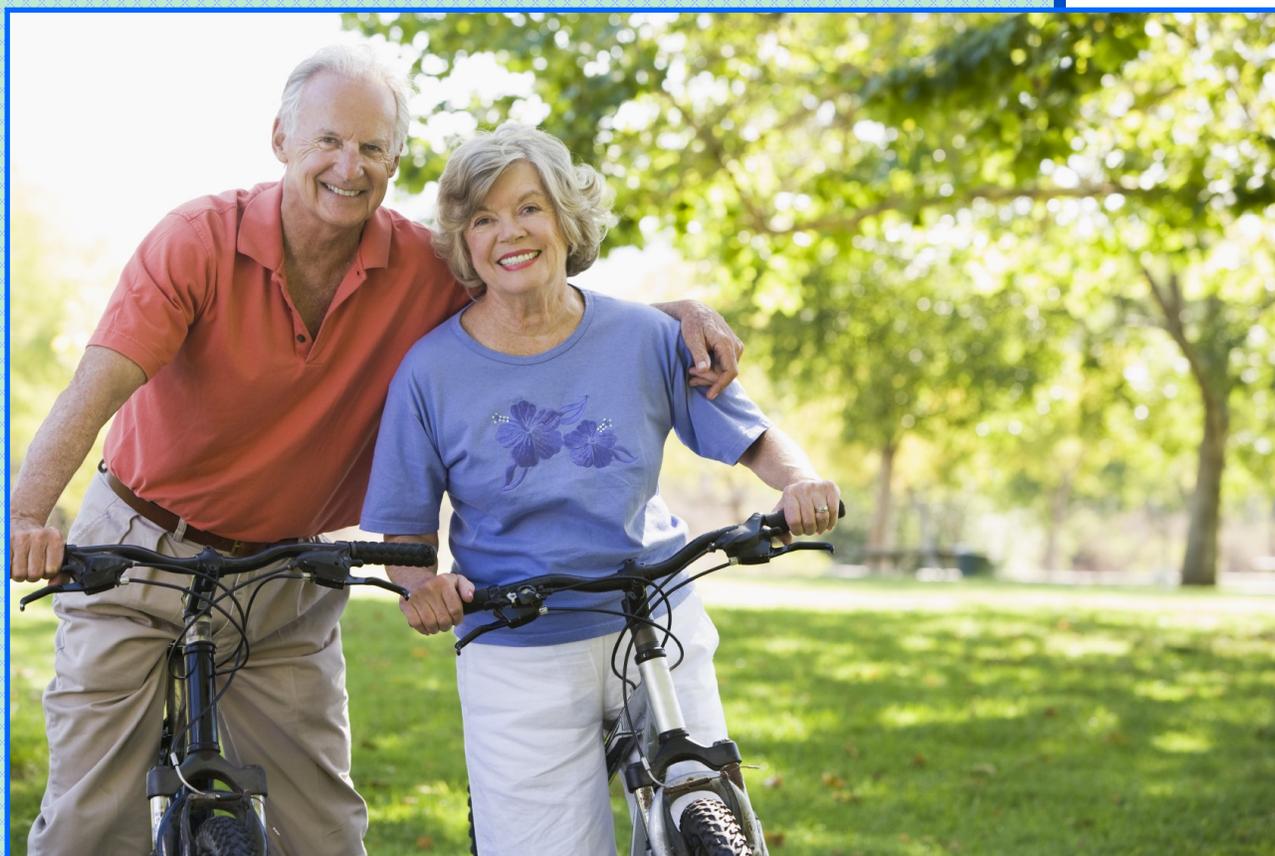


# West Virginia Behavioral Risk Factor Surveillance System Report



**2021**



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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 2021 as well as county data combined for the latest available five years (2017 through 2021).

The survey is conducted by telephone and represents a collaborative effort between the West Virginia Department of Health's 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 the second highest nationally in the prevalence of adults with fair or poor general health.
- ◆ The prevalence of West Virginia adults who considered their health to be either fair or poor was 22.9%.
- ◆ Fair or poor health was most common among adults aged 55 or higher, 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, Summers, Wayne, Webster, and Wyoming counties.
- ◆ West Virginia ranked highest among the 53 BRFSS participants for the prevalence of poor physical health.
- ◆ West Virginia ranked highest among the 53 BRFSS participants for the prevalence of poor mental health and second highest in activity limitations due to poor physical or mental health.

### Impairment

- ◆ The prevalence of difficulty concentrating, remembering, or making decisions was 18.2% among West Virginian adults, compared to 12.5% nationally, which ranked the state highest among the 53 BRFSS participants.
- ◆ More than one-fifth (21.1%) of West Virginians had serious difficulty walking or climbing stairs.
- ◆ Approximately 5.4% of West Virginia adults had difficulty bathing or dressing.
- ◆ The prevalence of having difficulty doing errands alone among West Virginians was 12.2%, significantly higher than the national prevalence of 7.5%.
- ◆ Approximately 6.7% of West Virginia adults are blind or have serious vision impairment, the sixth highest among the 53 BRFSS participants.
- ◆ The prevalence of deafness or serious hearing impairment was 10.6%, which was the second highest among the 53 BRFSS participants.

# EXECUTIVE SUMMARY

## Health Care Access

- ◆ The prevalence of no health care coverage among West Virginia adults aged 18-64 was 8.3%, compared to 10.9% nationally.
- ◆ Nearly half of West Virginia adults have private insurance (46.6%), followed by Medicare (27.8%) and Medicaid (12.8%).
- ◆ The prevalence of all adults who do not have a personal doctor or health care provider was 12.6%.
- ◆ Approximately 10.2% of West Virginia adults could not afford needed medical care in the past year.
- ◆ More than one-fifth (20.9%) of West Virginia adults did not have a routine checkup in the past year.

## Weight Status

- ◆ The prevalence of overweight in West Virginia was 33.0% compared to the U.S. prevalence of 34.0%.
- ◆ The prevalence of obesity in West Virginia was 40.6%, which was highest among the 53 BRFSS participants.
- ◆ The prevalence of obesity was significantly higher in Boone and Roane counties than the rest of the state.
- ◆ More than two-thirds (73.5%) of West Virginia adults were overweight or obese, the highest in the U.S.
- ◆ The prevalence of overweight or obese was highest among men, and those aged 45 and older.

## Physical Activity

- ◆ Over one-fourth of West Virginia adults (30.5%) participate in no leisure-time physical activity or exercise, which ranked West Virginia the fifth highest among the 53 BRFSS participants.
- ◆ Physical inactivity was highest among those aged 45 and older, those with high school education, and those with annual household income of less than \$35,000.
- ◆ The prevalence of physical inactivity was significantly higher in Fayette, Grant, Logan, Mingo, Summers, Wayne, and Wyoming counties than the rest of the state.

## Nutrition

- ◆ Nine out of every 10 adults (90.0%) in West Virginia consume fewer than five servings of fruits and vegetables daily, which ranked West Virginia the third highest among the 53 BRFSS participants.
- ◆ The prevalence of consuming fewer than five servings of fruits and vegetables daily was significantly higher in Doddridge, Logan, Mingo, and Webster counties than the rest of the state.

# EXECUTIVE SUMMARY

## Tobacco Use

- ◆ More than one-fifth of adults (22.0%) currently smoke cigarettes every day or some days, which ranked West Virginia highest nationally.
- ◆ The prevalence of current smoking was highest among those aged 35-44, those with less than a high school education, and those with an annual household income of less than \$15,000.
- ◆ The prevalence of current cigarette smoking was highest in Fayette County.
- ◆ Approximately 44.8% of current smokers had tried to quit smoking in the past year.
- ◆ West Virginia ranked highest among the 53 BRFSS participants in the prevalence of smokeless tobacco use (8.8%) among adults.
- ◆ The prevalence of e-cigarette or other electronic vaping products use was 7.1%, which ranked West Virginia the 21<sup>st</sup> highest among the 53 BRFSS participants.

## Alcohol Consumption

- ◆ The West Virginia heavy drinking prevalence was 5.0% which was the eighth lowest among the 53 BRFSS participants.
- ◆ The prevalence of binge drinking among West Virginia adults was 11.6%, the lowest among the 53 BRFSS participants.
- ◆ Binge drinking was highest among men, those aged 18-34, those with some post-high school education, and those with a household income of \$50,000 or more per year.

## Cholesterol Testing

- ◆ About 91.2% of West Virginia adults had their cholesterol checked at least once.
- ◆ The prevalence of adults who had their cholesterol checked in the past five years was 87.9%.

## Diabetes Testing

- ◆ Among West Virginia adults who do not have diabetes, 58.6% have had a diabetes test in the past three years.

## HIV Testing

- ◆ One-third of West Virginia adults (33.0%) have been tested for HIV.
- ◆ The prevalence of HIV testing was highest among those between the ages of 35-44, those with less than high school education, and those with an annual household income less than \$25,000.



## Immunization

- ◆ Approximately 43.7% of all adults and 63.7% of seniors had a flu vaccine in the past 12 months.
- ◆ Among West Virginia adults and adults aged 65 and older, 38.1% and 72.0%, respectively, had ever received the pneumonia vaccine.

## Hypertension

- ◆ Approximately 43.4% of West Virginia adults have been told by a health care professional that they have hypertension, which ranked the state the second highest among the 53 BRFSS participants.
- ◆ The prevalence of hypertension was highest among those aged 65 and older, those with less than a high school education, and those with a household income of less than \$35,000 per year.
- ◆ The prevalence of hypertension was significantly higher in Boone, Logan, Mingo, Nicholas, Raleigh, and Wyoming counties than in the rest of the state.
- ◆ More than three-fourths (82.2%) of those with hypertension are taking medication.

## High Cholesterol

- ◆ The prevalence of high cholesterol among West Virginia adults was 41.0%, the second highest among the 53 BRFSS participants.
- ◆ The prevalence of high cholesterol was highest among those aged 55 and older, those with less than a high school education, and those with an annual household income of less than \$15,000.
- ◆ The prevalence of high cholesterol was significantly higher in Clay, McDowell, Mingo, Monroe, Pendleton, Raleigh, and Wyoming counties than in the rest of the state.
- ◆ Among those that have high cholesterol, 67.9% were taking cholesterol medication, which ranked West Virginia the third highest among the 53 BRFSS participants.

## Cardiovascular Disease

- ◆ West Virginia ranked highest among the 53 BRFSS participants in the prevalence of heart attack (7.1%), and coronary heart disease (7.2%).
- ◆ West Virginia ranked the fourth highest among the 53 BRFSS participants in the prevalence of stroke (4.6%).
- ◆ The West Virginia cardiovascular disease prevalence was highest among the 53 BRFSS participants at 14.2%.
- ◆ The prevalence of cardiovascular disease was highest among those aged 45 and older, those with less than a high school education, and those with an annual household income less than \$25,000.
- ◆ The prevalence of cardiovascular disease was significantly higher in Logan, McDowell, Mingo, Wayne, and Wirt counties than the state as a whole.

## EXECUTIVE SUMMARY

### Diabetes

- ◆ More than one in seven West Virginia adults had been told they have diabetes by a health professional (15.9%), which ranked West Virginia the second highest nationally.
- ◆ The prevalence of diabetes was highest among adults aged 65 and older, those with less than a high school education, and those with an annual household income of less than \$25,000.
- ◆ The prevalence of diabetes was significantly higher in Boone, Logan, and McDowell counties than the rest of the state.
- ◆ Approximately 11.3% of West Virginia adults had borderline or pre-diabetes.
- ◆ The prevalence of borderline or pre-diabetes was highest among those aged 45 and older.

### Cancer

- ◆ Approximately 8.0% of West Virginia adults reporting having a health professional tell them they had skin cancer.
- ◆ About 7.7% of West Virginia adults reporting having a health professional tell them they had some other type of cancer.
- ◆ About one in seven West Virginia adults are cancer survivors (14.1%) which ranked West Virginia the sixth highest for overall cancer prevalence.
- ◆ Cancer prevalence was highest among adult women, those aged 65 and older, those with less than a high school education, and those with an annual household income of less than \$35,000.

### Respiratory Diseases

- ◆ Approximately 16.6% of West Virginia adults have ever been diagnosed with asthma and 12.1% of West Virginia adults currently have asthma.
- ◆ Women had a 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 lifetime asthma was significantly higher in Lincoln County, while the prevalence of current asthma was significantly higher in Mercer, McDowell, and Wayne counties compared to the rest of the state.
- ◆ The prevalence of chronic obstructive pulmonary disease or COPD in West Virginia was 13.1%, the highest among the 53 BRFSS participants.
- ◆ The prevalence of COPD was highest among adults aged 55 and older, those with less than a high school education, and those with an annual household income of less than \$15,000.
- ◆ The prevalence of COPD was significantly higher in Fayette, Logan, Mason, McDowell, Mercer, Mingo, Wayne, and Wyoming counties than the rest of the state.

### Arthritis

- ◆ More than one in three West Virginia adults had arthritis (37.4%), which ranked West Virginia highest among the 53 BRFSS participants.
- ◆ Arthritis prevalence was higher among those aged 45 and older, those with less than a high school education, and those with an annual household income less than \$15,000 per year.
- ◆ The prevalence of arthritis was highest in Boone, Calhoun, Fayette, Logan, Marshall, Mercer, Mingo, Nicholas, Webster, and Wyoming counties than the rest of the state.
- ◆ Nearly half of West Virginia adults with arthritis (46.6%) have limitations in the usual activities due to the condition.
- ◆ The prevalence of adults that arthritis affects whether they work, the type of work they do, or the amount of work they do was 34.1%.



## Kidney Disease

- ◆ The prevalence of kidney disease in West Virginia was 4.6% and was highest among the 53 BRFSS participants.
- ◆ Kidney disease prevalence was highest among those aged 65 and older, those with less than a high school education, and those with an annual household income less than \$15,000 per year.

## Depression

- ◆ Over one-fourth, 27.5%, of West Virginia adults had been diagnosed with depression, the highest in the U.S.
- ◆ The prevalence of depression was significantly higher among women than men.
- ◆ The prevalence of depression was highest among those aged 35-44, those with less than a high school education and those with a household income less than \$25,000 per year.
- ◆ The prevalence of depression was highest in Lincoln, Logan, Mingo, and Wyoming counties than the rest of the state.

## Comorbidities

- ◆ More than one-fifth (20.9%) of West Virginia adults were obese and had hypertension.
- ◆ Approximately 17.0% of adults had arthritis and did not exercise.
- ◆ Approximately one in seven West Virginia adults (14.0%) were obese and did not exercise.
- ◆ Approximately 12.1% of West Virginia adults had a fair or poor health and did not exercise.
- ◆ Approximately 8.8% of West Virginia adults had depression and were current smokers.
- ◆ About 8.7% of West Virginia adults were obese and had diabetes.
- ◆ Approximately 5.2% of West Virginia adults had both cardiovascular disease and diabetes.

## ESTIMATED NUMBER OF PERSONS WITH DISEASE OR RISK FACTOR

Table ES.1 below shows selected risk factor 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 2021**

Risk Factor/Chronic Disease/Health-Related Factor	Percentage Prevalence Estimate (%)	Estimated Number of Adults	Risk Factor/Chronic Disease/Health-Related Factor	Percentage Prevalence Estimate (%)	Estimated Number of Adults
General Health is Fair or Poor	22.5	326,020	Binge Drinking	11.6	158,886
Poor Physical Health	16.0	223,996	Ever Had Cholesterol Checked	92.2	1,316,969
Poor Mental Health	19.3	270,836	Cholesterol Checked in Past 5 Years	87.9	1,142,783
Cognitive Difficulty	18.2	254,331	Diabetes Test	58.6	643,534
Difficulty Walking	21.1	295,119	HIV Test	33.0	423,901
Difficulty Dressing or Bathing	5.4	75,664	Flu Vaccine	43.7	601,526
Difficulty Doing Errands Alone	12.2	170,343	Pneumonia Vaccination (ages 65 and older)	72.0	262,054
Vision Impairment	6.7	93,533	Hypertension	43.4	618,097
Hearing Impairment	10.6	149,387	Hypertension Medication	82.2	507,472
No Health Care Coverage (Ages 18-64)	8.3	81,642	High Cholesterol	41.0	484,003
No Personal Doctor or Health Care Provider	12.6	179,038	Cholesterol Medication	67.9	327,120
Unable to Afford Needed Medical Care	10.2	14,659	Heart Attack	7.1	101,181
No Routine Medical Checkup in Past Year	20.9	294,188	Coronary Heart Disease	7.2	101,662
Overweight (BMI 25.0-29.9)	33.0	438,483	Stroke	4.6	64,886
Obesity (BMI 30.0+)	40.6	539,574	Cardiovascular Disease	14.2	200,923
Overweight or Obese (BMI 25.0+)	73.5	978,057	Pre-diabetes	11.3	131,020
No Leisure-time Physical Activity	30.5	435,723	Diabetes	15.9	226,294
Consumed < 5 Servings of Fruits and Vegetables Daily	90.0	1,107,774	Cancer	14.1	200,341
Current Cigarette Smoking	22.0	304,700	Current Asthma	12.1	171,141
Smoking Cessation	44.8	125,965	Chronic Obstructive Pulmonary Disease	13.1	186,185
Smokeless Tobacco Use	8.8	122,427	Arthritis	37.4	531,566
E-cigarette Use	7.1	99,278	Kidney Disease	4.6	64,963
Heavy Drinking	5.0	67,622	Depression	27.5	390,461



## 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, and 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.

Thirty-two 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 2021 risk factor prevalence estimates and compares them to the years 2011 through 2021. 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 2021**

In 2021, West Virginia asked several optional modules including: Prediabetes HPV Vaccination, COVID Vaccination, Colorectal Cancer Screening, Home/Self-measured Blood Pressure, Caregiver, Tobacco Cessation, and Sexual Orientation and Gender Identity. The West Virginia questionnaire also included several state added questions including questions about insurance, diabetes education, hepatitis B, hepatitis C, cancer plan, and discrimination.

Table I.1 Topics Administered in the Survey: WVBRFSS, 2011-2021

Topic	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
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	X
Asthma	X	X	X	X	X	X	X	X	X	X	X
Cancer	X	X	X	X	X	X	X	X	X	X	X
Cancer Screenings		X		X		X		X		X	
Cardiovascular Disease	X	X	X	X	X	X	X	X	X	X	X
Cholesterol	X		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									
Falls		X		X		X		X		X	
Food Stamps in the Past Year											X
Fruits & Vegetables	X		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		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	
Osteoporosis				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	
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 2021 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 WV BRFSS SAMPLE

The demographic characteristics of the samples in 2021, both unweighted and weighted to the West Virginia population, are presented in Table M.1. Data were weighted according to the process described later in this chapter in order to more accurately estimate the actual prevalence of behavioral risk factors in the adult population of West Virginia.

Table M.1 Demographic Summary: WVBRFSS, 2021

Demographic Characteristic	Number of Interviews	Percent of Unweighted Sample	Percent of Weighted Sample
<b>Total</b>	<b>6744</b>	<b>100.0</b>	<b>100.0</b>
<u>Sex</u>			
Male	3002	44.5	49.1
Female	3742	55.5	50.9
<u>Age</u>			
18-24	282	4.2	11.2
25-34	626	9.3	14.4
35-44	795	11.8	14.6
45-54	1035	15.3	15.5
55-64	1,439	21.3	17.3
65+	2,567	38.1	27.0
<u>Education</u>			
< High School (HS)	484	7.2	12.4
HS or GED	2,352	34.9	39.7
Some College	1,713	25.4	27.6
College Degree	2,171	32.2	19.9
<u>Household Income</u>			
<\$15,000	445	6.6	6.8
\$15,000-\$24,999	749	11.2	11.7
\$25,000-\$34,999	836	12.5	12.7
\$35,000-\$49,999	935	13.9	13.6
\$50,000-\$74,999	970	14.5	14.1
\$75,000+	1,671	24.9	24.1
<u>Marital Status</u>			
Married	3,585	53.2	51.6
Divorced	1,002	14.9	12.6
Widowed	900	13.4	8.8
Separated	117	1.7	2.0
Never Married	930	13.8	20.7
Unmarried Couple	179	2.7	3.9
<u>Employment Status</u>			
Employed for wages	2,635	39.2	44.2
Self-Employed	376	5.6	6.1
Unemployed (>1 year)	148	2.2	2.4
Unemployed (<1 year)	117	1.7	2.6
Homemaker	408	6.1	6.5
Student	127	1.9	4.1
Retired	2,230	33.2	23.9
Unable to Work	658	9.8	9.8



## 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 2021 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.

### **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 2020 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

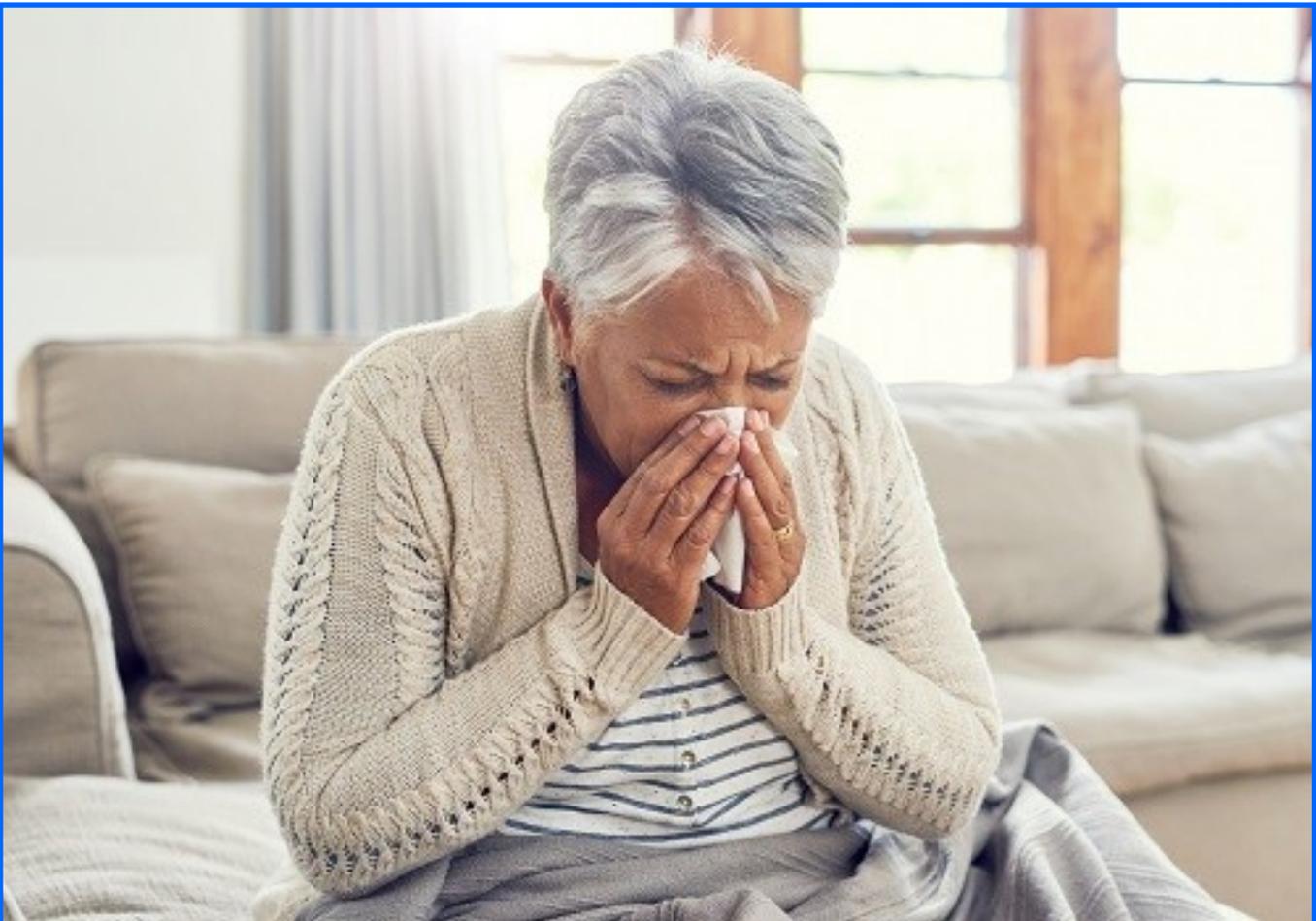
In the sections that follow, the prevalence estimates are presented in a variety of ways, including by state rank, yearly state and national prevalence, and demographic variables. It should be stressed that the risk factor prevalence estimates for the demographic variables (age, sex, education, and income) 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 53 BRFSS participants, ranking first in diabetes would mean having the highest prevalence of diabetes among all the U.S. states and territories while ranking 54<sup>th</sup> 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.

# SECTION 1: Health Indicators 2021



# CHAPTER 1: HEALTH STATUS

## General Health

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

**Prevalence** **WV: 22.9%** (95% CI: 21.7-24.1)  
**U.S.: 16.2%** (95% CI: 16.0-16.5)

West Virginia’s prevalence of fair or poor health was significantly higher than the U.S. prevalence. West Virginia ranked the second highest among 53 BRFSS participants. The highest was Puerto Rico with a prevalence of 26.8%.

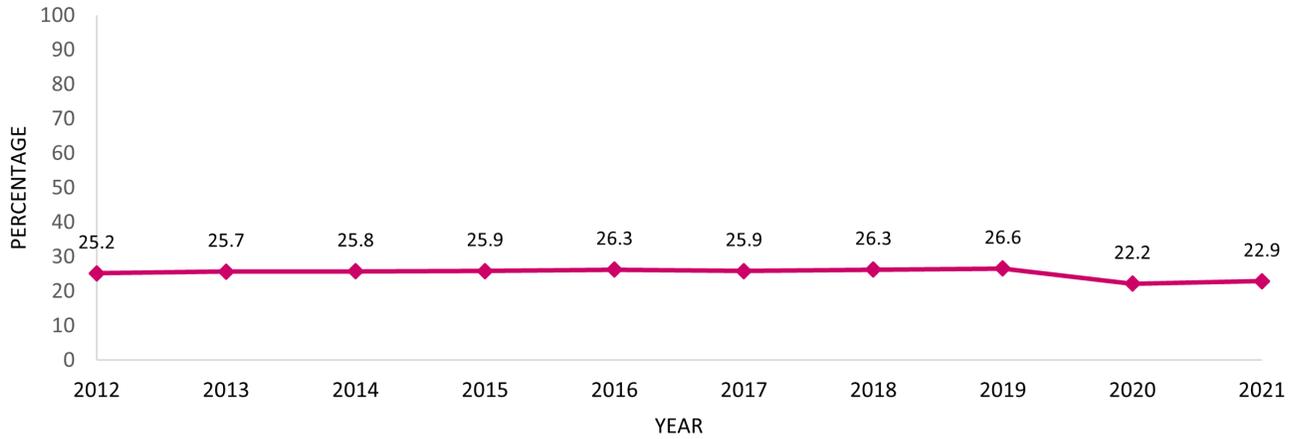
**Table 1.1 Prevalence of Fair or Poor Health by Demographic Characteristics: WVBRFSS, 2021**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	157,450	<b>22.5</b>	20.8-24.3	168,570	<b>23.3</b>	21.6-24.9	326,020	<b>22.9</b>	21.7-24.1
<b>Age</b>									
18-24	12,848	<b>15.5</b>	8.9-22.2	4,091	<b>5.4 *</b>	1.3-9.4	16,939	<b>10.7</b>	6.6-14.7
25-34	9,508	<b>8.9</b>	5.4-12.5	11,869	<b>11.9</b>	7.8-16.0	21,378	<b>10.4</b>	7.7-13.1
35-44	15,128	<b>14.5</b>	10.2-18.8	20,559	<b>19.8</b>	15.1-24.6	35,686	<b>17.2</b>	14.0-20.4
45-54	22,297	<b>21.4</b>	17.0-25.8	25,681	<b>24.5</b>	20.2-28.7	47,978	<b>22.9</b>	19.9-26.0
55-64	37,845	<b>31.5</b>	27.3-35.7	40,438	<b>32.0</b>	28.2-35.7	78,282	<b>31.7</b>	28.9-34.6
65+	59,468	<b>34.2</b>	30.8-37.7	64,505	<b>31.3</b>	28.5-34.2	123,973	<b>32.7</b>	30.4-34.9
<b>Education</b>									
Less than H.S.	37,710	<b>45.6</b>	37.8-53.5	38,944	<b>42.1</b>	35.3-48.8	76,654	<b>43.7</b>	38.6-48.9
H.S. or G.E.D.	73,412	<b>24.3</b>	21.5-27.1	70,112	<b>26.6</b>	23.8-29.4	143,524	<b>25.4</b>	23.4-27.3
Some Post-H.S.	32,774	<b>18.6</b>	15.4-21.7	42,115	<b>19.4</b>	16.8-22.0	74,889	<b>19.0</b>	17.0-21.1
College Graduate	12,908	<b>9.7</b>	7.7-11.7	17,146	<b>11.4</b>	9.4-13.4	30,054	<b>10.6</b>	9.2-12.0
<b>Income</b>									
Less than \$15,000	18,196	<b>51.4</b>	41.9-61.0	29,870	<b>49.0</b>	42.0-56.0	48,066	<b>49.9</b>	44.2-55.6
\$15,000 - 24,999	29,083	<b>43.4</b>	36.3-50.4	35,894	<b>36.4</b>	31.2-41.6	64,978	<b>39.2</b>	35.0-43.5
\$25,000 - 34,999	26,065	<b>30.7</b>	24.9-36.5	24,467	<b>27.7</b>	22.7-32.6	52,533	<b>29.1</b>	25.3-32.9
\$35,000 - 49,999	23,251	<b>25.0</b>	20.1-29.8	21,230	<b>21.3</b>	17.1-25.5	44,480	<b>23.1</b>	19.9-26.3
\$50,000 - 74,999	16,175	<b>15.1</b>	11.1-19.1	92,921	<b>13.5</b>	10.1-17.0	28,743	<b>14.4</b>	11.7-17.0
\$75,000+	17,380	<b>8.9</b>	6.6-11.1	11,124	<b>7.6</b>	5.5-9.8	28,505	<b>8.3</b>	6.8-9.9

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

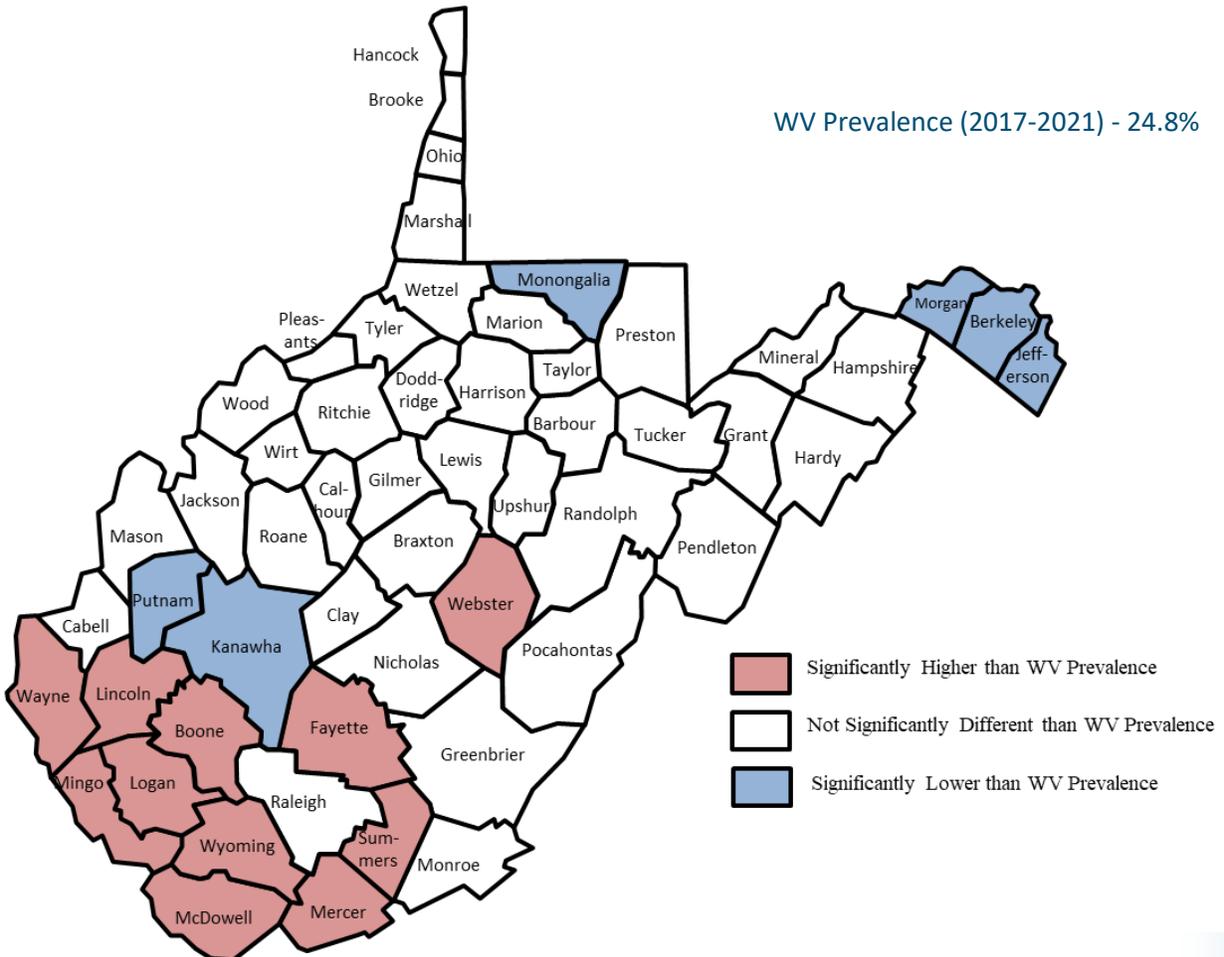
# CHAPTER 1: HEALTH STATUS

**FIGURE 1.1: PERCENTAGE OF FAIR POOR PREVALENCE: WVBRSS, 2012-2021.**



\*Due to changes in sample composition and weighting methodology, 2011-2017 results are not directly comparable to previous years.

**Figure 1.2 Prevalence of Fair or Poor Health by County: WVBRFSS, 2017-2021**



# CHAPTER 1: HEALTH STATUS

## 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: 16.0%** (95% CI: 15.0-17.1)

**U.S.: 11.0%** (95% CI: 10.8-11.2)

West Virginia’s prevalence was significantly higher than the U.S. prevalence of poor physical health. West Virginia ranked the highest among 53 BRFSS participants.

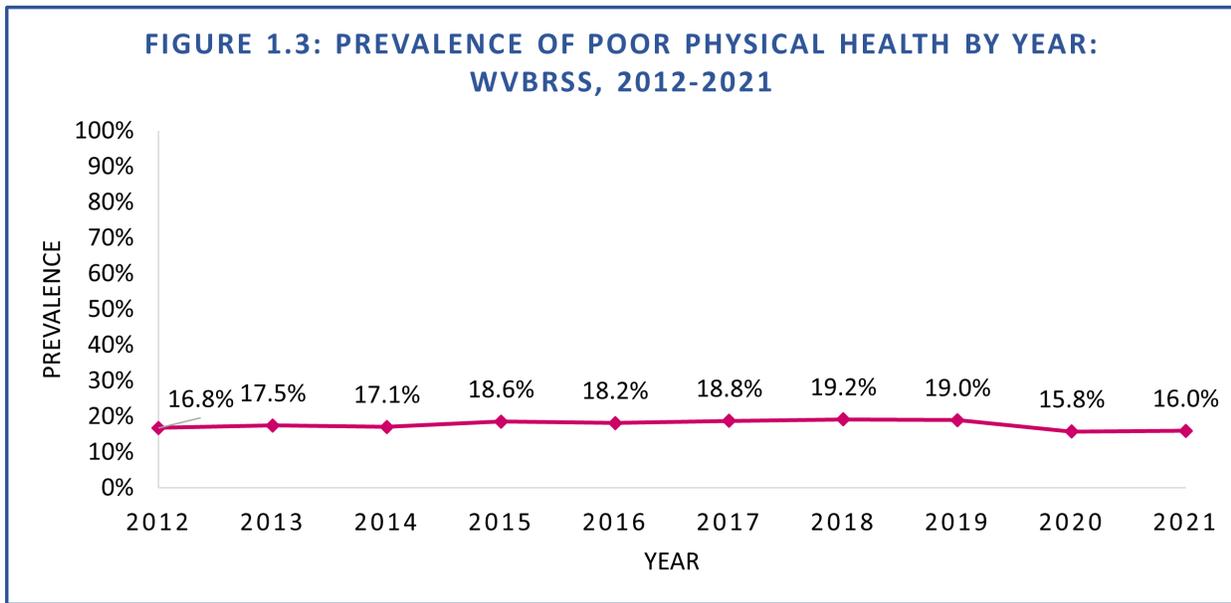
**Table 1.2 Prevalence of Poor Physical Health by Demographic Characteristics: WVBRFSS, 2021**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	98,925	<b>14.4</b>	12.9-15.9	125,071	<b>17.7</b>	16.2-19.1	223,996	<b>16.0</b>	15.0- 17.1
<b>Age</b>									
18-24	5,668	<b>6.9*</b>	2.0-11.7	2,760	<b>3.6*</b>	0.4-6.9	8,427	<b>5.3</b>	2.3-8.3
25-34	6,230	<b>5.9</b>	2.7-9.0	7,272	<b>7.4</b>	4.2-10.6	13,502	<b>6.6</b>	4.4-8.9
35-44	5,874	<b>5.7</b>	2.9-8.5	13,972	<b>13.7</b>	9.7-17.7	19,846	<b>9.7</b>	7.2-12.1
45-54	17,311	<b>16.9</b>	12.7-21.1	22,512	<b>21.9</b>	17.6-26.1	39,823	<b>19.4</b>	16.4-22.4
55-64	27,509	<b>23.4</b>	19.6-27.3	31,028	<b>25.0</b>	21.5-28.6	58,538	<b>24.2</b>	21.6-26.9
65+	35,960	<b>21.2</b>	18.2-24.2	46,750	<b>23.5</b>	20.8-26.2	82,710	<b>22.4</b>	20.4-24.4
<b>Education</b>									
Less than H.S.	22,855	<b>28.1</b>	21.2-35.1	26,626	<b>29.0</b>	23.0-35.0	49,482	<b>28.6</b>	24.0-33.2
H.S. or G.E.D.	43,643	<b>14.7</b>	12.5-17.0	51,972	<b>20.3</b>	17.8-22.9	95,615	<b>17.3</b>	15.6-19.0
Some Post-H.S.	23,208	<b>13.2</b>	10.6-15.9	31,458	<b>14.8</b>	12.4-17.2	54,666	<b>14.1</b>	12.3-15.9
College Graduate	8,573	<b>6.5</b>	4.9-8.1	14,947	<b>10.1</b>	8.2-12.0	23,519	<b>8.4</b>	7.2-9.7
<b>Income</b>									
Less than \$15,000	12,984	<b>38.1</b>	28.6-47.6	19,815	<b>33.4</b>	26.9-39.8	32,798	<b>35.1</b>	29.7-40.5
\$15,000 - 24,999	16,425	<b>24.8</b>	19.2-30.4	24,796	<b>26.0</b>	21.4-30.5	41,222	<b>25.5</b>	22.0-29.0
\$25,000 - 34,999	14,820	<b>17.6</b>	12.9-22.3	20,039	<b>21.2</b>	16.8-25.6	34,859	<b>19.5</b>	16.3-22.7
\$35,000 - 49,999	14,248	<b>15.5</b>	11.5-19.6	13,648	<b>13.9</b>	10.4-17.4	27,897	<b>14.7</b>	12.0-17.4
\$50,000 - 74,999	12,301	<b>11.6</b>	7.9-15.2	11,447	<b>12.5</b>	9.1-15.9	23,747	<b>12.0</b>	9.5-14.5
\$75,000+	11,543	<b>5.9</b>	4.1-7.7	11,347	<b>7.9</b>	5.6-10.1	22,890	<b>6.8</b>	5.3-8.2

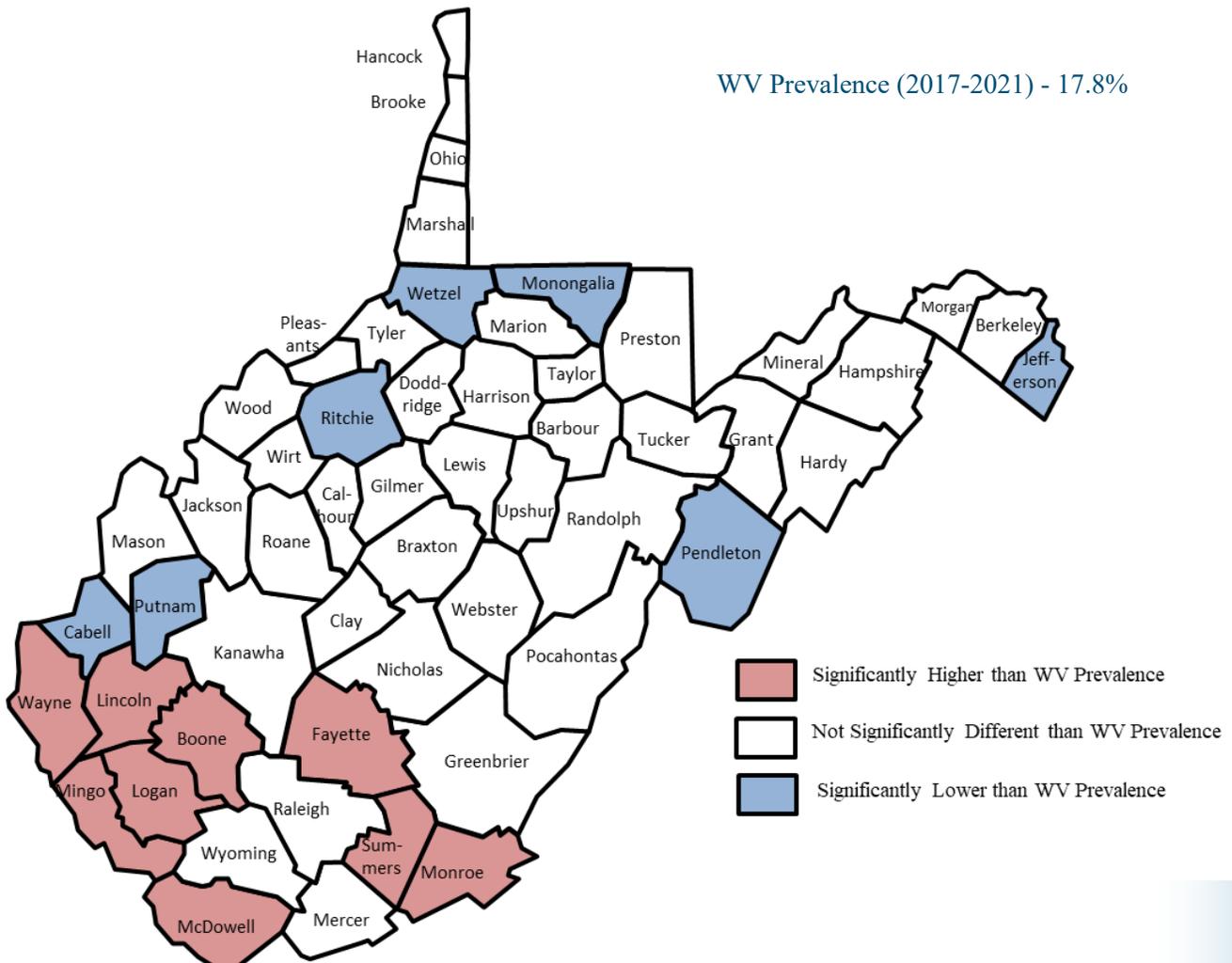
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

# CHAPTER 1: HEALTH STATUS

**FIGURE 1.3: PREVALENCE OF POOR PHYSICAL HEALTH BY YEAR: WVBRSS, 2012-2021**



**Figure 1.4 Prevalence of Poor Physical Health by County: WVBRFSS, 2017-2021**



# CHAPTER 1: HEALTH STATUS

## 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: 19.3%** (95% CI: 18.1-20.6)  
**U.S.: 14.7%** (95% CI: 14.4-14.9)  
 The WV prevalence of poor mental health was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 53 BRFS participants.

**Table 1.3 Prevalence of Poor Mental Health by Demographic Characteristics: WVBRFSS, 2021**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	101,148	<b>14.7</b>	13.1-16.3	169,689	<b>23.8</b>	22.0-25.6	270,836	<b>19.3</b>	18.1-20.6
<b>Age</b>									
18-24	16,153	<b>19.6</b>	12.4-26.7	26,771	35.8	27.2-44.5	42,924	<b>27.3</b>	21.6-32.9
25-34	20,807	<b>19.9</b>	14.9-24.9	27,186	27.6	22.0-33.2	47,993	<b>23.7</b>	19.9-27.4
35-44	15,160	<b>14.7</b>	10.5-18.9	26,509	25.7	21.0-30.5	41,670	<b>20.2</b>	17.0-23.5
45-54	17,165	<b>16.8</b>	12.8-20.8	28,451	27.4	22.9-31.9	45,616	<b>22.1</b>	19.1-25.2
55-64	16,250	<b>13.7</b>	10.5-16.9	27,829	22.3	18.8-25.7	44,079	<b>18.1</b>	15.7-20.4
65+	15,264	<b>8.9</b>	6.9-11.0	31,322	15.7	13.3-18.1	46,586	<b>12.6</b>	11.0-14.2
<b>Education</b>									
Less than H.S.	19,277	<b>23.7</b>	16.5-31.0	31,032	34.3	27.6-41.0	50,309	<b>29.3</b>	24.4-34.3
H.S. or G.E.D.	45,612	<b>15.3</b>	12.8-17.8	59,948	23.3	20.3-26.2	105,560	<b>19.0</b>	17.1-20.9
Some Post-H.S.	21,722	<b>12.5</b>	9.7-15.3	55,210	25.9	22.5-29.3	76,932	<b>19.9</b>	17.6-22.1
College Graduate	14,350	<b>10.9</b>	8.5-13.3	23,270	15.6	13.1-18.0	37,621	<b>13.4</b>	11.7-15.1
<b>Income</b>									
Less than \$15,000	10,867	<b>31.2</b>	22.2-40.2	23,353	39.3	32.4-46.3	34,219	<b>36.3</b>	30.8-41.8
\$15,000 - 24,999	14,932	<b>22.5</b>	16.6-28.5	32,441	33.5	27.9-39.1	47,373	<b>29.1</b>	24.9-33.2
\$25,000 - 34,999	12,227	<b>14.7</b>	10.2-19.2	28,378	30.1	24.7-35.4	40,605	<b>22.8</b>	19.2-26.5
\$35,000 - 49,999	13,077	<b>14.2</b>	9.8-18.5	21,892	22.4	17.8-27.0	34,969	<b>18.4</b>	15.2-21.6
\$50,000 - 74,999	15,258	<b>14.5</b>	10.2-18.7	17,726	19.2	14.7-23.7	32,984	<b>16.7</b>	13.6-19.8
\$75,000+	14,900	<b>7.6</b>	5.4-9.8	20,759	14.3	11.2-17.5	35,659	<b>10.5</b>	8.6-12.3



# CHAPTER 1: HEALTH STATUS

## Poor Health Limitations

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

**Prevalence** *At least 14 days*  
**WV: 22.1%** (95% CI: 20.5-23.7)  
**U.S.: 16.8%** (95% CI: 16.5-17.2)  
 West Virginia ranked the highest among 53 BRFSS participants and the WV prevalence was significantly higher than the U.S. prevalence.

*Every day*  
**WV: 11.0%** (95% CI: 9.9-12.2)  
**U.S.: 7.4%** (95% CI: 7.1-7.6)  
 West Virginia ranked the second highest among 53 BRFSS participants, after Puerto Rico. The WV prevalence was significantly higher than the U.S. prevalence.

**Table 1.4 Prevalence of Poor Health Limitations at Least 14 Days in the Past 30 Days by Demographic Characteristics: WVBRFSS, 2021**

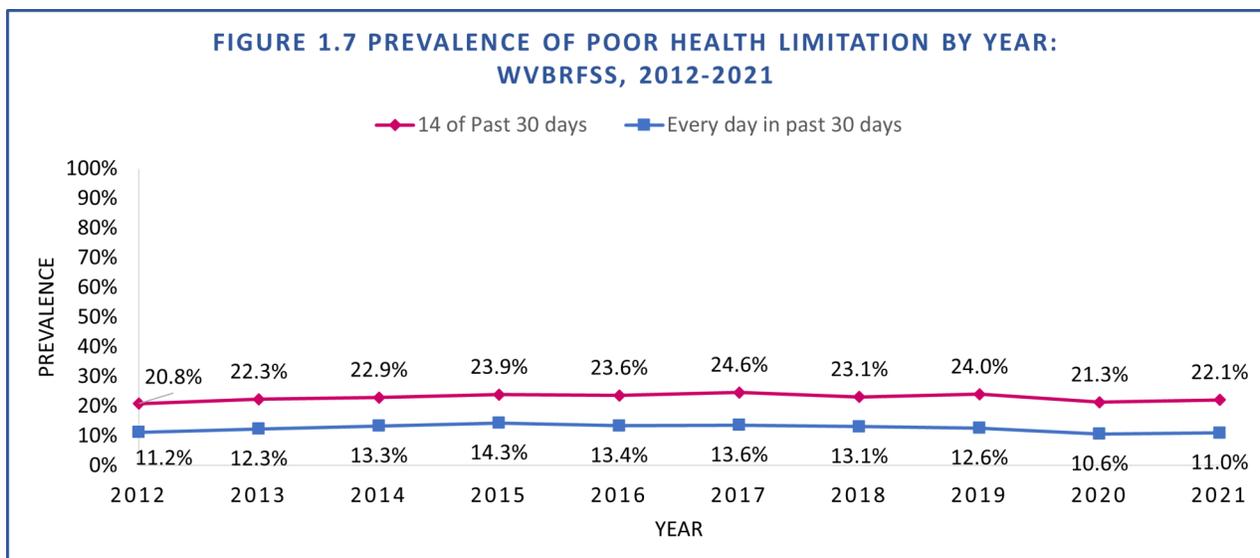
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	76,065	<b>21.4</b>	18.9-23.9	101,263	<b>22.6</b>	20.5-24.6	177,327	<b>22.1</b>	20.5-23.7
<b>Age</b>									
18-24	6,858	<b>14.6</b>	6.5-22.7	6,023	<b>11.0</b>	4.0-18.0	12,882	<b>12.7</b>	7.4-18.0
25-34	7,483	<b>14.0</b>	7.5-20.5	10,771	<b>15.8</b>	10.6-21.0	18,253	<b>15.0</b>	10.9-19.1
35-44	6,787	<b>13.4</b>	7.3-19.5	12,098	<b>18.0</b>	12.7-23.4	18,885	<b>16.0</b>	12.0-20.1
45-54	11,758	<b>21.8</b>	15.7-28.0	19,518	<b>29.6</b>	23.8-35.4	31,276	<b>26.1</b>	21.9-30.4
55-64	20,792	<b>34.0</b>	27.9-40.1	22,721	<b>29.2</b>	24.4-33.9	43,514	<b>31.3</b>	27.5-35.1
65+	22,386	<b>26.4</b>	21.8-31.0	28,967	<b>26.2</b>	22.6-29.8	51,353	<b>26.3</b>	23.4-29.1
<b>Education</b>									
Less than H.S.	19,934	<b>38.2</b>	28.6-47.8	19,951	<b>32.7</b>	24.9-40.5	39,886	<b>35.2</b>	29.1-41.4
H.S. or G.E.D.	31,696	<b>21.7</b>	17.8-25.5	39,271	<b>24.6</b>	21.0-28.2	70,966	<b>23.2</b>	20.6-25.8
Some Post-H.S.	17,266	<b>19.3</b>	14.9-23.8	32,055	<b>23.2</b>	19.5-26.9	49,321	<b>21.7</b>	18.9-24.5
College Graduate	6,429	<b>9.9</b>	7.1-12.8	9,919	<b>11.0</b>	8.5-13.5	16,347	<b>10.6</b>	8.7-12.5
<b>Income</b>									
Less than 15,000	13,217	<b>55.1*</b>	43.7-66.6	17,999	<b>42.6</b>	34.6-50.6	31,216	<b>47.1</b>	40.4-53.9
\$15,000 - 24,999	16,508	<b>38.8</b>	30.4-47.1	21,635	<b>30.8</b>	24.8-36.7	38,142	<b>33.8</b>	28.9-38.7
\$25,000 - 34,999	9,318	<b>20.0</b>	13.1-26.8	17,519	<b>27.4</b>	21.5-33.3	26,837	<b>24.3</b>	19.8-28.7
\$35,000 - 49,999	8,815	<b>18.9</b>	12.7-25.1	9,288	<b>15.5</b>	10.7-20.2	18,103	<b>17.0</b>	13.2-20.8
\$50,000 - 74,999	7,801	<b>14.8</b>	9.6-19.9	6,247	<b>11.0</b>	7.0-15.0	14,048	<b>12.9</b>	9.6-16.1
\$75,000+	7,671	<b>9.8</b>	5.9-13.6	10,598	<b>13.0</b>	8.8-17.2	18,270	<b>11.4</b>	8.5-14.2

# CHAPTER 1: HEALTH STATUS

**Table 1.5 Prevalence of Poor Health Limitations Every Day in the Past 30 Days by Demographic Characteristics: WVBRFSS, 2021**

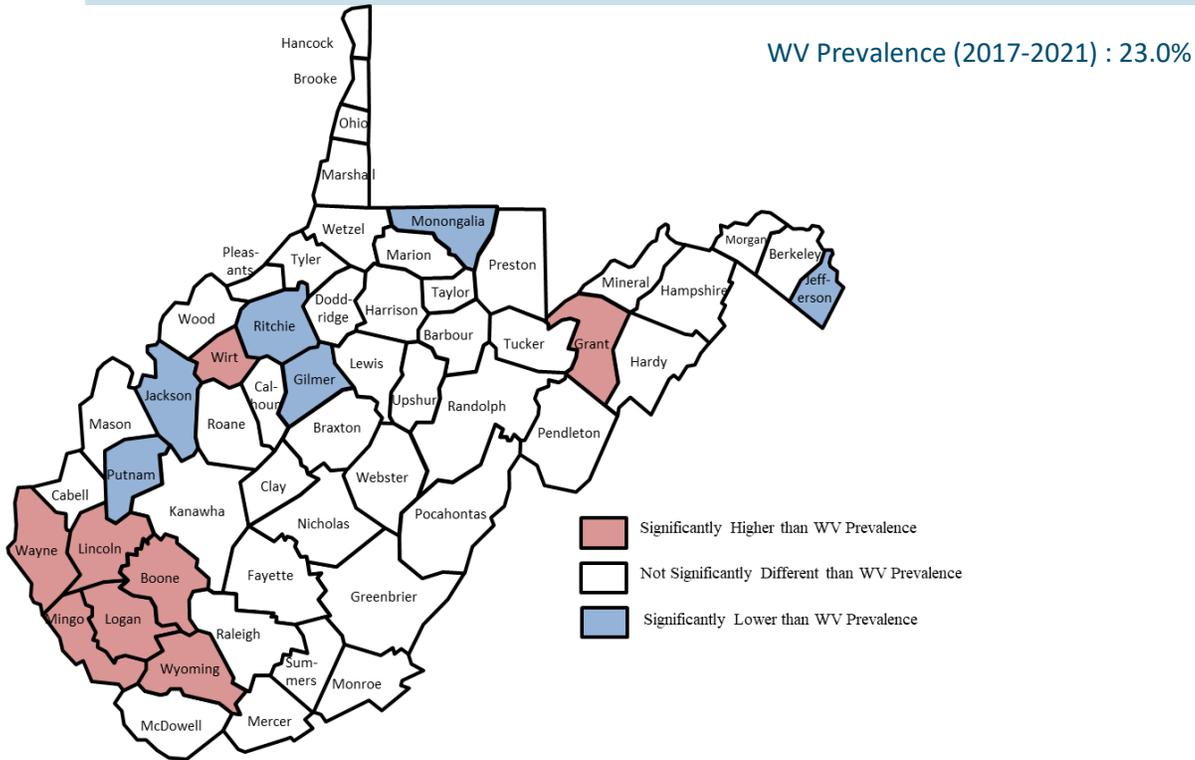
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	41,312	<b>11.6</b>	9.8-13.5	47,492	<b>10.6</b>	9.1-12.1	88,804	<b>11.0</b>	9.9-12.2
<b>Age</b>									
18-24	500	<b>1.1*</b>	0.0-3.1	886	<b>1.6*</b>	0.0-4.8	1,386	<b>1.4*</b>	0.0-3.3
25-34	2,937	<b>5.5*</b>	1.4-9.6	4,043	<b>5.9</b>	2.7-9.2	6,980	<b>5.7</b>	3.2-8.3
35-44	3,140	<b>6.2*</b>	1.7-10.7	3,949	<b>5.9</b>	2.5-9.3	7,089	<b>6.0</b>	3.3-8.8
45-54	7,415	<b>13.8</b>	8.6-19.0	9,774	<b>14.8</b>	10.1-19.5	17,189	<b>14.4</b>	10.9-17.8
55-64	11,371	<b>18.6</b>	13.6-23.6	12,294	<b>15.8</b>	11.8-19.7	23,664	<b>17.0</b>	13.9-20.1
65+	15,950	<b>18.8</b>	14.6-23.0	16,049	<b>14.5</b>	11.6-17.4	31,999	<b>16.4</b>	13.9-18.9
<b>Education</b>									
Less than H.S.	9,002	<b>17.2</b>	10.5-24.0	10,454	<b>17.2</b>	11.4-22.9	19,456	<b>17.2</b>	12.8-21.6
H.S. or G.E.D.	17,789	<b>12.2</b>	9.2-15.1	19,587	<b>12.3</b>	9.6-15.0	37,376	<b>12.2</b>	10.2-14.2
Some Post-H.S.	10,658	<b>11.9</b>	8.4-15.5	13,992	<b>10.1</b>	7.6-12.6	24,650	<b>10.8</b>	8.8-12.9
College Graduate	3,282	<b>5.1</b>	3.0-7.2	3,459	<b>3.8</b>	2.5-5.2	6,741	<b>4.4</b>	3.2-5.6
<b>Income</b>									
Less than \$15,000	5,537	<b>23.1</b>	13.8-32.4	9,872	<b>23.4</b>	16.5-30.2	15,408	<b>23.3</b>	17.8-28.8
\$15,000 - 24,999	9,409	<b>22.1</b>	15.4-28.8	11,504	<b>16.4</b>	11.6-21.1	20,913	<b>18.5</b>	14.6-22.4
\$25,000 - 34,999	6,364	<b>13.6</b>	7.8-19.5	8,498	<b>13.3</b>	9.1-17.5	14,862	<b>13.4</b>	10.0-16.9
\$35,000 - 49,999	4,726	<b>10.1</b>	5.3-15.0	4,297	<b>7.1</b>	3.8-10.5	9,023	<b>8.5</b>	5.6-11.3
\$50,000 - 74,999	5,104	<b>9.7</b>	5.4-14.0	1,901	<b>3.4*</b>	1.2-5.5	7,005	<b>6.4</b>	4.0-8.8
\$75,000+	4,033	<b>5.1</b>	2.6-7.6	3,743	<b>4.6</b>	2.1-7.0	7,776	<b>4.8</b>	3.1-6.6

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

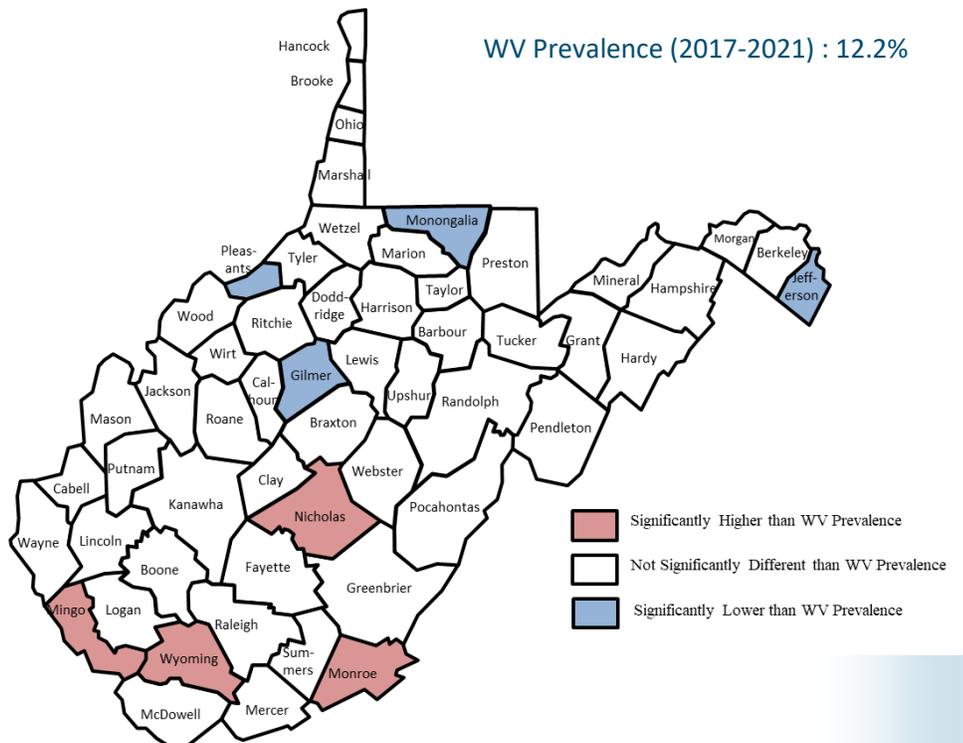


# CHAPTER 1: HEALTH STATUS

**Figure 1.8 Prevalence of Poor Health Limitations at Least 14 Days in the Past 30 Days by County: WVBRFSS, 2017-2021**



**Figure 1.9 Prevalence of Poor Health Limitations Every Day in the Past 30 Days by County: WVBRFSS, 2017-2021**



## CHAPTER 2: IMPAIRMENT

### 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: 18.2%** (95% CI: 17.0-19.4)  
**U.S.: 12.5%** (95% CI: 12.2-12.7)  
 The West Virginia prevalence of cognitive difficulty was significantly higher than the U.S. prevalence. West Virginia ranked highest among the 53 BRFSS participants.

**Table 2.1 Prevalence of Cognitive Difficulty by Demographic Characteristics: WVBRFSS, 2021**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	111,071	<b>16.1</b>	14.4-17.8	143,261	<b>20.2</b>	18.5-21.8	254,331	<b>18.2</b>	17.0-19.4
<b>Age</b>									
18-24	18,337	<b>22.2</b>	14.7-29.7	17,739	<b>23.7</b>	15.9-31.6	36,076	<b>22.9</b>	17.5-28.3
25-34	15,956	<b>15.1</b>	10.6-19.6	18,525	<b>19.2</b>	14.1-24.4	34,481	<b>17.1</b>	13.7-20.5
35-44	16,272	<b>16.0</b>	11.7-20.4	19,134	<b>18.8</b>	14.4-23.2	35,405	<b>17.4</b>	14.3-20.5
45-54	17,440	<b>17.2</b>	12.9-21.4	23,160	<b>22.7</b>	18.5-27.0	40,600	<b>20.0</b>	17.0-23.0
55-64	17,419	<b>14.7</b>	11.4-18.1	27,402	<b>21.9</b>	18.4-25.4	44,820	<b>18.4</b>	16.0-20.9
65+	24,925	<b>14.5</b>	11.9-17.1	36,394	<b>17.8</b>	15.3-20.3	61,320	<b>16.3</b>	14.5-18.1
<b>Education</b>									
Less than H.S.	24,596	<b>30.5</b>	22.8-38.1	31,994	<b>35.3</b>	28.5-42.1	56,590	<b>33.0</b>	27.9-38.1
H.S. or G.E.D.	51,808	<b>17.4</b>	14.8-20.0	56,113	<b>21.7</b>	18.9-24.5	107,921	<b>19.4</b>	17.5-21.3
Some Post-H.S.	22,982	<b>13.1</b>	10.3-16.0	42,686	<b>20.1</b>	17.1-23.0	65,669	<b>16.9</b>	14.9-19.0
College Graduate	11,194	<b>8.5</b>	6.5-10.5	12,467	<b>8.4</b>	6.6-10.2	23,661	<b>8.5</b>	7.1-9.8
<b>Income</b>									
Less than \$15,000	14,266	<b>40.9</b>	31.3-50.4	24,378	<b>40.1</b>	33.3-46.9	38,644	<b>40.4</b>	34.8-45.9
\$15,000 - 24,999	17,829	<b>27.1</b>	20.7-33.5	32,903	<b>33.9</b>	28.4-39.5	50,732	<b>31.2</b>	27.0-35.4
\$25,000 - 34,999	16,576	<b>19.6</b>	14.7-24.6	23,745	<b>24.9</b>	19.8-30.1	40,321	<b>22.4</b>	18.8-26.0
\$35,000 - 49,999	14,484	<b>15.7</b>	11.2-20.1	14,894	<b>15.3</b>	11.4-19.3	29,378	<b>15.5</b>	12.5-18.5
\$50,000 - 74,999	10,308	<b>9.7</b>	6.1-13.3	11,631	<b>12.6</b>	8.9-16.3	21,939	<b>11.0</b>	8.4-13.6
\$75,000+	13,641	<b>7.0</b>	4.9-9.1	10,506	<b>7.3</b>	4.9-9.7	24,147	<b>7.1</b>	5.5-8.7



## Difficulty Walking

**Definition** Responding “Yes” to the question, “Do you have serious difficulty walking or climbing stairs?”

**Prevalence** **WV: 21.1%** (95% CI: 19.9-22.2)

**U.S.: 13.6%** (95% CI: 13.4-13.8)

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

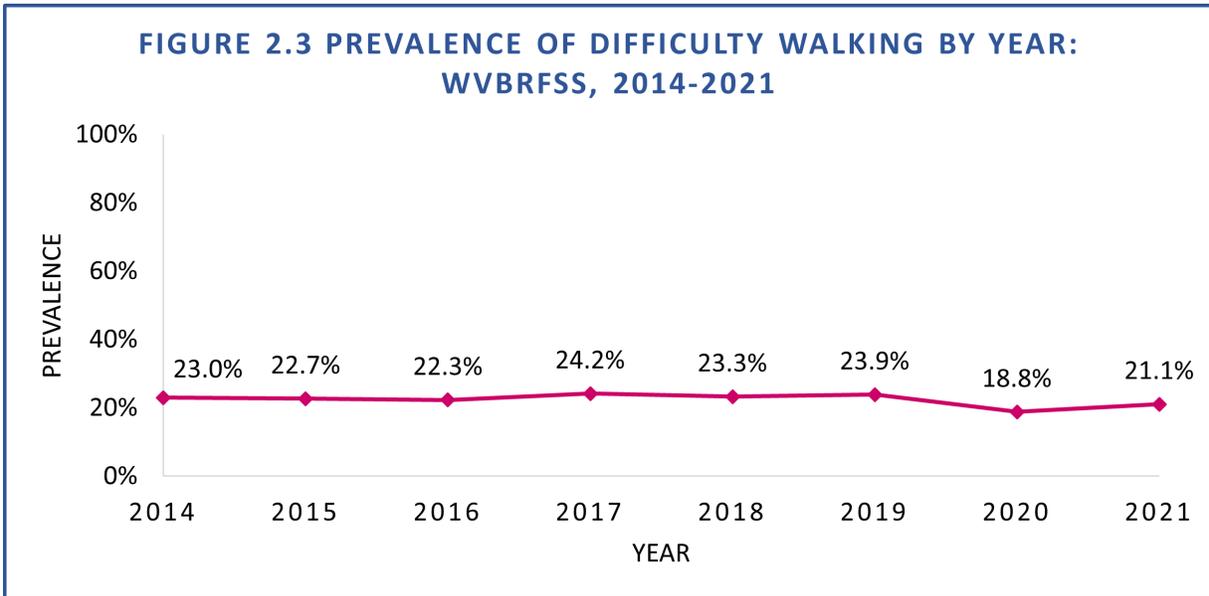
**Table 2.2 Prevalence of Difficulty Walking by Demographic Characteristics: WVBRFSS, 2021**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	121,574	<b>17.6</b>	16.1-19.2	173,545	<b>24.4</b>	22.8-26.0	295,119	<b>21.1</b>	19.9-22.2
<b>Age</b>									
18-24	2,010	2.4*	0.0-5.4	.	.	.	2,010	1.3*	0.0-2.8
25-34	3,592	3.4*	1.2-5.7	5,226	5.4	2.4-8.4	8,818	4.4	2.5-6.2
35-44	9,862	9.7	6.0-13.3	11,823	11.6	7.7-15.4	21,685	10.6	8.0-13.3
45-54	19,911	19.6	15.3-23.9	26,553	25.9	21.5-30.3	46,464	22.8	19.7-25.9
55-64	32,860	27.9	23.9-32.0	45,555	36.3	32.4-40.2	78,415	32.3	29.4-35.1
65+	52,951	30.7	27.3-34.0	82,478	40.5	37.4-43.6	135,429	36.0	33.7-38.3
<b>Education</b>									
Less than H.S.	27,007	33.7	26.4-41.1	37,285	41.3	34.6-48.1	64,292	37.7	32.7-42.7
H.S. or G.E.D.	56,657	19.0	16.6-21.4	71,066	27.5	24.8-30.3	127,723	22.9	21.1-24.8
Some Post-H.S.	24,540	14.0	11.4-16.6	46,658	21.7	19.0-24.5	71,198	18.3	16.4-20.2
College Graduate	13,278	10.1	8.1-12.1	18,202	12.3	10.4-14.1	31,480	11.2	9.9-12.6
<b>Income</b>									
Less than \$15,000	16,362	46.7	37.2-56.2	28,734	47.2	40.2-54.2	45,096	47.0	41.4-52.7
\$15,000 - 24,999	23,017	34.9	28.3-41.6	36,515	37.6	32.4-42.8	59,532	36.5	32.4-40.6
\$25,000 - 34,999	20,089	23.8	18.5-29.1	31,959	33.5	28.3-38.6	52,048	28.9	25.2-32.6
\$35,000 - 49,999	16,162	17.5	13.5-21.4	22,036	22.5	18.4-26.6	38,198	20.1	17.2-22.9
\$50,000 - 74,999	12,818	12.1	8.8-15.3	12,042	13.0	9.8-16.2	24,859	12.5	10.2-14.8
\$75,000+	12,670	6.5	4.8-8.1	11,397	7.9	5.8-10.0	24,067	7.1	5.8-8.4

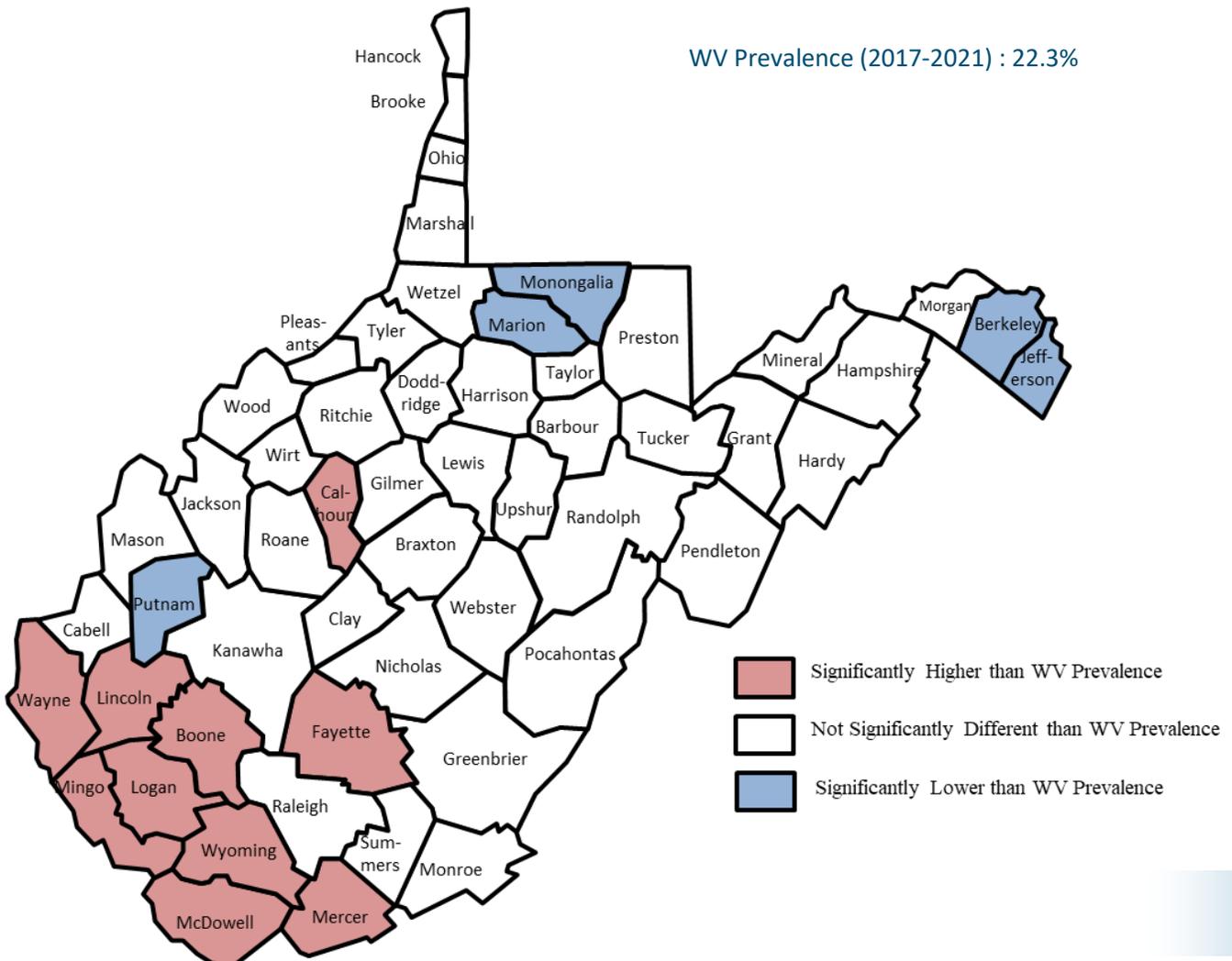
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

## CHAPTER 2: IMPAIRMENT

**FIGURE 2.3 PREVALENCE OF DIFFICULTY WALKING BY YEAR:  
WVBRFSS, 2014-2021**



**Figure 2.4 Prevalence of Difficulty Walking by County: WVBRFSS, 2017-2021**



### Difficulty Dressing or Bathing

**Definition** Responding “Yes” to the question, “Do you have difficulty dressing or bathing?”

**Prevalence** **WV: 5.4%** (95% CI: 4.8-6.0)

**U.S.: 3.9%** (95% CI: 3.8-4.1)

The West Virginia prevalence of difficulty dressing or bathing is significantly higher than the U.S. prevalence. West Virginia ranked the fourth highest among the 53 BRFSS participants.

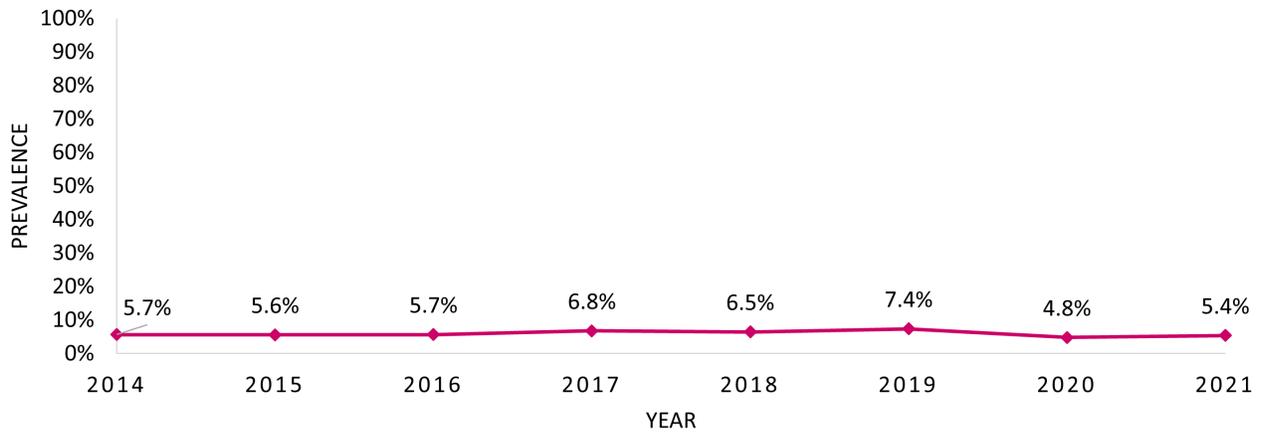
**Table 2.3 Prevalence of Difficulty Dressing or Bathing by Demographic Characteristics: WVBRFSS, 2021**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	34,611	<b>5.0</b>	4.2-5.9	41,053	<b>5.8</b>	4.9-6.7	75,664	<b>5.4</b>	4.8-6.0
<b>Age</b>									
18-24	934	<b>1.1*</b>	0.0-2.7	.	.	.	934	<b>0.6*</b>	0.0-1.4
25-34	.	.	.	1,663	<b>1.7*</b>	0.2-3.3	1,663	<b>0.8*</b>	0.1-1.6
35-44	2,493	<b>2.4*</b>	0.9-4.0	2,862	<b>2.8*</b>	0.9-4.7	5,356	<b>2.6</b>	1.4-3.9
45-54	9,580	<b>9.4</b>	6.0-12.8	6,891	<b>6.7</b>	4.0-9.5	16,471	<b>8.1</b>	5.9-10.2
55-64	9,263	<b>7.9</b>	5.4-10.3	10,779	<b>8.6</b>	6.3-10.9	20,043	<b>8.3</b>	6.6-9.9
65+	12,341	<b>7.2</b>	5.4-8.9	18,560	<b>9.1</b>	7.2-11.0	30,901	<b>8.2</b>	6.9-9.5
<b>Education</b>									
Less than H.S.	5,987	<b>7.5</b>	3.8-11.2	11,559	<b>13.0</b>	8.6-17.3	17,546	<b>10.4</b>	7.5-13.2
H.S. or G.E.D.	16,058	<b>5.4</b>	4.0-6.7	13,174	<b>5.1</b>	3.9-6.3	29,233	<b>5.2</b>	4.3-6.2
Some Post-H.S.	8,401	<b>4.8</b>	3.2-6.4	12,375	<b>5.8</b>	4.2-7.4	20,776	<b>5.3</b>	4.2-6.5
College Graduate	3,769	<b>2.9</b>	1.7-4.0	3,945	<b>2.7</b>	1.7-3.6	7,713	<b>2.8</b>	2.0-3.5
<b>Income</b>									
Less than \$15,000	6,178	<b>17.7</b>	10.5-24.8	10,221	<b>16.9</b>	11.7-22.2	16,400	<b>17.2</b>	13.0-21.4
\$15,000 - 24,999	5,301	<b>8.0</b>	4.7-11.4	8,090	<b>8.4</b>	5.7-11.0	13,391	<b>8.2</b>	6.2-10.3
\$25,000 - 34,999	5,613	<b>6.6</b>	3.6-9.7	7,637	<b>8.0</b>	5.2-10.8	13,250	<b>7.4</b>	5.3-9.4
\$35,000 - 49,999	3,003	<b>3.2</b>	1.5-5.0	4,273	<b>4.4</b>	2.4-6.4	7,276	<b>3.8</b>	2.5-5.2
\$50,000 - 74,999	3,509	<b>3.3</b>	1.7-4.9	2,542	<b>2.7</b>	1.2-4.3	6,052	<b>3.0</b>	1.9-4.2
\$75,000+	4,253	<b>2.2</b>	1.1-3.2	1,563	<b>1.1*</b>	0.1-2.1	5,816	<b>1.7</b>	1.0-2.5

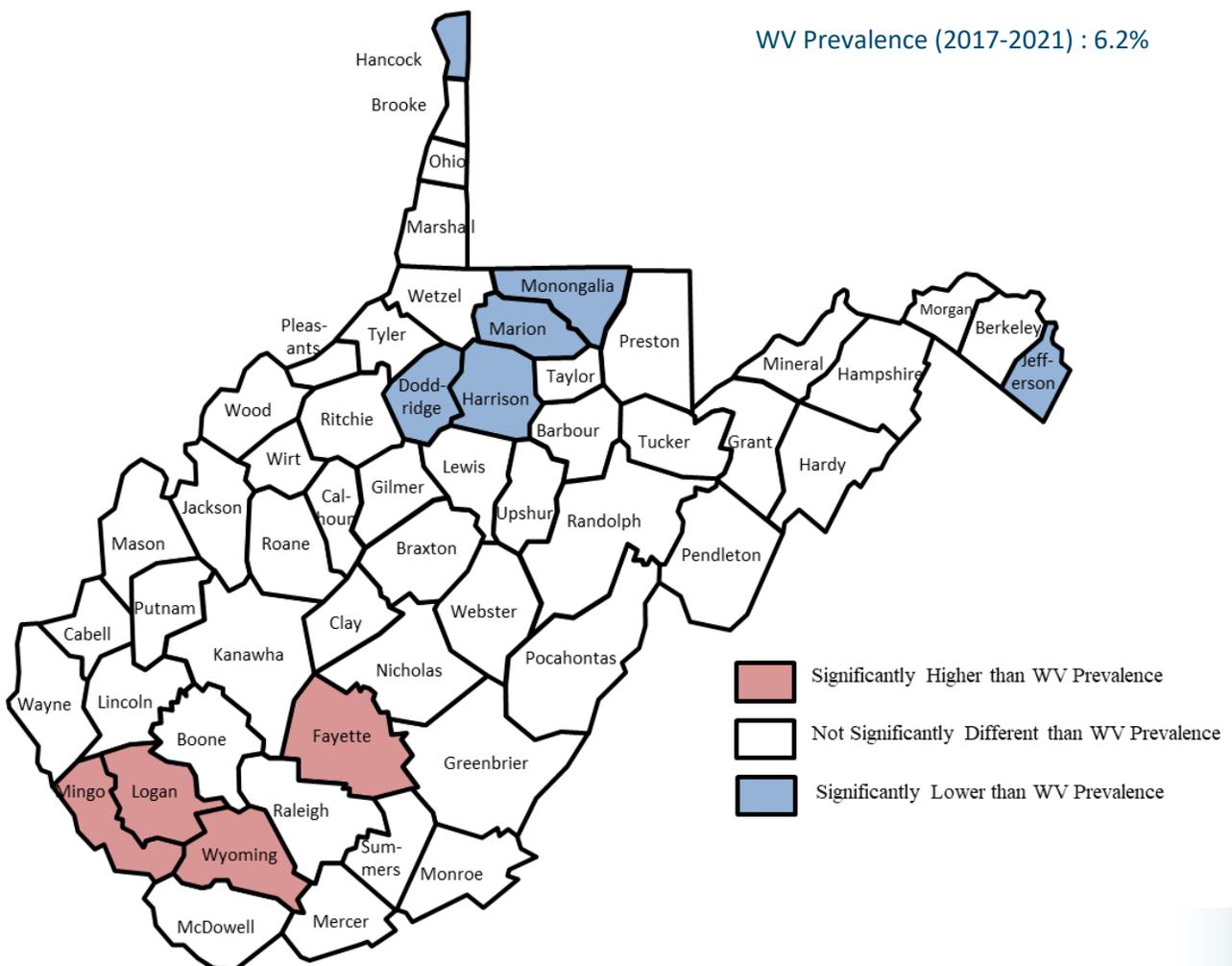
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

## CHAPTER 2: IMPAIRMENT

**FIGURE 2.5 PREVALENCE OF DIFFICULTY DRESSING OR BATHING BY YEAR: WVBRFSS, 2014-2021**



**Figure 2.6 Prevalence of Difficulty Dressing or Bathing by County: WVBRFSS, 2017-2021**



### 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?”

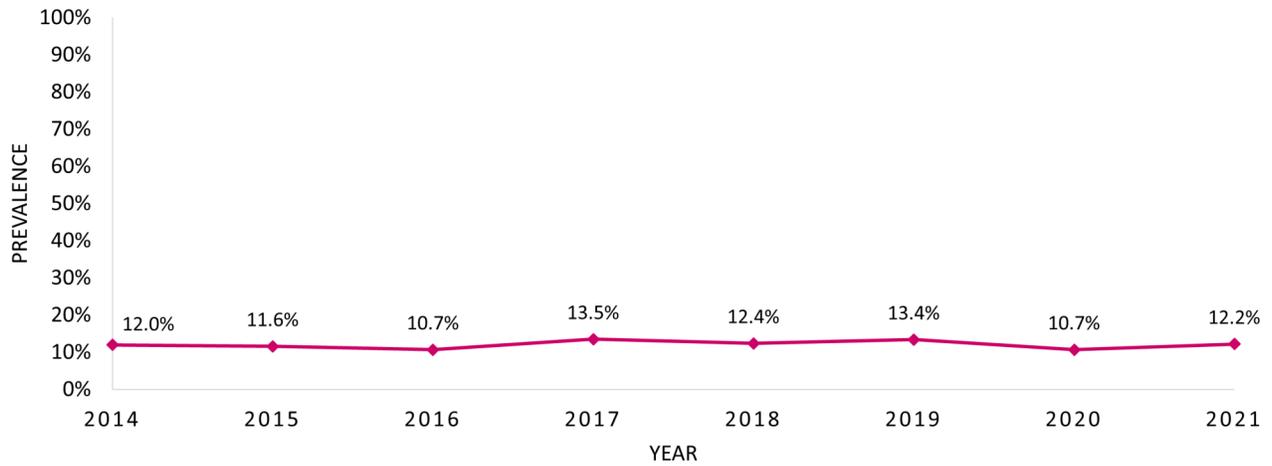
**Prevalence** **WV: 12.2%** (95% CI: 11.2-13.2)  
**U.S.: 7.5%** (95% CI: 7.3-7.6)  
 The West Virginia prevalence of difficulty doing errands alone was significantly higher than the U.S. prevalence. West Virginia ranked the highest among the 53 BRFSS participants.

**Table 2.4 Prevalence of Difficulty Doing Errands Alone by Demographic Characteristics: WVBRFSS, 2021**

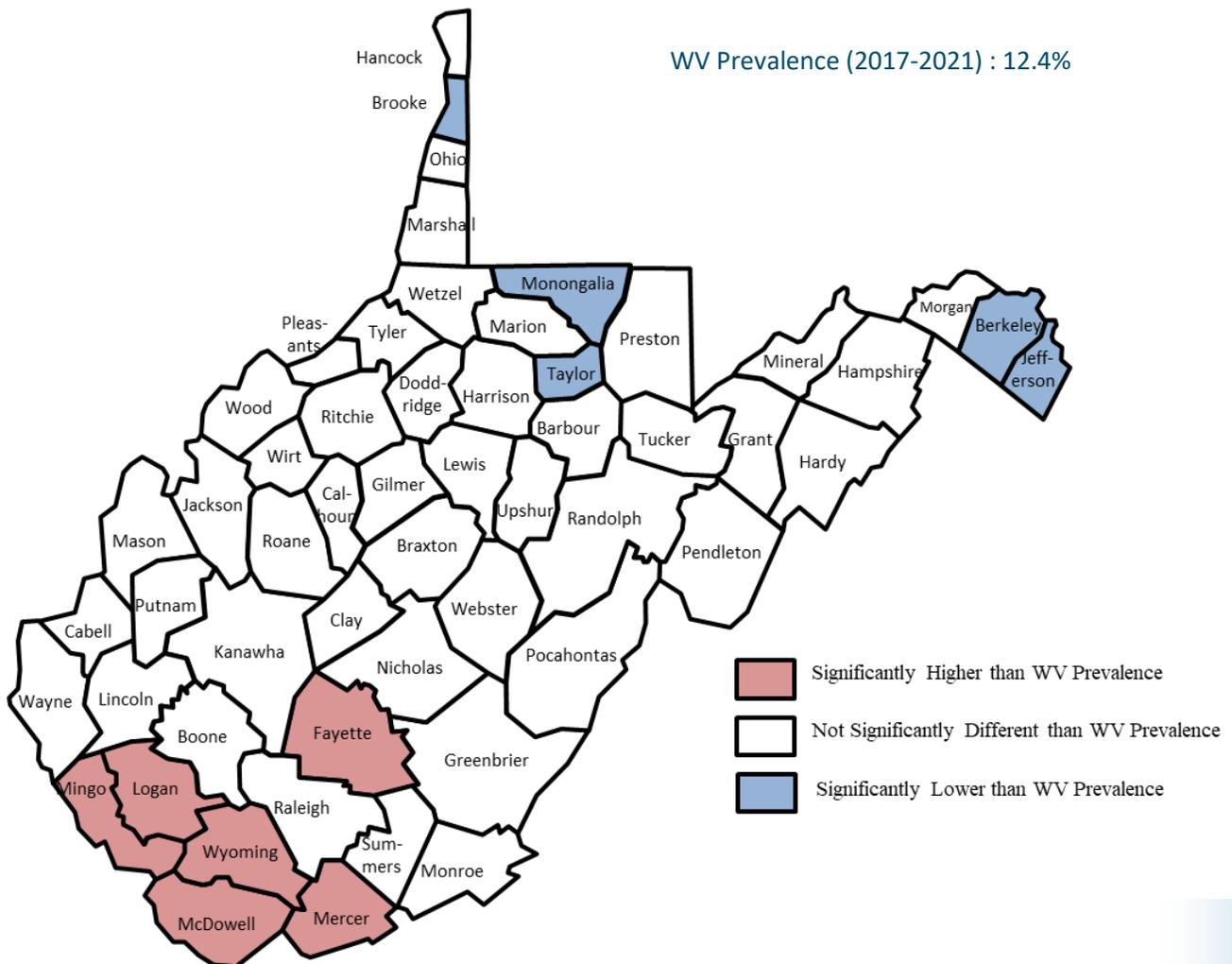
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	60,535	<b>8.8</b>	7.5-10.1	109,808	<b>15.5</b>	14.1-17.0	170,343	<b>12.2</b>	11.2-13.2
<b>Age</b>									
18-24	8,152	<b>9.8</b>	4.2-15.4	8,812	<b>11.9</b>	5.9-17.8	16,964	<b>10.8</b>	6.7-14.9
25-34	5,588	<b>5.3</b>	2.4-8.3	9,103	<b>9.4</b>	5.5-13.3	14,691	<b>7.3</b>	4.9-9.7
35-44	8,288	<b>8.2</b>	4.8-11.6	12,531	<b>12.4</b>	8.8-16.0	20,819	<b>10.3</b>	7.8-12.8
45-54	7,962	<b>7.8</b>	5.0-10.7	14,777	<b>14.4</b>	10.8-18.0	22,740	<b>11.1</b>	8.8-13.5
55-64	10,093	<b>8.6</b>	6.1-11.1	22,375	<b>17.9</b>	14.6-21.1	32,468	<b>13.4</b>	11.3-15.5
65+	20,261	<b>11.8</b>	9.4-14.1	40,703	<b>20.1</b>	17.6-22.6	60,965	<b>16.3</b>	14.5-18.0
<b>Education</b>									
Less than H.S.	15,725	<b>19.8</b>	13.3-26.3	26,433	<b>29.8</b>	23.4-36.1	42,158	<b>25.1</b>	20.5-29.7
H.S. or G.E.D.	28,795	<b>9.7</b>	7.7-11.6	43,388	<b>16.8</b>	14.4-19.2	72,183	<b>13.0</b>	11.5-14.5
Some Post-H.S.	9,295	<b>5.3</b>	3.6-7.0	30,547	<b>14.3</b>	11.9-16.8	39,842	<b>10.3</b>	8.7-11.8
College Graduate	6,530	<b>5.0</b>	3.4-6.5	9,439	<b>6.4</b>	4.9-7.9	15,969	<b>5.7</b>	4.6-6.8
<b>Income</b>									
Less than \$15,000	8,943	<b>25.6</b>	17.3-33.8	22,653	<b>37.2</b>	30.5-43.9	31,596	<b>32.9</b>	27.7-38.2
\$15,000 - 24,999	10,682	<b>16.2</b>	11.3-21.1	25,223	<b>26.2</b>	21.5-30.9	35,905	<b>22.2</b>	18.7-25.6
\$25,000 - 34,999	10,282	<b>12.2</b>	8.0-16.5	19,053	<b>20.1</b>	15.2-24.9	29,336	<b>16.4</b>	13.1-19.7
\$35,000 - 49,999	7,311	<b>8.0</b>	5.0-10.9	9,865	<b>10.1</b>	7.0-13.2	17,176	<b>9.1</b>	6.9-11.2
\$50,000 - 74,999	3,169	<b>3.0</b>	1.4-4.5	5,355	<b>5.8</b>	3.5-8.0	8,524	<b>4.3</b>	2.9-5.6
\$75,000+	4,229	<b>2.2</b>	1.0-3.3	5,684	<b>4.0</b>	2.3-5.6	9,914	<b>2.9</b>	2.0-3.9

## CHAPTER 2: IMPAIRMENT

**FIGURE 2.7 PREVALENCE OF DIFFICULTY DOING ERRANDS ALONE BY YEAR: WVBRFSS, 2014-2021**



**Figure 2.8 Prevalence of Difficulty Doing Errands Alone by County: WVBRFSS, 2017-2021**



## CHAPTER 2: IMPAIRMENT

### Prevalence of Vision Impairment

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

**Prevalence** **WV: 6.7%** (95% CI: 5.9-7.4)

**U.S.: 5.1%** (95% CI: 5.0-5.3)

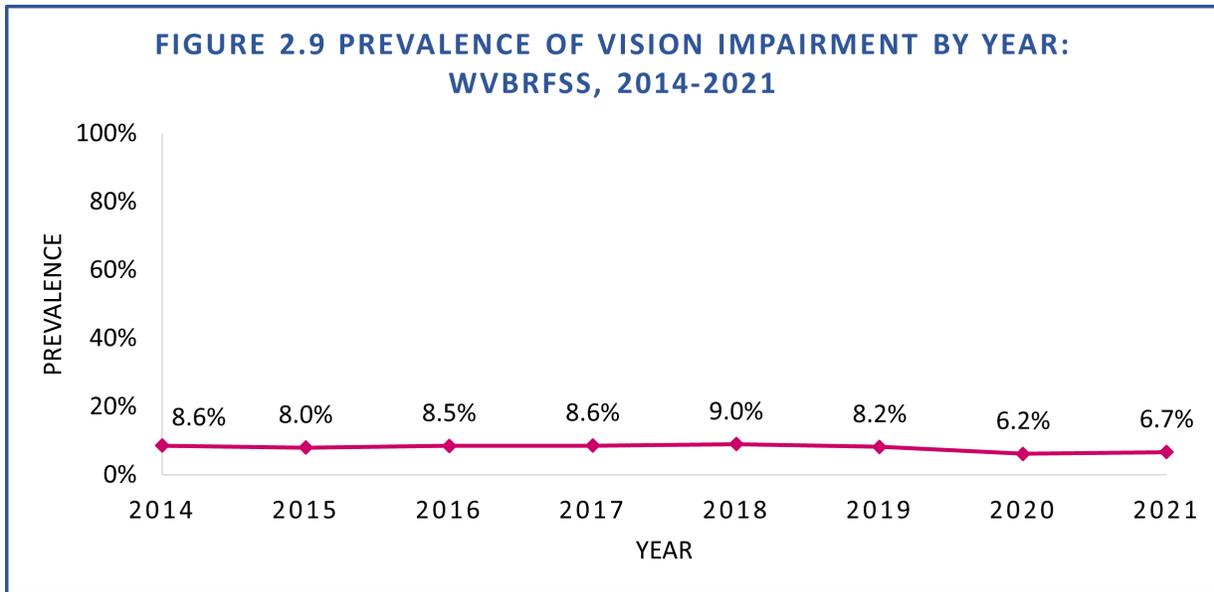
The West Virginia prevalence of vision impairment was significantly higher than the U.S. prevalence. West Virginia ranked the sixth highest among 53 BRFSS participants.

**Table 2.5 Prevalence of Vision Impairment by Demographic Characteristics: WVBRFSS, 2021**

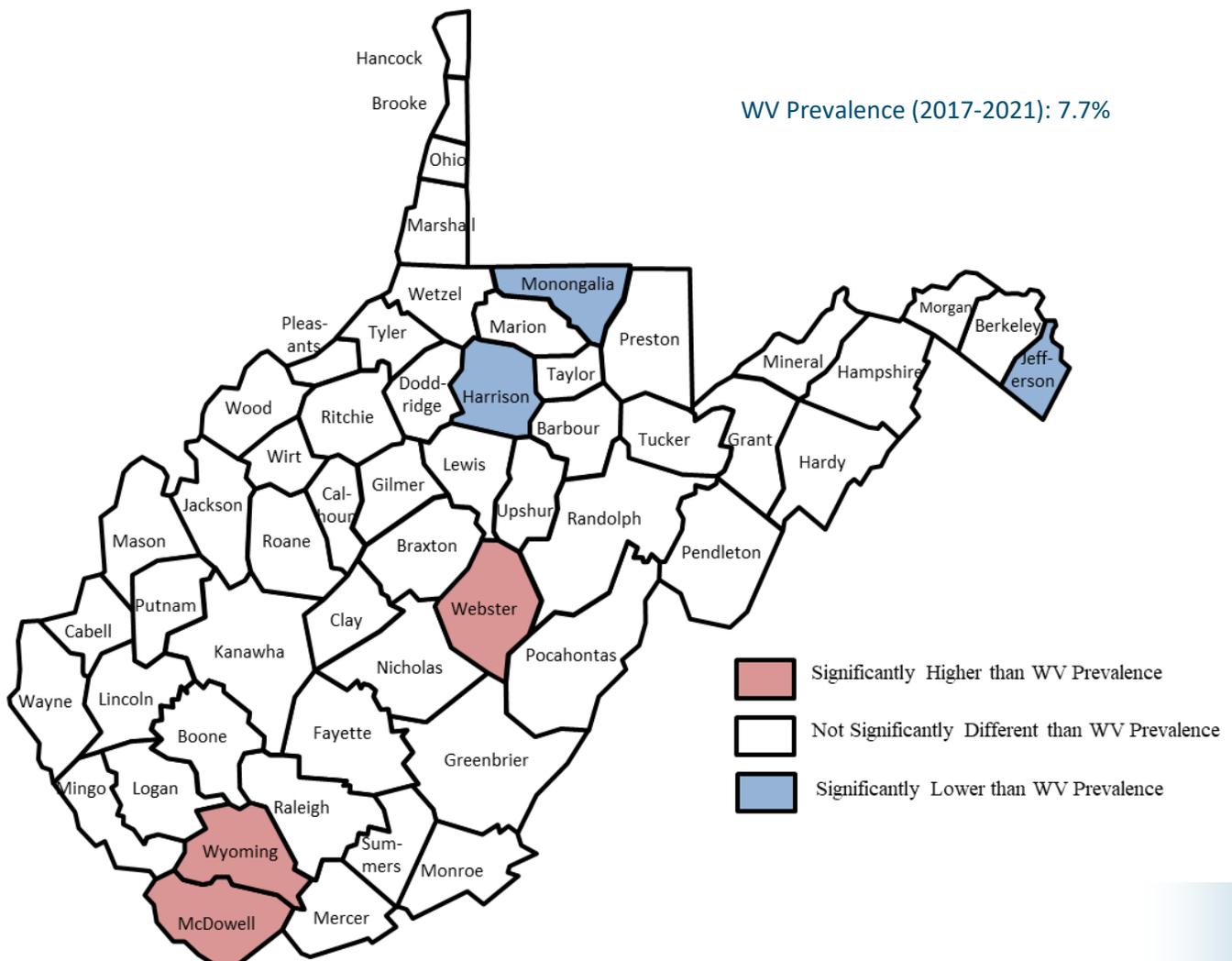
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	43,020	<b>6.2</b>	5.2-7.3	50,513	<b>7.1</b>	6.1-8.1	93,533	<b>6.7</b>	5.9-7.4
<b>Age</b>									
18-24	2,677	<b>3.2*</b>	0.0-6.4	2,563	<b>3.4*</b>	0.4-6.5	5,240	<b>3.3*</b>	1.1-5.5
25-34	2,859	<b>2.7*</b>	0.8-4.7	3,966	<b>4.1*</b>	1.3-6.9	6,825	<b>3.4</b>	1.7-5.0
35-44	1,854	<b>1.8*</b>	0.3-3.3	4,184	<b>4.1</b>	2.0-6.2	6,039	<b>3.0</b>	1.7-4.2
45-54	7,731	<b>7.6</b>	4.5-10.7	7,421	<b>7.2</b>	4.6-9.8	15,152	<b>7.4</b>	5.4-9.4
55-64	9,598	<b>8.1</b>	5.6-10.6	10,918	<b>8.7</b>	6.4-11.1	20,516	<b>8.4</b>	6.7-10.1
65+	18,300	<b>10.6</b>	8.1-13.1	21,272	<b>10.4</b>	8.4-12.3	39,572	<b>10.5</b>	8.9-12.0
<b>Education</b>									
Less than H.S.	12,902	<b>15.8</b>	10.5-21.1	17,121	<b>19.1</b>	14.0-24.1	30,024	<b>17.5</b>	13.8-21.2
H.S. or G.E.D.	17,315	<b>5.8</b>	4.3-7.3	18,802	<b>7.3</b>	5.7-8.9	36,117	<b>6.5</b>	5.4-7.6
Some Post-H.S.	8,854	<b>5.1</b>	3.1-7.0	10,580	<b>4.9</b>	3.5-6.3	19,435	<b>5.0</b>	3.8-6.1
College Graduate	3,949	<b>3.0</b>	1.8-4.1	3,942	<b>2.6</b>	1.7-3.6	7,891	<b>2.8</b>	2.1-3.5
<b>Income</b>									
Less than \$15,000	5,512	<b>15.7</b>	8.6-22.8	9,402	<b>15.5</b>	11.0-20.0	14,914	<b>15.6</b>	11.7-19.4
\$15,000 - 24,999	8,510	<b>12.8</b>	8.1-17.5	12,340	<b>12.6</b>	9.1-16.1	20,850	<b>12.7</b>	9.9-15.5
\$25,000 - 34,999	5,265	<b>6.2</b>	3.1-9.3	8,751	<b>9.1</b>	5.8-12.4	14,016	<b>7.8</b>	5.5-10.1
\$35,000 - 49,999	6,919	<b>7.6</b>	4.6-10.5	4,890	<b>5.0</b>	2.8-7.2	11,809	<b>6.2</b>	4.4-8.0
\$50,000 - 74,999	2,673	<b>2.5</b>	1.1-4.0	3,269	<b>3.5*</b>	1.3-5.7	5,942	<b>3.0</b>	1.7-4.3
\$75,000+	5,552	<b>2.8</b>	1.4-4.3	2,447	<b>1.7</b>	0.7-2.6	7,999	<b>2.3</b>	1.4-3.3

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

## CHAPTER 2: IMPAIRMENT



**Figure 2.10 Prevalence of Vision Impairment by County: WVBRFSS, 2017-2021**



## CHAPTER 2: IMPAIRMENT

### Prevalence of Hearing Impairment

**Definition** Responding “Yes” to the question, “Are you deaf or do you have serious difficulty hearing?”

**Prevalence** **WV: 10.6%** (95% CI: 9.7-11.5)

**U.S.: 6.9%** (95% CI: 6.7-7.0)

The West Virginia prevalence of hearing impairment was significantly higher than the U.S. prevalence. West Virginia ranked the second highest among 53 BRFSS participants. Kentucky has the highest prevalence of hearing impairment among 53 BRFSS participants.

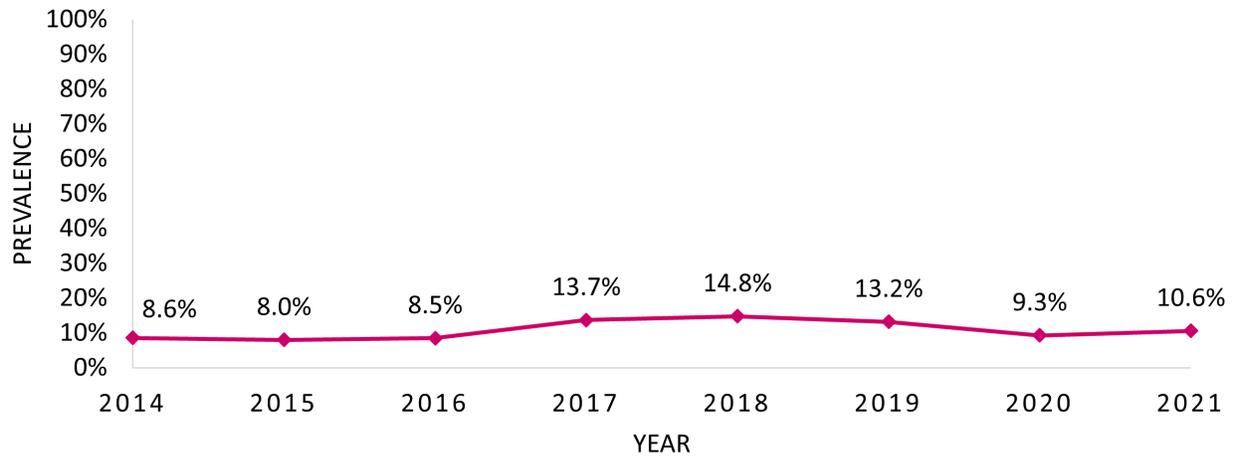
**Table 2.6 Prevalence of Hearing Impairment by Demographic Characteristics: WVBRFSS, 2021**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	97,015	<b>14.0</b>	12.6-15.5	52,372	<b>7.3</b>	6.3-8.3	149,387	<b>10.6</b>	9.7-11.5
<b>Age</b>									
18-24	6,771	<b>8.1*</b>	3.1-13.2	1,265	<b>1.7*</b>	0.0-3.7	8,036	<b>5.1</b>	2.2-7.9
25-34	2,269	<b>2.1*</b>	0.6-3.6	688	<b>0.7*</b>	0.0-1.5	2,957	<b>1.5*</b>	0.6-2.3
35-44	7,628	<b>7.4</b>	3.9-10.9	4,197	<b>4.1*</b>	1.7-6.5	11,825	<b>5.7</b>	3.6-7.9
45-54	12,404	<b>12.2</b>	8.7-15.7	5,410	<b>5.2</b>	2.8-7.7	17,814	<b>8.7</b>	6.6-10.8
55-64	19,464	<b>16.4</b>	13.1-19.7	8,054	<b>6.4</b>	4.5-8.3	27,518	<b>11.3</b>	9.3-13.2
65+	47,929	<b>27.8</b>	24.6-31.0	31,866	<b>15.5</b>	13.2-17.9	79,794	<b>21.1</b>	19.2-23.1
<b>Education</b>									
Less than H.S.	18,210	<b>22.3</b>	15.9-28.8	12,648	<b>13.9</b>	9.3-18.4	30,858	<b>17.8</b>	14.0-21.7
H.S. or G.E.D.	44,014	<b>14.8</b>	12.5-17.0	18,521	<b>7.1</b>	5.6-8.7	62,535	<b>11.2</b>	9.8-12.6
Some Post-H.S.	22,795	<b>12.9</b>	10.4-15.5	14,210	<b>6.6</b>	5.0-8.2	37,005	<b>9.5</b>	8.0-10.9
College Graduate	11,561	<b>8.8</b>	7.0-10.6	6,925	<b>4.6</b>	3.5-5.8	18,486	<b>6.6</b>	5.5-7.6
<b>Income</b>									
Less than \$15,000	6,811	<b>19.3</b>	11.7-26.8	7,485	<b>12.3</b>	8.0-16.6	14,296	<b>14.8</b>	10.9-18.8
\$15,000 - 24,999	12,181	<b>18.3</b>	12.8-23.8	10,158	<b>10.4</b>	7.2-13.5	22,338	<b>13.6</b>	10.6-16.5
\$25,000 - 34,999	15,111	<b>18.0</b>	13.4-22.5	7,911	<b>8.3</b>	5.5-11.1	23,022	<b>12.8</b>	10.2-15.4
\$35,000 - 49,999	15,023	<b>16.2</b>	12.4-20.1	6,732	<b>6.9</b>	4.0-9.7	21,755	<b>11.4</b>	9.1-13.8
\$50,000 - 74,999	11,166	<b>10.5</b>	7.5-13.5	4,755	<b>5.1</b>	3.1-7.1	15,921	<b>8.0</b>	6.1-9.8
\$75,000+	18,507	<b>9.4</b>	7.3-11.5	5,253	<b>3.6</b>	2.2-5.1	23,759	<b>7.0</b>	5.6-8.3

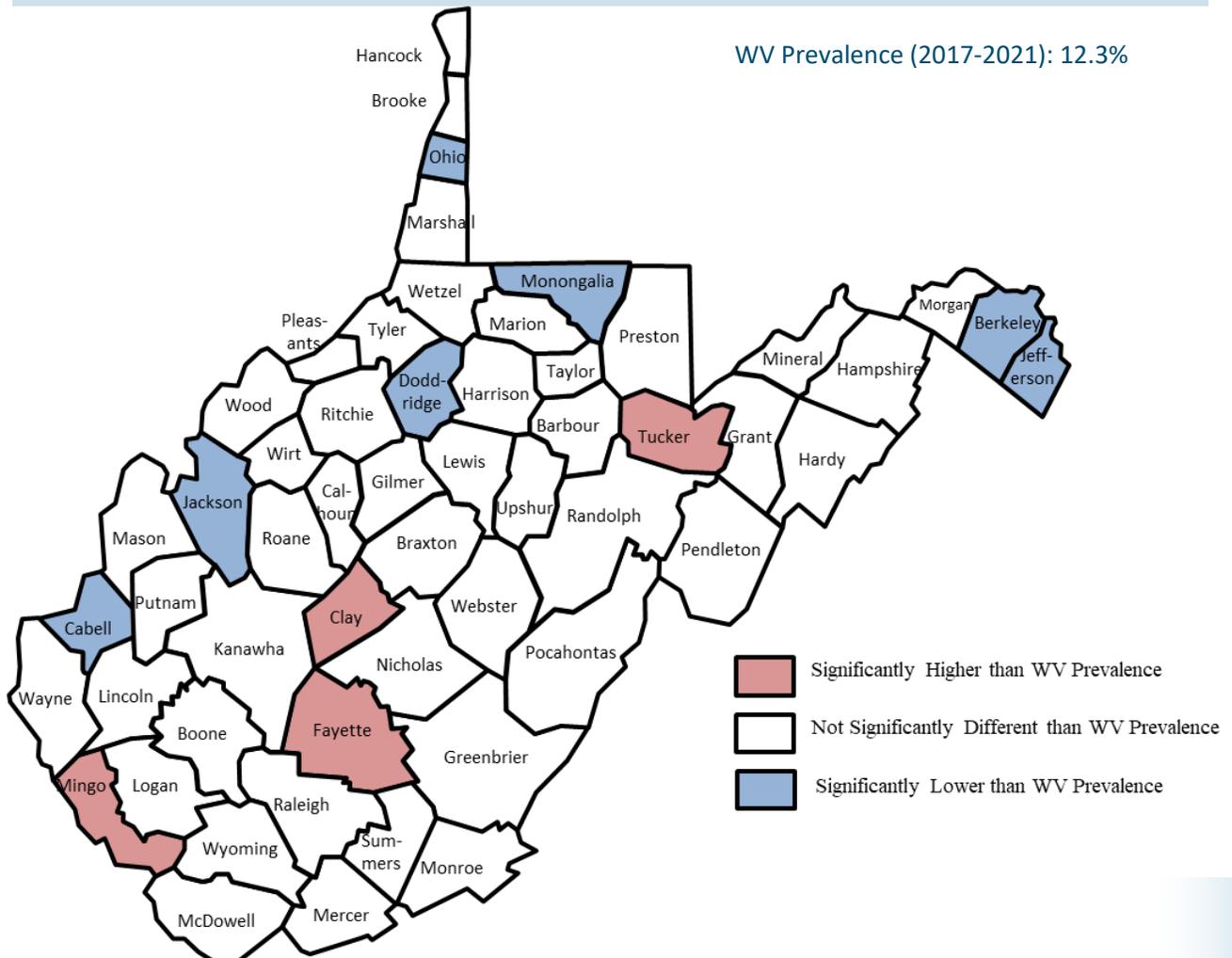
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

## CHAPTER 2: IMPAIRMENT

**FIGURE 2.11 PREVALENCE OF HEARING IMPAIRMENT BY YEAR: WVBRFSS, 2014-2021**



**Figure 2.12 Prevalence of Hearing Impairment by County: WVBRFSS, 2017-2021**



## CHAPTER 3: HEALTH CARE ACCESS

### 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: 8.3%** (95% CI: 7.2-9.4)  
**U.S.: 10.9%** (95% CI: 10.6-11.1)  
 The prevalence of no health care coverage among those aged 18-64 was significantly lower in West Virginia than in the U.S. West Virginia ranked the 30<sup>th</sup> highest among 53 BRFSS participants.

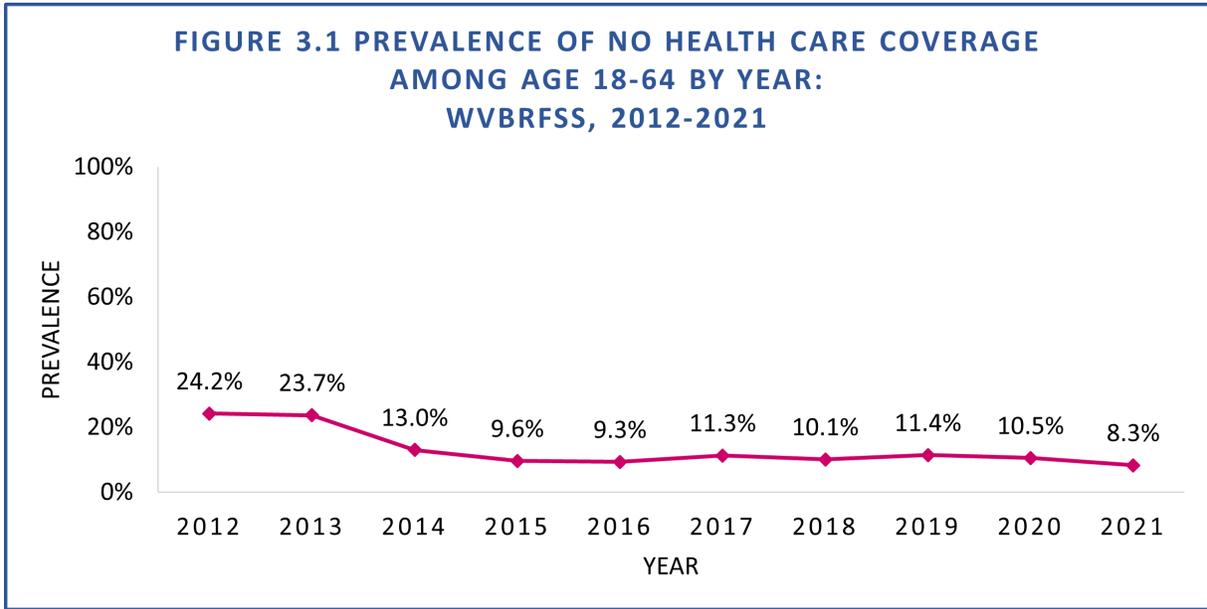
**Table 3.1 Prevalence of No Health Care Coverage Among Adults Aged 18-64 by Demographic Characteristics: WVBRFSS, 2021**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	49,453	<b>10.0</b>	8.3-11.7	32,189	<b>6.6</b>	5.2-7.9	81,642	<b>8.3</b>	7.2-9.4
<b>Age</b>									
18-24	8,666	<b>12.3</b>	6.2-18.3	4,807	<b>7.3*</b>	2.2-12.4	13,473	<b>9.9</b>	5.9-13.9
25-34	14,234	<b>13.8</b>	9.4-18.2	7,247	<b>7.4</b>	3.8-11.1	21,481	<b>10.7</b>	7.8-13.6
35-44	10,670	<b>10.4</b>	6.6-14.2	6,325	<b>6.2</b>	3.5-8.9	16,995	<b>8.3</b>	6.0-10.7
45-54	8,117	<b>8.1</b>	5.2-11.1	4,942	<b>4.8</b>	2.9-6.8	13,059	<b>6.5</b>	4.7-8.2
55-64	7,766	<b>6.6</b>	4.4-8.8	8,867	<b>7.3</b>	5.0-9.5	16,633	<b>7.0</b>	5.4-8.5
<b>Education</b>									
Less than H.S.	5,870	<b>10.9</b>	4.6-17.2	5,542	<b>10.0*</b>	3.9-16.0	11,412	<b>10.4</b>	6.1-14.8
H.S. or G.E.D.	28,724	<b>13.2</b>	10.3-16.2	13,206	<b>8.1</b>	5.6-10.5	41,929	<b>11.0</b>	9.0-13.0
Some Post-H.S.	10,015	<b>8.0</b>	5.2-10.8	9,332	<b>6.0</b>	3.7-8.3	19,347	<b>6.9</b>	5.1-8.7
College Graduate	4,255	<b>4.5</b>	2.7-6.3	4,110	<b>3.6</b>	2.1-5.1	8,365	<b>4.0</b>	2.8-5.2
<b>Income</b>									
Less than \$15,000	3,286	<b>12.7*</b>	4.2-21.1	2,035	<b>5.0*</b>	1.2-8.9	5,322	<b>8.0</b>	3.9-12.1
\$15,000 - 24,999	5,637	<b>13.5</b>	7.1-19.9	4,252	<b>6.9</b>	3.0-10.8	9,888	<b>9.6</b>	6.1-13.1
\$25,000 - 34,999	9,266	<b>18.2</b>	11.6-24.8	9,967	<b>16.5</b>	10.5-22.5	19,233	<b>17.3</b>	12.8-21.7
\$35,000 - 49,999	8,514	<b>14.0</b>	9.0-18.9	5,472	<b>8.1</b>	4.3-11.9	13,986	<b>10.9</b>	7.8-14.0
\$50,000 - 74,999	6,689	<b>8.5</b>	4.0-13.0	3,625	<b>5.3*</b>	2.0-8.7	10,314	<b>7.0</b>	4.1-9.9
\$75,000+	6,422	<b>3.9</b>	2.1-5.8	2,498	<b>2.0*</b>	0.4-3.6	8,920	<b>3.1</b>	1.8-4.4

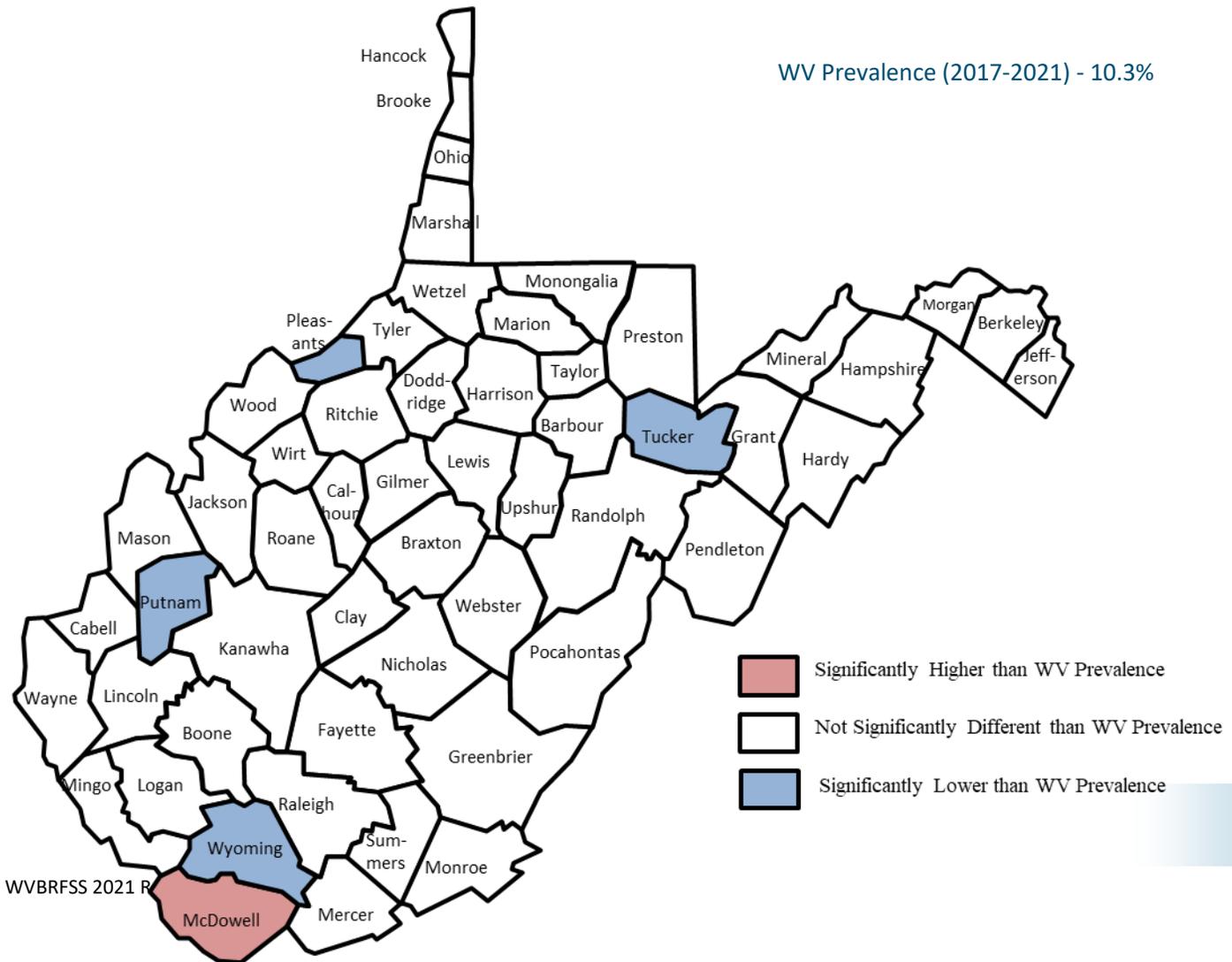
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

# CHAPTER 3: HEALTH CARE ACCESS

**FIGURE 3.1 PREVALENCE OF NO HEALTH CARE COVERAGE AMONG AGE 18-64 BY YEAR: WVBRFSS, 2012-2021**



**Figure 3.2 Prevalence of No Health Care Coverage Among Adults Aged 18-64 by County: WVBRFSS, 2017-2021**



### 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: WV: 46.6%** (95% CI: 45.1-48.1)

**U.S.: 56.8%** (95% CI: 56.5-57.2)

The prevalence of private health care coverage was significantly lower in West Virginia than in the U.S. West Virginia ranked the 14<sup>th</sup> lowest among 53 BRFSS participants.

**Medicare: WV: 27.8%** (95% CI: 26.6-29.0)

**U.S.: 22.9%** (95% CI: 22.6-23.2)

The prevalence of Medicare health care coverage was significantly higher in West Virginia than in the U.S. West Virginia ranked the second highest among 53 BRFSS participants.

**Medicaid: WV: 12.8%** (95% CI: 11.7-13.9)

**U.S.: 0.2%** (95% CI: 0.1-0.2)

The prevalence of Medicaid health care coverage was significantly higher in West Virginia than in the U.S. West Virginia ranked the ninth highest among 53 BRFSS participants.

**Other: WV: 6.7%** (95% CI: 6.0-7.4)

**U.S.: 10.8%** (95% CI: 10.6-11.0)

The prevalence of Other health care coverage was significantly lower in West Virginia than in the U.S. West Virginia ranked the sixth lowest among 53 BRFSS participants.

**None: WV: 6.1%** (95% CI: 5.3-6.9)

**U.S.: 9.3%** (95% CI: 9.1-9.6)

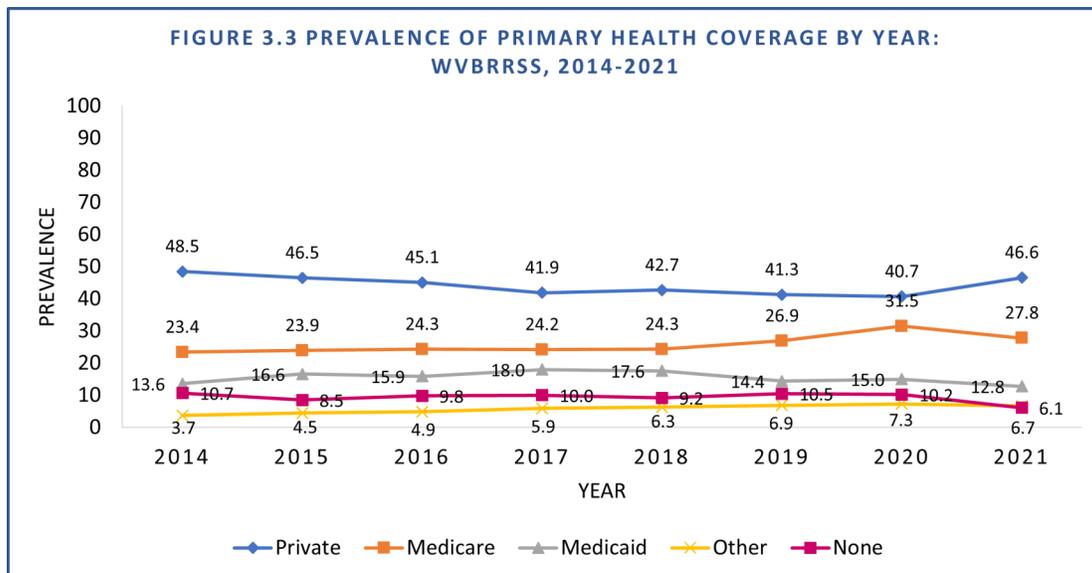
The prevalence of no health care coverage was significantly lower in West Virginia than in the U.S. West Virginia ranked the 33<sup>th</sup> highest among 53 BRFSS participants.

## CHAPTER 3: HEALTH CARE ACCESS

**Table 3.2 Prevalence of Primary Health Care Coverage by Demographic Characteristics: WVBRFSS, 2021**

Characteristic	Private		Medicare		Medicaid		Other		None	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>TOTAL</b>	<b>46.6</b>	45.1-48.1	<b>27.8</b>	26.6-29.0	<b>12.8</b>	11.7-13.9	<b>6.7</b>	6.0-7.4	<b>6.1</b>	5.3-6.9
<b>Gender</b>										
Male	49.7	47.5-51.9	24.6	22.9-26.4	10.1	8.6-11.6	7.9	6.8-9.0	7.6	6.3-8.9
Female	43.6	41.6-45.6	30.8	29.1-32.5	15.4	13.8-17.0	5.5	4.5- 6.4	4.7	3.8-5.7
<b>Age</b>										
18-24	62.8	56.2-69.5	4.7*	1.8-7.6	17.2	12.0-22.5	5.4	2.3-8.4	9.9	5.9-13.9
25-34	57.7	53.3-62.2	5.0	2.8-7.2	21.5	17.8-25.3	5.0	3.2-6.8	10.7	7.8-13.6
35-44	62.8	58.8-66.8	4.8	3.0-6.6	18.5	15.2-21.8	5.5	3.6-7.5	8.3	6.0-10.7
45-54	62.0	58.4-65.5	10.0	7.8-12.2	13.9	11.3-16.5	7.6	5.7-9.5	6.5	4.7-8.2
55-64	51.9	48.9-54.9	19.0	16.6-21.4	14.6	12.3-16.9	7.5	5.9-9.1	7.0	5.4-8.5
65+	13.4	11.9-14.9	76.6	74.7-78.6	1.8	1.1-2.5	7.7	6.5-9.0	0.5*	0.1-0.8
<b>Education</b>										
Less than H.S.	17.3	12.8-21.8	41.8	36.7-46.9	29.3	24.4-34.3	4.4	2.2-6.6	7.2	4.3-10.1
H.S. or G.E.D.	40.9	38.5-43.4	30.1	28.1-32.1	14.0	12.2-15.8	7.0	5.8-8.3	8.0	6.5-9.4
Some Post-H.S.	52.1	49.3-54.9	24.4	22.3-26.6	10.2	8.4-12.0	8.1	6.6-4.0	5.1	3.8-6.5
College Graduate	68.0	65.9-70.2	19.3	17.6-21.0	4.2	3.2-5.2	5.3	4.3-6.4	3.1	2.2-4.0
<b>Income</b>										
Less than \$15,000	6.7	3.4-10.0	43.6	38.0-49.2	34.6	29.1-40.2	8.9	5.4-12.3	6.2	3.1-9.2
\$15,000 - 24,999	11.5	8.6-14.3	45.2	40.8-49.6	28.5	24.1-33.0	8.6	6.2-11.0	6.2	3.9-8.5
\$25,000 - 34,999	25.4	21.6-29.2	35.4	31.6-39.2	19.8	16.2-23.2	7.9	5.9-10.0	11.5	8.5-14.5
\$35,000 - 49,999	44.4	40.5-48.4	30.0	26.7-33.3	10.2	7.6-12.8	7.6	5.4-9.8	7.8	5.6-10.0
\$50,000 - 74,999	64.5	60.8-68.2	20.0	17.3-22.7	3.3	1.4-5.1	7.0	5.0-9.0	5.3	3.1-7.4
\$75,000+	80.4	78.2-82.6	11.0	9.5-12.6	1.3	0.6-2.1	4.6	3.4-5.8	2.7	1.6-3.7

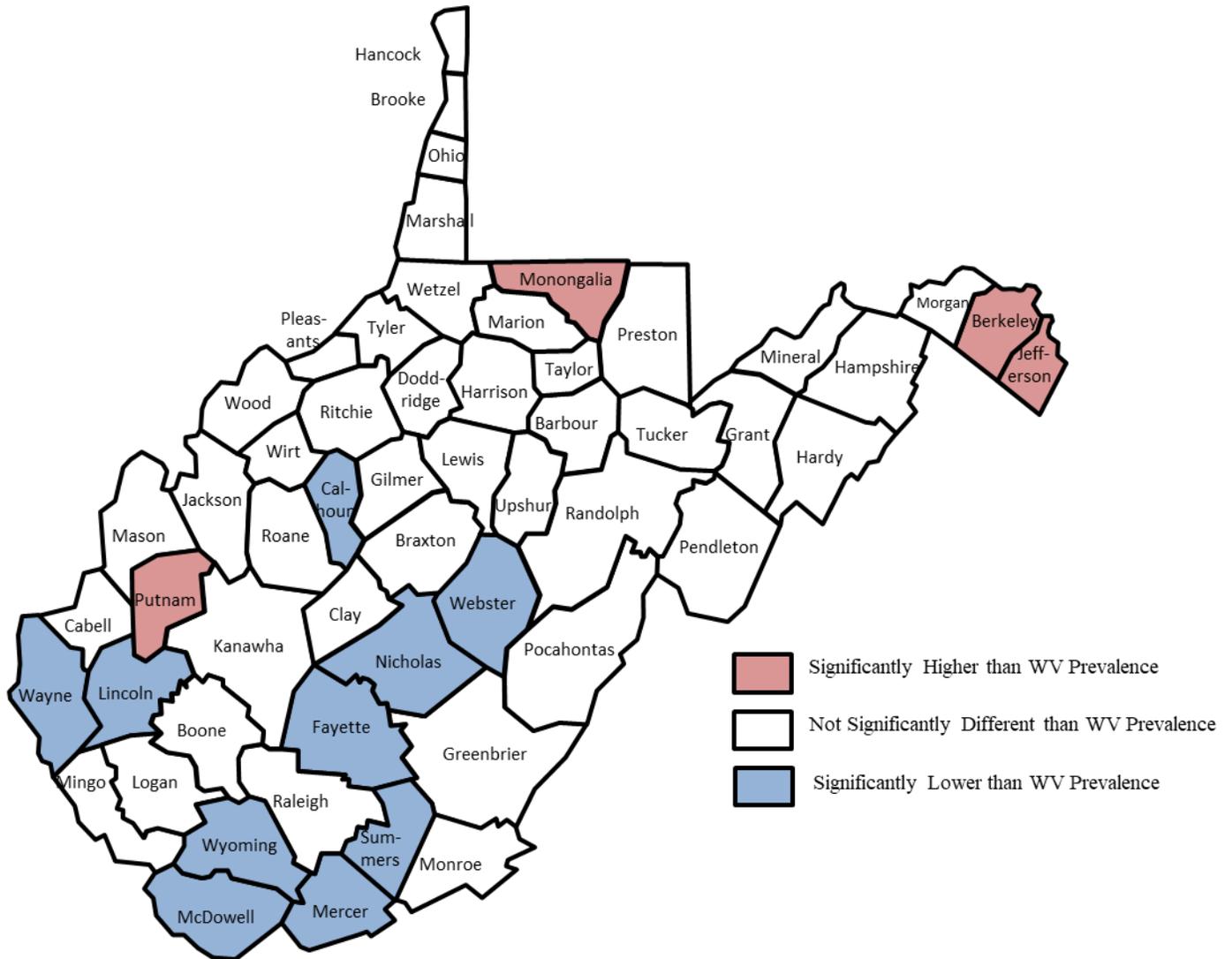
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.



# CHAPTER 3: HEALTH CARE ACCESS

Figure 3.4 Prevalence of Private Insurance by County: WVBRFSS, 2017-2021

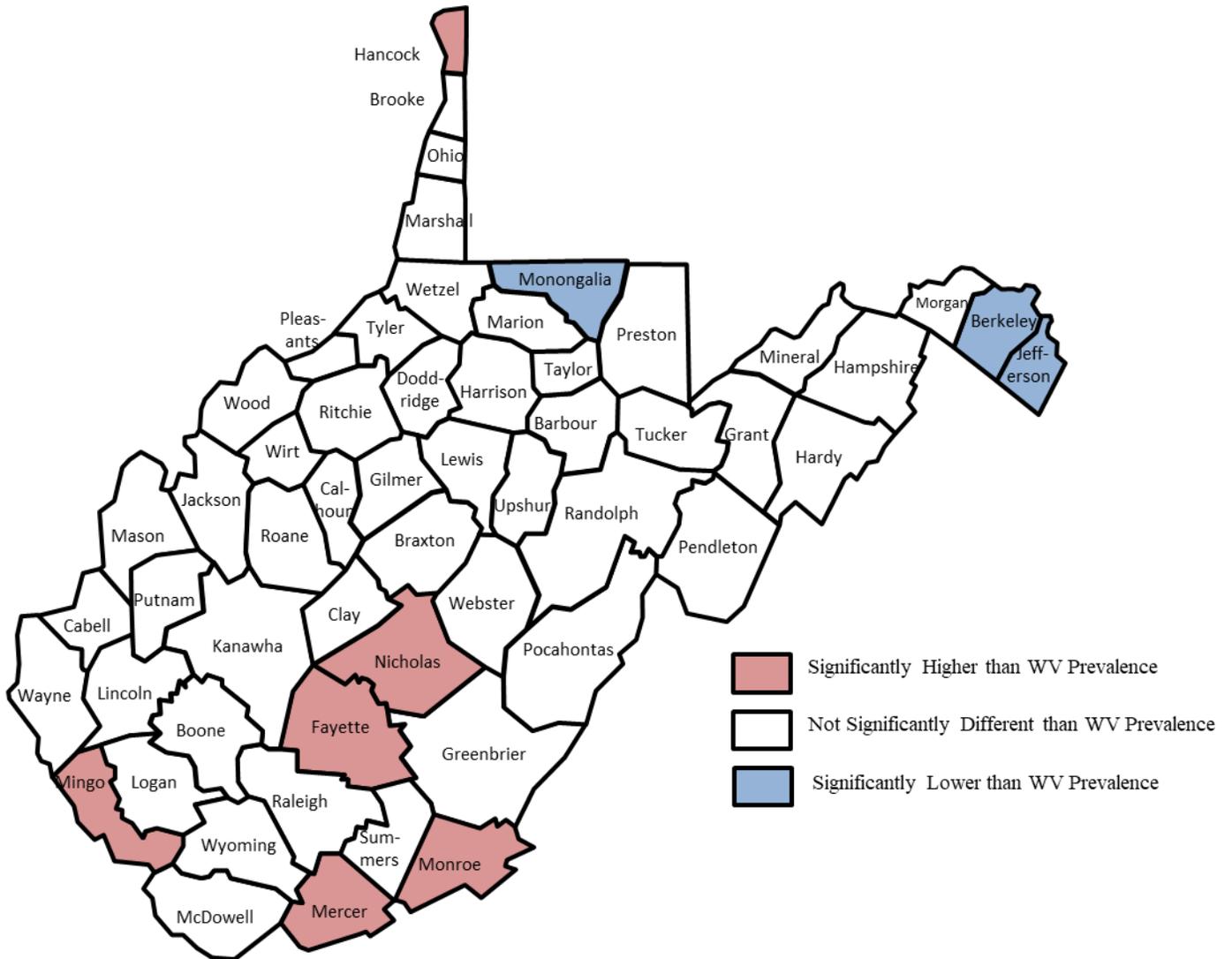
WV Prevalence (2017-2021): 43.1%



# CHAPTER 3: HEALTH CARE ACCESS

Figure 3.5 Prevalence of Medicare Insurance by County: WVBRFSS, 2017-2021

WV Prevalence (2017-2021): 26.2%

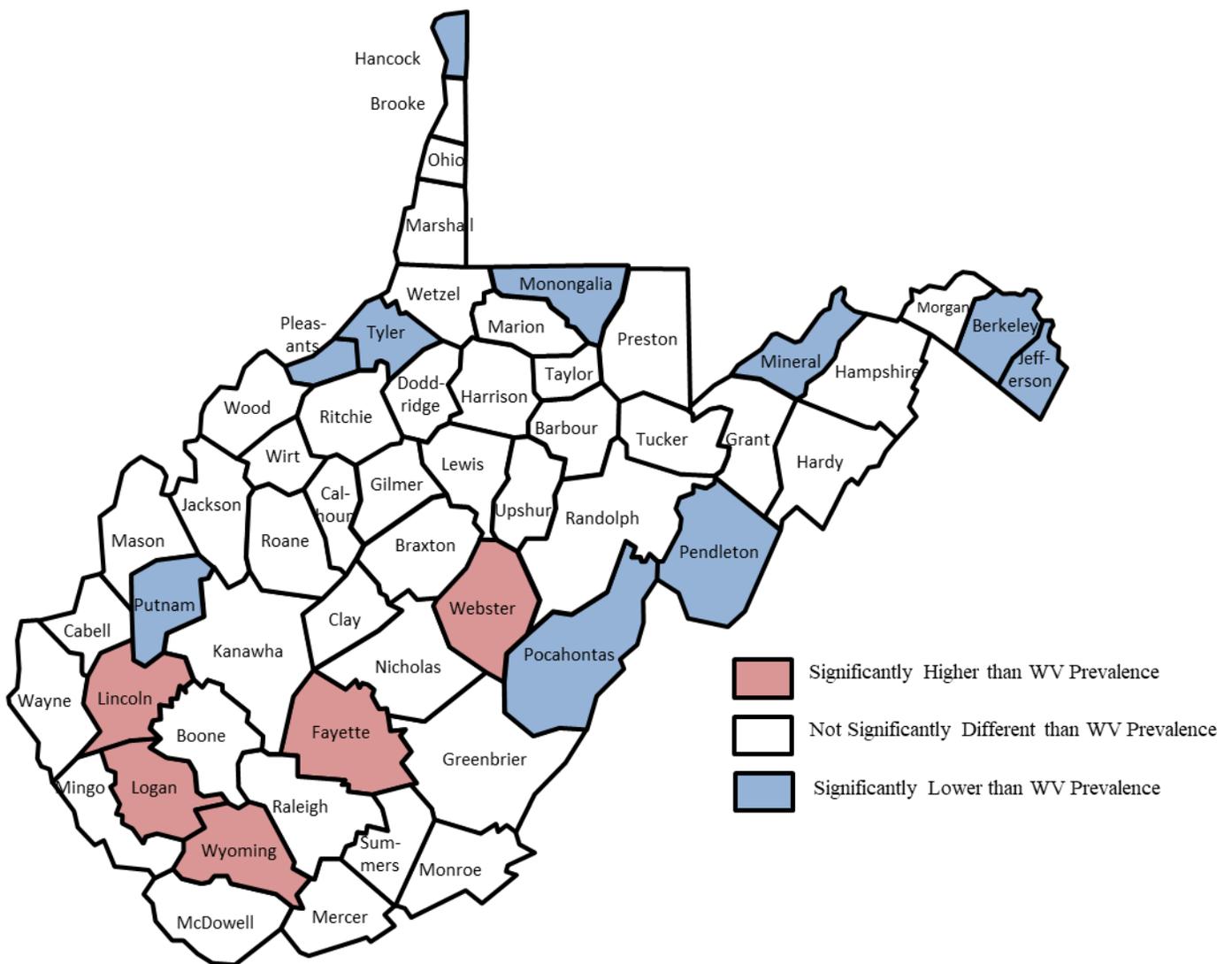


\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

## CHAPTER 3: HEALTH CARE ACCESS

Figure 3.6 Prevalence of Medicaid Insurance by County: WVBRFSS, 2017-2021

WV Prevalence (2017-2021): 15.2%

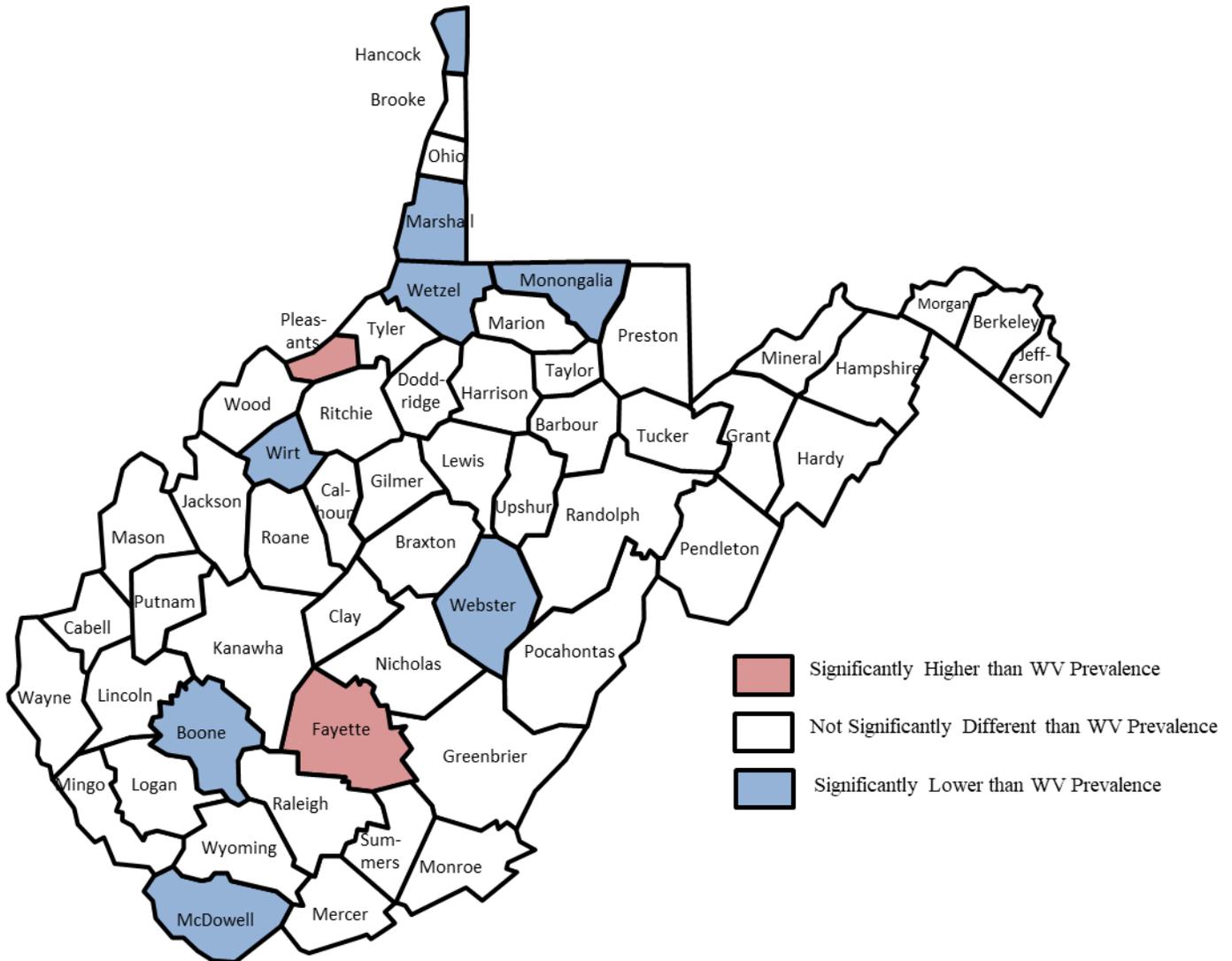


\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

# CHAPTER 3: HEALTH CARE ACCESS

Figure 3.7 Prevalence of Other Insurance by County: WVBRFSS, 2017-2021

WV Prevalence (2017-2021): 6.6%



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

## CHAPTER 3: HEALTH CARE ACCESS

### 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?”

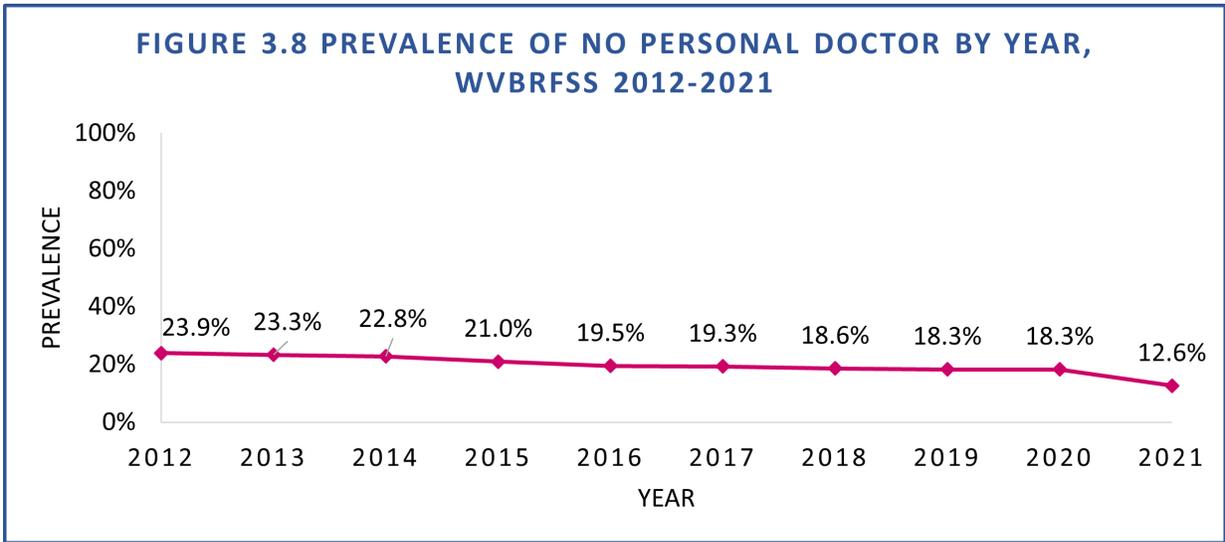
**Prevalence** **WV: 12.6%** (95% CI: 11.5-13.7)  
**U.S.: 16.7%** (95% CI: 16.4-17.0)

West Virginia ranked the ninth lowest among 53 BRFSS participants. The U.S. prevalence of no personal doctor or health care provider was significantly higher than the West Virginia prevalence.

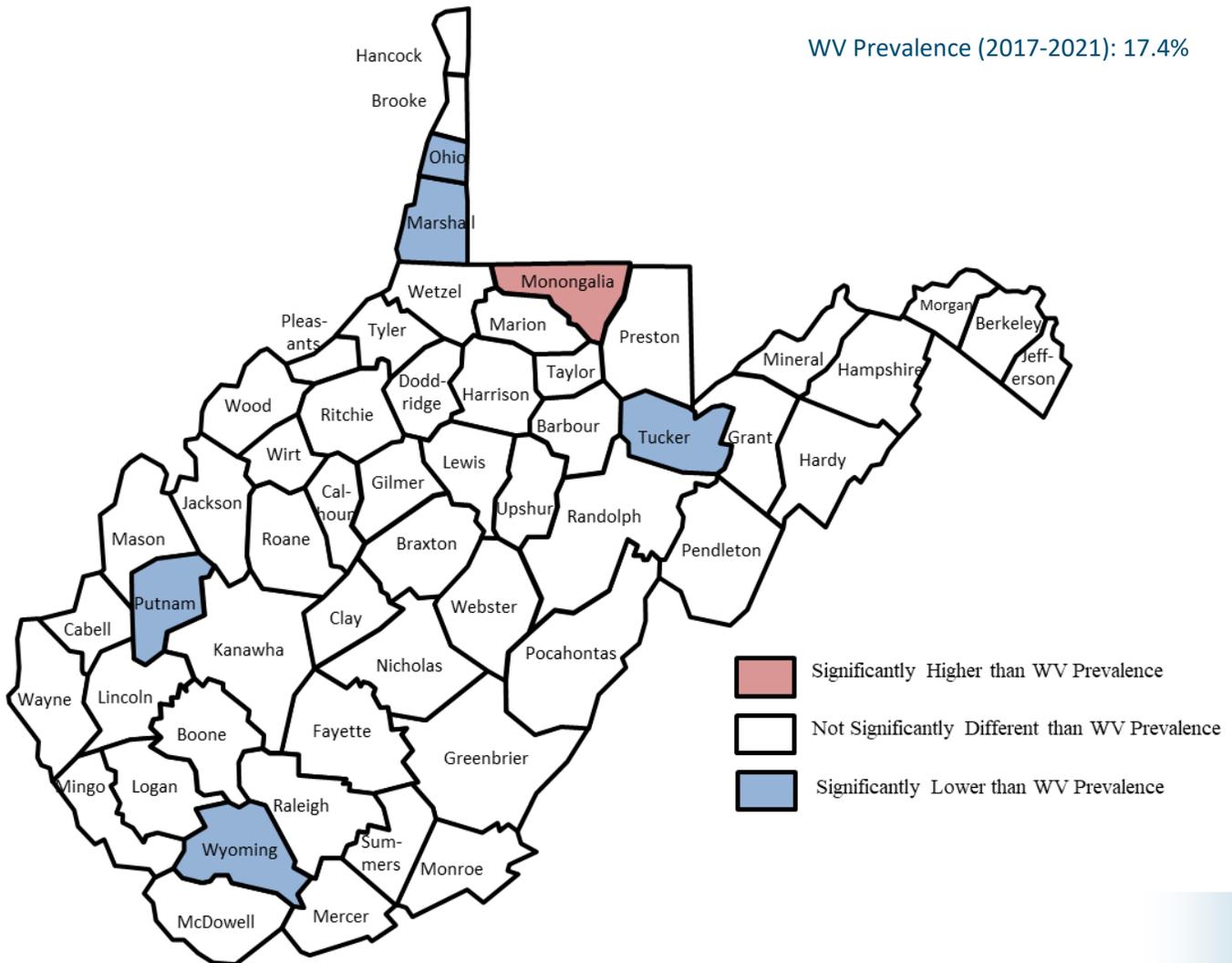
**Table 3.3 Prevalence of No Personal Doctor or Health Care Provider by Demographics: WVBRFSS, 2021**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	117,265	<b>16.9</b>	15.0-18.7	61,773	<b>8.5</b>	7.2-9.8	179,038	<b>12.6</b>	11.5-13.7
<b>Age</b>									
18-24	24,784	<b>30.9</b>	22.4-39.3	16,483	<b>21.6</b>	14.3-28.9	41,267	<b>26.4</b>	20.7-32.0
25-34	38,237	<b>36.5</b>	30.5-42.6	15,478	<b>15.5</b>	10.9-20.1	53,716	<b>26.3</b>	22.3-30.2
35-44	22,647	<b>21.6</b>	16.6-26.6	12,500	<b>12.1</b>	8.4-15.7	35,147	<b>16.8</b>	13.7-20.0
45-54	13,953	<b>13.5</b>	9.8-17.1	5,739	<b>5.5</b>	3.3-7.6	19,691	<b>9.4</b>	7.3-11.6
55-64	10,696	<b>8.9</b>	6.3-11.5	6,087	<b>4.8</b>	3.0-6.6	16,783	<b>6.8</b>	5.2-8.3
65+	6,705	<b>3.8</b>	2.5-5.2	5,346	<b>2.6</b>	1.4-3.8	12,051	<b>3.2</b>	2.3-4.1
<b>Education</b>									
Less than H.S.	17,417	<b>21.1</b>	14.0-28.2	8,799	<b>9.5</b>	5.3-13.7	26,216	<b>15.0</b>	10.9-19.1
H.S. or G.E.D.	55,852	<b>18.6</b>	15.7-21.6	24,121	<b>9.1</b>	7.0-11.3	79,972	<b>14.2</b>	12.3-16.1
Some Post-H.S.	25,759	<b>14.6</b>	11.2-17.9	20,382	<b>9.4</b>	6.8-11.9	46,141	<b>11.7</b>	9.7-13.8
College Graduate	17,808	<b>13.4</b>	10.9-16.0	8,471	<b>5.6</b>	3.9-7.3	26,279	<b>9.3</b>	7.8-10.8
<b>Income</b>									
Less than \$15,000	5,260	<b>15.3</b>	7.6-22.9	6,013	<b>9.9</b>	5.0-14.9	11,273	<b>11.9</b>	7.6-16.1
\$15,000 - 24,999	11,299	<b>16.8</b>	11.1-22.5	10,902	<b>11.1</b>	7.0-15.1	22,201	<b>13.4</b>	10.1-16.7
\$25,000 - 34,999	13,788	<b>16.5</b>	11.6-21.4	9,585	<b>10.0</b>	6.1-13.9	23,373	<b>13.0</b>	9.9-16.1
\$35,000 - 49,999	17,297	<b>18.6</b>	13.7-23.4	9,586	<b>9.6</b>	5.8-13.4	26,883	<b>13.9</b>	10.9-17.0
\$50,000 - 74,999	18,491	<b>17.4</b>	12.6-22.2	5,138	<b>5.5</b>	2.8-8.2	23,630	<b>11.9</b>	8.9-14.8
\$75,000+	25,767	<b>13.1</b>	10.0-16.2	9,634	<b>6.6</b>	4.2-9.0	35,401	<b>10.3</b>	8.3-12.4

# CHAPTER 3: HEALTH CARE ACCESS



**Figure 3.9 Prevalence of No Personal Doctor or Health Care Provider by County: WVBRFSS, 2017-2021**



## CHAPTER 3: HEALTH CARE ACCESS

### 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: 10.2%** (95% CI: 9.3-11.2)

**U.S.: 9.9%** (95% CI: 9.7-10.1)

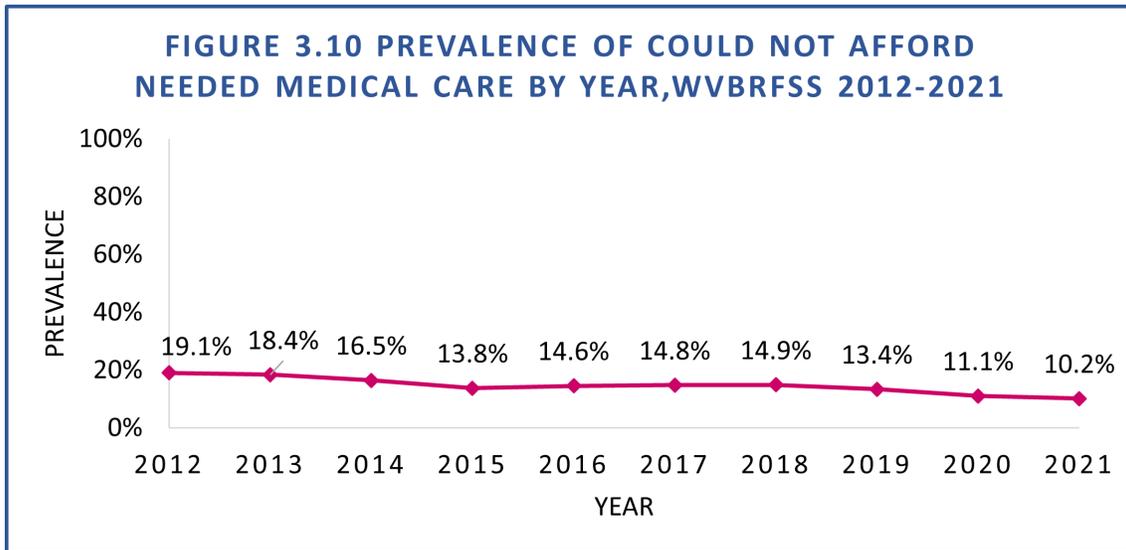
The West Virginia prevalence of could not afford needed medical care was slightly higher than the national prevalence. West Virginia ranked the 19<sup>th</sup> highest among 53 BRFSS participants.

**Table 3.4 Prevalence of Could Not Afford Needed Medical Care by Demographic Characteristics: WVBRFSS, 2021**

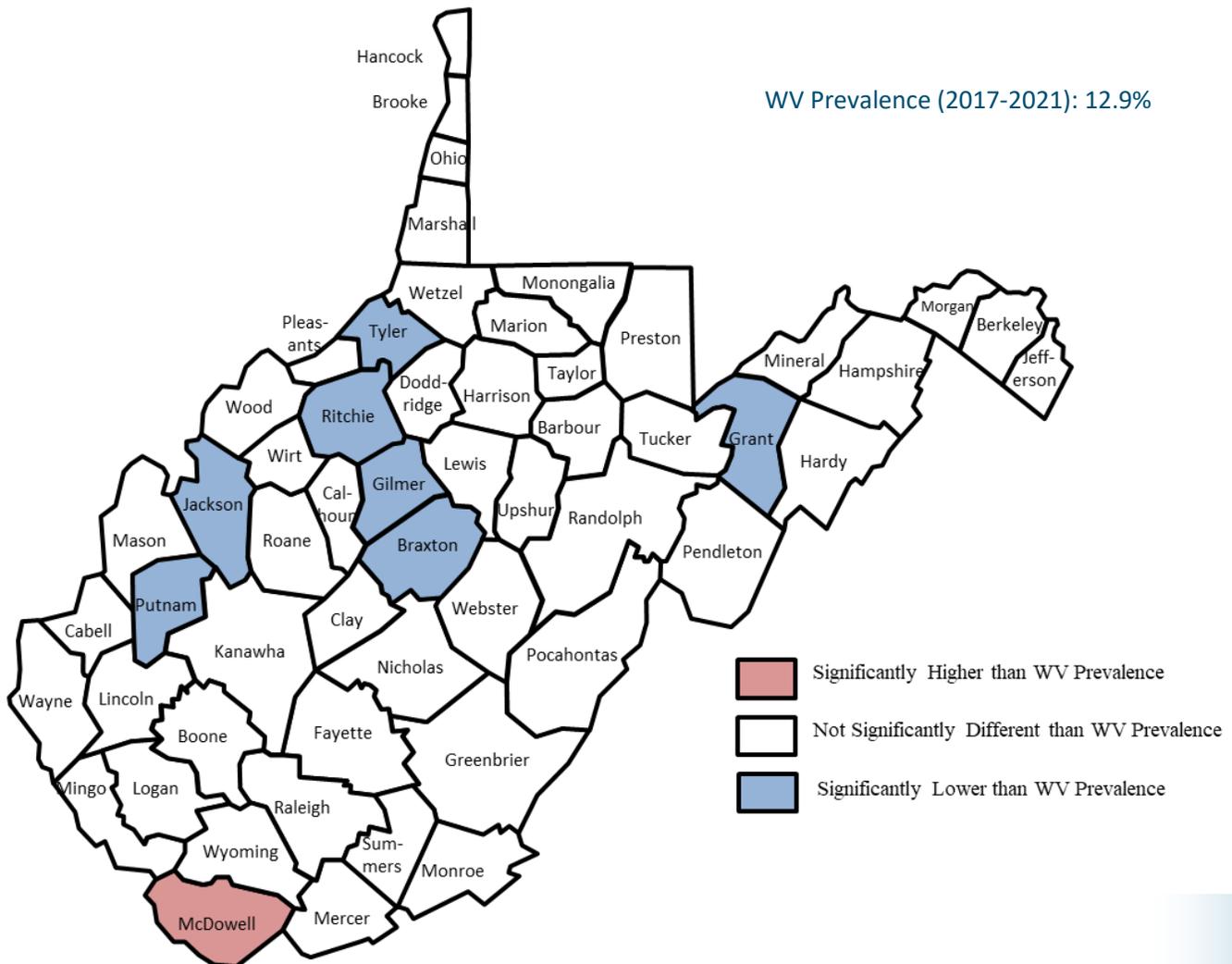
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	65,304	<b>9.3</b>	8.0-10.7	80,355	<b>11.1</b>	9.7-12.4	14,659	<b>10.2</b>	9.3-11.2
<b>Age</b>									
18-24	6,603	<b>8.0*</b>	3.2-12.7	9,582	<b>12.6</b>	6.8-18.3	16,186	<b>10.2</b>	6.5-13.9
25-34	15,698	<b>14.8</b>	10.2-19.3	17,922	<b>18.0</b>	13.1-22.8	33,620	<b>16.3</b>	13.0-19.7
35-44	12,573	<b>12.0</b>	8.0-16.1	14,183	<b>13.6</b>	9.9-17.4	26,755	<b>12.8</b>	10.1-15.6
45-54	13,700	<b>13.1</b>	9.4-16.9	16,063	<b>15.3</b>	11.6-19.0	29,763	<b>14.2</b>	11.6-16.9
55-64	10,307	<b>8.5</b>	6.1-11.0	13,257	<b>10.5</b>	7.9-13.1	23,564	<b>9.5</b>	7.8-11.3
65+	5,712	<b>3.3</b>	2.0-4.5	8,760	<b>4.2</b>	3.0-5.5	14,471	<b>3.8</b>	2.9-4.7
<b>Education</b>									
Less than H.S.	12,056	<b>14.4</b>	8.9-19.9	12,345	<b>13.3</b>	8.4-18.2	24,401	<b>13.8</b>	10.1-17.5
H.S. or G.E.D.	35,850	<b>11.8</b>	9.6-14.1	27,311	<b>10.4</b>	8.3-12.4	63,161	<b>11.2</b>	9.6-12.7
Some Post-H.S.	12,594	<b>7.1</b>	4.9-9.3	29,195	<b>13.4</b>	10.8-16.1	41,788	<b>10.6</b>	8.8-12.4
College Graduate	4,711	<b>3.5</b>	2.2-4.8	11,389	<b>7.6</b>	5.7-9.4	16,101	<b>5.7</b>	4.5-6.8
<b>Income</b>									
Less than \$15,000	7,762	<b>21.9</b>	13.8-30.0	8,644	<b>14.2</b>	9.1-19.2	16,406	<b>17.0</b>	12.6-21.4
\$15,000 - 24,999	12,756	<b>19.0</b>	13.6-24.3	15,581	<b>15.8</b>	11.7-19.9	28,337	<b>17.1</b>	13.8-20.3
\$25,000 - 34,999	12,068	<b>14.3</b>	9.6-19.0	17,064	<b>17.8</b>	13.0-22.6	29,132	<b>16.1</b>	12.8-19.5
\$35,000 - 49,999	7,629	<b>8.2</b>	4.7-11.7	11,012	<b>11.0</b>	7.4-14.7	18,641	<b>9.7</b>	7.1-12.2
\$50,000 - 74,999	6,619	<b>6.2</b>	3.4-9.0	8,547	<b>9.2</b>	6.1-12.3	15,166	<b>7.6</b>	5.5-9.7
\$75,000+	7,162	<b>3.6</b>	2.0-5.2	6,750	<b>4.6</b>	2.8-6.5	13,912	<b>4.1</b>	2.8-5.3

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

# CHAPTER 3: HEALTH CARE ACCESS



**Figure 3.11 Prevalence of Could Not Afford Needed Medical Care by County: WVBRFSS, 2017-2021**



## No Routine Checkup in Past Year

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

**Prevalence** **WV: 20.9%** (95% CI: 19.6-22.2)

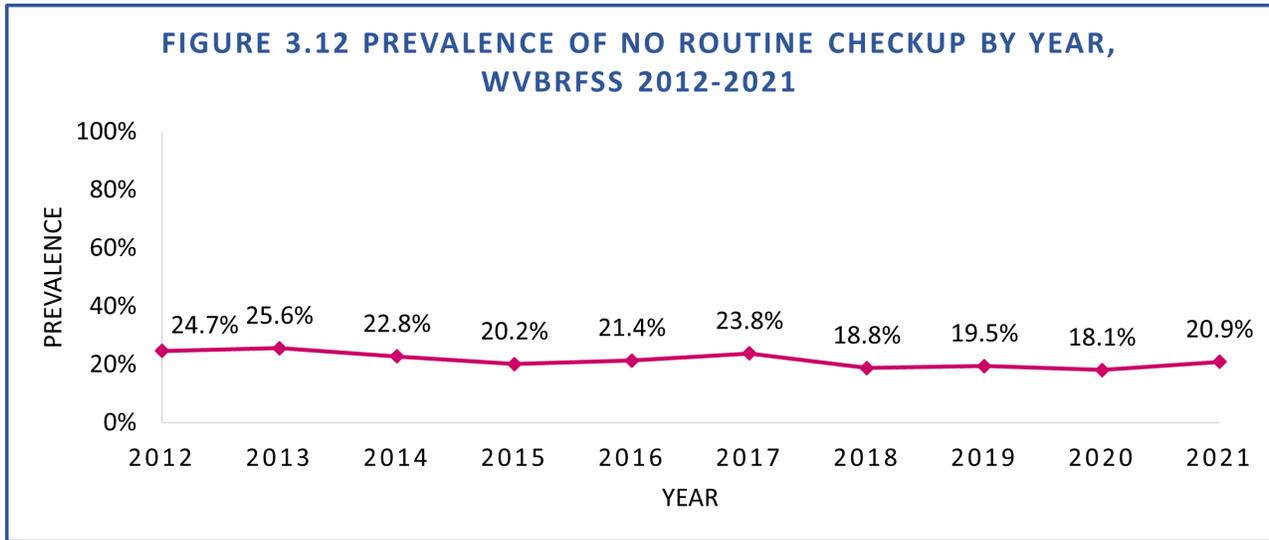
**U.S.: 26.4%** (95% CI: 26.1-26.7)

The U. S. prevalence of no checkup in the past year was significantly higher than the West Virginia prevalence. West Virginia ranked the fifth lowest among 53 BRFSS participants.

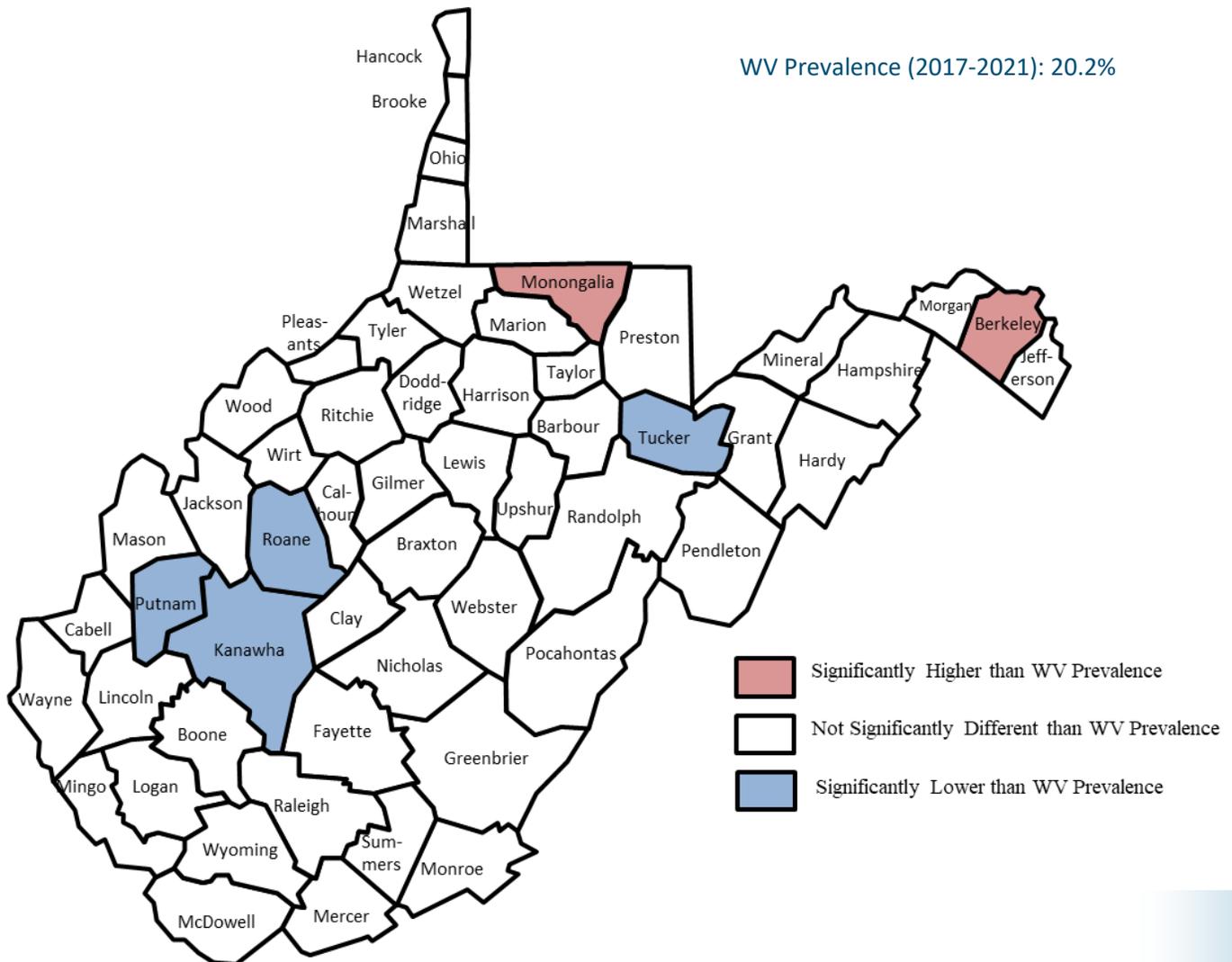
**Table 3.5 Prevalence of No Routine Checkup in the Past Year by Demographic Characteristics: WVBRFSS, 2021**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	175,513	<b>25.4</b>	23.4-27.4	118,676	<b>16.5</b>	15.0-18.1	294,188	<b>20.9</b>	19.6-22.2
<b>Age</b>									
18-24	32,410	<b>40.0</b>	31.1-48.9	19,689	<b>26.4</b>	18.5-34.4	52,099	<b>33.5</b>	27.5-39.6
25-34	48,590	<b>47.2</b>	40.9-53.6	26,011	<b>26.4</b>	21.0-31.9	74,601	<b>37.1</b>	32.8-41.4
35-44	38,125	<b>36.9</b>	31.1-42.7	26,572	<b>25.6</b>	20.7-30.5	64,697	<b>31.2</b>	27.4-35.1
45-54	22,634	<b>21.9</b>	17.6-26.3	18,250	<b>17.5</b>	13.8-21.2	40,885	<b>19.7</b>	16.9-22.6
55-64	19,103	<b>16.0</b>	12.8-19.2	16,209	<b>12.9</b>	10.1-15.6	35,311	<b>14.4</b>	12.3-16.5
65+	12,703	<b>7.3</b>	5.4-9.2	11,055	<b>5.4</b>	4.0-6.8	23,757	<b>6.3</b>	5.1-7.4
<b>Education</b>									
Less than H.S.	24,109	<b>29.0</b>	21.3-36.7	13,051	<b>14.3</b>	9.1-19.5	37,160	<b>21.3</b>	16.6-26.0
H.S. or G.E.D.	73,710	<b>24.7</b>	21.5-27.8	40,813	<b>15.7</b>	13.0-18.4	114,523	<b>20.5</b>	18.4-22.6
Some Post-H.S.	43,362	<b>24.9</b>	20.9-28.8	41,112	<b>19.0</b>	15.9-22.2	84,474	<b>21.7</b>	19.2-24.1
College Graduate	32,500	<b>24.8</b>	21.5-28.1	23,584	<b>15.8</b>	13.2-18.3	56,084	<b>20.0</b>	17.9-22.1
<b>Income</b>									
Less than \$15,000	8,503	<b>24.2</b>	15.3-33.1	9,182	<b>15.3</b>	9.8-20.9	17,685	<b>18.6</b>	13.8-23.4
\$15,000 - 24,999	17,663	<b>26.7</b>	19.8-33.6	21,260	<b>21.6</b>	16.4-26.8	38,923	<b>23.7</b>	19.5-27.8
\$25,000 - 34,999	22,758	<b>27.0</b>	21.1-32.8	14,010	<b>14.8</b>	10.4-19.2	36,768	<b>20.5</b>	16.9-24.2
\$35,000 - 49,999	21,369	<b>23.5</b>	18.4-28.5	15,855	<b>16.1</b>	11.9-20.2	37,224	<b>19.6</b>	16.4-22.9
\$50,000 - 74,999	25,715	<b>24.2</b>	19.1-29.3	11,546	<b>12.7</b>	9.1-16.2	37,261	<b>18.9</b>	15.6-22.1
\$75,000+	47,020	<b>24.3</b>	20.6-28.0	29,395	<b>20.2</b>	16.5-24.0	76,415	<b>22.6</b>	19.9-25.2

# CHAPTER 3: HEALTH CARE ACCESS



**Figure 3.13 Prevalence of No Routine Checkup in the Past Year by County: WVBRFSS, 2017-2021**



# SECTION 2: Risk Behaviors 2021



## CHAPTER 4: WEIGHT STATUS

### Overweight

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

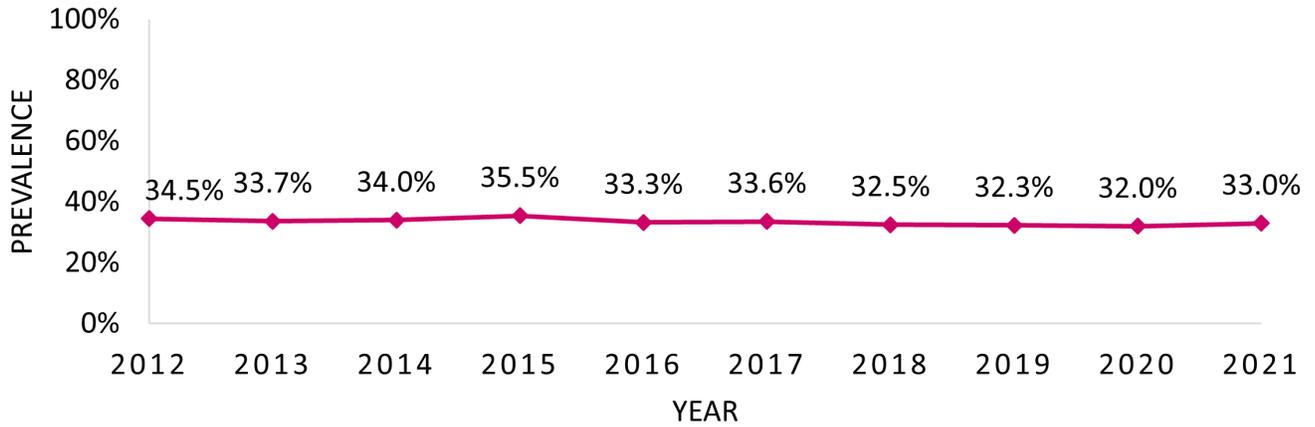
**Prevalence** **WV: 33.0%** (95% CI: 31.5-34.4)  
**U.S.: 34.4%** (95% CI: 34.1-34.8)  
 The prevalence of overweight in West Virginia was slightly lower than the U.S. West Virginia ranked the 12<sup>th</sup> lowest among 53 BRFSS participants.

**Table 4.1 Overweight Prevalence by Demographic Characteristics: WVBRFSS, 2021**

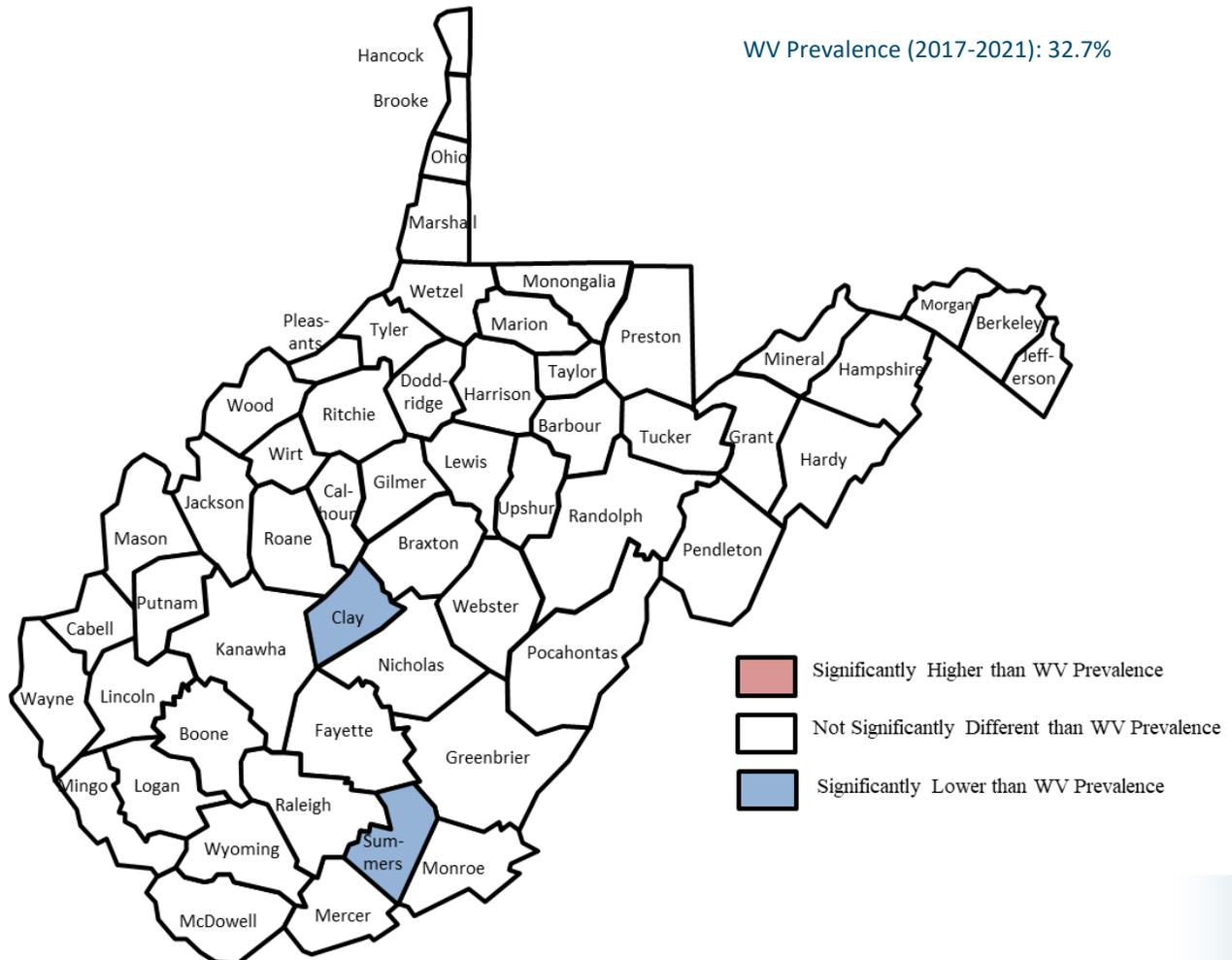
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	253,044	<b>37.2</b>	35.1-39.3	185,439	<b>28.5</b>	26.6-30.4	438,483	<b>33.0</b>	31.5-34.4
<b>Age</b>									
18-24	21,725	<b>26.9</b>	19.0-34.9	19,145	<b>28.1</b>	19.5-36.7	40,869	<b>27.5</b>	21.6-33.3
25-34	33,839	<b>32.6</b>	26.8-38.5	20,852	<b>23.0</b>	17.5-28.5	54,691	<b>28.1</b>	24.1-32.2
35-44	39,691	<b>39.1</b>	33.4-44.8	23,114	<b>24.4</b>	19.5-29.2	62,805	<b>32.0</b>	28.2-35.8
45-54	37,248	<b>36.8</b>	31.6-42.0	30,321	<b>32.6</b>	27.7-37.5	67,569	<b>34.8</b>	31.2-38.3
55-64	43,528	<b>37.3</b>	32.9-41.6	32,104	<b>28.1</b>	24.3-31.8	75,633	<b>32.7</b>	29.8-35.6
65+	74,165	<b>43.3</b>	39.8-46.8	59,487	<b>31.9</b>	29.0-34.9	133,653	<b>37.4</b>	35.1-39.7
<b>Education</b>									
Less than H.S.	21,680	<b>26.5</b>	19.9-33.2	22,414	<b>27.9</b>	21.2-34.7	44,094	<b>27.2</b>	22.5-32.0
H.S. or G.E.D.	103,978	<b>35.4</b>	32.1-38.7	60,866	<b>25.7</b>	22.7-28.8	164,844	<b>31.1</b>	28.8-33.4
Some Post-H.S.	67,951	<b>39.2</b>	34.9-43.4	60,659	<b>30.8</b>	27.2-34.4	128,610	<b>34.7</b>	32.0-37.5
College Graduate	58,773	<b>45.6</b>	42.0-49.3	41,500	<b>30.4</b>	27.2-33.6	100,273	<b>37.8</b>	35.4-40.2
<b>Income</b>									
Less than \$15,000	11,386	<b>33.1</b>	23.9-42.4	14,105	<b>25.2</b>	18.8-31.5	25,491	<b>28.2</b>	22.9-33.5
\$15,000 - 24,999	16,691	<b>25.3</b>	19.3-31.3	24,087	<b>26.4</b>	21.2-31.5	40,778	<b>25.9</b>	22.0-29.8
\$25,000 - 34,999	27,612	<b>33.4</b>	27.5-39.2	24,640	<b>28.0</b>	22.7-33.2	52,252	<b>30.6</b>	26.7-34.5
\$35,000 - 49,999	36,378	<b>39.6</b>	34.0-45.2	25,744	<b>28.1</b>	23.1-33.2	62,122	<b>33.9</b>	30.1-37.6
\$50,000 - 74,999	42,213	<b>40.1</b>	34.7-45.5	22,260	<b>25.5</b>	20.8-30.3	64,474	<b>33.5</b>	29.8-37.2
\$75,000+	80,979	<b>41.5</b>	37.6-45.5	41,370	<b>31.0</b>	27.1-35.0	122,348	<b>37.3</b>	34.4-40.1

# CHAPTER 4: WEIGHT STATUS

**FIGURE 4.1 PREVALENCE OF OVERWEIGHT BY YEAR:WVBRFSS, 2012-2021**



**Figure 4.2 Overweight Prevalence by County: WVBRFSS, 2017-2021**



## CHAPTER 4: WEIGHT STATUS

### 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: 40.6%** (95% CI: 39.1-42.1)

**U.S.: 33.0%** (95% CI: 32.7-33.3)

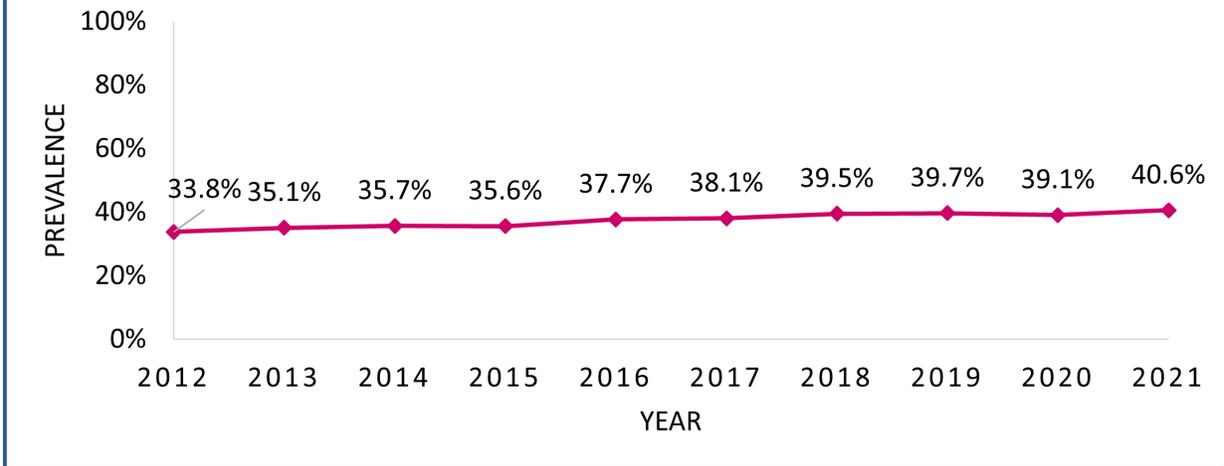
The West Virginia prevalence of obesity was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 53 BRFSS participants.

**Table 4.2 Obesity Prevalence by Demographic Characteristics: WVBRFSS, 2021**

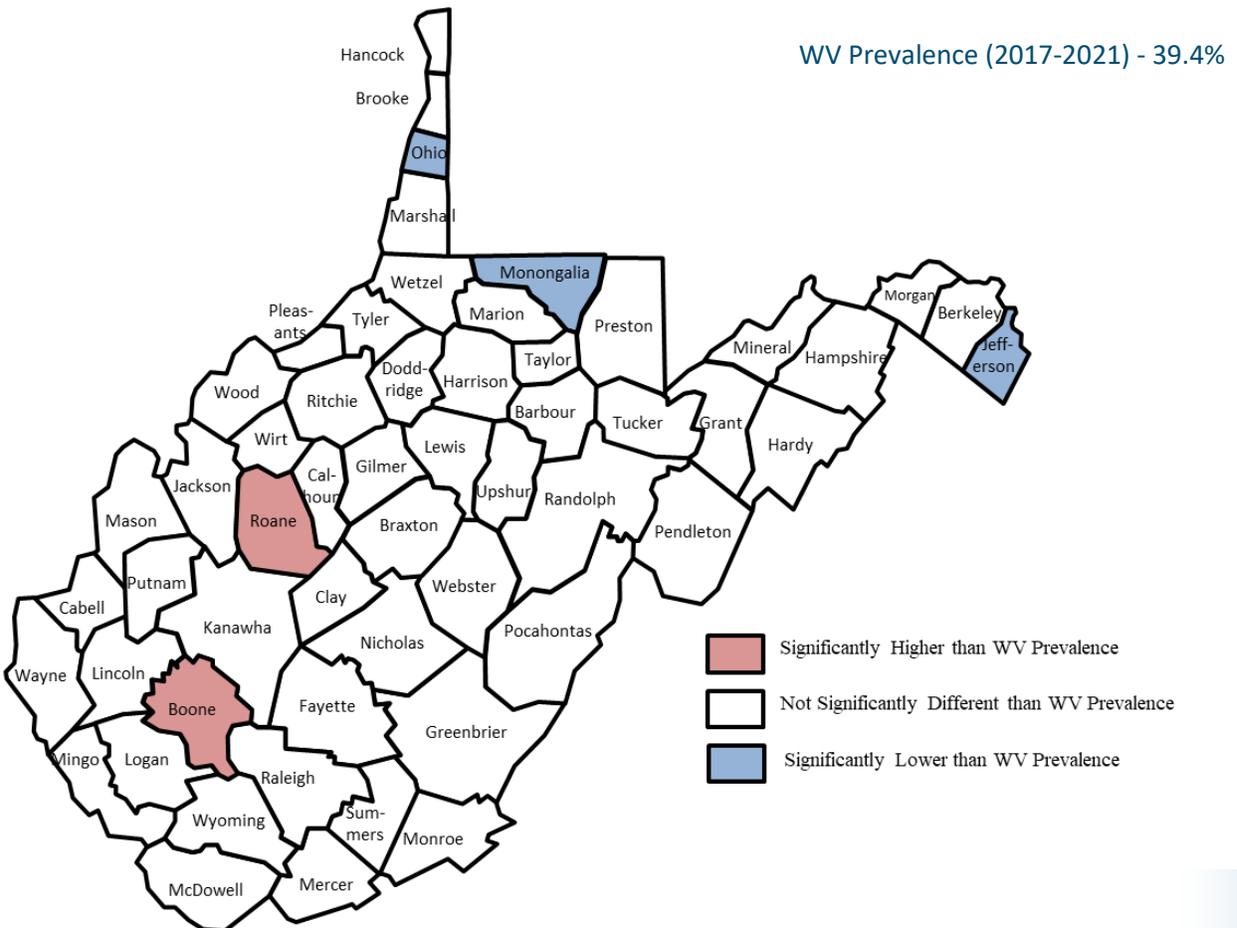
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	268,029	<b>39.4</b>	37.3-41.6	271,544	<b>41.8</b>	39.7-43.8	539,574	<b>40.6</b>	39.1-42.1
<b>Age</b>									
18-24	23,115	<b>28.7</b>	20.4-36.9	22,109	<b>32.5</b>	23.7-41.2	45,224	<b>30.4</b>	24.4-36.4
25-34	40,770	<b>39.3</b>	33.0-45.6	36,707	<b>40.4</b>	34.1-46.7	77,476	<b>39.8</b>	35.4-44.3
35-44	45,038	<b>44.4</b>	38.5-50.3	43,796	<b>46.2</b>	40.6-51.8	88,833	<b>45.2</b>	41.2-49.3
45-54	48,392	<b>47.8</b>	42.4-53.2	45,981	<b>49.4</b>	44.3-54.5	94,373	<b>48.6</b>	44.8-52.3
55-64	51,565	<b>44.2</b>	39.8-48.6	51,588	<b>45.1</b>	40.9-49.3	103,154	<b>44.6</b>	41.6-47.6
65+	58,447	<b>34.1</b>	30.8-37.4	70,255	<b>37.7</b>	34.5-40.9	128,702	<b>36.0</b>	33.7-38.3
<b>Education</b>									
Less than H.S.	29,765	<b>36.4</b>	28.7-44.2	35,577	<b>44.3</b>	37.0-51.6	65,342	<b>40.3</b>	35.0-45.7
H.S. or G.E.D.	121,667	<b>41.4</b>	38.0-44.9	105,018	<b>44.4</b>	40.9-47.9	226,686	<b>42.8</b>	40.3-45.2
Some Post-H.S.	71,044	<b>41.0</b>	36.7-45.2	81,438	<b>41.4</b>	37.6-45.2	152,482	<b>41.2</b>	38.4-44.0
College Graduate	44,340	<b>34.4</b>	31.0-37.8	49,511	<b>36.3</b>	33.0-39.6	93,851	<b>35.4</b>	33.0-37.7
<b>Income</b>									
Less than \$15,000	10,216	<b>29.7</b>	21.0-38.4	28,681	<b>51.2</b>	43.9-58.4	38,896	<b>43.0</b>	37.3-48.7
\$15,000 - 24,999	26,918	<b>40.8</b>	33.7-47.9	43,405	<b>47.5</b>	41.8-53.3	70,323	<b>44.7</b>	40.2-49.2
\$25,000 - 34,999	36,254	<b>43.8</b>	37.5-50.1	39,422	<b>44.7</b>	39.0-50.5	75,676	<b>44.3</b>	40.0-48.5
\$35,000 - 49,999	32,327	<b>35.2</b>	29.7-40.6	44,916	<b>49.1</b>	43.5-54.6	77,243	<b>42.1</b>	38.2-46.1
\$50,000 - 74,999	42,885	<b>40.8</b>	35.2-46.3	40,101	<b>46.0</b>	40.3-51.7	82,986	<b>43.1</b>	39.2-47.1
\$75,000+	85,172	<b>43.7</b>	39.7-47.7	45,734	<b>34.3</b>	30.0-38.6	130,906	<b>39.9</b>	36.9-42.8

# CHAPTER 4: WEIGHT STATUS

**FIGURE 4.3 PREVALENCE OF OBESITY BY YEAR:  
WVBRFSS, 2012-2021**



**Figure 4.4 Obesity Prevalence (Body Mass Index of 30.0 or Higher) by County:  
WVBRFSS, 2017-2021**



## CHAPTER 4: WEIGHT STATUS

### 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.

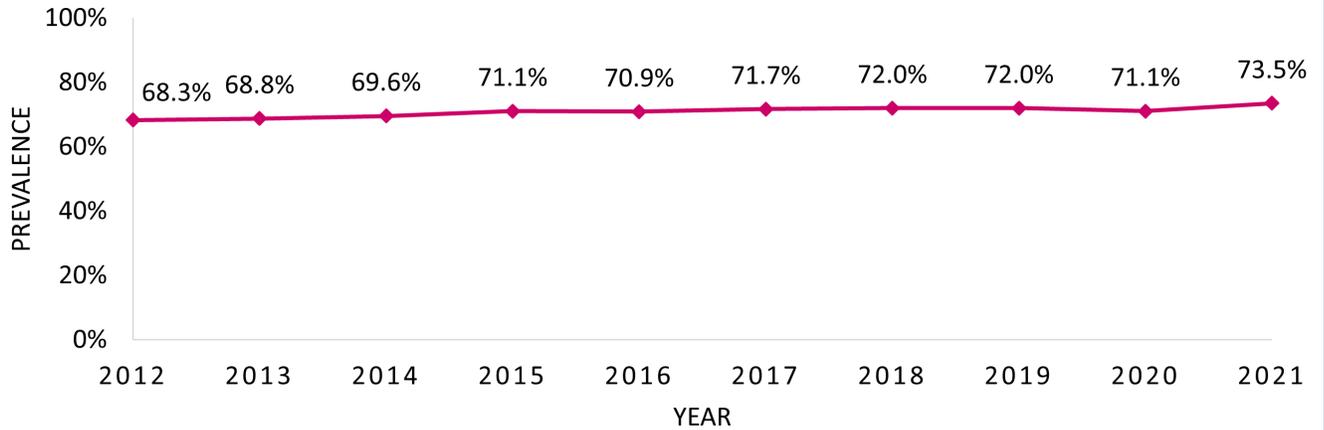
**Prevalence** **WV: 73.5%** (95% CI: 72.2-74.9)  
**U.S.: 67.5%** (95% CI: 67.1-67.8)  
 The West Virginia prevalence of overweight or obese was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 53 BRFSS participants.

**Table 4.3 Overweight or Obese Prevalence by Demographic Characteristics: WVBRFSS, 2021**

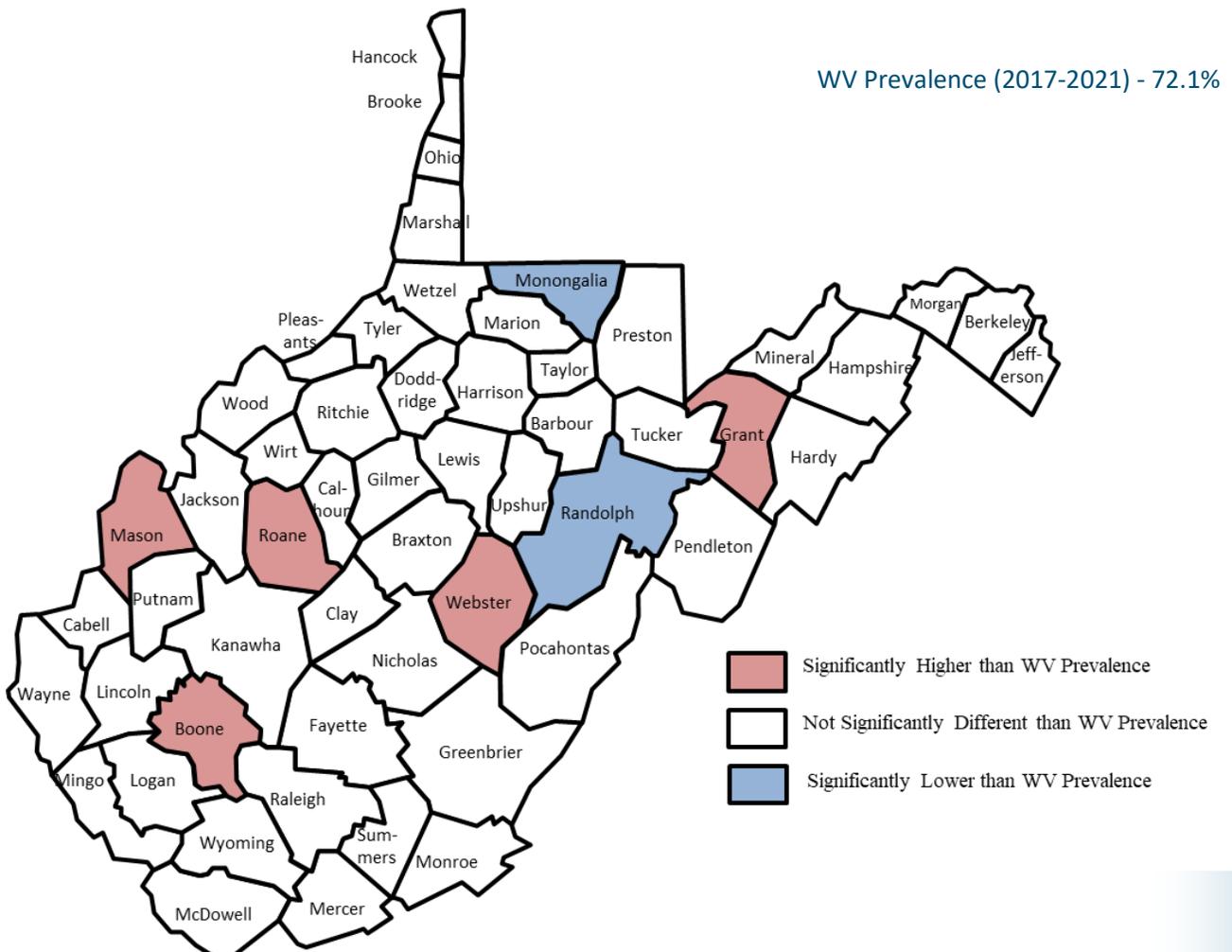
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	521,073	<b>76.6</b>	74.7-78.6	456,984	<b>70.3</b>	68.4-72.3	978,057	<b>73.5</b>	72.2-74.9
<b>Age</b>									
18-24	44,839	<b>55.6</b>	46.5-64.7	41,254	<b>60.6</b>	51.5-69.7	86,093	<b>57.9</b>	51.4-64.3
25-34	74,609	<b>71.9</b>	66.4-77.5	57,559	<b>63.4</b>	57.2-69.6	132,168	<b>67.9</b>	63.8-72.1
35-44	84,729	<b>83.5</b>	78.9-88.1	66,910	<b>70.5</b>	65.5-75.5	151,639	<b>77.2</b>	73.8-80.6
45-54	85,640	<b>84.6</b>	80.7-88.5	76,302	<b>82.0</b>	78.2-85.8	161,942	<b>83.3</b>	80.6-86.1
55-64	95,094	<b>81.4</b>	77.9-84.9	83,693	<b>73.1</b>	69.4-76.9	178,787	<b>77.3</b>	74.7-79.9
65+	132,613	<b>77.4</b>	74.4-80.4	129,742	<b>69.6</b>	66.6-72.6	262,355	<b>73.3</b>	71.2-75.5
<b>Education</b>									
Less than H.S.	51,445	<b>63.0</b>	55.0-71.0	57,992	<b>72.2</b>	65.7-78.7	109,436	<b>67.6</b>	62.3-72.8
H.S. or G.E.D.	225,646	<b>76.8</b>	73.8-79.9	165,884	<b>70.2</b>	66.9-73.5	391,530	<b>73.9</b>	71.6-76.1
Some Post-H.S.	138,995	<b>80.1</b>	76.6-83.7	142,097	<b>72.2</b>	68.7-75.8	281,091	<b>75.9</b>	73.4-78.5
College Graduate	103,113	<b>80.1</b>	77.1-83.0	91,011	<b>66.7</b>	63.4-70.0	194,124	<b>73.2</b>	70.9-75.4
<b>Income</b>									
Less than \$15,000	21,602	<b>62.8</b>	53.4-72.2	42,786	<b>76.3</b>	70.0-82.6	64,387	<b>71.2</b>	65.9-76.5
\$15,000 - 24,999	43,610	<b>66.2</b>	59.0-73.3	67,492	<b>73.9</b>	68.9-78.9	111,101	<b>70.7</b>	66.5-74.9
\$25,000 - 34,999	63,866	<b>77.2</b>	71.8-82.6	64,062	<b>72.7</b>	67.6-77.8	127,928	<b>74.9</b>	71.2-78.6
\$35,000 - 49,999	68,705	<b>74.8</b>	69.5-80.0	70,660	<b>77.2</b>	72.6-81.8	139,365	<b>76.0</b>	72.5-79.5
\$50,000 - 74,999	85,098	<b>80.9</b>	76.6-85.1	62,361	<b>71.5</b>	66.1-77.0	147,459	<b>76.7</b>	73.2-80.1
\$75,000+	166,150	<b>85.2</b>	82.1-88.4	87,104	<b>65.4</b>	61.2-69.5	253,254	<b>77.2</b>	74.6-79.7

## CHAPTER 4: WEIGHT STATUS

**FIGURE 4.5 PREVALENCE OF OVERWEIGHT OR OBESE BY YEAR:  
WVBRFSS, 2012-2021**



**Figure 4.6 Overweight or Obese Prevalence (Body Mass Index of 25.0 or Higher) by County: WVBRFSS, 2017-2021**



## CHAPTER 5: PHYSICAL ACTIVITY

### No Leisure-Time Physical Activity or Exercise

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

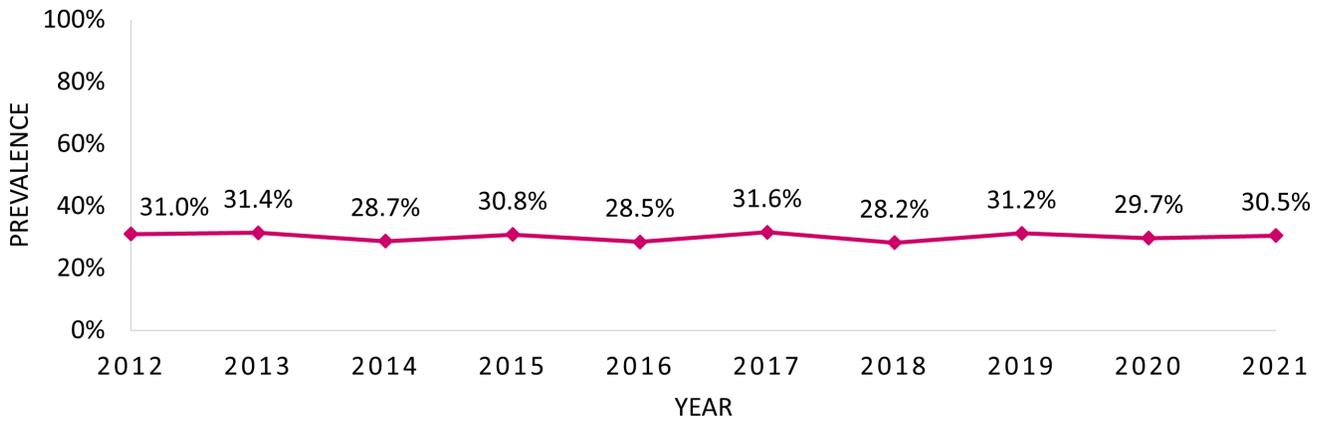
**Prevalence** **WV: 30.5%** (95% CI: 29.2-31.9)  
**U.S.: 23.9%** (95% CI: (23.6-24.2)  
 The West Virginia prevalence of physical inactivity was significantly higher than the U.S. prevalence. West Virginia ranked the fifth highest among 53 BRFSS participants.

**Table 5.1 Prevalence of Physical Inactivity by Demographic Characteristics: WVBRFSS, 2021**

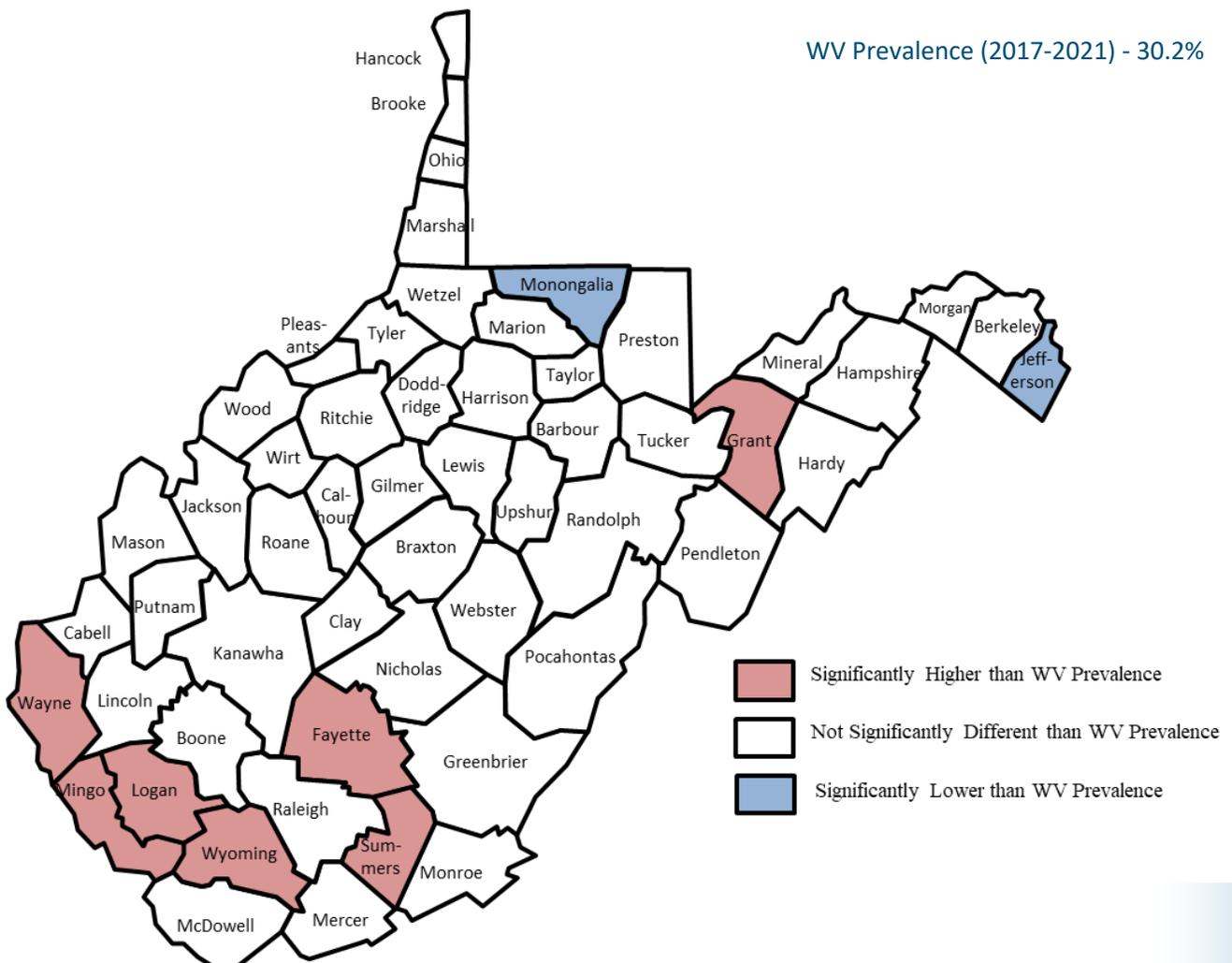
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	178,836	<b>25.5</b>	23.7-27.4	256,886	<b>35.4</b>	33.5-37.3	435,723	<b>30.5</b>	29.2-31.9
<b>Age</b>									
18-24	12,143	<b>14.6</b>	8.2-20.9	11,732	15.4	8.9-21.8	23,875	<b>15.0</b>	10.4-19.5
25-34	22,063	<b>20.8</b>	15.5-26.0	27,126	27.2	21.2-33.1	49,189	<b>23.9</b>	19.9-27.8
35-44	18,335	<b>17.6</b>	13.2-22.0	26,499	25.6	20.7-30.4	44,834	<b>21.6</b>	18.3-24.8
45-54	26,907	<b>25.8</b>	21.0-30.5	35,433	33.7	29.1-38.4	62,339	<b>29.8</b>	26.4-33.1
55-64	39,438	<b>32.7</b>	28.6-36.9	55,633	43.8	39.8-47.8	95,071	<b>38.4</b>	35.5-41.3
65+	59,224	<b>33.9</b>	30.5-37.2	97,692	47.2	44.1-50.3	156,916	<b>41.1</b>	38.8-43.4
<b>Education</b>									
Less than H.S.	31,252	<b>37.5</b>	30.0-44.9	51,745	55.5	48.5-62.5	82,997	<b>47.0</b>	41.8-52.2
H.S. or G.E.D.	87,966	<b>29.1</b>	26.1-32.1	111,522	42.3	39.1-45.6	199,488	<b>35.2</b>	33.0-37.5
Some Post-H.S.	42,987	<b>24.3</b>	20.7-27.8	65,382	30.1	26.8-33.4	108,369	<b>27.5</b>	25.0-29.9
College Graduate	15,668	<b>11.7</b>	9.5-14.0	27,971	18.6	16.2-20.9	43,639	<b>15.4</b>	13.7-17.0
<b>Income</b>									
Less than \$15,000	14,825	<b>41.8</b>	32.5-51.1	31,245	51.3	44.2-58.3	46,071	<b>47.8</b>	42.1-53.4
\$15,000 - 24,999	22,658	<b>33.9</b>	27.5-40.4	47,452	48.0	42.4-53.7	70,110	<b>42.4</b>	38.1-46.7
\$25,000 - 34,999	29,478	<b>34.7</b>	28.8-40.6	40,913	42.7	37.1-48.3	70,391	<b>38.9</b>	34.9-43.0
\$35,000 - 49,999	25,828	<b>27.7</b>	22.4-32.9	34,560	34.6	29.6-39.6	60,388	<b>31.2</b>	27.6-34.9
\$50,000 - 74,999	23,902	<b>22.3</b>	17.7-27.0	23,736	25.5	20.9-30.2	47,639	<b>23.8</b>	20.5-27.1
\$75,000+	29,244	<b>14.9</b>	12.1-17.6	28,992	19.9	16.5-23.3	58,236	<b>17.0</b>	14.9-19.1

# CHAPTER 5: PHYSICAL ACTIVITY

**FIGURE 5.1 PREVALENCE OF PHYSICAL INACTIVITY BY YEAR:  
WVBRFSS, 2012-2021**



**Figure 5.2 Prevalence of Physical Inactivity by County : WVBRFSS, 2017-2021**



## Fruit and Vegetable Consumption

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

**Prevalence** **WV: 90.0%** (95% CI: 89.1-91.0)

**U.S.: 85.5%** (95% CI: 85.2-85.7)

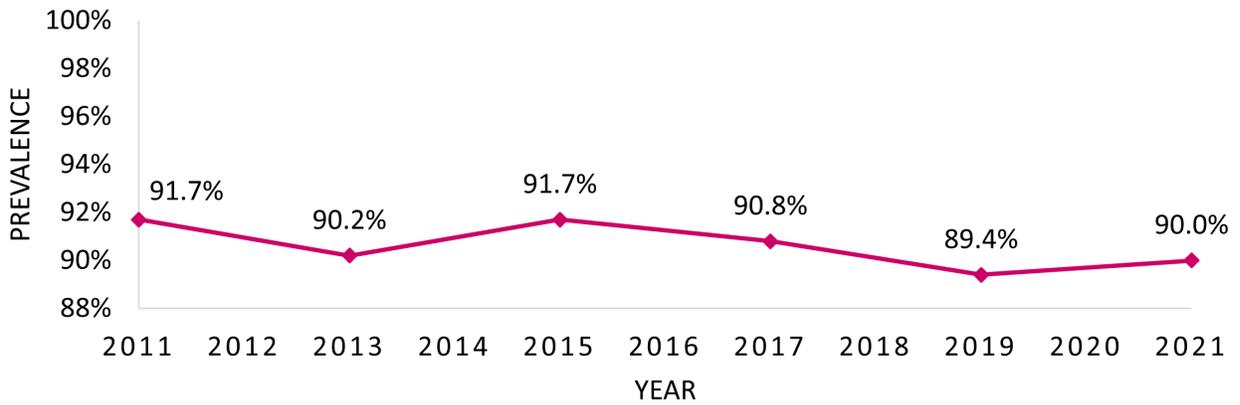
The West Virginia prevalence of consuming fewer than five servings of fruits and vegetables daily was significantly higher than the U.S. prevalence. West Virginia ranked the third highest among 53 BRFSS participants.

**Table 6.1 Prevalence of Consuming Less than Five Servings of Fruits and Vegetables Daily by Demographic Characteristics: WVBRFSS, 2021**

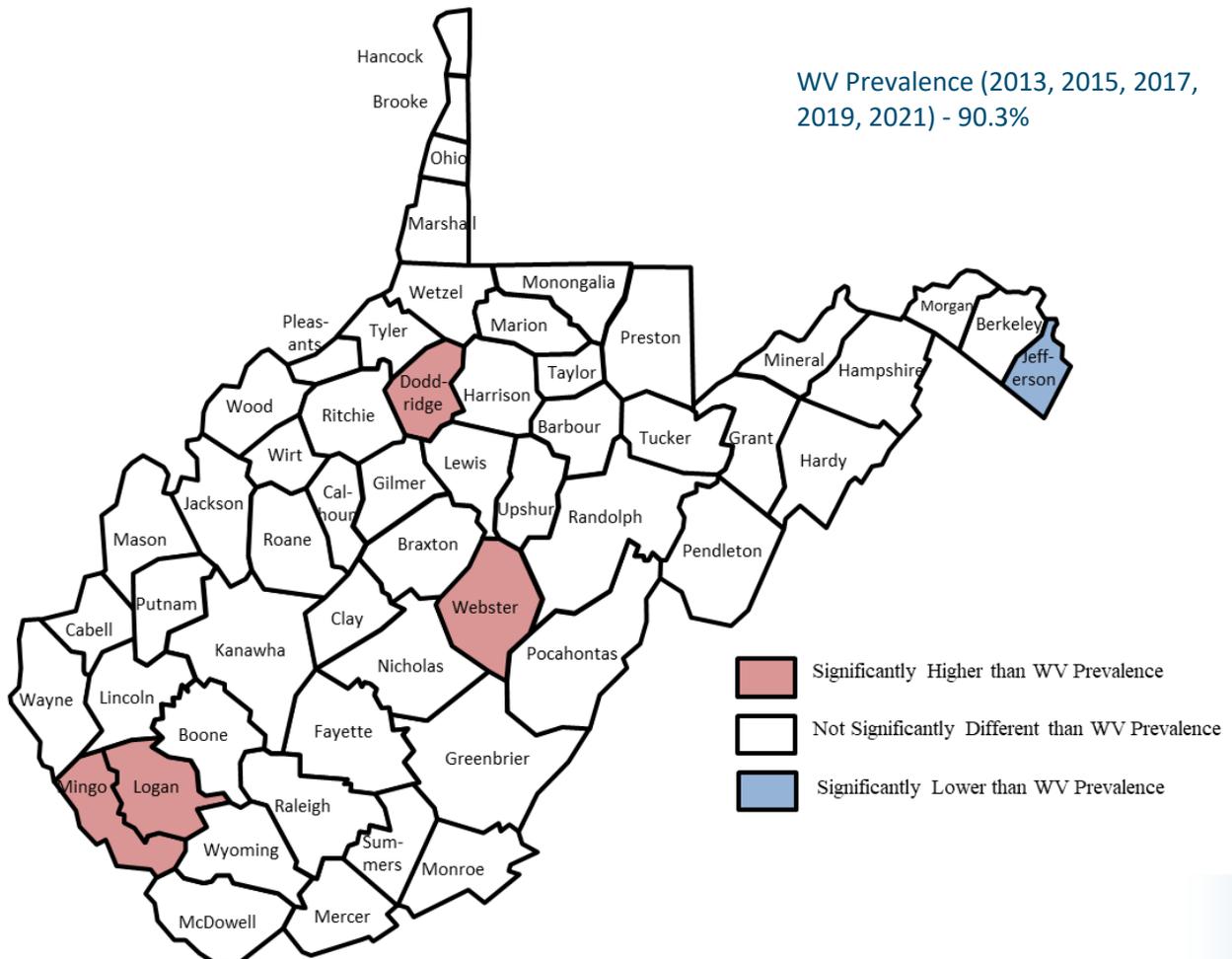
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	543,818	<b>90.8</b>	89.4-92.2	563,956	<b>89.3</b>	88.0-90.6	1,107,774	<b>90.0</b>	89.1-91.0
<b>Age</b>									
18-24	61,225	<b>84.7</b>	77.8-91.5	59,216	<b>93.5</b>	89.0-98.0	120,441	<b>88.8</b>	84.6-93.0
25-34	84,627	<b>91.7</b>	88.3-95.2	76,152	<b>85.5</b>	80.6-90.4	160,779	<b>88.7</b>	85.7-91.7
35-44	75,185	<b>87.2</b>	82.9-91.5	79,330	<b>85.6</b>	81.7-89.5	154,515	<b>86.4</b>	83.5-89.2
45-54	85,373	<b>92.2</b>	89.1-95.3	84,631	<b>88.4</b>	85.3-91.5	170,004	<b>90.3</b>	88.1-92.4
55-64	99,022	<b>92.8</b>	90.4-95.3	102,042	<b>90.6</b>	88.1-93.0	201,064	<b>91.7</b>	90.0-93.4
65+	132,799	<b>92.8</b>	91.0-94.6	158,132	<b>91.3</b>	89.5-93.0	290,930	<b>92.0</b>	90.7-93.2
<b>Education</b>									
Less than H.S.	58,652	<b>91.4</b>	86.2-96.6	66,398	<b>90.2</b>	85.1-95.4	125,049	<b>90.8</b>	87.1-94.5
H.S. or G.E.D.	235,121	<b>91.6</b>	89.4-93.8	203,454	<b>91.2</b>	89.2-93.1	438,575	<b>91.4</b>	89.9-92.9
Some Post-H.S.	139,991	<b>89.9</b>	87.1-92.8	170,767	<b>88.0</b>	85.6-90.5	310,757	<b>88.9</b>	87.0-90.8
College Graduate	108,735	<b>90.1</b>	87.8-92.3	123,270	<b>87.4</b>	85.2-89.6	232,005	<b>88.6</b>	87.1-90.2
<b>Income</b>									
Less than \$15,000	24,445	<b>93.6</b>	88.4-98.8	46,380	<b>87.5</b>	82.3-92.7	70,825	<b>89.5</b>	85.6-93.4
\$15,000 - 24,999	52,992	<b>93.3</b>	88.9-97.6	77,737	<b>91.4</b>	88.0-94.8	130,730	<b>92.2</b>	89.5-94.8
\$25,000 - 34,999	67,356	<b>89.9</b>	86.1-93.8	79,153	<b>89.8</b>	86.1-93.6	146,509	<b>89.9</b>	87.2-92.6
\$35,000 - 49,999	75,469	<b>91.5</b>	87.8-95.2	82,561	<b>91.5</b>	88.7-94.4	158,030	<b>91.5</b>	89.2-93.8
\$50,000 - 74,999	85,715	<b>90.3</b>	86.7-93.9	76,582	<b>88.8</b>	85.2-92.5	162,296	<b>89.6</b>	87.0-92.2
\$75,000+	160,176	<b>89.8</b>	87.2-92.5	117,680	<b>86.9</b>	84.1-89.6	277,856	<b>88.5</b>	86.6-90.5

# CHAPTER 6: NUTRITION

**FIGURE 6.1 PREVALENCE OF CONSUMED LESS THAN 5 SERVINGS OF FRUITS AND VEGETABLES BY YEAR: VWBRFSS 2011-2021**



**Figure 6.2 Prevalence of Consuming Less than Five Servings of Fruits and Vegetables Daily by County: WVBRFSS, 2013, 2015, 2017, 2019, 2021.**



## 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: 22.0%** (95% CI: 20.7-23.3)

**U.S.: 13.4%** (95% CI: 13.2-13.7)

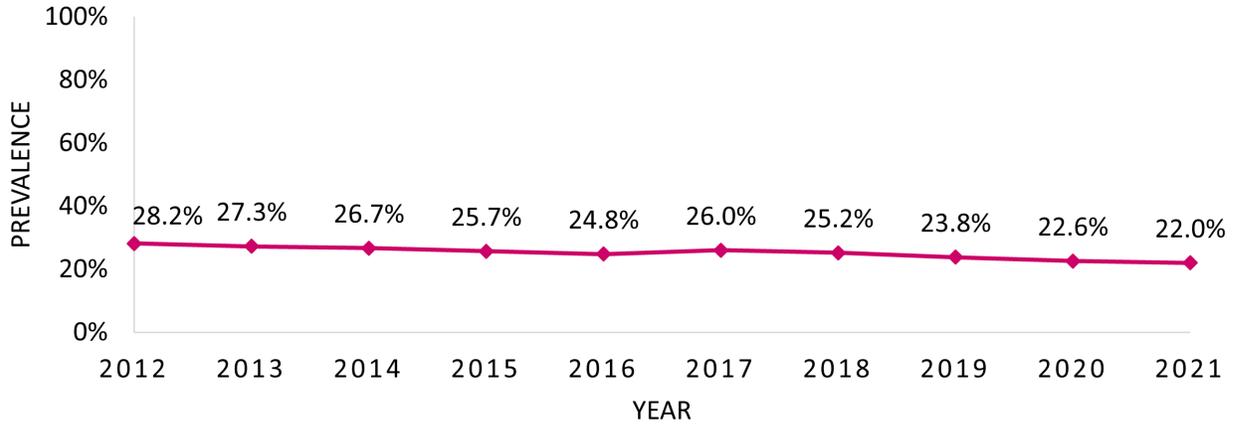
The West Virginia prevalence of current cigarette smoking was significantly higher than the U.S. prevalence. West Virginia ranked the highest among the 53 BRFSS participants.

**Table 7.1 Prevalence of Current Cigarette Smoking by Demographic Characteristics: WVBRFSS, 2021**

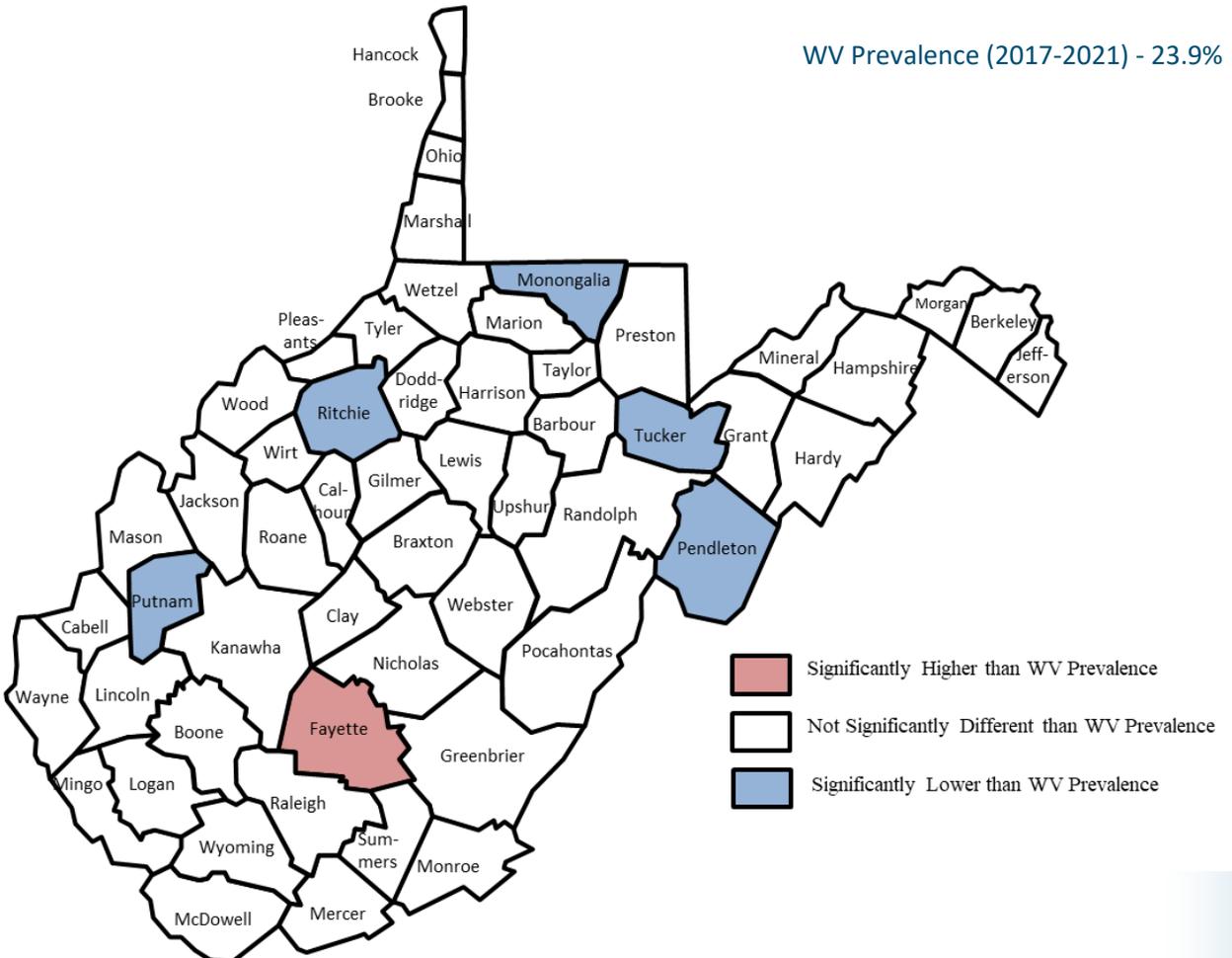
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	145,964	<b>21.5</b>	19.5-23.4	158,736	<b>22.5</b>	20.7-24.3	304,700	<b>22.0</b>	20.7-23.3
<b>Age</b>									
18-24	10,461	<b>12.6</b>	6.5-18.7	10,050	<b>13.5</b>	7.1-19.9	20,511	<b>13.0</b>	8.6-17.4
25-34	34,269	<b>33.1</b>	26.9-39.4	26,857	<b>27.9</b>	22.2-33.6	61,126	<b>30.6</b>	26.3-34.9
35-44	31,087	<b>31.3</b>	25.5-37.1	37,008	<b>36.7</b>	31.3-42.2	68,095	<b>34.0</b>	30.1-38.0
45-54	21,943	<b>21.6</b>	17.0-26.2	31,844	<b>31.3</b>	26.5-36.1	53,787	<b>26.4</b>	23.1-29.8
55-64	26,244	<b>22.5</b>	18.7-26.2	31,658	<b>25.5</b>	21.8-29.2	57,902	<b>24.0</b>	21.4-26.7
65+	21,543	<b>12.7</b>	10.1-15.3	21,128	<b>10.5</b>	8.5-12.4	42,672	<b>11.5</b>	9.9-13.1
<b>Education</b>									
Less than H.S.	35,968	<b>45.0</b>	36.9-53.1	33,601	<b>37.5</b>	30.6-44.4	69,570	<b>41.0</b>	35.7-46.3
H.S. or G.E.D.	69,635	<b>23.6</b>	20.6-26.6	67,899	<b>26.5</b>	23.5-29.5	137,535	<b>25.0</b>	22.8-27.1
Some Post-H.S.	30,707	<b>17.8</b>	14.5-21.1	44,858	<b>21.1</b>	18.1-24.2	75,565	<b>19.6</b>	17.4-21.9
College Graduate	9,420	<b>7.2</b>	5.4-9.0	12,377	<b>8.4</b>	6.6-10.2	21,797	<b>7.9</b>	6.6-9.1
<b>Income</b>									
Less than \$15,000	16,767	<b>47.9</b>	38.3-57.5	25,673	<b>42.4</b>	35.4-49.4	42,440	<b>44.4</b>	38.8-50.1
\$15,000 - 24,999	25,875	<b>39.5</b>	32.2-46.8	33,326	<b>34.6</b>	29.0-40.2	59,201	<b>36.6</b>	32.1-41.1
\$25,000 - 34,999	22,783	<b>27.3</b>	21.6-33.0	24,139	<b>25.5</b>	20.4-30.5	46,922	<b>26.3</b>	22.5-30.1
\$35,000 - 49,999	19,896	<b>21.7</b>	16.7-26.7	22,654	<b>23.4</b>	18.6-28.2	42,551	<b>22.6</b>	19.1-26.0
\$50,000 - 74,999	14,971	<b>14.1</b>	10.0-18.2	11,925	<b>13.0</b>	9.0-16.9	26,896	<b>13.6</b>	10.7-16.4
\$75,000+	25,685	<b>13.3</b>	10.2-16.5	17,893	<b>12.5</b>	9.6-15.4	43,579	<b>13.0</b>	10.8-15.2

# CHAPTER 7: TOBACCO USE

**FIGURE 7.1 PREVALENCE OF CURRENT CIGARETTE SMOKING BY YEAR: WVBRFSS, 2012-2021**



**Figure 7.2 Prevalence of Current Cigarette Smoking by County: WVBRFSS, 2017-2021**



## 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: 44.8%** (95% CI: 41.3-48.4)  
Because this question is part of a state selected optional module and complete national data are not available, a U.S. comparison was not conducted.

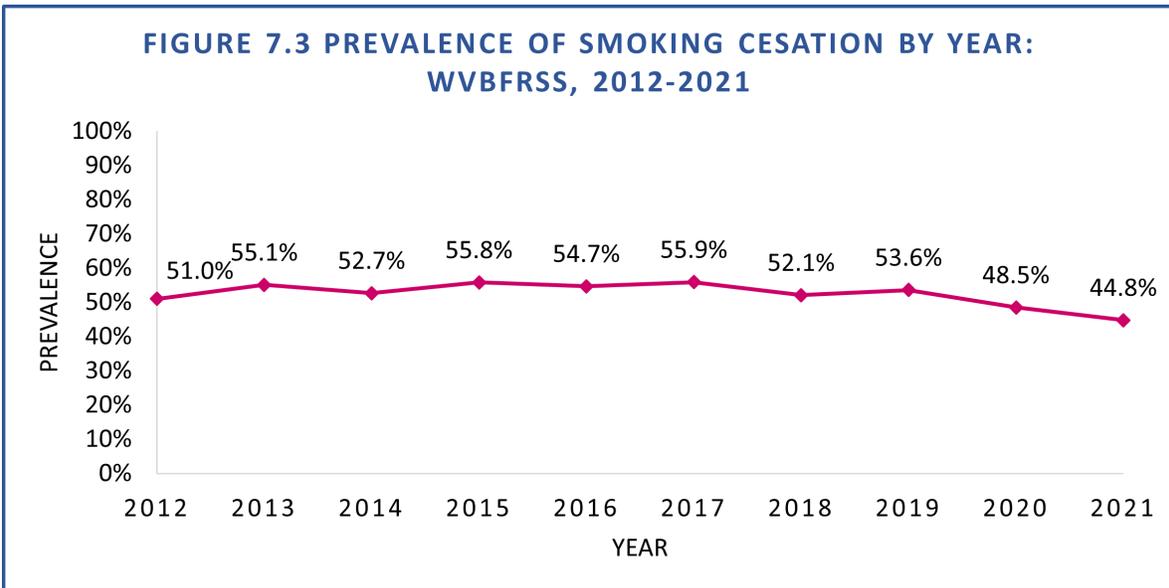
**Table 7.2 Prevalence of Smoking Cessation by Demographic Characteristics: WVBRFSS, 2021**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	63,328	<b>47.6</b>	42.2-53.0	62,637	<b>42.3</b>	37.7-47.0	125,965	<b>44.8</b>	41.3-48.4
<b>Age</b>									
18-24	4,640	<b>56.1*</b>	26.1-86.0	4,432	<b>49.5*</b>	22.0-77.0	9,071	<b>52.6*</b>	32.6-72.7
25-34	16,476	<b>53.3*</b>	40.6-66.0	11,846	<b>48.7*</b>	36.1-61.4	28,322	<b>51.3</b>	42.2-60.4
35-44	11,465	<b>42.8*</b>	30.7-54.9	12,696	<b>36.7</b>	27.0-46.3	24,162	<b>39.3</b>	31.7-46.9
45-54	9,148	<b>44.0*</b>	31.4-56.5	11,416	<b>38.5</b>	28.7-48.4	20,563	<b>40.8</b>	33.0-48.5
55-64	10,966	<b>43.8</b>	33.9-53.7	12,047	<b>39.3</b>	30.8-47.7	23,013	<b>41.3</b>	34.9-47.7
65+	10,538	<b>50.8*</b>	39.4-62.3	10,201	<b>52.2*</b>	41.9-62.5	20,738	<b>51.5</b>	43.8-59.2
<b>Education</b>									
Less than H.S.	16,989	<b>51.3*</b>	38.7-64.0	12,270	<b>40.4*</b>	28.1-52.8	29,259	<b>46.1</b>	37.3-55.0
H.S. or G.E.D.	27,406	<b>43.3</b>	35.6-50.9	28,958	<b>45.1</b>	38.3-51.9	56,364	<b>44.2</b>	39.1-49.3
Some Post-H.S.	14,408	<b>53.0*</b>	42.3-63.7	17,702	<b>42.4</b>	34.0-50.8	32,110	<b>46.6</b>	40.0-53.2
College Graduate	4,525	<b>49.5*</b>	36.0-63.0	3,707	<b>31.8*</b>	21.1-42.6	8,232	<b>39.6</b>	30.9-48.3
<b>Income</b>									
Less than \$15,000	4,804	<b>30.7*</b>	17.7-43.8	9,162	<b>36.6*</b>	25.3-47.9	13,966	<b>34.3</b>	25.7-43.0
\$15,000 - 24,999	14,134	<b>57.8*</b>	45.7-69.9	14,983	<b>48.0*</b>	37.2-58.8	29,116	<b>52.3</b>	44.2-60.4
\$25,000 - 34,999	10,043	<b>49.1*</b>	35.9-62.3	9,344	<b>42.0*</b>	30.5-53.4	19,387	<b>45.4</b>	36.6-54.2
\$35,000 - 49,999	10,136	<b>54.9*</b>	41.4-68.3	9,390	<b>47.0*</b>	34.3-59.7	19,527	<b>50.8</b>	41.6-60.1
\$50,000 - 74,999	6,450	<b>49.8*</b>	32.9-66.8	6,745	<b>59.1*</b>	43.1-75.1	13,195	<b>54.2*</b>	42.3-66.1
\$75,000+	10,321	<b>45.6*</b>	32.0-59.2	5,316	<b>31.3*</b>	19.6-42.9	15,637	<b>39.5</b>	30.1-48.8

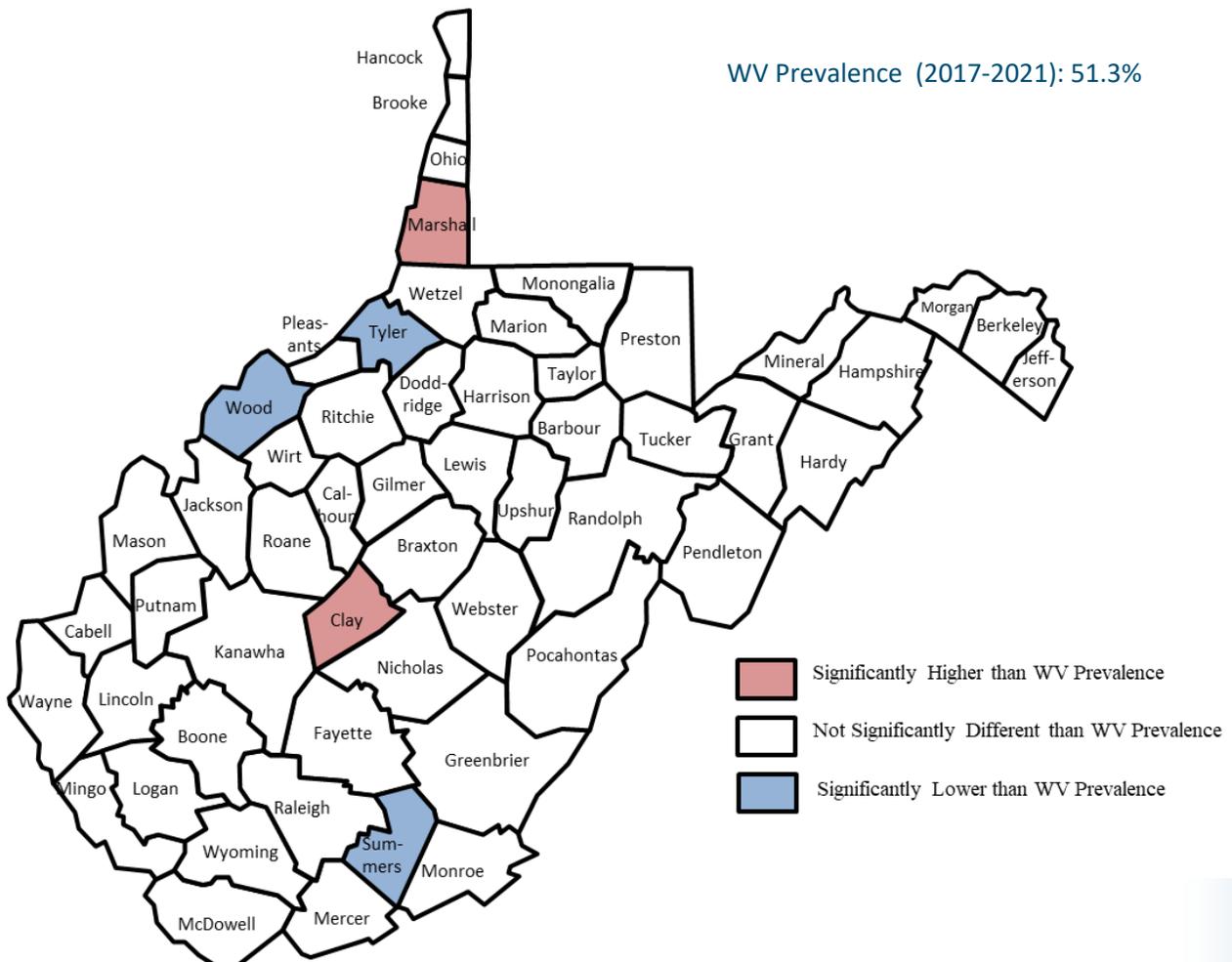
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

# CHAPTER 7: TOBACCO USE

**FIGURE 7.3 PREVALENCE OF SMOKING CESSATION BY YEAR: WVBRFSS, 2012-2021**



**Figure 7.4 Prevalence of Smoking Cessation by Demographic Characteristics: WVBRFSS, 2017-2021**



## Smokeless Tobacco

**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: 8.8%** (95% CI: 7.8-9.7)  
**U.S.: 3.2%** (95% CI: 3.1-3.3)

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

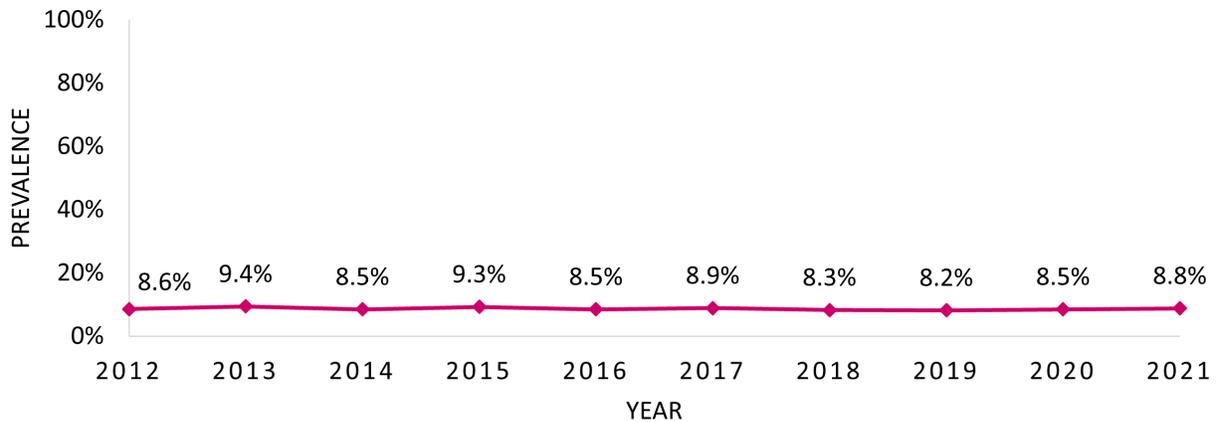
**Table 7.3 Prevalence of Current Smokeless Tobacco Use by Demographic Characteristics: WVBRFSS, 2021**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	113,835	<b>16.6</b>	14.8-18.3	8,592	<b>1.2</b>	0.8-1.7	122,427	<b>8.8</b>	7.8-9.7
<b>Age</b>									
18-24	12,413	<b>14.9</b>	8.2-21.6	1,301	<b>1.7*</b>	0.0-3.8	13,714	<b>8.7</b>	4.9-12.5
25-34	21,447	<b>20.4</b>	15.0-25.8	1,573	<b>1.6*</b>	0.3-3.0	23,021	<b>11.4</b>	8.3-14.5
35-44	21,723	<b>21.7</b>	16.6-26.8	1,065	<b>1.1*</b>	0.0-2.3	22,789	<b>11.3</b>	8.5-14.1
45-54	21,978	<b>21.6</b>	17.0-26.2	1,700	<b>1.7*</b>	0.4-2.9	23,678	<b>11.6</b>	9.1-14.1
55-64	21,551	<b>18.3</b>	14.8-21.9	2,019	<b>1.6*</b>	0.5-2.7	23,570	<b>9.7</b>	7.8-11.6
65+	14,119	<b>8.2</b>	6.2-10.3	934	<b>0.5*</b>	0.1-0.8	15,053	<b>4.0</b>	3.0-5.0
<b>Education</b>									
Less than H.S.	17,326	<b>21.6</b>	14.8-28.5	1,771	<b>2.0*</b>	0.3-3.7	19,097	<b>11.3</b>	7.7-14.8
H.S. or G.E.D.	62,156	<b>20.9</b>	18.0-23.8	4,763	<b>1.8</b>	0.9-2.8	66,919	<b>12.0</b>	10.4-13.7
Some Post-H.S.	24,796	<b>14.2</b>	11.1-17.4	934	<b>0.4*</b>	0.0-0.9	25,730	<b>6.6</b>	5.1-8.2
College Graduate	9,399	<b>7.2</b>	5.3-9.1	1,124	<b>0.8*</b>	0.2-1.3	10,523	<b>3.8</b>	2.8-4.7
<b>Income</b>									
Less than \$15,000	6,405	<b>18.3</b>	10.1-26.5	1,138	<b>1.9*</b>	0.0-3.8	7,543	<b>7.9</b>	4.5-11.3
\$15,000 - 24,999	11,073	<b>16.9</b>	11.3-22.4	2,633	<b>2.7*</b>	0.8-4.6	13,706	<b>8.4</b>	5.8-11.0
\$25,000 - 34,999	13,754	<b>16.4</b>	11.4-21.3	1,307	<b>1.4*</b>	0.2-2.5	15,061	<b>8.4</b>	5.9-10.9
\$35,000 - 49,999	15,189	<b>16.5</b>	12.0-21.0	476	<b>0.5*</b>	0.0-1.2	15,664	<b>8.3</b>	5.9-10.6
\$50,000 - 74,999	16,675	<b>15.7</b>	11.2-20.2	136	<b>0.1*</b>	0.0-0.4	16,811	<b>8.5</b>	5.9-11.0
\$75,000+	33,491	<b>17.2</b>	14.0-20.4	1,366	<b>1.0*</b>	0.1-1.8	34,857	<b>10.3</b>	8.3-12.2

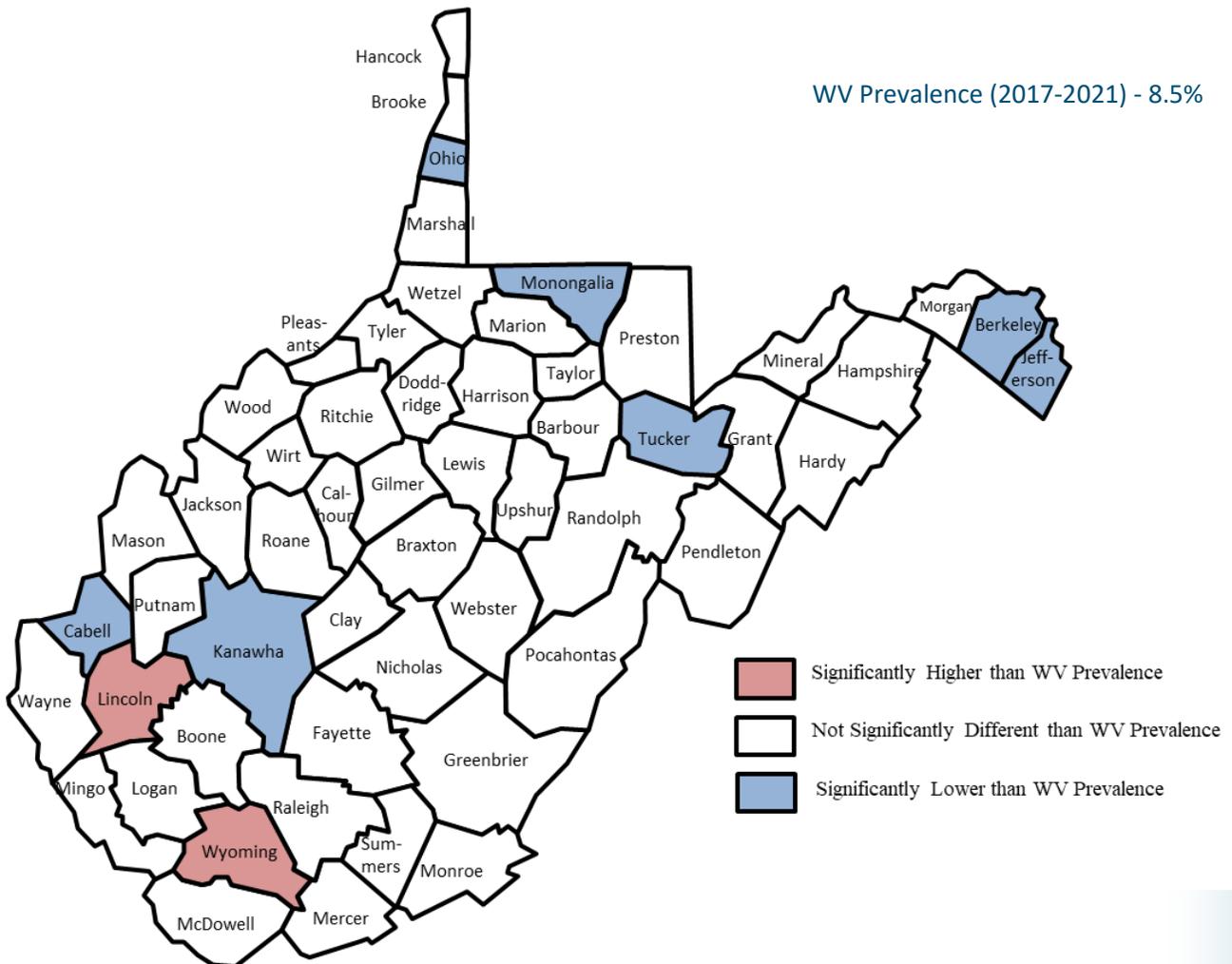
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

# CHAPTER 7: TOBACCO USE

**FIGURE 7.5 PREVALENCE OF SMOKELESS TOBACCO USE BY YEAR: WVBRFSS, 2012-2021**



**Figure 7.6 Prevalence of Current Smokeless Tobacco Use by County: WVBRFSS, 2017-2021**



## CHAPTER 7: E-cigarette Use

### E-cigarette Use

**Definition** Responding “Every day” or “Some days” to the question “Have you ever used an e-cigarette or other electronic vaping products every day, some days, or not at all?”

**Prevalence** **WV: 7.1%** (95% CI: 6.2-8.0)  
**U.S.: 6.5%** (95% CI: 6.3-6.7)  
 The West Virginia prevalence of e-cigarette use was slightly higher than the U.S. prevalence. West Virginia ranked the 21<sup>st</sup> highest among 53 BRFSS participants.

**Table 7.4 Prevalence of E-cigarette use by Demographic Characteristics: WVBRFSS, 2021**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	54,927	8.0	6.6-9.4	44,352	<b>6.3</b>	5.1-7.4	99,278	<b>7.1</b>	6.2-8.0
<b>Age</b>									
18-24	22,329	27.0	19.1-34.9	15,301	20.7	13.2-28.2	37,630	24.1	18.6-29.5
25-34	14,632	13.9	9.6-18.3	10,016	10.3	6.5-14.2	24,648	12.2	9.3-15.1
35-44	6,869	6.9	3.6-10.1	5,365	5.3	2.8-7.8	12,234	6.1	4.0-8.1
45-54	4,984	4.9	2.6-7.2	7,019	6.9	4.0-9.7	12,003	5.9	4.0-7.7
55-64	2,046	1.7	0.6-2.9	3,270	2.6	1.3-4.0	5,316	2.2	1.3-3.1
65+	3,569	2.1	0.9-3.3	3,002	1.5	0.8-2.1	6,571	1.8	1.1-2.4
<b>Education</b>									
Less than H.S.	7,103	8.9	3.7-14.1	5,710	6.4	2.2-10.5	12,814	7.6	4.3-10.9
H.S. or G.E.D.	29,295	9.8	7.4-12.3	19,669	7.7	5.6-9.8	48,964	8.8	7.2-10.5
Some Post-H.S.	13,137	7.5	5.0-10.0	15,306	7.2	5.0-9.4	28,443	7.4	5.7-9.0
College Graduate	5,391	4.1	2.6-5.6	3,666	2.5	1.3-3.7	9,058	3.2	2.3-4.2
<b>Income</b>									
Less than \$15,000	3,067	8.8	2.3-15.2	4,305	7.1	3.1-11.2	7,372	7.7	4.3-11.2
\$15,000 - 24,999	6,948	10.6	5.4-15.8	11,534	11.9	7.2-16.7	18,482	11.4	7.9-14.9
\$25,000 - 34,999	6,419	7.6	3.9-11.4	3,943	4.1	1.4-6.8	10,362	5.8	3.5-8.0
\$35,000 - 49,999	7,318	7.9	4.3-11.6	7,549	7.8	4.4-11.1	14,867	7.9	5.4-10.3
\$50,000 - 74,999	6,540	6.2	3.3-9.0	4,218	4.6	1.9-7.2	10,758	5.4	3.4-7.4
\$75,000+	12,781	6.6	4.0-9.1	4,761	3.3	1.7-5.0	17,542	5.2	3.5-6.8

## 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: 5.0%** (95% CI: 4.2-5.7)

**U.S.: 6.0%** (95% CI: 5.8-6.2)

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

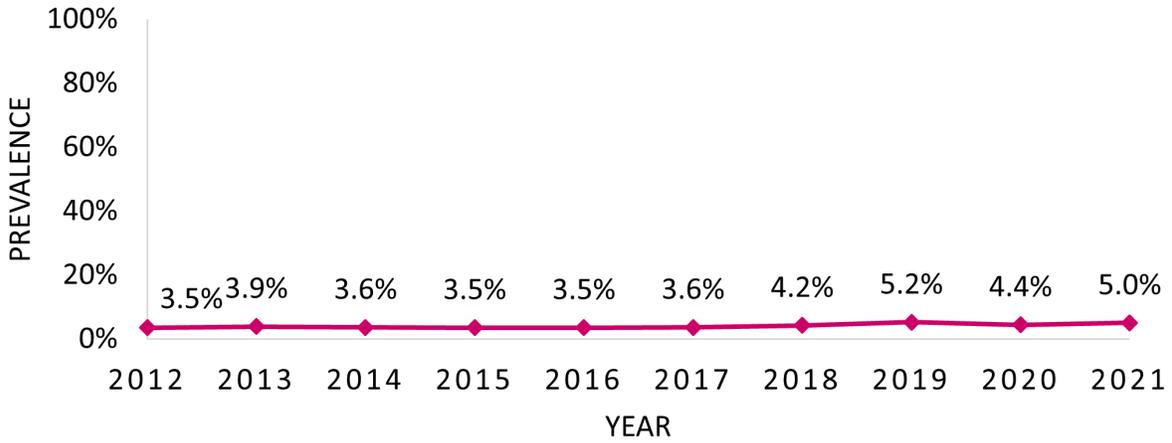
**Table 8.1 Prevalence of Heavy Drinking by Demographic Characteristics: WVBRFSS, 2021**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	41,522	<b>6.3</b>	5.1-7.4	26,099	<b>3.7</b>	2.9-4.6	67,622	<b>5.0</b>	4.2-5.7
<b>Age</b>									
18-24	6,102	<b>7.7*</b>	2.4-13.0	4,198	<b>5.7*</b>	1.6-9.8	10,300	<b>6.7</b>	3.3-10.1
25-34	11,292	<b>11.3</b>	7.1-15.4	5,292	<b>5.6</b>	2.8-8.4	16,584	<b>8.5</b>	5.9-11.0
35-44	2,787	<b>2.9*</b>	0.8-4.9	6,274	<b>6.3</b>	3.4-9.3	9,061	<b>4.6</b>	2.8-6.4
45-54	7,831	<b>7.9</b>	4.7-11.0	4,096	<b>4.1</b>	2.2-5.9	11,927	<b>6.0</b>	4.1-7.8
55-64	7,862	<b>6.9</b>	4.6-9.3	3,104	<b>2.5</b>	1.3-3.7	10,966	<b>4.6</b>	3.3-5.9
65+	5,648	<b>3.4</b>	2.0-4.8	2,988	<b>1.5</b>	0.8-2.2	8,635	<b>2.3</b>	1.6-3.1
<b>Education</b>									
Less than H.S.	6,312	<b>8.1*</b>	3.3-13.0	2,278	<b>2.6*</b>	0.0-5.3	8,589	<b>5.2</b>	2.5-7.9
H.S. or G.E.D.	22,208	<b>7.7</b>	5.7-9.7	7,617	<b>3.0</b>	1.7-4.3	29,826	<b>5.5</b>	4.3-6.7
Some Post-H.S.	7,691	<b>4.6</b>	2.7-6.6	8,679	<b>4.1</b>	2.5-5.8	16,370	<b>4.4</b>	3.1-5.6
College Graduate	5,312	<b>4.2</b>	2.6-5.7	7,525	<b>5.1</b>	3.6-6.6	12,837	<b>4.7</b>	3.6-5.8
<b>Income</b>									
Less than \$15,000	2,172	<b>6.3*</b>	2.1-10.6	3,133	<b>5.3*</b>	1.0-9.6	5,305	<b>5.7</b>	2.5-8.8
\$15,000 - 24,999	2,721	<b>4.2*</b>	1.4-7.0	4,078	<b>4.3*</b>	1.6-6.9	6,799	<b>4.2</b>	2.3-6.2
\$25,000 - 34,999	4,170	<b>5.1</b>	2.3-7.9	1,773	<b>1.9*</b>	0.6-3.1	5,943	<b>3.4</b>	1.9-4.8
\$35,000 - 49,999	3,651	<b>4.1</b>	1.9-6.2	3,508	<b>3.6</b>	1.8-5.5	7,159	<b>3.8</b>	2.4-5.2
\$50,000 - 74,999	7,456	<b>7.2</b>	3.4-11.1	3,821	<b>4.1</b>	1.9-6.4	11,277	<b>5.8</b>	3.5-8.1
\$75,000+	16,677	<b>8.8</b>	6.2-11.5	5,984	<b>4.3</b>	2.6-5.9	22,660	<b>6.9</b>	5.2-8.6

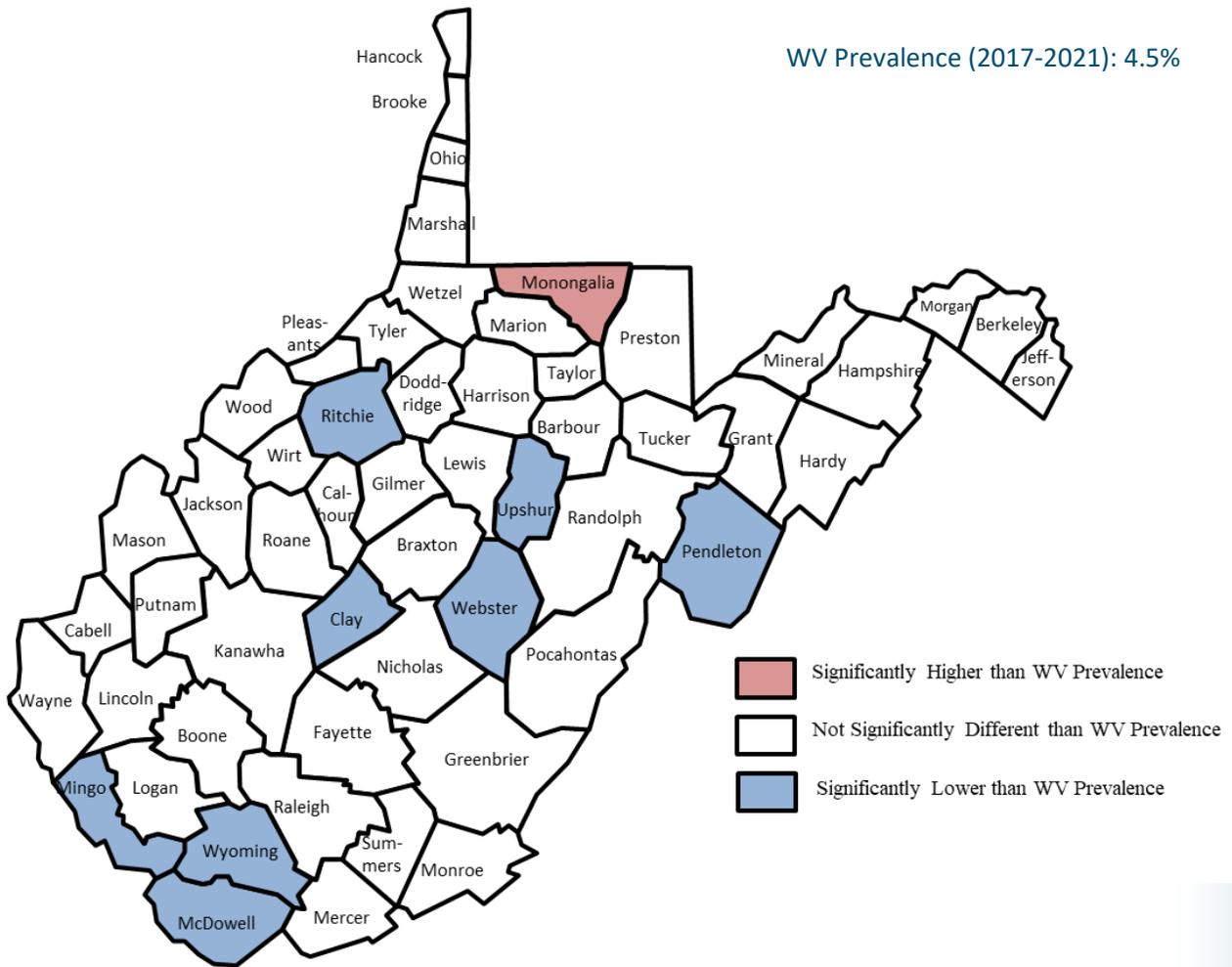
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

# CHAPTER 8: ALCOHOL USE

**FIGURE 8.1 PREVALENCE OF HEAVY DRINKING BY YEAR: WVBRFSS, 2012-2021**



**Figure 8.2 Prevalence of Heavy Drinking by County: WVBRFSS, 2017-2021**



## CHAPTER 8: ALCOHOL CONSUMPTION

### Binge Drinking

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

**Prevalence** **WV: 11.6%** (95% CI: 10.6-12.7)

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

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

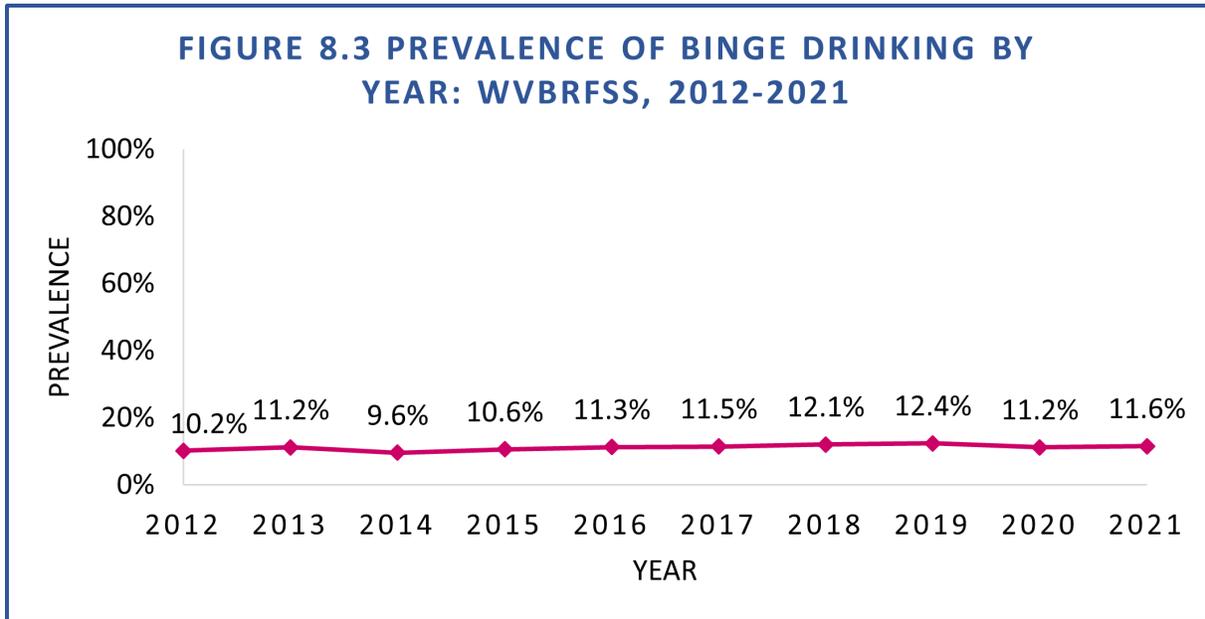
**Table 8.2 Prevalence of Binge Drinking by Demographic Characteristics: WVBRFSS, 2021**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	110,326	<b>16.5</b>	14.7-18.3	48,560	<b>7.0</b>	5.8-8.1	158,886	<b>11.6</b>	10.6-12.7
<b>Age</b>									
18-24	20,990	<b>25.9</b>	17.9-33.9	10,091	<b>13.8</b>	7.7-19.9	31,081	<b>20.2</b>	15.0-25.4
25-34	27,912	<b>28.0</b>	22.2-33.8	11,813	<b>12.3</b>	8.4-16.2	39,724	<b>20.3</b>	16.7-23.9
35-44	20,773	<b>21.1</b>	16.1-26.2	10,743	<b>10.9</b>	7.3-14.4	31,516	<b>16.0</b>	12.9-19.1
45-54	17,181	<b>17.2</b>	13.0-21.4	6,966	<b>6.9</b>	4.5-9.3	24,147	<b>12.0</b>	9.6-14.5
55-64	15,007	<b>13.1</b>	10.1-16.1	4,523	<b>3.7</b>	2.3-5.0	19,529	<b>8.2</b>	6.6-9.8
65+	8,462	<b>5.0</b>	3.4-6.7	4,425	<b>2.2</b>	1.2-3.2	12,887	<b>3.5</b>	2.6-4.4
<b>Education</b>									
Less than H.S.	9,034	<b>11.7</b>	5.7-17.7	2,965	<b>3.4*</b>	0.4-6.3	11,999	<b>7.3</b>	4.0-10.5
H.S. or G.E.D.	46,934	<b>16.1</b>	13.3-18.8	15,926	<b>6.3</b>	4.4-8.1	62,861	<b>11.5</b>	9.8-13.3
Some Post-H.S.	33,304	<b>19.8</b>	16.0-23.7	16,485	<b>7.9</b>	5.7-10.1	49,789	<b>13.2</b>	11.1-15.4
College Graduate	20,820	<b>16.2</b>	13.4-19.0	13,184	<b>9.0</b>	6.9-11.1	34,004	<b>12.4</b>	10.6-14.1
<b>Income</b>									
Less than \$15,000	3,295	<b>10.0</b>	4.9-15.1	4,675	<b>7.9*</b>	3.1-12.7	7,970	<b>8.6</b>	5.1-12.2
\$15,000 - 24,999	7,608	<b>11.7</b>	6.5-16.8	7,910	<b>8.4</b>	4.7-12.0	15,517	<b>9.7</b>	6.7-12.7
\$25,000 - 34,999	10,354	<b>12.7</b>	8.3-17.1	4,241	<b>4.5</b>	2.2-6.8	14,595	<b>8.3</b>	5.9-10.7
\$35,000 - 49,999	9,381	<b>10.4</b>	6.9-13.9	6,325	<b>6.5</b>	3.9-9.2	15,706	<b>8.4</b>	6.2-10.6
\$50,000 - 74,999	21,167	<b>20.3</b>	15.2-25.4	8,250	<b>9.0</b>	5.4-12.5	29,417	<b>15.0</b>	11.8-18.2
\$75,000+	47,396	<b>24.8</b>	20.9-28.8	11,884	<b>8.5</b>	6.1-10.8	59,279	<b>17.9</b>	15.3-20.5

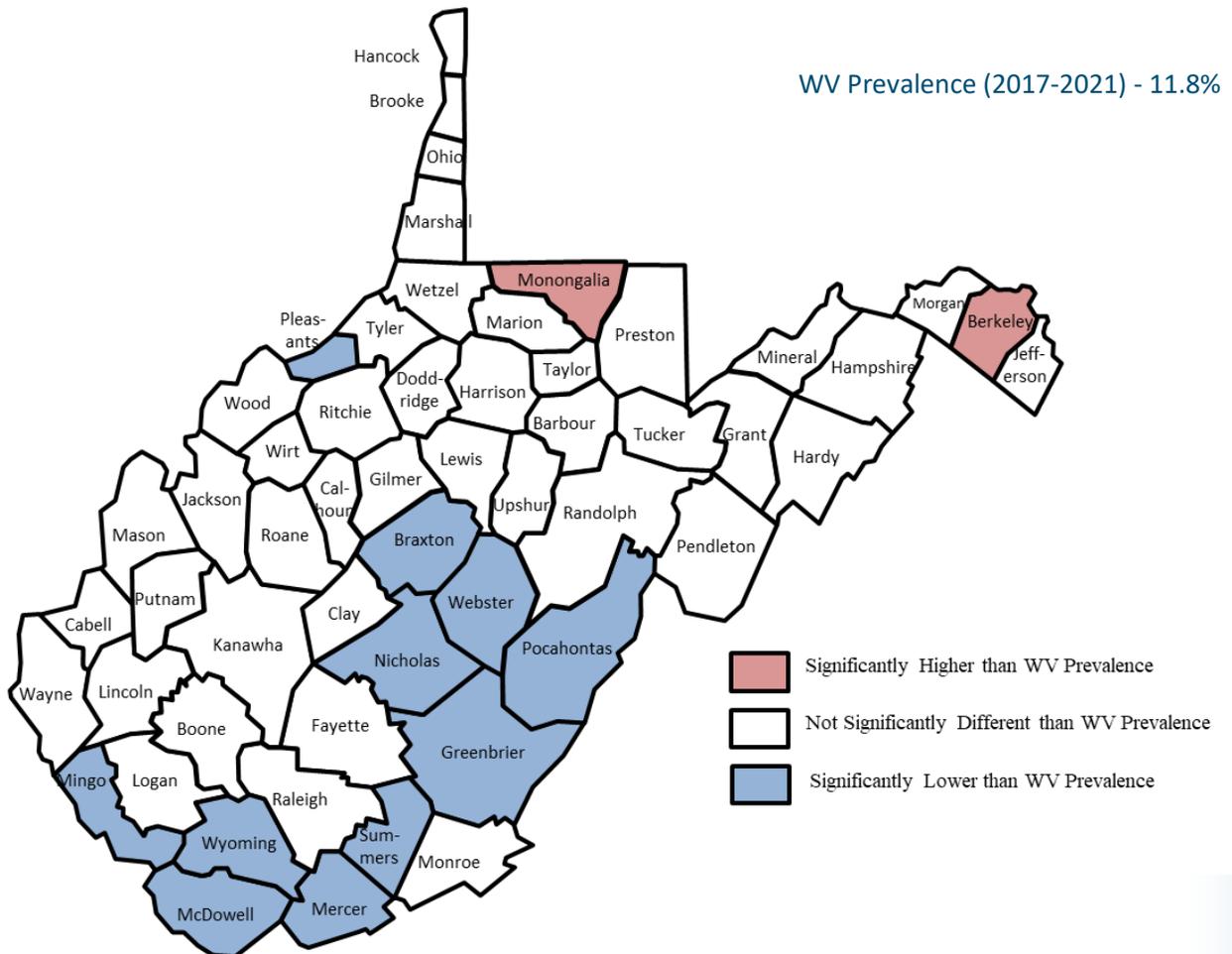
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

# CHAPTER 8: ALCOHOL CONSUMPTION

**FIGURE 8.3 PREVALENCE OF BINGE DRINKING BY YEAR: WVBRFSS, 2012-2021**



**Figure 8.4 Prevalence of Binge Drinking by County: WVBRFSS, 2017-2021**



# SECTION 3: Preventive Practices 2021



## CHAPTER 9: CHOLESTEROL TESTING

### Ever Had Cholesterol Checked

**Definition** Responding “Yes” to the question, “Have you ever had your blood cholesterol checked?”

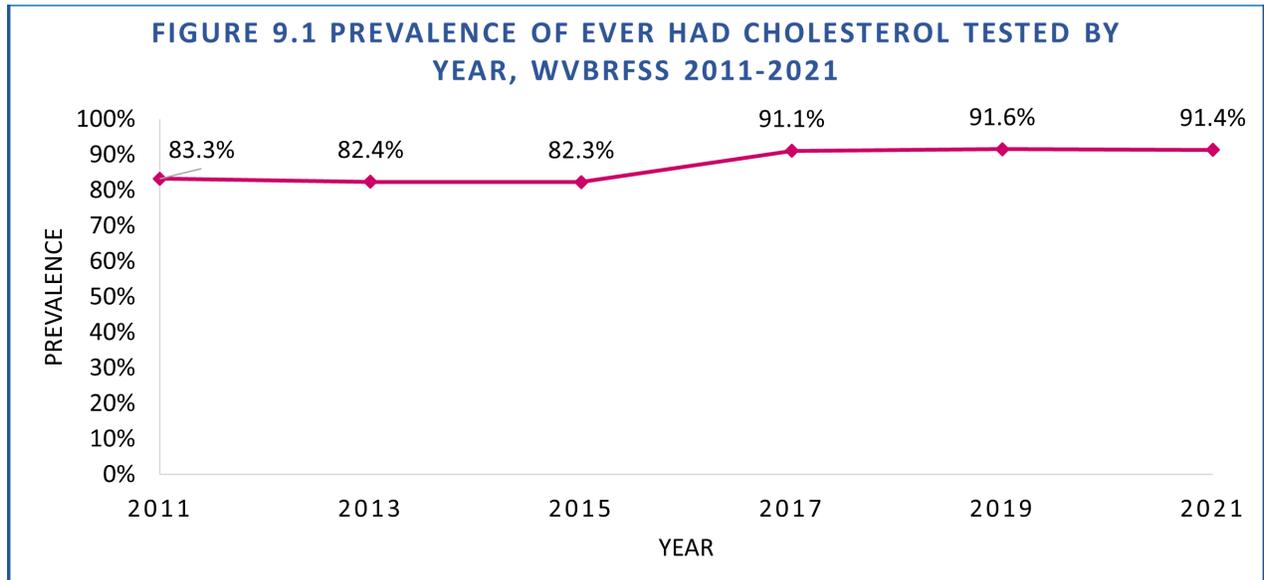
**Prevalence** **WV: 91.4%** (95% CI: 90.3-92.4)  
**U.S.: 89.7%** (95% CI: 89.5-89.9)

The prevalence of ever had cholesterol checked was significantly higher in West Virginia than the U.S. West Virginia ranked the 15<sup>th</sup> highest among 53 BRFSS participants.

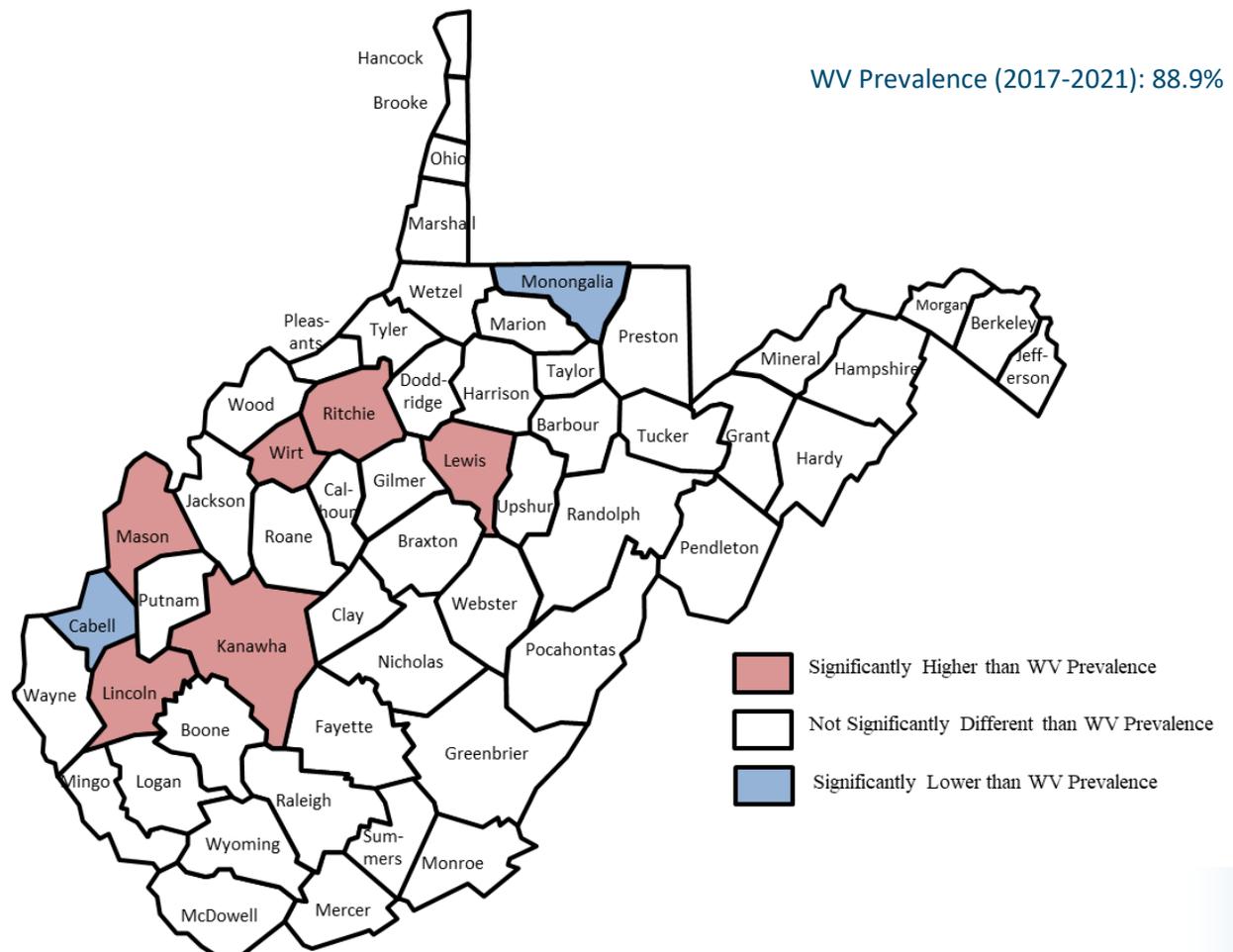
**Table 9.1 Prevalence of Ever Had Cholesterol Checked by Demographic Characteristics: WVBRFSS, 2021**

	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	561,953	<b>88.8</b>	87.1-90.5	625,433	<b>93.8</b>	92.6-95.0	1,187,386	<b>91.4</b>	90.3-92.4
<b>Age</b>									
18-24	38,834	62.3	52.0-72.7	41,794	78.9	70.5-87.2	80,628	69.9	63.0-76.9
25-34	63,650	73.9	67.8-80.1	73,601	84.3	79.5-89.1	137,252	79.2	75.2-83.1
35-44	86,103	90.5	87.0-94.0	87,252	91.3	87.8-94.7	173,354	90.9	88.4-93.3
45-54	91,025	91.4	88.1-94.7	99,024	97.3	95.6-99.0	190,049	94.4	92.5-96.2
55-64	112,501	96.6	95.0-98.2	120,413	98.1	97.0-99.2	232,914	97.4	96.4-98.3
65+	163,984	98.2	97.2-99.1	197,128	98.7	97.7-99.7	361,112	98.5	97.8-99.2
<b>Education</b>									
Less than H.S.	61,102	84.9	77.4-92.4	78,812	92.0	87.7-96.4	139,914	88.8	84.6-93.0
H.S. or G.E.D.	233,207	86.6	83.8-89.4	223,819	93.0	91.0-95.1	457,026	89.6	87.9-91.4
Some Post-H.S.	148,939	90.9	88.0-93.9	187,925	94.0	91.9-96.0	336,864	92.6	90.9-94.3
College Graduate	116,063	93.2	91.0-95.4	133,840	95.9	94.3-97.6	249,903	94.6	93.3-96.0
<b>Income</b>									
Less than \$15,000	28,434	91.6	86.0-97.2	50,829	90.1	85.2-94.9	79,262	90.6	86.9-94.3
\$15,000 - 24,999	53,444	86.3	79.9-92.7	81,476	93.2	89.7-96.7	134,920	90.3	86.9-93.7
\$25,000 - 34,999	65,967	84.1	79.1-89.2	85,472	95.4	93.0-97.9	151,439	90.1	87.4-92.9
\$35,000 - 49,999	75,647	90.1	86.1-94.1	86,691	93.4	90.3-96.6	162,338	91.9	89.4-94.4
\$50,000 - 74,999	88,528	88.8	84.2-93.3	85,603	96.3	93.9-98.7	174,131	92.3	89.6-95.0
\$75,000+	169,514	91.9	88.9-94.8	128,811	92.4	89.4-95.4	298,325	92.1	90.0-94.2

# CHAPTER 9: CHOLESTEROL TESTING



**Figure 9.2 Prevalence of Ever Had Cholesterol Checked by County: WVBRFSS, 2017-2021**



## CHAPTER 9: CHOLESTEROL TESTING

### Had Cholesterol Checked in Past Five Years

**Definition** Reported having blood cholesterol checked and responding “Within the past five years” to the question, “About how long has it been since you last had your blood cholesterol checked?”

**Prevalence** **WV: 87.9%** (95% CI: 86.8-89.1)  
**U.S.: 86.5%** (95% CI: 86.2-86.7)

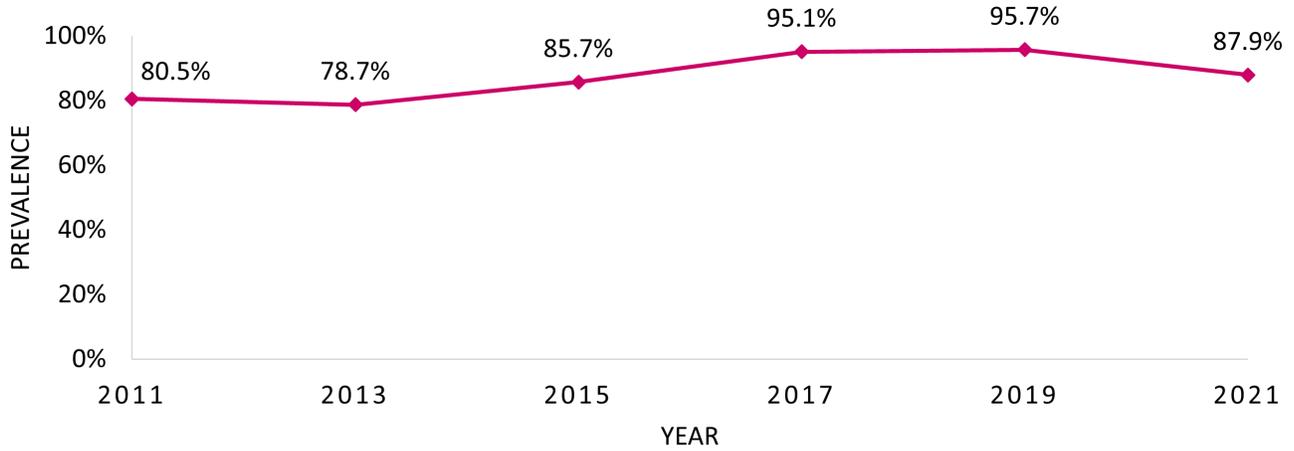
The prevalence of had cholesterol checked in the past five years in WV was significantly higher than the U.S. prevalence. West Virginia ranked the 14<sup>th</sup> lowest among the 53 BRFSS participants.

**Table 9.2 Prevalence of Had Cholesterol Checked in the Past Five Years by Demographic Characteristics: WVBRFSS, 2021**

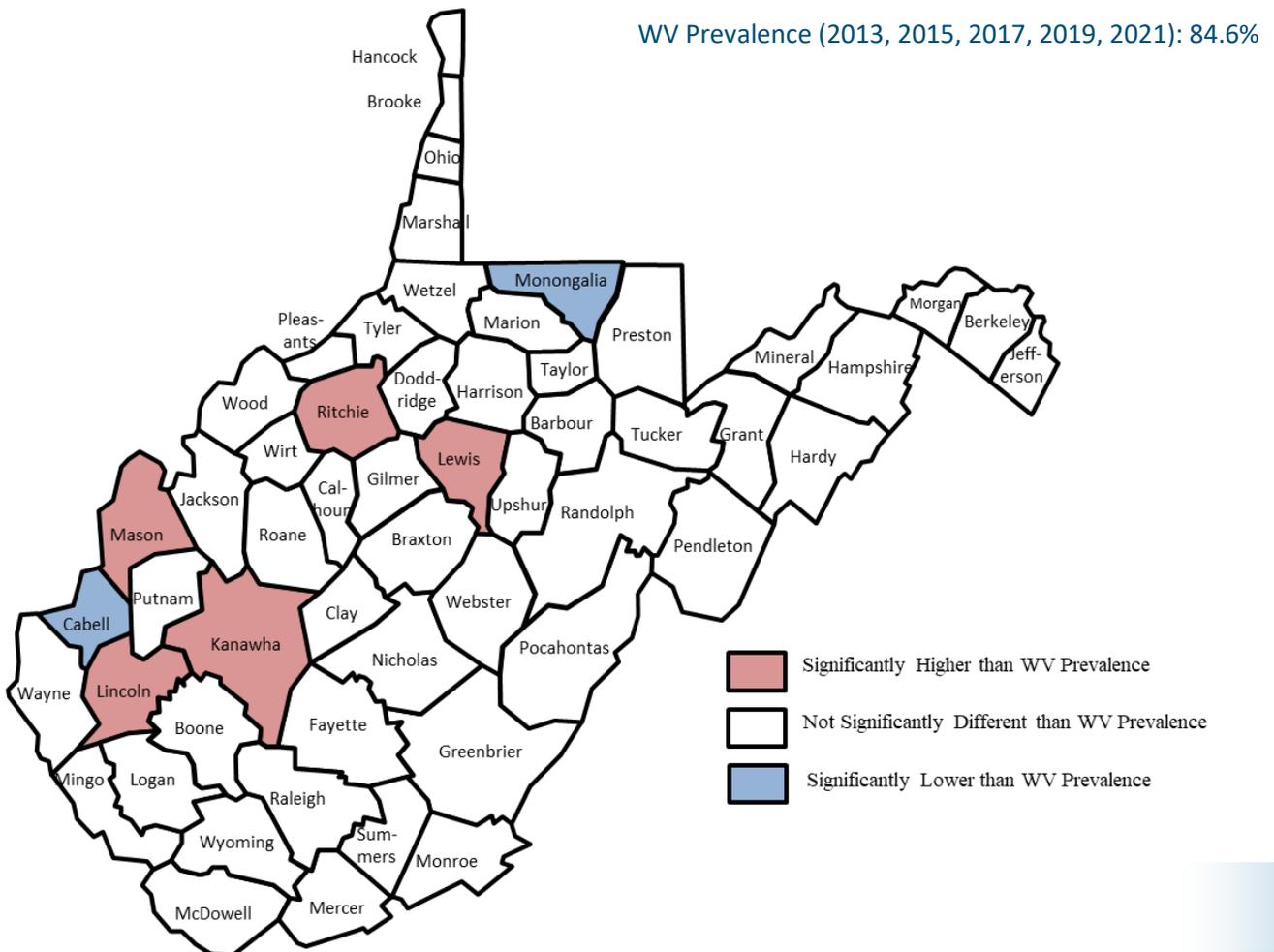
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	537,085	<b>84.9</b>	83.0-86.8	605,697	<b>90.9</b>	89.5-92.2	1,142,783	<b>87.9</b>	86.8-89.1
<b>Age</b>									
18-24	36,247	<b>58.2</b>	47.7-68.7	39,528	<b>74.6</b>	65.4-83.8	75,776	<b>65.7</b>	58.5-72.9
25-34	56,428	<b>65.5</b>	58.9-72.2	69,056	<b>79.1</b>	73.6-84.5	125,484	<b>72.4</b>	68.0-76.7
35-44	81,609	<b>85.8</b>	81.6-89.9	82,039	<b>85.8</b>	81.5-90.1	163,648	<b>85.8</b>	82.8-88.8
45-54	86,722	<b>87.1</b>	83.3-90.9	95,995	<b>94.3</b>	92.0-96.6	182,717	<b>90.7</b>	88.5-92.9
55-64	107,891	<b>92.6</b>	90.3-95.0	117,895	<b>96.1</b>	94.4-97.7	225,786	<b>94.4</b>	93.0-95.8
65+	162,596	<b>97.4</b>	96.2-98.5	194,963	<b>97.6</b>	96.4-98.8	357,558	<b>97.5</b>	96.7-98.3
<b>Education</b>									
Less than H.S.	60,282	<b>83.8</b>	76.2-91.3	73,588	<b>85.9</b>	80.3-91.6	133,871	<b>84.9</b>	80.3-89.6
H.S. or G.E.D.	220,290	<b>81.8</b>	78.7-84.9	216,917	<b>90.2</b>	87.8-92.5	437,207	<b>85.7</b>	83.8-87.7
Some Post-H.S.	142,281	<b>86.8</b>	83.4-90.2	183,485	<b>91.8</b>	89.4-94.1	325,766	<b>89.5</b>	87.5-91.5
College Graduate	111,854	<b>89.8</b>	87.3-92.3	130,671	<b>93.7</b>	91.7-95.6	242,525	<b>91.8</b>	90.3-93.4
<b>Income</b>									
Less than \$15,000	26,685	<b>86.0</b>	79.1-92.9	48,858	<b>86.6</b>	80.9-92.2	75,543	<b>86.4</b>	82.0-90.7
\$15,000 - 24,999	51,461	<b>83.1</b>	76.4-89.7	79,356	<b>90.8</b>	87.0-94.6	130,817	<b>87.6</b>	84.0-91.2
\$25,000 - 34,999	64,696	<b>82.5</b>	77.4-87.6	80,328	<b>89.7</b>	85.4-93.9	145,024	<b>86.3</b>	83.0-89.6
\$35,000 - 49,999	71,261	<b>84.9</b>	80.1-89.7	84,996	<b>91.6</b>	88.2-95.0	156,257	<b>88.4</b>	85.5-91.3
\$50,000 - 74,999	86,335	<b>86.6</b>	81.9-91.2	83,674	<b>94.1</b>	91.4-96.8	170,009	<b>90.1</b>	87.3-93.0
\$75,000+	160,001	<b>86.7</b>	83.3-90.1	125,367	<b>90.0</b>	86.6-93.3	285,368	<b>88.1</b>	85.7-90.5

# CHAPTER 9: CHOLESTEROL TESTING

**FIGURE 9.3 PREVALENCE OF HAD CHOLESTEROL TESTED IN PAST FIVE YEARS BY YEAR: WVBRFSS, 2011-2021**



**Figure 9.4 Prevalence of Had Cholesterol Checked in the Past Five Years by County: WVBRFSS, 2013, 2015, 2017, 2019, 2021**



## CHAPTER 10: DIABETES TESTING

### Diabetes Testing

**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: 58.6%** (95% CI: 56.9-60.3)  
Because this question is part of a state selected optional module and complete national data are not available, a U.S. comparison was not conducted.

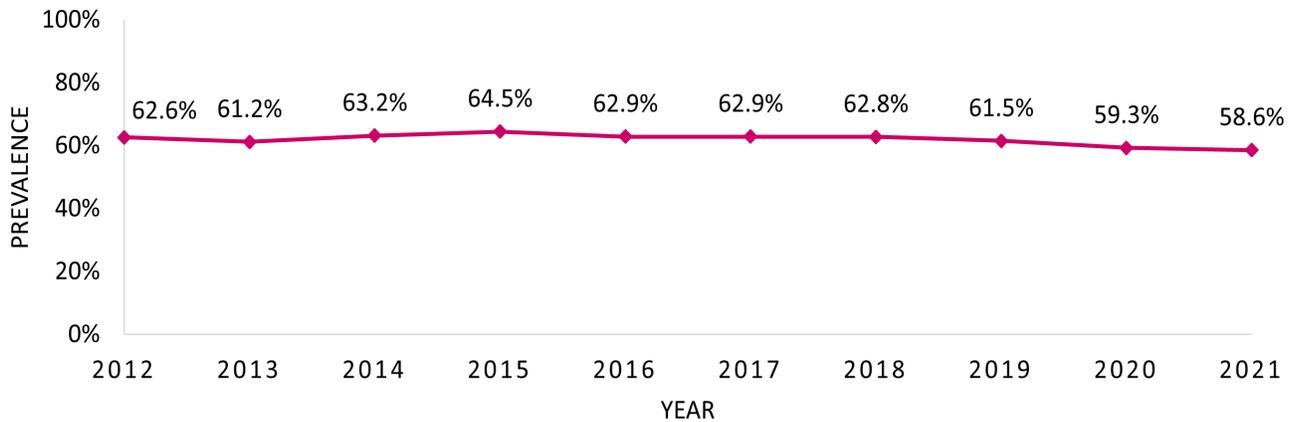
**Table 10.1 Prevalence of Had a Diabetes Test in the Past Three Years by Demographic Characteristics: WVBRFSS, 2021**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	296,816	<b>55.5</b>	52.9-58.0	346,718	<b>61.5</b>	59.3-63.8	643,534	<b>58.6</b>	56.9-60.3
<b>Age</b>									
18-24	21,862	<b>33.0</b>	23.4-42.5	26,380	<b>42.7</b>	32.8-52.5	48,243	<b>37.7</b>	30.8-44.5
25-34	31,455	<b>32.9</b>	26.8-39.1	47,880	<b>52.9</b>	46.4-59.4	79,335	<b>42.6</b>	38.1-47.2
35-44	46,266	<b>51.9</b>	45.7-58.2	49,061	<b>56.7</b>	50.9-62.5	95,327	<b>54.3</b>	50.0-58.6
45-54	51,866	<b>64.2</b>	58.4-70.1	55,271	<b>65.6</b>	60.5-70.8	107,138	<b>64.9</b>	61.1-68.8
55-64	58,498	<b>68.7</b>	63.8-73.6	61,747	<b>66.6</b>	62.3-70.9	120,245	<b>67.6</b>	64.3-70.9
65+	83,606	<b>74.2</b>	70.3-78.2	102,813	<b>72.6</b>	69.3-76.0	186,419	<b>73.3</b>	70.8-75.9
<b>Education</b>									
Less than H.S.	27,189	<b>44.6</b>	35.3-53.9	35,091	<b>56.5</b>	47.8-65.1	62,280	<b>50.6</b>	44.1-57.1
H.S. or G.E.D.	117,019	<b>51.9</b>	47.8-56.0	118,961	<b>58.6</b>	54.7-62.5	235,981	<b>55.1</b>	52.2-57.9
Some Post-H.S.	84,656	<b>61.8</b>	56.8-66.8	113,095	<b>65.2</b>	61.2-69.3	197,750	<b>63.7</b>	60.5-66.9
College Graduate	66,451	<b>61.4</b>	57.4-65.4	79,043	<b>63.8</b>	60.1-67.4	145,494	<b>62.7</b>	60.0-65.3
<b>Income</b>									
Less than \$15,000	10,038	<b>40.2*</b>	29.2-51.1	24,503	<b>64.6</b>	55.9-73.4	34,540	<b>54.9</b>	47.8-62.0
\$15,000 - 24,999	26,590	<b>57.7</b>	48.9-66.6	39,047	<b>54.5</b>	47.7-61.3	65,637	<b>55.8</b>	50.4-61.2
\$25,000 - 34,999	38,369	<b>57.7</b>	50.4-65.1	44,847	<b>61.9</b>	55.6-68.2	83,216	<b>59.9</b>	55.1-64.8
\$35,000 - 49,999	42,648	<b>58.1</b>	51.5-64.6	50,082	<b>64.3</b>	58.3-70.3	92,730	<b>61.3</b>	56.8-65.7
\$50,000 - 74,999	49,159	<b>60.3</b>	53.9-66.7	54,893	<b>71.4</b>	66.1-76.7	104,051	<b>65.7</b>	61.4-69.9
\$75,000+	91,706	<b>58.1</b>	53.5-62.7	80,096	<b>63.0</b>	58.4-67.6	171,802	<b>60.3</b>	57.0-63.6

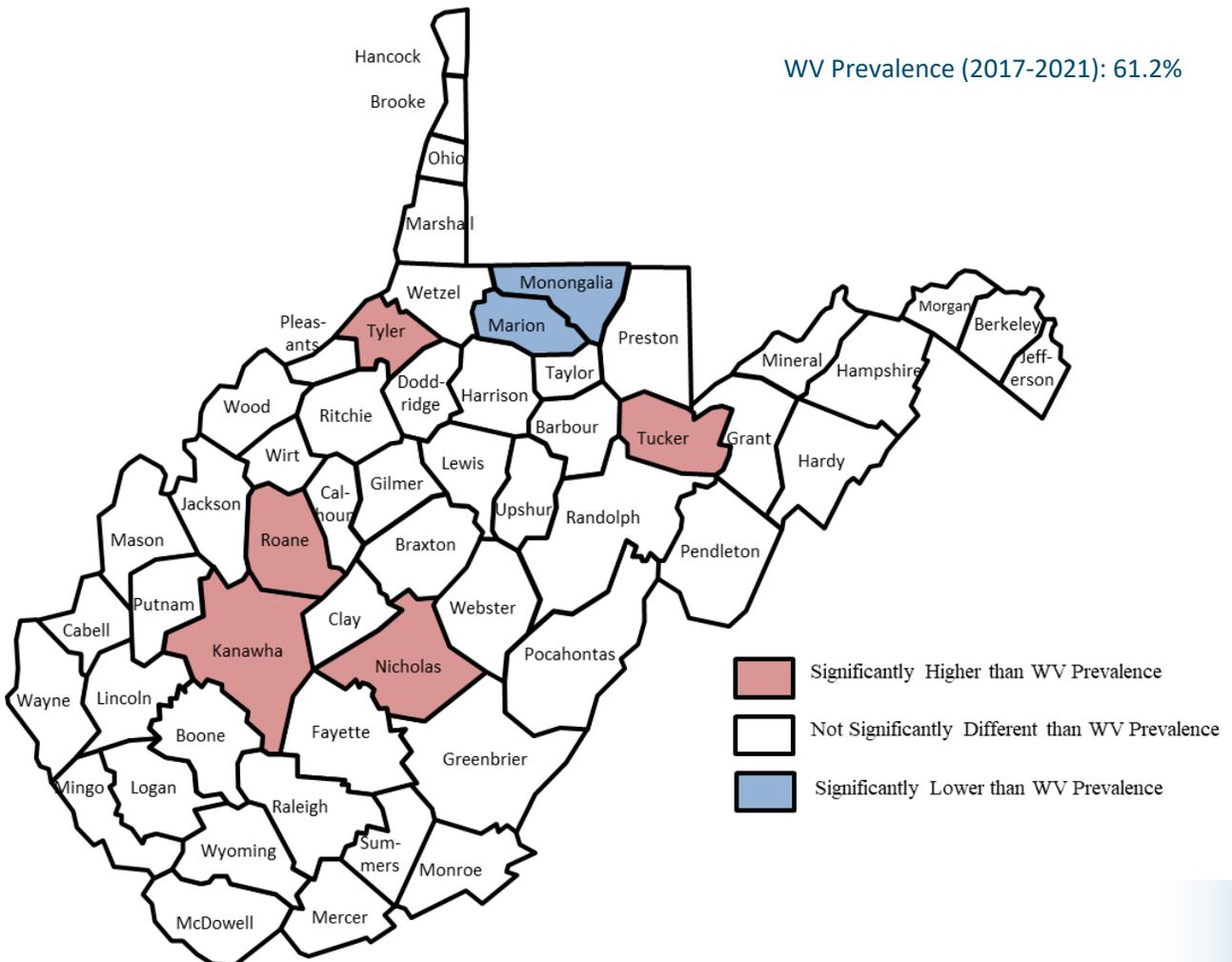
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

# CHAPTER 10: DIABETES TESTING

**FIGURE 10.1 PREVALENCE OF HAVING DIABETES TEST IN THE PAST THREE YEARS BY YEAR: WVBRFSS, 2012-2021**



**Figure 10.2 Prevalence of Had a Diabetes Test in the Past Three Years by Demographic Characteristics: WVBRFSS, 2017-2021**



## CHAPTER 11: 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.”

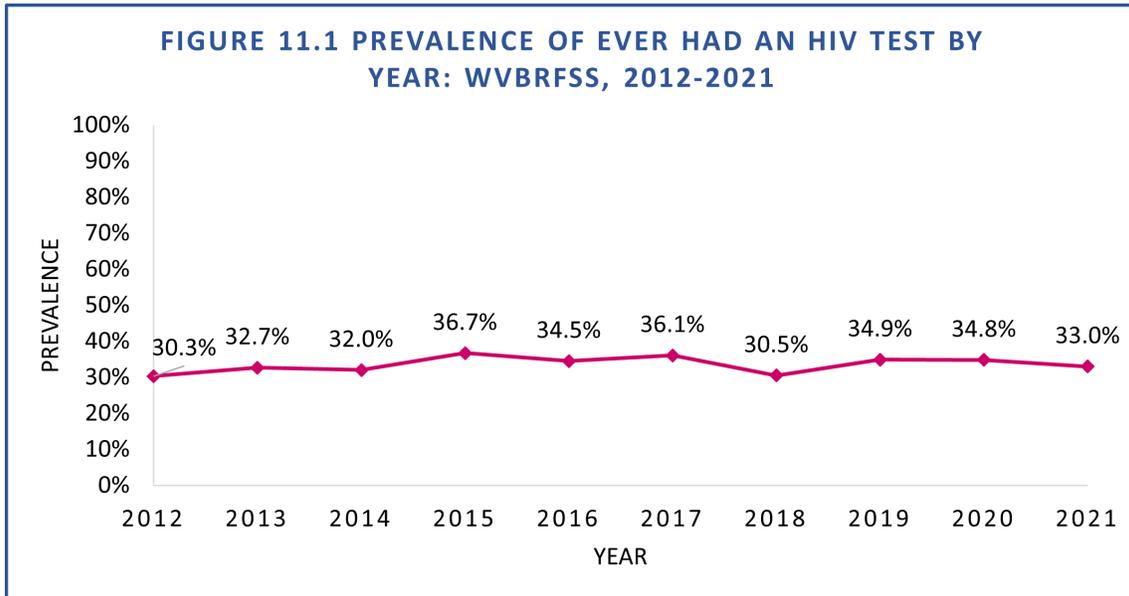
**Prevalence** **WV: 33.0%** (95% CI: 31.6-34.5)  
**U.S.: 37.3%** (95% CI: 37.0-37.7)

The West Virginia prevalence of ever had a HIV test was significantly lower than the U.S. prevalence. West Virginia ranked 20<sup>th</sup> lowest among 53 BRFSS participants.

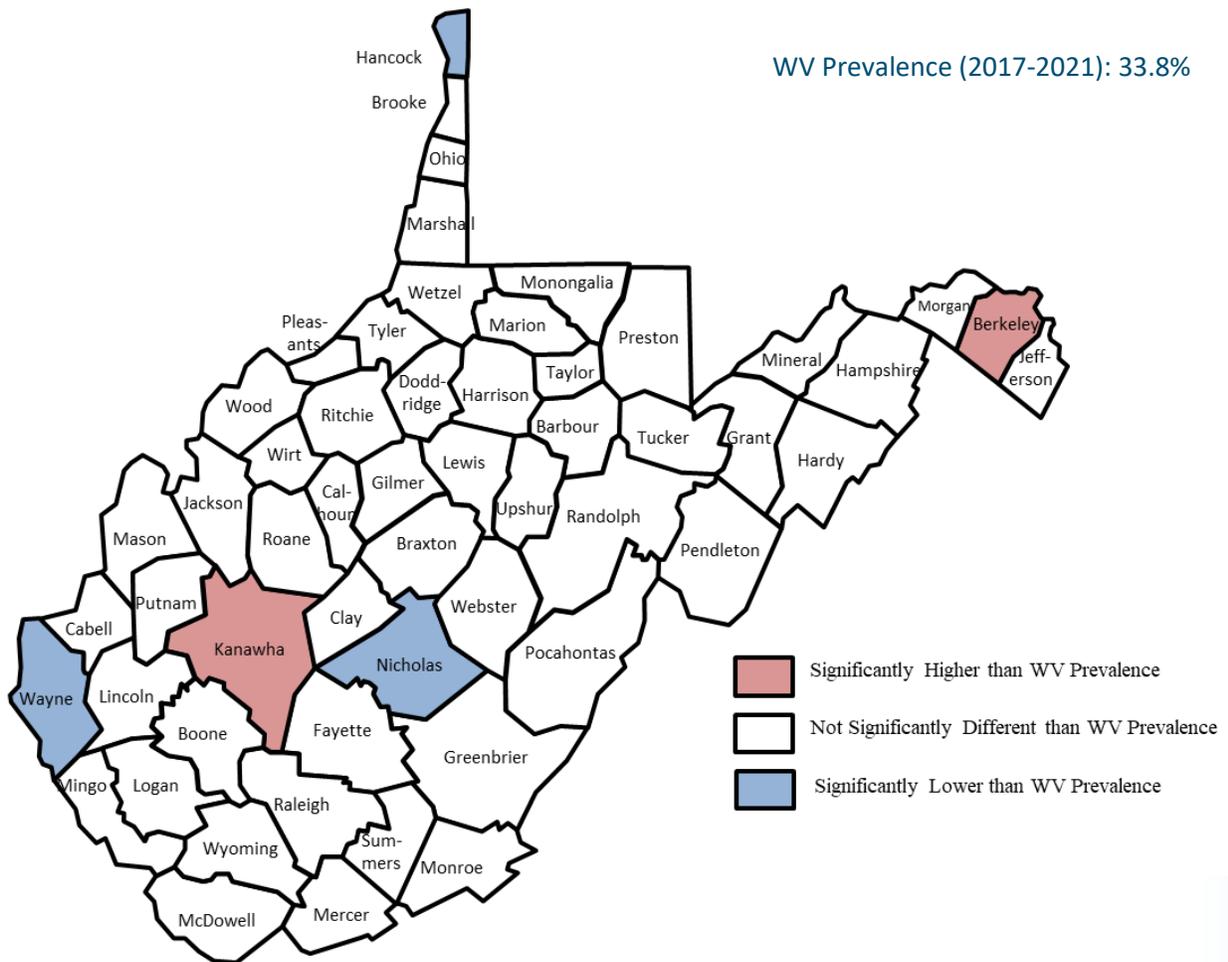
**Table 11.1 Prevalence of Ever Had an HIV Test by Demographic Characteristics: WVBRFSS, 2021**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	218,204	<b>34.9</b>	32.7-37.1	205,696	<b>31.2</b>	29.3-33.2	423,901	<b>33.0</b>	31.6-34.5
<b>Age</b>									
18-24	18,565	<b>24.0</b>	16.4-31.6	23,997	<b>35.2</b>	26.0-44.3	42,562	<b>29.3</b>	23.3-35.2
25-34	39,262	<b>40.4</b>	34.0-46.8	37,940	<b>41.6</b>	35.3-47.8	77,202	<b>41.0</b>	36.5-45.4
35-44	44,298	<b>47.3</b>	41.1-53.4	52,098	<b>54.3</b>	48.7-60.0	96,395	<b>50.9</b>	46.7-55.0
45-54	41,565	<b>44.9</b>	39.3-50.5	38,491	<b>41.4</b>	36.3-46.5	80,056	<b>43.1</b>	39.3-46.9
55-64	39,278	<b>36.2</b>	31.7-40.7	29,821	<b>25.1</b>	21.6-28.7	69,099	<b>30.4</b>	27.6-33.3
65+	33,852	<b>22.5</b>	19.3-25.7	22,477	<b>12.1</b>	10.1-14.1	56,328	<b>16.8</b>	14.9-18.6
<b>Education</b>									
Less than H.S.	33,301	<b>45.6</b>	37.1-54.2	30,457	<b>36.3</b>	29.0-43.5	63,758	<b>40.6</b>	35.1-46.2
H.S. or G.E.D.	83,585	<b>30.6</b>	27.3-33.9	65,868	<b>27.2</b>	24.0-30.5	149,453	<b>29.0</b>	26.7-31.3
Some Post-H.S.	59,155	<b>37.7</b>	33.3-42.2	62,027	<b>31.7</b>	28.0-35.3	121,182	<b>34.4</b>	31.5-37.2
College Graduate	41,455	<b>34.7</b>	31.1-38.3	47,345	<b>34.7</b>	31.4-38.0	88,800	<b>34.7</b>	32.3-37.1
<b>Income</b>									
Less than \$15,000	16,570	<b>50.4</b>	40.5-60.4	26,030	<b>46.2</b>	38.9-53.5	42,600	<b>47.8</b>	41.9-53.6
\$15,000 - 24,999	29,394	<b>48.1</b>	40.5-55.6	34,252	<b>37.6</b>	31.7-43.4	63,646	<b>41.8</b>	37.1-46.5
\$25,000 - 34,999	28,220	<b>36.7</b>	30.3-43.1	27,956	<b>31.1</b>	25.6-36.6	56,176	<b>33.7</b>	29.5-37.9
\$35,000 - 49,999	25,224	<b>29.7</b>	24.1-35.2	27,320	<b>29.9</b>	24.7-35.0	52,544	<b>29.8</b>	26.0-33.6
\$50,000 - 74,999	33,378	<b>34.3</b>	28.9-39.7	24,136	<b>27.6</b>	22.1-33.1	57,514	<b>31.1</b>	27.3-35.0
\$75,000+	57,995	<b>32.5</b>	28.5-36.4	42,580	<b>32.3</b>	28.3-36.3	100,575	<b>32.4</b>	29.6-35.2

# CHAPTER 11: HIV TESTING



**Figure 11.2 Prevalence of Ever Had an HIV Test by County: WVBRFSS, 2017-2021**



## CHAPTER 12: IMMUNIZATIONS

### Flu Vaccine

**Definition** Responding “Yes” to the question, “During the past 12 months, have you had either a flu shot or a flu vaccine that was sprayed in your nose?”

**Prevalence** **WV: 43.7%** (95% CI: 42.3-45.2)

**U.S.: 45.1%** (95% CI: 44.7-45.4)

The prevalence of had a flu vaccine in the past year in West Virginia was slightly lower than the U.S. prevalence. West Virginia ranked the 21<sup>th</sup> lowest among the 53 BRFSS participants.

**Table 12.1 Prevalence of Had a Flu Vaccine in the Past Year by Demographic Characteristics: WVBRFSS, 2021**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	261,269	<b>38.8</b>	36.7-40.9	340,256	<b>48.5</b>	46.5-50.5	601,526	<b>43.7</b>	42.3-45.2
<b>Age</b>									
18-24	24,204	<b>30.6</b>	21.9-39.3	31,608	<b>42.8</b>	33.8-51.8	55,812	<b>36.5</b>	30.2-42.8
25-34	18,349	<b>17.9</b>	13.2-22.5	31,399	<b>32.5</b>	26.8-38.3	49,748	<b>25.0</b>	21.3-28.7
35-44	26,104	<b>26.6</b>	21.6-31.6	33,991	<b>33.9</b>	28.8-39.0	60,095	<b>30.3</b>	26.7-33.9
45-54	29,971	<b>29.7</b>	24.9-34.5	46,157	<b>45.4</b>	40.6-50.3	76,127	<b>37.6</b>	34.1-41.1
55-64	50,744	<b>43.3</b>	38.9-47.7	67,325	<b>54.6</b>	50.6-58.7	118,069	<b>49.1</b>	46.1-52.1
65+	108,915	<b>64.2</b>	60.7-67.6	126,927	<b>63.4</b>	60.3-66.4	235,842	<b>63.7</b>	61.4-66.0
<b>Education</b>									
Less than H.S.	31,090	<b>40.4</b>	32.4-48.4	35,582	<b>40.4</b>	33.4-47.4	66,672	<b>40.4</b>	35.1-45.7
H.S. or G.E.D.	93,516	<b>31.8</b>	28.7-34.9	117,294	<b>45.9</b>	42.6-49.3	210,810	<b>38.4</b>	36.0-40.7
Some Post-H.S.	70,909	<b>41.3</b>	37.1-45.5	105,846	<b>50.3</b>	46.5-54.0	176,755	<b>46.3</b>	43.4-49.1
College Graduate	64,876	<b>50.7</b>	47.0-54.3	80,958	<b>55.0</b>	51.6-58.3	145,834	<b>53.0</b>	50.5-55.4
<b>Income</b>									
Less than \$15,000	8,623	<b>24.6</b>	17.3-32.0	26,821	<b>45.2</b>	38.2-52.2	35,444	<b>37.6</b>	32.2-42.9
\$15,000 - 24,999	23,206	<b>36.0</b>	29.3-42.7	40,353	<b>42.2</b>	36.7-47.8	63,559	<b>39.7</b>	35.4-44.0
\$25,000 - 34,999	28,568	<b>34.5</b>	28.6-40.3	43,617	<b>45.7</b>	40.2-51.2	72,185	<b>40.5</b>	36.5-44.5
\$35,000 - 49,999	35,105	<b>38.4</b>	32.9-43.9	47,944	<b>49.8</b>	44.4-55.1	83,049	<b>44.2</b>	40.4-48.1
\$50,000 - 74,999	42,762	<b>40.7</b>	35.5-46.0	56,685	<b>61.5</b>	56.1-66.9	99,448	<b>50.5</b>	46.5-54.4
\$75,000+	80,232	<b>41.9</b>	38.0-45.9	71,519	<b>50.2</b>	45.9-54.5	151,750	<b>45.5</b>	42.6-48.4



## CHAPTER 12: IMMUNIZATIONS

### 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: 63.7%** (95% CI:61.4-66.0)  
**U.S.: 67.5%** (95% CI: 66.9-68.1)  
 The West Virginia prevalence of flu vaccine in the past year among adults 65 and older was significantly lower than the U.S. prevalence. West Virginia ranked the 12<sup>th</sup> lowest among the 53 BRFSS participants.

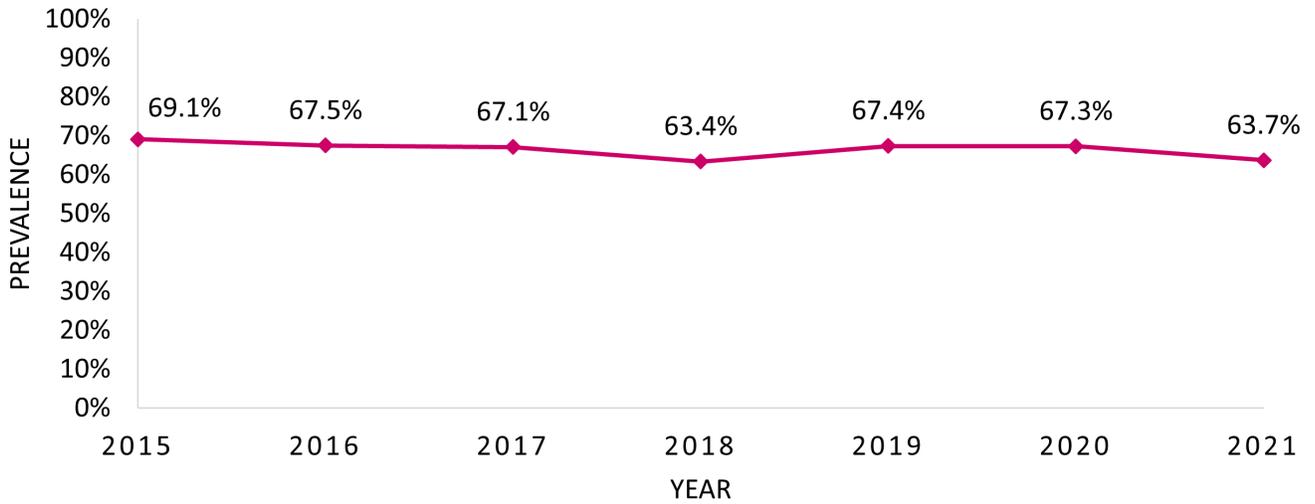
**Table 12.2 Prevalence of Had a Flu Vaccine in the Past Year Among Those Aged 65 and Older by Demographic Characteristics: WVBRFSS, 2021**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	108,915	<b>64.2</b>	60.7-67.6	126,927	<b>63.4</b>	60.3-66.4	235,842	<b>63.7</b>	61.4-66.0
<b>Education</b>									
Less than H.S.	15,556	<b>62.0*</b>	50.6-73.5	15,193	<b>47.0</b>	37.0-56.9	30,749	<b>53.6</b>	46.0-61.1
H.S. or G.E.D.	39,806	<b>57.5</b>	51.9-63.2	52,177	<b>62.6</b>	57.9-67.2	91,983	<b>60.3</b>	56.7-63.9
Some Post-H.S.	28,575	<b>68.9</b>	62.3-75.4	36,571	<b>68.3</b>	63.0-73.7	65,146	<b>68.6</b>	64.4-72.7
College Graduate	24,792	<b>75.0</b>	70.0-80.0	22,919	<b>74.0</b>	69.0-79.0	47,711	<b>74.5</b>	70.9-78.1
<b>Income</b>									
Less than \$15,000	3,010	<b>40.5*</b>	23.4-57.6	10,784	<b>59.3*</b>	48.1-70.5	13,794	<b>53.9</b>	44.2-63.5
\$15,000 - 24,999	12,222	<b>56.3*</b>	45.2-67.4	18,870	<b>58.3</b>	50.3-66.4	31,092	<b>57.5</b>	50.9-64.1
\$25,000 - 34,999	15,560	<b>54.0</b>	45.0-63.0	20,074	<b>62.2</b>	54.7-69.8	35,634	<b>58.4</b>	52.5-64.2
\$35,000 - 49,999	19,302	<b>67.6</b>	59.7-75.5	21,752	<b>70.8</b>	63.9-77.8	41,054	<b>69.3</b>	64.0-74.5
\$50,000 - 74,999	20,229	<b>78.9</b>	71.8-85.9	15,417	<b>67.6</b>	58.3-77.0	35,646	<b>73.6</b>	67.7-79.5
\$75,000+	19,626	<b>68.3</b>	60.6-75.9	13,331	<b>79.7</b>	71.9-87.4	32,957	<b>72.4</b>	66.8-78.1

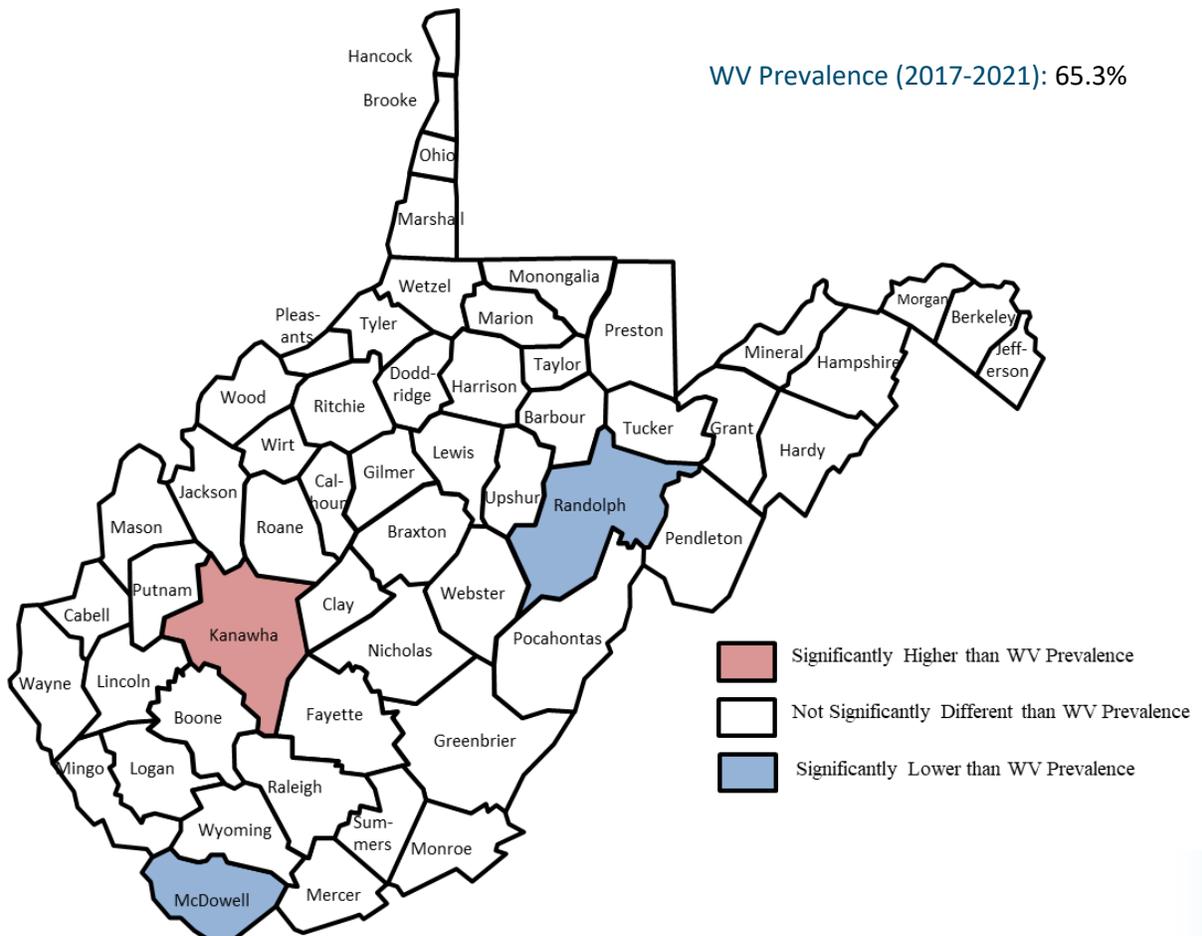
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

# CHAPTER 12: IMMUNIZATIONS

**FIGURE 12.3 PREVALENCE OF FLU VACCINE IN PAST YEAR AGES 65 AND OLDER BY YEAR: WVBRFSS, 2015-2021**



**Figure 12.4 Prevalence of Had a Flu Vaccine in the Past Year Among Those Aged 65 and Older by County: WVBRFSS, 2017-2021**



## CHAPTER 12: IMMUNIZATIONS

### Pneumonia Vaccine

**Definition** Responding “Yes” to the question, “A pneumonia shot or pneumococcal vaccine is usually given only once or twice in a person’s lifetime and is different from the flu shot. Have you ever had a pneumonia shot?”

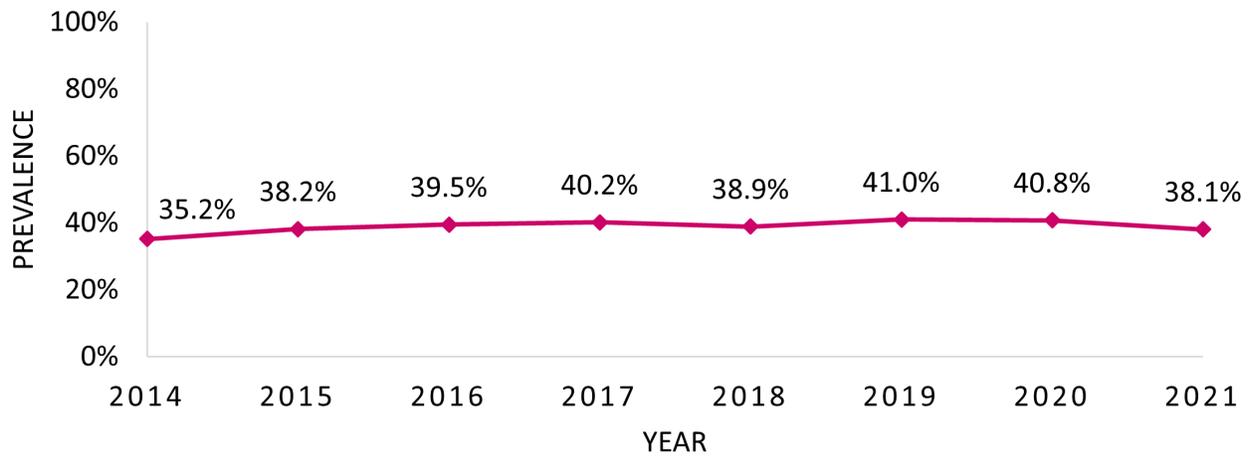
**Prevalence** **WV: 38.1%** (95% CI: 36.7-39.6)  
**U.S.: 31.7%** (95% CI: 31.4-32.1)  
 The West Virginia prevalence of ever had a pneumonia vaccine was significantly higher than the U.S. prevalence. West Virginia ranked the highest among the 53 BRFSS participants.

**Table 12.3 Prevalence of Ever Had a Pneumonia Vaccine by Demographic Characteristics: WVBRFSS, 2019**

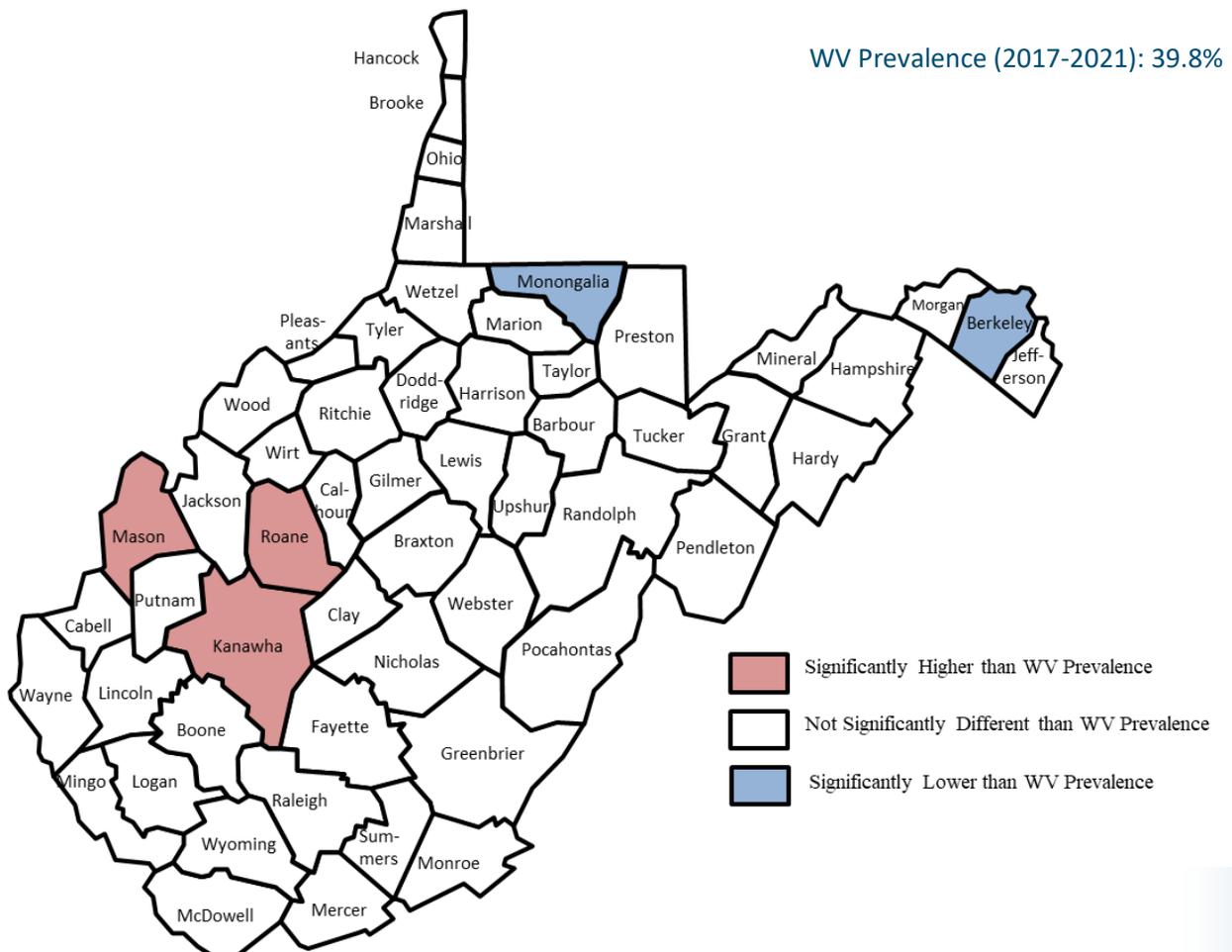
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	219,235	<b>35.9</b>	33.8-38.0	262,548	<b>40.3</b>	38.3-42.2	481,783	<b>38.1</b>	36.7-39.6
<b>Age</b>									
18-24	7,157	<b>12.5</b>	5.9-19.1	12,544	<b>24.5</b>	15.3-33.8	19,701	<b>18.2</b>	12.5-23.8
25-34	12,598	<b>15.2</b>	10.2-20.2	14,069	<b>16.6</b>	11.9-21.3	26,667	<b>15.9</b>	12.5-19.3
35-44	16,158	<b>17.8</b>	13.3-22.4	14,403	<b>15.7</b>	11.5-19.9	30,562	<b>16.7</b>	13.7-19.8
45-54	23,397	<b>24.9</b>	20.1-29.8	25,130	<b>25.2</b>	20.9-29.5	48,527	<b>25.1</b>	21.8-28.3
55-64	40,364	<b>35.3</b>	31.0-39.6	49,169	<b>40.6</b>	36.5-44.6	89,533	<b>38.0</b>	35.1-41.0
65+	118,452	<b>71.2</b>	67.9-74.4	143,601	<b>72.8</b>	69.9-75.6	262,054	<b>72.0</b>	69.9-74.2
<b>Education</b>									
Less than H.S.	30,828	<b>42.2</b>	34.2-50.1	36,351	<b>44.5</b>	37.3-51.7	67,179	<b>43.4</b>	38.1-48.7
H.S. or G.E.D.	83,617	<b>31.8</b>	28.7-34.9	100,081	<b>42.3</b>	39.0-45.6	183,697	<b>36.8</b>	34.5-39.1
Some Post-H.S.	58,109	<b>37.5</b>	33.3-41.7	78,661	<b>40.0</b>	36.5-43.6	136,771	<b>38.9</b>	36.2-41.6
College Graduate	45,690	<b>38.8</b>	35.3-42.4	47,122	<b>34.4</b>	31.3-37.5	92,812	<b>36.5</b>	34.1-38.8
<b>Income</b>									
Less than \$15,000	14,590	<b>44.1</b>	34.5-53.8	28,949	<b>51.2</b>	43.9-58.5	43,539	<b>48.6</b>	42.8-54.4
\$15,000 - 24,999	24,059	<b>41.0</b>	33.7-48.2	42,377	<b>47.0</b>	41.3-52.7	66,436	<b>44.6</b>	40.1-49.1
\$25,000 - 34,999	30,852	<b>40.2</b>	34.0-46.4	38,757	<b>42.9</b>	37.4-48.4	69,609	<b>41.7</b>	37.5-45.8
\$35,000 - 49,999	31,878	<b>37.7</b>	32.3-43.1	37,638	<b>41.4</b>	36.2-46.6	69,515	<b>39.6</b>	35.8-43.4
\$50,000 - 74,999	36,062	<b>37.9</b>	32.7-43.2	31,814	<b>37.0</b>	31.7-42.3	67,877	<b>37.5</b>	33.8-41.2
\$75,000+	50,827	<b>29.2</b>	25.6-32.8	34,046	<b>25.9</b>	22.5-29.4	84,874	<b>27.8</b>	25.3-30.3

# CHAPTER 12: IMMUNIZATIONS

**FIGURE 12.5 PREVALENCE OF EVER HAD A PNEUMONIA VACCINE BY YEAR: WVBRFSS, 2014-2021**



**Figure 12.6 Prevalence of Ever Had a Pneumonia Vaccine by County: WVBRFSS, 2017-2021**



## CHAPTER 12: IMMUNIZATIONS

### Pneumonia Vaccine, Ages 65 and Older

**Definition** Responding “Yes” to the question, “A pneumonia shot or pneumococcal vaccine is usually given only once or twice in a person’s lifetime and is different from the flu shot. Have you ever had a pneumonia shot?” Restricted to adults aged 65 and older.

**Prevalence** **WV: 72.0%** (95% CI: 69.9-74.2)  
**U.S.: 69.7%** (95% CI: 69.1-70.3)  
 The prevalence of ever had a pneumonia vaccine among those aged 65 and older was slightly higher in West Virginia than the U.S. prevalence. West Virginia ranked 21<sup>st</sup> highest among the 53 BRFSS participants.

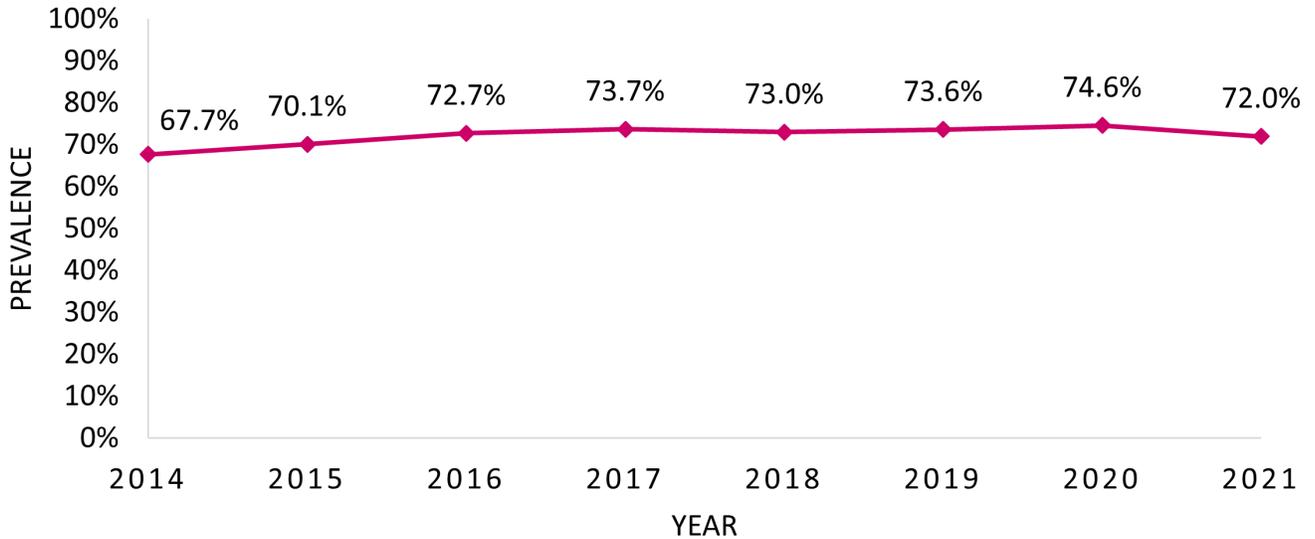
**Table 12.4 Prevalence of Ever Had a Pneumonia Vaccine Among Those Aged 65 and Older by Demographic Characteristics: WVBRFSS, 2021**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	118,452	<b>71.2</b>	67.9-74.4	143,601	<b>72.8</b>	69.9-75.6	262,054	<b>72.0</b>	69.9-74.2
<b>Education</b>									
Less than H.S.	18,028	<b>73.5*</b>	63.3-83.8	19,285	<b>60.9*</b>	50.9-71.0	37,313	<b>66.4</b>	59.1-73.8
H.S. or G.E.D.	43,857	<b>64.4</b>	58.8-69.9	58,272	<b>71.2</b>	66.9-75.5	102,129	<b>68.1</b>	64.6-71.5
Some Post-H.S.	30,737	<b>75.8</b>	69.7-81.8	42,107	<b>79.4</b>	74.7-84.2	72,844	<b>77.9</b>	74.1-81.6
College Graduate	25,236	<b>78.1</b>	73.2-83.0	23,870	<b>77.6</b>	73.0-82.3	49,106	<b>77.9</b>	74.5-81.3
<b>Income</b>									
Less than \$15,000	4,419	<b>59.5*</b>	42.3-76.7	13,508	<b>73.1*</b>	62.4-83.8	17,926	<b>69.2</b>	60.1-78.2
\$15,000 - 24,999	12,401	<b>59.4*</b>	48.5-70.3	23,677	<b>74.8</b>	67.4-82.2	36,078	<b>68.7</b>	62.4-75.0
\$25,000 - 34,999	18,455	<b>64.9</b>	56.0-73.8	23,293	<b>73.7</b>	66.6-80.8	41,749	<b>69.5</b>	63.9-75.2
\$35,000 - 49,999	21,613	<b>77.3</b>	70.0-84.5	23,335	<b>76.7</b>	70.3-83.1	44,948	<b>77.0</b>	72.2-81.8
\$50,000 - 74,999	21,238	<b>83.1</b>	76.6-89.6	16,490	<b>73.0</b>	63.5-82.5	37,728	<b>78.4</b>	72.6-84.1
\$75,000+	20,463	<b>72.8</b>	66.0-79.7	12,152	<b>72.5</b>	63.7-81.2	32,615	<b>72.7</b>	67.3-78.1

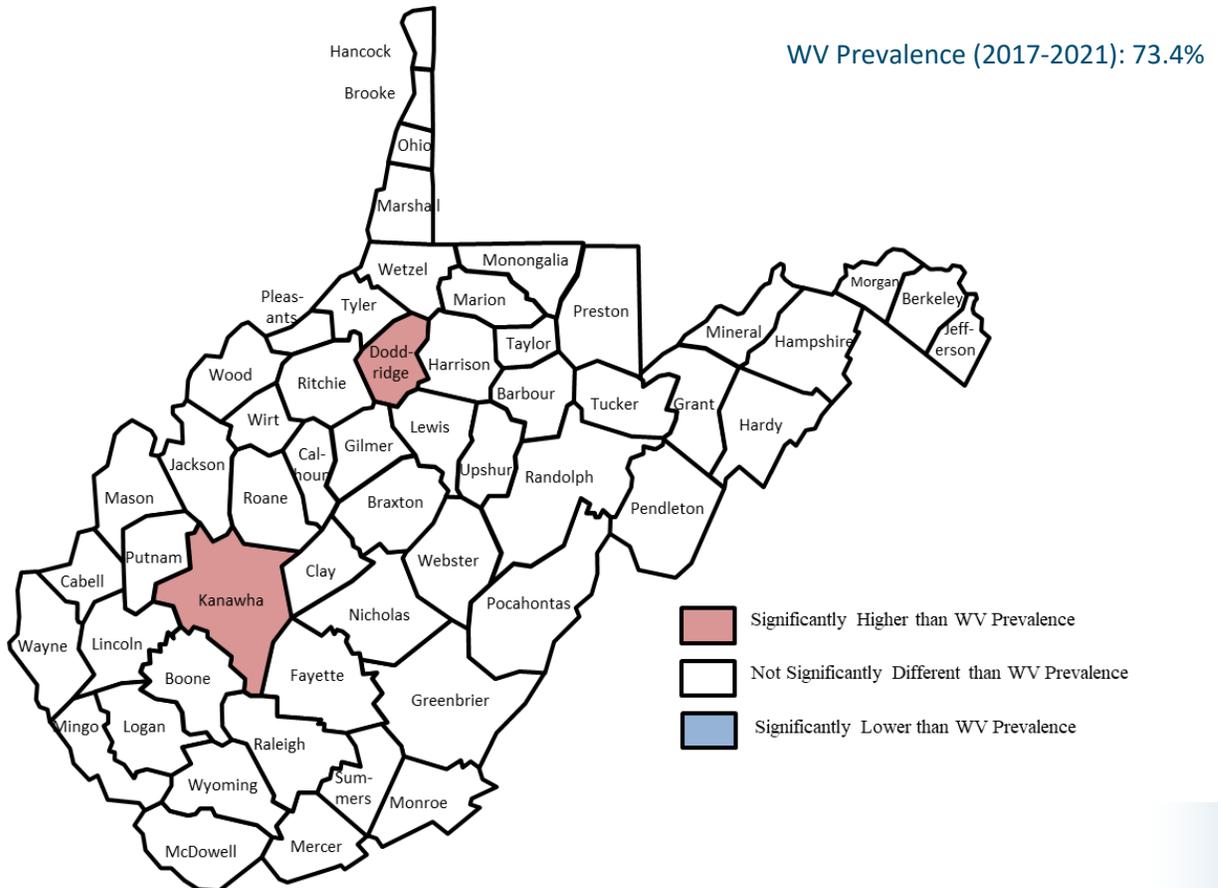
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

# CHAPTER 12: IMMUNIZATIONS

**FIGURE 12.7 PREVALENCE OF PNEUMONIA VACCINE AGED 65 AND OLDER BY YEAR: WVBRFSS, 2014-2021**



**Table 12.8 Prevalence of Ever Had a Pneumonia Vaccine Among Those Aged 65 and Older by Demographic Characteristics: WVBRFSS, 2017-2021**



# SECTION 4: Chronic Diseases



## CHAPTER 13: HYPERTENSION

### Hypertension Prevalence

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

**Prevalence** **WV: 43.4%** (95% CI: 42.0-44.8)

**U.S.: 32.8%** (95% CI: 32.5-33.1)

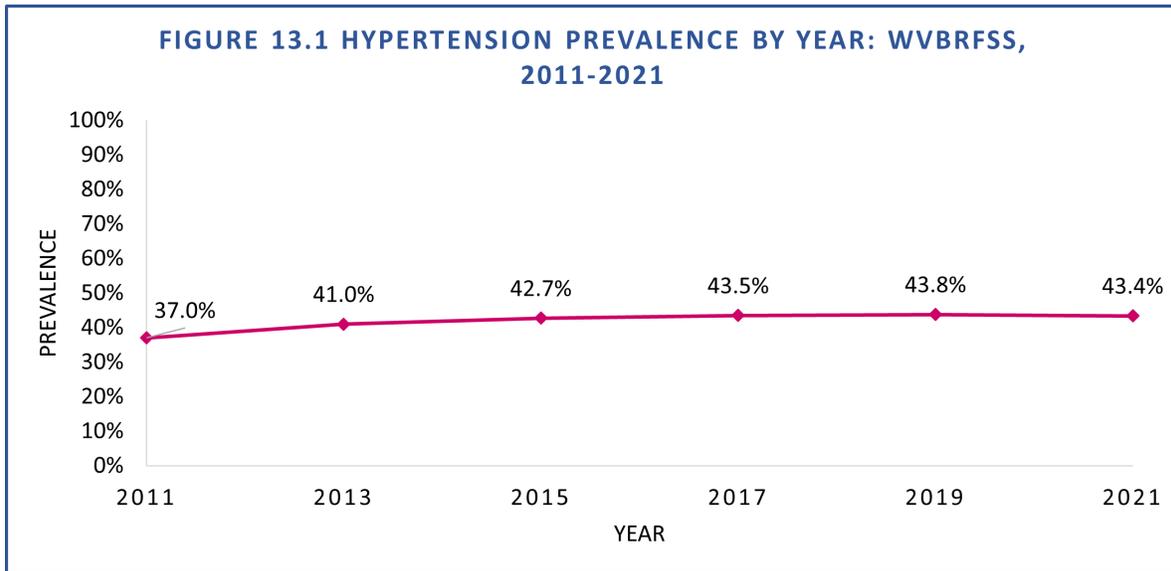
The West Virginia prevalence of hypertension was significantly higher than the U.S. prevalence. West Virginia ranked the second highest among 53 BRFSS participants.

**Table 13.1 Hypertension Prevalence by Demographic Characteristics: WVBRFSS, 2021**

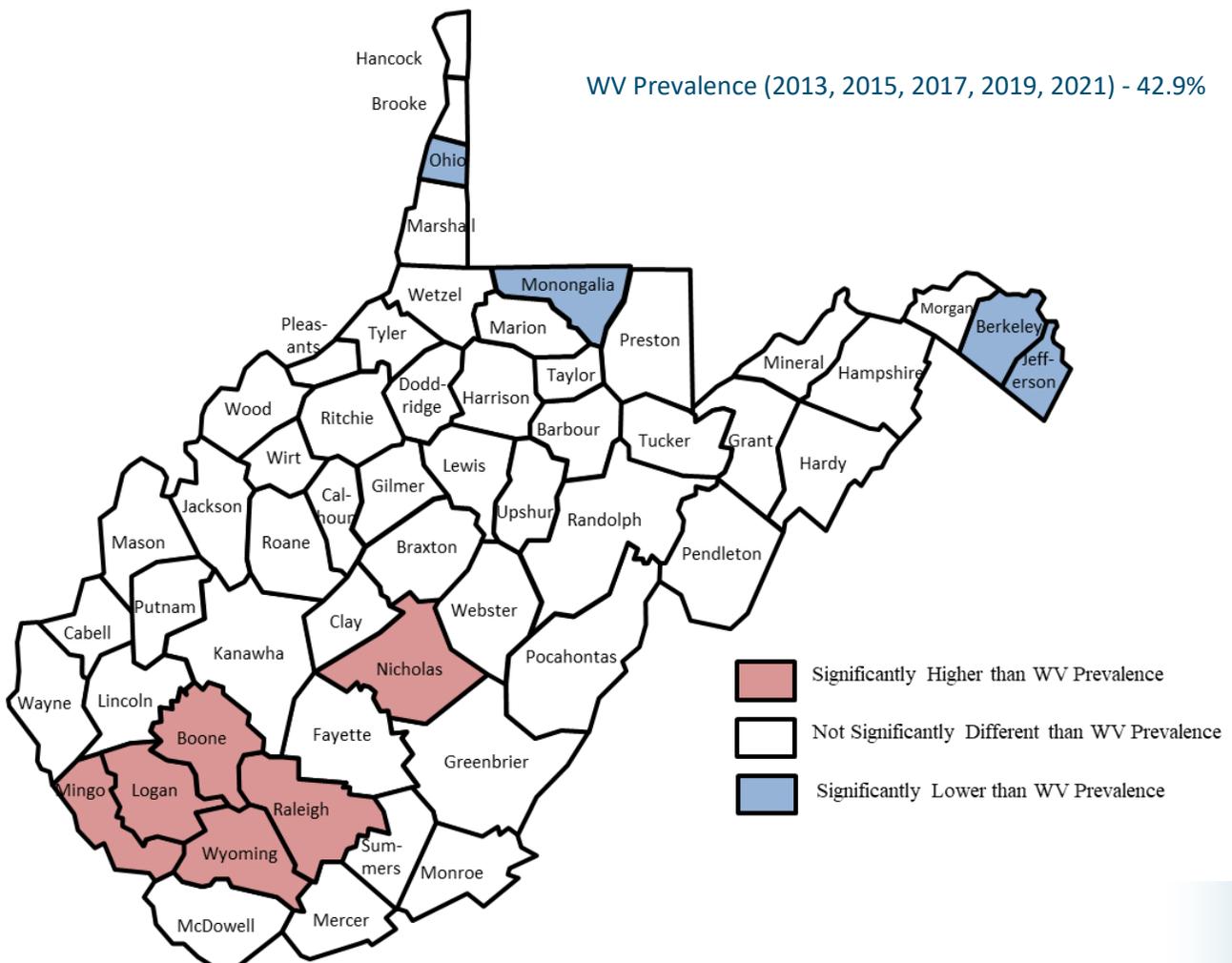
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	313,411	<b>44.7</b>	42.6-46.8	304,685	<b>42.1</b>	40.2-44.0	618,097	<b>43.4</b>	42.0-44.8
<b>Age</b>									
18-24	15,392	<b>18.5</b>	11.6-25.4	5,959	<b>7.9*</b>	2.8-13.0	21,351	<b>13.4</b>	9.0-17.8
25-34	22,948	<b>21.7</b>	16.7-26.8	13,872	<b>13.9</b>	9.3-18.5	36,820	<b>17.9</b>	14.5-21.4
35-44	36,841	<b>35.1</b>	29.5-40.7	27,809	<b>26.8</b>	21.8-31.7	64,651	<b>30.9</b>	27.2-34.7
45-54	48,790	<b>46.7</b>	41.4-52.0	45,648	<b>43.5</b>	38.6-48.3	94,438	<b>45.1</b>	41.5-48.7
55-64	66,718	<b>55.3</b>	51.0-59.6	67,482	<b>53.4</b>	49.5-57.4	134,200	<b>54.4</b>	51.4-57.3
65+	120,122	<b>68.7</b>	65.5-71.9	140,587	<b>68.2</b>	65.4-71.1	260,708	<b>68.4</b>	66.3-70.6
<b>Education</b>									
Less than H.S.	44,785	<b>53.5</b>	45.5-61.4	53,916	<b>58.2</b>	51.2-65.2	98,701	<b>55.9</b>	50.6-61.2
H.S. or G.E.D.	136,993	<b>45.3</b>	41.9-48.7	116,856	<b>44.6</b>	41.3-47.8	253,848	<b>45.0</b>	42.6-47.3
Some Post-H.S.	76,649	<b>43.1</b>	39.0-47.3	86,044	<b>39.6</b>	36.2-43.1	162,693	<b>41.2</b>	38.5-43.9
College Graduate	54,153	<b>40.6</b>	37.2-44.0	47,617	<b>31.6</b>	28.8-34.4	101,769	<b>35.8</b>	33.6-38.0
<b>Income</b>									
Less than \$15,000	18,538	<b>52.3</b>	42.7-61.8	32,132	<b>52.7</b>	45.7-59.7	50,671	<b>52.6</b>	46.9-58.2
\$15,000 - 24,999	40,814	<b>60.8</b>	53.6-68.0	46,564	<b>47.2</b>	41.7-52.8	87,378	<b>52.7</b>	48.3-57.2
\$25,000 - 34,999	45,396	<b>53.5</b>	47.2-59.7	49,589	<b>52.0</b>	46.4-57.6	94,984	<b>52.7</b>	48.5-56.8
\$35,000 - 49,999	42,717	<b>45.8</b>	40.2-51.4	40,293	<b>40.3</b>	35.3-45.3	83,009	<b>43.0</b>	39.2-46.7
\$50,000 - 74,999	46,363	<b>43.3</b>	37.9-48.7	38,911	<b>41.9</b>	36.5-47.2	85,275	<b>42.6</b>	38.8-46.5
\$75,000+	75,657	<b>38.5</b>	34.7-42.2	41,252	<b>28.3</b>	24.8-31.9	116,909	<b>34.2</b>	31.5-36.8

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

# CHAPTER 13: HYPERTENSION



**Figure 13.2 Hypertension Prevalence by County: WVBRFSS, 2013, 2015, 2017, 2019, 2021**



## CHAPTER 13: HYPERTENSION

### Hypertension Medication

**Definition** Reported having been told they have high blood pressure and responding “Yes” to the question, “Are you currently taking medicine for your high blood pressure?”

**Prevalence** **WV: 82.2%** (95% CI: 80.4-83.9)  
**U.S.: 78.3%** (95% CI: 77.8-78.8)

The West Virginia prevalence of taking medication for hypertension was significantly higher than the U.S. prevalence. West Virginia ranked the sixth highest among the 53 BRFSS participants.

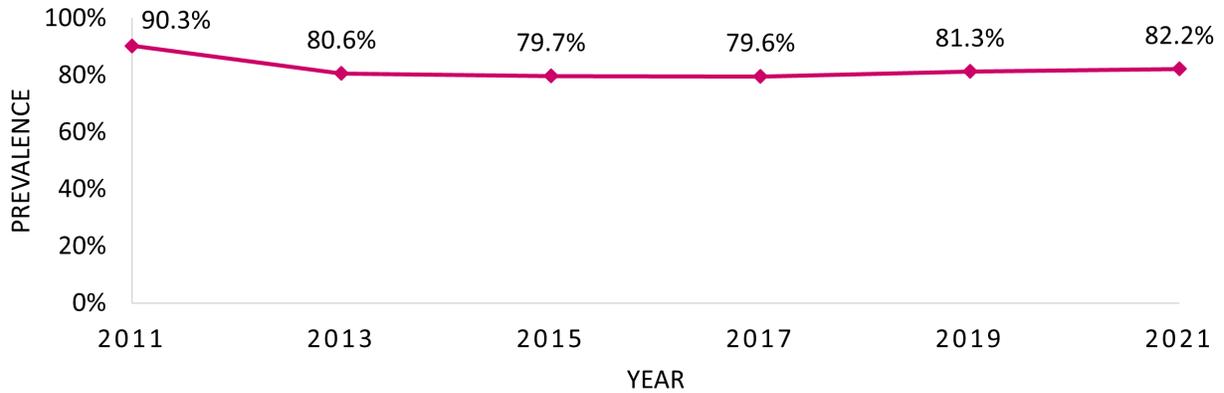
**Table 13.2 Use of Hypertension Medication by Demographic Characteristics: WVBRFSS, 2021**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	251,318	<b>80.2</b>	77.6-82.9	256,153	<b>84.1</b>	81.8-86.5	507,472	<b>82.2</b>	80.4-83.9
<b>Age</b>									
18-24	2,667	<b>17.3*</b>	1.5-33.1	522	<b>8.8*</b>	0.0-25.5	3,189	<b>14.9*</b>	2.5-27.4
25-34	10,484	<b>45.7*</b>	32.7-58.7	7,026	<b>50.7*</b>	32.6-68.7	17,510	<b>47.6*</b>	37.0-58.2
35-44	23,801	<b>64.6</b>	55.1-74.1	19,589	<b>70.4*</b>	60.3-80.5	43,389	<b>67.1</b>	60.2-74.1
45-54	40,194	<b>82.4</b>	77.0-87.8	37,619	<b>82.6</b>	77.1-88.1	77,814	<b>82.5</b>	78.6-86.4
55-64	60,371	<b>90.5</b>	86.9-94.0	58,453	<b>86.6</b>	82.8-90.4	118,824	<b>88.5</b>	85.9-91.2
65+	111,989	<b>93.4</b>	91.2-95.5	129,900	<b>92.4</b>	90.4-94.5	241,889	<b>92.9</b>	91.4-94.4
<b>Education</b>									
Less than H.S.	36,379	<b>81.2</b>	72.8-89.7	42,291	<b>78.4</b>	70.8-86.1	78,671	<b>79.7</b>	74.0-85.4
H.S. or G.E.D.	111,869	<b>81.8</b>	77.6-85.9	103,584	<b>88.7</b>	85.6-91.8	215,454	<b>85.0</b>	82.3-87.6
Some Post-H.S.	59,577	<b>77.7</b>	72.2-83.2	69,939	<b>81.4</b>	76.7-86.1	129,516	<b>79.6</b>	76.0-83.2
College Graduate	42,660	<b>78.8</b>	74.2-83.4	40,086	<b>84.2</b>	80.2-88.1	82,747	<b>81.3</b>	78.2-84.4
<b>Income</b>									
Less than \$15,000	16,026	<b>86.4</b>	78.3-94.6	27,905	<b>86.8</b>	79.6-94.1	43,932	<b>86.7</b>	81.2-92.2
\$15,000 - 24,999	33,516	<b>82.1</b>	75.7-88.6	38,897	<b>83.5</b>	77.4-89.7	72,414	<b>82.9</b>	78.4-87.3
\$25,000 - 34,999	35,751	<b>78.8</b>	71.0-86.5	41,617	<b>84.1</b>	77.5-90.7	77,368	<b>81.5</b>	76.5-86.6
\$35,000 - 49,999	36,045	<b>84.4</b>	78.0-90.8	32,108	<b>79.7</b>	72.6-86.8	68,153	<b>82.1</b>	77.3-86.9
\$50,000 - 74,999	37,884	<b>81.7</b>	74.5-88.9	31,323	<b>80.5</b>	73.9-87.1	69,207	<b>81.2</b>	76.2-86.1
\$75,000+	60,512	<b>80.0</b>	74.7-85.2	35,319	<b>85.6</b>	80.7-90.5	95,831	<b>82.0</b>	78.1-85.8

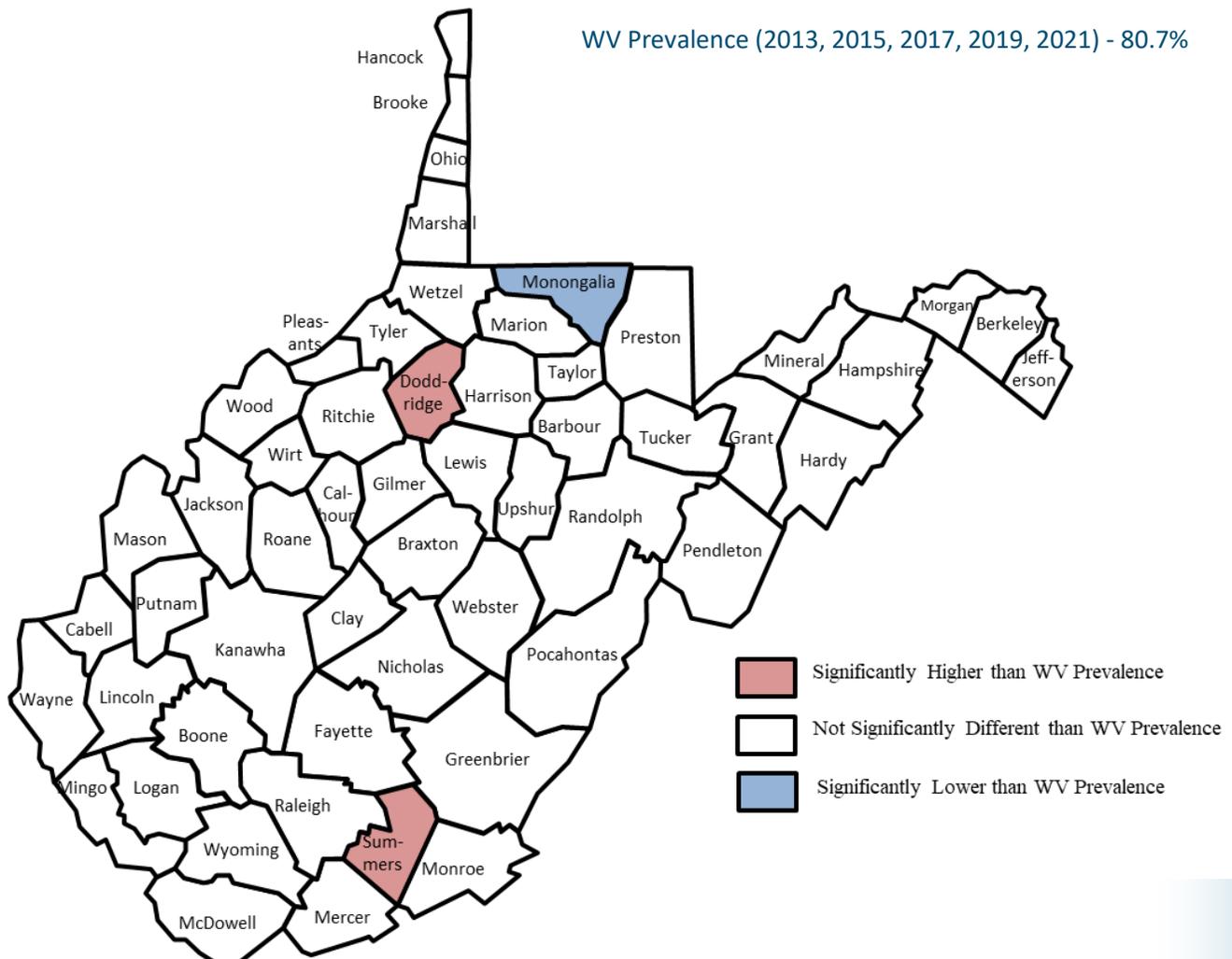
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

# CHAPTER 13: HYPERTENSION

**FIGURE 13.3 PREVALENCE OF HYPERTENSION MEDICATION BY YEAR: WVBRFSS, 2011-2021**



**Figure 13.4 Use of Hypertension Medication by County: WVBRFSS, 2013, 2015, 2017, 2019, 2021**



# CHAPTER 14: HIGH CHOLESTEROL

## High Cholesterol

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

**Prevalence** **WV: 41.0%** (95% CI: 39.5-42.5)  
**U.S.: 35.6%** (95% CI: 35.2-35.9)

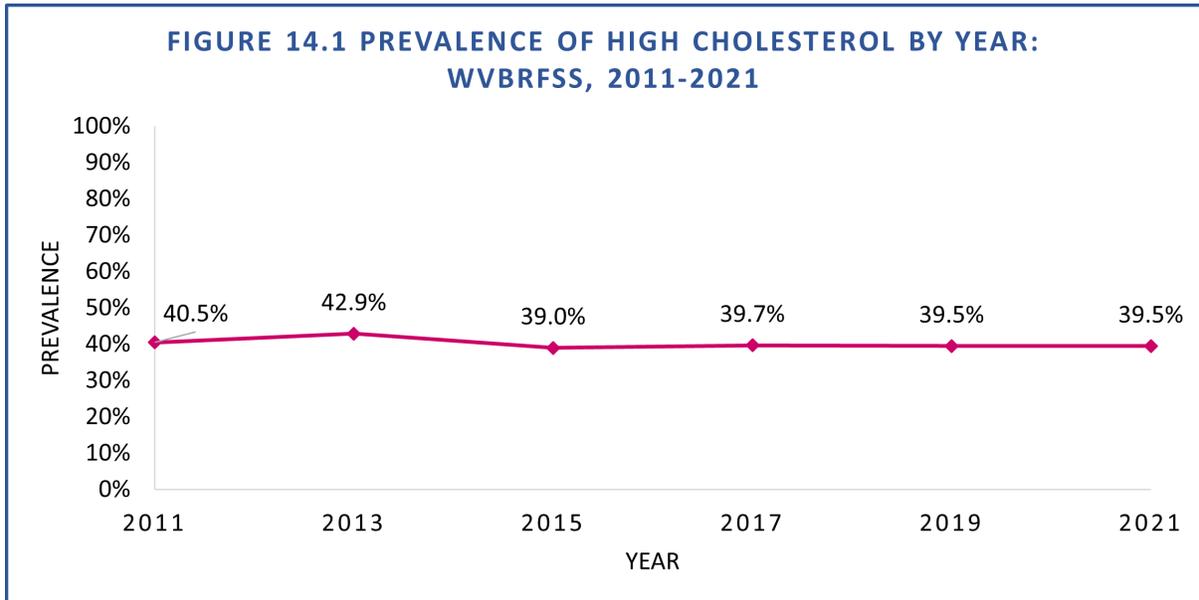
The West Virginia prevalence of high cholesterol was significantly higher than the U.S. prevalence. West Virginia ranked the second highest among 53 BRFSS participants.

**Table 14.1 Prevalence of High Cholesterol by Demographic Characteristics: WVBRFSS, 2021**

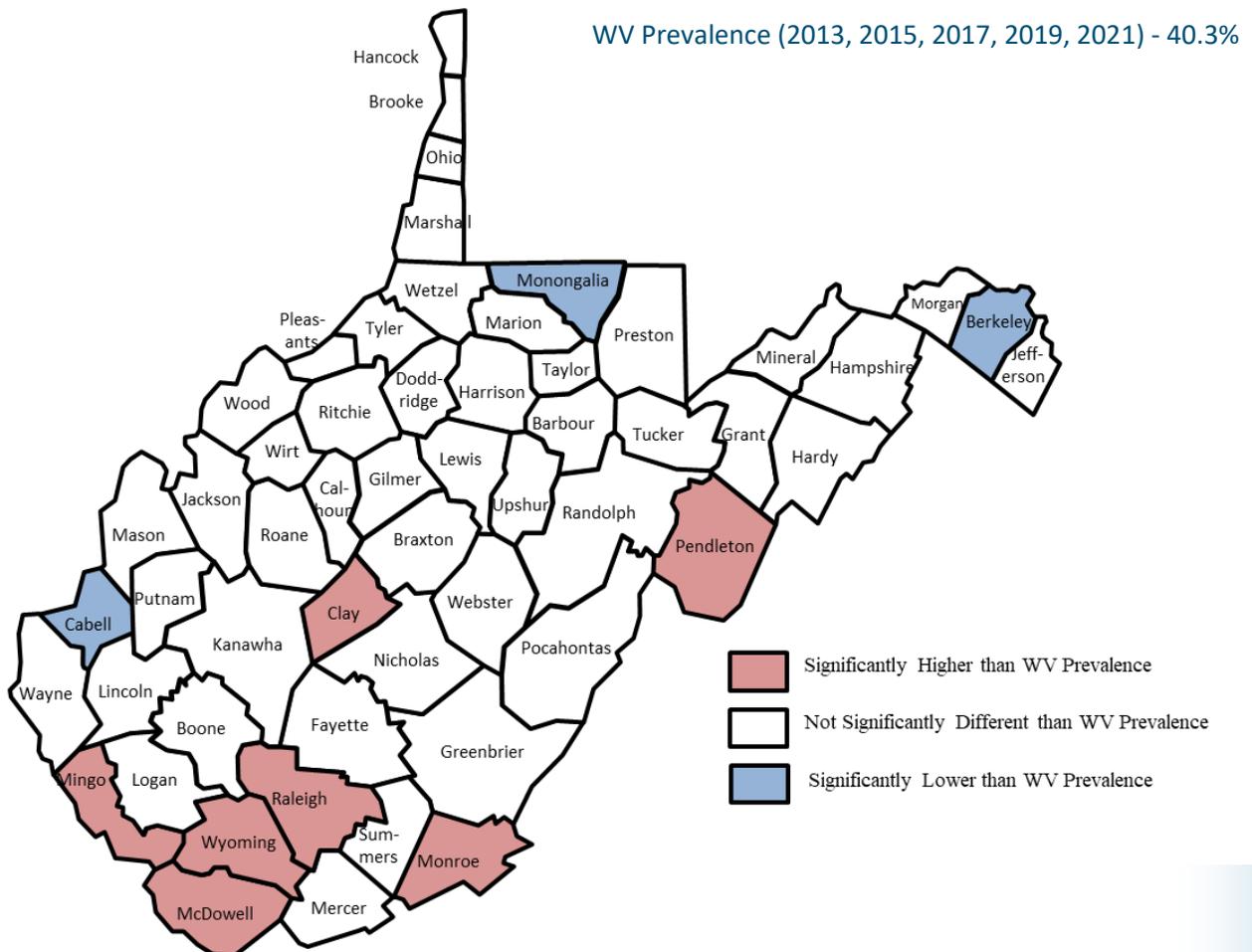
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	231,137	<b>41.4</b>	39.1-43.6	252,865	<b>40.7</b>	38.7-42.6	484,003	<b>41.0</b>	39.5-42.5
<b>Age</b>									
18-24	6,113	<b>15.7*</b>	6.4-25.0	4,066	<b>9.9*</b>	3.0-16.7	10,179	<b>12.7</b>	7.0-18.5
25-34	9,818	<b>15.5</b>	9.6-21.4	11,094	<b>15.1</b>	10.1-20.0	20,912	<b>15.3</b>	11.5-19.1
35-44	21,164	<b>24.7</b>	19.3-30.0	23,392	<b>27.0</b>	21.5-32.4	44,556	<b>25.8</b>	22.0-29.6
45-54	36,791	<b>40.9</b>	35.3-46.5	37,409	<b>37.8</b>	33.0-42.7	74,200	<b>39.3</b>	35.6-43.0
55-64	59,699	<b>53.2</b>	48.7-57.7	63,550	<b>53.0</b>	48.9-57.0	123,248	<b>53.1</b>	50.1-56.1
65+	95,657	<b>58.7</b>	55.2-62.3	110,936	<b>56.8</b>	53.7-60.0	206,593	<b>57.7</b>	55.4-60.0
<b>Education</b>									
Less than H.S.	29,618	<b>48.7</b>	40.1-57.3	36,247	<b>46.1</b>	38.7-53.5	65,864	<b>47.2</b>	41.6-52.8
H.S. or G.E.D.	98,953	<b>42.7</b>	39.1-46.3	95,083	<b>42.9</b>	39.6-46.3	194,036	<b>42.8</b>	40.4-45.3
Some Post-H.S.	59,577	<b>40.3</b>	35.9-44.6	77,160	<b>41.2</b>	37.5-44.8	136,737	<b>40.8</b>	38.0-43.6
College Graduate	42,613	<b>36.8</b>	33.3-40.3	44,190	<b>33.1</b>	30.1-36.1	86,803	<b>34.8</b>	32.5-37.1
<b>Income</b>									
Less than \$15,000	13,154	<b>47.3*</b>	37.0-57.6	28,319	<b>56.2</b>	48.8-63.6	41,473	<b>53.0</b>	47.0-59.1
\$15,000 - 24,999	26,981	<b>50.9</b>	43.3-58.5	41,164	<b>51.1</b>	45.2-56.9	68,145	<b>51.0</b>	46.4-55.6
\$25,000 - 34,999	31,347	<b>47.6</b>	40.9-54.4	36,239	<b>42.5</b>	36.9-48.2	67,586	<b>44.8</b>	40.4-49.1
\$35,000 - 49,999	34,819	<b>46.4</b>	40.3-52.5	31,298	<b>36.1</b>	31.0-41.3	66,117	<b>40.9</b>	36.9-44.9
\$50,000 - 74,999	35,515	<b>40.1</b>	34.6-45.6	31,530	<b>36.9</b>	31.6-42.3	67,045	<b>38.6</b>	34.7-42.4
\$75,000+	58,663	<b>34.6</b>	30.8-38.4	43,130	<b>33.5</b>	29.6-37.4	101,792	<b>34.2</b>	31.4-36.9

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

# CHAPTER 14: HIGH CHOLESTEROL



**Figure 14.2 Prevalence of High Cholesterol by County: WVBRFSS, 2013, 2015, 2017, 2019, 2021**



## CHAPTER 14: Cholesterol Medication

### Cholesterol Medication

**Definition** Responding “Yes” to the question, “Are you currently taking medicine prescribed by your doctor or other health professional for your cholesterol?” Among adults with high cholesterol.

**Prevalence** **WV: 67.9%**(95% CI: 65.7-70.0)  
**U.S.: 58.7%** (95% CI: 58.1-59.2)  
 The West Virginia prevalence of cholesterol medication was significantly higher than the U.S. prevalence. West Virginia ranked the third highest among 53 BRFSS participants.

**Table 14.2 Prevalence of Cholesterol Medication by Demographic Characteristics: WVBRFSS, 2021**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	164,096	71.6	68.4-74.8	163,024	<b>64.5</b>	61.6-67.5	327,120	<b>67.9</b>	65.7-70.0
<b>Age</b>									
18-24	.	.	.	.	.	.	.	.	.
25-34	2,807	<b>28.6*</b>	9.8-47.4	1,459	<b>13.1*</b>	2.0-24.3	4,266	<b>20.4*</b>	9.5-31.3
35-44	10,630	<b>50.2*</b>	37.9-62.6	9,601	<b>41.0*</b>	29.1-53.0	20,231	<b>45.4</b>	36.8-54.0
45-54	24,758	<b>68.2</b>	60.1-76.3	23,602	<b>63.1</b>	55.1-71.1	48,360	<b>65.6</b>	59.9-71.4
55-64	45,971	<b>77.2</b>	71.8-82.6	44,450	<b>69.9</b>	64.9-75.0	90,421	<b>73.5</b>	69.8-77.2
65+	78,379	<b>82.9</b>	79.4-86.5	82,701	<b>74.7</b>	71.1-78.2	161,080	<b>78.5</b>	75.9-81.0
<b>Education</b>									
Less than H.S.	24,204	<b>83.2</b>	74.4-91.9	26,371	<b>72.8</b>	63.4-82.1	50,575	<b>77.4</b>	70.8-84.0
H.S. or G.E.D.	72,436	<b>74.1</b>	69.0-79.1	69,159	<b>72.9</b>	68.6-77.1	141,594	<b>73.5</b>	70.2-76.8
Some Post-H.S.	38,407	<b>64.5</b>	57.8-71.1	42,216	<b>54.7</b>	49.2-60.3	80,623	<b>59.0</b>	54.7-63.3
College Graduate	28,745	<b>67.7</b>	62.2-73.2	25,092	<b>56.8</b>	51.4-62.2	53,838	<b>62.1</b>	58.2-66.0
<b>Income</b>									
Less than \$15,000	9,905	<b>77.4</b>	65.8-89.1	21,722	<b>76.7</b>	67.9-85.5	31,627	<b>76.9</b>	69.9-84.0
\$15,000 - 24,999	21,677	<b>80.9</b>	73.0-88.7	29,303	<b>71.3</b>	64.5-78.2	50,980	<b>75.1</b>	69.9-80.3
\$25,000 - 34,999	22,495	<b>71.8</b>	63.0-80.6	23,936	<b>66.1</b>	57.9-74.2	46,431	<b>68.7</b>	62.7-74.7
\$35,000 - 49,999	23,585	<b>67.8</b>	59.2-76.5	18,951	<b>60.6</b>	52.0-69.2	42,536	<b>64.4</b>	58.3-70.6
\$50,000 - 74,999	26,364	<b>74.2</b>	66.6-81.9	15,833	<b>50.2</b>	41.6-58.8	42,197	<b>62.9</b>	57.0-68.9
\$75,000+	40,000	<b>68.9</b>	62.5-75.4	24,670	<b>57.2</b>	50.4-64.0	64,670	<b>63.9</b>	59.2-68.6

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

## CHAPTER 15: CARDIOVASCULAR DISEASE

### Heart Attack

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

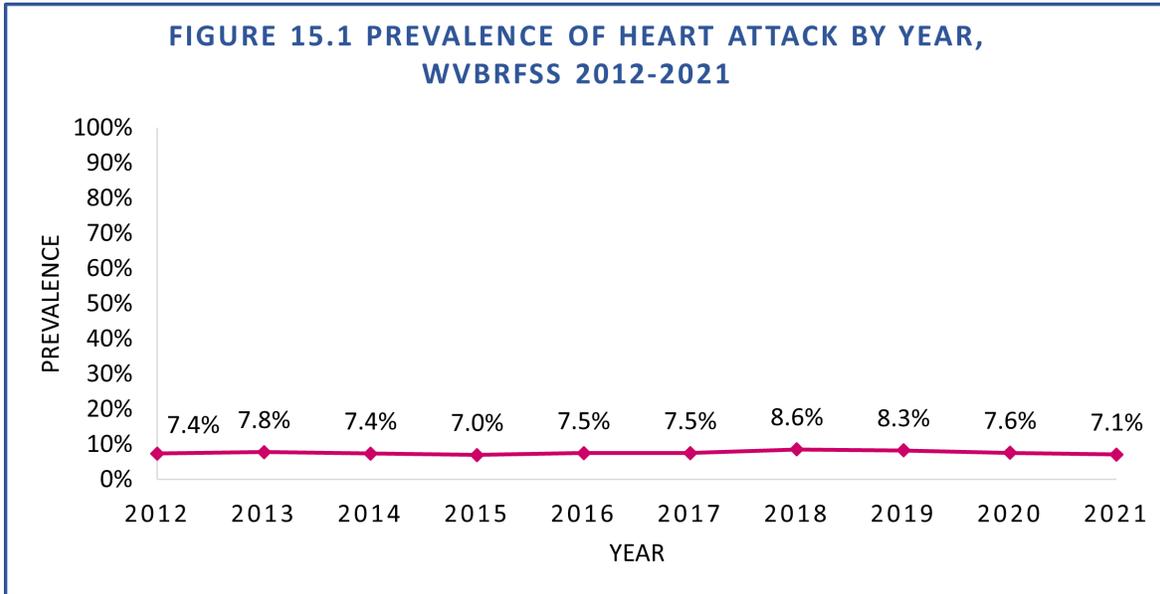
**Prevalence** **WV: 7.1%** (95% CI: 6.4-7.8)  
**U.S.: 4.0%** (95% CI: 3.9-4.1)  
 The West Virginia prevalence of heart attack was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 53 BRFSS participants.

**Table 15.1 Heart Attack Prevalence by Demographic Characteristics: WVBRFSS, 2021**

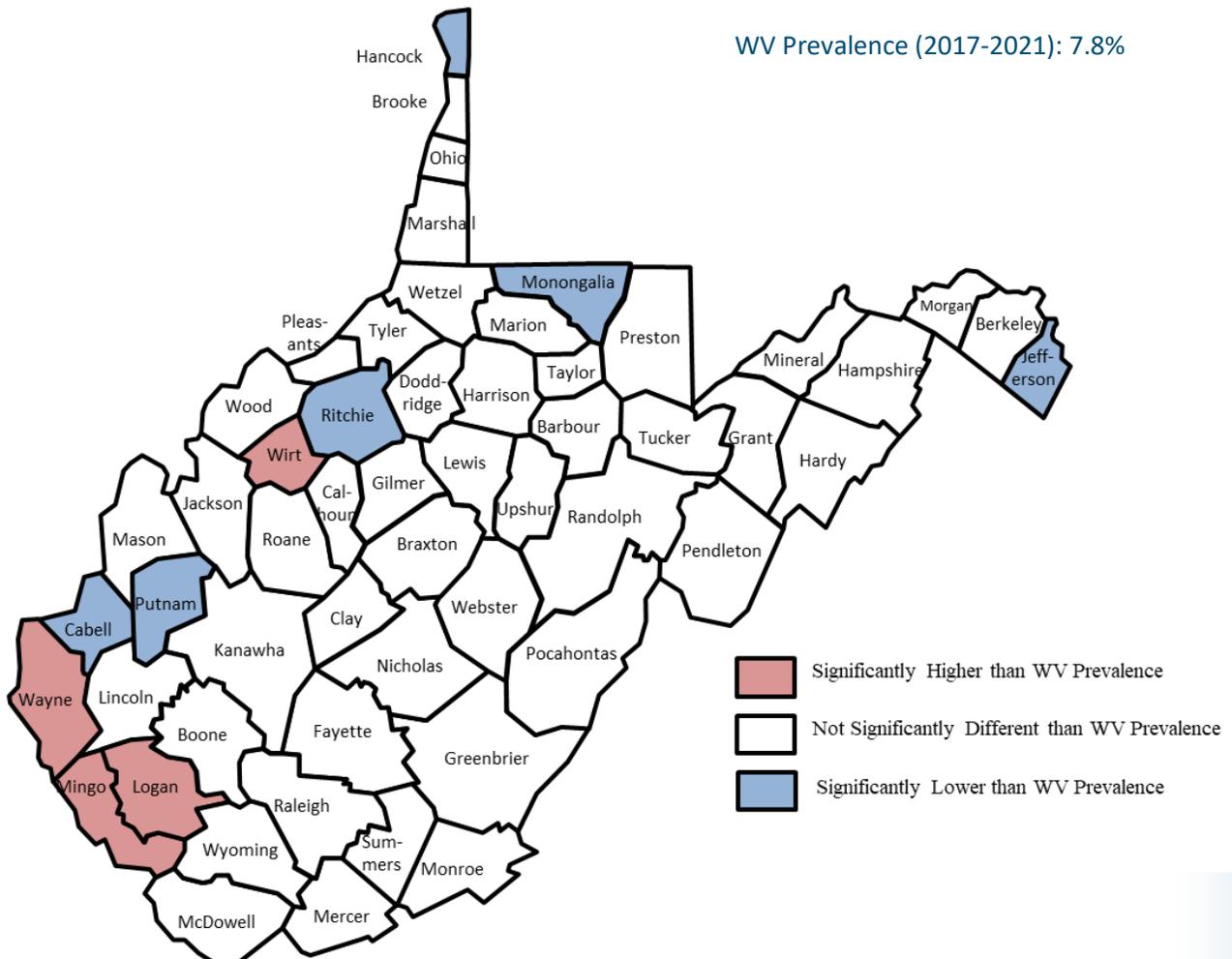
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	61,411	<b>8.8</b>	7.7-9.9	39,769	<b>5.5</b>	4.7-6.3	101,181	<b>7.1</b>	6.4-7.8
<b>Age</b>									
18-24	609	<b>0.7*</b>	0.0-2.2	266	<b>0.3*</b>	0.0-1.0	875	<b>0.5*</b>	0.0-1.4
25-34	681	<b>0.6*</b>	0.0-1.5	697	<b>0.7*</b>	0.0-1.8	1,377	<b>0.7*</b>	0.0-1.4
35-44	5,340	<b>5.1</b>	2.5-7.7	1,872	<b>1.8*</b>	0.3-3.3	7,212	<b>3.5</b>	1.9-5.0
45-54	7,002	<b>6.8</b>	4.1-9.4	4,608	<b>4.4</b>	2.4-6.5	11,611	<b>5.6</b>	3.9-7.3
55-64	12,410	<b>10.4</b>	7.7-13.0	9,545	<b>7.6</b>	5.4-9.8	21,955	<b>8.9</b>	7.2-10.6
65+	35,370	<b>20.3</b>	17.4-23.2	22,629	<b>11.0</b>	9.1-13.0	57,999	<b>15.3</b>	13.6-17.0
<b>Education</b>									
Less than H.S.	11,277	<b>13.7</b>	8.9-18.5	10,656	<b>11.5</b>	7.7-15.3	21,933	<b>12.5</b>	9.5-15.6
H.S. or G.E.D.	29,016	<b>9.6</b>	7.9-11.3	14,414	<b>5.5</b>	4.2-6.8	43,430	<b>7.7</b>	6.6-8.8
Some Post-H.S.	13,197	<b>7.4</b>	5.5-9.3	11,030	<b>5.1</b>	3.7-6.5	24,227	<b>6.2</b>	5.0-7.3
College Graduate	7,447	<b>5.6</b>	4.2-7.0	3,669	<b>2.4</b>	1.6-3.3	11,116	<b>3.9</b>	3.1-4.7
<b>Income</b>									
Less than \$15,000	3,636	<b>10.5</b>	4.8-16.1	7,573	<b>12.6</b>	8.3-16.9	11,209	<b>11.8</b>	8.4-15.3
\$15,000 - 24,999	10,890	<b>16.4</b>	11.4-21.4	9,547	<b>9.8</b>	6.8-12.7	20,437	<b>12.5</b>	9.8-15.2
\$25,000 - 34,999	9,890	<b>11.6</b>	8.3-15.0	5,393	<b>5.7</b>	3.5-7.9	15,283	<b>8.5</b>	6.5-10.5
\$35,000 - 49,999	10,391	<b>11.2</b>	7.9-14.4	4,569	<b>4.6</b>	2.5-6.6	14,960	<b>7.8</b>	5.9-9.7
\$50,000 - 74,999	7,814	<b>7.3</b>	5.0-9.6	2,726	<b>2.9</b>	1.4-4.5	10,540	<b>5.3</b>	3.8-6.7
\$75,000+	9,983	<b>5.1</b>	3.5-6.6	2,070	<b>1.4*</b>	0.6-2.3	12,053	<b>3.5</b>	2.5-4.5

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

# CHAPTER 15: CARDIOVASCULAR DISEASE



**Figure 15.2 Heart Attack Prevalence by County: WVBRFSS, 2017-2021**



## Angina or Coronary Heart Disease

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

**Prevalence** **WV: 7.2%** (95% CI: 6.5-7.9)  
**U.S.: 3.9%** (95% CI: 3.7-4.0)

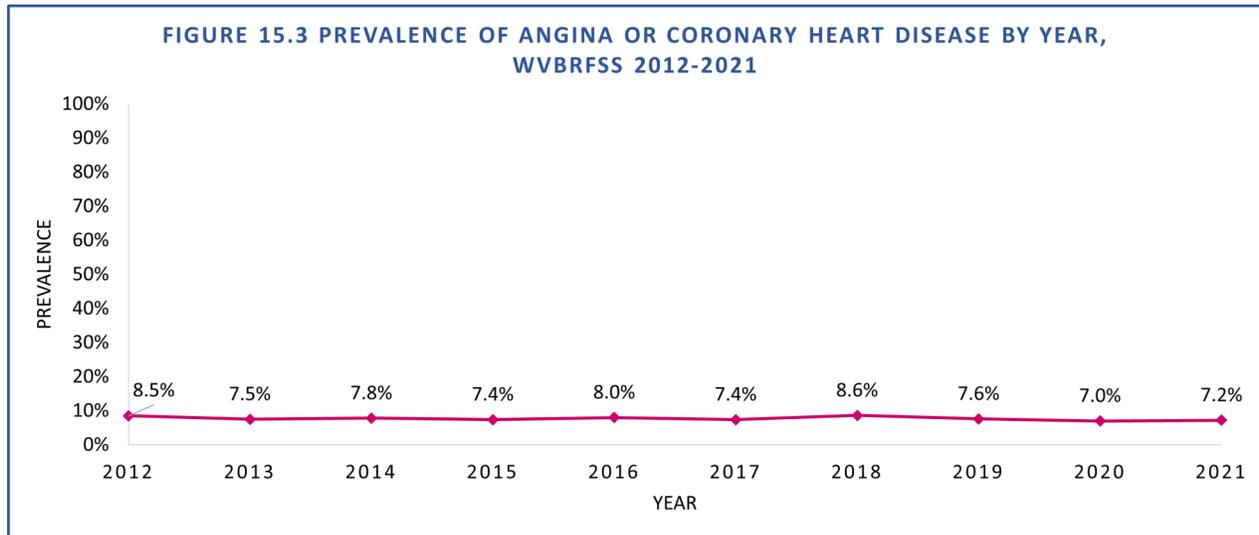
The West Virginia prevalence of coronary heart disease was significantly higher than the U.S. prevalence. West Virginia ranked highest among the 53 BRFSS participants.

**Table 15.2 Angina or Coronary Heart Disease Prevalence by Demographic Characteristics: WVBRFSS, 2021**

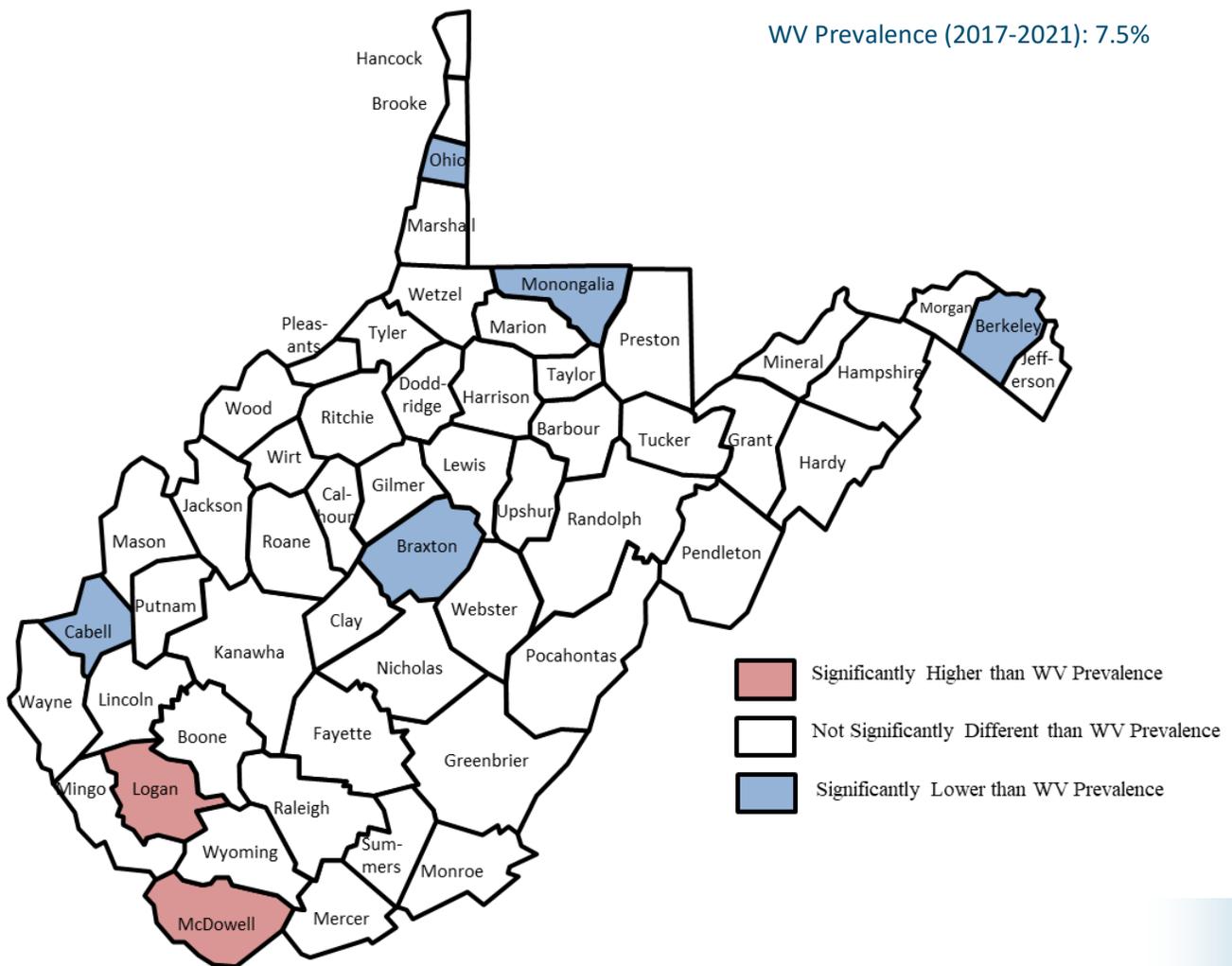
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	55,473	<b>8.0</b>	6.9-9.1	46,189	<b>6.4</b>	5.5-7.3	101,662	<b>7.2</b>	6.5-7.9
<b>Age</b>									
18-24	833	<b>1.0*</b>	0.0-3.0	1,360	<b>1.8*</b>	0.0-3.9	2,193	<b>1.4*</b>	0.0-2.8
25-34	1,254	<b>1.2*</b>	0.0-2.6	1,259	<b>1.3*</b>	0.0-3.2	2,513	<b>1.2*</b>	0.0-2.4
35-44	1,792	<b>1.7*</b>	0.3-3.1	2,769	<b>2.7*</b>	0.8-4.5	4,562	<b>2.2</b>	1.0-3.3
45-54	7,574	<b>7.3</b>	4.2-10.4	5,383	<b>5.2</b>	2.7-7.6	12,957	<b>6.2</b>	4.3-8.2
55-64	11,856	<b>10.0</b>	7.2-12.7	10,723	<b>8.6</b>	6.1-11.0	22,579	<b>9.2</b>	7.4-11.1
65+	31,694	<b>18.5</b>	15.7-21.3	24,367	<b>12.0</b>	10.1-14.0	56,061	<b>15.0</b>	13.3-16.7
<b>Education</b>									
Less than H.S.	10,637	<b>13.0</b>	8.0-17.9	8,815	<b>9.8</b>	5.8-13.7	19,452	<b>11.3</b>	8.2-14.4
H.S. or G.E.D.	23,448	<b>7.9</b>	6.3-9.4	20,136	<b>7.7</b>	6.1-9.3	43,584	<b>7.8</b>	6.7-8.9
Some Post-H.S.	12,793	<b>7.3</b>	5.3-9.2	11,869	<b>5.5</b>	4.0-7.0	24,662	<b>6.3</b>	5.1-7.5
College Graduate	8,198	<b>6.2</b>	4.7-7.7	5,369	<b>3.6</b>	2.6-4.6	13,568	<b>4.8</b>	3.9-5.7
<b>Income</b>									
Less than \$15,000	3,438	<b>10.0</b>	4.4-15.6	7,092	<b>12.0</b>	7.5-16.4	10,530	<b>11.2</b>	7.8-14.7
\$15,000 - 24,999	9,318	<b>14.0</b>	9.4-18.6	10,344	<b>10.6</b>	7.6-13.6	19,662	<b>12.0</b>	9.4-14.6
\$25,000 - 34,999	8,961	<b>10.7</b>	7.4-13.9	6,021	<b>6.4</b>	3.5-9.2	14,982	<b>8.4</b>	6.3-10.5
\$35,000 - 49,999	7,253	<b>7.8</b>	4.8-10.8	5,920	<b>6.0</b>	3.7-8.3	13,173	<b>6.9</b>	5.0-8.8
\$50,000 - 74,999	7,730	<b>7.3</b>	4.4-10.2	4,130	<b>4.5</b>	2.4-6.5	11,860	<b>6.0</b>	4.1-7.8
\$75,000+	9,908	<b>5.0</b>	3.6-6.4	2,181	<b>1.5*</b>	0.6-2.4	12,089	<b>3.5</b>	2.6-4.4

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

# CHAPTER 15: CARDIOVASCULAR DISEASE



**Figure 15.4 Angina or Coronary Heart Disease Prevalence by County: WVBRFSS, 2017-2021**



## CHAPTER 15: CARDIOVASCULAR DISEASE

### 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: 4.6%** (95% CI: 4.0-5.1)

**U.S.: 3.3%** (95% CI: 3.1-3.4)

The West Virginia prevalence of stroke was significantly higher than the U.S. prevalence. West Virginia ranked the fourth highest among the 53 BRFSS participants.

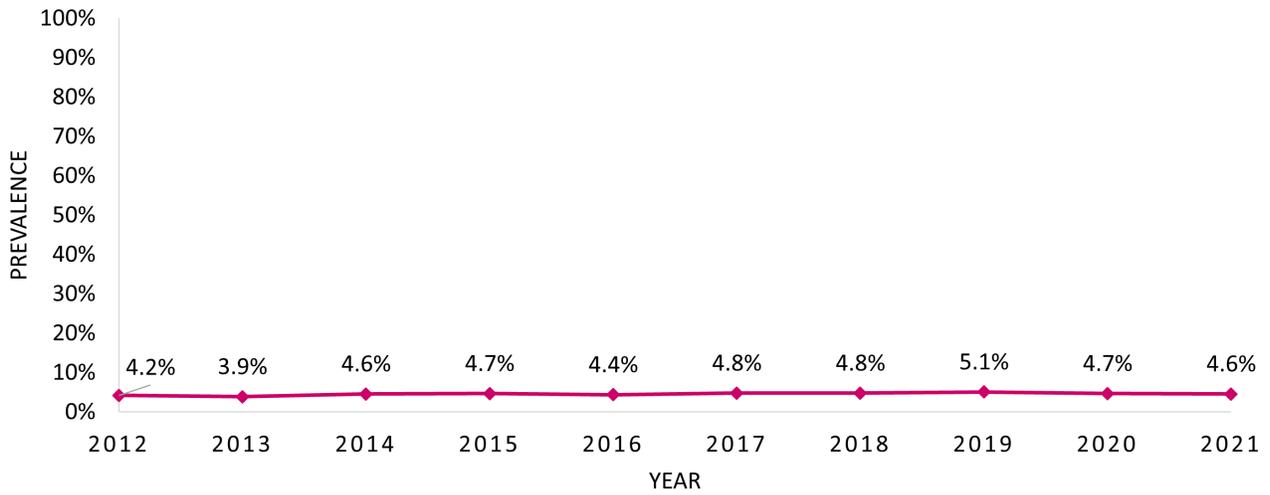
**Table 15.3 Stroke Prevalence by Demographic Characteristics: WVBRFSS, 2021**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	31,226	<b>4.5</b>	3.7-5.3	33,659	<b>4.6</b>	3.9-5.4	64,886	<b>4.6</b>	4.0-5.1
<b>Age</b>									
18-24	574	<b>0.7*</b>	0.0-2.0	788	<b>1.0*</b>	0.0-2.5	1,362	<b>0.9*</b>	0.0-1.9
25-34	1,721	<b>1.6*</b>	0.0-3.4	634	<b>0.6*</b>	0.0-1.6	2,355	<b>1.1*</b>	0.1-2.2
35-44	879	<b>0.8*</b>	0.0-1.7	1,537	<b>1.5*</b>	0.1-2.9	2,416	<b>1.2*</b>	0.3-2.0
45-54	6,202	<b>5.9</b>	3.3-8.5	5,177	<b>5.0</b>	2.4-7.5	11,380	<b>5.5</b>	3.6-7.3
55-64	5,826	<b>4.9</b>	3.1-6.6	7,656	<b>6.0</b>	4.1-7.9	13,482	<b>5.5</b>	4.2-6.8
65+	15,951	<b>9.2</b>	7.1-11.3	17,868	<b>8.6</b>	6.9-10.4	33,818	<b>8.9</b>	7.5-10.2
<b>Education</b>									
Less than H.S.	7,216	<b>8.7</b>	4.7-12.6	10,651	<b>11.5</b>	7.4-15.6	17,867	<b>10.2</b>	7.3-13.0
H.S. or G.E.D.	11,328	<b>3.8</b>	2.7-4.9	12,630	<b>4.8</b>	3.6-6.0	23,958	<b>4.2</b>	3.4-5.1
Some Post-H.S.	8,314	<b>4.7</b>	3.1-6.3	7,395	<b>3.4</b>	2.3-4.5	15,709	<b>4.0</b>	3.0-4.9
College Graduate	4,138	<b>3.1</b>	2.1-4.1	2,983	<b>2.0</b>	1.3-2.7	7,121	<b>2.5</b>	1.9-3.1
<b>Income</b>									
Less than \$15,000	2,564	<b>7.5*</b>	2.3-12.6	6,767	<b>11.2</b>	7.0-15.4	9,331	<b>9.9</b>	6.6-13.1
\$15,000 - 24,999	5,563	<b>8.4</b>	5.0-11.7	6,786	<b>6.9</b>	4.2-9.6	12,349	<b>7.5</b>	5.4-9.6
\$25,000 - 34,999	6,230	<b>7.3</b>	4.1-10.6	5,721	<b>6.0</b>	3.3-8.7	11,951	<b>6.6</b>	4.5-8.7
\$35,000 - 49,999	4,108	<b>4.4</b>	2.3-6.5	2,316	<b>2.3</b>	1.1-3.5	6,424	<b>3.3</b>	2.1-4.5
\$50,000 - 74,999	4,094	<b>3.8</b>	1.8-5.8	2,636	<b>2.8</b>	1.5-4.2	6,730	<b>3.4</b>	2.1-4.6
\$75,000+	3,363	<b>1.7</b>	0.8-2.6	1,267	<b>0.9*</b>	0.3-1.4	4,630	<b>1.4</b>	0.8-1.9

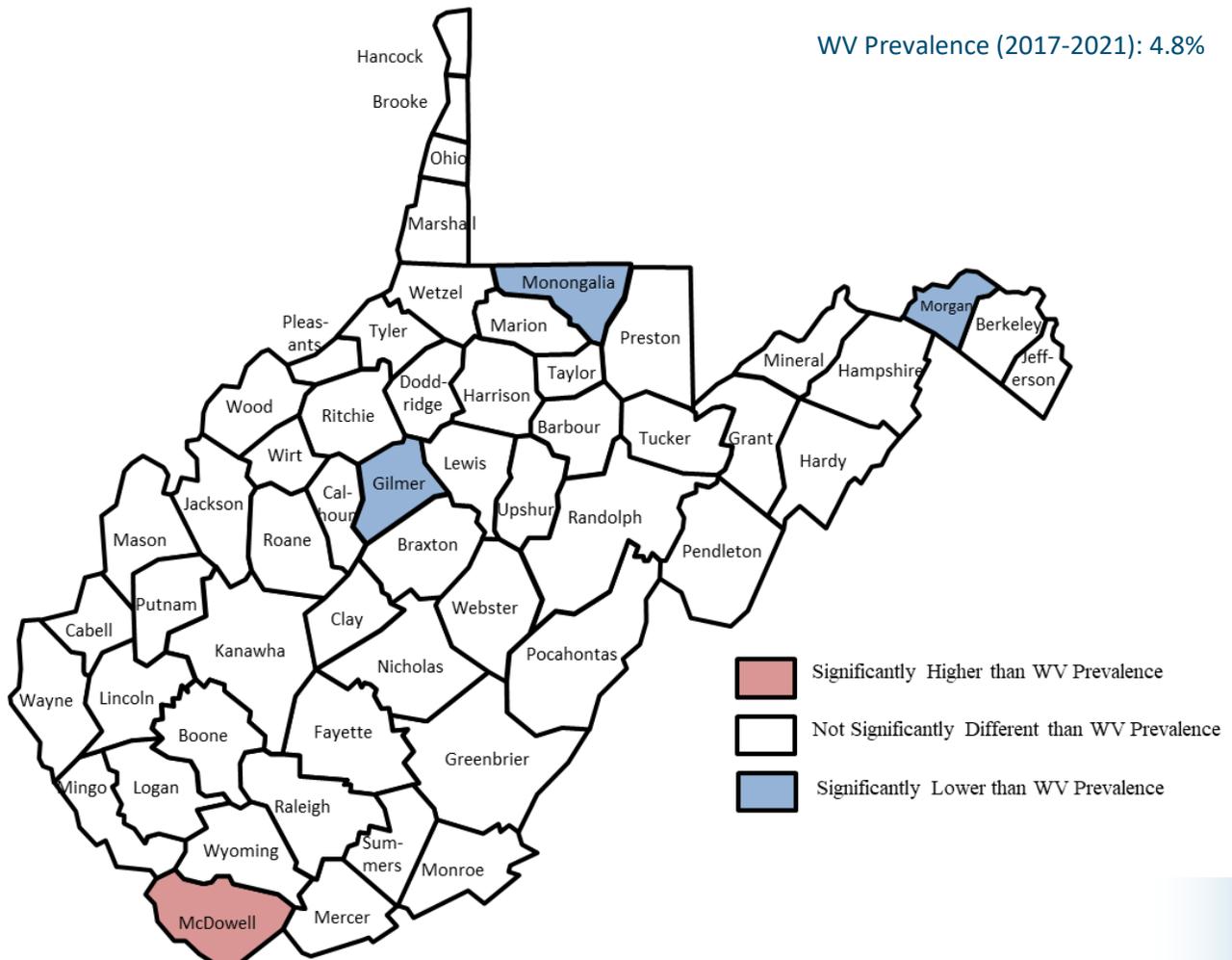
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

# CHAPTER 15: CARDIOVASCULAR DISEASE

**FIGURE 15.5 PREVALENCE OF STROKE BY YEAR, WVBRFSS 2012-2021**



**Figure 15.6 Stroke Prevalence by County: WVBRFSS, 2017-2021**



# CHAPTER 15: CARDIOVASCULAR DISEASE

## Cardiovascular Disease

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

**Prevalence** **WV: 14.2%** (95% CI: 13.3-15.2)  
**U.S.: 8.3%** (95% CI: 8.2-8.5)  
 The West Virginia prevalence of cardiovascular disease was significantly higher than the U.S. prevalence. West Virginia ranked the highest among the 53 BRFSS participants.

**Table 15.4 Cardiovascular Disease Prevalence by Demographic Characteristics: WVBRFSS, 2021**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	109,834	<b>15.9</b>	14.4-17.3	91,088	<b>12.7</b>	11.4-13.9	200,923	<b>14.2</b>	13.3-15.2
<b>Age</b>									
18-24	2,016	<b>2.5*</b>	0.0-5.3	1,882	<b>2.5*</b>	0.0-4.9	3,898	<b>2.5*</b>	0.6-4.3
25-34	3,656	<b>3.5*</b>	1.0-5.9	2,589	<b>2.6*</b>	0.2-5.0	6,245	<b>3.0</b>	1.3-4.8
35-44	6,770	<b>6.5</b>	3.6-9.3	5,475	<b>5.3</b>	2.7-7.8	12,245	<b>5.9</b>	4.0-7.8
45-54	15,267	<b>14.8</b>	10.8-18.8	10,789	<b>10.4</b>	7.2-13.6	26,055	<b>12.6</b>	10.0-15.2
55-64	22,497	<b>19.0</b>	15.5-22.5	20,466	<b>16.3</b>	13.2-19.4	42,963	<b>17.6</b>	15.3-19.9
65+	59,087	<b>34.4</b>	31.0-37.8	49,406	<b>24.4</b>	21.7-27.0	108,493	<b>28.9</b>	26.8-31.1
<b>Education</b>									
Less than H.S.	22,148	<b>27.3</b>	20.6-34.0	22,467	<b>24.6</b>	18.9-30.3	44,615	<b>25.9</b>	21.5-30.2
H.S. or G.E.D.	46,826	<b>15.7</b>	13.6-17.9	34,972	<b>13.4</b>	11.4-15.4	81,798	<b>14.6</b>	13.1-16.1
Some Post-H.S.	25,454	<b>14.4</b>	11.7-17.1	24,242	<b>11.2</b>	9.2-13.3	49,696	<b>12.7</b>	11.0-14.3
College Graduate	14,463	<b>10.9</b>	8.9-12.8	9,408	<b>6.3</b>	5.0-7.6	23,871	<b>8.4</b>	7.3-9.6
<b>Income</b>									
Less than \$15,000	7,694	<b>23.0</b>	14.9-31.1	15,213	<b>25.6</b>	19.8-31.5	22,907	<b>24.7</b>	19.9-29.4
\$15,000 - 24,999	18,951	<b>28.7</b>	22.5-34.9	19,543	<b>20.1</b>	15.9-24.2	38,494	<b>23.6</b>	20.0-27.1
\$25,000 - 34,999	18,719	<b>22.2</b>	17.4-27.0	13,825	<b>14.6</b>	10.7-18.5	32,545	<b>18.2</b>	15.1-21.3
\$35,000 - 49,999	15,766	<b>17.0</b>	12.9-21.1	10,097	<b>10.2</b>	7.3-13.1	25,863	<b>13.5</b>	11.0-16.0
\$50,000 - 74,999	15,257	<b>14.3</b>	10.7-18.0	6,946	<b>7.5</b>	5.0-10.0	22,203	<b>11.2</b>	8.9-13.4
\$75,000+	17,409	<b>8.8</b>	6.9-10.8	5,347	<b>3.7</b>	2.4-5.0	22,756	<b>6.6</b>	5.4-7.9

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



## Diabetes Prevalence

**Definition** Responding “Yes” to the question, “Has doctor, nurse, or other health professional ever told you that you have diabetes?”

**Prevalence** **WV: 15.9%** (95% CI: 14.9-16.9)  
**U.S.: 11.4%** (95% CI: 11.2-11.6)

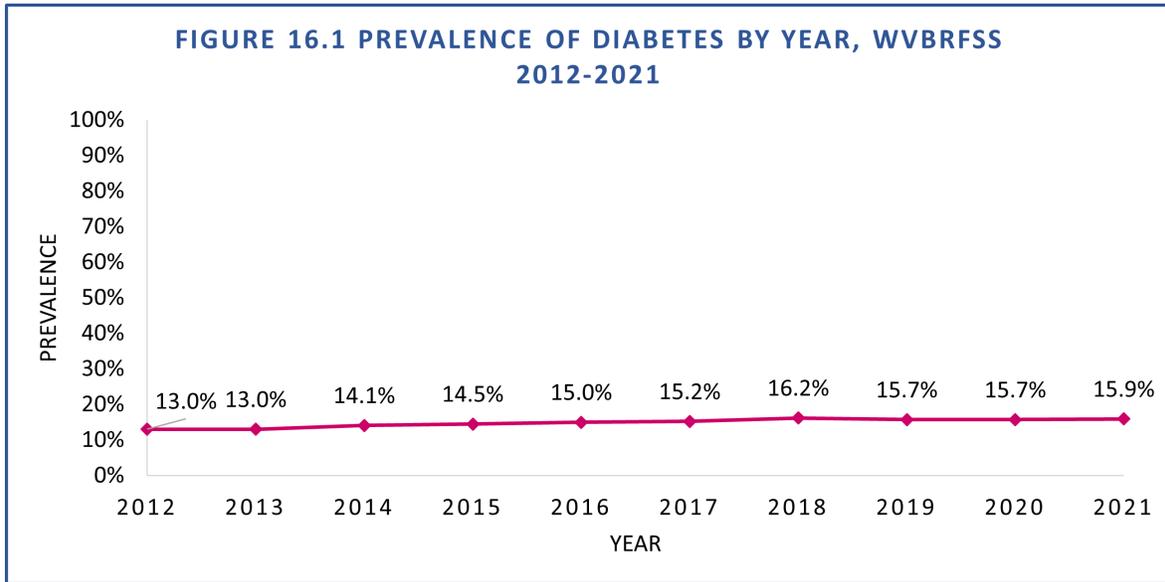
The West Virginia prevalence of diabetes was significantly higher than the U.S. prevalence. West Virginia ranked the second highest among the 53 BRFSS participants.

**Table 16.1 Diabetes Prevalence by Demographic Characteristics: WVBRFSS, 2021**

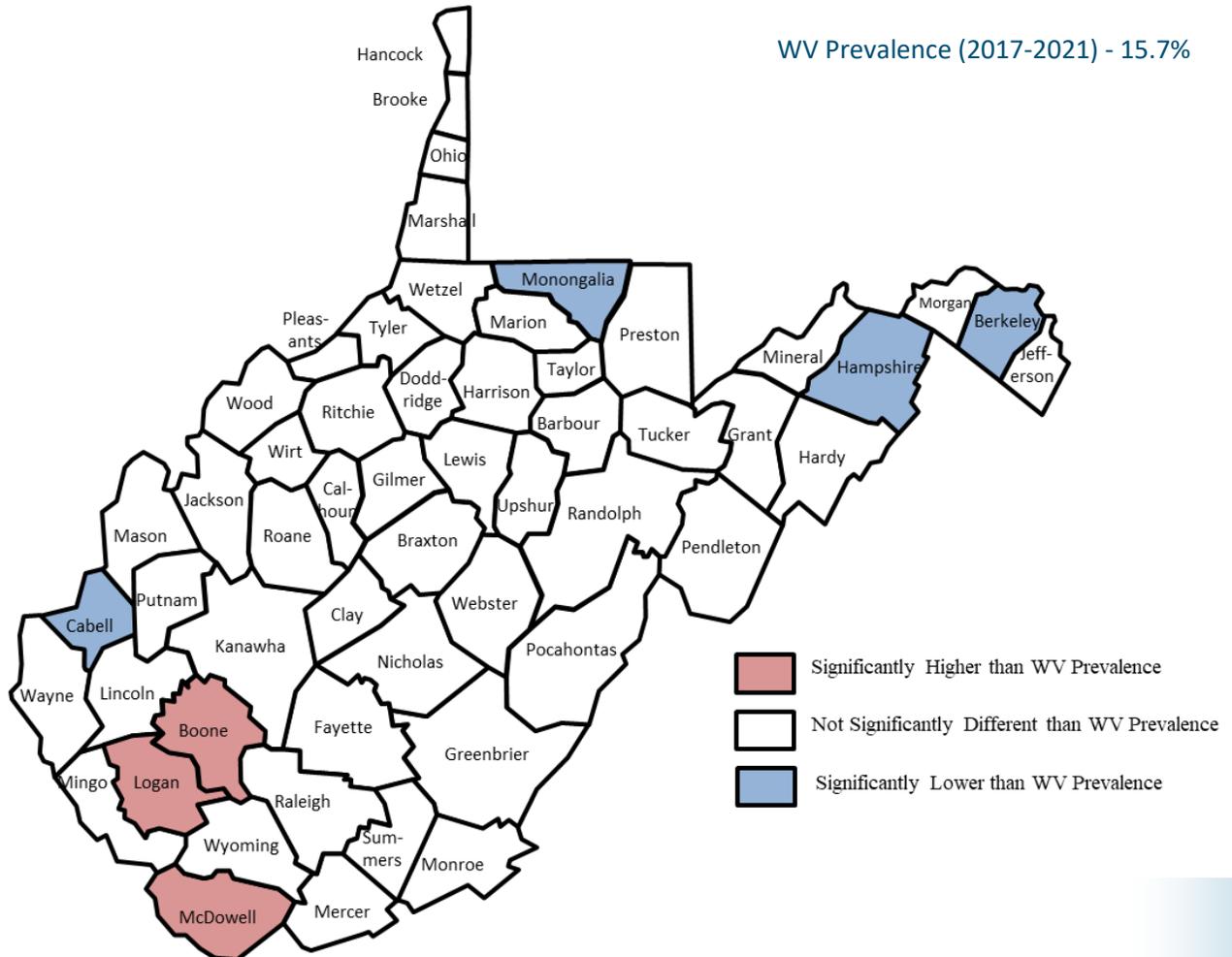
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	113,642	<b>16.2</b>	14.7-17.7	112,652	<b>15.5</b>	14.2-16.8	226,294	<b>15.9</b>	14.9-16.9
<b>Age</b>									
18-24	4,643	<b>5.6*</b>	1.1-10.1	814	<b>1.1*</b>	0.0-2.7	5,458	<b>3.4*</b>	0.9-5.9
25-34	3,079	<b>2.9*</b>	0.8-5.0	2,259	<b>2.3*</b>	0.8-3.7	5,338	<b>2.6</b>	1.3-3.9
35-44	6,559	<b>6.2</b>	3.3-9.2	9,415	<b>9.1</b>	5.8-12.4	15,975	<b>7.6</b>	5.4-9.9
45-54	15,933	<b>15.3</b>	11.2-19.3	17,069	<b>16.3</b>	12.6-19.9	33,002	<b>15.8</b>	13.0-18.5
55-64	29,763	<b>24.8</b>	20.9-28.6	29,373	<b>23.1</b>	19.7-26.6	59,135	<b>23.9</b>	21.3-26.5
65+	53,172	<b>30.4</b>	27.2-33.7	52,914	<b>25.6</b>	22.8-28.4	106,086	<b>27.8</b>	25.7-29.9
<b>Education</b>									
Less than H.S.	17,948	<b>21.5</b>	15.3-27.7	25,217	<b>27.1</b>	21.3-32.9	43,166	<b>24.5</b>	20.2-28.7
H.S. or G.E.D.	54,128	<b>17.9</b>	15.4-20.3	44,182	<b>16.7</b>	14.5-18.9	98,310	<b>17.4</b>	15.7-19.0
Some Post-H.S.	25,477	<b>14.3</b>	11.8-16.9	26,966	<b>12.4</b>	10.3-14.5	52,443	<b>13.3</b>	11.7-14.9
College Graduate	15,839	<b>11.9</b>	9.8-14.0	16,020	<b>10.6</b>	8.8-12.4	31,859	<b>11.2</b>	9.8-12.6
<b>Income</b>									
Less than \$15,000	7,888	<b>22.5</b>	15.1-29.9	17,940	<b>29.4</b>	23.2-35.6	25,827	<b>26.9</b>	22.1-31.7
\$15,000 - 24,999	16,853	<b>25.2</b>	19.4-31.0	20,733	<b>21.0</b>	16.8-25.2	37,586	<b>22.7</b>	19.3-26.1
\$25,000 - 34,999	14,763	<b>17.4</b>	13.0-21.8	16,643	<b>17.4</b>	13.6-21.2	31,406	<b>17.4</b>	14.5-20.3
\$35,000 - 49,999	15,169	<b>16.3</b>	12.3-20.2	15,374	<b>15.4</b>	11.9-18.9	30,542	<b>15.8</b>	13.2-18.4
\$50,000 - 74,999	18,626	<b>17.4</b>	13.5-21.3	11,476	<b>12.3</b>	9.1-15.6	30,102	<b>15.1</b>	12.5-17.6
\$75,000+	22,422	<b>11.4</b>	9.1-13.7	10,049	<b>6.9</b>	5.1-8.7	32,471	<b>9.5</b>	7.9-11.0

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

# CHAPTER 16: DIABETES



**Figure 16.2 Diabetes Prevalence by County: WVBRFSS, 2017-2021**



## 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: 11.3%** (95% CI: 10.4-12.3)  
Because this question is part of a state selected optional module and complete national data are not available, a U.S. comparison was not conducted.

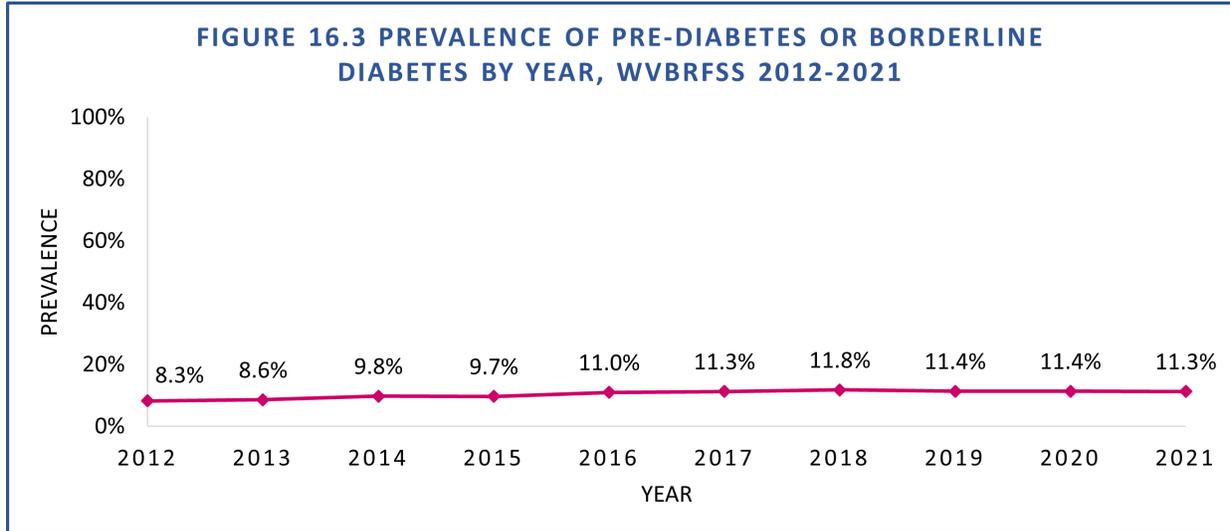
**Table 16.2 Prevalence of Pre-Diabetes or Borderline Diabetes by Demographic Characteristics: WVBRFSS, 2021**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	58,412	<b>10.3</b>	9.0-11.7	72,608	<b>12.3</b>	10.9-13.7	131,020	<b>11.3</b>	10.4-12.3
<b>Age</b>									
18-24	2,361	<b>3.2*</b>	0.0-6.4	5,055	<b>7.4*</b>	1.9-12.9	7,415	<b>5.2*</b>	2.0-8.4
25-34	2,186	<b>2.2*</b>	0.5-3.9	7,097	<b>7.7</b>	4.1-11.2	9,283	<b>4.9</b>	2.9-6.8
35-44	6,416	<b>7.0</b>	3.9-10.1	8,560	<b>9.4</b>	6.3-12.6	14,976	<b>8.2</b>	6.0-10.4
45-54	12,298	<b>14.3</b>	10.3-18.4	12,633	<b>14.6</b>	10.9-18.2	24,931	<b>14.4</b>	11.7-17.2
55-64	13,547	<b>15.2</b>	11.8-18.6	14,812	<b>15.6</b>	12.1-19.1	28,359	<b>15.4</b>	13.0-17.9
65+	21,006	<b>17.6</b>	14.5-20.6	24,169	<b>16.1</b>	13.5-18.8	45,175	<b>16.8</b>	14.8-18.8
<b>Education</b>									
Less than H.S.	4,037	<b>6.4</b>	2.9-9.8	9,640	<b>14.9</b>	9.0-20.9	13,678	<b>10.7</b>	7.2-14.2
H.S. or G.E.D.	25,935	<b>10.8</b>	8.7-13.0	24,834	<b>11.7</b>	9.3-14.1	50,769	<b>11.2</b>	9.7-12.8
Some Post-H.S.	17,001	<b>11.6</b>	8.8-14.5	24,581	<b>13.5</b>	10.9-16.2	41,581	<b>12.7</b>	10.7-14.6
College Graduate	11,439	<b>10.2</b>	8.0-12.4	13,438	<b>10.3</b>	8.2-12.3	24,877	<b>10.2</b>	8.7-11.7
<b>Income</b>									
Less than \$15,000	3,480	<b>13.0</b>	6.2-19.9	6,432	<b>15.8</b>	10.1-21.6	9,912	<b>14.7</b>	10.3-19.1
\$15,000 - 24,999	5,670	<b>11.8</b>	7.0-16.6	12,221	<b>16.2</b>	11.6-20.7	17,892	<b>14.5</b>	11.1-17.8
\$25,000 - 34,999	6,686	<b>9.9</b>	6.3-13.4	10,154	<b>13.6</b>	9.1-18.1	16,840	<b>11.8</b>	8.9-14.7
\$35,000 - 49,999	10,314	<b>13.8</b>	9.6-17.9	12,326	<b>15.1</b>	11.0-19.2	22,639	<b>14.5</b>	11.6-17.4
\$50,000 - 74,999	6,986	<b>8.2</b>	5.3-11.1	8,406	<b>10.6</b>	7.4-13.7	15,392	<b>9.4</b>	7.2-11.5
\$75,000+	15,489	<b>9.3</b>	7.0-11.6	13,454	<b>10.3</b>	7.5-13.1	28,944	<b>9.7</b>	8.0-11.5

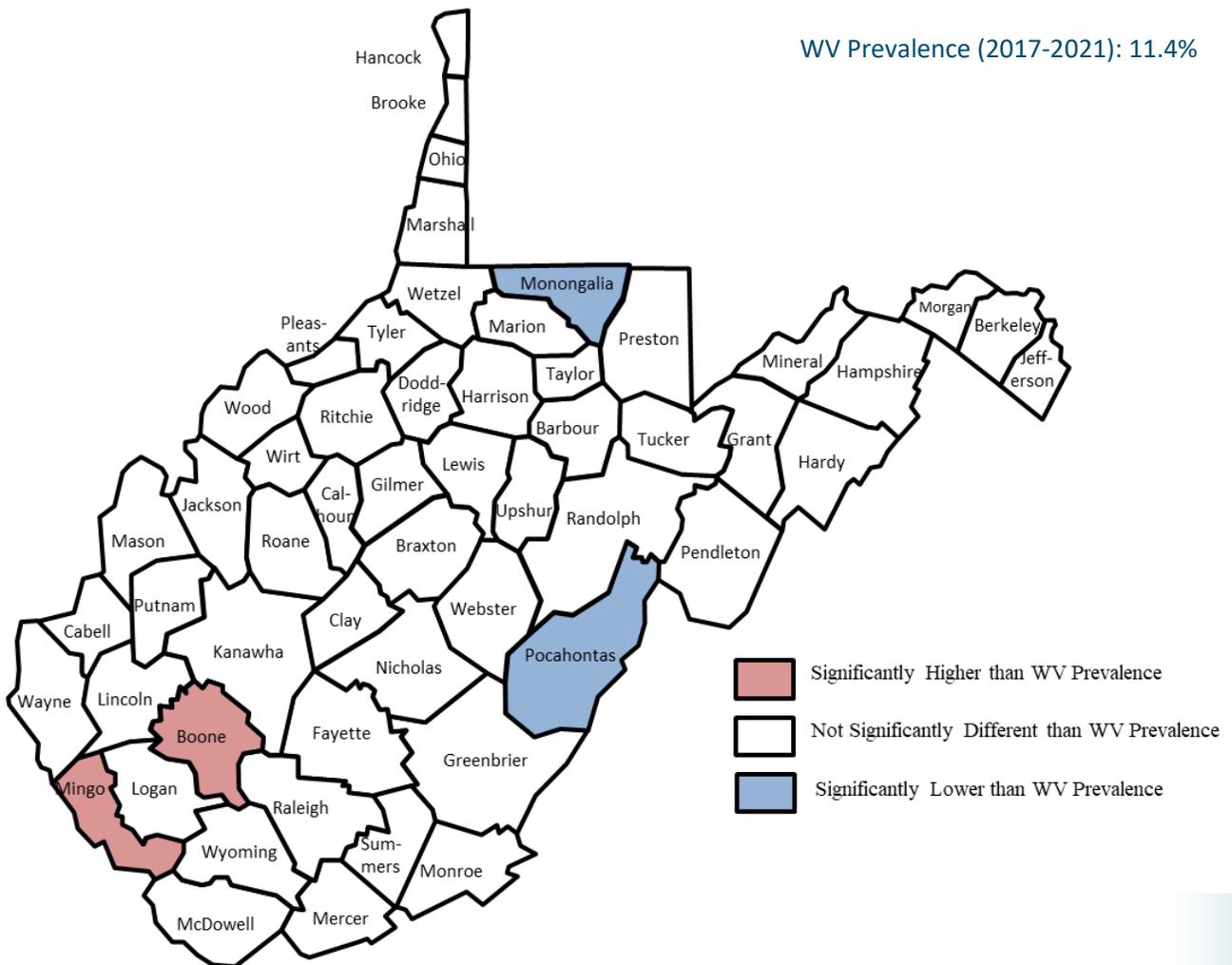
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

# CHAPTER 16: DIABETES

**FIGURE 16.3 PREVALENCE OF PRE-DIABETES OR BORDERLINE DIABETES BY YEAR, WVBRFSS 2012-2021**



**Figure 16.4 Prevalence of Pre-Diabetes or Borderline Diabetes by County: WVBRFSS, 2017-2021**



## 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: 8.0%** (95% CI: 7.4-8.7)  
**U.S.: 6.1%** (95% CI: 6.0-6.3)

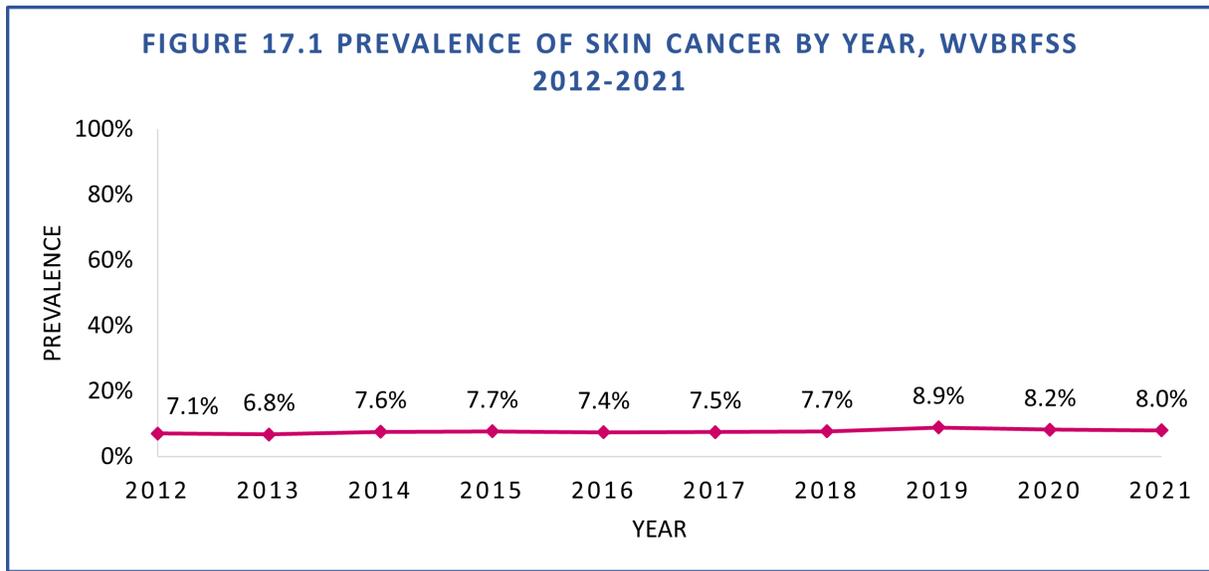
The West Virginia prevalence of skin cancer is significantly higher than the U.S. prevalence. West Virginia ranked the fourth highest among the 53 BRFSS participants.

**Table 17.1 Skin Cancer Prevalence by Demographic Characteristics: WVBRFSS, 2021**

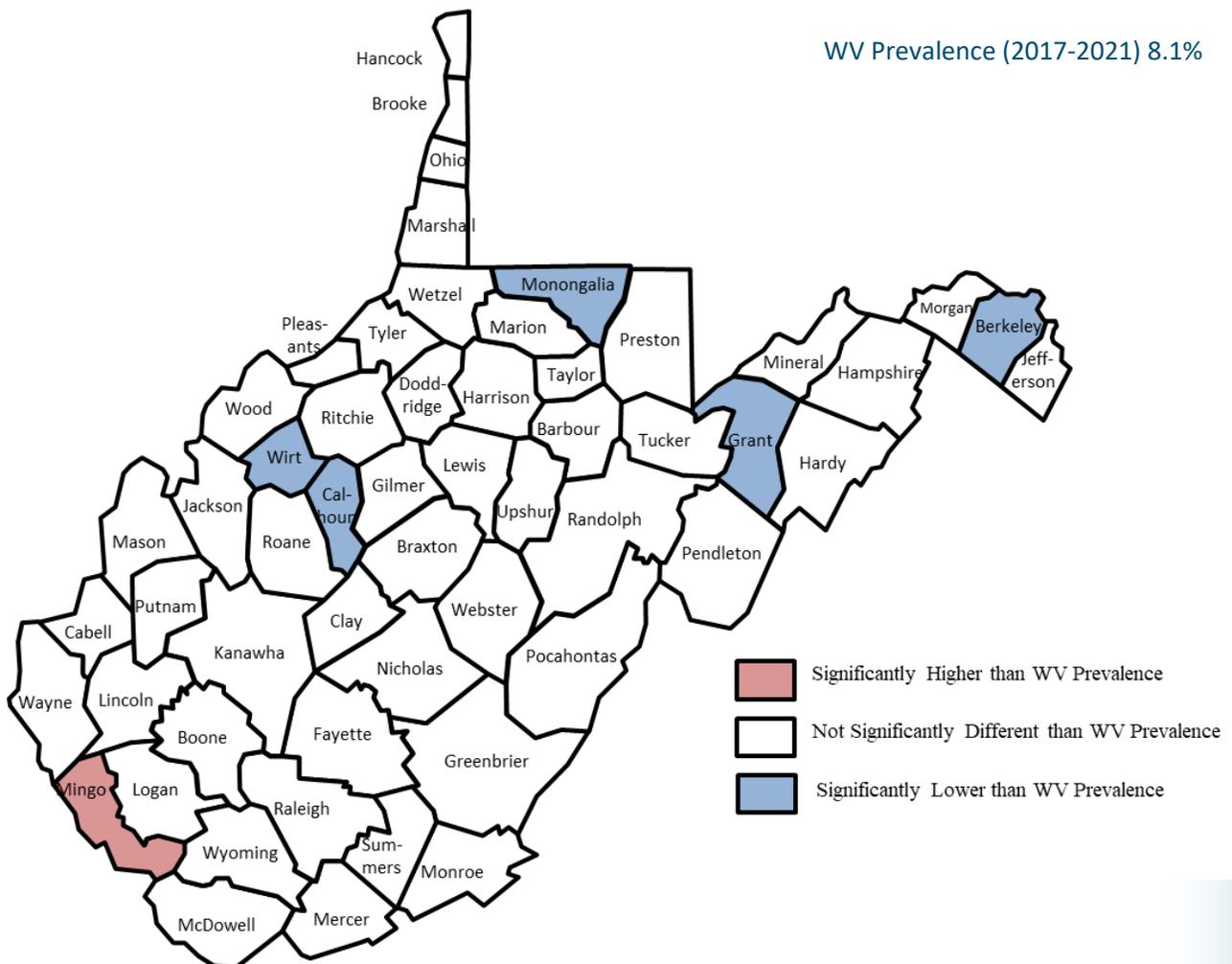
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	57,815	<b>8.3</b>	7.3-9.2	58,847	<b>7.8</b>	6.9-8.7	114,662	<b>8.0</b>	7.4-8.7
<b>Age</b>									
18-24	280	<b>0.3*</b>	0.0-1.0	1,437	<b>1.9*</b>	0.0-4.6	1,717	<b>1.1*</b>	0.0-2.4
25-34	984	<b>0.9*</b>	0.0-2.3	1,691	<b>1.7*</b>	0.3-3.0	2,675	<b>1.3*</b>	0.4-2.2
35-44	1,324	<b>1.3*</b>	0.1-2.4	2,930	<b>2.8*</b>	1.3-4.3	4,255	<b>2.0</b>	1.1-3.0
45-54	4,157	<b>4.0</b>	2.0-6.0	7,648	<b>7.3</b>	4.7-9.9	11,805	<b>5.6</b>	4.0-7.3
55-64	11,185	<b>9.3</b>	6.8-11.8	9,537	<b>7.5</b>	5.5-9.5	20,722	<b>8.4</b>	6.8-10.0
65+	39,784	<b>22.8</b>	20.0-25.7	33,074	<b>16.0</b>	13.9-18.1	72,858	<b>19.1</b>	17.4-20.9
<b>Education</b>									
Less than H.S.	3,843	<b>4.6*</b>	1.8-7.4	6,891	<b>7.4</b>	3.9-10.9	10,734	<b>6.1</b>	3.8-8.4
H.S. or G.E.D.	27,128	<b>9.0</b>	7.3-10.6	22,036	<b>8.4</b>	6.8-9.9	49,163	<b>8.7</b>	7.6-9.8
Some Post-H.S.	14,884	<b>8.4</b>	6.5-10.3	15,979	<b>7.4</b>	5.7-9.0	30,863	<b>7.8</b>	6.6-9.1
College Graduate	11,961	<b>9.0</b>	7.2-10.7	11,756	<b>7.8</b>	6.3-9.3	23,716	<b>8.4</b>	7.2-9.5
<b>Income</b>									
Less than \$15,000	2,315	<b>6.5</b>	2.9-10.2	3,190	<b>5.2</b>	2.2-8.3	5,505	<b>5.7</b>	3.4-8.0
\$15,000 - 24,999	3,818	<b>5.7</b>	3.5-7.9	7,630	<b>7.7</b>	4.8-10.7	11,449	<b>6.9</b>	4.9-8.9
\$25,000 - 34,999	9,597	<b>11.3</b>	7.8-14.8	9,215	<b>9.6</b>	6.9-12.4	18,813	<b>10.4</b>	8.2-12.6
\$35,000 - 49,999	7,403	<b>7.9</b>	5.3-10.5	9,663	<b>9.7</b>	7.0-12.3	17,066	<b>8.8</b>	7.0-10.7
\$50,000 - 74,999	10,343	<b>9.7</b>	7.0-12.4	5,250	<b>5.7</b>	3.6-7.7	15,593	<b>7.8</b>	6.1-9.5
\$75,000+	15,734	<b>8.0</b>	6.2-9.8	8,945	<b>6.2</b>	4.5-7.9	24,679	<b>7.2</b>	5.9-8.5

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

# CHAPTER 17: CANCER



**Figure 17.2 Skin Cancer Prevalence by County: WVBRFSS, 2017-2021**



## Other Cancer Prevalence

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

**Prevalence** **WV: 7.7%** (95% CI: 7.0-8.4)

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

The West Virginia prevalence of other cancer was slightly higher than the U.S. prevalence. West Virginia ranked the 18<sup>th</sup> highest among the 53 BRFSS participants.

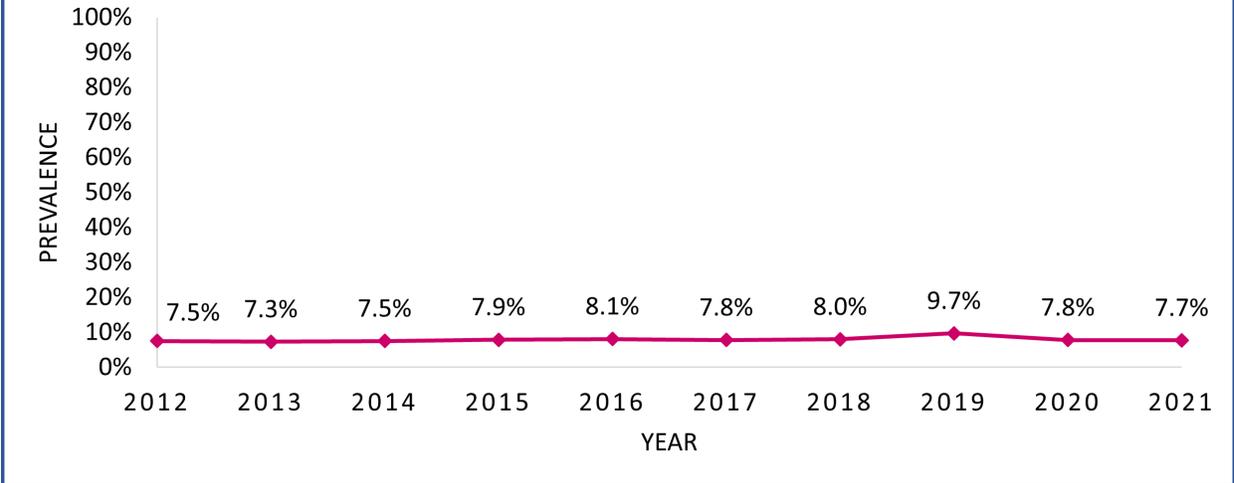
**Table 17.2 Other Cancer Prevalence by Demographic Characteristics: WVBRFSS, 2021**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	40,298	<b>5.8</b>	4.9-6.6	68,984	<b>9.5</b>	8.4-10.6	109,283	<b>7.7</b>	7.0-8.4
<b>Age</b>									
18-24	1,180	<b>1.4*</b>	0.0-3.4	522	<b>0.7*</b>	0.0-2.0	1,703	<b>1.1*</b>	0.0-2.3
25-34	729	<b>0.7*</b>	0.0-1.5	4,731	<b>4.7*</b>	1.8-7.7	5,459	<b>2.7</b>	1.1-4.2
35-44	866	<b>0.8*</b>	0.0-1.8	4,663	<b>4.5</b>	2.1-6.9	5,529	<b>2.7</b>	1.3-4.0
45-54	3,203	<b>3.1</b>	1.3-4.8	8,427	<b>8.1</b>	5.4-10.7	11,630	<b>5.6</b>	4.0-7.2
55-64	6,699	<b>5.6</b>	3.6-7.5	13,089	<b>10.4</b>	7.9-12.8	19,788	<b>8.0</b>	6.5-9.6
65+	27,304	<b>15.6</b>	13.1-18.1	36,693	<b>17.8</b>	15.4-20.1	63,997	<b>16.8</b>	15.1-18.5
<b>Education</b>									
Less than H.S.	5,855	<b>7.0</b>	3.7-10.4	11,241	<b>12.1</b>	7.8-16.5	17,096	<b>9.7</b>	6.9-12.5
H.S. or G.E.D.	17,516	<b>5.8</b>	4.5-7.1	23,608	<b>9.0</b>	7.4-10.6	41,124	<b>7.3</b>	6.2-8.3
Some Post-H.S.	8,123	<b>4.6</b>	3.1-6.1	22,604	<b>10.4</b>	8.3-12.5	30,728	<b>7.8</b>	6.4-9.1
College Graduate	8,618	<b>6.5</b>	4.9-8.0	11,278	<b>7.5</b>	6.0-9.0	19,896	<b>7.0</b>	5.9-8.1
<b>Income</b>									
Less than \$15,000	3,724	<b>10.5</b>	5.5-15.6	10,126	<b>16.8</b>	11.6-22.0	13,850	<b>14.5</b>	10.7-18.3
\$15,000 - 24,999	3,474	<b>5.2</b>	2.4-8.0	10,753	<b>10.9</b>	7.8-14.0	14,226	<b>8.6</b>	6.4-10.8
\$25,000 - 34,999	6,613	<b>7.8</b>	4.9-10.8	9,961	<b>10.4</b>	7.5-13.4	16,574	<b>9.2</b>	7.1-11.3
\$35,000 - 49,999	8,733	<b>9.4</b>	6.5-12.3	8,795	<b>8.8</b>	6.0-11.7	17,529	<b>9.1</b>	7.1-11.1
\$50,000 - 74,999	4,329	<b>4.0</b>	2.4-5.7	7,713	<b>8.3</b>	5.5-11.1	12,042	<b>6.0</b>	4.4-7.6
\$75,000+	7,950	<b>4.0</b>	2.7-5.4	8,909	<b>6.1</b>	4.1-8.1	16,859	<b>4.9</b>	3.8-6.1

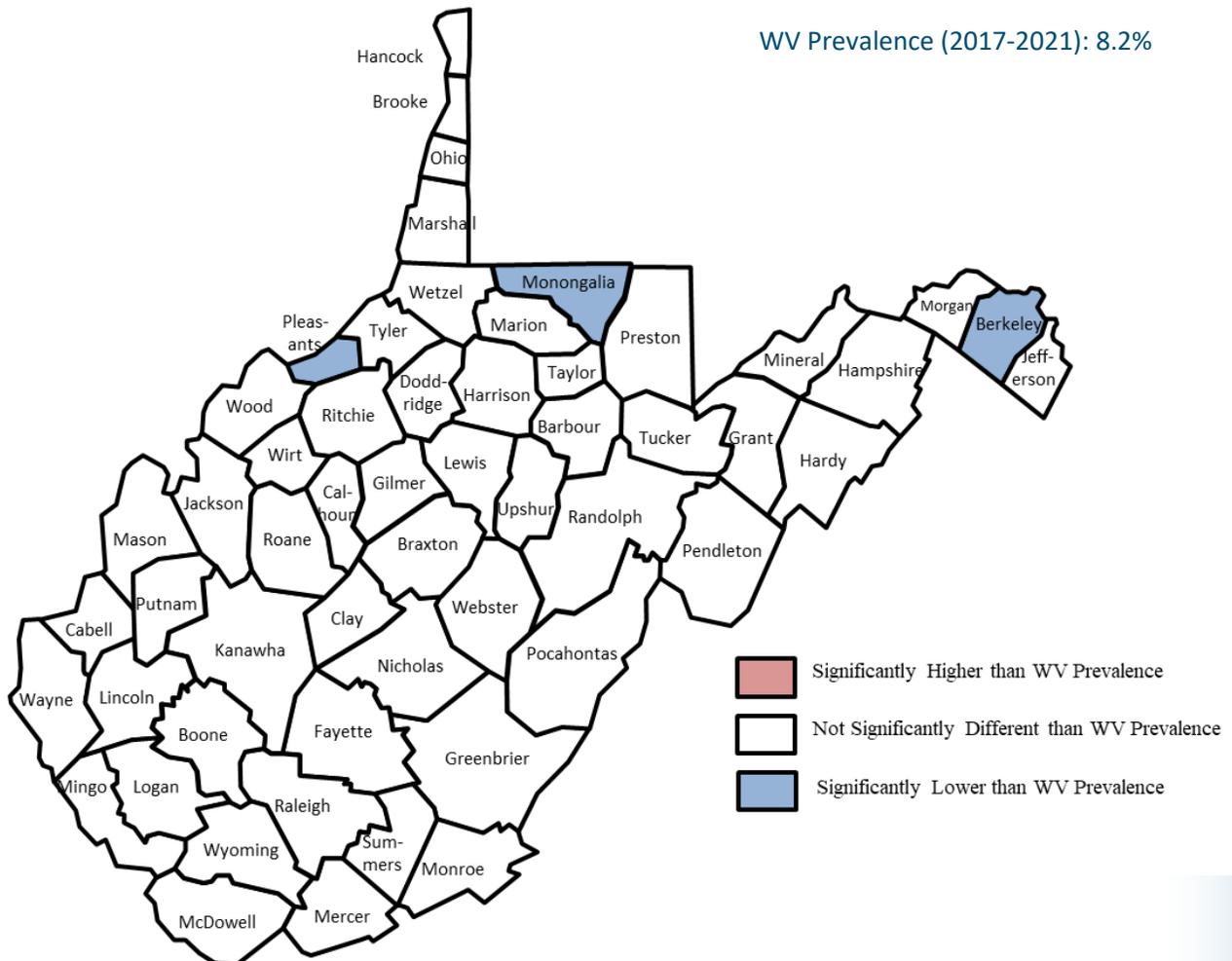
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

# CHAPTER 17: CANCER

**FIGURE 17.3 PREVALENCE OF OTHER CANCER BY YEAR:  
WVBRFSS, 2012-2021**



**Table 17.4 Other Cancer Prevalence by County: WVBRFSS, 2017-2021**



## Overall Cancer Prevalence

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

**Prevalence** **WV: 14.1%** (95% CI: 13.2-15.0)  
**U.S.: 11.7%** (95% CI: 11.5-11.9)

The West Virginia prevalence of cancer was significantly higher than the U.S. prevalence. West Virginia ranked the sixth highest among 53 BRFSS participants.

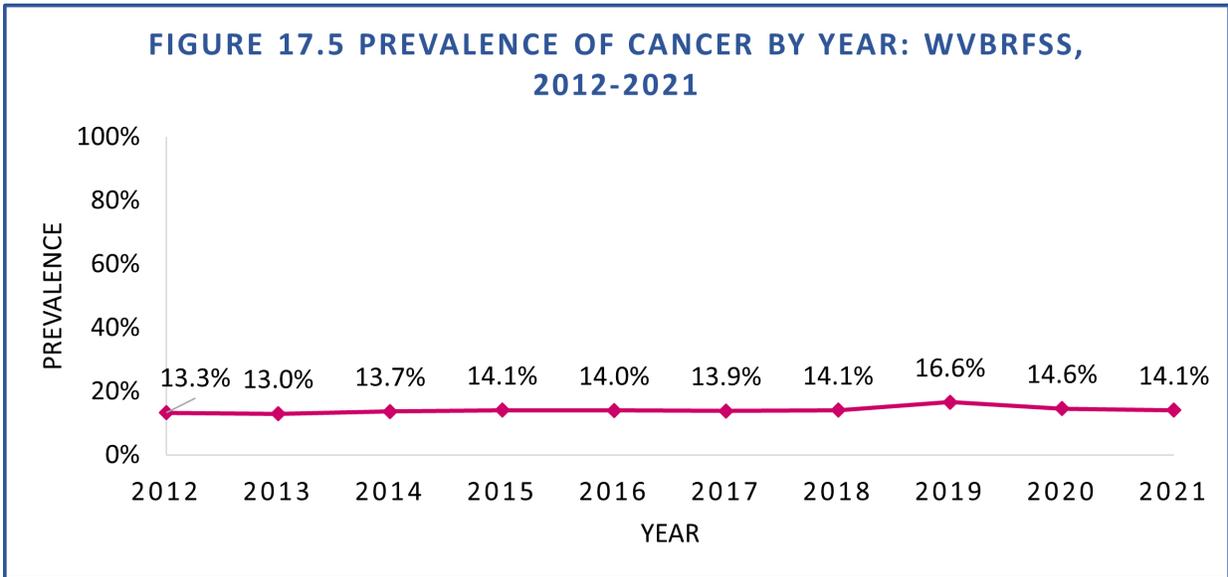
**Table 17.3 Cancer Prevalence by Demographic Characteristics: WVBRFSS, 2021**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	86,681	<b>12.4</b>	11.2-13.6	113,660	<b>15.7</b>	14.4-17.0	200,341	<b>14.1</b>	13.2-15.0
<b>Age</b>									
18-24	1,460	<b>1.8*</b>	0.0-3.8	1,960	<b>2.6*</b>	0.0-5.5	3,420	<b>2.2*</b>	0.4-3.9
25-34	1,713	<b>1.6*</b>	0.1-3.1	6,421	<b>6.4</b>	3.2-9.7	8,134	<b>3.9</b>	2.2-5.7
35-44	1,994	<b>1.9*</b>	0.4-3.4	7,313	<b>7.0</b>	4.2-9.8	9,307	<b>4.5</b>	2.9-6.1
45-54	7,127	<b>6.8</b>	4.2-9.4	14,166	<b>13.6</b>	10.3-16.9	21,293	<b>10.2</b>	8.1-12.3
55-64	16,489	<b>13.7</b>	10.8-16.7	20,555	<b>16.3</b>	13.4-19.2	37,044	<b>15.1</b>	13.0-17.1
65+	57,581	<b>33.0</b>	29.8-36.2	62,085	<b>30.0</b>	27.2-32.8	119,666	<b>31.4</b>	29.3-33.5
<b>Education</b>									
Less than H.S.	9,002	<b>10.8</b>	6.6-14.9	16,809	<b>18.2</b>	13.0-23.3	25,811	<b>14.6</b>	11.3-18.0
H.S. or G.E.D.	38,430	<b>12.7</b>	10.8-14.7	40,391	<b>15.3</b>	13.3-17.4	78,821	<b>13.9</b>	12.5-15.4
Some Post-H.S.	20,507	<b>11.6</b>	9.3-13.9	35,622	<b>16.4</b>	13.9-18.9	56,129	<b>14.2</b>	12.5-16.0
College Graduate	18,556	<b>13.9</b>	11.7-16.1	20,586	<b>13.7</b>	11.7-15.7	39,141	<b>13.8</b>	12.3-15.3
<b>Income</b>									
Less than \$15,000	5,302	<b>15.0</b>	9.3-20.7	11,814	<b>19.6</b>	14.1-25.1	17,116	<b>17.9</b>	13.8-22.0
\$15,000 - 24,999	6,293	<b>9.4</b>	6.1-12.8	16,947	<b>17.2</b>	13.2-21.2	23,241	<b>14.1</b>	11.3-16.8
\$25,000 - 34,999	13,969	<b>16.5</b>	12.3-20.6	17,174	<b>17.9</b>	14.2-21.7	31,143	<b>17.2</b>	14.5-20.0
\$35,000 - 49,999	14,632	<b>15.7</b>	12.1-19.4	16,282	<b>16.3</b>	12.7-19.9	30,914	<b>16.0</b>	13.5-18.6
\$50,000 - 74,999	13,463	<b>12.6</b>	9.5-15.7	11,707	<b>12.6</b>	9.3-15.9	25,170	<b>12.6</b>	10.4-14.8
\$75,000+	21,255	<b>10.8</b>	8.7-13.0	16,287	<b>11.2</b>	8.7-13.7	37,542	<b>11.0</b>	9.4-12.6

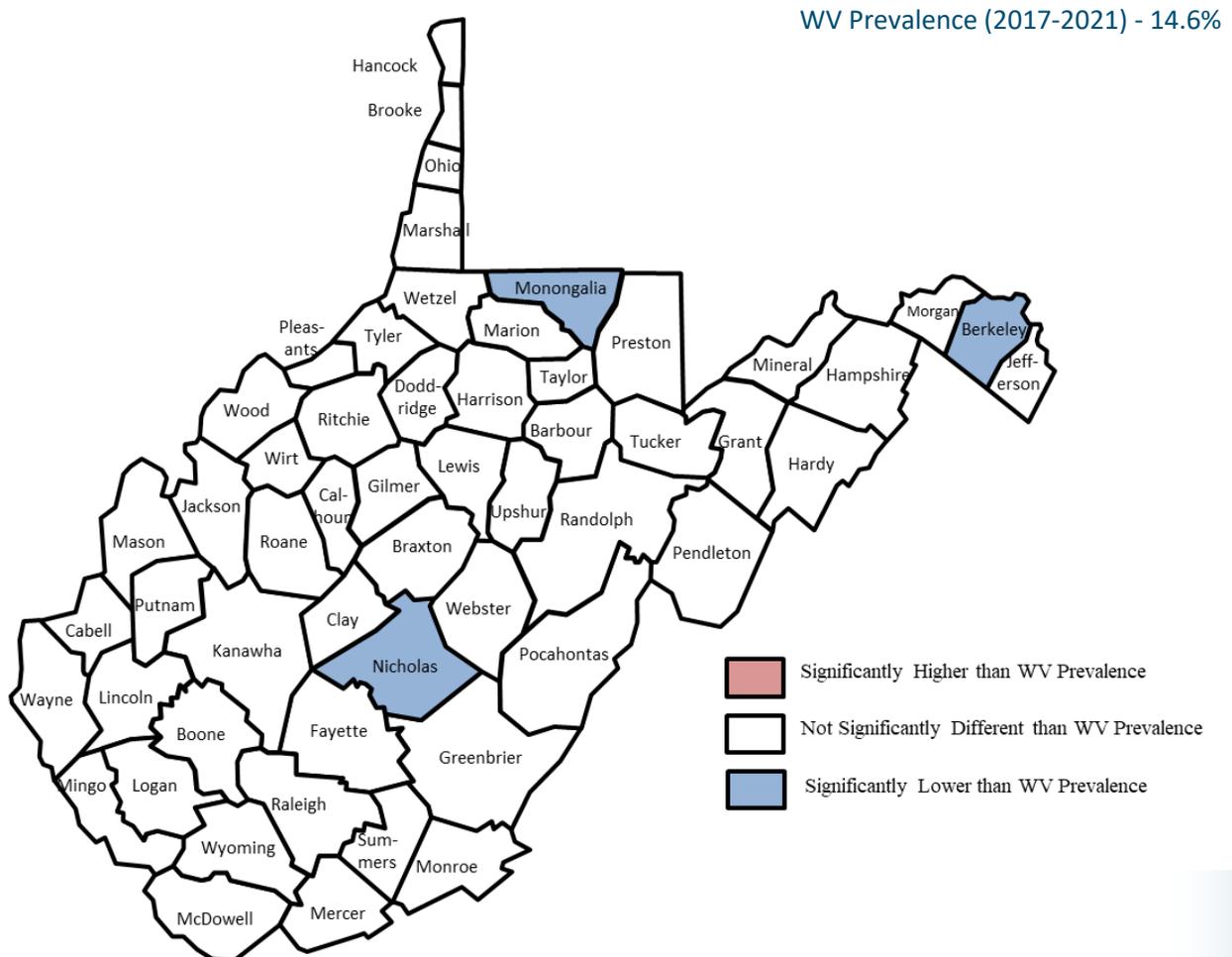
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

# CHAPTER 17: CANCER

**FIGURE 17.5 PREVALENCE OF CANCER BY YEAR: WVBRFSS, 2012-2021**



**Figure 17.6 Cancer Prevalence by County: WVBRFSS, 2017-2021**



## CHAPTER 18: RESPIRATORY DISEASES

### 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: 16.6%** (95% CI: 15.5-17.7)  
**U.S.: 14.6%** (95% CI: 14.4-14.8)

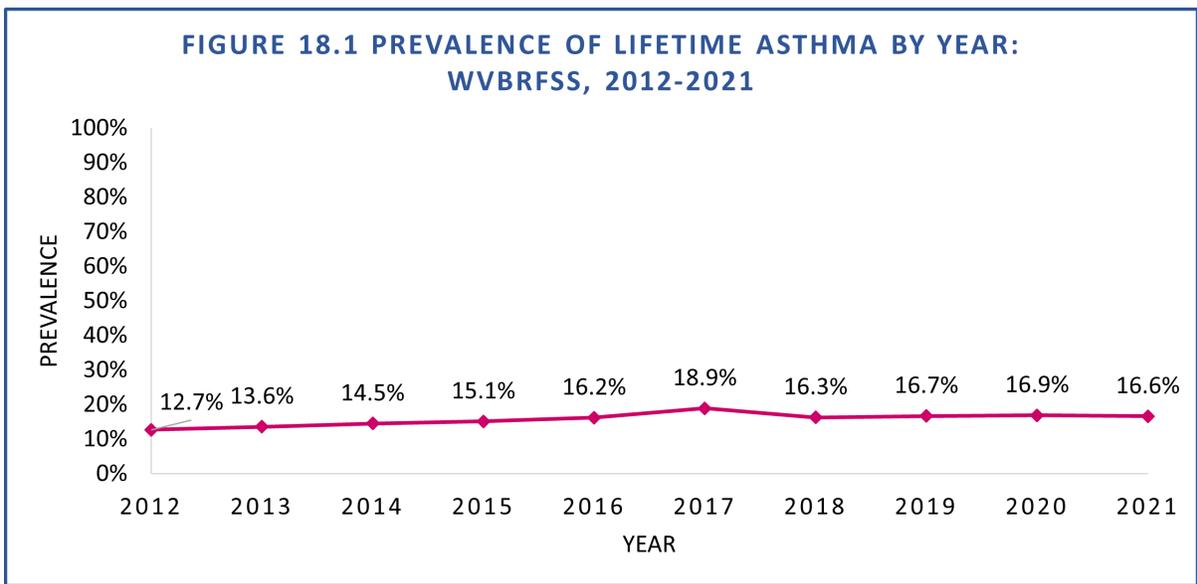
The West Virginia prevalence of lifetime asthma was significantly higher than the U.S. prevalence. West Virginia ranked the seventh highest among 53 BRFSS participants.

**Table 18.1 Lifetime Asthma Prevalence by Demographic Characteristics: WVBRFSS, 2021**

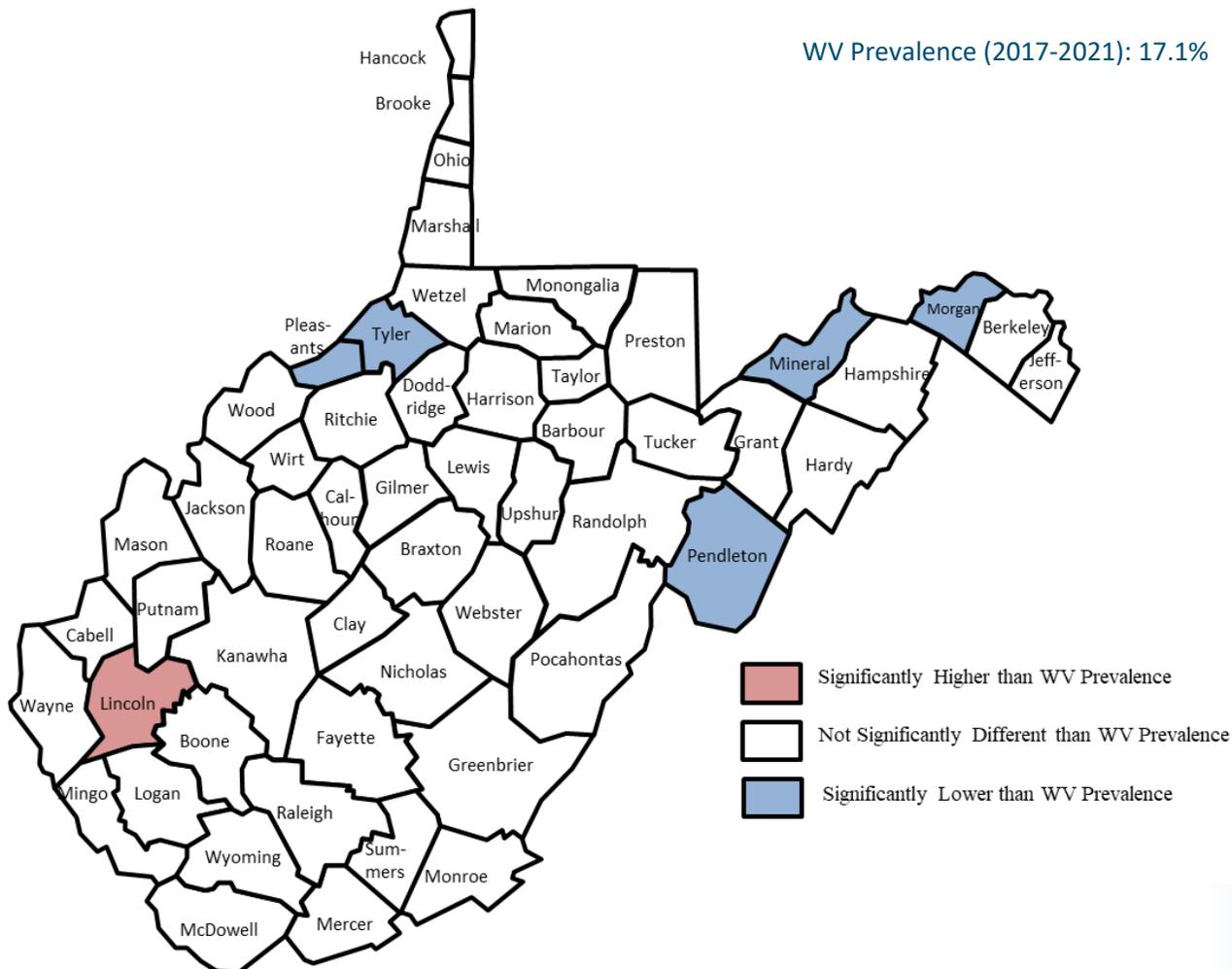
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	97,939	<b>14.0</b>	12.4-15.6	138,519	<b>19.1</b>	17.5-20.7	236,458	<b>16.6</b>	15.5-17.7
<b>Age</b>									
18-24	15,282	<b>18.9</b>	12.0-25.8	16,241	<b>21.3</b>	14.1-28.5	31,523	<b>20.0</b>	15.1-25.0
25-34	15,950	<b>15.0</b>	10.4-19.7	20,990	<b>21.0</b>	16.0-26.0	36,940	<b>17.9</b>	14.5-21.3
35-44	18,000	<b>17.1</b>	12.7-21.6	18,986	<b>18.3</b>	14.1-22.6	36,986	<b>17.7</b>	14.7-20.8
45-54	14,208	<b>13.6</b>	9.8-17.4	23,477	<b>22.4</b>	18.2-26.5	37,685	<b>18.0</b>	15.2-20.8
55-64	15,539	<b>12.9</b>	9.8-16.0	25,423	<b>20.1</b>	16.9-23.3	40,962	<b>16.6</b>	14.4-18.8
65+	18,705	<b>10.7</b>	8.5-12.9	32,290	<b>15.7</b>	13.4-17.9	50,995	<b>13.4</b>	11.8-15.0
<b>Education</b>									
Less than H.S.	16,570	<b>20.2</b>	13.8-26.5	25,673	<b>27.7</b>	21.6-33.7	42,243	<b>24.1</b>	19.7-28.5
H.S. or G.E.D.	41,574	<b>13.8</b>	11.4-16.2	46,534	<b>17.7</b>	15.1-20.3	88,108	<b>15.6</b>	13.8-17.4
Some Post-H.S.	24,783	<b>13.9</b>	10.8-17.1	42,550	<b>19.6</b>	16.6-22.5	67,333	<b>17.0</b>	14.9-19.2
College Graduate	14,524	<b>10.9</b>	8.7-13.1	23,601	<b>15.7</b>	13.3-18.0	38,126	<b>13.4</b>	11.8-15.0
<b>Income</b>									
Less than \$15,000	6,437	<b>18.3</b>	10.9-25.7	17,747	<b>29.1</b>	23.0-35.3	24,185	<b>25.1</b>	20.4-29.9
\$15,000 - 24,999	12,671	<b>19.0</b>	13.0-24.9	25,348	<b>25.7</b>	20.7-30.7	38,019	<b>23.0</b>	19.1-26.8
\$25,000 - 34,999	13,474	<b>15.9</b>	11.0-20.7	18,466	<b>19.4</b>	14.9-23.8	31,939	<b>17.7</b>	14.5-21.0
\$35,000 - 49,999	13,118	<b>14.1</b>	9.9-18.4	18,499	<b>18.5</b>	14.1-23.0	31,617	<b>16.4</b>	13.3-19.5
\$50,000 - 74,999	11,432	<b>10.7</b>	7.4-14.0	11,227	<b>12.1</b>	8.8-15.4	22,659	<b>11.3</b>	9.0-13.7
\$75,000+	23,573	<b>12.0</b>	9.1-14.8	23,022	<b>15.8</b>	12.6-19.0	46,594	<b>13.6</b>	11.5-15.7

# CHAPTER 18: RESPIRATORY DISEASES

**FIGURE 18.1 PREVALENCE OF LIFETIME ASTHMA BY YEAR: WVBRFSS, 2012-2021**



**Figure 18.2 Lifetime Asthma Prevalence by County: WVBRFSS, 2017-2021**



## CHAPTER 18: RESPIRATORY DISEASES

### Current Asthma

**Definition** Responding “Yes” to the lifetime asthma question, and “Yes” to the question, “Do you still have asthma?”

**Prevalence** **WV: 12.1%** (95% CI: 11.1-13.0)  
**U.S.: 9.7%** (95% CI: 9.5-9.9)

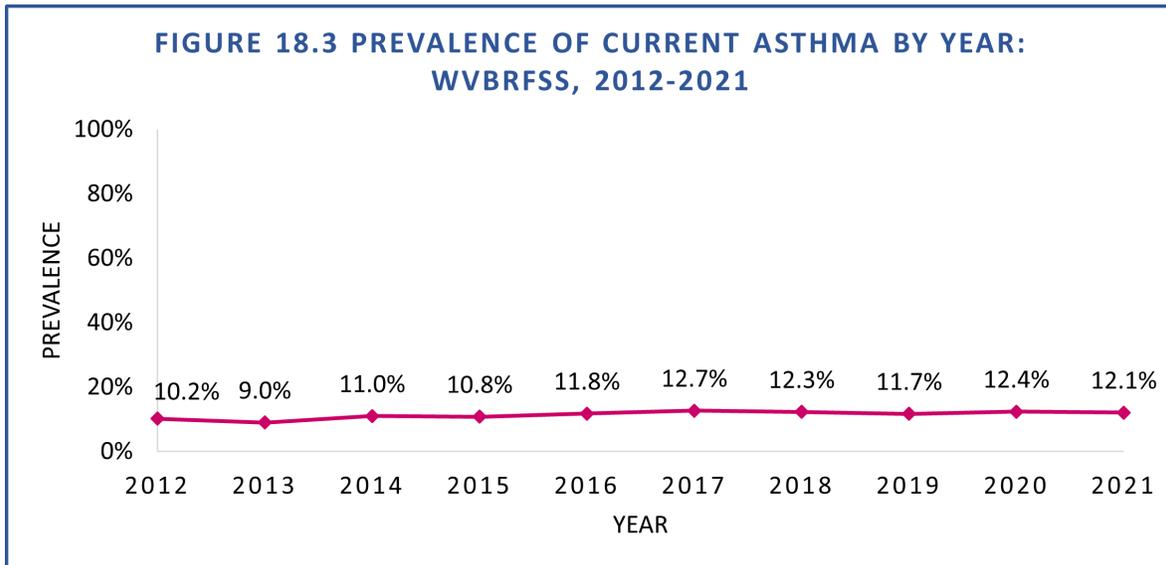
The West Virginia prevalence of current asthma was significantly higher than the U.S. prevalence. West Virginia ranked the fourth highest among 53 BRFSS participants.

**Table 18.2 Current Asthma Prevalence by Demographic Characteristics: WVBRFSS, 2021**

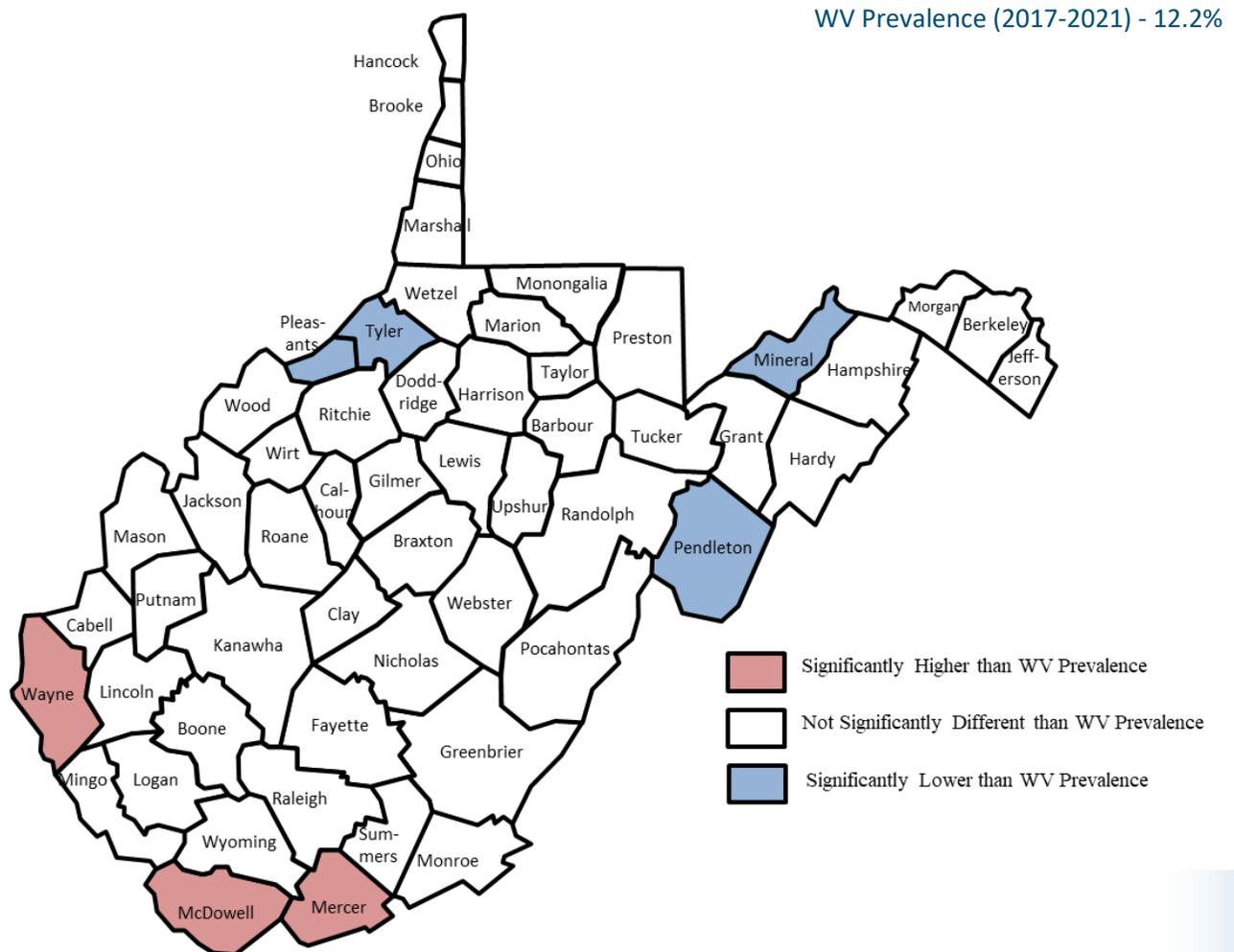
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	60,453	<b>8.7</b>	7.4-9.9	110,688	<b>15.3</b>	13.9-16.8	171,141	<b>12.1</b>	11.1-13.0
<b>Age</b>									
18-24	7,193	<b>9.0</b>	3.9-14.0	12,616	<b>16.5</b>	9.8-23.2	19,810	<b>12.6</b>	8.4-16.8
25-34	8,561	<b>8.1</b>	4.7-11.5	15,757	<b>15.9</b>	11.4-20.5	24,318	<b>11.9</b>	9.1-14.7
35-44	10,556	<b>10.1</b>	6.5-13.7	15,779	<b>15.3</b>	11.2-19.3	26,336	<b>12.7</b>	10.0-15.4
45-54	9,074	<b>8.7</b>	5.5-11.9	18,699	<b>17.9</b>	14.1-21.8	27,772	<b>13.3</b>	10.8-15.9
55-64	11,361	<b>9.5</b>	6.7-12.3	21,430	<b>17.0</b>	14.0-20.0	32,791	<b>13.3</b>	11.3-15.4
65+	13,453	<b>7.7</b>	5.8-9.6	25,294	<b>12.3</b>	10.3-14.3	38,747	<b>10.2</b>	8.8-11.6
<b>Education</b>									
Less than H.S.	11,933	<b>14.5</b>	9.1-19.9	22,269	<b>24.2</b>	18.3-30.0	34,203	<b>19.6</b>	15.6-23.7
H.S. or G.E.D.	25,301	<b>8.4</b>	6.5-10.4	35,288	<b>13.5</b>	11.2-15.8	60,589	<b>10.8</b>	9.3-12.3
Some Post-H.S.	14,094	<b>7.9</b>	5.5-10.4	35,277	<b>16.3</b>	13.5-19.1	49,371	<b>12.5</b>	10.7-14.4
College Graduate	8,637	<b>6.5</b>	4.7-8.3	17,693	<b>11.8</b>	9.7-13.8	26,330	<b>9.3</b>	7.9-10.7
<b>Income</b>									
Less than \$15,000	5,776	<b>16.4</b>	9.2-23.6	14,656	<b>24.3</b>	18.5-30.1	20,432	<b>21.4</b>	16.9-25.9
\$15,000 - 24,999	8,233	<b>12.4</b>	7.8-17.1	20,042	<b>20.5</b>	15.9-25.1	28,276	<b>17.2</b>	13.9-20.6
\$25,000 - 34,999	9,248	<b>10.9</b>	7.0-14.8	14,672	<b>15.4</b>	11.4-19.5	23,920	<b>13.3</b>	10.5-16.1
\$35,000 - 49,999	7,580	<b>8.2</b>	4.8-11.6	15,198	<b>15.3</b>	11.0-19.6	22,778	<b>11.9</b>	9.1-14.7
\$50,000 - 74,999	7,272	<b>6.8</b>	4.0-9.6	8,886	<b>9.6</b>	6.6-12.6	16,158	<b>8.1</b>	6.0-10.1
\$75,000+	11,616	<b>5.9</b>	4.0-7.9	16,214	<b>11.2</b>	8.4-13.9	27,830	<b>8.2</b>	6.5-9.8

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

# CHAPTER 18: RESPIRATORY DISEASES



**Figure 18.4 Current Asthma Prevalence by County: WVBRFSS, 2017-2021**



## CHAPTER 19: RESPIRATORY DISEASES

### Chronic Obstructive Pulmonary Disease

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

**Prevalence** **WV: 13.1%** (95% CI: 12.2-14.0)  
**U.S.: 6.4%** (95% CI: 6.3-6.6)  
 The prevalence of chronic obstructive pulmonary disease (COPD) was significantly higher in West Virginia than in the U.S. West Virginia ranked the highest among 53 BRFSS participants.

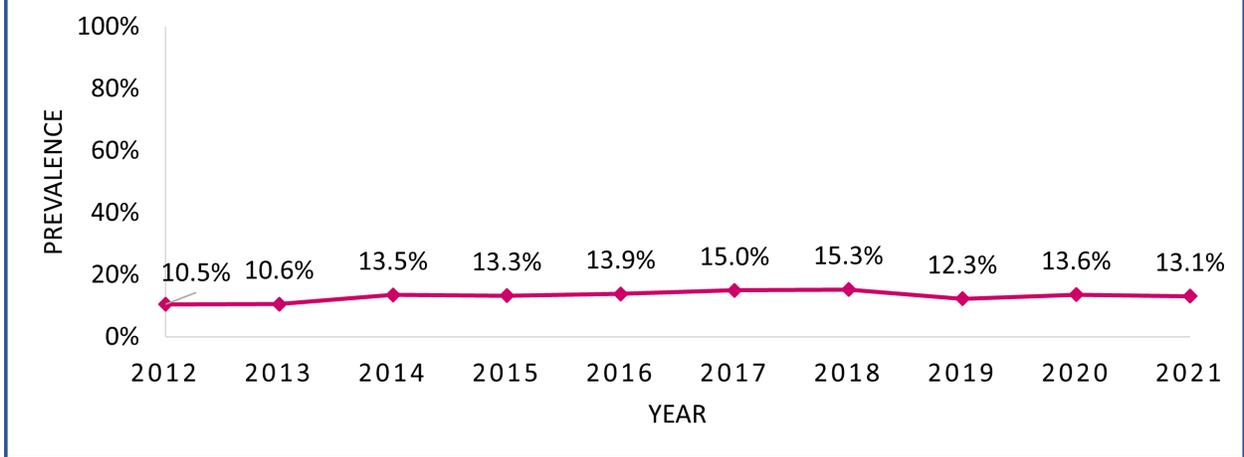
**Table 19.1 Chronic Obstructive Pulmonary Disease (COPD) Prevalence by Demographic Characteristics: WVBRFSS, 2021**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	82,265	<b>11.8</b>	10.5-13.1	103,920	<b>14.4</b>	13.0-15.7	186,185	<b>13.1</b>	12.2-14.0
<b>Age</b>									
18-24	3,002	<b>3.7*</b>	0.2-7.1	862	<b>1.1*</b>	0.0-2.8	3,864	<b>2.4*</b>	0.5-4.4
25-34	5,915	<b>5.6</b>	2.5-8.6	4,726	<b>4.7*</b>	1.2-8.3	10,642	<b>5.2</b>	2.9-7.5
35-44	4,994	<b>4.8</b>	2.3-7.2	11,489	<b>11.1</b>	7.4-14.8	16,483	<b>7.9</b>	5.7-10.1
45-54	9,631	<b>9.3</b>	6.2-12.4	18,629	<b>17.8</b>	13.9-21.7	28,261	<b>13.5</b>	11.0-16.1
55-64	21,544	<b>17.9</b>	14.5-21.3	30,450	<b>24.1</b>	20.5-27.6	51,994	<b>21.1</b>	18.6-23.5
65+	37,179	<b>21.5</b>	18.5-24.5	37,041	<b>18.0</b>	15.6-20.4	74,219	<b>19.6</b>	17.7-21.5
<b>Education</b>									
Less than H.S.	20,619	<b>25.0</b>	18.9-31.1	27,980	<b>30.2</b>	24.0-36.4	48,599	<b>27.7</b>	23.3-32.1
H.S. or G.E.D.	35,776	<b>11.9</b>	9.9-13.8	40,914	<b>15.6</b>	13.4-17.8	76,690	<b>13.6</b>	12.1-15.1
Some Post-H.S.	19,581	<b>11.1</b>	8.5-13.7	25,260	<b>11.6</b>	9.5-13.7	44,842	<b>11.4</b>	9.8-13.0
College Graduate	5,892	<b>4.4</b>	3.1-5.8	9,698	<b>6.4</b>	5.1-7.8	15,590	<b>5.5</b>	4.5-6.5
<b>Income</b>									
Less than \$15,000	9,501	<b>26.8</b>	18.8-34.8	18,373	<b>30.1</b>	23.8-36.5	27,874	<b>28.9</b>	23.9-33.9
\$15,000 - 24,999	16,231	<b>24.3</b>	18.4-30.1	25,008	<b>25.3</b>	20.6-30.1	41,238	<b>24.9</b>	21.2-28.6
\$25,000 - 34,999	15,805	<b>18.7</b>	14.2-23.2	16,914	<b>17.8</b>	13.3-22.2	32,718	<b>18.2</b>	15.0-21.4
\$35,000 - 49,999	10,180	<b>11.0</b>	7.5-14.4	13,417	<b>13.5</b>	10.1-16.8	23,597	<b>12.3</b>	9.9-14.7
\$50,000 - 74,999	10,140	<b>9.5</b>	6.6-12.3	6,513	<b>7.0</b>	4.5-9.5	16,652	<b>8.3</b>	6.4-10.2
\$75,000+	6,848	<b>3.5</b>	2.1-4.9	8,168	<b>5.6</b>	3.8-7.4	15,016	<b>4.4</b>	3.3-5.5

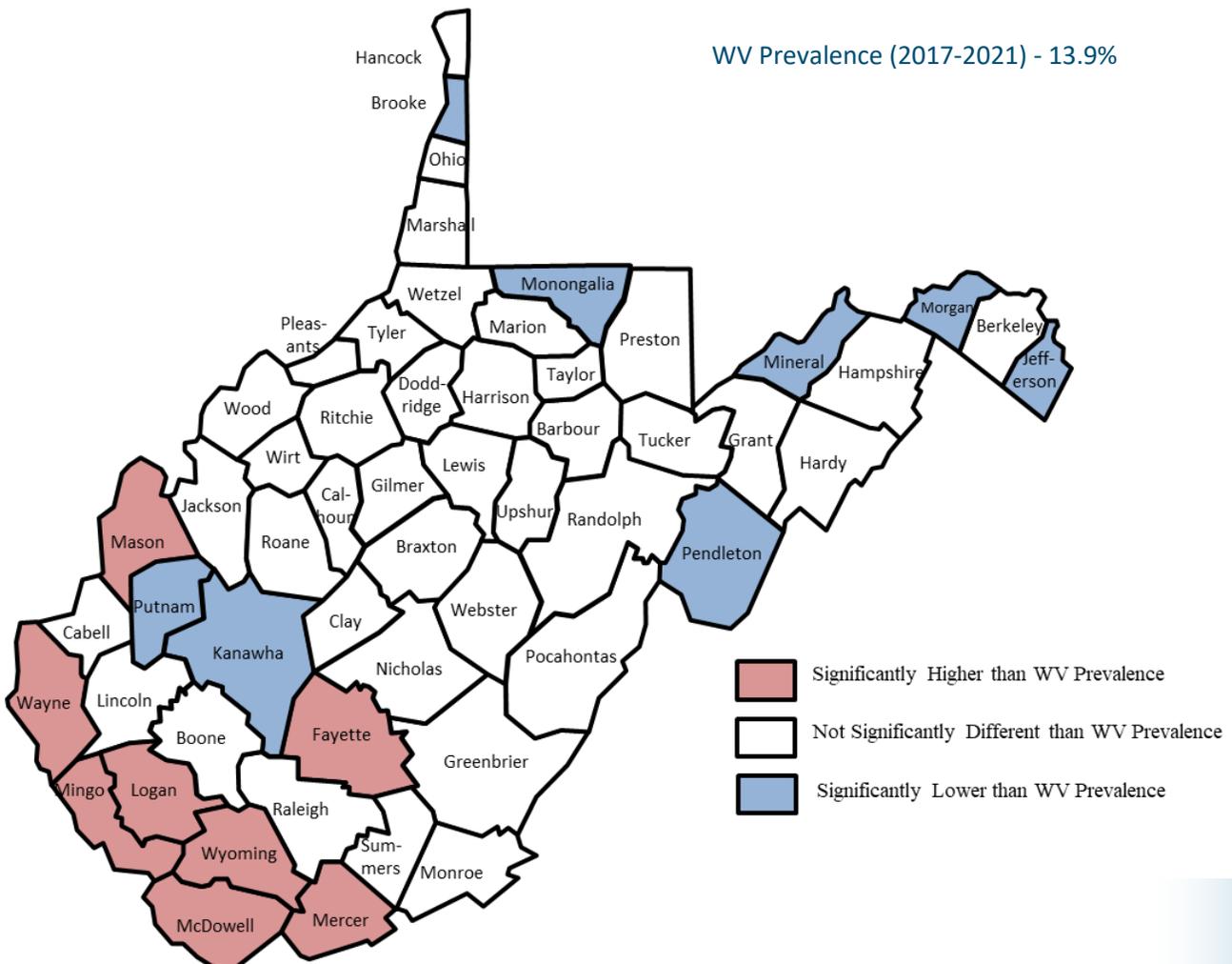
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

# CHAPTER 19: RESPIRATORY DISEASES

**FIGURE 19.1 PREVALENCE OF COPD BY YEAR: WVBRFSS, 2012-2021**



**Figure 19.6 Prevalence of Chronic Obstructive Pulmonary Disease (COPD) by County: WVBRFSS, 2017-2021**



## 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: 37.4%** (95% CI: 36.0-38.8)  
**U.S.: 25.2%** (95% CI: 24.9-25.4)

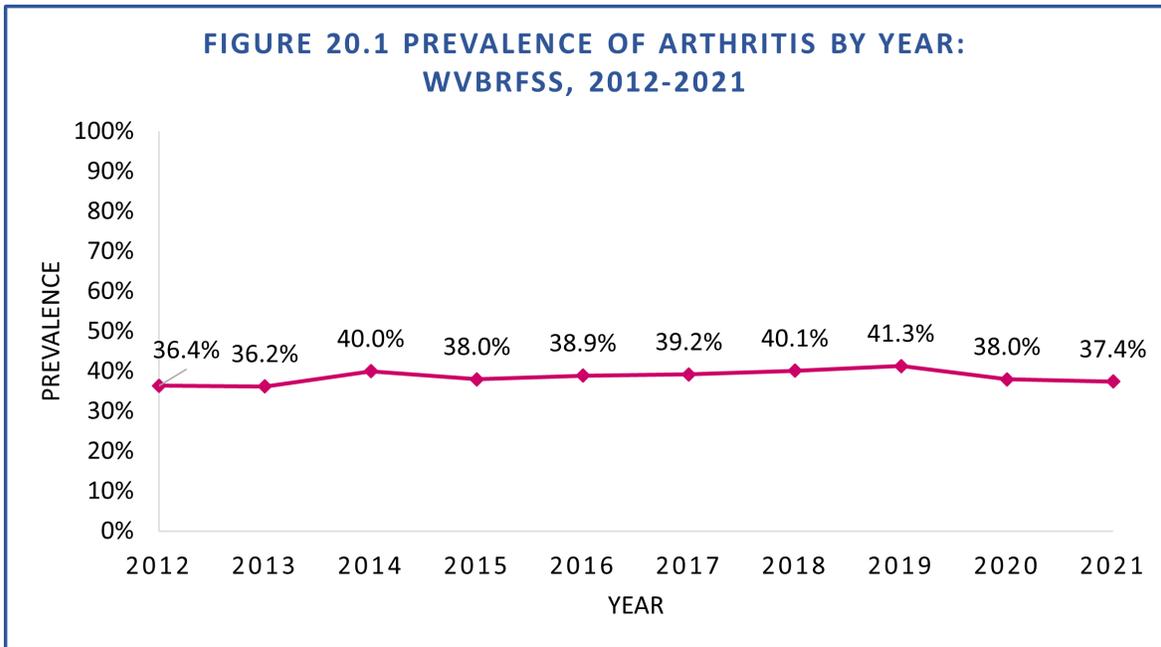
The West Virginia prevalence of arthritis was significantly higher than the United States prevalence. West Virginia ranked the highest among 53 BRFSS participants.

**Table 20.1 Prevalence of Arthritis by Demographic Characteristics: WVBRFSS, 2021**

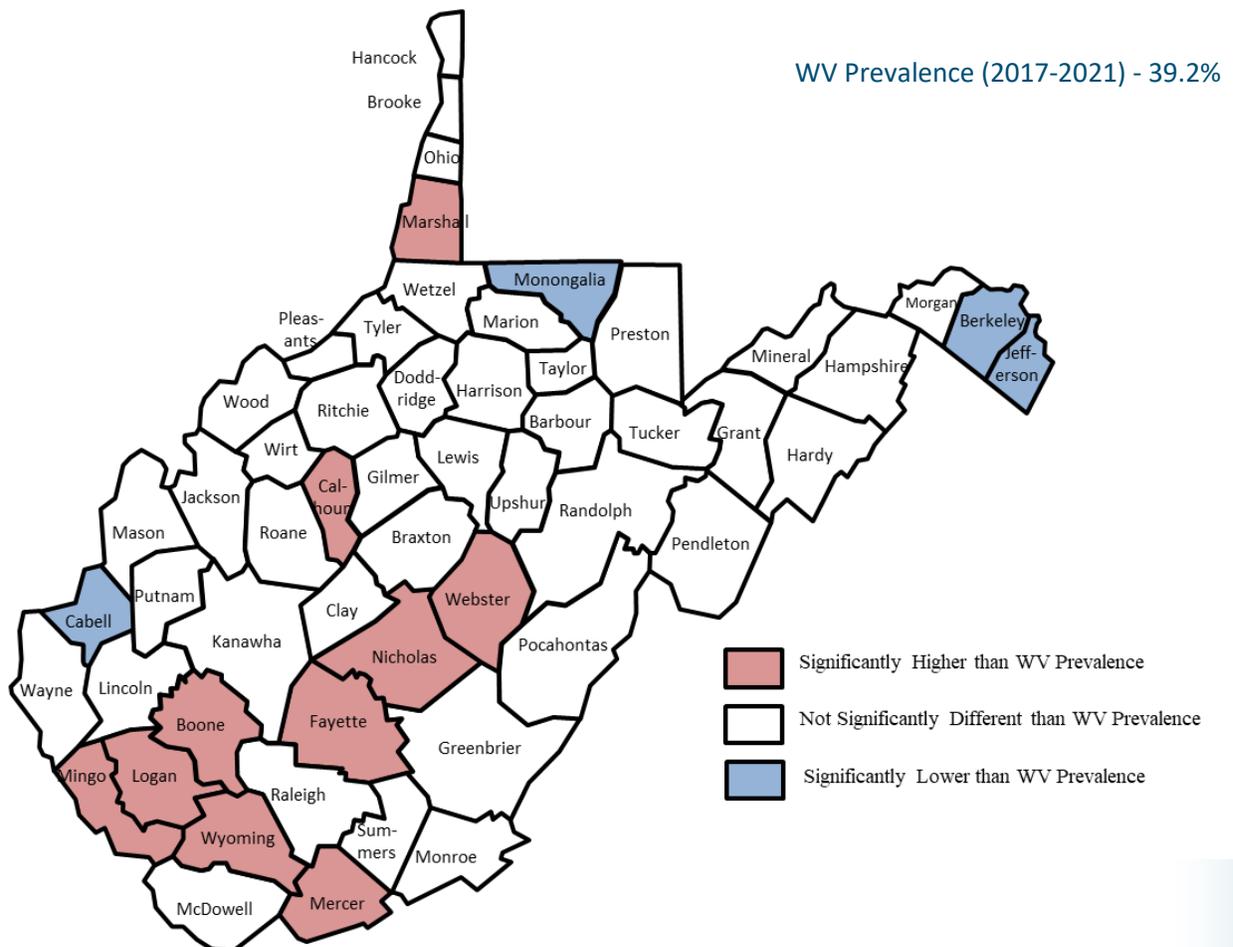
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	231,807	<b>33.2</b>	31.3-35.2	299,760	<b>41.4</b>	39.5-43.3	531,566	<b>37.4</b>	36.0-36.8
<b>Age</b>									
18-24	4,324	<b>5.3*</b>	1.3-9.2	2,765	<b>3.6*</b>	0.4-6.9	7,089	<b>4.5</b>	1.9-7.0
25-34	10,599	<b>10.0</b>	6.2-13.8	16,863	<b>17.0</b>	11.8-22.1	27,462	<b>13.4</b>	10.2-16.6
35-44	22,442	<b>21.5</b>	16.7-26.4	22,615	<b>21.9</b>	17.3-26.4	45,057	<b>21.7</b>	18.4-25.0
45-54	41,858	<b>40.2</b>	34.9-45.6	45,767	<b>43.7</b>	38.9-48.6	87,625	<b>42.0</b>	38.4-45.6
55-64	56,370	<b>47.0</b>	42.7-51.4	72,444	<b>57.5</b>	53.6-61.4	128,813	<b>52.4</b>	49.5-55.4
65+	95,428	<b>54.7</b>	51.2-58.2	136,643	<b>66.3</b>	63.4-69.2	232,071	<b>61.0</b>	58.7-63.2
<b>Education</b>									
Less than H.S.	35,999	<b>43.4</b>	35.7-51.1	52,746	<b>56.7</b>	49.7-63.8	88,745	<b>50.4</b>	45.2-55.7
H.S. or G.E.D.	98,887	<b>32.8</b>	29.8-35.8	115,041	<b>43.8</b>	40.6-47.1	213,928	<b>37.9</b>	35.7-40.2
Some Post-H.S.	58,189	<b>32.9</b>	29.1-36.8	86,110	<b>39.7</b>	36.2-43.1	144,299	<b>36.7</b>	34.1-39.2
College Graduate	37,438	<b>28.2</b>	25.1-31.3	45,253	<b>30.2</b>	27.4-33.0	82,690	<b>29.3</b>	27.2-31.3
<b>Income</b>									
Less than \$15,000	19,143	<b>54.6</b>	45.1-64.2	35,157	<b>57.8</b>	50.7-64.9	54,300	<b>56.7</b>	51.0-62.3
\$15,000 - 24,999	28,883	<b>43.2</b>	36.2-50.2	48,018	<b>48.8</b>	43.2-54.5	76,901	<b>46.6</b>	42.2-50.9
\$25,000 - 34,999	37,026	<b>43.8</b>	37.7-49.9	47,467	<b>50.0</b>	44.4-55.6	84,492	<b>47.1</b>	42.9-51.2
\$35,000 - 49,999	35,454	<b>38.0</b>	32.6-43.4	41,764	<b>41.9</b>	36.8-47.0	77,218	<b>40.0</b>	36.3-43.7
\$50,000 - 74,999	32,984	<b>31.0</b>	26.2-35.8	35,816	<b>38.5</b>	33.3-43.8	68,800	<b>34.5</b>	30.9-38.1
\$75,000+	45,528	<b>23.1</b>	20.0-26.2	37,671	<b>25.9</b>	22.5-29.3	83,199	<b>24.3</b>	22.0-26.6

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

# CHAPTER 20: ARTHRITIS



**Figure 20.2 Arthritis Prevalence by County: WVBRFSS, 2017-2021**



## Arthritis Limitation

**Definition** Reported having been told they have arthritis and responding “Yes” to the question, “Are you now limited in any way in any of your usual activities because of arthritis or joint symptoms?”

**Prevalence** **WV: 46.2%** (95% CI: 44.0-48.0)  
**U.S.: 42.5%** (95% CI: 41.9-43.0)  
 The West Virginia prevalence of activity limitations due to arthritis was significantly higher than the U.S. prevalence. West Virginia ranked the ninth highest among 53 BRFSS participants.

**Table 20.2 Prevalence of Arthritis Limitation by Demographic Characteristics: WVBRFSS, 2021**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	93,080	<b>40.5</b>	37.1-43.9	150,940	<b>50.5</b>	47.7-53.4	244,020	<b>46.2</b>	44.0-48.3
<b>Age</b>									
18-24	1,525	35.3*	0.1-70.4	.	.	.	1,525	21.5*	0.0-44.3
25-34	4,176	39.4*	19.2-59.6	7,442	44.1*	27.2-61.1	11,618	42.3*	29.3-55.3
35-44	7,949	35.4*	23.4-47.4	14,322	64.0*	53.1-75.0	22,271	49.7	41.0-58.4
45-54	14,530	34.7	26.5-42.9	26,694	58.3	50.9-65.7	41,224	47.0	41.3-52.8
55-64	29,329	52.2	45.8-58.6	39,310	54.4	49.0-59.9	68,639	53.5	49.3-57.6
65+	35,300	37.7	33.0-42.3	61,724	45.4	41.6-49.2	97,025	42.2	39.3-45.2
<b>Education</b>									
Less than H.S.	15,313	43.4*	32.6-54.3	28,276	53.6	44.9-62.4	43,589	49.5	42.7-56.4
H.S. or G.E.D.	41,329	42.0	36.8-47.2	57,401	50.2	45.7-54.6	98,730	46.4	43.0-49.8
Some Post-H.S.	24,461	42.2	35.5-48.8	43,543	50.8	45.7-55.8	68,004	47.3	43.2-51.4
College Graduate	11,302	30.3	24.6-36.1	21,178	46.8	41.6-52.0	32,481	39.4	35.5-43.3
<b>Income</b>									
Less than \$15,000	9,839	51.9*	38.8-65.1	23,400	66.8	58.6-75.1	33,239	61.6	54.4-68.8
\$15,000 - 24,999	12,972	44.9	35.0-54.8	28,432	59.4	52.5-66.4	41,404	54.0	48.2-59.8
\$25,000 - 34,999	15,243	42.4	33.3-51.4	26,119	55.1	47.7-62.4	41,362	49.6	43.8-55.3
\$35,000 - 49,999	13,587	38.7	30.3-47.0	17,927	42.9	35.6-50.3	31,514	41.0	35.4-46.5
\$50,000 - 74,999	11,703	35.5	27.1-43.9	14,591	41.0	33.1-49.0	26,294	38.4	32.6-44.1
\$75,000+	15,144	33.4	26.4-40.3	14,444	38.3	31.3-45.4	29,588	35.6	30.7-40.6

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

## CHAPTER 20: ARTHRITIS

### Work Limitations

**Definition** Reported having been told they have arthritis and responding “Yes” to the question, “Do arthritis or joint symptoms now affect whether you work, the type of work you do, or the amount of work you do?”

**Prevalence** **WV: 34.1%** (95% CI: 32.0-36.2)  
**U.S.: 31.6%** (95% CI: 31.0-32.2)  
 The West Virginia prevalence of work limitations due to arthritis was slightly higher than the U.S. prevalence. West Virginia ranked the 11<sup>th</sup> highest among 53 BRFSS participants.

**Table 20.3 Prevalence of Work Limitation by Demographic Characteristics: WVBRFSS, 2021**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	76,415	<b>33.3</b>	29.9-36.6	103,064	<b>34.8</b>	32.1-37.5	179,479	<b>34.1</b>	32.0-36.2
<b>Age</b>									
18-24	934	21.6*	0.0-50.5	1,952	70.6*	32.3-100.0	2,886	40.7*	11.9-69.5
25-34	4,581	43.2*	23.3-63.2	5,302	33.8*	18.3-49.2	9,883	37.6*	25.1-50.1
35-44	8,273	37.5*	24.8-50.3	10,895	48.2*	36.2-60.1	19,168	42.9	34.2-51.6
45-54	19,007	45.6	36.7-54.5	22,889	50.1	42.6-57.6	41,896	48.0	42.2-53.7
55-64	22,438	40.0	33.6-46.4	30,843	43.0	37.6-48.4	53,281	41.7	37.5-45.8
65+	21,007	22.3	18.0-26.6	30,666	22.7	19.5-25.9	51,673	22.5	19.9-25.1
<b>Education</b>									
Less than H.S.	17,267	49.3*	38.1-60.4	15,482	30.2	22.3-38.1	32,749	37.9	31.2-44.7
H.S. or G.E.D.	35,432	36.2	31.1-41.2	43,893	38.4	34.0-42.8	79,324	37.4	34.1-40.7
Some Post-H.S.	15,819	27.2	21.3-33.1	29,851	34.9	30.0-39.8	45,671	31.8	28.0-35.6
College Graduate	7,197	19.3	14.4-24.3	13,563	30.3	25.3-35.2	20,760	25.3	21.7-28.9
<b>Income</b>									
Less than \$15,000	10,305	53.8*	40.9-66.8	15,607	45.1	36.3-53.8	25,912	48.2	40.9-55.5
\$15,000 - 24,999	11,081	40.2*	30.1-50.3	21,270	44.3	37.3-51.3	32,350	42.8	37.0-48.6
\$25,000 - 34,999	13,568	36.8	27.9-45.7	18,188	38.8	31.6-46.0	31,755	37.9	32.3-43.5
\$35,000 - 49,999	11,912	33.8	25.6-42.1	14,024	33.8	26.7-41.0	25,936	33.8	28.4-39.2
\$50,000 - 74,999	9,046	27.4	19.3-35.6	10,476	29.3	21.9-36.7	19,522	28.4	22.9-33.9
\$75,000+	10,519	23.1	16.8-29.5	9,459	25.2	18.8-31.7	19,978	24.1	19.5-28.6

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

## CHAPTER 21: 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: 4.0-5.1)

**U.S.: 3.1%** (95% CI: 3.0-3.2)

The West Virginia prevalence of kidney disease was significantly higher than the United States prevalence. West Virginia ranked the highest among 53 BRFSS participants.

**Table 21.1 Prevalence of Kidney Disease by Demographic Characteristics: WVBRFSS, 2021**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	25,760	<b>3.7</b>	3.0-4.4	39,203	<b>5.4</b>	4.6-6.2	64,963	<b>4.6</b>	4.0-5.1
<b>Age</b>									
18-24	1,076	<b>1.3*</b>	0.0-3.8	291	<b>0.4*</b>	0.0-1.1	1,367	<b>0.9*</b>	0.0-2.2
25-34	.	.	.	767	<b>0.8*</b>	0.0-1.9	767	<b>0.4*</b>	0.0-0.9
35-44	663	<b>0.6*</b>	0.0-1.4	4,954	<b>4.8</b>	2.3-7.2	5,617	<b>2.7</b>	1.4-4.0
45-54	2,334	<b>2.2*</b>	0.4-4.1	4,272	<b>4.1</b>	2.2-6.0	6,606	<b>3.2</b>	1.8-4.5
55-64	5,213	<b>4.3</b>	2.5-6.2	7,101	<b>5.6</b>	3.8-7.4	12,314	<b>5.0</b>	3.7-6.3
65+	16,474	<b>9.5</b>	7.5-11.5	21,528	<b>10.5</b>	8.6-12.4	38,002	<b>10.0</b>	8.7-11.4
<b>Education</b>									
Less than H.S.	5,281	<b>6.3*</b>	2.5-10.2	6,931	<b>7.6</b>	4.2-10.9	12,212	<b>7.0</b>	4.4-9.5
H.S. or G.E.D.	11,086	<b>3.7</b>	2.6-4.7	15,053	<b>5.7</b>	4.4-7.0	26,139	<b>4.6</b>	3.8-5.5
Some Post-H.S.	5,805	<b>3.3</b>	2.1-4.4	11,634	<b>5.4</b>	3.9-6.8	17,439	<b>4.4</b>	3.5-5.4
College Graduate	3,588	<b>2.7</b>	1.8-3.6	5,400	<b>3.6</b>	2.6-4.6	8,988	<b>3.2</b>	2.5-3.9
<b>Income</b>									
Less than \$15,000	1,573	<b>4.5*</b>	0.3-8.6	6,284	<b>10.5</b>	6.7-14.3	7,858	<b>8.2</b>	5.4-11.1
\$15,000 - 24,999	2,829	<b>4.3</b>	2.1-6.5	7,363	<b>7.5</b>	4.8-10.2	10,191	<b>6.2</b>	4.3-8.1
\$25,000 - 34,999	3,589	<b>4.3</b>	1.8-6.7	7,279	<b>7.6</b>	5.0-10.3	10,869	<b>6.0</b>	4.2-7.9
\$35,000 - 49,999	3,804	<b>4.1</b>	2.1-6.0	5,282	<b>5.3</b>	3.2-7.4	9,086	<b>4.7</b>	3.3-6.2
\$50,000 - 74,999	3,653	<b>3.4</b>	1.9-4.9	2,866	<b>3.1</b>	1.6-4.6	6,519	<b>3.3</b>	2.2-4.3
\$75,000+	4,279	<b>2.2</b>	1.3-3.1	4,183	<b>2.9</b>	1.6-4.2	8,462	<b>2.5</b>	1.7-3.2

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



## CHAPTER 22: 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: 27.5%** (95% CI: 26.1-28.8)  
**U.S.: 19.5%** (95% CI: 19.2-19.7)

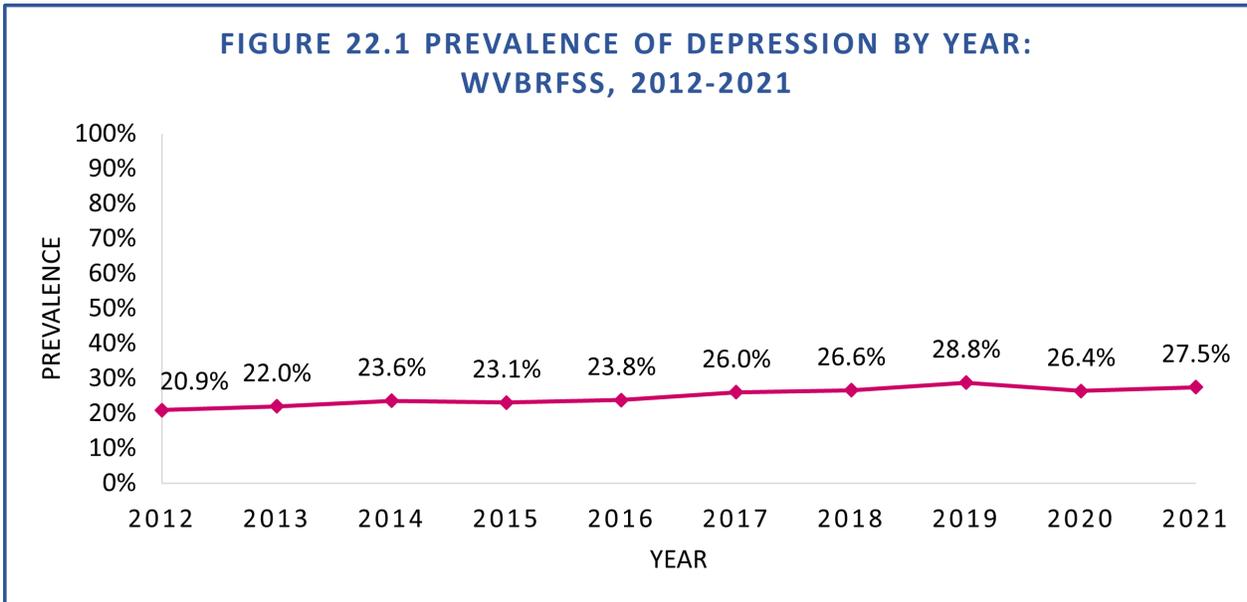
The West Virginia prevalence of ever diagnosed with depression was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 53 BRFSS participants.

**Table 22.1 Prevalence of Ever Diagnosed with Depression by Demographic Characteristics: WVBRFSS, 2021**

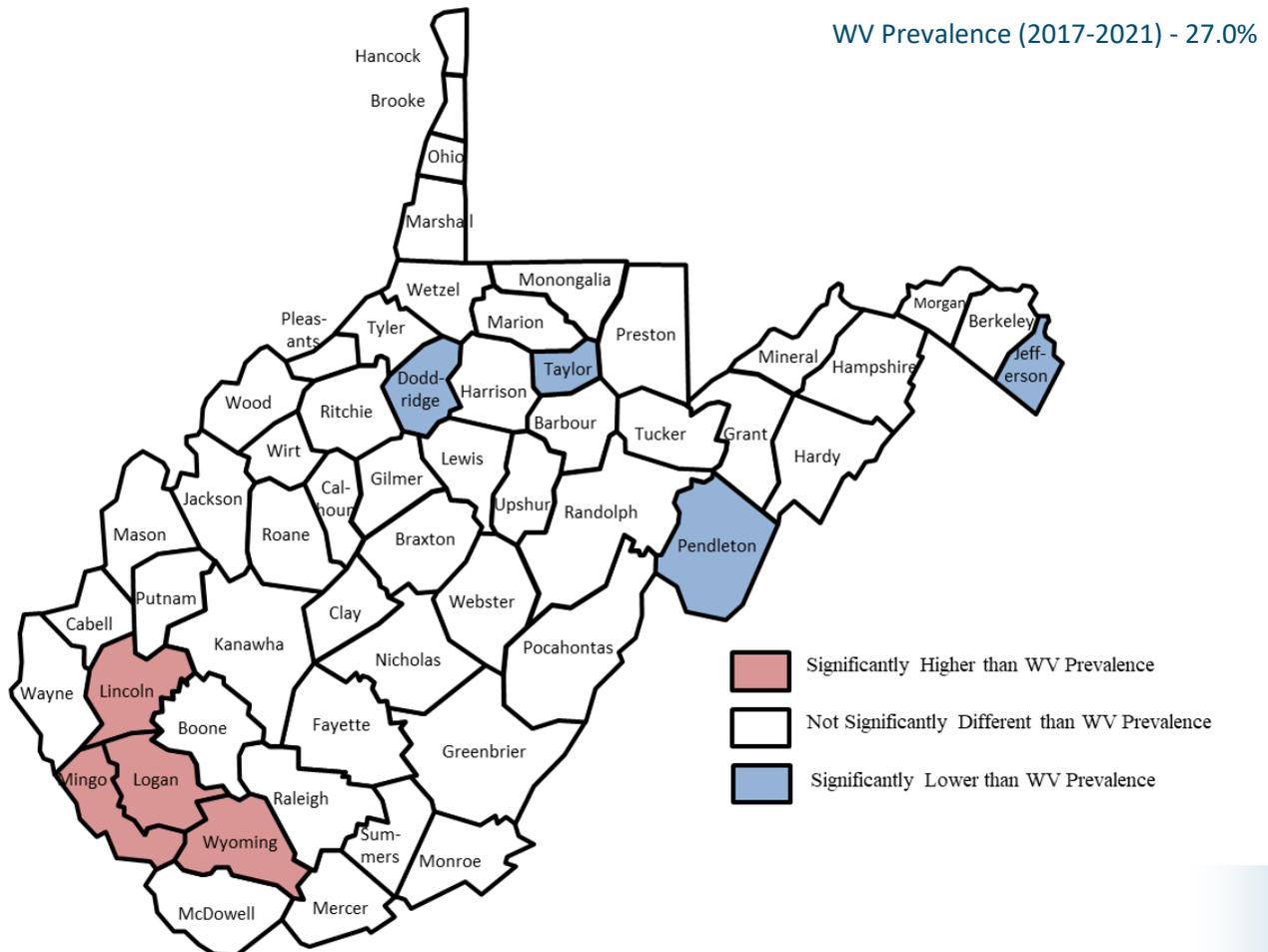
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	138,498	<b>19.9</b>	18.1-21.7	251,963	<b>34.8</b>	32.8-36.7	390,461	<b>27.5</b>	26.1-28.8
<b>Age</b>									
18-24	23,673	<b>28.9</b>	20.7-37.1	33,446	<b>43.8</b>	34.9-52.7	57,119	<b>36.1</b>	30.0-42.2
25-34	20,074	<b>18.9</b>	14.1-23.8	40,720	<b>41.0</b>	34.9-47.0	60,795	<b>29.6</b>	25.6-33.6
35-44	26,610	<b>25.4</b>	20.2-30.6	41,499	<b>39.9</b>	34.6-45.2	68,109	<b>32.6</b>	28.9-36.4
45-54	21,243	<b>20.5</b>	16.2-24.8	40,718	<b>38.9</b>	34.1-43.7	61,961	<b>29.8</b>	26.4-33.1
55-64	22,314	<b>18.6</b>	15.1-22.1	46,243	<b>36.5</b>	32.6-40.3	68,557	<b>27.8</b>	25.1-30.4
65+	24,183	<b>13.9</b>	11.5-16.3	47,643	<b>23.1</b>	20.4-25.7	71,826	<b>18.9</b>	17.1-20.7
<b>Education</b>									
Less than H.S.	26,976	<b>32.7</b>	25.0-40.3	37,537	<b>40.3</b>	33.4-47.1	64,513	<b>36.7</b>	31.6-41.8
H.S. or G.E.D.	57,998	<b>19.2</b>	16.5-21.9	84,923	<b>32.3</b>	29.1-35.5	142,920	<b>25.3</b>	23.2-27.4
Some Post-H.S.	32,202	<b>18.3</b>	14.9-21.7	89,048	<b>41.0</b>	37.4-44.7	121,249	<b>30.9</b>	28.2-33.5
College Graduate	21,231	<b>16.0</b>	13.3-18.6	40,295	<b>26.8</b>	23.9-29.7	61,526	<b>21.7</b>	19.7-23.7
<b>Income</b>									
Less than \$15,000	13,740	<b>39.3</b>	29.9-48.8	31,742	<b>52.1</b>	45.1-59.1	45,482	<b>47.4</b>	41.8-53.1
\$15,000 - 24,999	22,884	<b>34.3</b>	27.3-41.2	43,870	<b>44.5</b>	38.8-50.1	66,755	<b>40.4</b>	35.9-44.8
\$25,000 - 34,999	18,809	<b>22.2</b>	16.7-27.7	38,662	<b>40.7</b>	35.0-46.3	57,471	<b>32.0</b>	28.0-36.0
\$35,000 - 49,999	16,512	<b>17.7</b>	13.1-22.3	33,178	<b>33.2</b>	28.2-38.2	49,690	<b>25.7</b>	22.3-29.2
\$50,000 - 74,999	17,358	<b>16.3</b>	12.0-20.6	30,048	<b>32.3</b>	27.0-37.6	47,406	<b>23.8</b>	20.3-27.2
\$75,000+	22,830	<b>11.6</b>	9.0-14.2	37,992	<b>26.1</b>	22.3-29.9	60,822	<b>17.8</b>	15.5-20.0

# CHAPTER 22: DEPRESSION

**FIGURE 22.1 PREVALENCE OF DEPRESSION BY YEAR: WVBRFSS, 2012-2021**



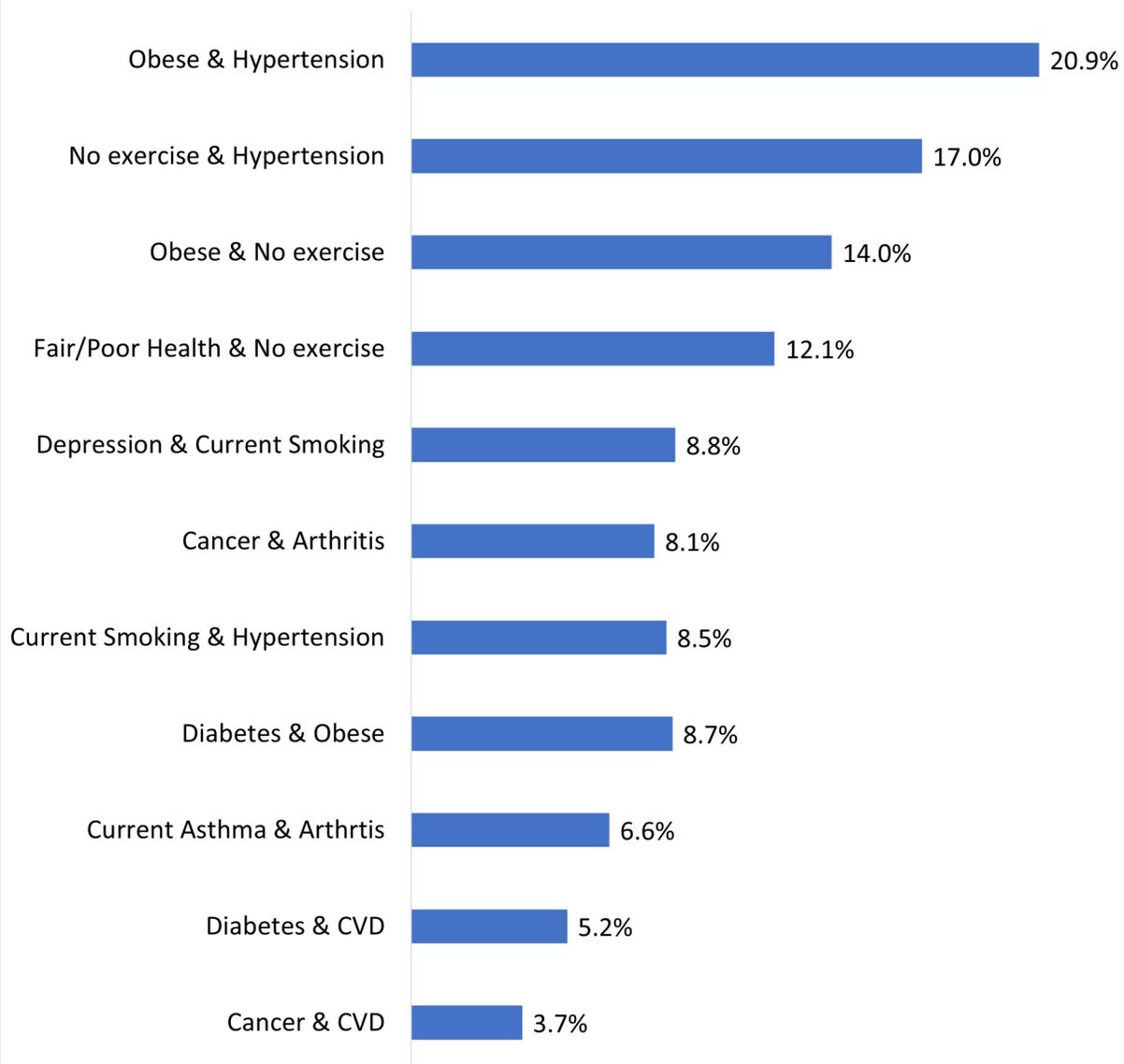
**Figure 22.2 Prevalence of Ever Diagnosed with Depression by County: WVBRFSS, 2017-2021**



## 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 2021 (see Figure 25.1 and Table 25.1). For definitions of risk factors and health conditions, please refer to appropriate chapter in this report.

**Figure 23.1 Comorbidities: The Prevalence of Multiple Risk Behaviors and/or Health Conditions Among Adults: WVBRFSS, 2021**



## CHAPTER 23: COMORBIDITIES

Table 23.1 Comorbidities: The Prevalence of Multiple Risk Behaviors and/or Health Conditions Among Adults: WVBRFSS, 2021

% of Total Population	Fair/Poor Health	No Health Coverage	No Exercise	Obese	Current Smoker	CVD	Diabetes	Current Asthma	Cancer	Arthritis	Hypertension	Depression
Fair/Poor Health	22.9 (21.7-24.1)	1.0 (0.7-1.3)	12.2 (11.2-13.1)	11.4 (10.5-12.4)	6.9 (6.1-7.7)	7.8 (7.1-8.5)	7.7 (7.0-8.0)	5.1 (4.5-5.7)	5.3 (4.7-5.9)	14.4 (13.4-15.3)	15.0 (14.0-16.0)	10.0 (9.1-10.8)
No Health Coverage	1.0 (0.7-1.3)	6.1 (5.3-6.9)	1.7 (1.2-2.1)	2.3 (1.8-2.7)	2.4 (1.9-2.9)	0.5 (0.3-0.7)	0.4 (0.2-0.6)	0.5 (0.3-0.8)	0.3 (0.1-0.5)	1.6 (1.2-2.0)	1.9 (1.5-2.4)	2.0 (1.5-2.5)
No Exercise	12.2 (11.2-13.1)	1.7 (1.2-2.1)	30.5 (29.2-31.9)	15.0 (13.9-16.1)	8.4 (7.6-9.3)	6.4 (5.8-7.1)	7.8 (7.1-8.5)	4.7 (4.1-5.3)	5.5 (4.9-6.1)	15.3 (14.3-16.3)	17.0 (16.0-18.1)	10.6 (9.7-11.5)
Obese	11.4 (10.5-12.4)	2.3 (1.8-2.7)	15.0 (13.9-16.1)	40.6 (39.1-42.1)	8.0 (7.1-8.9)	6.4 (5.7-7.1)	9.4 (8.5-10.2)	6.2 (5.5-6.9)	5.3 (4.7-5.9)	17.3 (16.2-18.3)	22.5 (21.3-23.8)	13.0 (12.0-14.0)
Current Smoker	6.9 (6.1-7.7)	2.4 (1.9-2.9)	8.4 (7.6-9.3)	8.0 (7.1-8.9)	22.0 (20.7-23.3)	4.0 (3.4-4.6)	3.2 (2.7-3.8)	3.5 (2.9-4.1)	2.6 (2.1-3.0)	8.6 (7.8-9.5)	8.8 (7.9-9.6)	9.1 (8.1-10.0)
CVD	7.8 (7.1-8.5)	0.5 (0.3-0.7)	6.4 (5.8-7.1)	6.4 (5.7-7.1)	4.0 (3.4-4.6)	14.2 (13.3-15.2)	5.2 (4.7-5.8)	3.1 (2.6-3.6)	3.7 (3.2-4.2)	9.2 (8.4-10.0)	10.8 (10.0-11.7)	4.9 (4.3-5.5)
Diabetes	7.7 (7.0-8.0)	0.4 (0.2-0.6)	7.8 (7.1-8.5)	9.4 (8.5-10.2)	3.2 (2.7-3.8)	5.2 (4.7-5.8)	15.9 (14.9-16.9)	2.7 (2.3-3.1)	3.7 (3.2-4.1)	9.2 (8.4-9.9)	12.2 (11.3-13.0)	4.9 (4.3-5.5)
Current Asthma	5.1 (4.5-5.7)	0.5 (0.3-0.8)	4.7 (4.1-5.3)	6.2 (5.5-6.9)	3.5 (2.9-4.1)	3.1 (2.6-3.6)	2.7 (2.3-3.1)	12.1 (11.1-13.0)	2.0 (1.6-2.4)	6.7 (6.0-7.4)	6.5 (5.8-7.2)	5.8 (5.0-6.5)
Cancer	5.3 (4.7-5.9)	0.3 (0.1-0.5)	5.5 (4.9-6.1)	5.3 (4.7-5.9)	2.6 (2.1-3.0)	3.7 (3.3-4.2)	3.7 (3.2-4.1)	2.0 (1.6-2.4)	14.1 (13.2-15.0)	8.2 (7.5-8.9)	8.5 (7.8-9.2)	4.3 (3.8-4.9)
Arthritis	14.4 (13.4-15.3)	1.6 (1.2-2.0)	15.3 (14.3-16.3)	17.3 (16.2-18.3)	8.6 (7.8-9.5)	9.2 (8.4-10.0)	9.2 (8.4-9.9)	6.7 (6.0-7.4)	8.2 (7.5-8.9)	37.4 (36.0-38.8)	23.4 (22.2-24.5)	13.5 (12.5-14.4)
Hypertension	15.0 (14.0-16.0)	1.9 (1.5-2.4)	17.0 (16.0-18.1)	22.5 (21.3-23.8)	8.8 (7.9-9.6)	10.8 (10.0-11.7)	12.2 (11.3-13.0)	6.5 (5.8-7.2)	8.5 (7.8-9.2)	23.4 (22.2-24.5)	43.4 (42.0-44.8)	12.9 (11.9-13.9)
Depression	10.0 (9.1-10.8)	2.0 (1.5-2.5)	10.6 (9.7-11.5)	13.0 (12.0-14.0)	9.1 (8.1-10.0)	4.9 (4.3-5.5)	4.9 (4.3-5.5)	5.8 (5.0-6.5)	4.3 (3.8-4.9)	13.5 (12.5-14.4)	12.9 (11.9-13.9)	27.5 (26.1-28.8)

Table interpretation: Each cell represents the percentage of West Virginia adults with **both** of the conditions/risk factors. For example, 6.7% of West Virginia adults have **both** asthma and arthritis.

# Appendices 2021



Appendix A  
Behavioral Risk Factors Prevalence in 50 States, District of Columbia, and Territories  
United States, 2021

State	Fair or Poor		Obesity		Physical Inactivity		Current Asthma		Cardiovascular		Diabetes		Cancer		Arthritis		Depression	
	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank
Alabama	19.4	9	39.9	3	31.5	2	10.1	23	11.6	5	15.1	4	15.0	1	16.4	53	22.4	19
Alaska	14.5	33	33.5	31	20.3	43	9.0	40	6.8	47	8.3	50	9.1	49	16.7	52	19.7	31
Arizona	16.4	20	31.3	39	22.7	34	9.4	35	8.4	22	11.0	28	14.5	3	17.8	51	17.5	42
Arkansas	22.0	5	38.7	6	30.6	4	9.0	41	11.3	6	12.5	14	14.3	4	20.1	50	24.5	6
California	16.2	23	27.6	49	20.1	45	8.8	43	6.4	49	11.6	18	9.6	48	20.4	49	15.2	50
Colorado	13.1	45	25.1	51	16.7	52	10.4	19	5.7	51	7.0	53	11.9	37	20.9	48	20.4	27
Connecticut	12.5	47	30.4	42	22.9	32	10.5	16	7.3	42	10.8	29	11.9	36	20.9	47	18.0	37
Delaware	14.6	32	33.9	28	27.2	11	9.8	26	9.8	13	12.0	17	13.9	8	21.3	46	16.4	48
District of Columbia	13.6	40	24.7	53	15.8	53	11.6	8	5.4	52	7.7	52	8.1	50	22.0	45	20.5	24
Georgia	18.1	14	33.9	27	23.7	27	9.4	34	9.2	17	12.3	15	11.2	43	22.6	44	17.7	39
Guam	16.6	19	33.5	30	20.0	46	4.7	53	8.2	25	11.5	20	2.6	53	22.9	43	9.5	52
Hawaii	12.2	51	25.0	52	20.5	41	8.1	51	6.7	48	9.5	41	9.8	46	23.4	42	11.1	51
Idaho	13.6	41	31.6	37	27.2	12	9.8	27	8.0	27	9.8	36	13.9	9	23.6	41	22.6	17
Illinois	14.9	27	34.1	26	25.9	15	8.7	45	8.2	24	10.8	30	11.9	35	23.7	40	16.9	45
Indiana	16.7	18	36.3	12	24.7	21	10.3	21	9.0	18	12.1	16	12.8	24	23.9	39	24.2	10
Iowa	13.2	44	36.4	11	23.6	28	9.1	38	7.6	33	9.7	37	12.8	25	23.9	38	17.7	38
Kansas	14.7	30	36.0	15	30.5	6	10.6	14	8.9	20	11.1	27	12.7	26	24.2	37	20.6	23
Kentucky	22.6	3	40.3	2	29.4	8	11.7	7	12.0	3	13.8	7	13.1	18	24.2	36	27.0	2
Louisiana	20.3	7	38.6	7	26.5	13	9.7	31	10.2	10	13.6	9	12.1	31	24.3	35	24.5	7
Maine	14.8	28	31.9	35	21.7	37	12.5	2	10.3	9	10.4	34	14.7	2	24.6	34	23.6	11
Maryland	13.7	39	34.3	24	21.1	39	9.4	36	7.4	38	11.1	26	11.2	42	24.7	33	16.6	46
Massachusetts	12.2	53	27.4	50	23.1	30	11.7	6	7.3	40	8.9	44	13.0	21	24.9	32	18.6	35
Michigan	16.2	22	34.4	23	20.2	44	11.5	9	9.6	15	10.8	31	13.1	19	24.9	31	22.6	18
Minnesota	12.2	50	32.4	33	30.9	3	8.8	44	7.4	39	9.0	43	12.3	29	25.0	30	20.5	25
Mississippi	22.5	4	39.1	5	25.3	18	10.0	24	12.4	2	15.2	3	12.8	23	25.0	29	20.0	28
Missouri	17.4	15	37.2	10	21.2	38	9.4	33	9.6	16	11.3	24	13.6	12	25.2	28	22.8	16
Montana	14.4	34	31.8	36	24.2	24	9.7	30	7.8	30	8.9	45	13.5	15	25.4	27	22.8	15
Nebraska	13.9	36	35.9	18	24.2	23	8.2	50	7.1	45	9.6	38	11.7	38	25.4	26	17.5	41
Nevada	18.6	12	31.3	38	20.0	47	9.1	39	7.9	28	11.5	19	12.0	34	26.1	25	17.0	43
New Hampshire	12.2	52	30.6	41	24.1	26	12.1	3	7.8	31	8.7	48	14.1	5	26.7	24	23.4	13
New Jersey	15.0	26	28.2	48	23.0	31	8.9	42	7.3	43	10.3	35	11.2	41	27.1	23	17.5	40
New Mexico	19.1	11	34.6	22	25.8	16	10.6	15	7.3	41	13.2	10	10.2	44	27.1	22	19.8	29
New York	14.6	31	29.1	45	22.3	35	9.8	25	7.5	36	11.4	23	9.6	47	27.3	21	17.0	44
North Carolina	15.3	24	36.0	16	25.5	17	8.7	46	9.8	12	12.7	12	11.6	40	27.3	20	21.3	21
North Dakota	13.0	46	35.2	20	25.9	14	8.4	48	7.7	32	9.5	40	11.6	39	27.5	19	19.5	33
Ohio	16.8	17	37.7	9	28.3	10	10.4	18	10.3	8	12.6	13	13.4	16	27.9	18	22.0	20
Oklahoma	19.9	8	39.4	4	19.9	48	10.9	12	10.5	7	12.8	11	12.1	33	28.0	17	24.4	9
Oregon	14.8	29	30.4	43	24.3	22	11.2	11	8.1	26	9.6	39	13.8	10	28.1	16	24.6	5
Pennsylvania	16.2	21	33.3	32	24.2	25	10.3	22	9.7	14	11.1	25	13.0	22	28.4	15	19.1	34
Puerto Rico	26.8	1	36.0	17	25.0	20	11.4	10	10.1	11	16.7	1	7.4	51	28.7	14	15.3	49
Rhode Island	13.9	37	30.1	44	23.2	29	12.6	1	7.4	37	10.4	33	12.4	28	28.7	13	23.3	14
South Carolina	17.2	16	36.1	14	28.7	9	9.2	37	8.9	19	13.7	8	13.5	13	29.1	12	19.7	30
South Dakota	13.6	42	38.4	8	25.1	19	8.3	49	8.8	21	10.8	32	14.0	7	29.5	11	16.5	47
Tennessee	19.4	10	35.0	21	17.3	51	10.3	20	11.7	4	14.0	6	13.5	14	29.8	10	25.2	4
Texas	18.1	13	36.1	13	17.8	50	8.4	47	7.3	44	11.5	21	9.9	45	29.9	9	18.6	36
Utah	12.4	48	30.9	40	20.9	40	9.7	29	5.8	50	8.0	51	12.3	30	30.1	8	24.5	8
Vermont	12.3	49	29.0	46	17.8	49	11.8	5	7.8	29	8.5	49	13.7	11	30.1	7	25.4	3
Virgin Islands	21.4	6	35.6	19	30.5	5	5.0	52	4.7	53	14.9	5	5.3	52	30.6	6	8.0	53
Virginia	15.0	25	34.2	25	20.3	42	9.8	28	8.2	23	11.5	22	12.6	27	31.1	5	19.6	32
Washington	14.3	35	28.8	47	22.9	33	10.5	17	6.9	46	8.7	47	12.1	32	31.1	4	23.4	12
West Virginia	22.9	2	40.6	1	29.9	7	12.1	4	14.2	1	15.9	2	14.1	6	31.6	3	27.5	1
Wisconsin	13.6	43	33.9	29	46.1	1	10.8	13	7.6	34	9.1	42	13.0	20	32.8	2	20.4	26
Wyoming	13.9	38	32.0	34	21.9	36	9.7	32	7.5	35	8.8	46	13.2	17	37.4	1	21.0	22
<b>United States</b>	<b>16.2</b>		<b>33.0</b>		<b>23.9</b>		<b>9.7</b>		<b>8.3</b>		<b>11.4</b>		<b>11.7</b>		<b>25.2</b>		<b>19.5</b>	

Source: Centers for Disease Control & Prevention, 2021 Behavioral Risk Factor Surveillance System data; West Virginia Department of Health and Human Services Health Statistics Center, 2021

Appendix B  
2017-2021 WV Behavioral Risk Factors and Health Conditions by County

County	Fair or Poor			Poor Physical Health 14+ Days			Poor Mental Health 14+ Days			Health Limited Everyday (30 days)			No Health Care Coverage (18-64)			Difficulty Hearing			Vision Impairment		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
Barbour	29.9	17	NS	23.0	14	NS	20.2	17	NS	16.5	12	NS	8.9*	35	NS	14.5	24	NS	9.2	20	NS
Berkeley	19.1	50	L	15.4	40	NS	17.2	31	NS	11.1	33	NS	10.4	27	NS	8.3	51	L	6.9	42	NS
Boone	36.4	4	H	23.6	12	H	30.5	1	H	13.6	20	NS	8.2	41	NS	16.6	12	NS	10.2	13	NS
Braxton	22.8	39	NS	20.8	20	NS	14.3	46	NS	13.3	22	NS	5.8*	49	NS	13.3	30	NS	8.9	22	NS
Brooke	21.9	40	NS	14.6	45	NS	17.4	29	NS	7.7	48	NS	11.9*	16	NS	12.2	38	NS	6.9	41	NS
Cabell	21.7	42	NS	14.1	46	L	18.6	26	NS	9.6	43	NS	11.4	21	NS	9.5	48	L	6.3	45	NS
Calhoun	35.9*	5	NS	22.4	16	NS	22.5*	8	NS	8.3*	45	NS	13.5*	6	NS	18.8	5	NS	10.4	11	NS
Clay	30.5	14	NS	24.5	10	NS	18.7*	24	NS	7.1*	52	NS	12.4*	13	NS	24.8	2	H	15.2*	4	NS
Doddridge	17.9	52	NS	11.8*	51	NS	15.4	41	NS	7.3*	51	NS	8.4*	40	NS	7.2*	55	L	5.2*	51	NS
Fayette	32.7	11	H	24.0	11	H	24.4	5	H	16.3	14	NS	11.4	20	NS	16.9	10	H	8.1	29	NS
Gilmer	18.9	51	NS	15.0	43	NS	23.7*	6	NS	5.0*	54	L	13.3*	7	NS	11.7*	43	NS	8.2*	28	NS
Grant	27.5	21	NS	19.1	24	NS	12.7	49	NS	20.5*	3	NS	8.2*	43	NS	17.0*	9	NS	7.2*	37	NS
Greenbrier	25.5	30	NS	17.7	29	NS	16.2	34	NS	14.4	18	NS	10.5	26	NS	12.1	41	NS	7.3	36	NS
Hampshire	27.3	23	NS	19.3	23	NS	16.8	33	NS	13.0	23	NS	8.7*	36	NS	14.9	23	NS	8.1	30	NS
Hancock	23	38	NS	18.3	26	NS	16.0	37	NS	10.0	41	NS	6.3*	48	NS	9.1	49	NS	5.2	53	NS
Hardy	26.1	25	NS	15.3	42	NS	15.3	42	NS	11.7	29	NS	12.0*	15	NS	12.0	42	NS	10.1	14	NS
Harrison	23.6	37	NS	16.8	34	NS	18.7	25	NS	10.4	39	NS	13.5	5	NS	13.0	33	NS	5.2	52	L
Jackson	21.1	45	NS	16.2	37	NS	15.7	39	NS	10.7	38	NS	10.2	29	NS	8.7	50	L	5.6	48	NS
Jefferson	13.6	55	L	10.7	55	L	13.6	47	L	7.5	50	L	10.8	24	NS	7.3	54	L	4.1	55	L
Kanawha	21.9	41	L	15.8	38	NS	19.4	21	NS	11.3	31	NS	8.5	37	NS	10.9	45	NS	6.9	40	NS
Lewis	25	32	NS	16.2	36	NS	17.4	30	NS	14.7	17	NS	14.6	4	NS	15.4	19	NS	9.1	21	NS
Lincoln	34.5	8	H	24.7	8	H	21.7	12	NS	18.7	8	NS	11.7	19	NS	17.2	7	NS	10.5	10	NS
Logan	35.8	6	H	26.7	5	H	21.6	13	NS	16.8	11	NS	7.6	46	NS	13.7	27	NS	10.2	12	NS
Marion	25.7	28	NS	16.6	35	NS	19.3	22	NS	12.2	25	NS	8.2	42	NS	12.1	40	NS	7.3	35	NS
Marshall	25.8	27	NS	23.5	13	NS	23.1	7	NS	12.9	24	NS	8.9	34	NS	15.0	22	NS	9.9	15	NS
Mason	29.5	18	NS	17.4	30	NS	22.3	9	NS	10.8	35	NS	11.3	22	NS	12.6	37	NS	7.5	32	NS
McDowell	44.9	1	H	28.4	3	H	27.3	3	NS	17.0	10	NS	22.4*	1	H	16.6	14	NS	14.9	5	H
Mercer	31.5	12	H	20.9	19	NS	20.6	16	NS	13.4	21	NS	12.6	11	NS	12.6	36	NS	9.4	19	NS
Mineral	19.7	48	NS	16.9	31	NS	19.5	20	NS	10.9	34	NS	8.0	44	NS	12.8	35	NS	6.7	44	NS
Mingo	39.4	3	H	28.5	2	H	26.1	4	H	19.8	4	H	8.5	38	NS	22.2	3	H	10.7	8	NS
Monongalia	14.5	54	L	10.9	54	L	16.0	36	NS	6.6	53	L	11.7	17	NS	8	53	L	5.4	49	L
Monroe	30.4	15	NS	26.7	4	H	17.0	32	NS	21.0	2	H	16.2	3	NS	13.1	31	NS	12.8	7	NS
Morgan	17	53	L	18.3	25	NS	15.2	43	NS	17.9	9	NS	9.0*	33	NS	13.6	28	NS	8.2*	27	NS
Nicholas	28.6	20	NS	21.3	17	NS	18.6	27	NS	19.3	7	H	10.2	30	NS	16.6	13	NS	10.7	9	NS
Ohio	23.6	36	NS	15.4	41	NS	15.6	40	NS	9.2	44	NS	8.4	39	NS	8.2	52	L	7.1	39	NS
Pendleton	23.9	34	NS	11.8	52	L	9.4	53	L	10.8*	36	NS	9.1*	32	NS	15.2	21	NS	4.4*	54	NS
Pleasants	25.9*	26	NS	18.2*	27	NS	19.7*	19	NS	4.8*	55	L	3.3*	55	L	14.2*	25	NS	7.2*	38	NS
Pocahontas	31.4	13	NS	24.6	9	NS	15.9	38	NS	14.3*	19	NS	17.7	2	NS	17.2	8	NS	9.5	18	NS
Preston	21.1	43	NS	16.8	32	NS	21.8	10	NS	10.0	40	NS	13.2	8	NS	13.1	32	NS	6.3	46	NS
Putnam	20.3	47	L	13.2	49	L	14.6	44	L	9.8	42	NS	5.8	50	L	10.8	47	NS	5.8	47	NS
Raleigh	27.2	24	NS	20.7	21	NS	19.9	18	NS	11.6	30	NS	9.3	31	NS	13	34	NS	8.4	25	NS
Randolph	24	33	NS	19.4	22	NS	19.0	23	NS	11.7	28	NS	12.5	12	NS	14	26	NS	8.5	24	NS
Ritchie	25.2	31	NS	11.6	53	L	16.1	35	NS	8.3*	46	NS	11.7	18	NS	15.2	20	NS	9.6*	16	NS
Roane	25.6	29	NS	16.8	33	NS	12.1	50	L	11.2	32	NS	10.9	23	NS	16.9	11	NS	7.3	34	NS
Summers	35.6	7	H	29.8	1	H	21.3	14	NS	19.4	6	NS	5.6*	51	NS	18.3	6	NS	13.6	6	NS
Taylor	21.1	44	NS	14.6	44	NS	8.4	54	L	10.7	37	NS	7.7*	45	NS	16.1	16	NS	7.4	33	NS
Tucker	29.0*	19	NS	13.6	48	NS	11.7*	51	NS	7.5*	49	NS	3.9*	54	L	27.5*	1	H	5.4*	50	NS
Tyler	19.6	49	NS	13.8	47	NS	8.0*	55	L	16.1*	15	NS	4.2*	53	NS	12.2*	39	NS	8.2*	26	NS
Upshur	27.5	22	NS	15.5	39	NS	10.2	52	L	11.8	27	NS	13.0	10	NS	16	17	NS	7.6	31	NS
Wayne	29.9	16	H	22.7	15	H	21.7	11	NS	15.5	16	NS	13.2	9	NS	13.4	29	NS	8.8	23	NS
Webster	42.2	2	H	26.3	6	NS	14.4	45	NS	16.4	13	NS	7.0*	47	NS	15.6	18	NS	15.5	3	H
Wetzel	20.5	46	NS	12.7	50	L	13.0	48	NS	7.8*	47	NS	10.6*	25	NS	10.9	46	NS	9.6	17	NS
Wirt	33.4*	10	NS	25.5*	7	NS	21.2*	15	NS	26.6*	1	NS	10.3*	28	NS	18.9*	4	NS	18.2*	1	NS
Wood	23.8	35	NS	17.7	28	NS	17.9	28	NS	11.8	26	NS	12.2	14	NS	11.1	44	NS	6.9	43	NS
Wyoming	34.2	9	H	20.9	18	NS	29.4	2	H	19.6	5	H	4.9*	52	L	16.3	15	NS	16.1	2	H
<b>West Virginia</b>	<b>24.8</b>			<b>17.8</b>			<b>18.7</b>			<b>12.2</b>			<b>10.3</b>			<b>12.3</b>			<b>7.7</b>		

Source: West Virginia Behavioral Risk Factor Surveillance System (WVBRFSS), West Virginia Health Statistics Center, 2021.

Sig. - Indicates whether county prevalence estimate is significantly different than WV prevalence. H = significantly higher, ns = not significantly different, L = significantly lower.

\* Unreliable prevalence estimate - use caution when reporting and interpreting. See discussion on page 5 about unreliable estimates.

Appendix B  
2017-2021 WV Behavioral Risk Factors and Health Conditions by County

County	Obesity			Overweight or Obese			No Exercise			Smoke			Smokless Tobacco			Electronic Cigarette			Heavy Drinking			Binge Drinking		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
Barbour	34.4	50	NS	67.5	49	NS	33.3	16	NS	20.3	46	NS	9.3	28	NS	8.0*	17	NS	3.9*	31	NS	7.6*	42	NS
Berkeley	38.7	38	NS	71.8	34	NS	28.7	36	NS	26.6	16	NS	5.1	52	L	8.7	13	NS	5.4	11	NS	15.1	5	H
Boone	50.7	1	H	79.0	5	H	35.4	12	NS	23.7	31	NS	14.7	5	NS	9.7	9	NS	2.4*	47	NS	10.2	28	NS
Braxton	39.3	31	NS	74.0	20	NS	32.4	21	NS	27.6	11	NS	8.9	34	NS	6.4*	29	NS	2.8*	40	NS	6.3*	50	L
Brooke	35.7	47	NS	69.5	45	NS	30.3	27	NS	26.7	15	NS	8.9*	33	NS	1.7*	54	L	6.3*	6	NS	12.9	12	NS
Cabell	36.8	44	NS	69.2	48	NS	27.6	42	NS	21.7	39	NS	4.5	54	L	6.4	27	NS	5.6	9	NS	13.3	8	NS
Calhoun	41.2*	23	NS	75.4*	12	NS	33.7*	15	NS	21.5	40	NS	17.2	2	NS	4.0	46	NS	2.8*	41	NS	6.5*	48	NS
Clay	49.6	3	NS	71.8	35	NS	29.3	31	NS	28.3*	5	NS	8.1*	39	NS	10.5*	4	NS	0.6*	55	L	7.2*	45	NS
Doddridge	42.8*	18	NS	70.1*	41	NS	28.9*	35	NS	22.2*	37	NS	9.1*	31	NS	11.6*	2	NS	2.4*	46	NS	7.2*	46	NS
Fayette	38.8	37	NS	72.8	27	NS	35.6	11	H	31.2	1	H	7.8	41	NS	6.6	25	NS	4.0	28	NS	13.1	10	NS
Gilmer	39.4*	30	NS	66.1*	52	NS	21.3	55	NS	22.3*	35	NS	13.3*	10	NS	16.4*	1	NS	11.6*	1	NS	10.7*	23	NS
Grant	44.8*	12	NS	82.5	2	H	44.3*	2	H	17.5	50	NS	10.3	23	NS	1.8*	53	L	3.8*	32	NS	10.1*	30	NS
Greenbrier	39.2	33	NS	72.0	32	NS	29.2	33	NS	24.4	26	NS	8.3	37	NS	6.6	24	NS	4.3	23	NS	8.3	41	L
Hampshire	39.3	32	NS	71.2	40	NS	27.6	41	NS	27.5	12	NS	9.2	30	NS	5.5*	38	NS	8.9	3	NS	13.8	7	NS
Hancock	37.6	43	NS	70.0	42	NS	26.5	46	NS	24.9	22	NS	7.2	46	NS	5.0*	40	NS	5.2	12	NS	13.2	9	NS
Hardy	34.2	51	NS	71.9	33	NS	27.8	40	NS	25.4	21	NS	11.2	17	NS	0.7*	55	L	6.4*	5	NS	10.0	32	NS
Harrison	36.7	45	NS	72.7	29	NS	26.1	34	NS	24.3	27	NS	7.6	42	NS	7.3	20	NS	3.5	34	NS	11.9	15	NS
Jackson	41.0	24	NS	74.8	16	NS	26.1	49	NS	24.2	29	NS	10.5	20	NS	8.1	16	NS	4.1	27	NS	10.7	25	NS
Jefferson	33.4	52	L	69.7	44	NS	23.1	52	L	20.2	47	NS	5.4	51	L	9.8	6	NS	6.3	8	NS	16.0	3	NS
Kanawha	38.3	40	NS	71.7	36	NS	29.3	32	NS	22.7	33	NS	6.1	49	L	6.8	22	NS	4.6	17	NS	12.9	11	NS
Lewis	47.3	5	NS	75.2	13	NS	35.1	13	NS	27.8	7	NS	12.6	12	NS	1.9*	52	L	4.9*	13	NS	12.4	13	NS
Lincoln	46.2	9	NS	78.2	6	NS	36.2	9	NS	22.2	36	NS	14.5	6	H	5.6*	36	NS	4.3*	24	NS	11.7	16	NS
Logan	44.7	13	NS	73.6	23	NS	39.1	5	H	27.9	6	NS	11.3	16	NS	6.0	32	NS	4.5	21	NS	9.4	37	NS
Marion	36.4	46	NS	67.3	50	NS	28.3	37	NS	24.9	23	NS	9.0	32	NS	8.9	11	NS	4.0	30	NS	11.3	19	NS
Marshall	41.6	21	NS	74.9	15	NS	31.2	25	NS	24.5	24	NS	6.3	48	NS	6.4	28	NS	4.6*	18	NS	16.3	2	NS
Mason	47.0	6	NS	81.2	3	H	36.3	8	NS	29.5	3	NS	9.5	27	NS	4.9	41	NS	5.5	10	NS	12.2	14	NS
McDowell	45.1	11	NS	77.5	8	NS	37.8	7	NS	27.8	9	NS	11.3	15	NS	2.7*	49	L	1.2*	53	L	3.7*	55	L
Mercer	40.5	26	NS	73.2	25	NS	33.1	17	NS	23.7	32	NS	8.4	35	NS	8.3	14	NS	3.8	33	NS	8.7	39	L
Mineral	38.8	36	NS	73.9	21	NS	26.1	48	NS	18.8	48	NS	7.4	43	NS	7.0	21	NS	4.1*	26	NS	11.1	21	NS
Mingo	44.6	14	NS	75.1	14	NS	45.0	1	H	30.0	2	NS	8.2	38	NS	5.6*	35	NS	1.7*	50	L	6.7	47	L
Monongalia	30.9	55	L	62.4	54	L	21.5	53	L	18.1	49	L	5.5	50	L	10.3	5	NS	7.5	4	H	22.0	1	H
Monroe	33.2	53	NS	69.9	43	NS	28.0	39	NS	26.9	14	NS	13.6	9	NS	6.7*	23	NS	3.0*	39	NS	11.5*	18	NS
Morgan	38.2	41	NS	67.1	51	NS	25.7	50	NS	24.3	28	NS	8.4*	36	NS	3.4*	48	NS	6.3*	7	NS	9.7	35	NS
Nicholas	40.1	27	NS	73.5	24	NS	33.1	18	NS	24.1	30	NS	10.1	24	NS	4.3*	45	NS	2.7*	42	NS	7.5	44	L
Ohio	32.9	54	L	71.4	37	NS	25.5	51	NS	26.2	19	NS	4.5	53	L	4.5*	44	NS	4.6	19	NS	15.6	4	NS
Pendleton	38.3	39	NS	77.8	7	NS	32.8	20	NS	11.3	55	L	9.5	26	NS	2.4*	50	L	0.7*	54	L	10.9	22	NS
Pleasants	39.9*	29	NS	69.5*	46	NS	29.5*	29	NS	22.7*	34	NS	19.0*	1	NS	4.6*	42	NS	2.5*	45	NS	3.9*	53	L
Pocahontas	39.1	34	NS	69.4	47	NS	28.2	38	NS	20.6	44	NS	7.3*	44	NS	6.6*	26	NS	3.0*	36	NS	3.8*	54	L
Preston	42.2	19	NS	74.4	18	NS	29.3	30	NS	25.5	20	NS	13.0	11	NS	8.7	12	NS	4.8	14	NS	11.2	20	NS
Putnam	43.5	16	NS	76.3	10	NS	26.7	45	NS	16.7	52	L	7.1	47	NS	4.6	43	NS	4.0	29	NS	11.6	17	NS
Raleigh	41.7	20	NS	74.7	17	NS	30.9	26	NS	26.3	18	NS	11.0	19	NS	6.0	33	NS	4.5	20	NS	9.9	33	NS
Randolph	34.9	49	NS	63.9	53	L	32.3	22	NS	26.3	17	NS	12.2	14	NS	3.0*	34	NS	4.1*	25	NS	10.0	31	NS
Ritchie	43.9	15	NS	72.1	31	NS	38.0	6	NS	15.7	53	L	15.4	4	NS	10.7*	3	NS	2.0*	49	L	8.5*	40	NS
Roane	49.8	2	H	80.7	4	H	26.3	47	NS	21.2	42	NS	10.5	21	NS	6.3*	30	NS	3.0*	38	NS	7.5*	43	NS
Summers	46.4	8	NS	71.2	39	NS	43.1	3	H	27.1	13	NS	9.2	29	NS	8.3*	15	NS	2.6*	44	NS	4.7	51	L
Taylor	46.8	7	NS	75.8	11	NS	34.7	14	NS	21.4	41	NS	15.5	3	NS	9.8*	7	NS	2.6*	43	NS	9.7	34	NS
Tucker	35.2*	48	NS	72.7	28	NS	21.4	54	NS	13.4	54	L	2.9*	55	L	2.1*	51	L	4.7*	15	NS	10.6*	26	NS
Tyler	46.0*	10	NS	72.4*	30	NS	32.8*	19	NS	27.6*	10	NS	11.1*	18	NS	9.6*	10	NS	9.0*	2	NS	9.4*	38	NS
Upshur	41.4	22	NS	73.6	22	NS	27.0	44	NS	21.7	38	NS	10.4	22	NS	6.1*	31	NS	2.2*	48	L	10.7	24	NS
Wayne	40.1	28	NS	76.8	9	NS	35.7	10	H	28.9	4	NS	8.0	40	NS	7.9	18	NS	3.0	37	NS	10.5	27	NS
Webster	47.4*	4	NS	84.2	1	H	31.3	24	NS	20.5	45	NS	14.2*	8	NS	5.2*	39	NS	1.7*	51	L	4.1*	52	L
Wetzel	43.3	17	NS	74.3	19	NS	27.5	43	NS	20.9	43	NS	12.4	13	NS	3.4*	47	NS	4.4*	22	NS	14.6	6	NS
Wirt	38.9*	35	NS	62.3*	55	NS	29.6*	28	NS	17.4	51	NS	10.1*	25	NS	5.6*	37	NS	3.3*	35	NS	9.5*	36	NS
Wood	40.8	25	NS	73.0	26	NS	31.5	23	NS	24.4	25	NS	7.3	45	NS	9.8	8	NS	4.7	16	NS	10.1	29	NS
Wyoming	38.0	42	NS	71.2	38	NS	42.2	4	H	27.8	8	NS	14.4	7	H	7.7	19	NS	1.4*	52	L	6.4*	49	L
<b>West Virginia</b>	<b>39.4</b>			<b>72.1</b>			<b>30.2</b>			<b>23.9</b>			<b>8.5</b>			<b>7.1</b>			<b>4.5</b>			<b>11.8</b>		

Source: West Virginia Behavioral Risk Factor Surveillance System (WVBRFSS), West Virginia Health Statistics Center, 2021.  
 Sig. - Indicates whether county prevalence estimate is significantly different than WV prevalence. H = significantly higher, ns = not significantly different, L = significantly lower.  
 \* Unreliable prevalence estimate - use caution when reporting and interpreting. See discussion on page 5 about unreliable estimates.

Appendix B  
2017-2021 WV Behavioral Risk Factors and Health Conditions by County

County	Flu			Flu (65+)			Pneumonia (65+)			HIV Test		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
Barbour	50.5	7	NS	58.2*	45.0	NS	66.0*	49.0	NS	34.1	19	NS
Berkeley	41.4	39	NS	67.9	16.0	NS	77.0	13.0	NS	40.5	1	H
Boone	46.8	15	NS	68.6	14.0	NS	72.8	30.0	NS	35.3	15	NS
Braxton	44.0	28	NS	63.7*	27.0	NS	73.9	26.0	NS	28.1	42	NS
Brooke	49.4	9	NS	75.1	2.0	NS	66.9	47.0	NS	26.7	46	NS
Cabell	50.6	6	H	70.5	6.0	NS	74.9	22.0	NS	32.5	28	NS
Calhoun	33.5*	53	L	57.1*	48.0	NS	74.9*	23.0	NS	32.4*	30	NS
Clay	46.1*	17	NS	55.1*	51.0	NS	66.1*	48.0	NS	29.8*	37	NS
Doddridge	41.2*	41	NS	57.8*	47.0	NS	79.7*	5.0	NS	26.4*	48	NS
Fayette	41.4	40	NS	66.8	21.0	NS	73.3	29.0	NS	37.2	6	NS
Gilmer	45.6*	19	NS	58.8*	44.0	NS	78.1*	8.0	NS	35.9*	13	NS
Grant	43.1*	32	NS	56.3*	50.0	NS	81.8*	2.0	NS	33.4*	21	NS
Greenbrier	48.0	12	NS	67.8	18.0	NS	75.0	20.0	NS	33.3	22	NS
Hampshire	37.5	50	NS	56.6*	49.0	NS	65.8*	50.0	NS	38.1	5	NS
Hancock	49.1	10	NS	60.0	41.0	NS	68.2	46.0	NS	25.6	50	L
Hardy	33.1	54	L	63.3*	31.0	NS	77.5*	10.0	NS	35.7	14	NS
Harrison	41.7	37	NS	63.4	30.0	NS	72.3	33.0	NS	35.9	12	NS
Jackson	45.9	18	NS	63.1	33.0	NS	71.3	36.0	NS	31.2	33	NS
Jefferson	43.9	29	NS	70.0	8.0	NS	70.8	38.0	NS	39.4	2	NS
Kanawha	51.2	5	H	70.0	9.0	H	77.3	11.0	H	38.1	4	H
Lewis	44.5	26	NS	68.8*	13.0	NS	84.7	1.0	H	28.2	41	NS
Lincoln	44.7	24	NS	72.8	4.0	NS	81.5	3.0	NS	33.2	23	NS
Logan	42.7	34	NS	65.5	23.0	NS	75.0	19.0	NS	33	24	NS
Marion	41.5	38	NS	61.3	38.0	NS	70.4	41.0	NS	31.7	31	NS
Marshall	47.0	14	NS	68.8	12.0	NS	69.7	43.0	NS	30	36	NS
Mason	46.7	16	NS	63.3	32.0	NS	79.3	6.0	NS	32.7	27	NS
McDowell	26.8	55	L	43.1*	55.0	L	61.5*	55.0	NS	30.7	35	NS
Mercer	44.4	27	NS	63.8	26.0	NS	68.8	45.0	NS	36.3	9	NS
Mineral	45.2	23	NS	61.7	37.0	NS	71.2	37.0	NS	29	39	NS
Mingo	38.0	48	NS	70.1	7.0	NS	78.5	7.0	NS	33.4	20	NS
Monongalia	44.5	25	NS	71.0	5.0	NS	76.6	16.0	NS	35.9	11	NS
Monroe	43.6	30	NS	60.3*	40.0	NS	70.4*	42.0	NS	27.7	44	NS
Morgan	37.4	52	NS	74.4*	3.0	NS	70.7*	40.0	NS	37	7	NS
Nicholas	43.1	33	NS	59.1	43.0	NS	64.2	52.0	NS	25.4	51	L
Ohio	47.8	13	NS	69.3	11.0	NS	74.8	24.0	NS	31.7	32	NS
Pendleton	48.3	11	NS	67.8*	17.0	NS	65.3*	51.0	NS	25.1	53	NS
Pleasants	52.1*	4	NS	59.1*	42.0	NS	64.0*	53.0	NS	34.7*	16	NS
Pocahontas	37.4	51	NS	57.9*	46.0	NS	69.3*	44.0	NS	25.1	54	NS
Preston	45.5	21	NS	60.7	39.0	NS	70.7	39.0	NS	30.8	34	NS
Putnam	49.4	8	NS	67.7	19.0	NS	74.9	21.0	NS	34.5	17	NS
Raleigh	42.4	35	NS	63.4	29.0	NS	72.7	31.0	NS	36.8	8	NS
Randolph	37.6	49	L	54.1	53.0	L	63.9	54.0	NS	29.3	38	NS
Ritchie	39.9	43	NS	62.4*	35.0	NS	71.3*	35.0	NS	25.3	52	NS
Roane	53.0	3	NS	63.4*	28.0	NS	76.9*	14.0	NS	34.4	18	NS
Summers	45.5	22	NS	65.2*	24.0	NS	72.5*	32.0	NS	38.3	3	NS
Taylor	45.6	20	NS	68.3	15.0	NS	75.6	17.0	NS	26.2	49	NS
Tucker	54.4*	2	NS	69.4*	10.0	NS	80.1*	4.0	NS	26.4*	47	NS
Tyler	59.1*	1	H	77.8*	1.0	NS	73.5*	28.0	NS	29.0*	40	NS
Upshur	40.8	42	NS	66.7	22.0	NS	77.8	9.0	NS	32.8	26	NS
Wayne	42.0	36	NS	63.8	25.0	NS	75.4	18.0	NS	27.8	43	L
Webster	38.7*	47	NS	54.9*	52.0	NS	77.1*	12.0	NS	32.8*	25	NS
Wetzel	39.8	44	NS	62.9*	34.0	NS	74.3*	25.0	NS	27.5	45	NS
Wirt	39.7*	45	NS	61.7*	36.0	NS	73.6*	27.0	NS	24.4*	55	NS
Wood	43.3	31	NS	67.4	20.0	NS	76.6	15.0	NS	32.4	29	NS
Wyoming	38.9	46	NS	53.7*	54.0	NS	71.6*	34.0	NS	36.3	10	NS
<b>West Virginia</b>	<b>44.5</b>			<b>65.3</b>			<b>73.4</b>			<b>33.8</b>		

Source: West Virginia Behavioral Risk Factor Surveillance System (WVBRFSS), West Virginia Health Statistics Center, 2021.  
 Sig. - Indicates whether county prevalence estimate is significantly different from WV prevalence. H = significantly higher, ns = not significantly different, L = significantly lower.  
 \* Unreliable prevalence estimate - use caution when reporting and interpreting. See discussion on page 5 about unreliable estimates.

Appendix B  
2017-2021 WV Behavioral Risk Factors and Health Conditions by County

County	Cardiovascular Disease			Diabetes			Overall Cancer			Current Asthma			COPD		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
Barbour	15.3	29	NS	17.7	17	NS	11.7	51	NS	13.1	22	NS	11.6	41	NS
Berkeley	12.0	50	L	13.1	50	L	10.4	54	L	13.7	16	NS	11.7	40	NS
Boone	18.9	12	NS	25.2	1	H	17.0	13	NS	11.4	32	NS	16.7	17	NS
Braxton	12.0	51	NS	17.4	22	NS	16.2	20	NS	11.6	29	NS	12.9	35	NS
Brooke	15.7	27	NS	17.6	19	NS	18.0	8	NS	9.9	46	NS	9.2	50	L
Cabell	11.1	53	L	11.7	52	L	12.8	45	NS	11.6	30	NS	14.1	26	NS
Calhoun	21.2	6	NS	14.8	40	NS	13.7	38	NS	16.5	5	NS	14.7	22	NS
Clay	21.7	3	NS	16.1	33	NS	17.0	12	NS	14.8	11	NS	14.3	24	NS
Doddridge	10.1	54	NS	13.4	47	NS	15.5	25	NS	11.1*	33	NS	9.1*	51	NS
Fayette	17.0	19	NS	19.0	8	H	16.5	18	NS	14.2	13	NS	19.7	9	H
Gilmer	12.8*	45	NS	18.3	13	NS	15.3	27	NS	10.7*	39	NS	11.0	45	NS
Grant	15.9	25	NS	21.4	5	NS	12.0	50	NS	13.3	20	NS	16.9	15	NS
Greenbrier	16.2	24	NS	16.0	36	NS	17.6	9	NS	11.0	34	NS	18.1	13	NS
Hampshire	16.3	23	NS	11.6	53	L	13.9	35	NS	15.0	10	NS	15.1	21	NS
Hancock	13.4	39	NS	17.6	18	NS	15.7	23	NS	13.4	19	NS	14.1	25	NS
Hardy	12.7	46	NS	18.4	12	NS	12.4	48	NS	12.1	27	NS	13.0	34	NS
Harrison	13.2	41	NS	17.5	20	NS	15.3	26	NS	12.8	23	NS	11.9	38	NS
Jackson	13.3	40	NS	17.4	21	NS	14.5	32	NS	9.5	47	NS	13.2	30	NS
Jefferson	12.0	49	NS	13.9	43	NS	13.3	41	NS	10.3	43	NS	7.6	52	L
Kanawha	14.7	33	NS	16.0	35	NS	15.8	21	NS	10.5	40	NS	11.1	44	L
Lewis	11.9	52	NS	13.2	49	NS	14.7	31	NS	16.6	4	NS	15.8	20	NS
Lincoln	18.3	13	NS	19.5	7	NS	18.4	7	NS	18.4	3	NS	17.7	14	NS
Logan	19.7	8	H	20.7	6	H	16.7	15	NS	10.9	36	NS	23.8	3	H
Marion	12.6	47	NS	14.0	42	NS	15.1	29	NS	10.1	45	NS	11.8	39	NS
Marshall	18.3	14	NS	16.1	34	NS	13.9	36	NS	13.1	21	NS	18.3	12	NS
Mason	13.6	22	NS	15.2	39	NS	13.3	42	NS	10.7	38	NS	21.6	6	H
McDowell	28.2	1	H	23.5	2	H	17.2	11	NS	20.7	2	H	26.9	1	H
Mercer	17.6	16	NS	17.3	23	NS	16.6	17	NS	16.3	7	H	18.9	10	H
Mineral	12.9	43	NS	16.8	28	NS	13.3	43	NS	8.4	51	L	9.3	49	L
Mingo	21.6	4	H	18.6	11	NS	19.6	4	NS	12.7	24	NS	22.9	5	H
Monongalia	8.4	55	L	9.3	55	L	10.1	55	L	10.2	44	NS	7.2	53	L
Monroe	21.3	5	NS	15.5	38	NS	15.2	28	NS	15.3	9	NS	18.3	11	NS
Morgan	13.2	42	NS	16.2	31	NS	13.9	37	NS	8.3	52	NS	7.1	54	L
Nicholas	16.7	21	NS	17.2	25	NS	10.9	52	L	11.8	28	NS	13.4	29	NS
Ohio	14.2	36	NS	12.3	51	NS	14.2	34	NS	13.6	18	NS	11.2	43	NS
Pendleton	15.8	26	NS	17.1	26	NS	16.5	19	NS	6.2	53	L	3.7*	55	L
Pleasants	16.8	20	NS	11.5	54	NS	10.4	53	NS	5.4*	55	L	14.3*	23	NS
Pocahontas	14.7	32	NS	18.2	14	NS	16.8	14	NS	9.1	48	NS	13.8	27	NS
Preston	14.9	30	NS	18.8	9	NS	13.6	39	NS	12.2	26	NS	13.1	33	NS
Putnam	12.1	48	NS	13.3	48	NS	14.5	33	NS	10.9	37	NS	9.7	48	L
Raleigh	15.4	28	NS	17.3	24	NS	16.6	16	NS	11.6	31	NS	16.4	18	NS
Randolph	13.6	38	NS	14.0	41	NS	13.3	40	NS	14.4	12	NS	12.2	36	NS
Ritchie	12.9	44	NS	16.4	29	NS	12.6	47	NS	13.9	15	NS	12.1	37	NS
Roane	17.0	18	NS	18.0	15	NS	15.7	22	NS	8.9	49	NS	13.1	32	NS
Summers	19.1	10	NS	16.2	32	NS	19.3	5	NS	14.0	14	NS	19.9	7	NS
Taylor	13.6	37	NS	22.0	3	H	13.2	44	NS	10.3	42	NS	10.1	47	NS
Tucker	17.5*	17	NS	16.0	37	NS	21.8	1	NS	16.3	8	NS	13.5	28	NS
Tyler	17.9	15	NS	17.7	16	NS	21.2	2	NS	5.6*	54	L	13.1	31	NS
Upshur	14.5	35	NS	13.6	45	NS	17.4	10	NS	10.3	41	NS	10.5	46	NS
Wayne	19.6	9	H	18.7	10	H	12.7	46	NS	16.5	6	H	19.7	8	H
Webster	20.9	7	NS	21.4	4	NS	20.4	3	NS	11.0	35	NS	16.9	16	NS
Wetzel	14.7	31	NS	13.6	46	NS	15.6	24	NS	8.4	50	NS	11.5	42	NS
Wirt	27.3*	2	H	13.7	44	NS	12.3	49	NS	23.1*	1	NS	24.2*	2	NS
Wood	14.6	34	NS	16.3	30	NS	15.0	30	NS	13.6	17	NS	15.9	19	NS
Wyoming	18.9	11	NS	16.9	27	NS	19.1	6	NS	12.3	25	NS	23.3	4	H
<b>West Virginia</b>	<b>14.5</b>			<b>15.7</b>			<b>14.6</b>			<b>12.2</b>			<b>13.9</b>		

Source: West Virginia Behavioral Risk Factor Surveillance System (WVBRFSS), West Virginia Health Statistics Center, 2021.  
 Sig. - indicates whether county prevalence estimate is significantly different than WV prevalence. H = significantly higher, ns = not significantly different, L = significantly lower.  
 \* Unreliable prevalence estimate - use caution when reporting and interpreting. See discussion on page 5 about unreliable estimates.

Appendix B  
2017-2021 WV Behavioral Risk Factors and Health Conditions by County

County	Arthritis			Kidney Disease			Hypertension**			High Cholesterol**			Depression		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
Barbour	41.3	29	NS	5.4	17	NS	45.5	25	NS	38.7	41	NS	26.0	31	NS
Berkeley	34.6	50	L	3.1	42	L	38.2	50	L	35.2	54	L	25.4	35	NS
Boone	50.3	3	H	7.1	6	NS	52.7	5	H	42.0	22	NS	28.9	16	NS
Braxton	44.5	19	NS	4.0	34	NS	43.9	34	NS	43.4	18	NS	23.0	45	NS
Brooke	40.5	32	NS	3.1*	44	NS	50.2	7	NS	38.4	44	NS	29.5	10	NS
Cabell	34.2	51	L	4.8	25	NS	39.7	49	NS	36.1	52	L	29.1	14	NS
Calhoun	54.2*	2	H	3.6*	38	NS	43.2*	39	NS	40.5*	30	NS	27.5*	23	NS
Clay	46.9*	11	NS	8.4*	2	NS	49.8	8	NS	54.7	2	H	29.2*	13	NS
Doddridge	43.9*	23	NS	5.4*	19	NS	41.3*	44	NS	38.3*	45	NS	15.7	55	L
Fayette	48.9	6	H	5.4	18	NS	46.8	18	NS	38.9	40	NS	31.2	6	NS
Gilmer	30.4*	54	NS	5.5*	15	NS	51.2*	6	NS	43.0*	19	NS	25.6*	33	NS
Grant	45.1*	16	NS	7.4*	3	NS	48.4	11	NS	48.6*	7	NS	27.5*	22	NS
Greenbrier	40.8	30	NS	3.8	36	NS	44.9	28	NS	40.3	33	NS	22.7	48	NS
Hampshire	37.1	43	NS	5.1	22	NS	40.4	47	NS	38.9	39	NS	24.8	38	NS
Hancock	36.9	44	NS	4.5*	29	NS	37.4	51	NS	38.0	46	NS	25.3	36	NS
Hardy	37.7	39	NS	5.0*	23	NS	40.9	46	NS	37.7	47	NS	21.7	52	NS
Harrison	37.4	40	NS	3.5	40	NS	41.4	43	NS	41.8	24	NS	26.7	28	NS
Jackson	38.8	37	NS	4.4	32	NS	44.8	29	NS	43.3	16	NS	23.2	44	NS
Jefferson	30.5	53	L	2.5	49	L	34.9	54	L	36.4	50	NS	22.1	51	L
Kanawha	36.6	45	NS	5.7	12	H	44.5	33	NS	42.8	20	NS	27.4	25	NS
Lewis	36.5	46	NS	5.7	11	NS	44.7	30	NS	43.5	17	NS	27.6	20	NS
Lincoln	44.1	22	NS	9.3	1	H	46.1	21	NS	39.8	34	NS	35.1	2	H
Logan	50	4	H	7.3	4	H	53.4	3	H	45.8	10	NS	33.0	4	H
Marion	36.5	47	NS	4.2	33	NS	39.9	48	NS	37.4	49	NS	24.1	41	NS
Marshall	49.3	5	H	3.9	35	NS	45.0	27	NS	45.2	13	NS	26.4	29	NS
Mason	45.7	13	NS	6.0	9	NS	49.7	9	NS	44.6	14	NS	23.6	43	NS
McDowell	47.6	8	NS	6.8*	7	NS	47.1	16	NS	50.8	3	H	32.2	5	NS
Mercer	46.1	12	H	3.5	39	NS	45.4	26	NS	42.6	21	NS	27.6	21	NS
Mineral	37.3	41	NS	2.8	47	NS	43.4	36	NS	35.8	53	NS	26.1	30	NS
Mingo	47.2	10	H	5.5	16	NS	53.3	4	H	49.0	6	H	34.5	3	H
Monongalia	23.7	55	L	2.1	51	L	29.5	55	L	28.4	55	L	25.4	34	NS
Monroe	44.4	20	NS	7.1	5	NS	47.5	14	NS	55.0	1	H	22.6	49	NS
Morgan	40.5	31	NS	2.0*	53	L	41.6	42	NS	39.2	38	NS	24.0	42	NS
Nicholas	45.6	14	H	5.0	24	NS	53.5	2	H	40.4	31	NS	30.8	7	NS
Ohio	33.8	52	NS	4.5	28	NS	35.3	53	L	38.6	42	NS	27.8	19	NS
Pendleton	45.5	15	NS	1.7*	54	L	45.9	22	NS	50.8	4	H	17.5	53	L
Pleasants	37.8*	38	NS	0.8*	55	L	41.9*	41	NS	36.1*	51	NS	27.1*	26	NS
Pocahontas	38.8	36	NS	4.4*	31	NS	43.8	35	NS	40.9	27	NS	27.4	24	NS
Preston	39.9	33	NS	4.6	27	NS	42.0	40	NS	39.4	36	NS	29.0	15	NS
Putnam	35.6	49	NS	4.8	26	NS	44.5	32	NS	41.8	23	NS	24.3	40	NS
Raleigh	43.2	24	NS	3.7	37	NS	47.2	15	H	45.4	12	H	27.9	17	NS
Randolph	41.4	28	NS	3.0	45	NS	43.4	37	NS	39.4	37	NS	25.7	32	NS
Ritchie	44.6	18	NS	4.4*	30	NS	49.6	10	NS	39.8	35	NS	22.5	50	NS
Roane	42.5	25	NS	5.4	20	NS	45.9	23	NS	41.5	26	NS	24.3	39	NS
Summers	48.6	7	NS	3.1*	43	NS	48.3	12	NS	49.1	5	NS	30.4	8	NS
Taylor	44.8	17	NS	6.0	10	NS	43.9	17	NS	45.6	11	NS	17.5	54	L
Tucker	37.1*	42	NS	2.4*	50	NS	36.4*	52	NS	41.7*	25	NS	22.8	47	NS
Tyler	36.4*	48	NS	3.4*	41	NS	46.4*	20	NS	45.8*	9	NS	25.2	37	NS
Upshur	39	35	NS	2.7*	48	NS	44.6	31	NS	40.9	28	NS	22.9	46	NS
Wayne	44.2	21	NS	5.6	14	NS	46.7	19	NS	38.6	43	NS	29.3	11	NS
Webster	59.1*	1	H	5.2*	21	NS	48.0*	13	NS	40.8*	29	NS	27.0	27	NS
Wetzel	39.2	34	NS	2.0*	52	L	41.1	45	NS	37.6	48	NS	27.9	18	NS
Wirt	42.4*	26	NS	2.9*	46	NS	45.8*	24	NS	44.3*	15	NS	30.3*	9	NS
Wood	42.1	27	NS	5.7	13	NS	43.3	38	NS	40.4	32	NS	29.3	12	NS
Wyoming	47.6	9	H	6.2	8	NS	54.0	1	H	48.6	8	H	38.5	1	H
<b>West Virginia</b>	<b>39.2</b>			<b>4.4</b>			<b>42.9</b>			<b>40.3</b>			<b>27.3</b>		

Source: West Virginia Behavioral Risk Factor Surveillance System (WVBRFSS), West Virginia Health Statistics Center, 2021.  
 Sig. - Indicates whether county prevalence estimate is significantly different than WV prevalence. H = significantly higher, ns = not significantly different, L = significantly lower.  
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 \*\* This question was asked 2009-2021 (odd years).