West Virginia Behavioral Risk Factor Surveillance System Report 2018

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EXECUTIVE SUMMARY

Introduction

Each year since 1984, the West Virginia Behavioral Risk Factor Surveillance System has measured a range of risk factors that can affect our health. This report presents state survey results for the year 2018 as well as county data combined for the latest available five years (2014 through 2018).

The survey is conducted by telephone and represents a collaborative effort between the West Virginia Department of Health and Human Resources' Health Statistics Center (HSC) 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.
- More than one-fourth of West Virginia adults (26.3%) considered their health to be either fair or poor.
- Fair or 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, Mercer, Mingo, 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

- The prevalence of difficulty concentrating, remembering, or making decisions was 17.9% among West Virginians, compared to 11.5% nationally, which ranked the state 2nd highest nationally.
- More than one-fifth (23.3%) of West Virginians had serious difficulty walking or climbing stairs.
- Approximately 6.5% of West Virginia adults had difficulty bathing or dressing.
- The prevalence of having difficulty doing errands alone among West Virginians was 12.4%, significantly higher than the national prevalence of 7.1%.
- Approximately 9.0% of West Virginia adults are blind or have serious vision impairment, the 2nd highest in the nation.
- The prevalence of deafness or serious hearing impairment was 14.8%, which was highest in the nation.

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Health Care Access

- The prevalence of no health care coverage among West Virginia adults aged 18-64 was 10.1%, compared to 14.9% nationally.
- Nearly half of West Virginia adults have private insurance (42.7%), followed by Medicare (24.3%) and Medicaid (17.6%).
- Nearly one-fifth (18.6%) of all adults do not have a personal doctor or health care provider.
- Approximately 14.9% of West Virginia adults could not afford needed medical care in the past year.
- More than one-fifth (18.8%) of West Virginia adults did not have a routine checkup in the past year.

Weight Status

- The prevalence of obesity in West Virginia was 39.5%, which was the highest in the nation.
- The prevalence of obesity was significantly higher in Morgan county than the rest of the state.
- More than two-thirds (72.0%) of West Virginia adults were overweight or obese, the 2nd 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 $35,000-$49,999.

Physical Activity

- More than one-fourth of West Virginia adults (28.2%) did not participate in leisure-time physical activity or exercise, which ranked West Virginia 10th highest for inactivity 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 Logan, McDowell, Mingo, and Wyoming counties than the rest of the state.

Tobacco Use

- Over one-fourth of adults (25.2%) currently smoke cigarettes every day or some days, which ranked West Virginia the 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.
- Approximately 52.1% of current smokers had tried to quit smoking in the past year, which was the 4th lowest in the nation.
- West Virginia ranked the 3rd highest in the nation in the prevalence of smokeless tobacco use (8.3%) among adults.
- The prevalence of smokeless tobacco use was highest in Boone, Lincoln, and Wyoming counties.

Marijuana Use

- Less than one-tenth of adults (6.9%) have used marijuana in the past 30 days.
- The prevalence of marijuana use was significantly higher among men, those aged 25-34, those with less than a high school education, and those with a household annual income less than $25,000 a year.

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Alcohol Consumption

- The West Virginia heavy drinking prevalence was 4.2%, which was the 3rd lowest in the nation.
- The prevalence of binge drinking among West Virginia adults was 12.1%, the 2nd lowest in the nation.
- Binge drinking was highest among men, those aged 25-34, college graduates, and those with a household income of $75,000 or more per year.
- The prevalence of binge drinking was significantly higher in Brooke, Jefferson, and Monongalia counties than the rest of the state.

Seat Belt Use

- Approximately 4.0% 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 or high school education, and those with an annual household income of less than $15,000.

Falls

- More than one-fourth (31.4%) of West Virginia adults over age 45 reported falling at least once in the past year.
- The prevalence of falling at least once in the past year was highest among those aged 55-64, those with less than a high school education, and those earning less than $15,000 per year.
- Among those who fell in the past year, the prevalence of having an injury from that fall was 43.6%.

Sleep

- More than one-third (41.4%) of West Virginia adults get an inadequate amount of sleep.

Sunburn

- More than one-third of West Virginia adults (38.1%) had at least one sunburn in the past year.
- The prevalence of sunburn was highest among men, those aged 18-24, college graduates, and those with an annual household income of $50,000 or more.

Tooth Loss

- More than half of West Virginia adults (58.1%) had one or more teeth removed because of gum disease, the 2nd highest in the nation.
- Approximately 28.6% of West Virginia adults have six or more missing teeth, which was the highest in the nation.
- The prevalence of six or more missing teeth was highest among those aged 65 and older, those with less than a high school education, and those with an annual household income of $15,000 or less.
- About 26.3% of West Virginia adults aged 65 and older have all their teeth missing, which was the highest in the nation.
- The prevalence of all teeth missing among those aged 65 and older was highest among those with less than a high school education and among those with an annual income of $15,000 or less.

HIV Risk

- Few West Virginia adults are at high risk for developing HIV (5.2%), the 10th lowest in the nation.
- The prevalence of high risk for HIV was highest among men, those aged 18-24, and those with some post high school education.

Dental Visit

- More than half of West Virginia adults had a dental visit in the past year (55.3%), which was the 2nd lowest in the nation.
- The prevalence of a dental visit in the past year was highest among women, those aged 18-24, college graduates, and those earning $75,000 or more per year.

Diabetes Testing

- Among West Virginia adults who do not have diabetes, 62.8% have had a diabetes test in the past 3 years.
- The prevalence of had a diabetes test in the past 3 years was highest among those aged 65 and older, college graduates, and those with an annual income of $35,000-$49,999.

HIV Testing

- More than one-third of West Virginia adults (30.5%) have been tested for HIV.
- The prevalence of HIV testing was highest among those aged 35-44, those with some post high school education, and those earning less than $15,000 per year.

Immunization

- About 42.6% of all adults and 63.4% of seniors had a flu vaccination in the past 12 months.
- The prevalence of ever had a pneumonia vaccination was 38.9% among all adults and 73.0% among those aged 65 and older.

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Cancer Screening

- The prevalence of West Virginian adults who have received screening for lung cancer was 4.0%.
- The prevalence of had a mammogram in the past 2 years among women aged 50-74 was 75.0%, similar to the U.S. prevalence.
- The prevalence of had a Pap test in the past 3 years among women aged 21-65 was 80.2%, similar to the U.S. prevalence.
- Among West Virginia men aged 40 and older, 48.3% discussed the advantages of the prostate specific antigen (PSA) test with a doctor, 28.3% discussed the disadvantages of the PSA test with a doctor, 48.0% had a doctor who recommended having the PSA test, and 38.4% had a PSA test in the past 2 years.
- Among adults aged 50-75, 9.7% had a Fecal Occult Blood Test (FOBT) test in the past year and 15.4% had a FOBT test in the past 3 years.
- Among adults aged 50-75, 63.2% had a colonoscopy in the past 10 years, similar to the U.S. prevalence.
- More than two-thirds of West Virginia adults aged 50-75 had at least one of the recommended colorectal cancer screenings (68.1%), which was similar to the U.S. prevalence.

Cardiovascular Disease

- West Virginia ranked the highest in the nation in the prevalence of heart attack (8.6%) and coronary heart disease (8.3%).
- West Virginia ranked the 4th highest in the nation in the prevalence of stroke (4.4%).
- The overall cardiovascular disease prevalence was the highest in the nation at 15.5%.
- 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 Logan, McDowell, Mingo, and Wyoming counties than the state as a whole.

Diabetes

- More than 1 in 10 (16.2%) West Virginia adults had diabetes, which ranked West Virginia the 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 Logan and Wayne counties than the state as a whole.
- Approximately 11.8% of West Virginia adults had borderline or pre-diabetes.
- The prevalence of borderline or pre-diabetes was highest among those aged 65 and older and those with less than a high school education.

Cancer

- Approximately 7.7% of West Virginia adults ever had skin cancer and 8.0% ever had some other type of cancer.
- About 1 in 7 West Virginia adults had been diagnosed with cancer (14.1%), which ranked West Virginia the 6th highest for overall cancer prevalence.
- Cancer prevalence was highest among adults aged 65 or older, those with less than a high school education, and those with an annual household income of less than $15,000.

Respiratory Diseases

- Approximately 16.3% of West Virginia adults have ever been diagnosed with asthma and 12.3% 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 Mercer and Mingo counties than the rest of the state.
- The prevalence of chronic obstructive pulmonary disease or COPD among West Virginia adults was 15.3%, which was the highest in the nation.
- The prevalence of COPD was highest among adults aged 65 or 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, Mason, McDowell, and Mingo counties than the rest of the state.

Arthritis

- More than 1 in 3 West Virginia adults had arthritis (40.1%), which ranked West Virginia the 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 Barbour, Braxton, Fayette, Logan, Mason, McDowell, Raleigh and Wyoming counties.

Kidney Disease

- The prevalence of kidney disease in West Virginia was 4.6% and was the highest in the nation.
- Kidney disease prevalence was highest among seniors, those with less than high school education, and those earning an annual household income less than $15,000.

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Depression

- About 26.6% of West Virginia adults had depression, which ranked the state the highest in the nation.
- The prevalence of depression was significantly higher among women than men.
- The prevalence of depression was highest among those aged 45-54, those with less than a high school education, and those with an annual household income less than $15,000.
- The prevalence of depression was significantly higher in Fayette, Logan, and Wyoming counties than the rest of the state.

Comorbidities

- Approximately 1 in 5 West Virginia adults (19.2%) were both obese and had arthritis.
- About 1 in 6 West Virginia adults (16.1%) had arthritis and did not exercise.
- About 1 in 8 West Virginia adults (13.0%) were obese and did not exercise.
- About 1 in 10 West Virginia adults (9.9%) were obese and had diabetes.
- Approximately 1 in 20 West Virginia adults (5.9%) had both cardiovascular disease and diabetes.
- About 1 in 10 West Virginia adults (10.0%) were current smokers who and have depression.

ESTIMATED NUMBER OF PERSONS WITH DISEASE OR RISK FACTOR

Table ES.1 below shows selected risk factor or disease 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 2018

Risk Factor/Chronic Disease/Health-Related Factor	Prevalence Estimate (%)	Estimated Number of Adults
General Health Is Fair or Poor	26.3	377,402
Poor Physical Health	19.2	271,085
Poor Mental Health	18.9	269,126
Cognitive Difficulty	17.9	251,808
Difficulty Walking	23.3	328,962
Difficulty Dressing or Bathing	6.5	91,673
Difficulty Doing Errands Alone	12.4	174,278
Vision Impairment	9.0	128,148
Hearing Impairment	14.8	209,695
No Health Care Coverage (Ages 18-64)	10.1	107,427
No Personal Doctor or Health Care Provider	18.6	266,237
Unable to Afford Needed Medical Care	14.9	213,931
No Routine Medical Checkup in Past Year	18.8	268,077
Overweight (BMI 25.0-29.9)	32.5	439,019
Obesity (BMI 30.0+)	39.5	534,344
Overweight or Obese (BMI 25.0+)	72.0	973,363
No Leisure-Time Physical Activity	28.2	405,282
Current Cigarette Smoking	25.2	354,990
Smoking Cessation	52.1	184,409
Smokeless Tobacco Use	8.3	116,689
Marijuana Use	6.9	91,354
Heavy Drinking	4.2	58,496
Binge Drinking	12.1	167,897
Seldom or Never Wear a Seatbelt	4.0	56,195

Risk Factor/Chronic Disease/Health-Related Factor	Prevalence Estimate (%)	Estimated Number of Adults
Fall in Past Year	31.4	257,005
Injury from a Fall in Past Year	43.6	110,870
Inadequate Sleep	41.4	587,186
Sunburn in Past Year	38.1	464,451
Dental Visit	55.3	784,637
Diabetes Test	62.8	700,930
HIV Test	30.5	402,130
Flu Vaccine	42.6	594,579
Pneumonia Vaccination (ages 65 and older)	73.0	253,905
Mammogram	71.1	338,127
Pap Test	93.0	663,716
Fecal Occult Blood Test (FOBT)	9.7	57,747
Colonoscopy	63.2	376,772
Colorectal Cancer Screening Recommendation	68.1	403,287
Heart Attack	8.6	123,765
Coronary Heart Disease	8.3	118,875
Stroke	4.8	69,492
Cardiovascular Disease	15.5	221,701
Diabetes	16.2	232,336
Borderline or Pre-Diabetes	11.8	134,995
Cancer	14.1	202,323
Current Asthma	12.3	175,368
Chronic Obstructive Pulmonary Disease	15.3	219,706
Arthritis	40.1	574,680
Kidney Disease	4.6	66,058
Depression	26.6	380,521

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, chronic diseases, ad health practices. 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 two prevalence estimates that have been statistically tested and compared and found to be statistically different from one another. 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 3 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) in order to permit states to determine the prevalence of certain health risk factors and health conditions among their adult population. West Virginia, through the West Virginia Department of Health and Human Resources (DHHR), Bureau for Public Health (BPH), Health Statistics Center (HSC) 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, the Virgin Islands, 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-nine reports have been published by the HSC presenting survey results of the State's participation in the BRFSS since 1984. This report focuses on the 2018 risk factor prevalence estimates and compares them to the years 1984 through 2017. 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 2018

In 2018, West Virginia opted to ask several Optional Modules including: Pre-Diabetes, Marijuana Use, Excess Sun Exposure, and Lung Cancer Screening. State-added questions for 2018 included type of insurance. Additionally, this report includes trend analysis for each indicator as well as analysis of 5 year combined county prevalence estimates.

Table I.1 Topics Administered in the Survey: WVBRFSS, 2008-2018

Topic	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Adverse Childhood Events							X				X
AIDS/HIV	X	X	X	X	X	X	X	X	X	X	X
Alcohol Consumption	X	X	X	X	X	X	X	X	X	X	X
Arthritis		X	X	X	X	X	X	X	X	X	X
Asthma	X	X	X	X	X	X	X	X	X	X	X
Cancer		X	X	X	X	X	X	X	X	X	X
Cancer Screenings	X		X		X		X		X		X
Cardiovascular Disease	X	X	X	X	X	X	X	X	X	X	X
Cholesterol		X		X		X		X		X	
Diabetes	X	X	X	X	X	X	X	X	X	X	X
Disability	X	X	X	X	X	X	X	X			
Emotional Support/ Life Satisfaction	X	X	X								
Falls	X		X		X		X		X		X
Fruits & Vegetables		X		X		X		X		X	
Health Insurance	X	X	X	X	X	X	X	X	X	X	X
Health Status	X	X	X	X	X	X	X	X	X	X	X
HPV Vaccine	X		X		X			X	X		
Hypertension		X		X		X		X		X	
Immunization	X	X	X	X	X	X	X	X	X	X	X
Leisure-Time Physical Activity	X	X	X	X	X	X	X	X	X	X	X
Obesity	X	X	X	X	X	X	X	X	X	X	X
Oral Health	X		X		X		X		X		X
Osteoporosis	X				X						
Routine Checkup	X	X	X	X	X	X	X	X	X	X	X
Seatbelt Use	X		X	X	X	X	X	X	X	X	X
Sexual Violence	X										
Sleep		X	X			X	X		X		X
Sunburn									X	X	X
Tobacco Use	X		X	X	X	X	X	X	X	X	X
Weight Control		X		X							

Methodology

The survey is conducted by the method known as Computer Assisted Telephone Interviewing (CATI) and represents a collaborative effort between HSC and the CDC. HSC provides telephones, computer-assisted telephone interviewing software, 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 optional modules, survey protocols, 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, the survey covers 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 HSC for approximately a two-week 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 2017 state-level estimates from the National Health Interview Survey, 96.9% of West Virginia households have telephones, with 44.1% of households having landline telephones. In addition, a growing number of adults (82.3%) live in wireless-only households. In order to better represent the latter residents, the 2018 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, a refusal, or a disqualification. 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 landline 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 WVBRFSS SAMPLE

The demographic characteristics of the samples in 2018, 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.

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Table M.1 Demographic Summary: WVBRFSS, 2018

Demographic Characteristic	Number of Interviews	Percent of Unweighted Sample	Percent of Weighted Sample
Total	**4,896**	**100.0**	**100.0**
Sex			
Male	2,130	43.5	49.1
Female	2,766	56.5	50.9
Race/Ethnicity			
White, Non-Hispanic	4,536	93.6	93.0
Black, Non-Hispanic	110	2.3	3.3
Other, Non-Hispanic	68	1.4	1.3
Multiracial, Non-Hispanic	84	1.4	1.2
Hispanic	48	0.99	1.3
Age			
18-24	219	4.52	11.5
25-34	396	8.2	14.7
35-44	560	11.6	15.1
45-54	751	15.5	15.5
55-64	1,087	22.4	17.9
65+	1,832	37.8	25.2
Education			
< High School (HS)	475	9.72	14.0
HS or GED	1,725	35.3	40.1
Some College	1,272	26.0	27.3
College Degree	1,417	29.0	18.5
Household Income			
<$15,000	527	12.5	12.3
$15,000-$24,999	822	19.5	21.4
$25,000-$34,999	650	15.5	16.1
$35,000-$49,999	668	15.9	14.9
$50,000-$74,999	574	13.7	13.9
$75,000+	965	22.9	21.4
Marital Status			
Married	2,479	50.8	52.2
Divorced	854	17.5	12.8
Widowed	730	15.0	9.2
Separated	87	1.8	1.7
Never Married	589	12.1	19.1
Unmarried Couple	138	2.8	5.0
Employment Status			
Employed for wages	1,778	36.6	42.0
Self-Employed	275	5.7	5.6
Unemployed (>1 year)	82	1.7	2.3
Unemployed (<1 year)	72	1.5	2.4
Homemaker	277	5.7	7.3
Student	98	2.0	4.2
Retired	1,609	33.1	22.6
Unable to Work	672	13.8	13.6

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 CI is a range of values around an estimate, which reflects sampling error and represents the uncertainty of the estimate. This report presents 95% CI. Therefore, one can be 95% confident that the CI contains the true value that is being estimated.

Significant is the term used in this report to describe when two or more prevalence estimates have been compared 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% CI 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 7.”

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 2018 DATA RESULTS

Beginning in 2011, CDC changed the weighting procedures for the WVBRFSS. 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 2011-2018 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 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 estimates 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, 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% 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 54 BRFSS participants, ranking 1st in diabetes would mean having the highest prevalence of diabetes among all the U.S. states and territories while ranking 54th 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 are often 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 HSC 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.

West Virginia Behavioral Risk Factor Surveillance System Report

2018

SECTION 1: Health Indicators

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: 26.3% (95% CI: 24.8-27.8)
U.S.: 18.6% (95% CI: 18.3-18.8)
West Virginia's prevalence of fair or poor health was significantly higher than the U.S. prevalence. West Virginia ranked the 2nd highest among 54 BRFSS participants.

Gender

Men: 26.4% (95% CI: 24.2-28.7)
Women: 26.1% (95% CI: 24.1-28.1)
There was no gender difference in the prevalence of fair or poor health.

Age

The prevalence of fair or poor health was significantly higher among adults aged 45 and older than among those aged 44 and younger.

Education

The prevalence of fair or poor health was significantly higher among those with less than a high school education (53.2%) than all other educational attainment levels.

Household Income

The prevalence of fair or poor health was significantly higher among adults with an annual household income of $15,000 or less (55.3%) than among all other annual household income levels.

Trend

There was no change in the prevalence of fair to poor health from 1999 to 2010. Because of the change in BRFSS methodology, results from 2011 and later are not directly comparable to previous years. There was a small increase in the prevalence of fair or poor health from 2011 to 2018 among West Virginia adults.

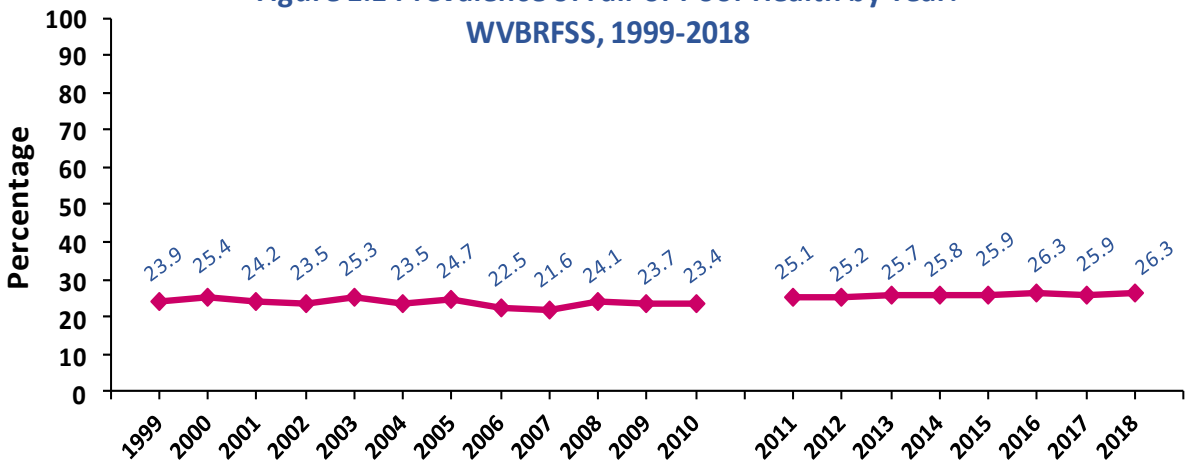
County

The 2014-2018 West Virginia state prevalence of fair or poor health was 26.0%. There were 6 counties with a significantly lower prevalence compared to the state; Berkeley, Kanawha, Monongalia, Ohio, Preston, and Putnam counties. There were 9 counties with a significantly higher prevalence compared to the state; Boone, Fayette, Lincoln, Logan, McDowell, Mercer, Mingo, Summers, and Wyoming counties.

Table 1.1 Prevalence of Fair or Poor Health by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	186,218	**26.4**	24.2-28.7	191,185	**26.1**	24.2-28.1	377,402	**26.3**	24.8-27.8
Age									
18-24	6,557	**7.7**	1.3-14.1	5,582	**7.1**	1.8-12.4	12,138	**7.4**	3.2-11.6
25-34	16,947	**15.8**	9.8-21.7	11,416	**11.1**	6.5-15.8	28,363	**13.5**	9.7-17.3
35-44	19,963	**18.4**	12.6-24.3	20,575	**19.2**	14.2-24.2	40,538	**18.8**	15.0-22.7
45-54	30,978	**27.9**	22.3-33.6	40,698	**36.8**	31.3-42.4	71,676	**32.4**	28.4-36.4
55-64	48,252	**38.2**	33.3-43.1	45,772	**35.5**	30.9-40.1	94,024	**36.8**	33.5-40.2
65+	62,408	**38.4**	34.2-42.5	65,692	**33.6**	30.2-36.9	128,100	**35.7**	33.1-38.4
Education									
Less than H.S.	53,062	**55.6**	47.2-64.1	53,849	**51.1**	43.7-58.5	106,911	**53.2**	47.6-58.8
H.S. or G.E.D.	79,750	**26.7**	23.3-30.2	78,415	**28.3**	25.0-31.6	158,165	**27.5**	25.1-29.9
Some Post-H.S.	38,121	**20.7**	17.0-24.5	42,511	**20.4**	17.3-23.6	80,632	**20.6**	18.1-23.0
College Graduate	14,857	**11.8**	9.1-14.4	16,024	**11.5**	9.0-13.9	30,881	**11.6**	9.8-13.4
Income									
Less than $15,000	33,238	**61.6**	52.8-70.3	50,193	**51.8**	45.3-58.3	83,431	**55.3**	50.0-60.6
$15,000 - 24,999	53,675	**43.9**	37.5-50.4	47,524	**33.5**	28.5-38.4	101,199	**38.3**	34.3-42.3
$25,000 - 34,999	26,915	**28.2**	22.1-34.3	26,004	**25.4**	20.0-30.7	52,919	**26.7**	22.7-30.7
$35,000 - 49,999	23,431	**23.1**	17.5-28.8	1,344	**16.3**	11.4-21.2	36,875	**20.1**	16.2-23.9
$50,000 - 74,999	11,056	**11.7**	7.8-15.6	11,591	**15.0**	10.4-19.5	22,647	**13.2**	10.2-16.1
$75,000+	13,736	**9.5**	6.5-12.5	9,069	**7.6**	4.7-10.4	22,805	**8.6**	6.6-10.7

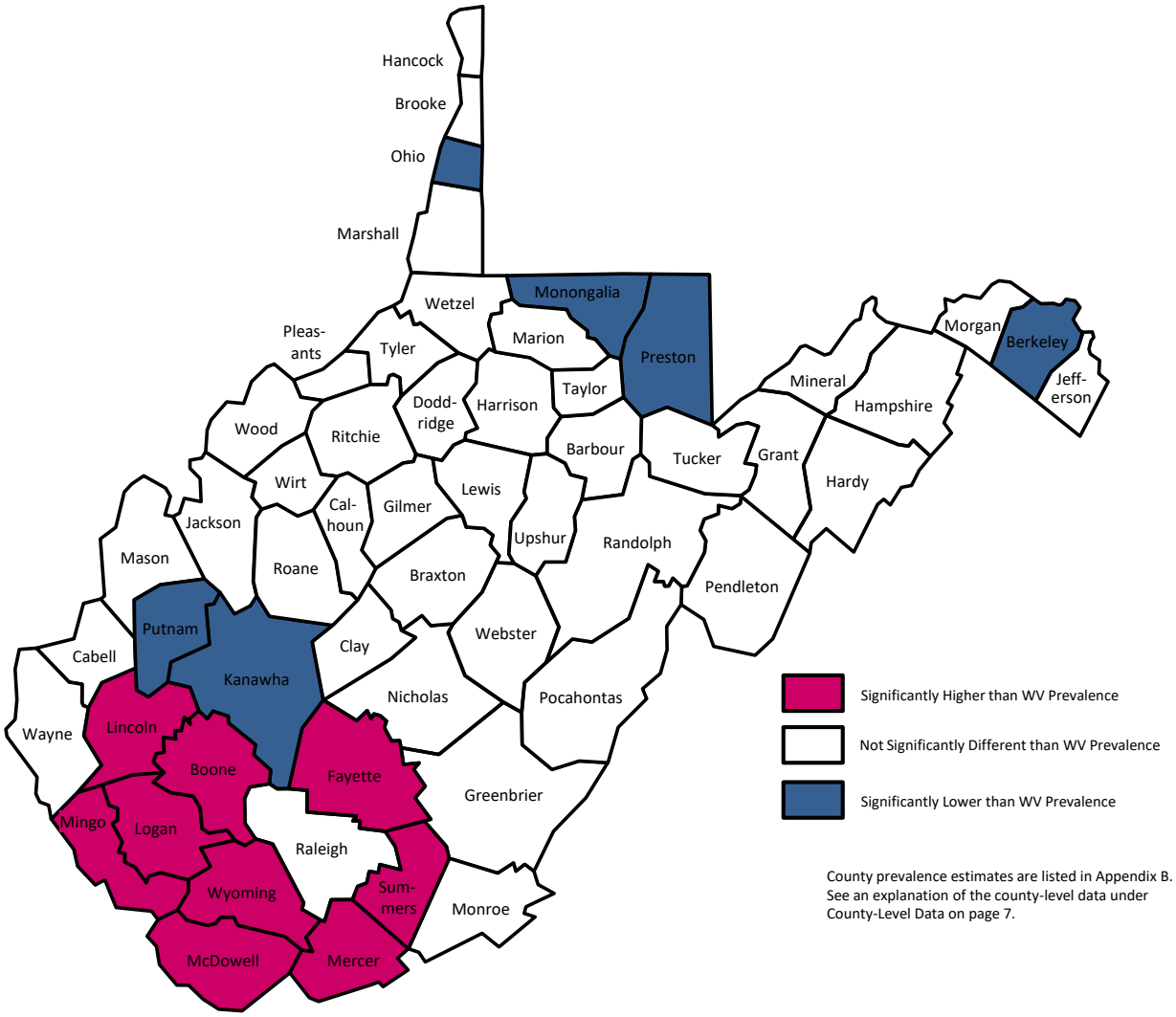
Figure 1.1 Prevalence of Fair or Poor Health by Year: WVBRFSS, 1999-2018



*Due to changes in sample composition and weighting methodology, 2011-2018 results are not directly comparable to previous years.

Figure 1.2 Prevalence of Fair or Poor Health by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 26.0%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

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: 19.2% (95% CI: 17.9-20.5)
U.S.: 12.6% (95% CI: 12.4-12.8)
West Virginia ranked the highest among 54 BRFSS participants. West Virginia's prevalence of poor physical health was significantly higher than the U.S. prevalence.

Gender

Men: 17.6% (95% CI: 15.7-19.6)
Women: 20.7% (95% CI: 18.9-22.6)
There was no significant gender difference in the prevalence of poor physical health.

Age

The prevalence of poor physical health was significantly higher among adults aged 45 and older than all other age groups.

Education

The prevalence of poor physical health was significantly higher among adults with less than an high school education (37.6%) than any other educational attainment level. The prevalence of poor physical health was significantly lower among college graduates (8.4%) than all other educational attainment levels.

Household Income

The prevalence of poor physical health was significantly higher among adults with an annual household income of $15,000 or lower (45.1%) than all other annual household income levels.

Trend

There was no change in the prevalence of poor physical health from 2011 to 2018.

County

The 2014-2018 West Virginia state prevalence of poor physical health was 18.4%. There were 6 counties with a significantly lower prevalence compared to the state; Hardy, Jefferson, Kanawha, Mineral, Monongalia, and Putnam counties. There were 5 counties with a significantly higher prevalence compared to the state; Boone, McDowell, Mingo, Morgan, and Nicholas counties.

Table 1.2 Prevalence of Poor Physical Health by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	121,900	**17.6**	15.7-19.6	149,186	**20.7**	18.9-22.6	271,085	**19.2**	17.9-20.5
Age									
18-24	5,861	**7.0**	1.6-12.3	5,392	**6.9**	1.8-12.0	11,253	**6.9**	3.2-10.7
25-34	8,421	**7.9**	3.6-12.2	11,293	**11.2**	6.5-15.8	19,714	**9.5**	6.3-12.6
35-44	10,429	**9.7**	5.1-14.3	15,289	**14.3**	9.8-18.8	25,717	**12.0**	8.8-15.2
45-54	22,692	**20.7**	15.6-25.8	32,328	**29.5**	24.2-34.8	55,021	**25.1**	21.4-28.8
55-64	37,651	**30.6**	25.8-35.3	39,156	**30.5**	26.0-35.0	76,807	**30.5**	27.3-33.8
65+	36,404	**23.3**	19.7-27.0	45,001	**23.9**	20.7-27.0	81,406	**23.6**	21.3-26.0
Education									
Less than H.S.	33,641	**36.2**	28.3-44.0	40,272	**38.9**	31.8-45.9	73,913	**37.6**	32.3-42.9
H.S. or G.E.D.	49,067	**16.9**	14.1-19.7	60,658	**22.4**	19.3-25.5	109,724	**19.6**	17.4-21.7
Some Post-H.S.	29,036	**16.0**	12.5-19.6	34,906	**17.0**	14.0-20.0	63,942	**16.5**	14.2-18.8
College Graduate	9,729	**7.8**	5.5-10.0	12,415	**8.9**	6.8-11.1	22,144	**8.4**	6.8-9.9
Income									
Less than $15,000	26,608	**50.9**	41.7-60.2	39,440	**41.9**	35.4-48.4	66,047	**45.1**	39.8-50.5
$15,000 - 24,999	35,766	**29.8**	24.1-35.6	35,257	**25.3**	20.8-29.9	71,023	**27.4**	23.8-31.0
$25,000 - 34,999	16,569	**17.8**	1.4-23.2	19,623	**19.2**	14.4-24.1	36,193	**18.6**	14.9-22.2
$35,000 - 49,999	12,149	**12.1**	8.1-16.1	10,723	**13.1**	8.6-17.6	22,872	**12.5**	9.5-15.5
$50,000 - 74,999	8,515	**9.1**	5.6-12.6	8,293	**10.8**	6.6-15.0	16,808	**9.9**	7.2-12.6
$75,000+	8,344	**5.8**	3.5-8.2	8,916	**7.5**	4.7-10.2	17,259	**6.6**	4.8-8.4

Figure 1.3 Prevalence of Poor Physical Health by Year: WVBRFSS, 2011-2018

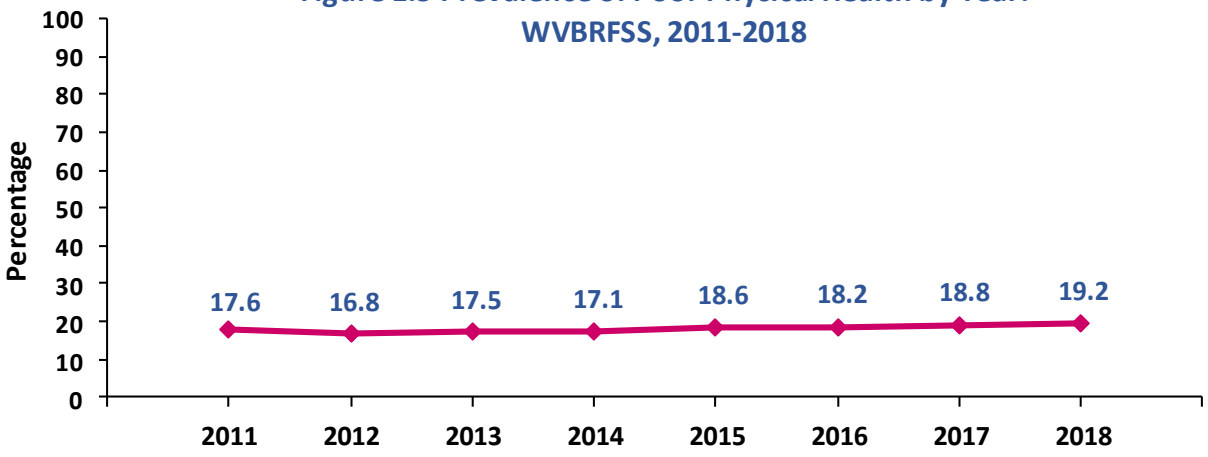
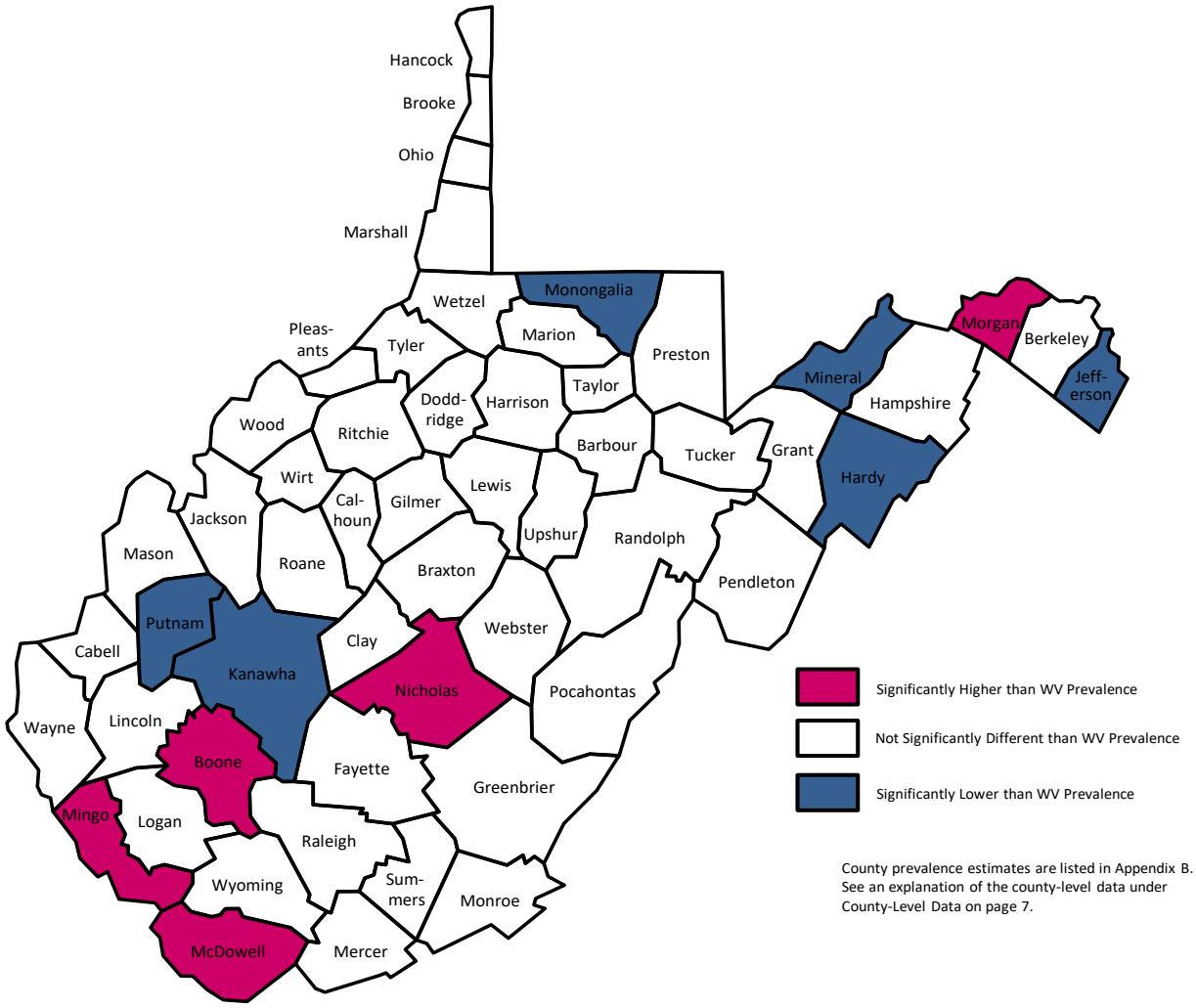


Figure 1.4 Prevalence of Poor Physical Health by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 18.4%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

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: 18.9% (95% CI: 17.5-20.4)
U.S.: 12.7% (95% CI: 12.5-12.9)
The WV prevalence of poor mental health was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 54 BRFSS participants.

Gender

Men: 16.0% (95% CI: 14.0-18.0)
Women: 21.9% (95% CI: 19.7-23.9)
The prevalence of poor mental health was significantly higher among women than men.

Age

The prevalence of poor mental health was significantly lower in adults aged 65 and older (11.3%) than all other age groups.

Education

The prevalence of poor mental health was significantly higher among adults with less than an high school education (30.3%) than all other educational attainment levels. The prevalence of poor mental health was significantly lower among college graduates (12.4%) than all other educational attainment levels.

Household Income

The prevalence of poor mental health was significantly higher among adults with an annual household income less than $25,000 than all other annual household income levels.

Trend

There was no change in the prevalence of poor mental health from 2011 to 2018.

County

The 2014-2018 West Virginia state prevalence of poor mental health was 17.6%. There were 5 counties with a significantly lower prevalence compared to the state; Doddridge, Grant, Monongalia, Ohio, and Pendleton counties. There were 3 counties with a significantly higher prevalence compared to the state; Nicholas, Raleigh, and Wyoming counties.

Table 1.3 Prevalence of Poor Mental Health by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	111,512	**16.0**	14.0-18.0	157,614	**21.8**	19.7-23.9	269,126	**18.9**	17.5-20.4
Age									
18-24	22,176	**25.9**	16.9-35.0	22,145	**28.1**	17.8-38.4	44,321	**27.0**	20.1-33.8
25-34	13,613	**12.7**	7.9-17.6	29,135	**29.0**	22.2-35.8	42,748	**20.6**	16.4-24.9
35-44	18,143	**16.8**	11.3-22.4	18,899	**17.8**	13.1-22.4	37,042	**17.3**	13.7-20.9
45-54	21,116	**19.4**	14.3-24.4	30,604	**27.8**	22.8-32.8	51,720	**23.6**	20.0-27.1
55-64	21,419	**17.2**	13.2-21.1	31,247	**24.6**	20.5-28.8	52,666	**20.9**	18.0-23.8
65+	14,809	**9.3**	6.9-11.6	24,858	**12.9**	10.5-15.4	39,667	**11.3**	9.5-13.0
Education									
Less than H.S.	23,974	**26.0**	18.6-33.4	35,359	**34.1**	26.7-41.5	59,334	**30.3**	30.0-35.6
H.S. or G.E.D.	49,110	**16.6**	13.4-19.8	59,891	**21.9**	18.4-25.4	109,002	**19.1**	16.8-21.5
Some Post-H.S.	27,717	**15.1**	11.3-18.9	39,022	**19.0**	15.7-22.3	66,740	**17.2**	14.7-19.7
College Graduate	10,283	**8.2**	5.6-10.7	22,406	**1.2**	13.1-19.3	3,269	**12.4**	10.3-14.4
Income									
Less than $15,000	17,761	**33.8**	24.6-43.0	36,678	**38.3**	32.0-44.7	54,439	**36.7**	31.5-41.9
$15,000 - 24,999	33,331	**27.6**	21.7-33.6	37,166	**26.5**	21.6-31.5	70,497	**27.0**	23.2-30.9
$25,000 - 34,999	12,740	**13.4**	8.5-18.4	21,015	**20.9**	14.2-27.6	33,755	**17.3**	13.0-21.5
$35,000 - 49,999	10,913	**10.8**	6.8-14.8	12,549	**15.4**	10.5-20.2	23,461	**12.8**	9.7-15.9
$50,000 - 74,999	8,781	**9.3**	4.0-14.6	10,645	**13.8**	9.2-18.3	19,426	**11.3**	7.8-14.9
$75,000+	14,762	**10.3**	6.9-13.7	15,625	**13.1**	9.2-16.9	30,387	**11.5**	9.0-14.1

Figure 1.5 Prevalence of Poor Mental Health by Year: WVBRFSS, 2011 - 2018

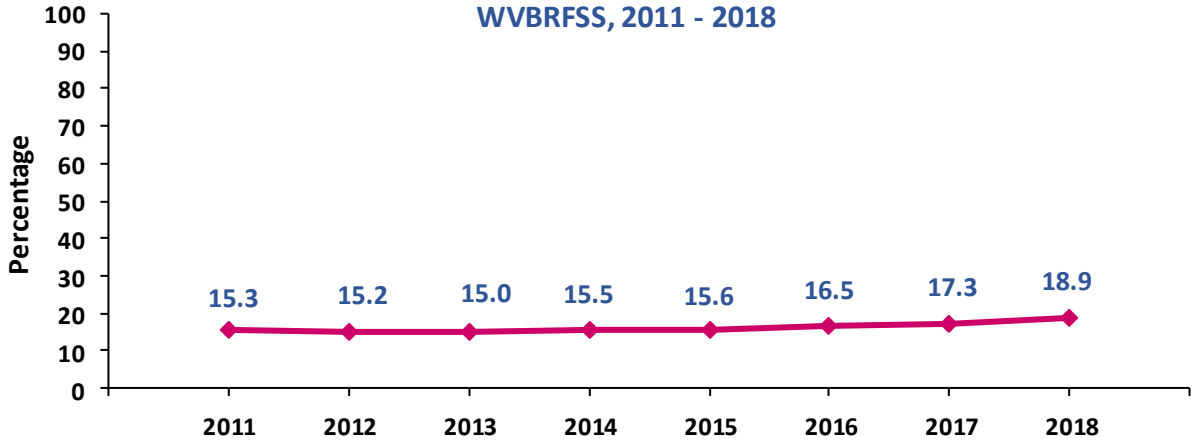
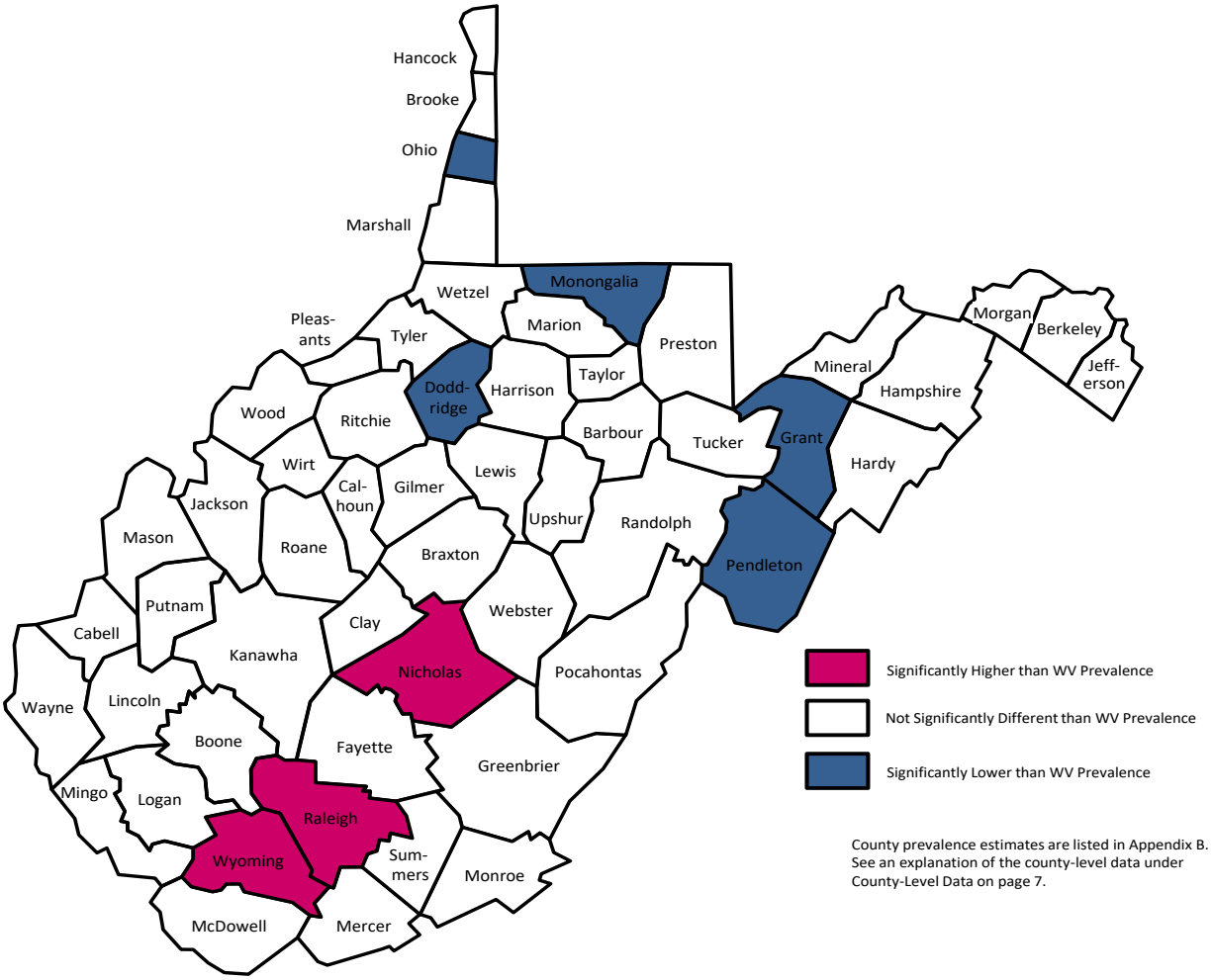


Figure 1.6 Prevalence of Poor Mental Health by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 17.6%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

Poor Health Limitations

Definition

Responding "14 to 30 days" or "30 days" 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: 23.1% (95% CI: 21.3-25.0)
U.S.: 16.3% (95% CI: 16.0-16.6)
West Virginia ranked the highest among 54 BRFSS participants and was significantly higher than the U.S. prevalence.

Every day

WV: 13.1% (95% CI: 1.7-14.5)
U.S.: 8.0% (95% CI: 7.8-8.2)
West Virginia ranked the highest among 54 BRFSS participants and was significantly higher than the U.S. prevalence.

Gender

At least 14 days

Men: 22.7% (95% CI: 19.9-25.5)
Women: 23.5% (95% CI: 21.0-25.9)
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: 12.7% (95% CI: 10.6-14.8)
Women: 13.4% (95% CI: 11.5-15.4)
There was no gender difference in the prevalence of poor health limitations every day in the past 30 days.

Age

At least 14 days

The prevalence of poor health limitations at least 14 days in the past 30 days was significantly higher among adults aged 45 and older than among those aged 44 and younger.

Every day

The prevalence of poor health limitations every day in the past 30 days was significantly higher among adults aged 45 and older than other age groups.

Education

At least 14 days

The prevalence of poor health limitations at least 14 days in the past 30 days was significantly higher among adults with less than a high school education (40.9%) than all other educational attainment levels.

Poor Health Limitations

Education (cont.)

Every day

The prevalence of poor health limitations every day in the past 30 days was significantly higher among adults with less than a high school education (27.0%) than all other educational attainment levels.

Household Income

At least 14 days

The prevalence of poor health limitations at least 14 days in the past 30 days was significantly higher among adults with an annual household income of less than $25,000 than among those with an annual household income of $25,000 or more.

Every day

The prevalence of poor health limitations every day in the past 30 days was significantly higher among those with an annual household income less than $25,000 than among those with an annual household income of $25,000 or more.

Trend

At least 14 days

There was no change the prevalence of poor health limitations at least 14 days in the past 30 days from 2011 to 2018.

Every day

There was no change in prevalence of poor health limitations every day in the past 30 days from 2011 to 2018.

County

At least 14 days

The 2014-2018 West Virginia state prevalence for at least 14 days in the past 30 days of poor health limitations was 23.6%. There were 6 counties with a prevalence significantly lower than the state; Hardy, Jackson, Jefferson, Mineral, Monongalia, and Taylor counties. There were 8 counties that were significantly higher than the state; Boone, Fayette, Lincoln, Logan, Mercer, Mingo, McDowell, and Wyoming counties.

Every day

The 2014-2018 West Virginia state prevalence for everyday in the past 30 days poor health limitations was 13.5%. There were 5 counties with a prevalence significantly lower prevalence compared to the state; Doddridge, Gilmer, Monongalia, Morgan, and Tucker counties. There were 3 counties with a significantly higher prevalence compared to the state; Fayette, Logan, and Mingo counties.

Table 1.4 Prevalence of Poor Health Limitations at Least 14 Days in the Past 30 Days by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	88,131	**22.7**	19.9-25.5	107,368	**23.5**	21.0-25.9	195,498	**23.1**	21.3-25.0
Age									
18-24	7,068	**13.5**	4.0-23.0	3,809	**7.5**	1.2-13.7	10,878	**10.5**	4.7-16.3
25-34	4,852	**8.1**	3.1-13.1	9,163	**13.3**	7.3-19.4	14,016	**10.9**	6.9-14.9
35-44	6,110	**9.4**	4.7-14.1	12,871	**19.6**	13.5-25.8	18,982	**14.5**	10.6-18.5
45-54	17,768	**30.2**	22.4-37.9	22,714	**30.0**	23.8-36.1	40,482	**30.1**	25.2-35.0
55-64	29,274	**39.3**	32.9-45.8	26,370	**29.8**	24.2-35.3	55,645	**34.1**	29.9-38.4
65+	22,822	**30.0**	24.4-35.5	31,712	**30.1**	25.7-34.6	54,534	**30.0**	26.6-33.6
Education									
Less than H.S.	25,195	**40.5**	30.8-50.3	30,597	**41.2**	32.7-49.7	55,792	**40.9**	34.5-47.3
H.S. or G.E.D.	37,391	**22.3**	18.1-26.6	39,994	**23.1**	19.2-26.6	77,384	**22.8**	19.9-25.6
Some Post-H.S.	17,978	**17.9**	13.4-22.5	24,112	**19.2**	15.2-23.3	42,090	**18.7**	15.6-21.7
College Graduate	7,567	**13.1**	8.9-17.2	11,639	**13.9**	10.4-17.4	19,207	**13.6**	10.9-16.2
Income									
Less than $15,000	21,515	**52.6**	42.2-63.0	29,000	**38.9**	31.9-46.0	50,515	**43.8**	37.9-49.7
$15,000 - 24,999	27,120	**31.1**	24.3-37.9	28,185	**29.6**	23.8-35.4	55,305	**30.3**	25.8-34.8
$25,000 - 34,999	8,019	**15.5**	9.7-21.3	12,969	**19.8**	13.3-26.3	20,988	**17.9**	13.4-22.4
$35,000 - 49,999	9,821	**18.0**	11.4-24.7	6,529	**13.8**	7.9-19.7	16,350	**16.0**	11.6-20.5
$50,000 - 74,999	6,975	**14.9**	6.8-23.0	5,204	**11.0**	5.8-16.2	12,178	**12.9**	8.1-17.8
$75,000+	5,498	**8.8**	4.6-12.9	6,758	**10.8**	5.7-15.8	12,256	**9.8**	6.5-13.0

Table 1.5 Prevalence of Poor Health Limitations Every Day in the Past 30 Days by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	49,235	**12.7**	10.6-14.8	61,570	**13.4**	11.5-15.4	110,805	**13.1**	1.7-14.5
Age									
18-24	1,129	**2.2**	0.0-6.3	1,555	**3.0**	0.0-7.3	2,684	**2.6**	0.0-5.6
25-34	2,577	**4.3**	0.4-8.2	4,879	**7.1**	2.6-11.6	7,456	**5.8***	2.8-8.8
35-44	3,058	**4.7***	1.2-8.2	5,670	**8.7**	4.1-13.2	8,728	**6.7**	3.8-9.6
45-54	11,379	**19.4**	12.4-26.3	12,045	**15.9**	10..8-21.0	23,424	**17.4**	13.2-21.6
55-64	17,695	**23.8**	18.0-29.6	14,012	**15.8**	11.2-20.4	31,707	**19.5**	15.8-23.1
65+	13,397	**17.6**	13.1-22.1	22,683	**21.6**	17.4-25.7	36,080	**19.9**	16.8-22.9
Education									
Less than H.S.	16,778	**27.0**	18.5-35.5	19,999	**26.9**	19.6-34.2	36777	**27.0**	21.4-32.5
H.S. or G.E.D.	20,457	**12.2**	9.1-15.3	21,641	**12.5**	9.6-15.5	42,098	**12.4**	10.2-14.5
Some Post-H.S.	8,837	**8.8**	5.8-11.8	13,142	**10.5**	7.3-13.7	21,980	**9.7**	7.5-12.0
College Graduate	3,163	**5.5**	3.0-7.9	5,763	**6.9**	4.3-9.4	8,925	**6.3**	4.5-8.1
Income									
Less than $15,000	14,127	**34.6**	24.9-44.2	15,257	**20.5**	15.0-26.0	29,384	**25.5**	20.5-30.5
$15,000 - 24,999	14,906	**17.1**	11.5-22.6	17,920	**18.8**	13.7-23.9	32,826	**18.0**	14.2-21.7
$25,000 - 34,999	4,076	**7.9**	3.7-12.0	7,229	**11.1**	6.0-16.1	11,305	**9.6**	6.3-13.0
$35,000 - 49,999	5,559	**10.2**	5.1-15.3	4,111	**8.7**	3.3-14.1	9,671	**9.5**	5.8-13.2
$50,000 - 74,999	3,061	**6.5**	2.7-10.3	2,411	**5.1**	1.0-9.2	5,472	**5.8**	3.0-8.6
$75,000+	2,962	**4.7***	1.5-8.0	2,712	**4.3***	0.9-7.7	5,674	**4.5**	2.2-6.9

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

Figure 1.7 Prevalance of Poor Health Limitation by Year: WVBRFSS, 2011-2018

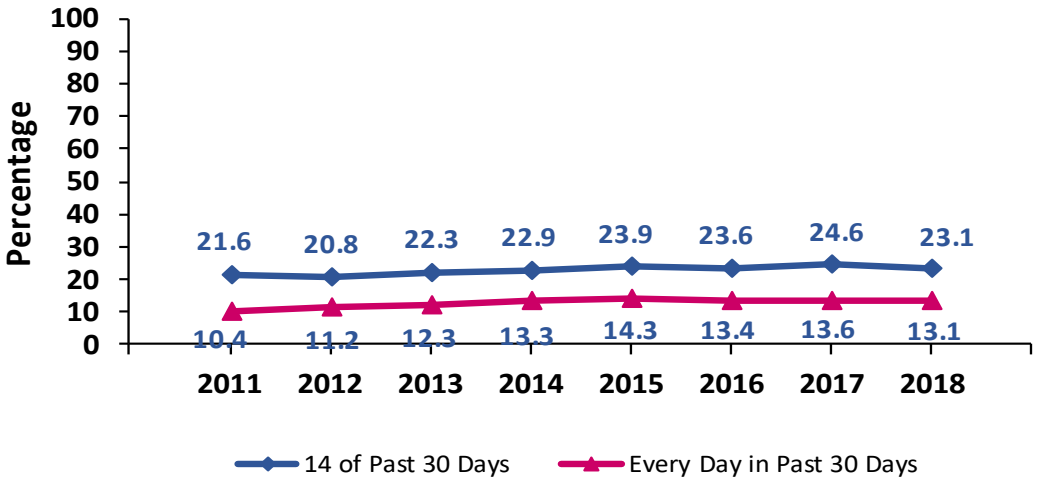
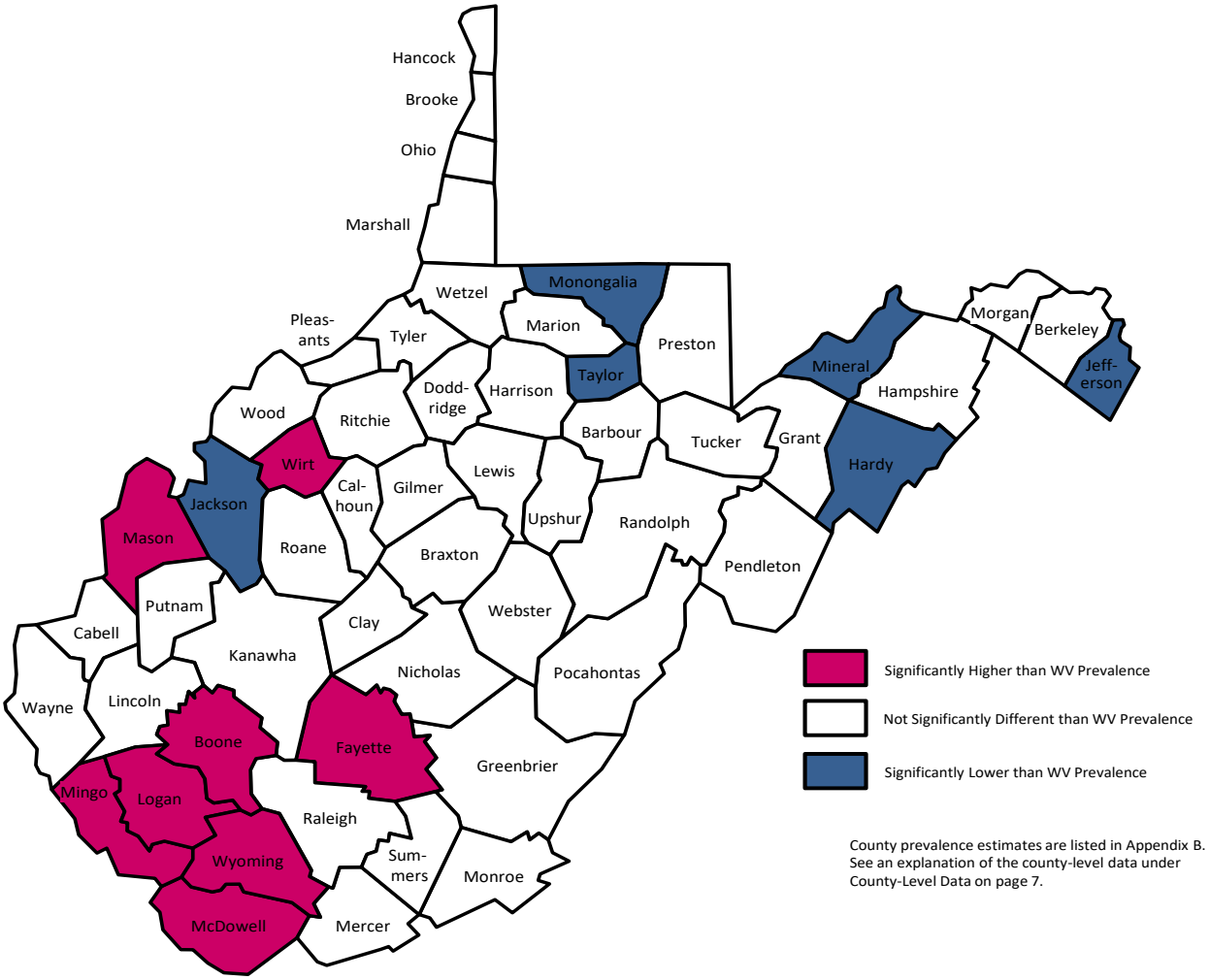


Figure 1.8 Prevalence of Poor Health Limitations At Least 14 Days in the Past 30 Days by County: WVBRFSS, 2014-2018

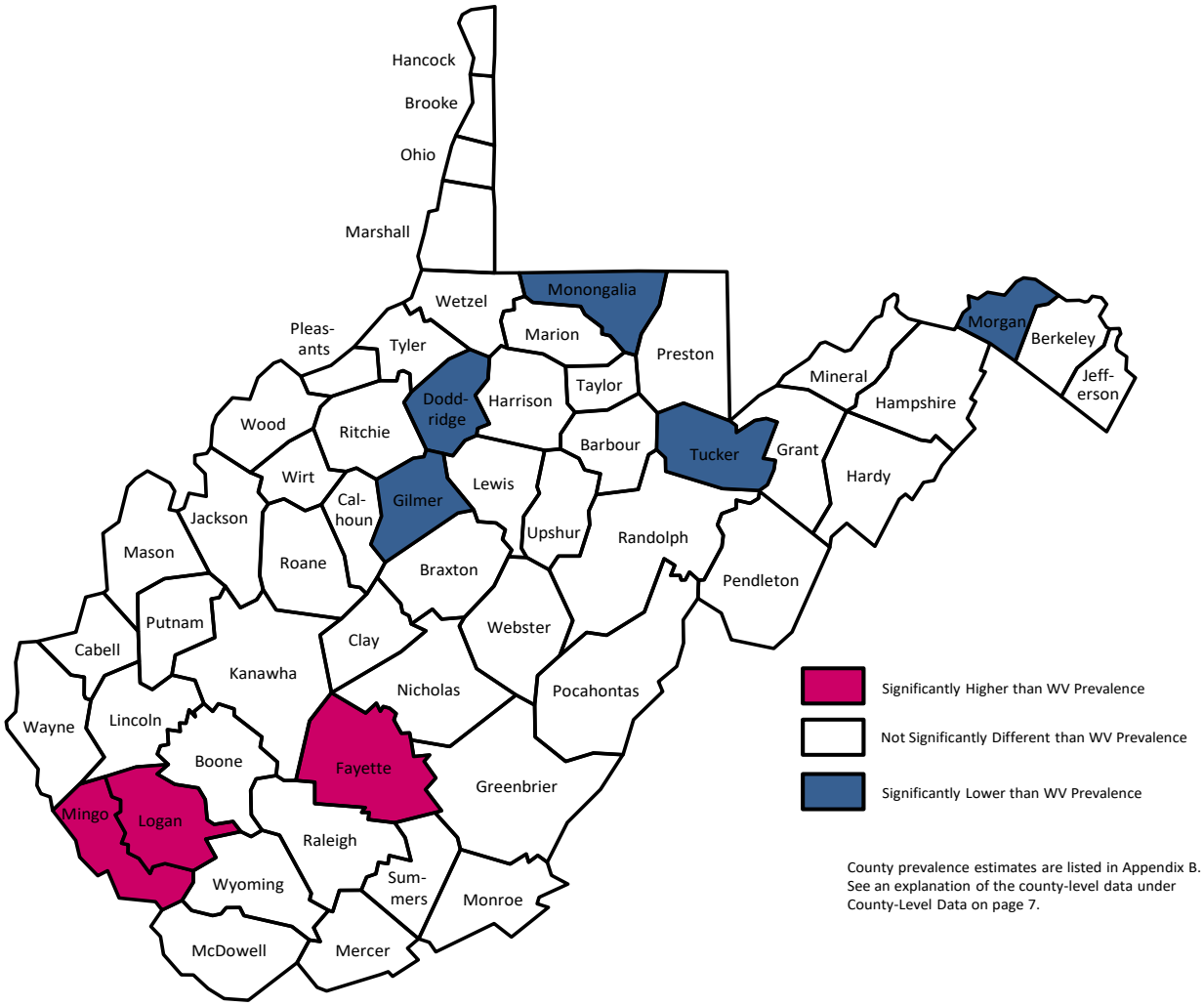
WV Prevalence (2014-2018) - 23.6%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

Figure 1.9 Prevalence of Poor Health Limitations Every Day in the Past 30 Days by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 13.5%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

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: 17.9% (95% CI: 16.5-19.3)
U.S.: 11.5% (95% CI: 11.3-11.7)
The West Virginia prevalence of cognitive difficulty was significantly higher than the U.S. prevalence. West Virginia ranked 2nd highest among the 54 BRFSS participants.

Gender

Men: 16.8% (95% CI: 14.8-18.8)
Women: 18.9% (95% CI: 17.0-20.8)
There was no gender difference in the prevalence of cognitive difficulty.

Age

There were no age difference in the prevalence of cognitive difficulty.

Education

The prevalence of cognitive difficulty was significantly higher among those with less than a high school education (37.4%) than among all other educational attainment levels. The prevalence of cognitive difficulty was significantly lower among those with a college degree (8.0%) than among all other educational attainment levels.

Household Income

The prevalence of cognitive difficulty was significantly higher among those with an annual household income of less than $25,000 than among all other annual household income levels.

Trend

There was no significant change in the prevalence of cognitive difficulty 2011-2018.

County

The 2014-2018 West Virginia state prevalence of cognitive difficulty was 16.5%. There were 6 counties with a significantly lower prevalence compared to the state; Gilmer, Hancock, Jefferson, Monongalia, Ohio, and Preston counties. There were 3 counties with a significantly higher prevalence compared to the state; Mingo, Raleigh, and Wyoming counties.

Table 2.1 Prevalence of Cognitive Difficulty by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	115,709	**16.8**	14.8-18.8	136,099	**18.9**	17.0-20.8	251,808	**17.9**	16.5-19.3
Age									
18-24	14,279	**17.8**	9.9-25.7	14,710	**19.0**	10.3-27.7	28,989	**18.4**	12.5-24.3
25-34	8,930	**8.4**	4.4-12.5	18,310	**17.9**	12.0-23.8	27,240	**13.1**	9.5-16.7
35-44	25,223	**23.8**	17.2-30.3	18,392	**17.6**	12.9-22.2	43,615	**20.7**	16.6-24.7
45-54	23,053	**21.0**	15.6-26.4	27,577	**25.5**	20.6-30.5	50,630	**23.3**	19.6-26.9
55-64	19,599	**15.8**	12.2-19.5	26,266	**20.5**	16.6-24.5	45,864	**18.2**	15.5-20.9
65+	24,420	**15.3**	12.2-18.4	30,511	**15.8**	13.1-18.5	54,931	**15.6**	13.5-17.6
Education									
Less than H.S.	32,488	**35.8**	27.6-44.0	40,172	**28.7**	31.6-45.9	72,660	**37.4**	32.0-42.8
H.S. or G.E.D.	47,311	**16.3**	13.4-19.3	54,845	**20.2**	17.0-23.5	102,156	**18.2**	16.0-20.4
Some Post-H.S.	25,316	**13.9**	10.3-17.5	30,016	**14.6**	11.6-17.5	55,332	**14.2**	11.9-16.5
College Graduate	10,167	**8.1**	5.6-10.6	10,975	**8.0**	5.8-10.1	21,142	**8.0**	6.4-9.7
Income									
Less than $15,000	20,338	**39.1**	29.9-48.2	38,041	**39.7**	33.4-46.0	58,379	**39.5**	34.2-44.7
$15,000 - 24,999	34,337	**28.3**	22.5-34.1	37,736	**26.8**	22.0-31.6	72,113	**27.5**	23.8-31.2
$25,000 - 34,999	12,463	**13.2**	8.3-18.1	11,587	**11.3**	7.2-15.4	24,050	**12.2**	9.0-15.4
$35,000 - 49,999	12,158	**12.1**	7.6-16.5	8,880	**10.8**	6.1-15.6	21,037	**11.5**	8.3-14.8
$50,000 - 74,999	11,144	**12.2**	7.1-17.2	6,752	**8.9**	5.3-12.4	17,896	**10.7**	7.4-13.9
$75,000+	10,520	**7.3**	4.2-10.5	8,201	**6.9**	4.3-9.5	18,721	**7.1**	5.0-9.2

Figure 2.1 Prevalence of Cognitive Difficulty by Year: WVBRFSS, 2011-2018

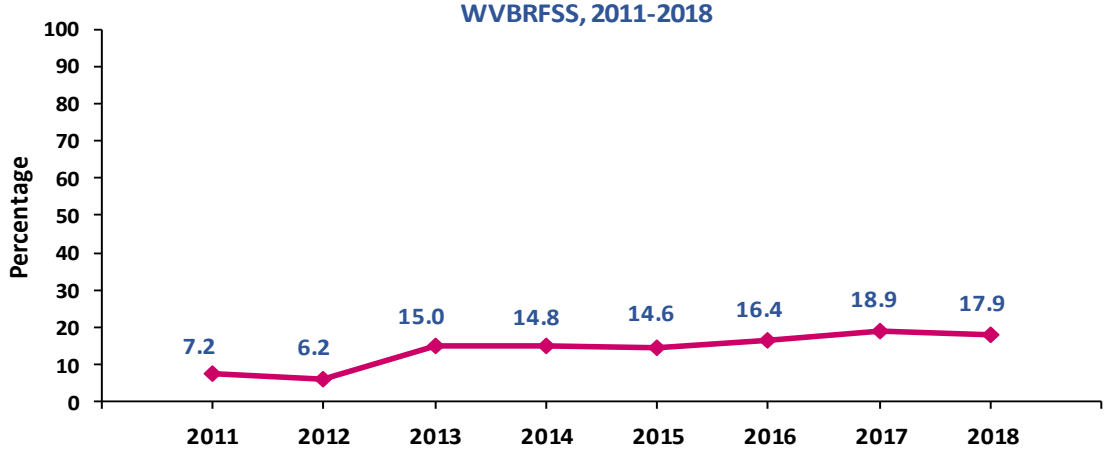
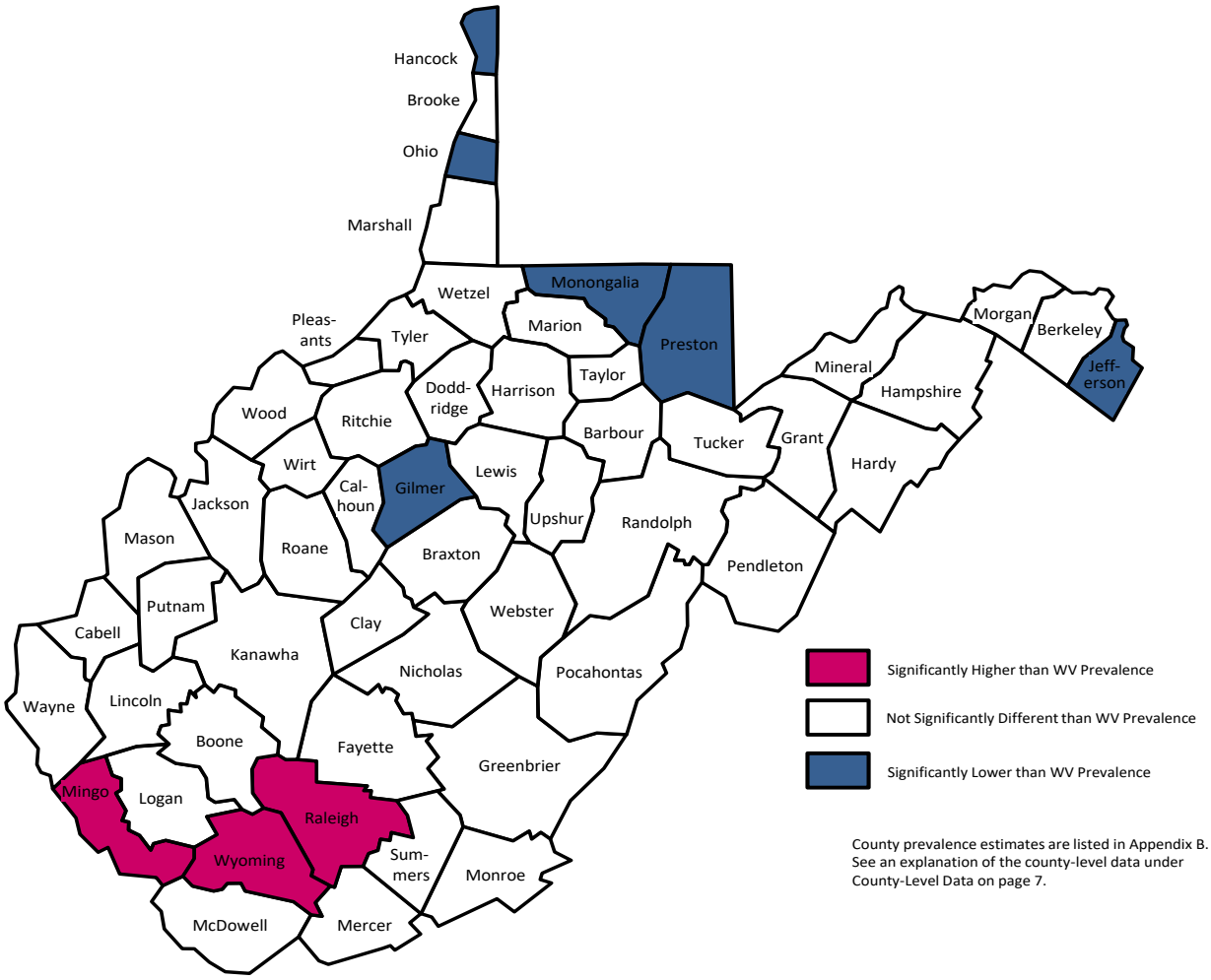


Figure 2.2 Prevalence of Cognitive Difficulty by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 16.5%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

Difficulty Walking

Definition

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

Prevalence

WV: 23.3% (95% CI: 21.9-24.6)
U.S.: 13.7% (95% CI: 13.5-14.0)
The West Virginia prevalence of difficulty walking was significantly higher than the U.S. prevalence. West Virginia ranked the highest among the 54 BRFSS participants.

Gender

Men: 21.2% (95% CI: 19.2-23.2)
Women: 25.3% (95% CI: 23.4-27.2)
The prevalence of difficulty walking was significantly higher among women than men.

Age

The prevalence of difficulty walking was significantly higher among adults aged 55 and older than among those aged 54 and younger.

Education

The prevalence of difficulty walking was significantly higher among adults with less than a high school education (45.9%) than all other educational attainment levels. The prevalence of difficulty walking was significantly lower among college graduates (12.0%) than all other educational attainment levels.

Household Income

The prevalence of difficulty walking was significantly higher among those with an annual household income less than $15,000 (48.3%) than all other annual household income levels.

Trend

There was no change in the prevalence of difficulty walking from 2014 to 2018.

County

The 2014-2018 West Virginia state prevalence of difficulty walking was 23.1%. There were 10 counties with a significantly lower prevalence compared to the state; Berkeley, Hardy, Jefferson, Marion, Monongalia, Ohio, Pocahontas, Putnam, Preston, and Tucker counties. There were 6 counties with a significantly higher prevalence compared to the state; Fayette, Logan, McDowell, Mingo, Nicholas, and Wyoming counties.

Table 2.2 Prevalence of Difficulty Walking by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	146,220	**21.2**	19.2-23.2	182,741	**25.3**	23.4-27.2	328,962	**23.3**	21.9-24.6
Age									
18-24	3,153	**3.9**	0.0-8.3	3,073	**4.0**	0.0-8.0	6,226	**3.9**	1.0-6.9
25-34	4,998	**4.7**	1.7-7.7	5,660	**5.5**	2.0-9.0	10,659	**5.1**	2.8-7.4
35-44	11,005	**10.3**	5.7-14.9	12,897	**12.3**	8.2-16.5	23,902	**11.3**	8.2-14.4
45-54	25,506	**23.3**	17.8-28.7	35,055	**31.9**	26.4-37.3	60,560	**27.6**	23.7-31.5
55-64	41,510	**33.4**	28.7-38.1	49,937	**39.0**	34.3-43.6	91,448	**36.2**	32.9-39.5
65+	59,842	**37.3**	33.2-41.5	75,254	**38.9**	35.5-42.3	135,096	**38.2**	35.5-40.8
Education									
Less than H.S.	39,527	**43.7**	35.3-52.1	49,899	**47.8**	40.4-55.1	89,427	**45.9**	40.3-51.4
H.S. or G.E.D.	59,625	**20.5**	17.5-23.5	73,339	**26.9**	23.8-30.1	132,964	**23.6**	21.4-25.8
Some Post-H.S.	32,152	**17.6**	14.3-21.0	42,136	**20.4**	17.3-23.5	74,288	**19.1**	16.8-21.4
College Graduate	14,489	**11.5**	9.1-13.9	17,277	**12.5**	10.1-14.9	31,765	**12.0**	10.3-13.8
Income									
Less than $15,000	27,508	**52.1**	42.9-61.3	44,459	**46.2**	39.8-52.6	71,966	**48.3**	43.0-53.5
$15,000 - 24,999	39,468	**32.7**	26.8-38.5	46,196	**32.8**	28.0-37.6	85,664	**32.7**	29.0-36.5
$25,000 - 34,999	21,183	**22.4**	17.1-27.8	24,225	**23.5**	18.5-28.6	45,408	**23.0**	19.3-26.7
$35,000 - 49,999	19,155	**18.9**	14.3-23.5	15,730	**19.3**	14.0-24.5	34,886	**19.1**	15.6-22.5
$50,000 - 74,999	9,424	**10.3**	6.5-14.0	11,559	**15.2**	10.9-19.4	20,983	**12.5**	9.6-15.3
$75,000+	10,900	**7.6**	4.9-10.3	10,261	**8.6**	5.7-11.5	21,161	**8.1**	6.1-10.0

Figure 2.3 Prevalence of Difficulty Walking by Year: WVBRFSS, 2014-2018

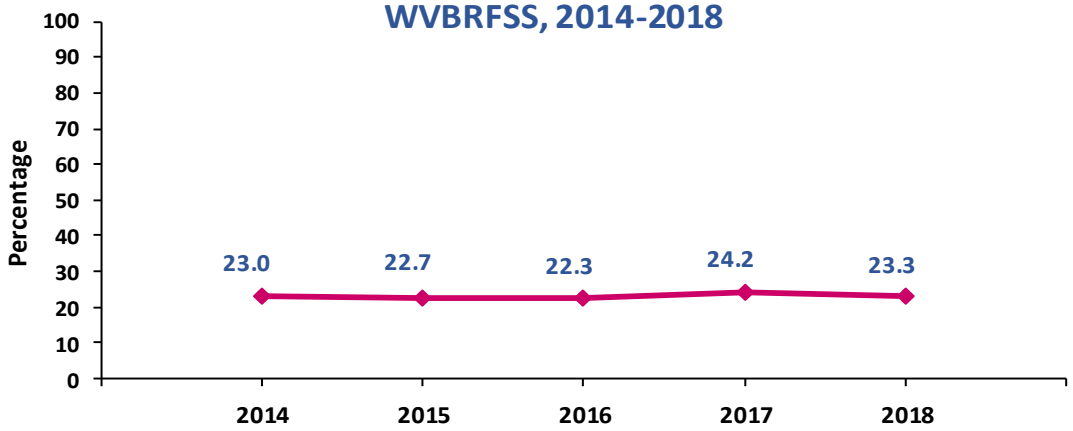
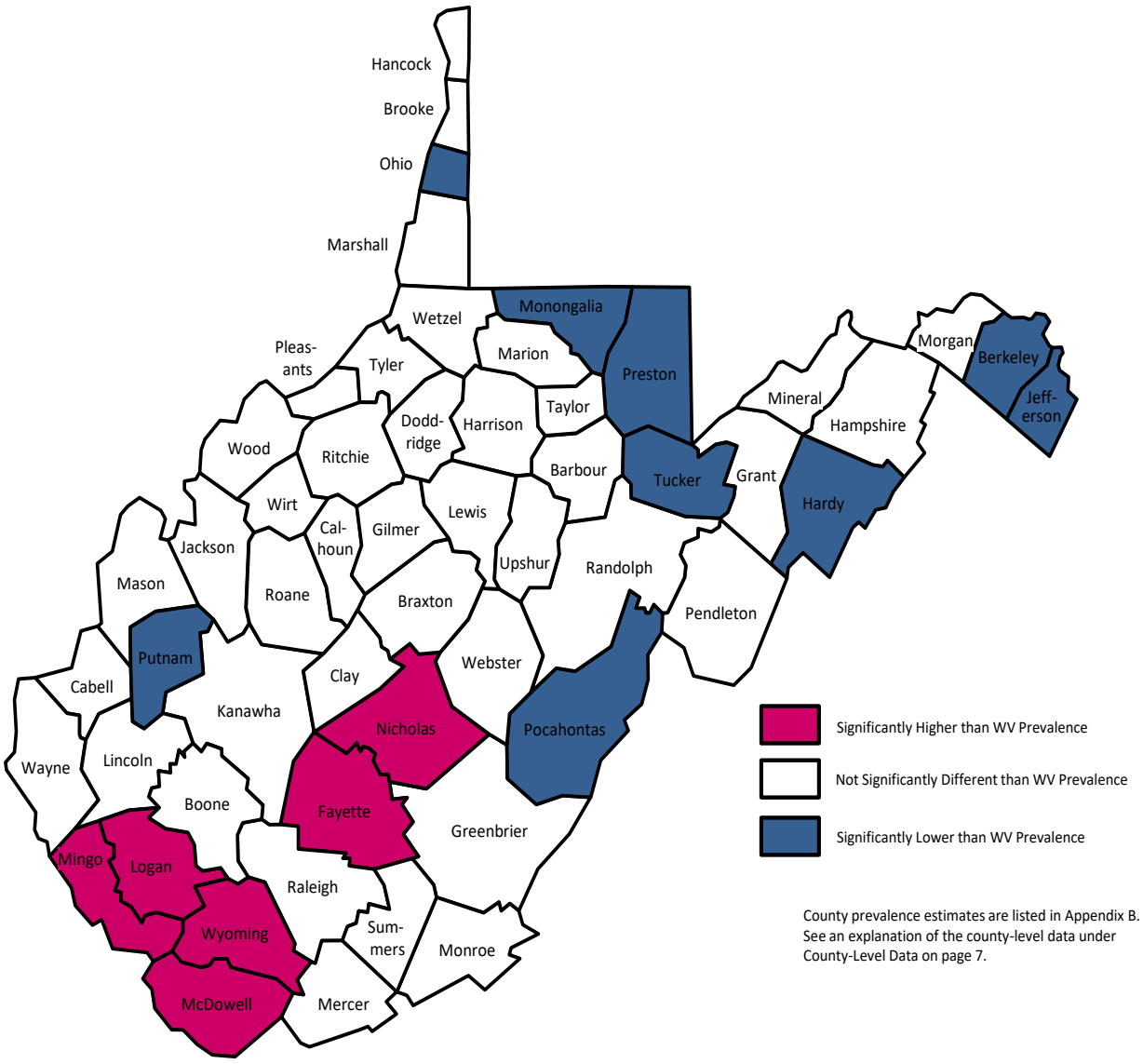


Figure 2.4 Prevalence of Difficulty Walking by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 23.1%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

Difficulty Dressing or Bathing

Definition

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

Prevalence

WV: 6.5% (95% CI: 5.7-7.3)
U.S.: 3.8% (95% CI: 3.7-3.9)
The West Virginia prevalence of difficulty dressing or bathing was significantly higher than the U.S. prevalence. West Virginia ranked the highest among the 54 BRFSS participants.

Gender

Men: 6.6% (95% CI: 5.4-7.8)
Women: 6.4% (95% CI: 5.4-7.4)
There was no gender difference in the prevalence of difficulty dressing or bathing.

Age

The prevalence of difficulty dressing or bathing was significantly higher among those aged 45 and older than among those aged 44 and younger.

Education

The prevalence of difficulty dressing or bathing was significantly higher among adults with less than a high school education (11.8%) than all other educational attainment levels. The prevalence of difficulty dressing or bathing was significantly lower among adults with a college degree (2.9%) than all other educational attainment levels.

Household Income

The prevalence of difficulty dressing or bathing was significantly higher among adults with an annual household income of less than $15,000 (16.9%) than all other income levels.

Trend

There was no change in the prevalence of difficulty dressing or bathing from 2014 to 2018.

County

The 2014-2018 West Virginia state prevalence of difficulty dressing or bathing was 6.0%. There were 11 counties with a significantly lower prevalence compared to the state; Brooke, Hampshire, Harrison, Jefferson, Marion, Monongalia, Pleasants, Preston, Putnam, Taylor, and Wood counties. There were 5 counties with a significantly higher prevalence compared to the state; Boone, Clay, Logan, Mingo, and Wyoming counties.

Table 2.3 Prevalence of Difficulty Dressing or Bathing by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	45,387	**6.6**	5.4-7.8	46,286	**6.4**	5.4-7.4	91,673	**6.5**	5.7-7.3
Age									
18-24	725.5	**0.9**	0.0-2.7	948.5	**1.2**	0.0-3.6	1,674	**1.1**	0.0-2.5
25-34	1,801	**1.7**	0.0-3.7	2,804	**2.7**	0.4-5.1	4,605	**2.2**	0.7-3.8
35-44	4,362	**4.1**	1.4-6.7	4,008	**3.8**	1.5-6.2	8,369	**4.0**	2.2-5.7
45-54	12,655	**11.5**	7.4-15.7	10,215	**9.3**	6.1-12.6	22,870	**10.4**	7.8-13.1
55-64	12,126	**9.8**	6.8-12.8	11,298	**8.8**	6.2-11.5	23,424	**9.3**	7.3-11.3
65+	13,717	**8.5**	6.2-10.9	17,014	**8.8**	6.8-10.8	30,731	**8.7**	7.2-10.2
Education									
Less than H.S.	9,678	**10.7**	5.8-15.5	13,280	**12.7**	8.4-17.0	22,958	**11.8**	8.5-15.0
H.S. or G.E.D.	20,738	**7.1**	5.3-9.0	18,950	**7.0**	5.3-8.6	39,688	**7.1**	5.8-8.3
Some Post-H.S.	11,124	**6.1**	4.1-8.1	9,818	**4.7**	3.2-6.3	20,942	**5.4**	4.1-6.7
College Graduate	3,419	**2.7**	1.4-4.0	4,238	**3.1**	1.7-4.4	7,658	**2.9**	2.0-3.9
Income									
Less than $15,000	10,927	**20.7**	14.1-27.3	14,283	**14.8**	10.9-18.8	25,210	**16.9**	13.4-20.4
$15,000 - 24,999	14,072	**11.6**	7.5-15.6	11,841	**8.4**	5.6-11.2	25,913	**9.9**	7.4-12.3
$25,000 - 34,999	4,599	**4.9**	2.4-7.3	6,669	**6.5**	3.8-9.2	11,268	**5.7**	3.9-7.6
$35,000 - 49,999	4,863	**4.8**	2.4-7.3	2,564	**3.1**	1.2-5.1	7,428	**4.1**	2.5-5.7
$50,000 - 74,999	2,004	**2.2**	0.4-4.0	310.3	**0.4**	0.0-1.0	2,314	**1.4**	0.3-2.4
$75,000+	3,666	**2.6**	1.0-4.1	1,208	**1.0**	0.1-1.9	4,874	**1.9**	0.9-2.8

Figure 2.5 Prevalance of Difficulty Dressing or Bathing by Year: WVBRFSS, 2014-2018

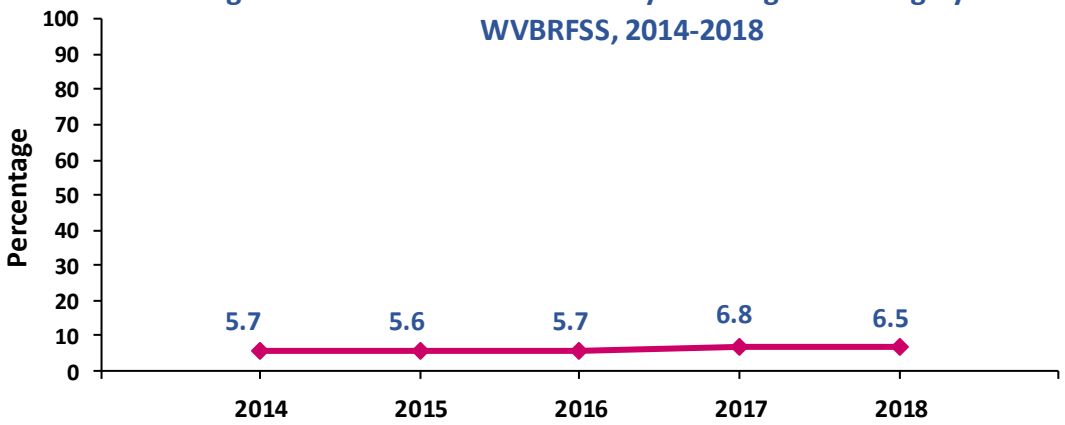
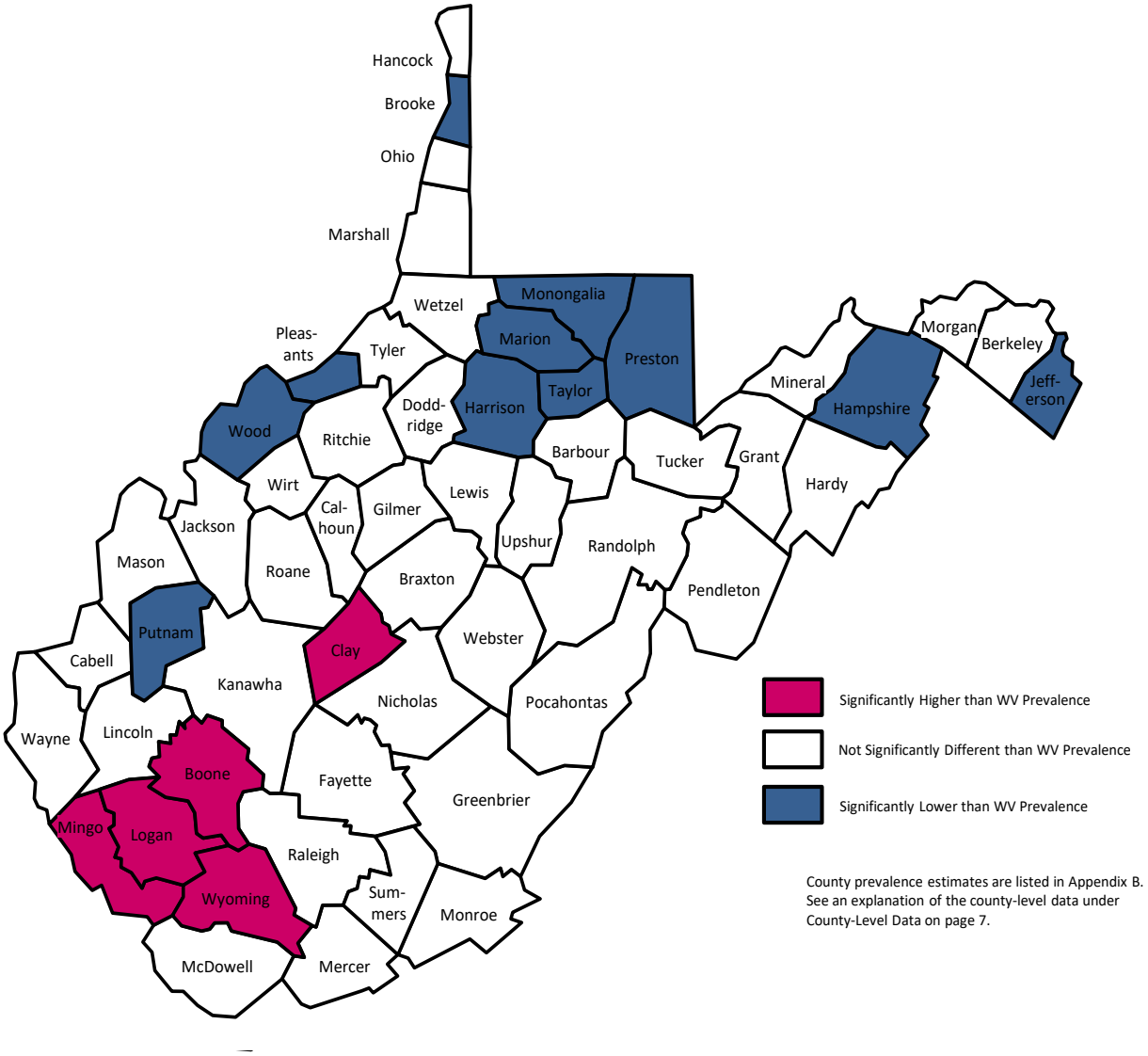


Figure 2.6 Prevalence of Difficulty Dressing or Bathing by County: WVBRFSS, 2014 -2018

WV Prevalence (2014-2018) - 6.0%



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: 12.4% (95% CI: 11.3-13.5)
U.S.: 7.1% (95% CI: 6.9-7.2)
The West Virginia prevalence of difficulty doing errands alone was significantly higher than the U.S. prevalence. West Virginia ranked the highest among the 54 BRFSS participants.

Gender

Men: 10.4% (95% CI: 8.8-11.9)
Women: 14.3% (95% CI: 12.7-15.9)
The prevalence of difficulty doing errands alone was significantly higher among women than among men.

Age

The prevalence of difficulty doing errands alone was significantly higher among adults aged 45 years and older than among those aged 34 and younger.

Education

The prevalence of difficulty doing errands alone was significantly higher among adults with less than a high school education (26.3%) than all other educational attainment groups. The prevalence was significantly lower among college graduates (5.4%) than among all other education groups.

Household Income

The prevalence of difficulty doing errands alone was significantly higher among adults with an annual household income less than $15,000 (30.9%) than all other income levels.

Trend

There was no change in the prevalence of difficulty doing errands alone from 2014 to 2018.

County

The 2014-2018 West Virginia state prevalence of difficulty doing errands alone was 12.0%. There were 5 counties with a significantly lower prevalence compared to the state; Berkeley, Hardy, Jefferson, Monongalia, and Putnam counties. There were 4 counties with a significantly higher prevalence compared to the state; Fayette, McDowell, Mingo, and Wyoming counties.

Table 2.4 Prevalence of Difficulty Doing Errands Alone by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	71,359	**10.4**	8.8-11.9	102,919	**14.3**	12.7-15.9	174,278	**12.4**	11.3-13.5
Age									
18-24	1,895	**2.4**	0.0-5.1	6,712	**8.7**	2.8-14.6	8,607	**5.5**	2.2-8.7
25-34	3,274	**3.1**	0.5-5.6	7,613	**7.5**	3.5-11.4	10,887	**5.2**	2.9-7.6
35-44	12,202	**11.5**	6.6-16.3	9,039	**8.6**	5.2-12.0	21,242	**10.1**	7.1-13.0
45-54	13,835	**12.7**	8.5-16.9	18,624	**17.1**	12.9-21.3	32,459	**14.9**	12.0-17.9
55-64	18,080	**14.6**	10.8-18.3	22,434	**17.5**	13.7-21.3	40,514	**16.1**	13.4-18.8
65+	22,073	**13.8**	10.6-16.9	37,823	**19.6**	16.7-22.4	59,896	**16.9**	14.8-19.1
Education									
Less than H.S.	21,178	**23.4**	16.6-30.2	30,029	**28.8**	22.5-35.2	51,207	**26.3**	21.7-31.0
H.S. or G.E.D.	28,591	**9.9**	7.6-12.1	42,808	**15.8**	13.2-18.4	71,399	**12.7**	11.0-14.5
Some Post-H.S.	15,278	**8.4**	5.7-11.0	21,756	**10.5**	8.1-13.0	37,034	**9.5**	7.7-11.3
College Graduate	5,885	**4.7**	2.9-6.5	8,234	**6.0**	4.2-7.8	14,117	**5.4**	4.1-6.6
Income									
Less than $15,000	18,020	**34.6**	25.8-43.4	27,630	**28.9**	23.3-34.5	45,650	**30.9**	26.1-35.7
$15,000 - 24,999	24,783	**20.4**	15.5-25.3	29,195	**20.8**	16.6-25.0	53,977	**20.6**	17.4-23.8
$25,000 - 34,999	6,698	**7.1**	3.7-10.5	10,669	**10.4**	6.4-14.4	17,367	**8.8**	6.2-11.5
$35,000 - 49,999	5,444	**5.4**	2.4-8.4	8,224	**10.1**	5.5-14.6	13,668	**7.5**	4.8-10.1
$50,000 - 74,999	4,717	**5.2**	2.1-8.2	2,453	**3.2**	0.9-5.5	7,170	**4.3**	2.3-6.2
$75,000+	4,482	**3.1**	1.5-4.8	2,951	**2.5**	1.1-3.9	7,433	**2.8**	1.7-3.9

Figure 2.7 Prevalance of DIfficulty Doing Errands Alone by Year: WVBRFSS, 2014-2018

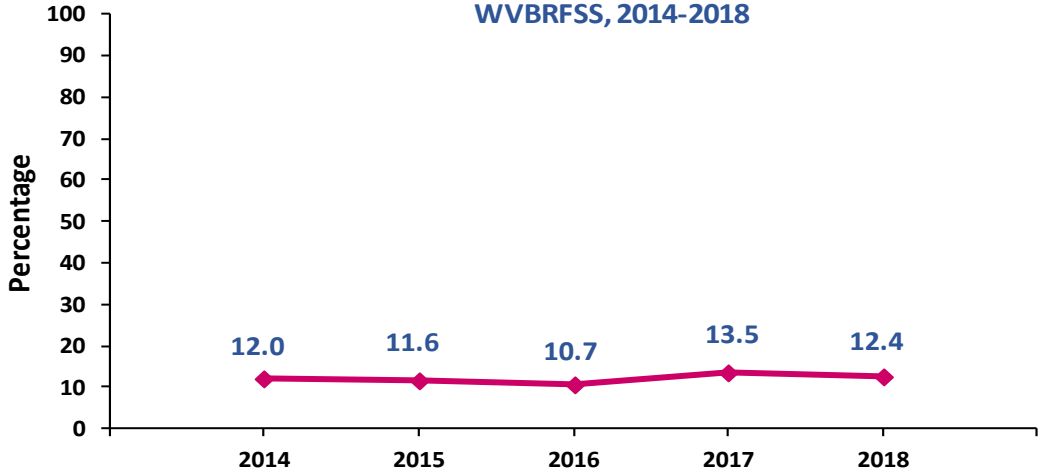
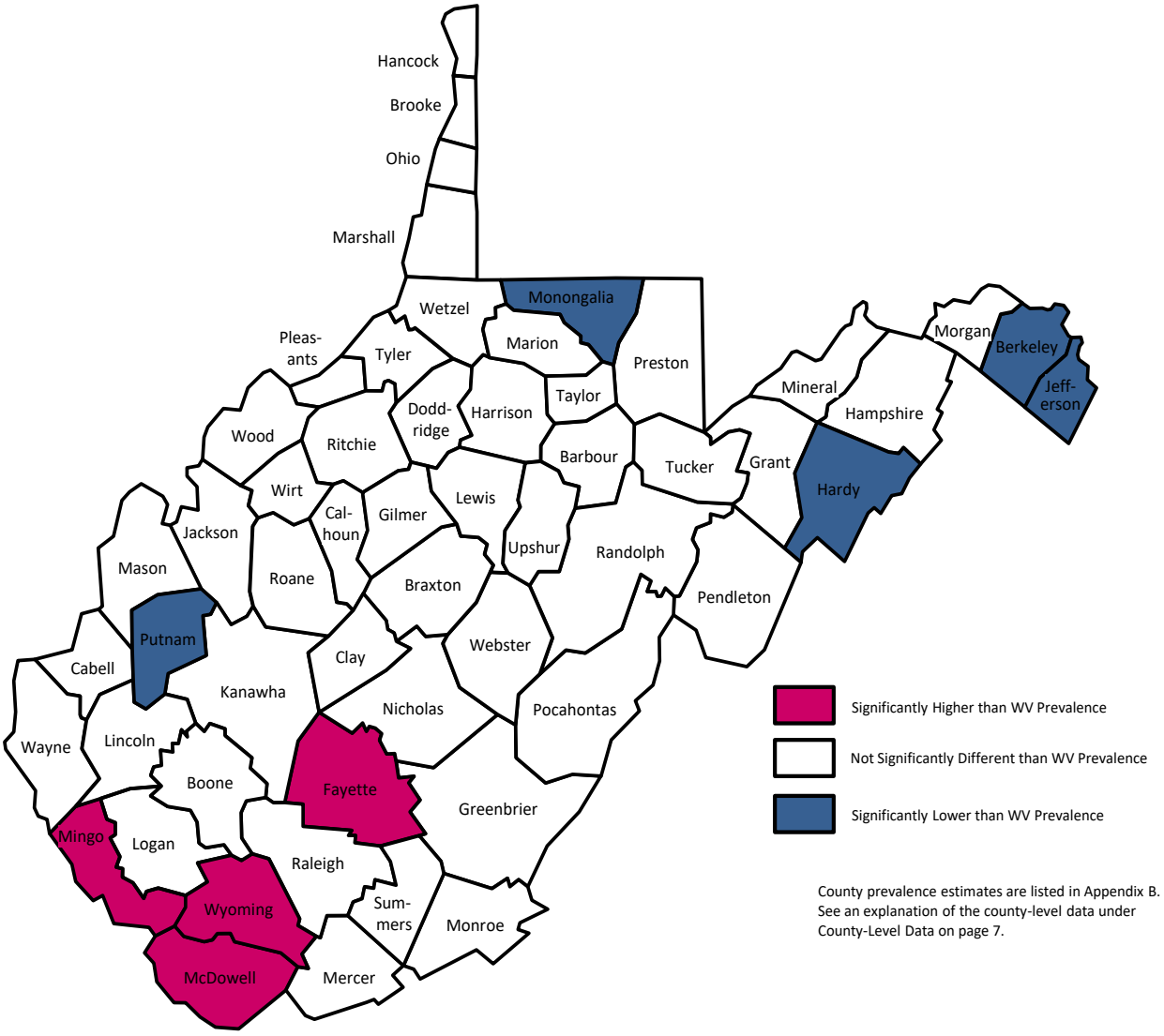


Figure 2.8 Prevalence of Difficulty Doing Errands Alone by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 12.0%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

Vision Impairment

Definition

Responding "Yes" to the question, "Are you blind or do you have serious difficulty seeing, even when wearing glasses?"

Prevalence

WV: 9.0% (95% CI: 8.1-10.0)
U.S.: 5.3% (95% CI: 5.1-5.4)
The West Virginia prevalence of vision impairment was significantly higher than the U.S. prevalence. West Virginia ranked the 2nd highest among 54 BRFSS participants.

Gender

Men: 10.4% (95% CI: 9.0-11.9)
Women: 7.6% (95% CI: 6.3-8.9)
The prevalence of vision impairment was significantly higher among men than women.

Age

The prevalence of vision impairment was significantly higher among adults aged 45 and older than among adults aged 44 and younger.

Education

The prevalence of vision impairment was significantly higher among adults with less than a high school education (21.4%) than among all other educational attainment levels. The prevalence was significantly lower among adults with a college degree (4.8%) than among all other education attainment levels.

Household Income

The prevalence of vision impairment was significantly higher among adults with an annual household income of less than $15,000 (21.6%) than all other annual household income levels.

Trend

There was no change in the prevalence of vision impairment from 2014 to 2018.

County

The 2014-2018 West Virginia state prevalence of vision impairment was 8.6%. There were 4 counties with a significantly lower prevalence compared to the state; Jefferson, Monongalia, Putnam, and Tyler counties. There were 3 counties with a significantly higher prevalence compared to the state; McDowell, Randolph, and Wyoming counties.

Table 2.5 Prevalence of Vision Impairment by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	52,513	**7.6**	6.3-8.9	75,634	**10.4**	9.0-11.9	128,148	**9.0**	8.1-10.0
Age									
18-24	1,443	**1.8***	0.0-4.3	3,028	**3.9***	0.4-7.4	4,472	**2.8**	0.7-5.0
25-34	4,402	**4.1***	1.2-7.1	6,815	**6.6***	2.7-10.6	110,217	**5.4**	2.9-7.8
35-44	5,612	**5.3***	2.0-8.5	5,772	**5.5**	2.4-8.7	11,384	**5.4**	3.1-7.6
45-54	8,477	**7.7**	4.3-11.1	17,497	**15.9**	11.7-20.2	25,973	**11.8**	9.1-14.6
55-64	13,124	**10.5**	7.2-13.8	17,327	**13.5**	9.8-17.3	30,451	**12.0**	9.5-14.5
65+	19,456	**12.1**	9.3-14.9	24,761	**12.7**	10.3-15.2	44,217	**12.5**	10.6-14.3
Education									
Less than H.S.	16,053	**17.7**	11.7-23.7	25,654	**24.6**	18.5-30.6	41,708	**21.4**	17.1-25.7
H.S. or G.E.D.	19,994	**6.8**	5.0-8.7	25,243	**9.2**	7.1-11.4	45,238	**8.0**	6.6-9.4
Some Post-H.S.	9,914	**5.4**	3.4-7.5	18,395	**8.9**	6.5-11.2	28,310	**7.3**	5.7-8.8
College Graduate	6,552	**5.2**	3.3-7.1	6,251	**4.5**	3.0-6.1	12,802	**4.8**	3.6-6.0
Income									
Less than $15,000	11,993	**22.7**	15.3-30.1	20,128	**20.9**	15.7-26.2	32,121	**21.6**	17.3-25.8
$15,000 - 24,999	12,682	**10.4**	6.7-14.2	18,422	**13.1**	9.5-16.7	31,104	**11.9**	9.2-14.5
$25,000 - 34,999	7,151	**7.6**	4.4-10.7	9,872	**9.6**	5.9-13.3	17,023	**8.6**	6.2-11.1
$35,000 - 49,999	8,362	**8.2**	4.7-11.8	6,474	**7.9**	3.7-12.1	14,836	**8.1**	5.4-10.8
$50,000 - 74,999	3,014	**3.3***	0.9-5.6	5,180	**6.8**	3.2-10.3	8,194	**4.9**	2.8-6.9
$75,000+	3,105	**2.2***	0.9-3.5	3,744	**3.1***	1.1-5.2	6,849	**2.6**	1.4-3.8

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

Figure 2.9 Prevalence of Vison Impairments by Year: WVBRFSS, 2014-2018

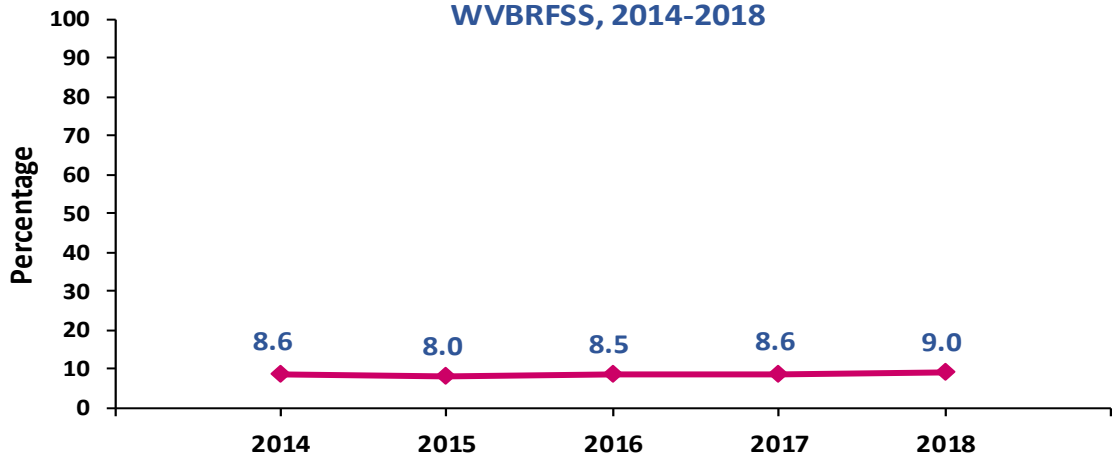
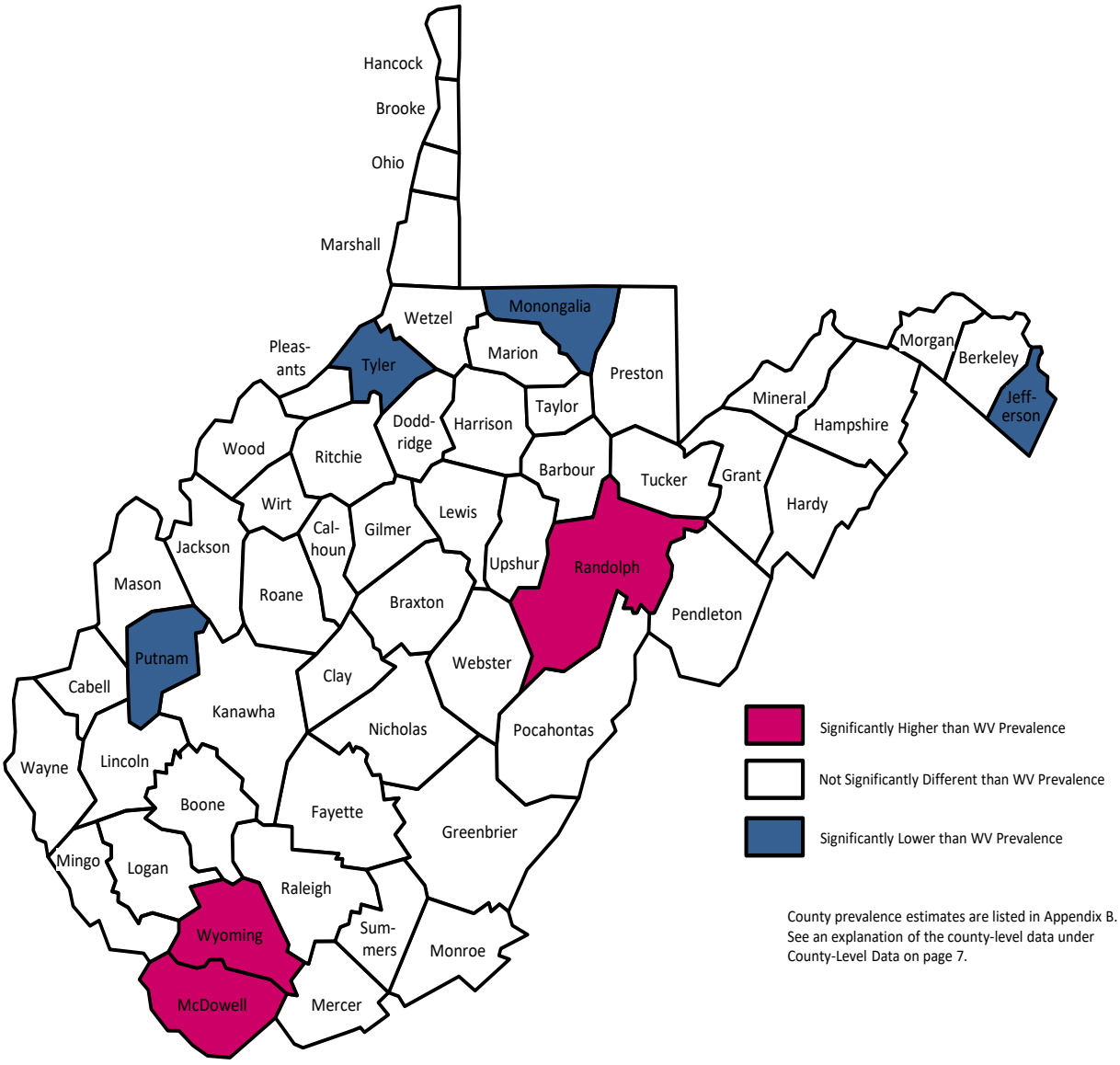


Figure 2.10 Prevalence of Vision Impairment by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 8.5%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

Hearing Impairment

Definition

Responding "Yes" to the question, "Are you deaf or do you have serious difficulty hearing?"

Prevalence

WV: 14.8% (95% CI: 13.6-16.0)
U.S.: 6.6% (95% CI: 6.5-6.8)
The West Virginia prevalence of hearing impairment was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 54 BRFSS participants.

Gender

Men: 18.1% (95% CI: 16.2-20.0)
Women: 11.6% (95% CI: 10.2-13.2)
The prevalence of hearing impairment was significantly higher among males than among females.

Age

The prevalence of hearing impairment was significantly higher among adults aged 65 and older (29.9%) than among all other age groups.

Education

The prevalence of hearing impairment was significantly higher among adults with less than a high school education (24.8%) than adults who graduated from college (7.8%).

Household Income

The prevalence of hearing impairment was significantly higher among adults with an annual household income of less than $15,000 (19.1%) than adults with an annual household income of $75,000 or more per year (8.6%).

Trend

There was an increase in the prevalence of hearing impairment from 2014 to 2018.

County

The 2014-2018 West Virginia state prevalence of hearing impairment was 14.0%. There were 10 counties with a significantly lower prevalence compared to the state; Berkeley, Cabell, Doddridge, Jefferson, Kanawha, Mercer, Monongalia, Ohio, Pendleton, and Ritchie counties. There were 4 counties with a significantly higher prevalence compared to the state; Clay, McDowell, Nicholas, and Summers counties.

Table 2.6 Prevalence of Hearing Impairment by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	125,446	**18.1**	16.2-20.0	84,249	**11.6**	10.2-13.1	209,695	**14.8**	13.6-16.0
Age									
18-24	1,433	**1.8***	0.0-4.2	4,636	**6.0***	0.0-12.2	6,069	**3.8***	0.5-7.2
25-34	7,095	**6.6***	2.5-10.8	2,094	**2.0***	0.1-3.9	9,190	**4.4**	2.1-6.7
35-44	11,844	**11.1**	6.5-15.7	4,245	**4.1***	1.3-6.9	16,089	**7.6**	4.9-10.3
45-54	16,570	**15.1**	10.2-19.9	9,433	**8.6**	5.5-11.6	26,002	**11.8**	8.9-14.7
55-64	28,708	**23.0**	18.8-27.3	16,683	**13.0**	9.6-16.5	45,391	**18.0**	15.2-20.7
65+	59,679	**37.1**	33.0-41.2	46,472	**24.0**	21.0-27.0	106,151	**29.9**	27.4-32.5
Education									
Less than H.S.	26,074	**28.6**	21.5-35.7	22,373	**21.4**	16.0-26.9	48,447	**24.8**	20.4-29.2
H.S. or G.E.D.	54,786	**18.7**	15.7-21.7	37,448	**13.7**	11.0-16.4	92,235	**16.3**	14.3-18.3
Some Post-H.S.	31,884	**17.4**	13.9-21.0	16,070	**7.8**	6.0-9.6	47,954	**12.3**	10.4-14.3
College Graduate	12,275	**9.8**	7.5-12.1	8,267	**6.0**	4.2-7.8	20,542	**7.8**	6.4-9.2
Income									
Less than $15,000	13,202	**24.8**	17.7-31.9	15,339	**16.0**	11.6-20.4	28,542	**19.1**	15.3-22.9
$15,000 - 24,999	29,454	**24.2**	18.9-28.6	18,993	**13.5**	10.2-16.9	48,447	**18.5**	15.4-21.6
$25,000 - 34,999	17,828	**18.9**	13.7-24.0	10,612	**10.3**	7.0-13.7	28,440	**14.4**	11.4-17.5
$35,000 - 49,999	19,265	**19.0**	14.2-23.9	81,619	**12.1**	7.9-16.3	29,134	**15.9**	12.6-19.2
$50,000 - 74,999	12,981	**14.0**	9.4-18.6	4,729	**6.2**	3.3-9.1	17,710	**10.5**	7.7-13.4
$75,000+	17,182	**11.9**	8.4-15.4	5,576	**4.7**	2.6-6.7	22,758	**8.6**	6.5-10.8

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

Figure 2.11 Prevalence of Hearing Impairment by Year: WVBRFSS, 2014-2018

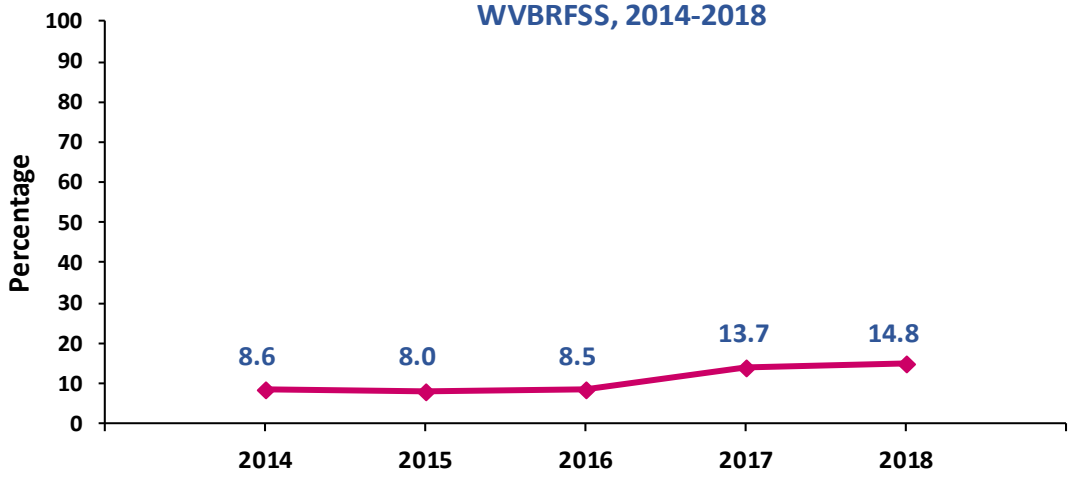
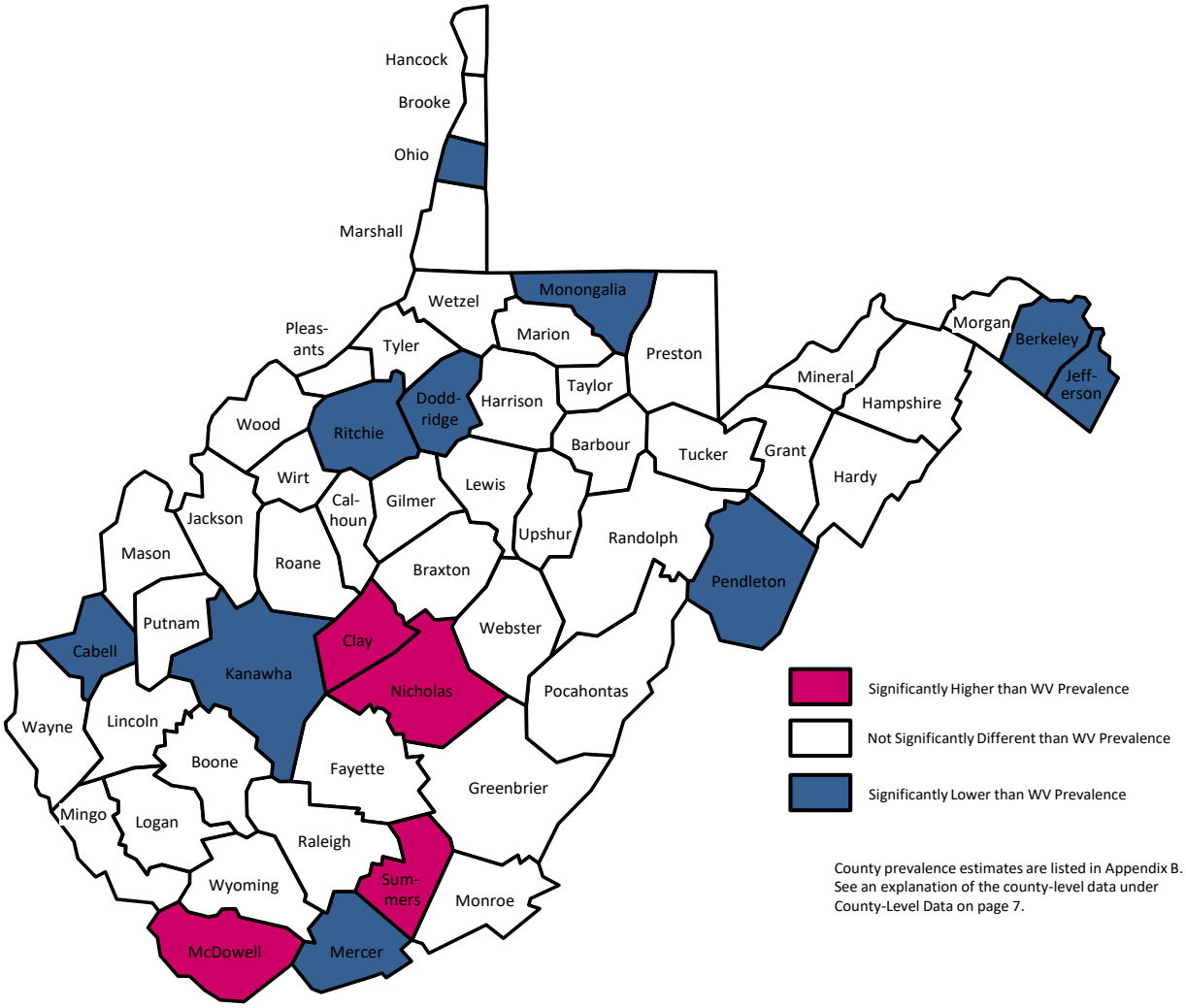


Figure 2.12 Prevalence of Hearing Impairment by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 14.0%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

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: 10.1% (95% CI: 8.7-11.5)
U.S.: 14.9% (95% CI: 14.6-15.2)
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 41st highest among 54 BRFSS participants.

Gender

Men: 12.8% (95% CI: 10.5-15.0)
Women: 7.4% (95% CI: 5.8-9.0)
The prevalence of no health care coverage among adults aged 18-64 was significantly higher among men than women.

Age

The prevalence of no health care coverage among adults 18-64 was significantly higher among adults aged 18-25 (16.0%) than adults aged 55-64 (8.1%).

Education

The prevalence of no health care coverage among adults 18-64 was significantly higher among adults with less than a high school education (13.6%) than among college graduates (4.7%).

Household Income

The prevalence of no health care coverage among those aged 18-64 was significantly higher among adults with an annual household income of $15,000-$24,999 than among adults with an annual household income of $75,000 or more (4.7%).

Trend

The prevalence of no health care coverage among adults 18-64 declined between 2013 and 2015. After 2015, there was no change in prevalence of no health care coverage among adults 18-64. It is also important to note, in 2013, the Affordable Health Care Act (ACA) was implemented. Because of the change in BRFSS methodology, results from 2011 and later are not directly comparable to previous years.

County

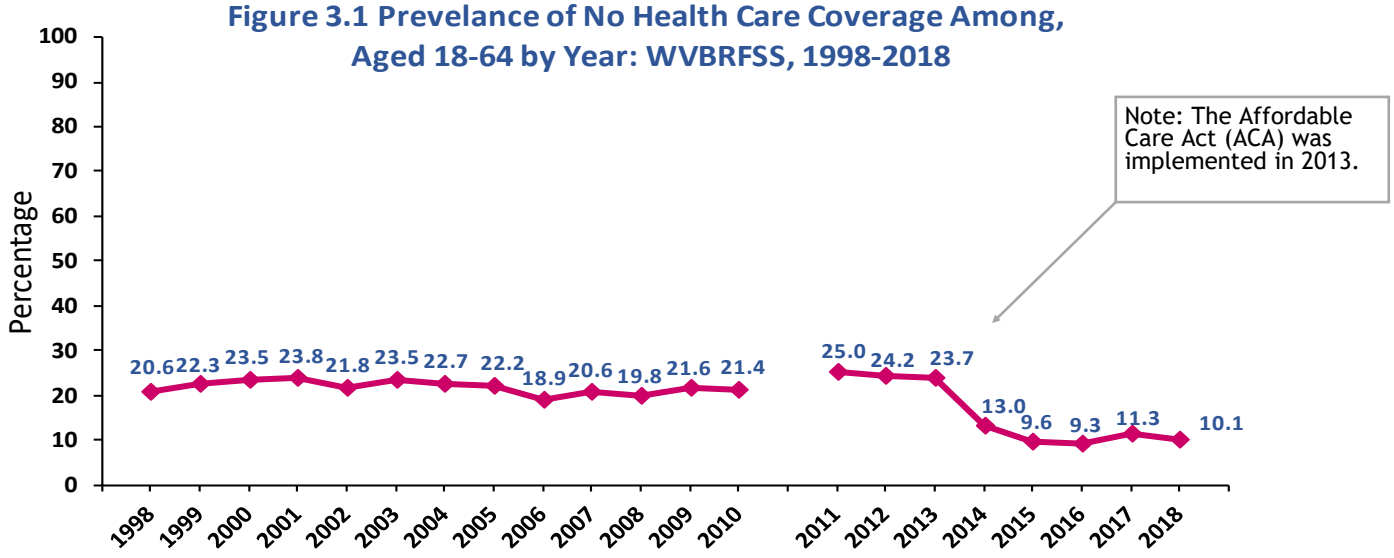
The 2014-2018 West Virginia state prevalence of no health care coverage among adults 18-64 was 10.8%. There were 3 counties with a significantly lower prevalence compared to the state; Hardy, Mason, and Putnam counties.

Table 3.1 Prevalence of No Health Care Coverage Among Adults Aged 18-64 by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	68,282	**12.8**	10.5-15.0	39,146	**7.4**	5.8-9.0	107,427	**10.1**	8.7-11.5
Age									
18-24	18,117	**21.6**	12.7-30.5	2,559	**10.0***	3.9-16.1	26,020	**16.0**	10.5-21.5
25-34	12,994	**12.2**	7.5-16.9	7,904	**8.1**	4.1-12.1	21,338	**10.2**	7.1-13.3
35-44	12,072	**11.3**	6.6-15.9	8,548	**8.0**	4.7-11.3	20,620	**9.6**	6.8-12.5
45-54	13,402	**12.1**	8.0-16.2	5,412	**4.9**	2.7-7.2	18,814	**8.5**	6.2-10.9
55-64	11,696	**9.3**	6.1-12.5	8,939	**6.9**	4.4-9.5	20,635	**8.1**	6.1-10.1
Education									
Less than H.S.	14,822	**21.8**	13.1-30.5	4,042	**5.7**	1.3-10.1	18,864	**13.6**	8.7-18.5
H.S. or G.E.D.	34,624	**15.5**	11.6-19.4	18,049	**9.7**	6.7-12.7	52,673	**12.9**	10.3-15.4
Some Post-H.S.	13,456	**9.4**	6.0-12.8	12,393	**8.0**	4.9-11.2	25,849	**8.7**	6.4-11.0
College Graduate	5,380	**5.4**	2.9-7.9	4,661	**4.0**	2.1-6.0	10,041	**4.7**	3.1-6.2
Income									
Less than $15,000	3,273	**8.1**	2.4-13.8	2,633	**3.5**	0.6-6.5	5,906	**5.1**	2.4-7.9
$15,000 - 24,999	20,481	**22.4**	15.7-29.2	10,274	**11.0***	6.7-15.4	30,755	**16.6**	12.6-20.7
$25,000 - 34,999	10,805	**16.0**	9.0-23.0	6,797	**9.7**	4.6-14.8	17,602	**12.8**	8.4-17.1
$35,000 - 49,999	8,173	**11.7**	6.3-17.0	5,611	**9.6**	4.0-15.3	13,784	**10.7**	6.8-14.6
$50,000 - 74,999	9,819	**13.1**	5.8-20.4	4,143	**6.7**	2.4-11.0	13,962	**10.2**	5.7-14.7
$75,000+	6,012	**4.8**	2.0-7.5	4,825	**4.6***	1.7-7.4	10,837	**4.7**	2.7-6.7

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

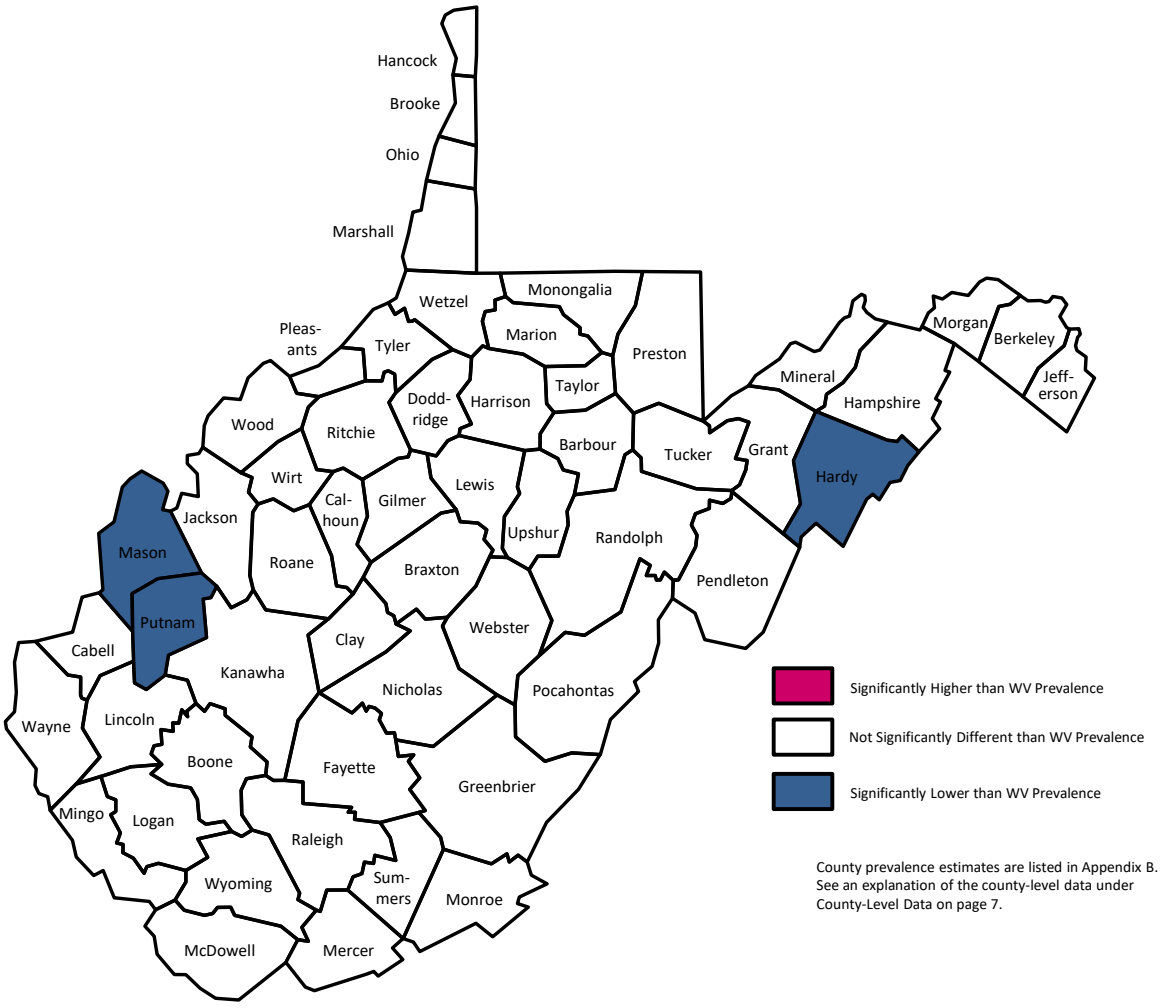
Figure 3.1 Prevelance of No Health Care Coverage Among, Aged 18-64 by Year: WVBRFSS, 1998-2018



*Due to changes in sample composition and weighting methodology, 2011-2018 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, 2014-2018

WV Prevalence (2014-2018) - 10.8%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

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: **42.7%** (95% CI: 40.8-44.5)
Medicare: **24.3%** (95% CI: 22.9-25.6)
Medicaid: **17.6** (95% CI: 16.0-19.1)
Other: **6.3%** (95% CI: 5.5-7.2)
None: **9.2%** (95% CI: 8.0-10.3)
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

Private:
There was no gender difference in the prevalence of private insurance.
Medicare:
The prevalence of Medicare insurance was significantly higher among women than men.
Medicaid:
The prevalence of Medicaid insurance was significantly higher among women than men.
Other:
The prevalence of having other insurance was significantly higher among men than women.
None:
The prevalence of no insurance was significantly higher among men than women.

Age

Private:
The prevalence of private insurance was significantly higher among adults aged 54 years or younger than adults aged 55 years and older.
Medicare:
The prevalence of Medicare insurance was significantly higher among adults aged 65 or older (70.5%) than all other age groups.

Age (cont.)

Medicaid:
The prevalence of Medicaid insurance was significantly higher among adults aged 34 years or younger than adults aged 55 or older.

Other:
There was no age difference in the prevalence of adults with other insurance.

None:
The prevalence of no insurance was significantly higher among adults aged 18-24 (18.7%) than adults aged 45 and older.

Education

Private:
The prevalence of private insurance was significantly higher among college graduates (64.9%) than all other educational attainment levels.

Medicare:
The prevalence of Medicare insurance was significantly higher among adults with less than an high school education (33.2%) than college graduates (16.7%).

Medicaid:
The prevalence of Medicaid insurance was significantly higher among adults with less than a high school education (33.5%) than all other educational attainment levels.

Other:
There was no education difference in the prevalence of having other insurance.

None:
The prevalence of no insurance was significantly higher among adults with less than a high school education (11.0%) than college graduates (4.7%).

Household Income

Private:
The prevalence of private insurance was significantly higher among adults with an annual household income of $75,000 or more (79.3%) than all other annual household income levels.

Medicare:
The prevalence of Medicare insurance was significantly higher among adults with an annual household income of less than $15,000 (33.9%) than adults with an annual household income of $75,000 or more (8.9%).

Medicaid:
The prevalence of Medicaid insurance was significantly higher among adults with an annual household income of less than $15,000 (48.9%) than adults with an annual household income of $50,000 or higher.

Other:
There was no annual household income difference in the prevalence of having other insurance.

None:
The prevalence of no insurance was significantly higher among adults with an annual household income of $15,000-$24,999 (14.4%) than adults with an annual household income of $75,000 or higher (4.9%).

Trend

Private:

There was no change in the prevalence of private insurance from 2014 to 2018.

Medicare:

There was no change in the prevalence of Medicare insurance from 2014 to 2018.

Medicaid:

There was no change in the prevalence of Medicaid insurance from 2014 to 2018.

Other:

There was no change in the prevalence of having other insurance from 2014 to 2018.

None:

There was no change in the prevalence of no insurance from 2014 to 2018.

County

Private:

The 2014-2018 West Virginia state prevalence of private insurance coverage was 45.0%. There were 6 counties with a significantly lower prevalence compared to the state; Fayette, McDowell, Mercer, Roane, Upshur, and Wyoming counties. There were 10 counties with a significantly higher prevalence compared to the state; Berkeley, Doddridge, Hancock, Jefferson, Kanawha, Marion, Marshall, Monongalia, Pleasants, Putnam, and Taylor counties.

Medicare:

The 2014-2018 West Virginia state prevalence of Medicare insurance coverage was 24.0%. There were 6 counties with a significantly lower prevalence compared to the state; Berkeley, Cabell, Harrison, Jefferson, Monongalia, and Preston counites. No counties were significantly higher than the state prevalence.

Medicaid:

The 2014-2018 West Virginia state prevalence of Medicaid insurance coverage was 16.3%. There were 7 counties with a significantly lower prevalence when compared to the state; Doddridge, Hancock, Jefferson, Monongalia, Pleasants, Pocahontas and Putnam counties. There were 7 counties with a significantly higher prevalence when compared to the state; Barbour, Fayette, Lincoln, Logan, McDowell, Summers, and Wyoming counties.

Other:

The 2014-2018 West Virginia state prevalence of other insurance coverage was 5.1%. There were 3 counties with a significantly lower prevalence when compared to the state; Gilmer, Hancock, and Wirt counties. Upshur County had a significantly higher prevalence than the state.

Table 3.2 Prevalence of Primary Health Care Coverage by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Private		Medicare		Medicaid		Other		None	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
TOTAL	**42.7**	40.8-44.5	**24.3**	22.9-25.6	**17.6**	16.0-19.1	**6.3**	5.5-7.2	**9.2**	8.0-10.3
Gender										
Male	**45.3**	42.5-48.1	**22.3**	20.3-24.3	**12.6**	10.7-14.5	**7.9**	6.5-9.3	**11.8**	9.9-13.8
Female	**40.1**	37.7-42.5	**26.2**	24.3-28.0	**22.3**	20.0-24.6	**4.8**	3.7-5.8	**6.6**	5.3-7.9
Age										
18-24	**45.2**	37.1-53.3	**3.7**	1.0-6.5	**24.8**	17.6-31.9	**7.6**	3.6-11.5	**18.7**	12.4-25.1
25-34	**51.0**	45.3-56.8	**3.8**	1.6-6.0	**25.3**	20.2-30.4	**6.8**	3.8-9.7	**13.1**	9.3-16.9
35-44	**59.9**	55.0-64.8	**4.2**	2.0-6.4	**21.0**	16.8-25.1	**3.9**	2.1-5.6	**11.1**	7.9-14.3
45-54	**52.2**	47.9-56.6	**9.2**	6.6-11.9	**22.0**	18.3-25.8	**7.4**	5.0-9.7	**9.1**	6.6-11.6
55-64	**51.5**	47.9-55.1	**17.6**	14.9-20.4	**16.2**	13.6-18.9	**5.4**	3.9-6.8	**9.3**	7.1-11.5
65+	**14.4**	12.4-16.3	**70.5**	67.9-73.0	**6.6**	5.2-8.0	**7.1**	5.6-8.5	**1.5**	0.7-2.2
Education										
Less than H.S.	**17.7**	12.7-22.7	**33.2**	28.2-38.2	**33.5**	27.9-39.1	**4.5**	2.1-6.9	**11.0**	7.2-14.8
H.S. or G.E.D.	**36.6**	33.6-39.6	**27.2**	24.9-29.6	**18.7**	16.2-21.1	**6.1**	4.6-7.5	**11.5**	9.3-13.6
Some Post-H.S.	**49.2**	45.8-52.7	**20.6**	18.3-22.9	**14.8**	12.2-17.3	**7.6**	5.8-9.4	**7.8**	5.8-9.8
College Graduate	**64.9**	62.0-67.9	**16.7**	14.8-18.7	**7.2**	5.4-9.0	**6.4**	4.9-7.9	**4.7**	3.3-6.2
Income										
Less than $15,000	**7.8**	4.7-10.9	**33.9**	25.9-38.9	**48.9**	43.3-54.5	4.7	2.4-7.0	**4.7**	2.3-7.0
$15,000 - 24,999	**18.8**	15.1-22.4	**33.9**	30.1-37.7	**27.1**	23.1-31.2	5.9	3.9-7.8	**14.4**	11.1-17.6
$25,000 - 34,999	**35.5**	30.6-40.3	**25.4**	21.6-29.2	**20.1**	15.6-24.7	7.6	5.0-10.1	**11.4**	7.9-14.9
$35,000 - 49,999	**52.8**	48.0-57.7	**22.0**	18.5-25.5	**8.3**	5.3-11.2	8.0	5.1-10.9	**8.9**	5.9-11.9
$50,000 - 74,999	**64.2**	57.2-69.3	**18.0**	14.7-21.4	**2.1**	0.5-3.8	6.6	4.1-9.1	**9.0**	5.1-13.0
$75,000+	**79.3**	76.1-82.4	**8.9**	7.2-10.6	**1.4**	0.0-2.7	5.5	3.8-7.3	**4.9**	3.0-6.9

Figure 3.3 Prevalence of Primary Health Coverage by Year: WVBRFSS, 2014-2018

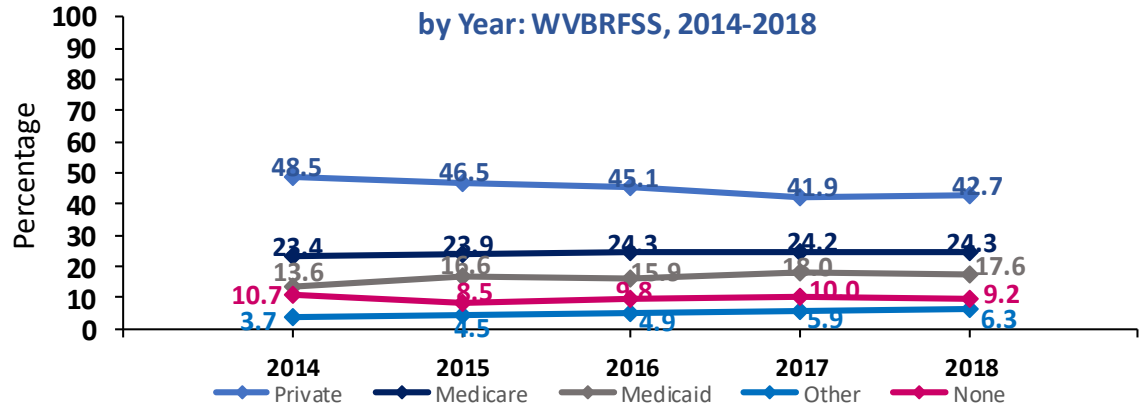
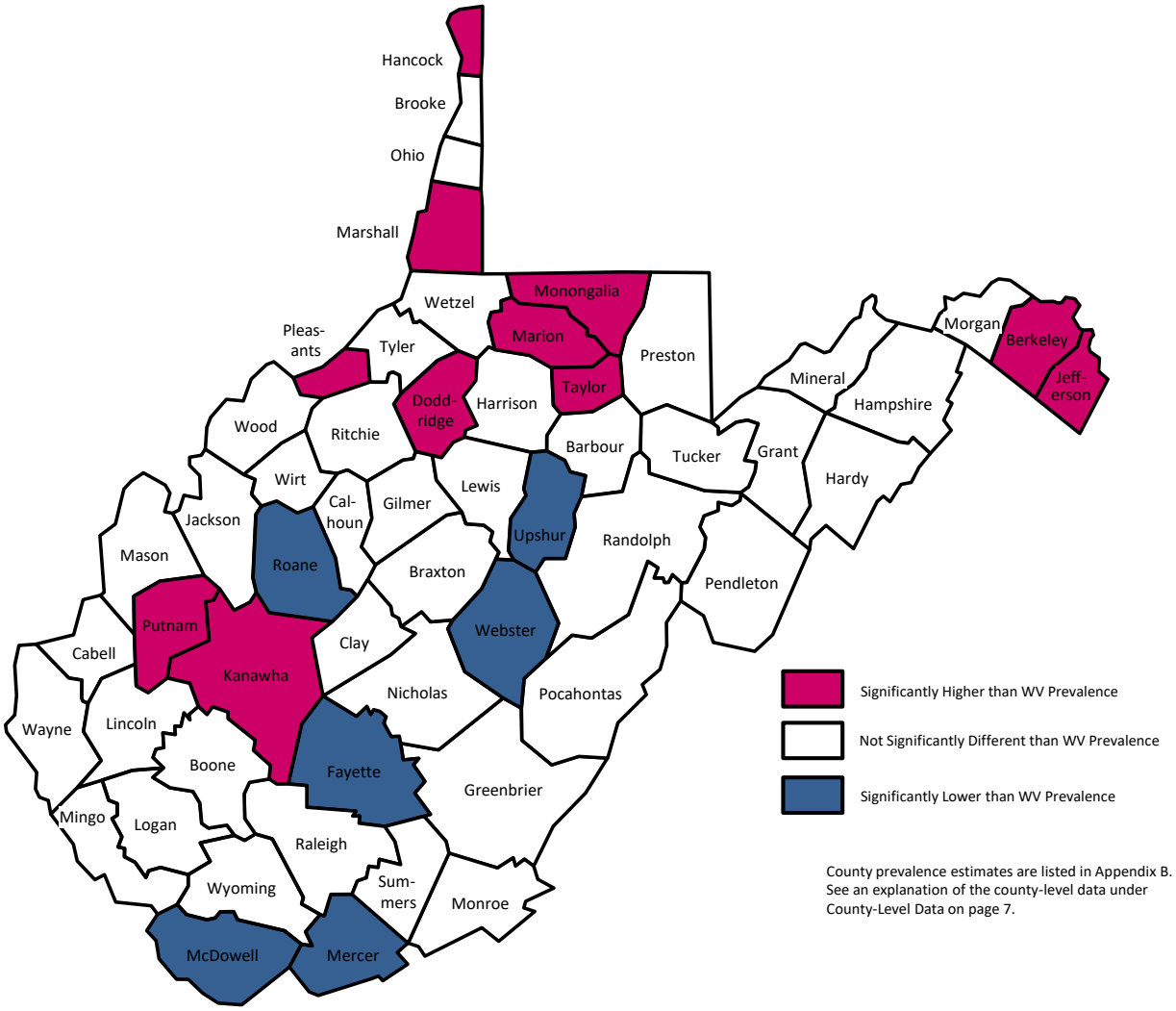


Figure 3.4 Prevalence of Private Insurance by County: WVBRFSS, 2014-2018

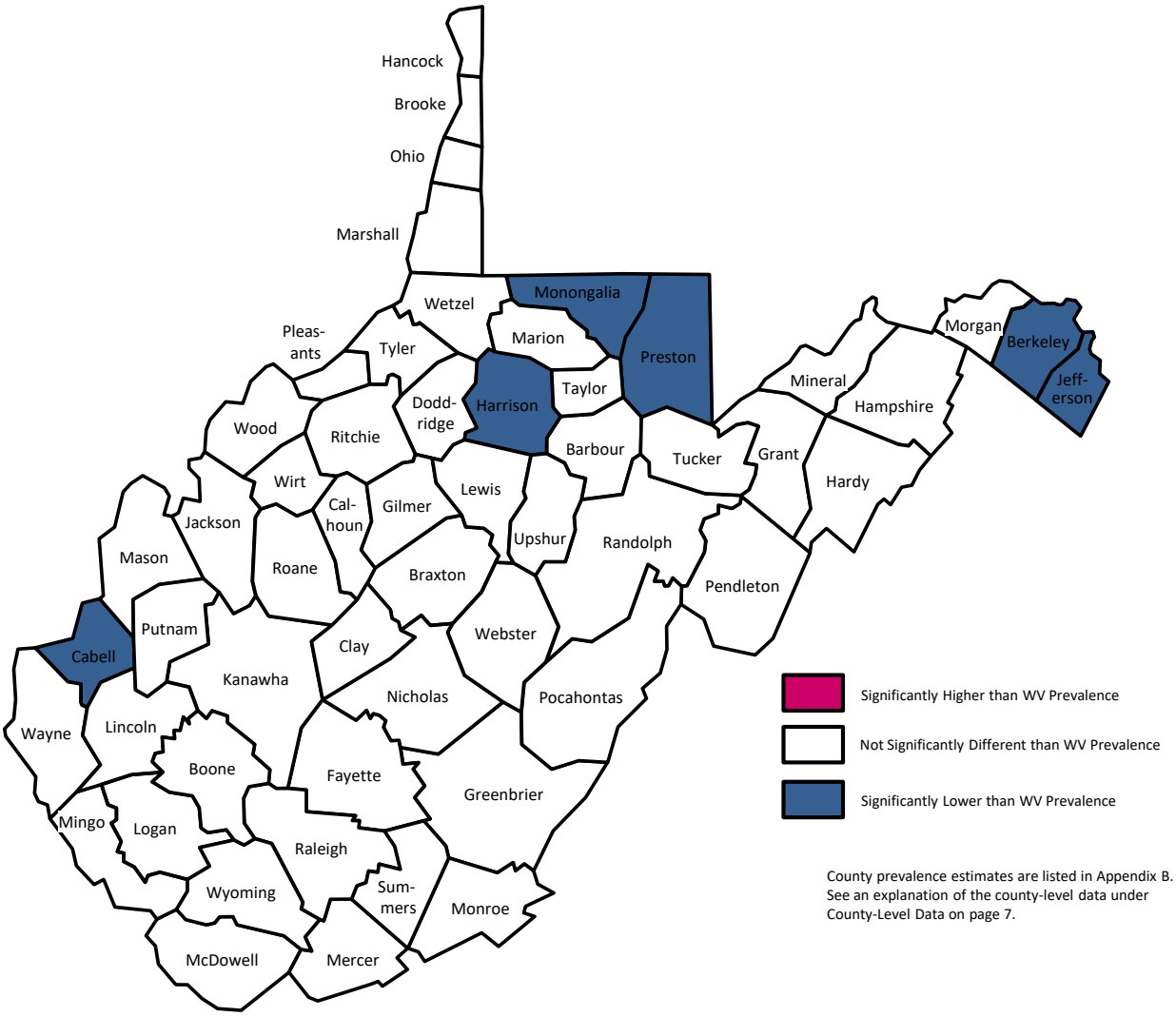
WV Prevalence (2014-2018) - 45.0%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

Figure 3.5 Prevalence of Medicare Insurance by County: WVBRFSS, 2014-2018

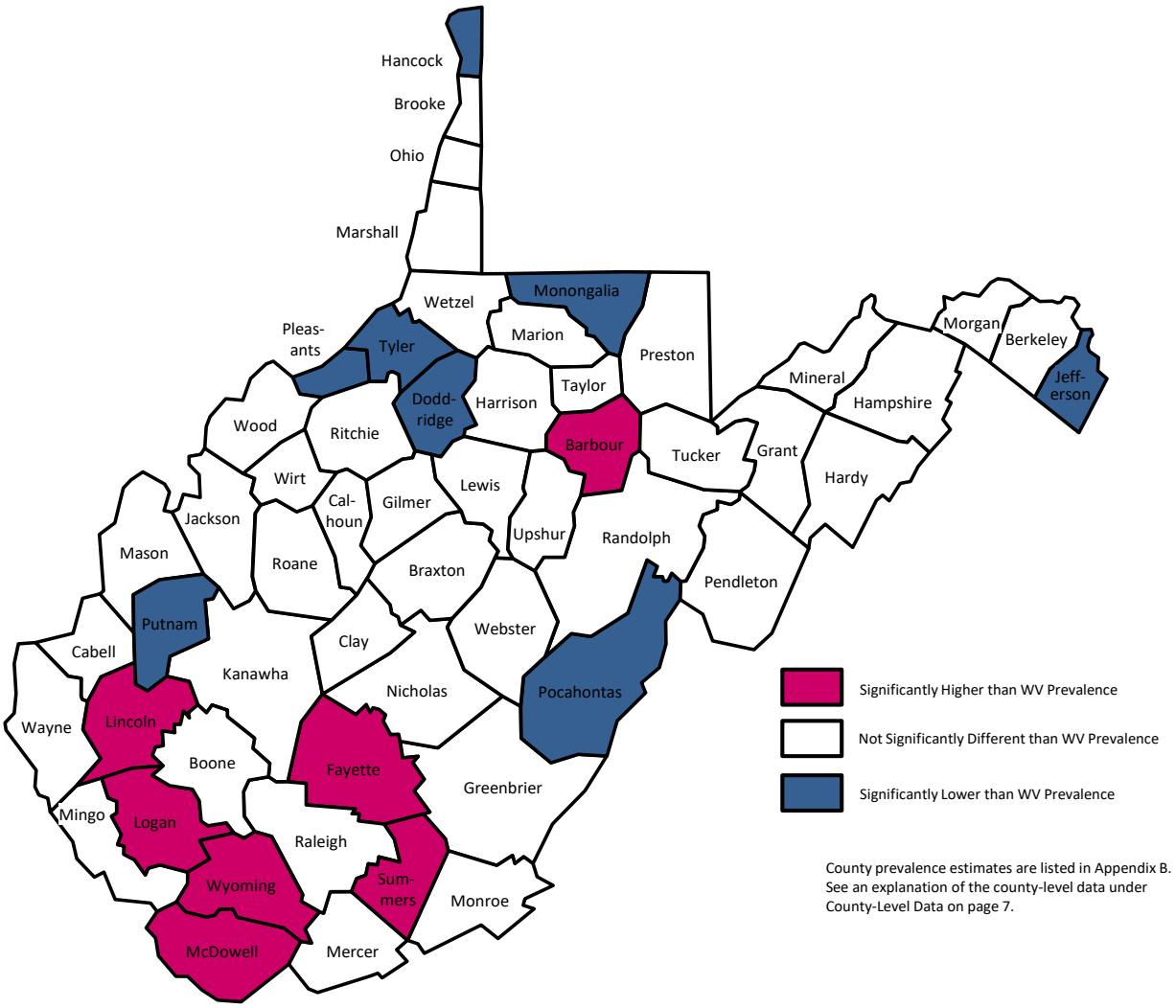
WV Prevalence (2014-2018) - 24.0 %



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

Figure 3.6 Prevalence of Medicaid Insurance by County: WVBRFSS, 2014-2018

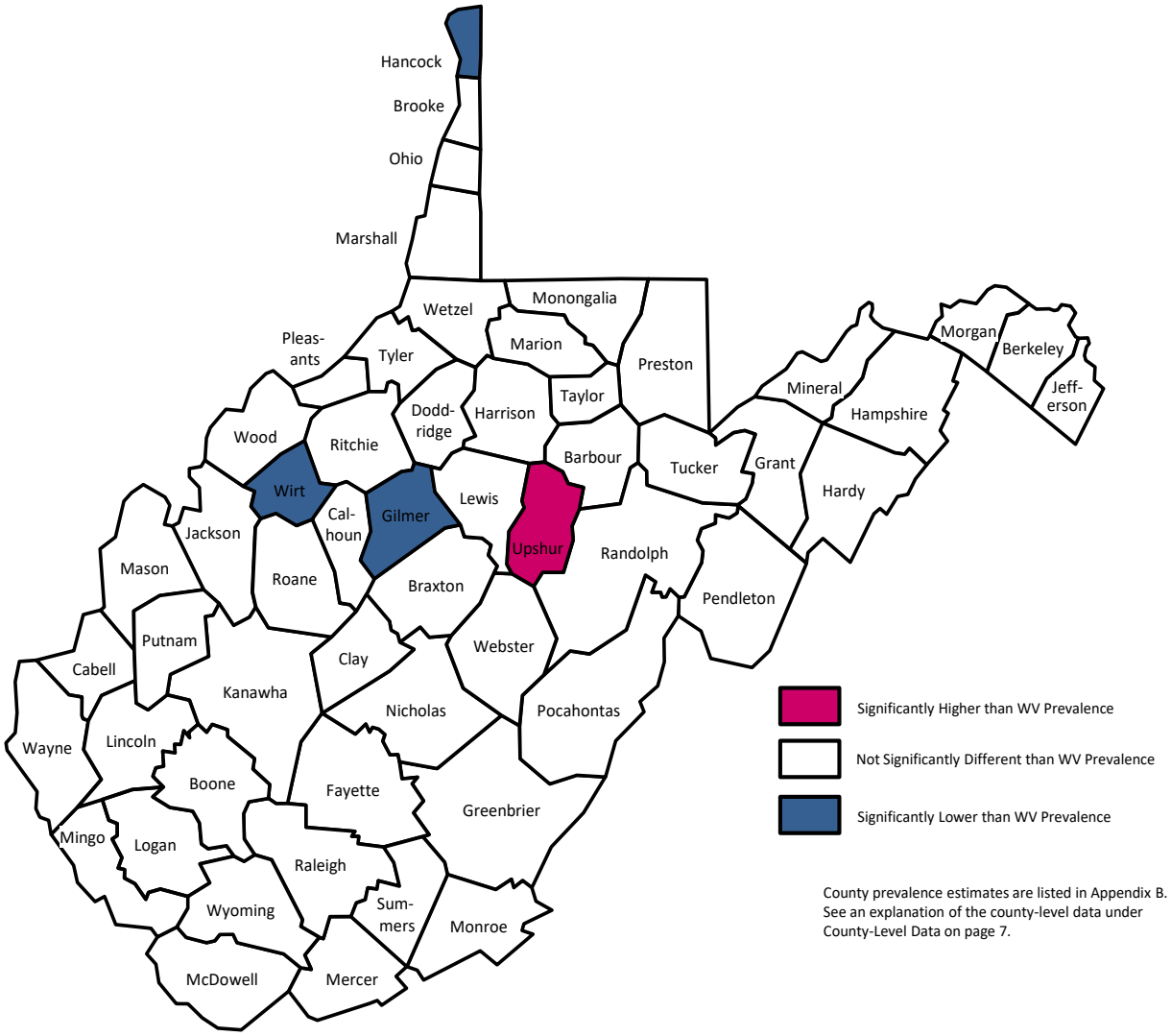
WV Prevalence (2014-2018) - 16.3%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

Figure 3.7 Prevalence of Other Insurance by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 5.1%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

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: 18.6% (95% CI: 17.1-20.1)
U.S.: 22.8% (95% CI: 22.5-23.0)
West Virginia ranked the 38th highest among 54 BRFSS participants. The West Virginia prevalence of no personal doctor or health care provider was significantly lower than the U.S. prevalence.

Gender

Men: 25.3% (95% CI: 22.8-27.7)
Women: 12.2% (95% CI: 10.5-13.8)
The prevalence of no personal doctor or health care provider was significantly higher among men than women.

Age

The prevalence of no personal doctor or health care provider was significantly higher among adults under the age of 35 than adults agreed 35 and older.

Education

There was no education difference in prevalence of no personal doctor or health care provider.

Household Income

There was no annual household income difference in the prevalence of not having a personal doctor or health care provider.

Trend

There was a decline in the prevalence of no personal doctor or health care provider from 2011 to 2018. Because of the change in BRFSS methodology, results from 2011 and later are not directly comparable to previous years.

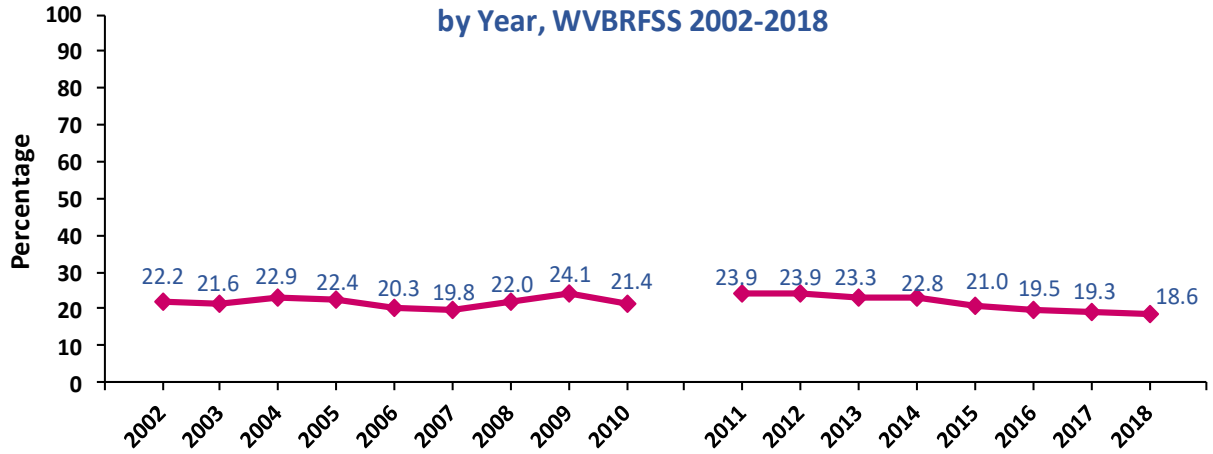
County

The 2014-2018 West Virginia state prevalence of no personal doctor or health care provider was 20.3%. There were 5 counties with a significantly lower prevalence compared to the state; Brooke, Braxton, Grant, Mason, and Putnam counties. Gilmer County and Monongalia County had a significantly higher prevalence than the state prevalence.

Table 3.3 Prevalence of No Personal Doctor or Health Care Provider by Demographics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	177,546	**25.3**	22.8-27.7	88,690	**12.2**	10.5-13.8	266,237	**18.6**	17.1-20.1
Age									
18-24	41,870	**50.7***	39.9-61.4	13,189	**16.7**	9.2-24.3	55,058	**34.1**	27.1-41.1
25-34	52,470	**48.9**	41.0-56.8	25,590	**25.1**	18.6-31.7	78,060	**37.3**	32.0-42.6
35-44	29,651	**27.4**	21.1-33.7	19,576	**18.3**	13.3-23.4	49,227	**22.9**	18.9-26.9
45-54	27,209	**24.5**	19.2-29.9	12,788	**11.7**	8.0-15.5	39,998	**18.2**	14.9-21.5
55-64	12,180	**9.7**	6.6-12.7	8,867	**6.9**	4.4-9.4	21,048	**8.3**	6.3-10.2
65+	13,184	**8.1**	5.8-10.4	8,223	**4.2**	2.8-5.6	21,407	**6.0**	4.6-7.3
Education									
Less than H.S.	21,589	**22.9**	15.5-30.2	15,355	**14.8**	9.2-20.4	36,944	**18.6**	14.0-23.2
H.S. or G.E.D.	23,992	**28.3**	24.2-32.3	34,462	**12.5**	9.7-15.2	118,454	**20.6**	18.1-23.2
Some Post-H.S.	44,134	**24.1**	19.4-28.8	26,946	**13.0**	9.7-16.2	71,080	**18.2**	15.4-21.0
College Graduate	27,832	**22.1**	17.8-26.3	11,926	**8.5**	6.1-11.0	39,759	**15.0**	12.5-17.4
Income									
Less than $15,000	14,416	**26.8**	18.4-35.2	13,324	**14.0**	9.1-18.8	27,739	**18.6**	14.2-23.0
$15,000 - 24,999	33,734	**27.6**	21.3-33.9	17,476	**12.3**	8.6-16.0	51,210	**19.4**	15.8-23.0
$25,000 - 34,999	24,587	**25.8**	18.8-32.7	11,788	**11.6**	7.0-16.2	36,375	**18.4**	14.2-22.7
$35,000 - 49,999	23,436	**23.3**	17.4-29.2	8,862	**10.8**	6.2-15.4	32,298	**17.7**	13.8-21.6
$50,000 - 74,999	26,790	**28.3**	20.8-35.9	9,753	**12.6**	7.4-17.7	36,544	**21.2**	16.3-26.2
$75,000+	30,425	**21.0**	16.3-25.8	12,861	**10.7**	6.7-14.8	43,286	**16.4**	13.1-19.6

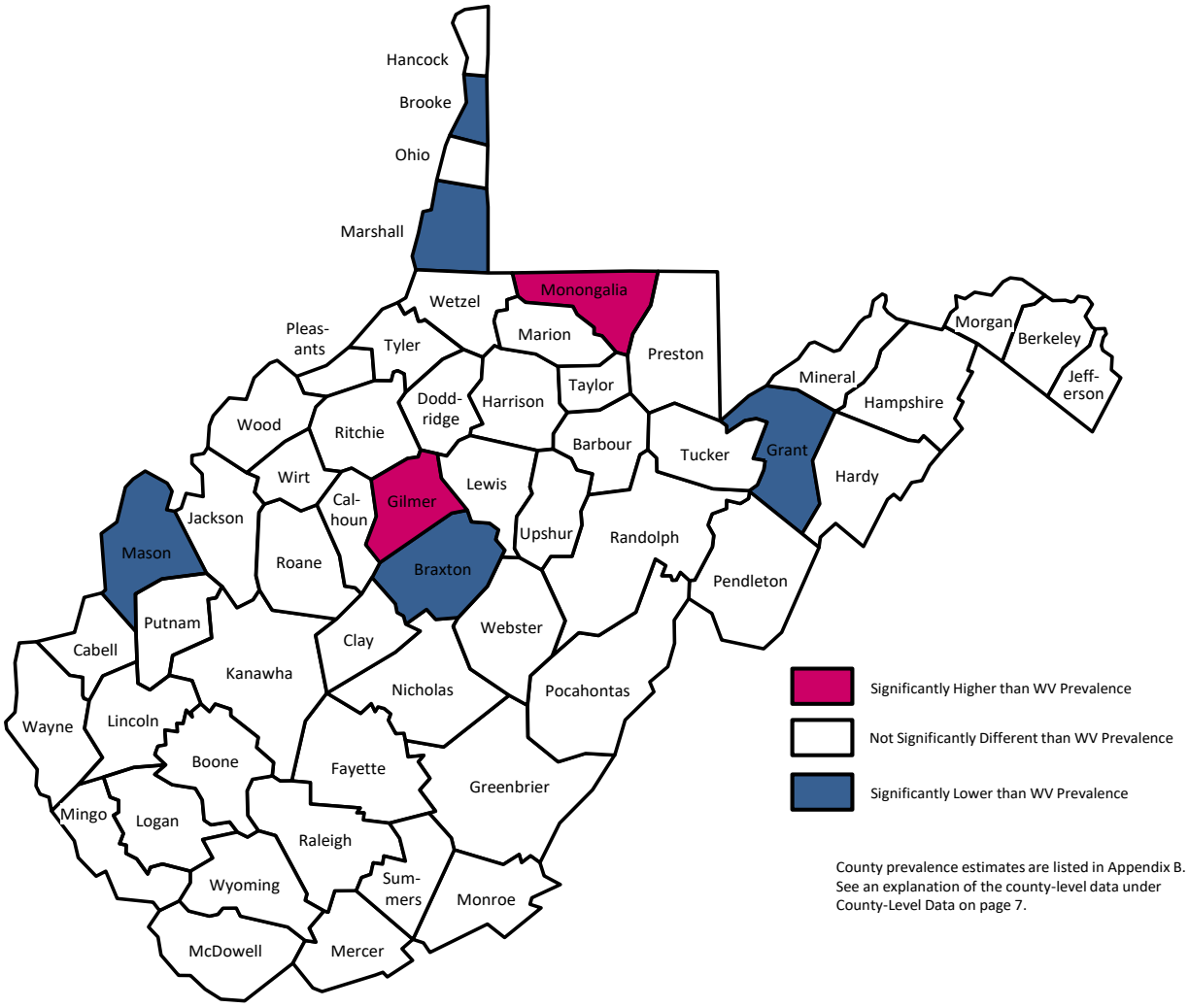
Figure 3.8 Prevalence of No Personal Doctor by Year, WVBRFSS 2002-2018



*Due to changes in sample composition and weighting methodology, 2011-2018 results are not directly comparable to previous years.

Figure 3.9 Prevalence of No Personal Doctor or Health Care Provider by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 20.3%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

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: 14.9% (95% CI: 13.6-16.2)
U.S.: 13.0% (95% CI: 12.7-13.2)
The West Virginia prevalence of could not afford needed medical care was significantly higher than the U.S. prevalence. West Virginia ranked the 11th highest among 54 BRFSS participants.

Gender

Men: 16.0% (95% CI: 14.0-18.1)
Women: 13.8% (95% CI: 12.2-15.5)
There was no gender difference in the prevalence of could not afford needed medical care.

Age

There was no age difference in prevalence of could not afford needed medical care.

Education

The prevalence of could not afford needed medical care was significantly higher among adults with less than a high school education (20.9%) than college graduates (10.7%).

Household Income

The prevalence of could not afford needed medical care was significantly higher among adults with an annual household income of less than $35,000 than adults with an annual household income of $35,000 of more.

Trend

There was a decrease in the prevalence of could not afford needed medical cost from 2011 to 2018. Because of the change in BRFSS methodology, results from 2011 and later are not directly comparable to previous years.

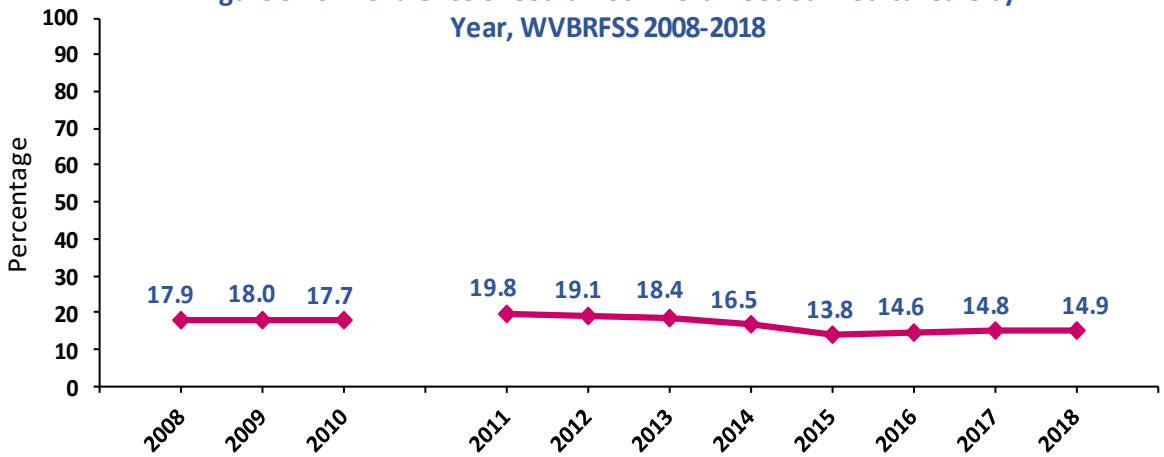
County

The 2014-2018 West Virginia state prevalence of could not afford needed medical care was 14.9%. There were 5 counties with a significantly lower prevalence compared to the state; Grant, Hancock, Mason, Mineral, and Preston counties. There were 6 counties with a significantly higher prevalence compared to the state; Fayette, Logan, McDowell, Mingo, Nicholas, and Wyoming counties.

Table 3.4 Prevalence of Could Not Afford Needed Medical Care by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	112,915	**16.0**	14.0-18.1	101,016	**13.8**	12.2-15.5	213,931	**14.9**	13.6-16.2
Age									
18-24	13,510	**15.8**	8.2-23.4	7,997	**10.2**	4.0-16.3	21,507	**13.1**	8.2-18.0
25-34	25,686	**24.1**	17.2-30.9	20,205	**19.9**	14.0-25.7	45,891	**22.0**	17.4-26.6
35-44	23,255	**21.5**	15.6-27.3	15,960	**14.9**	10.6-19.3	39,215	**18.2**	14.6-21.9
45-54	18,739	**17.0**	12.2-21.6	23,013	**20.9**	16.2-25.6	41,753	**18.9**	15.6-22.2
55-64	19,488	**15.5**	11.7-19.2	19,877	**15.4**	11.8-19.0	39,365	**15.4**	12.8-18.0
65+	11,415	**7.0**	4.8-9.3	13,361	**6.8**	5.0-8.6	24,776	**6.9**	5.5-8.3
Education									
Less than H.S.	20,981	**22.1**	15.1-29.1	20,952	**19.8**	14.2-25.4	41,933	**20.9**	16.4-25.4
H.S. or G.E.D.	51,845	**17.4**	14.1-20.7	39,507	**14.3**	11.4-17.2	91,352	**15.9**	13.7-18.1
Some Post-H.S.	25,999	**14.2**	10.5-17.8	26,182	**12.6**	9.8-15.3	52,181	**13.3**	11.1-15.6
College Graduate	14,090	**11.2**	8.1-14.2	14,375	**10.3**	7.7-12.9	28,465	**10.7**	8.7-12.7
Income									
Less than $15,000	13,281	**24.8**	16.1-33.5	17,048	**17.5**	12.9-22.2	30,329	**20.1**	15.7-24.5
$15,000 - 24,999	32,103	**26.3**	20.4-32.3	28,976	**20.4**	15.9-24.9	61,079	**23.1**	19.5-26.8
$25,000 - 34,999	21,109	**22.2**	15.9-28.5	14,301	**14.1**	9.5-18.7	35,409	**18.0**	14.1-21.9
$35,000 - 49,999	9,175	**9.0**	5.6-12.5	10,509	**12.8**	7.9-17.6	19,684	**10.7**	7.8-13.6
$50,000 - 74,999	15,385	**16.4**	10.4-22.3	8,400	**10.9**	6.7-15.1	23,784	**13.9**	10.1-17.7
$75,000+	12,070	**8.4**	5.3-11.4	7,516	**6.3**	3.4-9.2	19,586	**7.4**	5.3-9.5

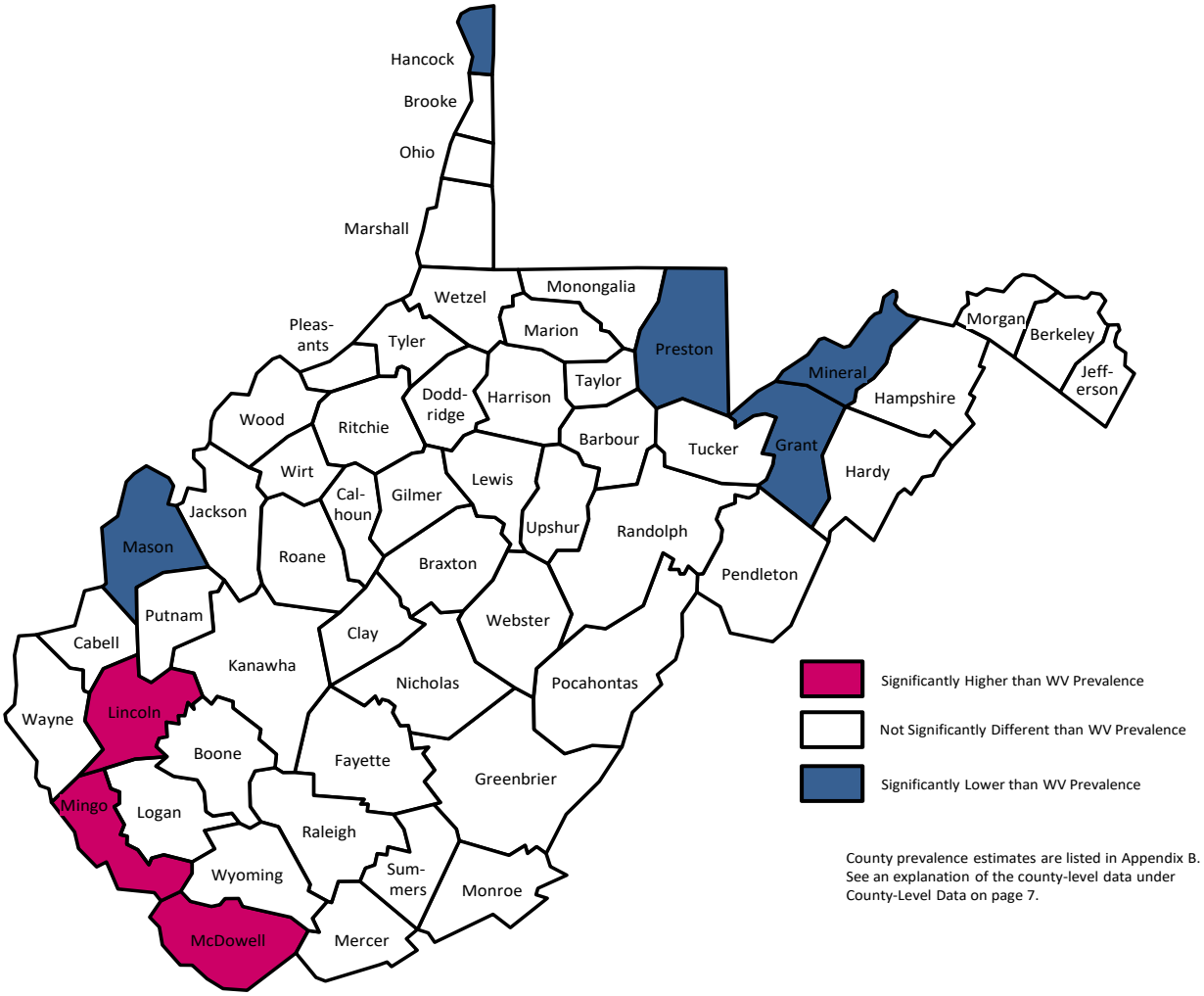
Figure 3.10 Prevalence of Could Not Afford Needed Medical Care by Year, WVBRFSS 2008-2018



*Due to changes in sample composition and weighting methodology, 2011-2018 results are not directly comparable to previous years.

Figure 3.11 Prevalence of Could Not Afford Needed Medical Care by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 14.9%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

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: 18.8% (95% CI: 17.3-20.3)
U.S.: 23.3% (95% CI: 23.0-23.6)
The West Virginia prevalence of no checkup in the past year was significantly lower than the national prevalence. West Virginia ranked the 51st highest among 54 BRFSS participants.

Gender

Men: 23.6% (95% CI:21.2-26.0)
Women: 14.1% (95% CI: 12.4-15.9)
The prevalence of no checkup in the past year was significantly higher among men than among women.

Age

The prevalence of no checkup in the past year was significantly higher among adults aged 34 and younger than adults aged 45 and older.

Education

There was no education difference in the prevalence of no checkup in the past year.

Household Income

There was no annual household income difference in the prevalence of no checkup in the past year.

Trend

There was a decline in prevalence of no routine checkup in the past year from 2011 to 2018. Because of the change in BRFSS methodology, results from 2011 and later are not directly comparable to previous years.

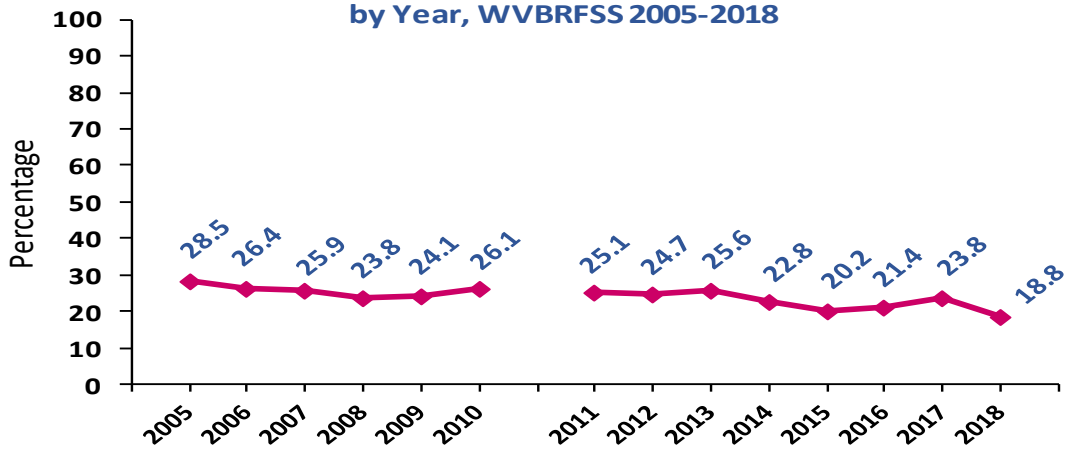
County

The 2014-2018 West Virginia state prevalence of no routine check up in the past year was 21.4%. The prevalence of no checkup in the past year in Mason County was significantly lower than the state prevalence. There were 3 counties with a significantly higher prevalence compared to the state; Jefferson, Monongalia, and Wyoming counties.

Table 3.5 Prevalence of No Checkup in the Past Year by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	165,532	**23.6**	21.2-26.0	102,546	**14.1**	12.4-15.9	268,077	**18.8**	17.3-20.3
Age									
18-24	37,836	**45.2***	34.7-55.7	15,949	**20.4**	12.0-28.9	53,785	**33.2**	26.2-40.2
25-34	44,057	**41.2**	33.4-48.9	30,281	**30.3**	23.3-37.3	74,338	**35.9**	30.6-41.2
35-44	30,699	**28.6**	22.2-34.9	21,841	**20.5**	15.4-25.6	52,540	**24.5**	20.5-28.6
45-54	25,983	**23.6**	18.4-28.7	12,653	**11.5**	8.0-15.0	38,636	**17.5**	14.4-20.7
55-64	14,276	**11.3**	8.2-14.4	11,335	**8.8**	5.9-11.7	25,611	**10.1**	7.9-12.2
65+	11,110	**6.8**	4.7-9.0	9,812	**5.1**	3.6-6.5	20,922	**5.9**	4.6-7.1
Education									
Less than H.S.	18,411	**19.4**	12.3-26.4	13,694	**13.1**	7.9-18.3	32,105	**16.1**	11.7-20.4
H.S. or G.E.D.	70,029	**23.7**	19.9-27.5	36,142	**13.2**	10.3-16.2	106,171	**18.7**	16.2-21.1
Some Post-H.S.	48,703	**26.5**	21.7-31.4	33,063	**16.0**	12.4-19.6	81,766	**21.0**	18.0-23.9
College Graduate	27,962	**22.2**	18.1-26.4	19,647	**14.1**	11.2-17.1	47,609	**18.0**	15.4-20.5
Income									
Less than $15,000	12,682	**23.6**	15.5-31.8	15,665	**16.3**	10.7-21.9	28,347	**18.9**	14.3-23.6
$15,000 - 24,999	28,962	**23.7**	17.8-29.6	22,401	**15.9**	11.5-20.3	51,363	**19.5**	15.9-23.2
$25,000 - 34,999	20,353	**21.5**	14.9-28.1	15,674	**15.5**	10.4-20.7	36,027	**18.4**	14.3-22.6
$35,000 - 49,999	20,179	**20.1**	14.6-25.6	10,024	**12.3**	7.7-16.9	30,203	**16.6**	12.9-20.3
$50,000 - 74,999	25,994	**27.5**	20.2-34.8	9,931	**12.8**	7.8-17.8	35,925	**20.9**	16.1-25.6
$75,000+	35,160	**24.4**	19.5-29.4	16,742	**14.0**	9.8-18.2	51,902	**19.7**	16.4-23.0

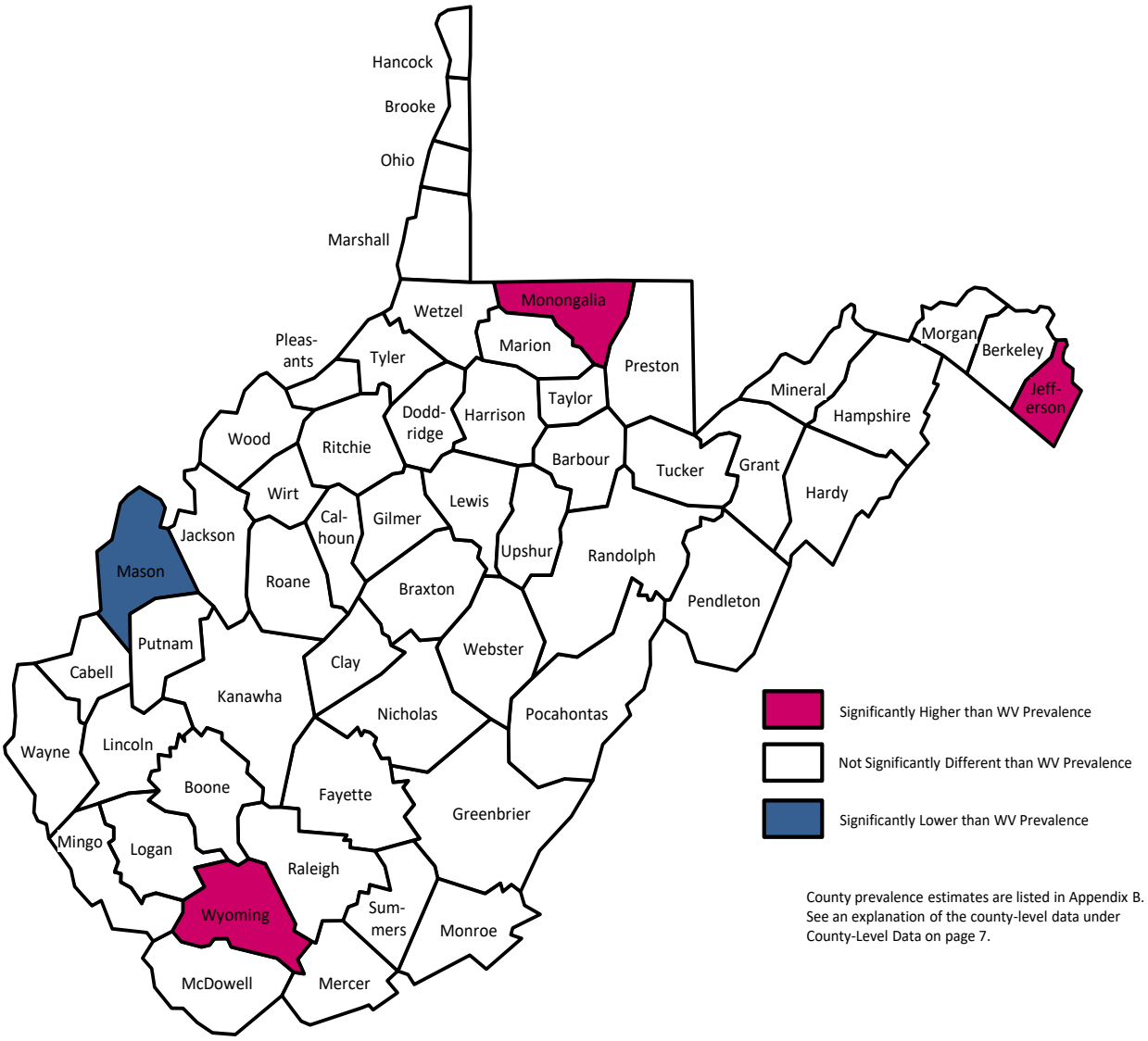
Figure 3.12 Prevalence of No Routine Checkup by Year, WVBRFSS 2005-2018



*Due to changes in sample composition and weighting methodology, 2011-2018 results are not directly comparable to previous years.

Figure 3.13 Prevalence of No Checkup in the Past Year by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 21.4%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

West Virginia Behavioral Risk Factor Surveillance System Report

2018

SECTION 2:
Risk Behaviors

Overweight

Definition

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

Prevalence

WV: 32.5% (95% CI: 30.8-34.2)
U.S.: 35.0% (95% CI: 34.7-35.3)
The prevalence of overweight in West Virginia was significantly lower than the U.S. prevalence. West Virginia ranked the 49th highest among 54 BRFSS participants.

Gender

Men: 35.2% (95% CI: 32.8-37.7)
Women: 28.6% (95% CI: 27.4-31.8)
The prevalence of overweight was significantly higher among men than women.

Age

There was no age difference in the prevalence of overweight.

Education

There is no educational attainment difference in prevalence of overweight.

Household Income

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

Trend

There is no change in the prevalence of overweight between 2011 and 2018. Because of the change in BRFSS methodology, results from 2011 and later are not directly comparable to previous years.

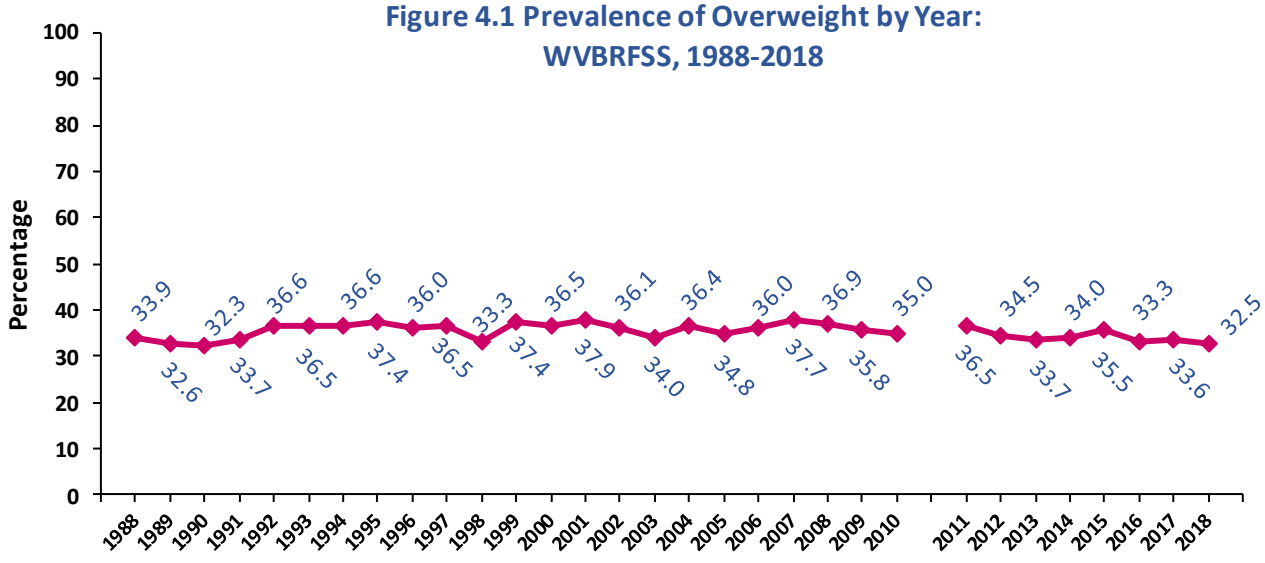
County

The 2014-2018 West Virginia state prevalence of overweight was 33.8%. Grant County and Tucker County had a significantly higher prevalence compared to the state. No counties were lower than the state.

Table 4.1 Prevalence of Overweight by Demographic Characteristics: WVBRFSS, 2018

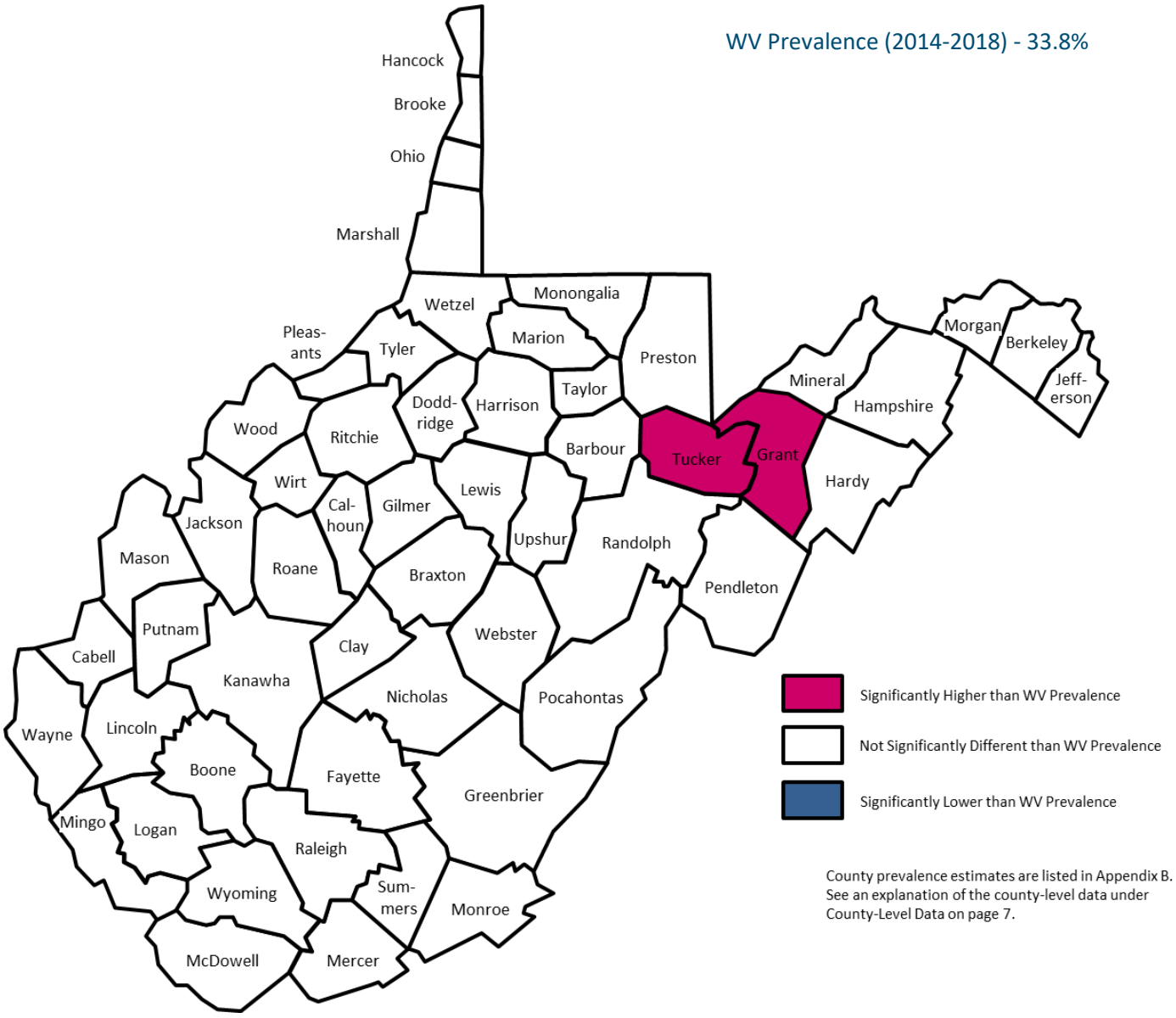
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	242,083	**35.2**	32.8-37.7	196,936	**29.6**	27.4-31.8	439,019	**32.5**	30.8-34.2
Age									
18-24	21,819	**27.7**	18.3-37.1	17,383	**26.1***	15.6-36.7	39,202	**27.0**	20.0-34.0
25-34	32,572	**30.4**	23.3-37.5	26,823	**29.0**	21.9-36.0	59,395	**29.7**	24.7-34.8
35-44	38,077	**36.0**	29.0-43.0	26,136	**25.9**	20.3-31.4	64,213	**31.1**	26.5-35.6
45-54	39,066	**35.8**	29.8-41.8	24,719	**23.9**	19.2-28.8	63,785	**30.1**	26.1-34.0
55-64	44,375	**35.9**	31.2-40.7	41,711	**34.5**	30.2-39.4	87,432	**35.3**	29.8-39.1
65+	64,482	**40.3**	36.2-44.4	58,597	**33.2**	29.8-36.6	123,079	**36.6**	33.9-39.2
Education									
Less than H.S.	28,361	**31.3**	23.2-39.3	27,304	**29.0**	21.7-36.3	55,665	**30.1**	24.7-35.5
H.S. or G.E.D.	99,377	**34.3**	30.4-38.3	71,982	**28.8**	25.1-32.4	17,1359	**31.8**	29.1-34.5
Some Post-H.S.	65,264	**36.0**	31.1-40.8	54,007	**28.6**	24.5-32.7	11,9271	**32.2**	29.1-35.4
College Graduate	48,192	**38.9**	34.3-43.5	43,643	**33.5**	29.5-37.6	91,835	**36.1**	33.1-39.2
Income									
Less than $15,000	18,510	**34.8**	25.7-44.0	21,228	**23.7**	18.2-29.1	39,738	**27.8**	22.9-32.7
$15,000 - 24,999	33,646	**27.7**	21.8-33.7	35,739	**26.9**	22.1-31.7	69,384	**27.3**	23.5-31.1
$25,000 - 34,999	33,138	**35.9**	29.0-42.9	36,161	**38.3**	31.3-45.3	69,298	**37.1**	32.2-42.1
$35,000 - 49,999	35,684	**35.8**	29.4-42.1	26,210	**34.6**	27.7-41.5	61,894	**35.3**	30.6-40.0
$50,000 - 74,999	33,433	**36.3**	29.5-43.0	20,795	**29.3**	23.2-35.4	54,228	**33.3**	28.6-37.9
$75,000+	55,371	**38.4**	33.2-43.5	35,568	**31.6**	26.5-36.7	90,939	**35.4**	31.7-39.1

Figure 4.1 Prevalence of Overweight by Year: WVBRFSS, 1988-2018



*Due to changes in sample composition and weighting methodology, 2011-2018 results are not directly comparable to previous years.

Figure 4.2 Prevalence of Overweight (Body Mass Index of 25.0-29.9) by County: WVBRFSS, 2014-2018



Obesity

Definition

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

Prevalence

WV: 39.5% (95% CI: 37.8-41.3)
U.S.: 30.9% (95% CI: 30.6-31.2)
The prevalence of obesity was significantly higher in West Virginia than in the U.S. West Virginia ranked the highest among 54 BRFSS participants.

Gender

Men: 40.6% (95% CI: 38.0-43.2)
Women: 38.5% (95% CI: 36.1-40.8)
There was no gender difference in the prevalence of obesity.

Age

The prevalence of obesity was significantly higher among adults aged 45-54 (48.4%) than adults aged 18-24 (22.3%).

Education

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

Household Income

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

Trend

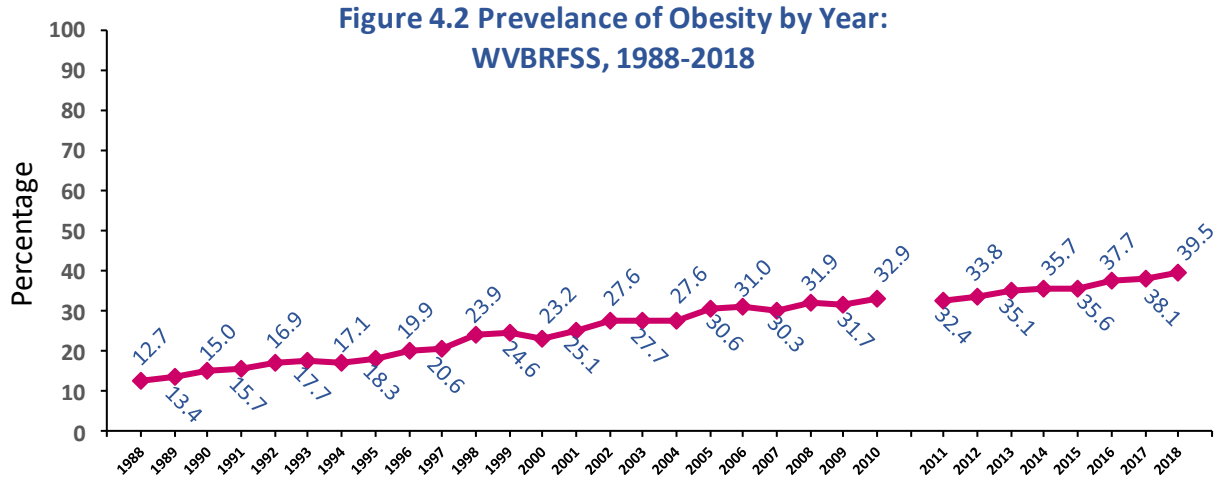
There was a significant increase in the prevalence of obesity between 2011 and 2018. Because of the change in BRFSS methodology, results from 2011 and later are not directly comparable to previous years.

County

The 2014-2018 West Virginia state prevalence of obesity was 37.3%. There were 5 counties with a significantly lower prevalence compared to the state; Cabell, Marion, Monongalia, Monroe, and Ohio counties. Clay County and McDowell County had a significantly higher prevalence of obesity than the state.

Table 4.2 Prevalence of Obesity by Demographic Characteristics: WVBRFSS, 2018

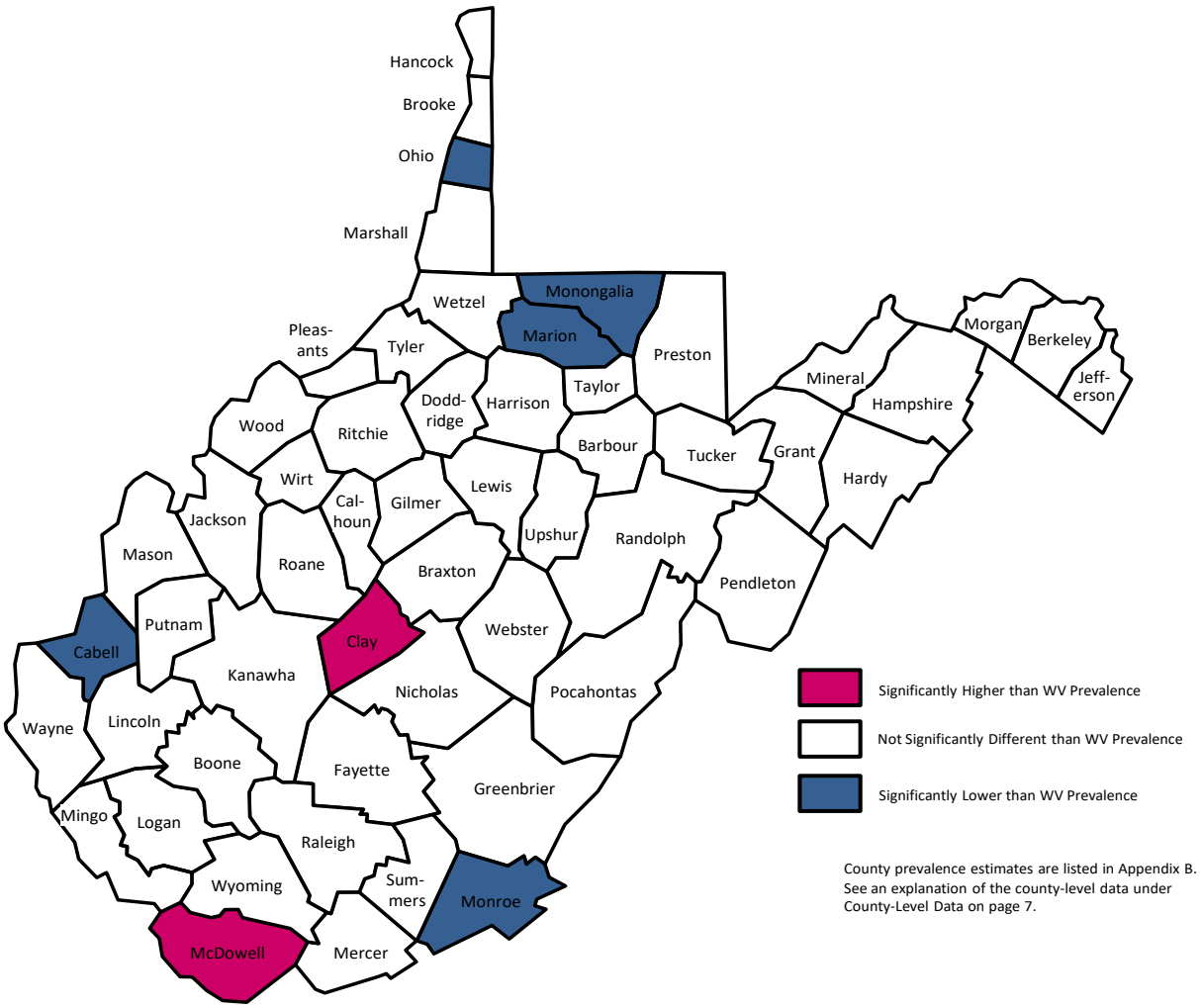
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	278,689	**40.6**	38.0-43.2	25,655	**38.5**	36.1-40.8	534,344	**39.5**	37.8-41.3
Age									
18-24	17,965	**22.8**	12.8-32.8	14,408	**21.7**	12.3-31.0	32,373	**22.3**	15.4-29.2
25-34	46,938	**43.9***	36.0-51.8	34,434	**37.2**	29.7-44.6	81,372	**40.8**	35.3-46.3
35-44	50,335	**47.6**	40.5-54.7	45,254	**44.8**	38.4-51.2	95,590	**46.2**	41.4-51.0
45-54	51,521	**47.2**	41.0-53.3	51,138	**49.6**	43.9-55.4	102,659	**48.4**	44.1-52.6
55-64	56,706	**45.9**	40.9-51.0	49,551	**40.9**	36.2-45.7	106,257	**43.5**	40.0-47.0
65+	54,518	**34.1**	30.1-38.0	60,117	**34.1**	30.6-37.5	114,635	**34.1**	31.4-36.7
Education									
Less than H.S.	38,485	**42.4**	34.0-50.8	38,789	**41.2**	33.8-48.7	77,274	**41.8**	36.2-47.4
H.S. or G.E.D.	11,6811	**40.4**	36.2-44.6	102,655	**41.0**	37.0-45.0	219,466	**40.7**	37.8-43.6
Some Post-H.S.	73,732	**40.6**	35.6-45.7	71,248	**37.7**	33.3-42.1	144,980	**39.2**	35.8-42.5
College Graduate	49,233	**39.7**	35.1-44.3	42,234	**32.5**	28.4-36.5	91,467	**36.0**	32.9-39.1
Income									
Less than $15,000	22,150	**41.7**	32.7-50.6	42,900	**47.8**	41.2-54.4	65,050	**45.5**	40.2-50.9
$15,000 - 24,999	51,091	**42.1**	35.6-48.6	56,869	**42.8**	37.2-48.3	107,960	**42.4**	38.2-46.7
$25,000 - 34,999	34,687	**37.6**	30.6-44.6	33,703	**35.7**	29.2-42.2	118,366	**36.6**	31.8-41.4
$35,000 - 49,999	44,676	**44.8**	38.1-51.4	27,354	**36.1**	29.6-42.6	72,030	**41.0**	36.3-45.8
$50,000 - 74,999	34,690	**37.6**	30.7-44.6	30,503	**43.0**	36.1-50.0	68,390	**40.0**	35.0-45.0
$75,000+	62,234	**43.1**	37.8-48.5	34,817	**30.9**	25.6-36.2	97,051	**37.8**	33.9-41.6



*Due to changes in sample composition and weighting methodology, 2011-2018 results are not directly comparable to previous years.

Figure 4.2 Prevalence of Obesity (Body Mass Index of 30.0 or Higher) by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 37.3%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

Overweight or Obese

Definition

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

Prevalence

WV: 72.0% (95% CI: 70.4-73.7)
U.S.: 66.0% (95% CI: 65.7-66.3)
The prevalence of overweight or obese in West Virginia was significantly higher than the U.S. prevalence. West Virginia ranked the 2nd highest among 54 BRFSS participants.

Gender

Men: 75.8% (95% CI: 73.5-78.2)
Women: 31.9% (95% CI: 29.6-34.2)
The prevalence of overweight or obese was significantly higher among men than women.

Age

The prevalence of overweight or obese was significantly higher among adults aged 25-64 than those aged 18-24 (49.3%).

Education

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

Household Income

There was no annual household income difference in prevalence of overweight or obese.

Trend

There was no change in the prevalence of overweight or obese from 2011 to 2018. Because of the change in BRFSS methodology, results from 2011 and later are not directly comparable to previous years.

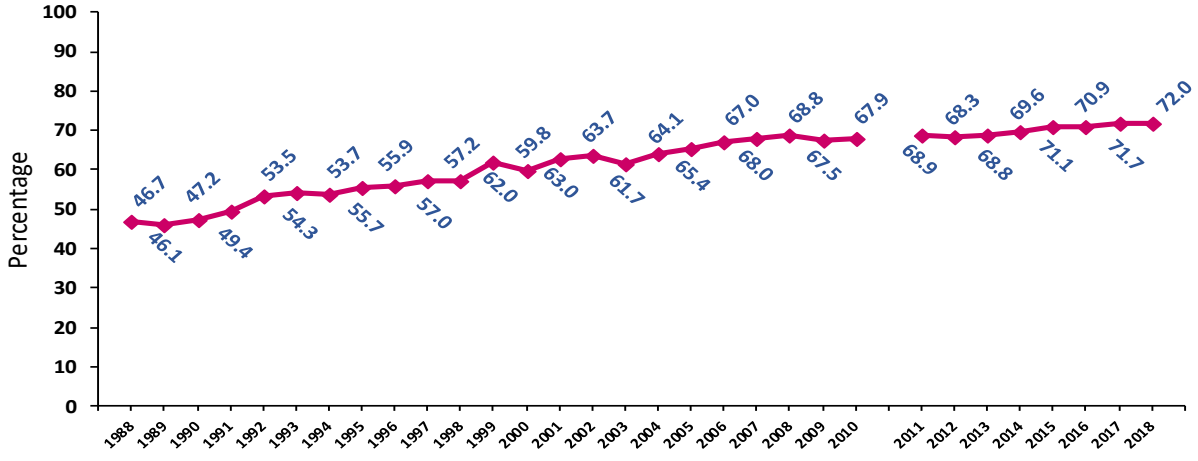
County

The 2014-2018 West Virginia state prevalence of overweight or obese was 71.1%. There were 4 counties with a significantly lower prevalence compared to the state; Calhoun, Marion, Monongalia, and Monroe counties. There were 7 counties with a significantly higher prevalence compared to the state; Boone, Gilmer, Grant, McDowell, Ritchie, Webster, and Wyoming counties.

Table 4.3 Prevalence of Overweight or Obese by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	52,0772	**75.8**	73.5-78.2	452,591	**31.9**	65.8-70.4	97,3363	**72.0**	70.4-73.7
Age									
18-24	39,784	**50.5**	39.7-61.3	31,791	**47.8***	36.4-59.2	71,,576	**49.3**	41.4-57.1
25-34	79,510	**74.3***	67.4-81.2	61,257	**66.1**	58.8-73.5	140,768	**70.5**	65.5-75.5
35-44	88,412	**83.6**	78.6-88.6	71,390	**70.7**	64.6-76.7	159,803	**77.3**	73.3-81.3
45-54	90,587	**82.9**	78.2-87.7	75,857	**73.6**	68.6-78.7	166,444	**78.4**	75.0-81.9
55-64	101,082	**81.9**	77.9-85.9	91,262	**75.4**	71.3-79.6	192,344	**78.7**	75.8-81.5
65+	119,000	**74.3**	70.5-78.1	118,714	**67.3**	63.8-70.6	237,714	**70.6**	68.1-73.2
Education									
Less than H.S.	66,846	**73.7**	65.9-81.5	66,093	**70.2**	62.9-77.5	138,939	**71.9**	66.6-77.2
H.S. or G.E.D.	216,188	**74.7**	71.0-78.4	174,637	**69.8**	66.0-73.6	390,825	**72.4**	69.8-75.1
Some Post-H.S.	138,996	**76.6**	72.1-81.1	125,255	**66.4**	62.0-70.7	264,251	**71.4**	68.2-74.5
College Graduate	97,425	**78.6**	74.7-82.6	85,877	**66.0**	61.8-70.2	183,302	**72.2**	69.2-75.1
Income									
Less than $15,000	40,660	**76.5**	69.4-83.6	64,128	**71.5**	65.5-77.5	104,788	**73.4**	68.7-78.0
$15,000 - 24,999	84,736	**69.8**	63.7-75.9	92,608	**69.7**	64.3-75.0	177,344	**69.7**	65.7-73.8
$25,000 - 34,999	67,825	**73.5**	66.8-80.2	69,864	**74.0**	68.2-79.8	137,688	**73.8**	69.4-78.2
$35,000 - 49,999	80,360	**80.5**	75.0-86.1	53,568	**70.7**	64.2-77.3	133,924	**76.3**	72.1-80.6
$50,000 - 74,999	68,123	**73.9**	66.7-81.0	51,298	**72.4**	65.6-79.2	119,421	**73.2**	68.2-78.2
$75,000+	117,605	**81.5**	77.2-85.8	70,385	**62.5**	56.9-68.1	187,990	**73.2**	69.7-76.7

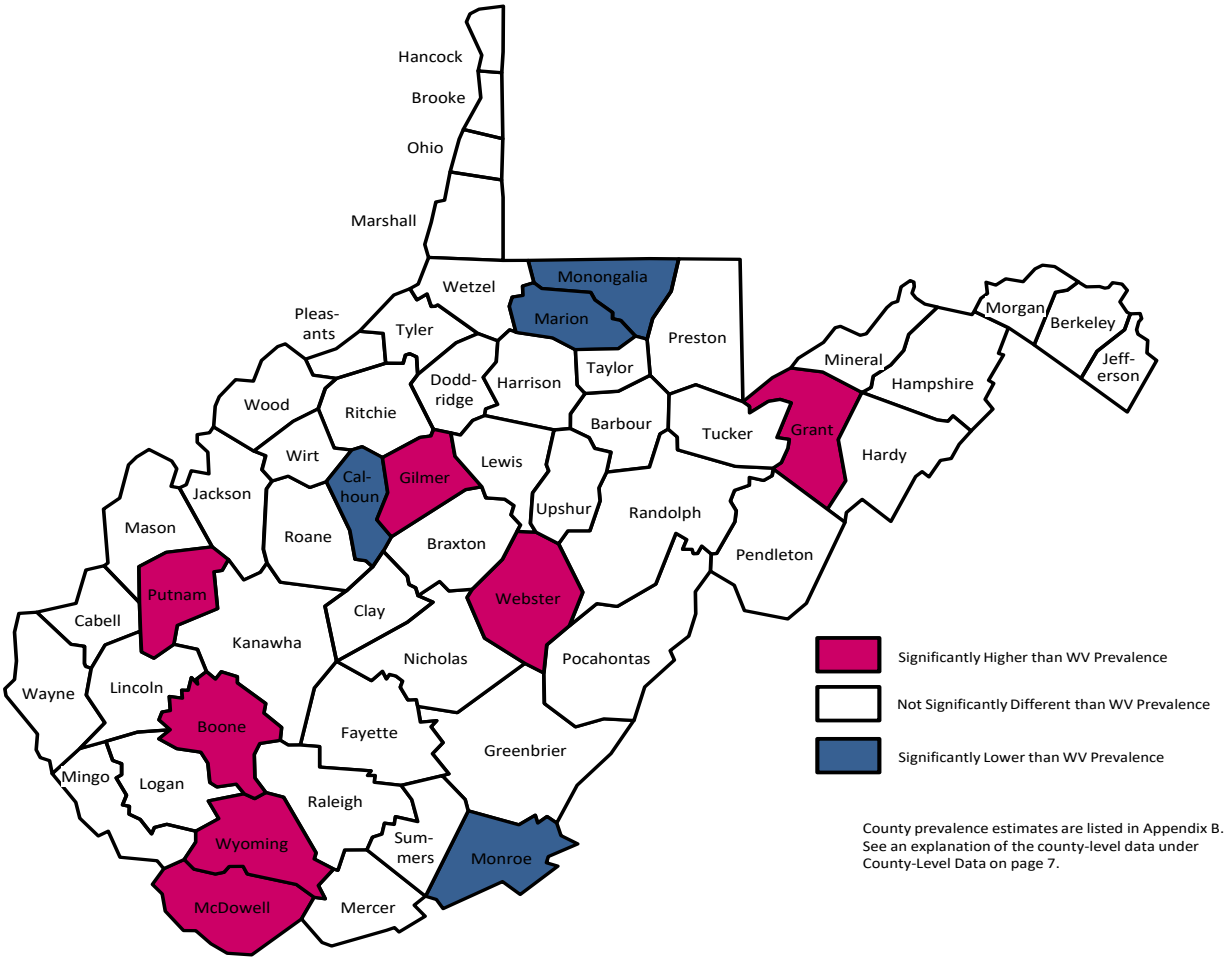
Figure 4.3 Prevalence of Overweight or Obese by Year: WVBRFSS, 1988-2018



*Due to changes in sample composition and weighting methodology, 2011-2018 results are not directly comparable to previous years.

Figure 4.4 Prevalence of Overweight or Obese (Body Mass Index of 25.0 or Higher) by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 70.8%



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: 28.2% (95% CI: 26.7-29.7)
U.S.: 24.5% (95% CI: 24.2-24.8)
The prevalence of physical inactivity was significantly higher in West Virginia than in the U.S. West Virginia ranked the 10th highest among 54 BRFSS participants.

Gender

Men: 25.3% (95% CI: 23.0-27.5)
Women: 31.0% (95% CI: 28.9-33.1)
The prevalence of physical inactivity was significantly higher among women than men.

Age

The prevalence of physical inactivity was significantly higher among adults aged 45 and older than adults aged 44 and younger.

Education

The prevalence of physical inactivity was significantly higher among those with less than a high school education (46.2%) than all other educational attainment levels. The prevalence of physical inactivity was significantly lower among college graduates (15.3%) than all other educational attainment groups.

Household Income

The prevalence of physical inactivity was significantly higher among adults with an annual household income of less than $15,000 (47.7%) than all other income levels. The prevalence of physical inactivity was significantly lower among adults with an annual household income of $75,000 or more (14.8%) than among all other income levels.

Trend

There was a decline in the prevalence of physical inactivity among adults between 2011 to 2018. Because of the change in BRFSS methodology, results from 2011 and later are not directly comparable to previous years.

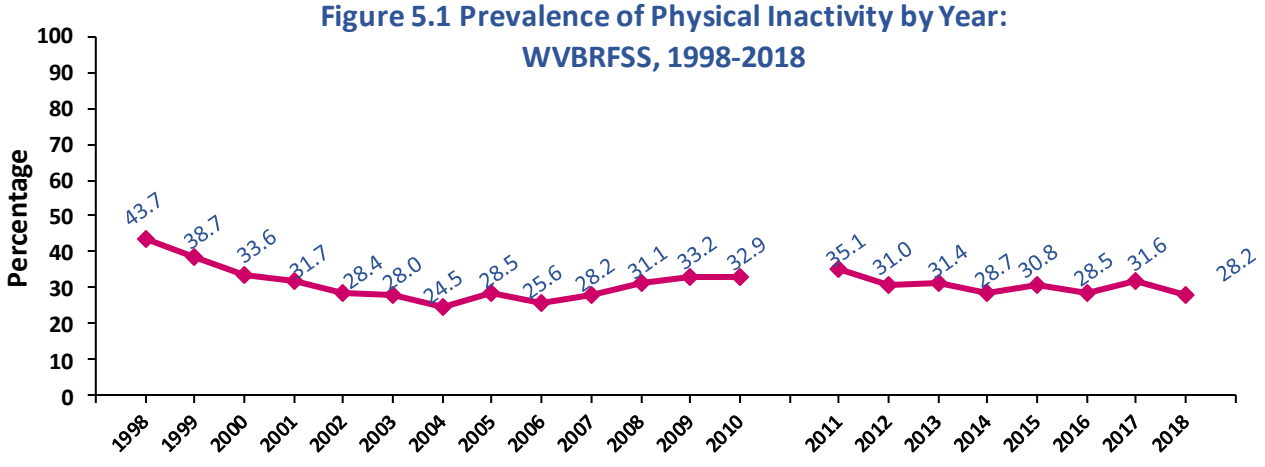
County

The 2014-2018 West Virginia state prevalence of physical inactivity was 29.5%. There were 4 counties with a significantly lower prevalence compared to the state; Jefferson, Marion, Monongalia, and Roane counties. There were 4 counties with a significantly higher prevalence compared to the state; Logan, McDowell, Mingo, and Wyoming counties.

Table 5.1 Prevalence of Physical Inactivity by Demographic Characteristics: WVBRFSS, 2018

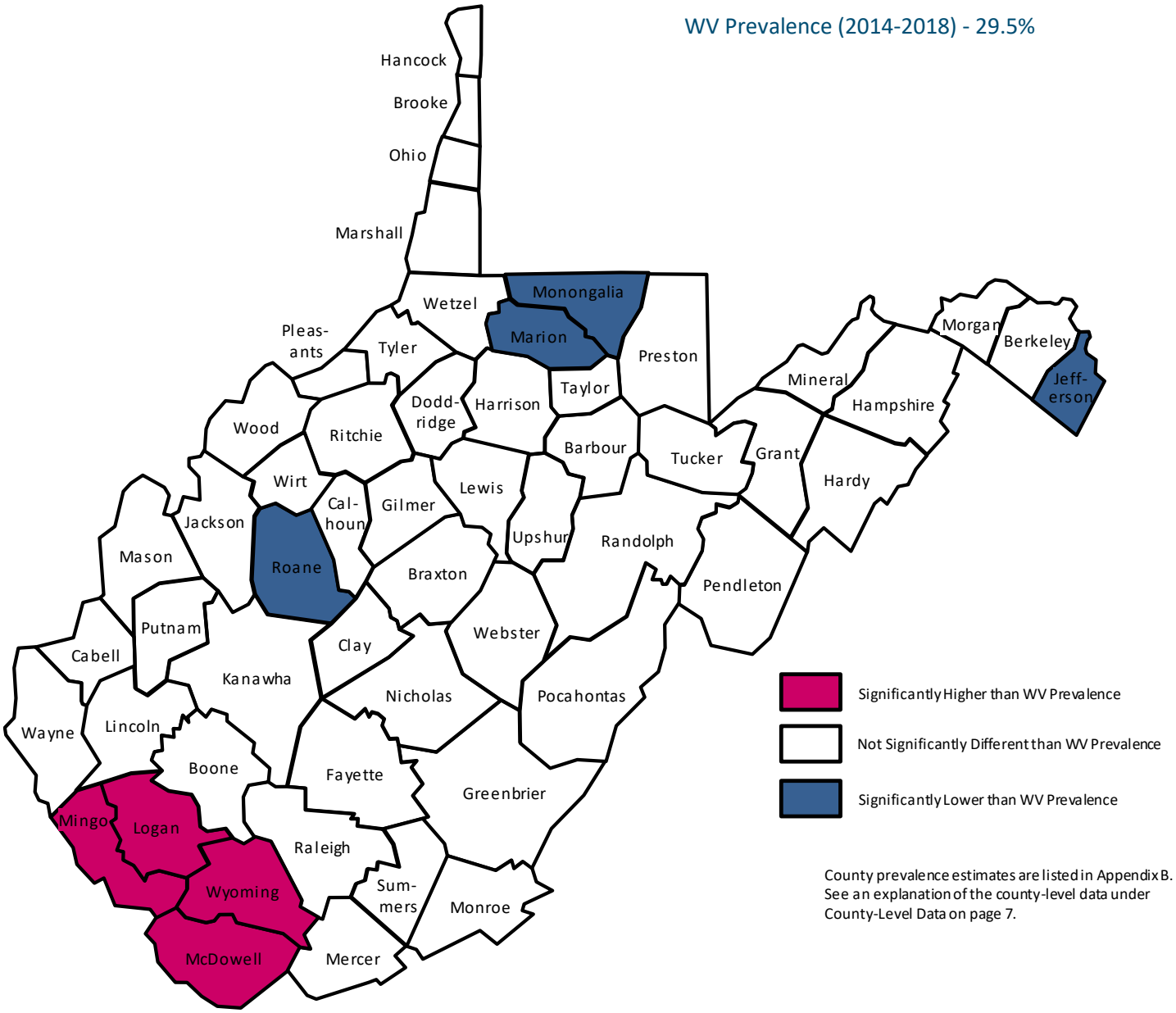
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	178,247	**25.3**	23.0-27.5	227,035	**31.0**	28.9-33.1	405,282	**28.2**	26.7-29.7
Age									
18-24	14,621	**17.1**	9.0-25.2	9,470	**12.0**	4.7-19.4	24,091	**14.7**	9.1-20.2
25-34	15,043	**14.0**	8.7-19.4	19,399	**18.9**	13.2-24.6	34,442	**16.4**	12.5-20.3
35-44	19,073	**17.6**	12.4-22.8	25,314	**23.7**	18.3-29.0	44,387	**20.6**	16.9-24.4
45-54	35,146	**31.7**	25.9-37.5	40,378	**36.9**	31.5-42.3	75,524	**34.3**	30.3-38.3
55-64	40,557	**32.1**	27.4-36.9	46,907	**36.3**	31.7-41.0	87,463	**34.3**	30.9-37.6
65+	52,943	**32.4**	28.5-36.4	83,565	**42.5**	39.1-46.0	136,508	**37.9**	35.3-40.6
Education									
Less than H.S.	38,482	**40.4**	32.2-48.5	53,794	**51.4**	44.0-58.8	92,276	**46.2**	40.7-51.6
H.S. or G.E.D.	79,102	**26.5**	23.0-30.0	98,165	**35.4**	31.7-39.0	177,267	**30.8**	28.2-33.3
Some Post-H.S.	41,990	**22.8**	18.7-26.9	51,797	**24.9**	21.5-28.3	93,787	**23.9**	21.3-26.6
College Graduate	17,782	**14.1**	11.0-17.1	22,892	**16.4**	13.5-19.3	40,675	**15.3**	13.2-17.4
Income									
Less than $15,000	22,248	**41.2**	32.5-49.9	49,341	**51.4**	44.9-57.9	71,589	**47.7**	42.5-53.0
$15,000 - 24,999	42,210	**34.5**	28.3-40.8	48,232	**34.7**	29.7-39.6	91,441	**34.6**	30.7-38.6
$25,000 - 34,999	24,933	**26.1**	19.7-32.5	23,825	**23.2**	18.0-28.5	48,759	**24.6**	20.5-28.7
$35,000 - 49,999	21,773	**21.5**	16.3-26.6	22,124	**26.9**	21.1-32.8	43,897	**23.9**	20.0-27.8
$50,000 - 74,999	20,599	**21.8**	16.2-27.4	17,665	**22.8**	17.4-28.2	38,264	**22.2**	18.3-26.2
$75,000+	19,594	**13.6**	9.9-17.2	19,657	**16.4**	12.5-20.3	39,250	**14.8**	12.2-17.5

Figure 5.1 Prevalence of Physical Inactivity by Year: WVBRFSS, 1998-2018



*Due to changes in sample composition and weighting methodology, 2011-2018 results are not directly comparable to previous years.

Figure 5.2 Prevalence of Physical Inactivity by County: WVBRFSS, 2014-2018



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

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: 25.2% (95% CI: 23.6-26.9)
U.S.: 15.5% (95% CI: 15.3-15.7)
The West Virginia prevalence of current cigarette smoking was significantly higher than the national prevalence. West Virginia ranked the highest among the 54 BRFSS participants.

Gender

Men: 25.7% (95% CI: 23.3-28.1)
Women: 24.8% (95% CI: 22.6-27.0)
There was no gender difference in the prevalence of current cigarette smoking.

Age

The prevalence of current cigarette smoking was significantly lower among adults aged 65 and older (13.9%) than all other age groups.

Education

The prevalence of current cigarette smoking was significantly higher among adults with less than a high school degree (44.2%) than all other educational attainment levels. The prevalence of current cigarette smoking was significantly lower among college graduates (11.3%) than all other educational attainment levels.

Household Income

The prevalence of current cigarette smoking was significantly higher among adults with an annual household income of less than $25,000 than all other income levels.

Trend

There was no change in prevalence of current cigarette smoking between 2011 and 2018. Because of the change in BRFSS methodology, results from 2011 and later are not directly comparable to previous years.

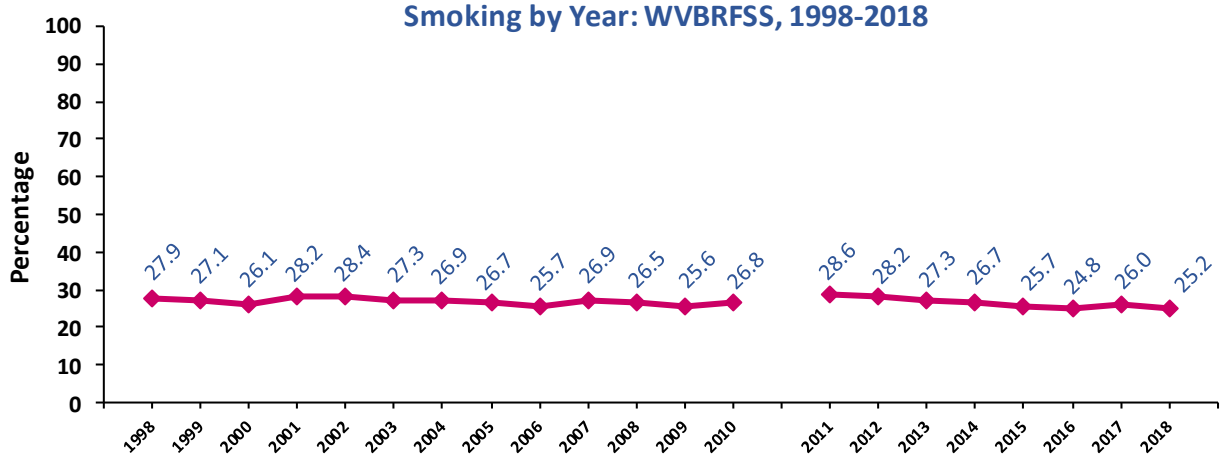
County

The 2014-2018 West Virginia state prevalence of current cigarette smoking was 25.7%. Monongalia County and Putnam County had a significantly lower prevalence when compared to the state. Fayette County and Mingo County had a significantly higher prevalence when compared to the state.

Table 6.1 Prevalence of Current Cigarette Smoking by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	176,879	**25.7**	23.3-28.1	178,110	**24.8**	22.6-27.0	354,990	**25.2**	23.6-26.9
Age									
18-24	19,068	**23.8**	14.7-32.8	17,350	**22.4**	12.8-32.0	36,418	**23.1**	16.5-29.7
25-34	36,610	**34.8**	27.1-42.6	35,368	**34.8**	27.7-42.0	71,977	**34.8**	29.5-40.1
35-44	33,729	**31.7**	25.1-38.4	34,470	**33.0**	26.7-39.3	68,199	**32.4**	27.8-36.9
45-54	28,201	**25.8**	20.3-31.4	32,212	**29.9**	24.7-35.1	60,414	**27.9**	24.1-31.6
55-64	33,950	**27.5**	23.0-32.1	34,017	**26.6**	22.4-30.9	68,158	**26.7**	23.7-29.8
65+	24,620	**15.4**	12.2-18.6	24,241	**12.6**	10.1-15.1	48,861	**13.9**	11.9-15.8
Education									
Less than H.S.	36,995	**41.0**	32.4-49.7	48,254	**46.9**	39.4-54.4	85,249	**44.2**	38.5-49.9
H.S. or G.E.D.	83,569	**28.9**	25.1-32.8	71,762	**26.6**	23.0-30.1	155,331	**30.8**	28.2-30.4
Some Post-H.S.	42,166	**23.2**	18.9-27.5	42,027	**20.33**	16.8-23.9	84,192	**21.7**	18.9-24.4
College Graduate	13,722	**10.9**	8.1-13.8	16,067	**11.7**	9.0-14.4	29,790	**11.3**	9.4-13.3
Income									
Less than $15,000	19,543	**37.0**	28.3-45.8	41,318	**44.1**	37.6-50.6	60,861	**41.5**	36.3-46.8
$15,000 - 24,999	45,309	**37.6**	31.1-44.2	47,980	**34.1**	28.7-39.5	93,288	**35.7**	31.5-39.9
$25,000 - 34,999	26,671	**28.6**	21.5-35.6	20,714	**20.3**	14.0-26.6	47,384	**24.3**	19.5-28.9
$35,000 - 49,999	26,333	**26.1**	19.7-32.5	16,460	**20.2**	14.2-26.3	42,793	**23.5**	19.0-28.0
$50,000 - 74,999	17,790	**19.5**	13.4-25.6	12,033	**15.8**	10.4-21.3	29,823	**17.8**	13.7-22.0
$75,000+	20,355	**14.2**	10.4-18.0	15,533	**13.0**	9.4-16.6	35,888	**13.7**	11.0-16.3

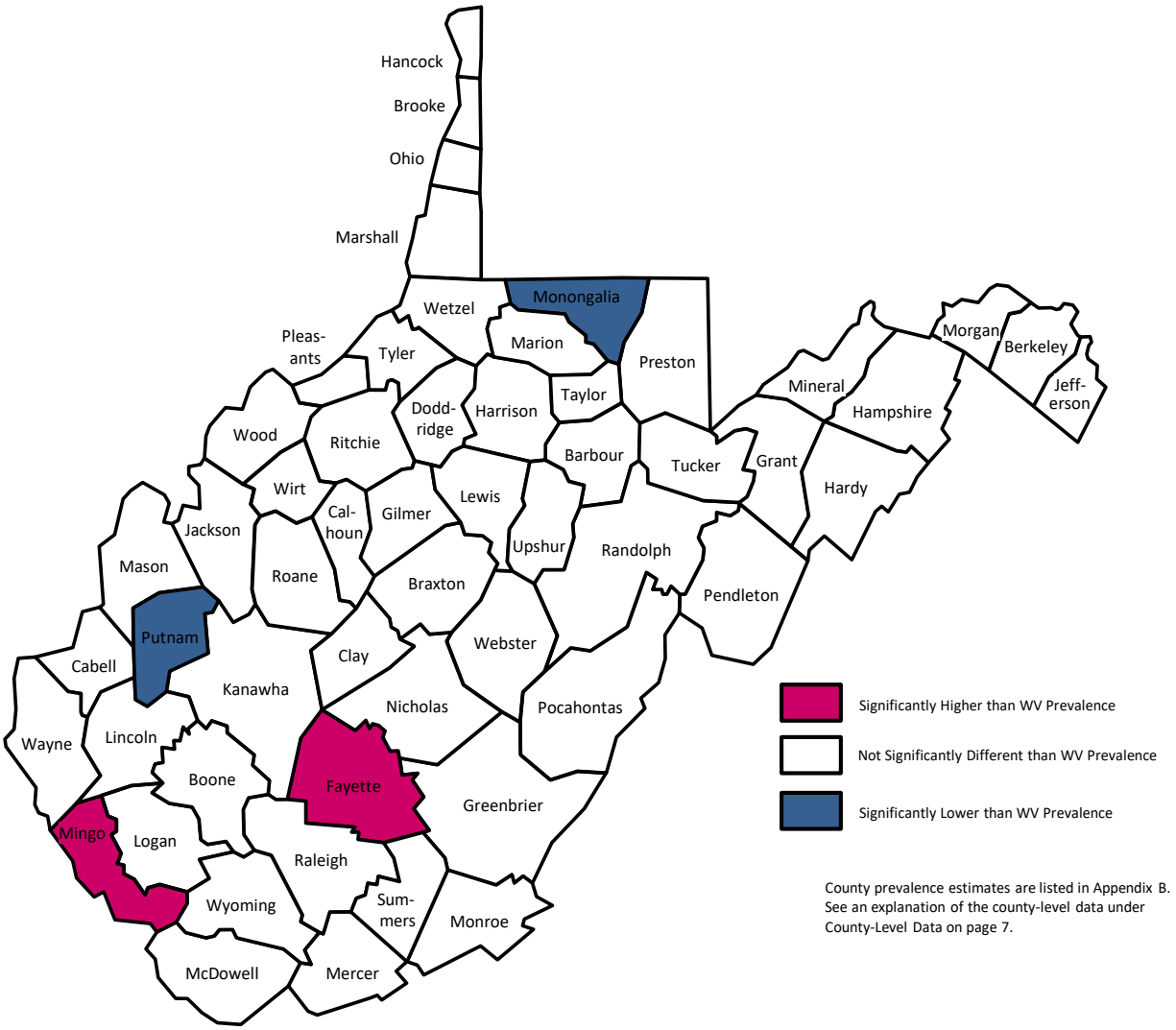
Figure 6.1 Prevalence of Current Cigarette Smoking by Year: WVBRFSS, 1998-2018



*Due to changes in sample composition and weighting methodology, 2011-2018 results are not directly comparable to previous years.

Figure 6.2 Prevalence of Current Cigarette Smoking by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 25.7%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

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: 52.1% (95% CI:48.4-55.9)
U.S.: 57.3% (95% CI: 56.5-58.1)
The West Virginia prevalence of smoking cessation was significantly lower than the U.S. prevalence. West Virginia ranked the 51st highest among 54 BRFSS participants.

Gender

Men: 54.2% (95% CI: 48.8-59.7)
Women: 50.1% (95% CI: 44.8-55.3)
There was no gender difference in the prevalence of smoking cessation.

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.

Trend

There was no change in the prevalence of smoking cessation between 2011 and 2018. Because of the change in BRFSS methodology, results from 2011 and later are not directly comparable to previous years.

County

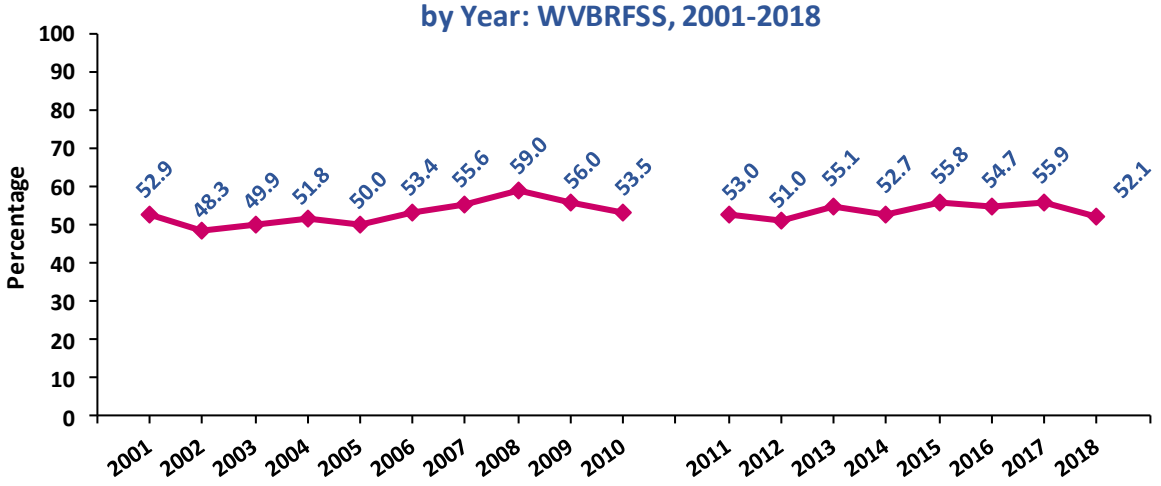
The 2014-2018 West Virginia state prevalence of smoking cessation was 54.2%. Tyler County had a significantly lower prevalence of smoking cessation than the state. No county had a higher prevalence than the state.

Table 6.2 Prevalence of Smoking Cessation by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	95,484	**54.2**	48.8-59.7	88,925	**50.1**	44.8-55.3	184,409	**52.1**	48.4-55.9
Age									
18-24	14,665	**76.9***	58.6-95.2	9,206	**53.1***	28.4-77.8	23,871	**65.5***	50.3-80.8
25-34	21,890	**60.2***	46.0-74.3	19,652	**55.6***	42.7-68.5	41,542	**57.9**	48.3-67.5
35-44	21,850	**64.8***	52.9-76.7	14,216	**41.7***	29.6-53.8	36,065	**53.2**	44.4-61.9
45-54	10,317	**36.6***	25.0-48.2	16,682	**51.8***	41.4-62.2	27,463	**44.7**	36.8-52.6
55-64	17,146	**51.5**	41.6-61.3	17,095	**50.3**	40.9-59.6	34,241	**50.9**	44.1-57.7
65+	9,413	**38.2***	27.6-48.9	11,621	**48.1***	37.3-58.9	21,034	**43.1**	35.5-50.8
Education									
Less than H.S.	19,823	**53.6***	39.4-67.7	25,364	**52.6***	40.8-64.4	45,187	**53.0**	43.9-62.1
H.S. or G.E.D.	44,066	**53.1**	45.2-61.1	34,483	**48.2**	40.3-56.1	78,550	**50.8**	45.2-56.5
Some Post-H.S.	24,802	**58.8***	48.7-69.0	20,925	**49.9**	40.1-59.7	45,726	**54.4**	47.3-61.5
College Graduate	6,793	**50.3***	36.4-64.3	8,153	**51.2***	38.7-63.7	14,946	**50.8**	41.5-60.1
Income									
Less than $15,000	12,560	**64.3***	50.4-78.1	14,965	**36.2**	26.5-45.9	27,525	**45.2**	36.9-53.6
$15,000 - 24,999	24,952	**55.1***	43.8-66.3	28,225	**59.1**	48.9-69.3	53,177	**57.1**	49.6-64.7
$25,000 - 34,999	14,215	**53.3**	38.3-68.3	11,950	**57.7***	40.7-74.7	26,166	**55.2***	43.9-66.6
$35,000 - 49,999	13,305	**50.5***	35.6-65.5	7,891	**47.9***	30.7-65.2	21,196	**49.5***	38.2-60.9
$50,000 - 74,999	9,522	**54.2***	36.8-71.7	6,278	**52.2***	33.2-71.2	15,800	**53.4***	40.4-66.3
$75,000+	9,621	**47.3***	32.8-61.7	6,617	**43.0***	28.1-57.9	16,238	**45.4***	35.0-55.9

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

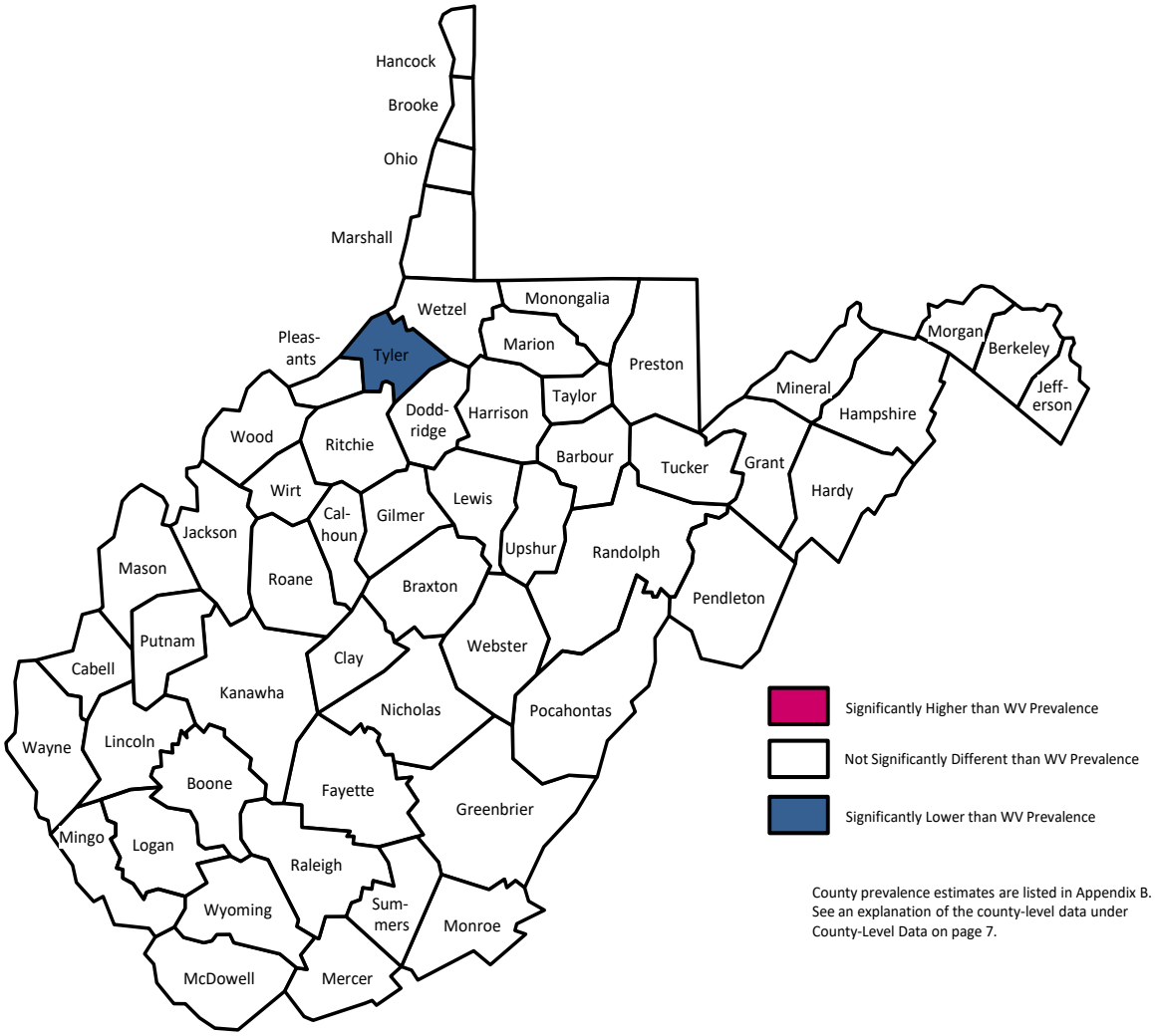
Figure 6.2 Prevalence of Smoking Cessation by Year: WVBRFSS, 2001-2018



Due to changes in sample composition and weighting methodology, 2011-2018 results are not directly comparable to previous years.

Figure 6.2 Prevalence of Smoking Cessation by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 54.2%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

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: 8.3% (95% CI: 7.2-9.4)
U.S.: 3.6% (95% CI: 3.5-3.7)
The West Virginia prevalence of smokeless tobacco use was significantly higher than the U.S. prevalence. West Virginia ranked the 3rd highest among 54 BRFSS participants.

Gender

Men: 15.5% (95% CI: 13.5-17.6)
Women: 1.4% (95% CI: 0.7-2.0)
The prevalence of smokeless tobacco use was significantly higher among men than women.

Age

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

Education

The prevalence of smokeless tobacco use was significantly higher among adults with less than a high school education and high school graduates than among adults with some college and college graduates.

Household Income

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

Trend

The was no change in prevalence of smokeless tobacco use. Because of the change in BRFSS methodology, results from 2011 and later are not directly comparable to previous years.

County

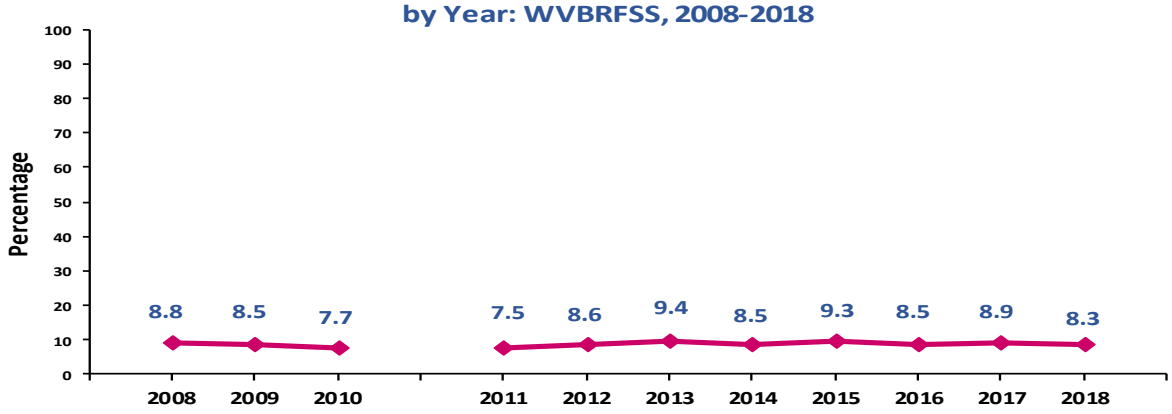
The 2014-2018 West Virginia state prevalence of smokeless tobacco was 8.7%. There were 5 counties with a significantly lower prevalence compared to the state; Berkeley, Cabell, Kanawha, Monongalia, and Taylor counties. There were 3 counties with a significantly higher prevalence compared to the state; Boone, Lincoln, and Wyoming counties.

Table 6.3 Prevalence of Smokeless Tobacco Use by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	106,925	**15.5**	13.5-17.6	9,763	**1.4**	0.7-2.0	116,689	**8.3**	7.2-9.4
Age									
18-24	8,685	**10.8**	2.9-18.8	3,611	**4.7***	0.4-8.9	12,297	**7.8**	3.2-12.4
25-34	17,457	**16.5**	10.4-22.6	1,006	**1.0***	0.0-2.5	18,463	**8.9**	5.6-12.2
35-44	19,428	**18.3**	12.5-24.0	872.5	**0.8***	0.0-2.2	20,300	**9.6**	6.5-12.7
45-54	26,238	**24.0**	18.5-29.4	2,014	**1.8***	0.0-4.1	28,252	**12.9**	9.8-15.7
55-64	16,163	**13.1**	9.8-16.5	1,073	**0.8***	0.0-1.6	17,236	**6.9**	5.1-8.6
65+	18,669	**11.6**	8.6-14.7	1,187	**0.6***	0.-1.2	19,856	**5.6**	4.1-7.1
Education									
Less than H.S.	23,413	**25.9**	18.5-33.3	2,275	**2.2***	0.0-4.8	25,687	**13.2**	9.3-17.1
H.S. or G.E.D.	50,562	**17.5**	14.0-20.9	6,609	**2.4***	1.0-3.9	57,170	**10.2**	8.2-12.2
Some Post-H.S.	23,476	**12.9**	9.4-16.4	606.3	**0.3***	0.0-0.9	24,082	**6.2**	4.5-7.9
College Graduate	9,048	**7.2**	4.6-9.8	273.9	**0.2***	0.0-0.5	9,322	**3.5**	2.3-4.8
Income									
Less than $15,000	11,549	**22.0**	13.5-30.5	3,533	**3.7***	05-6.9	15,082	**10.2**	6.4-14.1
$15,000 - 24,999	22,258	**18.3**	13.4-23.3	2,321	**1.7***	0.0-3.5	24,580	**9.4**	6.8-12.0
$25,000 - 34,999	10,883	**11.5**	6.6-16.4	475.5	**0.5***	0.0-1.4	11,359	**5.8**	3.3-8.3
$35,000 - 49,999	11,483	**11.4**	7.2-15.6	685.6	**0.8***	0.0-2.5	12,169	**6.7**	4.2-9.2
$50,000 - 74,999	10,201	**11.2**	6.6-15.7	125.7	**0.2***	0.0-0.5	10,327	**6.2**	3.6-8.7
$75,000+	25,458	**17.8**	13.4-22.2	1,401	**1.2***	0.0-2.5	26,859	**10.2**	7.6-12.8

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

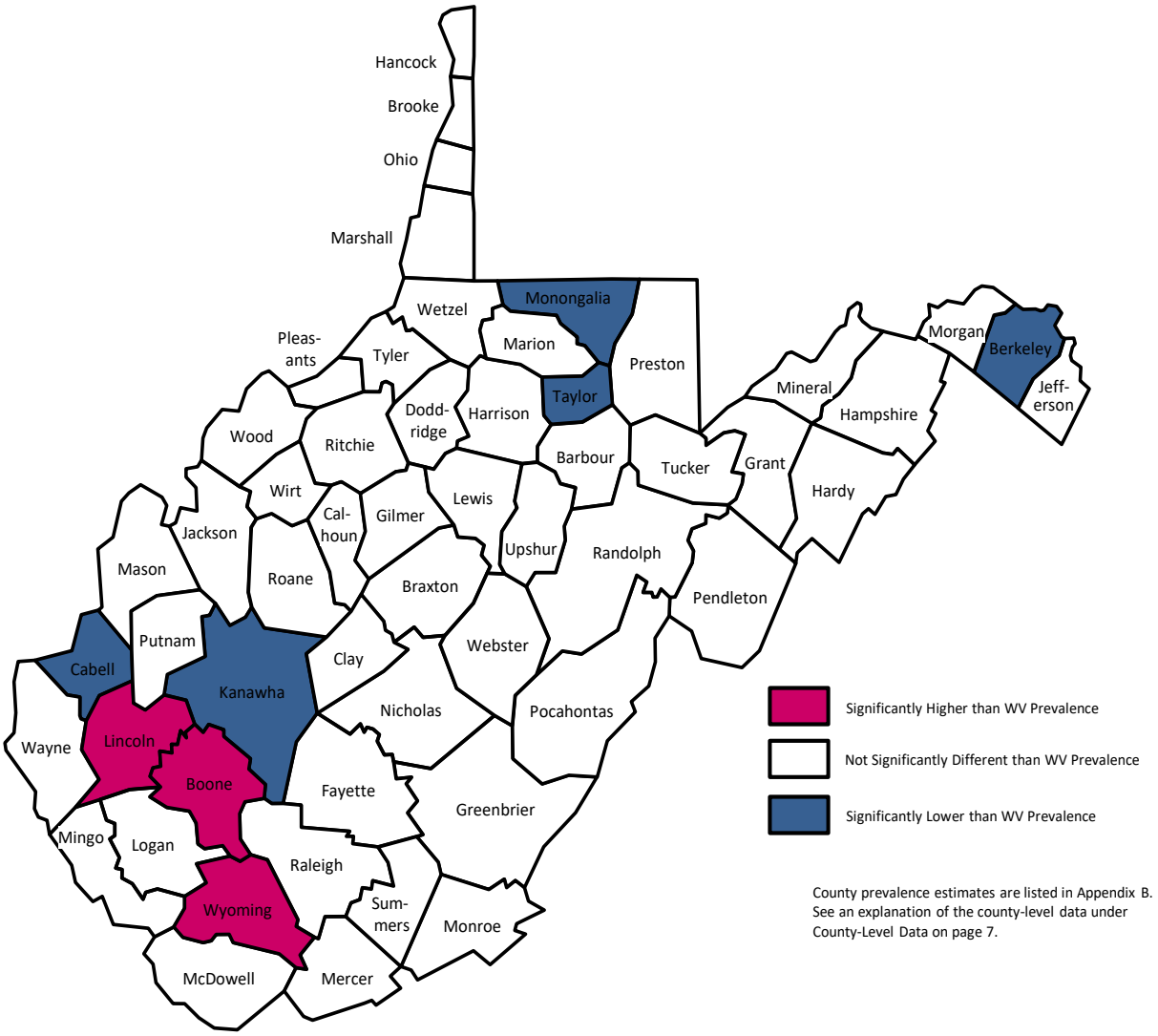
Figure 6.3 Prevalence of Smokeless Tobacco Use by Year: WVBRFSS, 2008-2018



*Due to changes in sample composition and weighting methodology, 2011-2018 results are not directly comparable to previous years.

Figure 6.5 Prevalence of Smokeless Tobacco Use by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 8.7%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

CHAPTER 7: Marijuana Use

Marijuana Use

Definition

Responding "1" or more to the question "During the past 30 days, on how many days did you use marijuana or hashish?"

Prevalence

WV: 6.9**%** (95% CI: 5.9-7.9)
Because this question is part of a state selected optional module and complete national data are not available, a U.S. comparison was not conducted.

Gender

Men: 9.1 (95% CI: 7.4-10.8)
Women: 4.8% (95% CI: 3.7-5.9)
The prevalence of marijuana use in the past 30 days was significantly higher among men than women.

Age

The prevalence marijuana use in the past 30 days was significantly higher among adults aged 25-34 (14.8%) than adults aged 35 and older. The prevalence of marijuana use in the past 30 days was significantly lower among those aged 65 and older (1.7%) than among all other age groups.

Education

There was no educational attainment difference in the prevalence of marijuana use in the past 30 days.

Household Income

The prevalence of marijuana use in the past 30 days was significantly higher among adults with an annual household income of less than $25,000 than among those earning $25,000-$49,999 and those earning more than $75,000.

Trend

Because of the lack of data from previous years, a trendline for marijuana use could not be created.

County

No county estimates are available for marijuana use due to lack of data from previous years.

Table 7.1 Prevalence of Marijuana Use in the Past Month: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	58,606	**9.1**	7.4-10.8	32,749	**4.8**	3.7-5.9	91,354	**6.9**	5.9-7.9
Age									
18-24	11,671	**16.2**	8.0-24.4	5,878	**8.7**	3.0-14.4	17,549	**12.5**	7.5-17.6
25-34	18,147	**18.9**	12.3-25.5	9,627	**10.5**	5.7-15.3	27,774	**14.8**	10.7-19.0
35-44	7,474	**7.5**	3.5-11.5	5,091	**5.2**	2.7-7.6	12,565	**6.4**	4.0-8.7
45-54	10,581	**10.2**	6.3-14.2	6,460	**6.2**	3.3-8.9	17,041	**8.2**	5.8-10.6
55-64	7,762	**6.6**	4.2-9.1	2,563	**2.1**	1.0-3.2	10,325	**4.3**	3.0-5.6
65+	2,769	**1.8**	0.8-2.8	2,938	**1.6**	0.7-2.4	5,707	**1.7**	1.0-2.3
Education									
Less than H.S.	5,452	**6.5**	1.4-11.6	1,840	**1.8**	0.0-3.9	7,292	**4.0**	1.4-6.6
H.S. or G.E.D.	10,460	**4.1**	2.1-6.2	5,038	**2.0**	0.8-3.3	15,498	**3.1**	1.9-4.3
Some Post-H.S.	5,095	**3.2**	1.1-5.2	4,142	**2.2**	0.8-3.6	9,237	**2.6**	1.4-3.9
College Graduate	1,986	**1.8**	0.6-3.1	1,366	**1.1**	0.2-2.0	3,353	**1.5**	0.7-2.2
Income									
Less than $15,000	7,323	**14.9**	7.4-22.5	9,286	**10.2**	5.8-14.6	16,609	**11.9**	7.9-15.8
$15,000 - 24,999	19,668	**17.2**	11.9-22.6	7,142	**5.5**	2.8-8.1	26,810	**11.0**	8.0-13.9
$25,000 - 34,999	6,203	**6.8**	2.7-10.8	3,928	**4.0**	1.2-6.8	10,131	**5.3**	2.9-7.8
$35,000 - 49,999	6,339	**6.6**	2.7-10.4	3,101	**4.0**	1.2-6.7	9,439	**5.4**	3.0-7.9
$50,000 - 74,999	6,971	**8.5**	3.3-13.6	2,775	**3.9**	0.9-6.9	9,746	**6.4**	3.2-9.5
$75,000+	5,050	**3.9**	1.7-6.0	4,567	**4.1**	2.0-6.3	9,617	**4.0**	2.5-5.5

CHAPTER 8: ALCOHOL CONSUMPTION

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: 4.2% (95% CI: 3.5-5.0)
U.S.: 6.3% (95% CI: 6.2-6.5)
The West Virginia prevalence of heavy drinking was significantly lower than the U.S. prevalence. West Virginia ranked 52nd highest among the 54 BRFSS participants.

Gender

Men: 6.5% (95% CI: 5.1-7.9)
Women: 2.1% (95% CI: 1.5-2.7)
The prevalence of heavy drinking was significantly higher among men than among women.

Age

There was no age difference in the prevalence of heavy drinking.

Education

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

Household Income

There was no annual household income difference in the prevalence of heavy drinking.

Trend

There was a no change in prevalence of heavy drinking between 2011 and 2018. Because of the change in BRFSS methodology, results from 2011 and later are not directly comparable to previous years.

County

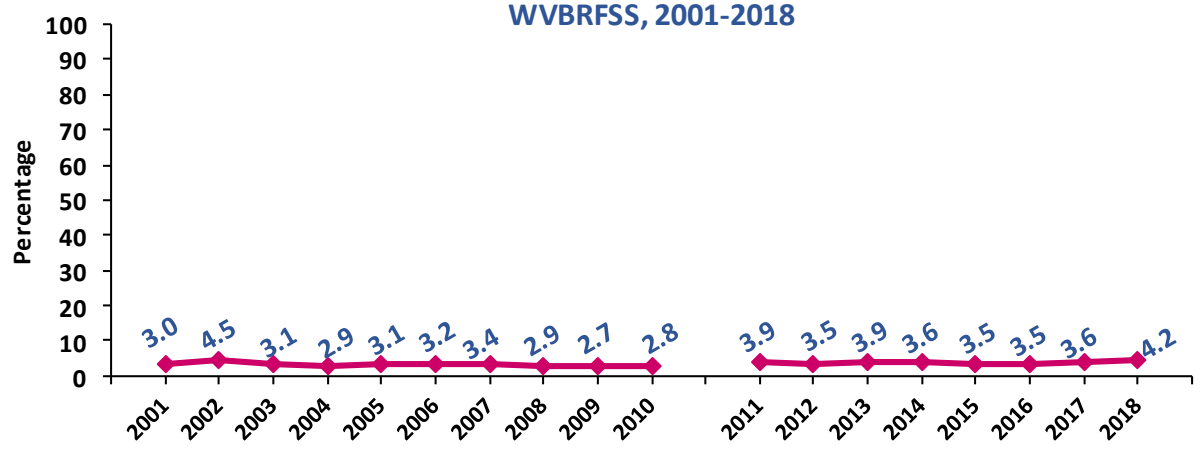
The 2014-2018 West Virginia prevalence for heavy drinking was 3.7%. There were 10 counties with a prevalence significantly lower than the state; Doddridge, Grant, Mercer, Mingo, Pleasant, Ritchie, Roane, Summer, Upshur, and Wyoming. Monongalia County had a significantly higher prevalence than the state.

Table 8.1 Prevalence of Heavy Drinking by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	43,588	**6.5**	5.1-7.9	14,908	**2.1**	1.5-2.7	58,496	**4.2**	3.5-5.0
Age									
18-24	7,326	**9.4***	3.3-15.4	1,620	**2.1***	0.0-4.6	8,946	**5.8**	2.4-9.2
25-34	10,211	**9.8**	4.9-14.7	2,954	**3.0***	0.5-5.6	13,166	**6.5**	3.7-9.4
35-44	6,104	**6.0***	2.1-9.8	2,939	**2.9***	1.1-4.7	9,043	**4.4**	2.3-6.6
45-54	7,619	**7.3**	3.8-10.7	2,927	**2.7***	0.9-4.6	10,546	**4.9**	3.0-6.9
55-64	7,521	**6.2**	4.1-8.4	2,561	**2.0***	0.8-3.2	10,081	**4.1**	2.8-5.3
65+	4,604	**2.9**	1.6-4.3	1,907	**1.0**	0.4-1.6	6,511	**1.9**	1.2-2.5
Education									
Less than H.S.	4,048	**4.6***	0.8-8.5	1,272	**1.2***	0.0-2.9	5,320	**2.8**	0.8-4.8
H.S. or G.E.D.	21,998	**7.8**	5.4-10.2	3,748	**1.4***	0.5-2.3	25,746	**4.7**	3.4-6.0
Some Post-H.S.	12,211	**6.9**	4.0-9.8	4,722	**2.3**	1.1-3.6	16,932	**4.5**	2.9-6.0
College Graduate	5,331	**4.3**	2.6-6.0	5,166	**3.8**	2.1-5.4	10,497	**4.0**	2.8-5.2
Income									
Less than $15,000	5,575	**11.2***	4.6-17.7	2,179	**2.3***	0.4-4.2	7,755	**5.4**	2.7-8.1
$15,000 - 24,999	8,108	**6.8**	3.4-10.1	2,104	**1.5***	0.3-2.8	10,212	**4.0**	2.3-5.7
$25,000 - 34,999	5,531	**6.1***	2.3-9.8	3,785	**3.8**	0.9-6.6	9,316	**4.9**	2.5-7.2
$35,000 - 49,999	4,458	**4.5***	1.7-7.3	725.5	**0.9***	0.1-1.7	5,184	**2.9**	1.3-4.5
$50,000 - 74,999	5,116	**5.7***	1.5-9.8	2,368	**3.1***	1.0-5.3	7,484	**4.5**	2.0-7.0
$75,000+	10,614	**7.5**	4.4-10.6	3,589	**3.0**	1.5-4.5	14,203	**5.5**	3.6-7.3

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

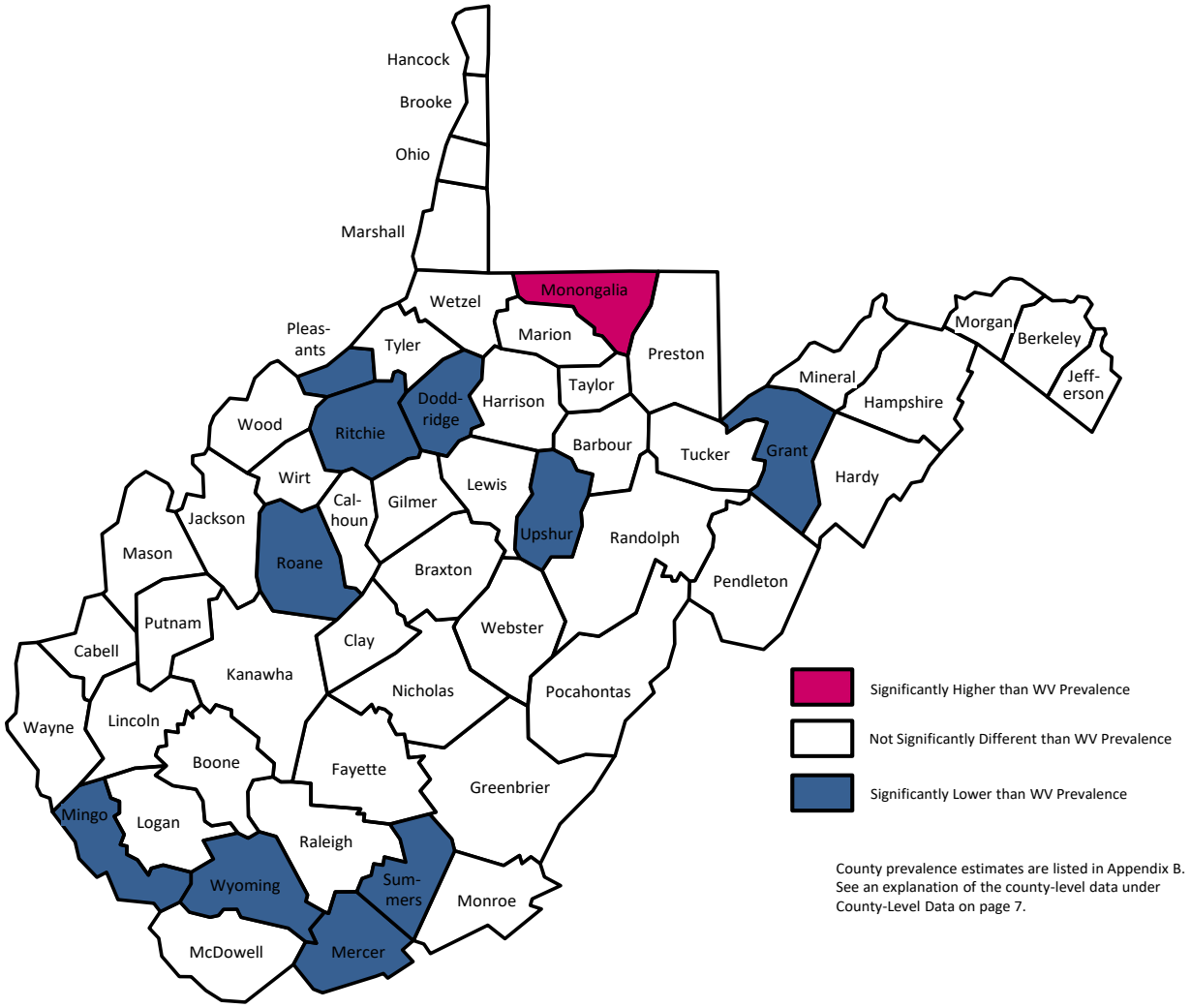
Figure 8.1 Prevalence of Heavy Drinking by Year: WVBRFSS, 2001-2018



*Due to changes in sample composition and weighting methodology, 2011-2018 results are not directly comparable to previous years.

Figure 8.3 Prevalence of Heavy Drinking by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 3.7%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

CHAPTER 8: ALCOHOL CONSUMPTION

Binge Drinking

Definition

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

Prevalence

WV: 12.1% (95% CI: 10.9-13.4)
U.S.: 16.4% (95% CI: 16.2-16.6)
The West Virginia prevalence of binge drinking was significantly lower than the U.S. prevalence. West Virginia ranked the 53rd highest among 54 BRFSS participants.

Gender

Men: 16.8% (95% CI: 15.1-18.5)
Women: 6.2% (95% CI: 5.2-7.2)
The prevalence of binge drinking was significantly higher among men than among women.

Age

The prevalence of binge drinking was significantly higher among adults aged 18-24 (19.7%) than adults aged 45 and older. The prevalence of binge drinking was significantly lower among adults aged 65 and older (2.8%) than all other age groups.

Education

The prevalence of binge drinking was significantly higher among college graduates (14.3%) than adults with less than a high school education (8.1%).

Household Income

The prevalence of binge drinking was significantly higher among adults with an annual household income of $75,000 or more (18.7%) than adults with an income of less than $50,000 per year.

Trend

There was no change in the prevalence of binge drinking between 2011 and 2018. Because of the change in BRFSS methodology, results from 2011 and later are not directly comparable to previous years.

County

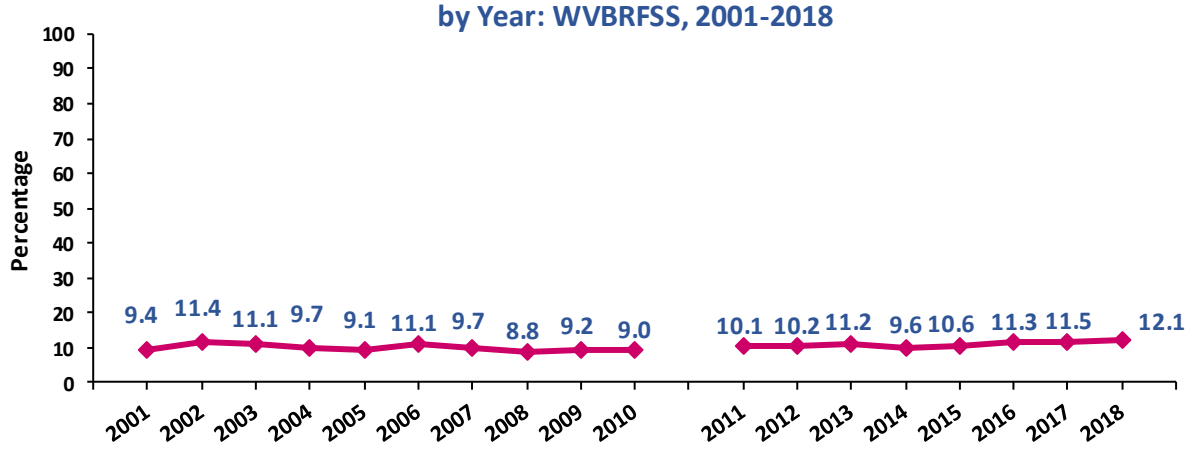
The 2014-2018 West Virginia state prevalence of binge drinking was 11.0%. There were 7 counties with a significantly lower prevalence compared to the state; Doddridge, Mercer, Mingo, Raleigh, Roane, Webster, and Wyoming. There were 3 counties with a significantly higher prevalence compared to the state; Brooke, Jefferson, and Monongalia.

Table 8.2 Prevalence of Binge Drinking by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	126,372	**18.7**	16.5-20.9	41,525	**5.8**	4.7-7.0	167,897	**12.1**	10.9-13.4
Age									
18-24	21,206	**27.3**	18.1-36.5	9,068	**11.9**	5.9-17.9	30,273	**19.7**	14.0-25.3
25-34	34,600	**33.0**	25.5-40.5	11,179	**11.4**	6.7-16.2	45,779	**22.6**	17.9-27.3
35-44	26,451	**25.6**	19.2-32.0	9,619	**9.3**	5.8-12.8	36,069	**17.4**	13.7-21.2
45-54	18,851	**17.7**	12.8-22.6	5,143	**4.8**	2.6-7.0	23,994	**11.2**	8.5-14.0
55-64	15,915	**13.1**	9.9-16.3	5,486	**4.3**	2.5-6.2	21,401	**8.6**	6.8-10.5
65+	8,566	**5.4**	3.6-7.3	1,030	**0.5***	0.2-0.9	9,596	**2.8**	1.9-3.7
Education									
Less than H.S.	13,687	**15.5**	8.9-22.2	1,957	**1.9***	0.0-4.0	15,644	**8.1**	4.8-11.5
H.S. or G.E.D.	53,205	**18.9**	15.4-22.4	12,664	**4.7**	2.9-6.5	65,869	**12.0**	10.0-14.0
Some Post-H.S.	34,637	**19.4**	15.0-23.9	14,519	**7.2**	4.6-9.8	49,156	**13.0**	10.4-15.5
College Graduate	24,844	**20.0**	15.9-24.1	12,384	**9.1**	6.5-11.7	37,228	**14.3**	11.8-16.7
Income									
Less than $15,000	10,172	**20.3**	11.6-29.1	3,951	**4.2***	1.5-6.9	14,123	**9.8**	6.1-13.6
$15,000 - 24,999	21,699	**18.0**	12.7-23.2	6,559	**4.8**	2.4-7.2	28,258	**10.9**	8.1-13.8
$25,000 - 34,999	13,717	**15.0**	9.0-21.0	7,795	**7.8**	3.6-11.9	21,512	**11.2**	7.6-14.8
$35,000 - 49,999	13,962	**14.0**	9.3-18.7	4,118	**5.1***	1.7-8.5	18,080	**10.0**	7.0-13.0
$50,000 - 74,999	18,769	**20.8**	14.2-27.4	6,013	**8.0**	3.8-12.1	24,782	**15.0**	10.8-19.1
$75,000+	37,010	**26.4**	21.4-31.3	11,390	**9.6**	6.5-12.7	48,401	**18.7**	15.6-21.8

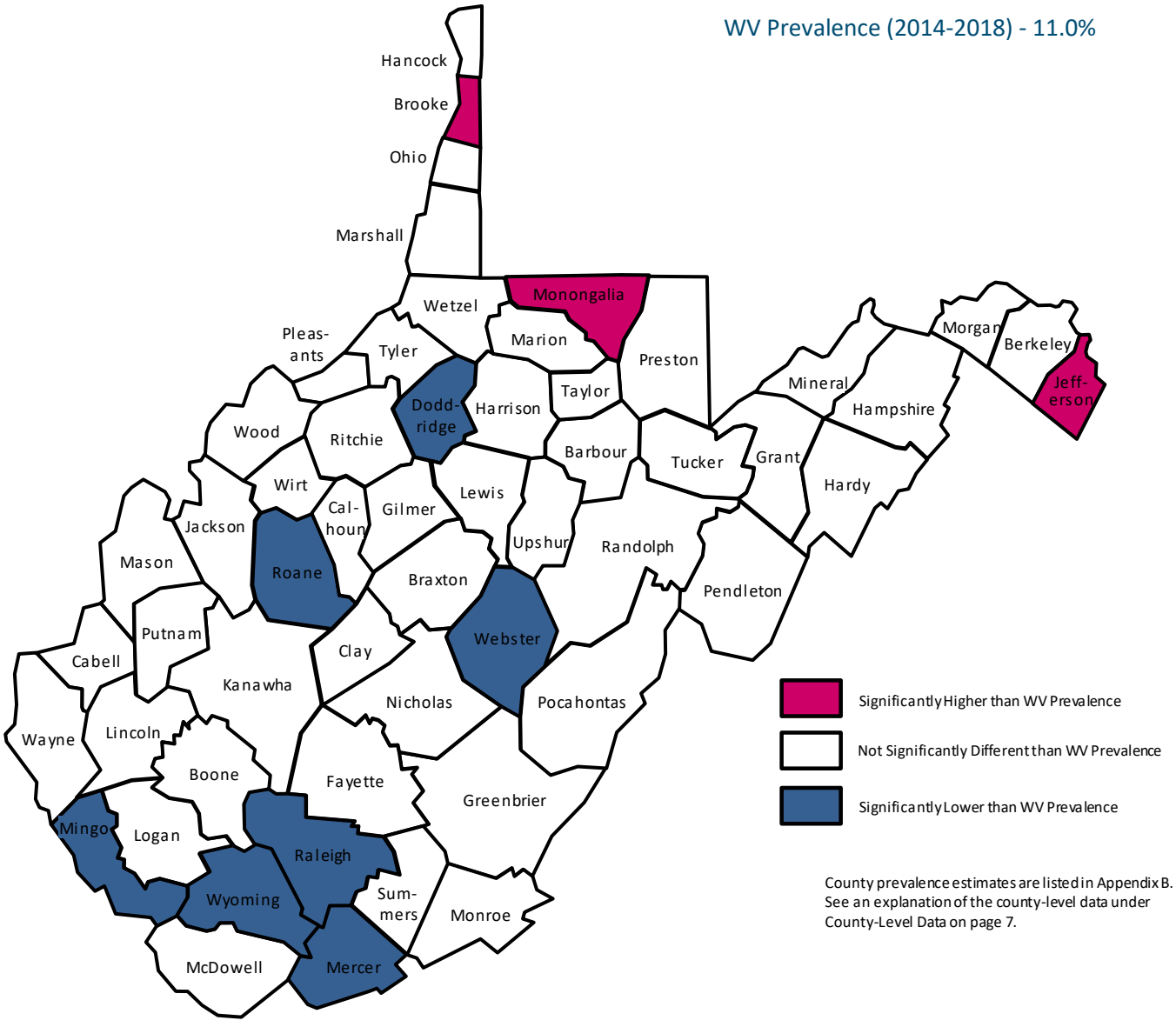
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

Figure 8.2 Prevalence of Binge Drinking by Year: WVBRFSS, 2001-2018



*Due to changes in sample composition and weighting methodology, 2011-2018 results are not directly comparable to previous years.

Figure 8.3 Prevalence of Binge Drinking by County: WVBRFSS, 2014-2018



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: 4.0% (95% CI: 3.3-4.8)
U.S.: 3.1% (95% CI: 3.0-3.2)
The West Virginia prevalence of seldom or never wear a seat belt was significantly higher than the U.S. prevalence. West Virginia ranked the 15th highest among the 54 BRFSS participants.

Gender

Men: 5.9% (95% CI: 4.6-7.2)
Women: 2.2% (95% CI: 1.5-3.0)
The prevalence of seldom or never wear a seat belt was significantly higher among men than women.

Age

There was no age difference in prevalence of seldom or never wear a seat belt.

Education

There was no educational attainment difference in the prevalence of seldom or never wear a seatbelt.

Household Income

There was no annual household income difference in the prevalence of seldom or never wear a seatbelt.

Trend

There was a no change in prevalence of seldom or never wear a seatbelt from 2014 to 2018.

County

The 2014-2018 West Virginia state prevalence of seldom or never wear a seatbelt was 4.1%. Mason County and Putnam County had a significantly lower prevalence when compared to the state. There were no counties with a significantly higher prevalence than the state.

Table 9.1 Prevalence of Seldom or Never Wear a Seatbelt: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	40,244	**5.9**	4.6-7.2	15,951	**2.2**	1.5-3.0	56,195	**4.0**	3.3-4.8
Age									
18-24	4,372	**5.5***	0.6-10.4	1,740	**2.2***	0.0-5.4	6,112	**3.9***	0.9-6.8
25-34	8,704	**8.2**	3.7-12.7	2,628	**2.6***	0.3-4.9	11,333	**5.5**	2.9-8.1
35-44	5,697	**5.5**	2.3-8.6	2,259	**2.2***	0.5-3.8	7,956	**3.8**	2.0-5.6
45-54	7,603	**7.0**	3.6-10.4	2,332	**2.1***	0.7-3.6	9,935	**4.6**	2.7-6.5
55-64	6,905	**5.6**	3.5-7.8	4,243	**3.3***	1.1-5.6	11,148	**4.5**	2.9-6.0
65+	6,464	**4.0**	2.3-5.8	2,749	**1.4***	0.5-2.4	9,213	**2.6**	1.7-3.6
Education									
Less than H.S.	5,431	**6.0**	2.5-9.6	4,903	**4.8***	1.4-8.1	10,334	**5.4**	2.9-7.8
H.S. or G.E.D.	21,702	**7.6**	5.2-9.9	5,841	**2.2**	1.1-3.3	27,543	**5.0**	3.6-6.3
Some Post-H.S.	9,181	**5.1**	2.6-7.5	2,863	**1.4***	0.2-2.6	12,044	**3.1**	1.8-4.4
College Graduate	3,929	**3.1**	1.7-4.6	2,344	**1.7**	0.7-2.7	6,273	**2.4**	1.5-3.2
Income									
Less than $15,000	3,439	**6.7**	3.0-10.4	5,183	**5.5**	2.4-8.7	8,622	**5.9**	3.5-8.4
$15,000 - 24,999	5,936	**4.9**	2.3-7.5	2,730	**1.9***	0.3-3.5	8,666	**3.3**	1.8-4.8
$25,000 - 34,999	6,703	**7.2**	3.3-11.0	3,423	**3.3***	0.5-6.2	10,125	**5.2**	2.8-7.5
$35,000 - 49,999	5,881	**5.8**	2.5-9.2	646.4	**0.8***	0.0-1.7	6,528	**3.6**	1.7-5.5
$50,000 - 74,999	8,423	**9.3**	4.1-14.4	821.3	**1.1***	0.0-2.4	9,244	**5.5**	2.6-8.5
$75,000+	7,272	**5.1**	2.6-7.7	1,032	**0.9***	0.0-1.7	8,304	**3.2**	1.7-4.7

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

Figure 9.1 Prevalence of Seldom or Never Wear a Seatbelt by Year: WVBRFSS, 2014-2018

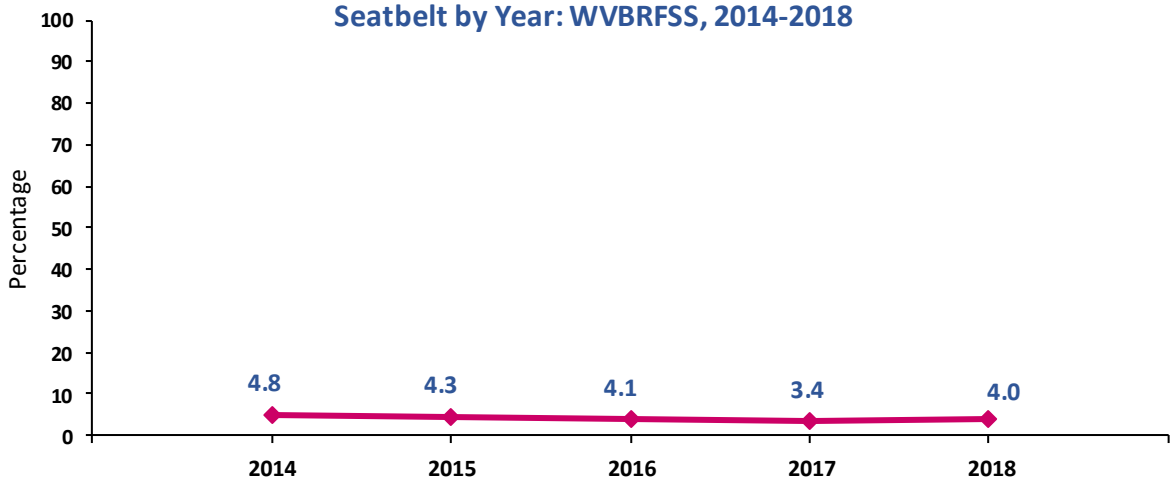
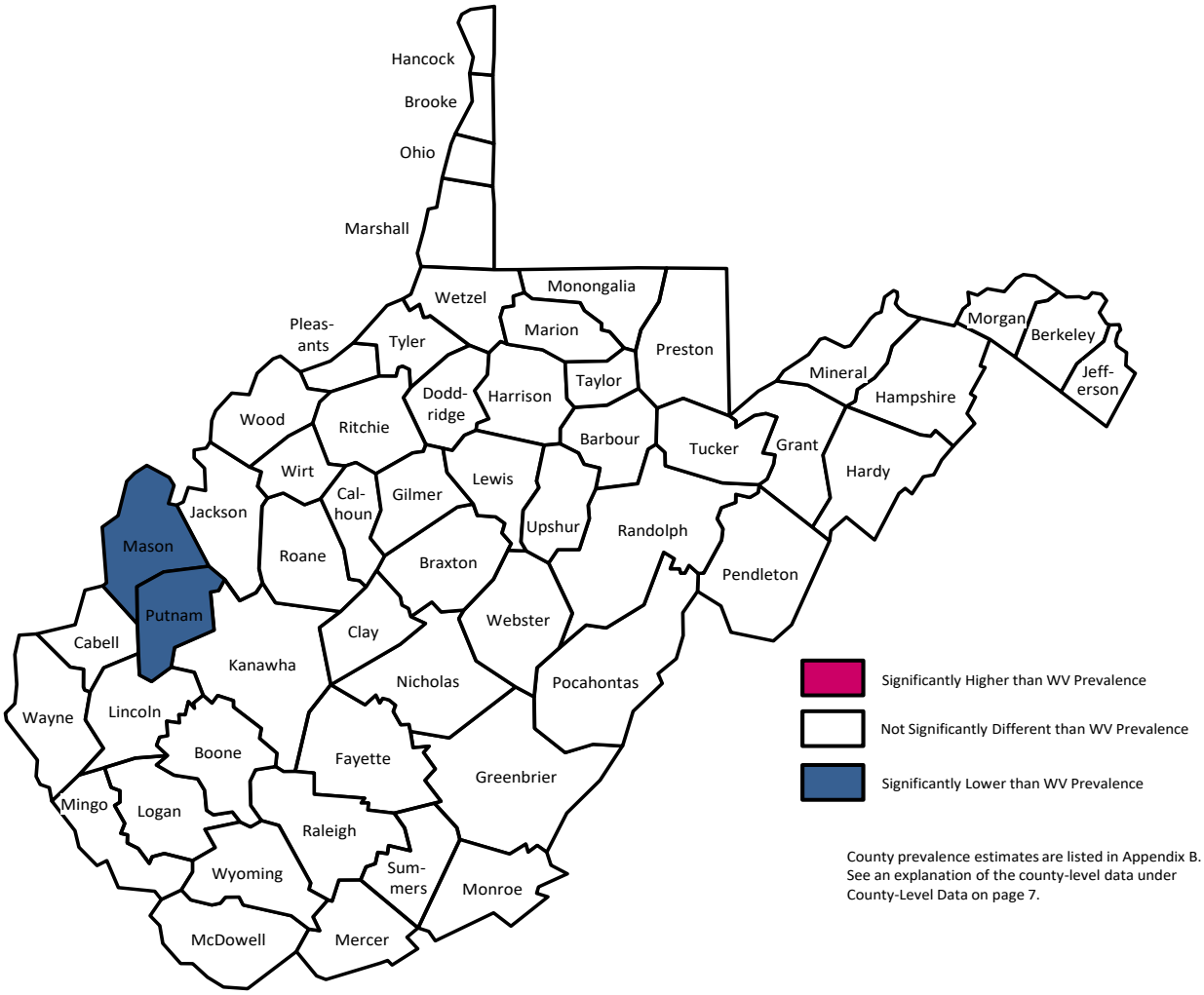


Figure 9.1 Prevalence of Seldom or Never Wear Seatbelt by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 4.1%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

Fall in Past Year

Definition

Responding "1" or more to the question, "In the past 12 months, how many times have you fallen? By a fall, we mean when a person unintentionally comes to rest on the ground or another lower level." Asked among those aged 45 and older.

Prevalence

WV: 31.4% (95% CI: 29.6-33.2)
U.S.: 25.3% (95% CI: 25.3-25.7)
The West Virginia prevalence of at least one fall in the past year was significantly higher than the U.S. prevalence. West Virginia ranked the 2nd highest among the 54 BRFSS participants.

Gender

Men: 30.5% (95% CI: 27.7-33.2)
Women: 32.3% (95% CI: 29.9-34.7)
There was no gender difference in the prevalence of at least one fall in the past year among adults aged 45 and older.

Age

There was no age difference in the prevalence of at least one fall in the past year among adults aged 45 and older.

Education

There was no education attainment difference in prevalence of at least one fall in the past year among adults aged 45 and older.

Household Income

The prevalence of least one fall in the past year among adults aged 45 and older was significantly higher among adults with an annual household income of less than $25,000 than all other annual household income levels.

Trend

There was an increase in prevalence of at least one fall in the past year among adults aged 45 and older from 2012 to 2018.

County

The 2010-2018 West Virginia state prevalence of at least one fall in the past year among adults aged 45 and older was 26.8%. There were 4 counties with a significantly lower prevalence compared to the state; Cabell, Kanawha, Marshall, and Putnam. There were 5 counties with a significantly higher prevalence compared to the state; Gilmer, Mingo, Nicholas, Roane, and Wyoming.

Table 9.2 Prevalence of At Least One Fall in the Past Year Among Adults Aged 45 and Older: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	117,910	**30.5**	27.7-33.2	139,096	**32.3**	29.9-34.7	257,005	**31.4**	29.6-33.2
Age									
45-54	32,697	**30.9**	25.0-36.9	38,131	**35.8**	30.4-41.2	70,828	**33.4**	29.3-37.4
55-64	44,325	**36.7**	31.7-41.7	40,449	**32.0**	27.5-36.6	84,774	**34.3**	30.9-37.7
65+	40,053	**25.4**	21.7-29.0	58,793	**30.9**	27.7-34.2	98,846	**28.4**	26.0-30.8
Education									
Less than H.S.	24,102	**42.9**	33.9-51.9	29,213	**41.0**	33.6-48.4	53,315	**41.8**	36.1-47.6
H.S. or G.E.D.	50,703	**29.4**	25.2-33.5	56,943	**32.4**	28.5-36.2	107,646	**30.9**	28.0-33.7
Some Post-H.S.	26,627	**27.8**	22.8-32.7	34,945	**30.5**	26.2-34.8	61,572	**29.3**	26.0-32.5
College Graduate	15,623	**25.6**	21.0-30.2	17,904	**26.2**	22.0-30.3	33,527	**25.9**	22.8-29.0
Income									
Less than $15,000	16,844	**48.1**	38.2-58.0	25,237	**45.3**	38.1-52.4	42,080	**46.4**	40.6-52.2
$15,000 - 24,999	29,342	**43.0**	35.6-50.5	31,569	**36.8**	31.1-42.5	60,912	**39.6**	35.0-44.2
$25,000 - 34,999	15,403	**27.3**	20.2-34.5	18,188	**30.0**	23.5-36.4	33,591	**28.7**	23.9-33.5
$35,000 - 49,999	17,437	**27.2**	20.9-33.5	12,234	**23.4**	16.9-29.8	29,671	**25.5**	21.0-30.0
$50,000 - 74,999	9,062	**21.7**	15.1-28.2	13,289	**29.9**	23.0-36.8	22,351	**25.9**	21.1-30.7
$75,000+	15,521	**20.5**	15.3-25.6	15,115	**24.7**	19.1-30.2	30,636	**22.4**	18.6-26.1

Figure 9.2 Prevalence of At Least One Fall in the Past Year Among Adults Aged 45 and Older by Year: WVBRFSS, 2012-2018

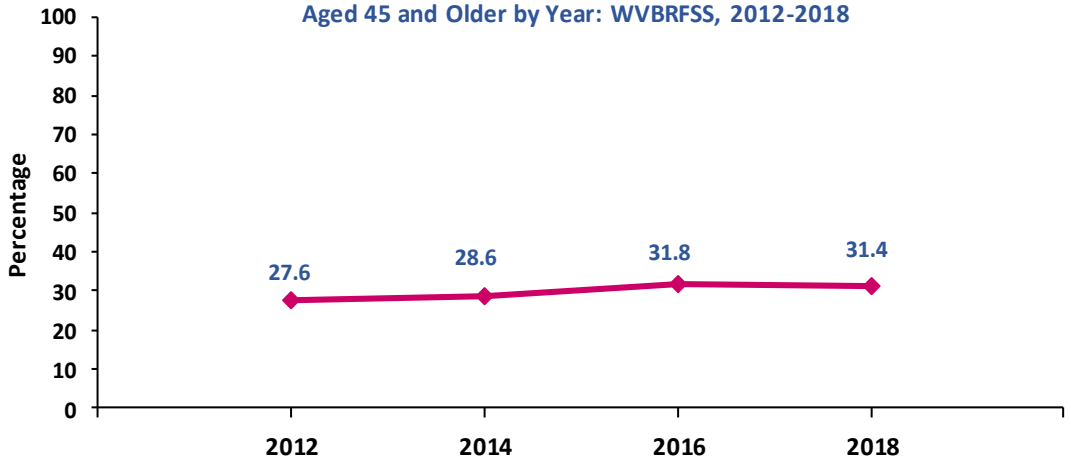
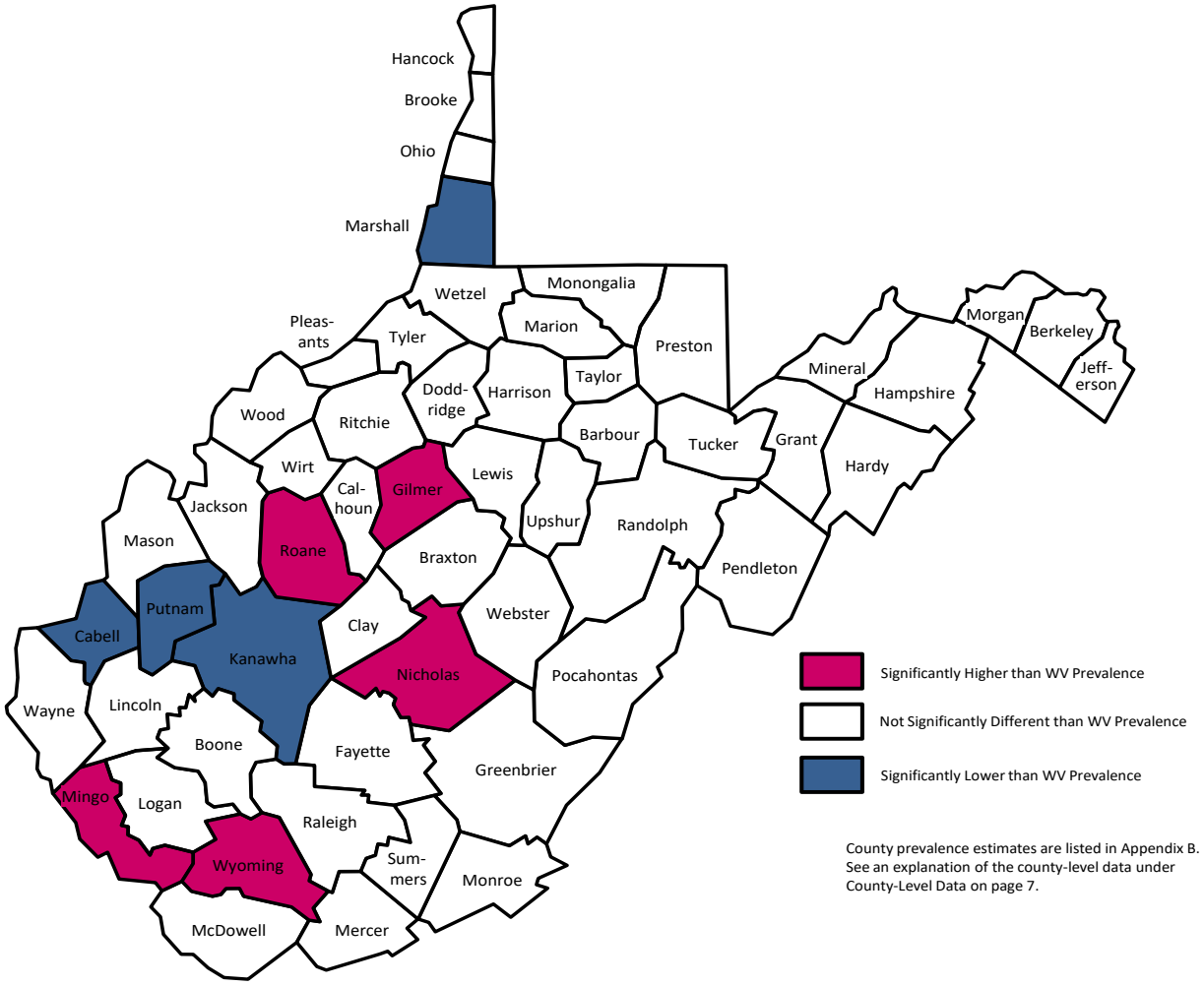


Figure 9.1 Prevalence of At Least One Fall in the Past Year Among Adults Aged 45 and Older by County: WVBRFSS, 2010-2018

WV Prevalence (2010-2018) - 26.8%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

Fall Injury

Definition

Responding "1" or more to the question, "How many of these falls caused an injury? By an injury, we mean the fall caused you to limit your regular activities for at least a day or to go see a doctor." Asked among adults aged 45 and older who had responded they had fallen at least once in the past year.

Prevalence

WV: 43.6% (95% CI: 40.1-47.0)
U.S.: 40.4% (95% CI: 39.6-41.2)
The West Virginia prevalence of injured from a fall in the past year was equivalent to the U.S. prevalence. West Virginia ranked the 7th highest among the 54 BRFSS participants.

Gender

Men: 36.0% (95% CI: 30.8-41.2)
Women: 49.9% (95% CI: 45.4-54.4)
The prevalence of injured from a fall in the past year was significantly higher among women than men.

Age

There was no age difference in the prevalence of injured from a fall in the past year.

Education

There was no educational attainment difference in the prevalence of injured from a fall in the past year.

Household Income

The prevalence of injured from a fall in the past year was significantly higher among adults with an annual household income of less than $15,000 (58.7%) than adults with an annual household income of $35,000 or more.

Trend

There was a no change in the prevalence of injured from a fall from 2012 to 2018.

County

The 2010-2018 West Virginia state prevalence of injured from a fall was 39.6%. Harrison County and Nicholas County had a significantly higher prevalence when compared to the state. No counties had a lower prevalence than the state.

Table 9.3 Prevalence of Injured from a Fall in the Past Year Among Adults Aged 45 and Older: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	41,700	**36.0**	30.8-41.2	69,171	**49.9**	45.4-54.4	110,870	**43.6**	40.1-47.0
Age									
45-54	12,340	**39.4***	28.0-50.9	19,660	**51.7**	42.4-61.2	32,000	**46.2**	38.8-53.5
55-64	16,726	**38.0**	29.4-46.5	22,131	**52.7**	44.4-62.0	38,857	**45.2**	39.1-51.4
65+	12,428	**31.4**	23.8-39.1	27,279	**46.6**	40.2-53.0	39,707	**40.5**	35.5-45.5
Education									
Less than H.S.	11,770	**52.2***	37.5-67.0	16,011	**55.3***	43.5-67.0	27,781	**54.0**	44.7-63.2
H.S. or G.E.D.	15,458	**30.7**	22.9-38.5	27,217	**47.8**	40.6-55.0	42,675	**39.8**	34.4-45.1
Some Post-H.S.	8,699	**3.0**	23.6-42.5	18,432	**53.0**	44.6-61.3	27,130	**44.4**	37.9-50.8
College Graduate	5,346	**34.2**	24.4-44.0	7,511	**42.1**	33.0-51.2	12,857	**38.4**	31.7-45.1
Income									
Less than $15,000	8,963	**54.8***	40.7-69.0	15,466	**61.3**	51.5-71.1	24,429	**58.7**	50.6-66.9
$15,000 - 24,999	12,468	**44.7***	32.8-56.5	14,394	**45.8**	36.1-55.5	26,861	**45.3**	37.7-52.8
$25,000 - 34,999	5,316	**34.5***	20.2-48.8	8,837	**48.6***	35.6-61.5	14,153	**42.1**	32.3-52.0
$35,000 - 49,999	4,974	**28.5***	16.1-40.9	4,688	**38.3**	23.4-53.2	9,662	**32.6**	23.0-42.1
$50,000 - 74,999	1,620	**17.9***	5.1-30.7	6,265	**47.1***	33.3-60.9	7,885	**35.3***	25.1-45.5
$75,000+	4,165	**26.8***	15.3-38.4	7,036	**46.5***	33.4-59.7	11,201	**36.6**	27.3-45.9

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

Figure 9.3 Prevalene of Injuries From a Fall in the Past Year Among Adults Age 45 and Older by Year: WVBRFSS, 2012-2018

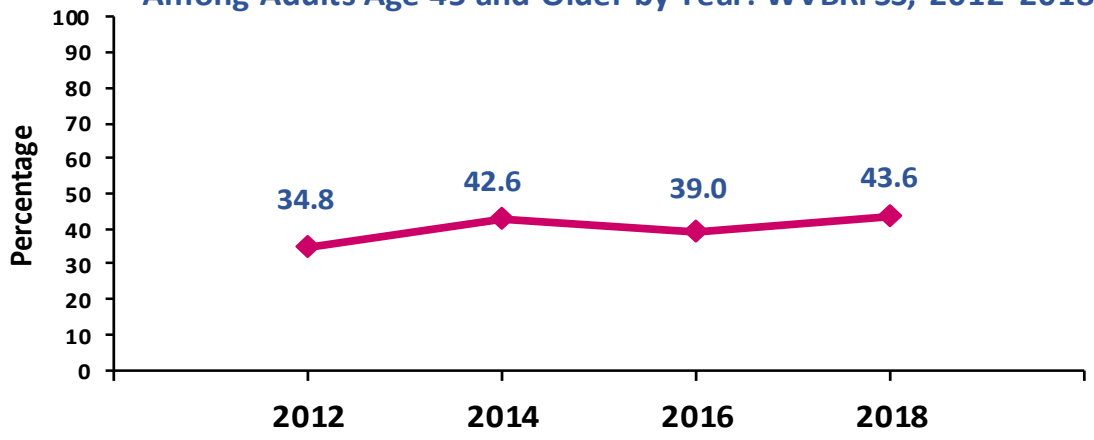
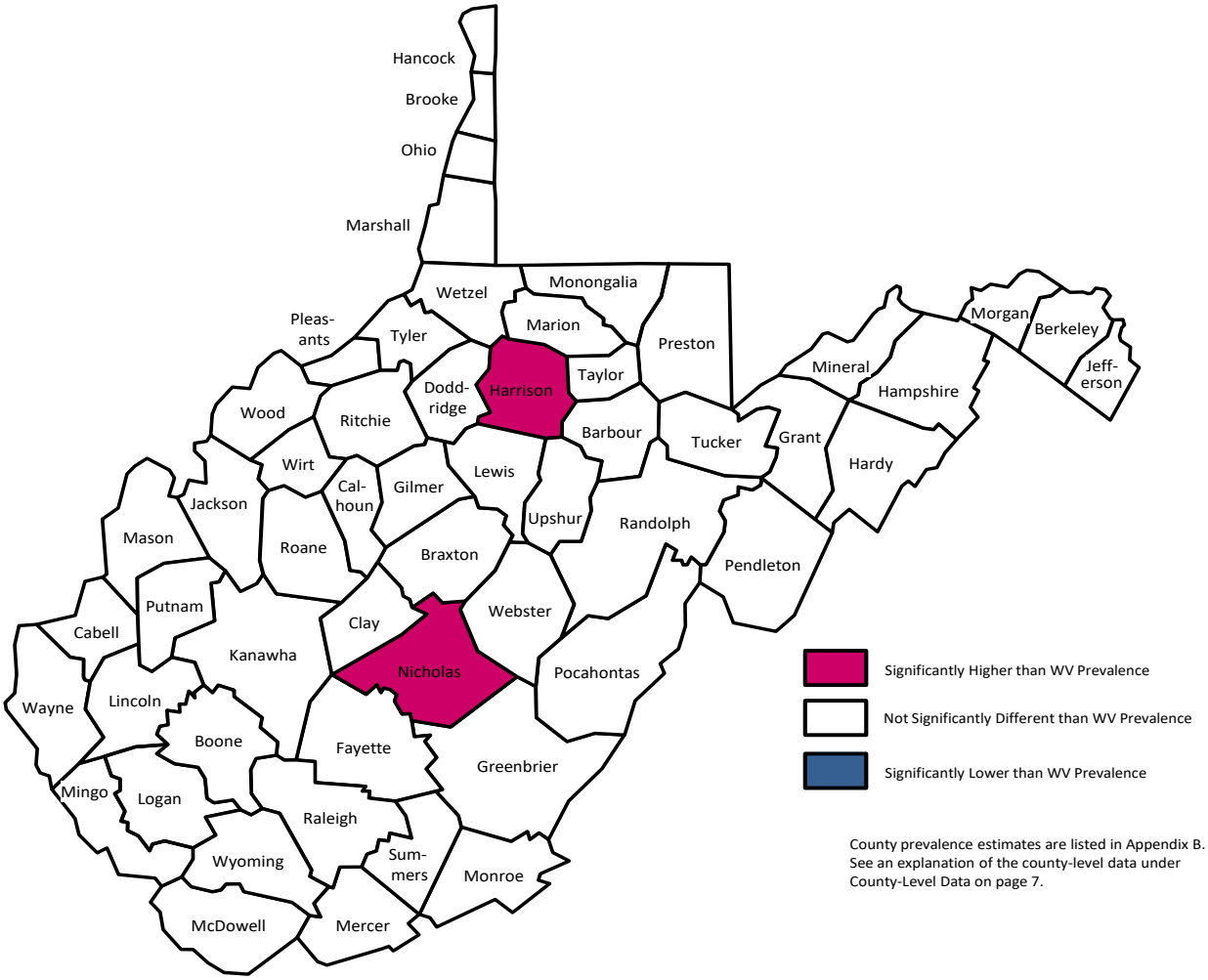


Figure 9.1 Prevalence of Injured from a Fall in the Past Year Among Adults Aged 45 and Older by County: WVBRFSS, 2010-2018

WV Prevalence (2010-2018) - 39.4%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

Inadequate Sleep

Definition

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

Prevalence

WV: 41.4% (95% CI: 39.7-43.2)
U.S.: 35.1% (95% CI: 34.8-35.4)
The West Virginia prevalence of inadequate sleep was significantly higher than the U.S. prevalence. West Virginia ranked the 4th highest among 54 BRFSS participants.

Gender

Men: 41.0% (95% CI: 38.4-43.6)
Women: 41.8% (95% CI: 39.4-44.1)
There was no gender difference in the prevalence of inadequate sleep.

Age

The prevalence of inadequate sleep was significantly higher among adults aged 25-34 (48.2%) than adults aged 65 and older (32.9%).

Education

The prevalence of inadequate sleep was significantly higher among adults with less than a high school education (46.9%) than college graduates (35.5%).

Household Income

The prevalence of inadequate sleep was significantly higher among adults with an annual household income of less than $15,000 (50.4%) than adults with an annual household income of $50,000 or more per year.

Trend

There was no change in the prevalence of inadequate sleep from 2012 to 2018.

County

The 2014-2018 West Virginia state prevalence of inadequate sleep was 39.6%. There were 4 counties with a significantly lower prevalence compared to the state; Braxton, Grant, Jefferson, and Putnam. There were 7 counties with a significantly higher prevalence when compared to the state; Barbour, Boone, Hardy, McDowell, Randolph, Wayne, and Wyoming.

Table 10.1 Prevalence of Inadequate Sleep by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequen-	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	286,103	**41.0**	38.4-43.6	301,084	**41.8**	39.4-44.1	587,186	**41.4**	39.7-43.2
Age									
18-24	28,902	**33.8***	24.2-43.4	25,001	**32.5***	22.5-42.4	53,902	**33.2**	26.3-40.1
25-34	53,176	**49.5***	41.7-57.4	47,633	**46.8**	39.4-54.3	100,809	**48.2**	42.8-53.7
35-44	49,387	**46.3**	39.2-53.3	48,190	**45.7**	39.4-52.0	97,577	**46.0**	41.2-50.7
45-54	49,311	**44.9**	38.7-51.0	56,106	**51.1**	45.5-56.6	105,417	**48.0**	43.8-52.1
55-64	53,726	**43.4**	38.4-48.4	55,800	**43.6**	38.9-48.4	109,525	**43.5**	40.1-47.0
65+	50,620	**31.6**	27.7-35.6	64,721	**33.9**	30.5-37.2	115,341	**32.9**	30.3-35.4
Education									
Less than H.S.	49,888	**53.0**	44.5-61.5	44,334	**44.2**	36.8-51.6	94,222	**48.5**	42.8-54.1
H.S. or G.E.D.	121,124	**41.3**	37.2-45.4	118,267	**43.4**	39.4-47.4	239,391	**42.3**	39.4-45.2
Some Post-H.S.	70,745	**38.8**	33.7-43.8	87,929	**42.5**	38.2-46.8	158,674	**40.7**	37.4-44.1
College Graduate	43,917	**34.8**	30.3-39.3	50,259	**36.1**	32.1-40.2	94,176	**35.5**	32.5-38.5
Income									
Less than $15,000	27,515	**51.7**	42.6-60.8	47,170	**49.7**	43.2-56.3	74,685	**50.4**	45.1-55.8
$15,000 - 24,999	63,353	**52.3**	45.7-58.9	62,709	**45.1**	39.6-50.6	126,063	**48.4**	44.2-52.7
$25,000 - 34,999	34,039	**36.0**	28.9-43.0	45,626	**44.8**	29.2-51.5	79,665	**40.6**	35.7-45.4
$35,000 - 49,999	42,733	**42.6**	35.9-49.4	32,047	**38.9**	32.2-45.7	74,780	**41.0**	36.2-45.8
$50,000 - 74,999	35,448	**37.7**	30.4-45.0	26,114	**33.9**	27.3-40.4	61,563	**36.0**	31.0-40.9
$75,000+	56,160	**39.1**	33.8-44.5	45,766	**38.4**	33.0-43.8	101,926	**38.8**	35.0-42.6

Figure 10.1 Prevalence of Inadequate Sleep by Year: WVBRFSS, 2013-2018

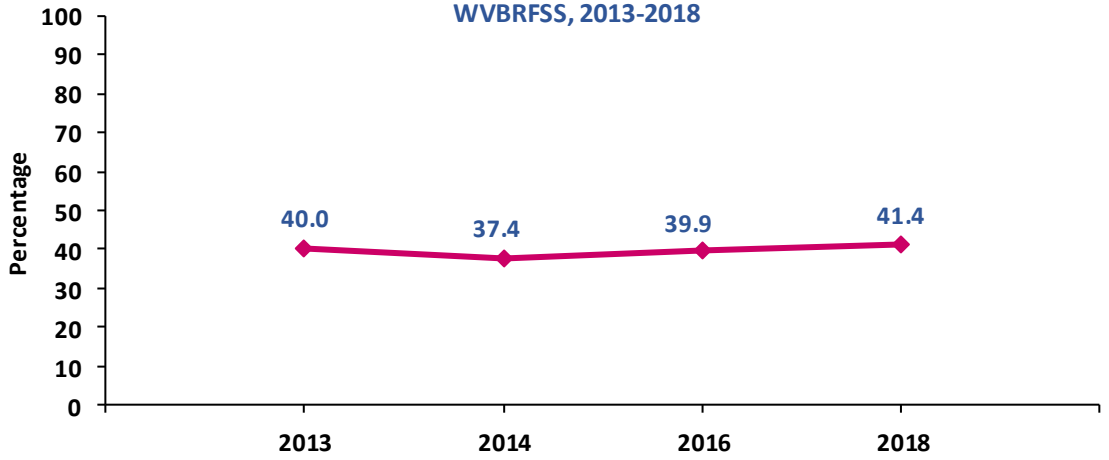
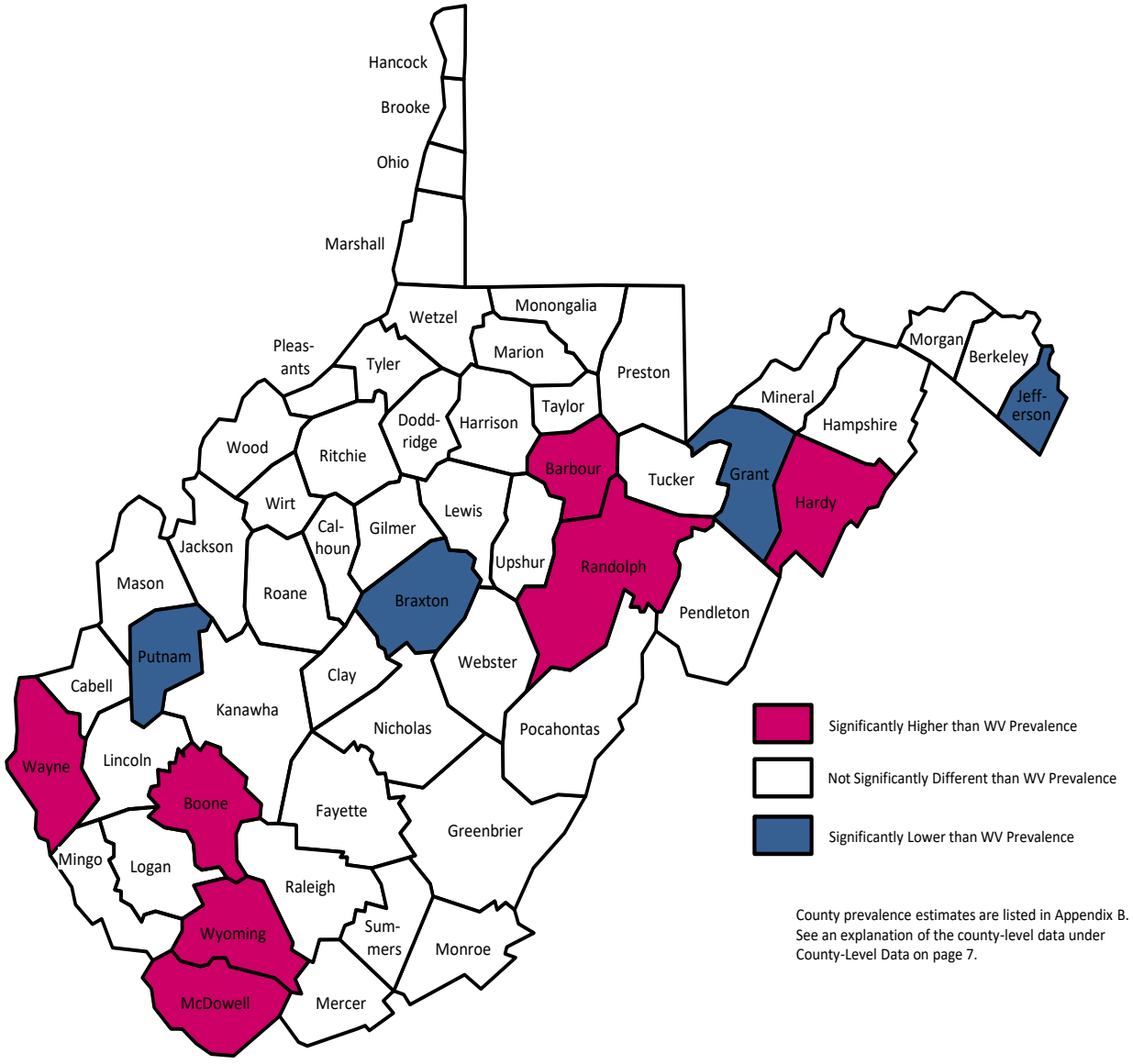


Figure 9.1 Prevalence of Inadequate Sleep by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 39.6%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

CHAPTER 11: SUNBURN

Sunburn in Past Year

Definition

Responding "1" or more to the question, "In the past 12 months, how many times did you have a red or painful sunburn that lasted a day or more?"

Prevalence

WV: 38.1% (95% CI: 36.2-40.0)
Because this question was part of an optional module and complete national data are not available, a U.S. comparison was not conducted.

Gender

Men: 43.1% (95% CI: 40.2-46.0)
Women: 33.4% (95% CI: 30.9-35.8)
The prevalence of sunburn in the past year was significantly higher among men than women.

Age

The prevalence of sunburn in the past year was significantly higher among adults aged 18-54 than adults aged 55 and older.

Education

The prevalence of had a sunburn in the past year was significantly higher among college graduates (45.6%) than adults with a high school education or less than a high school education. The prevalence of had a sunburn in the past year was significantly lower among those with less than a high school education (27.8%) than among all other educational attainment levels.

Household Income

The prevalence of sunburn in the past year was significantly higher among adults with an annual household income of $50,000 or more than among adults with an annual household income of less than $25,000.

Trend

Due to a change in the wording of the sunburn question, 2018 results are not comparable to previous years.

County

Due to a change in the wording of the sunburn question, no county prevalence estimates could be produced.

CHAPTER 11: SUNBURN

Table 11.1 Prevalence of Had a Sunburn in the Past Year by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	256,576	**43.1**	40.2-46.0	207,876	**33.4**	30.9-35.8	464,451	**38.1**	36.2-40.0
Age									
18-24	45,175	**63.8***	52.9-74.6	34,535	**57.9***	45.8-70.0	79,710	**61.1**	52.9-69.2
25-34	53087	**60.1**	51.6-68.6	46,043	**54.1**	46.2-62.1	99,130	**57.2**	51.3-63.0
35-44	49,401	**55.6**	47.8-63.4	47,799	**51.5**	44.7-58.3	97,201	**53.5**	48.4-58.6
45-54	44,249	**45.6**	39.1-52.1	31,262	**32.7**	27.2-38.07	75,510	**39.2**	34.9-43.5
55-64	34,470	**31.9**	27.0-37.0	29,107	**25.2**	20.9-29.4	63,718	**28.5**	25.2-31.7
65+	29,164	**20.8**	17.2-24.4	18,349	**10.7**	8.5-12.9	47,513	**15.3**	13.2-17.3
Education									
Less than H.S.	29,554	**37.1**	27.8-46.5	17,863	**19.6**	13.2-26.1	47,417	**27.8**	22.1-33.5
H.S. or G.E.D.	105,909	**42.7**	38.1-47.4	72,303	**31.3**	27.2-35.5	178,212	**37.2**	34.1-40.4
Some Post-H.S.	68,730	**43.1**	37.6-48.5	67,269	**36.5**	31.9-41.1	136,000	**39.6**	36.0-43.1
College Graduate	52,382	**48.6**	43.6-53.6	49,801	**42.8**	38.2-47.3	102,183	**45.6**	42.2-48.9
Income									
Less than $15,000	13,194	**31.2**	22.1-40.2	24,826	**30.4**	23.7-37.2	38,020	**30.7**	25.2-36.1
$15,000 - 24,999	42,662	**40.2**	32.9-47.4	32,184	**26.8**	21.4-32.2	74,846	**33.1**	28.6-37.6
$25,000 - 34,999	35,953	**41.4**	33.7-49.2	28,875	**32.5**	25.7-39.2	64,828	**36.9**	31.7-42.1
$35,000 - 49,999	33,886	**38.2**	31.3-45.1	21,776	**31.5**	24.2-38.7	55,662	**35.3**	30.3-40.2
$50,000 - 74,999	37,568	**50.0**	41.9-58.0	26,403	**39.6**	32.2-46.9	63,941	**45.1**	39.5-50.6
$75,000+	66,385	**55.1**	49.4-60.8	49,592	**47.5**	41.6-53.4	115,977	**51.6**	47.5-55.7

One or More Missing Teeth

Definition

Responding "1 to 5," "6 or more but not all," or "All" to the question, "How many of your permanent teeth have been removed because of tooth decay or gum disease? Include teeth lost to infection, but do not include teeth lost for other reasons, such as injury or orthodontics."

Prevalence

WV: 58.1% (95% CI: 56.3-59.8)
U.S.: 42.5% (95% CI: 41.9-42.5)
The West Virginia prevalence of one or more missing teeth was significantly higher than the U.S. prevalence. West Virginia ranked the 2nd highest among 54 BRFSS participants.

Gender

Men: 57.2% (95% CI: 54.5-59.9)
Women: 58.9% (95% CI: 56.5-61.3)
There was no gender difference in the prevalence of one or more missing teeth.

Age

The prevalence of one or more missing teeth was significantly higher among adults aged 65 and older (83.5%) than all other age groups. The prevalence of one or more missing teeth was significantly lower among adults aged 18-24 (11.5%) than all other age groups.

Education

The prevalence of one or more missing teeth was significantly higher among adults with less than a high school education (79.3%) than all other educational attainment levels.

Household Income

The prevalence of one or more missing teeth was significantly higher among adults with an annual household income of less than $50,000 than adults with an annual household income of $50,000.

Trend

There was a decline in the prevalence of one or more missing teeth from 2012 to 2018.

County

The 2010-2018 West Virginia state prevalence of one or more missing teeth was 60.0%. There were 8 counties with a significantly lower prevalence compared to the state; Berkeley, Cabell, Jefferson, Kanawha, Monongalia, Ohio, Putnam, and Randolph. There were 12 counties with a significantly higher prevalence compared to the state; Braxton, Calhoun, Clay, Fayette, Logan, McDowell, Mercer, Mingo, Nicholas, Summers, Tucker, and Wyoming.

Table 12.1 Prevalence of One or More Missing Teeth by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	398,954	**57.2**	54.5-59.9	423,383	**58.9**	56.5-61.3	821,737	**58.1**	56.3-59.8
Age									
18-24	10,709	**12.5**	5.7-19.3	8,238	**10.5***	4.0-16.9	18,947	**11.5**	6.8-16.2
25-34	33,862	**31.5**	24.0-39.1	38,144	**37.8**	30.5-45.1	72,006	**34.6**	29.3-39.9
35-44	54,735	**51.3**	44.3-58.4	47,381	**44.9**	38.5-51.2	102,117	**48.1**	43.3-52.9
45-54	67,798	**62.1**	56.3-68.0	74,625	**68.0**	63.0-73.0	142,422	**65.1**	61.2-68.9
55-64	94,320	**75.6**	71.5-79.8	93,340	**73.7**	69.7-77.8	187,659	**74.7**	71.8-77.6
65+	135,052	**84.8**	81.7-87.8	156,439	**82.4**	79.8-84.9	291,491	**83.5**	81.5-85.4
Education									
Less than H.S.	75,879	**80.7**	72.7-88.8	81,319	**77.9**	70.5-85.4	157,198	**79.3**	73.8-84.7
H.S. or G.E.D.	186,200	**63.5**	59.1-67.8	180,633	**66.8**	62.9-71.0	366,833	**65.1**	62.0-68.1
Some Post-H.S.	92,983	**50.8**	45.7-55.9	108,272	**53.1**	48.6-57.5	201,256	**52.0**	48.6-55.4
College Graduate	42,864	**34.4**	30.2-38.5	52,429	**37.8**	33.8-41.8	95,293	**36.2**	33.3-39.1
Income									
Less than $15,000	44,195	**82.1**	74.8-89.3	68,412	**71.9**	65.5-78.2	112,607	**75.5**	70.7-80.4
$15,000 - 24,999	89,738	**73.8**	67.5-80.1	100,793	**71.9**	66.4-77.4	190,532	**72.8**	68.6-76.9
$25,000 - 34,999	58,306	**62.4**	54.8-69.9	58,398	**57.8**	50.7-64.8	116,705	**60.0**	54.8-65.1
$35,000 - 49,999	60,887	**61.5**	54.8-68.1	53,520	**65.7**	59.2-72.2	114,407	**63.4**	58.7-68.0
$50,000 - 74,999	41,070	**43.9**	36.7-51.1	37,493	**49.8**	42.8-56.8	78,564	**46.5**	41.4-51.6
$75,000+	54,646	**37.9**	32.8-43.1	39,435	**33.1**	82.0-38.1	94,081	**35.7**	32.1-39.3

Figure 12.1 Prevalence of One or More Missing Teeth by Year: WVBRFSS, 2012-2018

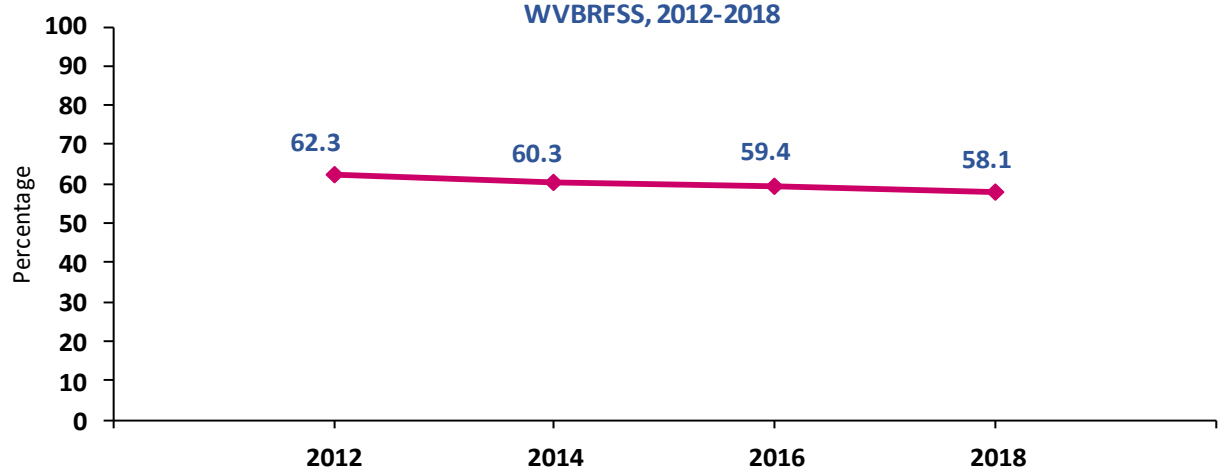
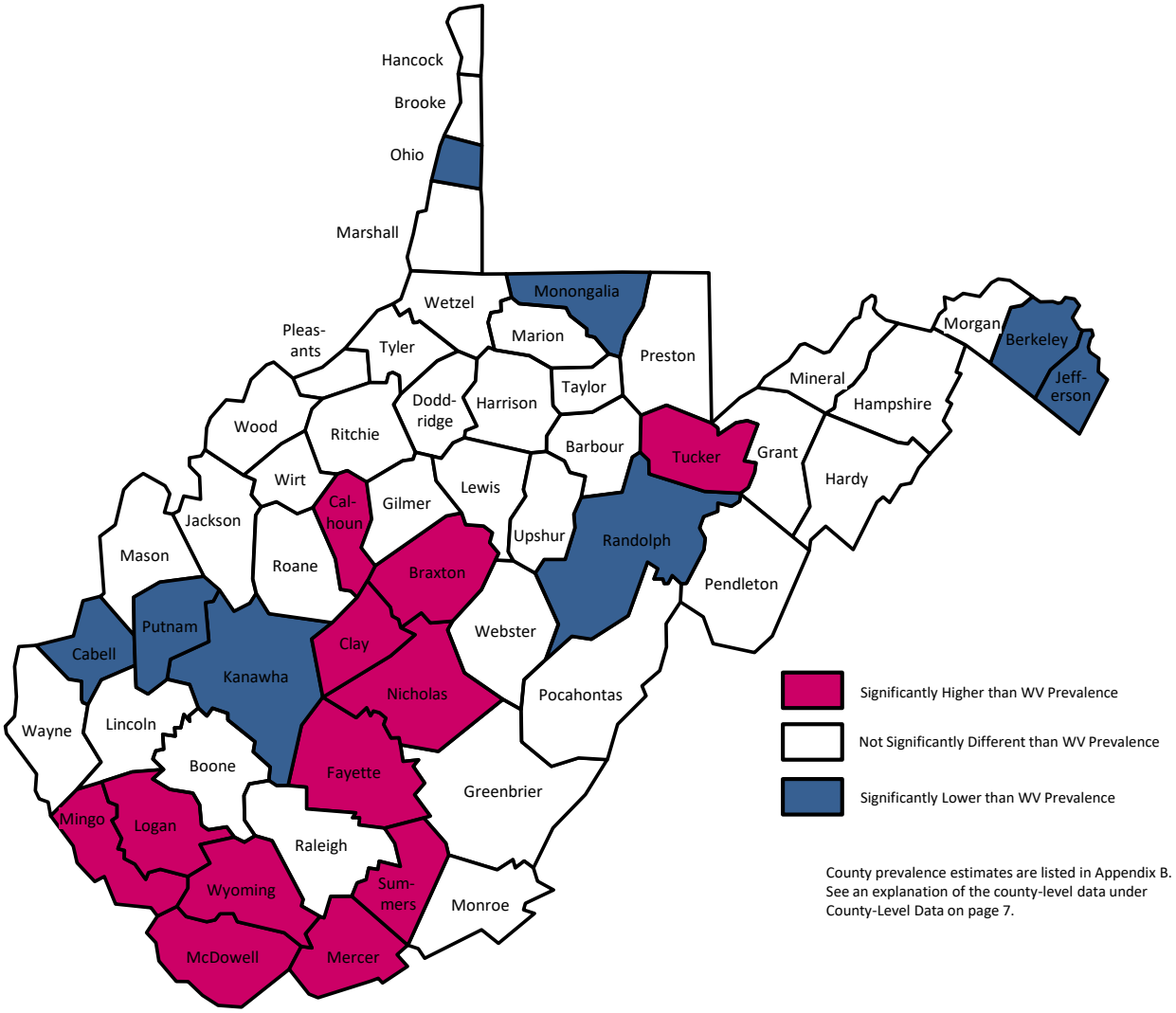


Figure 12.2 Prevalence of One or More Missing Teeth by County: WVBRFSS, 2010-2018

WV Prevalence (2010-2018) - 60.0%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

Six or More Missing Teeth

Definition

Responding "6 or more but not all" or "All" to the question, "How many of your permanent teeth have been removed because of tooth decay or gum disease? Include teeth lost to infection, but do not include teeth lost for other reasons, such as injury or orthodontics."

Prevalence

WV: 28.6% (95% CI: 27.2-30.1)
U.S.: 14.3% (95% CI: 14.1-14.5)
The West Virginia prevalence of six or more missing teeth was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 54 BRFSS participants.

Gender

Men: 26.6% (95% CI: 24.4-28.8)
Women: 30.6% (95% CI: 28.6-32.7)
There was no gender difference in the prevalence of six or more missing teeth.

Age

The prevalence of six or more missing teeth was significantly higher among adults aged 65 and older (54.8%) than all other age groups. The prevalence of six or more missing teeth was significantly lower among adults aged 25-34 (7.4%) than all other age groups.

Education

The prevalence of six or more missing teeth was significantly higher among adults with less than an high school education (57.0%) than all other educational attainment levels. The prevalence of six or more missing teeth was significantly lower among college graduates (8.5%) than all other educational attainment levels.

Household Income

The prevalence of six or more missing teeth was significantly higher among adults with an annual household income of less than $15,000 (50.7%) than any other income level. The prevalence of six or more missing teeth was significantly lower among adults with an annual household income of $75,000 or more (9.6%) than all other income levels.

Trend

There was a decline in the prevalence of six or more missing teeth from 2012 to 2018. Because of the change in BRFSS methodology, results from 2011 and later are not directly comparable to previous years.

County

The 2010-2018 West Virginia state prevalence of six or more missing teeth was 30.3%. There were 8 counties with a significantly lower prevalence compared to the state; Berkeley, Cabell, Kanawha, Jefferson, Marion, Monongalia, Ohio, and Putnam. There were 11 counties with a significantly higher prevalence compared to the state; Boone, Braxton, Calhoun, Clay, Logan, Mercer, McDowell, Mingo,

Table 12.2 Prevalence of Six or More Missing Teeth by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	185,259	**26.6**	24.4-28.8	220,146	**30.6**	28.6-32.7	405,405	**28.6**	27.2-30.1
Age									
18-24	1,716	**2.0***	0.0-4.9	821.0	**1.0***	0.0-3.1	2,537	**1.5***	0.0-3.3
25-34	4,048	**3.8***	0.6-7.0	1,1329	**11.2**	6.3-16.1	15,377	**7.4**	4.5-10.3
35-44	17,339	**16.3**	10.6-21.9	16,924	**16.0**	11.2-20.9	34,263	**16.1**	12.4-19.9
45-54	24,033	**22.0**	16.8-27.2	34,887	**31.8**	26.4-37.1	58,920	**26.9**	23.2-30.7
55-64	48,078	**38.6**	33.5-43.6	52,573	**41.5**	36.7-46.3	100,651	**40.1**	36.6-43.5
65+	89,326	**56.1**	51.9-60.2	102,024	**53.7**	50.2-57.2	191,350	**54.8**	52.1-57.5
Education									
Less than H.S.	48,626	**51.7**	43.2-60.3	64,480	**61.8**	54.1-69.5	113,106	**57.0**	51.3-62.8
H.S. or G.E.D.	90,561	**30.9**	27.2-34.5	95,327	**35.3**	31.7-38.8	185,888	**33.0**	30.4-35.5
Some Post-H.S.	34,805	**19.0**	15.6-22.5	48,804	**23.9**	20.5-27.4	83,609	**21.6**	19.2-24.0
College Graduate	10,840	**8.7**	6.6-10.8	11,444	**8.3**	6.4-10.1	22,284	**8.5**	7.0-9.9
Income									
Less than $15,000	27,201	**50.5**	41.4-59.6	48,398	**50.8**	44.3-57.4	75,598	**50.7**	45.4-56.0
$15,000 - 24,999	45,457	**37.4**	31.3-43.4	61,566	**43.9**	38.6-49.3	107,022	**40.9**	36.9-44.9
$25,000 - 34,999	29,204	**31.2**	25.0-37.4	30,895	**30.6**	24.8-36.3	60,099	**30.9**	26.7-35.1
$35,000 - 49,999	26,376	**26.6**	20.8-32.5	20,419	**25.1**	19.4-30.7	46,795	**25.9**	21.8-30.0
$50,000 - 74,999	17,957	**19.2**	14.0-24.4	10,251	**13.6**	9.4-17.8	28,208	**16.7**	13.3-20.1
$75,000+	14,633	**10.2**	6.8-13.5	10,761	**9.0**	5.8-12.3	25,395	**9.6**	7.3-12.0

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

Figure 12.3 Prevalence of Six or More Missing Teeth by Year: WVBRFSS, 2010 - 2012

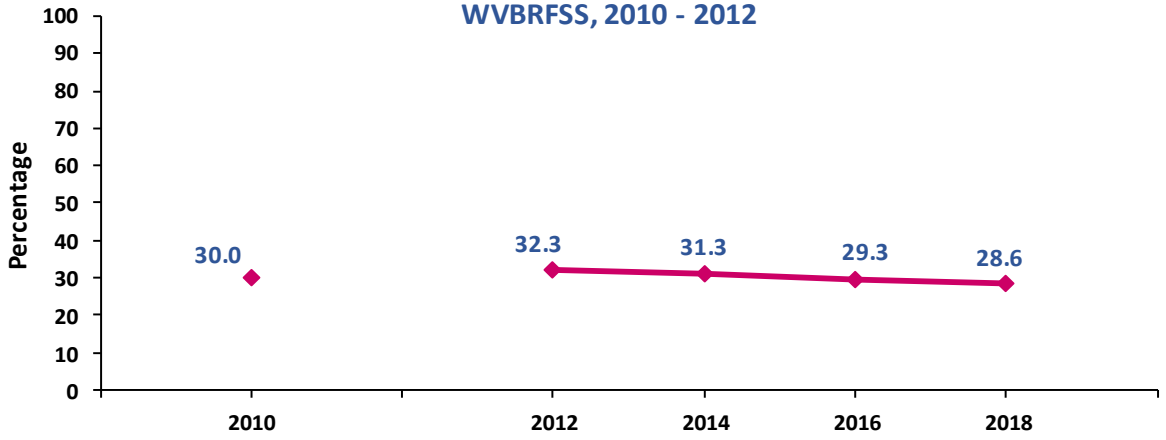
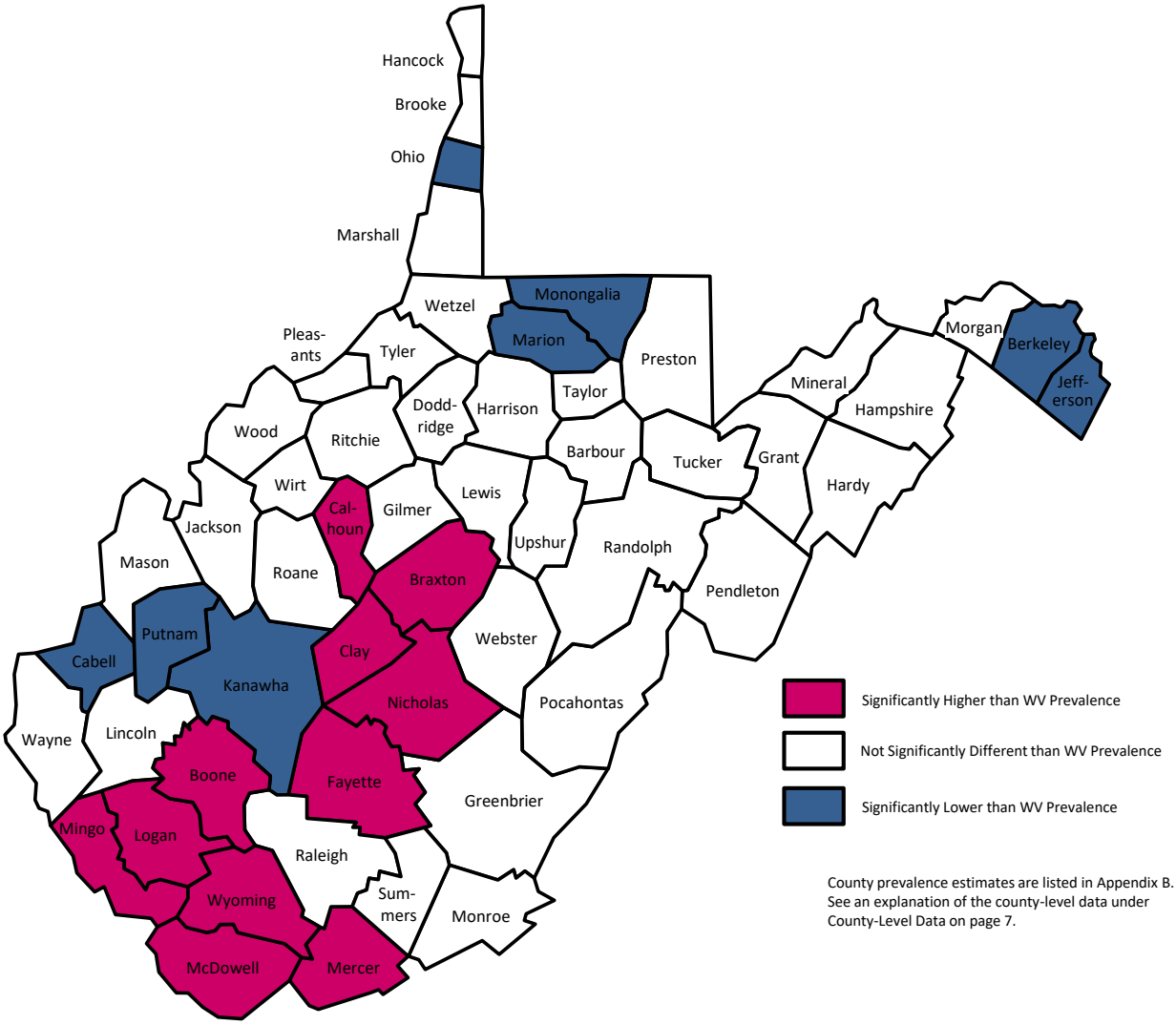


Figure 12.4 Prevalence of Six or More Missing Teeth by County: WVBRFSS, 2010-2018

WV Prevalence (2010-2018) - 30.3%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

CHAPTER 12: TOOTH LOSS

All Teeth Missing, Aged 65 and Older

Definition

Responding "All" to the question, "How many of your permanent teeth have been removed because of tooth decay or gum disease? Include teeth lost to infection, but do not include teeth lost for other reasons, such as injury or orthodontics." Restricted to adults aged 65 and older.

Prevalence

WV: 26.3% (95% CI: 23.8-28.8)
U.S.: 13.5% (95% CI: 13.1-13.9)
The West Virginia prevalence of all teeth missing among those aged 65 and older was significantly higher than the U.S. prevalence. West Virginia ranked highest among 54 BRFSS participants.

Gender

Men: 26.5% (95% CI: 22.7-30.4)
Women: 26.1% (95% CI: 22.8-29.4)
There was no gender difference in the prevalence of all teeth missing among those aged 65 and older.

Education

The prevalence of all teeth missing was significantly higher among those with less than an high school education (48.5%) than all other educational attainment group. The prevalence of all teeth missing was significantly lower among college graduates (4.9%) than all other educational attainment levels.

Household Income

The prevalence of all teeth missing among those aged 65 and older was significantly higher among those with an annual household income of less than $25,000 than among all other income groups.

Trend

The prevalence of all teeth missing in adults aged 65 and older increased from 2012 to 2018. Because of the change in BRFSS methodology, results from 2011 and later are not directly comparable to previous years.

County

The 2010-2018 West Virginia state prevalence of all teeth missing among adults aged 65 and older was 31.8%. There were 4 counties with a significantly lower prevalence compared to the state; Kanawha, Monongalia, Ohio, and Tucker. There were 9 counties with a significantly higher prevalence compared to the state; Boone, Clay, Fayette, Lewis, Logan, McDowell, Mercer, Wirt, and Wyoming.

Table 12.3 Prevalence of All Teeth Missing Among Those Aged 65 and Older by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	42,279	**26.5**	22.7-30.4	49,550	**26.1**	22.8-29.4	91,830	**26.3**	23.8-28.8
Education									
Less than H.S.	13,621	**50.8***	38.8-62.7	15,623	**46.7**	36.7-56.7	29,245	**48.5**	40.8-56.2
H.S. or G.E.D.	19,787	**29.5**	23.3-35.8	24,980	**29.7**	24.8-34.6	44,767	**29.6**	25.7-33.5
Some Post-H.S.	6,979	**17.3**	11.2-23.5	8,018	**16.1**	11.1-21.2	14,997	**16.7**	12.8-20.6
College Graduate	1,465	**5.9**	2.6-9.3	838.1	**3.7***	1.2-6.2	2,303	**4.9**	2.8-7.0
Income									
Less than $15,000	6,617	**48.9***	33.1-64.8	8,796	**41.2***	30.7-51.7	15,413	**44.2**	35.3-53.1
$15,000 - 24,999	11,502	**39.8***	29.2-50.5	16,340	**35.0**	27.6-42.4	27,842	**36.8**	30.7-43.0
$25,000 - 34,999	5,468	**20.9**	12.7-29.2	8,192	**26.8**	18.4-35.2	13,660	**24.1**	18.1-30.1
$35,000 - 49,999	6,857	**23.5**	15.2-31.7	3,855	**17.1**	8.3-25.8	10,712	**20.7**	14.7-26.7
$50,000 - 74,999	3,034	**15.8***	6.4-25.2	1,283	**9.1***	1.2-17.0	4,317	**13.0**	6.6-19.4
$75,000+	1,390	**7.7***	2.2-13.1	207.4	**1.7***	0.0-3.9	1,597	**5.2**	1.8-8.6

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

Figure 12.5 Prevalence of All Teeth Missing Among Those Aged 65 and Older by Year: WVBRFSS, 2010 - 2018

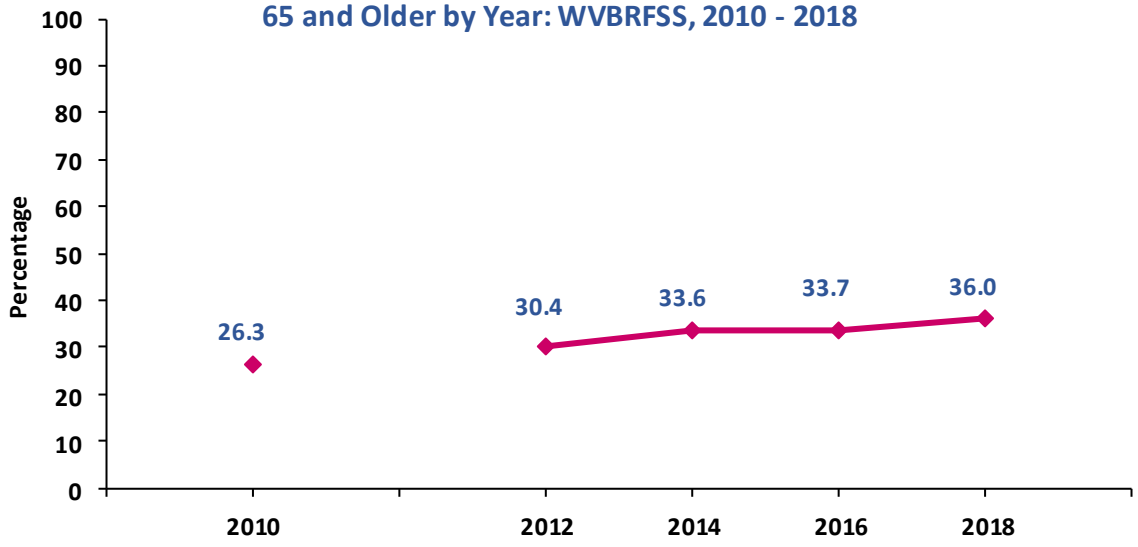
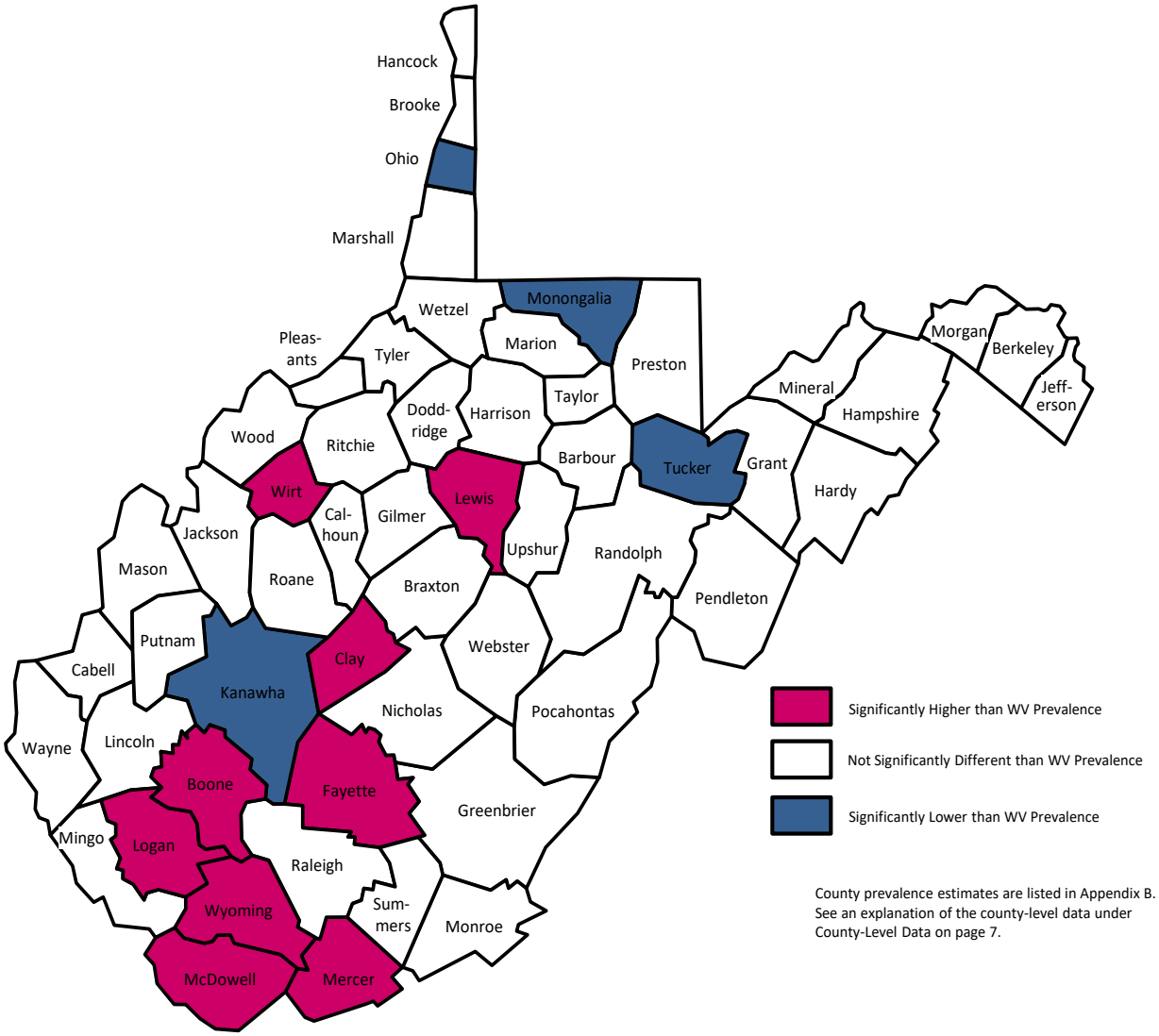


Figure 9.1 Prevalence of All Teeth Missing Among Those Aged 65 and Older by County: WVBRFSS, 2010-2018

WV Prevalence (2010-2018) - 31.8%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

CHAPTER 13: HIV RISK

High Risk for HIV

Definition

Responding "Yes" to the question, "I am going to read you a list. When I am done, please tell me if any of the situations apply to you. You do not need to tell me which one. You have used intravenous drugs in the past year. You have been treated for a sexually transmitted or venereal disease in the past year. You have given or received money or drugs in exchange for sex in the past year. You had anal sex without a condom in the past year. You had four or more sex partners in the past year. Do any of these situations apply to you?"

Prevalence

WV: 5.2% (95% CI: 4.3-6.2)
U.S.: 6.3% (95% CI: 6.1-6.5)
There was no difference between the West Virginia and U.S. prevalence of high risk for HIV. West Virginia ranked the 44th highest among 54 BRFSS participants.

Gender

Men: 7.3% (95% CI: 5.7-9.0)
Women: 3.2% (95% CI: 2.2-4.2)
The prevalence of high risk for HIV was significantly higher among men than women.

Age

The prevalence of high risk for HIV was significantly higher among adults aged 34 and younger than all other age groups.

Education

There was no educational attainment difference in prevalence of high risk for HIV .

Household Income

There was no annual household income difference in the prevalence of high risk for HIV.

Trend

There was an increase in prevalence of high risk for HIV from 2011 to 2018.

County

The 2012-2018 West Virginia state prevalence of high risk for HIV was 4.7%. There were 5 counties with a significantly lower prevalence compared to the state; Hampshire, Hardy, Marshall, Preston, and Putnam. No counties had a higher prevalence than the state prevalence.

Table 13.1 Prevalence of High Risk for HIV by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	49,645	**7.3**	5.7-9.0	22,526	**3.2**	2.2-4.2	72,171	**5.2**	4.3-6.2
Age									
18-24	19,629	**24.9**	15.9-33.9	7,492	**10.1***	3.9-16.3	27,121	**17.7***	12.1-23.3
25-34	15,860	**15.2**	9.4-21.0	9,262	**9.3**	4.9-13.7	25,122	**12.3**	8.6-16.0
35-44	6,419	**6.2***	2.5-9.9	3,090	**3.0***	1.2-4.8	9,509	**4.6**	2.5-6.7
45-54	3,790	**3.5***	1.3-5.7	598.0	**0.6***	0.0-1.2	4,936	**2.2**	1.0-3.4
55-64	2,923	**2.4***	0.9-4.0	989.1	**0.8***	0.0-1.7	3,912	**1.6**	0.7-2.5
65+	597.6	**0.4***	0.0-0.8	972.0	**0.5***	0.0-1.0	1,570	**0.5***	0.1-0.8
Education									
Less than H.S.	5,655	**6.3***	1.7-10.9	1,284	**1.3***	0.0-3.2	6,940	**3.6***	1.2-6.0
H.S. or G.E.D.	20,764	**7.3**	4.7-10.0	8,153	**3.1***	1.3-4.9	28,917	**5.3**	3.7-6.9
Some Post-H.S.	15,325	**8.6**	5.1-12.1	9,493	**4.7**	2.6-6.8	24,818	**6.5**	4.5-8.5
College Graduate	7,474	**6.1**	3.6-8.5	3,595	**2.7**	1.1-4.2	11,069	**4.3**	2.9-5.7
Income									
Less than $15,000	3,789	**7.4***	0.9-14.0	5,457	**5.9***	2.5-9.3	9,246	**6.4**	3.2-9.7
$15,000 - 24,999	10,393	**8.8**	4.8-12.9	8,133	**6.0**	2.5-9.4	18,526	**7.3**	4.7-9.9
$25,000 - 34,999	5,017	**5.4***	1.3-9.4	1,423	**1.4***	0.0-3.1	6,439	**3.3***	1.2-5.5
$35,000 - 49,999	5,288	**5.3***	1.8-8.7	2,378	**3.0***	0.1-5.8	7,666	**4.3**	1.9-6.6
$50,000 - 74,999	9,843	**11.1**	5.3-16.8	1,786	**2.4***	0.1-4.6	11,629	**7.1**	3.7-10.4
$75,000+	7,215	**5.1**	2.4-7.8	2,561	**2.2***	0.7-3.7	9,776	**3.8**	2.2-5.4

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

Figure 13.1 Prevalence of High Risk for HIV by Year: WVBRFSS, 2011-2018

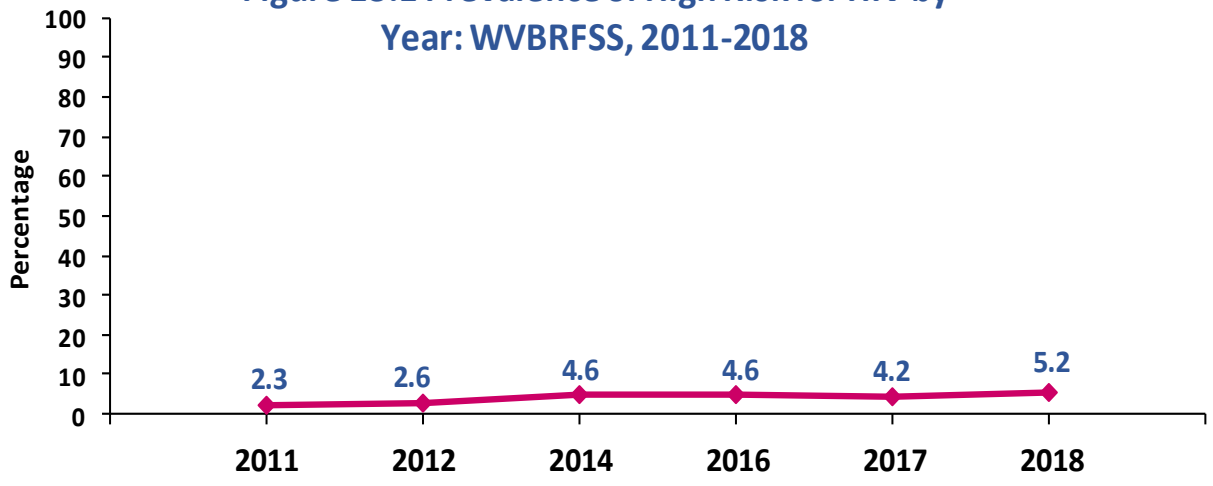
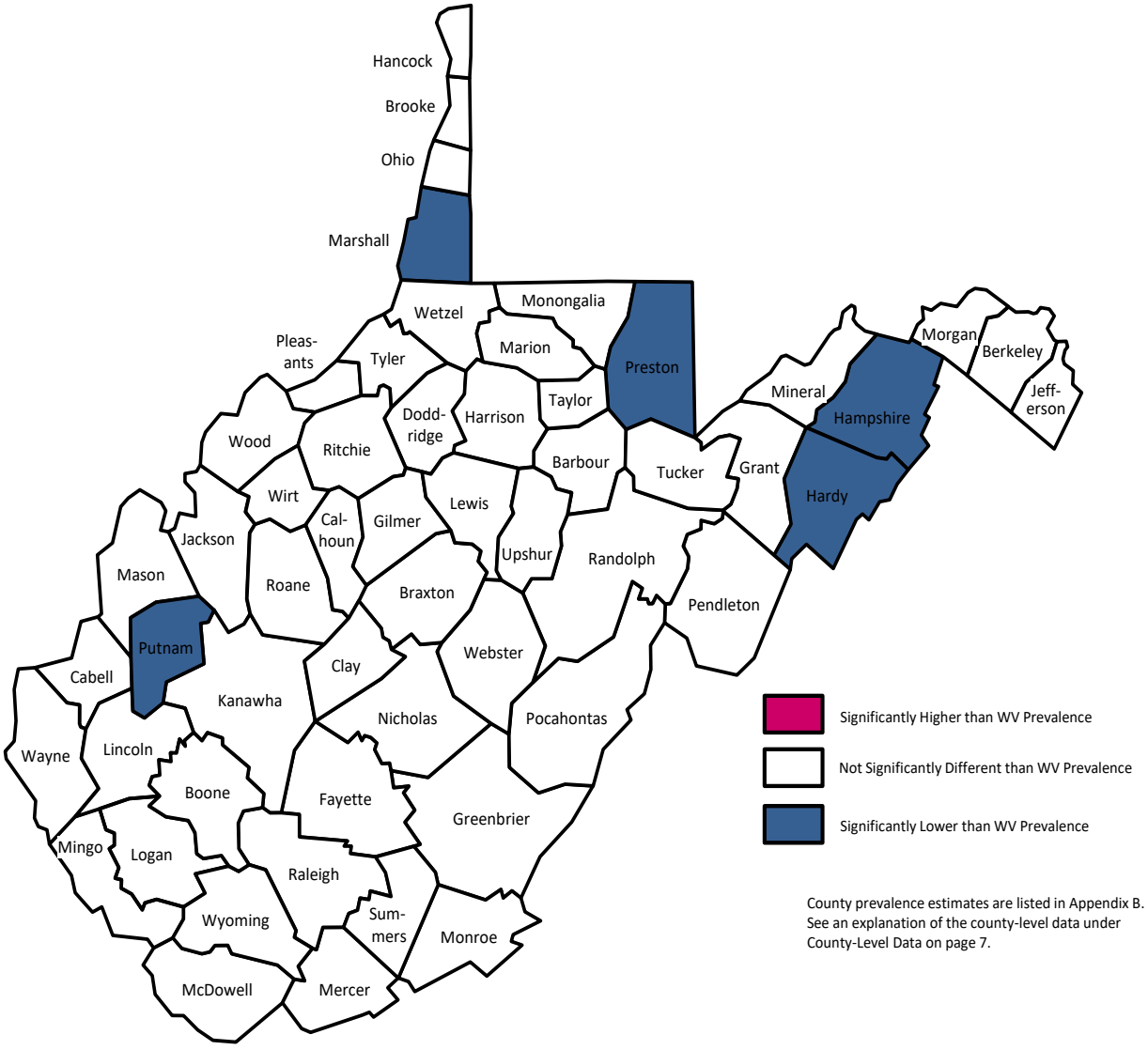


Figure 13.1 Prevalence of High Risk for HIV by County: WVBRFSS, 2012-2018

WV Prevalence (2012-2018) - 4.7%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

West Virginia Behavioral Risk Factor Surveillance System Report

2018

SECTION 3: Preventive Practices

Dental Visit

Definition

Responding "Within the past year" to the question, "Including all types of dentists, such as orthodontists, oral surgeons, and all other dental specialists, as well as dental hygienists, how long has it been since you last visited a dentist or a dental clinic for any reason?"

Prevalence

WV: 55.3% (95% CI: 53.6-57.1)
U.S.: 66.5% (95% CI: 66.2-66.8)
The West Virginia prevalence of had a dental visit in the past year was significantly lower than the U.S. prevalence. West Virginia ranked 53rd highest among 54 BRFSS participants.

Gender

Men: 53.6% (95% CI: 50.9-56.2)
Women: 57.1% (95% CI: 54.7-59.4)
There was no gender difference in prevalence of had a dental visit in the past year.

Age

The prevalence of had a dental visit in the past year was significantly higher among adults aged 18-24 (63.0%) than adults aged 44-54 (49.2%).

Education

The prevalence of had a dental visit in the past year was significantly higher among college graduates (76.8%) than all other educational attainment levels. The prevalence of had a dental visit in the past year was significantly lower among adults with less than a high school education (32.4%) than all other educational attainment levels.

Household Income

The prevalence of had a dental visit in the past year was significantly higher among adults with an annual household income of $75,000 or more (74.0%) than all other annual household income levels. The prevalence of had a dental visit in the past year was significantly lower among adults with an annual household income of less than $15,000 (32.5%) than all other annual household income level.

Trend

There was no change in the prevalence of had a dental visit in the past year from 2012 to 2018.

County

The 2010-2018 West Virginia state prevalence of had a dental visit in the past year was 52.7%. There were 5 counties with a significantly lower prevalence compared to the state; Barbour, Fayette, McDowell, Summers, and Wyoming. There were 3 counties with a significantly higher prevalence when compared to the state; Kanawha, Monongalia, and Putnam.

Table 14.1 Prevalence of Had a Dental Visit in the Past Year by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	373,105	**53.6**	50.9-56.2	411,532	**57.1**	54.7-59.4	784,637	**55.3**	53.6-57.1
Age									
18-24	47,694	**57.1***	46.6-67.7	52,382	**69.5***	59.2-79.9	100,075	**63.0**	55.6-70.4
25-34	56,743	**53.6**	45.6-61.5	59,692	**59.6**	52.3-67.0	116,435	**56.5**	51.1-61.9
35-44	63,119	**59.0**	52.0-66.0	61,206	**57.2**	50.9-63.5	124,325	**58.1**	53.4-62.8
45-54	53,804	**48.6**	42.5-54.8	54,467	**49.8**	44.2-55.4	108,271	**49.2**	45.1-53.4
55-64	60,762	**48.8**	43.8-53.8	69,716	**54.7**	49.9-59.5	130,478	**51.8**	48.3-55.2
65+	88,291	**54.9**	50.7-59.1	108,247	**55.9**	52.3-59.4	196,538	**55.4**	52.7-58.1
Education									
Less than H.S.	32,520	**34.7**	26.3-43.1	31,275	**30.2**	23.3-37.2	63,795	**32.4**	27.0-37.8
H.S. or G.E.D.	137,270	**47.0**	42.7-51.2	145,362	**53.8**	49.9-57.7	282,632	**50.3**	47.3-53.2
Some Post-H.S.	109,503	**59.6**	54.5-64.6	123,279	**59.6**	55.3-63.9	232,782	**59.6**	56.3-62.9
College Graduate	92,922	**74.1**	69.9-78.2	110,292	**79.2**	75.8-82.6	203,213	**76.8**	74.1-79.4
Income									
Less than $15,000	14,993	**28.0**	19.7-36.3	33,371	**35.0**	28.7-41.2	48,363	**32.5**	27.4-37.5
$15,000 - 24,999	46,036	**38.0**	31.5-44.5	60,830	**43.3**	37.8-48.9	106,867	**40.9**	36.6-45.1
$25,000 - 34,999	45,542	**48.6**	41.3-56.0	54,636	**54.1**	47.2-60.9	100,178	**51.5**	46.4-56.5
$35,000 - 49,999	57,798	**57.9**	51.3-64.5	54,681	**67.2**	60.8-73.7	112,479	**62.1**	57.4-66.8
$50,000 - 74,999	58,267	**61.7**	54.3-69.0	56,855	**73.4**	67.2-79.6	115,122	**66.9**	62.0-71.9
$75,000+	99,307	**69.4**	64.2-74.5	95,228	**79.6**	74.7-84.4	194,535	**74.0**	70.4-77.6

Figure 14.1 Prevalence of Had Dental Visit in the Past Year by Year: WVBRFSS, 2012-2018

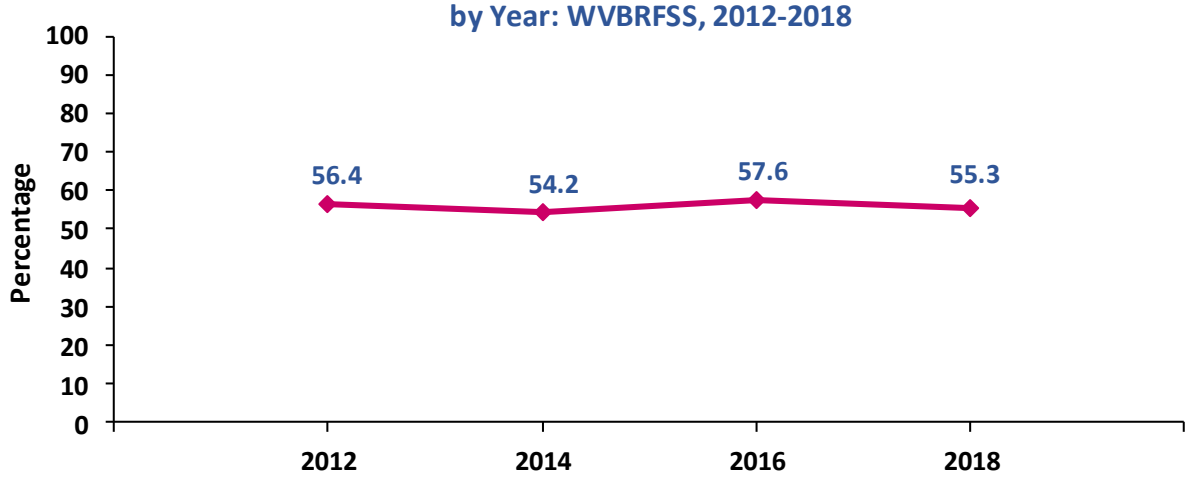
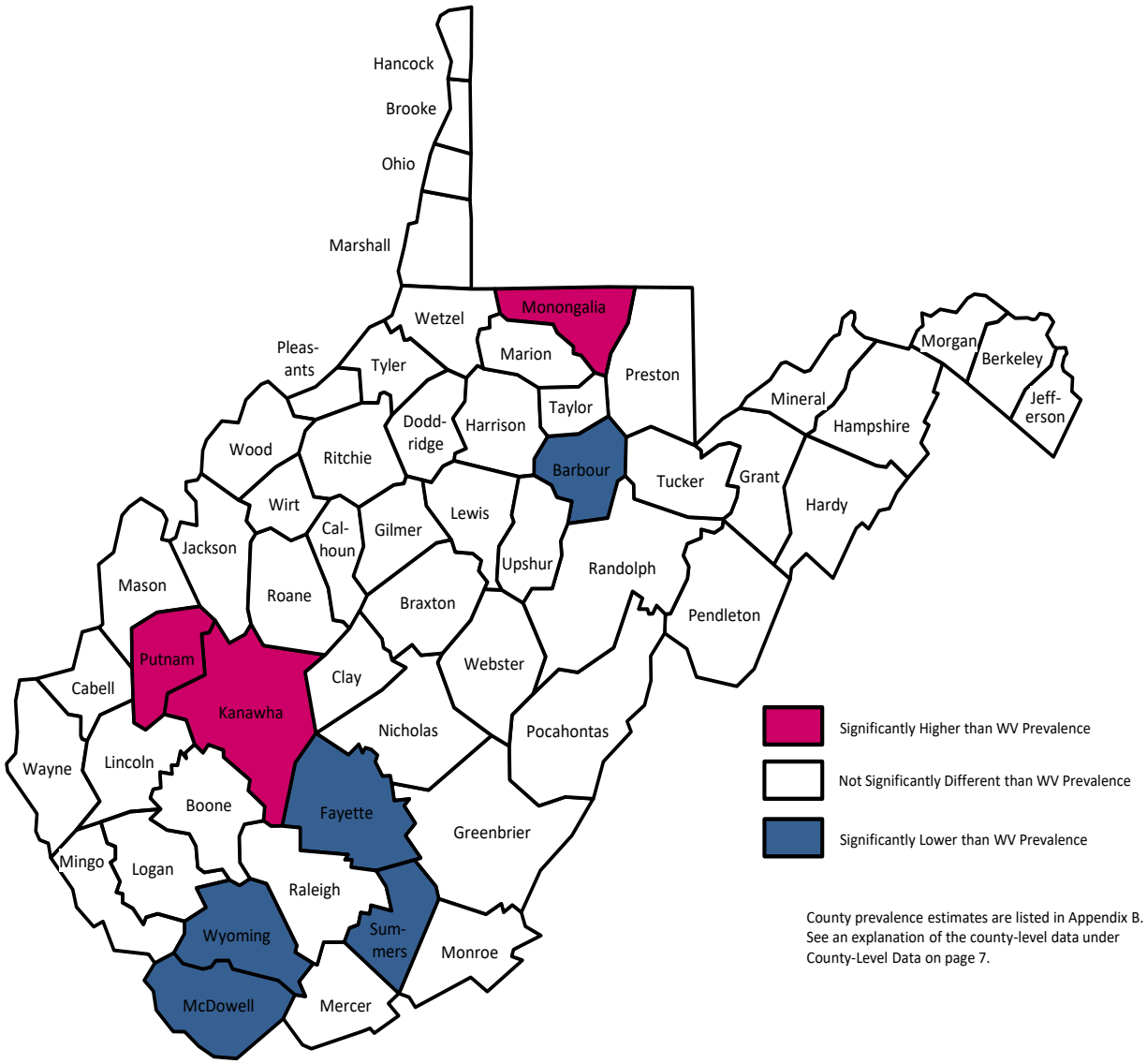


Figure 13.1 Prevalence of Had a Dental Visit in the Past Year by County: WVBRFSS, 2010-2018

WV Prevalence (2010-2018) - 52.7%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

CHAPTER 15: DIABETES TESTING

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: 62.8% (95% CI: 60.8-64.9)
Because this question is part of a state selected optional module and complete national data are not available, a U.S. comparison was not conducted.

Gender

Men: 61.5% (95% CI: 58.5-64.6)
Women: 64.1% (95% CI: 61.4-66.8)
There was no gender difference in the prevalence of had a diabetes test in the past 3 years.

Age

The prevalence of had a diabetes test in the past 3 years was significantly higher among adults aged 35 and older than adults aged 18-24 (43.9%).

Education

The prevalence of had a diabetes test in the past 3 years was significantly higher among college graduates (67.7%) than among adults with less than a high school education (56.1%).

Household Income

There was no annual household income difference in prevalence had a diabetes test in the past 3 years.

Trend

There was no change in the prevalence of had a diabetes test in the past 3 years from 2011 to 2018.

County

The 2014-2018 West Virginia state prevalence of had a diabetes test in the past 3 years 63.4%. Monongalia County and Cabell County had a significantly lower prevalence when compared to the state. Doddridge County and Roane County had a significantly higher prevalence when compared to the state.

Table 15.1 Prevalence of Had a Diabetes Test in the Past Three Years by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	341,358	**61.5**	58.5-64.6	359,572	**64.1**	61.4-66.8	700,930	**62.8**	60.8-64.9
Age									
18-24	28,666	**38.4***	27.2-49.6	32,573	**49.1***	37.6-60.7	61,239	**43.5**	35.4-51.5
25-34	47,969	**50.7**	42.2-59.2	50,370	**57.4**	49.4-65.3	98,338	**53.9**	48.1-59.7
35-44	55,743	**56.6**	49.2-64.0	52,750	**57.9**	51.1-64.8	108,492	**57.2**	52.2-62.3
45-54	58,030	**69.9**	63.5-76.3	53,797	**66.0**	60.0-72.2	111,826	**68.0**	63.5-72.4
55-64	66,527	**72.4**	67.0-77.9	69,038	**76.6**	72.0-81.1	135,565	**74.5**	70.9-78.1
65+	82,685	**75.4**	70.9-79.9	96,859	**70.1**	66.2-74.0	179,544	**72.4**	69.5-75.4
Education									
Less than H.S.	38,939	**54.6**	44.3-64.8	40,697	**57.7**	48.2-67.2	79,636	**56.1**	49.1-63.1
H.S. or G.E.D.	142,866	**60.9**	56.1-65.7	134,291	**65.4**	60.8-69.9	277,157	**63.0**	59.6-66.3
Some Post-H.S.	90,364	**62.1**	56.3-67.9	106,826	**62.4**	57.5-67.4	197,190	**62.3**	58.5-66.0
College Graduate	68,761	**67.0**	61.9-72.1	77,119	**68.3**	63.8-72.7	145,880	**67.7**	64.3-71.1
Income									
Less than $15,000	20,324	**50.3***	39.3-61.2	39,982	**59.7**	51.7-67.7	60,306	**56.1**	49.7-62.6
$15,000 - 24,999	58,267	**61.1**	53.3-68.9	65,722	**63.1**	56.7-69.5	123,989	**62.2**	57.2-67.2
$25,000 - 34,999	44,222	**59.9**	51.6-68.3	51,472	**63.1**	55.1-71.1	95,694	**61.6**	55.8-67.4
$35,000 - 49,999	50,054	**65.0**	57.5-72.6	47,848	**71.2**	64.2-78.3	97,902	**67.9**	62.7-73.1
$50,000 - 74,999	48,903	**65.0***	56.4-73.6	42,063	**70.1**	62.8-77.3	90,965	**67.3**	61.4-73.1
$75,000+	79,513	**67.3**	61.4-73.2	65,012	**64.5**	58.5-70.6	144,525	**66.0**	61.8-70.3

Figure 15.1 Prevalence of Having Diabetes Test in the Past Three Years by Year: WVBRFSS, 2011-2018

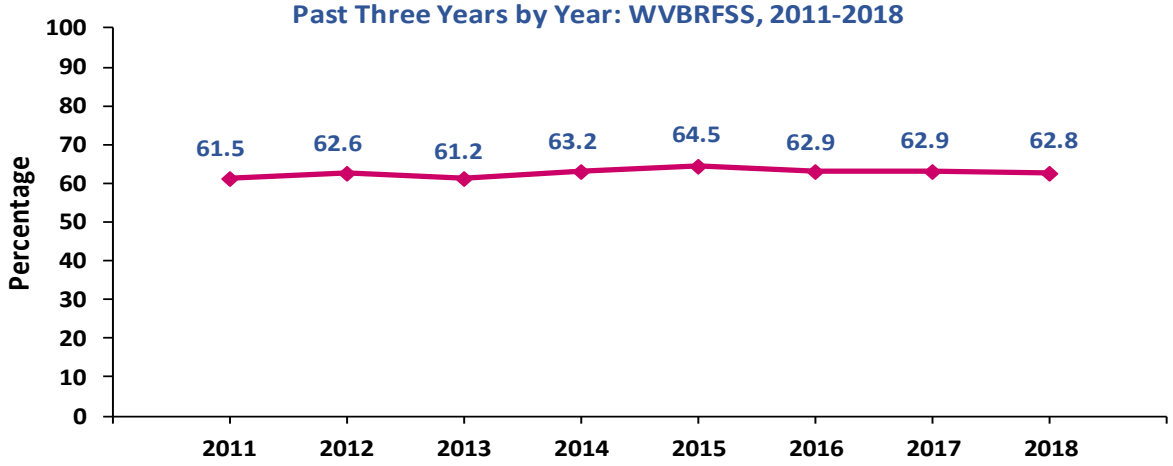
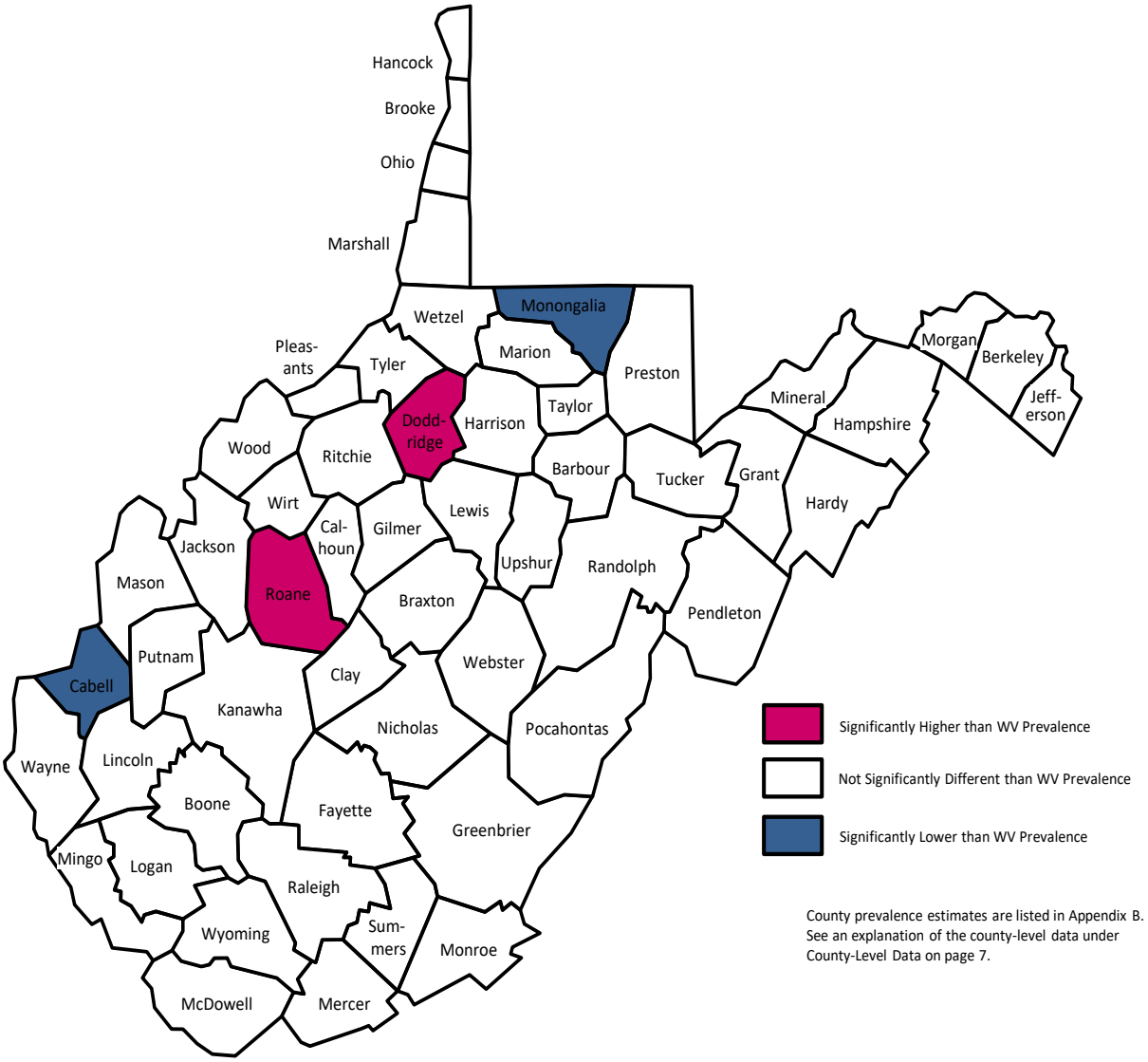


Figure 15.1 Prevalence of Had a Diabetes Test In The Past Three Years by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 63.4%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

CHAPTER 16: 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: 30.5% (95% CI: 28.8-32.2)
U.S.: 40.2% (95% CI: 39.9-40.5)
The West Virginia prevalence of ever had a HIV test was significantly lower than the U.S. prevalence. West Virginia ranked 46th highest among 54 BRFSS participants.

Gender

Men: 30.0% (95% CI: 27.4-32.5)
Women: 31.0% (95% CI: 28.1-33.3)
There was no gender difference in the prevalence of ever had a HIV test.

Age

The prevalence of ever had a HIV test was significantly higher among adults aged 25-54 than all other age groups.

Education

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

Household Income

There was no annual household income difference in the prevalence of ever had a HIV test.

Trend

There was no change in prevalence of ever had a HIV test from 2011 to 2018.

County

The 2014-2018 West Virginia state prevalence of ever had a HIV test was 33.9%. Pendleton County and Pocahontas County had a significantly lower prevalence when compared to the state. There were 5 counties that had a significantly higher prevalence when compared to the state; Berkeley, Fayette, Jefferson, Morgan, and Raleigh.

Table 16.1 Prevalence of Ever Had a HIV Test by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	192,173	**30.0**	27.4-32.5	209,957	**31.0**	28.7-33.3	402,130	**30.5**	28.8-32.2
Age									
18-24	17,263	**22.2**	13.3-31.0	18,998	**26.3**	17.2-35.4	36,262	**24.2**	17.8-30.5
25-34	34,476	**34.9**	27.1-42.7	49,372	**51.0**	43.4-58.6	83,848	**42.9**	37.3-48.4
35-44	44,998	**45.3**	38.0-52.6	51,078	**51.9**	45.4-58.5	96,076	**48.6**	43.7-53.5
45-54	36,818	**35.0**	29.0-41.0	42,127	**40.0**	34.5-45.6	78,946	**37.5**	33.4-41.6
55-64	28,871	**24.9**	20.3-29.4	29,063	**24.2**	20.0-28.4	57,934	**24.5**	21.4-27.6
65+	29,198	**20.7**	17.0-24.4	17,996	**10.1**	7.9-12.4	47,195	**14.8**	12.7-16.9
Education									
Less than H.S.	28,539	**34.1**	25.5-42.7	30,516	**31.0**	24.0-37.9	59,055	**32.4**	26.9-37.9
H.S. or G.E.D.	75,475	**28.0**	24.0-32.0	63,955	**25.2**	21.6-28.9	139,430	**26.7**	24.0-29.4
Some Post-H.S.	55,596	**32.8**	27.8-37.8	69,385	**35.7**	31.3-40.0	124,982	**34.3**	31.0-37.6
College Graduate	32,562	**27.7**	23.4-32.0	45,461	**35.2**	31.0-39.5	78,023	**31.6**	28.6-34.7
Income									
Less than $15,000	19,820	**41.0**	31.1-50.9	34,165	**38.5**	31.9-45.0	53,986	**39.4**	33.9-44.9
$15,000 - 24,999	41,067	**36.6**	29.9-43.2	45,347	**34.8**	29.4-40.3	86,414	**35.6**	31.4-39.9
$25,000 - 34,999	22,673	**25.1**	18.5-31.8	22,987	**23.3**	17.5-29.1	45,660	**24.2**	19.8-28.6
$35,000 - 49,999	27,340	**29.3**	22.9-35.7	21,234	**26.7**	20.3-33.1	48,574	**28.1**	23.6-32.6
$50,000 - 74,999	22,045	**25.5**	18.8-32.3	25,739	**35.8**	28.7-42.8	47,784	**30.2**	25.3-35.1
$75,000+	43,172	**32.6**	27.3-37.9	35,782	**32.2**	27.1-37.4	78,954	**32.4**	28.7-36.2

Figure 16.1 Prevalence of Ever Had an HIV Test by Year: WVBRFSS, 2011-2018

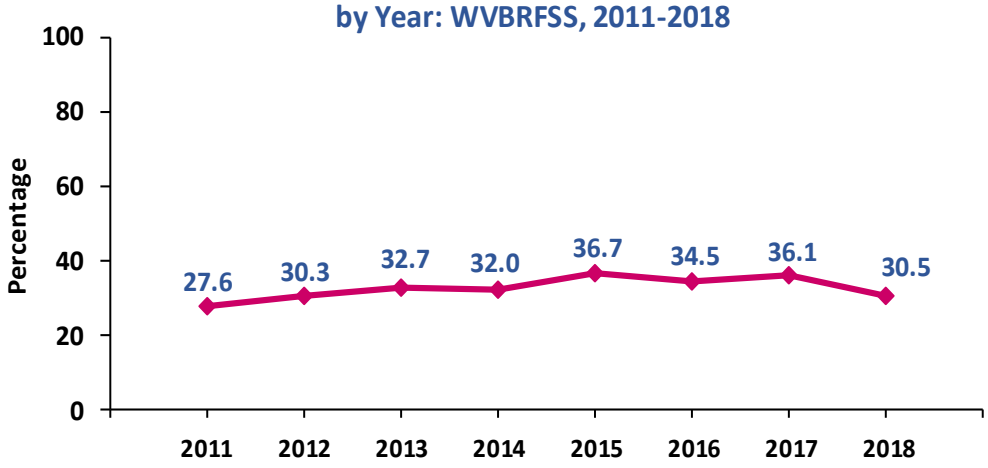
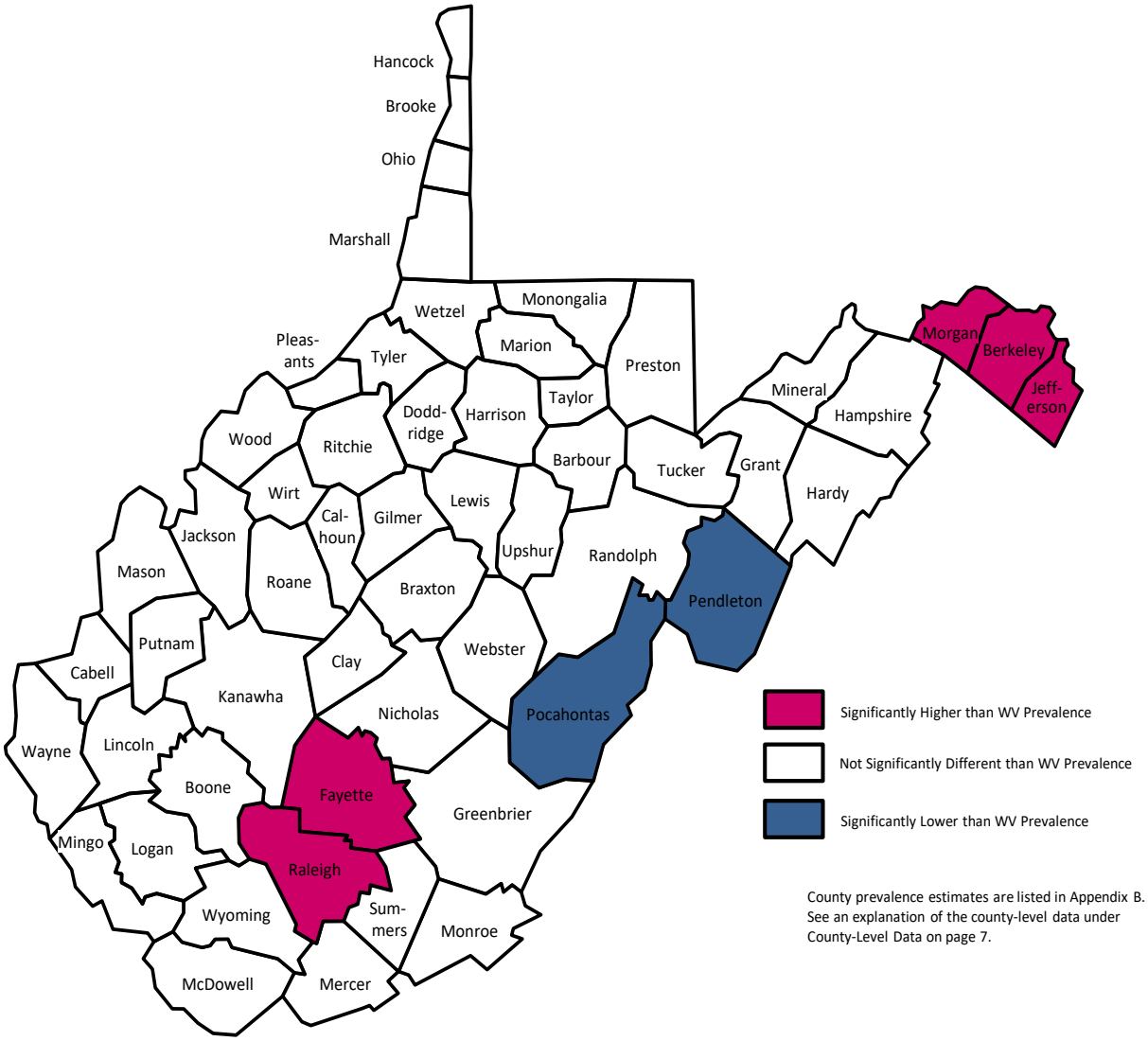


Figure 16.1 Prevalence of Ever Had a HIV Test by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 33.9%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

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: 42.6% (95% CI: 40.9-44.3)
U.S.: 33.2% (95% CI: 32.9-33.5)
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 2nd highest among the 54 BRFSS participants.

Gender

Men: 39.8% (95% CI: 37.2-42.3)
Women: 45.3% (95% CI: 43.0-47.6)
The prevalence of had a flu vaccine in the past year was significantly higher among women than men.

Age

The prevalence of had a flu vaccine in the past year was significantly higher among adults aged 65 and older (63.4%) than all other age groups.

Education

The prevalence of had a flu vaccine in the past year was significantly higher among college graduates (51.3%) than all other educational attainment levels.

Household Income

There was no annual household income difference in the prevalence of had a flu vaccine in the past year.

Trend

The prevalence of had a flu vaccine in the past year significantly decreased from 2014 to 2018.

County

The 2014-2018 West Virginia state prevalence of had a flu vaccine in the past year was 45.5%. There were 4 counties with a significantly lower prevalence compared to the state; Jefferson, McDowell, Mingo, and Randolph. Kanawha County and Putnam County had a significantly higher prevalence when compared to the state.

Table 17.1 Prevalence of Had a Flu Vaccine in the Past Year by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	269,937	**39.8**	37.2-42.3	324,641	**45.3**	43.0-47.6	594,579	**42.6**	40.9-44.3
Age									
18-24	21,515	**28.5**	18.7-38.4	29,567	**38.7***	28.3-49.1	51,081	**33.6**	26.5-40.8
25-34	24,419	**23.0**	16.7-29.3	30,189	**29.8**	23.1-36.5	54,608	**26.3**	21.7-30.9
35-44	29,618	**28.1**	21.9-34.4	35,497	**34.0**	28.2-39.8	65,115	**31.1**	26.8-35.3
45-54	33,689	**31.3**	25.6-37.0	40,202	**37.4**	32.0-42.7	73,891	**34.3**	30.4-38.3
55-64	54,820	**44.8**	39.7-49.8	67,805	**53.0**	48.2-57.7	122,625	**49.0**	45.5-52.4
65+	104,637	**65.9**	61.8-69.9	118,072	**61.5**	58.0-64.9	222,708	**63.4**	60.8-66.1
Education									
Less than H.S.	34,962	**38.9**	30.7-47.1	46,675	**45.2**	38.0-52.5	81,637	**42.3**	36.8-47.7
H.S. or G.E.D.	102,500	**36.3**	32.4-40.2	114,928	**42.8**	38.9-46.7	217,428	**39.5**	36.7-42.2
Some Post-H.S.	72,152	**40.1**	35.2-45.1	86,419	**41.8**	37.5-46.0	158,571	**41.0**	37.8-44.2
College Graduate	59,470	**47.4**	42.7-52.0	75,204	**55.0**	50.8-59.2	134,674	**51.3**	48.2-54.4
Income									
Less than $15,000	19,662	**38.2**	29.5-47.0	39,799	**42.2**	35.9-48.6	59,461	**40.8**	35.7-46.0
$15,000 - 24,999	47,344	**39.0**	32.6-45.4	55,826	**39.8**	34.6-45.0	103,171	**39.5**	35.4-43.5
$25,000 - 34,999	38,991	**41.5**	34.5-48.5	50,470	**49.4**	42.6-56.1	89,461	**45.6**	40.8-50.5
$35,000 - 49,999	41,923	**41.6**	35.3-47.9	37,480	**46.0**	39.3-52.7	79,403	**43.6**	38.9-48.2
$50,000 - 74,999	34,976	**38.9**	31.8-45.9	33,715	**44.4**	37.6-51.1	68,691	**41.4**	36.5-46.3
$75,000+	55,536	**39.2**	34.1-44.3	56,343	**47.3**	41.9-52.8	111,879	**42.9**	39.2-46.7

Figure 17.1 Prevalence of Had a Flu Vaccine in the Past Year by Year: WVBRFSS, 2014-2018

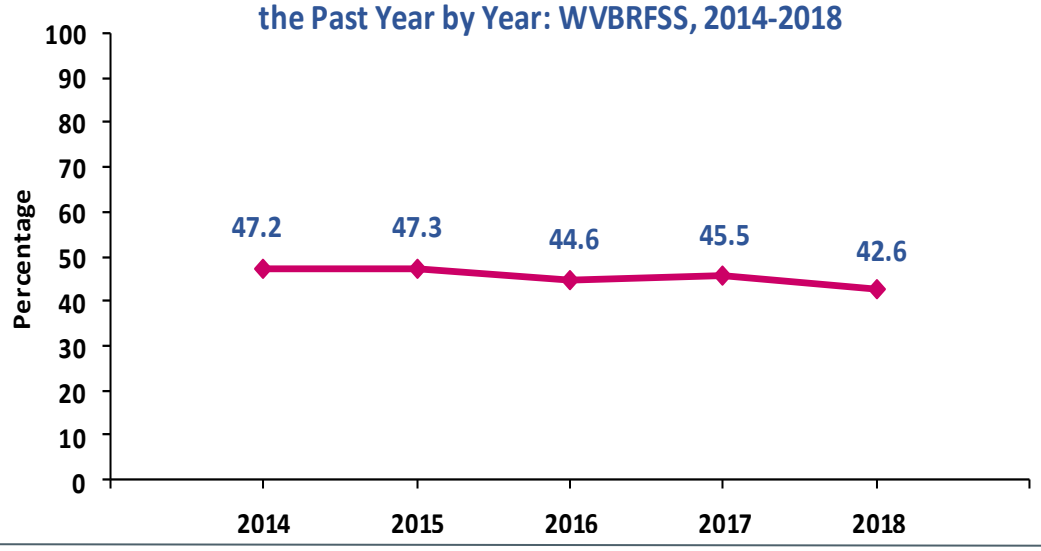
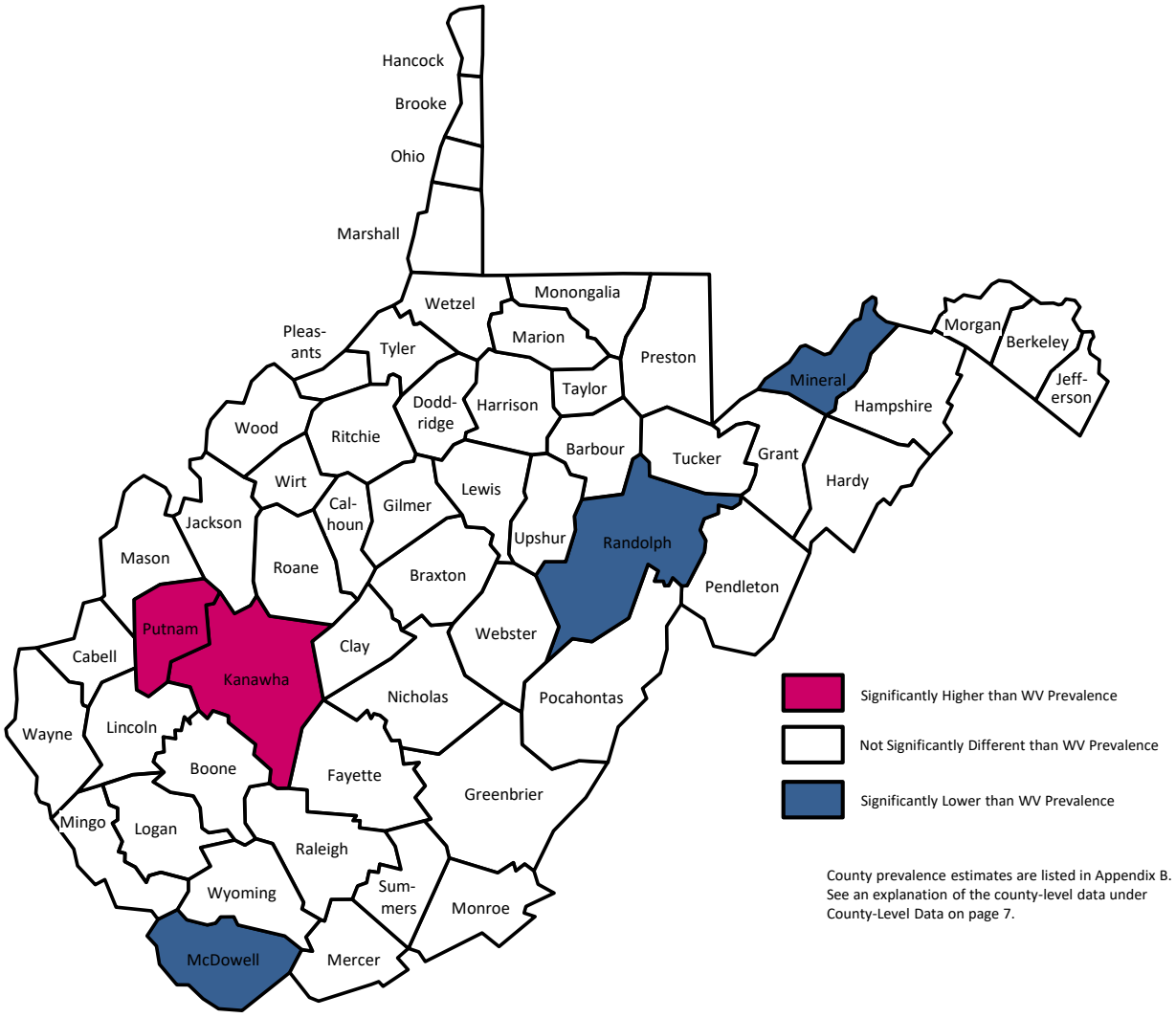


Figure 17.2 Prevalence of Had a Flu Vaccine in the Past Year by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 45.5%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

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: 63.4% (95% CI: 60.8-66.1)
U.S.: 54.0% (95% CI: 53.4-54.5)
The West Virginia prevalence of had a flu vaccine in the past year among adults 65 and older was significantly higher than the U.S. prevalence. West Virginia ranked 4th highest among the 54 BRFSS participants.

Gender

Men: 65.9% (95% CI: 61.8-69.9)
Women: 61.5% (95% CI: 58.0-64.9)
There was no gender difference in the prevalence of had a flu vaccine in the past year among adults 65 and older.

Education

The prevalence of had a flu vaccine in the past year among adults 65 and older was significantly higher among college graduates (72.0%) than adults with less than a high school education (59.3%).

Household Income

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

Trend

There was a decline in the prevalence of had a flu vaccine in the past year among adults 65 and older from 2015 to 2018.

County

The 2014-2018 West Virginia state prevalence of for had a flu vaccine in the past year among adults 65 and older was 67.3%. McDowell County and Wyoming County had a significantly lower prevalence when compared to the state. Boone County and Kanawha County had a significantly higher prevalence when compared to the state.

Table 17.2 Prevalence of Had a Flu Vaccine in the Past Year Among Those Aged 65 and Older by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	104,637	**65.9**	61.8-69.9	118,072	**61.5**	58.0-64.9	222,708	**63.4**	60.8-66.1
Education									
Less than H.S.	14,988	**61.1***	49.0-73.3	19,805	**57.9**	48.0-67.9	34,794	**59.3**	51.6-67.0
H.S. or G.E.D.	42,004	**62.4**	55.7-69.1	52,624	**61.4**	56.3-66.5	94,629	**61.8**	57.7-65.9
Some Post-H.S.	28,140	**69.0**	61.7-76.3	29,868	**60.1**	53.5-66.8	58,009	**64.1**	59.2-69.1
College Graduate	19,076	**73.9**	67.3-80.4	15,683	**69.8**	63.1-76.4	34,759	**72.0**	67.3-76.6
Income									
Less than $15,000	8,492	**66.2***	51.4-81.1	13,198	**60.9***	50.3-71.5	21,690	**62.9**	54.1-71.6
$15,000 - 24,999	16,941	**58.5***	48.0-69.0	26,386	**55.2**	47.9-62.5	43,327	**56.5**	50.4-62.5
$25,000 - 34,999	19,093	**71.5**	62.2-80.8	20,693	**65.9**	57.4-74.5	39,786	**68.5**	62.2-74.8
$35,000 - 49,999	19,043	**62.6**	53.0-72.1	13,247	**59.3***	49.2-69.3	32,290	**61.2**	54.2-68.1
$50,000 - 74,999	14,311	**72.9***	62.1-83.8	9,982	**65.7***	54.2-77.3	24,293	**69.8**	61.9-77.7
$75,000+	13,607	**75.8**	67.0-84.5	8,291	**64.6***	53.1-76.1	21,899	**71.1**	64.0-78.2

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

Figure 17.5 Prevalence of Flu Vaccine in Past Year, Ages 65 and Older by Year: WVBRFSS, 2015-2018

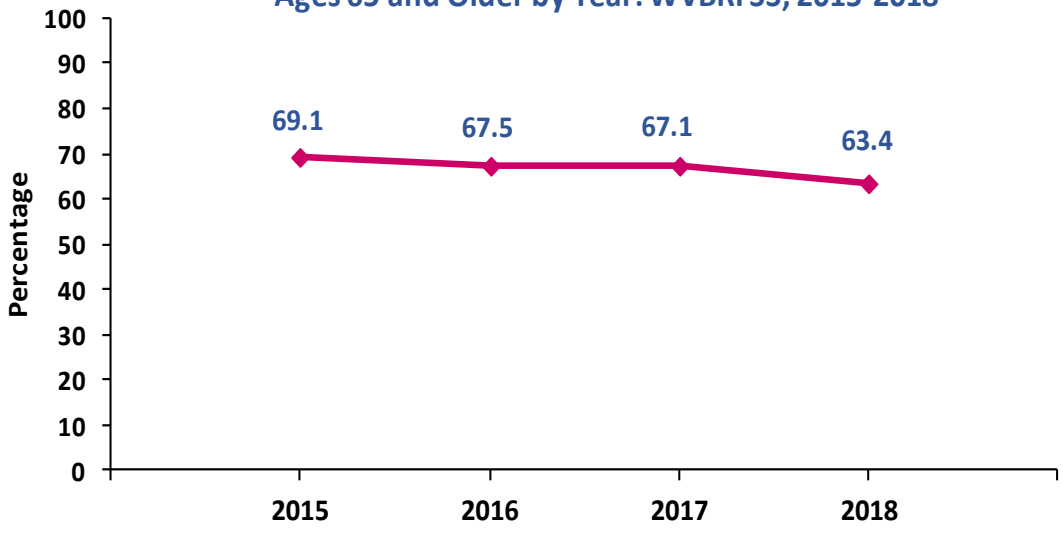
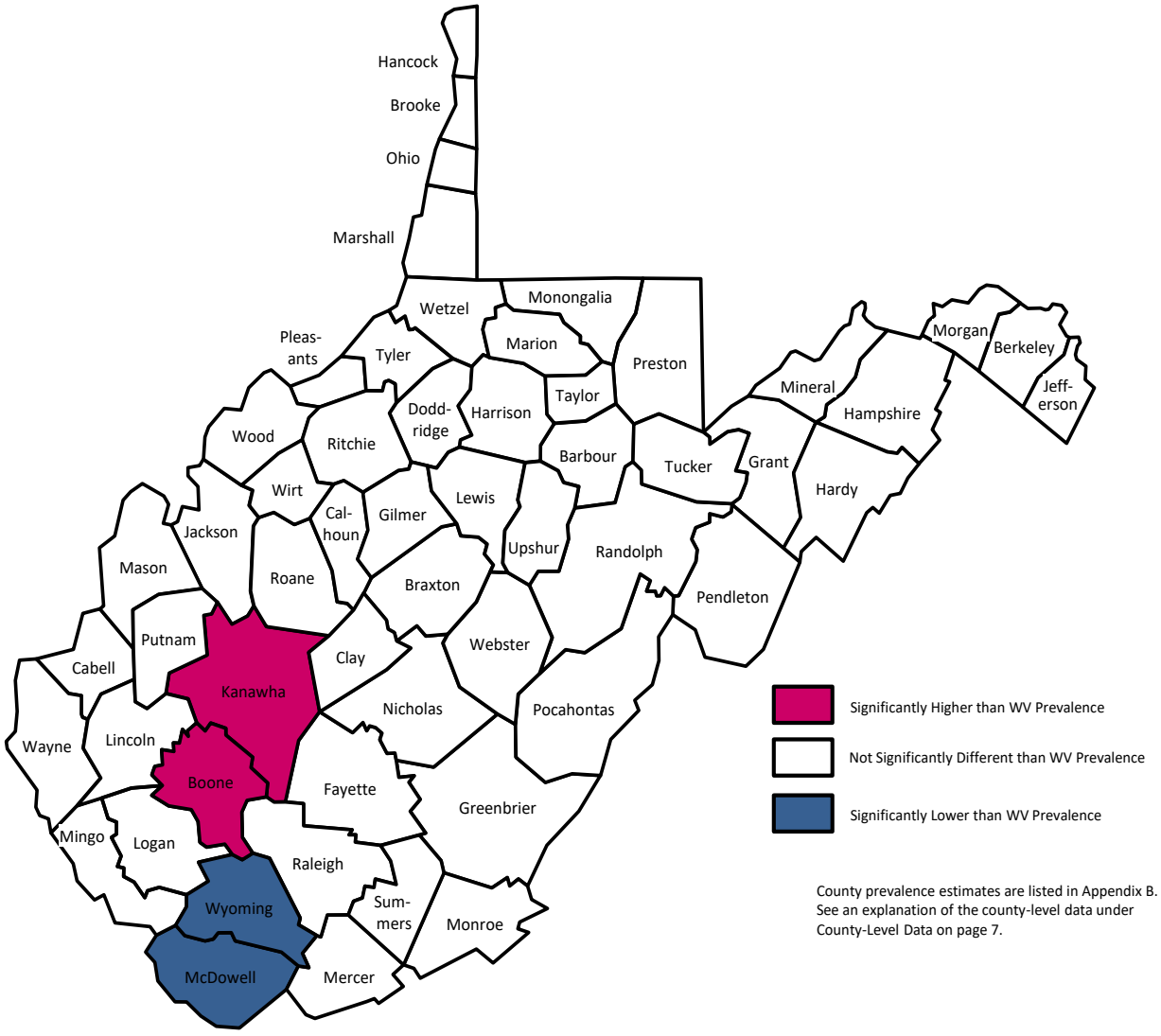


Figure 17.4 Prevalence of Had a Flu Vaccine in the Past Year Among Those Aged 65 and Older by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 67.3%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

Pneumonia Vaccine

Definition

Responding "Yes" to the question, "Have you ever had a pneumonia shot also known as a pneumococcal vaccine?"

Prevalence

WV: 38.9% (95% CI: 37.2-40.5)
U.S.: 32.2% (95% CI: 31.9-32.5)
The West Virginia prevalence of had a pneumonia vaccine was significantly higher than the U.S. prevalence. West Virginia ranked the 2nd highest among the 54 BRFSS participants.

Gender

Men: 35.7% (95% CI: 33.2-38.1)
Women: 41.8% (95% CI: 39.5-44.1)
The prevalence of had a pneumonia vaccine was significantly higher among women than men.

Age

The prevalence of had a pneumonia vaccine was significantly higher among adults aged 65 and older (73.0%) than all other age groups.

Education

The prevalence of had a pneumonia vaccine was significantly higher among adults with less than a high school education (44.5%) than college graduates (33.4%).

Household Income

The prevalence of had a pneumonia vaccine was significantly higher among adults with an annual household income of less than $15,000 (46.8%) than adults with an annual household income of $50,000 or more.

Trend

There was no change in prevalence of had a pneumonia vaccine from 2014 to 2018.

County

The 2014-2018 West Virginia state prevalence of had a pneumonia vaccine was 38.3%. There were 9 counties with a significantly lower prevalence compared to the state; Berkeley, Hampshire, Harrison, Jefferson, Marion, Monongalia, Preston, Ritchie, and Tyler. Kanawha County had a significantly higher prevalence of had a pneumonia vaccine when compared to the state.

Table 17.3 Prevalence of Had a Pneumonia Vaccine by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	228,235	**35.7**	33.2-38.1	288,279	**41.8**	39.5-44.1	516,514	**38.9**	37.2-40.5
Age									
18-24	15,693	**24.6**	14.8-34.4	20,548	**31.1**	20.3-41.9	36,241	**27.9**	20.6-35.2
25-34	14,285	**15.0**	9.5-20.5	18,677	**19.8**	13.5-26.1	32,963	**17.4**	13.2-21.6
35-44	15,957	**16.4**	11.0-21.7	23,248	**23.4**	17.6-29.2	39,205	**19.9**	16.0-23.9
45-54	22,392	**21.8**	16.5-27.0	29,298	**27.8**	22.8-32.8	51,690	**24.8**	21.2-28.4
55-64	44,340	**36.9**	32.0-41.8	54,121	**42.8**	38.1-47.5	98,462	**40.0**	36.5-43.3
65+	115,042	**73.4**	69.5-77.2	138,863	**72.7**	69.6-75.8	253,905	**73.0**	70.6-75.4
Education									
Less than H.S.	30,952	**35.4**	27.6-43.3	52,137	**52.4**	44.9-60.0	83,089	**44.5**	38.9-50.0
H.S. or G.E.D.	94,612	**35.5**	31.6-39.4	118,046	**45.1**	41.2-49.1	212,658	**40.3**	37.5-43.1
Some Post-H.S.	61,173	**35.9**	31.2-40.7	76,395	**39.0**	34.9-43.2	137,569	**37.6**	34.5-40.7
College Graduate	41,070	**35.9**	31.5-40.4	40,925	**31.2**	27.4-35.0	81,995	**33.4**	30.5-36.3
Income									
Less than $15,000	21,882	**43.4**	34.5-52.4	43,559	**48.6**	42.1-55.2	65,441	**46.8**	41.4-52.1
$15,000 - 24,999	43,149	**38.3**	32.0-44.7	67,697	**50.6**	45.0-56.2	110,846	**45.0**	40.7-49.2
$25,000 - 34,999	32,085	**35.5**	28.9-42.1	41,392	**41.5**	35.0-47.9	73,476	**38.6**	34.0-43.2
$35,000 - 49,999	36,765	**38.5**	32.2-44.8	28,764	**36.1**	29.6-42.5	65,529	**37.4**	32.9-41.9
$50,000 - 74,999	29,347	**34.5**	27.5-41.5	26,611	**36.3**	29.9-42.7	55,957	**35.3**	30.6-40.1
$75,000+	36,041	**27.0**	22.4-31.6	28,839	**25.5**	21.0-29.9	64,880	**26.3**	23.1-29.5

Figure 17.5 Prevalence of Ever Had a Pneumonia Vaccine by Year: WVBRFSS, 2014-2018

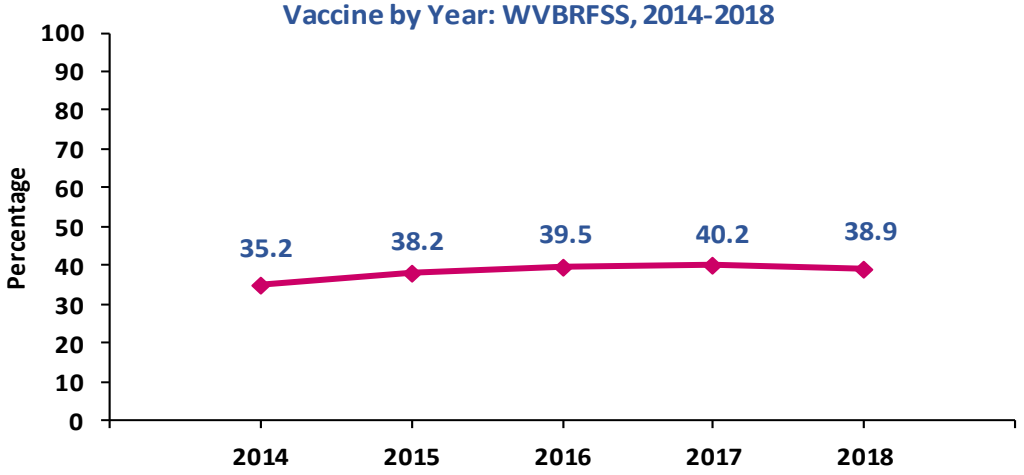
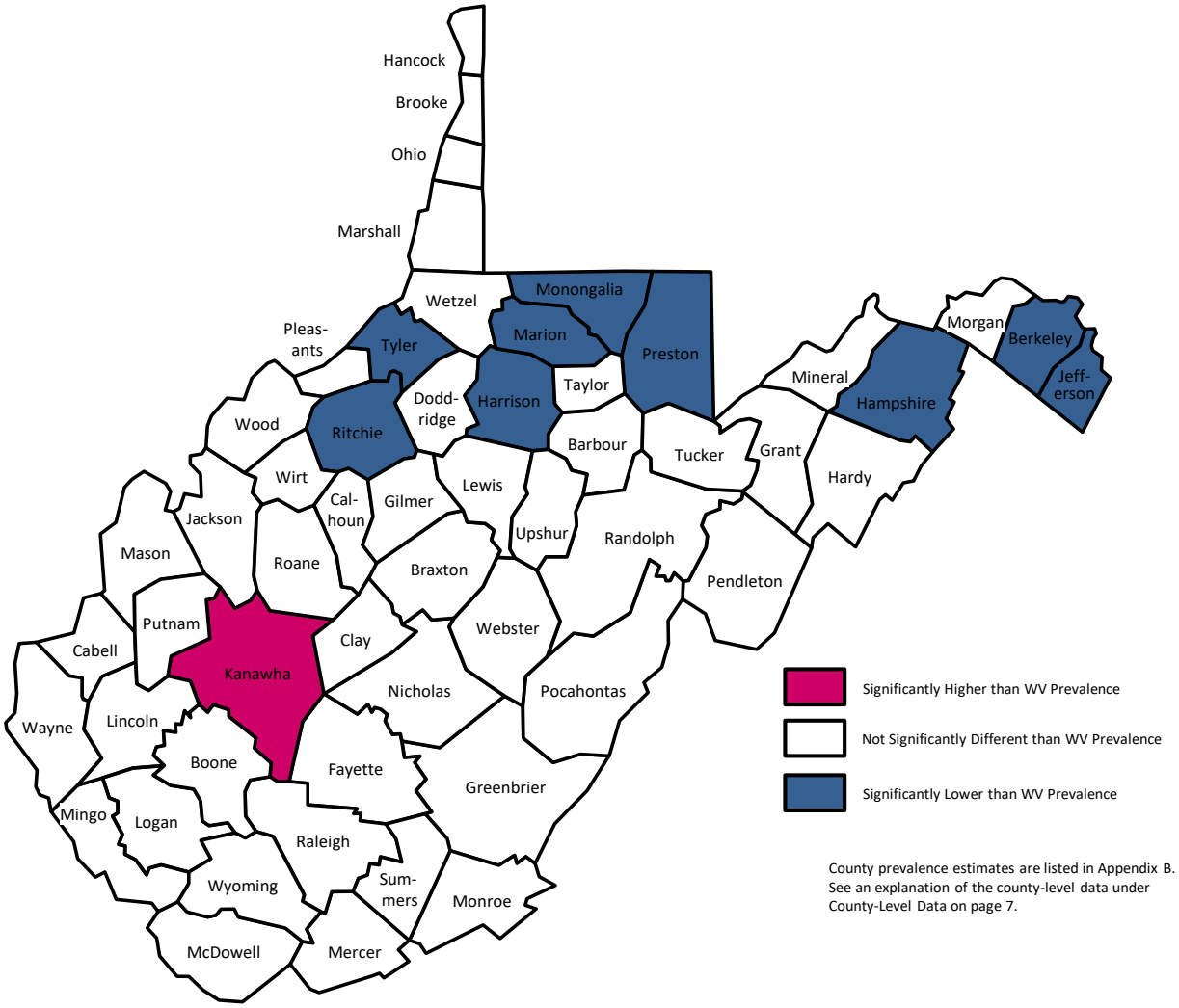


Figure 17.6 Prevalence of Had a Pneumonia Vaccine by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 38.3%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

Pneumonia Vaccine, Ages 65 and Older

Definition

Responding "Yes" to the question, "Have you ever had a pneumonia shot also known as a pneumococcal vaccine?" Restricted to adults aged 65 and older.

Prevalence

WV: 73.0% (95% CI: 70.6-75.4)
U.S.: 71.3% (95% CI: 70.7-71.9)
The West Virginia prevalence of had a pneumonia vaccine among those aged 65 and older was similar to the U.S. prevalence. West Virginia ranked the 29th highest among the 54 BRFSS participants.

Gender

Men: 73.4% (95% CI: 69.5-77.2)
Women: 72.7% (95% CI: 69.6-75.8)
There was no gender difference in the prevalence of had a pneumonia vaccine among those aged 65 and older.

Education

There was no educational attainment difference in the prevalence of had a pneumonia vaccine among those aged 65 and older.

Household Income

There was no annual household income difference in the prevalence of had a pneumonia vaccine among those aged 65 and older.

Trend

There was an increase in prevalence of had a pneumonia vaccine among those aged 65 and older from 2014 to 2018.

County

The 2014-2018 West Virginia state prevalence of for had a pneumonia vaccine among those aged 65 and older was 71.4%. Jefferson County and Marion County had a significantly lower prevalence than the state. Kanawha County and Monongalia County had a significantly higher prevalence when compared to the state.

Table 17.4 Prevalence of Had a Pneumonia Vaccine Among Those Aged 65 and Older by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	115,042	**73.4**	69.5-77.2	138,863	**72.7**	69.6-75.8	253,905	**73.0**	70.6-75.4
Education									
Less than H.S.	17,356	**69.6***	58.4-80.9	25,463	**76.5**	68.0-84.9	42,819	**73.5**	66.9-80.4
H.S. or G.E.D.	46,922	**70.9**	64.4-77.3	60,002	**69.7**	64.9-74.5	106,923	**70.2**	66.3-74.1
Some Post-H.S.	30,395	**77.1**	70.4-83.8	37,358	**76.3**	70.6-81.9	67,753	**76.6**	72.3-80.9
College Graduate	19,943	**77.4**	71.3-83.4	15,950	**70.9**	64.1-77.8	35,892	**74.4**	69.8-78.9
Income									
Less than $15,000	10,115	**78.9***	66.4-91.4	14,929	**70.2***	60.2-80.3	25,044	**73.5**	65.6-81.4
$15,000 - 24,999	18,547	**65.8***	55.4-76.2	35,264	**74.0**	67.8-80.1	53,811	**70.9**	65.4-76.4
$25,000 - 34,999	19,916	**76.5**	68.1-84.8	23,075	**74.4**	67.0-81.8	42,991	**75.3**	69.8-80.9
$35,000 - 49,999	22,814	**76.8**	68.5-85.1	14,719	**67.2**	57.8-76.6	37,532	**72.7**	66.5-78.9
$50,000 - 74,999	15,303	**78.0***	67.4-88.6	12,141	**78.5**	69.3-87.8	27,444	**78.2**	71.1-85.4
$75,000+	14,397	**80.4**	72.6-88.1	8,867	**69.1***	58.3-79.8	23,263	**75.7**	69.2-82.1

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

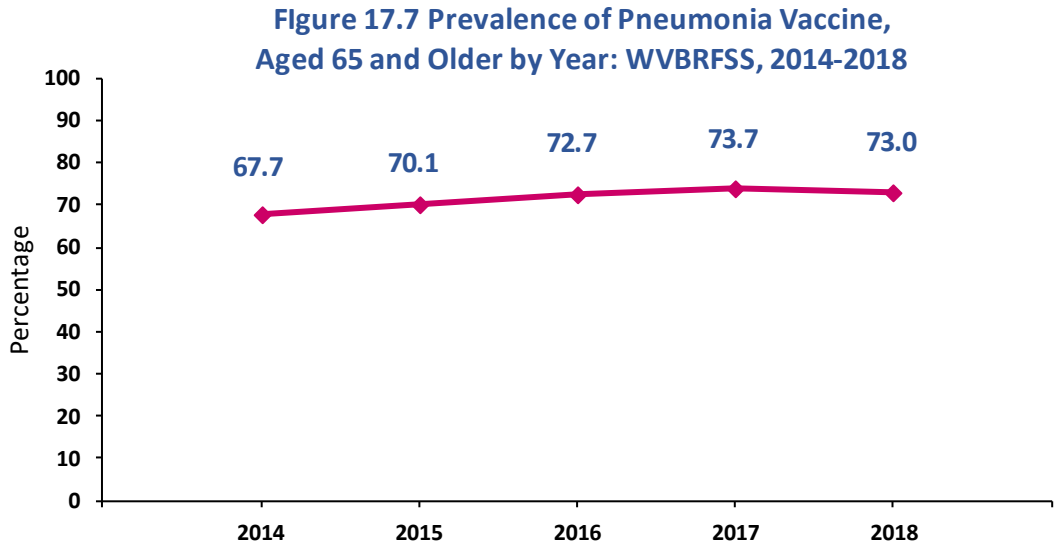
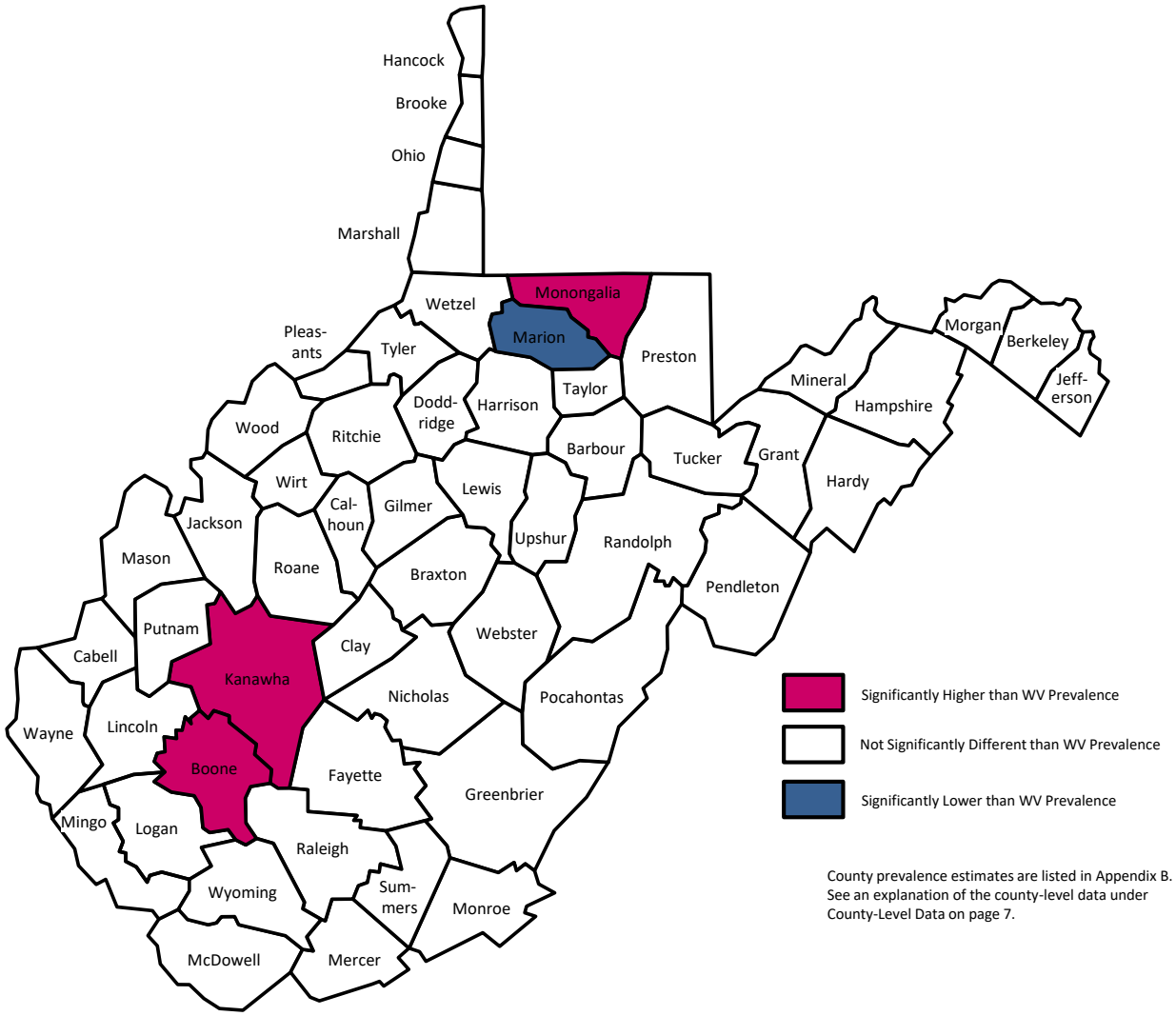


Figure 17.8 Prevalence of Had a Pneumonia Vaccine Among Those Aged 65 and Older by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 71.4%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

Lung Cancer Screening

Definition

Responding "Yes, to check for lung cancer" to "In the last 12 months, did you have a CT or CAT scan?"

Prevalence

WV: 4.0% (95% CI: 3.3-4.7)
Because this question is part of a state selected optional module and complete national data are not available, a U.S. comparison was not conducted.

Gender

Men: 4.2% (95% CI: 3.2-5.3)
Women: 3.7% (95% CI: 2.8-4.6)
There was no gender difference in the prevalence of lung cancer screening in the past year.

Age

The prevalence of lung cancer screening in the past year was significantly higher among adults aged 65 and older (6.3%) than among those aged 44 and younger.

Education

The prevalence of lung cancer screening in the past year was significantly higher among adults with less than high school education (6.9%) than college graduates (1.8%).

Household Income

The prevalence of lung cancer screening in the past year was significantly higher among those with an annual household income less than $25,000 than the prevalence among those with an income of $50,000-$74,999 or more.

Trend

There is no trendline available for the prevalence of lung cancer screening in the past year.

County

County estimates are not available for the prevalence of lung cancer screening in the past year.

Table 18.1 Prevalence of Lung Cancer Screening in the Past Year by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	26,815	**4.2**	3.2-5.3	24,845	**3.7**	2.8-4.6	51,660	**4.0**	3.3-4.7
Age									
18-24	0	**0.0**	0.0-0.0	1,496	**2.3**	0.0-5.6	1,496	**1.1**	0.0-2.7
25-34	649.3	**0.7**	0.0-2.0	1,647	**1.8**	0.0-3.9	2,297	**1.2**	0.0-2.5
35-44	3,374	**3.4**	0.3-6.5	2,047	**2.1**	0.3-3.9	5,422	**2.7**	0.9-4.6
45-54	3,170	**3.1**	0.9-5.4	4,959	**4.8**	2.3-7.4	8,129	**4.0**	2.3-5.7
55-64	7,146	**6.3**	3.2-9.3	6,192	**5.1**	2.6-7.7	13,337	**5.7**	3.7-7.7
65+	12,476	**8.4**	5.9-10.9	8,312	**4.6**	3.1-6.1	20,788	**6.3**	4.9-7.7
Education									
Less than H.S.	6,193	**7.4**	3.1-11.7	6,203	**6.5**	2.9-10.2	12,396	**6.9**	4.1-9.7
H.S. or G.E.D.	11,463	**4.3**	2.7-6.0	9,911	**4.0**	2.5-5.4	21,374	**4.2**	3.1-5.3
Some Post-H.S.	7,447	**4.3**	2.4-6.3	6,206	**3.2**	1.6-4.8	13,653	**3.7**	2.5-5.0
College Graduate	1,712	**1.5**	0.5-2.5	2,525	**2.0**	1.0-3.0	4,237	**1.8**	1.1-2.5
Income									
Less than $15,000	4,180	**8.9**	3.5-14.2	5,086	**6.0**	2.8-9.2	9,266	**7.0**	4.2-9.8
$15,000 - 24,999	5,594	**5.0**	2.4-7.6	5,656	**4.4**	2.3-6.6	11,250	**4.7**	3.0-6.4
$25,000 - 34,999	2,602	**2.9**	0.9-4.9	4,216	**4.3**	1.3-7.3	6,818	**3.6**	1.8-5.5
$35,000 - 49,999	4,749	**4.9**	2.2-7.7	2,136	**2.8**	0.4-5.1	6,885	**4.0**	2.1-5.8
$50,000 - 74,999	774.6	**0.9**	0.0-2.3	1,253	**1.8**	0.4-3.2	2,028	**1.3**	0.4-2.3
$75,000+	5,796	**4.4**	1.8-7.1	2,964	**2.7**	0.9-4.5	8,760	**3.6**	2.0-5.3

Breast Cancer Screening

Definition

Mammogram in past 2 years (women aged 40 and older)

Responding "Yes" to the question, "Have you ever had a mammogram?" and responding "Within the past 2 years" to the question, "How long has it been since you had your last mammogram?" Restricted to women aged 40 and older.

Mammogram in past 2 years (women aged 50-74)

Responding "Yes" to the question, "Have you ever had a mammogram?" and responding "Within the past 2 years" to the question, "How long has it been since you had your last mammogram?" Restricted to women aged 50-74, per recommended guidelines.

Prevalence

Mammogram in past 2 years (women aged 40 and older)

WV: 71.1% (95% CI: 68.8-73.4)
U.S.: 72.6% (95% CI: 72.1-73.1)

The West Virginia prevalence of had a mammogram in the past 2 years among women aged 40 and older was similar to the U.S. prevalence. West Virginia ranked the 30th highest among the 54 BRFSS participants.

Mammogram in past 2 years (women aged 50-74)

WV: 75.0% (95% CI: 72.2-77.9)
U.S.: 78.9% (95% CI: 78.3-79.4)

The West Virginia prevalence of had a mammogram in the past 2 years among women aged 50-74 was similar to the U.S. prevalence. West Virginia ranked the 40th highest among the 54 BRFSS participants.

Age

Mammogram in past 2 years (women aged 40 and older)

The prevalence of had a mammogram in the past 2 years among women aged 40 and older was significantly higher among women aged 55 and older than women aged 35-44.

Mammogram in past 2 years (women aged 50-74)

There was no age difference in the prevalence of had a mammogram in the past 2 years among women aged 50-74.

Education

Mammogram in past 2 years (women aged 40 and older)

The prevalence of had a mammogram in the past 2 years among women aged 40 and older was significantly higher among college graduates (78.0%) than those with less than a high school education (64.2%) and those with a high school degree (69.4%).

Mammogram in past 2 years (women aged 50-74)

The prevalence of had a mammogram in the past 2 years among women aged 50 -74 was significantly higher among college graduates (86.1%) than those with less than a high school education (71.1%) and those with a high school degree (70.1%).

Household Income

Mammogram in past 2 years (women aged 40 and older)

The prevalence of had a mammogram in the past 2 years among women aged 40 and older was significantly higher among those with an annual household income of $75,000 or more (77.9%) than among those earning less than $15,000 per year (63.2%).

Mammogram in past 2 years (women aged 50-74)

The prevalence of had a mammogram in the past 2 years among women aged 50-74 was significantly higher among those with an annual household income of $75,000 or more (84.6%) than among those earning less than $15,000 per year (69.7%).

Trend

Mammogram in past 2 years (women aged 40 and older)

There was no change in the prevalence of had a mammogram in the past 2 years among women aged 40 and older between 2012 and 2018. Because of the change in BRFSS methodology, results from 2011 and later are not directly comparable to previous years.

Mammogram in past 2 years (women aged 50-74)

There was no change in the prevalence of had a mammogram in the past 2 years among women aged 50-74 from 2012 to 2018.Because of the change in BRFSS methodology, results from 2011 and later are not directly comparable to previous years.

County

Mammogram in past 2 years (women aged 40 and older)

The 2010-2018 West Virginia state prevalence of had a mammogram in the past 2 years among women aged 40 and older was 91.0%. There were 3 counties with a significantly higher prevalence when compared to the state; Monroe, Ohio, and Randolph. No counties had a significantly lower prevalence than the state.

Mammogram in past 2 years (women aged 40 and older)

The 2010-2018 West Virginia state prevalence of had a mammogram in the past 2 years among women aged 50-74 was 72.1%. There were 4 counties with a significantly lower prevalence compared to the state; Logan, Marion, Summers, and Wyoming. There were 4 counties with a significantly higher prevalence when compared to the state; Greenbrier, Monroe, Ohio, and Tyler.

Table 18.2 Prevalence of Had a Mammogram in the Past 2 Years by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Women Aged 40 and Older			Women Aged 50-74		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	338,127	**71.1**	68.8-73.4	222,522	**75.0**	72.2-77.9
Age						
35-44	31,572	**58.9**	50.2-67.7	.	**.**	.
45-54	77,900	**71.8**	66.7-77.0	44,763	**71.9**	64.8-79.1
55-64	93,569	**74.4**	69.9-78.9	93,569	**74.4**	69.9-78.9
65+	135,086	**71.9**	68.8-75.1	84,190	**77.5**	73.6-81.4
Education						
Less than H.S.	51,001	**65.3**	58.2-72.4	36,265	**71.1**	62.6-79.5
H.S. or G.E.D.	129,911	**69.4**	65.6-73.2	82,692	**70.1**	65.3-74.8
Some Post-H.S.	93,340	**72.8**	68.7-77.0	59,247	**77.9**	73.0-82.9
College Graduate	63,875	**78.0**	74.0-82.0	44,317	**86.1**	82.3-89.8
Income						
Less than $15,000	39,885	**63.2**	56.3-70.0	27,001	**69.7**	61.5-78.0
$15,000 - 24,999	65,314	**71.0**	65.6-76.4	42,653	**76.5**	70.3-82.7
$25,000 - 34,999	45,769	**69.7**	63.3-76.1	30,872	**72.2**	64.1-80.2
$35,000 - 49,999	40,617	**71.6**	64.7-78.5	28,092	**69.7**	61.3-78.1
$50,000 - 74,999	38,728	**72.7**	66.0-79.3	27,926	**77.7**	70.1-85.2
$75,000+	58,473	**77.9**	72.7-83.1	36,500	**84.6**	78.7-90.6

Figure 18.1 Prevalence of Had Mammogram in the Past 2 Years by Year: WVBRFSS, 2010-2018

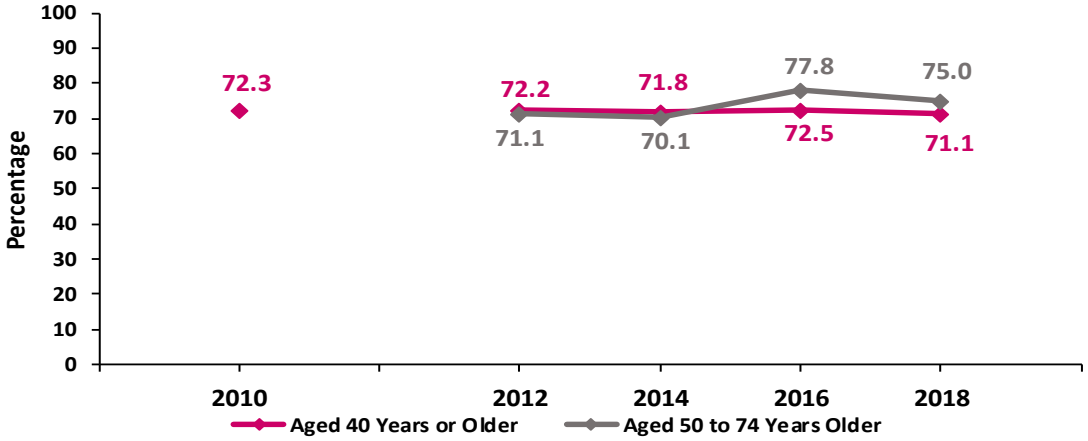
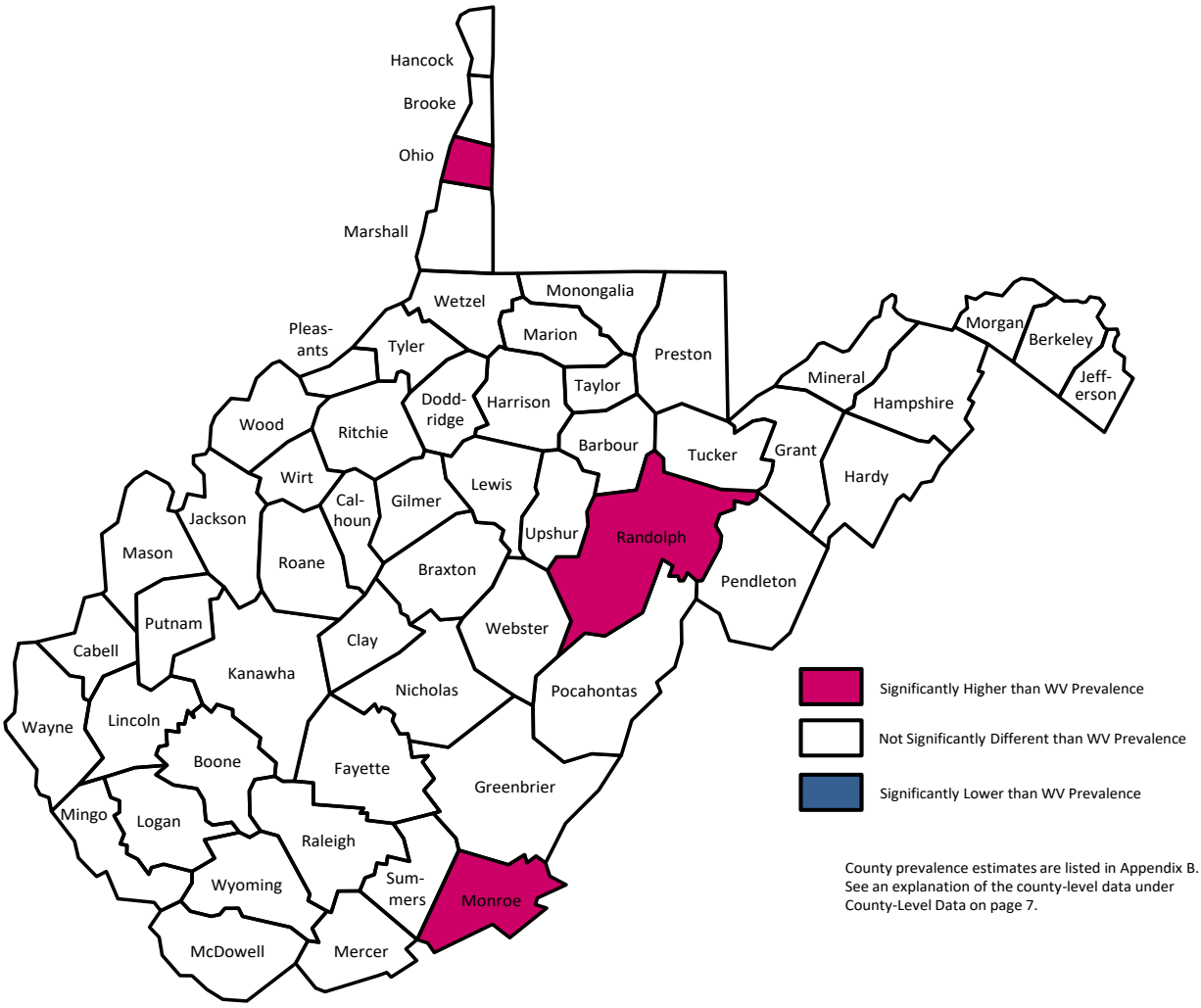


Figure 18.2 Prevalence of Had a Mammogram in the Past 2 Years Among Women Aged 40 and Older by County: WVBRFSS, 2010-2018

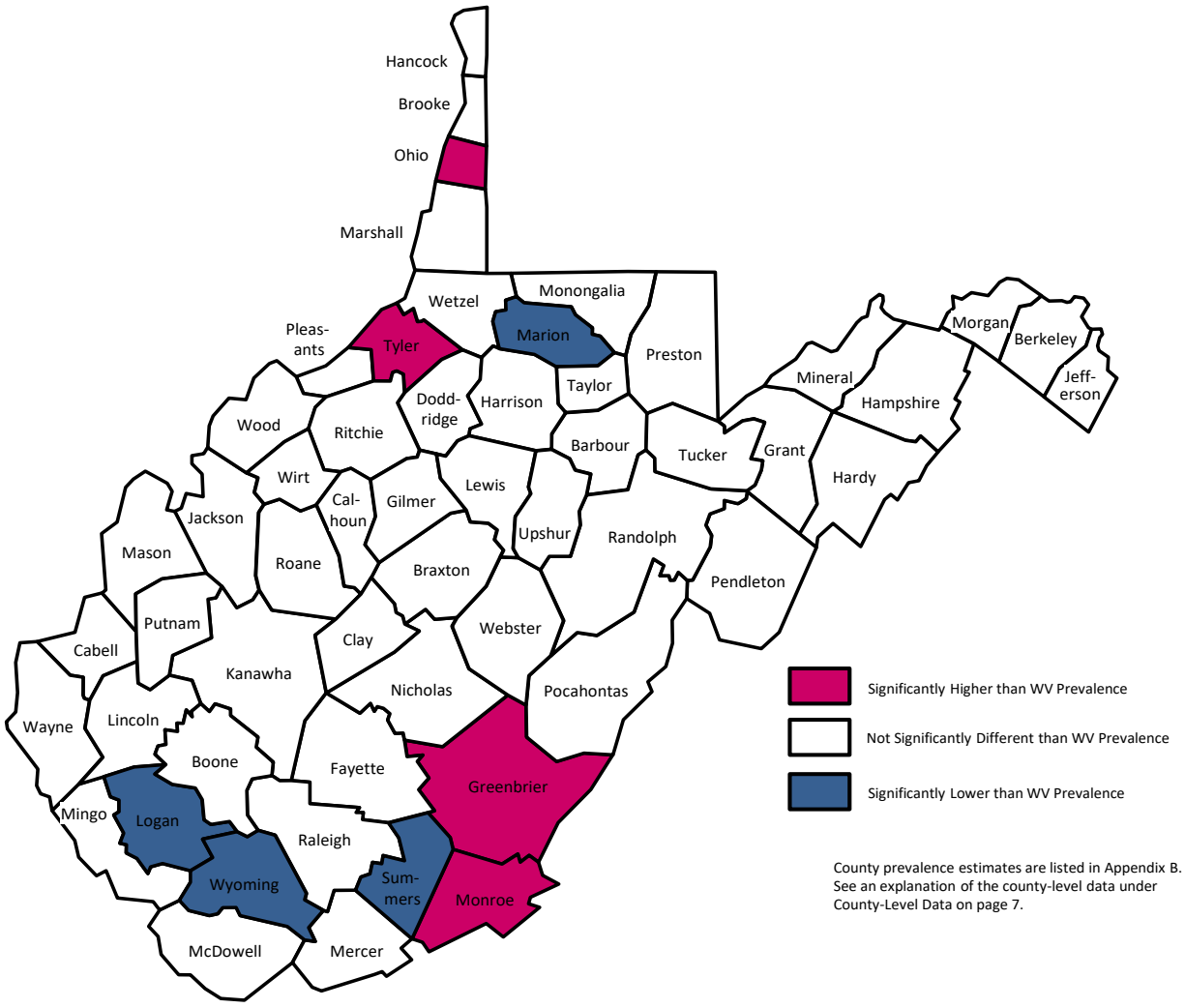
WV Prevalence (2010-2018) - 91.0%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

Figure 18.3 Prevalence of Had a Mammogram in the Past 2 Years Among Women Aged 50-74 by County: WVBRFSS, 2010-2018

WV Prevalence (2010-2018) - 72.1%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

Cervical Cancer Screening

Definition

Ever had a Pap test (women aged 18 and older)

Responding "Yes" to the question, "Have you ever had a Pap test?" Restricted to women aged 18 and older.

Pap test in the past 3 years (women aged 21-65)

Responding "Yes" to the question, "Have you ever had a Pap test?" and responding "Within the past 3 years" to the question, "How long has it been since you had your last Pap test?" Restricted to women aged 21-65, per recommended guidelines.

Ever had a HPV test (women aged 18 and older)

Responding "Yes" to the question, "An HPV test is sometimes given with the Pap test for cervical cancer screening. Have you ever had an HPV test?" Restricted to women aged 18 and older.

Prevalence

Ever had a Pap test (women aged 18 and older)

WV: 93.0% (95% CI: 91.4-94.6)
U.S.: 89.7% (95% CI: 89.4-90.0)

The West Virginia prevalence of had a Pap test among women aged 18 and older was significantly higher than the U.S. prevalence. West Virginia ranked the 5th highest among the 54 BRFSS participants.

Pap test in the past 3 years (women aged 21-65)

WV: 80.2% (95% CI: 77.4-83.0)
U.S.: 79.9% (95% CI: 79.4-80.4)

The West Virginia prevalence of had a Pap test in the past 3 years among women aged 21-65 was similar to the U.S. prevalence. West Virginia ranked the 26th lowest among the 54 BRFSS participants.

Ever had a HPV test (women aged 18 and older)

WV: 47.6% (95% CI: 44.7-50.4)
U.S.: 49.3% (95% CI: 48.7-49.8)

The West Virginia prevalence of had a HPV test among women aged 18 and older was similar to the U.S. prevalence. West Virginia ranked the 37th highest among the 54 BRFSS participants.

Age

Ever had a Pap test (women aged 18 and older)

There was no age difference in the prevalence of had a Pap test among women aged 18 and older.

Pap test in the past 3 years (women aged 21-65)

The prevalence of had a Pap test in the past 3 years among women aged 21-65 was significantly higher among women aged 25-34 (89.4%) than among those aged 35-65.

Ever had a HPV test (women aged 18 and older)

The prevalence of had a HPV test among women aged 18 and older was significantly higher among women aged 35-54 than women aged 55 and older.

Education

Ever had a Pap test (women aged 18 and older)

The prevalence of had a Pap test among women aged 18 and older was significantly higher among college graduates (98.4%) than all other educational attainment levels.

Pap test in the past 3 years (women aged 21-65)

The prevalence of had a Pap test in the past 3 years among women aged 21-65 was significantly higher among college graduates (88.1%) than women with a high school education or less.

Ever had a HPV test (women aged 18 and older)

The prevalence of had a HPV test among women aged 18 and older was significantly higher among college graduates (59.0%) than all other educational attainment levels.

Household Income

Ever had a Pap test (women aged 18 and older)

There was no annual household income difference in the prevalence of had a Pap test among women aged 18 and older.

Pap test in the past 3 years (women aged 21-65)

There was no annual household income difference in the prevalence of had a Pap test in the past 3 years among women aged 21-65.

Ever had a HPV test (women aged 18 and older)

The prevalence of had a HPV test among women aged 18 and older was significantly higher among those with an annual household income of $75,000 or more (60.0%) than among those earning $15,000-$34,999 per year.

Trend

Ever had a Pap test (women aged 18 and older)

There was no change in prevalence of Pap test among women 18 and older from 2012 to 2018. Because of the change in BRFSS methodology, results from 2011 and later are not directly comparable to previous years.

Pap test in the past 3 years (women aged 21-65)

There is no change in prevalence of Pap test in the past 3 years among women 21 to 65 from 2012 to 2018.Because of the change in BRFSS methodology, results from 2011 and later are not directly comparable to previous years.

Ever had a HPV test (women aged 18 and older)

No trendline is available for the prevalence of had a HPV test among women aged 18 and older. Because of the change in BRFSS methodology, results from 2011 and later are not directly comparable to previous years.

County

Ever had a Pap test (women aged 18 and older)

The 2010-2018 West Virginia state prevalence of had Pap test among women aged 18 and older was 93.0%. Monongalia County had a significantly lower prevalence when compared to the state. There were 10 counties with a significantly higher prevalence than the state; Barbour, Calhoun, Gilmer, Hardy, Harrison, Lewis, Marshall, Nicholas, Tucker, and Wirt.

Pap test in the past 3 years (women aged 21-65)

The 2010-2018 West Virginia state prevalence of had a Pap test among women aged 21 -65 was 73.0%. Pocahontas County had a significantly lower prevalence compared to the state. There were 5 counties with a significantly higher prevalence than the state; Clay, Doddridge, Kanawha, Nicolas, and Wirt.

Table 18.3 Prevalence of Cervical Cancer Screening by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Ever Had a Pap Test (Women Aged 18 and Older)			Had a Pap Test in the Past 3 Years (Women Aged 21-65)			Ever Had a HPV Test (Women Aged 18 and Older)		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	663,716	**93.0**	91.4-94.6	302,037	**80.2**	77.4-83.0	250,280	**47.6**	44.7-50.4
Age									
18-24	43,633	**57.8***	47.1-68.5	34,475	**87.0***	76.8-97.2	28,007	**42.3***	30.7-53.8
25-34	98,095	**97.2**	94.5-100.0	80,315	**89.4**	84.2-94.5	59,278	**73.8***	66.2-81.3
35-44	101,072	**97.7**	95.4-100.0	69,622	**78.8**	72.9-84.8	52,966	**69.1**	62.2-76.0
45-54	105,592	**97.1**	95.0-99.1	53,101	**76.3**	70.2-82.4	45,853	**57.7**	51.3-64.1
55-64	125,347	**98.5**	97.0-99.9	58,636	**73.0**	67.3-78.7	38,691	**43.0**	37.4-48.6
65+	182,866	**95.9**	94.4-97.3	5,889	**66.2***	52.5-79.9	24,647	**19.2**	15.9-22.5
Education									
Less than H.S.	93,499	**92.5**	88.0-97.0	32,207	**71.5***	61.0-82.1	32,116	**43.1**	34.1-52.1
H.S. or G.E.D.	245,467	**91.4**	88.3-94.4	98,860	**77.3**	72.1-82.5	86,193	**44.2**	39.3-49.0
Some Post-H.S.	189,437	**91.9**	89.0-94.9	86,096	**80.1**	74.8-85.5	71,223	**46.5**	41.3-51.6
College Graduate	134,584	**98.4**	97.4-99.4	84,236	**88.1**	85.0-91.3	60,109	**59.0**	54.2-63.8
Income									
Less than $15,000	86,043	**91.6**	87.2-96.0	33,458	**73.0**	64.3-81.8	37,428	**53.2**	45.6-60.8
$15,000 - 24,999	129,227	**93.2**	89.7-96.7	51,750	**75.2**	67.4-82.9	46,043	**45.8**	39.1-52.5
$25,000 - 34,999	92,761	**91.2**	87.0-95.4	44,889	**80.2**	72.6-87.9	30,981	**36.6**	28.7-44.5
$35,000 - 49,999	76,709	**94.2**	89.9-98.5	36,414	**82.0**	74.2-89.8	27,317	**46.8**	38.5-55.1
$50,000 - 74,999	72,942	**95.6**	92.2-99.0	37,196	**86.6**	80.1-93.1	28,735	**52.3**	44.3-60.4
$75,000+	112,735	**95.1**	91.5-98.6	68,817	**85.0**	80.3-89.7	53,460	**60.0**	53.6-66.3

Figure 18.4 Prevalence of Cervical Cancer Screening by Year: WVBRFSS, 2010-2018

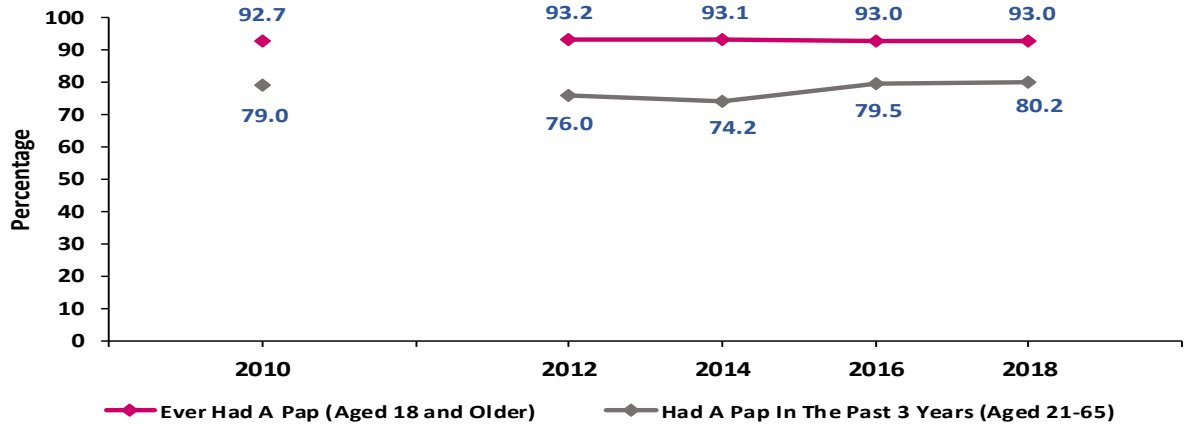
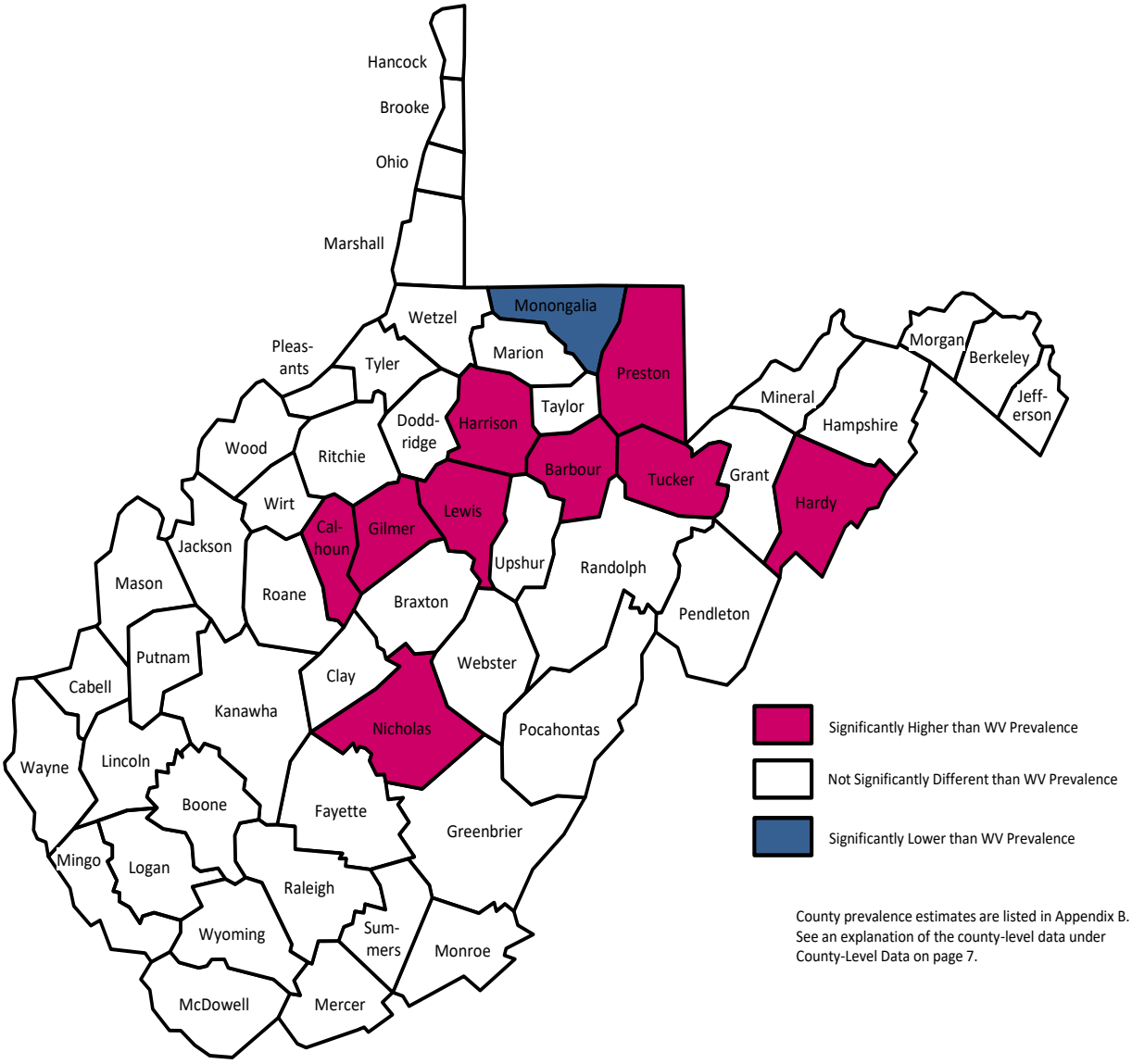


Figure 18.5 Prevalence of Ever Had Pap Test Among Women Aged 18 and Older by County: WVBRFSS, 2010-2018

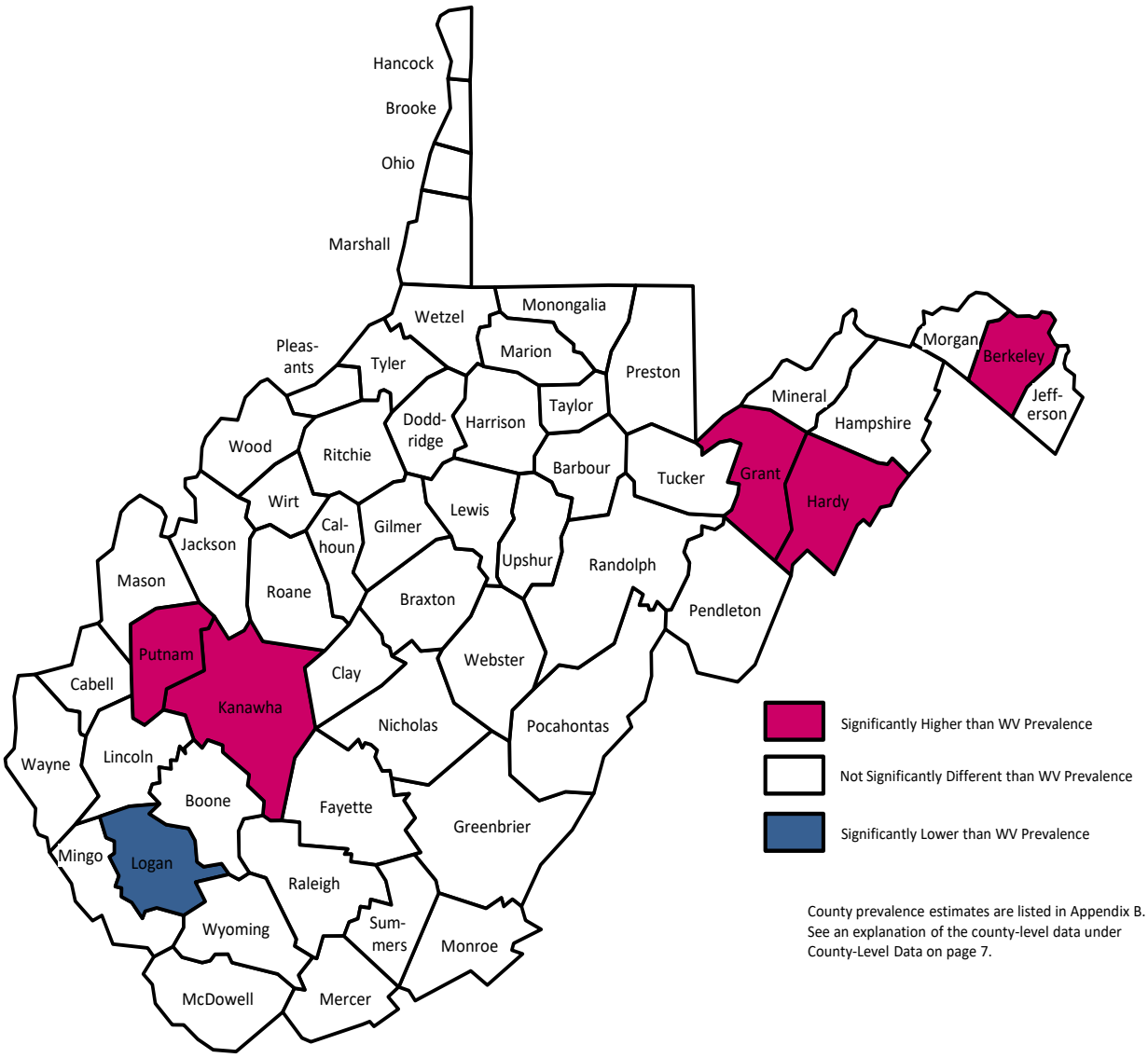
WV Prevalence (2010-2018) - 93.0%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

Figure 18.6 Prevalence of Had A Pap Test in the Past 3 Years Among Women Aged 21-65 by County: WVBRFSS, 2010-2018

WV Prevalence (2010-2018) - 73.0%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

Prostate Cancer Screening

Definition

Doctor discussed advantages of PSA test

Responding "Yes" to the question, "Has a doctor, nurse, or other health professional ever talked with you about the advantages of the PSA test?" Restricted to men aged 40 and older.

Doctor discussed disadvantages of PSA test

Responding "Yes" to the question, "Has a doctor, nurse, or other health professional ever talked with you about the disadvantages of the PSA test?" Restricted to men aged 40 and older.

Prevalence

Doctor discussed advantages of PSA test

WV: 48.3% (95% CI: 45.4-51.1)

U.S.: 43.9% (95% CI: 43.3-44.5)

The West Virginia prevalence of doctor discussed advantages of PSA test among men aged 40 and older was significantly higher than the U.S. prevalence. West Virginia ranked the 9th highest among the 54 BRFSS participants.

Doctor discussed disadvantages of PSA test

WV: 28.3% (95% CI: 25.8-30.8)

U.S.: 19.9% (95% CI: 19.4-20.3)

The West Virginia prevalence of doctor discussed disadvantages of PSA test among men aged 40 and older was significantly higher than the U.S. prevalence. West Virginia ranked the 4th highest among the 54 BRFSS participants.

Age

Doctor discussed advantages of PSA test

The prevalence of doctor discussed advantages of PSA test among men aged 40 and older was significantly different between each age group with the highest prevalence among those aged 65 and older.

Doctor discussed disadvantages of PSA test

The prevalence of doctor discussed disadvantages of PSA test among men aged 40 and older was significantly higher among those aged 55 and older than among those aged 54 and younger.

Education

Doctor discussed advantages of PSA test

The prevalence of doctor discussed advantages of PSA test among men aged 40 and older was significantly lower among those with less than a high school education (38.3%) than those with some college (53.0%) and college graduates (57.7%).

Doctor discussed disadvantages of PSA test

There was no educational attainment difference in the prevalence of doctor discussed disadvantages of PSA test among men aged 40 and older.

Household Income

Doctor discussed advantages of PSA test

There was no annual household income difference in the prevalence of doctor discussed advantages of PSA test among men aged 40 and older.

Doctor discussed disadvantages of PSA test

The prevalence of doctor discussed disadvantages of PSA test among men aged 40 and older was significantly higher among those with an annual household income of $25,000-$34,999 (39.2%) than among those earning $75,000 or more per year (25.3%).

Trend

No trendline is available for these indicators.

County

No county estimates are available for these indicators.

Table 18.4 Prevalence of Discussed PSA Test with Doctor Among Men Aged 40 and Older by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Discussed Advantages of PSA Test			Discussed Disadvantages of PSA Test		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	210,271	**48.3**	45.4-51.1	121,900	**28.3**	25.8-30.8
Age						
35-44	8,893	**16.4**	8.9-24.0	5,469	**10.2***	3.8-16.5
45-54	32,792	**31.6**	25.9-37.3	20,363	**19.5**	14.8-24.2
55-64	65,230	**54.7**	49.6-59.8	39,013	**33.0**	28.2-37.9
65+	102,828	**66.3**	62.2-70.5	56,846	**37.7**	33.5-41.9
Education						
Less than H.S.	24,432	**38.3**	29.9-46.6	14,217	**23.0**	16.2-29.8
H.S. or G.E.D.	86,152	**45.5**	41.0-49.9	50,985	**26.8**	22.8-30.8
Some Post-H.S.	57,551	**53.0**	47.4-58.6	32,756	**31.0**	25.9-36.0
College Graduate	41,710	**57.7**	52.6-62.9	23,514	**32.8**	28.1-37.6
Income						
Less than $15,000	15,433	**39.4**	29.8-49.0	10,081	**26.4**	17.8-35.1
$15,000 - 24,999	33,120	**43.6**	36.6-50.7	19,229	**25.9**	19.8-31.9
$25,000 - 34,999	33,702	**55.0**	47.3-62.7	23,905	**39.2**	31.6-46.7
$35,000 - 49,999	34,991	**52.2**	45.0-59.5	19,026	**28.5**	22.4-34.6
$50,000 - 74,999	25,325	**49.8**	41.5-58.1	14,691	**29.0**	21.7-36.4
$75,000+	43,072	**46.2**	40.3-52.1	23,349	**25.3**	20.3-30.2

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

Prostate Cancer Screening (continued)

Definition

Doctor recommended having a PSA test

Responding "Yes" to the question, "Has a doctor, nurse, or other health professional ever recommended that you have a PSA test?" Restricted to men aged 40 and older.

Had a PSA test in the past 2 years

Responding "Yes" to the question, "Have you ever had a PSA test?" and responding "Within the past 2 years" to the question, "How long has it been since you had your last PSA test?" Restricted to men aged 40 and older.

Prevalence

Doctor recommended having a PSA test

WV: 48.0% (95% CI: 45.1-50.8)

U.S.: 40.5% (95% CI: 39.9-41.0)

The West Virginia prevalence of doctor recommended having a PSA test among men aged 40 and older was significantly higher than the U.S. prevalence. West Virginia ranked the 2nd highest among the 54 BRFSS participants.

Had a PSA test in the past 2 years

WV: 38.4% (95% CI: 35.7-41.2)

U.S.: 33.2% (95% CI: 32.6-33.7)

The West Virginia prevalence of had a PSA test in the past 2 years among men aged 40 and older was significantly higher than the U.S. prevalence. West Virginia ranked the 6th highest among the 54 BRFSS participants.

Age

Doctor recommended having a PSA test

The prevalence of doctor recommended having a PSA test among men aged 40 and older was significantly higher among men aged 65 and older (68.1%) than all other age groups.

Had a PSA test in the past 2 years

The prevalence of PSA test in the past 2 years among men aged 40 and older was significantly higher among men 65 and older (56.6%) than all other age groups.

Education

Doctor recommended having a PSA test

The prevalence of doctor recommended having a PSA test among men aged 40 and older was significantly higher among college graduates (55.8%) than men with less than a high school education (35.4%).

Had a PSA test in the past 2 years

The prevalence of PSA test in the past 2 years among men aged 40 and older was significantly higher among college graduates (46.6%) than men with less than high school education (28.8%)

Household Income

Doctor recommended having a PSA test

There was no annual household income difference in the prevalence of doctor recommended having a PSA test among men aged 40 and older.

Had a PSA test in the past 2 years

There was no annual household income difference in the prevalence of PSA test in the past 2 years among men aged 40 and older.

Trend

No trendline is available for these indicators.

County

No county estimates are available for these indicators.

Table 18.5 Prevalence of PSA Test Among Men Aged 40 and Older by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Doctor Recommended PSA Test			Had a PSA Test in the Past 2 Years		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	207,971	**48.0**	45.1-50.8	160,402	**38.4**	35.7-41.2
Age						
35-44	6,142	**11.3**	4.9-17.7	4,294	**8.0**	2.9-13.2
45-54	31,000	**29.5**	23.9-35.1	20,604	**20.2**	15.2-25.1
55-64	66,491	**56.0**	50.9-61.1	52,156	**45.4**	40.2-50.6
65+	103,607	**68.1**	64.0-72.2	83,349	**56.6**	52.2-61.0
Education						
Less than H.S.	22,446	**35.4**	27.2-43.5	17,808	**28.8**	21.1-36.5
H.S. or G.E.D.	90,286	**47.5**	43.0-51.9	67,040	**37.1**	32.7-41.4
Some Post-H.S.	54,216	**51.1**	45.5-56.8	41,964	**40.7**	35.2-46.2
College Graduate	40,596	**55.8**	50.7-60.9	33,163	**46.6**	41.4-51.7
Income						
Less than $15,000	14,870	**37.8**	28.4-47.2	8,810	**23.9**	15.7-32.1
$15,000 - 24,999	31,740	**43.3**	36.1-50.5	21,889	**30.8**	24.1-37.5
$25,000 - 34,999	31,600	**52.9**	45.1-60.7	25,092	**42.7**	35.0-50.4
$35,000 - 49,999	37,227	**55.9**	48.6-63.3	29,788	**46.1**	38.9-53.3
$50,000 - 74,999	27,167	**52.9**	44.5-61.2	21,446	**43.2**	35.1-51.3
$75,000+	42,137	**44.6**	38.7-50.4	34,768	**37.7**	32.1-43.4

Colorectal Cancer Screening

Definition

Had a Fecal Occult Blood Test (FOBT) in the past year

Responding "Yes" to the question, "A blood stool test is a test that may use a special kit at home to determine whether the stool contains blood. Have you ever had this test using a home kit?" and responding "Within the past year" to the question, "How long has it been since you had your last blood stool test using a home kit?" Restricted to adults aged 50-75, per screening recommendations.

Had a FOBT in the past 3 years

Responding "Yes" to the question, "A blood stool test is a test that may use a special kit at home to determine whether the stool contains blood. Have you ever had this test using a home kit?" and responding "Within the past 3 years" to the question, "How long has it been since you had your last blood stool test using a home kit?" Restricted to adults aged 50-75, per screening recommendations.

Prevalence

Had a FOBT in the past year

WV: 9.7% (95% CI: 8.4-11.0)
U.S.: 11.6% (95% CI: 11.2-11.9)
The West Virginia prevalence of had a FOBT in the past year among adults aged 50-75 was significantly lower than the U.S. prevalence. West Virginia ranked the 20th highest among the 54 BRFSS participants.

Had a FOBT in the past 3 years

WV: 15.4% (95% CI: 13.8-17.0)
U.S.: 18.7% (95% CI: 18.3-19.1)
The West Virginia prevalence of had a FOBT in the past 3 years among adults aged 50-75 was significantly lower than the U.S. prevalence. West Virginia ranked the 28th highest among the 54 BRFSS participants.

Gender

Had a FOBT in the past year

Men: 10.1% (95% CI: 8.2-12.1)
Women: 9.2% (95% CI: 7.5-11.0)
There was no gender difference in the prevalence of had a FOBT in the past year among adults aged 50-75.

Had a FOBT in the past 3 years

Men: 16.6% (95% CI: 14.2-19.0)
Women: 14.2% (95% CI: 12.1-16.3)
There was no gender difference in the prevalence of had a FOBT in the past 3 years among adults aged 50-75.

Age

Had a FOBT in the past year

The prevalence of had a FOBT in the past year among adults aged 50-75 was significantly higher among those aged 65 and older (11.3%) than those aged 50-54 (6.0%).

Had a FOBT in the past 3 years

The prevalence of had a FOBT in the past 3 years among adults aged 50-75 was significantly higher among those aged 65 and older (18.9%) than those aged 50-54 (9.2%).

Education

Had a FOBT in the past year

There was no educational attainment difference in the prevalence of FOBT in the past year among adults aged 50-75.

Had a FOBT in the past 3 years

There was no education attainment difference in the prevalence of FOBT in the past 3 years among adults aged 50-75.

Household Income

Had a FOBT in the past year

There was no annual household income difference in the prevalence of had a FOBT in the past year among adults aged 50-75.

Had a FOBT in the past 3 years

There was no annual household income difference in the prevalence of had a FOBT in the past 3 years among adults aged 50-75.

Trend

Had a FOBT in the past year

There is a decline in prevalence of FOBT in the past year, among adults aged 50-75 from 2010 to 2018. Because of the change in BRFSS methodology, results from 2011 and later are not directly comparable to previous years.

Had a FOBT in the past 3 years

There is a decline in prevalence of had FOBT in the past 3 years among adults aged 50-75 from 2010 to 2018. Because of the change in BRFSS methodology, results from 2011 and later are not directly comparable to previous years.

County

Had a FOBT in the past year

The 2010-2018 state prevalence of FOBT in the past year among adults aged 50-75 was 11.4%. There were 5 counties with a significantly lower prevalence when compared to the state; Berkeley, Brooke, Hancock, Jackson, and Morgan. There were 4 counties with a significantly higher prevalence when compared to the state; Mercer, Mineral, Pendleton, and Roane.

Had a FOBT in the past 3 years

The 2010-2018 state prevalence of FOBT in the past 3 years among adults aged 50-75 was 19.1%. There were 7 counties with a significantly lower prevalence when compared to the state; Berkeley, Hampshire, Hancock, Jackson, Logan, Pocahontas, and Wyoming. There were 5 counties with a significantly higher

Table 18.6 Prevalence of Had a FOBT in the Past Year Among Those Aged 50-75 by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	29,696	**10.1**	8.2-12.1	28,051	**9.2**	7.5-11.0	57,747	**9.7**	8.4-11.0
Age									
50-54	3,687	**5.8***	2.2-9.3	3,927	**6.3**	2.8-9.7	7,614	**6.0**	3.5-8.5
55-64	13,814	**11.3**	8.1-14.6	11,182	**8.9**	6.1-11.6	24,996	**10.1**	7.9-12.2
65-75	12,196	**11.4**	8.2-14.5	12,942	**11.2**	8.3-14.1	25,137	**11.3**	9.1-13.4
Education									
Less than H.S.	5,125	**11.2**	4.9-17.5	5,221	**10.0**	4.6-15.3	10,346	**10.5**	6.4-14.6
H.S. or G.E.D.	13,002	**9.9**	7.0-12.9	11,253	**9.2**	6.4-11.9	24,254	**9.6**	7.5-11.6
Some Post-H.S.	7,479	**10.5**	9.8-14.3	7,943	**10.2**	6.8-13.7	15,422	**10.4**	7.8-12.9
College Graduate	4,091	**9.1**	5.6-12.5	3,633	**7.0**	4.4-9.6	7,724	**8.0**	5.8-10.1
Income									
Less than $15,000	2,909	**10.5***	4.0-17.0	35,198	**13.1**	7.4-18.9	8,107	**12.1**	7.7-16.4
$15,000 - 24,999	6,634	**11.8**	6.6-16.9	5,095	**8.9**	5.3-12.4	11,729	**10.3**	7.2-13.4
$25,000 - 34,999	2,960	**7.9**	3.3-12.5	4,233	**9.7**	4.7-14.8	7,193	**8.9**	5.4-12.3
$35,000 - 49,999	6,013	**12.0**	6.5-17.4	2,440	**5.9***	1.4-10.3	8,453	**9.2**	5.6-12.8
$50,000 - 74,999	3,157	**10.7**	4.9-16.5	3,570	**9.7**	4.5-14.9	6,727	**10.1**	6.2-14.0
$75,000+	5,409	**9.4**	5.6-13.3	3,690	**8.4**	4.2-12.5	9,099	**9.0**	6.1-11.8

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

Table 18.7 Prevalence of Had a FOBT in the Past 3 Years Among Those Aged 50-75 by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	48,732	**16.6**	14.2-19.0	43,211	**14.2**	12.1-16.3	91,943	**15.4**	13.8-17.0
Age									
50-54	6,155	**9.6**	5.2-14.1	5,441	**8.7**	4.7-12.7	11,596	**9.2**	6.2-12.2
55-64	21,548	**17.6**	13.8-21.5	16,602	**13.2**	9.9-16.4	38,149	**15.4**	12.8-17.9
65-75	21,029	**19.6**	15.6-23.6	21,169	**18.3**	14.9-21.7	42,198	**18.9**	16.3-21.5
Education									
Less than H.S.	7,526	**16.4**	9.3-23.6	7,519	**14.3**	8.4-20.3	15,045	**15.3**	10.7-19.9
H.S. or G.E.D.	22,164	**16.9**	13.2-20.7	17,707	**14.4**	11.2-17.7	39,872	**15.7**	13.2-18.2
Some Post-H.S.	11,518	**16.2**	11.7-20.7	12,144	**15.6**	11.5-19.8	23,662	**15.9**	12.8-18.9
College Graduate	7,096	**15.7**	11.4-20.1	5,843	**11.3**	8.1-14.5	12,939	**13.4**	10.7-16.0
Income									
Less than $15,000	4,684	**16.9**	9.1-24.8	6,272	**15.8**	9.7-22.0	10,956	**16.3**	11.5-21.1
$15,000 - 24,999	9,357	**16.6**	10.8-22.4	8,565	**14.9**	10.3-19.5	17,922	**15.8**	12.1-19.4
$25,000 - 34,999	5,073	**13.5**	7.6-19.4	6,162	**14.2**	8.5-19.9	11,235	**13.9**	9.8-18.0
$35,000 - 49,999	9,745	**19.4**	12.8-25.9	4,057	**9.8**	4.7-14.8	13,802	**15.0**	10.7-19.3
$50,000 - 74,999	4,283	**14.5**	7.8-21.2	5,267	**14.3**	8.3-20.3	9,550	**14.4**	9.9-18.8
$75,000+	9,829	**17.1**	12.0-22.2	5,606	**12.7**	7.8-17.7	15,435	**15.2**	11.6-18.8

FIgure 18.7 Prevalence of Had a FOBT Among Those Aged 50-75 by Year: WVBRFSS, 2010 - 2018

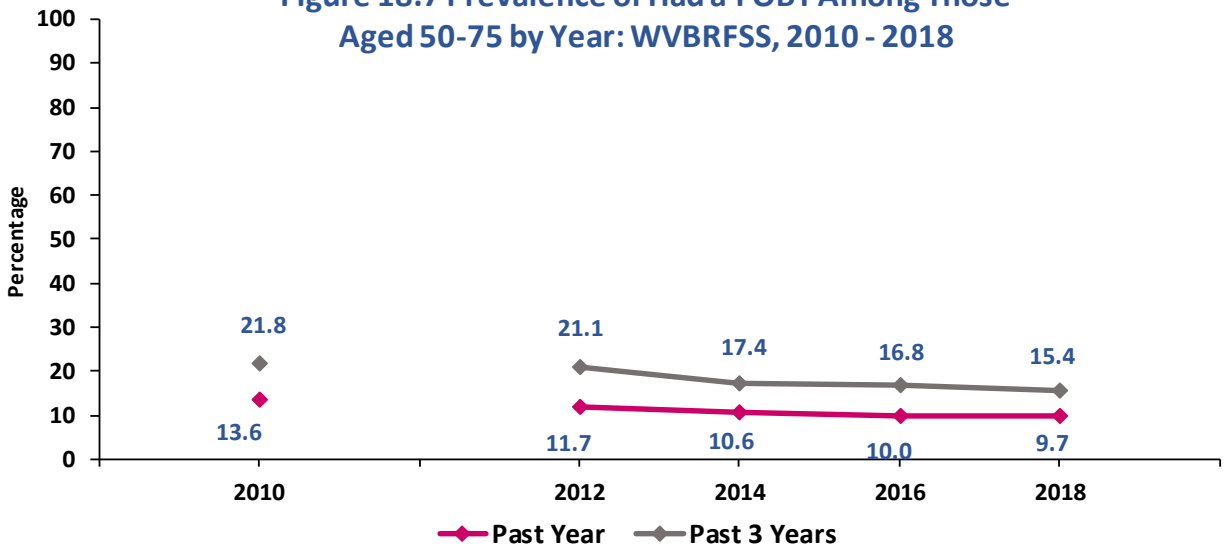
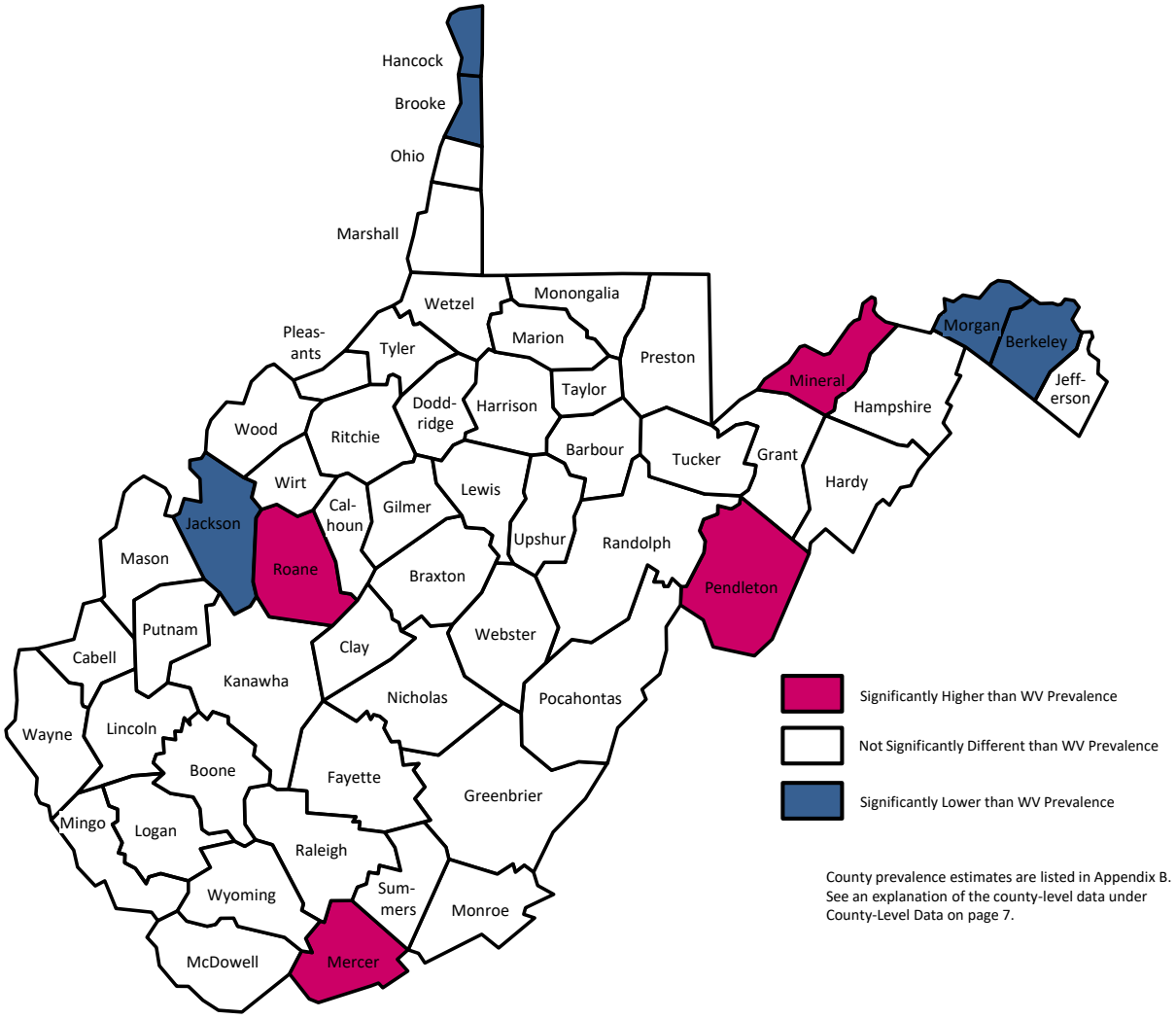


Figure 18.8 Prevalence of Had a FOBT in the Past Year Among Those Aged 50-75 by County: WVBRFSS, 2010-2018

WV Prevalence (2010-2018) - 11.4%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

Figure 18.9 Prevalence of Had a FOBT in the Past 3 Years Among Those Aged 50-75 by County: WVBRFSS, 2014-2018

WV Prevalence (2010-2018) - 19.1%

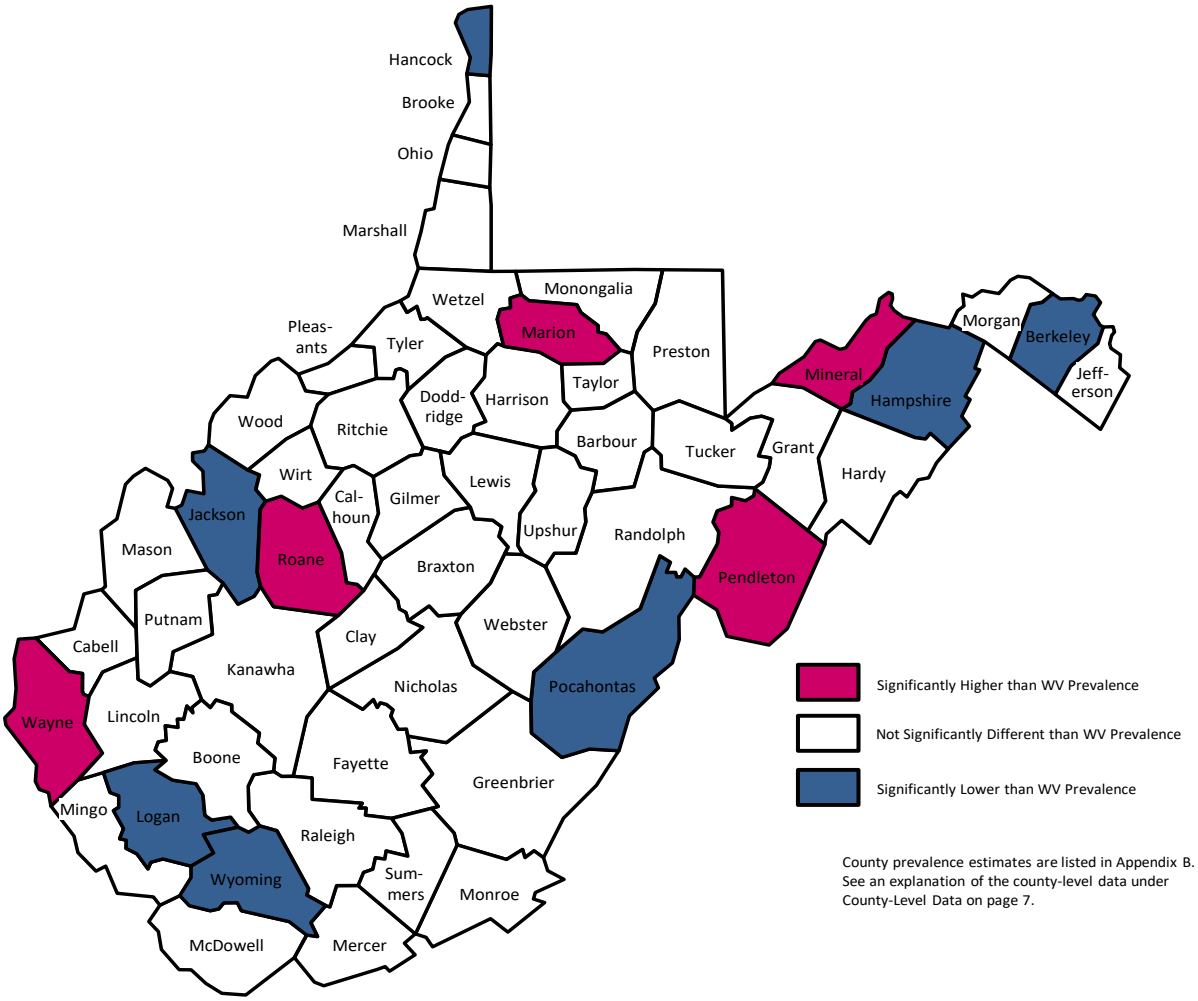
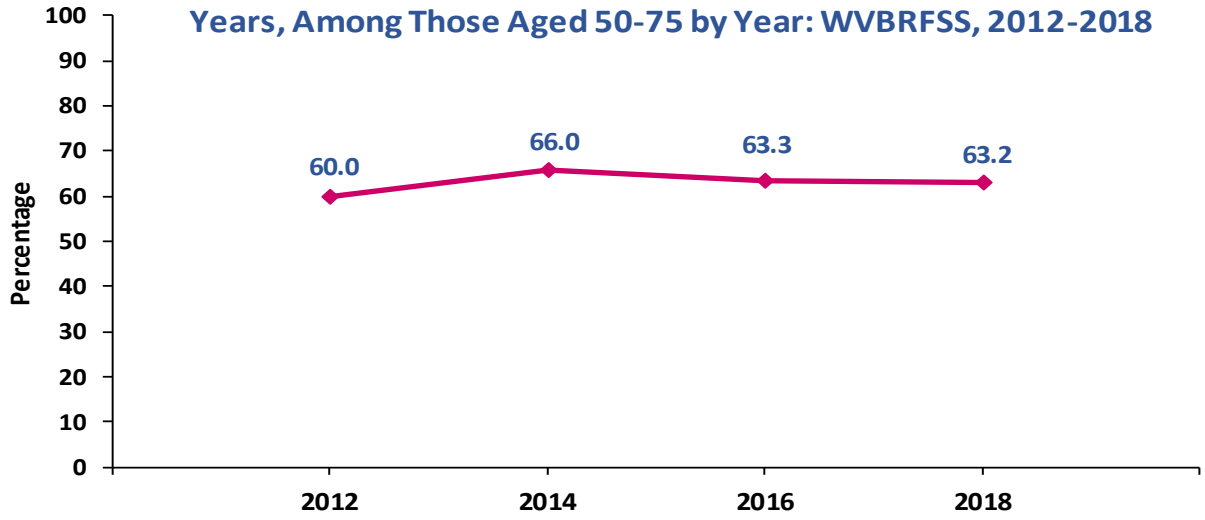


Table 18.8 Prevalence of Had a Colonoscopy in the Past 10 Years Among Those Aged 50-75 by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	178,929	**61.2**	57.9-64.5	197,843	**65.2**	62.3-68.2	376,772	**63.2**	61.0-65.4
Age									
50-54	25,208	**39.3**	31.4-47.2	33,639	**53.9**	46.4-61.5	58,846	**46.5**	41.0-52.1
55-64	76,877	**63.6**	58.6-68.5	83,356	**66.3**	61.7-71.0	160,234	**65.0**	61.6-68.4
65-75	76,844	**71.5**	66.9-76.1	80,848	**70.1**	65.9-74.2	157,692	**70.8**	67.7-73.9
Education									
Less than H.S.	24,244	**54.1**	44.0-64.2	28,940	**55.6**	46.7-64.5	53,184	**54.9**	48.2-61.6
H.S. or G.E.D.	74,772	**57.0**	51.8-62.1	77,195	**63.4**	58.7-68.2	151,967	**60.1**	56.5-63.6
Some Post-H.S.	46,609	**66.0**	59.9-72.1	52,823	**67.8**	62.4-73.2	99,431	**67.0**	62.9-71.0
College Graduate	32,877	**72.5**	66.8-78.1	38,885	**75.3**	70.6-79.9	71,762	**74.0**	70.3-77.6
Income									
Less than $15,000	12,123	**44.0***	33.4-54.6	20,602	**52.4**	43.8-60.9	32,725	**48.9**	42.2-55.6
$15,000 - 24,999	32,213	**58.7**	50.6-66.8	39,361	**67.7**	61.1-74.4	71,574	**63.3**	58.1-68.6
$25,000 - 34,999	22,848	**60.8**	51.4-70.1	27,213	**63.0**	54.7-71.3	50,061	**62.0**	55.7-68.2
$35,000 - 49,999	32,760	**64.9**	57.1-72.8	26,186	**62.8**	54.5-71.0	58,946	**63.9**	58.3-69.6
$50,000 - 74,999	20,242	**67.8**	58.4-77.3	25,924	**71.6**	63.6-79.6	46,165	**69.9**	63.8-76.0
$75,000+	37,828	**66.2**	59.3-73.2	31,632	**71.9**	64.7-79.1	69,461	**68.7**	63.7-73.7

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

Figure 18.10 Prevalence of Had a Colonoscopy in the Past 10 Years, Among Those Aged 50-75 by Year: WVBRFSS, 2012-2018



Colorectal Cancer Screening (continued)

Definition

Responding "Yes" to the question, "Sigmoidoscopy and colonoscopy are exams in which a tube is inserted in the rectum to view the colon for signs of cancer or other health problems. Have you ever had either of these exams?" and responding "Colonoscopy" to the question, "Was your most recent exam a sigmoidoscopy or a colonoscopy?" and responding "Within the past 10 years" to the question, "How long has it been since you had your last sigmoidoscopy or colonoscopy?" Restricted to adults aged 50-75, per screening recommendations.

Prevalence

WV: 63.2% (95% CI: 61.0-65.4)
U.S.: 64.1% (95% CI: 63.6-64.6)
The West Virginia prevalence of had a colonoscopy in the past 10 years among those aged 50-75 was similar to the U.S. prevalence. West Virginia ranked the 30th highest among the 54 BRFSS participants.

Gender

Men: 61.2% (95% CI: 57.9-64.5)
Women: 65.2% (95% CI: 62.3-68.2)
There was no gender difference in the prevalence of had a colonoscopy in the past 10 years among those aged 50-75.

Age

The prevalence of had a colonoscopy in the past 10 years was significantly lower among adults aged 50-54 (46.5%) than those 55 and older.

Education

The prevalence of had a colonoscopy in the past 10 years among those aged 50-75 was significantly lower among those with less than a high school education (54.9%) and those with a high school degree (60.1%) than college graduates (74.0%). Additionally, the prevalence of had a colonoscopy in the past 10 years among those aged 50-75 was significantly lower among those with less than a high school education (54.9%) than those with some college (67.0%).

Household Income

The prevalence of had a colonoscopy in the past 10 years among those aged 50-75 was significantly lower among those with an annual household income of less than $15,000 (48.9%) than any other household income.

Trend

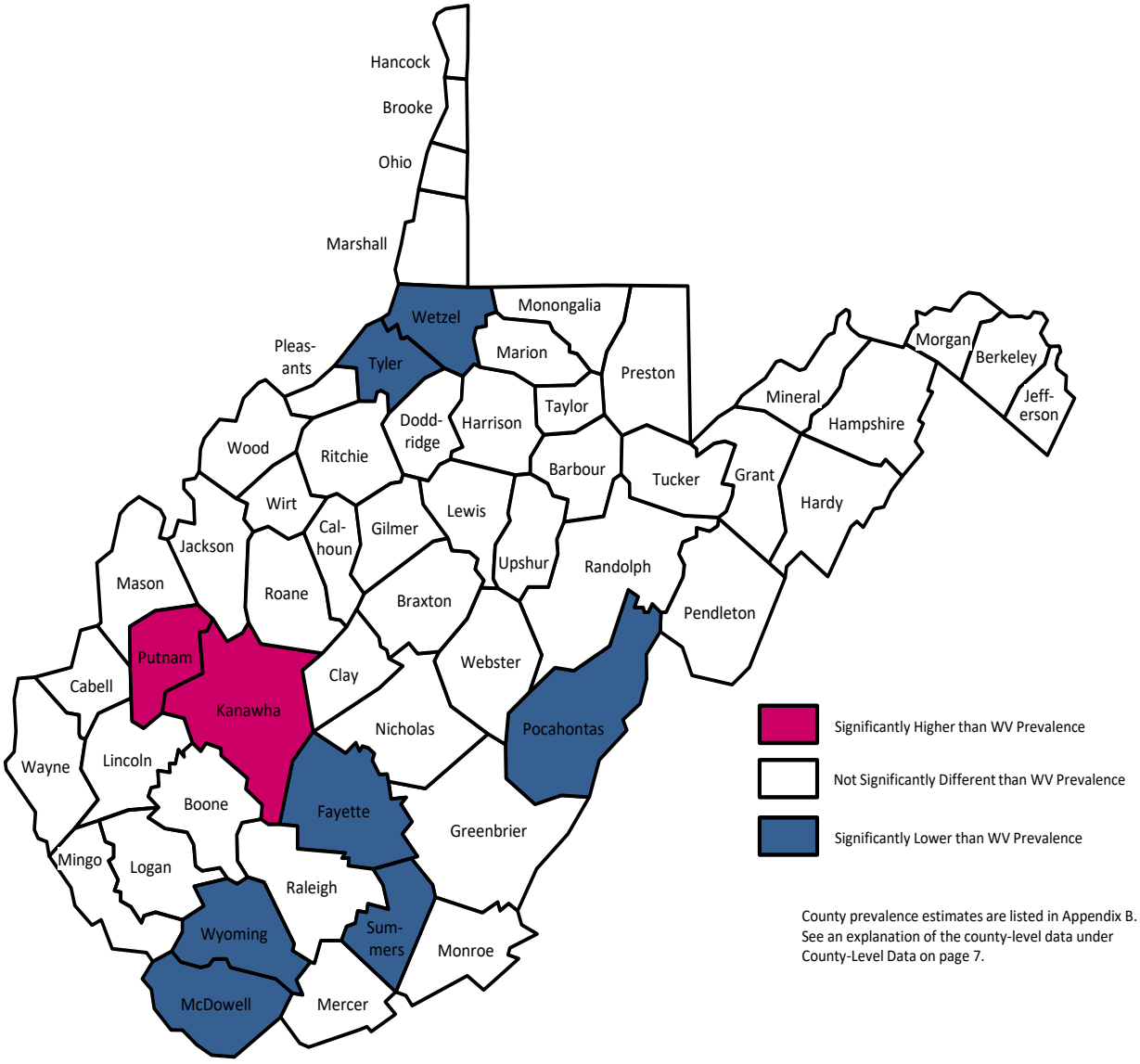
There was no change in the prevalence of had a colonoscopy in the past 10 years among those aged 50-75 from 2012 to 2018.

County

The 2010-2018 West Virginia state prevalence of had a colonoscopy in the past 10 years among those aged 50-75 was 59.2%. There were 7 counties with a significantly lower prevalence compared to the state; Fayette, McDowell, Pocahontas, Summer, Tyler, Wetzel, and Wyoming. Kanawha County and Putnam County had a significantly higher prevalence than the state.

Figure 18.11 Prevalence of Had a Colonoscopy in the Past 10 Years Among Those Aged 50-75 by County: WVBRFSS, 2010-2018

WV Prevalence (2010-2018) - 59.2%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

Colorectal Cancer Screening (continued)

Definition

Respondents who received one or more of the recommended colorectal cancer screening tests:

- FOBT within the past year
- Sigmoidoscopy within the past 5 years and FOBT within the past 3 years
- Colonoscopy within the past 10 years

Restricted to adults aged 50-75, per screening recommendations.

Prevalence

WV: 68.1% (95% CI: 66.0-70.3)
U.S.: 69.3% (95% CI: 68.8-69.8)
The West Virginia prevalence of met colorectal cancer screening recommendation among those aged 50-75 was similar to the U.S. prevalence. West Virginia ranked the 37th highest among the 54 BRFSS participants.

Gender

Men: 66.1% (95% CI: 62.9-69.3)
Women: 70.1% (95% CI: 67.2-72.9)
There was no gender difference in the prevalence of met colorectal cancer screening recommendation among those aged 50-75.

Age

The prevalence of met colorectal cancer screening recommendation among those aged 50-75 was significantly higher among those aged 65 and older (76.9%) than among all other age groups.

Education

The prevalence of met colorectal cancer screening recommendation among those aged 50-75 was significantly lower among those with less than a high school education (61.1%) than those with some college and college graduates. The prevalence of met colorectal cancer screening recommendation among those aged 50-75 was significantly higher among college graduates (77.3%) than among those with an high school education or less.

Household Income

The prevalence of met colorectal cancer screening recommendation among those aged 50-75 was significantly lower among those with an annual household income of less than $15,000 (55.6%) than among those earning $35,000 or more per year.

Trend

The prevalence of met colorectal cancer screening recommendation among those aged 50-75 significantly increased from 2010 to 2018. Because of the change in BRFSS methodology, results from 2011 and later are not directly comparable to previous years.

County

The 2010-2018 West Virginia state prevalence of met colorectal cancer screening recommendation among those aged 50-75 was 71.5%. There were 5 counties with a significantly lower prevalence compared to the state; Hampshire, McDowell, Pocahontas, Summers and Wyoming. Kanawha County and Monongalia County had significantly higher prevalence than the state.

Table 18.9 Prevalence of Met Colorectal Cancer Screening Recommendation Among Those Aged 50-75 by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	192,232	**66.1**	62.9-69.3	211,055	**70.1**	67.2-72.9	403,287	**68.1**	66.0-70.3
Age									
50-54	26,816	**41.9**	33.9-50.0	36,071	**57.8**	50.3-65.4	62,886	**49.8**	44.2-55.4
55-64	83,334	**69.0**	64.4-73.7	87,608	**70.2**	65.7-74.7	170,943	**69.6**	66.4-72.9
65-75	82,082	**77.3**	73.0-81.6	87,376	**76.6**	72.8-80.5	169,485	**76.9**	74.1-79.8
Education									
Less than H.S.	27,028	**61.0**	51.1-71.0	31,704	**61.2**	52.4-70.1	58,732	**61.1**	54.5-67.7
H.S. or G.E.D.	81,156	**62.1**	57.0-67.2	81,863	**68.2**	63.6-72.8	163,019	**65.0**	61.6-68.5
Some Post-H.S.	49,947	**70.8**	64.9-76.7	56,637	**72.8**	67.6-78.0	106,584	**71.8**	67.9-75.8
College Graduate	33,674	**74.9**	69.4-80.5	40,851	**79.3**	75.0-83.6	74,526	**77.3**	73.8-80.8
Income									
Less than $15,000	13,361	**49.8***	38.8-60.7	23,082	**59.7**	51.2-68.2	36,443	**55.6**	48.9-62.4
$15,000 - 24,999	36,018	**65.2**	57.4-73.0	41,192	**70.9**	64.4-77.5	77,210	**68.1**	63.1-73.2
$25,000 - 34,999	24,990	**67.0**	57.9-76.2	28,746	**66.9**	58.7-75.1	53,737	**67.0**	60.9-73.1
$35,000 - 49,999	35,981	**72.0**	64.6-79.5	27,846	**67.3**	59.4-75.3	63,827	**69.9**	64.5-75.3
$50,000 - 74,999	21,323	**71.5**	62.2-80.7	28,462	**79.1**	71.9-86.3	49,785	**75.6**	69.8-81.4
$75,000+	39,053	**68.6**	61.7-75.5	33,020	**75.1**	68.1-82.1	72,074	**71.4**	66.5-76.4

Figure 18.12 Prevalence of Met Colorectal Cancer Screening Recommendation, Among Ages 50-75 by Year: WVBRFSS, 2010-2018

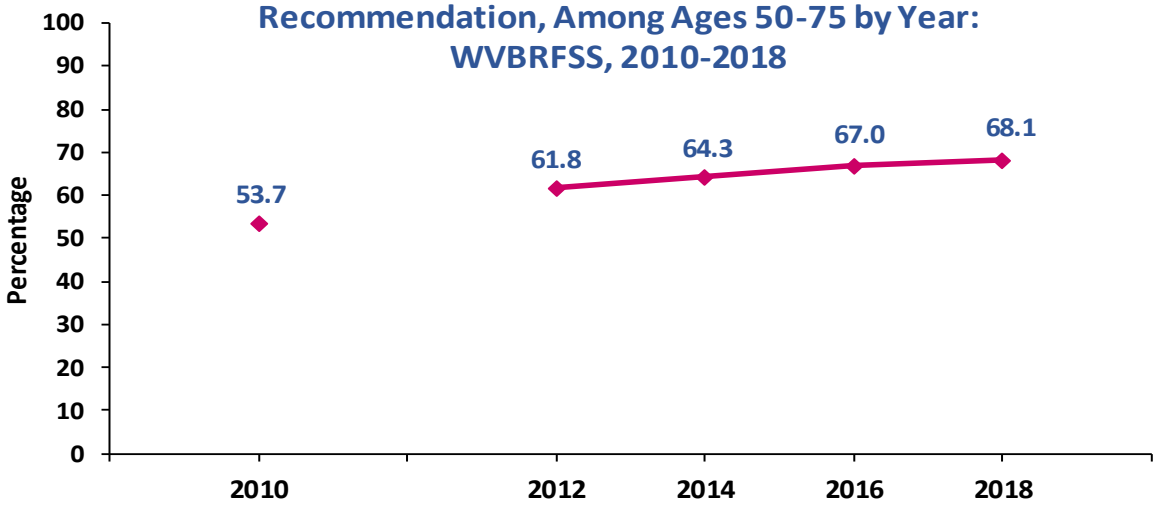
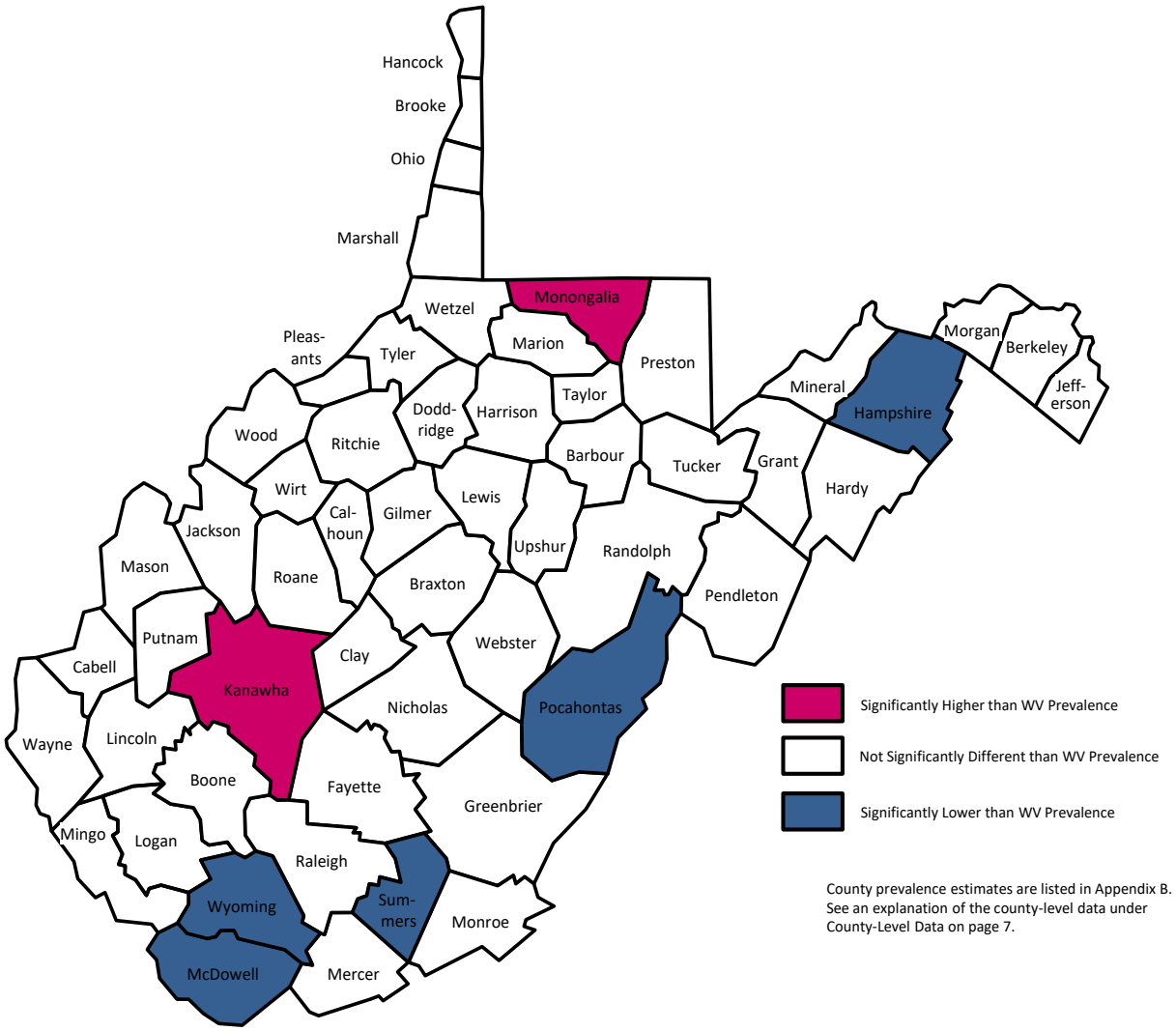


Figure 18.11 Prevalence of Met Colorectal Cancer Screening Recommendation Among Those Aged 50-75 by County: WVBRFSS, 2010-2018

WV Prevalence (2010-2018) - 71.5%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

West Virginia Behavioral Risk Factor Surveillance System Report

2018

SECTION 4: Chronic Diseases

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: 8.6% (95% CI: 7.7-9.5)
U.S.: 4.6% (95% CI: 4.5-4.7)
The West Virginia prevalence of heart attack was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 54 BRFSS participants.

Gender

Men: 9.8% (95% CI: 8.4-11.1)
Women: 7.5% (95% CI: 6.4-8.7)
The prevalence of heart attack was significantly higher among men than women.

Age

The prevalence of heart attack was significantly higher among adults aged 65 and older (18.0%) than among all other age groups.

Education

The prevalence of heart attack was significantly higher among adults with less than a high school education (18.0%) than all other educational attainment levels. The prevalence of heart attack was significantly lower among college graduates (4.7%) than those with a high school education or less than a high school education.

Household Income

The prevalence of heart attack was significantly higher among adults with an annual household income of less than $50,000 than adults with an annual household income of $75,000 or more (3.0%).

Trend

There was an increase in the prevalence of heart attack from 2011 to 2018.

County

The 2014-2018 West Virginia state prevalence of heart attack was 7.6%. There were 8 counties with a significantly lower prevalence compared to the state; Doddridge, Hancock, Harrison, Jefferson, Mason, Monongalia, Pleasant and Putnam. There were 3 counties with a significantly higher prevalence when compared to the state; McDowell, Mingo, and Wirt.

Table 19.1 Prevalence of Heart Attack by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	68,738	**9.8**	8.4-11.1	55,027	**7.5**	6.4-8.7	123,765	**8.6**	7.7-9.5
Age									
18-24	338.0	**0.4***	0.0-1.2	0.0	**0.0**	0.0-0.0	338.0	**0.2***	0.0-0.6
25-34	2,489	**2.3***	0.0-4.7	2,472	**2.4***	0.0-4.9	4,961	**2.4***	0.7-4.1
35-44	5,128	**4.8***	1.3-8.3	4,974	**4.7***	1.8-7.6	10,156	**4.7**	2.5-7.0
45-54	7,481	**6.7**	3.7-9.8	6,794	**5.9**	3.1-8.8	14,036	**6.4**	4.3-8.4
55-64	16,888	**13.4**	10.0-16.9	12,525	**9.7**	6.7-12.7	29,843	**11.5**	9.3-13.8
65+	36,219	**22.4**	18.8-26.0	27,973	**14.3**	11.8-16.8	64,192	**18.0**	15.8-20.1
Education									
Less than H.S.	17,781	**18.8**	12.8-24.8	18,134	**17.3**	12.1-22.5	35,915	**18.0**	14.0-21.9
H.S. or G.E.D.	29,279	**9.8**	7.7-12.0	22,929	**8.3**	6.5-10.0	52,208	**9.1**	7.7-10.5
Some Post-H.S.	12,838	**7.0**	4.9-9.1	10,357	**5.0**	3.4-6.6	32,196	**5.9**	4.6-7.2
College Graduate	8,840	**7.0**	5.0-9.0	3,516	**2.5**	1.3-3.7	12,355	**4.7**	3.5-5.8
Income									
Less than $15,000	11,397	**21.2**	13.2-29.1	14,689	**15.2**	10.6-19.8	26,083	**17.3**	13.2-21.4
$15,000 - 24,999	17,694	**14.5**	10.5-18.6	17,348	**12.3**	8.9-15.6	35,041	**13.3**	10.7-15.9
$25,000 - 34,999	9,429	**9.9**	6.3-13.5	7,270	**7.1**	4.2-10.0	16,699	**8.5**	6.2-10.8
$35,000 - 49,999	9,067	**9.0**	5.9-12.1	2,597	**3.2***	1.3-5.0	11,665	**6.4**	4.4-8.3
$50,000 - 74,999	6,036	**6.4**	3.3-9.5	2,568	**3.3***	1.1-5.5	8,605	**5.0**	3.0-7.0
$75,000+	6,945	**4.8**	2.7-6.9	1,053	**0.9***	0.1-1.6	7,998	**3.0**	1.8-4.2

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

Figure 19.1 Prevalence of Heart Attack by Year, WVBRFSS 2011-2018

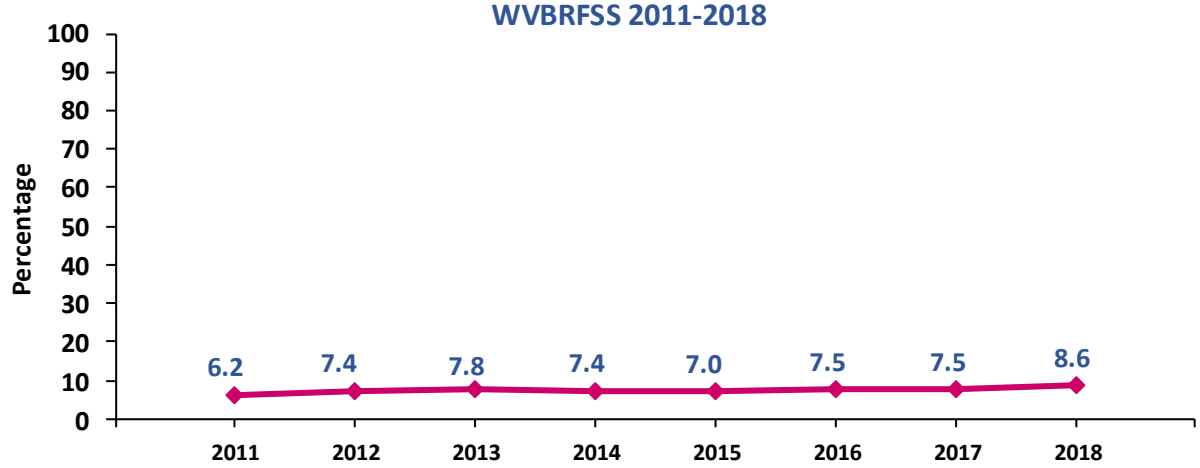
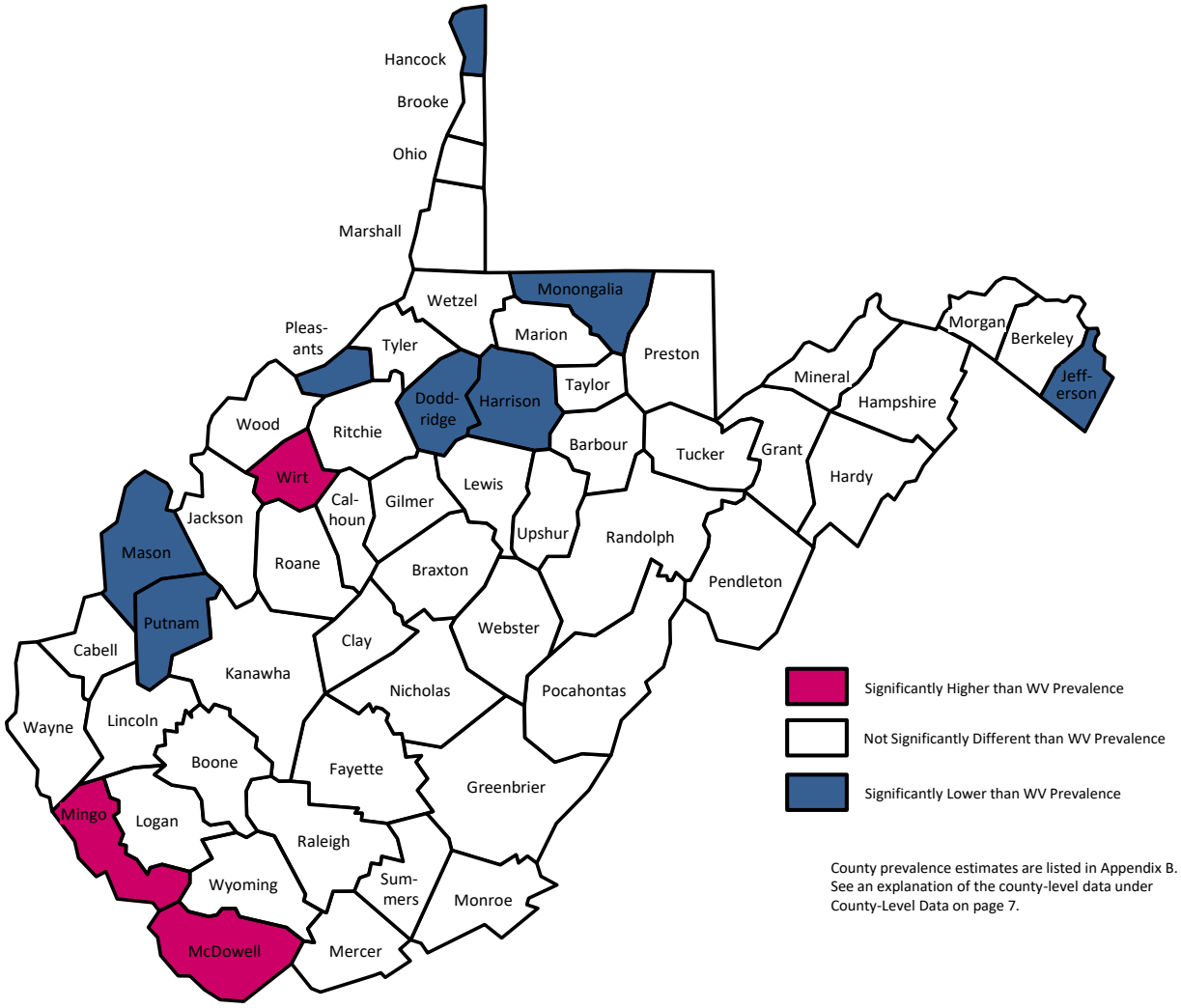


Figure 19.2 Prevalence of Heart Attack by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 7.6%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

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: 8.3% (95% CI: 7.5-9.2)
U.S.: 4.3% (95% CI: 4.2-4.4)
The West Virginia prevalence of heart disease was significantly higher than the U.S. prevalence. West Virginia ranked the highest among the 54 BRFSS participants.

Gender

Men: 8.8% (95% CI: 7.5-10.1)
Women: 7.9% (95% CI: 6.7-9.0)
There was no gender difference in the prevalence of heart disease.

Age

The prevalence of heart disease was significantly higher among adults aged 65 and older (18.8%) than all other age groups.

Education

The prevalence of heart disease was significantly higher among adults with less than a high school education (15.5%) than all other educational attainment levels. The prevalence of heart disease was significantly lower among college graduates (5.4%) than all other educational attainment levels.

Household Income

The prevalence of heart disease was significantly higher among adults with an annual household income of less than $25,000 than adults with an annual household income of $50,000 or more.

Trend

There was no change in the prevalence of heart disease from 2011 to 2018.

County

The 2014-2018 West Virginia state prevalence of angina or coronary heart disease was 7.8%. There were 7 counties with a significantly lower prevalence compared to the state; Berkeley, Doddridge, Harrison, Jefferson, Monongalia, Tucker, and Wood. Mingo County had a significantly higher prevalence than the state.

Table 19.2 Prevalence of Heart Disease by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	61,442	**8.8**	7.5-10.1	57,433	**7.9**	6.7-9.0	118,875	**8.3**	7.5-9.2
Age									
18-24	1,135	**1.3***	0.0-3.9	685.6	**0.9***	0.0-2.6	1,821	**1.1***	0.0-2.7
25-34	1,258	**1.2***	0.0-2.5	241.7	**0.2***	0.0-0.7	1,500	**0.7***	0.0-1.4
35-44	4,760	**4.4***	1.0-7.8	4,775	**4.5***	1.4-7.6	9,534	**4.5**	2.1-6.8
45-54	4,226	**3.9**	1.7-6.0	9,729	**8.8**	5.5-12.1	13,955	**6.3**	4.4-8.3
55-64	13,229	**10.6**	7.4-13.8	11,336	**8.8**	6.1-11.5	24,565	**9.7**	7.6-11.8
65+	36,390	**22.7**	19.0-26.3	30,164	**15.6**	12.9-18.2	66,554	**18.8**	16.6-21.0
Education									
Less than H.S.	15,963	**17.0**	10.9-23.2	14,538	**14.1**	9.5-18.6	30,501	**15.5**	11.7-19.3
H.S. or G.E.D.	22,887	**7.7**	5.9-9.6	22,687	**8.2**	6.3-10.1	45,574	**8.0**	6.7-9.3
Some Post-H.S.	13,103	**7.2**	5.2-9.2	14,511	**7.0**	5.2-8.8	27,614	**7.1**	5.7-8.4
College Graduate	9,489	**7.5**	5.4-9.6	4,967	**3.6**	2.2-4.9	14,457	**5.4**	4.2-6.7
Income									
Less than $15,000	8,892	**16.8**	9.5-24.0	12,483	**13.0**	8.9-17.1	21,375	**14.4**	10.7-18.1
$15,000 - 24,999	16,336	**13.6**	9.5-17.6	15,373	**10.9**	7.8-14.0	31,710	**12.1**	9.6-14.6
$25,000 - 34,999	7,272	**7.6**	4.4—10.9	6,974	**6.9**	3.9-9.8	14,246	**7.2**	5.1-9.4
$35,000 - 49,999	9,069	**9.1**	5.8-12.3	4,677	**5.7**	3.1-8.3	13,746	**7.5**	5.4-9.7
$50,000 - 74,999	7,077	**7.5**	4.6-10.4	2,728	**3.5***	1.4-5.6	9,804	**5.7**	3.8-7.6
$75,000+	6,163	**4.3**	2.5-6.0	4,064	**3.4**	1.4-5.3	10,227	**3.9**	2.6-5.2

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

Figure 19.3: Prevalence of Angina or Coronary Heart Disease by Year, WVBRFSS 2011-2018

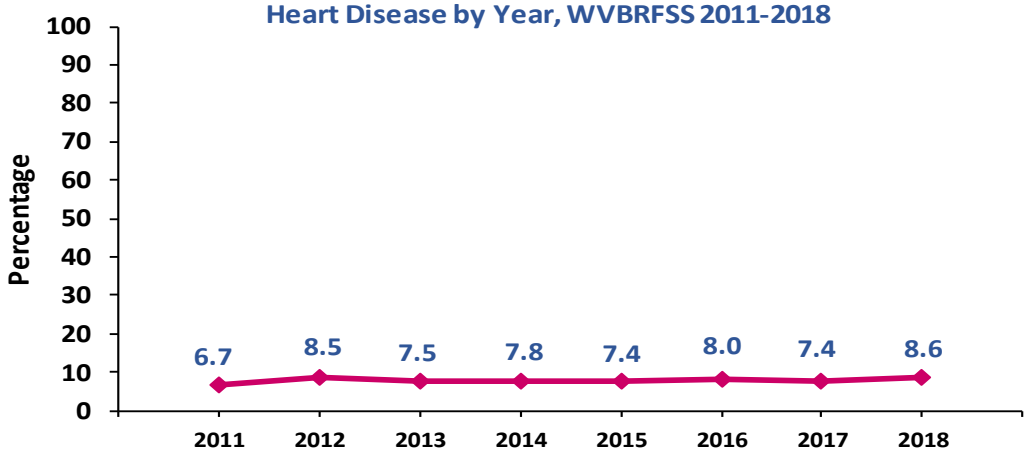
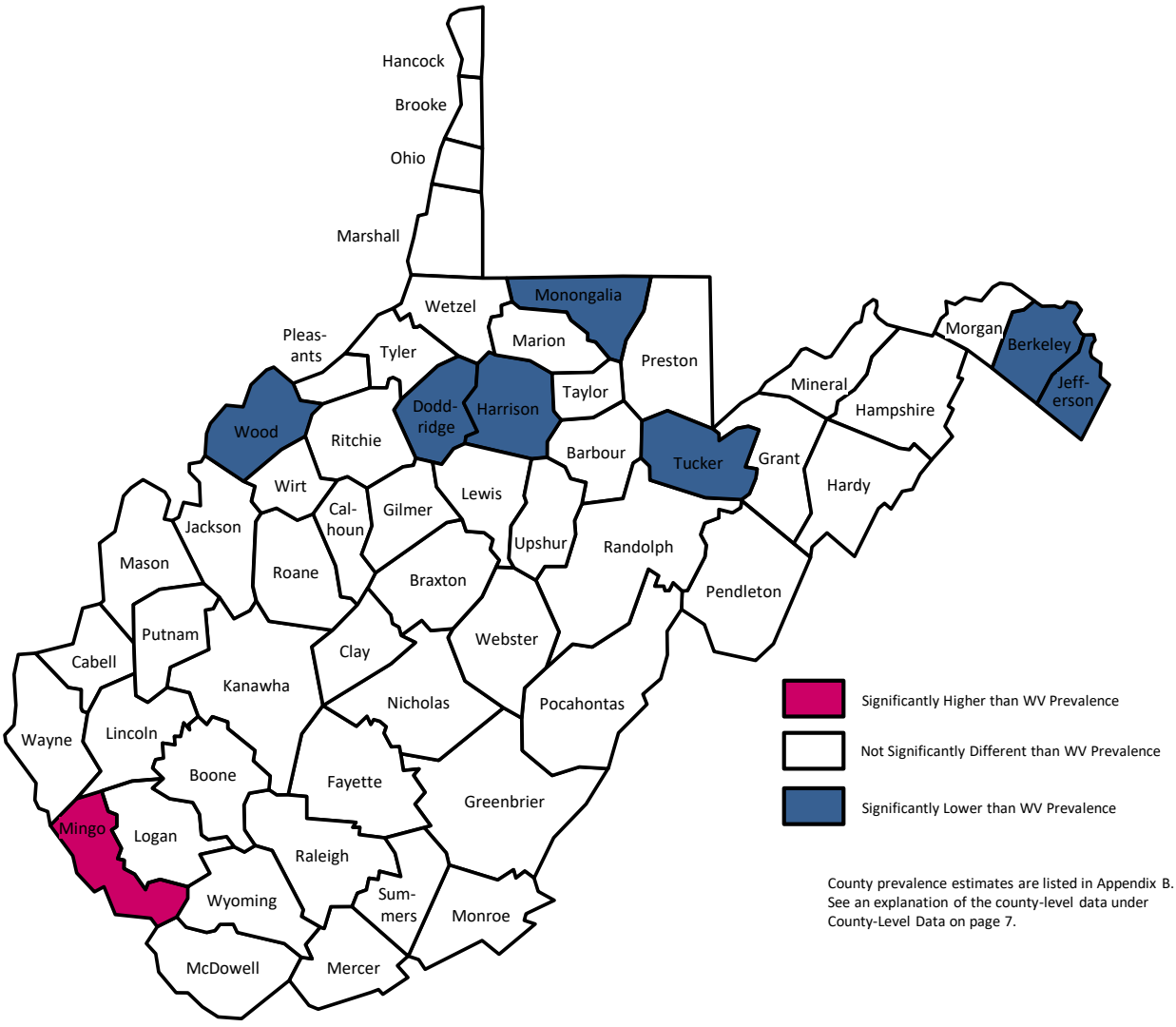


Figure 19.4 Prevalence of Heart Disease by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 7.8%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

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: 4.4% (95% CI: 3.9-4.9)
U.S.: 3.4% (95% CI: 3.3-3.5)
The West Virginia prevalence of stroke was significantly higher than the U.S. prevalence. West Virginia ranked the 4th highest among the 54 BRFSS participants.

Gender

Men: 4.3% (95% CI: 3.3-5.2)
Women: 5.4% (95% CI: 4.5-6.3)
There was no gender difference for the prevalence of stroke.

Age

The prevalence of stroke was significantly higher among adults aged 65 and older (10.9%) than all other age groups.

Education

The prevalence of stroke was significantly higher among adults with less than a high school education (10.7%) than among all other educational attainment levels.

Household Income

The prevalence of stroke was significantly higher among adults with an annual household income less than $15,000 (9.6%) than among adults with an annual household income of $25,000 or more per year.

Trend

There was no change in the prevalence of stroke from 2011 to 2018.

County

The 2014-2018 West Virginia state prevalence of stroke was 4.7%. There were 5 counties with a significantly lower prevalence compared to the state; Berkeley, Monongalia, Ohio, Pocahontas, and Preston. No county had a significantly higher prevalence than the state.

Table 19.3 Prevalence of Stroke by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	30055	**4.3**	3.3-5.2	39437	**5.4**	4.5-6.3	69492	**4.8**	4.2-5.5
Age									
18-24	0.0	**0.0**	0.0-0.0	0.0	**0.0**	0.0-0.0	0.0	**0.0**	0.0-0.0
25-34	475.3	**0.4***	0.0-1.3	925.3	**0.9***	0.0-2.3	1,401	**0.7***	0.0-1.5
35-44	1,518	**1.4***	0.0-2.9	1,533	**1.4***	0.1-2.8	3,050	**1.4***	0.4-2.4
45-54	3,941	**3.6***	1.1-6.0	5,285	**4.8**	2.3-7.3	9,226	**4.2**	2.4-5.9
55-64	7,259	**5.8**	3.3-8.2	9,176	**7.1**	4.7-9.6	16,434	**6.4**	4.7-8.1
65+	16,485	**10.1**	7.4-12.8	22,519	**11.5**	9.1-13.9	39,003	**10.9**	9.1-12.7
Education									
Less than H.S.	9,308	**9.9**	5.4-14.4	11,954	**11.3**	7.3-15.3	21,262	**10.7**	7.7-13.6
H.S. or G.E.D.	10,638	**3.6**	2.3-4.8	15,144	**5.5**	4.0-6.9	25,782	**4.5**	3.5-5.4
Some Post-H.S.	6,358	**3.5**	1.9-5.0	9,097	**4.4**	2.9-5.9	15,455	**3.9**	2.9-5.0
College Graduate	3,323	**2.6**	1.5-3.7	3,152	**2.3**	1.2-3.4	6,475	**2.4**	1.7-3.2
Income									
Less than $15,000	5,144	**9.8**	5.2-14.4	9,114	**9.4**	5.9-12.9	14,257	**9.6**	6.8-12.3
$15,000 - 24,999	8,457	**7.0**	4.1-9.9	10,771	**7.6**	5.2-10.0	19,318	**7.3**	5.5-9.2
$25,000 - 34,999	3,358	**3.5**	1.0-6.1	5,757	**5.6**	2.9-8.3	9,115	**4.6**	2.7-6.4
$35,000 - 49,999	5,107	**5.0**	2.2-7.9	3,135	**3.8**	1.5-6.1	8,242	**4.5**	2.6-6.4
$50,000 - 74,999	3,290	**3.5***	1.1-5.9	1,464	**1.9***	0.4-3.4	4,754	**2.8**	1.3-4.3
$75,000+	1,761	**1.2***	0.4-2.0	1,961	**1.6***	0.4-2.8	3,722	**1.4**	0.7-2.1

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

Figure 19.5 Prevalence of Stroke by Year, WVBRFSS 2011-2018

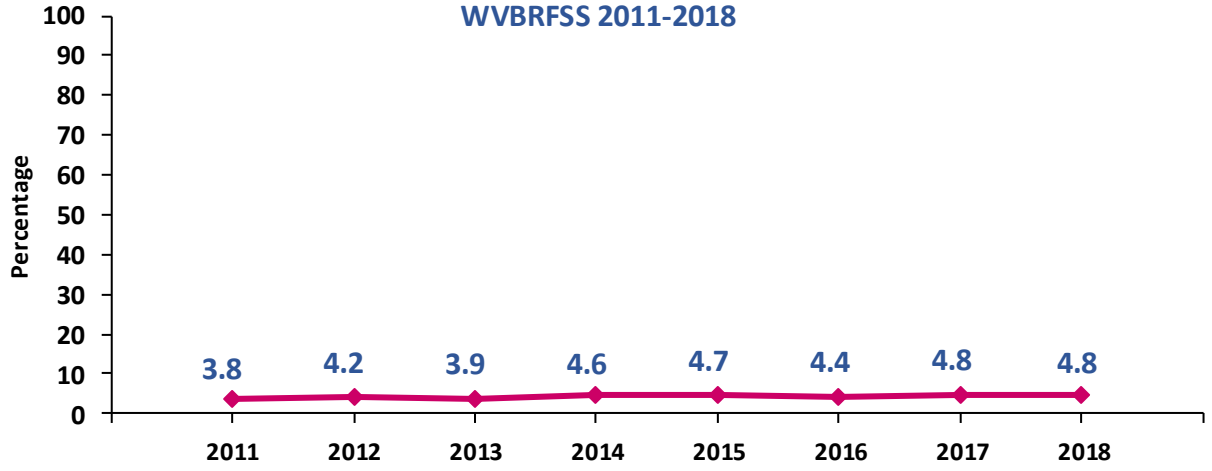
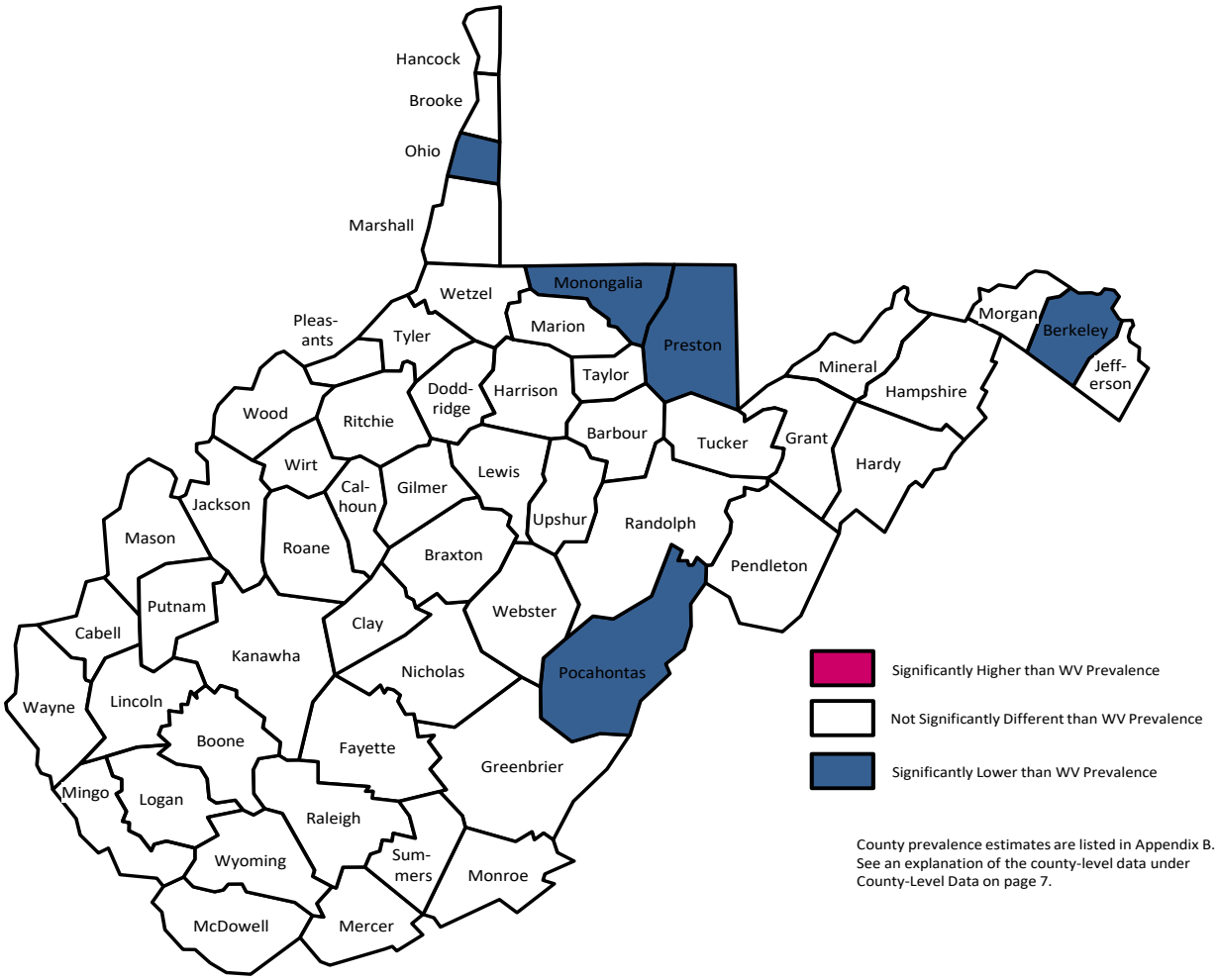


Figure 19.6 Prevalence of Stroke by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 4.7%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

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: 1) heart attack, also called a myocardial infarction; 2) angina or coronary heart disease; 3) a stroke?"

Prevalence

WV: 15.5% (95% CI: 14.4-16.6))
U.S.: 9.1% (95% CI: 9.1-9.4)
The West Virginia prevalence of cardiovascular disease was significantly higher than the U.S. prevalence. West Virginia ranked the highest among the 54 BRFSS participants.

Gender

Men: 15.7% (95% CI: 14.0-17.4)
Women: 15.3% (95% CI: 13.7-16.8)
There was no gender difference in the prevalence of cardiovascular disease.

Age

The prevalence of cardiovascular disease was significantly higher among adults aged 65 and older (33.7%) than among all other age groups.

Education

The prevalence of cardiovascular disease was significantly higher among adults with less than a high school education (30.0%) than all other educational attainment levels.

Household Income

The prevalence of cardiovascular disease was significantly higher among adults with an annual household income less than $25,000 than all other annual household income levels.

Trend

There was no change in the prevalence of cardiovascular disease from 2011 to 2018.

County

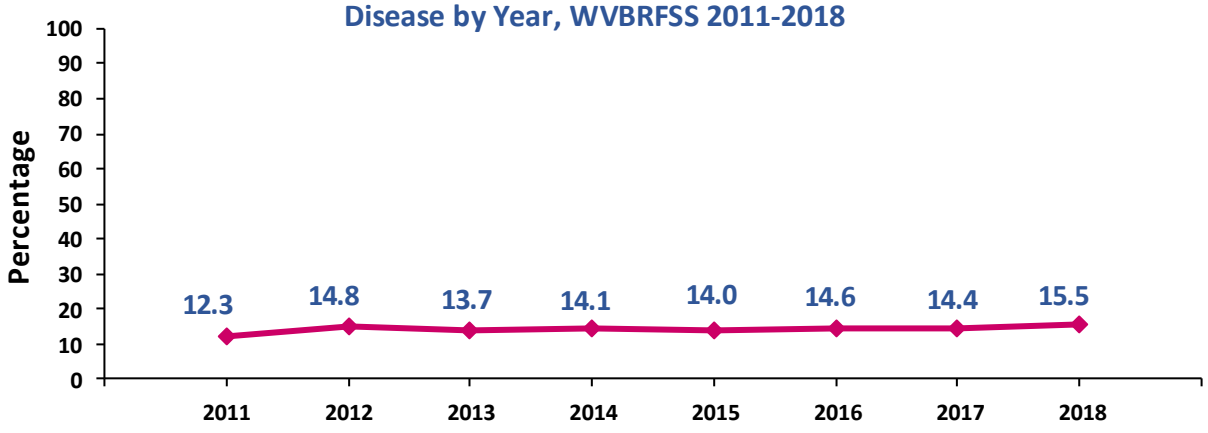
The 2014-2018 West Virginia state prevalence of cardiovascular disease was 14.5%. There were 8 counties with a significantly lower prevalence compared to the state; Berkeley, Doddridge, Jefferson, Hancock, Harrison, Monongalia, Putnam, and Tucker. There were 5 counties with a significantly higher prevalence than the state; Logan, McDowell, Mingo, Wirt, and Wyoming.

Table 19.4 Prevalence of Cardiovascular Disease by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	110,186	**15.7**	14.0-17.4	111,515	**15.3**	13.7-16.8	221,701	**15.5**	14.4-16.6
Age									
18-24	1,473	**1.7***	0.0-4.4	685.6	**0.9***	0.0-2.6	2,159	**1.3***	0.0-2.9
25-34	3,282	**3.1***	0.5-5.7	3,156	**3.1***	0.3-5.9	6,438	**3.1***	1.2-5.0
35-44	8,718	**8.1**	4.0-12.2	9,023	**8.5**	4.6-12.4	17,741	**8.3**	5.5-11.1
45-54	12,340	**11.3**	7.3-15.2	15,544	**14.1**	10.1-18.0	27,884	**12.7**	9.9-15.5
55-64	23,694	**18.9**	14.9-23.0	22,758	**17.5**	14.0-21.3	46,453	**18.3**	15.5-21.0
65+	60,092	**37.4**	33.2-41.5	59,608	**30.6**	27.2-33.9	119,700	**33.7**	31.0-36.3
Education									
Less than H.S.	27,980	**29.7**	22.4-37.1	31,582	**30.2**	23.9-36.5	59,561	**30.0**	25.2-34.8
H.S. or G.E.D.	44,484	**15.0**	12.4-17.6	44,384	**16.1**	13.5-18.6	88,868	**15.5**	13.7-17.3
Some Post-H.S.	21,202	**11.6**	9.0-14.3	25,814	**12.4**	10.0-14.9	47,017	**12.1**	10.2-13.9
College Graduate	16,093	**12.7**	10.1-15.4	9,005	**6.5**	4.6-8.3	25,098	**9.4**	7.8-11.0
Income									
Less than $15,000	15,987	**29.9**	21.6-38.3	24,354	**25.2**	19.8-30.6	40,341	**26.9**	22.3-31.5
$15,000 - 24,999	26,095	**21.6**	16.7-26.4	32,976	**23.4**	19.1-27.7	59,071	**22.5**	19.3-25.8
$25,000 - 34,999	14,149	**14.9**	10.3-19.4	14,344	**14.1**	10.0-18.1	28,493	**14.4**	11.4-17.5
$35,000 - 49,999	16,740	**16.7**	12.3-21.2	7,344	**8.9**	5.7-12.1	24,083	**13.2**	10.3-16.1
$50,000 - 74,999	12,569	**13.3**	9.0-17.6	5,423	**7.0**	3.9-10.1	17,992	**10.5**	7.7-13.2
$75,000+	11,443	**8.0**	5.4-10.5	6,781	**5.7**	3.3-8.0	18,223	**6.9**	5.1-8.7

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

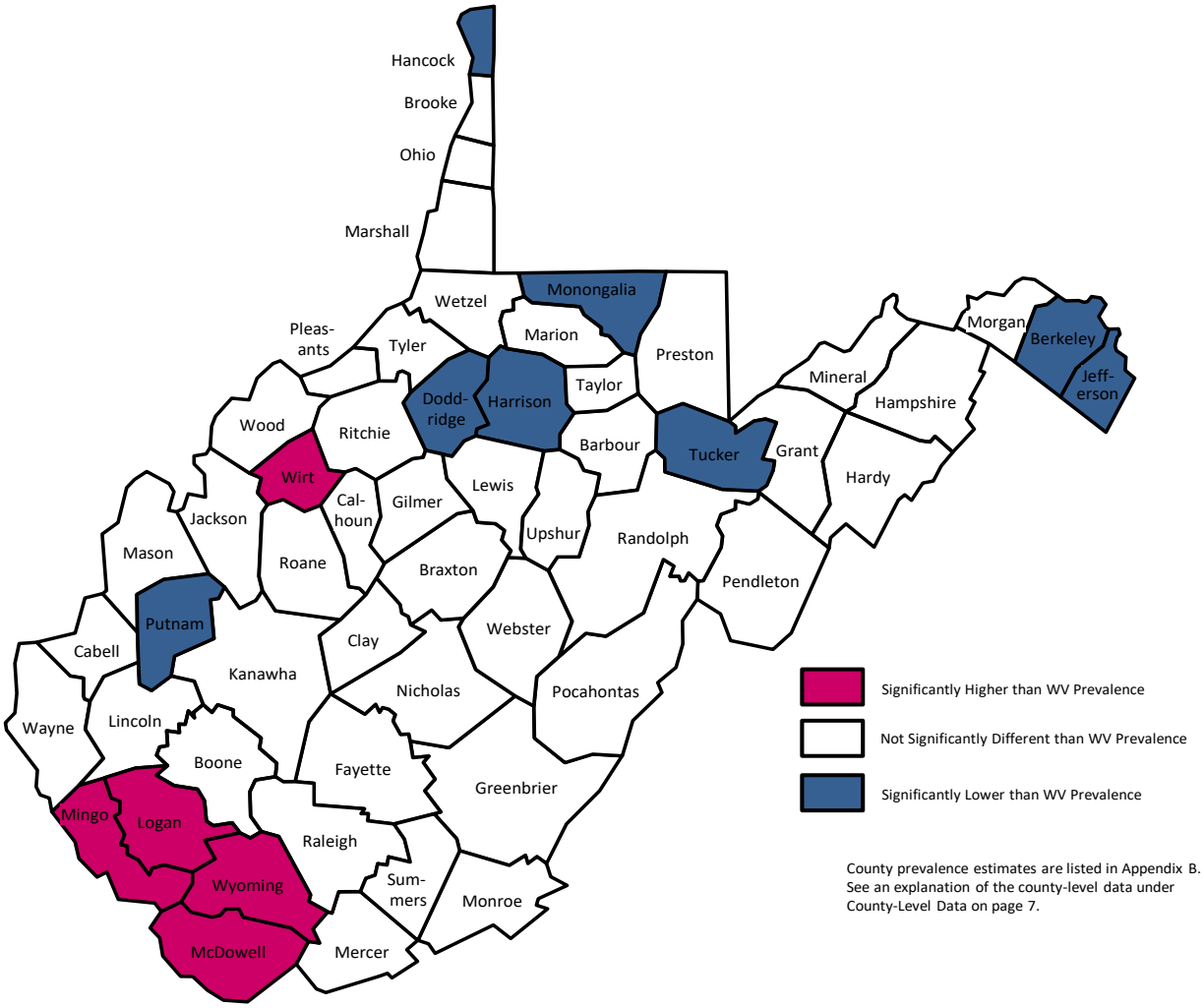
Figure 19.7 Prevalence of Cardiovascular Disease by Year, WVBRFSS 2011-2018



*Due to changes in sample composition and weighting methodology, 2011-2016 results are not directly comparable to previous years.

Figure 19.8 Prevalence of Cardiovascular Disease by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 14.5%



County prevalence estimates are listed in Appendix B.
See an explanation of the county-level data under County-Level Data on page 7.

CHAPTER 20: DIABETES

Diabetes Prevalence

Definition

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

Prevalence

WV: 16.2% (95% CI: 15.0-17.3)
U.S.: 11.4% (95% CI: 11.2-11.6)
The West Virginia prevalence of diabetes was significantly higher than the U.S. prevalence. West Virginia ranked the highest among the 54 BRFSS participants.

Gender

Men: 14.8% (95% CI: 13.2-16.4)
Women: 17.5% (95% CI: 15.8-19.1)
There was no gender difference in the prevalence of diabetes.

Age

The prevalence of diabetes was significantly higher among adults aged 45 and older than among adults aged 44 and younger.

Education

The prevalence of diabetes was significantly higher among adults with less than a high school education (24.8%) than all other educational attainment levels.

Household Income

The prevalence of diabetes was significantly higher among adults with an annual household income of less than $15,000 (23.7%) than adults with an annual household income of $50,000 or more.

Trend

There was a significant increase in prevalence of diabetes from 2011 to 2018.

County

The 2014-2018 West Virginia state prevalence of diabetes was 15.0%. There were 6 counties with a significantly lower prevalence compared to the state; Berkeley, Cabell, Jefferson, Monongalia, Ohio, and Putnam. There were 3 counties that had a significantly higher prevalence when compare to the state; Grant, Logan, and Wayne.

Table 20.1 Prevalence of Diabetes by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	104,327	**14.8**	13.2-16.4	128,009	**17.5**	15.8-19.1	232,336	**16.2**	15.0-17.3
Age									
18-24	1,060	**1.2***	0.0-3.1	2,663	**3.4***	0.0-7.3	3,723	**2.3***	0.2-4.4
25-34	891.9	**0.8***	0.0-2.0	4,917	**4.8***	1.4-8.2	5,809	**2.8***	1.0-4.5
35-44	4,337	**4.0**	1.5-6.5	9,401	**8.8**	5.2-12.4	13,738	**6.4**	4.2-8.6
45-54	20,658	**18.6**	13.9-23.3	23,560	**21.3**	16.6-26.0	44,218	**20.0**	16.6-23.3
55-64	29,882	**23.7**	19.4-27.9	34,070	**26.4**	22.1-30.7	63,952	**25.1**	22.0-28.1
65+	47,498	**29.1**	25.3-32.9	51,665	**26.3**	23.2-29.3	99,163	**27.5**	25.1-30.0
Education									
Less than H.S.	17,967	**18.8**	13.4-24.3	31,821	**30.1**	23.7-36.5	49,788	**24.8**	20.5-29.1
H.S. or G.E.D.	43,995	**14.7**	12.2-17.3	54,503	**19.6**	16.8-22.4	98,497	**17.1**	15.2-19.0
Some Post-H.S.	28,331	**15.4**	12.2-18.5	28,782	**13.8**	11.2-16.5	57,113	**14.6**	12.5-16.6
College Graduate	14,034	**11.1**	8.7-13.5	12,903	**9.2**	7.2-11.3	26,937	**10.1**	8.6-11.7
Income									
Less than $15,000	11,243	**20.8**	14.3-27.3	24,544	**25.3**	19.9-30.8	35,787	**23.7**	19.5-28.0
$15,000 - 24,999	23,232	**19.0**	14.6-23.4	31,250	**22.0**	17.8-26.2	54,482	**20.6**	17.6-23.7
$25,000 - 34,999	15,420	**16.2**	11.7-20.6	18,063	**17.6**	13.0-22.2	33,483	**16.9**	13.7-20.1
$35,000 - 49,999	18,751	**18.5**	13.9-23.1	12,187	**14.8**	10.3-19.2	30,938	**16.8**	13.6-20.1
$50,000 - 74,999	10,834	**11.5**	7.5-15.4	9,606	**12.4**	8.1-16.7	20,441	**11.9**	9.0-14.8
$75,000+	13,076	**9.0**	6.5-11.6	8,978	**7.5**	5.0-10.0	22,054	**8.3**	6.5-10.1

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

Figure 20.1 Prevalence of Diabetes by Years, WVBRFSS 2011-2018

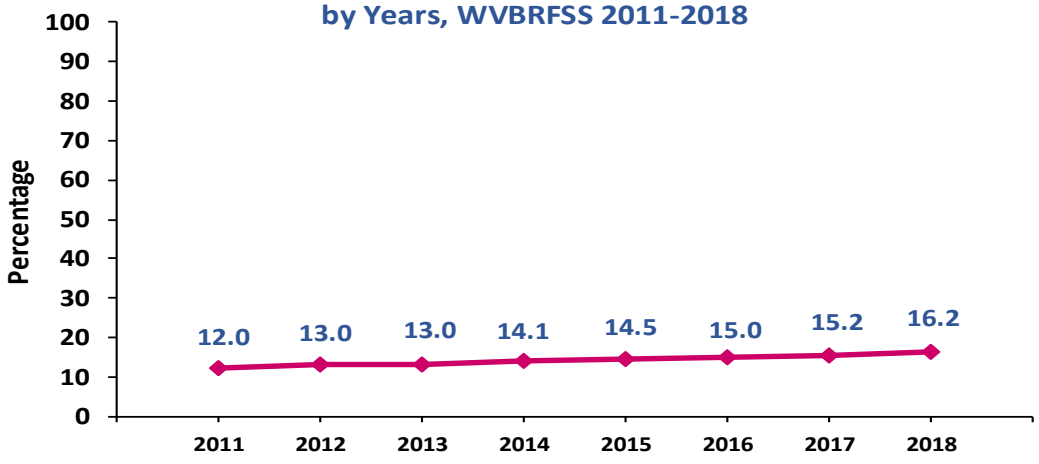
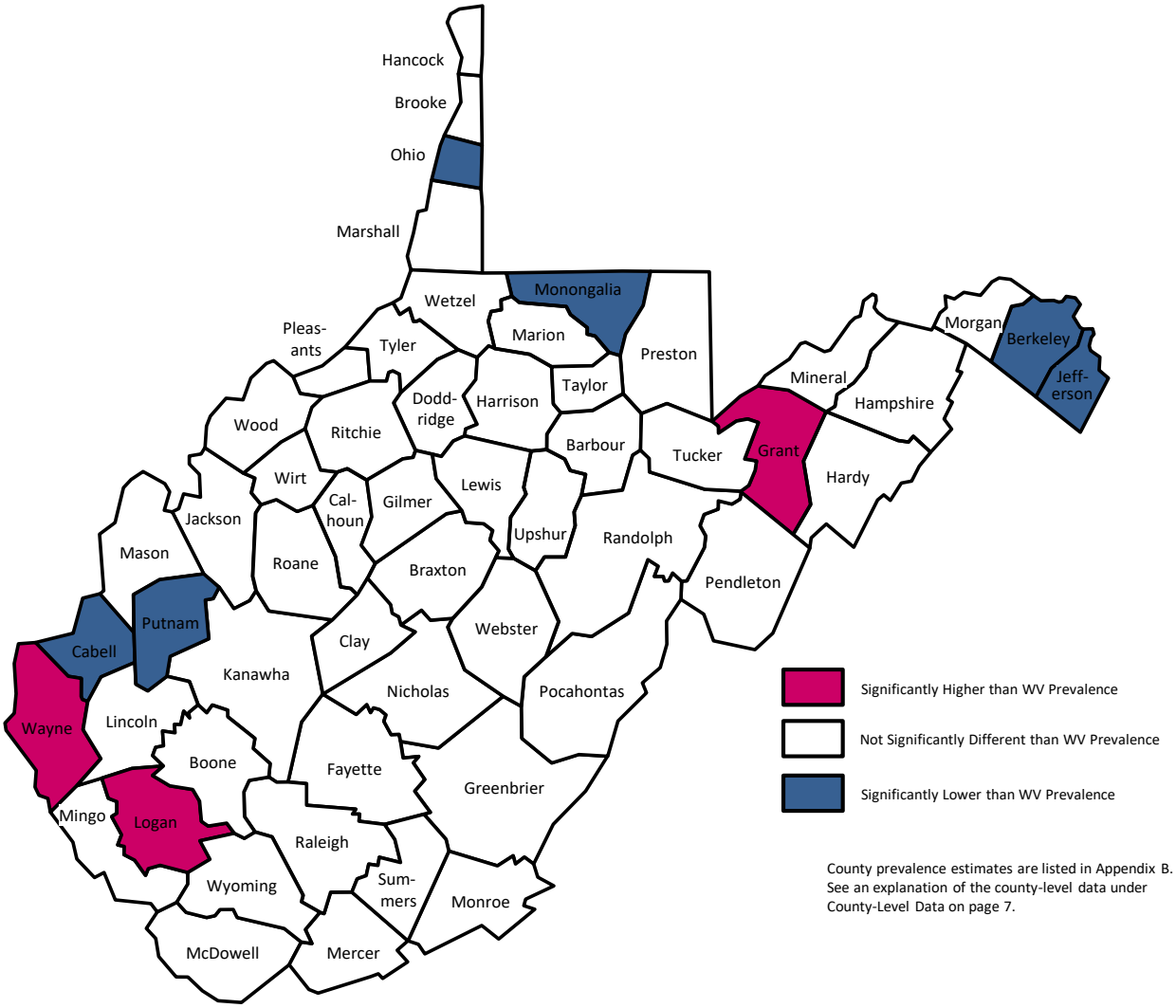


Figure 20.2 Prevalence of Diabetes by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 15.0%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

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: 11.8% (95% CI: 10.6-13.0)
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: 11.5% (95% CI: 9.7-13.2)
Women: 12.1% (95% CI: 10.5-13.6)
There was no gender difference in prevalence of pre-diabetes or borderline diabetes.

Age

The prevalence of pre-diabetes or borderline diabetes was significantly higher among adults aged 45 and older than adults aged 44 and younger.

Education

The prevalence of pre-diabetes or borderline diabetes was significantly higher among adults with less than a high school education (15.8%) than college graduates (9.3%).

Household Income

There was no annual household income difference in the prevalence of pre-diabetes or borderline diabetes.

Trend

There was an increase in prevalence of pre-diabetes or borderline diabetes from 2011 to 2018.

County

The 2014-2018 West Virginia state prevalence of pre-diabetes or borderline was 10.7%. There were 4 counties with a significantly lower prevalence compared to the state; Cabell, Gilmer, Jefferson, and Monongalia. No county has a significantly higher prevalence than the state.

Table 20.2 Prevalence of Pre-Diabetes or Borderline Diabetes by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	65,250	**11.5**	9.7-13.2	69,745	**12.1**	10.5-13.6	134,995	**11.8**	10.6-13.0
Age									
18-24	3,638	**4.7***	0.0-9.5	1,863	**2.7***	0.0-5.8	5,501	**3.8***	0.9-6.7
25-34	7,851	**8.0**	3.5-12.5	5,645	**6.2**	2.6-9.9	13,496	**7.2**	4.2-10.1
35-44	7,662	**7.7**	3.4-11.9	6,998	**7.5**	4.2-10.8	14,660	**7.6**	4.9-10.3
45-54	12,575	**14.5**	9.6-19.5	14,713	**17.4**	12.5-22.2	27,288	**15.9**	12.4-19.4
55-64	12,874	**13.9**	10.0-17.7	15,310	**16.6**	12.2-21.0	28,184	**15.2**	12.3-18.2
65+	20,649	**18.3**	14.5-22.1	24,978	**17.4**	14.2-20.6	45,627	**17.8**	15.4-20.3
Education									
Less than H.S.	8,925	**12.1**	6.0-18.2	14,280	**19.5**	13.2-25.8	23,205	**15.8**	11.4-20.1
H.S. or G.E.D.	32,397	**13.4**	10.4-16.5	25,210	**11.9**	9.2-14.7	57,607	**12.7**	10.7-14.8
Some Post-H.S.	14,583	**9.8**	6.8-12.7	18,607	**10.6**	7.9-13.3	33,190	**10.2**	8.2-12.2
College Graduate	8,918	**8.6**	6.0-11.2	11,648	**9.9**	7.5-12.3	20,566	**9.3**	7.5-11.0
Income									
Less than $15,000	6,234	**15.3**	8.3-22.2	8,451	**11.9**	7.5-16.3	14,685	**13.1**	9.3-16.9
$15,000 - 24,999	12,822	**13.3**	8.6-18.0	12,935	**12.2**	8.3-16.0	25,757	**12.7**	9.7-15.7
$25,000 - 34,999	8,972	**11.7**	6.1-17.3	10,332	**12.5**	8.5-16.6	19,304	**12.1**	8.7-15.6
$35,000 - 49,999	8,476	**10.6**	5.8-15.4	9,174	**13.5**	8.1-19.0	17,650	**12.0**	8.3-15.6
$50,000 - 74,999	8,451	**10.9**	6.5-15.4	7,892	**12.6**	8.2-17.0	16,343	**11.7**	8.5-14.8
$75,000+	10,525	**8.7**	5.7-11.7	8,851	**8.5**	5.5-11.6	19,376	**8.6**	6.5-10.8

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

Figure 20.3 Prevalence of Pre-Diabetes or Boarderline Diabetes By Year, WVBRFSS 2011-2018

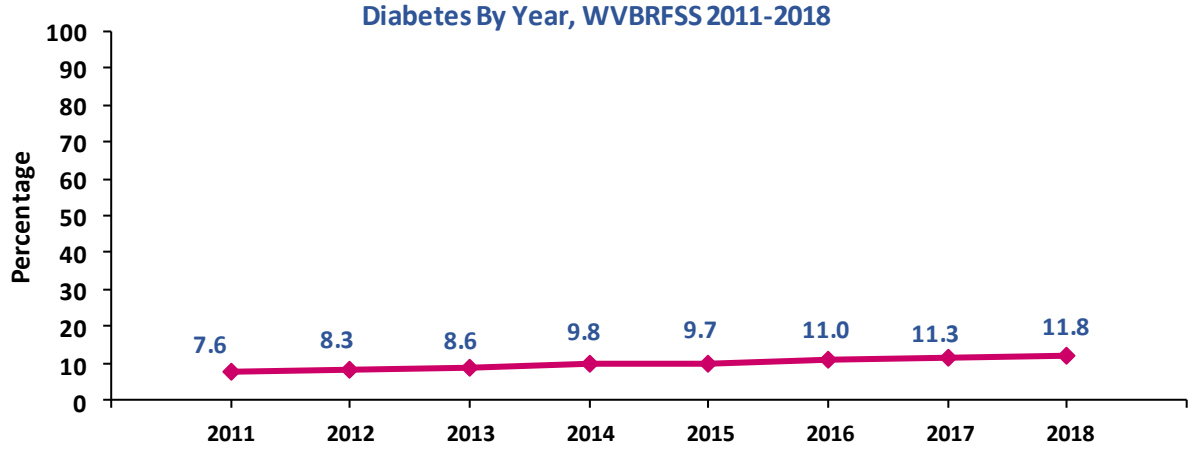
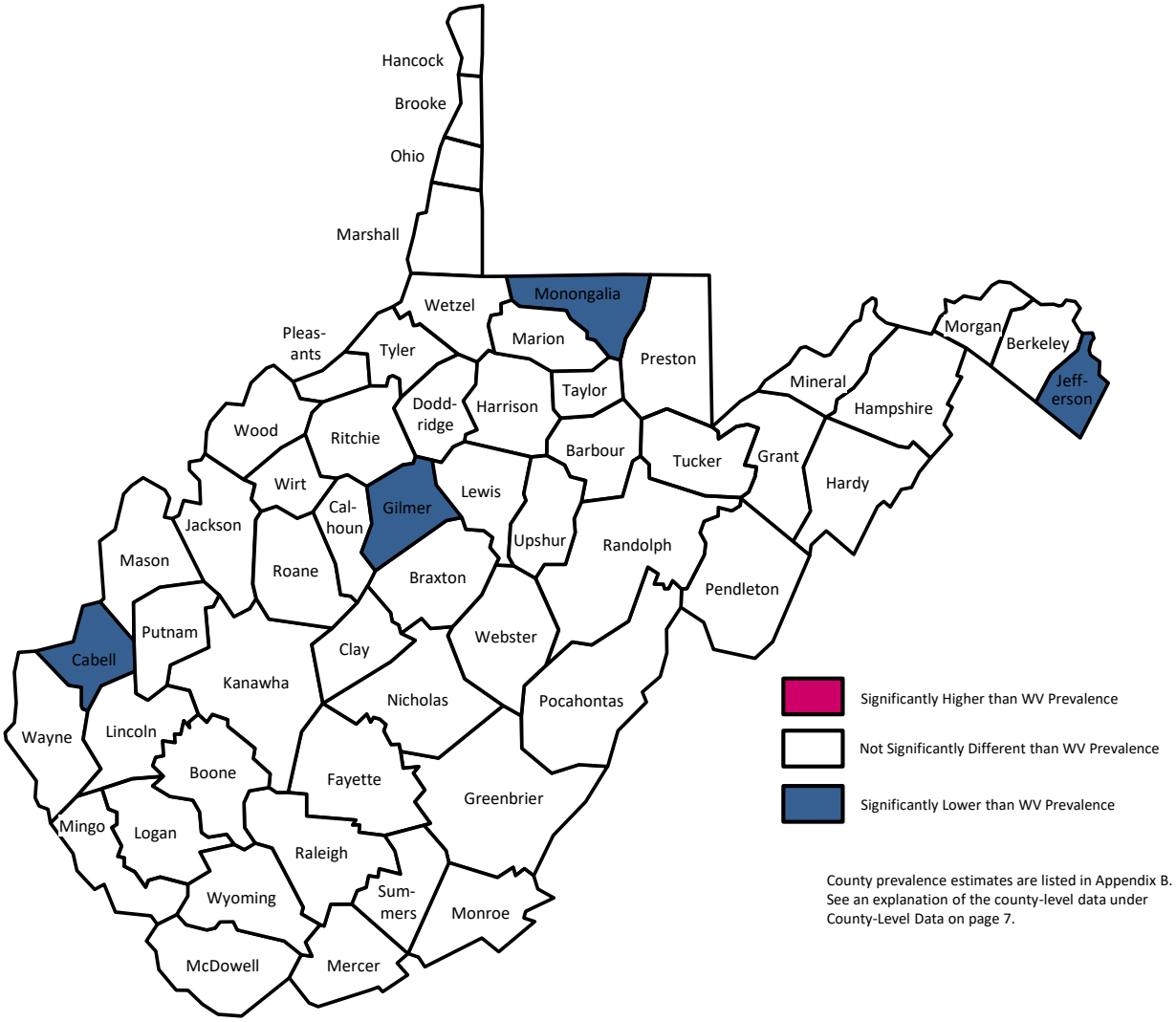


Figure 20.4 Prevalence of Pre-Diabetes or Borderline Diabetes by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 10.7%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

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: 6.9-8.5)
U.S.: 6.2% (95% CI: 6.1-6.4)
The West Virginia prevalence of skin cancer was significantly higher than the U.S. prevalence. West Virginia ranked the 6th highest among the 54 BRFSS participants.

Gender

Men: 8.4% (95% CI: 7.2-9.6)
Women: 7.0% (95% CI: 6.0-8.0)
There was no gender difference in the prevalence of skin cancer.

Age

The prevalence of skin cancer was significantly higher among adults aged 65 and older (19.0%) than all other age groups.

Education

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

Household Income

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

Trend

There was an increase in prevalence of skin cancer from 2011 to 2018.

County

The 2014-2018 West Virginia state prevalence of skin cancer was 7.6%. There were 6 counties with a significantly lower prevalence compared to the state; Cabell, Hampshire, Jefferson, Mineral, Monongalia, and Ohio. No county had a significantly higher prevalence than the state.

Table 21.1 Prevalence of Skin Cancer by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	59,437	**8.4**	7.2-9.6	51,046	**7.0**	6.0-8.0	110,483	**7.7**	6.9-8.5
Age									
18-24	0.0	**0.0**	0.0-0.0	0.0	**0.0**	0.0-0.0	0.0	**0.0**	0.0-0.0
25-34	385.0	**0.4***	0.0-1.1	2,255	**2.2***	0.2-4.2	2,640	**1.3***	0.2-2.3
35-44	2,472	**2.3***	0.3-4.3	2,776	**2.6***	0.3-4.9	5,248	**2.4***	0.9-4.0
45-54	4,849	**4.4**	2.0-6.8	7,404	**6.7**	3.8-9.6	12,252	**5.6**	3.7-7.4
55-64	10,748	**8.5**	5.8-11.2	10,679	**8.3**	5.7-10.8	21,427	**8.4**	6.5-10.2
65+	40,516	**24.8**	21.2-28.5	27,674	**14.1**	11.8-16.4	68,190	**19.0**	16.9-21.1
Education									
Less than H.S.	10,079	**10.6**	6.4-14.9	11,072	**10.6**	6.9-14.2	21,150	**10.6**	7.8-13.4
H.S. or G.E.D.	22,919	**7.8**	5.9-9.5	19,705	**7.1**	5.4-8.8	42,624	**7.4**	6.2-8.7
Some Post-H.S.	16,040	**8.7**	6.4-11.1	11,391	**5.5**	3.9-7.1	27,431	**7.0**	5.6-8.4
College Graduate	9,973	**7.9**	6.0-9.9	8,787	**6.3**	4.5-8.1	18,760	**7.1**	5.8-8.4
Income									
Less than $15,000	4,993	**9.3**	4.9-13.8	5,933	**6.1**	3.6-8.7	10,925	**7.3**	5.0-9.5
$15,000 - 24,999	11,286	**9.2**	6.0-12.5	13,463	**9.5**	6.6-12.4	24,749	**9.4**	7.2-11.6
$25,000 - 34,999	5,604	**5.9**	3.2-8.6	5,487	**5.3**	3.1-7.6	11,091	**5.6**	3.8-7.4
$35,000 - 49,999	11,634	**11.5**	7.8-15.1	4,453	**5.4**	3.2-7.6	16,087	**8.8**	6.5-11.0
$50,000 - 74,999	8,138	**8.6**	5.3-12.0	4,067	**5.2**	2.6-7.9	12,205	**7.1**	4.9-9.3
$75,000+	9,486	**6.6**	4.5-8.7	7,868	**6.6**	4.3-8.9	17,354	**6.6**	5.0-8.1

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

Figure 21.1 Prevalence of Skin Cancer by Year, WVBRFSS 2011-2018

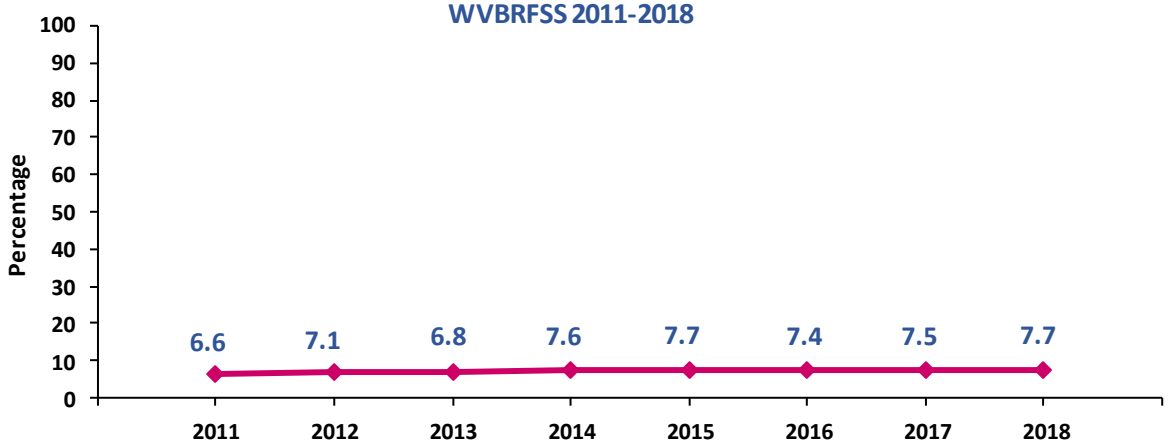
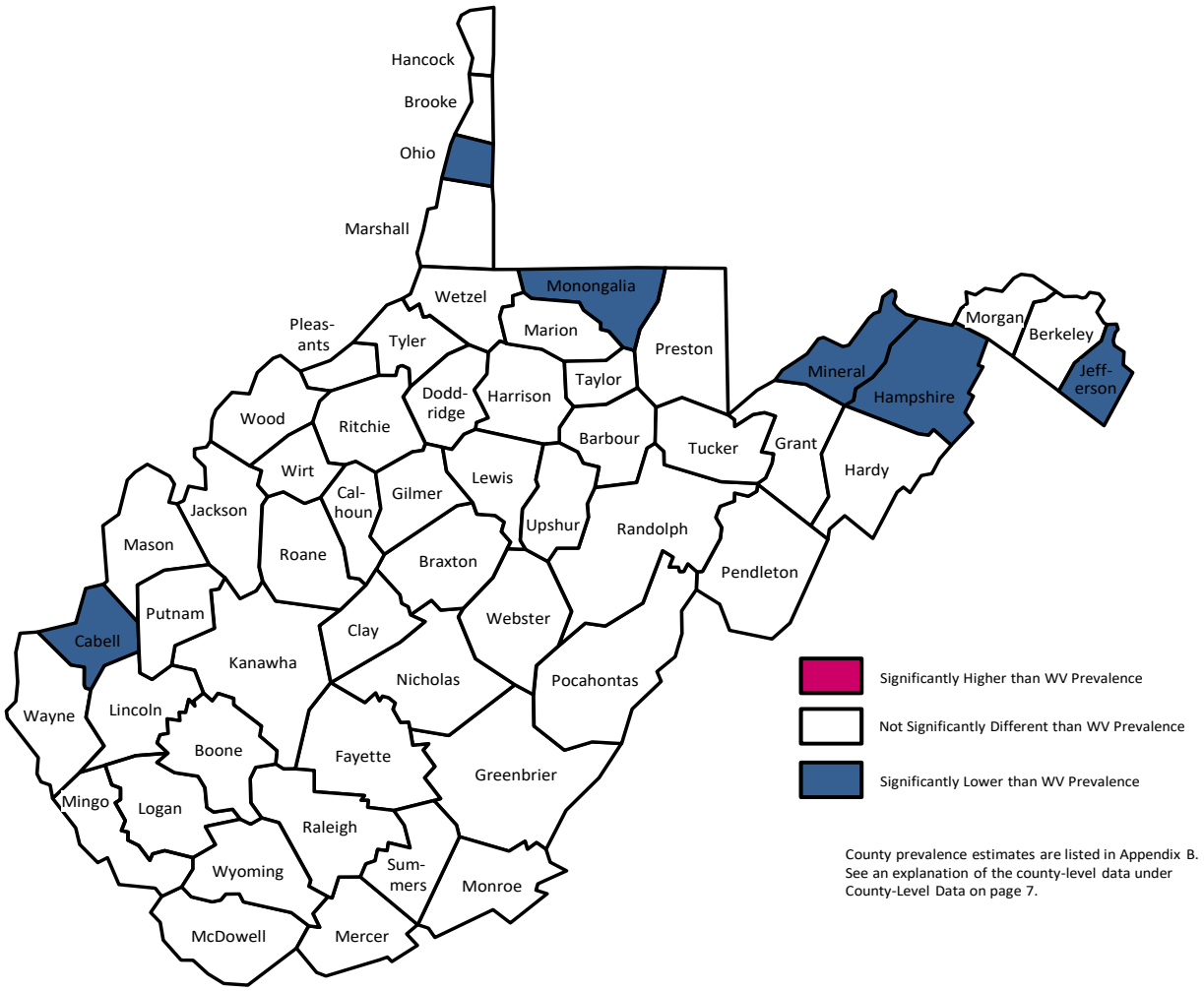


Figure 21.2 Prevalence of Skin Cancer by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 7.6%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

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: 8.0% (95% CI: 7.2-8.8)
U.S.: 6.8% (95% CI: 6.7-7.0)
The West Virginia prevalence of other cancer was significantly higher than the U.S. prevalence. West Virginia ranked the 5th highest among the 54 BRFSS participants.

Gender

Men: 6.1% (95% CI: 5.1-7.1)
Women: 9.9% (95% CI: 8.6-11.1)
The prevalence of other cancer was significantly higher among women than men.

Age

The prevalence of other cancer was significantly higher among adults aged 65 and older (17.1%) than all other age groups.

Education

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

Household Income

The prevalence of other cancer was significantly higher among adults with an annual household income of less than $15,000 (11.9%) than adults with an annual household income of $50,000 or more.

Trend

There was no change in the prevalence of other cancer from 2011 to 2018.

County

The 2014-2018 West Virginia state prevalence of other cancer was 7.9%. There were 5 counties with a significantly lower prevalence compared to the state; Berkeley, Hardy, Jefferson, Monongalia, and Roane. Calhoun County had a a significantly higher prevalence than the state.

Table 21.2 Prevalence of Other Cancer by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	43,226	**6.1**	5.1-7.1	72,139	**9.9**	8.6-11.1	115,365	**8.0**	7.2-8.8
Age									
18-24	1,044	**1.2***	0.0-3.0	0.0	**0.0**	0.0-0.0	1,044	**0.6***	0.0-1.6
25-34	734.0	**0.7***	0.0-1.7	3,905	**3.9***	1.0-6.6	4,639	**2.2***	0.7-3.7
35-44	890.1	**0.8***	0.0-2.0	5,986	**5.6**	2.9-8.4	6,876	**3.2**	1.7-4.7
45-54	3,795	**3.4***	1.2-5.7	12,689	**11.5**	7.8-15.2	16,484	**7.5**	5.3-9.6
55-64	7,373	**5.8**	3.6-8.1	17,073	**13.2**	10.0-16.4	24,446	**9.6**	7.6-11.6
65+	29,389	**18.0**	14.8-21.2	32,119	**16.4**	13.8-18.9	61,508	**17.1**	15.1-19.1
Education									
Less than H.S.	6,612	**6.9**	3.6-10.3	13,888	**13.3**	8.9-17.6	20,501	**10.2**	7.5-13.0
H.S. or G.E.D.	15,625	**5.2**	3.8-6.7	28,881	**10.4**	8.4-12.5	44,506	**7.7**	6.5-9.0
Some Post-H.S.	13,306	**7.2**	5.1-9.4	19,862	**9.5**	7.3-11.8	33,168	**8.5**	6.9-10.0
College Graduate	7,682	**6.1**	4.1-8.1	9,508	**6.8**	5.0-8.6	17,191	**6.5**	5.1-7.8
Income									
Less than $15,000	6,534	**12.1**	6.6-17.6	11,507	**11.8**	8.1-15.5	18,041	**11.9**	8.9-15.0
$15,000 - 24,999	6,924	**5.7**	3.3-8.0	15,677	**11.1**	8.1-14.0	22,602	**8.6**	6.6-10.5
$25,000 - 34,999	4,873	**5.1**	2.9-7.3	8,766	**8.5**	5.5-11.6	13,639	**6.9**	5.0-8.8
$35,000 - 49,999	7,600	**7.5**	4.5-10.5	9,115	**11.1**	7.4-14.8	16,715	**9.1**	6.8-11.4
$50,000 - 74,999	4,351	**4.6**	2.3-6.9	5,135	**6.6**	3.5-9.8	9,487	**5.5**	3.6-7.4
$75,000+	7,093	**4.9**	2.9-6.9	7,214	**6.0**	3.6-8.4	14,307	**5.4**	3.8-7.0

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

Figure 21.3 Prevalence of Other Cancer by Year: WVBRFSS, 2011-2018

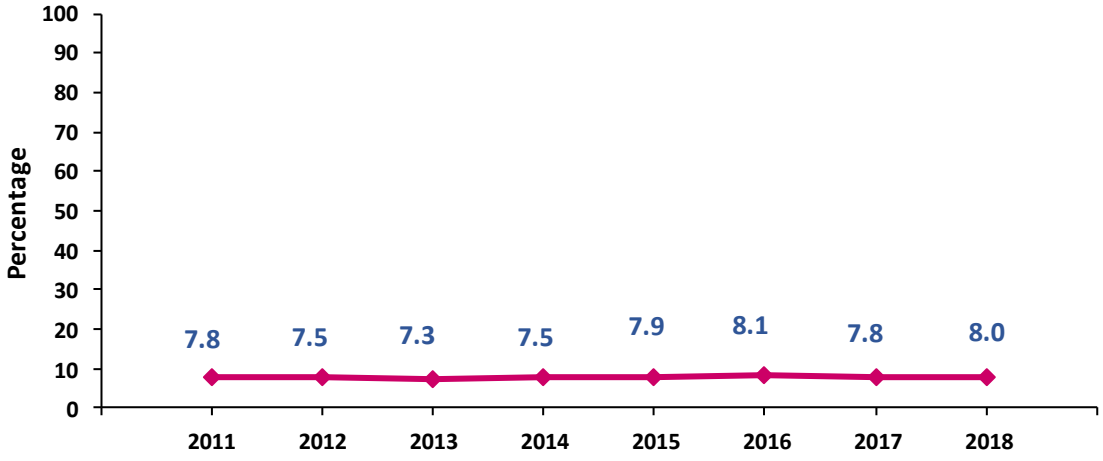
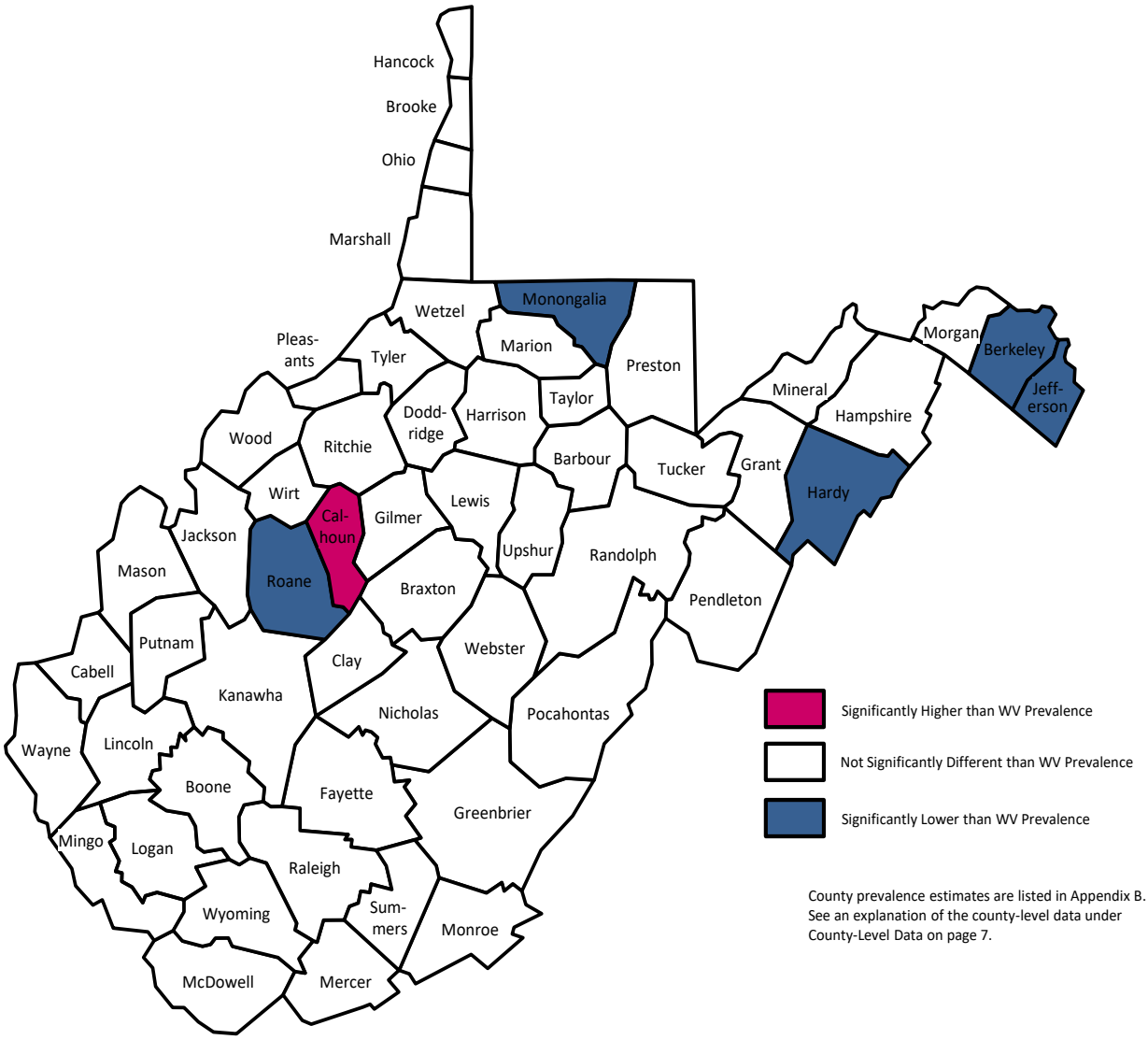


Figure 21.4 Prevalence of Other Cancer by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 7.9%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

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" or "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: 13.1-15.1)
U.S.: 11.7% (95% CI: 11.6-11.9)
The West Virginia prevalence of cancer was significantly higher than the U.S. prevalence. West Virginia ranked the 6th highest among 54 BRFSS participants.

Gender

Men: 13.1% (95% CI: 11.7-14.6)
Women: 15.0% (95% CI: 13.6-16.5)
There was no gender difference in the prevalence of cancer.

Age

The prevalence of cancer was significantly higher among adults aged 65 and older (31.6%) than all other age groups.

Education

The prevalence of cancer was significantly higher among adults with less than a high school education (18.7%) than among college graduates (12.0%).

Household Income

The prevalence of cancer was significantly higher among adults with an annual household income of less than $25,000 than adults with an annual household income of $75,000 or more (10.9%).

Trend

There was no change in the prevalence of cancer from 2011 to 2018.

County

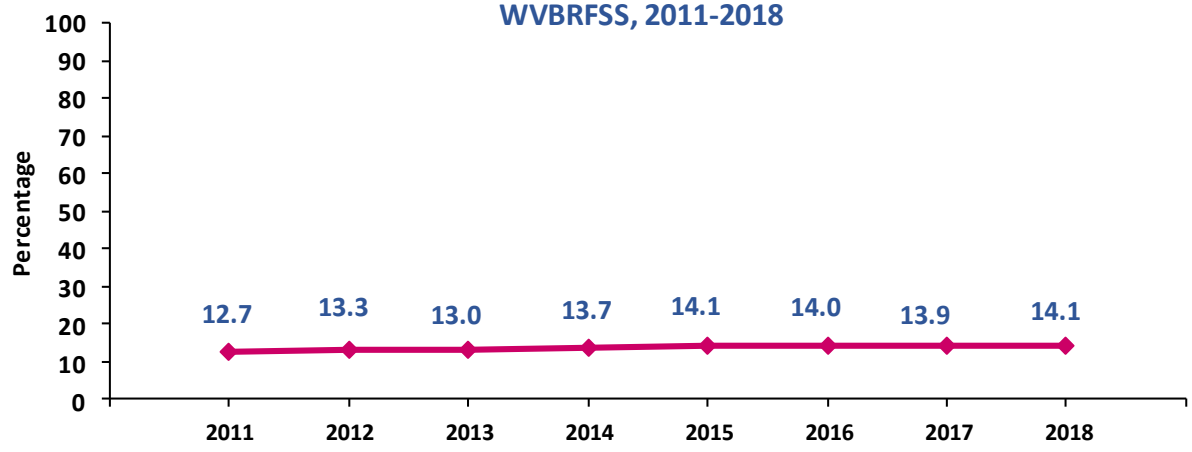
The 2014-2018 West Virginia state prevalence of overall cancer was 14.0%. There were 6 counties with a significantly lower prevalence compared to the state; Berkeley, Cabell, Jefferson, Hampshire, Monongalia, and Ohio. No county had a significantly higher prevalence than the state.

Table 21.3 Prevalence of Cancer by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	92,477	**13.1**	11.7-14.6	109,846	**15.0**	13.6-16.5	202,323	**14.1**	13.1-15.1
Age									
18-24	1,044	**1.2***	0.0-3.0	0.0	**0.0**	0.0-0.0	1,044	**0.6***	0.0-1.6
25-34	1,119	**1.0***	0.0-2.2	5,412	**5.3***	2.1-8.4	6,531	**3.1**	1.4-4.8
35-44	3,362	**3.1***	0.8-5.4	8,156	**7.7**	4.3-11.1	11,518	**5.4**	3.3-7.4
45-54	8,644	**7.8**	4.6-11.1	17,564	**15.9**	11.7-20.1	26,207	**11.9**	9.2-14.6
55-64	17,365	**13.8**	10.4-17.1	24,959	**19.4**	15.6-23.09	42,324	**16.6**	14.1-19.1
65+	60,476	**37.2**	33.1-41.2	53,130	**27.1**	24.0-30.1	113,606	**31.7**	29.2-34.2
Education									
Less than H.S.	15,504	**16.3**	11.1-21.5	21,859	**20.8**	15.7-26.0	37,363	**18.7**	15.0-22.4
H.S. or G.E.D.	34,073	**11.4**	9.3-13.6	43,541	**15.7**	13.2-18.2	77,614	**13.5**	11.8-15.1
Some Post-H.S.	26,710	**14.5**	11.5-17.5	28,144	**13.5**	11.0-16.1	54,854	**14.0**	12.0-16.0
College Graduate	15,763	**12.5**	9.9-15.1	16,211	**11.6**	9.3-13.9	31,975	**12.0**	10.3-13.8
Income									
Less than $15,000	9,863	**18.4**	12.0-24.8	15,583	**16.1**	11.9-20.3	25,445	**16.9**	13.4-20.4
$15,000 - 24,999	16,650	**13.6**	9.8-17.5	24,965	**17.6**	13.9-21.3	41,615	**15.8**	13.1-18.4
$25,000 - 34,999	9,768	**10.2**	6.9-13.6	13,254	**12.9**	9.2-16.6	23,022	**11.6**	9.1-14.1
$35,000 - 49,999	17,689	**17.5**	13.0-21.9	12,102	**14.7**	10.6-18.7	29,792	**16.2**	13.2-19.3
$50,000 - 74,999	10,677	**11.3**	7.6-15.0	85,61	**11.1**	7.2-14.9	19,237	**11.2**	8.5-13.9
$75,000+	14,877	**10.3**	7.6-13.1	13,927	**11.6**	8.4-14.8	28,804	**10.9**	8.8-13.0

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

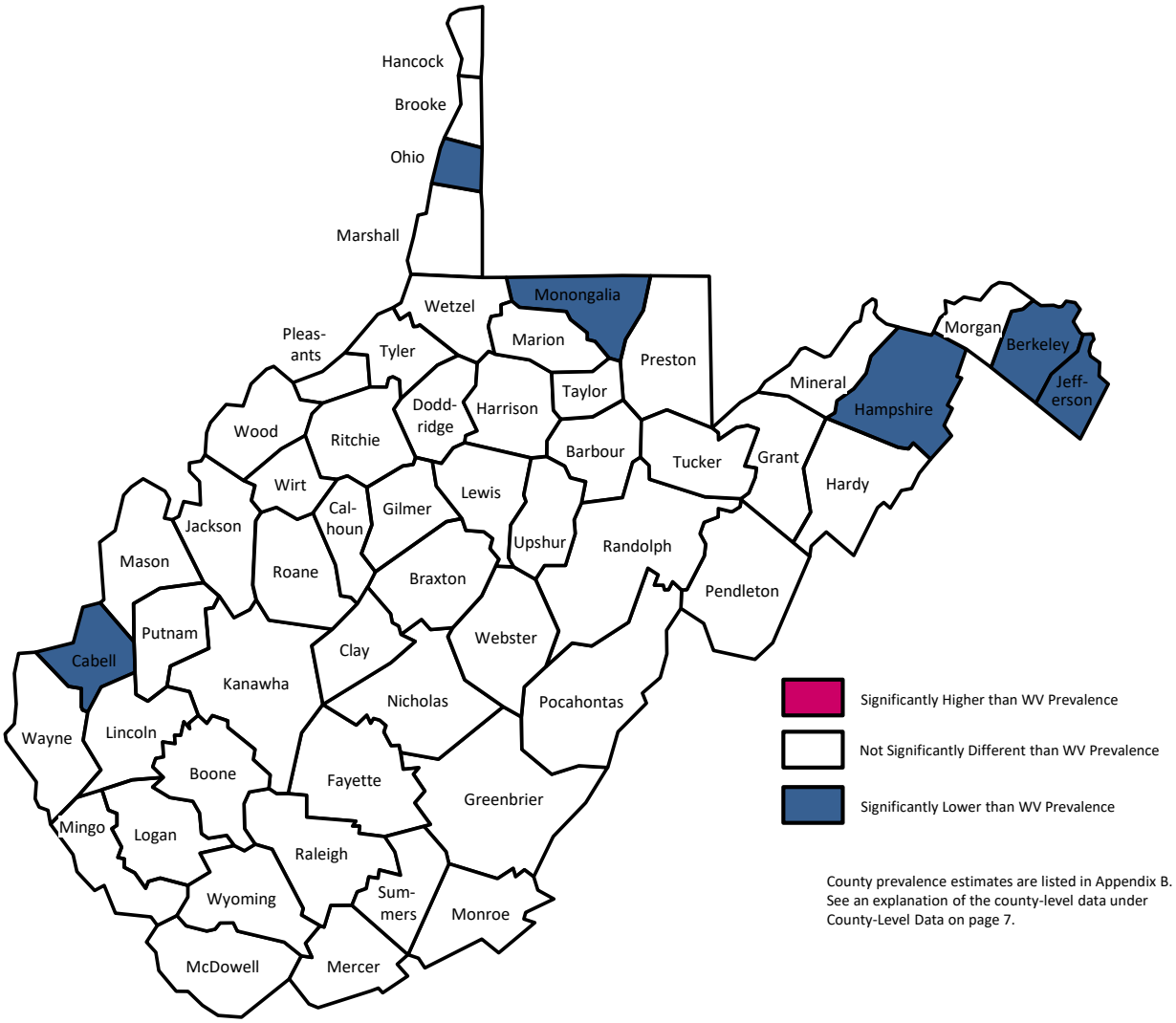
Figure 21.5 Prevalence of Cancer by Year: WVBRFSS, 2011-2018



*Due to changes in sample composition and weighting methodology, 2011-2016 results are not directly comparable to previous years.

Figure 21.5 Prevalence of Cancer by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 14.0%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

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: 16.3% (95% CI: 15.0-17.6)
U.S.: 14.5% (95% CI: 14.3-14.8)
The West Virginia prevalence of lifetime asthma was significantly higher than the U.S. prevalence. West Virginia ranked the 11th highest among 54 BRFSS participants.

Gender

Men: 13.7% (95% CI: 11.9-15.6)
Women: 18.8% (95% CI: 16.9-20.6)
The prevalence of lifetime asthma was significantly higher among women than men.

Age

There was no age difference in prevalence of lifetime asthma.

Education

The prevalence of lifetime asthma was significantly higher among adults with less than a high school education (29.1%) than among all other educational attainment levels.

Household Income

The prevalence of lifetime asthma was significantly higher among adults with an annual household income of less than $15,000 per year (30.3%) than all other annual household income levels.

Trend

There was an increase in prevalence of lifetime asthma from 2011 to 2018.

County

The 2014-2018 West Virginia state prevalence of lifetime asthma was 16.2%. Jackson County and Putnam County had a significantly lower prevalence when compared to the state. There were 5 counties that had a significantly higher prevalence when compared to the state; Fayette, Lincoln, Logan, Mercer, and Mingo.

Table 22.1 Prevalence of Lifetime Asthma by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	96,622	**13.7**	11.9-15.6	136,830	**18.8**	16.9-20.6	233,451	**16.3**	15.0-17.6
Age									
18-24	14,357	**16.8**	9.0-24.6	13,293	**17.3**	9.8-24.9	27,651	**17.0**	11.6-22.5
25-34	13,790	**12.8**	7.7-18.0	17,010	**16.6**	11.2-22.0	30,800	**14.7**	10.9-18.4
35-44	19,308	**17.8**	12.5-23.2	17,530	**16.5**	12.0-21.0	36,838	**17.2**	13.7-20.7
45-54	13,382	**12.1**	8.0-16.2	28,612	**25.9**	20.7-31.0	41,994	**19.0**	15.6-22.3
55-64	17,993	**14.3**	10.6-17.9	27,418	**21.3**	17.2-25.3	45,846	**17.8**	15.0-20.5
65+	17,377	**10.7**	8.0-13.3	32,094	**16.4**	13.6-19.2	49,471	**13.8**	11.8-15.7
Education									
Less than H.S.	23,574	**24.7**	17.5-32.0	34,612	**33.1**	26.3-39.9	58,186	**29.1**	24.1-34.1
H.S. or G.E.D.	31,099	**10.4**	8.0-12.9	44,091	**16.0**	13.2-18.8	75,190	**13.1**	11.3-15.0
Some Post-H.S.	27,334	**14.8**	11.0-18.7	37,084	**17.9**	14.5-21.2	64,418	**16.4**	13.9-19.0
College Graduate	14,187	**11.2**	8.1-14.3	20,357	**14.6**	11.7-17.5	34,544	**13.0**	10.9-15.1
Income									
Less than $15,000	13,556	**25.2**	16.9-33.4	32,196	**33.1**	26.9-39.3	45,753	**30.3**	25.3-35.3
$15,000 - 24,999	26,038	**21.4**	15.8-26.9	29,905	**21.2**	16.5-25.8	55,943	**21.3**	17.7-24.8
$25,000 - 34,999	10,092	**10.6**	5.9-15.2	17,714	**17.3**	12.5-22.1	27,806	**14.1**	10.7-17.4
$35,000 - 49,999	7,294	**7.2**	3.8-10.6	11,488	**14.0**	8.8-19.1	18,782	**10.2**	7.2-13.2
$50,000 - 74,999	10,505	**11.1**	6.2-16.0	12,694	**16.4**	11.5-21.3	23,198	**13.5**	10.0-17.0
$75,000+	15,801	**10.9**	7.6-14.3	13,685	**11.4**	8.1-14.7	29,486	**11.2**	8.8-13.5

Figure 22.1 Prevalence of Lifetime Asthma by Year: WVBRFSS, 2011-2018

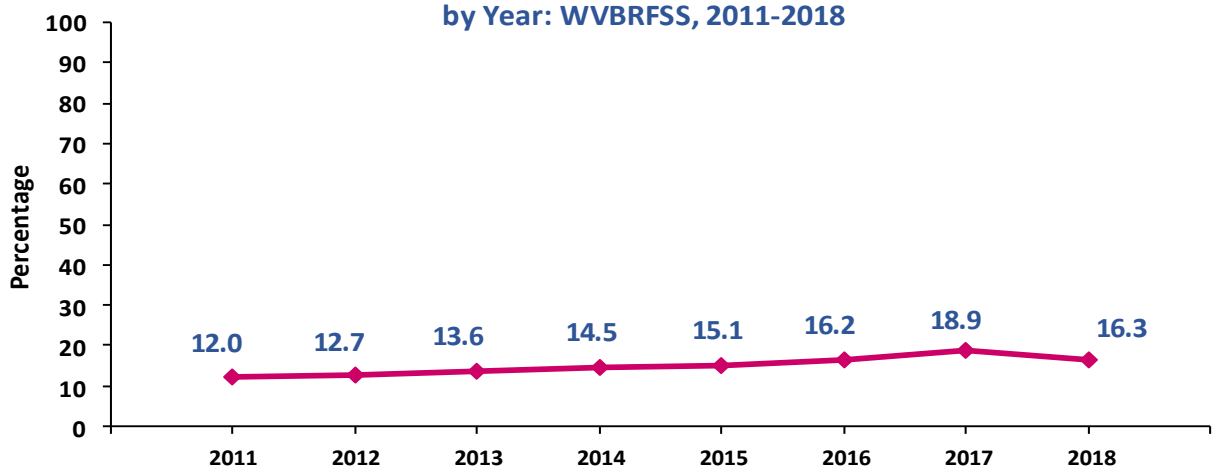
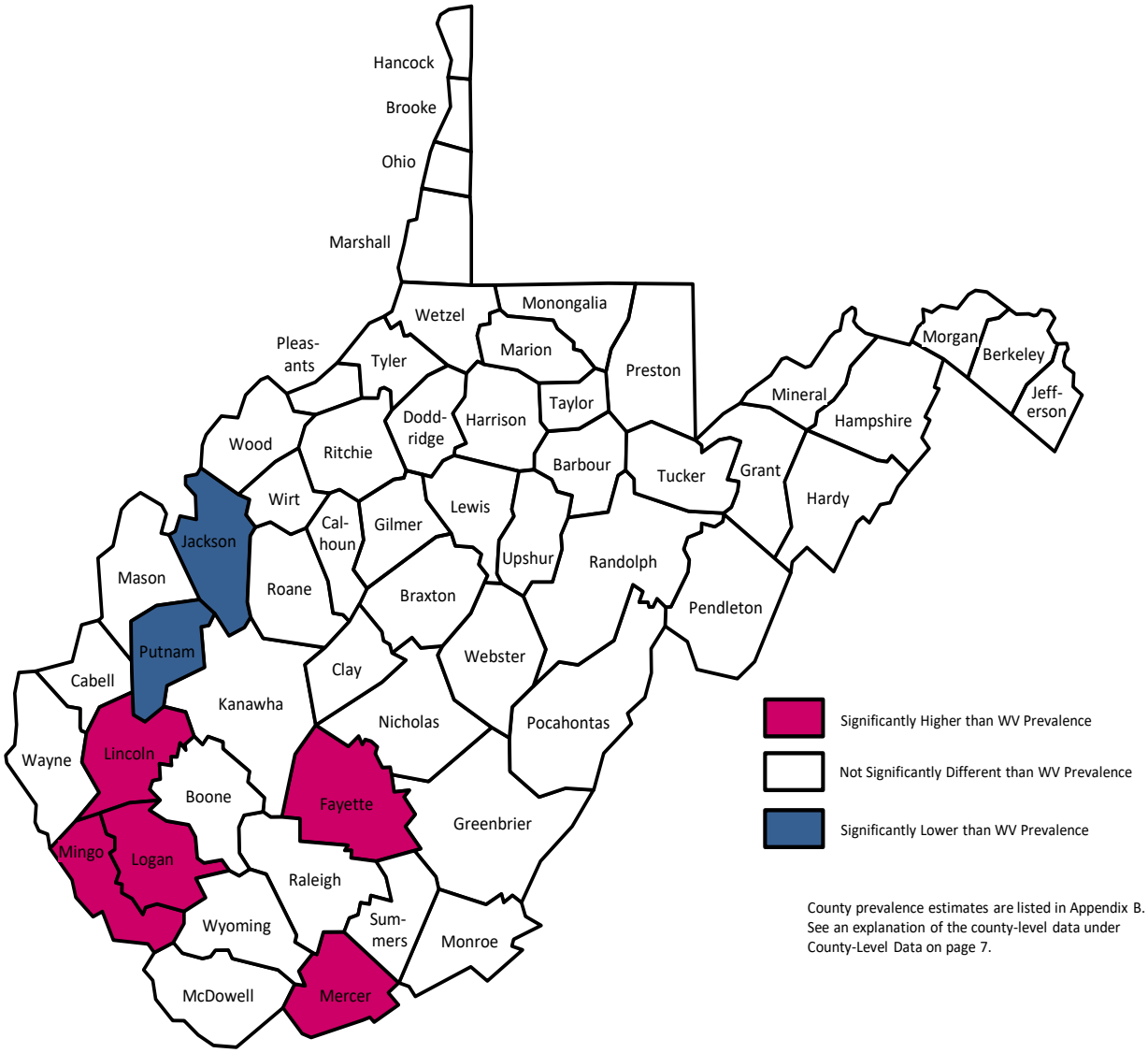


Figure 22.2 Prevalence of Lifetime Asthma by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 16.2%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

Current Asthma

Definition

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

Prevalence

WV: 12.3% (95% CI: 11.1-13.4)
U.S.: 8.9% (95% CI: 8.7-9.1)
The West Virginia prevalence of current asthma was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 54 BRFSS participants.

Gender

Men: 9.0% (95% CI: 7.5-10.6)
Women: 15.4% (95% CI: 13.7-17.1)
The prevalence of current asthma was significantly higher among women than men.

Age

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

Education

The prevalence of current asthma was significantly higher among adults with less than a high school education (23.7%) than all other educational attainment levels.

Household Income

The prevalence of current asthma was significantly higher among adults with an annual household income of less than $15,000 (27.0%) than adults with an annual household income of $35,000 or more.

Trend

There was a significant increase in the prevalence of current asthma from 2011 to 2018.

County

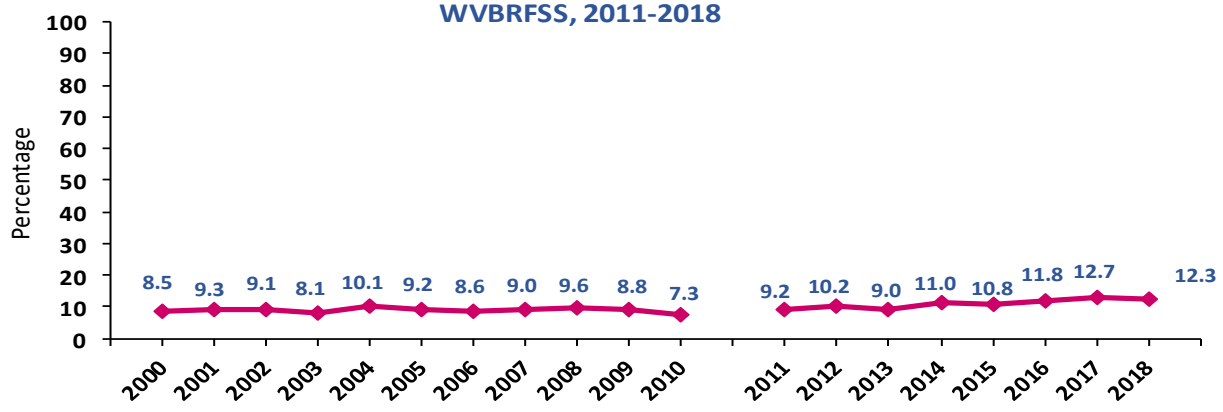
The 2014-2018 West Virginia state prevalence of current asthma was 11.7%. There were 9 counties with a significantly lower prevalence compared to the state; Greenbrier, Hancock, Jackson, Jefferson, Kanawha, Mineral, Monongalia, Putnam, and Tyler. There were 5 counties that had a significantly higher prevalence compared to the state; Lincoln, Logan, Mercer, Mingo, and Wayne.

Table 22.2 Prevalence of Current Asthma by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	63,468	**9.0**	7.5-10.6	111,899	**15.4**	13.7-17.1	175,368	**12.3**	11.1-13.4
Age									
18-24	9,502	**11.1**	4.3-17.9	10,249	**13.4**	6.7-20.0	19,751	**12.2**	7.4-16.9
25-34	5,146	**4.8***	1.6-8.1	13,336	**13.1**	8.2-17.9	18,483	**8.9**	5.9-11.8
35-44	11,055	**10.2**	5.9-14.6	14,360	**13.6**	9.3-17.8	25,414	**11.9**	8.9-14.9
45-54	9,604	**8.4**	5.2-11.7	23,822	**20.9**	16.1-25.6	33,426	**14.7**	11.7-17.6
55-64	14,712	**11.7**	8.2-15.1	23,810	**18.0**	14.2-21.8	38,522	**14.9**	12.3-17.5
65+	13,449	**8.3**	5.8-10.8	26,322	**13.5**	10.9-16.0	39,771	**11.1**	9.3-12.9
Education									
Less than H.S.	17,834	**18.8**	12.3-25.3	29,389	**28.2**	21.7-34.6	47,223	**23.7**	19.1-28.3
H.S. or G.E.D.	20,566	**6.9**	4.9-8.9	35,994	**13.1**	10.5-15.7	56,560	**9.9**	8.3-11.5
Some Post-H.S.	17,212	**9.4**	6.2-12.6	31,739	**15.3**	12.2-18.5	48,952	**12.6**	10.3-14.8
College Graduate	74,28	**5.9**	3.8-8.0	14,777	**10.6**	8.1-13.0	22,205	**8.4**	6.7-10.0
Income									
Less than $15,000	11,648	**21.8**	13.8-29.7	28,995	**29.9**	23.8-36.0	40,643	**27.0**	22.2-31.9
$15,000 - 24,999	17,131	**14.2**	9.3-19.1	26,823	**19.0**	14.6-23.4	43,954	**16.8**	13.5-20.0
$25,000 - 34,999	7,963	**8.3**	4.2-12.5	14,799	**14.5**	10.1-18.9	22,761	**11.5**	8.5-14.5
$35,000 - 49,999	3,917	**3.9***	1.5-6.3	8,374	**10.2**	5.7-14.7	12,291	**6.7**	4.2-9.2
$50,000 - 74,999	4,602	**4.9***	1.5-8.3	8,888	**11.5**	7.5-15.5	13,489	**7.9**	5.3-10.5
$75,000+	10,264	**7.1**	4.3-9.9	8,712	**7.3**	4.7-10.0	18,977	**7.2**	5.3-9.1

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

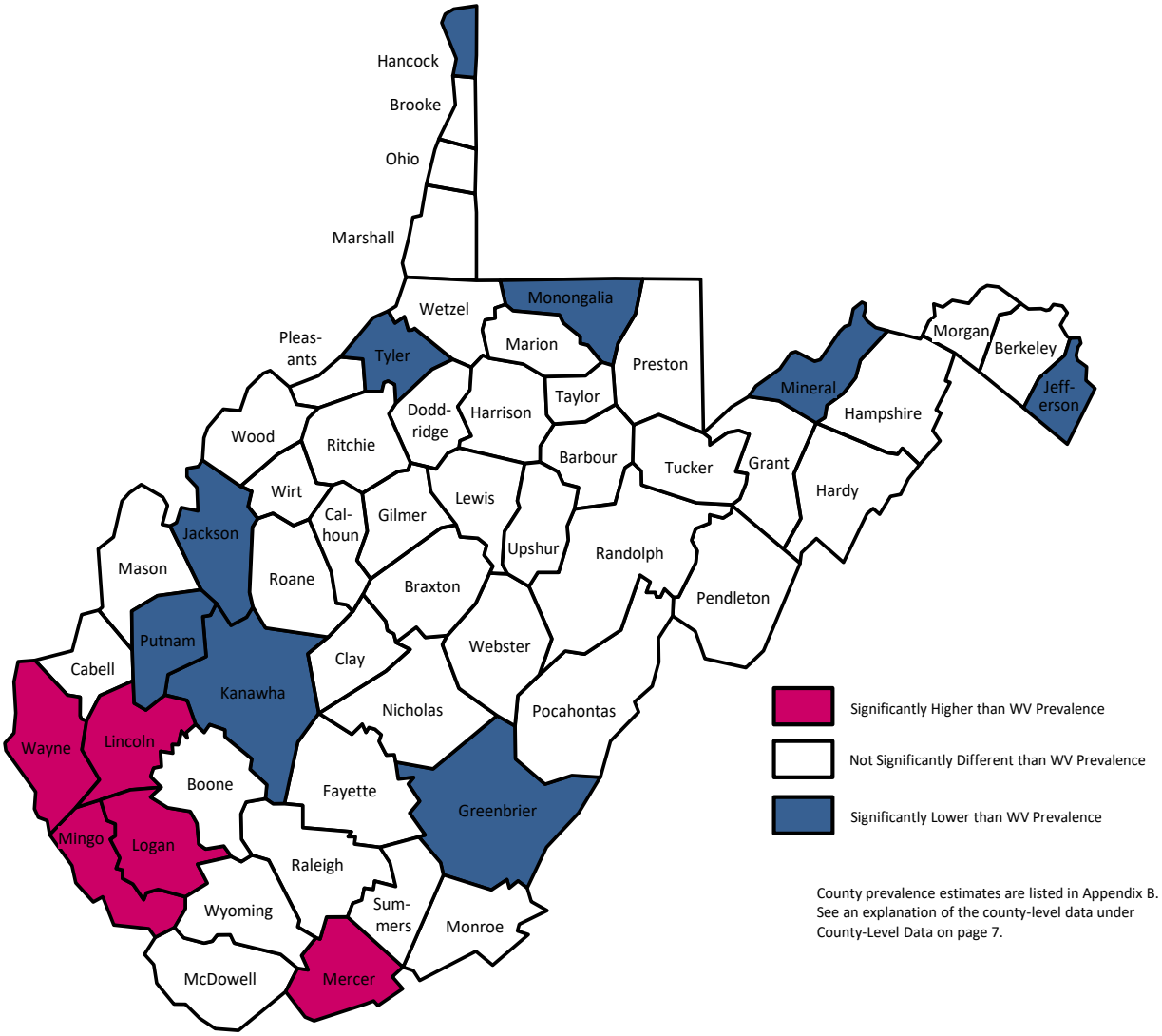
Figure 22.3 Prevalence of Current Asthma by Year: WVBRFSS, 2011-2018



*Due to changes in sample composition and weighting methodology, 2011-2018 results are not directly comparable to previous years.

Figure 22.4 Prevalence of Current Asthma by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 11.7%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

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: 15.3% (95% CI: 14.1-16.5)
U.S.: 6.8% (95% CI: 6.7-7.0)
The West Virginia prevalence of chronic obstructive pulmonary disease (COPD) was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 54 BRFSS participants.

Gender

Men: 14.0% (95% CI: 12.2-15.7)
Women: 16.6% (95% CI: 15.0-18.3)
There was no gender difference in the prevalence of COPD.

Age

The prevalence of COPD was significantly higher among adults aged 45 and older than adults aged 44 and younger.

Education

The prevalence of COPD was significantly higher among adults with less than a high school education (33.2%) than all other educational attainment levels. The prevalence of COPD was significantly lower among college graduates (5.7%) than all other educational attainment levels.

Household Income

The prevalence of COPD was significantly higher among adults with an annual household income of less than $15,000 (33.3%) than all other annual household income levels.

Trend

There was an increase in the prevalence of COPD from 2011 to 2018.

County

The 2014-2018 West Virginia state prevalence of COPD was 14.2%. There were 10 counties with a significantly lower prevalence compared to the state; Gilmer, Jefferson, Kanawha, Mineral, Monongalia, Ohio, Pendleton, Pleasant, Putnam, and Upshur. There were 6 counties with a significantly higher prevalence than the state; Fayette, Logan, Mason, McDowell, Mingo, and Wayne.

Table 22.3 Prevalence of Chronic Obstructive Pulmonary Disease (COPD) by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	98,194	**14.0**	12.2-15.7	121,512	**16.6**	15.0-18.3	219,706	**15.3**	14.1-18.3
Age									
18-24	5,582	**6.5***	0.8-12.3	1,861	**2.4***	0.0-5.2	7,443	**4.6***	1.3-7.9
25-34	5,452	**5.1***	1.4-8.8	6,481	**6.3***	2.5-10.2	1,193	**5.7**	3.0-8.4
35-44	9,465	**8.7**	4.6-12.9	10,820	**10.1**	5.9-14.3	20,285	**9.4**	6.5-12.4
45-54	14,843	**13.4**	8.9-17.9	26,217	**23.7**	18.7-28.8	41,060	**18.5**	15.1-22.0
55-64	22,431	**17.9**	13.9-21.8	32,074	**24.9**	20.6-29.2	54,505	**21.4**	18.5-24.4
65+	40,135	**24.9**	21.1-28.6	42,955	**21.9**	18.9-24.9	83,090	**23.2**	20.9-25.6
Education									
Less than H.S.	26,557	**28.1**	20.6-35.6	39,522	**37.9**	31.0-44.8	66,080	**33.2**	28.2-38.3
H.S. or G.E.D.	39,244	**13.2**	10.6-15.7	48,296	**17.4**	14.6-20.2	87,540	**15.2**	13.3-17.1
Some Post-H.S.	24,076	**13.2**	10.0-16.4	26,378	**12.7**	10.1-15.3	50,455	**12.9**	10.9-15.0
College Graduate	7,889	**6.3**	4.1-8.4	7,316	**5.3**	3.5-7.0	15,205	**5.7**	4.4-7.1
Income									
Less than $15,000	16,936	**31.7**	23.5-39.9	33,137	**34.2**	28.2-40.2	50,073	**33.3**	28.5-38.1
$15,000 - 24,999	32,677	**26.8**	21.0-32.7	30,564	**21.5**	17.3-25.8	63,242	**24.0**	20.4-27.5
$25,000 - 34,999	12,195	**12.8**	8.4-17.3	15,974	**15.6**	11.0-20.1	28,169	**14.3**	11.1-17.4
$35,000 - 49,999	9,799	**9.7**	6.2-13.2	7,865	**9.6**	5.0-14.1	17,664	**9.6**	6.8-12.4
$50,000 - 74,999	6,907	**7.3**	3.1-11.5	6,195	**8.0**	4.7-11.3	13,102	**7.6**	4.9-10.4
$75,000+	8,146	**5.7**	3.2-8.2	8,698	**7.3**	4.3-10.2	16,844	**6.4**	4.5-8.3

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

Figure 22.5 Prevalence of COPD by Year: WVBRFSS, 2011-2018

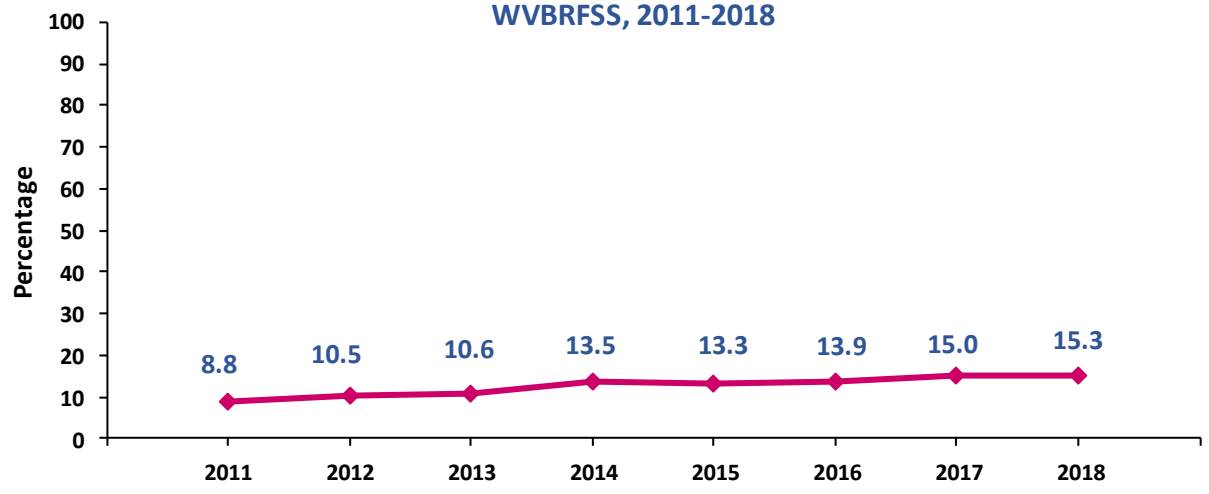
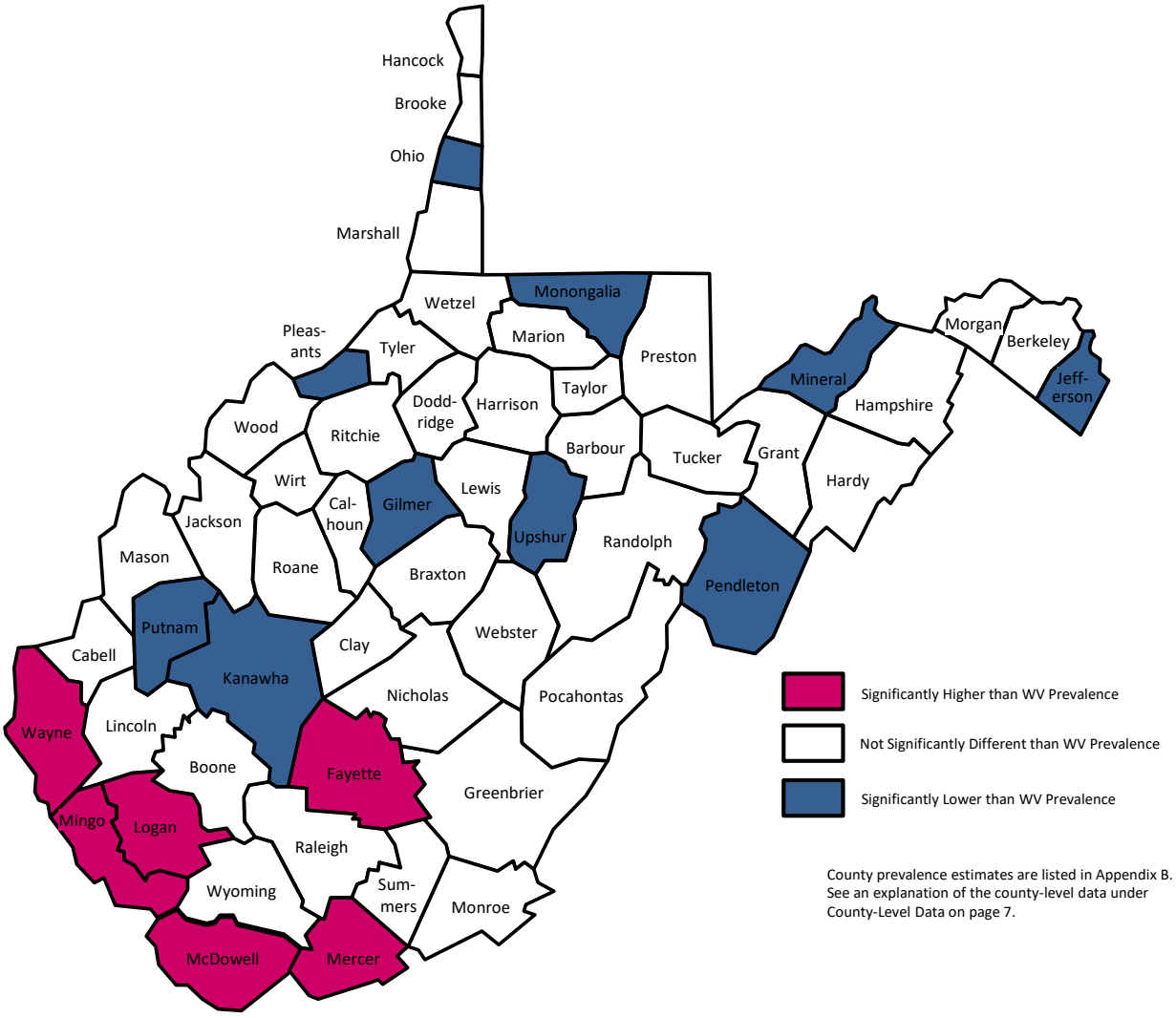


Figure 22.6 Prevalence of Chronic Obstructive Pulmonary Disease (COPD) by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 14.2%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

CHAPTER 23: ARTHRITIS

Arthritis Prevalence

Definition

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

Prevalence

WV: 40.1% (95% CI: 38.5-41.8)
U.S.: 25.8% (95% CI: 25.5-26.1)
The West Virginia prevalence of arthritis was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 54 BRFSS participants.

Gender

Men: 36.3% (95% CI: 33.8-38.7)
Women: 43.8% (95% CI: 41.6-46.1)
The prevalence of arthritis was significantly higher among women than men.

Age

There were significant differences in the prevalence of arthritis between each age group. The prevalence of arthritis was significantly higher among adults aged 65 and older (65.6%) than all other age groups.

Education

There were significant differences in the prevalence of arthritis between each educational attainment level. The prevalence of arthritis was significantly higher among adults with less than a high school education (60.6%) than all other educational attainment levels. The prevalence of arthritis was significantly lower among college graduates (25.9%) than all other educational attainment groups.

Household Income

The prevalence of arthritis was significantly higher among adults with an annual household income of less than $15,000 (58.5%) than all other annual household income levels. The prevalence of arthritis was significantly lower among adults with an annual household income of $50,000 or more than all other annual household income levels.

Trend

There is no change in the prevalence of arthritis from 2011 to 2018. Because of the change in BRFSS methodology, results from 2011 to 2018 are not directly comparable to previous years.

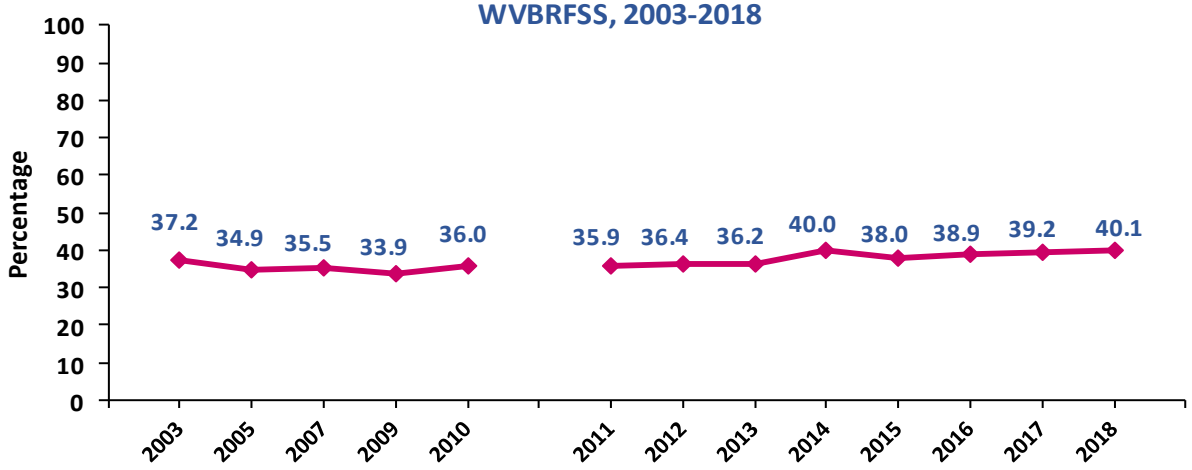
County

The 2014-2018 West Virginia state prevalence of arthritis was 39.2%. There were 8 counties with significantly lower prevalence compared to the state. These counties were Berkeley, Cabell, Hardy, Jefferson, Marion, Monongalia, Ohio, and Tucker. There were 8 counties with significantly higher prevalence than the state. These counties were Braxton, Fayette, Lincoln, Logan, McDowell, Nicholas, Raleigh, and Webster.

Table 23.1 Prevalence of Arthritis by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	25,4352	**36.3**	33.8-38.7	320,328	**43.8**	41.6-46.1	574,680	**40.1**	38.5-41.8
Age									
18-24	4,785	**5.6***	0.0-12.3	2,419	**3.1***	0.0-6.5	7,204	**4.4***	0.5-8.3
25-34	11,993	**11.2**	6.4-16.0	16,872	**16.5**	10.9-22.0	28,865	**13.8**	10.1-17.4
35-44	29,237	**27.3**	20.9-33.6	25,251	**23.9**	18.3-29.4	54,488	**25.6**	21.3-29.8
45-54	47,711	**43.8**	37.6-50.0	54,102	**47.9**	42.4-53.5	102,540	**45.9**	41.7-50.0
55-64	63,102	**50.1**	45.1-55.1	80,888	**62.8**	58.3-67.2	143,990	**56.5**	53.1-59.8
65+	96,797	**57.8**	55.7-63.9	138,371	**70.5**	67.3-73.6	235,068	**65.6**	63.1-68.2
Education									
Less than H.S.	50,739	**53.7**	45.0-62.3	70,137	**66.8**	59.2-74.4	120,876	**60.6**	54.8-66.4
H.S. or G.E.D.	113,609	**38.3**	34.3-42.2	129,621	**46.8**	43.0-50.7	243,230	**42.4**	39.6-45.2
Some Post-H.S.	60,621	**33.1**	28.7-37.6	80,637	**38.8**	34.7-42.8	141,258	**36.1**	33.2-39.1
College Graduate	28,955	**23.0**	19.6-26.5	39,843	**28.6**	25.1-32.0	68,798	**25.9**	23.5-28.4
Income									
Less than $15,000	30,673	**56.8**	47.8-65.8	57,762	**59.5**	53.0-66.0	88,436	**58.5**	53.3-63.8
$15,000 - 24,999	53,155	**43.6**	37.3-50.0	73,606	**52.3**	46.7-57.8	126,761	**48.3**	44.1-52.5
$25,000 - 34,999	35,883	**37.9**	31.3-44.5	44,714	**43.6**	37.2-50.0	80,597	**40.9**	36.3-45.5
$35,000 - 49,999	41,756	**41.2**	34.8-47.5	35,095	**42.7**	36.1-49.2	76,851	**41.8**	37.3-46.4
$50,000 - 74,999	25,021	**26.7**	20.8-32.6	25,449	**32.8**	26.8-38.9	50,470	**29.5**	25.2-33.7
$75,000+	35,518	**24.7**	20.4-29.0	31,892	**26.6**	22.1-31.1	67,410	**25.6**	22.4-28.7

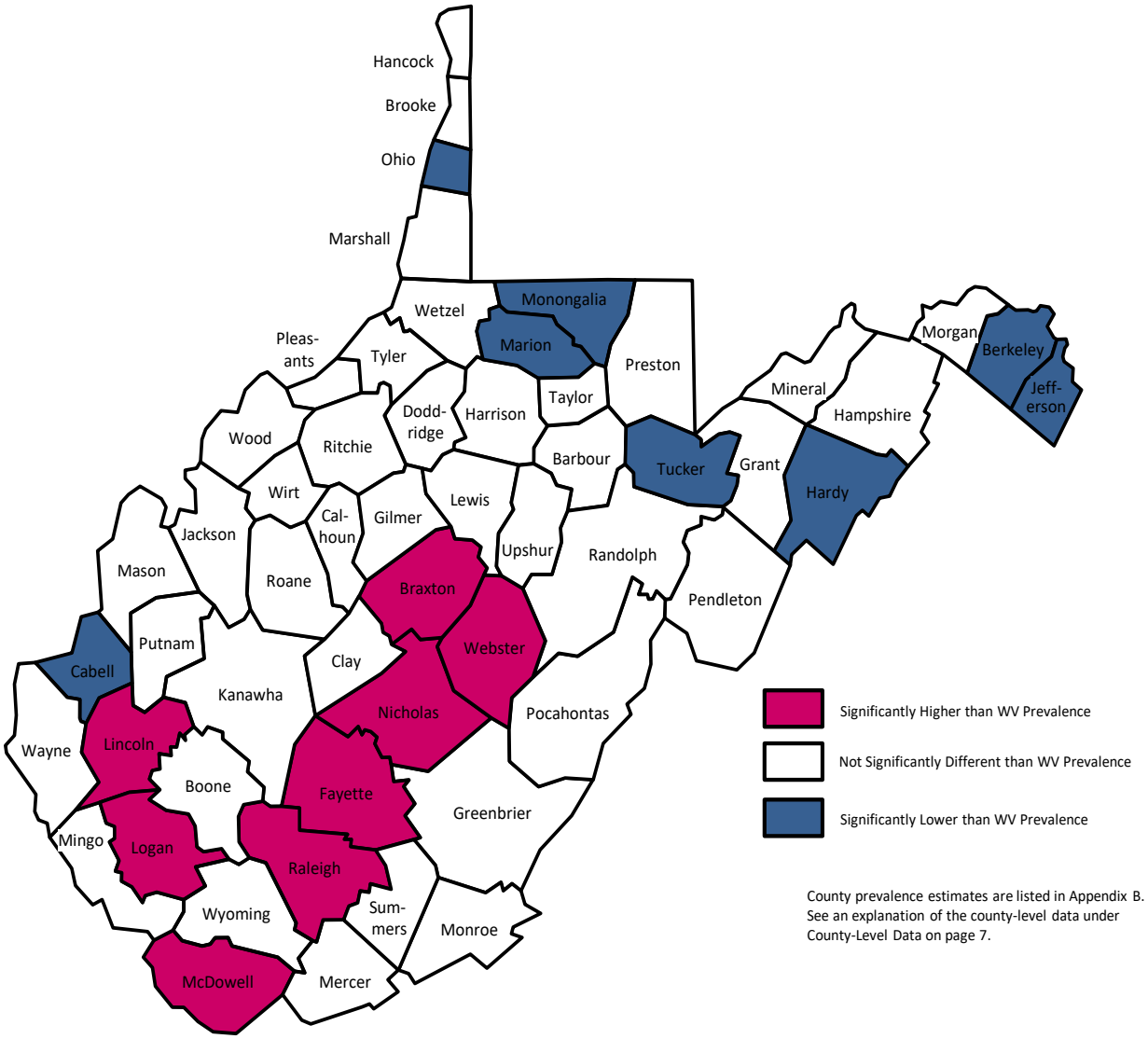
Figure 23.1 Prevalence of Arthritis by Year: WVBRFSS, 2003-2018



*Due to changes in sample composition and weighting methodology, 2011-2018 results are not directly comparable to previous years.

Figure 23.2 Prevalence of Arthritis by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 39.2%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

CHAPTER 24: KIDNEY DISEASE

Kidney Disease Prevalence

Definition

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

Prevalence

WV: 4.6% (95% CI: 4.0-5.2)
U.S.: 3.1% (95% CI: 3.0-3.2)
The West Virginia prevalence of kidney disease was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 54 BRFSS participants.

Gender

Men: 3.8% (95% CI: 3.0-4.6)
Women: 5.4% (95% CI: 4.4-6.3)
There was no gender difference in the prevalence of kidney disease.

Age

The prevalence of kidney disease was significantly higher among adults aged 55 and older than all other age groups.

Education

The prevalence of kidney disease was significantly higher among adults with less than a high school education (9.1%) than all other educational attainment levels.

Household Income

The prevalence of kidney disease was significantly higher among adults with an annual household income of less than $15,000 (10.1%) than adults with an annual household income of $25,000 or more per year.

Trend

There was an increase in prevalence of kidney disease from 2011 to 2018.

County

The 2014-2018 West Virginia state prevalence of kidney disease was 3.9%. There were 9 counties with a significantly lower prevalence compared to the state; Berkeley, Brooke, Doddridge, Gilmer, Jefferson, Monongalia, Pendleton, Tucker, and Upshur. No county had a significantly higher prevalence than the state.

Table 24.1 Prevalence of Kidney Disease by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	26,890	**3.8**	3.0-4.6	39,168	**5.4**	4.4-6.3	66,058	**4.6**	4.0-5.2
Age									
18-24	0	**0.0**	0.0-0.0	685.6	**0.9***	0.0-2.6	685.6	**0.4***	0.0-1.2
25-34	1,107	**1.0***	0.0-2.3	1,407	**1.4***	0.0-3.1	2,514	**1.2***	0.1-2.3
35-44	1406	**1.3***	0.1-2.5	2,328	**2.2***	0.3-4.1	3,734	**1.7***	0.6-2.9
45-54	2,712	**2.4***	0.6-4.3	6,433	**5.9**	3.3-8.5	9,145	**4.2**	2.6-5.7
55-64	9,112	**7.2**	4.6-9.9	9,964	**7.7**	5.0-10.4	19,076	**7.5**	5.6-9.4
65+	12,317	**7.5**	5.2-9.9	17,551	**9.0**	6.9-11.0	29,868	**8.3**	6.8-9.8
Education									
Less than H.S.	5,359	**5.6**	2.6-8.7	12,881	**12.3**	7.8-16.8	18,241	**9.1**	6.3-11.9
H.S. or G.E.D.	11,317	**3.8**	2.5-5.1	12,918	**4.7**	3.3-6.0	24,235	**4.2**	3.3-5.2
Some Post-H.S.	6,164	**3.3**	1.9-4.8	9,745	**4.7**	3.3-6.2	15,909	**4.1**	3.0-5.1
College Graduate	4,049	**3.2**	1.8-4.7	3,624	**2.6**	1.4-3.8	7,674	**2.9**	1.9-3.8
Income									
Less than $15,000	5,989	**11.1**	6.1-16.1	9,381	**9.7**	6.0-13.3	15,370	**10.1**	7.2-13.1
$15,000 - 24,999	3,849	**3.1***	1.3-5.0	1,108	**7.9**	5.4-10.3	14,931	**5.7**	4.1-7.3
$25,000 - 34,999	3,091	**3.2***	1.3-5.2	6,108	**6.0**	3.0-8.9	9,199	**4.6**	2.8-6.5
$35,000 - 49,999	5,025	**5.0**	2.5-7.5	1,981	**2.4***	0.9-4.0	7,006	**3.8**	2.3-5.4
$50,000 - 74,999	3,834	**4.1***	1.7-6.5	1,890	**2.4***	0.6-4.3	5,724	**3.3**	1.8-4.9
$75,000+	1,930	**1.3***	0.3-2.3	2,786	**2.3***	0.8-3.8	4,715	**1.8**	0.9-2.7

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

Figure 24.1 Prevalence of Kidney Disease by Year: WVBRFSS, 2011-2018

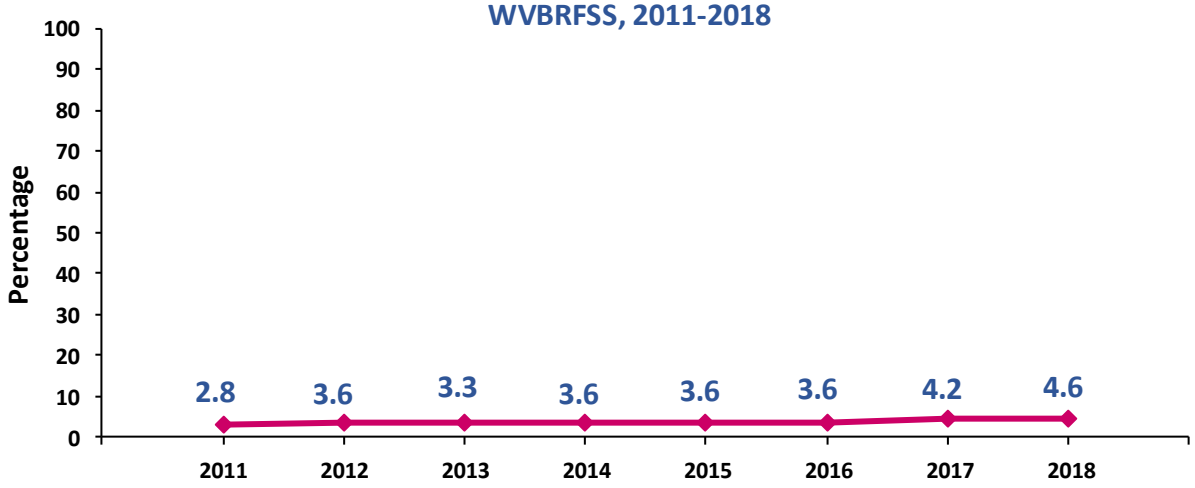
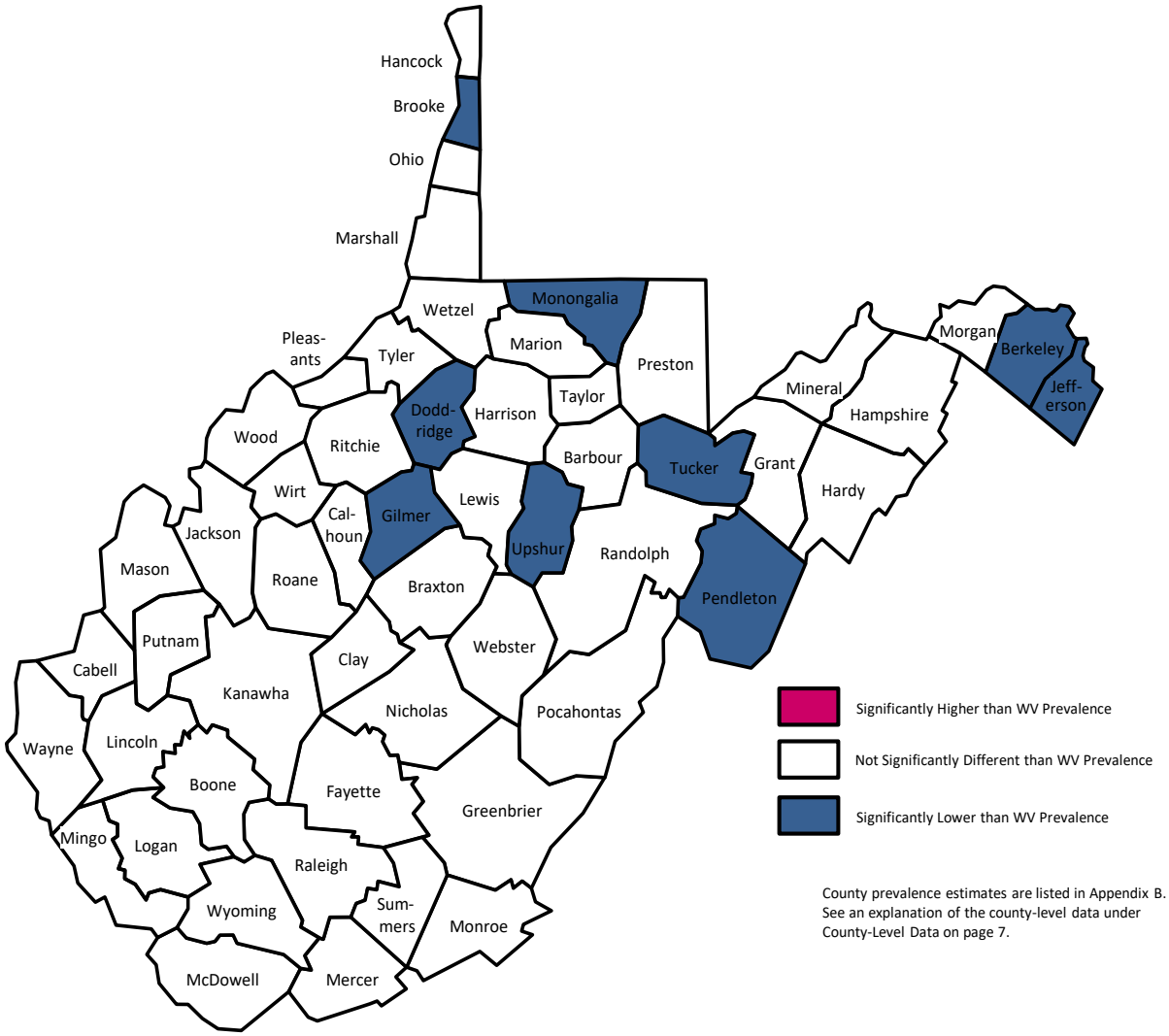


Figure 24.2 Prevalence of Kidney Disease by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 3.9%



County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

CHAPTER 25: DEPRESSION

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: 26.6% (95% CI: 25.0-28.1)
U.S.: 18.3% (95% CI: 18.1-18.6)
The West Virginia prevalence of depression was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 54 BRFSS participants.

Gender

Men: 20.7% (95% CI: 18.6-22.9)
Women: 32.2% (95% CI: 30.0-34.4)
The prevalence of depression was significantly higher among women than men.

Age

The prevalence of depression was significantly higher among adults aged 25-64 than adults aged 65 and older (18.2%).

Education

The prevalence of depression was significantly higher among adults with less than a high school education (41.6%) than all other educational attainment levels.

Household Income

The prevalence of depression was significantly higher among adults with an annual household income less than $25,000 than all other annual household income levels.

Trend

There was an increase in prevalence of depression from 2011 to 2018.

County

The 2014-2018 West Virginia state prevalence of depression was 24.6%. There were 8 counties with a significantly lower prevalence compared to the state; Gilmer, Grant, Hardy, Jefferson, Mason, Monongalia, Pendleton, and Pleasant. There were 4 counties with a significantly higher prevalence than the state; Fayette, Logan, Nicholas, and Wyoming.

Table 25.1 Prevalence of Depression by Demographic Characteristics: WVBRFSS, 2018

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	145,728	**20.7**	18.6-22.9	234,793	**32.2**	30.0-34.4	380,521	**26.6**	25.0-28.1
Age									
18-24	17,215	**20.1**	11.8-28.5	25,039	**31.8**	22.2-41.4	42,254	**25.7**	19.4-32.1
25-34	22,391	**21.1**	14.6-27.5	39,211	**38.4**	31.2-45.7	61,603	**29.6**	24.6-34.5
35-44	29,070	**27.0**	20.7-33.2	32,483	**30.5**	24.7-36.2	61,553	**28.7**	24.5-33.0
45-54	25,613	**23.1**	17.7-28.6	45,948	**42.1**	36.6-47.6	71,561	**32.6**	28.6-36.5
55-64	26,431	**21.0**	16.8-25.2	50,283	**39.0**	34.3-43.6	76,714	**30.1**	26.9-33.3
65+	24,631	**15.1**	12.1-18.1	40,755	**20.8**	17.8-23.6	65,385	**18.2**	16.1-20.3
Education									
Less than H.S.	35,650	**37.4**	29.2-45.6	47,456	**45.4**	38.1-52.7	83,107	**41.6**	36.1-47.0
H.S. or G.E.D.	57,264	**19.2**	15.9-22.5	90,091	**32.5**	28.8-36.2	147,354	**25.6**	23.1-28.1
Some Post-H.S.	32,423	**17.7**	13.9-21.6	64,944	**31.4**	27.4-35.4	97,367	**25.0**	22.2-27.8
College Graduate	19,964	**15.9**	12.5-19.3	32,303	**23.2**	19.7-26.7	52,266	**19.7**	17.3-22.2
Income									
Less than $15,000	22,083	**40.9**	32.1-49.7	49,179	**51.3**	44.8-57.7	71,262	**47.5**	42.3-52.8
$15,000 - 24,999	44,743	**36.6**	30.2-43.1	58,142	**41.1**	35.7-46.5	102,885	**39.0**	34.9-43.2
$25,000 - 34,999	12,857	**13.6**	8.4-18.8	24,509	**24.0**	18.2-29.6	37,365	**19.0**	15.1-22.9
$35,000 - 49,999	16,377	**16.2**	11.3-21.2	20,661	**25.1**	18.8-31.4	37,038	**20.2**	16.2-24.2
$50,000 - 74,999	11,327	**12.0**	7.2-16.7	18,215	**23.5**	18.0-29.0	29,542	**17.2**	13.6-20.8
$75,000+	18,608	**12.9**	9.2-16.6	28,037	**23.5**	18.8-28.2	46,645	**17.7**	14.8-20.6

Figure 25.1 Prevalence of Depression by Year: WVBRFSS, 2011-2018

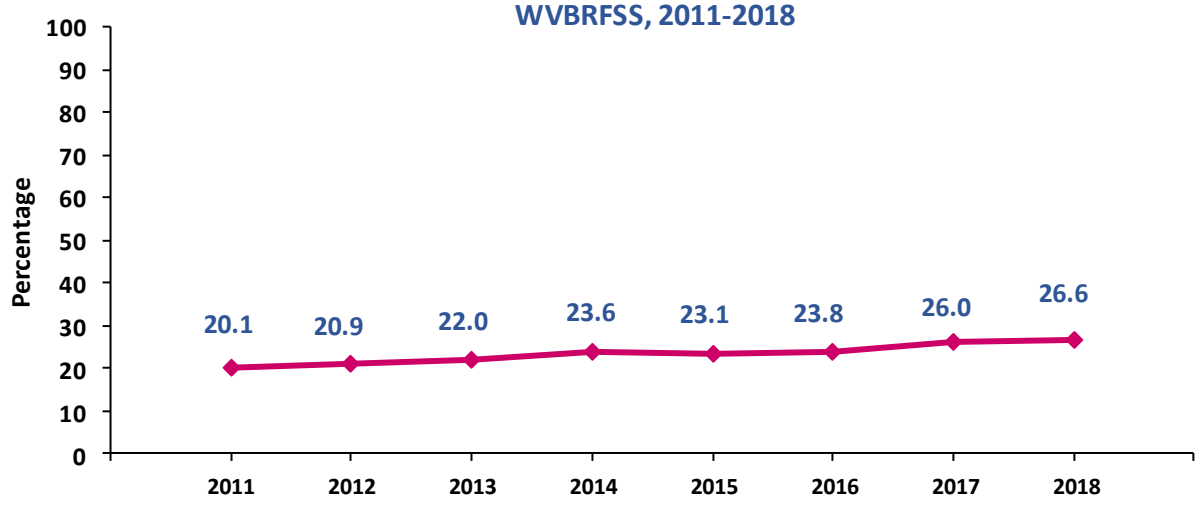
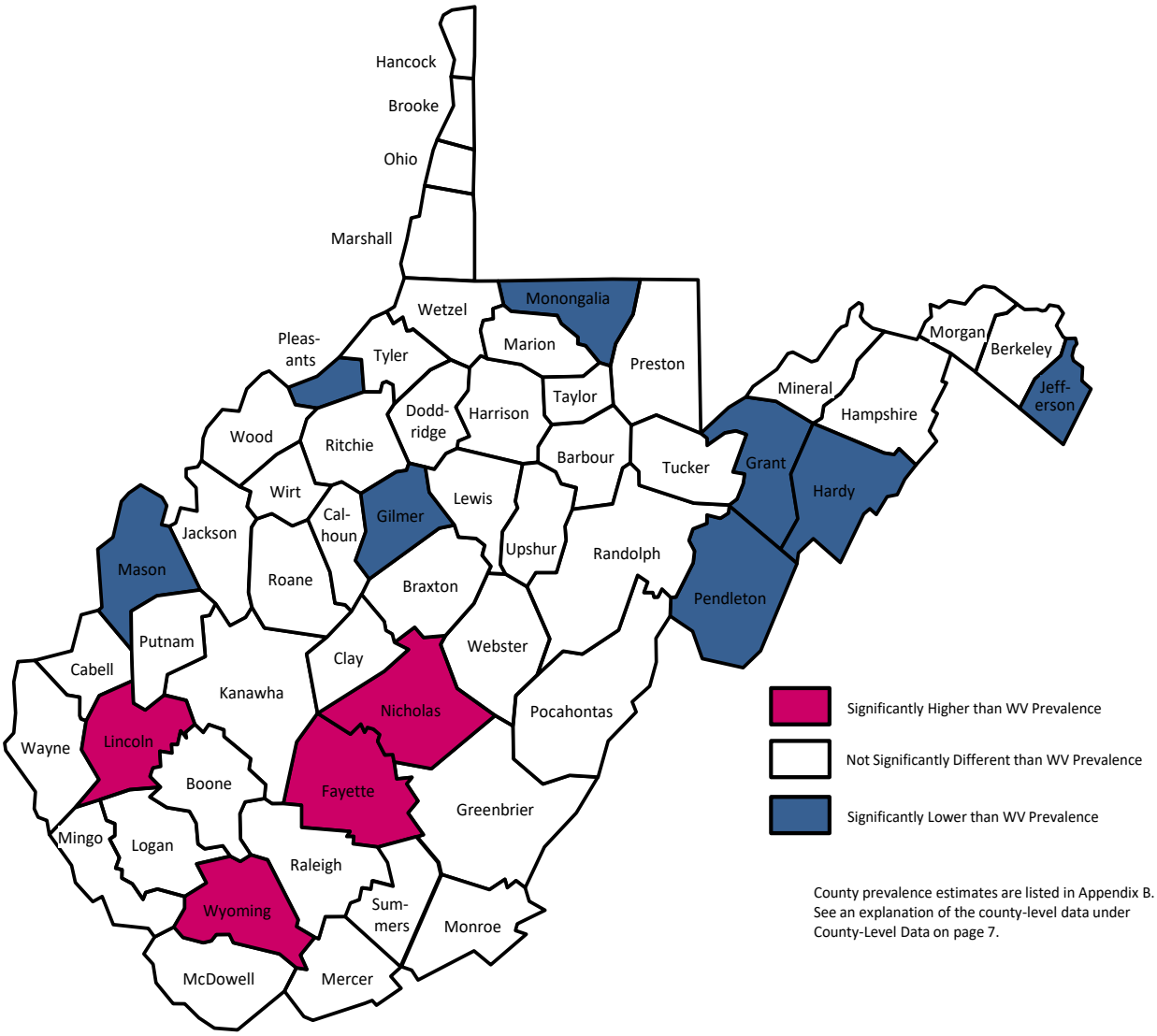


Figure 25.2 Prevalence of Depression by County: WVBRFSS, 2014-2018

WV Prevalence (2014-2018) - 24.6%

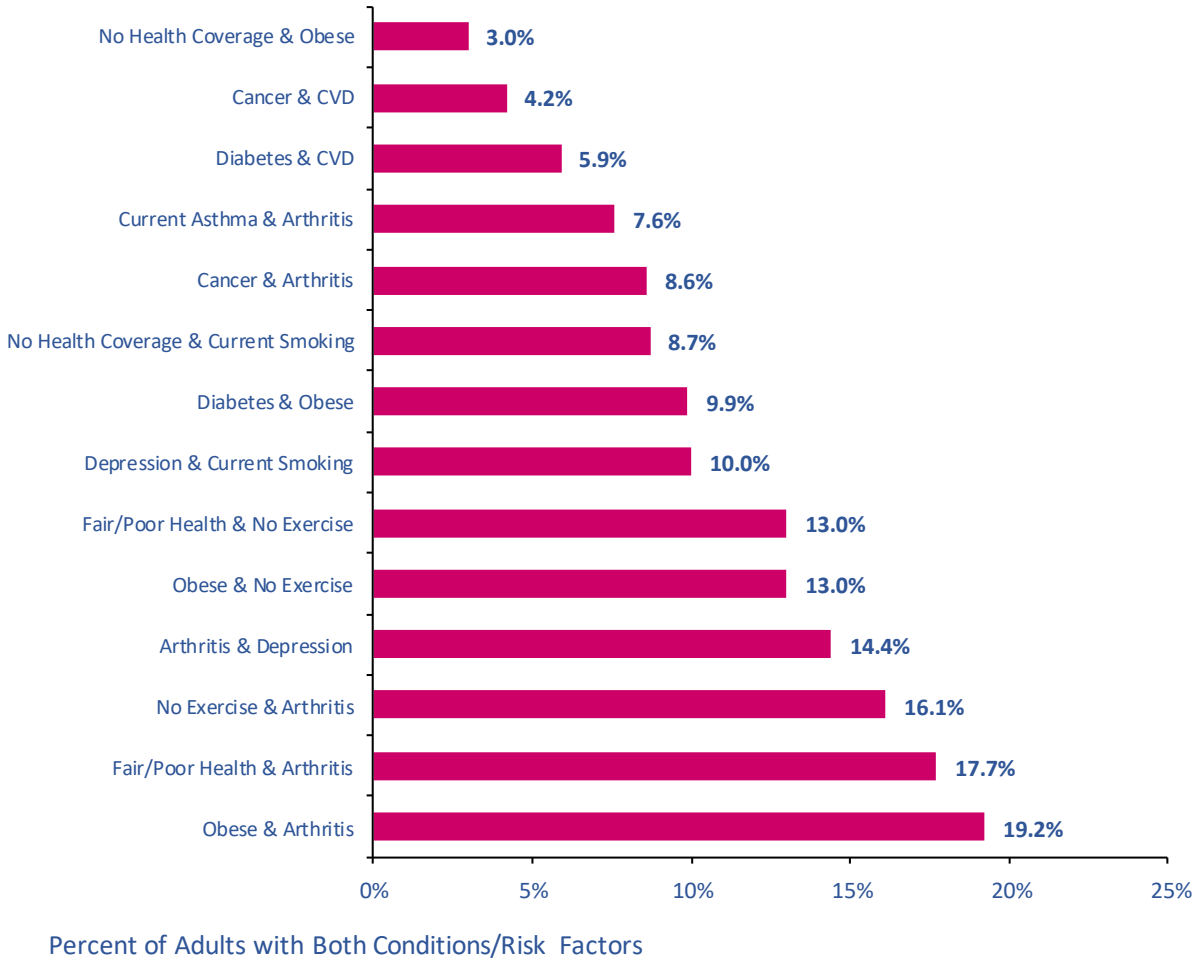


County prevalence estimates are listed in Appendix B. See an explanation of the county-level data under County-Level Data on page 7.

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 2018 (see Figure 26.1 and Table 26.1). For definitions of risk factors and health conditions, please refer to appropriate chapter in this report.

Figure 26.1 Comorbidities: The Prevalence of Multiple Risk Behaviors and/or Health Conditions Among Adults: WVBRFSS, 2018



CHAPTER 26: COMORBIDITIES

Table 26.1 Comorbidities: The Prevalence of Multiple Risk Behaviors and/or Health Conditions Among Adults: WVBRFSS, 2018

% of Total Population	Fair/Poor Health	No Health Coverage	No Exercise	Obese	Current Smoking	CVD	Diabetes	Current Asthma	Cancer	Arthritis	Depression
Fair/Poor Health	26.3 (24.8-27.8)	1.6 (1.1-2.0)	13.0 (11.9-14.1)	13.2 (12.0-14.3)	9.1 (8.1-10.2)	9.4 (8.5-10.3)	8.8 (7.9-9.7)	6.3 (5.5-7.2)	6.1 (5.4-6.8)	17.7 (16.5-19.0)	11.5 (10.4-12.6)
No Health Coverage	1.6 (1.1-2.0)	7.9 (6.9-9.0)	2.0 (1.5-2.5)	3.0 (2.4-3.7)	3.1 (2.4-3.8)	0.6 (0.3-0.9)	0.6 (0.3-0.9)	0.7 (0.4-1.1)	0.4 (0.2-0.6)	2.0 (1.5-2.4)	2.1 (1.6-2.7)
No Exercise	13.0 (11.9-14.1)	2.0 (1.5-2.5)	28.2 (26.7-29.7)	13.0 (11.9-14.1)	9.0 (8.0-10.0)	7.1 (6.3-7.9)	7.3 (6.5-8.1)	5.1 (4.3-5.9)	5.5 (4.8-6.1)	16.1 (14.9-17.3)	10.9 (9.8-11.9)
Obese	13.2 (12.0-14.3)	3.0 (2.4-3.7)	13.0 (11.9-14.1)	39.5 (37.8-41.3)	8.4 (7.4-9.4)	7.0 (6.2-7.8)	9.9 (8.9-10.8)	6.0 (5.2-6.9)	5.7 (5.0-6.4)	19.2 (17.8-20.5)	12.4 (11.2-13.5)
Current Smoking	9.1 (8.1-10.2)	3.1 (2.4-3.8)	9.0 (8.0-10.0)	8.4 (7.4-9.4)	25.2 (23.6-26.9)	4.6 (3.9-5.3)	3.8 (3.2-4.4)	3.8 (3.1-4.4)	3.0 (2.5-3.6)	10.4 (9.3-11.4)	10.0 (8.8-11.1)
CVD	9.4 (8.5-10.3)	0.6 (0.3-0.9)	7.1 (6.3-7.9)	7.0 (6.2-7.8)	4.6 (3.9-5.3)	15.5 (14.4-16.6)	5.9 (5.2-6.6)	3.3 (2.7-3.9)	4.2 (3.6-4.8)	10.8 (9.9-11.8)	5.8 (5.0-6.5)
Diabetes	8.8 (7.9-9.7)	0.6 (0.3-0.9)	7.3 (6.5-8.1)	9.9 (8.9-10.8)	3.8 (3.2-4.4)	5.9 (5.2-6.6)	16.2 (15.0-17.3)	3.2 (2.6-3.8)	3.9 (3.3-4.4)	10.6 (9.6-11.5)	5.6 (4.8-6.3)
Current Asthma	6.3 (5.5-7.2)	0.7 (0.4-1.1)	5.1 (4.3-5.9)	6.0 (5.2-6.9)	3.8 (3.1-4.4)	3.3 (2.7-3.9)	3.2 (2.6-3.8)	12.3 (11.1-13.4)	2.2 (1.7-2.7)	7.6 (6.7-8.5)	5.7 (4.9-6.6)
Cancer	6.1 (5.4-6.8)	0.4 (0.2-0.6)	5.5 (4.8-6.1)	5.7 (5.0-6.4)	3.0 (2.5-3.6)	4.2 (3.6-4.8)	3.9 (3.3-4.4)	2.2 (1.7-2.7)	14.1 (13.1-15.1)	8.9 (8.0-9.7)	4.4 (3.8-5.0)
Arthritis	17.7 (16.5-19.0)	2.0 (1.5-2.4)	16.1 (14.9-17.3)	19.2 (17.8-20.5)	10.4 (9.3-11.4)	10.8 (9.9-11.8)	10.6 (9.6-11.5)	7.6 (6.7-8.5)	8.9 (8.0-9.7)	40.1 (38.5-41.8)	14.4 (13.2-15.5)
Depression	11.5 (10.4-12.6)	2.1 (1.6-2.7)	10.9 (9.8-11.9)	12.4 (11.2-13.5)	10.0 (8.8-11.1)	5.8 (5.0-6.5)	5.6 (4.8-6.3)	5.7 (4.9-6.6)	4.4 (3.8-5.0)	14.4 (13.2-15.5)	26.6 (25.0-28.1)

*Table interpretation: Each cell represents the percentage of West Virginia adults with **both** of the conditions/risk factors. For example, 7.6% of West Virginia adults have **both** asthma and arthritis.*

West Virginia Behavioral Risk Factor Surveillance System Report

2018

Appendices

Appendix A
Behavioral Risk Factor Prevlance in 50 States, District of Columbia, and Territories
United States, 2018

State	Fair or Poor Health		Obesity		Physical Inactivity		Current Smoking		Cardiovascular Disease		Diabetes		Cancer		Arthritis		Depression	
	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank
Alabama	22.9	6	36.2	6	30.7	7	19.2	12	12.9	3	14.5	3	15.4	2	34.7	2	24.0	5
Alaska	15.6	40	29.5	36	19.6	47	19.1	14	6.9	49	8.8	47	8.8	49	23.5	43	20.2	21
Arizona	19.4	15	29.5	37	22.1	38	14.0	41	9.3	21	10.8	29	14.2	5	25.7	32	16.7	39
Arkansas	24.7	3	37.1	3	31.0	4	22.7	3	13.2	2	13.9	6	15.1	3	33.0	4	22.5	12
California	18.1	25	25.8	48	21.0	43	11.2	51	6.7	50	10.4	34	10.6	46	20.5	51	15.4	48
Colorado	14.1	47	22.9	53	16.4	53	14.5	38	6.0	52	7.0	53	12.1	29	22.6	46	15.7	45
Connecticut	13.8	49	27.4	46	22.4	35	12.2	49	7.5	45	9.7	41	12.2	25	26.0	28	15.5	47
Delaware	17.2	29	33.5	18	26.8	14	16.5	25	9.1	26	11.9	20	12.1	27	26.0	27	16.9	38
D.C.	13.5	51	24.7	52	19.6	48	13.8	42	6.4	51	8.4	51	7.6	51	18.7	52	19.4	29
Florida	20.8	12	30.7	28	26.8	13	14.5	39	11.0	11	12.6	12	15.6	1	26.5	23	15.6	46
Georgia	19.1	20	32.5	22	26.2	16	16.1	27	9.3	20	12.6	11	10.7	44	25.3	34	17.1	37
Guam	22.0	9	29.8	34	30.0	8	21.9	4	8.1	37	13.7	8	3.6	53	13.9	53	7.7	53
Hawaii	16.3	34	24.9	51	19.9	46	13.4	45	7.4	46	11.5	24	9.4	48	22.2	47	12.6	51
Idaho	15.9	36	28.4	41	20.5	45	14.7	36	8.0	38	10.2	36	13.5	10	26.3	26	19.5	28
Illinois	16.8	32	31.8	25	24.6	22	15.5	32	8.3	30	10.0	37	10.7	43	24.8	38	17.7	33
Indiana	19.3	17	34.1	16	27.4	11	21.1	5	11.0	10	12.5	17	12.1	28	28.5	18	19.7	25
Iowa	14.3	45	35.3	7	22.9	30	16.6	24	8.1	36	10.0	38	12.2	24	25.4	33	16.4	42
Kansas	17.0	31	34.4	12	22.5	33	17.3	22	8.9	28	11.6	22	12.2	26	25.7	31	20.7	20
Kentucky	23.5	4	36.6	5	32.4	2	23.4	2	12.6	4	13.7	9	14.4	4	33.4	3	24.0	6
Louisiana	22.2	8	36.8	4	30.8	6	20.5	8	11.5	8	14.1	5	11.0	40	29.2	13	23.2	9
Maine	18.1	26	30.4	29	22.5	32	17.8	20	10.6	12	10.6	32	13.8	8	32.8	5	22.8	11
Maryland	15.9	37	30.9	26	22.9	29	12.5	48	8.5	29	12.0	19	11.4	35	26.4	24	15.4	49
Massachusetts	14.2	46	25.7	49	22.4	34	13.4	44	7.3	47	8.6	50	11.3	37	24.2	42	18.1	31
Michigan	19.3	16	33.0	19	23.8	26	18.9	16	9.8	18	11.7	21	12.8	16	32.1	8	23.2	10
Minnesota	13.5	52	30.1	32	20.5	44	15.1	34	7.3	48	8.9	46	11.0	41	22.0	48	17.6	34
Mississippi	23.3	5	39.5	2	32.0	3	20.5	7	9.8	6	14.3	4	11.9	32	32.2	7	21.7	15
Missouri	20.4	14	35.0	9	26.1	17	19.4	11	7.3	16	11.5	23	12.7	20	31.1	9	22.2	13
Montana	15.1	41	26.9	47	22.7	31	18.0	19	11.6	27	9.3	43	13.9	7	28.6	16	21.9	14
Nebraska	14.5	44	34.1	15	23.8	28	16.0	28	10.1	41	9.7	40	11.3	36	25.2	36	17.3	35
Nevada	20.6	13	29.5	38	25.0	21	15.7	29	9.0	22	10.7	31	10.8	42	24.8	39	15.7	44
New Hampshire	13.4	53	29.6	35	21.5	42	15.6	30	7.8	40	10.3	35	13.7	9	29.8	12	20.7	19
New Jersey	16.7	33	25.6	50	28.5	9	13.1	46	8.1	35	10.8	30	11.0	39	23.1	44	11.8	52
New Mexico	21.5	11	32.3	23	22.2	37	15.2	33	8.2	32	12.5	14	11.1	38	27.0	22	17.2	36
New York	17.1	30	27.6	44	23.8	27	12.8	47	7.9	39	11.0	27	10.0	47	22.7	45	15.1	50
North Carolina	19.1	19	33.0	20	23.9	25	17.4	21	10.2	15	12.5	16	12.7	17	27.6	21	19.8	24
North Dakota	13.9	48	35.1	8	22.3	36	19.1	13	8.2	31	9.4	42	10.6	45	25.9	30	19.6	26
Ohio	18.7	24	34.0	17	25.4	19	20.5	9	10.3	14	12.2	18	12.1	31	30.8	10	20.0	22
Oklahoma	21.7	10	34.8	10	27.2	12	19.7	10	11.6	7	12.5	15	12.1	30	28.5	17	23.3	8
Oregon	18.7	23	29.9	33	19.3	49	15.6	31	9.5	19	11.0	26	13.5	11	29.1	14	26.2	2
Pennsylvania	18.9	22	30.9	27	24.0	23	17.0	23	9.9	17	11.3	25	12.4	22	28.7	15	21.6	16
Puerto Rico	35.0	1	32.9	21	47.3	1	10.0	52	11.3	9	15.5	2	6.8	52	24.6	40	19.3	30
Rhode Island	17.3	28	27.7	43	25.3	20	14.6	37	9.2	23	10.9	28	12.7	19	28.2	20	20.8	18
South Carolina	18.9	21	34.3	14	26.7	15	18.0	18	10.3	13	13.3	10	13.1	12	30.3	11	19.9	23
South Dakota	14.6	42	30.1	31	24.0	23	19.0	15	9.1	25	9.3	44	12.8	15	25.1	37	16.3	43
Tennessee	22.7	7	34.4	13	30.9	5	20.7	6	12.3	5	13.8	7	13.0	13	32.5	6	25.2	3
Texas	19.1	18	34.8	11	25.6	18	14.4	40	9.1	24	12.6	13	8.7	50	21.3	50	16.5	41
Utah	14.5	43	27.8	42	17.5	52	9.0	53	5.9	53	8.4	52	12.4	21	21.6	49	24.3	4
Vermont	13.8	50	27.5	45	18.9	50	13.7	43	7.7	43	9.2	45	12.8	14	28.4	19	21.2	17
Virginia	17.3	27	30.3	30	22.0	39	15.0	35	8.2	33	10.5	33	11.5	33	26.0	29	16.6	40
Washington	15.7	38	28.7	40	17.6	51	12.0	50	7.8	42	9.9	39	12.4	23	24.5	41	23.7	7
West Virginia	26.3	2	39.5	1	28.2	10	25.2	1	15.5	1	16.2	1	14.1	6	40.1	1	26.6	1
Wisconsin	15.7	39	32.0	24	21.8	40	16.4	26	7.5	44	8.7	49	11.5	34	26.3	25	19.6	27
Wyoming	16.0	35	29.0	39	21.7	41	18.8	17	8.1	34	8.7	48	12.7	18	25.3	35	17.9	32
United States	**18.6**		**30.9**		**24.5**		**15.5**		**9.1**		**11.4**		**11.7**		**25.8**		**18.3**	

Source: Centers for Disease Control & Prevention, 2018 Behavioral Risk Factor Surveillance System data; West Virginia Department of Health and Human Resources, Health Statistics Center, 2018

Appendix B
2014-2018 WV Behavioral Risk Factors and Health Conditions by County

County	Fair or Poor Health			No Health Care Coverage (18-64)			Obesity			Obese or Overweight			Physical Inactivity		
	%	Rank	Sig	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
Barbour	29.8	17	ns	9.5	34	ns	37.5	36	ns	67.0	45	ns	36.0	7	ns
Berkeley	20.8	50	L	11.9	17	ns	37.5	37	ns	72.4	26	ns	27.7	38	ns
Boone	35.7	7	H	8.6	45	ns	43.2	7	ns	77.2	8	H	30.8	23	ns
Braxton	21.3	46	ns	12.0	16	ns	38.8	29	ns	71.2	35	ns	29.0	33	ns
Brooke	23.0	40	ns	13.1	7	ns	34.5	44	ns	69.6	41	ns	30.4	25	ns
Cabell	21.2	49	L	12.8	10	ns	13.8	49	L	67.6	44	ns	27.1	40	ns
Calhoun	31.3	13	ns	8.8	43	ns	30.7	50	ns	61.3	54	ns	24.9	49	ns
Clay	33.1	10	ns	15.9	19	ns	47.9	2	H	79.1	4	ns	35.0	9	ns
Doddridge	17.8	53	ns	7.0	53	ns	43.1	9	ns	73.8	18	ns	36.1	6	ns
Fayette	35.3	8	H	12.3	13	ns	41.4	16	ns	72.4	27	ns	32.7	15	ns
Gilmer	21.1	49	ns	24.3	1	ns	43.4	6	ns	84.4	1	H	28.7	34	ns
Grant	30.4	14	ns	11.5	20	ns	38.2	31	ns	82.6	2	H	35.9	8	ns
Greenbrier	28.9	20	ns	11.3	22	ns	35.8	41	ns	70.5	38	ns	28.0	37	ns
Hampshire	23.9	35	ns	8.9	42	ns	39.7	25	ns	71.5	33	ns	25.0	47	ns
Hancock	22.7	41	ns	13.5	4	ns	40.3	21	ns	74.6	15	ns	28.6	35	ns
Hardy	22.2	42	ns	7.2	52	ns	37.4	38	ns	70.8	36	ns	31.6	19	ns
Harrison	24.9	33	ns	12.3	14	ns	35.4	42	ns	71.8	31	ns	30.3	26	ns
Jackson	23.3	38	ns	11.1	24	ns	40.6	19	ns	70.5	37	ns	25.8	44	ns
Jefferson	14.1	54	L	9.1	41	ns	33.0	45	ns	65.9	49	ns	22.7	53	L
Kanawha	23.2	39	L	9.1	40	ns	37.6	35	ns	71.4	34	ns	27.7	29	ns
Lewis	24.1	34	ns	12.9	9	ns	43.2	8	ns	75.3	12	ns	34.1	11	ns
Lincoln	35.8	5	H	12.5	11	ns	41.9	15	ns	75.8	10	ns	31.9	18	ns
Logan	39.3	3	H	10.6	30	ns	42.3	13	ns	72.3	29	ns	39.1	3	H
Marion	25.7	30	ns	8.2	47	ns	32.8	46	L	66.0	48	L	24.9	48	L
Marshall	25.6	31	ns	7.8	51	ns	42.0	14	ns	74.4	16	ns	35.0	27	ns
Mason	25.1	32	ns	8.1	48	ns	43.0	10	ns	75.7	11	ns	30.2	10	ns
McDowell	42.6	1	H	17.3	2	ns	48.0	1	H	77.9	5	H	37.3	4	H
Mercer	32.6	11	H	13.2	5	ns	38.9	28	ns	73.2	23	ns	33.4	13	ns
Mineral	21.4	45	ns	9.3	37	ns	39.1	27	ns	72.3	28	ns	25.6	46	ns
Mingo	41.0	2	H	10.2	31	ns	40.5	20	ns	73.9	17	ns	45.7	1	H
Monongalia	13.6	55	L	10.9	27	ns	28.5	54	L	62.7	53	L	20.2	55	L
Monroe	29.0	18	ns	12.9	8	ns	27.6	55	L	59.9	55	L	26.9	41	ns
Morgan	27.2	24	ns	10.2	23	ns	43.8	5	ns	73.1	24	ns	31.2	21	ns
Nicholas	30.4	15	ns	12.3	12	ns	40.0	23	ns	73.6	19	ns	32.0	17	ns
Ohio	19.9	51	L	9.4	36	ns	30.6	51	L	66.5	46	ns	26.4	42	ns
Pendleton	22.1	43	ns	7.9	49	ns	42.6	11	ns	73.4	21	ns	31.4	20	ns
Pleasants	26.3	26	ns	10.8	28	ns	32.5	47	ns	68.3	42	ns	20.7	54	ns
Pocahontas	28.2	23	ns	13.2	6	ns	31.9	48	ns	65.7	51	ns	23.5	51	ns
Preston	19.6	52	L	10.7	29	ns	38.0	33	ns	73.4	22	ns	29.5	29	ns
Putnam	21.1	48	L	6.7	54	L	39.2	26	ns	75.2	14	H	25.7	45	ns
Raleigh	28.7	21	ns	9.5	35	ns	39.7	24	ns	73.6	20	ns	30.9	22	ns
Randolph	28.5	22	ns	9.3	38	ns	34.9	43	ns	68.9	50	ns	32.9	14	ns
Ritchie	23.9	36	ns	9.7	33	ns	46.5	3	ns	77.3	7	ns	32.2	16	ns
Roane	28.9	19	ns	11.1	25	ns	44.4	4	ns	77.5	6	ns	24.5	50	ns
Summers	36.8	4	H	5.1	55	L	37.0	40	ns	72.6	25	ns	29.3	30	ns
Taylor	26.6	25	ns	8.5	46	ns	40.9	18	ns	68.2	43	ns	29.2	32	ns
Tucker	21.7	44	ns	14.7	3	ns	30.2	53	ns	76.3	9	ns	22.9	52	ns
Tyler	26.3	27	ns	9.3	39	ns	30.6	52	ns	65.3	52	ns	28.1	36	ns
Upshur	25.9	29	ns	11.6	18	ns	38.2	32	ns	70.4	39	ns	26.2	43	ns
Wayne	30.0	16	ns	11.2	23	ns	40.2	22	ns	71.6	32	ns	33.4	12	ns
Webster	33.4	9	ns	10.1	26	ns	42.5	12	ns	79.7	3	H	37.2	5	ns
Wetzel	26.0	28	ns	8.8	44	ns	41.0	17	ns	70.1	40	ns	29.3	31	ns
Wirt	31.4	12	ns	7.9	50	ns	38.4	30	ns	66.0	47	ns	30.6	24	ns
Wood	23.4	37	ns	11.4	21	ns	37.1	39	ns	72.1	30	ns	29.7	28	ns
Wyoming	35.7	6	H	12.1	15	ns	37.9	34	ns	75.3	13	ns	40.2	2	H
West Virginia	**26**			**10.7**			**37.3**			**71.1**			**29.5**		

Source: West Virginia Behavioral Risk Factor Surveillance System (WVBRFSS), West Virginia Department of Health and Human Resources, Health Statistics Center, 2018.
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 6 about unreliable estimates.

Appendix B, continued
2014-2018 WV Behavioral Risk Factors and Health Conditions by County

County	Current Smoking			Smokeless Tobacco Use			Binge Drinking			Cardiovascular Disease			Diabetes		
	%	Rank	Sig	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
Barbour	32.1	2	ns	9.4	33	ns	8.9	32	ns	15.1	19	ns	18.9	6	ns
Berkeley	27.3	21	ns	5.3	53	L	14.0	7	ns	11.0	44	L	10.5	51	L
Boone	25.8	33	ns	14.7	6	H	8.5	34	ns	18.1	8	ns	19.6	5	ns
Braxton	23.8	42	ns	12.9	11	ns	8.4	36	ns	10.4	48	ns	13.1	44	ns
Brooke	26.6	28	ns	9.9	28	ns	18.0	2	H	16.7	13	ns	18.3	9	ns
Cabell	27.6	18	ns	5.5	52	L	12.5	13	ns	12.5	36	ns	12.3	46	L
Calhoun	27.5	19	ns	11.6	16	ns	11.0	20	ns	13.7	28	ns	11.2	50	ns
Clay	27.2	23	ns	13.6	9	ns	7.9	43	ns	17.4	11	ns	17.1	15	ns
Doddridge	16.4	55	ns	15.0	5	ns	4.0	55	L	7.3	55	L	15.6	23	ns
Fayette	30.6	5	H	10.7	20	ns	9.8	28	ns	16.6	15	ns	17.9	11	ns
Gilmer	25.3	37	ns	17.2	2	ns	6.9	48	ns	8.9	52	ns	20.1	3	ns
Grant	18.1	51	ns	15.0	4	H	6.1	50	ns	17.9	10	ns	23.3	1	H
Greenbrier	28.3	14	ns	8.9	37	ns	9.7	30	ns	15.4	18	ns	14.8	31	ns
Hampshire	24.4	40	ns	11.1	17	ns	13.3	9	ns	14.9	21	ns	12.7	45	ns
Hancock	27.1	25	ns	5.8	51	L	11.3	19	ns	10.8	46	L	16.7	17	ns
Hardy	26.2	32	ns	8.6	39	ns	8.3	37	ns	11.1	43	ns	13.2	43	ns
Harrison	26.5	30	ns	9.3	34	ns	11.4	18	ns	10.3	49	L	15.6	24	ns
Jackson	23.5	43	ns	8.3	41	ns	8.4	35	ns	12.6	35	ns	14.0	38	ns
Jefferson	21.8	48	ns	6.1	49	L	17.1	3	H	10.0	51	L	9.3	54	L
Kanawha	25.3	36	ns	6.3	48	L	12.4	15	ns	14.2	25	ns	15.9	21	ns
Lewis	29.6	11	ns	10.6	22	ns	8.2	40	ns	14.4	24	ns	15.5	25	ns
Lincoln	27.4	20	ns	18.8	1	H	9.8	29	ns	19.3	6	ns	18.5	8	ns
Logan	30.7	4	ns	10.3	26	ns	8.2	39	ns	19.2	7	H	22.2	2	H
Marion	27.1	24	ns	9.1	36	ns	12.4	14	ns	11.8	39	ns	12.1	47	ns
Marshall	28.2	16	ns	10.6	21	ns	15.9	4	ns	13.0	32	ns	14.4	35	ns
Mason	30.0	8	ns	7.0	44	ns	10.2	27	ns	13.3	29	ns	13.8	40	ns
McDowell	30.9	3	ns	10.5	23	ns	8.8	33	ns	22.5	2	ns	18.6	7	ns
Mercer	26.6	29	ns	9.4	32	ns	7.2	45	L	16.3	17	ns	14.1	37	ns
Mineral	23.2	45	ns	8.3	40	ns	12.6	12	ns	11.2	42	ns	13.8	39	ns
Mingo	33.5	1	H	10.3	27	ns	4.2	54	L	21.8	3	H	17.6	12	ns
Monongalia	18.0	53	L	5.2	54	L	24.7	1	H	7.7	54	L	9.0	55	L
Monroe	26.6	27	ns	14.6	7	ns	8.1	41	ns	20.1	5	ns	16.9	16	ns
Morgan	22.5	46	ns	9.8	29	ns	7.9	42	ns	14.1	26	ns	16.1	18	ns
Nicholas	28.2	15	ns	10.4	25	ns	11.0	21	ns	14.6	23	ns	11.9	48	ns
Ohio	25.5	35	ns	5.9	50	ns	13.7	8	ns	12.8	33	ns	9.8	53	L
Pendleton	18.0	52	ns	10.8	18	ns	15.0	6	ns	10.8	47	ns	17.5	13	ns
Pleasants	22.3	47	ns	8.8	38	ns	7.1	46	ns	11.9	38	ns	14.3	36	ns
Pocahontas	18.1	50	ns	6.5	46	ns	7.5	44	ns	12.6	34	ns	15.4	26	ns
Preston	25.7	34	ns	10.4	24	ns	13.0	10	ns	11.4	41	ns	15.0	29	ns
Putnam	20.4	49	L	7.3	43	ns	11.8	16	ns	11.0	45	L	10.1	52	L
Raleigh	28.1	17	ns	9.6	31	ns	8.3	38	L	13.2	31	ns	15.2	27	ns
Randolph	30.0	7	ns	13.0	10	H	12.7	11	ns	14.9	20	ns	14.8	32	ns
Ritchie	24.5	39	ns	12.8	12	ns	6.9	49	ns	12.5	37	ns	17.1	14	ns
Roane	26.4	31	ns	11.7	15	ns	5.8	52	L	17.9	9	ns	15.7	22	ns
Summers	25.1	38	ns	12.0	14	ns	11.6	17	ns	16.7	14	ns	15.2	28	ns
Taylor	24.2	41	ns	3.7	55	L	6.9	47	ns	11.6	40	ns	14.8	30	ns
Tucker	23.3	44	ns	6.5	45	ns	10.6	22	ns	8.7	53	L	13.2	41	ns
Tyler	27.3	22	ns	6.4	47	ns	10.3	26	ns	10.3	50	ns	11.7	49	ns
Upshur	29.9	9	ns	9.1	35	ns	10.5	24	ns	13.2	30	ns	13.2	42	ns
Wayne	28.4	12	ns	9.6	30	ns	8.9	31	ns	16.4	16	ns	19.6	4	H
Webster	29.8	10	ns	12.8	13	ns	5.2	53	L	14.7	22	ns	18.3	10	ns
Wetzel	27.0	26	ns	14.0	8	H	15.6	5	ns	17.2	12	ns	15.9	20	ns
Wirt	17.7	54	ns	10.7	19	ns	10.4	25	ns	26.6	1	H	14.5	33	ns
Wood	28.4	13	ns	7.4	42	ns	10.5	23	ns	13.7	27	ns	16.1	19	ns
Wyoming	30.4	6	ns	15.6	3	H	5.9	51	L	20.5	4	H	14.5	34	ns
West Virginia	**25.7**			**8.7**			**11.0**			**14.5**			**15.0**		

Source: West Virginia Behavioral Risk Factor Surveillance System (WVBRFSS), West Virginia Department of Health and Human Resources, Health Statistics Center, 2018.
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 6 about unreliable estimates.

Appendix B, Continued
2014-2018 WV Behavioral Risk Factors and Health Conditions by County

County	Cancer			Current Asthma			COPD			Arthritis			Depression		
	%	Rank	Sig	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
Barbour	15.7	8	ns	14.2	14	ns	16.0	16	ns	42.0	22	ns	30.9	6	ns
Berkeley	10.8	49	L	13.6	17	ns	12.0	40	ns	34.0	48	L	22.5	36	ns
Boone	14.5	18	ns	10.8	32	ns	17.9	10	ns	44.6	13	ns	29.5	11	ns
Braxton	15.4	12	ns	11.1	29	ns	14.4	23	ns	51.7	2	H	24.4	26	ns
Brooke	14.9	14	ns	13.0	20	ns	13.8	26	ns	40.0	30	ns	24.6	24	ns
Cabell	11.6	47	L	11.5	27	ns	13.6	28	ns	32.1	51	L	24.8	23	ns
Calhoun	22.3	1	ns	19.2	2	ns	13.3	30	ns	39.7	31	ns	22.8	34	ns
Clay	13.3	32	ns	8.5	48	ns	12.8	36	ns	45.7	8	ns	27.4	17	ns
Doddridge	14.3	20	ns	8.3	50	ns	8.9	50	ns	47.1	5	ns	23.1	31	ns
Fayette	15.0	13	ns	14.8	10	ns	21.6	4	H	45.2	10	H	30.4	8	H
Gilmer	13.1	37	ns	10.6	33	ns	6.0	55	L	33.0	49	ns	12.7	54	L
Grant	19.8	3	ns	10.5	35	ns	12.0	41	ns	43.2	18	ns	16.1	52	L
Greenbrier	15.5	10	ns	8.4	49	L	17.2	13	ns	41.6	23	ns	20.9	46	ns
Hampshire	9.3	54	L	9.1	46	ns	12.8	34	ns	35.9	41	ns	21.7	40	ns
Hancock	13.6	29	ns	8.1	51	L	11.1	45	ns	36.5	38	ns	20.5	47	ns
Hardy	12.6	41	ns	16.7	4	ns	13.0	31	ns	29.7	52	L	16.1	53	L
Harrison	14.7	16	ns	14.4	13	ns	13.7	27	ns	37.4	36	ns	23.6	29	ns
Jackson	12.3	42	ns	7.9	54	L	13.0	33	ns	36.1	40	ns	20.9	45	ns
Jefferson	9.9	52	L	8.1	53	L	8.5	51	L	22.7	54	L	19.3	48	L
Kanawha	13.4	30	ns	9.5	40	L	11.5	43	L	37.2	37	ns	25.7	20	ns
Lewis	17.4	5	ns	14.5	11	ns	12.7	37	ns	40.5	29	ns	23.3	30	ns
Lincoln	17.0	6	ns	19.4	1	H	18.8	8	ns	46.6	6	H	33.7	1	H
Logan	12.9	38	ns	16.0	8	H	21.7	3	H	51.0	3	H	30.0	9	ns
Marion	12.8	39	ns	10.6	34	ns	12.1	39	ns	34.4	47	L	24.0	28	ns
Marshall	13.9	24	ns	13.4	19	ns	15.5	18	ns	42.4	21	ns	28.9	12	ns
Mason	11.7	46	ns	9.2	43	ns	19.4	6	ns	44.6	12	ns	19.1	49	ns
McDowell	14.0	23	ns	12.1	22	ns	22.8	2	H	49.0	4	H	28.4	13	ns
Mercer	13.4	31	ns	16.5	5	H	17.7	11	H	43.2	17	ns	26.6	19	ns
Mineral	12.0	44	ns	10.1	37	ns	9.1	48	L	34.9	45	ns	21.0	44	ns
Mingo	13.1	35	ns	17.6	3	H	24.9	1	H	45.0	11	ns	30.8	7	ns
Monongalia	8.5	55	L	9.1	45	L	7.5	52	L	21.5	55	L	21.2	43	L
Monroe	12.1	43	ns	9.4	42	ns	12.3	38	ns	38.7	32	ns	22.6	35	ns
Morgan	14.4	19	ns	9.7	39	ns	12.0	42	ns	35.4	43	ns	25.3	21	ns
Nicholas	13.9	26	ns	13.8	16	ns	16.4	14	ns	45.9	7	H	31.1	4	H
Ohio	10.7	51	L	13.4	18	ns	11.4	44	ns	32.4	50	L	22.0	37	ns
Pendleton	12.7	40	ns	8.1	52	ns	6.3	53	L	37.5	35	ns	17.5	51	ns
Pleasants	14.6	17	ns	11.1	30	ns	6.1	54	L	38.5	33	ns	12.3	55	L
Pocahontas	13.2	34	ns	12.6	21	ns	13.6	29	ns	34.7	46	ns	22.8	33	ns
Preston	10.8	50	ns	14.5	12	ns	10.6	46	ns	35.1	44	ns	21.7	41	ns
Putnam	13.3	33	ns	8.8	47	l	9.1	49	L	36.2	39	ns	24.6	25	ns
Raleigh	14.8	15	ns	11.6	26	ns	15.8	17	ns	44.4	14	H	26.7	18	ns
Randolph	15.5	11	ns	14.0	15	ns	14.9	20	ns	41.4	25	ns	27.6	15	ns
Ritchie	11.3	48	ns	9.4	41	ns	13.8	25	ns	42.6	20	ns	21.4	42	ns
Roane	11.7	45	ns	10.9	31	ns	14.6	22	ns	41.4	26	ns	24.1	27	ns
Summers	21.0	2	ns	10.2	36	ns	16.3	15	ns	44.4	15	ns	31.0	5	ns
Taylor	13.8	27	ns	11.6	24	ns	13.9	24	ns	42.9	19	ns	21.8	38	ns
Tucker	16.3	7	ns	11.2	28	ns	14.7	21	ns	28.1	53	L	19.1	50	ns
Tyler	15.6	9	ns	3.9	55	L	13.0	32	ns	37.6	34	ns	21.8	39	ns
Upshur	18.2	4	ns	9.9	38	ns	9.2	47	L	35.5	42	ns	25.2	22	ns
Wayne	14.2	22	ns	16.5	6	H	18.6	9	H	41.4	24	ns	27.9	14	ns
Webster	13.7	28	ns	15.9	9	ns	17.4	12	ns	56.7	1	H	33.6	2	ns
Wetzel	14.3	21	ns	9.2	44	ns	12.8	35	ns	44.2	16	ns	29.8	10	ns
Wirt	9.5	53	ns	16.4	7	ns	19.4	5	ns	40.8	28	ns	23.0	32	ns
Wood	13.1	36	ns	11.9	23	ns	15.3	19	ns	40.9	27	ns	27.5	16	ns
Wyoming	13.9	25	ns	11.6	25	ns	19.2	7	ns	45.2	9	ns	31.8	3	H
West Virginia	**14**			**11.7**			**14.2**			**39.2**			**24.6**		

Source: West Virginia Behavioral Risk Factor Surveillance System (WVBRFSS), West Virginia Department of Health and Human Resources, Health Statistics Center, 2018.
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