

# West Virginia Behavioral Risk Factor Surveillance System Report

2022



Health Statistics Center  
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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 2022 as well as county data combined for the latest available five years (2014 through 2022).

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

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

## Highlights of Findings

### Health Status

- ◆ West Virginia ranked second highest nationally in the prevalence of general health of adults as either fair or poor.
- ◆ The prevalence of West Virginia adults that considered their health to be either fair or poor was 25.4%.
- ◆ Fair or poor health was most common among groups of adults aged 45 or older, those with less than a high school education, and those with an annual household income of less than \$15,000.
- ◆ The prevalence of fair or poor health was significantly higher in Boone, Fayette, Lincoln, Logan, McDowell, Mercer, Mingo, Webster, and Wyoming counties than the rest of the state.
- ◆ West Virginia ranked the highest among BRFSS participants for the prevalence of poor physical health.
- ◆ West Virginia ranked highest among 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 18.8% among West Virginians, compared to 13.5% nationally, which ranked the state the fourth highest among BRFSS participants.
- ◆ More than one-fifth (20.9%) of West Virginians had serious difficulty walking or climbing stairs.
- ◆ Approximately 6.6% of West Virginia adults had difficulty bathing or dressing.
- ◆ The prevalence of having difficulty doing errands alone among West Virginians was 11.9%, significantly higher than the national prevalence of 8.0%.
- ◆ Approximately 7.1% of West Virginia adults are blind or have serious vision impairment, the 10<sup>th</sup> highest in the nation.
- ◆ The prevalence of deafness or serious hearing impairment was 9.8%, which was sixth highest in the nation.

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## Health Care Access

- ◆ The prevalence of no health care coverage among West Virginia adults aged 18-64 was 7.2%, compared to 10.8% nationally.
- ◆ Nearly half of West Virginia adults have private insurance (45.4%), followed by Medicare (27.6%) and Medicaid (15.8%).
- ◆ The prevalence of all adults that do not have a personal doctor or health care provider was 12.8%.
- ◆ Approximately 10.3% of West Virginia adults could not afford needed medical care in the past year.
- ◆ Nearly one-fifth (19.9%) of West Virginia adults did not have a routine checkup in the past year.

## Weight Status

- ◆ The prevalence of obesity in West Virginia was 41.0%, which was the highest among BRFSS participants.
- ◆ The prevalence of obesity was significantly higher in Boone, Lincoln, Mason, and Summers counties than the rest of the state.
- ◆ More than two-thirds (74.4%) of West Virginia adults were overweight or obese, the highest in the U.S.
- ◆ The prevalence of overweight or obese was highest among men.

## Physical Activity

- ◆ Over one-fourth of West Virginia adults (30.2%) participate in no leisure-time physical activity or exercise which ranked West Virginia fourth highest among BRFSS participants.
- ◆ Physical inactivity was highest among those aged 45 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 physical inactivity was significantly higher in Boone, Fayette, Lincoln, Logan, Mingo, Summers, and Wyoming counties than the rest of the state.

## Tobacco Use

- ◆ More than one-fifth of adults (21.0%) currently smoke cigarettes every day or some days, which ranked West Virginia the highest among BRFSS participants.
- ◆ The prevalence of current smoking was equal among men and women; and it was higher among adults aged 25-64, those with less than a high school education, and those with an annual household income of less than \$25,000.
- ◆ West Virginia ranked the third highest among BRFSS participants in the prevalence of smokeless tobacco use (7.7%) among adults.
- ◆ The prevalence of smokeless tobacco use was significantly higher in Calhoun, Lincoln, Raleigh, and Randolph counties than the rest of the state.

## E-Cigarette Use

- ◆ Approximately 9.3% of West Virginian adults currently use e-cigarettes, which ranked 10<sup>th</sup> among BRFSS participants.

## Executive Summary

### Alcohol Consumption

- ◆ The West Virginia heavy drinking prevalence was 5.7% which was the 11<sup>th</sup> lowest among BRFSS participants.
- ◆ The prevalence of binge drinking among West Virginia adults was 13.7%, the ninth lowest among BRFSS participants.
- ◆ Binge drinking was highest among men, those aged 18-54, college graduates, and those with a household income of \$75,000 or more per year.

### Sleep

- ◆ More than one-third (41.3%) of West Virginia adults get an inadequate amount of sleep.

### Tooth Loss

- ◆ More than half of West Virginia adults (56.5%) had one or more teeth removed because of gum disease, the highest among BRFSS participants.
- ◆ Approximately 26.9% of West Virginia adults have six or more missing teeth, which was the highest among BRFSS participants.
- ◆ The prevalence of six or more missing teeth was highest among those aged 65 and older, those with less than a high school education, and those with an annual household income of \$15,000 or less.
- ◆ About one-fourth (25.2%) of West Virginia adults aged 65 and older have all their teeth missing, which was the highest among BRFSS participants.
- ◆ The prevalence of all teeth missing among those aged 65 and older was highest among those with less than a high school education and among those with an annual income of \$25,000 or less.

### HIV Risk

- ◆ Few West Virginia adults are at high risk for developing HIV (4.5%), the second lowest among BRFSS participants.
- ◆ The prevalence of high risk for HIV was highest among men, and those aged 34 and younger.

### Dental Visit

- ◆ More than half of West Virginia adults had a dental visit in the past year (56.6%), which was the fifth lowest among BRFSS participants.
- ◆ The prevalence of a dental visit in the past year was highest among those aged 18-24, college graduates, and those earning \$75,000 or more per year.

### HIV Testing

- ◆ One-third of West Virginia adults (34.7%) had been tested for HIV.
- ◆ The prevalence of HIV testing was highest among those between the ages of 25-54 and those with an annual household income of less than \$15,000.

### Immunization

- ◆ About 43.5% of all adults and 65.2% of seniors had a flu vaccine in the past 12 months.
- ◆ Among West Virginia adults and adults aged 65 and older, 38.3% and 71.9%, respectively, had ever received the pneumonia vaccine.

# Executive Summary

## Cancer Screening

- ◆ The prevalence of had a mammogram in the past two years among women aged 50-74 was 76.1%, similar to the U.S. prevalence.
- ◆ The prevalence of ever had a cervical cancer screening test among women aged 18 and older was 63.6%.
- ◆ Among adults aged 50-75, 11.6% had a fecal occult blood test (FOBT) test in the past year.
- ◆ Among adults aged 50-75, 63.4% had a colonoscopy in the past 10 years, similar to the U.S. prevalence.
- ◆ Nearly two-thirds of West Virginia adults aged 50-75 had at least one of the recommended colorectal cancer screenings (64.4%), which ranked the seventh highest among BRFSS participants.

## Diabetes Testing

- ◆ Among West Virginia adults who do not have diabetes, 84.1% have had a diabetes test in the past three years.

## Cardiovascular Disease

- ◆ West Virginia ranked the highest among BRFSS participants in the prevalence of heart attack (7.8%), and coronary heart disease (7.1%).
- ◆ West Virginia ranked the second highest among BRFSS participants in the prevalence of stroke (5.6%).
- ◆ The West Virginia cardiovascular disease prevalence was highest among BRFSS participants at 14.6%.
- ◆ The prevalence of cardiovascular disease 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 \$25,000.
- ◆ The prevalence of cardiovascular disease was significantly higher in Logan, McDowell, Mingo, and Wayne counties than the state as a whole.

## Diabetes

- ◆ More than one in six West Virginia adults had been told they have diabetes by a health professional (17.4%), which ranked West Virginia the third highest among BRFSS participants.
- ◆ The prevalence of diabetes was highest among adults aged 45-54, those with less than a high school education, and those with an annual household income of less than \$15,000.
- ◆ The prevalence of diabetes was significantly higher in Logan, Boone, and McDowell counties than the state as a whole.

## Cancer

- ◆ Approximately 7.7% of West Virginia adults report having a health professional tell them they had skin cancer.
- ◆ About 10.8% of West Virginia adults report having a health professional tell them they had some other type of cancer.
- ◆ More than one in seven West Virginia adults are cancer survivors (16.0%) which ranked West Virginia the highest for overall cancer prevalence.
- ◆ Cancer prevalence was highest among women, and those aged 65 and older.

# Executive Summary

## Respiratory Diseases

- ◆ Approximately 18.4% of West Virginia adults have ever been diagnosed with asthma and 12.9% of West Virginia adults currently had 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 an annual household income of less than \$15,000.
- ◆ The prevalence of current asthma was significantly higher in Lincoln and McDowell counties compared to the rest of the state.
- ◆ The prevalence of chronic obstructive pulmonary disease or COPD in West Virginia was 14.0%, the highest among BRFSS participants.
- ◆ The prevalence of COPD was highest among adults aged 45 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, Greenbrier, Lincoln, Logan, McDowell, Mason, Mercer, Mingo, Wayne, and Wyoming counties than the rest of the state.

## Arthritis

- ◆ More than one in three West Virginia adults had arthritis (40.1%) which ranked West Virginia highest among BRFSS participants.
- ◆ Arthritis prevalence was higher among those aged 55 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, McDowell, Marshall, Mercer, Monroe, Nicholas, and Webster counties than the rest of the state.

## Kidney Disease

- ◆ The prevalence of kidney disease in West Virginia was 4.9% and was the highest among 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

- ◆ More than one-fourth, 26.9%, of West Virginia adults had diagnosed depression, the highest among BRFSS participants.
- ◆ The prevalence of depression was significantly higher among women than men.
- ◆ The prevalence of depression was highest among those aged 65 or older, 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 Wayne counties than the rest of the state.

## Comorbidities

- ◆ 19.8% of West Virginia adults were both obese and had arthritis.
- ◆ 16.4% of West Virginia adults had arthritis and did not exercise.
- ◆ 8.3% of West Virginia adults were current smokers and have depression.
- ◆ 5.7% of West Virginia adults had both cardiovascular disease and diabetes.
- ◆ 15.0% of West Virginia adults were obese and did not exercise.
- ◆ 10.8% of West Virginia adults were obese and had diabetes.

## ESTIMATED NUMBER OF PERSONS WITH DISEASE OR RISK FACTOR

**Table ES.1 Percentage and Number of Persons Estimated with Disease or Risk Factor (Among Adults Aged 18 and Older or Appropriate Subset): WBRFSS 2022**

Risk Factor/Chronic Disease/ Health-Related Factor	Prevalence Estimate (%)	Estimated Number of Adults	Risk Factor/Chronic Disease/ Health-Related Factor	Prevalence Estimate (%)	Estimated Number of Adults
General Health Is Fair or Poor	25.4	361,597	Heavy Drinking	5.7	75,412
Poor Physical Health	18.2	253,080	Binge Drinking	13.7	180,830
Poor Mental Health	21.1	293,818	Inadequate Sleep	41.3	578,424
Limited by Physical or Mental Everyday	10.5	91,200	Permanent Teeth Extracted (age 18+)	56.5	787,913
Cognitive Difficulty	18.8	259,028	HIV Risk	4.5	59,743
Difficulty Walking	20.9	288,376	Dental Visit	56.6	795,467
Difficulty Dressing or Bathing	6.6	91,220	HIV Test	34.7	433,658
Difficulty Doing Errands Alone	11.9	163,592	Flu Vaccine	43.5	577,296
Vision Impairment	7.1	98,700	Pneumonia Vaccination (ages 65 and older)	71.9	256,457
Hearing Impairment	9.8	137,223	Mammogram	76.1	221,819
No Health Care Coverage (Ages 18-64)	7.2	70,404	Cervical Cancer Screening	63.6	409,894
No Personal Doctor or Health Care Provider	12.8	182,350	Fecal Occult Blood Test (FOBT)	11.6	18,149
Unable to Afford Needed Medi- cal Care	10.3	146,581	Colonoscopy	63.4	423,096
No Routine Medical Checkup in Past Year	19.9	278,575	Colorectal Cancer Screening Recommendation	64.4	455,489
Overweight (BMI 25.0-29.9)	33.4	442,125	Heart Attack	7.8	109,577
Obesity (BMI 30.0+)	41.0	543,499	Coronary Heart Disease	7.1	100,056
Overweight or Obese (BMI 25.0+)	74.4	985,625	Stroke	5.6	79,285
No Leisure-Time Physical Activi- ty	30.2	430,213	Cardiovascular Disease	14.6	205,653
Current Cigarette Smoking	21.0	284,354	Diabetes	17.4	247,721
Smokeless Tobacco Use	7.7	104,747	Cancer	16.0	225,719
E-Cigarette Use	9.3	126,415	Current Asthma	12.9	181,395
			Chronic Obstructive Pulmo- nary Disease	14.0	197,919
			Arthritis	40.1	567,794
			Kidney Disease	4.9	69,188
			Depression	26.9	381,492





## 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.

Twenty-three 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 2022 risk factor prevalence estimates and compares them to the years 1984 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 2022**

In 2022, West Virginia opted to ask several Optional Modules including: Pre-Diabetes, Caregiver, E-Cigarettes, Marijuana Use, Cancer Survivorship: Course of Treatment and Sexual Orientation/Gender Identity (SOGI).



**Table I.1 Topics Administered in the Survey: WBRFSS, 2012-2022**

Topic	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
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		X
Cardiovascular Disease	X	X	X	X	X	X	X	X	X	X	X
Cholesterol		X		X		X		X		X	
Diabetes	X	X	X	X	X	X	X	X	X	X	X
Disability	X	X	X	X	X	X				X	X
E-cigarette Use					X	X			X	X	X
Emotional Support/ Life Satisfaction	X										
Falls	X		X		X		X		X		
Food Stamps in the Past Year										X	X
Fruits & Vegetables		X		X		X		X		X	
Health Insurance	X	X	X	X	X	X	X	X	X	X	X
Health Status	X	X	X	X	X	X	X	X	X	X	X
HPV Vaccine	X		X			X	X			X	
Hypertension		X		X		X		X		X	
Immunization	X	X	X	X	X	X	X	X	X	X	X
Leisure-Time Physical Activity	X	X	X	X	X	X	X	X	X	X	X
Obesity	X	X	X	X	X	X	X	X	X	X	X
Oral Health	X		X		X		X		X		X
Osteoporosis			X								
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	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 ensure maximum response rates, calls are made weekdays from 11:00 a.m. 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 2022 West Virginia dataset includes data from interviews conducted by cell phone. The addition of cell phone only households improves coverage of certain population groups including the young and those with lower socioeconomic status. CDC provides banks of telephone numbers (landline and cell phone) that are presumed to contain household numbers. Calls were made until each number resulted in a completed interview, a refusal, or a disqualification. A number was disqualified if it was nonresidential or nonworking, if there was no eligible respondent available during the survey, or if the selected respondent was unable to communicate. Additionally, a landline number was disqualified if it had been called at least 15 times without success (encompassing a minimum of three attempts each during afternoons, evenings, and weekends). Within each household, the actual respondent was chosen randomly to avoid possible biases related to the time of day and household



telephone answering preferences. Since the number of adult residents and the number of telephone lines may differ from household to household, resulting in different probabilities of being selected, data were weighted to compensate for this bias.

### **DEMOGRAPHIC CHARACTERISTICS OF THE WVBRFSS SAMPLE**

The demographic characteristics of the samples in 2022, 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, 2022**

<b>Demographic Characteristic</b>	<b>Number of Interviews</b>	<b>Percent of Unweighted Sample</b>	<b>Percent of Weighted Sample</b>
<b>Total</b>	<b>4,981</b>	<b>100.0</b>	<b>100.0</b>
<u>Sex</u>			
Male	2,140	43.0	49.3
Female	2,841	57.0	50.7
<u>Race/Ethnicity</u>			
White, Non-Hispanic	4,585	92.1	88.0
Black, Non-Hispanic	118	2.4	3.8
Other, Non-Hispanic	68	1.4	1.8
Multiracial, Non-Hispanic	64	1.3	2.8
Hispanic	58	1.2	1.7
<u>Age</u>			
18-24	220	4.4	11.2
25-34	416	8.4	14.4
35-44	611	12.3	14.6
45-54	803	16.1	15.3
55-64	941	18.9	17.0
65+	1,990	40.0	27.5
<u>Education</u>			
< High School (HS)	394	7.9	12.1
HS or GED	1,723	34.6	39.8
Some College	1,295	26.0	27.6
College Degree	1,555	31.2	20.3
<u>Household Income</u>			
<\$15,000	352	8.5	9.1
\$15,000-\$24,999	551	13.4	13.0
\$25,000-\$34,999	629	15.2	15.2
\$35,000-\$49,999	606	14.7	14.7
\$50,000-\$74,999	668	16.2	16.7
\$75,000+	1,322	32.0	31.3
<u>Marital Status</u>			
Married	2,584	51.9	49.9
Divorced	780	15.7	12.9
Widowed	742	14.9	9.6
Separated	76	1.5	1.5
Never Married	631	12.7	20.9
Unmarried Couple	141	2.8	4.7
<u>Employment Status</u>			
Employed for wages	1,849	37.3	43.7
Self-Employed	287	5.8	6.7
Unemployed (>1 year)	115	2.3	2.7
Unemployed (<1 year)	67	1.4	1.9
Homemaker	350	7.1	7.2
Student	79	1.6	3.2
Retired	1,630	32.8	23.1
Unable to Work	553	11.1	10.7



## LIMITATIONS

The target population consists of civilian, non-institutionalized people 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 individuals 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 individuals, 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 2022 DATA RESULTS**

Beginning in 2011, CDC changed the weighting procedures for the WVBRFSS. Prior to 2011, weights for the BRFSS data were calculated based on the sex and age distribution of the West Virginia population using a method known as post-stratification. For 2011 and future years, BRFSS weights are calculated using a method known as iterative proportional fitting or raking. This weighting method takes into account additional demographic factors allowing for a better fit to West Virginia's socio-demographic profile. The additional factors used in the raking method include age group by sex, detailed race/ethnicity, education, marital status, tenure (rent or own home), gender by race/ethnicity, age group by race/ethnicity, and telephone sample source (landline or cell phone). Due to the addition of cell phone data and the new weighting methodology, 2011 and later results are not comparable to previous years of data. Although time trend graphs for state prevalence estimates are included in this report, they should be interpreted with caution as no direct comparison can be made between 1984-2010 and 2011-2022 statistics. Any changes between 2011 and previous years' statistics cannot be directly interpreted due to unknown comparability ratios. This is noted in time trend graphs in this report as a break in the line between 2010 and 2011 statistics.

### **COUNTY-LEVEL DATA**

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



## PRESENTATION OF RESULTS

In the sections that follow, the prevalence estimates are presented in a variety of ways, including by state rank, yearly state and national prevalence, and demographic variables. It should be stressed that the risk factor prevalence estimates for the demographic variables (age, sex, education, and income) show the percentages of persons **within the group** - not in the total survey sample - who report the behavior being examined.

This method of presenting risk factor prevalence facilitates identification of at-risk populations for health promotion efforts. Each demographic table in this report shows the weighted frequency or estimated number of West Virginia adults who exhibit a behavior or condition, the weighted prevalence estimate (%), and the 95% CI.

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

The risk factor sections also include West Virginia's rank among the BRFSS participants. For example, if diabetes-related questions were administered by all 54 BRFSS participants, ranking 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.

# West Virginia Behavioral Risk Factor Surveillance System Report



## SECTION 1: Health Indicators

2022

# CHAPTER 1: HEALTH STATUS

## General Health

**Definition** Responding “Fair” or “Poor” to the question, “Would you say that in general your health is: excellent, very good, good, fair, or poor?”

**Prevalence** **WV: 25.4%** (95% CI: 24.0-26.9)  
**U.S.: 18.0%** (95% CI: 17.8-18.3)

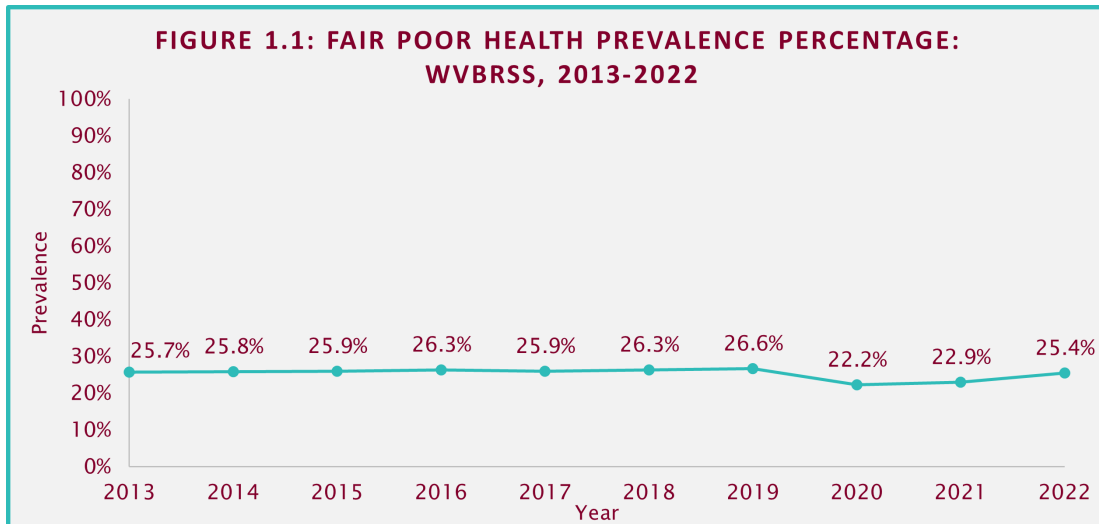
West Virginia’s prevalence of fair or poor health was significantly higher than the U.S. prevalence. West Virginia ranked the second highest among 54 BRFSS participants.

**Table 1.1 Prevalence of Fair or Poor Health by Demographic Characteristics: WVBRFSS, 2022**

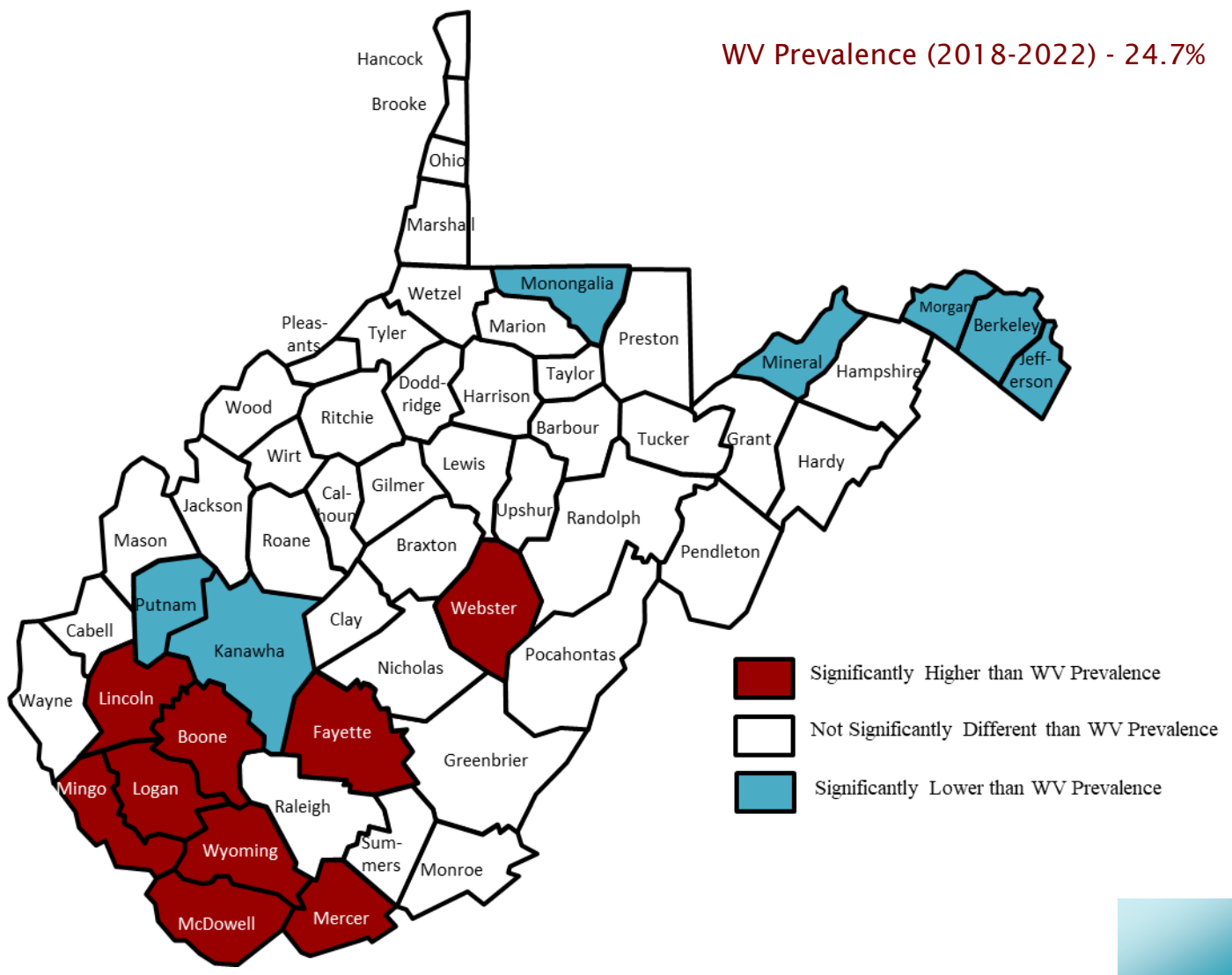
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	166,237	23.7	21.6-25.9	195,360	27.1	25.1-29.0	361,597	25.4	24.0-26.9
<b>Age</b>									
18-24	12,421	14.9	7.7-22.1	4,281	5.6*	1.0-10.3	16,702	10.5	6.0-14.9
25-34	12,135	11.3	5.6-17.1	13,820	14.0	9.2-18.8	25,954	12.6	8.8-16.4
35-44	14,927	14.2	9.1-19.3	20,422	19.9	15.1-24.7	35,349	17.0	13.5-20.5
45-54	26,746	25.7	20.3-31.0	33,291	31.6	26.5-36.7	60,038	28.6	24.9-32.4
55-64	42,111	35.8	30.6-41.0	42,313	34.0	29.2-38.8	84,424	34.9	31.4-38.4
65+	57,017	32.3	28.5-36.1	80,554	38.6	35.0-42.1	137,571	35.7	33.1-38.3
<b>Education</b>									
Less than H.S.	38,878	44.1	35.8-52.3	48,002	58.0	50.0-66.1	86,879	50.8	44.9-56.7
H.S. or G.E.D.	72,540	24.4	21.0-27.8	71,196	26.4	23.3-29.5	143,736	25.4	23.1-27.7
Some Post-H.S.	38,307	21.5	17.2-25.8	56,002	26.2	22.6-29.7	94,308	24.0	21.3-26.8
College Graduate	16,513	12.3	9.5-15.0	19,576	12.7	10.3-15.0	36,089	12.5	10.7-14.3
<b>Income</b>									
Less than \$15,000	20,620	50.6*	39.2-62.0	34,576	53.2	45.0-61.4	55,195	52.2	45.5-58.8
\$15,000 - 24,999	32,148	54.3	45.7-62.9	33,304	36.0	29.9-42.1	65,451	43.2	38.0-48.3
\$25,000 - 34,999	27,886	33.9	27.0-40.8	30,881	32.6	26.9-38.2	58,767	33.2	28.8-37.6
\$35,000 - 49,999	21,665	24.9	18.7-31.1	21,562	25.7	20.2-31.3	43,227	25.3	21.1-29.5
\$50,000 - 74,999	15,761	15.5	10.7-20.3	15,818	16.8	12.6-21.1	31,579	16.1	12.9-19.4
\$75,000+	18,374	8.9	6.6-11.3	16,002	10.0	7.3-12.8	34,376	9.4	7.6-11.2

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

# CHAPTER 1: HEALTH STATUS



**Figure 1.2 Prevalence of Fair or Poor Health by County: WVBRFSS, 2018-2022**



# 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: 18.2%** (95% CI: 16.9-19.5)  
**U.S.: 12.7%** (95% CI: 12.5-12.9)

West Virginia ranked the highest among 54 BRFSS participants. West Virginia’s prevalence of poor physical health was significantly higher than the U.S. prevalence.

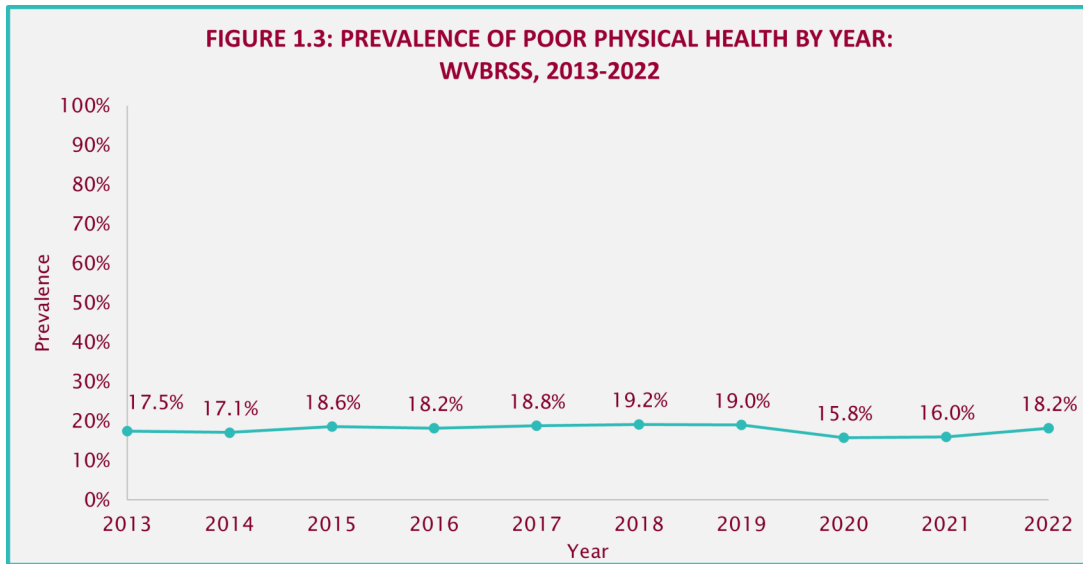
**Table 1.2 Prevalence of Poor Physical Health by Demographic Characteristics: WVBRFSS, 2022**

Characteristic	Men			Women			Total		
	Weighted	%	95% CI	Weighted	%	95% CI	Weighted	%	95% CI
<b>TOTAL</b>	113,346	<b>16.5</b>	14.6-18.4	139,734	<b>19.9</b>	18.1-21.6	253,080	<b>18.2</b>	16.9-19.5
<b>Age</b>									
18-24	1,324	1.6*	0.0-3.9	6,451	8.7*	2.8-14.6	7,775	5.0*	1.9-8.1
25-34	10,242	9.6*	3.7-15.6	8,773	9.1	5.3-12.9	19,015	9.4	5.8-13.0
35-44	12,922	12.5	7.6-17.4	14,853	14.6	10.5-18.7	27,775	13.5	10.3-16.7
45-54	21,642	21.3	16.1-26.4	27,770	26.6	21.7-31.5	49,412	24.0	20.4-27.5
55-64	29,556	25.6	20.8-30.3	29,647	24.2	19.7-28.6	59,202	24.9	21.6-28.1
65+	37,130	21.6	18.3-24.9	51,741	26.0	22.8-29.3	88,872	24.0	21.7-26.3
<b>Education</b>									
Less than H.S.	25,840	30.1	22.6-37.6	29,149	37.4	29.3-45.4	54,989	33.6	28.0-39.1
H.S. or G.E.D.	47,191	16.2	13.4-19.1	49,656	18.8	16.1-21.6	96,846	17.5	15.5-19.5
Some Post-H.S.	29,586	16.9	12.9-20.9	42,124	20.3	17.1-23.5	71,710	18.7	16.2-21.3
College Graduate	10,729	8.1	6.0-10.2	18,222	11.9	9.6-14.2	28,951	10.1	8.5-11.7
<b>Income</b>									
Less than \$15,000	14,437	37.6*	26.1-49.1	29,120	47.3	39.0-55.7	43,558	43.6	36.8-50.4
\$15,000 - 24,999	19,693	34.4	26.5-42.3	25,336	27.7	22.0-33.3	45,029	30.3	25.6-34.9
\$25,000 - 34,999	17,239	21.1	15.6-26.6	22,003	23.7	18.8-28.7	39,242	22.5	18.8-26.2
\$35,000 - 49,999	18,674	21.8	15.7-27.8	13,887	16.7	12.1-21.4	32,561	19.3	15.4-23.1
\$50,000 - 74,999	12,769	12.7	7.9-17.4	10,433	11.3	7.8-14.8	23,202	12.0	9.0-15.0
\$75,000+	11,760	5.7	3.8-7.7	15,233	9.6	6.9-12.3	26,993	7.4	5.8-9.0

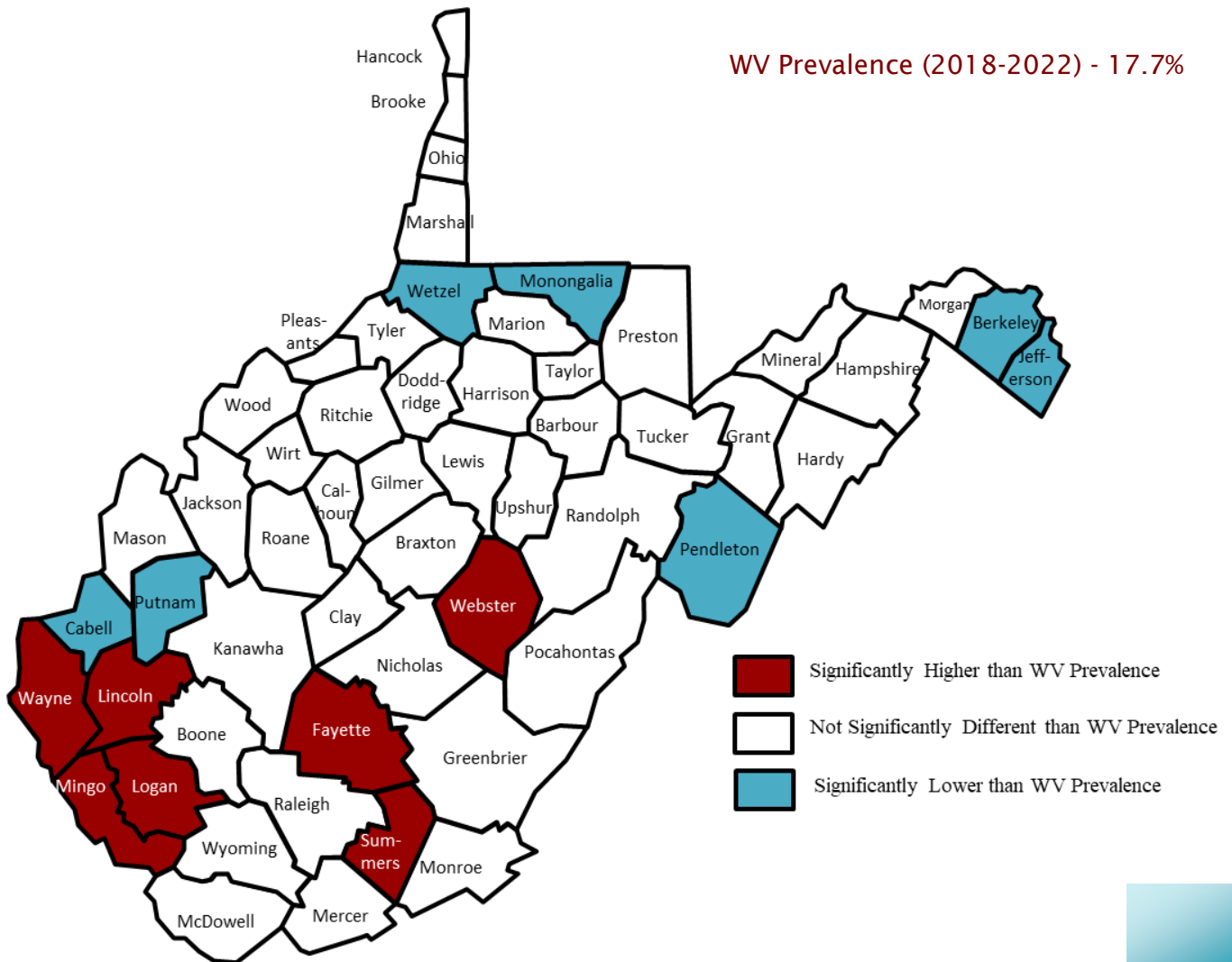
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.



# CHAPTER 1: HEALTH STATUS



**Figure 1.4 Prevalence of Poor Physical Health by County: WVBRFSS, 2018-2022**



# 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: 21.1%** (95% CI: 19.6-22.6)  
**U.S.: 15.8%** (95% CI: 15.5-16.0)

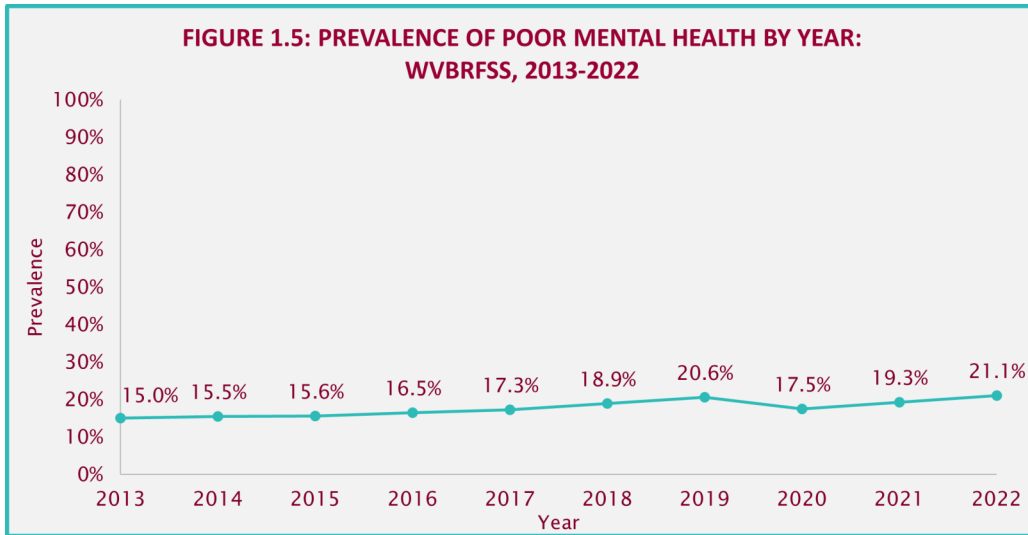
The WV prevalence of poor mental health was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 54 BRFSS participants.

**Table 1.3 Prevalence of Poor Mental health by Demographic Characteristics: WVBRFSS, 2022**

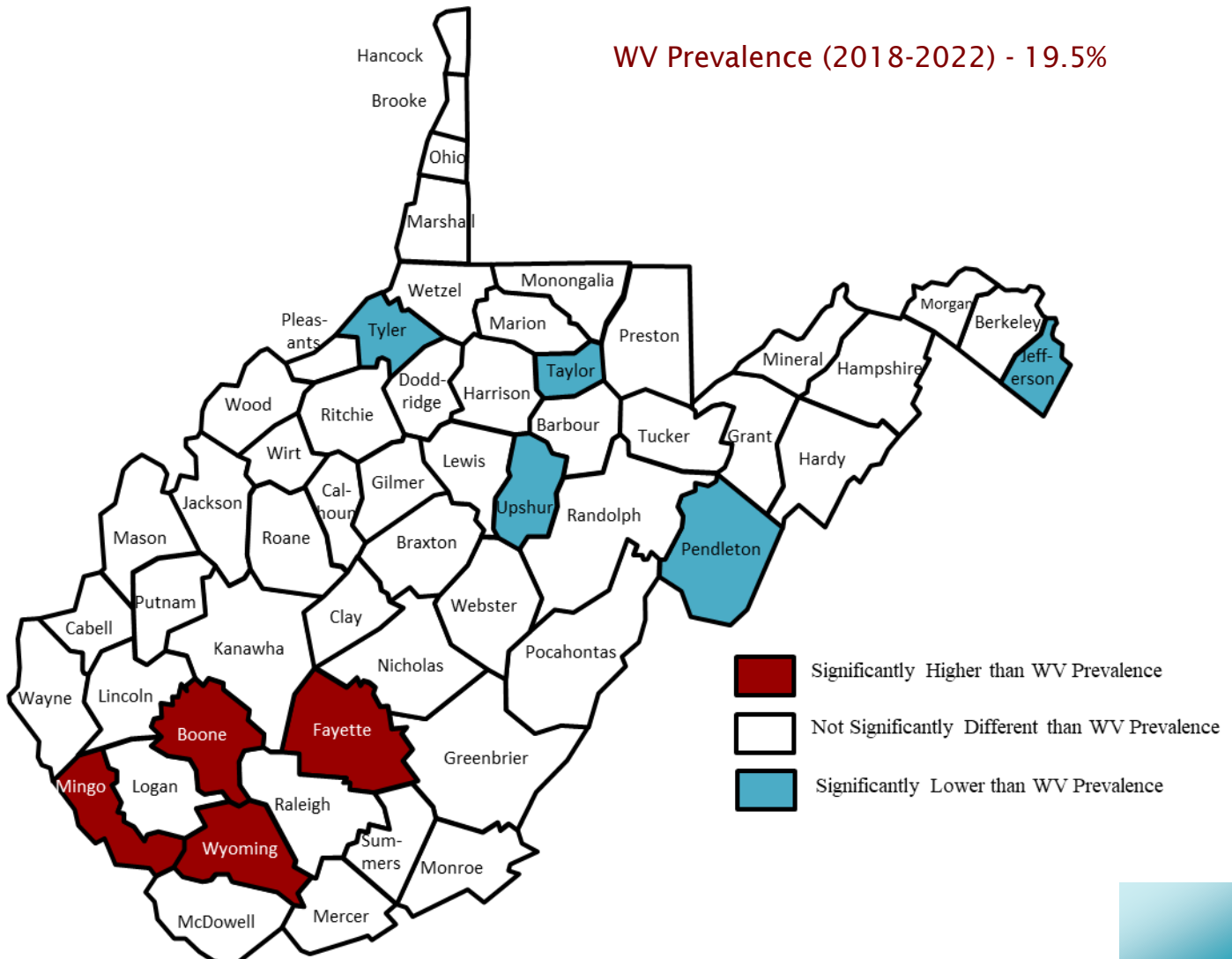
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	121,786	17.8	15.6-20.0	172,032	24.3	22.3-26.3	293,818	21.1	19.6-22.6
<b>Age</b>									
18-24	25,575	31.2	21.5-40.8	20,032	26.5	17.8-35.3	45,607	28.9	22.4-35.5
25-34	20,309	19.5	12.4-26.5	31,841	32.5	26.1-39.0	52,150	25.8	20.9-30.7
35-44	21,202	20.6	15.0-26.2	27,112	26.7	21.5-31.9	48,314	23.6	19.8-27.4
45-54	23,544	22.8	17.7-28.0	32,278	31.2	26.0-36.4	55,822	27.0	23.3-30.7
55-64	19,626	17.2	13.0-21.3	29,691	24.1	19.7-28.5	49,317	20.8	17.7-23.8
65+	11,322	6.6	4.7-8.5	30,804	15.3	12.7-17.9	42,127	11.3	9.6-12.9
<b>Education</b>									
Less than H.S.	22,879	27.0	19.0-35.1	27,053	33.3	25.8-40.9	49,932	30.1	24.6-35.6
H.S. or G.E.D.	52,319	18.1	14.7-21.5	64,121	24.4	21.0-27.8	116,440	21.1	18.7-23.5
Some Post-H.S.	31,889	18.0	13.7-22.4	54,865	26.2	22.4-30.0	86,754	22.5	19.6-25.3
College Graduate	14,698	11.1	8.0-14.2	25,771	16.8	13.7-19.9	40,470	14.2	11.9-16.4
<b>Income</b>									
Less than \$15,000	15,236	40.2*	28.2-52.2	30,900	48.3	40.1-56.6	46,137	45.3	38.5-52.1
\$15,000 - 24,999	12,317	20.7	14.2-27.3	26,265	28.8	22.9-34.7	38,582	25.6	21.2-30.0
\$25,000 - 34,999	20,298	25.3	18.2-32.3	25,438	27.2	21.6-32.8	45,735	26.3	21.9-30.7
\$35,000 - 49,999	16,801	19.4	12.3-26.5	20,506	24.9	18.9-30.8	37,307	22.1	17.4-26.7
\$50,000 - 74,999	13,545	13.5	8.4-18.5	18,492	20.3	15.1-25.4	32,037	16.7	13.1-20.3
\$75,000+	19,025	9.3	6.6-11.9	23,821	15.1	11.8-18.5	42,846	11.8	9.7-13.9

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

# CHAPTER 1: HEALTH STATUS



**Figure 1.6 Prevalence of Poor Mental Health by County: WVBRFSS, 2018-2022**



## Poor Health Limitations

**Definition** Responding “14 to 30 days” or “30 days” to the question, “During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?”

**Prevalence**

*At least 14 days*

**WV: 22.2%** (95% CI: 20.4-24.0)

**U.S.: 16.9%** (95% CI: 16.6-17.2)

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

*Every day*

**WV: 10.5%** (95% CI: 9.2-11.8)

**U.S.: 7.5%** (95% CI: 7.3-7.7)

West Virginia ranked the second highest among 54 BRFSS participants and was significantly higher than the U.S. prevalence.

# CHAPTER 1: HEALTH STATUS

**Table 1.4 Prevalence of Poor Health Limitations at Least 14 Days in the Past 30 Days by Demographic Characteristics: WVBRFSS, 2022**

Characteristic	Men			Women			Total		
	Weighted	%	95% CI	Weighted	%	95% CI	Weighted	%	95% CI
<b>TOTAL</b>	84,913	<b>21.4</b>	18.6-24.1	107,770	<b>22.9</b>	20.5-25.2	192,683	<b>22.2</b>	20.4-24.0
<b>Age</b>									
18-24	5,491	<b>9.5*</b>	3.0-15.9	8,046	<b>14.4*</b>	5.3-23.5	13,537	<b>11.9</b>	6.3-17.5
25-34	10,451	<b>16.0</b>	7.3-24.8	6,412	<b>9.1</b>	5.1-13.0	16,863	<b>12.4</b>	7.7-17.1
35-44	9,202	<b>14.7</b>	8.2-21.2	14,610	<b>22.3</b>	16.2-28.3	23,812	<b>18.6</b>	14.1-23.0
45-54	15,549	<b>25.8</b>	18.9-32.8	20,884	<b>28.3</b>	22.3-34.2	36,433	<b>27.2</b>	22.6-31.7
55-64	19,177	<b>29.0</b>	22.5-35.6	21,927	<b>27.8</b>	22.0-33.6	41,104	<b>28.4</b>	24.0-32.7
65+	24,163	<b>28.9</b>	23.7-34.1	35,605	<b>28.8</b>	24.5-33.0	59,768	<b>28.8</b>	25.5-32.1
<b>Education</b>									
Less than H.S.	21,827	<b>39.8*</b>	29.6-49.9	24,131	<b>44.6</b>	34.9-54.4	45,958	<b>42.2</b>	35.1-49.3
H.S. or G.E.D.	29,919	<b>18.1</b>	14.3-21.9	37,963	<b>22.7</b>	18.8-26.5	67,881	<b>20.4</b>	17.7-23.1
Some Post-H.S.	25,520	<b>23.3</b>	17.3-29.3	32,619	<b>22.4</b>	18.3-26.4	58,139	<b>22.8</b>	19.3-26.2
College Graduate	7,647	<b>11.3</b>	7.7-14.8	12,473	<b>12.1</b>	9.2-15.0	20,120	<b>11.8</b>	9.5-14.0
<b>Income</b>									
Less than \$15,000	16,726	<b>52.5*</b>	39.3-65.7	24,316	<b>46.4</b>	37.5-55.3	41,042	<b>48.7</b>	41.2-56.2
\$15,000 - 24,999	12,541	<b>33.8</b>	24.6-43.1	19,543	<b>31.0</b>	24.2-37.9	32,084	<b>32.1</b>	26.6-37.6
\$25,000 - 34,999	15,814	<b>31.1</b>	22.6-39.7	17,189	<b>26.4</b>	20.0-32.8	33,002	<b>28.5</b>	23.2-33.7
\$35,000 - 49,999	11,412	<b>23.6</b>	14.9-32.2	10,845	<b>19.5</b>	13.4-25.7	22,258	<b>21.4</b>	16.2-26.6
\$50,000 - 74,999	4,292	<b>7.8</b>	3.5-12.0	7,590	<b>12.2</b>	7.5-16.9	11,883	<b>10.1</b>	6.9-13.3
\$75,000+	6,189	<b>5.9</b>	3.3-8.5	8,890	<b>9.5</b>	5.8-13.3	15,079	<b>7.6</b>	5.4-9.9

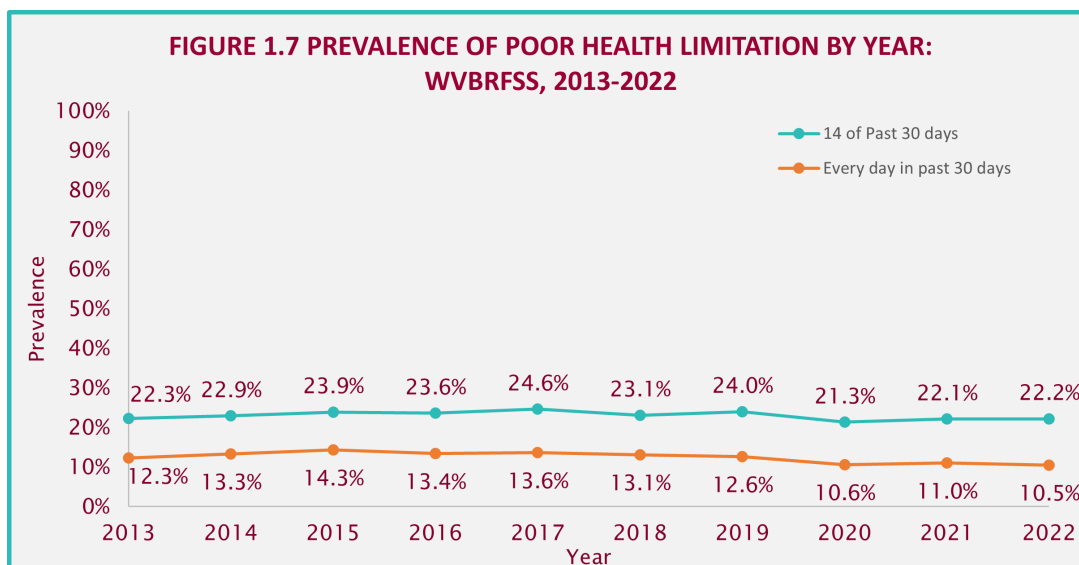
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

# CHAPTER 1: HEALTH STATUS

**Table 1.5 Prevalence of Poor Health Limitations Every Day in the Past 30 Days by Demographic Characteristics: WVBRFSS, 2022**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	46,183	11.6	9.5-13.7	45,017	9.6	8.0-11.1	91,200	10.5	9.2-11.8
<b>Age</b>									
18-24	1,305	2.2*	0.0-5.4	.	.	.	1,305	1.1*	0.0-2.7
25-34	4,507	6.9*	0.2-13.6	1,453	2.1*	0.1-4.0	5,960	4.4*	1.0-7.8
35-44	4,312	6.9*	2.3-11.4	4,680	7.1	3.7-10.6	8,992	7.0	4.2-9.8
45-54	8,183	13.6	8.3-18.9	7,060	9.6	5.5-13.6	15,243	11.4	8.1-14.6
55-64	12,301	18.6	12.8-24.4	10,338	13.1	9.0-17.2	22,639	15.6	12.1-19.1
65+	15,367	18.4	14.0-22.8	21,486	17.4	13.7-21.0	36,853	17.8	15.0-20.6
<b>Education</b>									
Less than H.S.	13,910	25.3	16.7-34.0	11,860	21.9	13.9-30.0	25,769	23.7	17.8-29.6
H.S. or G.E.D.	16,566	10.0	7.2-12.8	14,910	8.9	6.7-11.1	31,476	9.5	7.7-11.2
Some Post-H.S.	11,606	10.6	6.1-15.1	12,554	8.6	6.3-10.9	24,160	9.5	7.1-11.8
College Graduate	4,102	6.0	3.6-8.4	5,597	5.4	3.4-7.5	9,699	5.7	4.1-7.2
<b>Income</b>									
Less than \$15,000	10,897	34.2*	21.1-47.3	11,262	21.5	14.7-28.3	22,159	26.3	19.6-33.0
\$15,000 - 24,999	5,816	15.7	8.7-22.7	9,046	14.4	9.5-19.2	14,861	14.9	10.9-18.9
\$25,000 - 34,999	8,236	16.2	10.1-22.4	6,267	9.6	5.6-13.6	14,503	12.5	9.0-16.0
\$35,000 - 49,999	7,104	14.7	8.0-21.4	4,635	8.4	4.7-12.0	11,739	11.3	7.6-15.0
\$50,000 - 74,999	3,271	5.9*	2.2-9.7	3,334	5.4	2.6-8.1	6,605	5.6	3.3-7.9
\$75,000+	1,684	1.6*	0.5-2.8	3,365	3.6	1.5-5.7	5,049	2.6	1.4-3.7

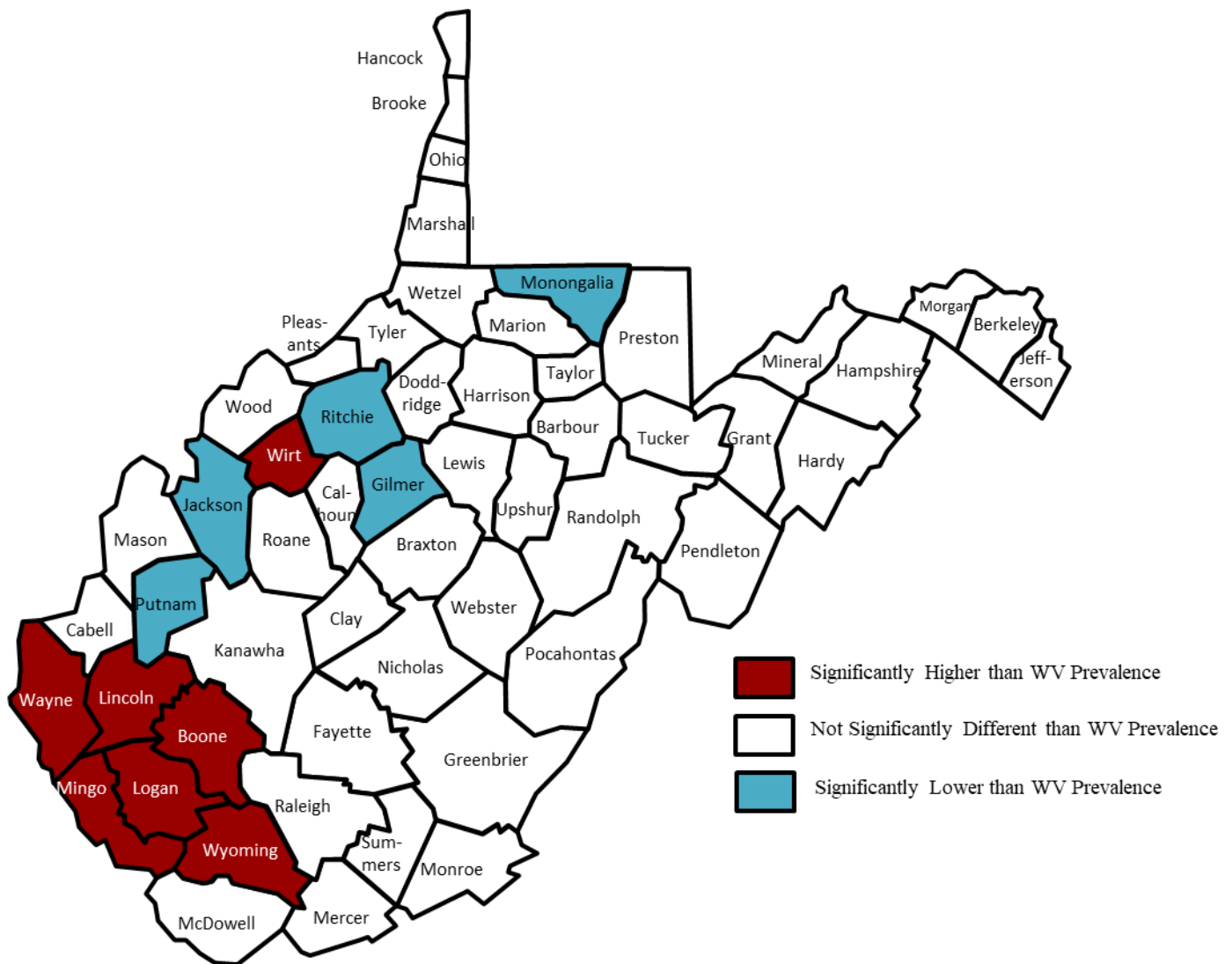
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page



# CHAPTER 1: HEALTH STATUS

**Figure 1.8 Prevalence of Poor Health Limitations At Least 14 Days in the Past 30 Days by County: WVBRFSS, 2018-2022**

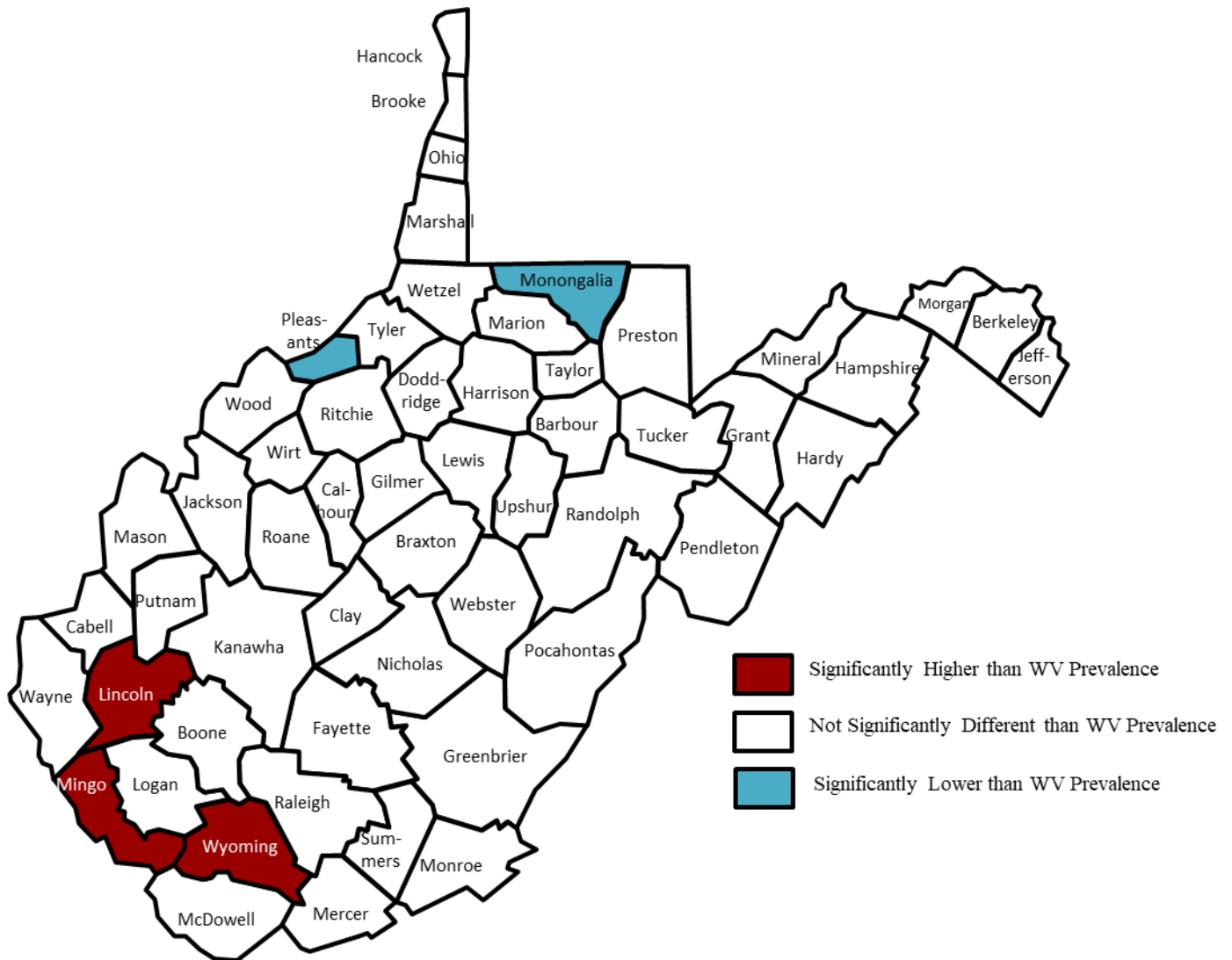
WV Prevalence (2018-2022) - 22.6%



# CHAPTER 1: HEALTH STATUS

**Figure 1.9 Prevalence of Poor Health Limitations Every Day in the Past 30 Days by County: WVBRFSS, 2018-2022**

WV Prevalence (2018-2022) - 11.6%





## 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: 18.8%** (95% CI: 17.4-20.2)

**U.S.: 13.5%** (95% CI: 13.2-13.7)

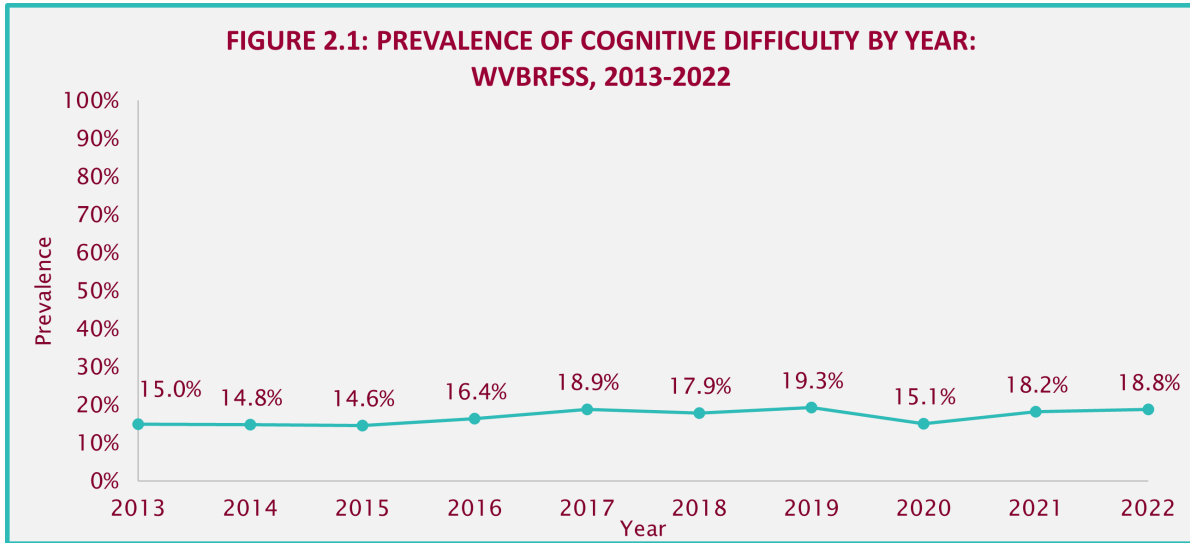
The West Virginia prevalence of cognitive difficulty was significantly higher than the U.S. prevalence. West Virginia ranked fourth highest among the 54 BRFSS participants.

**Table 2.1 Prevalence of Cognitive Difficulty by Demographic Characteristics: WVBRFSS, 2022**

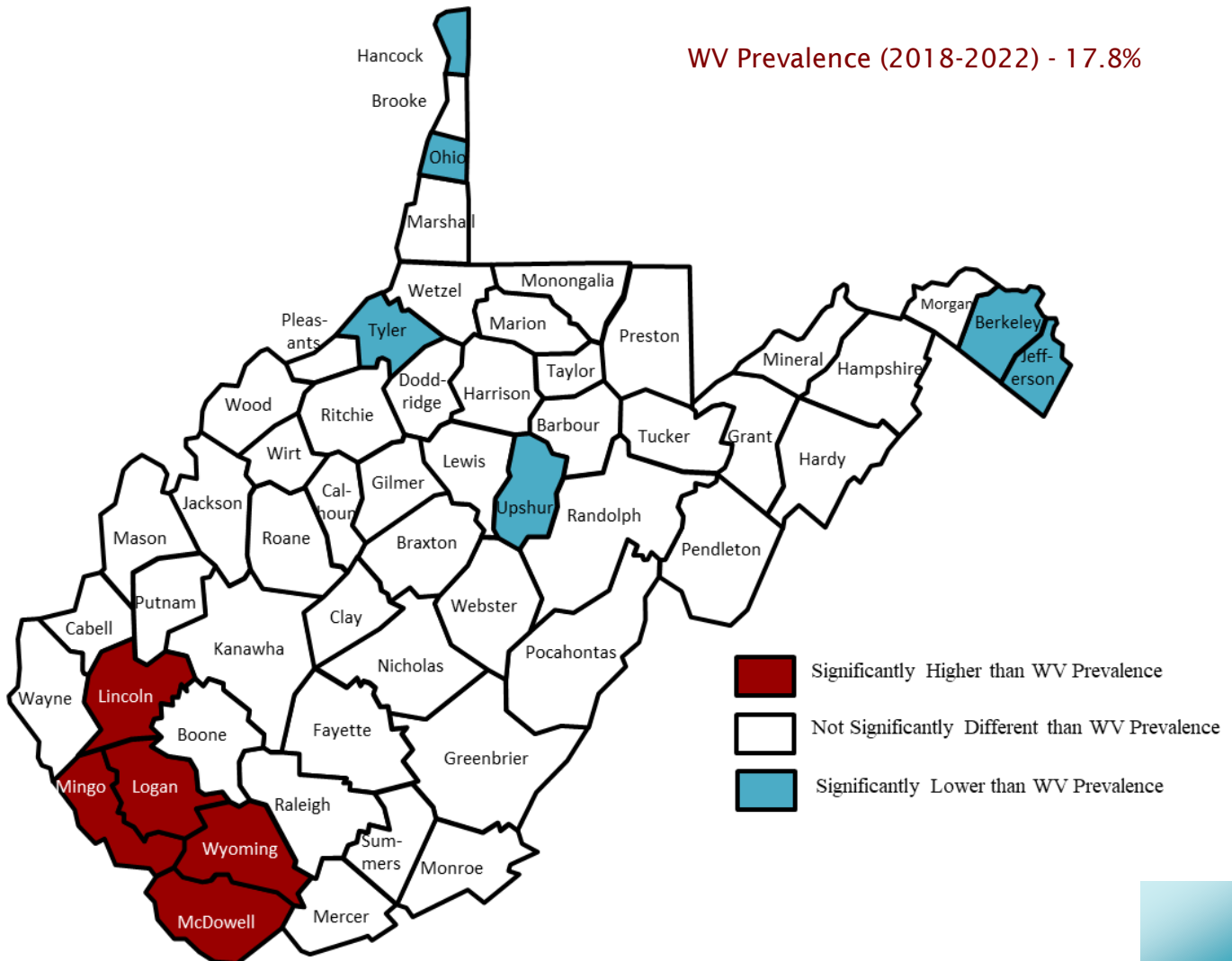
Characteristic	Men			Women			Total		
	Weighted	%	95% CI	Weighted	%	95% CI	Weighted	%	95% CI
TOTAL	110,185	<b>16.4</b>	14.3-18.4	148,843	<b>21.2</b>	19.2-23.1	259,028	<b>18.8</b>	17.4-20.2
<b>Age</b>									
18-24	17,267	<b>21.8</b>	13.1-30.5	18,867	<b>25.6</b>	16.4-34.7	36,133	<b>23.6</b>	17.3-29.9
25-34	16,819	<b>17.1</b>	10.0-24.2	21,460	<b>22.3</b>	16.5-28.0	38,279	<b>19.6</b>	15.1-24.2
35-44	16,147	<b>15.8</b>	10.7-20.9	20,029	<b>19.9</b>	15.2-24.7	36,176	<b>17.9</b>	14.4-21.4
45-54	18,770	<b>18.8</b>	13.8-23.7	22,085	<b>21.7</b>	17.0-26.4	40,855	<b>20.3</b>	16.8-23.7
55-64	19,915	<b>17.3</b>	13.0-21.6	25,413	<b>20.8</b>	16.7-25.0	45,328	<b>19.1</b>	16.1-22.1
65+	20,840	<b>12.1</b>	9.5-14.6	40,603	<b>20.0</b>	16.9-23.0	61,444	<b>16.3</b>	14.3-18.4
<b>Education</b>									
Less than H.S.	27,863	<b>33.3</b>	25.0-41.6	29,759	<b>37.0</b>	29.1-44.8	57,621	<b>35.1</b>	29.4-40.8
H.S. or G.E.D.	42,051	<b>14.7</b>	11.8-17.7	56,494	<b>21.6</b>	18.3-24.9	98,546	<b>18.0</b>	15.8-20.3
Some Post-H.S.	28,608	<b>16.8</b>	12.5-21.1	46,261	<b>22.2</b>	18.7-25.8	74,869	<b>19.8</b>	17.1-22.6
College Graduate	11,494	<b>8.7</b>	6.0-11.4	16,188	<b>10.6</b>	8.3-13.0	27,682	<b>9.7</b>	8.0-11.5
<b>Income</b>									
Less than \$15,000	18,173	<b>45.0*</b>	33.2-56.7	25,688	<b>39.8</b>	31.8-47.8	43,861	<b>41.8</b>	35.0-48.5
\$15,000 - 24,999	15,738	<b>27.8</b>	20.3-35.4	27,431	<b>30.5</b>	24.3-36.8	43,169	<b>29.5</b>	24.7-34.3
\$25,000 - 34,999	19,333	<b>24.1</b>	17.2-31.1	24,976	<b>26.7</b>	21.1-32.3	44,308	<b>25.5</b>	21.1-29.9
\$35,000 - 49,999	12,942	<b>14.8</b>	9.5-20.1	13,014	<b>15.9</b>	11.0-20.7	25,956	<b>15.3</b>	11.7-18.9
\$50,000 - 74,999	10,117	<b>10.0</b>	5.8-14.2	10,509	<b>11.3</b>	7.6-15.1	20,626	<b>10.7</b>	7.8-13.5
\$75,000+	12,817	<b>6.3</b>	4.1-8.5	14,383	<b>9.1</b>	6.5-11.6	27,199	<b>7.5</b>	5.8-9.2

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

# CHAPTER 2: Impairment



**Figure 2.2 Prevalence of Cognitive Difficulty by County: WVBRFSS, 2018-2022**



## CHAPTER 2: Impairment

### Difficulty Walking

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

**Prevalence** **WV: 20.9%** (95% CI: 19.6-22.2)  
**U.S.: 13.8%** (95% CI: 13.6-14.0)

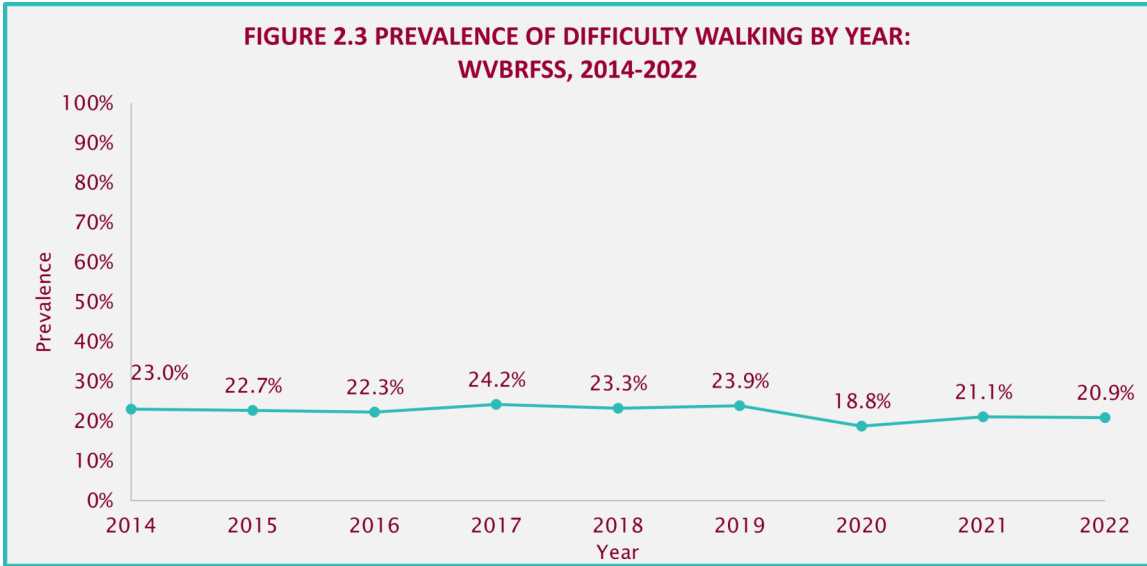
The West Virginia prevalence of difficulty walking was significantly higher than the U.S. prevalence. West Virginia ranked the second highest among the 54 BRFSS participants.

**Table 2.2 Prevalence of Difficulty Walking by Demographic Characteristics: WVBRFSS, 2022**

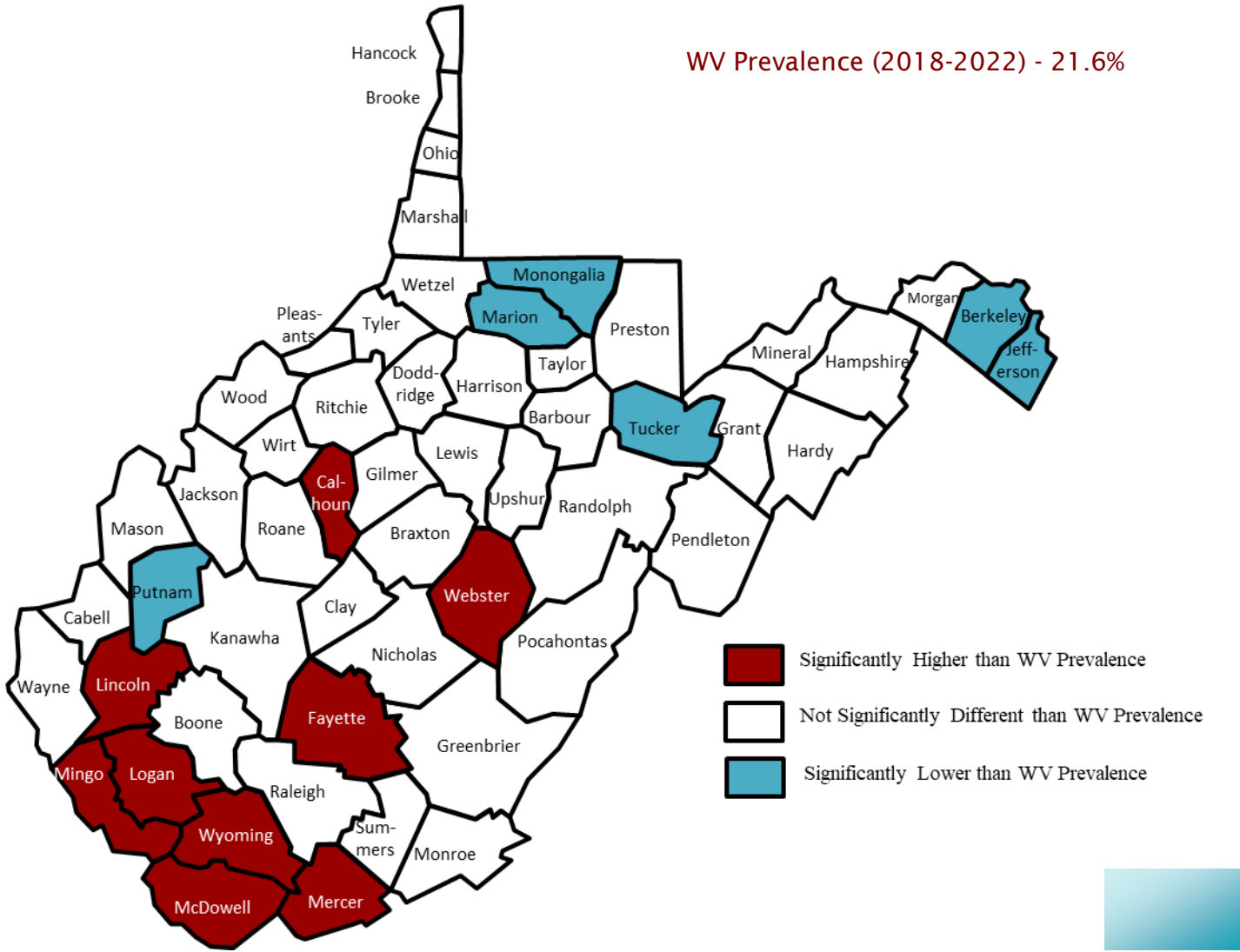
Characteristic	Men			Women			Total		
	Weighted	%	95% CI	Weighted	%	95% CI	Weighted	%	95% CI
TOTAL	124,716	<b>18.5</b>	16.6-20.4	163,660	<b>23.2</b>	21.4-25.0	288,376	<b>20.9</b>	19.6-22.2
<b>Age</b>									
18-24	1,227	<b>1.5*</b>	0.0-3.7	523	<b>0.7*</b>	0.0-2.1	1,750	<b>1.1*</b>	0.0-2.4
25-34	8,252	<b>8.2*</b>	2.8-13.6	4,260	<b>4.4*</b>	1.5-7.3	12,513	<b>6.4</b>	3.3-9.5
35-44	9,494	<b>9.4</b>	5.3-13.5	12,746	<b>12.7</b>	8.7-16.7	22,241	<b>11.0</b>	8.1-13.9
45-54	15,437	<b>15.3</b>	10.7-19.9	25,854	<b>25.2</b>	20.3-30.0	41,291	<b>20.3</b>	16.9-23.6
55-64	33,432	<b>29.4</b>	24.4-34.4	36,852	<b>30.2</b>	25.5-34.9	70,284	<b>29.8</b>	26.4-33.3
65+	55,801	<b>32.3</b>	28.5-36.2	82,158	<b>40.2</b>	36.6-43.7	137,959	<b>36.6</b>	34.0-39.2
<b>Education</b>									
Less than H.S.	32,018	<b>38.0</b>	29.7-46.3	36,639	<b>45.0</b>	37.0-53.1	68,656	<b>41.4</b>	35.7-47.2
H.S. or G.E.D.	53,689	<b>18.8</b>	15.9-21.7	62,531	<b>23.9</b>	20.9-26.9	116,221	<b>21.2</b>	19.1-23.3
Some Post-H.S.	27,340	<b>16.1</b>	12.8-19.4	46,806	<b>22.3</b>	19.2-25.5	74,146	<b>19.5</b>	17.2-21.8
College Graduate	11,669	<b>8.8</b>	6.6-11.0	17,448	<b>11.4</b>	9.2-13.7	29,117	<b>10.2</b>	8.6-11.8
<b>Income</b>									
Less than \$15,000	15,975	<b>40.1*</b>	29.0-51.2	27,234	<b>42.2</b>	34.3-50.0	43,209	<b>41.4</b>	34.9-47.8
\$15,000 - 24,999	25,376	<b>44.5</b>	36.1-52.9	30,819	<b>34.1</b>	28.2-40.1	56,195	<b>38.2</b>	33.2-43.1
\$25,000 - 34,999	19,175	<b>23.9</b>	18.1-29.6	23,468	<b>24.9</b>	20.1-29.8	42,643	<b>24.5</b>	20.7-28.2
\$35,000 - 49,999	17,794	<b>20.6</b>	15.2-26.0	17,357	<b>21.0</b>	16.0-26.1	35,151	<b>20.8</b>	17.1-24.5
\$50,000 - 74,999	14,421	<b>14.3</b>	9.8-18.7	14,759	<b>15.9</b>	11.8-19.9	29,180	<b>15.0</b>	12.0-18.1
\$75,000+	10,417	<b>5.1</b>	3.4-6.8	11,918	<b>7.5</b>	5.3-9.7	22,336	<b>6.2</b>	4.8-7.5

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

# CHAPTER 2: Impairment



**Figure 2.4 Prevalence of Difficulty Walking by County: WVBRFSS, 2018-2022**



## CHAPTER 2: Impairment

### Difficulty Dressing or Bathing

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

**Prevalence** **WV: 6.6%** (95% CI: 5.8-7.4)

**U.S.: 3.9%** (95% CI: 3.7-4.0)

The West Virginia prevalence of difficulty dressing or bathing was significantly higher than the U.S. prevalence. West Virginia ranked the second highest among the 54 BRFSS participants.

**Table 2.3 Prevalence of Difficulty Dressing or Bathing by Demographic Characteristics: WVBRFSS, 2022**

Characteristic	Men			Women			Total		
	Weighted	%	95% CI	Weighted	%	95% CI	Weighted	%	95% CI
TOTAL	41,115	<b>6.1</b>	4.9-7.3	50,105	<b>7.1</b>	6-8.2	91,220	<b>6.6</b>	5.8-7.4
<b>Age</b>									
18-24	.	.	.	752	<b>1.0*</b>	0.0-3.0	752	<b>0.5*</b>	0.0-1.4
25-34	3,462	<b>3.5*</b>	0.0-7.1	742	<b>0.8*</b>	0.0-1.6	4,204	<b>2.2*</b>	0.3-4.0
35-44	3,407	<b>3.4*</b>	1.1-5.6	5,048	<b>5.0</b>	2.4-7.6	8,456	<b>4.2</b>	2.5-5.9
45-54	8,115	<b>8.0</b>	4.6-11.4	9,876	<b>9.6</b>	6.0-13.2	17,991	<b>8.8</b>	6.3-11.3
55-64	12,229	<b>10.6</b>	7.2-14.0	11,004	<b>9.0</b>	6.1-11.9	23,233	<b>9.8</b>	7.6-12.0
65+	13,047	<b>7.5</b>	5.4-9.7	22,683	<b>11.1</b>	8.9-13.3	35,730	<b>9.5</b>	7.9-11.0
<b>Education</b>									
Less than H.S.	8,795	<b>10.4</b>	5.7-15.0	12,543	<b>15.5</b>	10.1-20.8	21,338	<b>12.8</b>	9.3-16.4
H.S. or G.E.D.	16,653	<b>5.8</b>	4.1-7.6	16,639	<b>6.3</b>	4.8-7.9	33,292	<b>6.1</b>	4.9-7.3
Some Post-H.S.	12,047	<b>7.1</b>	4.6-9.6	15,665	<b>7.5</b>	5.5-9.4	27,712	<b>7.3</b>	5.7-8.9
College Graduate	3,620	<b>2.7</b>	1.6-3.9	5,117	<b>3.4</b>	1.8-4.9	8,737	<b>3.1</b>	2.1-4.0
<b>Income</b>									
Less than \$15,000	5,931	<b>14.7</b>	7.5-21.9	12,475	<b>19.3</b>	13.2-25.4	18,406	<b>17.5</b>	12.8-22.2
\$15,000 - 24,999	10,399	<b>18.1</b>	11.9-24.3	12,457	<b>13.8</b>	9.7-17.9	22,856	<b>15.5</b>	12.0-19.0
\$25,000 - 34,999	8,728	<b>10.8</b>	6.7-15.0	5,747	<b>6.1</b>	3.6-8.6	14,476	<b>8.3</b>	5.9-10.7
\$35,000 - 49,999	4,400	<b>5.1*</b>	1.8-8.4	2,709	<b>3.3</b>	1.4-5.2	7,109	<b>4.2</b>	2.3-6.1
\$50,000 - 74,999	4,319	<b>4.3*</b>	1.3-7.3	4,095	<b>4.4</b>	2.0-6.8	8,414	<b>4.4</b>	2.4-6.3
\$75,000+	2,808	<b>1.4*</b>	0.4-2.3	2,263	<b>1.4*</b>	0.4-2.5	5,071	<b>1.4</b>	0.7-2.1

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



## CHAPTER 2: Impairment

### Difficulty Doing Errands Alone

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

**Prevalence** **WV: 11.9%** (95% CI: 10.8-13.0)

**U.S.: 8.0%** (95% CI: 7.8-8.2)

The West Virginia prevalence of difficulty doing errands alone was significantly higher than the U.S. prevalence. West Virginia ranked the second highest among the 54 BRFSS participants.

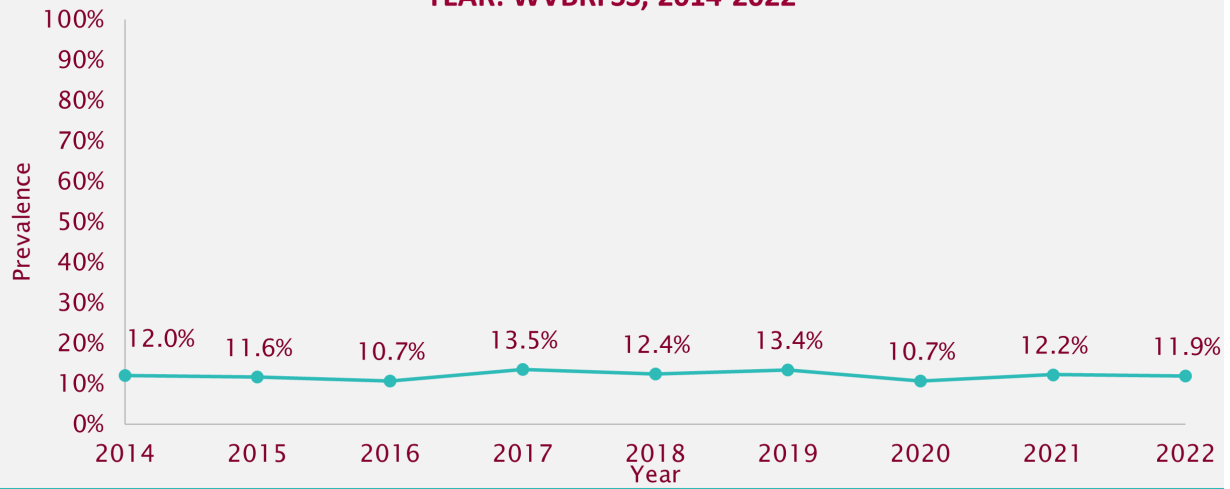
**Table 2.4 Prevalence of Difficulty Doing Errands Alone by Demographic Characteristics: WVBRFSS, 2022**

Characteristic	Men			Women			Total		
	Weighted	%	95% CI	Weighted	%	95% CI	Weighted	%	95% CI
TOTAL	59,593	<b>8.9</b>	7.3-10.4	103,999	<b>14.8</b>	13.2-16.4	163,592	<b>11.9</b>	10.8-13.0
<b>Age</b>									
18-24	3,442	<b>4.3*</b>	0.2-8.4	7,525	<b>10.2*</b>	3.9-16.6	10,968	<b>7.1</b>	3.4-10.9
25-34	8,040	<b>8.2*</b>	2.2-14.2	8,070	<b>8.4</b>	4.7-12.1	16,110	<b>8.3</b>	4.8-11.8
35-44	4,531	<b>4.5*</b>	1.6-7.4	13,876	<b>13.8</b>	9.7-18.0	18,407	<b>9.2</b>	6.6-11.7
45-54	10,994	<b>10.9</b>	7.1-14.7	16,749	<b>16.3</b>	12.0-20.6	27,743	<b>13.6</b>	10.7-16.5
55-64	13,687	<b>12.0</b>	8.4-15.6	15,766	<b>13.0</b>	9.7-16.3	29,453	<b>12.5</b>	10.0-14.9
65+	18,045	<b>10.5</b>	8.0-12.9	41,700	<b>20.5</b>	17.5-23.4	59,745	<b>15.9</b>	13.9-17.9
<b>Education</b>									
Less than H.S.	16,050	<b>19.3</b>	12.5-26.1	23,800	<b>29.8</b>	22.7-37.0	39,850	<b>24.5</b>	19.5-29.4
H.S. or G.E.D.	21,233	<b>7.5</b>	5.5-9.4	40,430	<b>15.5</b>	12.7-18.2	61,663	<b>11.3</b>	9.6-13.0
Some Post-H.S.	16,761	<b>9.9</b>	6.3-13.5	28,197	<b>13.5</b>	10.8-16.1	44,958	<b>11.9</b>	9.7-14.0
College Graduate	5,549	<b>4.2</b>	2.7-5.7	11,336	<b>7.5</b>	5.3-9.6	16,884	<b>5.9</b>	4.6-7.3
<b>Income</b>									
Less than \$15,000	12,367	<b>31.5*</b>	19.3-43.6	20,573	<b>31.9</b>	24.5-39.2	32,940	<b>31.7</b>	25.2-38.2
\$15,000 - 24,999	11,275	<b>19.9</b>	13.3-26.5	20,928	<b>23.3</b>	17.9-28.8	32,203	<b>22.0</b>	17.8-26.2
\$25,000 - 34,999	10,179	<b>12.6</b>	7.7-17.6	16,672	<b>17.8</b>	13.1-22.5	26,851	<b>15.4</b>	12.0-18.8
\$35,000 - 49,999	7,618	<b>8.8</b>	4.7-13.0	8,999	<b>10.9</b>	7.1-14.6	16,616	<b>9.8</b>	7.0-12.6
\$50,000 - 74,999	3,883	<b>3.9</b>	1.7-6.1	6,178	<b>6.6</b>	4.1-9.1	10,061	<b>5.2</b>	3.6-6.9
\$75,000+	3,241	<b>1.6*</b>	0.6-2.6	6,670	<b>4.2</b>	2.4-6.0	9,910	<b>2.7</b>	1.8-3.7

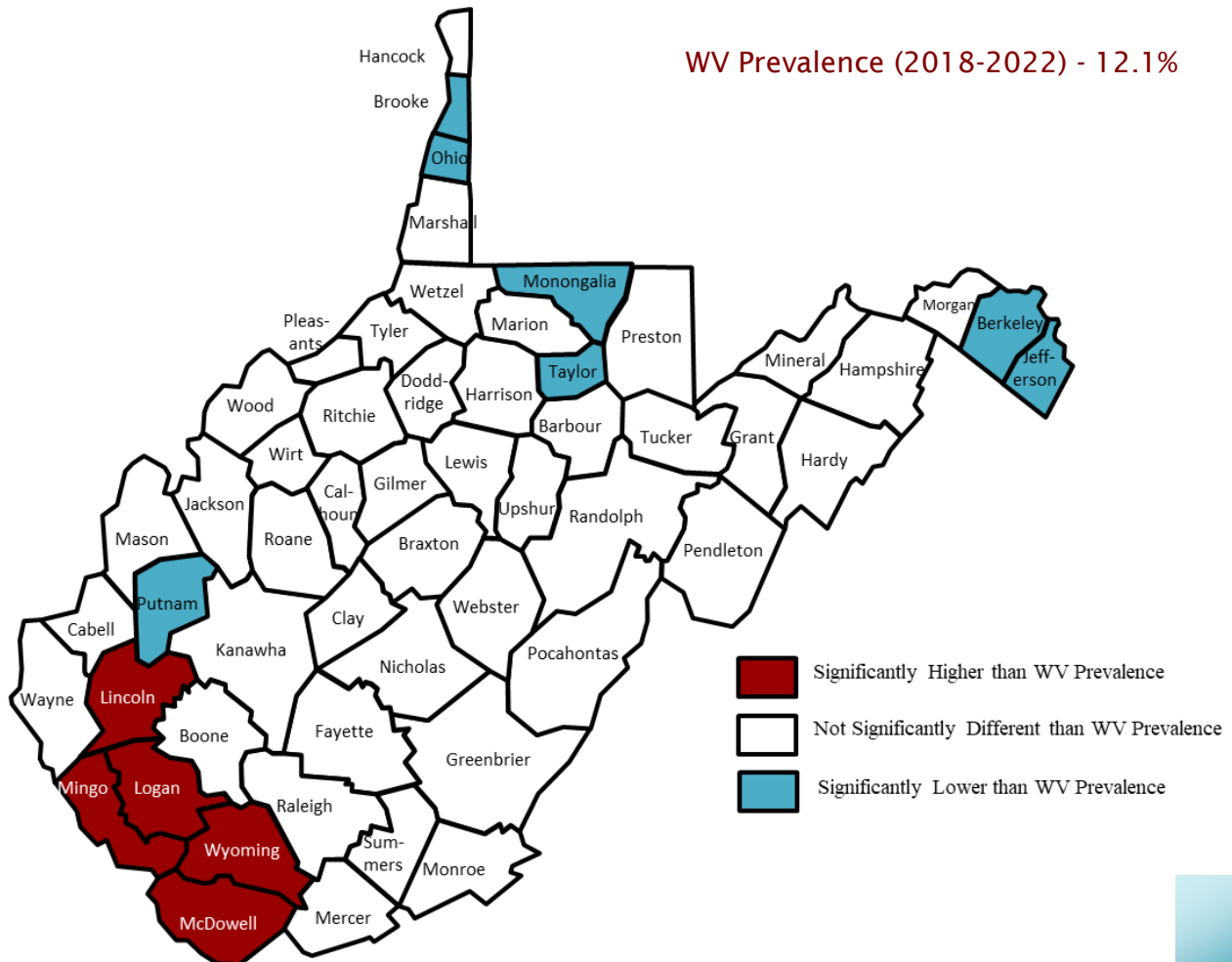
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

# CHAPTER 2: Impairment

**FIGURE 2.7 PREVALENCE OF DIFFICULTY DOING ERRANDS ALONE BY YEAR: WVBRFSS, 2014-2022**



**Figure 2.8 Prevalence of Difficulty Doing Errands Alone by County: WVBRFSS, 2018-2022**





## CHAPTER 2: Impairment

### Vision Impairment

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

**Prevalence** **WV: 7.1%** (95% CI: 6.3-7.9)

**U.S.: 5.8%** (95% CI: 5.7-6.0)

The West Virginia prevalence of vision impairment was significantly higher than the U.S. prevalence. West Virginia ranked 10<sup>th</sup> among 54 BRFSS participants.

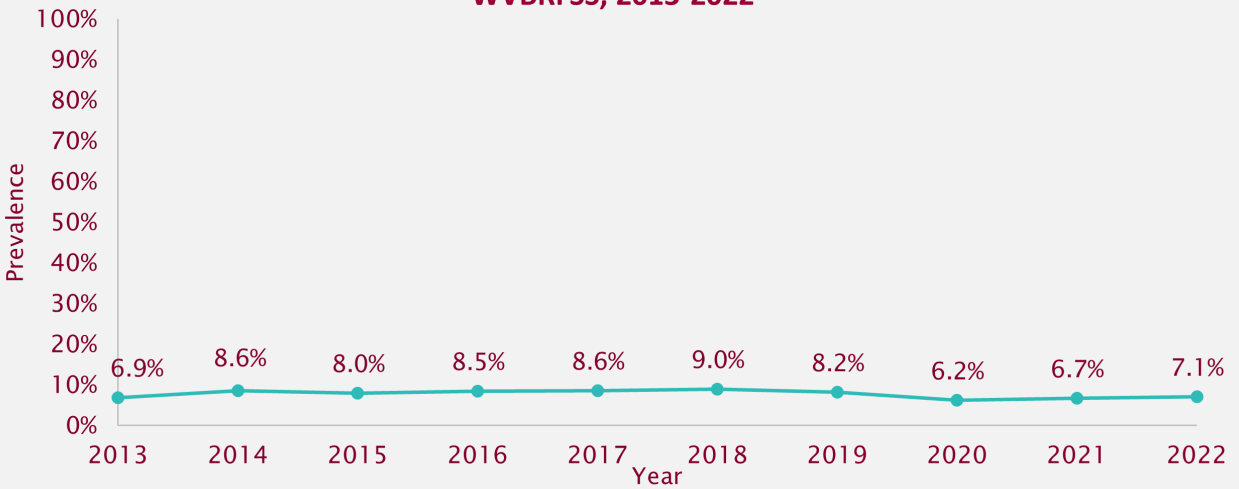
**Table 2.5 Prevalence of Vision Impairment by Demographic Characteristics: WVBRFSS, 2022**

Characteristic	Men			Women			Total		
	Weighted	%	95% CI	Weighted	%	95% CI	Weighted	%	95% CI
TOTAL	42,266	<b>6.2</b>	5.1-7.4	56,433	<b>7.9</b>	6.7-9.2	98,700	<b>7.1</b>	6.3-7.9
<b>Age</b>									
18-24	476	<b>0.6*</b>	0.0-1.8	3,771	<b>5.0*</b>	1.0-9.0	4,246	<b>2.7*</b>	0.7-4.8
25-34	3,596	<b>3.6*</b>	0.4-6.8	2,224	<b>2.3*</b>	0.2-4.4	5,820	<b>2.9*</b>	1.0-4.9
35-44	4,537	<b>4.5*</b>	1.7-7.2	5,941	<b>5.9</b>	3.1-8.7	10,477	<b>5.2</b>	3.2-7.1
45-54	6,787	<b>6.7</b>	3.4-9.9	10,014	<b>9.7</b>	6.1-13.4	16,801	<b>8.2</b>	5.8-10.6
55-64	10,132	<b>8.8</b>	5.7-11.8	11,558	<b>9.4</b>	6.5-12.3	21,690	<b>9.1</b>	7.0-11.2
65+	15,619	<b>9.0</b>	6.7-11.3	22,197	<b>10.8</b>	8.4-13.2	37,816	<b>10.0</b>	8.3-11.6
<b>Education</b>									
Less than H.S.	10,829	<b>12.7</b>	7.7-17.6	13,250	<b>16.1</b>	10.3-21.9	24,079	<b>14.4</b>	10.5-18.2
H.S. or G.E.D.	14,776	<b>5.1</b>	3.6-6.7	22,094	<b>8.4</b>	6.4-10.4	36,871	<b>6.7</b>	5.4-8.0
Some Post-H.S.	10,797	<b>6.3</b>	3.8-8.7	15,712	<b>7.4</b>	5.4-9.5	26,509	<b>6.9</b>	5.3-8.5
College Graduate	5,864	<b>4.4</b>	2.6-6.2	5,377	<b>3.5</b>	2.1-4.9	11,241	<b>3.9</b>	2.8-5.0
<b>Income</b>									
Less than \$15,000	7,131	<b>17.7</b>	10.0-25.4	11,530	<b>17.8</b>	12.1-23.5	18,660	<b>17.8</b>	13.2-22.4
\$15,000 - 24,999	9,075	<b>15.7</b>	9.6-21.9	9,410	<b>10.3</b>	6.7-13.9	18,485	<b>12.4</b>	9.1-15.6
\$25,000 - 34,999	4,290	<b>5.3</b>	2.5-8.2	6,927	<b>7.3</b>	4.3-10.4	11,217	<b>6.4</b>	4.3-8.5
\$35,000 - 49,999	4,772	<b>5.5</b>	2.7-8.2	4,919	<b>5.9</b>	3.3-8.5	9,691	<b>5.7</b>	3.8-7.6
\$50,000 - 74,999	4,167	<b>4.1</b>	1.9-6.3	5,120	<b>5.5</b>	2.6-8.3	9,287	<b>4.8</b>	3.0-6.6
\$75,000+	7,364	<b>3.6</b>	1.7-5.4	3,944	<b>2.5*</b>	0.9-4	11,308	<b>3.1</b>	1.9-4.3

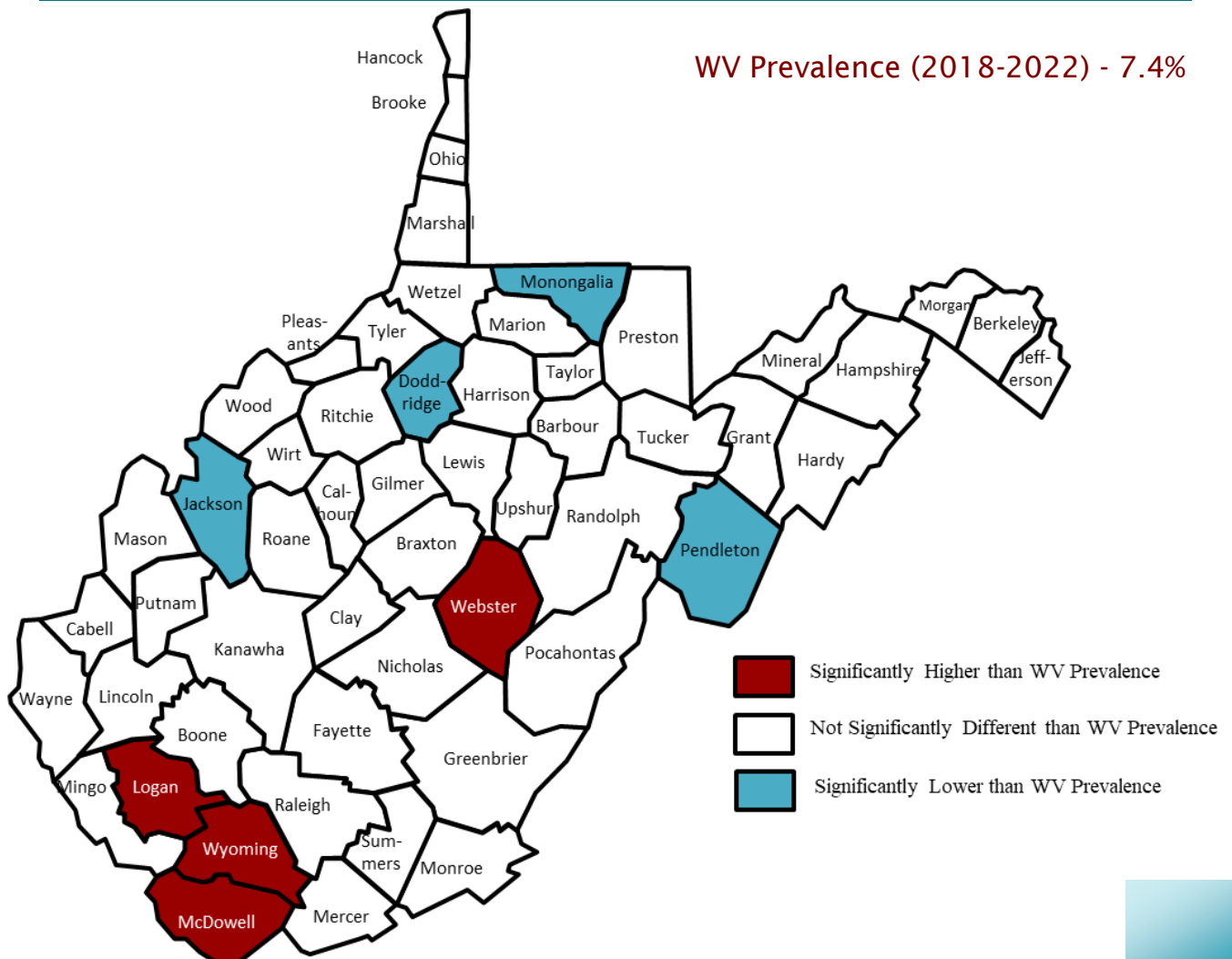
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

# CHAPTER 2: Impairment

**FIGURE 2.9 PREVALENCE OF VISION IMPAIRMENT BY YEAR:  
WVBRFSS, 2013-2022**



**Table 2.10 Prevalence of Vision Impairment by Demographic Characteristics:  
WVBRFSS, 2022**



## CHAPTER 2: Impairment

### Hearing Impairment

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

**Prevalence** **WV: 9.8%** (95% CI: 8.9-10.8)  
**U.S.: 7.1%** (95% CI: 6.9-7.3)

The West Virginia prevalence of hearing impairment was significantly higher than the U.S. prevalence. West Virginia ranked the sixth highest among 54 BRFSS participants.

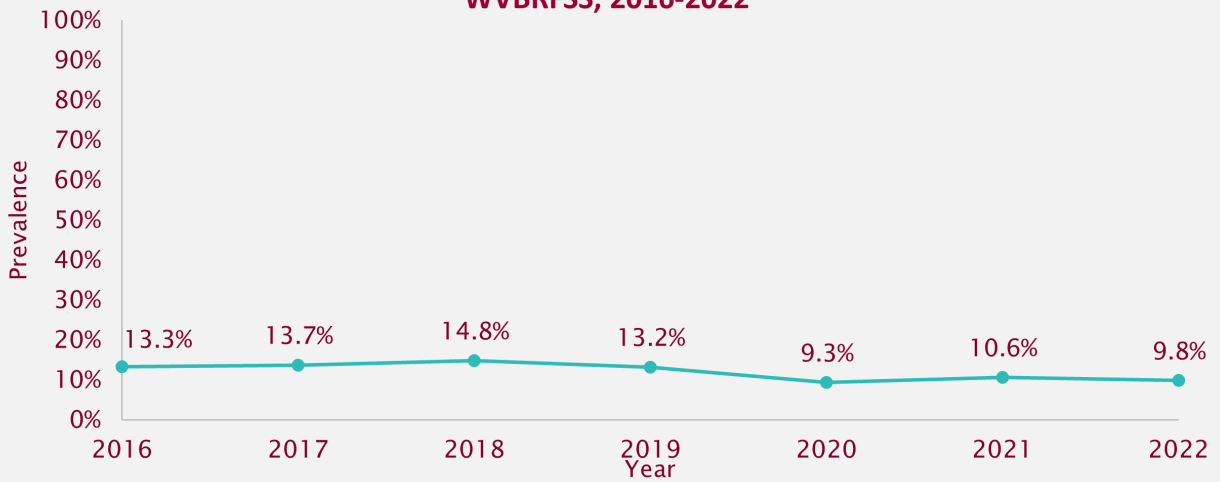
**Table 2.6 Prevalence of Hearing Impairment by Demographic Characteristics: WVBRFSS, 2022**

Characteristic	Men			Women			Total		
	Weighted	%	95% CI	Weighted	%	95% CI	Weighted	%	95% CI
TOTAL	84,515	<b>12.4</b>	10.9-13.9	52,708	<b>7.4</b>	6.2-8.6	137,223	<b>9.8</b>	8.9-10.8
<b>Age</b>									
18-24	2,019	<b>2.5*</b>	0.0-5.3	.	.	.	2,019	<b>1.3*</b>	0.0-2.8
25-34	3,384	<b>3.4*</b>	0.4-6.4	2,517	<b>2.6*</b>	0.3-4.9	5,901	<b>3.0*</b>	1.1-4.9
35-44	6,389	<b>6.2</b>	3.1-9.4	3,952	<b>3.9*</b>	1.5-6.3	10,341	<b>5.1</b>	3.1-7.1
45-54	10,393	<b>10.2</b>	6.5-13.9	3,614	<b>3.5</b>	1.6-5.4	14,007	<b>6.8</b>	4.7-8.9
55-64	16,127	<b>14.0</b>	10.3-17.7	10,167	<b>8.2</b>	5.3-11.1	26,294	<b>11.0</b>	8.7-13.4
65+	45,516	<b>26.0</b>	22.6-29.5	32,459	<b>15.7</b>	12.8-18.6	77,975	<b>20.4</b>	18.2-22.7
<b>Education</b>									
Less than H.S.	16,596	<b>19.2</b>	13.5-25.0	15,242	<b>18.5</b>	12.0-25.0	31,838	<b>18.9</b>	14.6-23.2
H.S. or G.E.D.	35,504	<b>12.3</b>	10.0-14.6	20,502	<b>7.7</b>	6.0-9.5	56,007	<b>10.1</b>	8.6-11.6
Some Post-H.S.	23,014	<b>13.4</b>	10.4-16.4	11,997	<b>5.7</b>	4.0-7.3	35,011	<b>9.2</b>	7.5-10.8
College Graduate	9,401	<b>7.1</b>	5.1-9.1	4,825	<b>3.1</b>	2.0-4.3	14,226	<b>5.0</b>	3.9-6.1
<b>Income</b>									
Less than \$15,000	7,227	<b>18.0</b>	10.9-25.0	6,121	<b>9.4</b>	5.5-13.3	13,348	<b>12.7</b>	9.1-16.3
\$15,000 - 24,999	11,068	<b>19.2</b>	13.1-25.3	9,578	<b>10.4</b>	6.4-14.4	20,646	<b>13.8</b>	10.4-17.2
\$25,000 - 34,999	14,381	<b>17.8</b>	12.7-22.8	7,161	<b>7.6</b>	4.7-10.5	21,542	<b>12.3</b>	9.5-15.1
\$35,000 - 49,999	12,812	<b>14.6</b>	10.3-19.0	4,435	<b>5.3</b>	3.0-7.6	17,247	<b>10.1</b>	7.6-12.6
\$50,000 - 74,999	7,467	<b>7.4</b>	4.8-10.0	4,921	<b>5.3</b>	2.6-7.9	12,388	<b>6.4</b>	4.5-8.2
\$75,000+	16,675	<b>8.1</b>	5.8-10.4	3,208	<b>2.0</b>	1.0-3.0	19,883	<b>5.4</b>	4.1-6.8

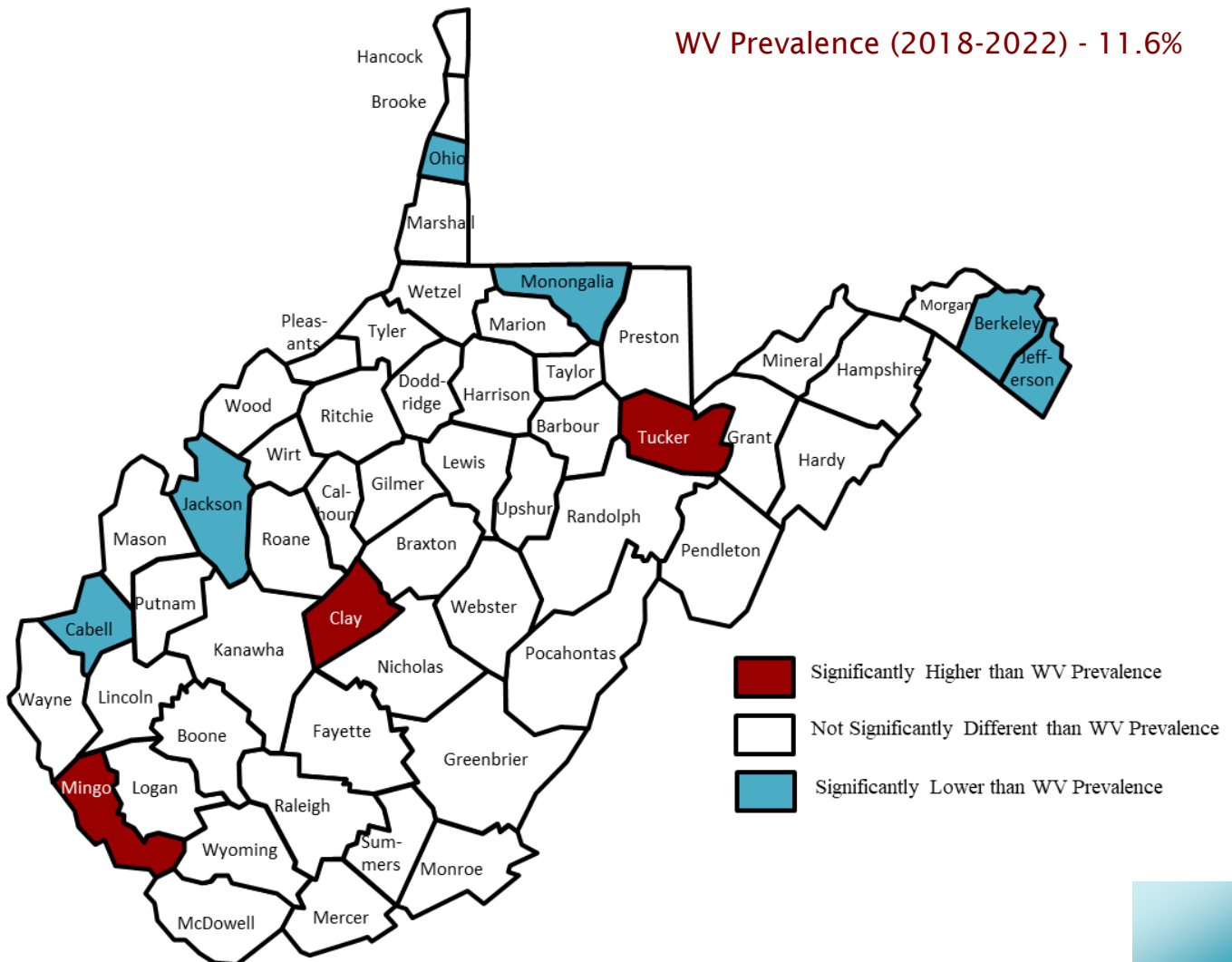
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

# CHAPTER 2: Impairment

**FIGURE 2.11 PREVALENCE OF HEARING IMPAIRMENT BY YEAR:  
WVBRFSS, 2016-2022**



**Figure 2.12 Prevalence of Hearing Impairment by County: WVBRFSS, 2018-2022**



## 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: 7.2%** (95% CI: 5.9-8.4)  
**U.S.: 10.8%** (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 17th the lowest among 54 BRFSS participants.

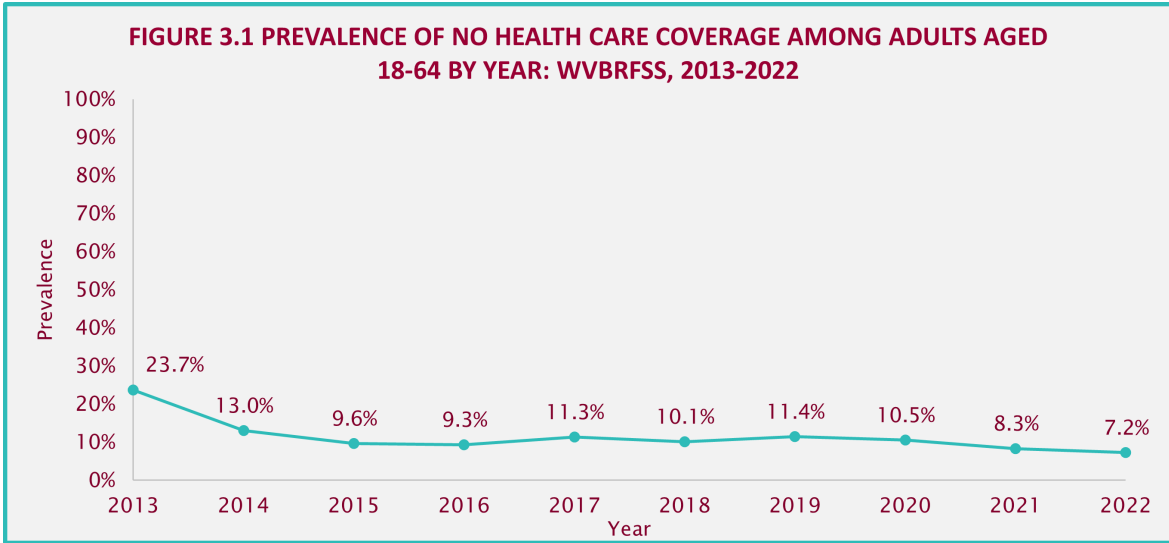
**Table 3.1 Prevalence of No Health Care Coverage Among Adults Aged 18-64 by Demographic Characteristics: WVBRFSS, 2022**

Characteristic	Men			Women			Total		
	Weighted	%	95% CI	Weighted	%	95% CI	Weighted	%	95% CI
TOTAL	48,592	<b>9.9</b>	7.7-12.1	21,812	<b>4.4</b>	3.3-5.6	70,404	<b>7.2</b>	5.9-8.4
<b>Age</b>									
18-24	9,499	<b>13.9*</b>	5.6-22.2	2,565	<b>3.8*</b>	0.3-7.3	12,064	<b>8.9</b>	4.3-13.6
25-34	11,291	<b>10.5</b>	5.0-16.1	4,465	<b>4.5*</b>	1.8-7.3	15,756	<b>7.7</b>	4.5-10.9
35-44	14,839	<b>14.3</b>	8.9-19.6	2,191	<b>2.2*</b>	0.5-3.8	17,030	<b>8.3</b>	5.4-11.2
45-54	5,493	<b>5.4</b>	2.7-8.2	6,924	<b>6.7</b>	3.8-9.6	12,418	<b>6.1</b>	4.1-8.1
55-64	7,471	<b>6.7</b>	3.7-9.7	5,666	<b>4.7</b>	2.2-7.2	13,137	<b>5.7</b>	3.7-7.6
<b>Education</b>									
Less than H.S.	9,194	<b>17.2</b>	8.4-26.0	3,479	<b>9.0*</b>	1.7-16.2	12,673	<b>13.7</b>	7.8-19.7
H.S. or G.E.D.	23,793	<b>11.5</b>	7.6-15.4	9,592	<b>5.5</b>	3.3-7.8	33,385	<b>8.8</b>	6.4-11.2
Some Post-H.S.	12,161	<b>9.3</b>	5.6-13.1	6,129	<b>3.9</b>	2.1-5.6	18,290	<b>6.3</b>	4.4-8.3
College Graduate	3,445	<b>3.4*</b>	0.8-6.0	2,611	<b>2.2*</b>	0.7-3.6	6,057	<b>2.7</b>	1.3-4.2
<b>Income</b>									
Less than \$15,000	3,171	<b>10.7*</b>	1.7-19.8	1,986	<b>4.3*</b>	0.0-8.9	5,157	<b>6.8*</b>	2.3-11.4
\$15,000 - 24,999	3,771	<b>9.9*</b>	3.0-16.9	2,764	<b>4.9*</b>	1.3-8.4	6,535	<b>6.9</b>	3.4-10.4
\$25,000 - 34,999	8,418	<b>16.8</b>	8.4-25.2	5,566	<b>9.1</b>	4.5-13.7	13,984	<b>12.5</b>	7.9-17.1
\$35,000 - 49,999	6,141	<b>10.8*</b>	4.4-17.2	3,567	<b>6.2*</b>	1.8-10.6	9,707	<b>8.5</b>	4.6-12.4
\$50,000 - 74,999	6,983	<b>9.9</b>	4.1-15.7	2,846	<b>4.0*</b>	1.4-6.6	9,829	<b>7.0</b>	3.8-10.2
\$75,000+	5,099	<b>3.0*</b>	0.8-5.2	2,128	<b>1.6*</b>	0.3-2.8	7,227	<b>2.4</b>	1.0-3.7

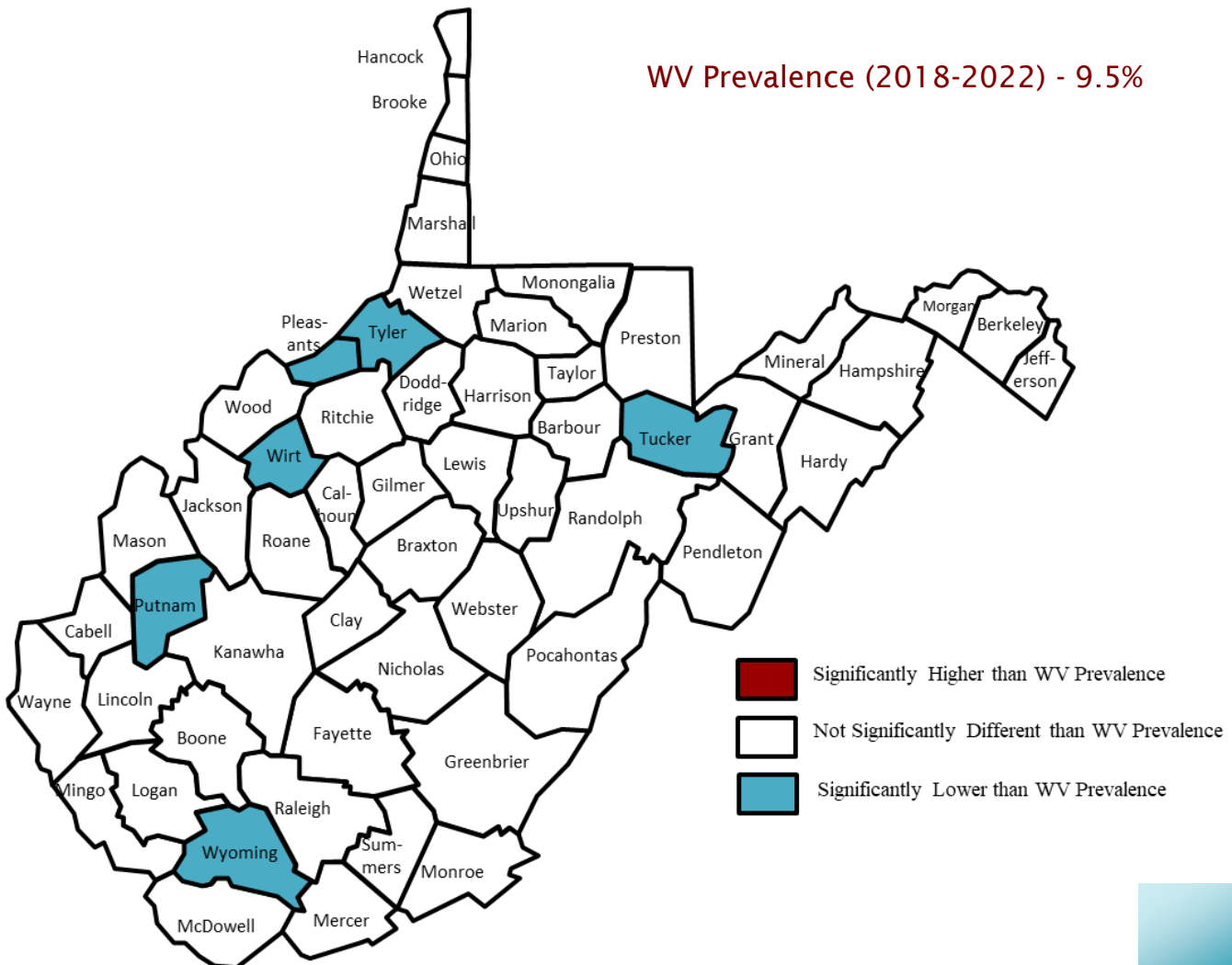
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

# CHAPTER 3: Health Care Access

**FIGURE 3.1 PREVALENCE OF NO HEALTH CARE COVERAGE AMONG ADULTS AGED 18-64 BY YEAR: WVBRFSS, 2013-2022**



**Figure 3.2 Prevalence of No Health Care Coverage Among Adults Aged 18-64 by County: WVBRFSS, 2018-2022**



## CHAPTER 3: Health Care Access

### 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 and Medigap

Medicaid

Other: The military, CHAMPUS, TriCare, or VA, or some other source

None (no coverage)

#### Prevalence

**Private:** WV: 45.4% (95% CI: 43.7-47.2)  
U.S.: 51.0% (95% CI: 50.7-51.3)

The prevalence of private health care coverage was significantly lower in West Virginia than in the U.S. West Virginia ranked the 45<sup>th</sup> highest among 54 BRFSS participants.

**Medicare:** WV: 27.6% (95% CI: 26.2-29.0)  
U.S.: 22.1% (95% CI: 21.8-22.3)

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 54 BRFSS participants.

**Medicaid:** WV: 15.8% (95% CI: 14.5-17.2)  
U.S.: 9.0% (95% CI: 8.8-9.2)

The prevalence of Medicaid health care coverage was significantly higher in West Virginia than in the U.S. West Virginia ranked the fourth highest among 54 BRFSS participants.

**Other:** WV: 5.9% (95% CI: 5.0-6.7)  
U.S.: 9.5% (95% CI: 9.3-9.7)

The prevalence of Other health care coverage was significantly lower in West Virginia than in the U.S. West Virginia ranked the third lowest among 54 BRFSS participants.

**None:** WV: 5.2% (95% CI: 4.3-6.1)  
U.S.: 8.5% (95% CI: 8.3-8.7)

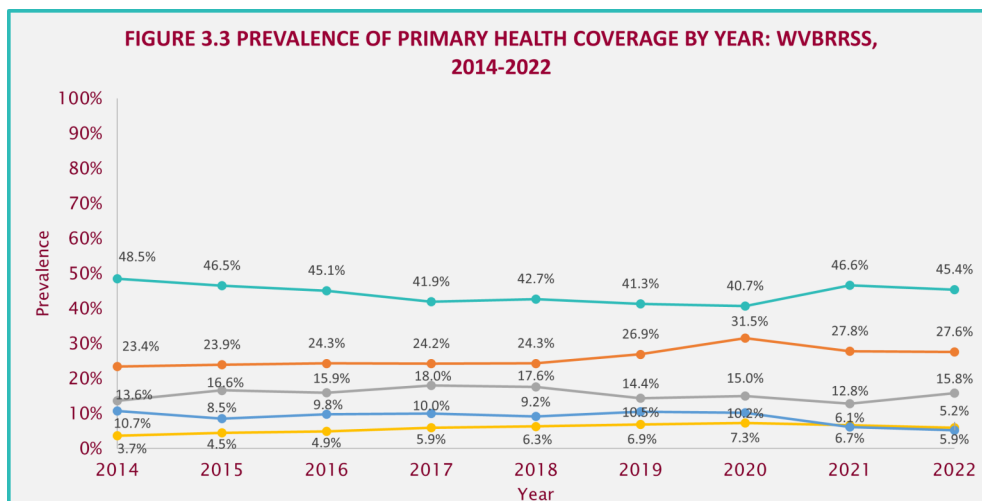
The prevalence of no health care coverage was significantly lower in West Virginia than in the U.S. West Virginia ranked the 39<sup>th</sup> highest among 54 BRFSS participants.

# CHAPTER 3: Health Care Access

**Table 3.2 Prevalence of Primary Health Care Coverage by Demographic Characteristics: WVBRFSS, 2022**

Characteristic	Private		Medicare		Medicaid		Other		None	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>TOTAL</b>	<b>45.4</b>	43.7-47.2	<b>27.6</b>	26.2-29.0	<b>15.8</b>	14.5-17.2	<b>5.9</b>	5.0-6.7	<b>5.2</b>	4.3-6.1
<b>Gender</b>										
Male	48.5	45.9-51.2	24.0	22.0-25.9	11.5	9.6-13.3	8.7	7.3-10.2	7.3	5.6-8.9
Female	42.5	40.2-44.7	31.2	29.2-33.1	20.1	18.0-22.1	3.1	2.3-3.9	3.2	2.4-4.1
<b>Age</b>										
18-24	55.5	47.8-63.2	6.4	2.9-9.8	26.2	19.3-33.2	3.0	0.2-5.7	8.9	4.3-13.6
25-34	56.9	51.3-62.4	4.1	2.1-6.2	23.2	18.6-27.8	8.1	4.8-11.4	7.7	4.5-10.9
35-44	57.7	53.2-62.3	6.0	3.7-8.3	23.4	19.5-27.2	4.6	2.8-6.3	8.3	5.4-11.2
45-54	61.9	57.9-65.9	8.1	5.8-10.3	18.5	15.2-21.8	5.4	3.5-7.3	6.1	4.1-8.1
55-64	55.3	51.5-59.0	17.0	14.2-19.8	15.3	12.6-18.1	6.8	4.9-8.7	5.7	3.7-7.6
65+	13.5	11.7-15.3	77.2	74.9-79.5	2.8	1.8-3.7	6.3	4.9-7.6	0.2	0.0-0.5
<b>Education</b>										
Less than H.S.	14.9	10.3-19.5	44.4	38.4-50.3	27.1	21.5-32.6	5.3	2.2-8.3	8.4	4.7-12.1
H.S. or G.E.D.	40.3	37.4-43.2	30.0	27.6-32.3	18.4	16.1-20.7	5.1	3.8-6.5	6.2	4.5-7.9
Some Post-H.S.	47.9	44.5-51.2	24.1	21.6-26.5	15.7	13.1-18.4	7.5	5.8-9.2	4.8	3.3-6.3
College Graduate	68.1	65.5-70.7	19.1	17.2-21.1	5.2	3.9-6.5	5.4	4.1-6.6	2.2	1.1-3.3
<b>Income</b>										
Less than \$15,000	5.9	3.2-8.6	33.3	27.5-39.1	50.3	43.5-57.1	5.4	1.6-9.3	5.1	1.7-8.5
\$15,000 - 24,999	13.5	9.4-17.7	42.5	37.3-47.7	32.2	27.0-37.4	7.0	4.3-9.7	4.8	2.4-7.1
\$25,000 - 34,999	25.1	20.5-29.7	39.0	34.5-43.6	20.1	16.1-24.0	7.7	5.2-10.1	8.1	5.1-11.1
\$35,000 - 49,999	44.0	39.0-48.9	30.6	26.5-34.7	13.2	9.7-16.7	6.5	4.0-9.0	5.8	3.1-8.5
\$50,000 - 74,999	61.7	57.2-66.1	21.4	18.2-24.7	4.9	3.0-6.9	6.9	4.3-9.5	5.1	2.7-7.4
\$75,000+	80.3	77.9-82.8	11.5	9.8-13.2	1.3	0.5-2.2	4.8	3.4-6.2	2.0	0.9-3.2

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



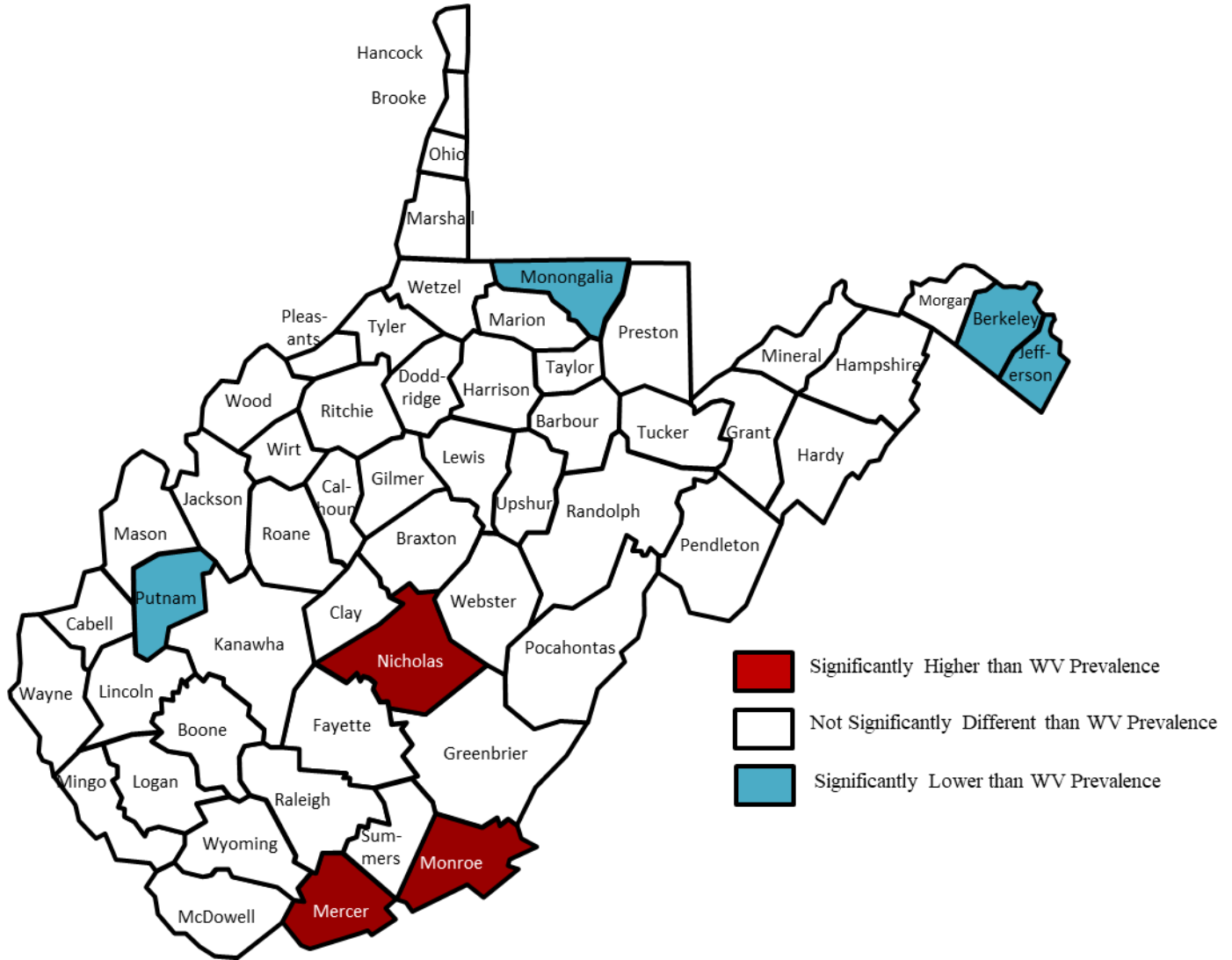




# CHAPTER 3: Health Care Access

Figure 3.5 Prevalence of Medicare Insurance by County: WVBRFSS, 2018-2022

WV Prevalence (2018-2022) - 26.9%

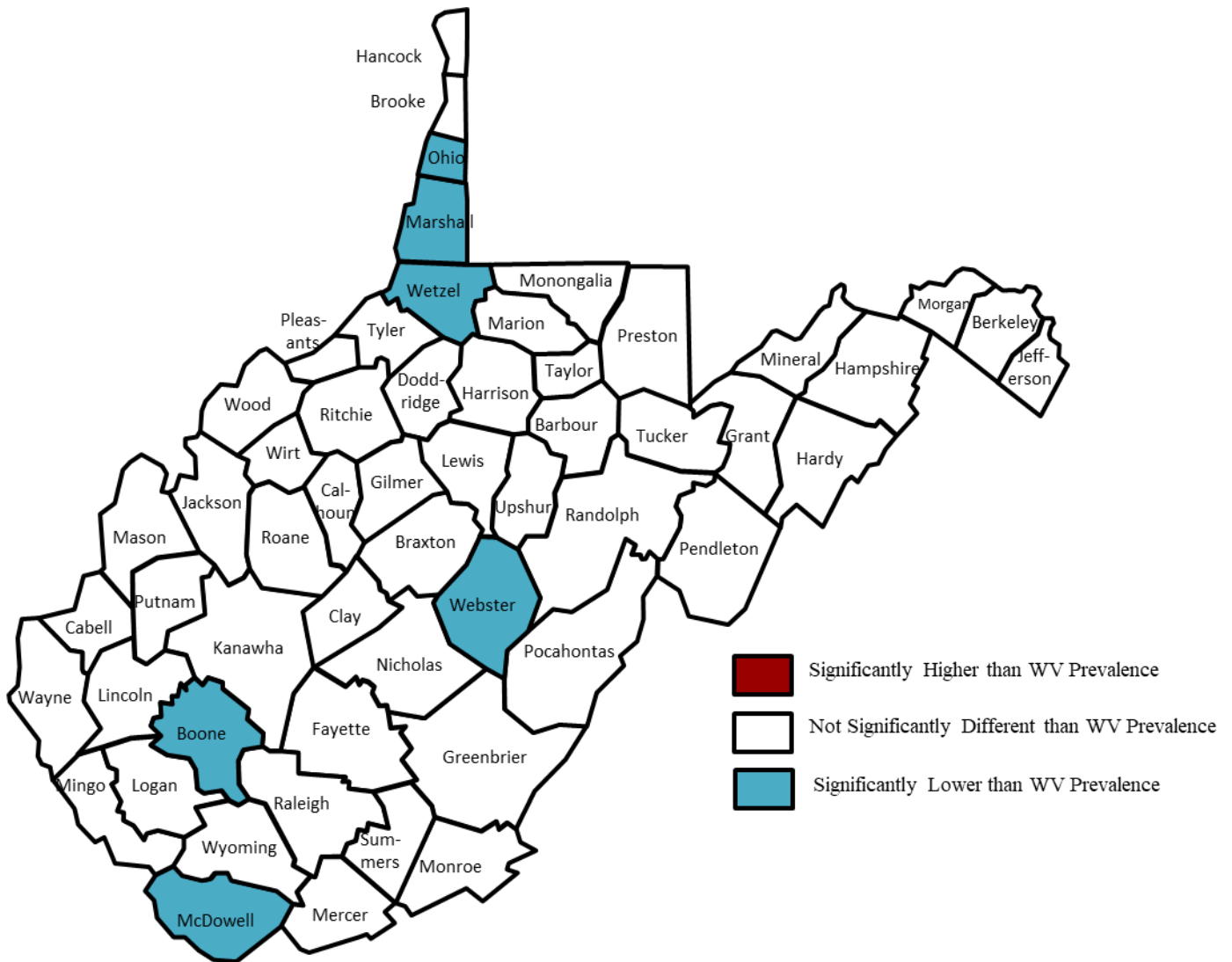




# CHAPTER 3: Health Care Access

Figure 3.7 Prevalence of Other Insurance by County: WVBRFSS, 2018-2022

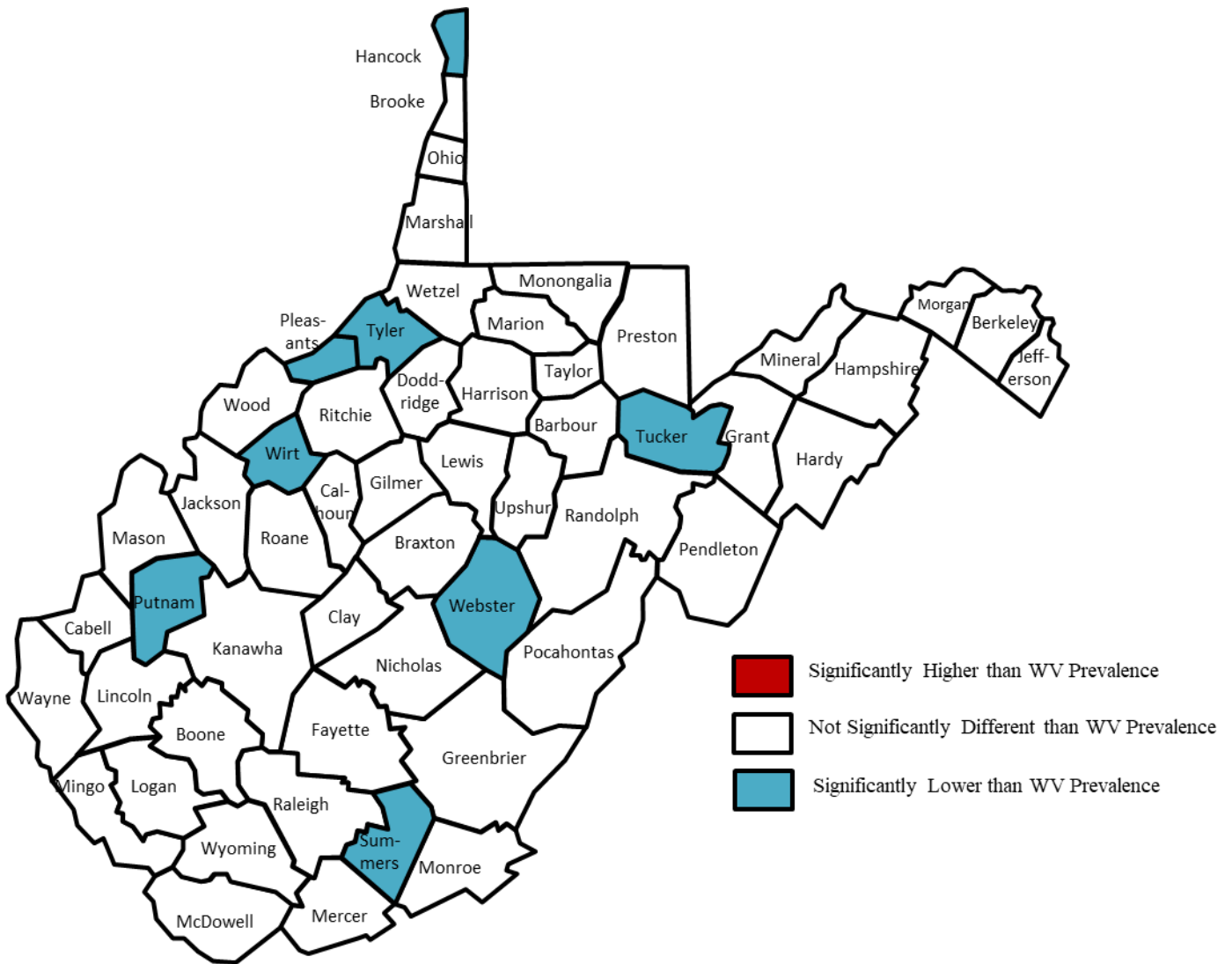
WV Prevalence (2018-2022) - 6.5%



# CHAPTER 3: Health Care Access

Figure 3.8 Prevalence of No Insurance by County: WVBRFSS, 2018-2022

WV Prevalence (2018-2022) - 8.0%



## 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?”

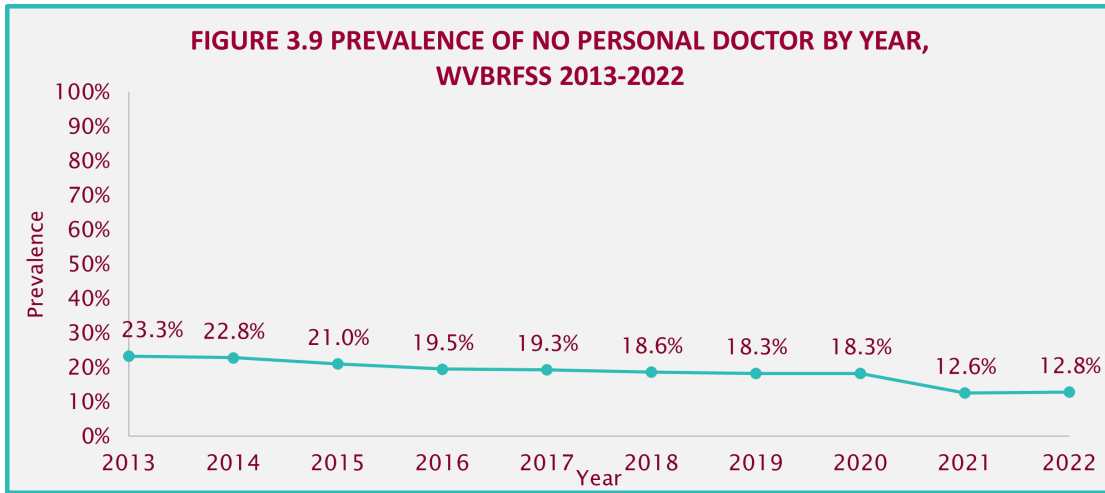
**Prevalence** **WV: 12.8%** (95% CI: 11.5-14.1)  
**U.S.: 17.9%** (95% CI: 17.6-18.1)  
 West Virginia ranked the 10th lowest among 54 BRFSS participants. The West Virginia prevalence of no personal doctor or health care provider was significantly lower than the U.S. prevalence.

**Table 3.3 Prevalence of No Personal Doctor or Health Care Provider by**

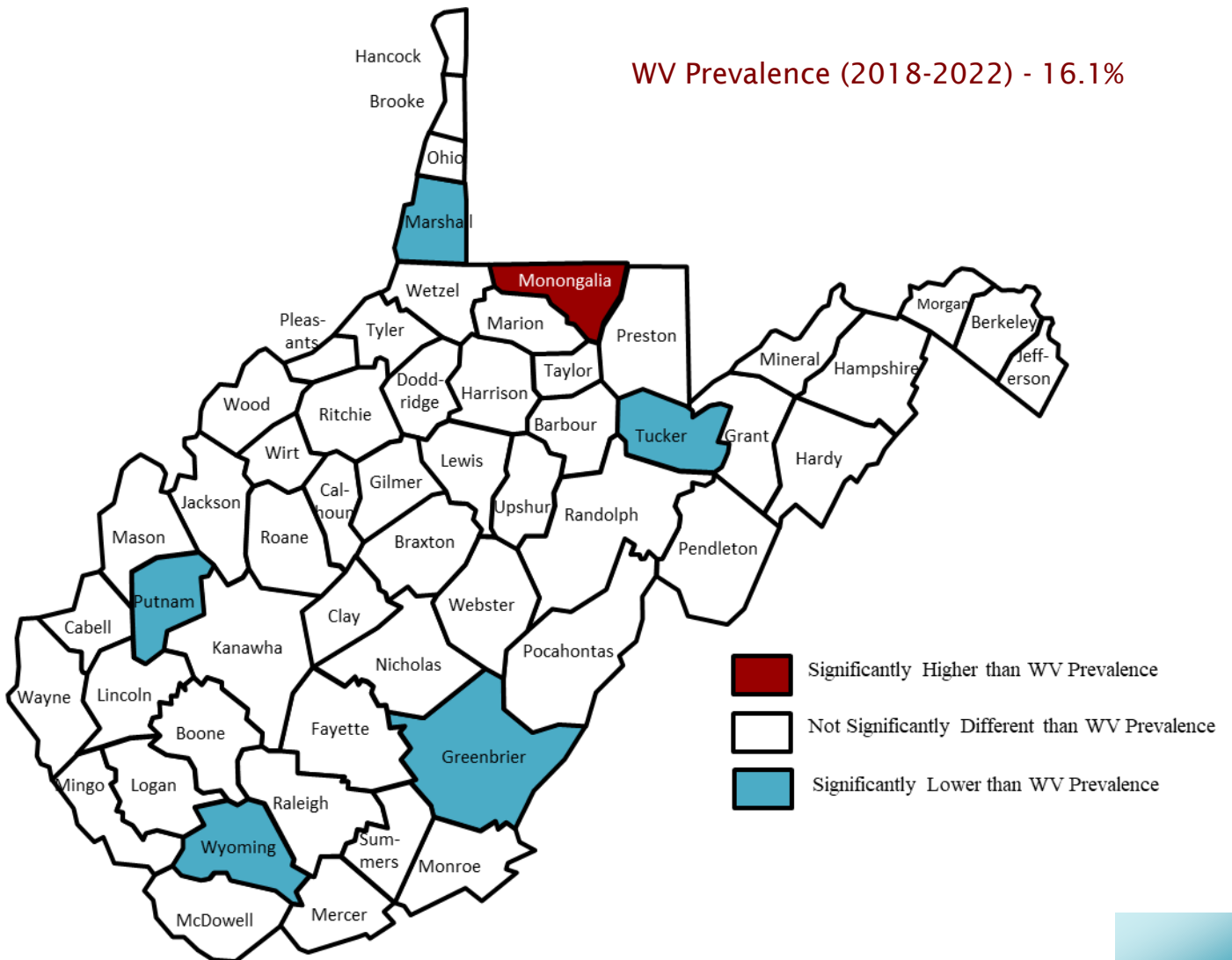
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	121,397	17.4	15.2-19.6	60,953	8.4	7.1-9.8	182,350	12.8	11.5-14.1
<b>Age</b>									
18-24	26,369	32.3	22.8-41.7	15,292	20.0	12.2-27.9	41,661	26.4	20.1-32.6
25-34	31,955	29.9	22.1-37.8	15,938	16.1	11.2-21.1	47,894	23.3	18.5-28.1
35-44	25,539	24.5	18.4-30.7	9,456	9.2	5.5-12.9	34,994	16.9	13.2-20.6
45-54	13,336	12.7	8.7-16.7	6,629	6.3	3.5-9.1	19,966	9.5	7.0-11.9
55-64	14,925	12.7	9.0-16.4	7,143	5.8	3.5-8.0	22,068	9.1	7.0-11.3
65+	7,561	4.3	2.6-5.9	6,183	3.0	1.7-4.2	13,744	3.6	2.5-4.6
<b>Education</b>									
Less than H.S.	14,894	16.9	10.4-23.5	10,524	12.7	6.8-18.6	25,418	14.9	10.5-19.3
H.S. or G.E.D.	51,696	17.5	14.0-20.9	24,291	9.0	6.7-11.4	75,987	13.4	11.3-15.6
Some Post-H.S.	38,337	21.5	16.8-26.2	15,817	7.4	5.0-9.7	54,154	13.8	11.2-16.4
College Graduate	16,018	11.9	8.6-15.2	10,225	6.6	4.4-8.8	26,244	9.1	7.1-11.0
<b>Income</b>									
Less than \$15,000	8,688	21.3	12.3-30.3	8,650	13.3	6.8-19.8	17,337	16.4	11.1-21.6
\$15,000 - 24,999	10,490	17.5	10.4-24.6	11,245	12.2	7.2-17.1	21,735	14.3	10.1-18.4
\$25,000 - 34,999	13,264	16.1	9.6-22.6	9,279	9.8	5.5-14.1	22,544	12.7	8.9-16.5
\$35,000 - 49,999	10,340	11.8	7.1-16.5	7,789	9.4	5.2-13.6	18,130	10.6	7.5-13.8
\$50,000 - 74,999	14,915	14.7	9.0-20.4	4,590	4.9	2.2-7.6	19,505	10.0	6.7-13.3
\$75,000+	30,978	15.1	11.4-18.7	8,108	5.1	3.1-7.0	39,086	10.7	8.4-13.0

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

# CHAPTER 3: Health Care Access



**Figure 3.10 Prevalence of No Personal Doctor or Health Care Provider by County: WVBRFSS, 2018-2022**



## 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: 10.3%** (95% CI: 9.2-11.4)  
**U.S.: 11.1%** (95% CI: 10.9-11.3)  
 The West Virginia prevalence of could not afford needed medical care was significantly lower than the U.S. prevalence. West Virginia ranked the 24<sup>th</sup> highest among 54 BRFSS participants.

**Table 3.4 Prevalence of Could Not Afford Needed Medical Care by Demographic Characteristics: WVBRFSS, 2022**

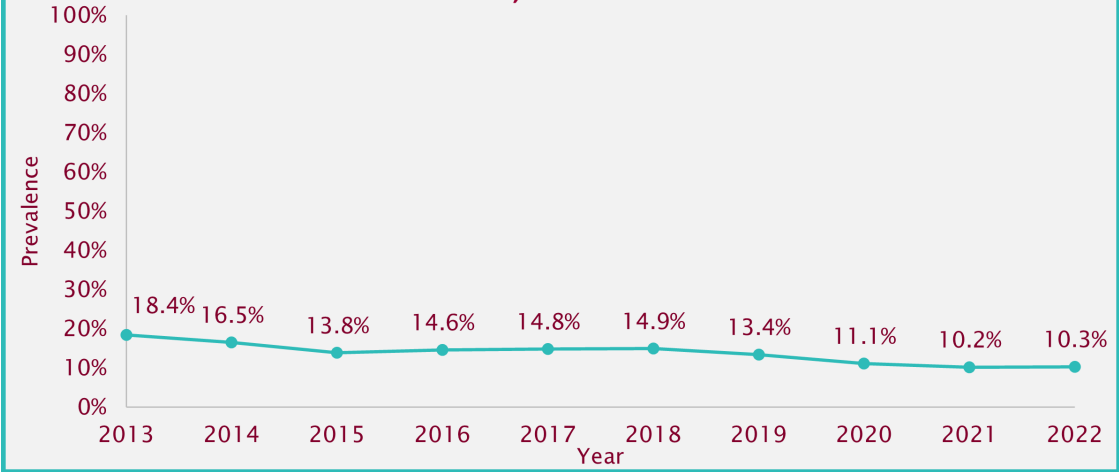
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	77,737	11.1	9.3-12.9	68,844	9.6	8.2-10.9	146,581	10.3	9.2-11.4
<b>Age</b>									
18-24	11,029	13.2	5.6-20.8	8,494	11.3	4.8-17.7	19,524	12.3	7.2-17.3
25-34	13,716	12.8	6.8-18.8	13,315	13.5	9.0-18.0	27,031	13.1	9.4-16.9
35-44	15,294	14.6	9.6-19.6	11,808	11.6	7.9-15.2	27,101	13.1	10.0-16.2
45-54	14,563	13.9	9.6-18.2	11,415	10.8	7.4-14.3	25,978	12.4	9.6-15.1
55-64	15,253	13.0	9.2-16.8	12,319	9.9	6.7-13.2	27,572	11.4	8.9-13.9
65+	7,495	4.2	2.6-5.8	11,271	5.4	3.8-7.0	18,766	4.9	3.7-6.0
<b>Education</b>									
Less than H.S.	17,542	19.8	12.8-26.8	10,874	13.3	7.7-18.8	28,416	16.6	12.1-21.2
H.S. or G.E.D.	29,625	10.0	7.2-12.7	22,303	8.3	6.2-10.4	51,928	9.2	7.4-10.9
Some Post-H.S.	23,347	13.1	9.4-16.8	25,385	11.9	9.1-14.7	48,732	12.4	10.1-14.7
College Graduate	7,054	5.2	3.1-7.4	10,186	6.6	4.8-8.4	17,240	6.0	4.6-7.4
<b>Income</b>									
Less than \$15,000	10,957	26.9*	16.7-37.1	7,828	12.0	6.3-17.7	18,784	17.8	12.4-23.1
\$15,000 - 24,999	11,378	19.0	12.3-25.6	12,470	13.5	8.9-18.2	23,848	15.7	11.8-19.5
\$25,000 - 34,999	16,167	19.7	13.2-26.1	12,784	13.6	9.3-17.8	28,951	16.4	12.6-20.2
\$35,000 - 49,999	7,457	8.5	4.2-12.8	13,051	15.6	10.6-20.5	20,508	12.0	8.7-15.2
\$50,000 - 74,999	9,620	9.5	4.6-14.3	7,206	7.7	4.4-11.0	16,826	8.6	5.6-11.6
\$75,000+	8,548	4.1	2.1-6.2	6,913	4.3	2.4-6.3	15,461	4.2	2.8-5.7

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

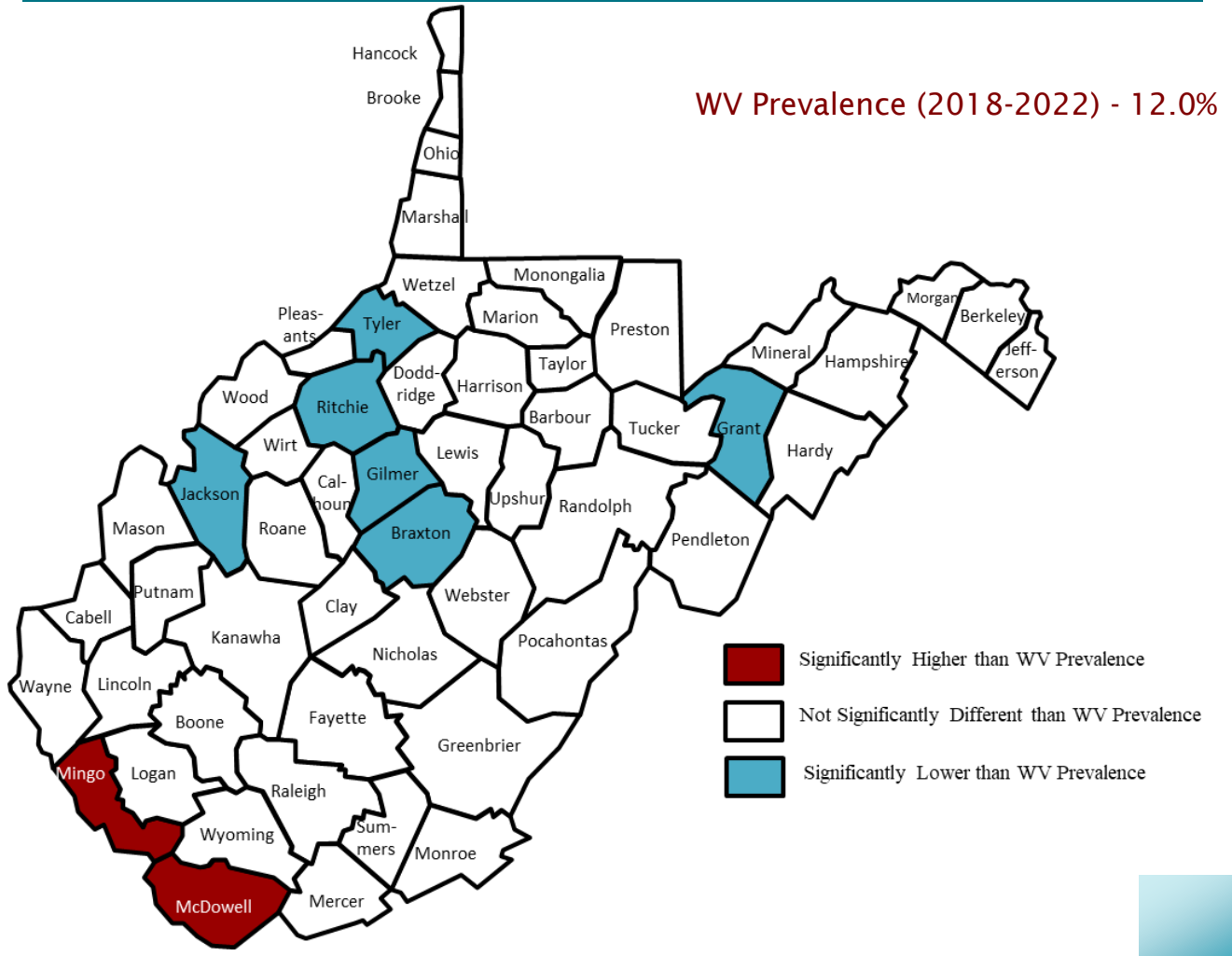


# CHAPTER 3: Health Care Access

**FIGURE 3.11 PREVALENCE OF COULD NOT AFFORD NEEDED MEDICAL CARE BY YEAR, WVBRFSS 2013-2022**



**Figure 3.12 Prevalence of Could Not Afford Needed Medical Care by County: WVBRFSS, 2018-2022**



## CHAPTER 3: Health Care Access

### 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.”

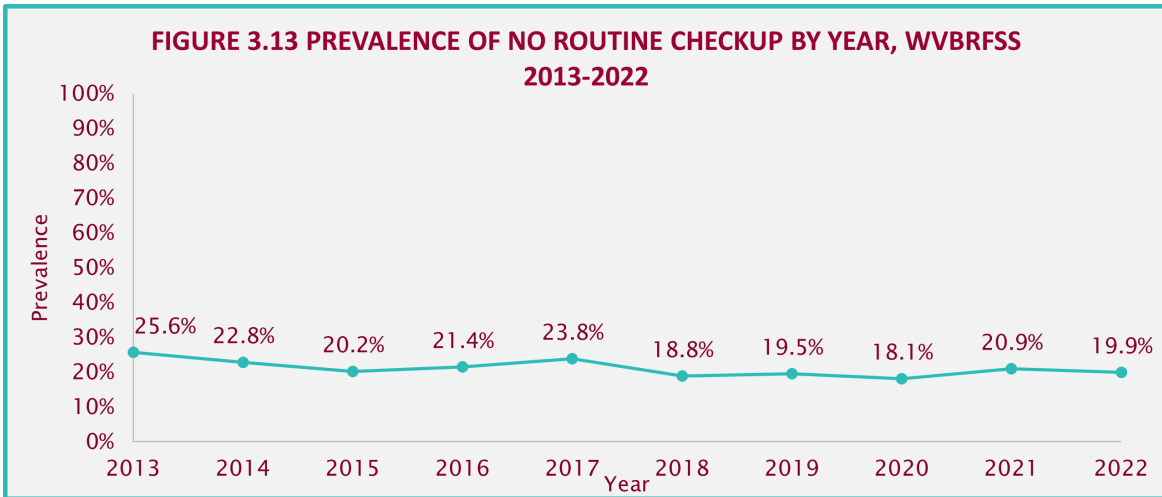
**Prevalence** **WV: 19.9%** (95% CI: 18.3-21.4)  
**U.S.: 23.8%** (95% CI: 23.5-24.1)  
 The West Virginia prevalence of no checkup in the past year was significantly lower than the national prevalence and ranked the fifth lowest among 54 BRFSS participants.

**Table 3.5 Prevalence of No Checkup in the Past Year by Demographic**  
**Characteristics: WVBRFSS, 2022**

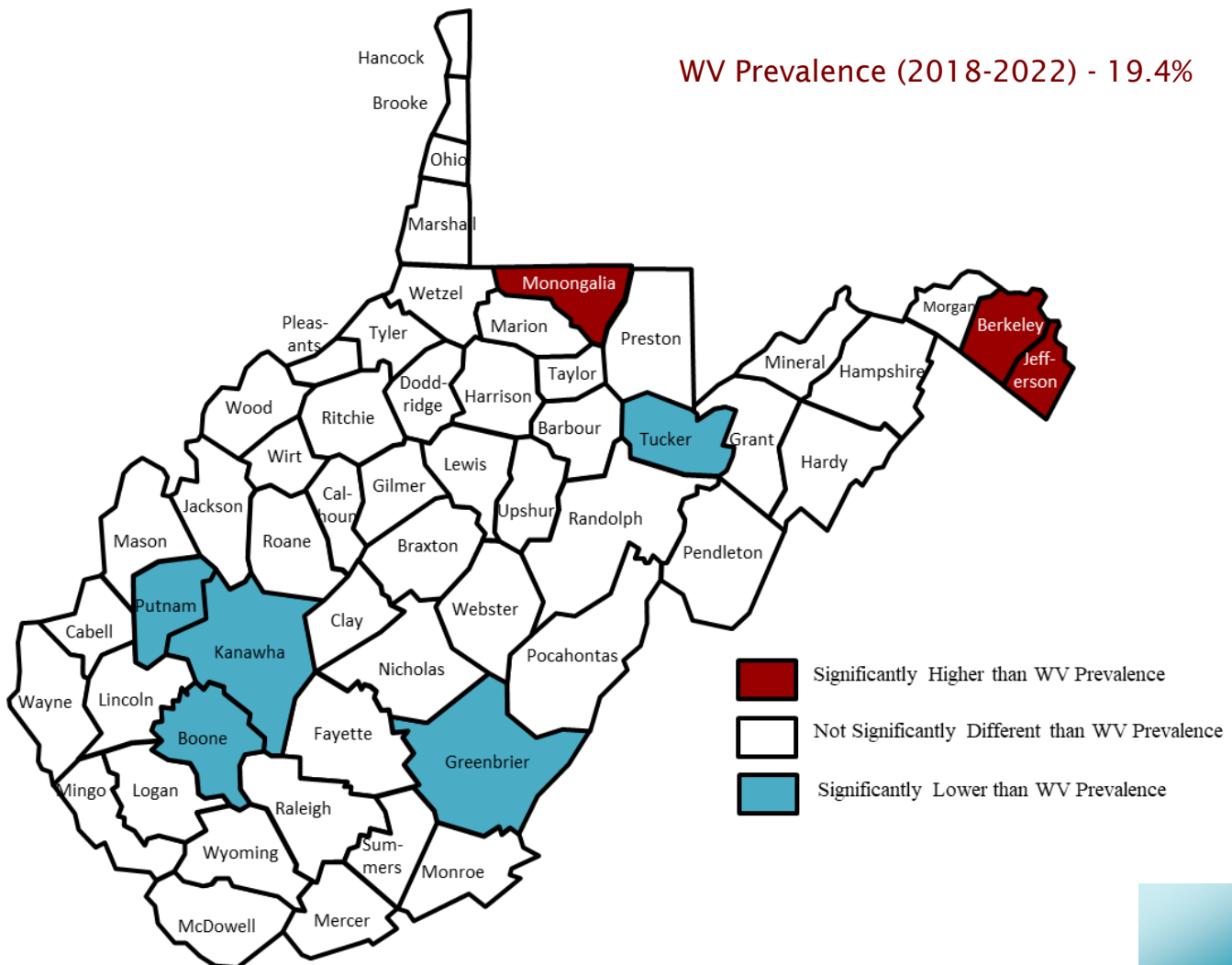
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	177,441	25.9	23.4-28.4	101,134	14.1	12.4-15.8	278,575	19.9	18.3-21.4
<b>Age</b>									
18-24	33,355	43.7*	33.3-54.1	20,532	27.2	17.9-36.4	53,887	35.5	28.4-42.5
25-34	44,941	43.6	34.9-52.4	22,669	23.2	17.4-29.0	67,610	33.7	28.3-39.1
35-44	36,980	36.1	29.3-42.8	17,057	16.8	12.5-21.1	54,037	26.5	22.3-30.7
45-54	22,837	22.0	17.0-26.9	18,506	17.6	13.2-22.0	41,343	19.8	16.5-23.1
55-64	23,154	19.8	15.2-24.4	13,649	11.0	7.9-14.1	36,802	15.3	12.5-18.0
65+	14,305	8.1	5.8-10.5	7,763	3.7	2.5-5.0	22,068	5.8	4.5-7.0
<b>Education</b>									
Less than H.S.	23,249	27.4	19.2-35.6	11,310	13.8	8.0-19.7	34,559	20.7	15.6-25.9
H.S. or G.E.D.	77,466	26.9	22.8-31.0	42,801	16.0	12.8-19.1	120,267	21.6	19.0-24.3
Some Post-H.S.	50,843	28.8	23.7-33.9	27,688	13.0	9.9-16.1	78,531	20.2	17.2-23.1
College Graduate	25,082	18.7	15.0-22.5	19,210	12.5	9.9-15.1	44,292	15.4	13.1-17.6
<b>Income</b>									
Less than \$15,000	12,230	30.2*	20.1-40.2	13,225	20.9	13.7-28.1	25,455	24.5	18.6-30.4
\$15,000 - 24,999	9,817	16.5	9.5-23.5	12,401	13.6	8.4-18.7	22,218	14.7	10.5-18.9
\$25,000 - 34,999	20,259	24.9	17.6-32.3	17,670	18.7	13.6-23.9	37,929	21.6	17.2-26.0
\$35,000 - 49,999	17,995	21.2	14.8-27.6	10,259	12.3	7.8-16.8	28,253	16.8	12.8-20.7
\$50,000 - 74,999	25,268	25.9	19.0-32.8	8,662	9.2	5.5-13.0	33,930	17.7	13.6-21.9
\$75,000+	60,227	29.2	24.7-33.8	23,342	14.7	11.1-18.4	83,569	22.9	19.8-26.0

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

# CHAPTER 3: Health Care Access



**Figure 3.14 Prevalence of No Checkup in the Past Year by County: WVBRFSS, 2018-2022**



# West Virginia Behavioral Risk Factor Surveillance System Report



## SECTION 2: Risk Behaviors

2022

## CHAPTER 4: Weight Status

### Overweight

#### Definition

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

#### Prevalence

**WV: 33.4%** (95% CI: 31.7-35.0)

**U.S.: 34.1%** (95% CI: 33.8-34.5)

The prevalence of overweight in West Virginia was significantly lower than the U.S. prevalence. West Virginia ranked the 42<sup>nd</sup> highest among 54 BRFSS participants.

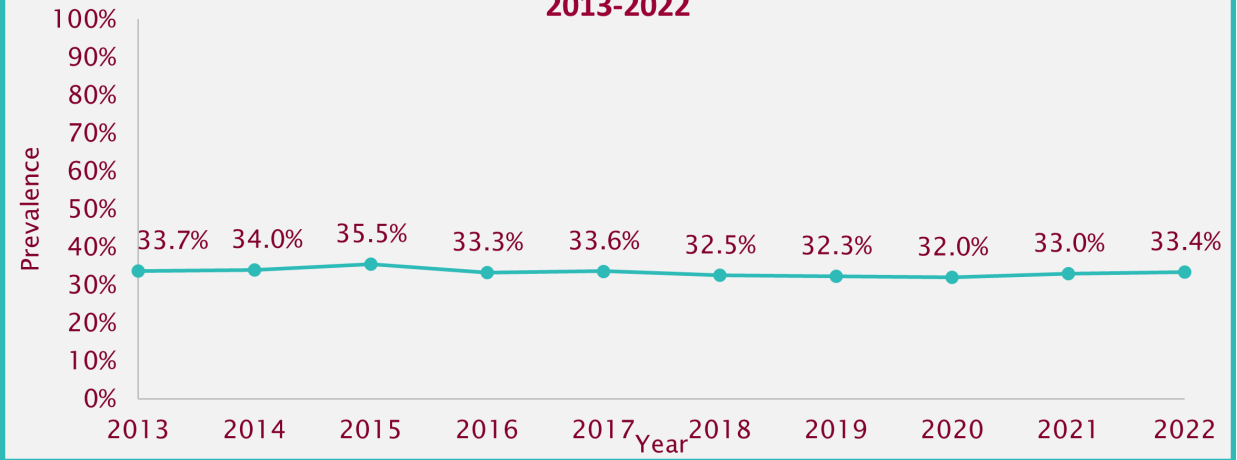
**Table 4.1 Prevalence of Overweight by Demographic Characteristics: WVBRFSS, 2022**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	253,402	<b>37.9</b>	35.3-40.4	188,724	<b>28.8</b>	26.6-30.9	442,125	<b>33.4</b>	31.7-35.0
<b>Age</b>									
18-24	23,051	<b>28.9</b>	19.7-38.2	18,560	<b>27.7</b>	17.8-37.6	41,611	<b>28.4</b>	21.6-35.1
25-34	37,999	<b>38.5</b>	29.8-47.2	21,455	<b>24.1</b>	17.9-30.3	59,454	<b>31.7</b>	26.2-37.1
35-44	35,543	<b>35.6</b>	29.0-42.2	27,092	<b>28.7</b>	22.9-34.5	62,634	<b>32.2</b>	27.8-36.7
45-54	38,002	<b>37.8</b>	32.1-43.5	28,363	<b>29.9</b>	24.7-35.2	66,365	<b>34.0</b>	30.1-37.9
55-64	43,235	<b>38.1</b>	32.8-43.3	28,889	<b>25.4</b>	20.9-29.9	72,124	<b>31.7</b>	28.2-35.2
65+	74,144	<b>43.1</b>	39.0-47.1	62,957	<b>32.5</b>	29.2-35.9	137,101	<b>37.5</b>	34.9-40.1
<b>Education</b>									
Less than H.S.	29,186	<b>35.5</b>	27.3-43.7	16,572	<b>21.8</b>	14.9-28.7	45,758	<b>28.9</b>	23.5-34.4
H.S. or G.E.D.	98,309	<b>34.5</b>	30.5-38.4	76,934	<b>31.5</b>	27.7-35.3	175,243	<b>33.1</b>	30.4-35.9
Some Post-H.S.	67,154	<b>39.8</b>	34.5-45.2	50,925	<b>26.0</b>	22.2-29.9	118,078	<b>32.4</b>	29.2-35.7
College Graduate	58,402	<b>44.5</b>	40.0-48.9	44,293	<b>31.6</b>	27.8-35.3	102,695	<b>37.8</b>	34.9-40.7
<b>Income</b>									
Less than \$15,000	13,852	<b>34.4*</b>	23.4-45.4	13,298	<b>22.0</b>	15.6-28.5	27,150	<b>27.0</b>	21.0-33.0
\$15,000 - 24,999	23,984	<b>42.2</b>	33.6-50.8	24,751	<b>27.8</b>	21.5-34.1	48,735	<b>33.4</b>	28.3-38.6
\$25,000 - 34,999	32,766	<b>41.3</b>	33.6-48.9	28,823	<b>32.4</b>	26.4-38.3	61,590	<b>36.6</b>	31.8-41.4
\$35,000 - 49,999	30,919	<b>35.6</b>	28.7-42.5	25,078	<b>32.1</b>	25.9-38.2	55,997	<b>33.9</b>	29.3-38.6
\$50,000 - 74,999	33,648	<b>33.1</b>	26.6-39.6	23,348	<b>26.9</b>	21.5-32.3	56,996	<b>30.2</b>	25.9-34.5
\$75,000+	86,490	<b>42.4</b>	37.9-46.9	47,272	<b>31.7</b>	27.2-36.2	133,762	<b>37.9</b>	34.6-41.1

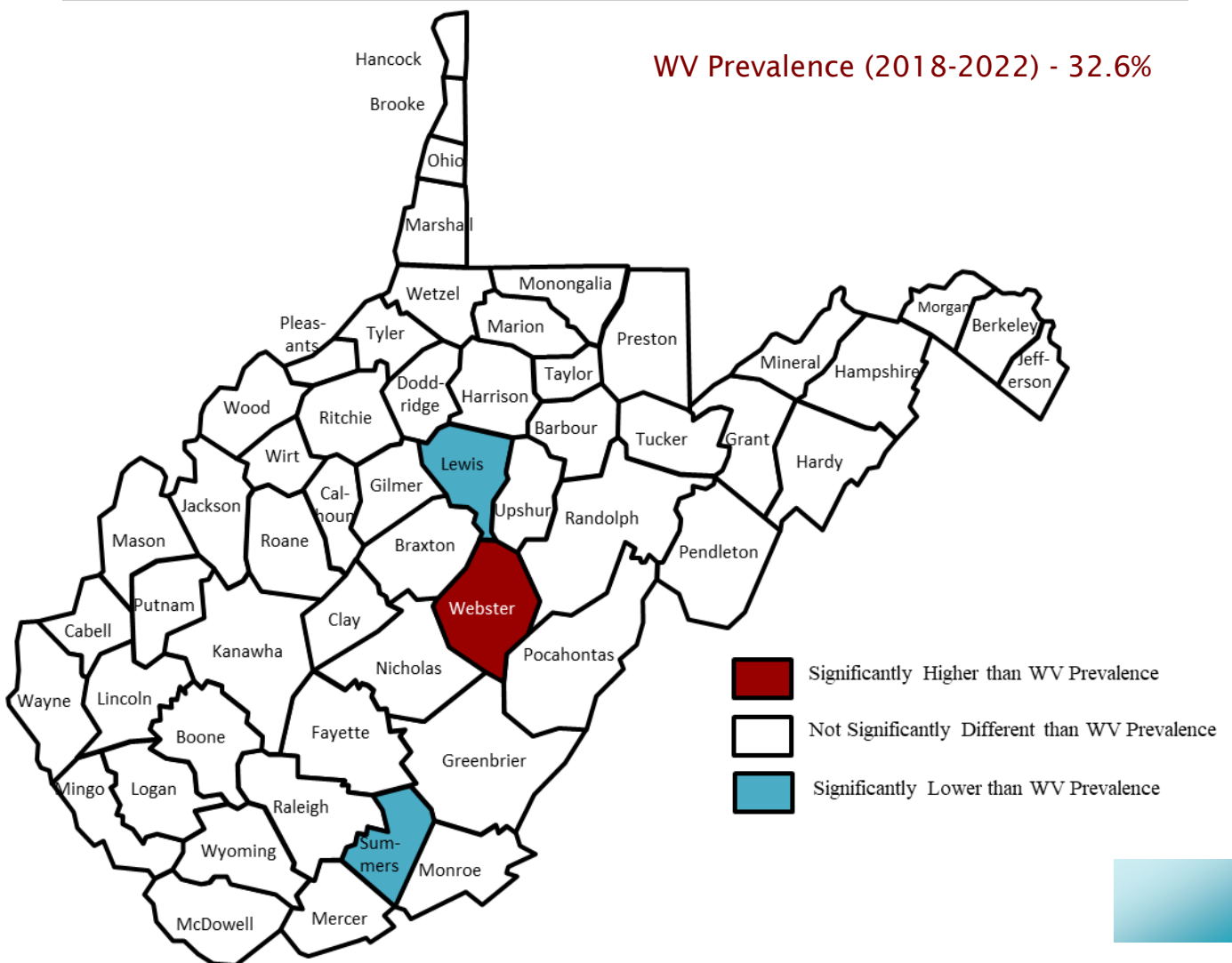
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

# CHAPTER 4: Weight Status

**FIGURE 4.1 PREVALENCE OF OVERWEIGHT BY YEAR: WVBRFSS, 2013-2022**



**Figure 4.2 Prevalence of Overweight (Body Mass Index of 25.0-29.9) by County: WVBRFSS, 2018-2022**



## 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 ( $BMI = \text{kg}/\text{m}^2$ ). Obese is defined as a BMI of 30.0 or higher.

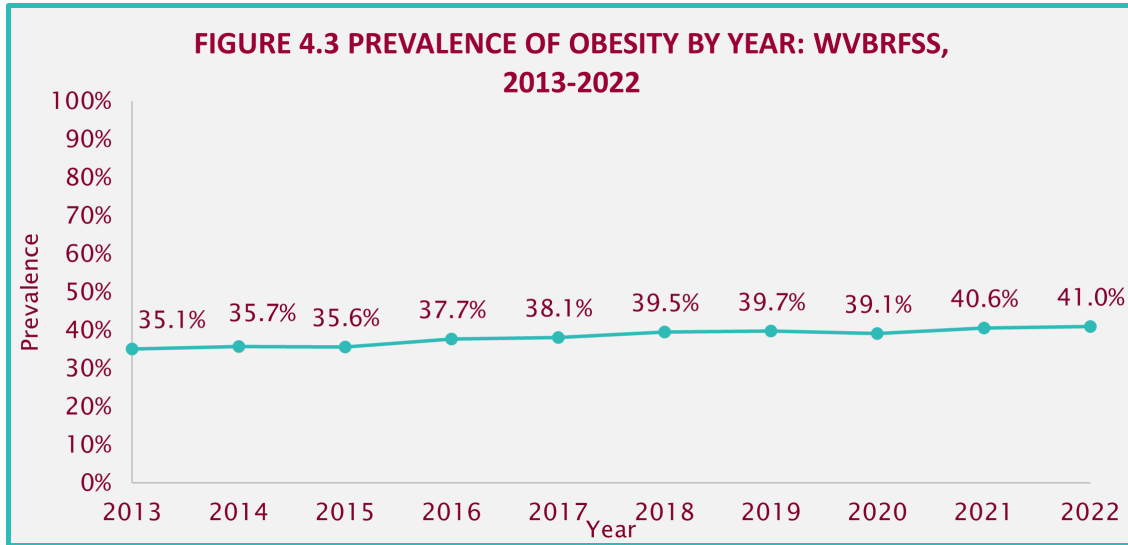
**Prevalence** **WV: 41.0%** (95% CI: 39.3-42.8)  
**U.S.: 33.3%** (95% CI: 33.0-33.6)  
 The prevalence of obesity was significantly higher in West Virginia than in the U.S. West Virginia ranked the highest among 54 BRFSS participants.

**Table 4.2 Prevalence of Obesity by Demographic Characteristics: WVBRFSS, 2022**

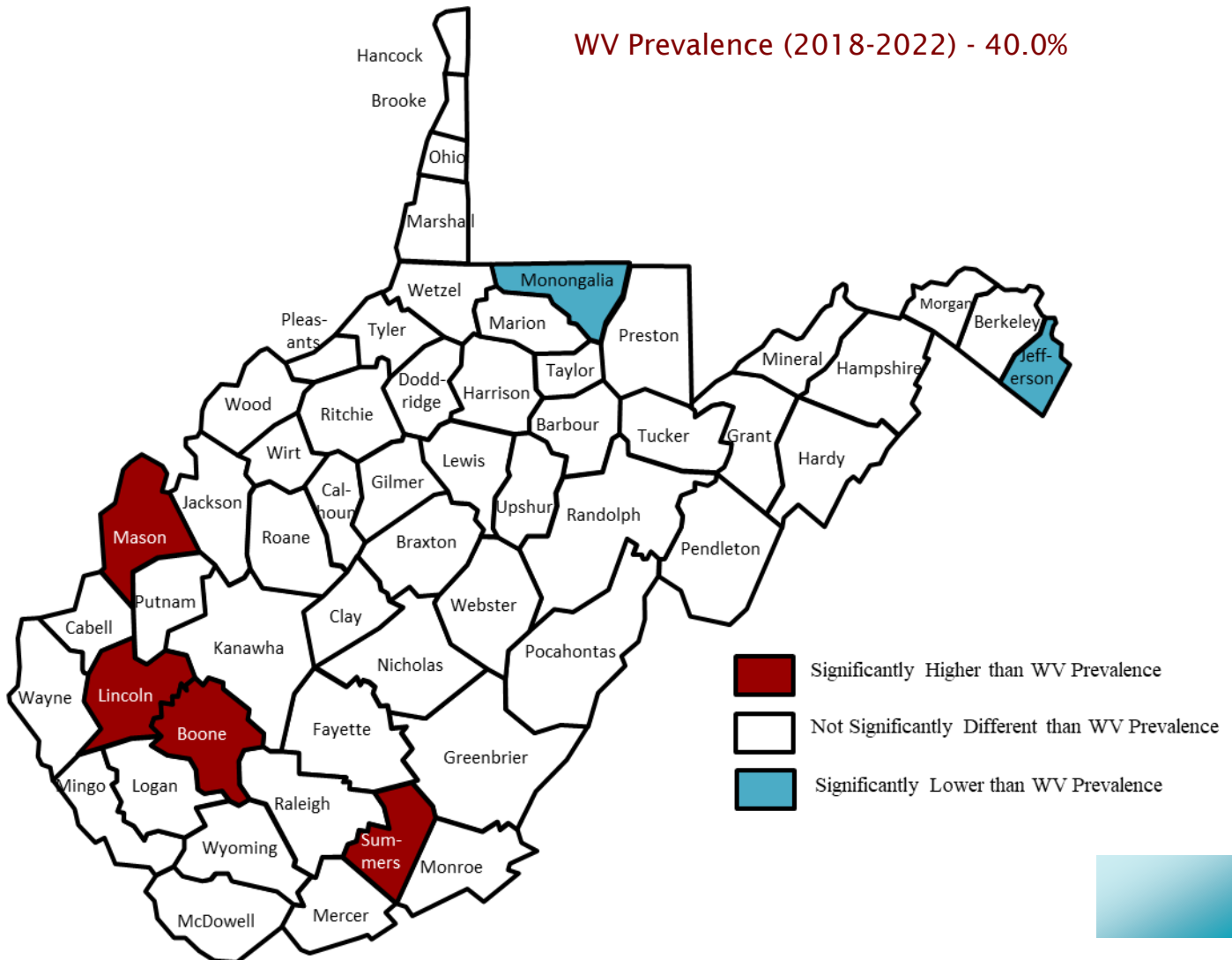
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	278,202	41.6	38.9-44.2	265,297	40.4	38.1-42.8	543,499	41.0	39.3-42.8
<b>Age</b>									
18-24	26,387	33.1	23.4-42.9	18,782	28.0	18.8-37.3	45,169	30.8	24.0-37.6
25-34	42,013	42.6	33.6-51.5	36,817	41.3	34.4-48.3	78,829	42.0	36.2-47.7
35-44	45,648	45.8	39.0-52.6	39,909	42.2	36.1-48.4	85,557	44.0	39.4-48.6
45-54	49,844	49.6	43.5-55.6	45,069	47.6	41.9-53.2	94,913	48.6	44.5-52.8
55-64	50,699	44.6	39.2-50.1	54,503	47.9	42.7-53.1	105,202	46.3	42.5-50.1
65+	61,270	35.6	31.7-39.5	69,845	36.1	32.5-39.7	131,115	35.9	33.2-38.5
<b>Education</b>									
Less than H.S.	31,644	38.5	30.0-47.0	30,995	40.8	32.6-49.1	62,639	39.6	33.7-45.5
H.S. or G.E.D.	127,930	44.9	40.6-49.1	96,566	39.6	35.7-43.5	224,496	42.4	39.5-45.4
Some Post-H.S.	69,406	41.2	35.8-46.5	85,689	43.8	39.5-48.1	155,095	42.6	39.2-46.0
College Graduate	48,520	36.9	32.6-41.3	51,906	37.0	33.1-40.8	100,426	37.0	34.1-39.9
<b>Income</b>									
Less than \$15,000	12,351	30.7*	20.6-40.8	24,629	40.8	32.7-48.8	36,980	36.8	30.4-43.1
\$15,000 - 24,999	19,239	33.9	25.7-42.0	40,191	45.2	38.5-51.9	59,431	40.8	35.6-46.0
\$25,000 - 34,999	33,239	41.9	34.3-49.5	34,042	38.2	32.1-44.4	67,280	40.0	35.1-44.8
\$35,000 - 49,999	35,212	40.6	33.2-47.9	33,138	42.4	35.7-49.0	68,349	41.4	36.4-46.4
\$50,000 - 74,999	45,441	44.7	37.7-51.7	39,517	45.5	39.1-51.8	84,957	45.1	40.3-49.8
\$75,000+	91,370	44.8	40.2-49.3	55,123	36.9	32.5-41.4	146,493	41.5	38.2-44.7

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

# CHAPTER 4: Weight Status



**Figure 4.4 Prevalence of Obesity (Body Mass Index of 30.0 or Higher) by County: WVBRFSS, 2018-2022**





## 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 ( $BMI = \text{kg}/\text{m}^2$ ). Overweight or obese is defined as a BMI of 25.0 or higher.

**Prevalence** **WV: 74.4%** (95% CI: 72.8-76.0)  
**U.S.: 67.5%** (95% CI: 67.2-67.8)  
 The prevalence of overweight or obese in West Virginia was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 54 BRFSS participants.

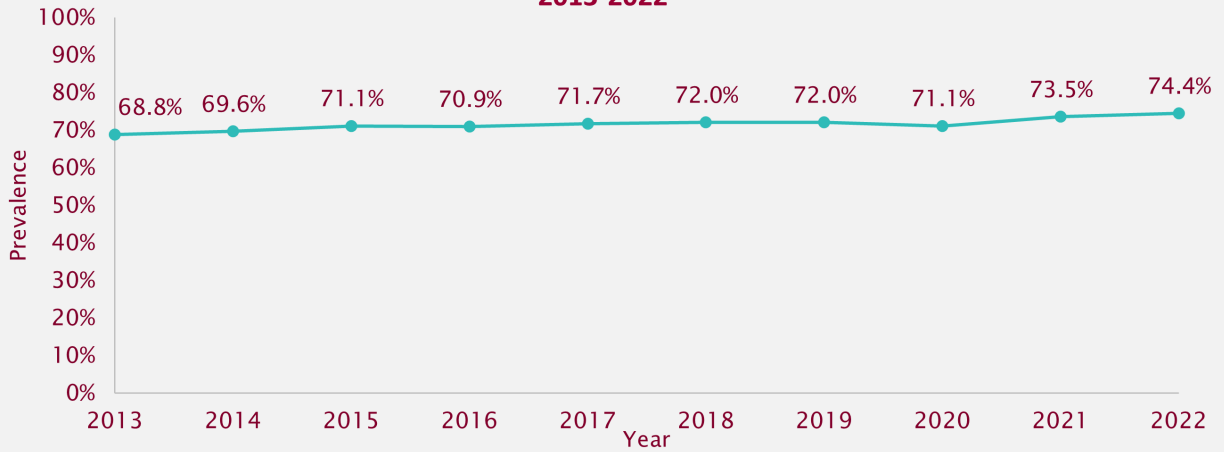
**Table 4.3 Prevalence of Overweight or Obese by Demographic Characteristics: WVBRFSS, 2022**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	531,604	79.5	77.2-81.7	454,021	69.2	67.0-71.5	985,625	74.4	72.8-76.0
<b>Age</b>									
18-24	49,438	62.1*	51.8-72.4	37,342	55.7*	45.1-66.4	86,779	59.2	51.8-66.6
25-34	80,011	81.0	73.9-88.2	58,272	65.4	58.5-72.4	138,283	73.6	68.5-78.7
35-44	81,191	81.4	75.9-86.9	67,001	70.9	65.4-76.4	148,192	76.3	72.4-80.2
45-54	87,846	87.4	83.4-91.4	73,432	77.5	72.8-82.2	161,278	82.6	79.5-85.7
55-64	93,934	82.7	78.7-86.8	83,392	73.3	68.7-77.9	177,326	78.0	74.9-81.1
65+	135,414	78.7	75.3-82.1	132,802	68.6	65.1-72.1	268,216	73.4	70.9-75.8
<b>Education</b>									
Less than H.S.	60,830	74.0	65.8-82.1	47,567	62.7	54.5-70.8	108,397	68.5	62.7-74.3
H.S. or G.E.D.	226,239	79.4	75.8-83.0	173,500	71.1	67.3-74.9	399,740	75.6	72.9-78.2
Some Post-H.S.	136,560	81.0	76.5-85.5	136,613	69.9	65.8-74.0	273,173	75.0	72.0-78.1
College Graduate	106,922	81.4	77.8-85.0	96,199	68.5	64.8-72.3	203,121	74.8	72.1-77.4
<b>Income</b>									
Less than \$15,000	26,203	65.1*	53.9-76.4	37,927	62.8	54.3-71.3	64,130	63.7	56.9-70.5
\$15,000 - 24,999	43,224	76.1	68.9-83.3	64,942	73.0	67.1-78.8	108,166	74.2	69.7-78.7
\$25,000 - 34,999	66,005	83.1	77.5-88.8	62,865	70.6	64.7-76.5	128,870	76.5	72.4-80.7
\$35,000 - 49,999	66,131	76.2	68.9-83.4	58,216	74.4	68.0-80.9	124,347	75.3	70.5-80.2
\$50,000 - 74,999	79,089	77.8	71.5-84.1	62,865	72.4	66.8-78.0	141,953	75.3	71.1-79.5
\$75,000+	177,860	87.1	84.0-90.2	102,395	68.6	64.1-73.2	280,255	79.3	76.6-82.0

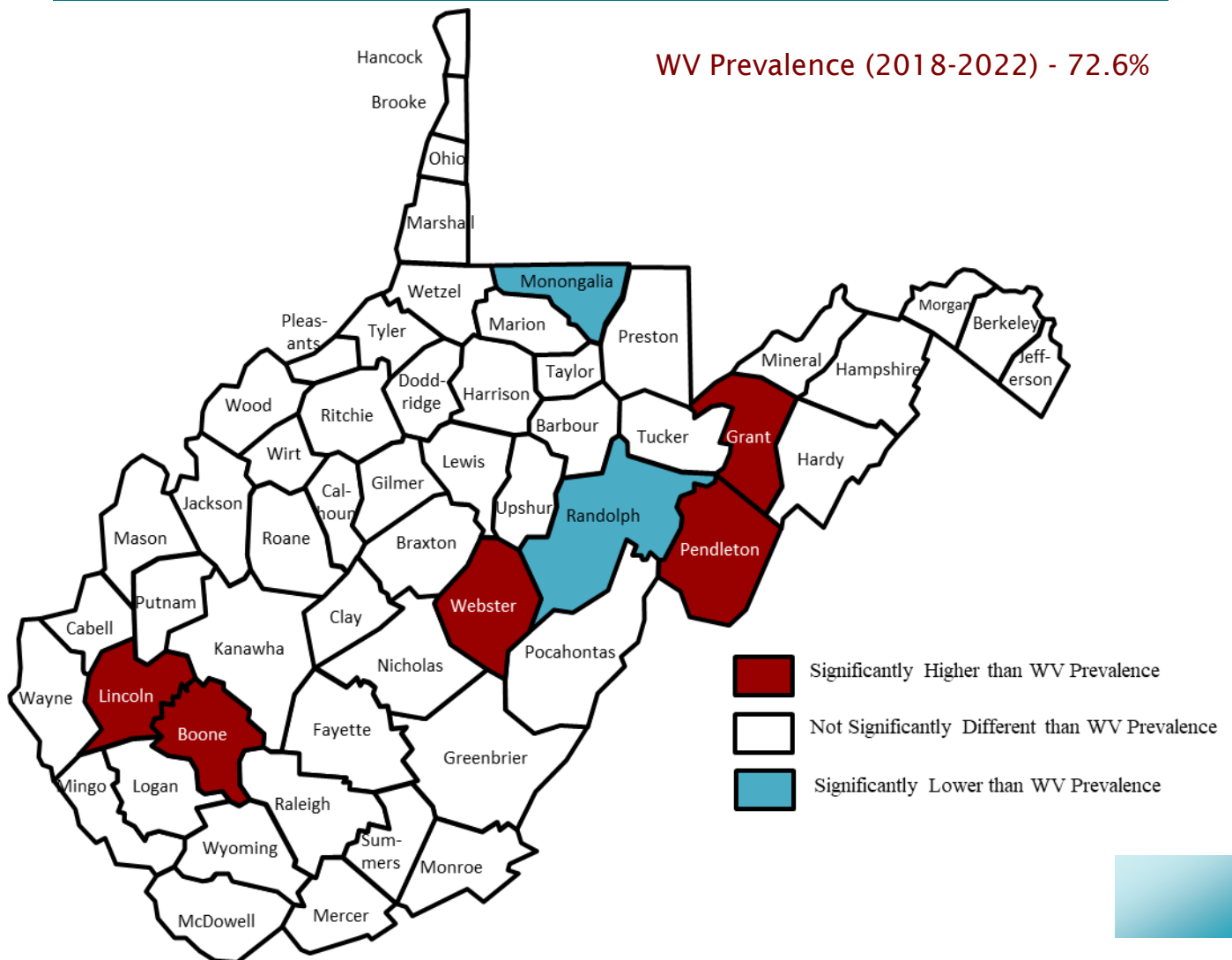
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

# CHAPTER 4: Weight Status

**FIGURE 4.5 PREVALENCE OF OVERWEIGHT OR OBESE BY YEAR: WVBRFSS, 2013-2022**



**Figure 4.6 Prevalence of Overweight or Obese (Body Mass Index of 25.0 or Higher) by County: WVBRFSS, 2018-2022**



## 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: 30.2%** (95% CI: 28.7-31.8)  
**U.S.: 23.9%** (95% CI: 23.7-24.2)  
 The prevalence of physical inactivity was significantly higher in West Virginia than in the U.S. West Virginia ranked the fourth highest among 54 BRFSS participants.

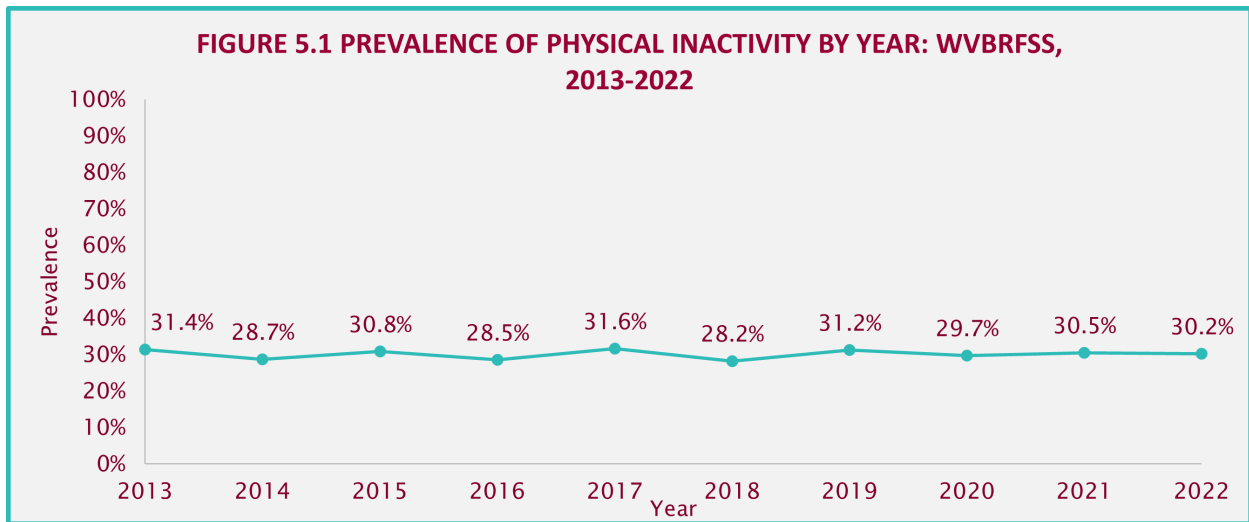
**Table 5.1 Prevalence of Physical Inactivity by Demographic Characteristics: WVBRFSS, 2022**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	178,162	25.4	23.1-27.6	252,051	34.9	32.8-37.0	430,213	30.2	28.7-31.8
<b>Age</b>									
18-24	10,095	12.2	5.7-18.7	12,850	16.8	9.1-24.6	22,945	14.4	9.4-19.5
25-34	17,995	16.8	9.8-23.8	19,908	20.2	14.5-25.8	37,903	18.4	13.9-22.9
35-44	21,896	20.8	14.9-26.7	27,945	27.2	21.8-32.7	49,841	24.0	20.0-28.0
45-54	25,158	24.0	18.7-29.2	42,308	40.2	34.9-45.5	67,466	32.1	28.3-35.9
55-64	41,153	35.0	29.7-40.3	50,691	40.7	35.8-45.6	91,844	37.9	34.4-41.5
65+	59,772	33.5	29.8-37.3	97,016	46.5	42.9-50.0	156,788	40.5	37.9-43.1
<b>Education</b>									
Less than H.S.	39,823	44.8	36.4-53.2	38,807	46.8	38.8-54.8	78,630	45.8	40.0-51.6
H.S. or G.E.D.	83,472	28.1	24.4-31.7	111,706	41.5	37.7-45.3	195,177	34.4	31.8-37.1
Some Post-H.S.	37,228	20.8	16.6-25.0	69,993	32.7	29.0-36.5	107,221	27.3	24.5-30.1
College Graduate	17,562	13.0	10.4-15.7	30,626	19.8	16.8-22.8	48,188	16.7	14.6-18.7
<b>Income</b>									
Less than \$15,000	18,709	45.9*	34.5-57.3	30,782	47.5	39.4-55.6	49,490	46.9	40.3-53.5
\$15,000 - 24,999	27,456	45.8	37.3-54.4	39,746	42.9	36.5-49.4	67,201	44.1	38.9-49.2
\$25,000 - 34,999	29,423	35.8	28.7-42.8	41,193	43.6	37.5-49.7	70,616	39.9	35.3-44.6
\$35,000 - 49,999	23,437	26.7	20.3-33.2	30,435	36.3	30.2-42.5	53,872	31.4	27.0-35.9
\$50,000 - 74,999	20,632	20.3	14.8-25.7	32,032	34.1	28.4-39.8	52,665	26.9	22.9-30.9
\$75,000+	26,152	12.7	9.8-15.5	30,977	19.4	16.0-22.9	57,130	15.6	13.4-17.8

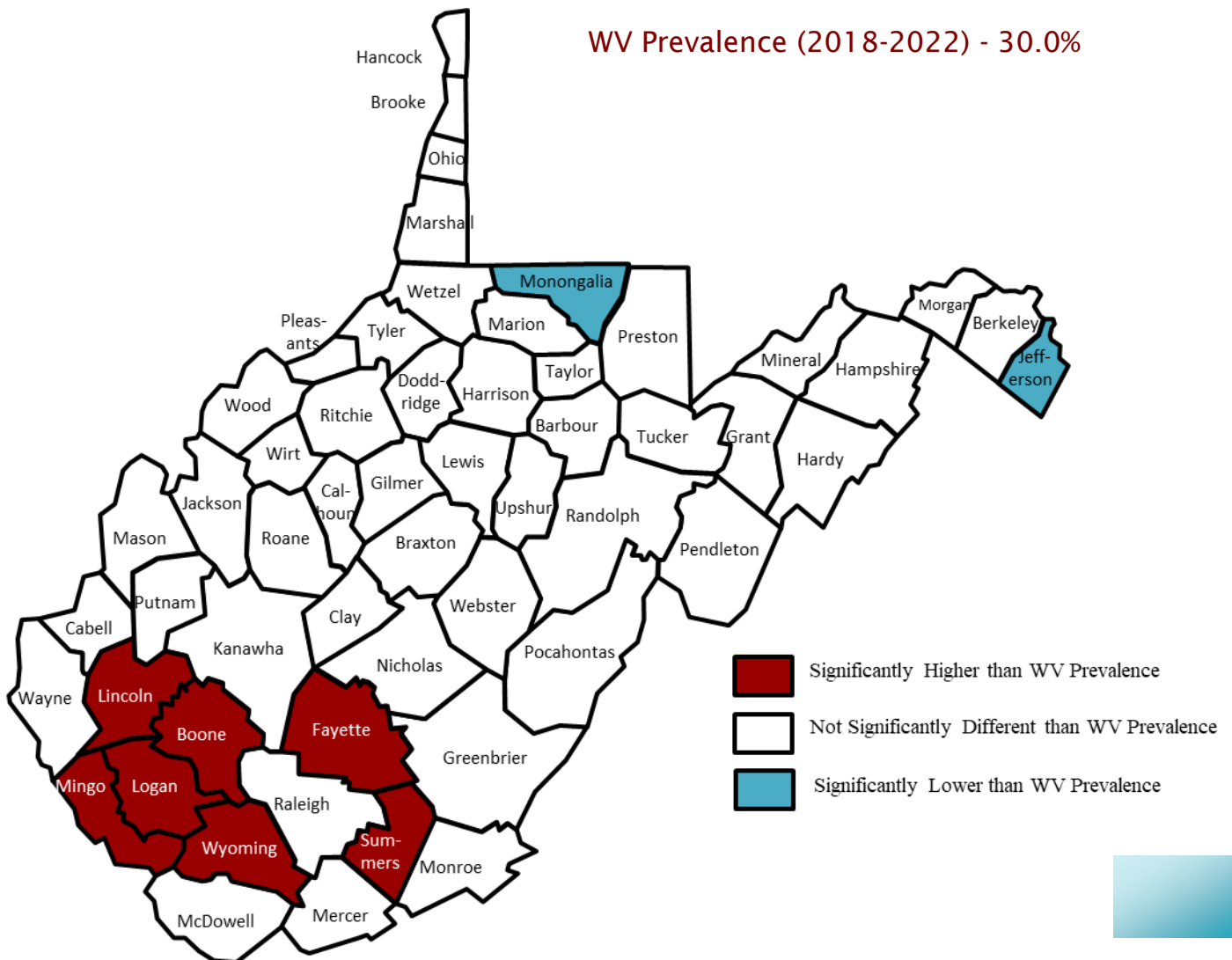
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

# CHAPTER 5: Physical Activity

**FIGURE 5.1 PREVALENCE OF PHYSICAL INACTIVITY BY YEAR: WVBRFSS, 2013-2022**



**Figure 5.2 Prevalence of Physical Inactivity by County: WVBRFSS, 2018-2022**



## CHAPTER 6: Tobacco Use

### Current Cigarette Smoking

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

**Prevalence** **WV: 21.0%** (95% CI: 19.5-22.5)  
**U.S.: 12.8%** (95% CI: 12.6-13.1)  
 The West Virginia prevalence of current cigarette smoking was significantly higher than the national prevalence. West Virginia ranked highest among the 54 BRFSS participants.

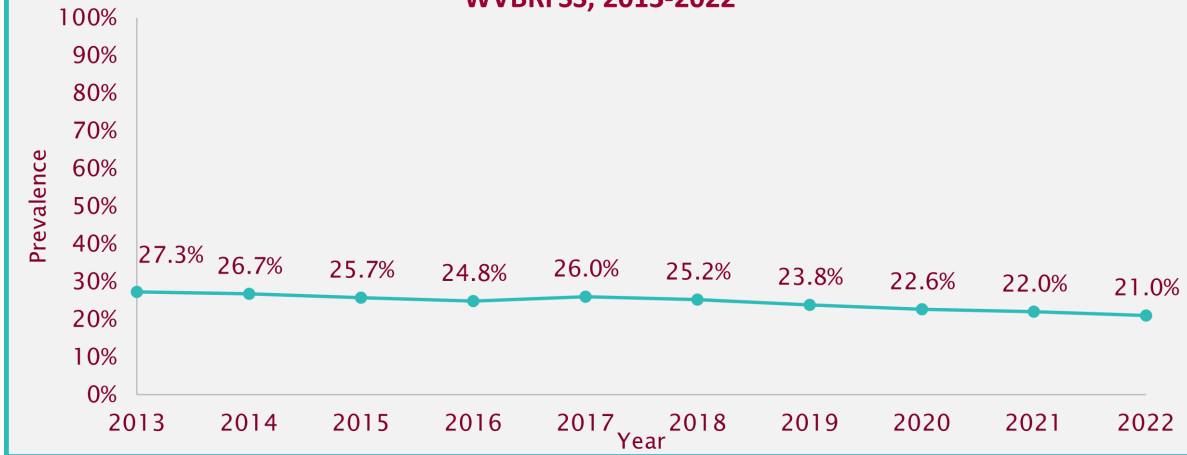
**Table 6.1 Prevalence of Current Cigarette Smoking by Demographic**  
**Characteristics: WVBFRSS, 2022**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	138,323	20.9	18.6-23.2	146,031	21.1	19.1-23.0	284,354	21.0	19.5-22.5
<b>Age</b>									
18-24	6,743	8.7*	2.3-15.0	12,353	17.4	8.9-26.0	19,096	12.8	7.5-18.2
25-34	23,125	23.6	15.2-32.0	21,031	22.0	16.3-27.7	44,156	22.8	17.7-27.9
35-44	28,768	29.2	22.8-35.6	29,918	30.0	24.2-35.7	58,686	29.6	25.3-33.9
45-54	26,239	26.2	20.8-31.5	26,835	26.5	21.6-31.4	53,074	26.3	22.7-30.0
55-64	31,511	27.8	22.6-32.9	30,325	25.1	20.6-29.6	61,836	26.4	23.0-29.8
65+	21,083	12.5	9.6-15.4	25,389	12.7	10.4-15.0	46,472	12.6	10.8-14.4
<b>Education</b>									
Less than H.S.	31,664	38.6	29.9-47.3	31,006	39.7	31.5-47.9	62,670	39.2	33.2-45.1
H.S. or G.E.D.	55,708	20.0	16.5-23.5	59,639	23.2	19.9-26.5	115,347	21.6	19.2-24.0
Some Post-H.S.	40,272	24.0	19.2-28.9	40,972	19.8	16.5-23.1	81,243	21.7	18.9-24.5
College Graduate	10,279	7.8	5.5-10.1	14,319	9.5	7.2-11.8	24,598	8.7	7.1-10.3
<b>Income</b>									
Less than \$15,000	20,168	53.0*	41.5-64.5	26,383	41.0	32.8-49.1	46,551	45.4	38.6-52.3
\$15,000 - 24,999	20,575	35.7	27.5-43.9	29,539	33.3	26.9-39.6	50,114	34.2	29.2-39.3
\$25,000 - 34,999	18,769	23.6	16.7-30.5	25,567	27.5	21.9-33.1	44,335	25.7	21.3-30.1
\$35,000 - 49,999	17,023	20.1	14.0-26.1	15,320	18.6	13.7-23.5	32,343	19.4	15.4-23.3
\$50,000 - 74,999	15,260	15.3	9.9-20.8	14,214	15.5	10.6-20.4	29,475	15.4	11.7-19.1
\$75,000+	27,176	13.6	10.1-17.0	15,091	9.6	6.9-12.3	42,266	11.8	9.6-14.1

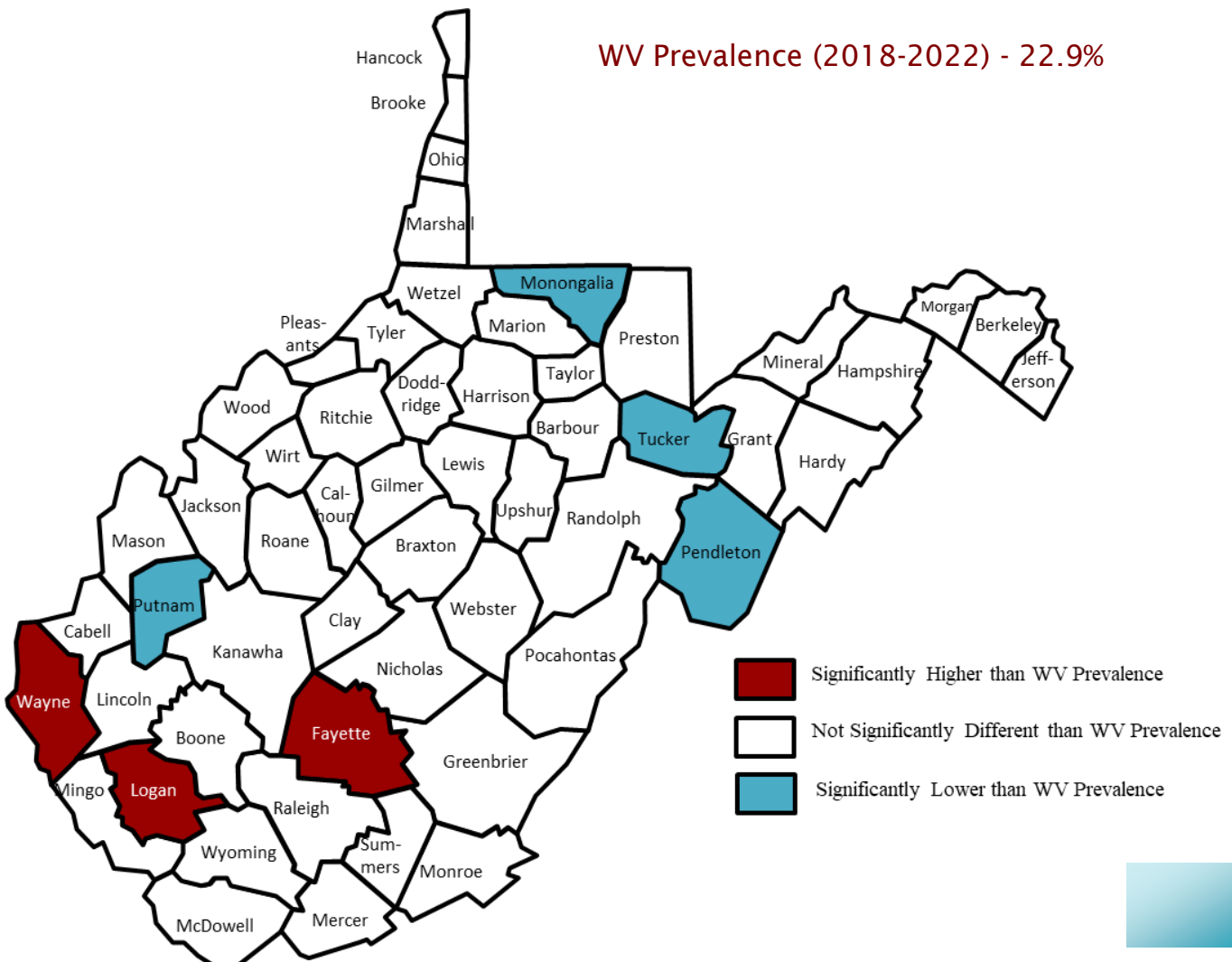
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

# CHAPTER 6: Tobacco Use

**FIGURE 6.1 PREVALENCE OF CURRENT CIGARETTE SMOKING BY YEAR:  
WVBRFSS, 2013-2022**



**Figure 6.2 Prevalence of Current Cigarette Smoking by County:  
WVBRFSS, 2018-2022**



## CHAPTER 6: Tobacco Use

### Smokeless Tobacco Use

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

**Prevalence** **WV: 7.7%** (95% CI: 6.7-8.7)  
**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 third highest among 54 BRFSS participants.

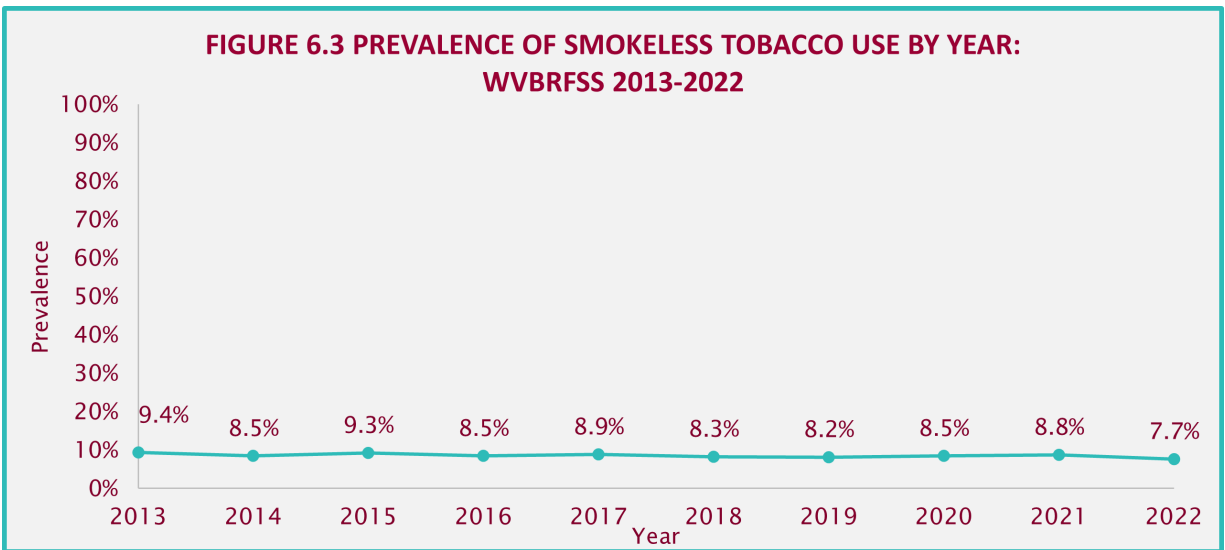
**Table 6.2 Prevalence of Smokeless Tobacco Use by Demographic Characteristics: WVBRFSS, 2022**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	95,798	14.4	12.5-16.3	8,949	1.3	0.7-1.8	104,747	7.7	6.7-8.7
<b>Age</b>									
18-24	6,588	8.3*	2.7-14.0	947	1.3*	0.0-3.2	7,534	5.0*	1.9-8.1
25-34	15,068	15.4	8.9-21.8	2,229	2.3*	0.1-4.6	17,298	8.9	5.4-12.4
35-44	17,742	17.8	12.3-23.3	806	0.8*	0.0-1.8	18,548	9.3	6.3-12.2
45-54	22,642	22.5	17.3-27.6	1,191	1.2*	0.0-2.6	23,833	11.8	9.0-14.6
55-64	16,799	14.8	10.9-18.7	1,279	1.1*	0.0-2.2	18,078	7.7	5.7-9.7
65+	16,107	9.5	7.0-11.9	2,496	1.2*	0.4-2.1	18,603	5.0	3.8-6.2
<b>Education</b>									
Less than H.S.	18,165	21.9	15.0-28.9	1,831	2.3*	0.3-4.4	19,996	12.4	8.6-16.3
H.S. or G.E.D.	50,645	18.1	14.7-21.4	3,637	1.4*	0.4-2.4	54,281	10.1	8.2-11.9
Some Post-H.S.	17,831	10.5	7.5-13.5	2,765	1.3*	0.3-2.4	20,595	5.5	4.0-6.9
College Graduate	8,707	6.6	4.5-8.7	717	0.5*	0.0-1.0	9,423	3.3	2.3-4.4
<b>Income</b>									
Less than \$15,000	4,174	10.6	5.4-15.8	1,350	2.1*	0.0-4.3	5,523	5.3	3.0-7.7
\$15,000 - 24,999	9,522	16.5	10.2-22.9	681	0.8*	0.0-1.9	10,203	7.0	4.2-9.7
\$25,000 - 34,999	11,025	13.8	8.7-18.9	1,243	1.3*	0.1-2.6	12,268	7.1	4.6-9.6
\$35,000 - 49,999	9,436	11.1	6.7-15.5	1,634	2.0*	0.0-4.1	11,070	6.6	4.1-9.1
\$50,000 - 74,999	17,940	18.0	11.9-24.0	1,812	2.0*	0.0-4.1	19,752	10.3	6.9-13.8
\$75,000+	24,905	12.4	9.3-15.4	895	0.6*	0.0-1.4	25,799	7.2	5.4-9.0

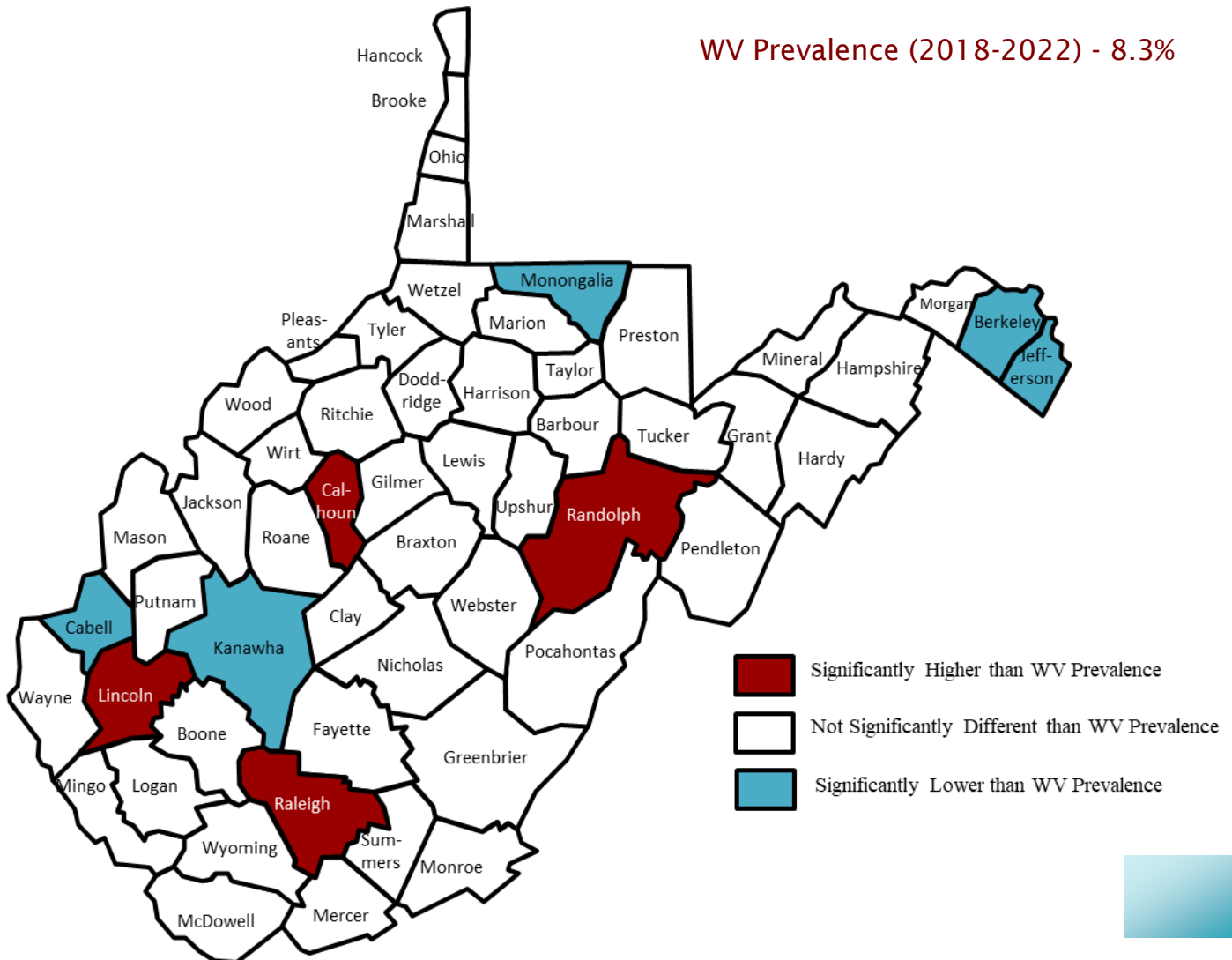
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

# CHAPTER 6: Tobacco Use

**FIGURE 6.3 PREVALENCE OF SMOKELESS TOBACCO USE BY YEAR:  
WVBRFSS 2013-2022**



**Figure 6.4 Prevalence of Smokeless Tobacco Use by County: WVBRFSS, 2018-2022**





## CHAPTER 7: E-cigarette Use

### E-cigarette Use

**Definition** Responding “every day” or “some days” to the question “Would you say you have never used e-cigarettes or other electronic vaping products in your entire life or now use them every day, use them some days, or used them in the past but do not currently use them at all?”

**Prevalence** **WV: 9.3%** (95% CI: 8.2-10.4)  
**U.S.: 7.5%** (95% CI: 7.3-7.7)  
 The West Virginia prevalence of e-cigarette use was significantly higher than the U.S. prevalence. West Virginia ranked the 10<sup>th</sup> highest among 54 BRFSS

**Table 7.1 Prevalence of E-cigarette Use: WVBRFSS, 2022**

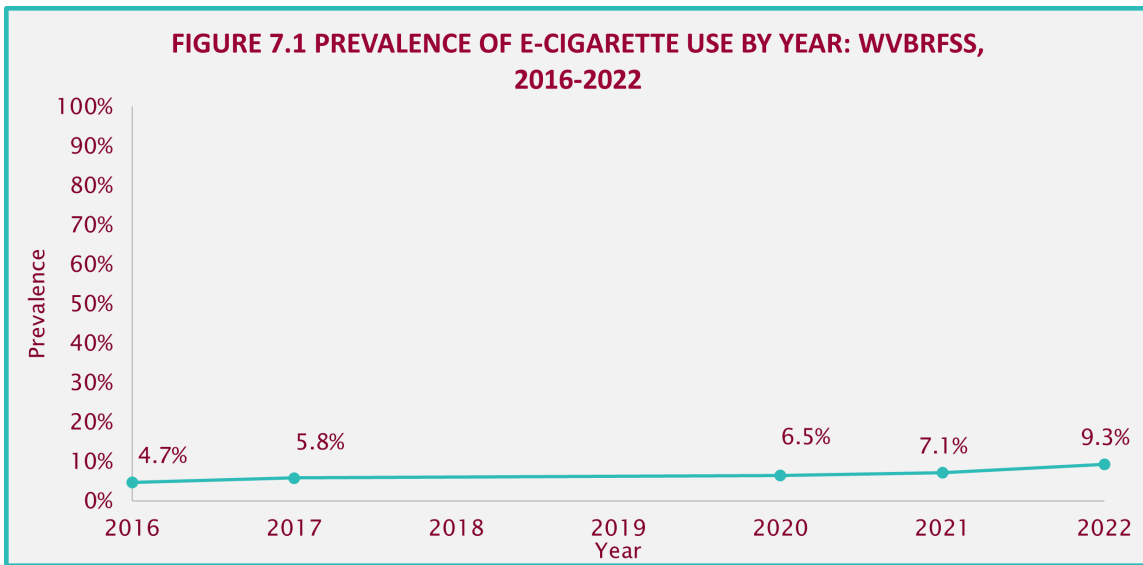
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	66,144	10.0	8.2-11.7	60,272	8.7	7.3-10.1	126,415	9.3	8.2-10.4
<b>Age</b>									
18-24	19,723	25.0	16.4-33.5	12,974	18.1	10.2-26.0	32,698	21.7	15.8-27.5
25-34	18,162	18.6	11.6-25.5	17,990	18.8	13.4-24.1	36,152	18.6	14.3-23.0
35-44	14,184	14.4	9.6-19.3	11,537	11.5	7.9-15.1	25,722	13.0	9.9-16.0
45-54	5,358	5.3	2.4-8.2	5,575	5.5	3.0-8.0	10,933	5.4	3.5-7.3
55-64	4,742	4.2	2.1-6.3	6,723	5.6	3.3-7.8	11,465	4.9	3.3-6.4
65+	2,779	1.6*	0.7-2.6	5,472	2.7	1.6-3.8	8,251	2.2	1.5-3.0
<b>Education</b>									
Less than H.S.	7,103	8.6*	2.6-14.5	7,766	10.0	4.4-15.5	14,869	9.2	5.2-13.3
H.S. or G.E.D.	28,515	10.2	7.4-13.1	22,465	8.7	6.4-11.0	50,981	9.5	7.7-11.3
Some Post-H.S.	21,550	12.8	8.9-16.6	19,865	9.6	7.0-12.2	41,415	11.0	8.7-13.3
College Graduate	8,447	6.4	3.9-8.9	10,175	6.7	4.6-8.9	18,622	6.6	4.9-8.2
<b>Income</b>									
Less than \$15,000	5,796	14.7*	4.6-24.9	7,021	11	5.4-16.5	12,818	12.4	7.2-17.6
\$15,000 - 24,999	4,644	8.1	3.6-12.5	10,245	11.5	7.0-16.1	14,889	10.2	6.9-13.4
\$25,000 - 34,999	7,121	8.9	4.2-13.6	10,695	11.5	7.4-15.6	17,816	10.3	7.2-13.4
\$35,000 - 49,999	6,357	7.5	3.2-11.8	8,130	9.9	6.0-13.7	14,487	8.7	5.8-11.6
\$50,000 - 74,999	12,496	12.8	7.5-18.1	6,701	7.3	3.9-10.7	19,197	10.1	6.9-13.3
\$75,000+	14,925	7.4	4.8-10.0	10,436	6.6	3.8-9.5	25,361	7.1	5.1-9.0

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

participants.

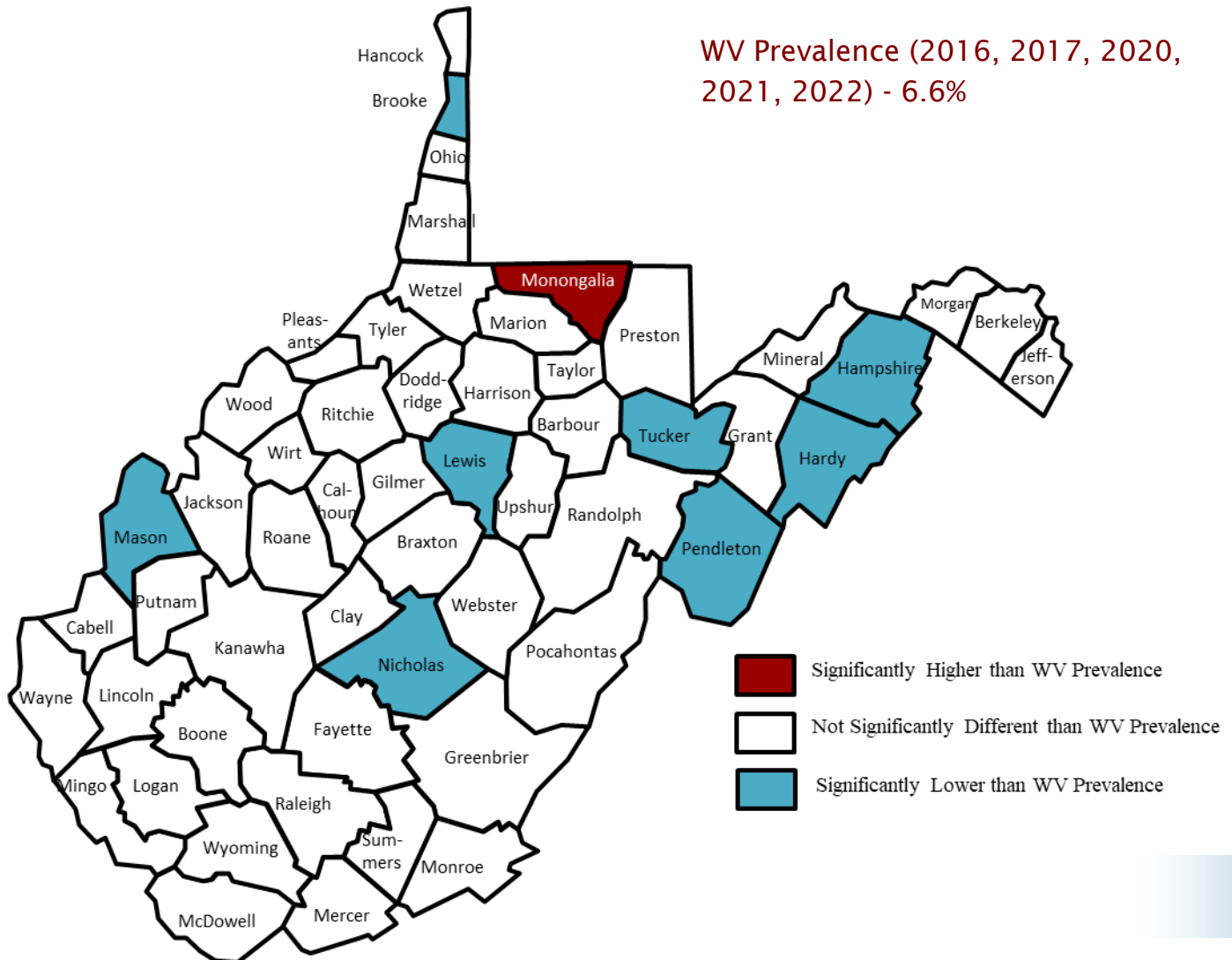
# CHAPTER 7: E-cigarette Use

**FIGURE 7.1 PREVALENCE OF E-CIGARETTE USE BY YEAR: WVBRFSS, 2016-2022**



Note: This question was not asked in 2018 and 2019.

**Figure 7.2 Prevalence of Current E-cigarette Use by County: WVBRFSS, 2016-2022**



# 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.

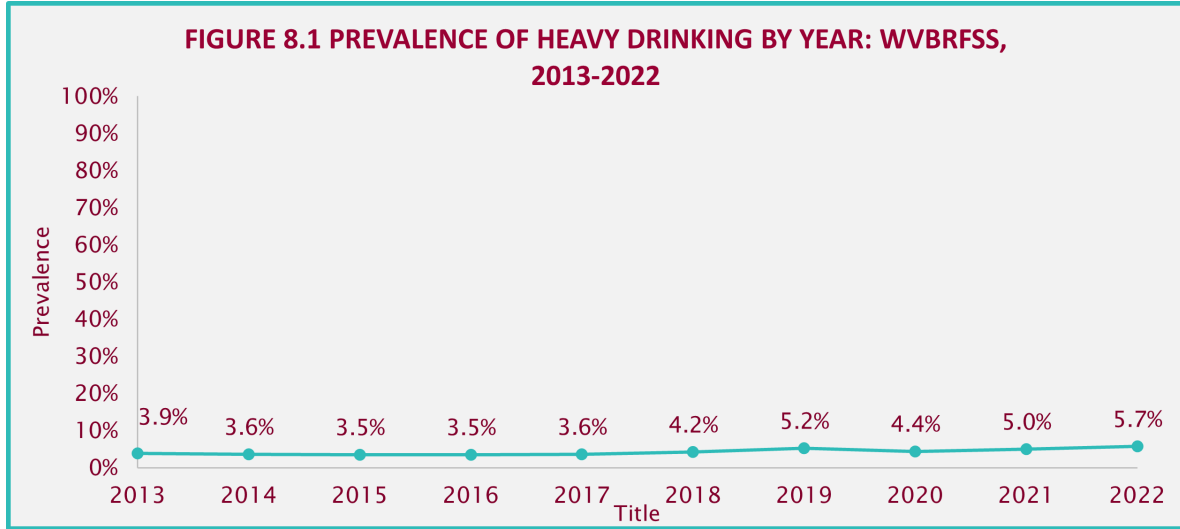
**Prevalence** **WV: 5.7%** (95% CI: 4.8-6.6)  
**U.S.: 6.6%** (95% CI: 6.4-6.8)  
 The West Virginia prevalence of heavy drinking was significantly lower than the U.S. prevalence. West Virginia ranked 44<sup>th</sup> among the 54 BRFSS participants.

**Table 8.1 Prevalence of Heavy Drinking: WVBRFSS, 2022**

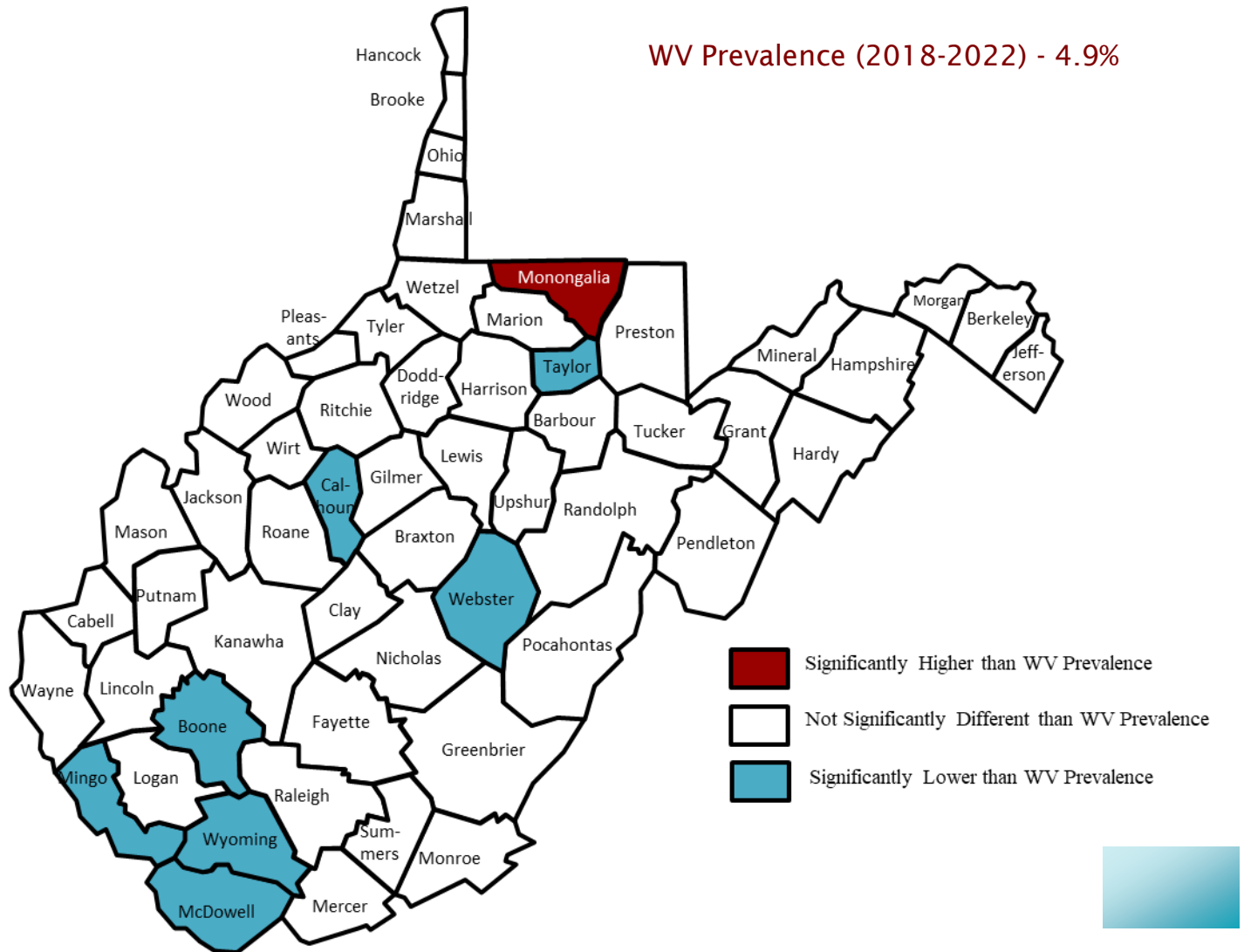
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	44,922	7.0	5.6-8.4	30,490	4.5	3.4-5.5	75,412	5.7	4.8-6.6
<b>Age</b>									
18-24	3,445	4.5*	0.7-8.2	5,491	7.8*	1.8-13.7	8,936	6.1	2.6-9.5
25-34	8,597	9.4	3.9-14.9	6,944	7.4	3.7-11.1	15,541	8.4	5.1-11.7
35-44	9,039	9.4	5.2-13.6	6,135	6.2	3.3-9.0	15,174	7.8	5.2-10.3
45-54	8,466	8.8	5.2-12.4	4,966	5.1	2.8-7.3	13,431	6.9	4.8-9.0
55-64	9,790	8.8	5.6-12.1	3,038	2.6	1.1-4.0	12,828	5.6	3.8-7.4
65+	5,425	3.3	1.8-4.8	3,916	2.0	1.1-2.9	9,341	2.6	1.7-3.4
<b>Education</b>									
Less than H.S.	4,228	5.3*	1.9-8.8	306	0.4*	0.0-1.2	4,534	2.9*	1.1-4.7
H.S. or G.E.D.	22,569	8.4	5.9-11.0	9,704	3.8	2.0-5.6	32,273	6.2	4.6-7.8
Some Post-H.S.	11,398	7.0	4.3-9.7	11,830	5.9	3.8-7.9	23,228	6.4	4.7-8.0
College Graduate	6,326	5.0	2.6-7.3	8,651	5.8	3.8-7.9	14,977	5.4	3.9-7.0
<b>Income</b>									
Less than \$15,000	2,017	5.3*	0.3-10.3	1,502	2.4*	0.2-4.6	3,519	3.5*	1.1-5.8
\$15,000 - 24,999	2,961	5.2*	1.5-9.0	2,396	2.7*	0.6-4.9	5,357	3.7	1.8-5.7
\$25,000 - 34,999	3,624	4.8*	1.4-8.2	4,797	5.3*	2.1-8.4	8,421	5.0	2.7-7.3
\$35,000 - 49,999	5,628	6.7	3.3-10.1	3,124	3.9*	1.6-6.3	8,752	5.3	3.3-7.4
\$50,000 - 74,999	6,285	6.6	2.8-10.3	4,853	5.3	2.3-8.4	11,138	6.0	3.5-8.4
\$75,000+	19,366	9.9	6.8-13.1	8,628	5.6	3.4-7.7	27,994	8.0	6.0-10.0

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

# CHAPTER 8: Alcohol Consumption



**Figure 8.2 Prevalence of Heavy Drinking by County: WVBRFSS, 2018-2022**



## CHAPTER 8: Alcohol Consumption

### Binge Drinking

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

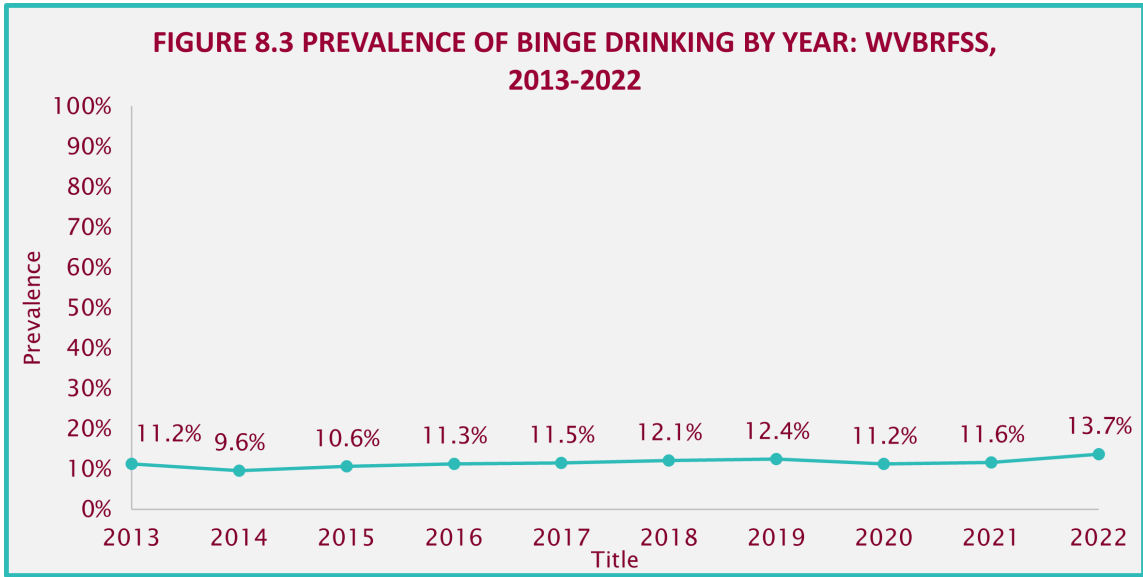
**Prevalence** **WV: 13.7%** (95% CI: 12.4-15.0)  
**U.S.: 16.5%** (95% CI: 16.3-16.8)  
 The West Virginia prevalence of binge drinking was significantly lower than the U.S. prevalence. West Virginia ranked the ninth lowest among 54 BRFSS participants.

**Table 8.2 Prevalence of Binge Drinking by Demographic Characteristics: WVBRFSS, 2022**

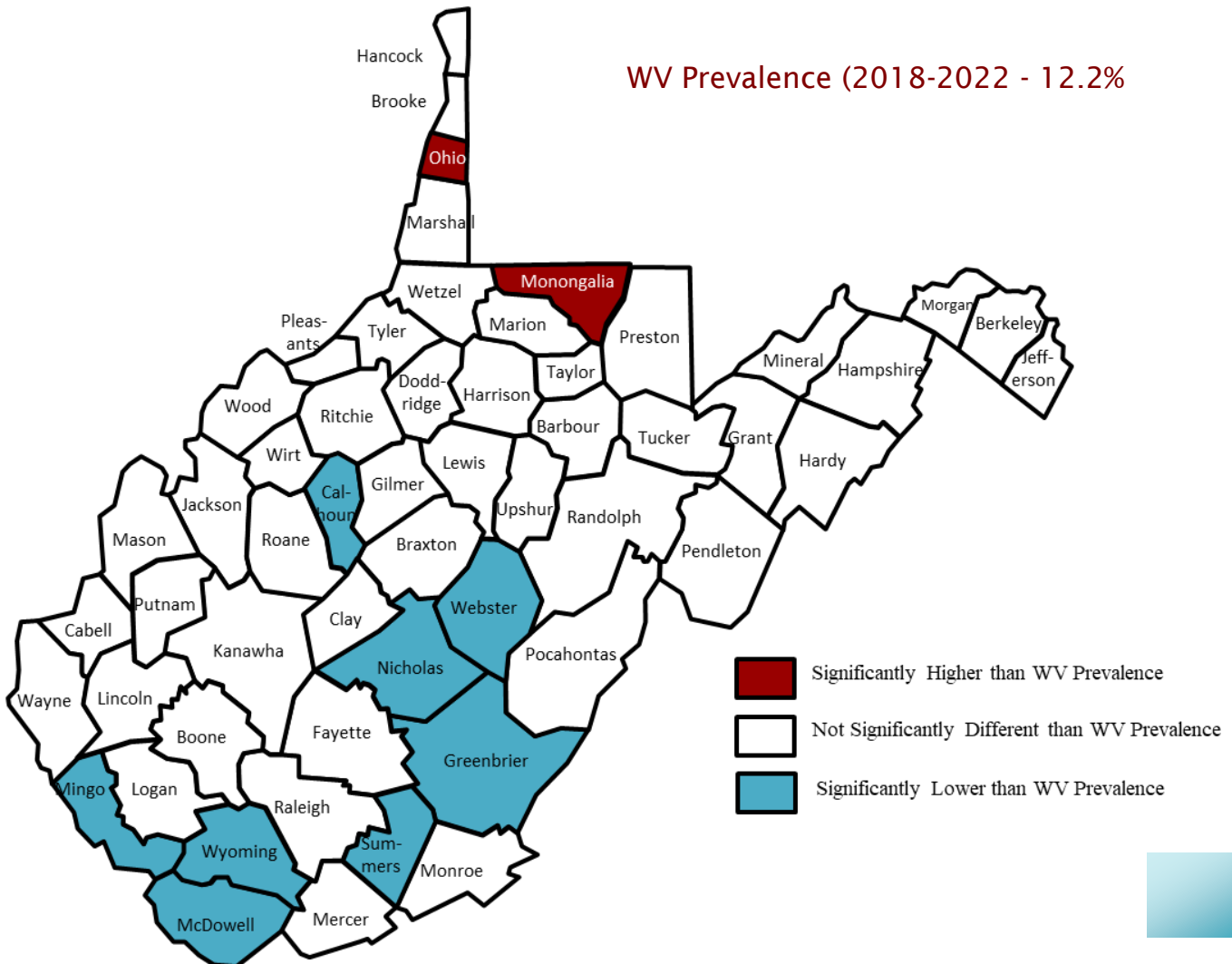
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	118,987	18.7	16.5-20.8	61,843	9.1	7.7-10.5	180,830	13.7	12.4-15.0
<b>Age</b>									
18-24	17,718	22.9	14.8-30.9	13,768	19.6	11.5-27.8	31,486	21.3	15.6-27.1
25-34	24,753	27.0	19.1-34.9	16,168	17.2	12.1-22.4	40,921	22.1	17.4-26.8
35-44	24,472	25.1	19.2-31.0	10,771	10.9	7.4-14.3	35,243	17.9	14.5-21.4
45-54	21,033	22.2	17.1-27.3	9,212	9.4	6.3-12.4	30,244	15.7	12.7-18.7
55-64	20,799	19.0	14.6-23.4	7,199	6.1	3.7-8.5	27,997	12.3	9.8-14.8
65+	9,601	5.9	4.1-7.7	4,725	2.4	1.4-3.4	14,326	4.0	3.0-4.9
<b>Education</b>									
Less than H.S.	9,056	11.7	6.0-17.5	2,294	3.0*	0.4-5.6	11,350	7.4	4.2-10.6
H.S. or G.E.D.	48,687	18.1	14.7-21.5	19,748	7.8	5.4-10.2	68,435	13.1	11.0-15.2
Some Post-H.S.	30,421	18.7	14.3-23.1	21,314	10.6	7.8-13.3	51,734	14.2	11.7-16.7
College Graduate	29,971	23.5	19.4-27.7	18,487	12.4	9.5-15.2	48,458	17.5	15.0-20.0
<b>Income</b>									
Less than \$15,000	6,488	16.9	8.6-25.2	3,216	5.1*	1.6-8.6	9,703	9.6	5.7-13.5
\$15,000 - 24,999	5,648	10.1	5.1-15.1	7,296	8.4	4.5-12.2	12,944	9.0	6.0-12.1
\$25,000 - 34,999	9,127	12.0	6.6-17.4	8,186	8.9	5.0-12.9	17,313	10.3	7.0-13.6
\$35,000 - 49,999	13,322	16.0	10.6-21.3	7,003	8.7	4.9-12.6	20,325	12.4	9.1-15.7
\$50,000 - 74,999	18,210	19.1	13.3-24.9	9,439	10.4	6.5-14.4	27,649	14.9	11.3-18.4
\$75,000+	53,649	27.5	23.2-31.9	19,884	12.8	9.7-15.9	73,533	21.0	18.1-23.8

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

# CHAPTER 8: Alcohol Consumption



**Figure 8.4 Prevalence of Binge Drinking by County: WVBRFSS, 2018-2022**



## CHAPTER 9: Sleep

### Inadequate Sleep

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

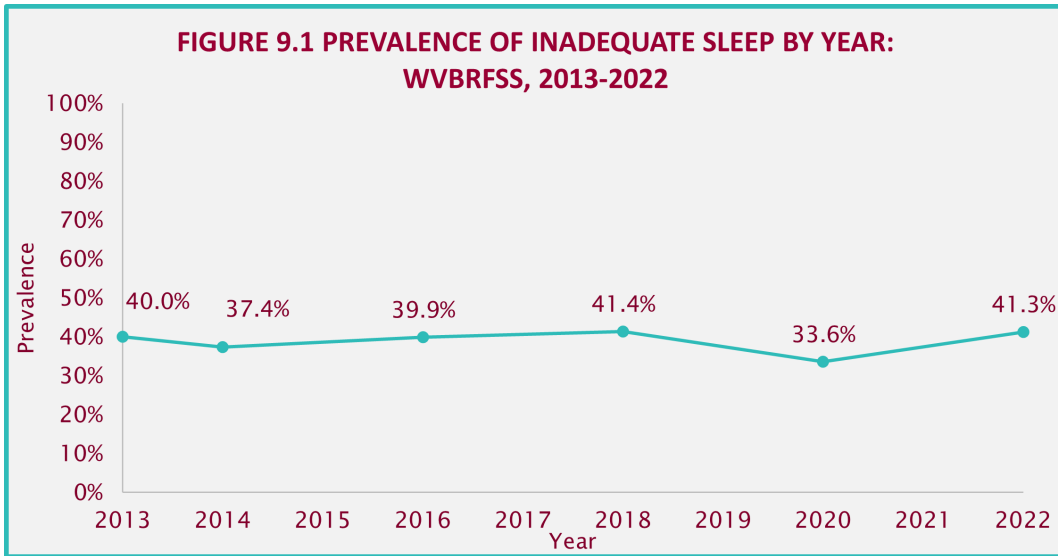
**Prevalence** **WV: 41.3%** (95% CI: 39.6-43.1)  
**U.S.: 36.1%** (95% CI: 35.8-36.4)  
 The West Virginia prevalence of inadequate sleep was significantly higher than the U.S. prevalence. West Virginia ranked the third highest among 54 BRFSS participants.

**Table 9.1 Prevalence of Inadequate Sleep by Demographic Characteristics: WVBRFSS, 2022**

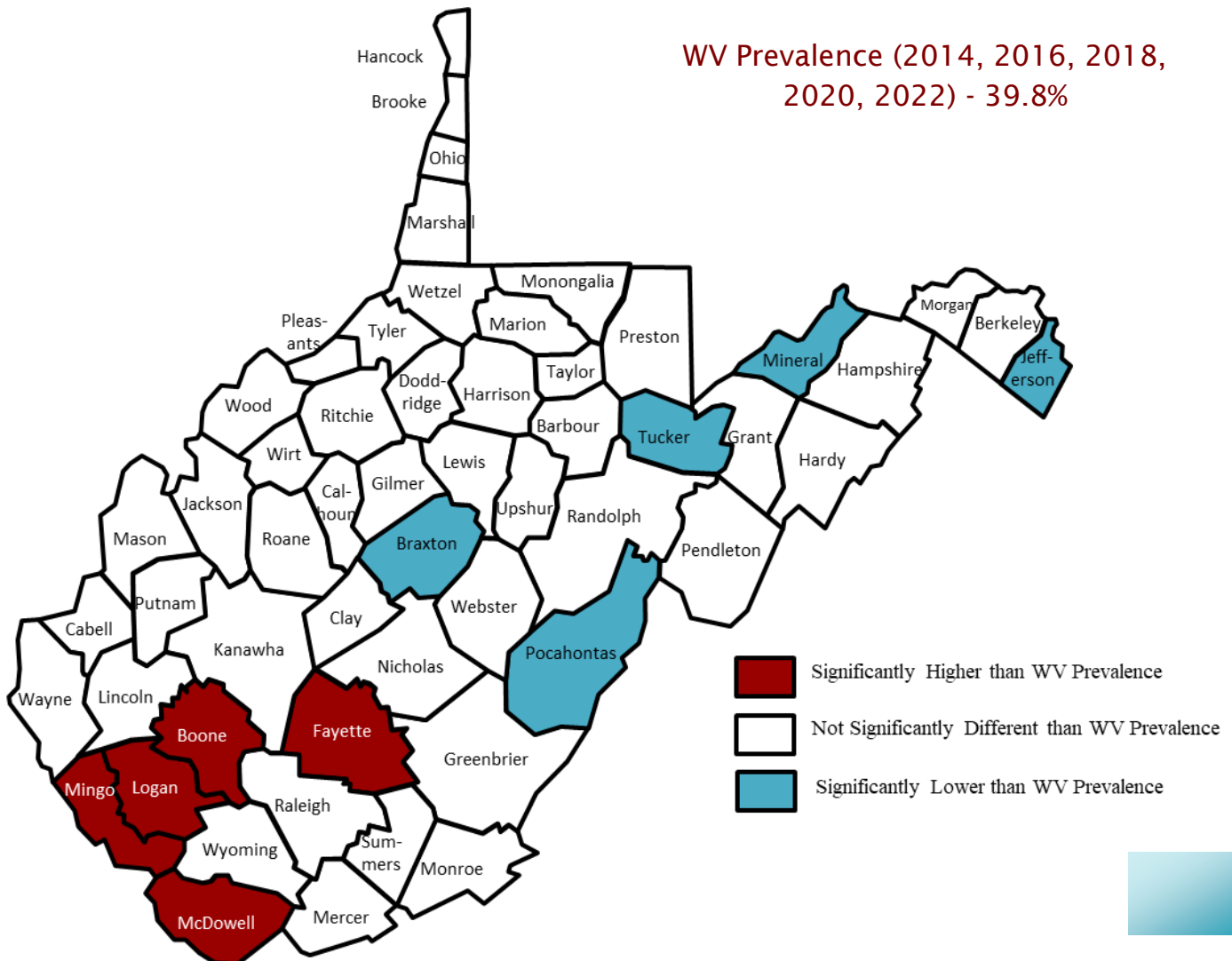
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	289,706	<b>41.9</b>	39.2-44.5	288,718	<b>40.8</b>	38.5-43.1	578,424	<b>41.3</b>	39.6-43.1
<b>Age</b>									
18-24	31,191	<b>37.7*</b>	27.6-47.7	27,960	<b>37.7*</b>	27.5-47.8	59,151	<b>37.7</b>	30.5-44.8
25-34	45,551	<b>43.1</b>	34.5-51.8	40,068	<b>40.8</b>	34.1-47.5	85,619	<b>42.0</b>	36.5-47.6
35-44	53,600	<b>52.0</b>	45.2-58.7	44,031	<b>44.0</b>	38.1-50.0	97,631	<b>48.1</b>	43.5-52.6
45-54	51,776	<b>50.2</b>	44.1-56.2	54,675	<b>52.2</b>	46.9-57.6	106,451	<b>51.2</b>	47.2-55.2
55-64	51,851	<b>44.7</b>	39.3-50.1	53,787	<b>43.5</b>	38.5-48.5	105,638	<b>44.1</b>	40.4-47.8
65+	53,116	<b>30.3</b>	26.6-34.0	66,808	<b>33.0</b>	29.7-36.4	119,924	<b>31.8</b>	29.3-34.2
<b>Education</b>									
Less than H.S.	49,006	<b>56.1</b>	47.6-64.5	34,576	<b>43.8</b>	35.6-52.0	83,583	<b>50.3</b>	44.3-56.3
H.S. or G.E.D.	120,021	<b>41.0</b>	36.8-45.1	116,015	<b>44.2</b>	40.3-48.1	236,036	<b>42.5</b>	39.6-45.4
Some Post-H.S.	75,360	<b>42.8</b>	37.5-48.1	88,338	<b>41.9</b>	37.8-46.1	163,697	<b>42.3</b>	39.0-45.6
College Graduate	43,864	<b>32.8</b>	28.4-37.1	49,300	<b>31.9</b>	28.3-35.5	93,164	<b>32.3</b>	29.5-35.1
<b>Income</b>									
Less than \$15,000	22,276	<b>55.7*</b>	44.2-67.3	35,100	<b>56.1</b>	47.7-64.5	57,376	<b>56.0</b>	49.2-62.8
\$15,000 - 24,999	27,116	<b>45.9</b>	37.3-54.5	42,897	<b>46.8</b>	40.1-53.4	70,013	<b>46.4</b>	41.2-51.7
\$25,000 - 34,999	36,912	<b>45.5</b>	37.8-53.2	41,283	<b>43.8</b>	37.7-49.9	78,195	<b>44.6</b>	39.7-49.4
\$35,000 - 49,999	33,616	<b>38.7</b>	31.1-46.3	34,035	<b>41.0</b>	34.4-47.5	67,651	<b>39.8</b>	34.8-44.9
\$50,000 - 74,999	42,493	<b>42.1</b>	35.0-49.2	35,433	<b>38.0</b>	31.9-44.0	77,926	<b>40.1</b>	35.4-44.8
\$75,000+	79,733	<b>38.7</b>	34.2-43.2	57,455	<b>36.2</b>	31.7-40.6	137,187	<b>37.6</b>	34.4-40.8

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

# CHAPTER 9: Sleep



**Figure 9.2 Prevalence of Inadequate Sleep by County: WVBRFSS, 2014, 2016, 2018, 2020, 2022**





## CHAPTER 10: Tooth Loss

### One or More Missing Teeth

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

**Prevalence** **WV: 56.5%** (95% CI: 54.7-58.2)  
**U.S.: 41.7%** (95% CI: 41.4-42.1)  
 The West Virginia prevalence of one or more missing teeth was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 54 BRFSS participants.

**Table 10.1 Prevalence of One or More Missing Teeth by Demographic Characteristics: WVBRFSS, 2022**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	381,937	55.5	52.8-58.1	405,977	57.4	55.1-59.7	787,913	56.5	54.7-58.2
<b>Age</b>									
18-24	11,624	13.9*	5.7-22.2	12,561	16.5	8.9-24.0	24,185	15.1	9.5-20.8
25-34	27,058	25.6	17.4-33.8	32,862	33.3	26.8-39.8	59,920	29.3	24.0-34.6
35-44	49,941	47.7	40.9-54.4	44,143	43.8	37.8-49.7	94,084	45.8	41.2-50.3
45-54	62,416	61.4	55.6-67.2	65,093	62.5	57.4-67.5	127,509	61.9	58.1-65.8
55-64	84,904	73.0	68.5-77.5	88,990	72.7	68.4-77.0	173,894	72.9	69.7-76.0
65+	142,609	82.9	80.0-85.9	159,407	79.9	77.1-82.7	302,017	81.3	79.3-83.4
<b>Education</b>									
Less than H.S.	76,672	89.5	84.2-94.7	69,685	87.6	81.4-93.7	146,357	88.6	84.5-92.6
H.S. or G.E.D.	169,540	58.3	53.9-62.7	171,718	65.2	61.2-69.3	341,258	61.6	58.6-64.6
Some Post-H.S.	88,976	50.3	44.9-55.7	110,444	52.5	48.3-56.8	199,420	51.5	48.1-54.9
College Graduate	45,819	34.3	30.3-38.3	53,545	35.0	31.4-38.5	99,364	34.7	32.0-37.3
<b>Income</b>									
Less than \$15,000	32,836	81.6	73.1-90.0	49,083	75.5	68.0-82.9	81,919	77.8	72.1-83.5
\$15,000 - 24,999	47,338	81.1	73.2-89.0	60,890	67.9	61.1-74.6	108,228	73.1	67.9-78.3
\$25,000 - 34,999	54,121	67.1	59.2-74.9	65,489	70.3	64.3-76.3	119,610	68.8	63.9-73.7
\$35,000 - 49,999	58,679	67.9	60.6-75.1	47,190	57.5	50.8-64.2	105,870	62.8	57.8-67.8
\$50,000 - 74,999	47,458	47.1	40.1-54.1	46,363	50.3	44.3-56.4	93,820	48.7	44.0-53.3
\$75,000+	80,180	39.1	34.8-43.5	56,232	35.3	31.1-39.6	136,412	37.5	34.4-40.6

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



## CHAPTER 10: Tooth Loss

### Six or More Missing Teeth

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

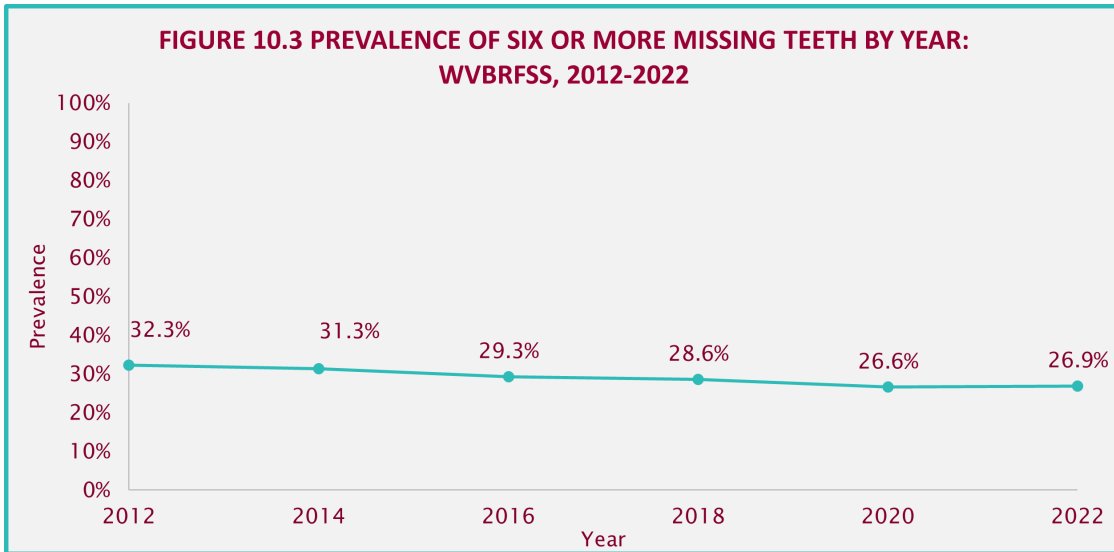
**Prevalence** **WV: 26.9%** (95% CI: 25.5-28.4)  
**U.S.: 13.6%** (95% CI: 13.4-13.8)  
 The West Virginia prevalence of six or more missing teeth was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 54 BRFSS participants.

**Table 10.2 Prevalence of Six or More Missing Teeth by Demographic**  
**Characteristics: WVBRFSS, 2022**

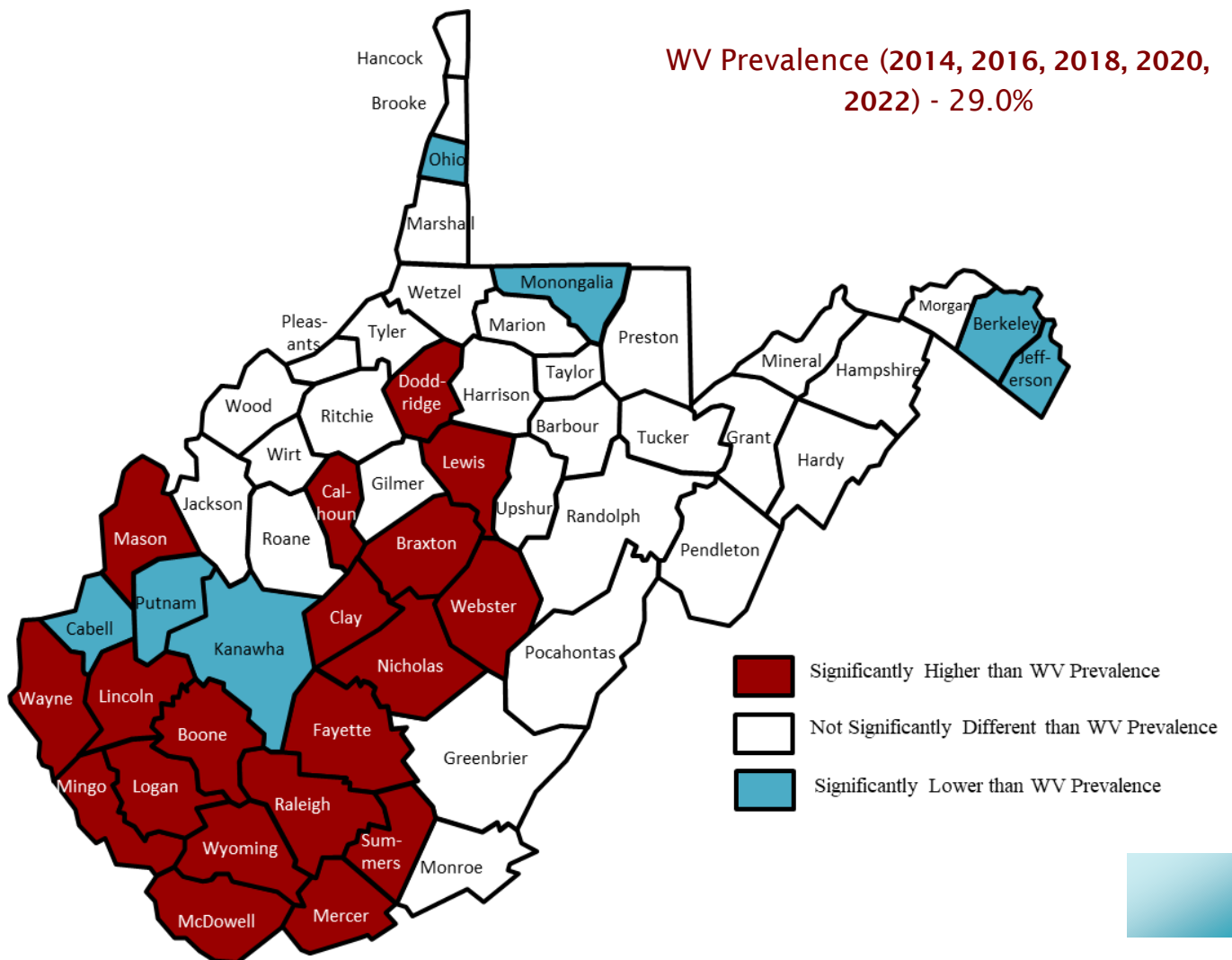
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	170,784	24.8	22.7-26.9	204,668	29.0	26.9-31.0	375,452	26.9	25.5-28.4
<b>Age</b>									
18-24	2,218	2.7*	0.0-7.8	5,191	6.8*	1.2-12.4	7,408	4.6*	0.9-8.4
25-34	3,817	3.6*	0.0-7.5	6,085	6.2	3.1-9.2	9,903	4.8	2.4-7.3
35-44	14,413	13.8	9.3-18.2	15,912	15.8	11.3-20.3	30,325	14.7	11.6-17.9
45-54	22,153	21.8	16.5-27.0	29,391	28.2	23.1-33.3	51,544	25.0	21.4-28.7
55-64	38,004	32.7	27.6-37.8	46,248	37.8	32.8-42.8	84,252	35.3	31.7-38.9
65+	88,963	51.7	47.7-55.8	100,966	50.6	47.0-54.2	189,929	51.1	48.4-53.8
<b>Education</b>									
Less than H.S.	48,885	57.0	48.4-65.7	55,169	69.3	61.4-77.3	104,054	63.0	57.0-68.9
H.S. or G.E.D.	76,132	26.2	23.0-29.4	87,494	33.2	29.8-36.7	163,626	29.5	27.2-31.9
Some Post-H.S.	34,440	19.5	15.9-23.0	47,521	22.6	19.4-25.8	81,961	21.2	18.8-23.5
College Graduate	11,327	8.5	6.4-10.5	13,900	9.1	7.1-11.0	25,227	8.8	7.4-10.2
<b>Income</b>									
Less than \$15,000	23,322	57.9*	46.3-69.6	34,768	53.5	45.3-61.7	58,090	55.2	48.5-61.9
\$15,000 - 24,999	27,246	46.7	38.1-55.2	38,310	42.7	36.3-49.1	65,555	44.3	39.1-49.4
\$25,000 - 34,999	29,288	36.3	29.5-43.1	40,634	43.6	37.5-49.7	69,922	40.2	35.6-44.8
\$35,000 - 49,999	25,781	29.8	23.1-36.6	21,204	25.8	20.3-31.3	46,985	27.9	23.5-32.3
\$50,000 - 74,999	21,158	21.0	15.9-26.1	15,930	17.3	12.9-21.7	37,087	19.2	15.9-22.6
\$75,000+	17,943	8.8	6.6-11.0	11,336	7.1	5.0-9.3	29,280	8.0	6.5-9.6

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

# CHAPTER 10: Tooth Loss



**Figure 10.4 Prevalence of Six or More Missing Teeth by County: WVBRFSS, 2014-2022**



## CHAPTER 10: Tooth Loss

### All Teeth Missing, Aged 65 and Older

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

**Prevalence** **WV: 25.2%** (95% CI: 22.8-27.7)  
**U.S.: 21.1%** (95% CI: 11.7-12.5)  
 The West Virginia prevalence of all teeth missing among those aged 65 and older was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 54 BRFSS participants.

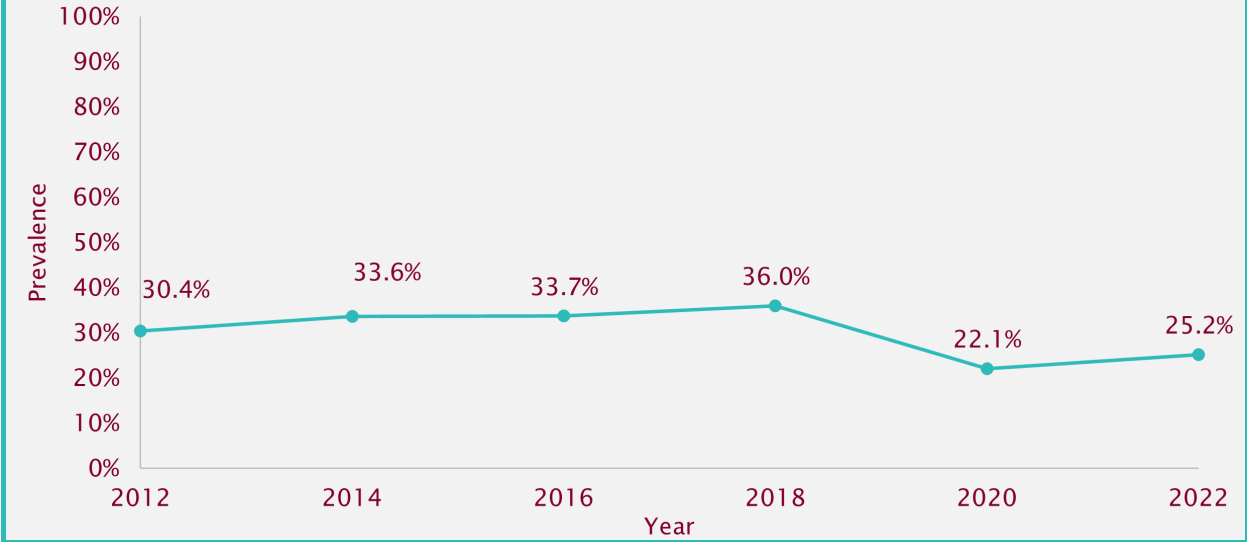
**Table 10.3 Prevalence of All Teeth Missing Among Those Aged 65 and Older by Demographic Characteristics: WVBRFSS, 2022**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	43,858	25.5	21.7-29.3	49,921	25.0	21.9-28.2	93,779	25.2	22.8-27.7
<b>Education</b>									
Less than H.S.	14,689	57.1	44.1-70.2	17,326	45.4	34.7-56.0	32,015	50.1	41.6-58.6
H.S. or G.E.D.	19,253	26.3	20.8-31.7	21,349	27.1	22.2-32.0	40,602	26.7	23.0-30.3
Some Post-H.S.	7,031	17.2	11.0-23.3	9,502	18.8	13.7-24.0	16,534	18.1	14.1-22.1
College Graduate	2,884	9.0	5.2-12.9	1,506	4.7	2.4-7.1	4,391	6.9	4.6-9.2
<b>Income</b>									
Less than \$15,000	4,747	52.4	34.5-70.3	8,399	49.7	37.4-62.0	13,146	50.6	40.5-60.8
\$15,000 - 24,999	6,926	41.0	27.9-54.0	9,740	30.9	22.1-39.6	16,666	34.4	27.0-41.8
\$25,000 - 34,999	9,194	30.0	20.8-39.2	8,273	26.0	17.6-34.4	17,467	28.0	21.7-34.2
\$35,000 - 49,999	6,891	25.4	16.9-33.9	4,701	18.8	11.7-26.0	11,592	22.3	16.7-27.9
\$50,000 - 74,999	4,869	15.9	9.1-22.8	3,139	14.4	7.3-21.5	8,008	15.3	10.3-20.3
\$75,000+	2,298	7.6	2.0-13.3	593	2.9	0.1-5.6	2,891	5.7	2.1-9.2

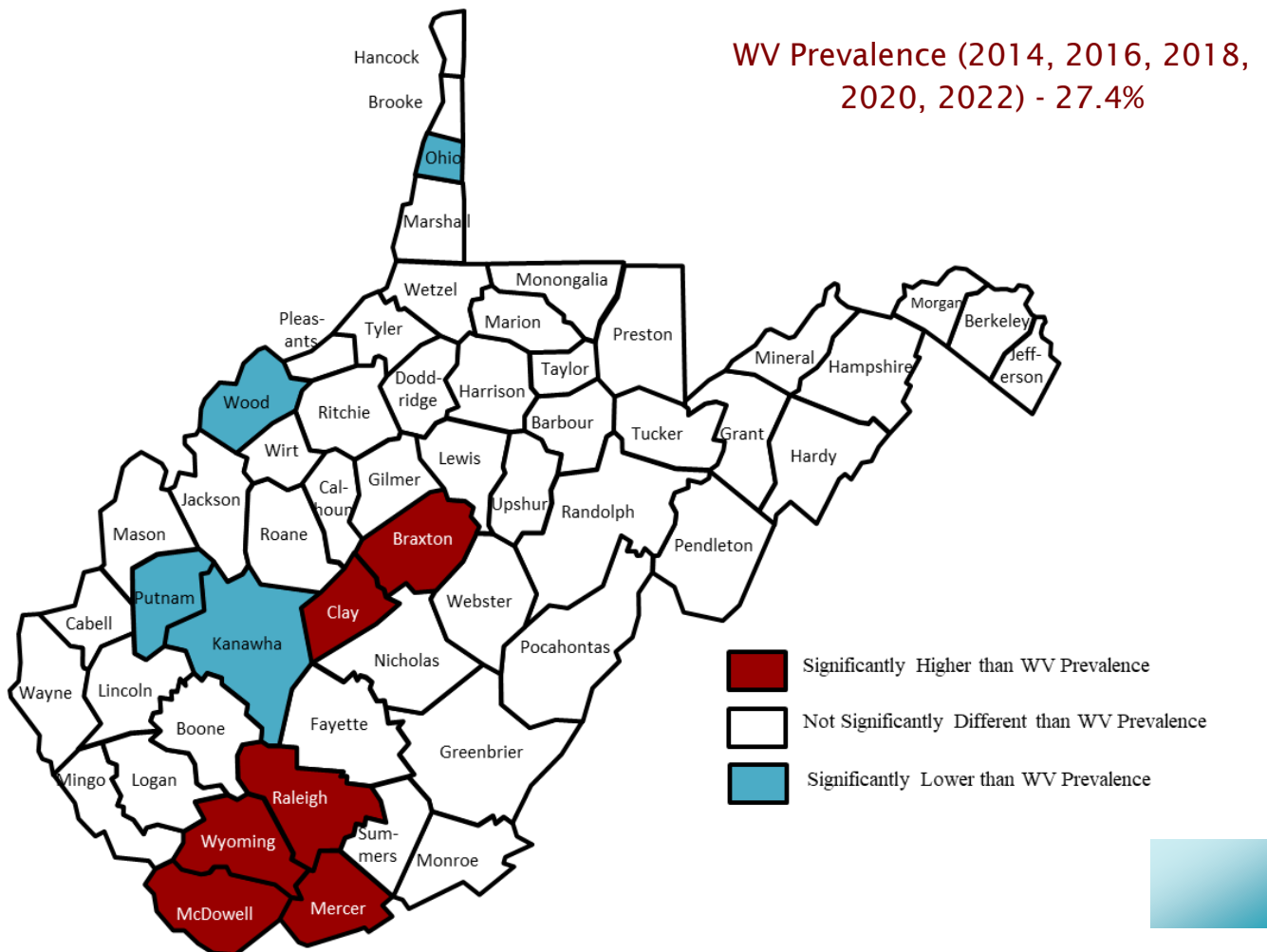
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

# CHAPTER 10: Tooth Loss

**FIGURE 10.5 PREVALENCE OF ALL TEETH MISSING AMONG THOSE AGED 65 AND OLDER BY YEAR: WVBRFSS, 2012-2022**



**Figure 10.6 Prevalence of All Teeth Missing Among Those Aged 65 and Older by County: WVBRFSS, 2014-2022**



# CHAPTER 11: High Risk

## High Risk for HIV

### Definition

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

### Prevalence

**WV: 4.5%** (95% CI: 3.6-5.4)

**U.S.: 6.1%** (95% CI: 6.0-6.3)

There was no difference between the West Virginia and U.S. prevalence of high risk for HIV. West Virginia ranked second lowest among 54 BRFSS participants.

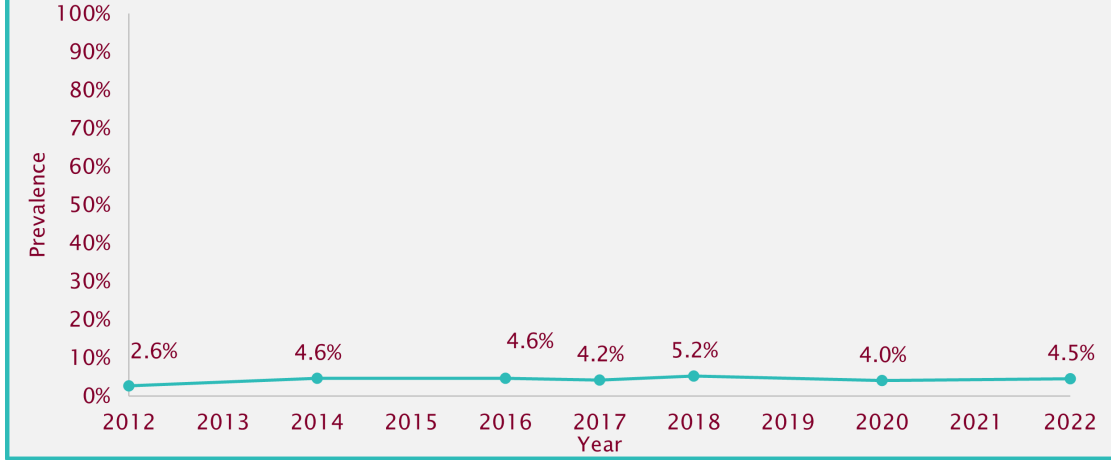
**Table 11.1 Prevalence of High Risk for HIV by Demographic Characteristics: WVBRFSS, 2022**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	35,509	5.5	4.1-7.0	24,234	3.6	2.5-4.6	59,743	4.5	3.6-5.4
<b>Age</b>									
18-24	9,994	12.7	6.5-18.9	7,969	11.6*	4.1-19.1	17,963	12.2	7.4-17.0
25-34	10,036	11.2	4.9-17.4	5,683	6.1	2.9-9.2	15,719	8.6	5.1-12.1
35-44	7,888	8.2	4.0-12.4	5,897	6.0	3.1-8.9	13,785	7.1	4.5-9.7
45-54	4,684	4.7*	1.7-7.8	2,701	2.8*	1.0-4.5	7,385	3.8	2.0-5.5
55-64	1,568	1.4*	0.1-2.7	961	0.8*	0.0-1.8	2,529	1.1*	0.3-1.9
65+	1,340	0.8*	0.2-1.4	1,023	0.5*	0.0-1.2	2,362	0.7*	0.2-1.1
<b>Education</b>									
Less than H.S.	4,114	5.3*	1.1-9.5	3,801	5.0*	1.5-8.5	7,915	5.1	2.4-7.9
H.S. or G.E.D.	12,498	4.6	2.5-6.7	10,372	4.1	2.1-6.2	22,870	4.4	2.9-5.9
Some Post-H.S.	10,326	6.3	3.0-9.5	7,710	3.8	1.9-5.8	18,036	4.9	3.1-6.7
College Graduate	8,571	6.7	3.8-9.6	2,352	1.6*	0.6-2.6	10,923	4	2.5-5.4
<b>Income</b>									
Less than \$15,000	5,050	13.8*	2.5-25.1	3,669	5.9	2.7-9.1	8,719	8.8	4.0-13.6
\$15,000 - 24,999	2,070	3.6*	0.1-7.2	5,693	6.6*	2.3-10.9	7,763	5.4	2.5-8.4
\$25,000 - 34,999	2,018	2.7*	0.0-5.5	3,179	3.5*	0.8-6.2	5,198	3.1*	1.2-5.1
\$35,000 - 49,999	1,710	2.1*	0.0-4.3	955	1.2*	0.0-2.4	2,666	1.6*	0.4-2.9
\$50,000 - 74,999	7,266	7.4	3.1-11.6	3,167	3.5*	0.4-6.7	10,433	5.5	2.8-8.2
\$75,000+	8,576	4.4	2.4-6.4	4,107	2.7*	0.9-4.5	12,682	3.6	2.3-5.0

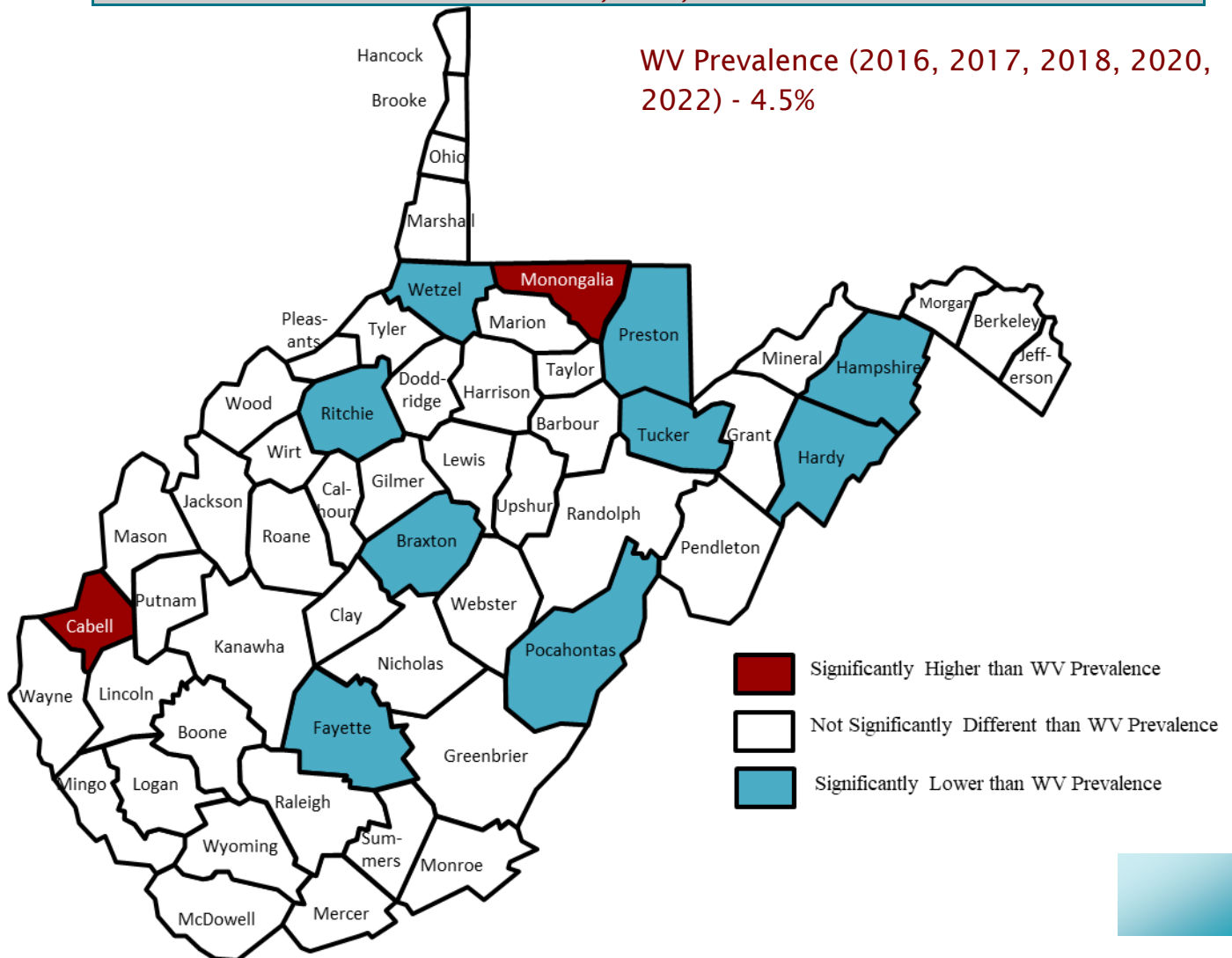
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

# CHAPTER 11: High Risk

**FIGURE 11.1 PREVALENCE OF HIGH RISK FOR HIV BY YEAR: WVBRFSS, 2012-2022**



**Figure 11.2 Prevalence of High Risk for HIV by County: WVBRFSS, 2016, 2017, 2018, 2020, 2022**





# West Virginia Behavioral Risk Factor Surveillance System Report



## SECTION 3: Preventive Practices

2022

## CHAPTER 12: Oral Health

### Dental Visit

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

**Prevalence** **WV: 56.6%** (95% CI: 54.9-58.4)  
**U.S.: 63.9%** (95% CI: 63.6-64.2)

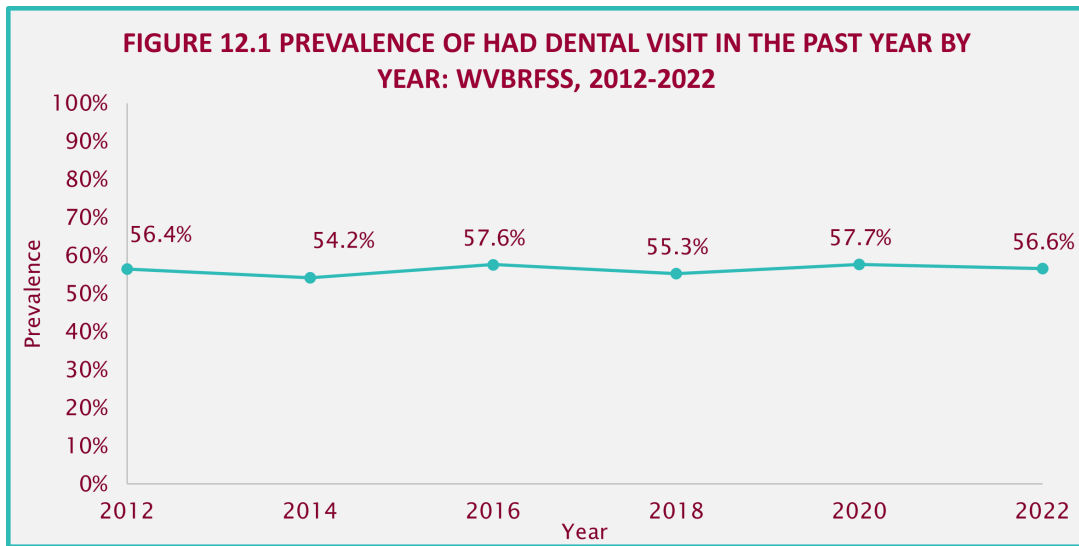
The West Virginia prevalence of had a dental visit in the past year was significantly lower than the U.S. prevalence. West Virginia ranked 50th among 54 BRFSS participants.

**Table 12.1 Prevalence of Had a Dental Visit in the Past Year by Demographic Characteristics: WVBFRSS, 2022**

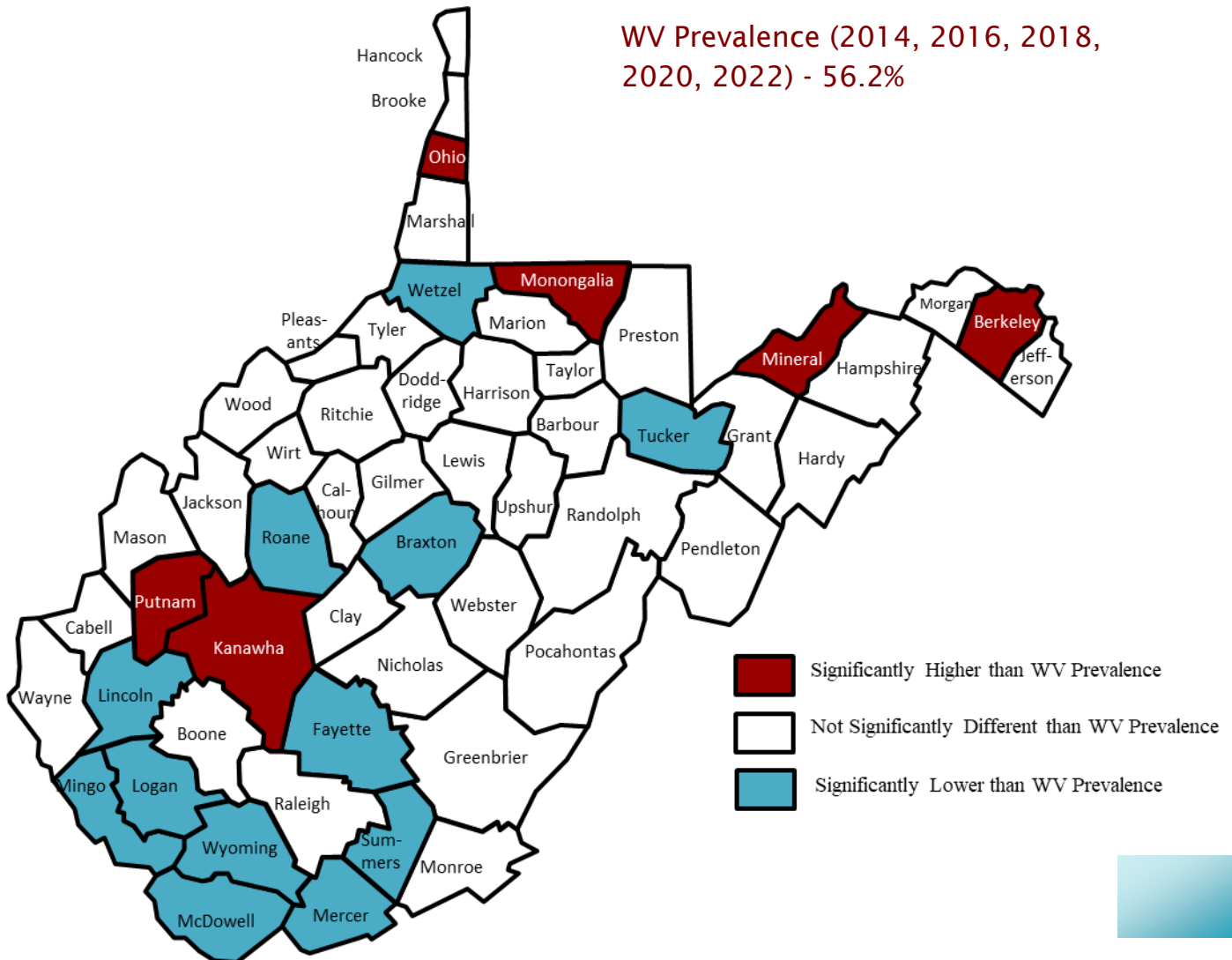
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	375,387	54.4	51.7-57.0	420,080	58.8	56.5-61.0	795,467	56.6	54.9-58.4
<b>Age</b>									
18-24	54,595	66.1	56.2-76.0	50,985	68.0	58.4-77.5	105,580	67.0	60.0-73.9
25-34	54,141	51.3	42.5-60.1	57,092	58.5	51.7-65.3	111,233	54.8	49.1-60.4
35-44	58,826	56.7	50.0-63.5	62,354	61.2	55.3-67.1	121,180	59.0	54.5-63.4
45-54	59,371	57.6	51.6-63.5	58,203	55.6	50.1-61.0	117,574	56.5	52.5-60.6
55-64	53,079	46.4	41.0-51.7	72,761	58.7	53.8-63.7	125,841	52.8	49.1-56.5
65+	93,878	53.7	49.6-57.8	115,099	55.7	52.2-59.3	208,977	54.8	52.1-57.5
<b>Education</b>									
Less than H.S.	22,985	26.7	18.9-34.6	27,229	33.7	25.7-41.7	50,214	30.1	24.5-35.7
H.S. or G.E.D.	153,442	52.7	48.5-57.0	142,682	53.3	49.4-57.2	296,124	53.0	50.1-55.9
Some Post-H.S.	98,383	55.3	50.0-60.7	131,683	62.0	58.0-66.1	230,066	59.0	55.7-62.3
College Graduate	99,680	74.7	70.8-78.6	117,584	76.8	73.5-80.1	217,263	75.8	73.3-78.4
<b>Income</b>									
Less than \$15,000	8,720	21.8	13.1-30.6	22,808	35.3	27.3-43.3	31,528	30.1	24.0-36.3
\$15,000 - 24,999	21,088	36.4	27.7-45.2	37,470	41.1	34.5-47.6	58,557	39.3	34.0-44.5
\$25,000 - 34,999	28,603	35.3	28.1-42.4	42,314	44.8	38.7-51.0	70,917	40.4	35.7-45.1
\$35,000 - 49,999	44,852	52.7	45.0-60.3	50,826	60.9	54.4-67.3	95,678	56.7	51.7-61.8
\$50,000 - 74,999	62,027	60.9	54.0-67.8	63,354	68.3	62.5-74.1	125,381	64.5	59.9-69.0
\$75,000+	147,513	71.9	67.7-76.1	126,898	80.1	76.3-84.0	274,411	75.5	72.6-78.4

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

# CHAPTER 12: Oral Health



**Figure 12.2 Prevalence of Had a Dental Visit in the Past Year by County: WVBRFSS, 2014-2022**



## CHAPTER 13: 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: 34.7%** (95% CI: 32.9-36.5)

**U.S.: 37.8%** (95% CI: 37.5-38.2)

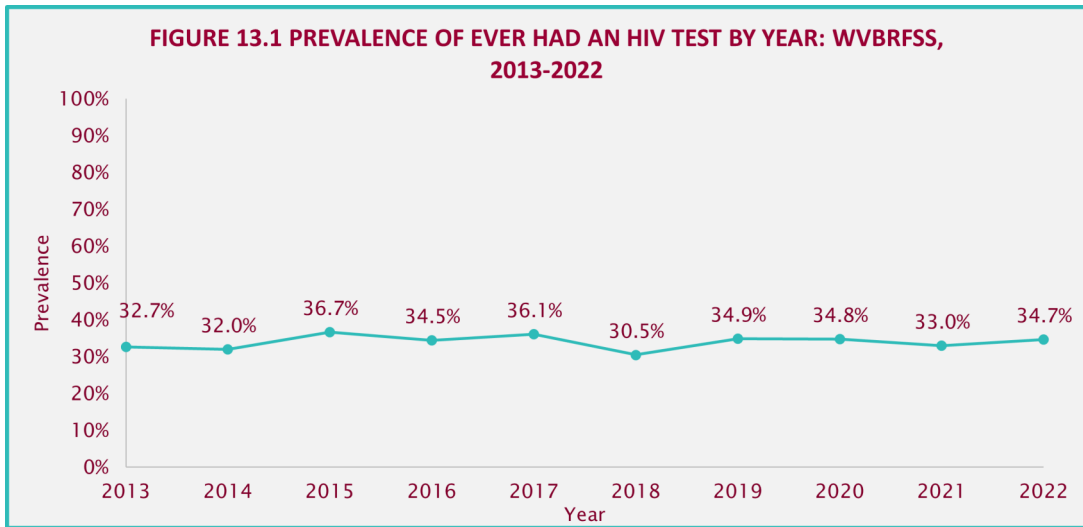
The West Virginia prevalence of ever had a HIV test was significantly lower than the U.S. prevalence. West Virginia ranked 34<sup>th</sup> among 54 BRFSS participants.

**Table 13.1 Prevalence of Ever Had a HIV Test by Demographic Characteristics: WVBRFSS, 2022**

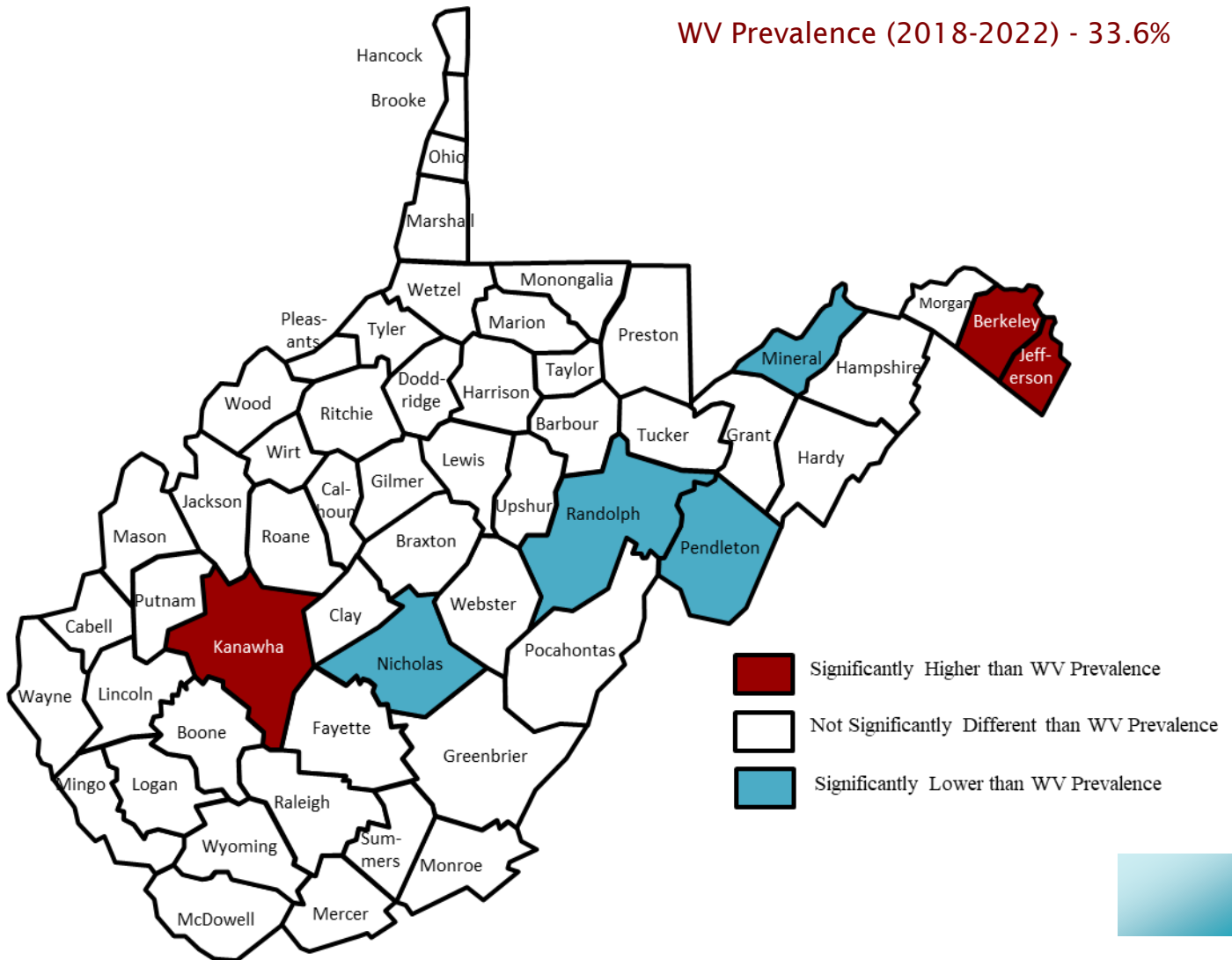
Characteristic	Men			Women			Total		
	Weighted	%	95% CI	Weighted	%	95% CI	Weighted	%	95% CI
TOTAL	205,840	33.6	31-36.2	227,818	35.7	33.4-38.1	433,658	34.7	32.9-36.5
<b>Age</b>									
18-24	13,562	18.2	10.1-26.2	23,455	37.4*	26.4-48.5	37,017	27.0	20.1-33.8
25-34	31,726	35.6	26.7-44.5	41,474	47.1	39.9-54.4	73,200	41.3	35.5-47.1
35-44	47,921	51.9	44.8-59.0	54,305	58.0	52.0-64.1	102,226	55.0	50.3-59.7
45-54	44,641	46.7	40.5-52.9	43,075	46.4	40.7-52.1	87,716	46.5	42.3-50.8
55-64	35,334	33.8	28.4-39.3	34,315	30.6	25.6-35.5	69,649	32.1	28.5-35.8
65+	32,255	21.3	17.8-24.7	29,269	15.9	13.1-18.8	61,524	18.3	16.1-20.6
<b>Education</b>									
Less than H.S.	24,115	33.0	24.6-41.4	27,560	38.5	29.8-47.2	51,675	35.7	29.6-41.8
H.S. or G.E.D.	69,849	27.2	23.3-31.1	76,334	32.1	28.1-36.1	146,183	29.6	26.8-32.4
Some Post-H.S.	67,485	42.9	37.2-48.5	75,887	39.7	35.3-44.1	143,372	41.1	37.6-44.6
College Graduate	44,391	35.9	31.4-40.5	48,036	35.1	31.3-39.0	92,427	35.5	32.5-38.5
<b>Income</b>									
Less than \$15,000	15,786	45.5	33.5-57.5	30,192	49.4	40.9-57.9	45,978	48.0	41.1-55.0
\$15,000 - 24,999	20,096	38.4	29.6-47.1	29,341	35.8	29.0-42.6	49,437	36.8	31.4-42.2
\$25,000 - 34,999	25,615	35.3	27.7-42.9	32,923	38.9	32.3-45.5	58,538	37.2	32.2-42.2
\$35,000 - 49,999	25,078	31.7	24.6-38.8	22,519	29.3	23.0-35.5	47,597	30.5	25.8-35.2
\$50,000 - 74,999	34,856	37.5	30.4-44.6	29,566	33.9	27.8-40.1	64,422	35.8	31.0-40.5
\$75,000+	60,302	32.0	27.6-36.3	56,167	39.3	34.5-44.0	116,469	35.1	31.9-38.3

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

# CHAPTER 13: HIV Testing



**Figure 13.2 Prevalence of Ever Had a HIV Test by County: WVBRFSS, 2018-2022**



# CHAPTER 14: Immunization

## 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: 43.5%** (95% CI: 41.8-45.2)

**U.S.: 45.0%** (95% CI: 44.7-45.3)

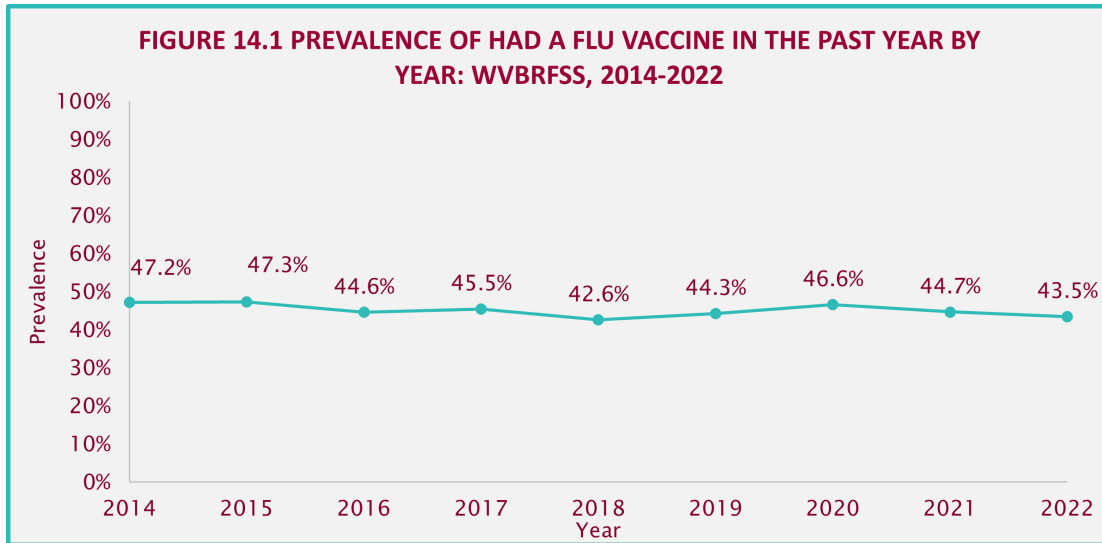
The West Virginia prevalence was lower than the U.S. prevalence of having a flu vaccine in the past year. West Virginia ranked 33<sup>rd</sup> among the 54 BRFSS participants.

**Table 14.1 Prevalence of Had a Flu Vaccine in the Past Year by Demographic Characteristics: WVBRFSS, 2022**

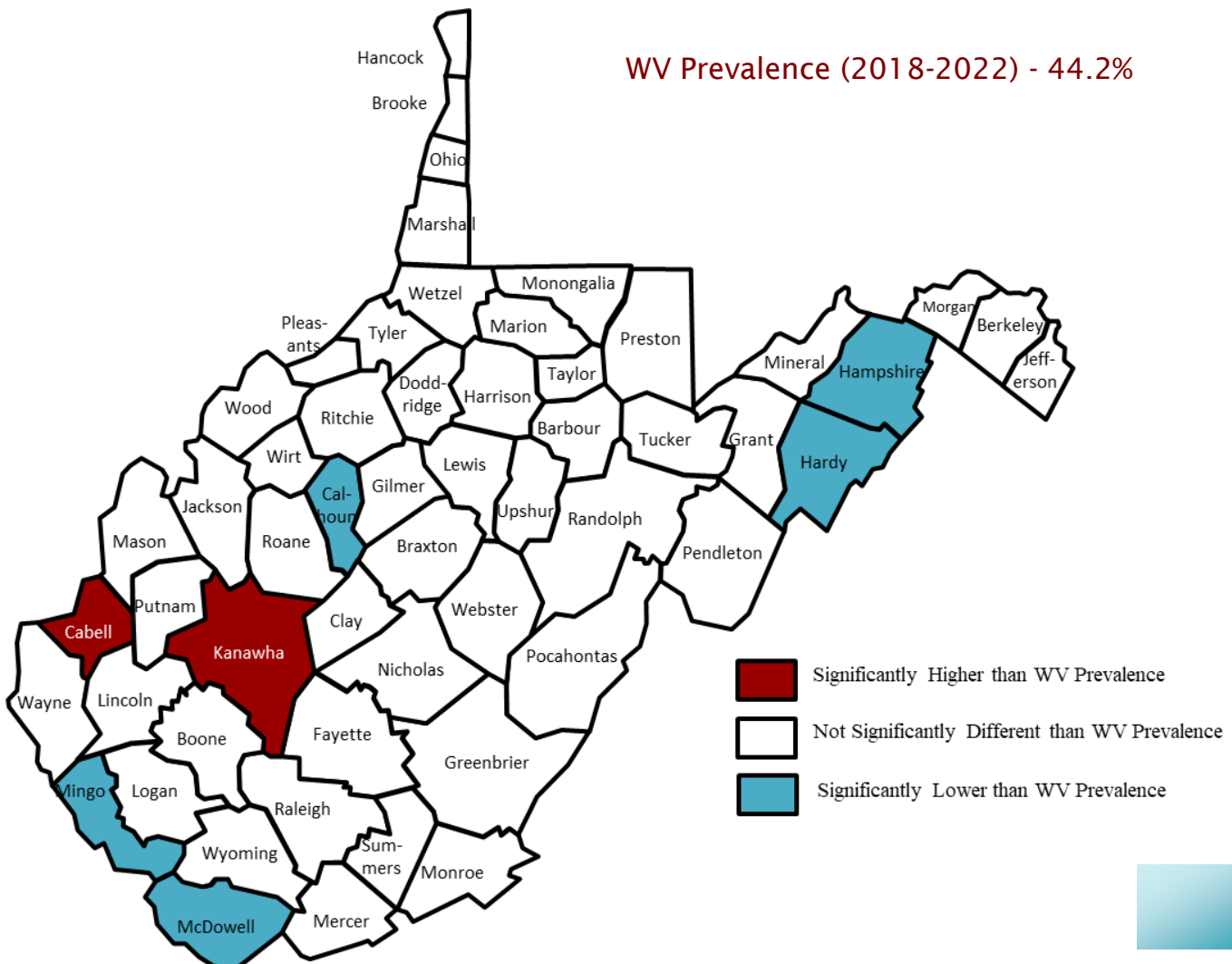
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	262,140	<b>40.6</b>	38.0-43.2	315,156	<b>46.2</b>	43.9-48.6	577,296	<b>43.5</b>	41.8-45.2
<b>Age</b>									
18-24	22,056	<b>28.8</b>	18.8-38.8	27,494	<b>38.6</b>	28.6-48.6	49,551	<b>33.5</b>	26.5-40.5
25-34	22,670	<b>24.3</b>	17.0-31.7	31,208	<b>33.2</b>	26.7-39.7	53,878	<b>28.8</b>	23.8-33.7
35-44	31,067	<b>31.9</b>	25.6-38.2	30,911	<b>31.5</b>	26.0-37.0	61,978	<b>31.7</b>	27.5-35.9
45-54	27,834	<b>28.5</b>	23.1-33.9	39,374	<b>39.9</b>	34.5-45.3	67,207	<b>34.2</b>	30.3-38.1
55-64	46,560	<b>42.0</b>	36.6-47.4	59,567	<b>50.1</b>	45.0-55.3	106,127	<b>46.2</b>	42.4-49.9
65+	111,157	<b>67.5</b>	63.6-71.5	123,929	<b>63.2</b>	59.6-66.8	235,086	<b>65.2</b>	62.5-67.8
<b>Education</b>									
Less than H.S.	28,288	<b>36.0</b>	27.4-44.6	32,294	<b>42.2</b>	34.1-50.3	60,582	<b>39.1</b>	33.2-44.9
H.S. or G.E.D.	105,699	<b>38.8</b>	34.7-42.9	105,524	<b>41.7</b>	37.8-45.6	211,224	<b>40.2</b>	37.3-43.0
Some Post-H.S.	61,619	<b>37.3</b>	32.2-42.4	91,924	<b>45.5</b>	41.2-49.7	153,544	<b>41.8</b>	38.5-45.1
College Graduate	66,299	<b>52.1</b>	47.6-56.7	85,272	<b>57.1</b>	53.2-61.0	151,571	<b>54.8</b>	51.9-57.8
<b>Income</b>									
Less than \$15,000	13,232	<b>35.7*</b>	25.4-46.0	22,329	<b>35.3</b>	27.6-42.9	35,561	<b>35.4</b>	29.3-41.6
\$15,000 - 24,999	20,581	<b>35.8</b>	27.9-43.8	38,208	<b>43.7</b>	37.0-50.3	58,788	<b>40.6</b>	35.4-45.7
\$25,000 - 34,999	33,437	<b>43.7</b>	36.1-51.3	38,755	<b>42.4</b>	36.3-48.5	72,192	<b>43.0</b>	38.2-47.8
\$35,000 - 49,999	35,025	<b>42.1</b>	34.5-49.7	36,456	<b>45.2</b>	38.7-51.8	71,481	<b>43.7</b>	38.6-48.7
\$50,000 - 74,999	40,759	<b>41.5</b>	34.7-48.3	46,883	<b>51.7</b>	45.5-58.0	87,642	<b>46.4</b>	41.7-51.1
\$75,000+	84,073	<b>43.0</b>	38.5-47.6	79,043	<b>51.5</b>	46.8-56.2	163,116	<b>46.8</b>	43.5-50.1

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

# CHAPTER 14: Immunization



**Figure 14.2 Prevalence of Had a Flu Vaccine in the Past Year by County: WVBRFSS, 2018-2022**



## CHAPTER 14: Immunization

### 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: 65.2%** (95% CI: 62.5-67.8)

**U.S.: 67.7%** (95% CI: 67.1-68.3)

The West Virginia prevalence of had a flu vaccine in the past year among adults 65 and older was consistent with the U.S. prevalence. West Virginia ranked 37<sup>th</sup> highest among the 54 BRFSS participants.

**Table 14.2 Prevalence of Had a Flu Vaccine in the Past Year Among Those Aged 65 and Older by Demographic Characteristics: WVBRFSS, 2022**

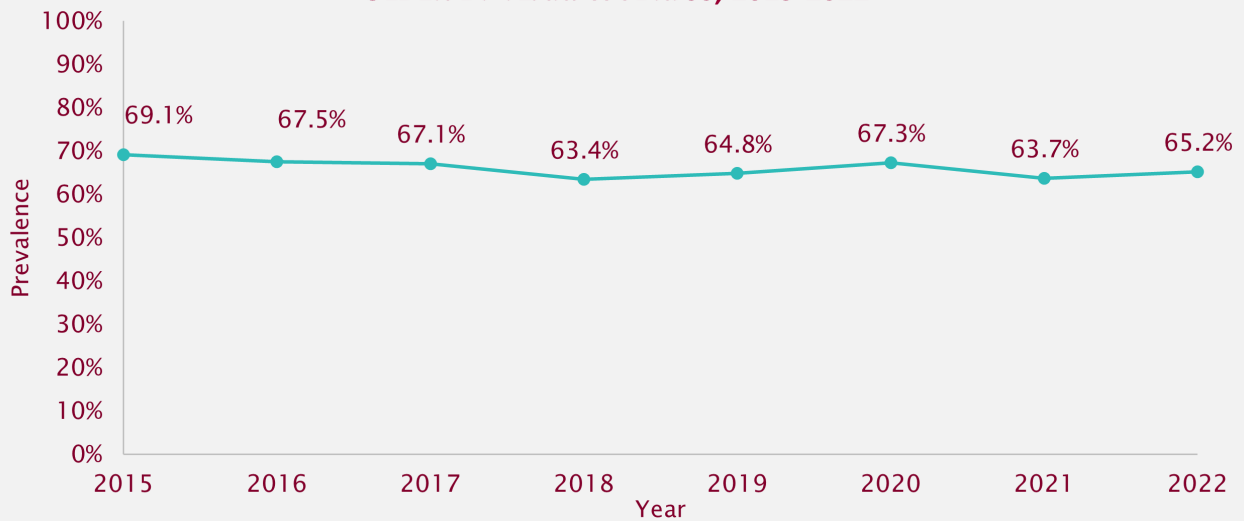
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	111,157	67.5	63.6-71.5	123,929	63.2	59.6-66.8	235,086	65.2	62.5-67.8
<b>Education</b>									
Less than H.S.	13,759	56.9*	43.3-70.4	22,087	59.5*	48.5-70.5	35,845	58.5	49.9-67.0
H.S. or G.E.D.	48,487	69.2	63.2-75.2	47,450	61.6	56.1-67.0	95,938	65.2	61.1-69.3
Some Post-H.S.	27,903	72.3	64.9-79.7	32,850	65.1	58.6-71.7	60,753	68.2	63.3-73.2
College Graduate	20,931	66.1	59.6-72.6	21,400	68.3	62.0-74.6	42,332	67.2	62.7-71.7
<b>Income</b>									
Less than \$15,000	5,483	63.2*	45.9-80.4	9,722	61.5*	49.1-74.0	15,205	62.1*	52.0-72.2
\$15,000 - 24,999	9,268	54.5*	41.4-67.6	19,689	61.1	51.9-70.2	28,957	58.8	51.2-66.4
\$25,000 - 34,999	19,847	70.5	61.6-79.3	18,710	61.1	52.1-70.0	38,557	65.6	59.2-71.9
\$35,000 - 49,999	18,847	71.7	62.5-80.8	15,341	63.7	54.6-72.8	34,188	67.9	61.4-74.4
\$50,000 - 74,999	20,975	71.5	63.0-79.9	14,393	67.4*	57.2-77.6	35,367	69.7	63.2-76.3
\$75,000+	19,802	68.1	59.8-76.5	14,818	73.5	64.4-82.7	34,620	70.4	64.2-76.5

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

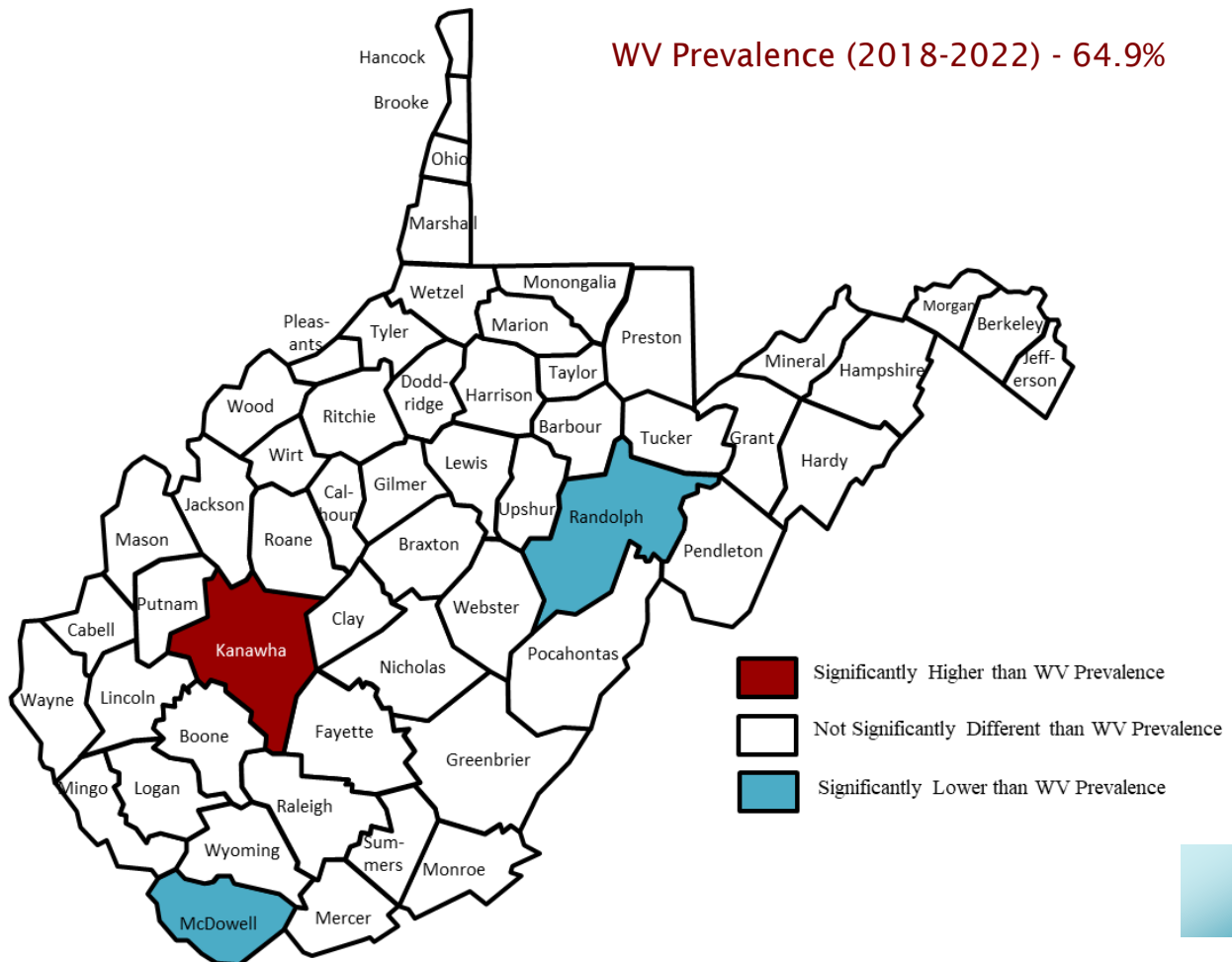


# CHAPTER 14: Immunization

**FIGURE 14.3 PREVALENCE OF FLU VACCINE IN PAST YEAR AGES 65 AND OLDER BY YEAR: WVBRFSS, 2015-2022**



**Figure 14.4 Prevalence of Had a Flu Vaccine in the Past Year Among Those Aged 65 and Older by County: WVBRFSS, 2018-2022**



# CHAPTER 14: Immunization

## Pneumonia Vaccine

**Definition** Responding “Yes” to the question, “Have you ever had a pneumonia shot also known as a pneumococcal vaccine?”

**Prevalence** **WV: 38.3%** (95% CI: 36.6-40.0)  
**U.S.: 32.8%** (95% CI: 32.5-33.1)

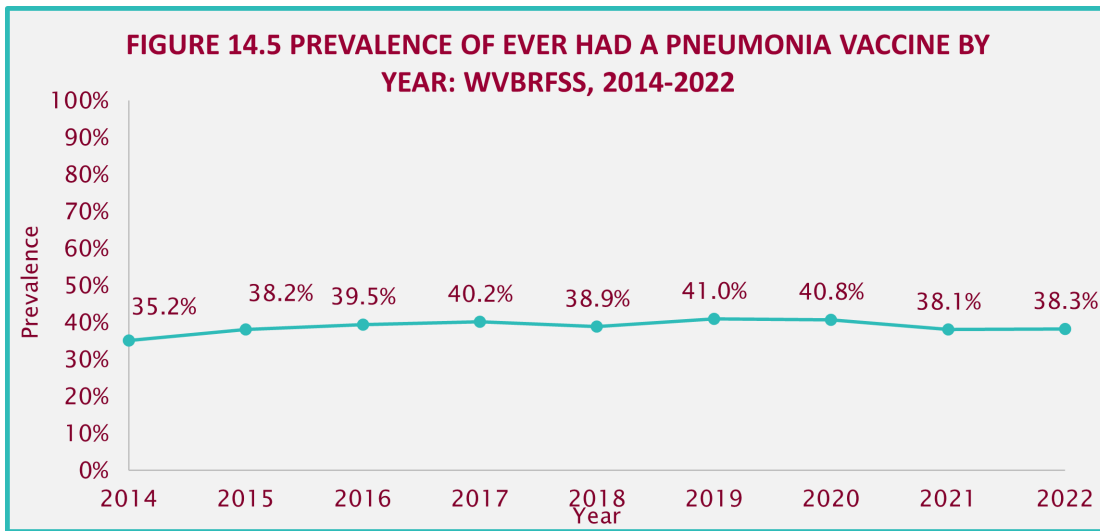
The West Virginia prevalence of had a pneumonia vaccine was significantly higher than the U.S. prevalence. West Virginia ranked the third highest among the 54 BRFSS participants.

**Table 14.3 Prevalence of Had a Pneumonia Vaccine by Demographic Characteristics: WVBRFSS, 2022**

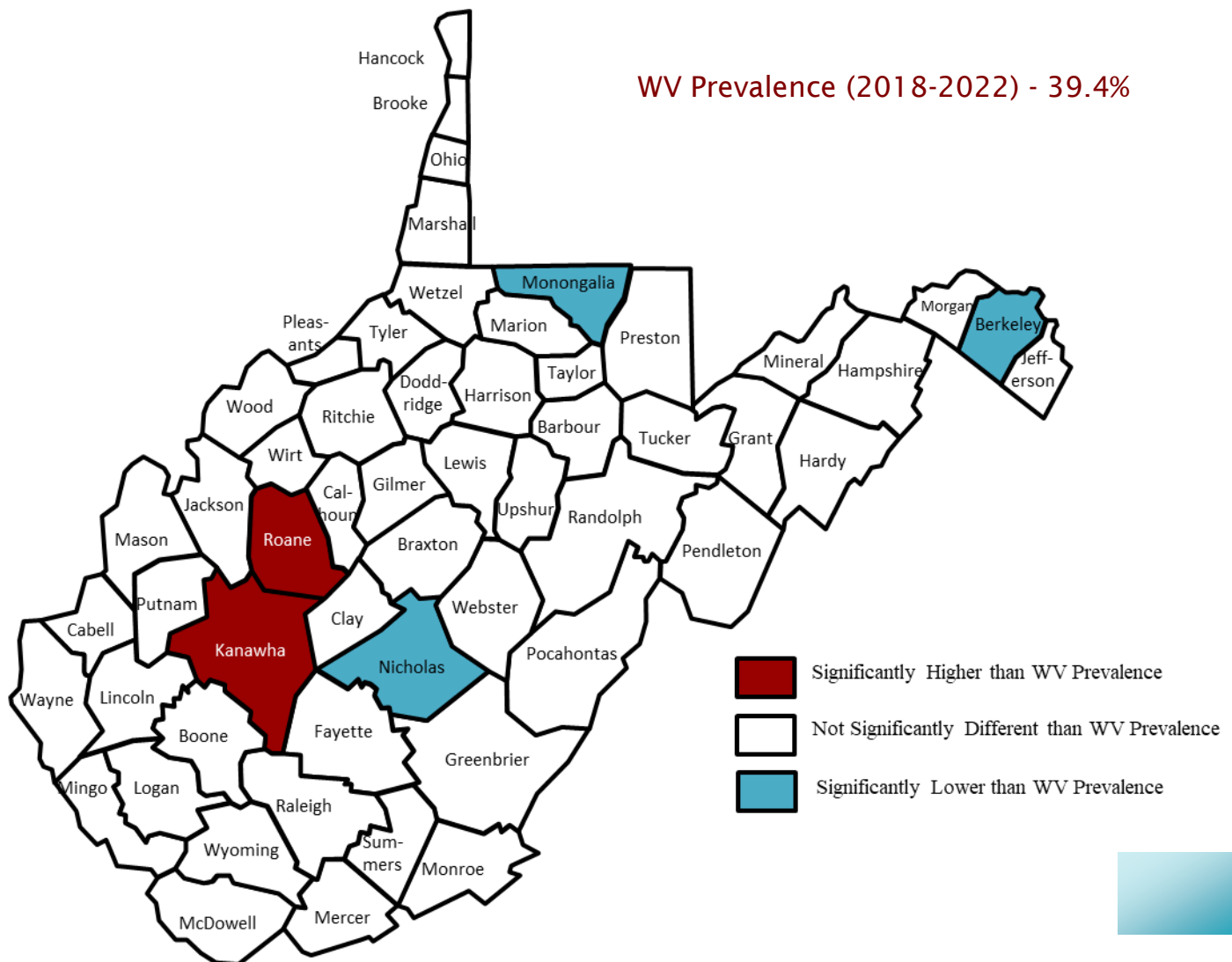
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	207,536	<b>34.9</b>	32.4-37.5	263,805	<b>41.3</b>	39-43.6	471,341	<b>38.3</b>	36.6-40.0
<b>Age</b>									
18-24	16,600	<b>27.3*</b>	17.0-37.6	17,723	<b>33.7*</b>	21.5-46.0	34,323	<b>30.3</b>	22.3-38.2
25-34	11,022	<b>14.7</b>	8.0-21.5	11,833	<b>14.5</b>	9.6-19.3	22,855	<b>14.6</b>	10.5-18.7
35-44	12,810	<b>14.5</b>	9.2-19.8	17,931	<b>18.7</b>	14.2-23.3	30,740	<b>16.7</b>	13.2-20.2
45-54	19,075	<b>20.3</b>	15.3-25.4	26,254	<b>27.7</b>	22.6-32.7	45,328	<b>24.0</b>	20.4-27.6
55-64	32,211	<b>29.9</b>	24.8-34.9	45,550	<b>39.3</b>	34.2-44.5	77,761	<b>34.8</b>	31.1-38.4
65+	114,962	<b>70.4</b>	66.5-74.3	141,495	<b>73.2</b>	69.8-76.7	256,457	<b>71.9</b>	69.4-74.5
<b>Education</b>									
Less than H.S.	27,093	<b>36.9</b>	28.3-45.4	37,308	<b>50.5</b>	41.9-59.1	64,402	<b>43.7</b>	37.6-49.9
H.S. or G.E.D.	88,550	<b>34.8</b>	30.8-38.8	94,168	<b>40.1</b>	36.2-44.0	182,718	<b>37.4</b>	34.5-40.2
Some Post-H.S.	52,981	<b>36.2</b>	31.0-41.5	81,789	<b>42.8</b>	38.6-47.1	134,771	<b>40.0</b>	36.6-43.3
College Graduate	38,677	<b>32.7</b>	28.5-37.0	50,540	<b>36.5</b>	32.8-40.2	89,217	<b>34.8</b>	32.0-37.6
<b>Income</b>									
Less than \$15,000	13,443	<b>38.9*</b>	28.0-49.9	24,720	<b>41.7</b>	33.4-49.9	38,162	<b>40.7</b>	34.1-47.3
\$15,000 - 24,999	21,201	<b>39.9</b>	31.6-48.3	35,869	<b>44.0</b>	37.2-50.8	57,071	<b>42.4</b>	37.1-47.7
\$25,000 - 34,999	29,896	<b>42.4</b>	34.8-50.0	38,377	<b>45.2</b>	38.8-51.5	68,273	<b>43.9</b>	39.0-48.8
\$35,000 - 49,999	33,710	<b>43.2</b>	35.7-50.7	34,567	<b>45.0</b>	38.4-51.7	68,277	<b>44.1</b>	39.1-49.1
\$50,000 - 74,999	31,080	<b>33.4</b>	26.9-39.9	34,185	<b>38.7</b>	32.7-44.7	65,265	<b>36.0</b>	31.5-40.4
\$75,000+	45,749	<b>26.3</b>	22.4-30.2	47,055	<b>32.6</b>	28.3-37.0	92,804	<b>29.2</b>	26.3-32.1

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

# CHAPTER 14: Immunization



**Figure 14.6 Prevalence of Had a Pneumonia Vaccine by County: WVBRFSS, 2018-2022**



## CHAPTER 14: Immunization

### Pneumonia Vaccine, Ages 65 and Older

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

**Prevalence** **WV: 71.9%** (95% CI: 69.4-74.5)

**U.S.: 69.5%** (95% CI: 69.0-70.1)

The West Virginia prevalence of had a pneumonia vaccine among those aged 65 and older was similar to the U.S. prevalence. West Virginia ranked the 24<sup>th</sup> highest among the 54 BRFSS participants.

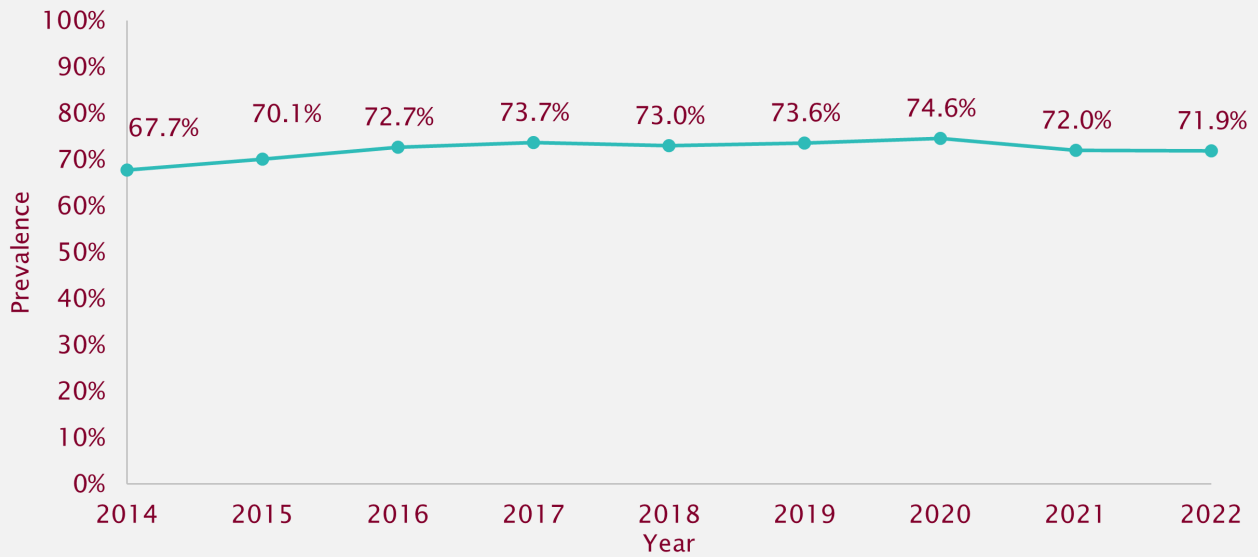
**Table 14.4 Prevalence of Had a Pneumonia Vaccine Among Those Aged 65 and Older by Demographic Characteristics: WVBRFSS, 2022**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	114,962	<b>70.4</b>	66.5-74.3	141,495	<b>73.2</b>	69.8-76.7	256,457	<b>71.9</b>	69.4-74.5
<b>Education</b>									
Less than H.S.	14,859	<b>63.1*</b>	49.7-76.5	23,743	<b>64.5*</b>	53.4-75.5	38,603	<b>63.9</b>	55.4-72.5
H.S. or G.E.D.	51,092	<b>72.3</b>	66.5-78.1	54,460	<b>73.0</b>	67.8-78.2	105,551	<b>72.7</b>	68.8-76.6
Some Post-H.S.	27,440	<b>72.0</b>	63.9-80.2	39,680	<b>78.1</b>	72.5-83.7	67,120	<b>75.5</b>	70.7-80.2
College Graduate	21,493	<b>69.5</b>	63.2-75.9	23,612	<b>76.9</b>	71.4-82.5	45,105	<b>73.2</b>	69.0-77.5
<b>Income</b>									
Less than \$15,000	5,786	<b>72.3*</b>	56.2-88.5	11,446	<b>74.8*</b>	63.4-86.1	17,233	<b>73.9</b>	64.7-83.2
\$15,000 - 24,999	11,552	<b>68.7*</b>	55.7-81.8	22,150	<b>69.9</b>	61.2-78.5	33,702	<b>69.5</b>	62.2-76.7
\$25,000 - 34,999	19,844	<b>70.9</b>	61.8-80.1	22,144	<b>72.5</b>	63.3-81.7	41,988	<b>71.8</b>	65.3-78.2
\$35,000 - 49,999	19,724	<b>75.2</b>	66.5-83.8	19,132	<b>79.3</b>	71.7-87.0	38,856	<b>77.2</b>	71.3-83.0
\$50,000 - 74,999	20,048	<b>68.8</b>	59.2-78.4	15,783	<b>74.3*</b>	64.2-84.4	35,832	<b>71.1</b>	64.1-78.1
\$75,000+	20,917	<b>72.0</b>	64.3-79.6	15,378	<b>77.4</b>	68.6-86.2	36,295	<b>74.2</b>	68.4-79.9

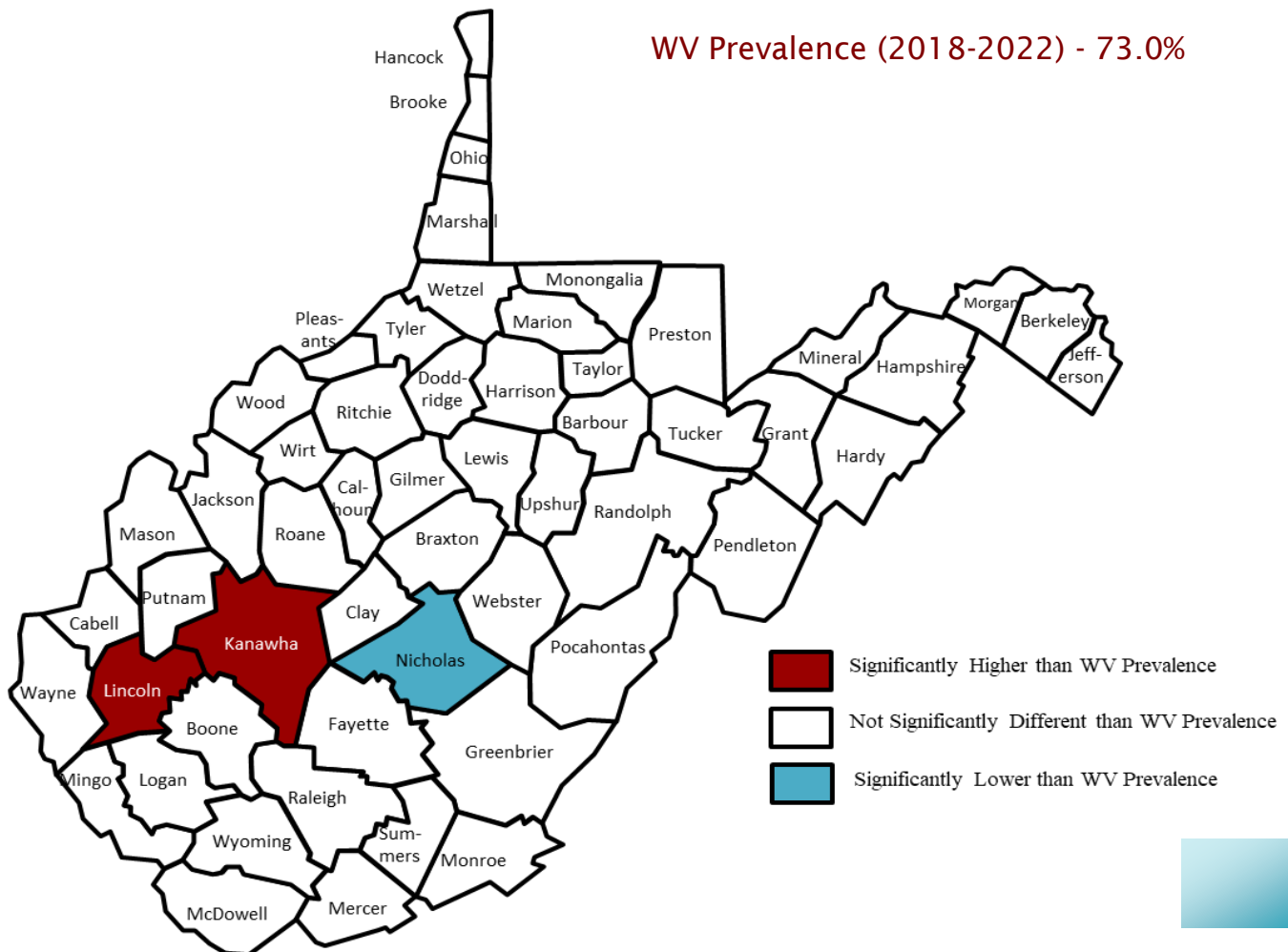
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

# CHAPTER 14: Immunization

**FIGURE 14.7 PREVALENCE OF PNEUMONIA VACCINE AGED 65 AND OLDER BY YEAR: WVBRFSS, 2014-2022**



**Figure 14.8 Prevalence of Had a Pneumonia Vaccine Among Those Aged 65 and Older by County: WVBRFSS, 2018-2022**



## CHAPTER 15: Cancer Screening

### Breast Cancer Screening

#### Definition

##### *Mammogram in past two years (women aged 40 and older)*

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

##### *Mammogram in past two years (women aged 50-74)*

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

#### Prevalence

##### *Mammogram in past two years (women aged 40 and older)*

**WV: 70.3%** (95% CI: 67.9-72.6)

**U.S.: 69.9%** (95% CI: 69.3-70.4)

The West Virginia prevalence of had a mammogram in the past two years among women aged 40 and older was similar to the U.S. prevalence. West Virginia ranked 26<sup>th</sup> highest among the 54 BRFSS participants.

##### *Mammogram in past two years (women aged 50-74)*

**WV: 76.1%** (95% CI: 73.4-78.9)

**U.S.: 76.8%** (95% CI: 76.2-77.4)

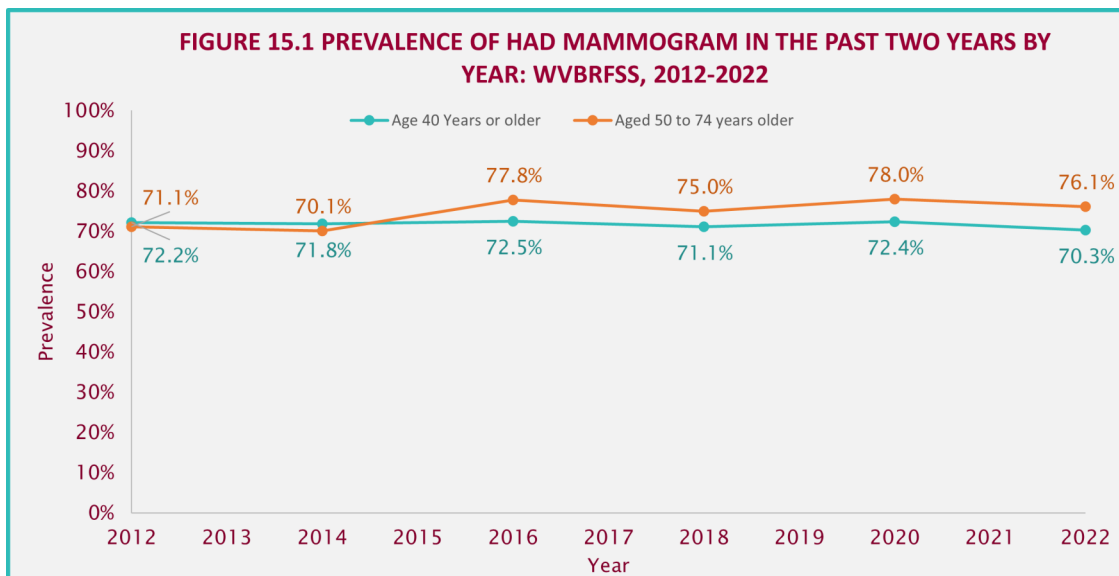
The West Virginia prevalence of had a mammogram in the past two years among women aged 50-74 was similar to the U.S. prevalence. West Virginia ranked 29<sup>th</sup> among the 54 BRFSS participants.

# CHAPTER 15: Cancer Screening

**Table 15.1 Prevalence of Had a Mammogram in the Past Two Years by Demographic Characteristics: WVBRFSS, 2022**

Characteristic	Women Aged 40 and Older			Women Aged 50-74		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	332,447	<b>70.3</b>	67.9-72.6	221,819	<b>76.1</b>	73.4-78.9
<b>Age</b>						
35-44	32,277	<b>58.6</b>	50.4-66.8	.	.	.
45-54	71,465	<b>70.3</b>	65.2-75.4	43,445	<b>76.0</b>	69.7-82.3
55-64	88,993	<b>73.7</b>	69.1-78.3	88,993	<b>73.7</b>	69.1-78.3
65+	139,712	<b>71.4</b>	68.0-74.8	89,381	<b>78.8</b>	74.9-82.7
<b>Education</b>						
Less than H.S.	37,348	<b>57.2</b>	48.6-65.9	24,964	<b>64.1*</b>	53.4-74.9
H.S. or G.E.D.	116,565	<b>67.3</b>	63.4-71.2	79,927	<b>74.8</b>	70.3-79.3
Some Post-H.S.	102,506	<b>73.5</b>	69.5-77.5	65,910	<b>78.0</b>	73.4-82.6
College Graduate	76,028	<b>79.9</b>	76.4-83.4	51,019	<b>83.7</b>	79.7-87.7
<b>Income</b>						
Less than \$15,000	24,562	<b>55.1</b>	46.4-63.8	14,495	<b>60.0*</b>	48.7-71.3
\$15,000 - 24,999	35,332	<b>56.7</b>	49.6-63.8	21,446	<b>60.2</b>	51.0-69.4
\$25,000 - 34,999	42,398	<b>63.3</b>	56.7-69.8	30,567	<b>71.5</b>	64.1-78.9
\$35,000 - 49,999	43,445	<b>77.2</b>	71.4-83.1	29,134	<b>81.4</b>	75.0-87.8
\$50,000 - 74,999	47,443	<b>80.0</b>	74.5-85.6	34,021	<b>83.0</b>	76.6-89.4
\$75,000+	84,862	<b>82.1</b>	78.0-86.1	57,663	<b>87.6</b>	83.5-91.7

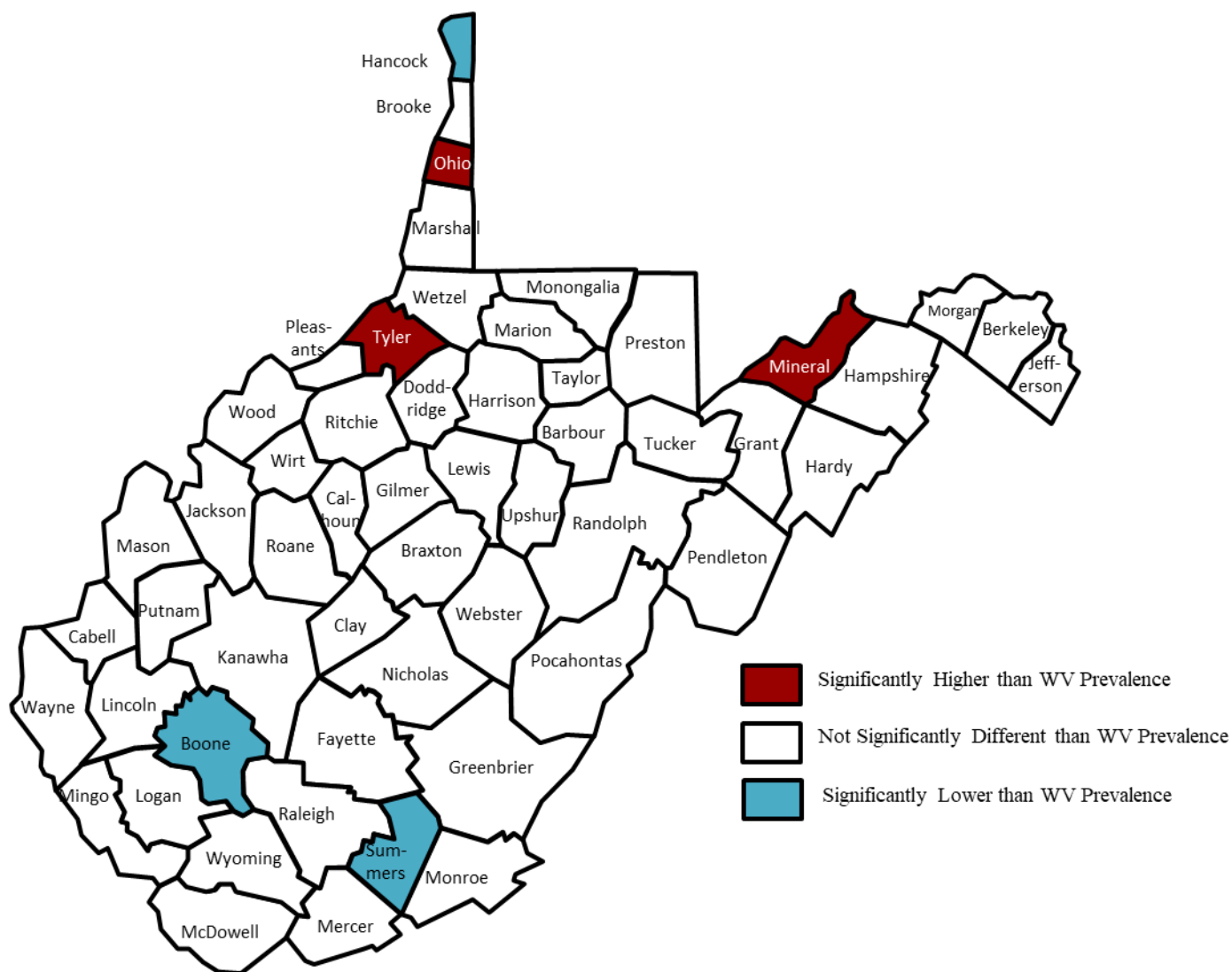
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.



# CHAPTER 15: Cancer Screening

**Figure 15.2 Prevalence of Had a Mammogram in the Past Two Years Among Women Aged 40 and Older by County: WVBFRSS, 2014-2022**

WV Prevalence (2014, 2016, 2018, 2020, 2022) - 71.6%

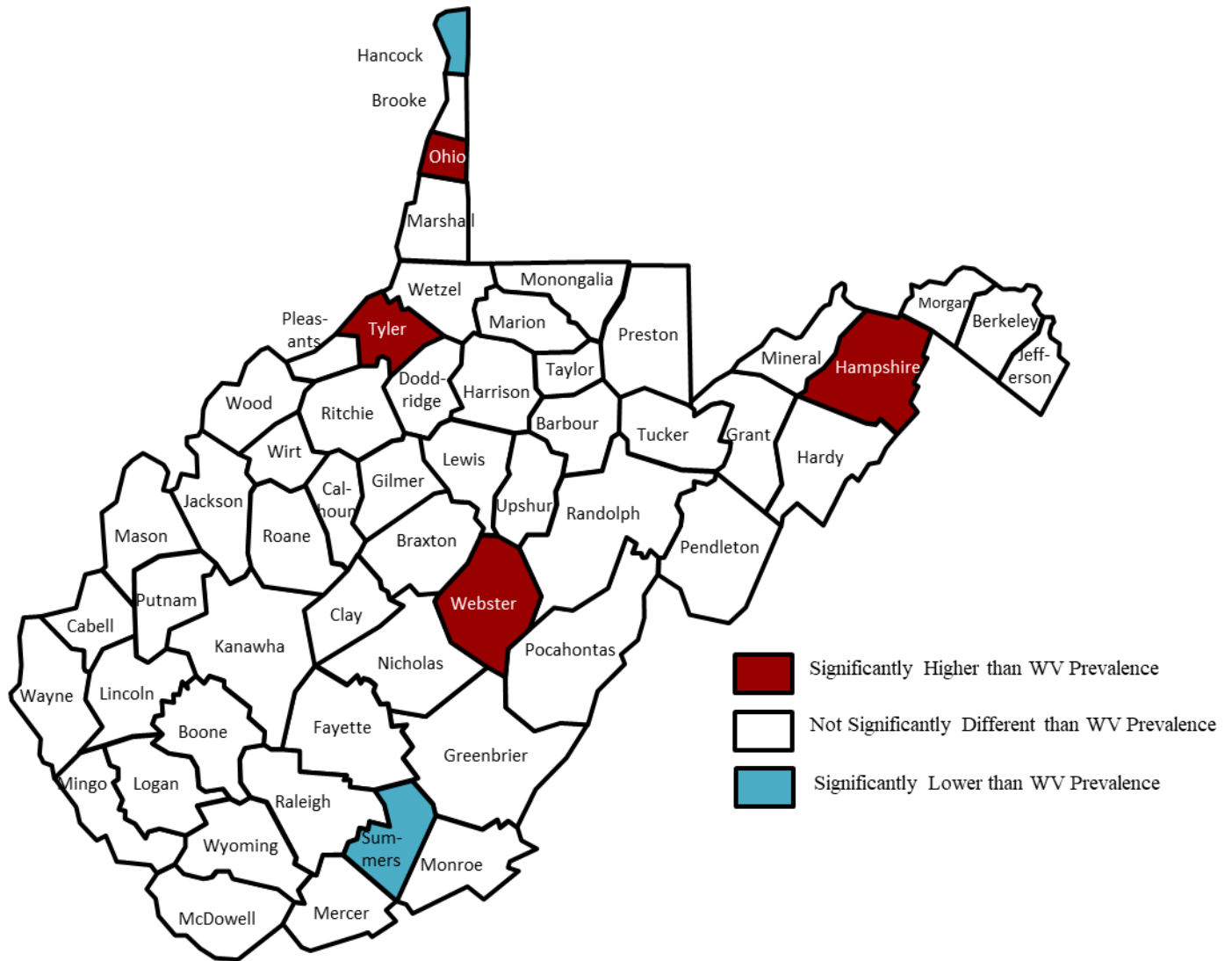




# CHAPTER 15: Cancer Screening

**Figure 15.3 Prevalence of Had a Mammogram in the Past Two Years Among Women Aged 50-74 by County: WVBRFSS, 2014-2022**

WV Prevalence (2014, 2016, 2018, 2020, 2022) - 76.5%



# CHAPTER 15: Cancer Screening

## Cervical Cancer Screening (pending)

**Definition** *Ever had a cervical cancer screening test (women aged 18 and older)*  
 Responding “Yes” to the question, “Have you ever had a cervical cancer screening test?” Restricted to women aged 18 and older.

**Prevalence** *Ever had a cervical cancer screening test (women aged 18 and older)*  
**WV: 63.6%** (95% CI: 61.2-66.0)  
**U.S.: 59.9%** (95% CI: 59.4-60.4)  
 The West Virginia prevalence of ever had a cervical cancer screening test among women aged 18 and older was significantly higher than the U.S. prevalence. West Virginia ranked the 14<sup>th</sup> highest among the 54 BRFSS participants.  
 Note: The cervical cancer screening questions were changed in 2022 and are not comparable to previous years questions for trend or county level statistics.

**Table 15.2 Prevalence of Cervical Cancer Screening by Demographic**  
**Characteristics: WVBFRSS, 2022**

Characteristic	Ever Had a Cervical Cancer Screening Test (Women Aged 18 and Older)		
	Weighted Frequency	%	95% CI
TOTAL	409,894	63.6	61.2-66.0
<b>Age</b>			
18-24	13,943	22.4	13.0-31.8
25-34	56,713	62.3	55.3-69.3
35-44	70,022	75.8	70.3-81.3
45-54	74,987	77.8	73.1-82.6
55-64	82,634	72.8	68.0-77.6
65+	108,671	58.8	55.1-62.6
<b>Education</b>			
Less than H.S.	36,649	51.6	42.8-60.4
H.S. or G.E.D.	129,631	54.5	50.3-58.6
Some Post-H.S.	134,019	69.3	65.1-73.4
College Graduate	109,595	77.2	73.6-80.8
<b>Income</b>			
Less than \$15,000	33,849	55.3	46.8-63.7
\$15,000 - 24,999	44,567	55.8	48.8-62.8
\$25,000 - 34,999	50,706	58.5	51.9-65.0
\$35,000 - 49,999	50,875	65.6	58.8-72.3
\$50,000 - 74,999	60,577	70.3	64.3-76.3
\$75,000+	112,445	76.6	72.2-81.0

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

# CHAPTER 15: Cancer Screening

## Colorectal Cancer Screening

### Definition

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

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

### Prevalence

*Had a FOBT in the past year*

**WV: 11.6%** (95% CI: 8.9-14.3)

**U.S.: 9.1%** (95% CI: 8.6-9.6)

The West Virginia prevalence of had a FOBT in the past year among adults aged 50-75 was significantly higher than the U.S. prevalence. West Virginia ranked fifth among the 54 BRFSS participants.

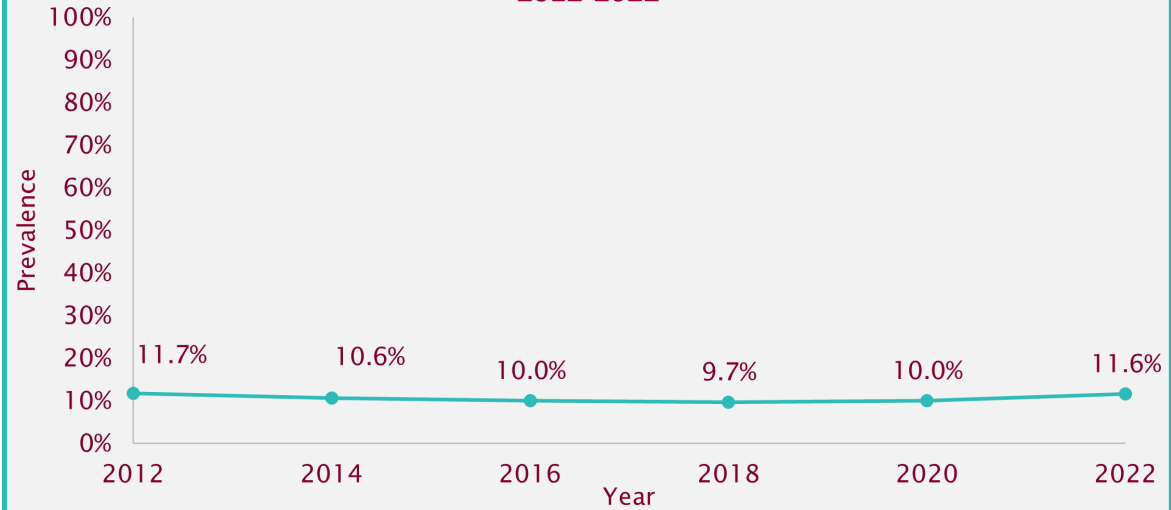
**Table 15.3 Prevalence of Had a FOBT in the Past Year Among Those Aged 50-75 by Demographic Characteristics: WVBRFSS, 2022**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted	%	95% CI
TOTAL	8,387	11.2	7.0-15.4	9,762	12.0	8.4-15.5	18,149	11.6	8.9-14.3
<b>Age</b>									
45-54	2,723	19.1*	5.3-32.9	766	6.3*	0.3-12.3	3,489	13.2*	5.1-21.4
55-64	1,903	10.5*	2.8-18.2	2,964	13.7	5.7-21.6	4,867	12.2	6.6-17.8
65+	3,542	8.4	3.9-12.9	6,032	12.8	8.1-17.4	9,573	10.7	7.5-14.0
<b>Education</b>									
Less than H.S.	1,718	16.4*	0.4-32.4	2,676	20.2*	6.0-34.3	4,393	18.5*	7.9-29.1
H.S. or G.E.D.	2,813	10.1*	3.5-16.7	2,630	10.2	4.6-15.9	5,443	10.2	5.8-14.5
Some Post-H.S.	1,502	7.2*	0.4-14.0	1,871	7.6	3.2-12.1	3,372	7.5	3.5-11.4
College Graduate	1,954	12.8	5.7-19.9	2,586	14.2	7.2-21.2	4,540	13.6	8.6-18.6
<b>Income</b>									
Less than \$15,000	1,713	27.0*	7.5-46.5	520	7.3*	0.0-15.1	2,233	16.6*	6.1-27.1
\$15,000 - 24,999	945	12.0*	0.0-29	1,223	13.3*	1.6-25.0	2,168	12.7*	2.6-22.7
\$25,000 - 34,999	812	7.7*	0.0-16.2	1,056	11.3*	0.0-22.5	1,869	9.4*	2.4-16.4
\$35,000 - 49,999	812	7.7*	0.0-17.9	2,599	20.6*	8.2-32.9	3,411	14.7	6.5-23.0
\$50,000 - 74,999	894	6.7*	0.0-14.7	871	8.5*	1.1-15.9	1,765	7.5*	1.9-13.1
\$75,000+	2,354	14.0*	5.1-22.9	2,013	15.7*	6.1-25.4	4,367	14.7	8.2-21.3

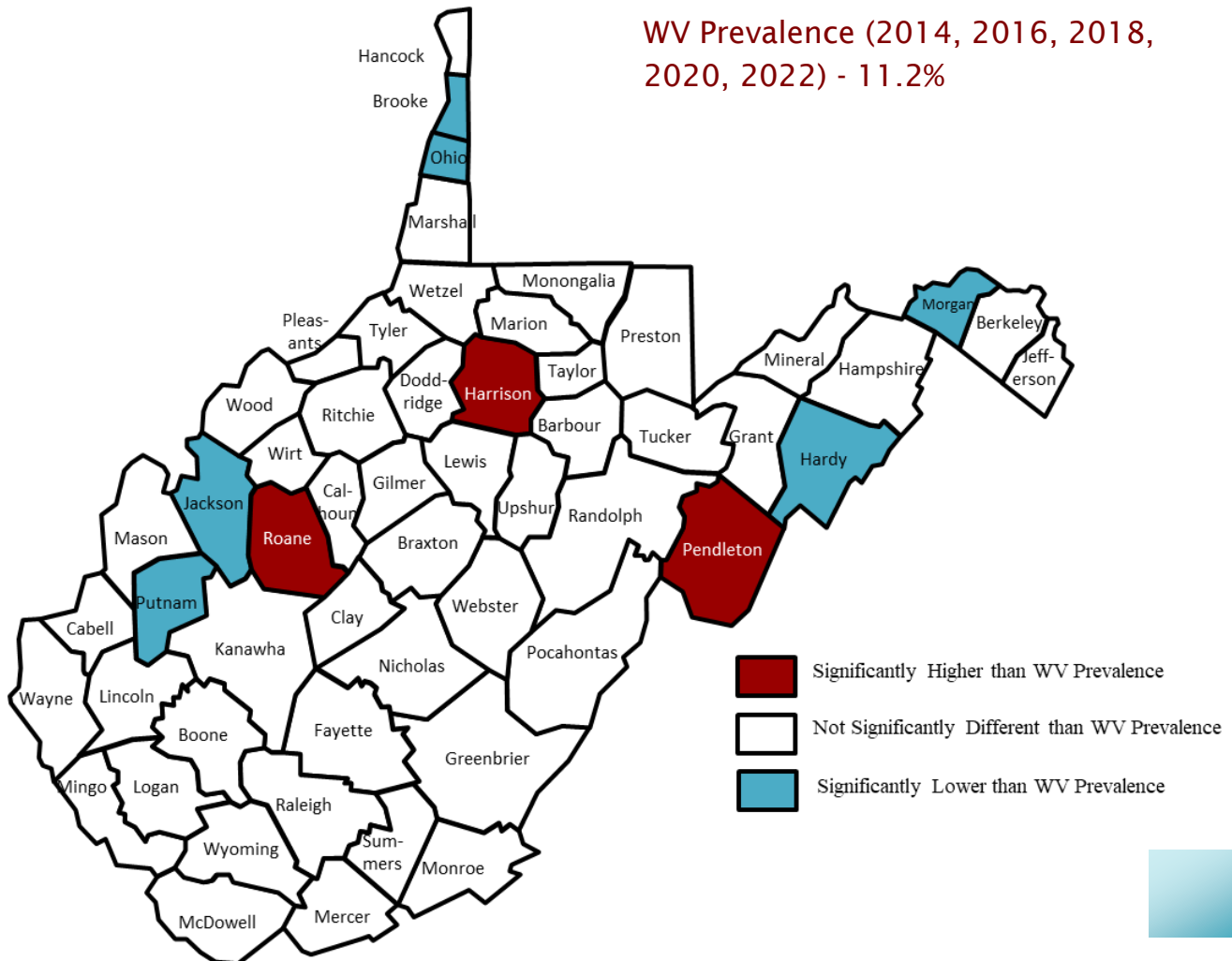
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

# CHAPTER 15: Cancer Screening

**FIGURE 15.8 PREVALENCE OF HAD A FOBT BY YEAR: WVBRFSS, 2012-2022**



**Figure 15.9 Prevalence of Had a FOBT in the Past Year Among Those Aged 50-75 by County: WVBRFSS, 2014, 2016, 2018, 2020, 2022**



## CHAPTER 15: Cancer Screening

### Colorectal Cancer Screening (continued)

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

**Prevalence** **WV: 63.4%** (95% CI: 61.3-65.5)  
**U.S.: 61.0%** (95% CI: 60.6-61.5)

The West Virginia prevalence of had a colonoscopy in the past 10 years among those aged 50-75 was similar to the U.S. prevalence. West Virginia ranked 22<sup>th</sup> among the 54 BRFSS participants.

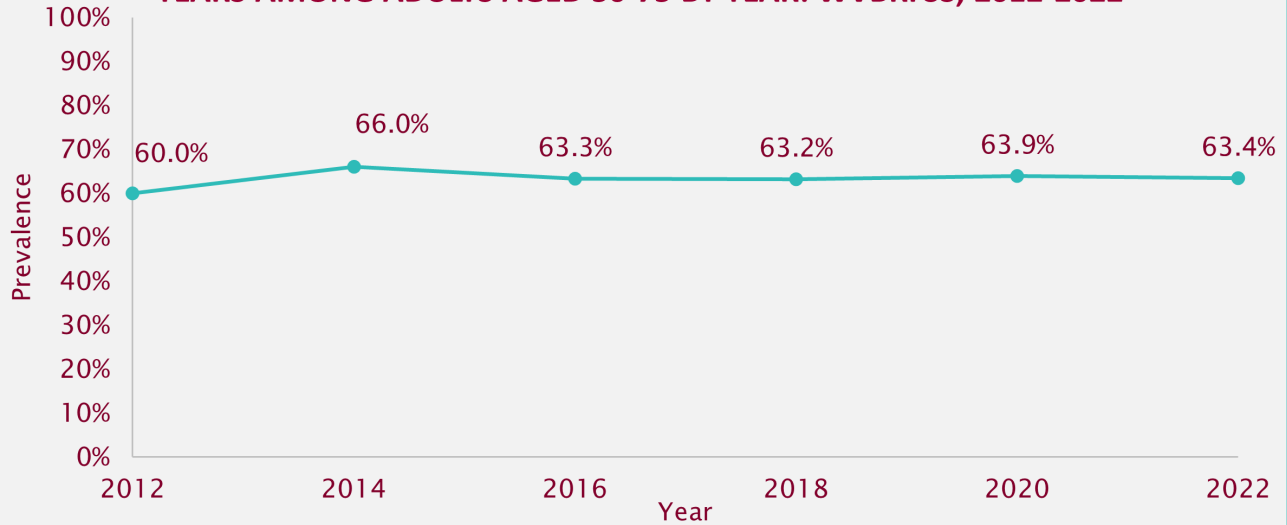
**Table 15.4 Prevalence of Had a Colonoscopy in the Past 10 Years Among Those Aged 50-75 by Demographic Characteristics: WVBRFSS, 2022**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	197,461	61.0	57.9-64.2	225,635	65.6	62.8-68.3	423,096	63.4	61.3-65.5
<b>Age</b>									
45-54	38,205	38.1	32.2-43.9	44,694	44.9	39.4-50.5	82,898	41.5	37.5-45.5
55-64	70,677	64.0	58.5-69.4	88,343	73.4	68.9-78.0	159,020	68.9	65.4-72.5
65+	88,579	78.5	74.4-82.7	92,599	74.4	70.3-78.5	181,178	76.4	73.4-79.3
<b>Education</b>									
Less than H.S.	22,060	46.4*	36.0-56.7	24,166	53.6*	43.2-64.1	46,226	49.9	42.5-57.3
H.S. or G.E.D.	83,347	61.2	56.3-66.1	81,553	65.5	60.9-70.2	164,900	63.2	59.9-66.6
Some Post-H.S.	46,690	63.8	57.4-70.2	71,824	70.4	65.7-75.1	118,513	67.7	63.8-71.5
College Graduate	45,208	68.9	64.0-73.9	47,952	66.2	61.5-70.8	93,160	67.5	64.1-70.9
<b>Income</b>									
Less than \$15,000	9,433	45.0*	32.3-57.7	17,601	58.4*	48.0-68.8	27,033	52.9	44.8-61.0
\$15,000 - 24,999	17,331	45.7*	35.7-55.8	25,549	61.1	52.8-69.4	42,880	53.8	47.2-60.4
\$25,000 - 34,999	24,428	61.0	51.8-70.2	29,833	60.2	52.7-67.7	54,261	60.6	54.7-66.4
\$35,000 - 49,999	28,257	67.2	57.9-76.4	27,438	64.3	56.1-72.5	55,695	65.7	59.6-71.9
\$50,000 - 74,999	32,458	68.9	61.4-76.5	33,399	70.8	63.8-77.8	65,857	69.9	64.7-75.0
\$75,000+	61,226	64.1	58.8-69.4	55,116	68.4	63.1-73.8	116,342	66.1	62.3-69.9

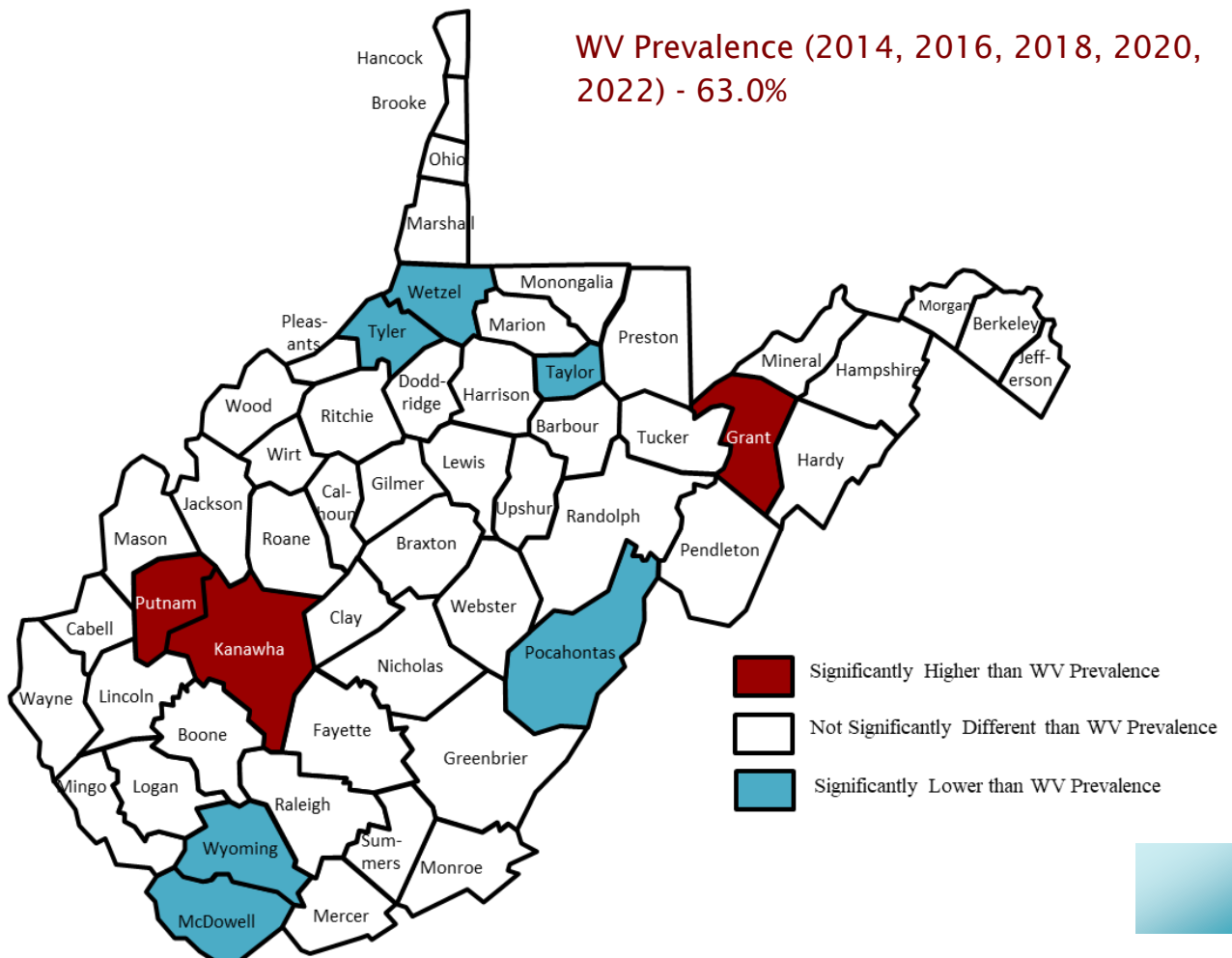
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

# CHAPTER 15: Cancer Screening

**FIGURE 15.10 PREVALENCE OF HAD COLONOSCOPY IN THE PAST 10 YEARS AMONG ADULTS AGED 50-75 BY YEAR: WVBRFSS, 2012-2022**



**Figure 15.11 Prevalence of Had a Colonoscopy in the Past 10 Years Among Those Aged 50-75 by County: WVBRFSS, 2014-2022**



## CHAPTER 15: Cancer Screening

### Colorectal Cancer Screening (continued)

#### Definition

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

FOBT within the past year

Sigmoidoscopy within the past 5 years and FOBT within the past 3 years

Colonoscopy within the past 10 years

Had a virtual colonoscopy in the past 5 years

Had a sigmoidoscopy in the past 5 years and a blood stool test in the past year

Had a stool DNA test in the past 3 years

Restricted to adults aged 45-75, per screening recommendations.

#### Prevalence

**WV: 64.4%** (95% CI: 62.4-66.5)

**U.S.: 59.4%** (95% CI: 59.0-59.8)

The West Virginia prevalence of met colorectal cancer screening recommendation among those aged 50-75 was similar to the U.S. prevalence. West Virginia ranked seventh highest among the 54 BRFSS participants.

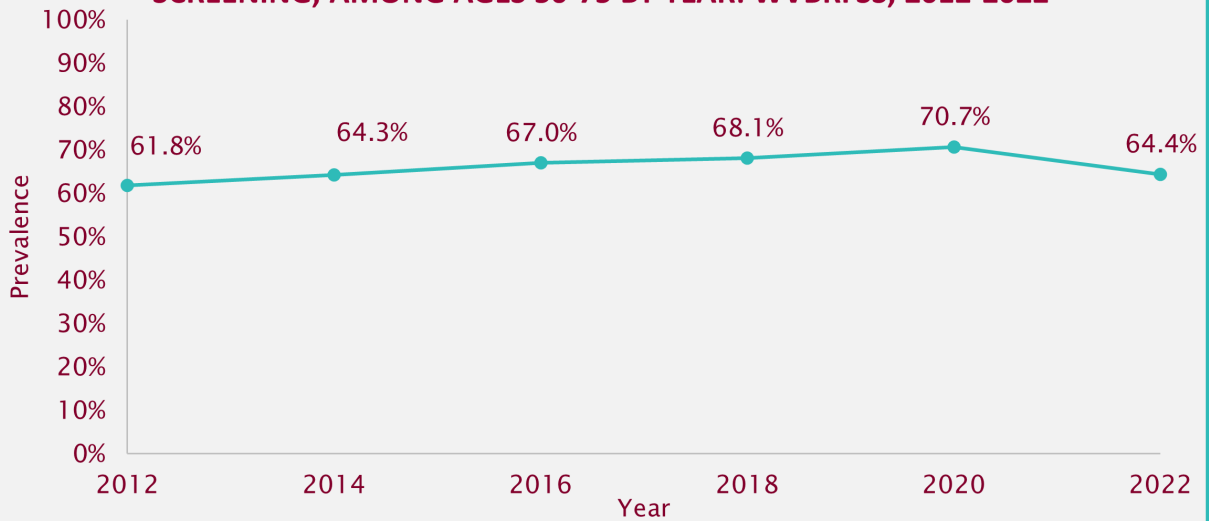
**Table 15.5 Prevalence of Met Colorectal Cancer Screening Recommendation Among Those Aged 50-75 by Demographic Characteristics: WVBRFSS, 2022**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	212,533	<b>61.9</b>	58.8-65.0	242,956	<b>66.8</b>	64.1-69.5	455,489	<b>64.4</b>	62.4-66.5
<b>Age</b>									
45-54	43,888	<b>41.8</b>	35.9-47.7	51,331	<b>48.6</b>	43.3-54.0	95,219	<b>45.2</b>	41.2-49.2
55-64	75,016	<b>63.8</b>	58.5-69.1	91,678	<b>73.6</b>	69.2-78.1	166,694	<b>68.9</b>	65.4-72.3
65+	93,629	<b>77.5</b>	73.3-81.8	99,947	<b>74.8</b>	70.9-78.8	193,576	<b>76.1</b>	73.2-79.0
<b>Education</b>									
Less than H.S.	24,157	<b>44.5</b>	34.9-54.1	27,459	<b>55.0</b>	45.1-64.9	51,616	<b>49.5</b>	42.6-56.5
H.S. or G.E.D.	89,672	<b>62.6</b>	57.8-67.3	85,867	<b>65.1</b>	60.6-69.6	175,539	<b>63.8</b>	60.5-67.1
Some Post-H.S.	49,935	<b>64.0</b>	57.8-70.1	77,013	<b>73.0</b>	68.6-77.4	126,949	<b>69.2</b>	65.5-72.8
College Graduate	48,212	<b>72.2</b>	67.4-77.0	52,475	<b>69.2</b>	64.7-73.6	100,688	<b>70.6</b>	67.3-73.8
<b>Income</b>									
Less than \$15,000	11,348	<b>50.9*</b>	38.5-63.2	18,856	<b>60.2</b>	50.1-70.3	30,204	<b>56.3</b>	48.5-64.2
\$15,000 - 24,999	19,687	<b>49.6</b>	39.6-59.5	27,587	<b>62.9</b>	54.8-70.9	47,273	<b>56.6</b>	50.1-63.0
\$25,000 - 34,999	26,036	<b>62.7</b>	53.6-71.7	31,898	<b>61.6</b>	54.2-69.0	57,934	<b>62.1</b>	56.3-67.8
\$35,000 - 49,999	29,302	<b>68.6</b>	59.5-77.8	31,668	<b>72.2</b>	64.6-79.9	60,969	<b>70.5</b>	64.5-76.4
\$50,000 - 74,999	33,559	<b>70.9</b>	63.6-78.3	36,047	<b>75.1</b>	68.5-81.8	69,605	<b>73.1</b>	68.1-78.0
\$75,000+	65,478	<b>66.6</b>	61.5-71.8	57,959	<b>70.4</b>	65.2-75.6	123,437	<b>68.3</b>	64.7-72.0

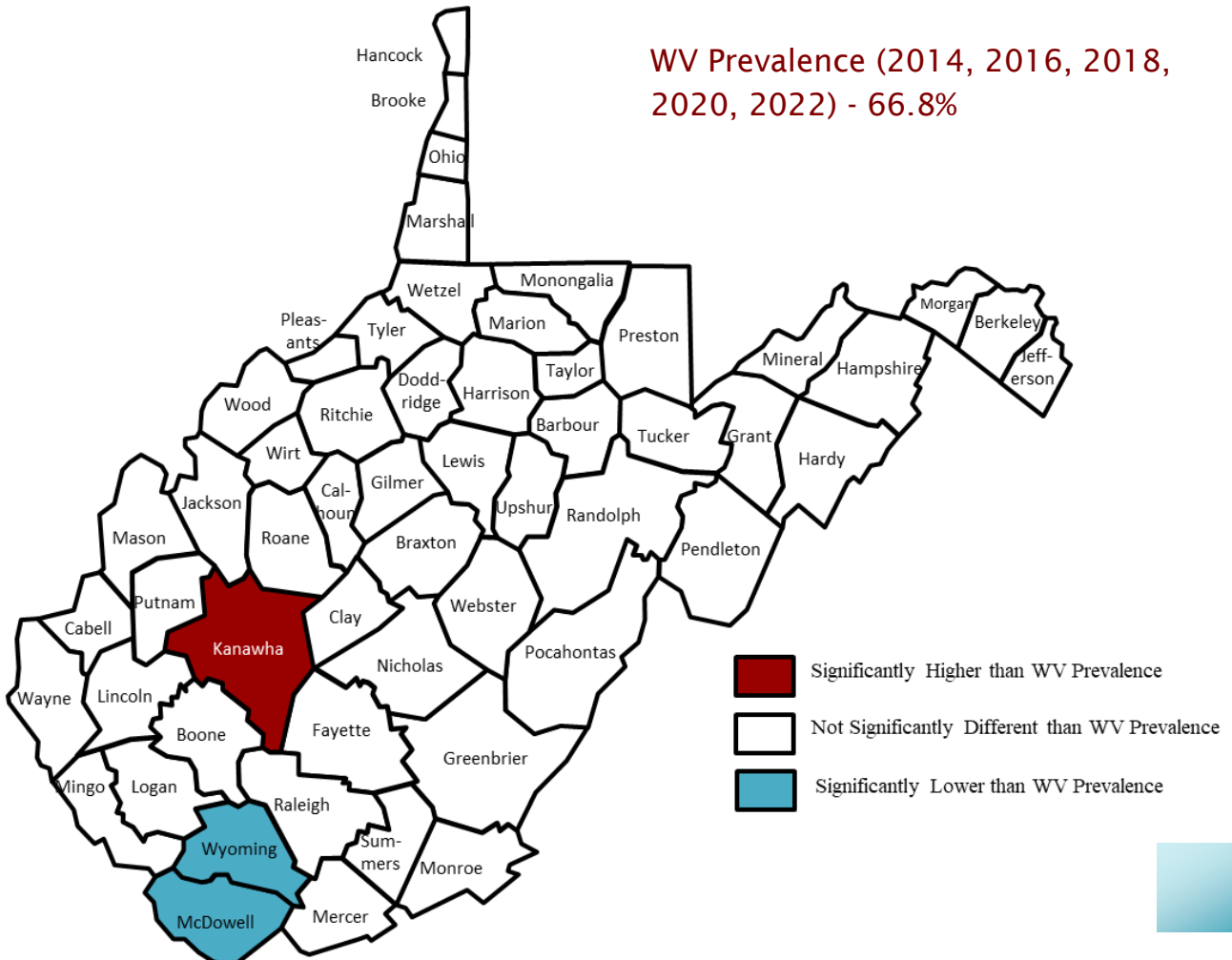
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

# CHAPTER 15: Cancer Screening

**FIGURE 15.12 PREVALENCE OF MET COLORECTAL CANCER SCREENING, AMONG AGES 50-75 BY YEAR: WVBRFSS, 2012-2022**



**Figure 15.13 Prevalence of Met Colorectal Cancer Screening Recommendation Among Those Aged 50-75 by County: WVBRFSS, 2014-2022**





# CHAPTER 16: Diabetes Testing

## Diabetes Testing

**Definition** Reported not having diabetes and responding “Within the past year”, “Within the past two years”, “Within the past three years” to the question, “When was the last time you had a blood test for high blood sugar or diabetes by a doctor, nurse, or other health professional?”

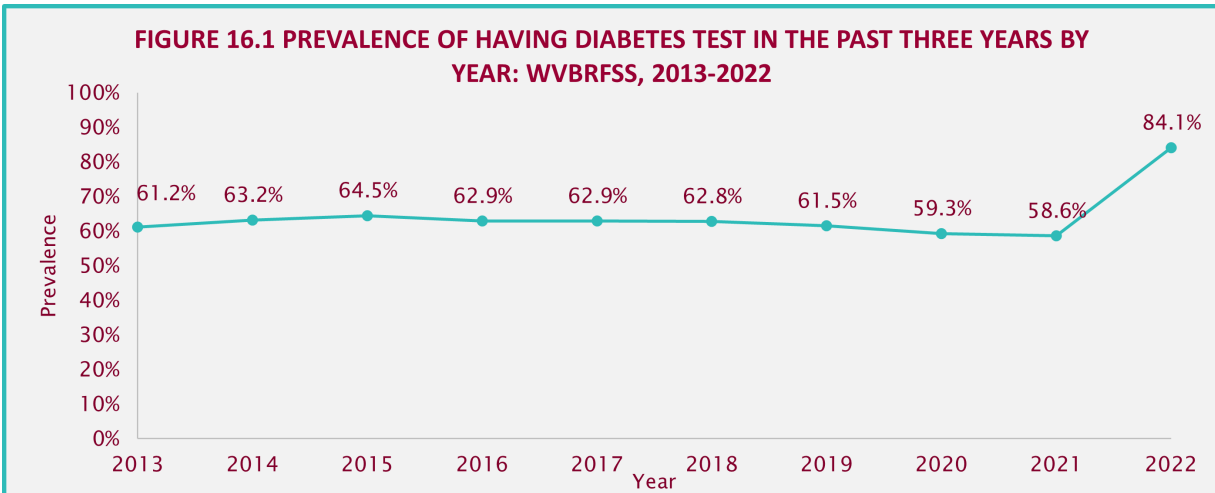
**Prevalence** **WV: 84.1%** (95% CI: 82.3-85.8)  
 Because this question is part of a state selected optional module and complete national data are not available, a U.S. comparison was not conducted.

**Table 16.1 Prevalence of Diabetes Testing by Demographic Characteristics: WVBRFSS, 2022**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	400,608	<b>79.8</b>	77.0-82.7	459,715	<b>88.1</b>	86.3-90.0	860,323	<b>84.1</b>	82.3-85.8
<b>Age</b>									
18-24	37,610	<b>62.4*</b>	50.2-74.7	40,952	<b>74.1*</b>	63.6-84.7	78,561	<b>68.0</b>	59.8-76.3
25-34	54,072	<b>66.6</b>	56.8-76.3	66,605	<b>83.5</b>	78.2-88.7	120,677	<b>75.0</b>	69.2-80.7
35-44	62,753	<b>75.1</b>	68.3-81.9	68,095	<b>83.4</b>	78.5-88.3	130,848	<b>79.2</b>	75.0-83.4
45-54	68,249	<b>85.7</b>	80.7-90.8	68,653	<b>88.6</b>	84.7-92.5	136,902	<b>87.1</b>	83.9-90.4
55-64	67,618	<b>84.5</b>	79.6-89.5	78,195	<b>92.0</b>	88.7-95.2	145,813	<b>88.4</b>	85.4-91.3
65+	106,859	<b>94.2</b>	91.5-96.8	132,810	<b>96.3</b>	94.9-97.7	239,669	<b>95.3</b>	93.9-96.8
<b>Education</b>									
Less than H.S.	49,259	<b>77.6</b>	68.0-87.3	41,148	<b>90.4</b>	83.3-97.6	90,407	<b>83.0</b>	76.5-89.5
H.S. or G.E.D.	162,525	<b>78.3</b>	73.6-83.0	168,998	<b>86.5</b>	83.2-89.9	331,523	<b>82.3</b>	79.3-85.2
Some Post-H.S.	98,659	<b>78.0</b>	72.0-84.1	139,652	<b>89.9</b>	86.7-93.2	238,311	<b>84.6</b>	81.3-87.9
College Graduate	88,911	<b>86.6</b>	82.9-90.2	109,032	<b>87.5</b>	84.4-90.6	197,943	<b>87.1</b>	84.7-89.4
<b>Income</b>									
Less than \$15,000	20,233	<b>67.2*</b>	52.9-81.5	33,536	<b>82.4</b>	73.5-91.3	53,769	<b>76.0</b>	67.8-84.1
\$15,000 - 24,999	29,210	<b>78.3*</b>	68.1-88.5	52,202	<b>85.4</b>	79.7-91.2	81,413	<b>82.7</b>	77.4-88.1
\$25,000 - 34,999	44,394	<b>82.5</b>	73.6-91.3	60,061	<b>88.9</b>	83.8-94.1	104,455	<b>86.1</b>	81.1-91.0
\$35,000 - 49,999	52,155	<b>83.9</b>	75.7-92.1	55,858	<b>89.4</b>	84.8-94.1	108,013	<b>86.7</b>	81.9-91.4
\$50,000 - 74,999	57,375	<b>82.8</b>	75.9-89.8	64,937	<b>91.4</b>	87.5-95.3	122,312	<b>87.2</b>	83.1-91.2
\$75,000+	132,960	<b>82.5</b>	78.1-86.8	118,393	<b>89.5</b>	86.3-92.7	251,353	<b>85.6</b>	82.8-88.5

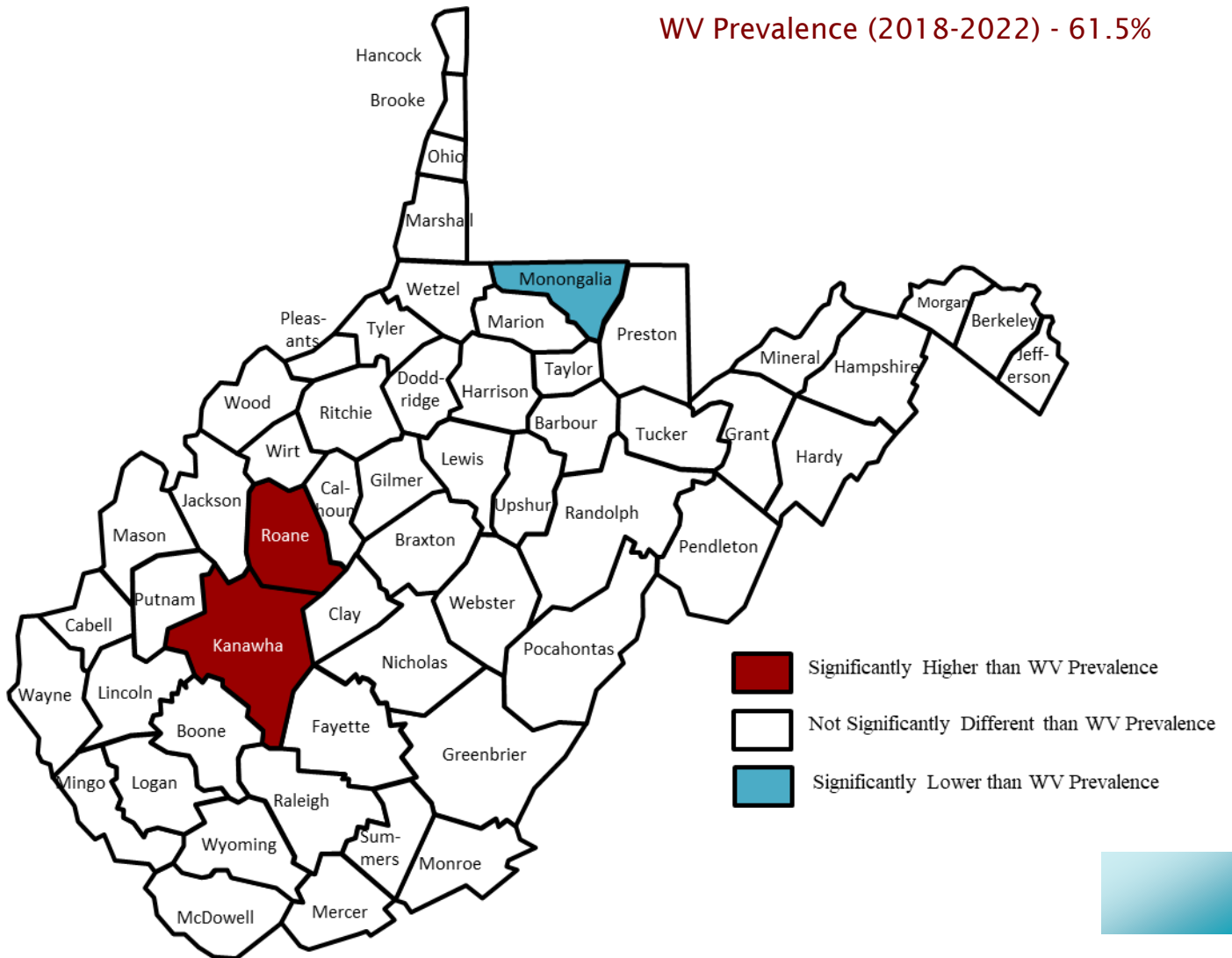
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

# CHAPTER 16: Diabetes Testing



Note: In 2021, there was a change to the United States Preventive Task Force screening recommendations for prediabetes and type 2 diabetes testing, lowering the age from age 40 to 35 for those who are overweight or obese.

**Figure 16.2 Prevalence of Had a Diabetes Test in the Past Three Years by Demographic Characteristics: WVBRFSS, 2018-2022**



# West Virginia Behavioral Risk Factor Surveillance System Report



## SECTION 4: Chronic Diseases

2022

# CHAPTER 17: Cardiovascular Disease

## Heart Attack

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

**Prevalence** **WV: 7.8%** (95% CI: 6.9-8.6)

**U.S.: 4.4%** (95% CI: 4.3-4.5)

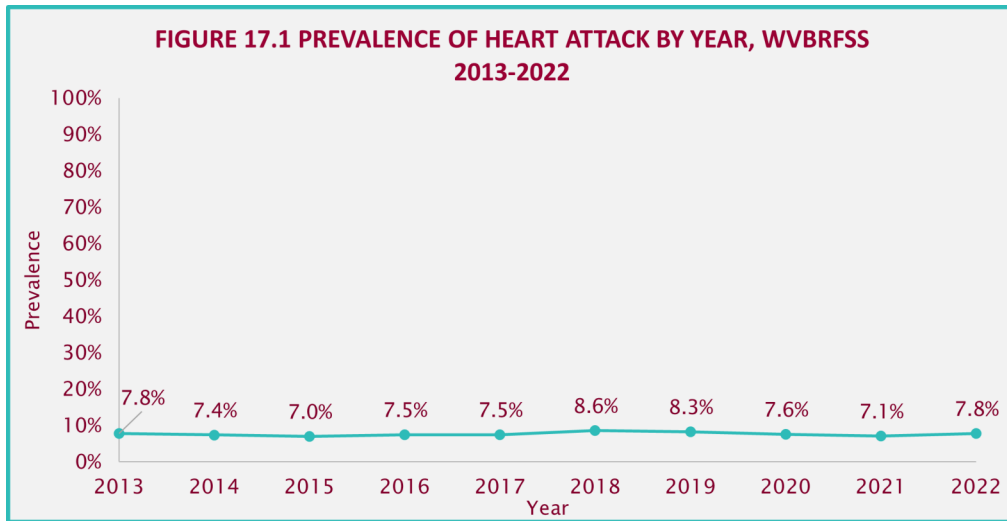
The West Virginia prevalence of heart attack was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 54 BRFSS participants.

**Table 17.1 Prevalence of Heart Attack by Demographic Characteristics: WVBRFSS, 2022**

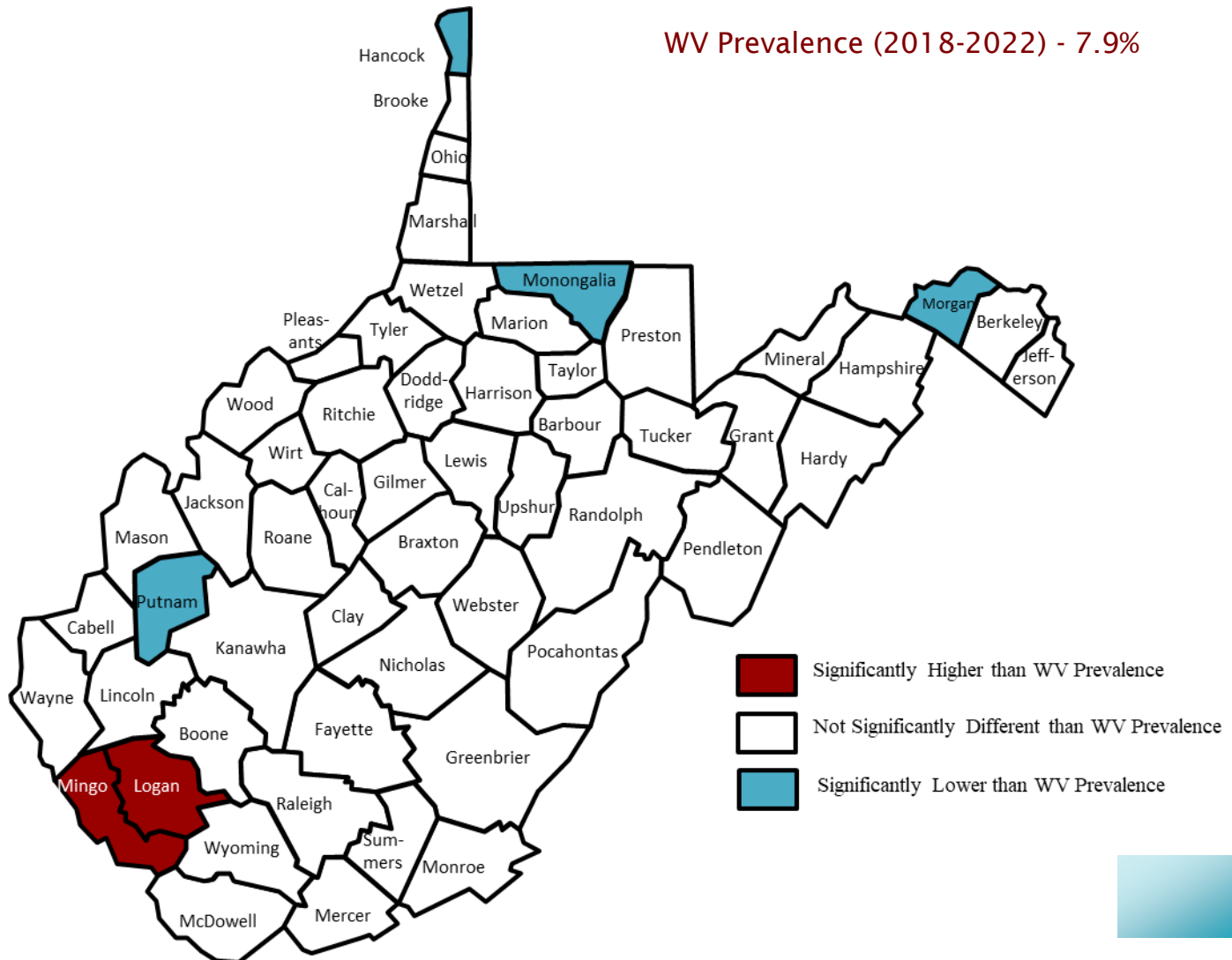
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	63,422	<b>9.1</b>	7.7-10.5	46,155	<b>6.4</b>	5.4-7.5	109,577	<b>7.8</b>	6.9-8.6
<b>Age</b>									
18-24	714	<b>0.9*</b>	0.0-2.6	686	<b>0.9*</b>	0.0-2.7	1,400	<b>0.9*</b>	0.0-2.1
25-34	2,444	<b>2.3*</b>	0.0-5.6	1,915	<b>1.9*</b>	0.0-4.1	4,359	<b>2.1*</b>	0.1-4.1
35-44	1,946	<b>1.9*</b>	0.2-3.5	961	<b>0.9*</b>	0.1-1.8	2,907	<b>1.4*</b>	0.5-2.3
45-54	10,517	<b>10.1</b>	6.1-14.0	5,043	<b>4.8</b>	2.6-6.9	15,561	<b>7.4</b>	5.2-9.7
55-64	13,428	<b>11.6</b>	8.1-15.1	9,622	<b>7.8</b>	5.0-10.6	23,050	<b>9.7</b>	7.4-11.9
65+	34,373	<b>19.5</b>	16.1-22.8	27,928	<b>13.5</b>	11.0-16.1	62,301	<b>16.3</b>	14.2-18.3
<b>Education</b>									
Less than H.S.	20,197	<b>23.5</b>	16.2-30.8	11,762	<b>14.7</b>	9.4-20.0	31,959	<b>19.2</b>	14.7-23.8
H.S. or G.E.D.	19,573	<b>6.6</b>	5.0-8.3	17,648	<b>6.6</b>	4.9-8.3	37,221	<b>6.6</b>	5.4-7.8
Some Post-H.S.	16,973	<b>9.6</b>	7.0-12.2	12,632	<b>5.9</b>	4.2-7.6	29,605	<b>7.6</b>	6.1-9.1
College Graduate	6,679	<b>5.0</b>	3.5-6.4	4,113	<b>2.7</b>	1.6-3.7	10,792	<b>3.7</b>	2.8-4.6
<b>Income</b>									
Less than \$15,000	7,638	<b>19.3</b>	9.4-29.2	7,006	<b>10.8</b>	6.3-15.3	14,644	<b>14.0</b>	9.3-18.8
\$15,000 - 24,999	11,086	<b>19.0</b>	12.7-25.3	9,075	<b>10.0</b>	6.4-13.7	20,161	<b>13.6</b>	10.2-16.9
\$25,000 - 34,999	11,151	<b>13.8</b>	9.3-18.3	6,760	<b>7.1</b>	4.4-9.8	17,910	<b>10.2</b>	7.7-12.7
\$35,000 - 49,999	7,077	<b>8.1</b>	4.9-11.3	4,927	<b>5.9</b>	2.9-8.9	12,004	<b>7.0</b>	4.8-9.2
\$50,000 - 74,999	9,306	<b>9.1</b>	5.8-12.5	3,509	<b>3.7*</b>	1.4-6.0	12,815	<b>6.5</b>	4.5-8.6
\$75,000+	7,173	<b>3.5</b>	2.1-4.8	3,372	<b>2.1*</b>	0.8-3.4	10,545	<b>2.9</b>	1.9-3.8

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

# CHAPTER 17: Cardiovascular Disease



**Figure 17.2 Prevalence of Heart Attack by County: WVBRFSS, 2018-2022**



# CHAPTER 17: Cardiovascular Disease

## 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:** 7.1% (95% CI: 6.3-7.9)  
**U.S.:** 4.4% (95% CI: 4.3-4.6)

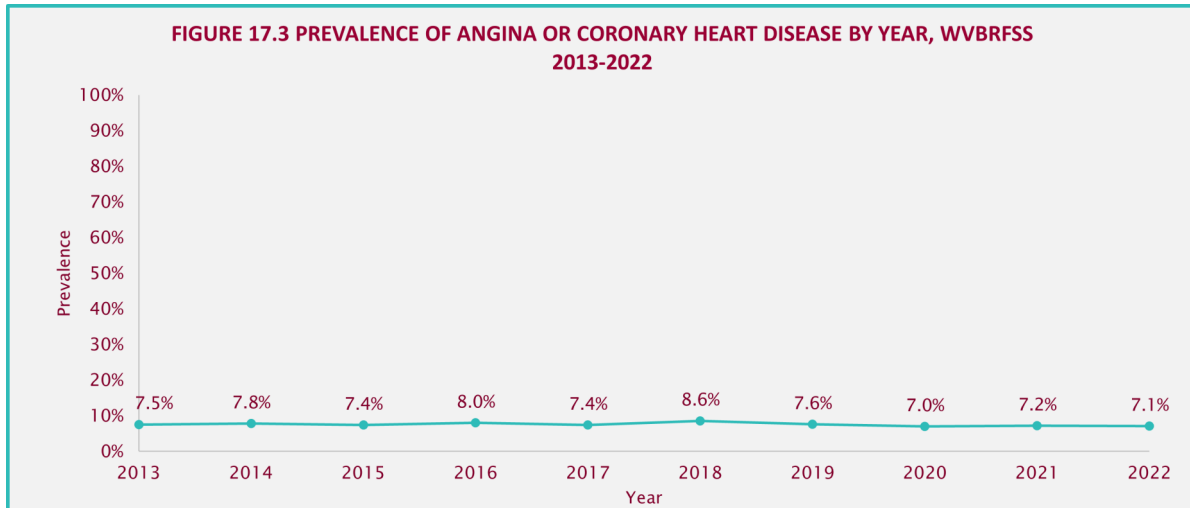
The West Virginia prevalence of heart disease was significantly higher than the U.S. prevalence. West Virginia ranked the highest among the 54 BRFSS participants.

**Table 17.2 Prevalence of Heart Disease by Demographic Characteristics: WVBRFSS, 2022**

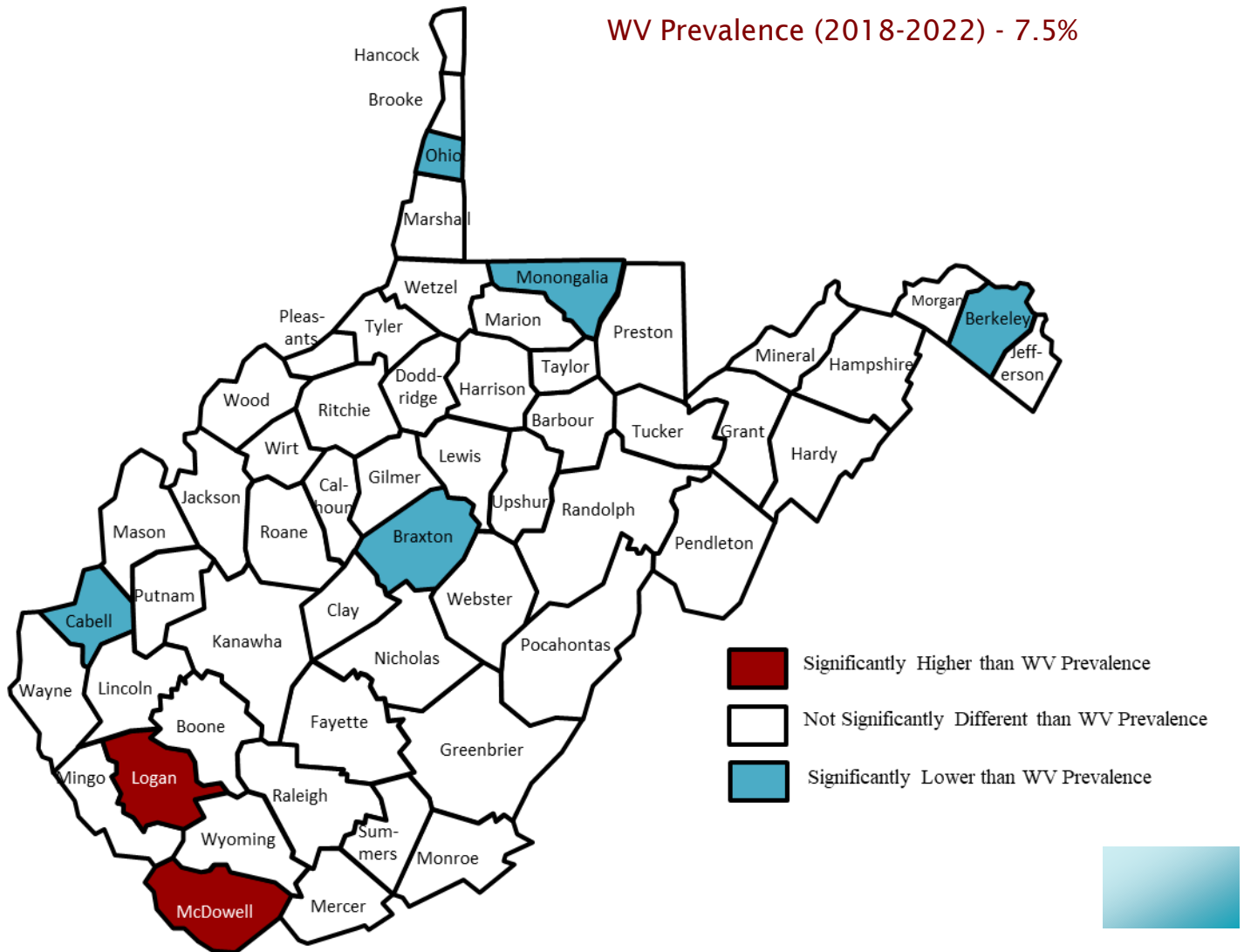
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	57,123	8.2	7.1-9.4	42,933	6.0	5.0-7.1	100,056	7.1	6.3-7.9
<b>Age</b>									
18-24	.	.	.	2,042	2.7*	0.0-6.7	2,042	1.3*	0.0-3.2
25-34	.	.	.	1,059	1.1*	0.0-2.2	1,059	0.5*	0.0-1.1
35-44	1,051	1.0*	0.0-2.2	1,078	1.1*	0.2-1.9	2,129	1.0*	0.3-1.7
45-54	6,946	6.7	3.4-10.0	4,958	4.8	2.5-7.1	11,904	5.7	3.7-7.7
55-64	12,932	11.2	7.7-14.7	9,359	7.7	5.0-10.4	22,291	9.4	7.2-11.6
65+	36,194	20.6	17.5-23.7	24,347	11.9	9.4-14.4	60,542	15.9	13.9-17.9
<b>Education</b>									
Less than H.S.	12,050	13.9	8.7-19.1	10,276	12.8	7.3-18.2	22,326	13.4	9.6-17.1
H.S. or G.E.D.	20,433	6.9	5.3-8.6	18,682	7.0	5.1-8.9	39,115	7.0	5.7-8.2
Some Post-H.S.	14,793	8.4	6.1-10.6	9,567	4.5	3.1-6.0	24,361	6.3	5.0-7.6
College Graduate	9,847	7.4	5.6-9.2	4,407	2.9	1.8-3.9	14,254	5.0	3.9-6.0
<b>Income</b>									
Less than \$15,000	4,149	10.6	4.8-16.5	6,767	10.6	6.5-14.7	10,916	10.6	7.3-14.0
\$15,000 - 24,999	10,057	17.3	11.3-23.3	7,586	8.3	5.2-11.4	17,643	11.8	8.7-14.8
\$25,000 - 34,999	9,712	11.9	7.9-15.9	6,783	7.3	4.3-10.3	16,495	9.4	7.0-11.9
\$35,000 - 49,999	10,043	11.5	7.6-15.4	6,102	7.4	3.2-11.5	16,146	9.5	6.6-12.3
\$50,000 - 74,999	7,996	7.9	5.0-10.7	3,987	4.3	2.1-6.5	11,982	6.2	4.3-8.0
\$75,000+	9,646	4.7	3.3-6.1	1,470	0.9*	0.2-1.6	11,117	3.0	2.2-3.9

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

# CHAPTER 17: Cardiovascular Disease



**Figure 17.4 Prevalence of Angina by County: WVBRFSS, 2018-2022**



# CHAPTER 17: 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: 5.6% (95% CI: 4.9-6.3)

U.S.: 3.6% (95% CI: 3.5-3.7)

The West Virginia prevalence of stroke was significantly higher than the U.S. prevalence. West Virginia ranked the second highest among the 54 BRFSS participants.

**Table 17.3 Prevalence of Stroke by Demographic Characteristics: WVBRFSS, 2022**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	32,455	4.6	3.7-5.6	46,830	6.5	5.5-7.6	79,285	5.6	4.9-6.3
<b>Age</b>									
18-24	.	.	.	651	0.9*	0.0-2.5	651	0.4*	0.0-1.2
25-34	111	0.1*	0.0-0.3	1,853	1.9*	0.0-3.8	1,964	1.0*	0.0-1.9
35-44	599	0.6*	0.0-1.5	2,279	2.2*	0.5-3.9	2,878	1.4*	0.4-2.4
45-54	3,618	3.5*	1.2-5.8	6,267	6.0	3.3-8.7	9,884	4.7	2.9-6.5
55-64	8,789	7.5	4.7-10.4	11,055	8.9	6.0-11.8	19,844	8.2	6.2-10.3
65+	19,287	10.9	8.1-13.6	24,725	11.9	9.4-14.3	44,012	11.4	9.6-13.2
<b>Education</b>									
Less than H.S.	8,070	9.1	4.4-13.9	10,836	13.2	7.9-18.6	18,906	11.1	7.5-14.7
H.S. or G.E.D.	12,379	4.2	2.9-5.4	16,086	6.0	4.5-7.5	28,466	5.0	4.0-6.0
Some Post-H.S.	8,678	4.9	3.0-6.8	14,981	7.0	5.1-8.9	23,658	6.0	4.7-7.4
College Graduate	3,328	2.5	1.5-3.5	4,690	3.0	1.8-4.3	8,018	2.8	2.0-3.6
<b>Income</b>									
Less than \$15,000	4,345	10.7	4.9-16.5	7,933	12.2	7.6-16.8	12,279	11.6	8.0-15.3
\$15,000 - 24,999	7,206	12.1	7.3-17.0	5,521	6.0	3.4-8.6	12,726	8.4	5.9-10.9
\$25,000 - 34,999	5,057	6.2	3.2-9.2	8,612	9.1	5.7-12.5	13,669	7.8	5.5-10.1
\$35,000 - 49,999	3,541	4.0*	1.6-6.4	7,075	8.5	4.9-12.2	10,616	6.2	4.0-8.4
\$50,000 - 74,999	3,230	3.2	1.4-5.0	3,906	4.2	1.9-6.4	7,137	3.6	2.2-5.1
\$75,000+	3,746	1.8	0.9-2.8	4,559	2.9	1.3-4.5	8,305	2.3	1.4-3.2

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



# CHAPTER 17: Cardiovascular Disease

FIGURE 17.5 PREVALENCE OF STROKE BY YEAR, WVBRFSS 2013-2022

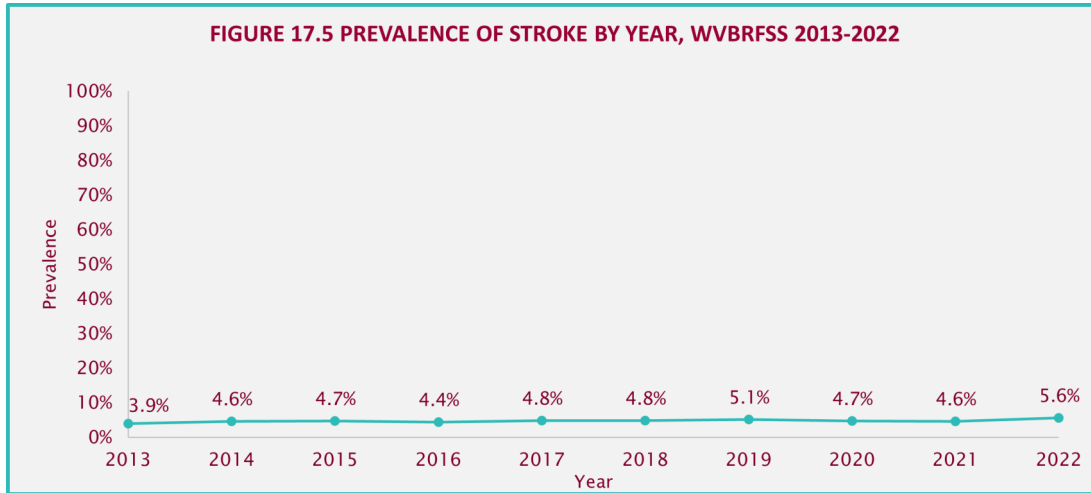
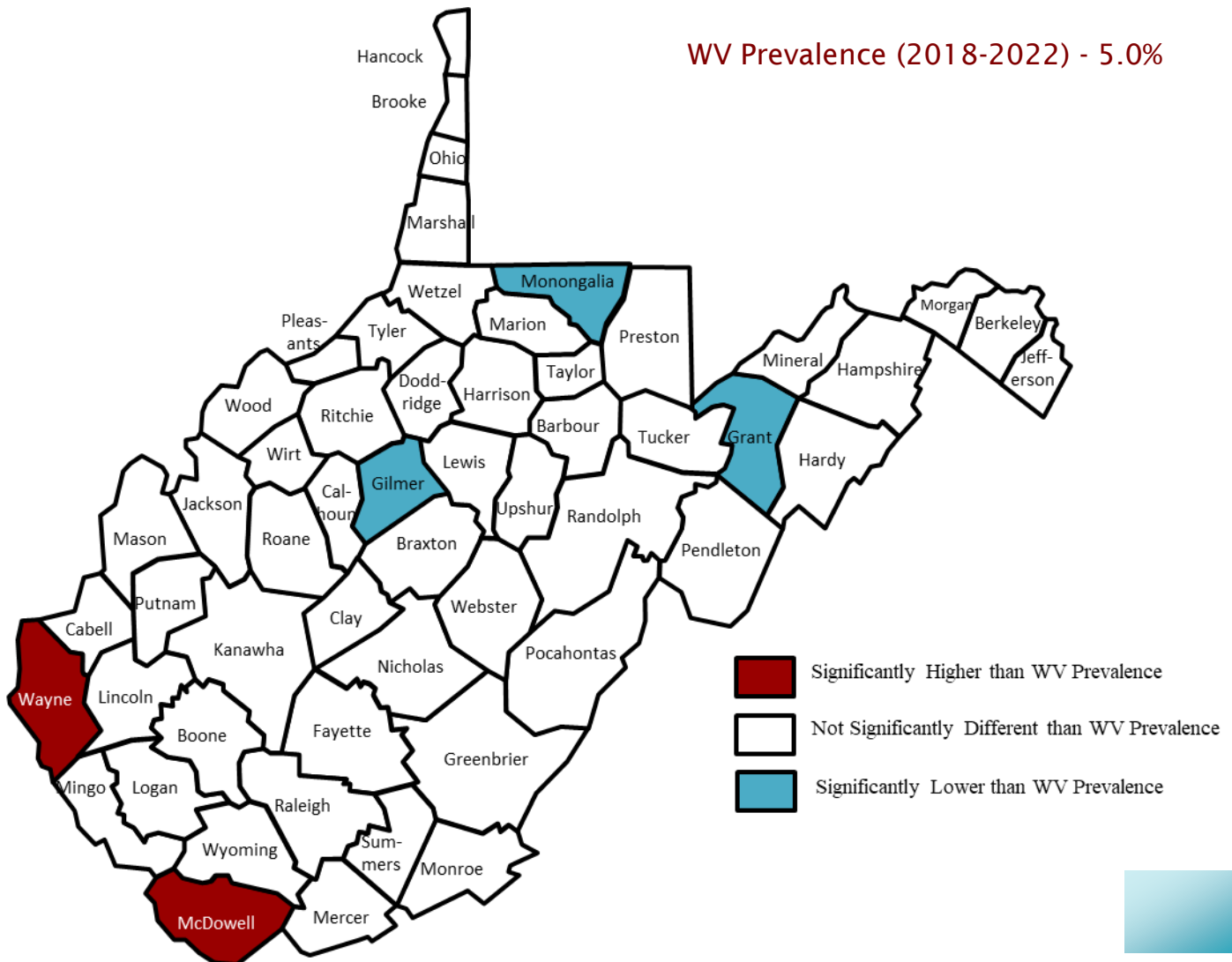


Figure 17.6 Prevalence of Stroke by County: WVBRFSS, 2018-2022



# CHAPTER 17: 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: 1) heart attack, also called a myocardial infarction; 2) angina or coronary heart disease; 3) a stroke?”

**Prevalence** **WV: 14.6%** (95% CI: 13.5-15.8)  
**U.S.: 9.2%** (95% CI: 9.1-9.4)

The West Virginia prevalence of cardiovascular disease was significantly higher than the U.S. prevalence. West Virginia ranked the highest among the 54 BRFSS participants.

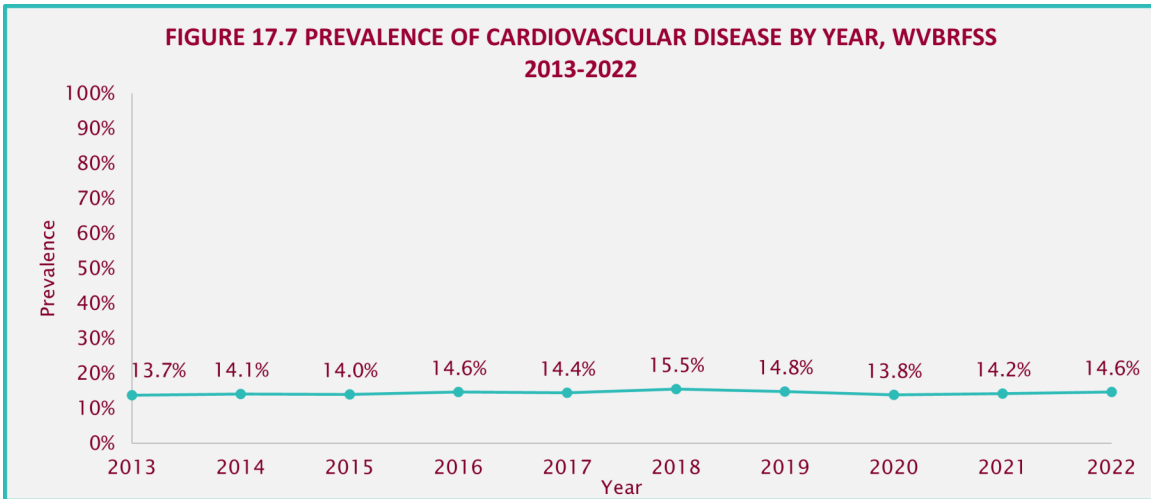
**Table 17.4 Prevalence of Cardiovascular Disease by Demographic Characteristics: WVBRFSS, 2022**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	106,778	15.5	13.8-17.1	98,875	13.9	12.4-15.4	205,653	14.6	13.5-15.8
<b>Age</b>									
18-24	714	0.9*	0.0-2.6	3,379	4.5*	0.0-9.2	4,093	2.6*	0.1-5.0
25-34	2,555	2.4*	0.0-5.8	3,193	3.2*	0.7-5.8	5,748	2.8*	0.7-4.9
35-44	3,152	3.0*	1.0-5.1	3,235	3.2*	1.3-5.0	6,387	3.1	1.7-4.5
45-54	15,129	14.6	10.2-19.1	12,163	11.7	8.2-15.2	27,293	13.2	10.3-16.0
55-64	23,263	20.3	15.9-24.8	22,455	18.3	14.4-22.2	45,718	19.3	16.3-22.2
65+	61,914	35.2	31.3-39.1	54,361	26.5	23.3-29.8	116,275	30.5	28.0-33.0
<b>Education</b>									
Less than H.S.	26,459	31.2	23.4-39.1	22,272	27.7	20.7-34.7	48,731	29.5	24.3-34.8
H.S. or G.E.D.	39,262	13.3	11.0-15.6	38,793	14.6	12.1-17.2	78,054	14.0	12.2-15.7
Some Post-H.S.	26,869	15.3	12.1-18.4	27,608	13.0	10.5-15.5	54,477	14.0	12.0-16.0
College Graduate	14,188	10.6	8.5-12.8	9,966	6.5	4.8-8.1	24,154	8.4	7.1-9.7
<b>Income</b>									
Less than \$15,000	10,980	28.0*	17.6-38.5	14,345	22.3	16.2-28.4	25,325	24.5	19.0-30.0
\$15,000 - 24,999	19,130	33.2	25.5-40.9	16,081	17.9	13.4-22.4	35,212	23.9	19.7-28.0
\$25,000 - 34,999	17,878	22.2	16.7-27.8	16,270	17.4	13.0-21.7	34,148	19.6	16.2-23.1
\$35,000 - 49,999	14,935	17.1	12.3-21.8	13,330	16.2	10.8-21.7	28,265	16.7	13.1-20.3
\$50,000 - 74,999	13,064	12.8	9.0-16.7	8,079	8.6	5.4-11.9	21,144	10.8	8.3-13.3
\$75,000+	16,156	7.8	5.9-9.8	8,052	5.0	3.1-7.0	24,209	6.6	5.2-8.0

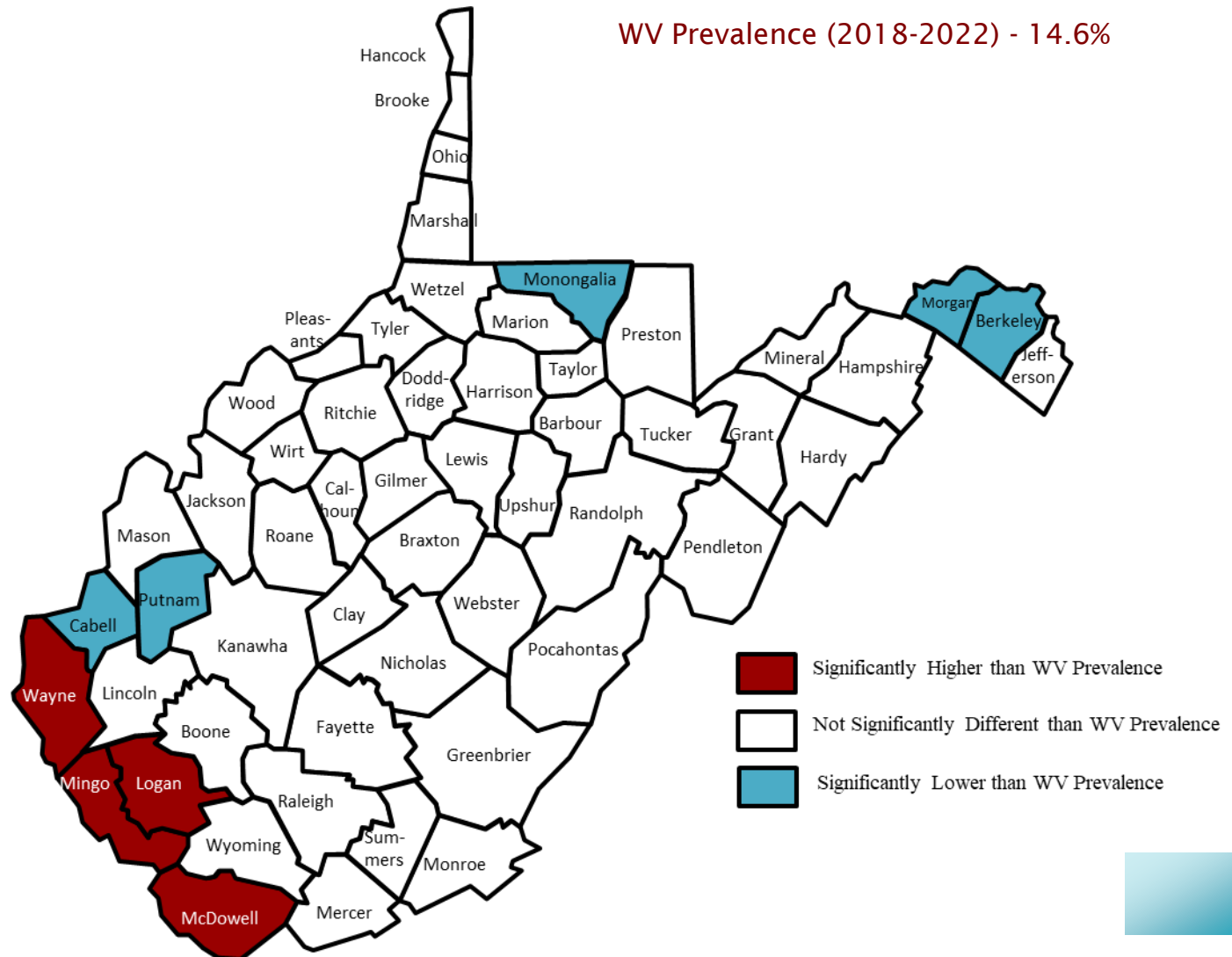
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

# CHAPTER 17: Cardiovascular Disease

**FIGURE 17.7 PREVALENCE OF CARDIOVASCULAR DISEASE BY YEAR, WVBRFSS 2013-2022**



**Figure 17.8 Prevalence of Cardiovascular Disease by County: WVBRFSS, 2018-2022**



# CHAPTER 18: Diabetes

## Diabetes Prevalence

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

**Prevalence** **WV: 17.4%** (95% CI: 16.2-18.6)

**U.S.: 12.1%** (95% CI: 11.9-12.3)

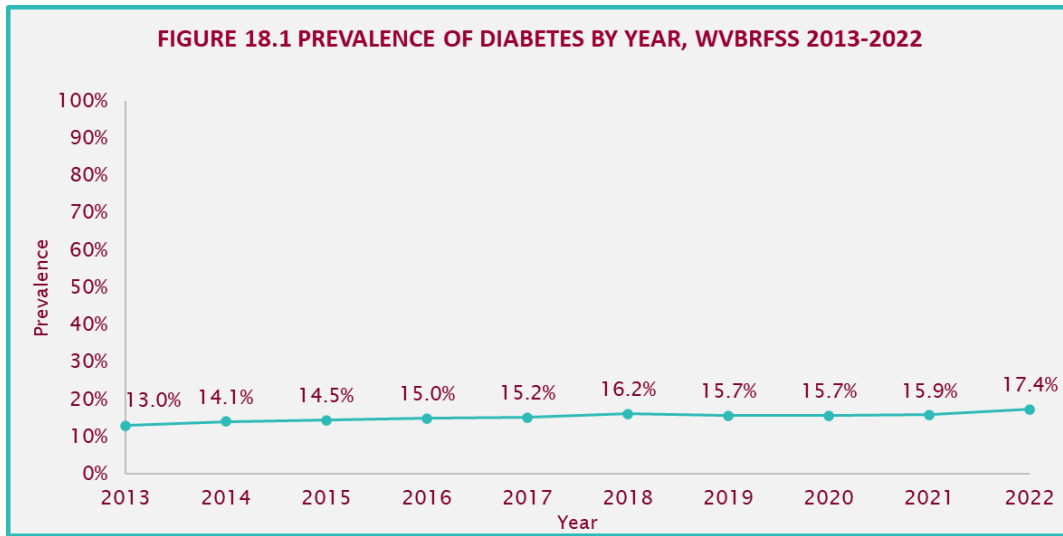
The West Virginia prevalence of diabetes was significantly higher than the U.S. prevalence. West Virginia ranked the third highest among the 54 BRFSS participants.

**Table 18.1 Prevalence of Diabetes by Demographic Characteristics: WVBRFSS, 2018-2022**

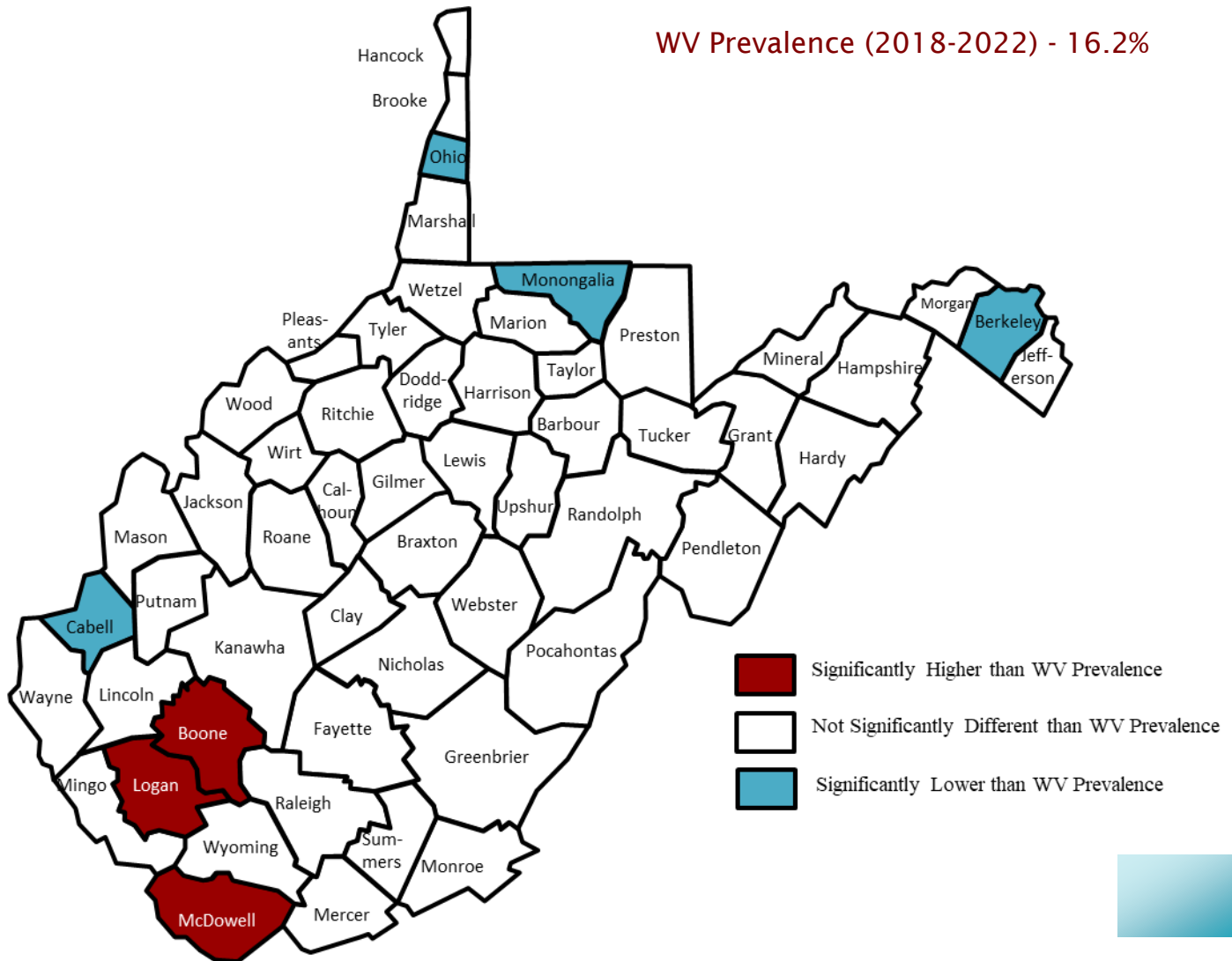
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	121,176	17.3	15.5-19	126,545	17.5	15.9-19.2	247,721	17.4	16.2-18.6
<b>Age</b>									
18-24	2,095	2.5*	0.0-5.9	389	0.5*	0.0-1.5	2,484	1.6*	0.0-3.4
25-34	2,636	2.5*	0.1-4.8	2,963	3.0*	0.6-5.4	5,599	2.7*	1.0-4.4
35-44	10,642	10.1	5.9-14.4	9,696	9.5	6.0-12.9	20,337	9.8	7.0-12.5
45-54	16,991	16.2	11.9-20.6	21,877	20.8	16.4-25.2	38,868	18.5	15.4-21.6
55-64	30,951	26.3	21.6-31.1	31,276	25.1	20.7-29.6	62,227	25.7	22.5-29.0
65+	56,384	31.7	28.0-35.5	59,419	28.4	25.0-31.8	115,803	29.9	27.4-32.4
<b>Education</b>									
Less than H.S.	19,550	22.1	15.5-28.7	29,443	35.6	28.0-43.2	48,993	28.6	23.5-33.7
H.S. or G.E.D.	55,222	18.5	15.6-21.4	43,695	16.3	13.7-18.8	98,917	17.4	15.5-19.4
Some Post-H.S.	29,025	16.2	13.0-19.5	36,767	17.2	14.3-20.0	65,792	16.8	14.6-18.9
College Graduate	17,129	12.8	10.1-15.4	16,498	10.7	8.6-12.8	33,627	11.6	10.0-13.3
<b>Income</b>									
Less than \$15,000	7,419	18.2	10.7-25.7	13,727	21.1	15.1-27.2	21,145	20.0	15.3-24.7
\$15,000 - 24,999	21,006	35.1	26.8-43.3	21,895	23.6	18.4-28.9	42,900	28.1	23.5-32.8
\$25,000 - 34,999	18,012	22.0	16.5-27.5	17,991	19.0	14.2-23.7	36,003	20.4	16.8-24.0
\$35,000 - 49,999	14,468	16.5	12.0-21.0	14,298	17.1	12.4-21.7	28,766	16.8	13.6-20.0
\$50,000 - 74,999	18,301	18.0	13.4-22.6	13,965	14.9	10.8-19.0	32,266	16.5	13.4-19.6
\$75,000+	24,445	11.8	9.3-14.4	15,741	9.9	7.3-12.4	40,185	11.0	9.2-12.8

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

# CHAPTER 18: Diabetes



**Figure 18.2 Prevalence of Diabetes by County: WVBRFSS, 2018-2022**



## CHAPTER 18: Pre-diabetes

### Pre-Diabetes or Borderline Diabetes

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

**Prevalence** **WV: 13.3%** (95% CI: 12.0-14.6)

Because this question is part of a state selected optional module and complete national data are not available, a U.S. comparison was not conducted.

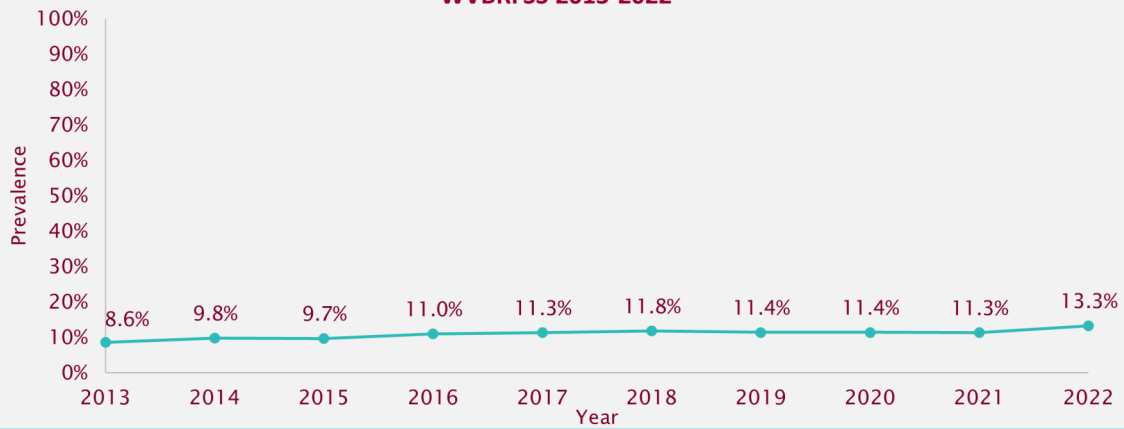
**Table 18.2 Prevalence of Pre-Diabetes or Borderline Diabetes by Demographic Characteristics: WBRFSS, 2022**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	77,966	<b>14.3</b>	12.3-16.3	70,330	<b>12.4</b>	10.7-14.1	148,296	<b>13.3</b>	12.0-14.6
<b>Age</b>									
18-24	5,800	<b>8.1*</b>	2.5-13.7	8,508	<b>12.4*</b>	4.7-20.2	14,308	<b>10.2</b>	5.4-15.0
25-34	4,600	<b>4.8*</b>	1.3-8.4	7,150	<b>8.1</b>	4.1-12.1	11,750	<b>6.4</b>	3.7-9.1
35-44	10,261	<b>11.4</b>	7.0-15.8	5,878	<b>6.6</b>	3.6-9.5	16,139	<b>9.0</b>	6.3-11.7
45-54	15,235	<b>18.1</b>	12.8-23.4	14,079	<b>17.3</b>	12.7-21.9	29,314	<b>17.7</b>	14.2-21.2
55-64	15,900	<b>19.1</b>	13.7-24.4	13,579	<b>15.1</b>	10.8-19.4	29,479	<b>17.0</b>	13.6-20.4
65+	25,767	<b>22.2</b>	18.0-26.4	20,526	<b>14.1</b>	11.4-16.7	46,293	<b>17.7</b>	15.3-20.1
<b>Education</b>									
Less than H.S.	12,254	<b>19.0</b>	11.3-26.7	6,057	<b>11.5</b>	5.7-17.4	18,311	<b>15.6</b>	10.6-20.7
H.S. or G.E.D.	33,604	<b>14.6</b>	11.6-17.5	25,619	<b>12.0</b>	8.9-15.0	59,223	<b>13.3</b>	11.2-15.4
Some Post-H.S.	21,149	<b>15.4</b>	11.1-19.7	22,560	<b>13.4</b>	10.2-16.6	43,709	<b>14.3</b>	11.7-16.9
College Graduate	10,959	<b>10.0</b>	7.1-12.8	15,667	<b>11.9</b>	9.2-14.6	26,627	<b>11.0</b>	9.0-13.0
<b>Income</b>									
Less than \$15,000	5,061	<b>15.7</b>	7.1-24.3	6,149	<b>12.4</b>	6.6-18.2	11,210	<b>13.7</b>	8.8-18.6
\$15,000 - 24,999	5,897	<b>15.4</b>	8.7-22.1	9,018	<b>13.8</b>	8.7-18.8	14,916	<b>14.4</b>	10.3-18.4
\$25,000 - 34,999	9,516	<b>16.2</b>	10.0-22.4	10,416	<b>14.3</b>	9.0-19.6	19,932	<b>15.1</b>	11.1-19.2
\$35,000 - 49,999	14,246	<b>21.1</b>	14.0-28.3	8,233	<b>12.7</b>	8.5-16.8	22,479	<b>17.0</b>	12.8-21.2
\$50,000 - 74,999	12,451	<b>16.0</b>	10.3-21.7	9,422	<b>12.4</b>	8.2-16.5	21,872	<b>14.2</b>	10.7-17.7
\$75,000+	21,615	<b>12.4</b>	9.4-15.3	13,231	<b>9.5</b>	6.7-12.3	34,846	<b>11.1</b>	9.0-13.2

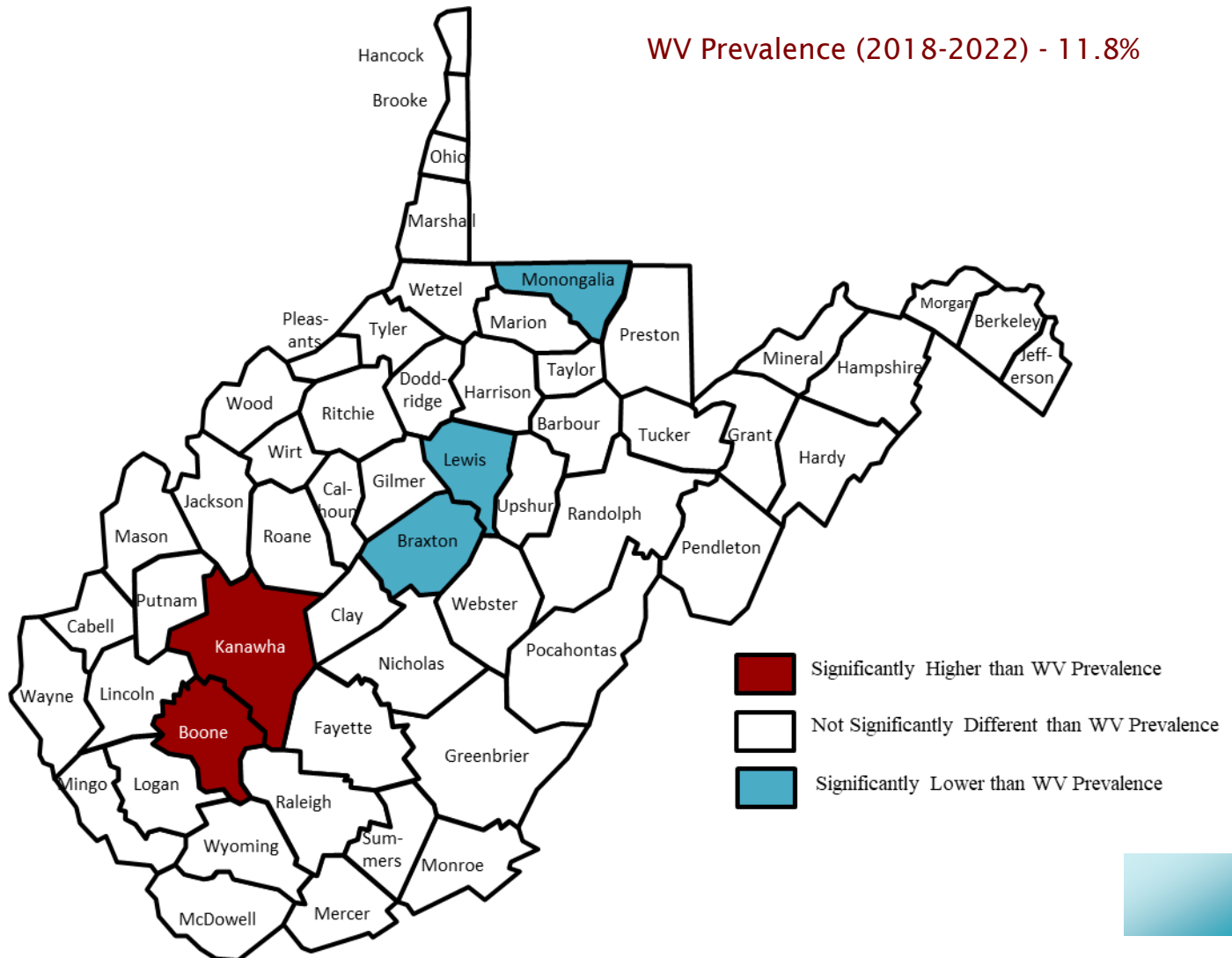
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

# CHAPTER 18: Pre-diabetes

**FIGURE 18.3 PREVALENCE OF PRE-DIABETES OR BORDERLINE DIABETES BY YEAR, WVBRFSS 2013-2022**



**Figure 18.4 Prevalence of Pre-diabetes or Borderline Diabetes by County: WVBRFSS, 2018-2022**



# CHAPTER 19: Cancer

## Skin Cancer Prevalence

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

**Prevalence** WV: 7.7% (95% CI: 6.9-8.4)

U.S.: 5.3% (95% CI: 5.1-5.4)

The West Virginia prevalence of skin cancer was significantly higher than the U.S. prevalence. West Virginia ranked the second highest among the 54 BRFSS participants.

**Table 19.1 Prevalence of Skin Cancer by Demographic Characteristics: WVBRFSS, 2022**

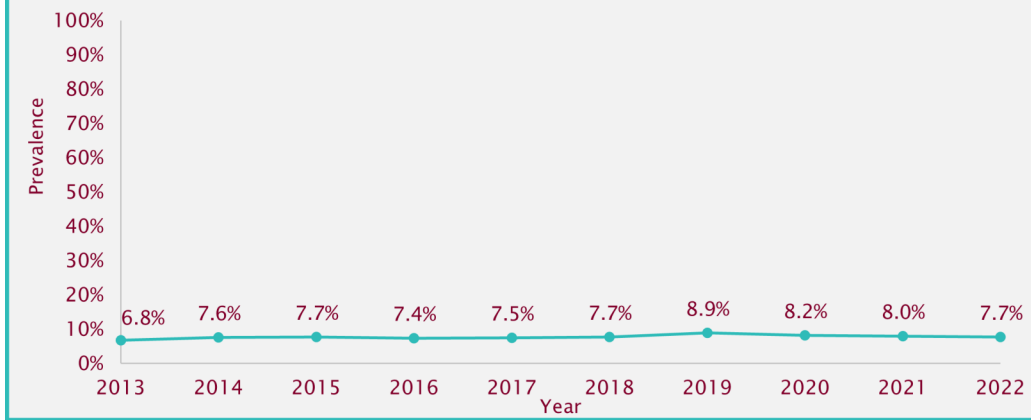
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	49,359	7.1	6.0-8.2	58,916	8.2	7.1-9.3	108,275	7.7	6.9-8.4
<b>Age</b>									
18-24	1,324	1.6*	0.0-3.8	1,826	2.4*	0.0-5.9	3,150	2.0*	0.0-4.0
25-34	475	0.4*	0.0-1.3	.	.	.	475	0.2*	0.0-0.7
35-44	297	0.3*	0.0-0.8	2,584	2.5*	0.8-4.3	2,880	1.4*	0.5-2.3
45-54	4,640	4.5*	1.8-7.2	6,275	6.0	3.5-8.5	10,915	5.2	3.4-7.1
55-64	11,112	9.5	6.5-12.5	10,328	8.4	5.8-10.9	21,440	8.9	7.0-10.9
65+	31,511	18.1	15.1-21.1	37,529	18.0	15.3-20.8	69,040	18.1	16.0-20.1
<b>Education</b>									
Less than H.S.	7,173	8.2	3.6-12.7	9,420	11.5	6.7-16.2	16,593	9.8	6.5-13.0
H.S. or G.E.D.	18,182	6.2	4.7-7.7	19,415	7.3	5.6-8.9	37,597	6.7	5.6-7.8
Some Post-H.S.	12,326	6.9	4.8-9.0	18,231	8.5	6.4-10.7	30,557	7.8	6.3-9.3
College Graduate	11,600	8.7	6.6-10.7	11,626	7.5	5.8-9.3	23,227	8.1	6.7-9.4
<b>Income</b>									
Less than \$15,000	2,654	6.5*	1.5-11.6	4,383	6.8	3.3-10.2	7,037	6.7	3.8-9.6
\$15,000 - 24,999	4,384	7.6	3.7-11.6	9,679	10.6	6.3-14.8	14,063	9.4	6.4-12.5
\$25,000 - 34,999	5,536	6.8	3.8-9.8	7,495	7.9	5.0-10.8	13,031	7.4	5.3-9.5
\$35,000 - 49,999	5,777	6.7	3.9-9.5	6,157	7.4	4.3-10.4	11,934	7.0	5.0-9.1
\$50,000 - 74,999	8,610	8.5	5.7-11.3	8,987	9.7	6.2-13.2	17,598	9.1	6.8-11.3
\$75,000+	13,127	6.4	4.7-8.1	12,008	7.5	5.5-9.5	25,134	6.9	5.6-8.2

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

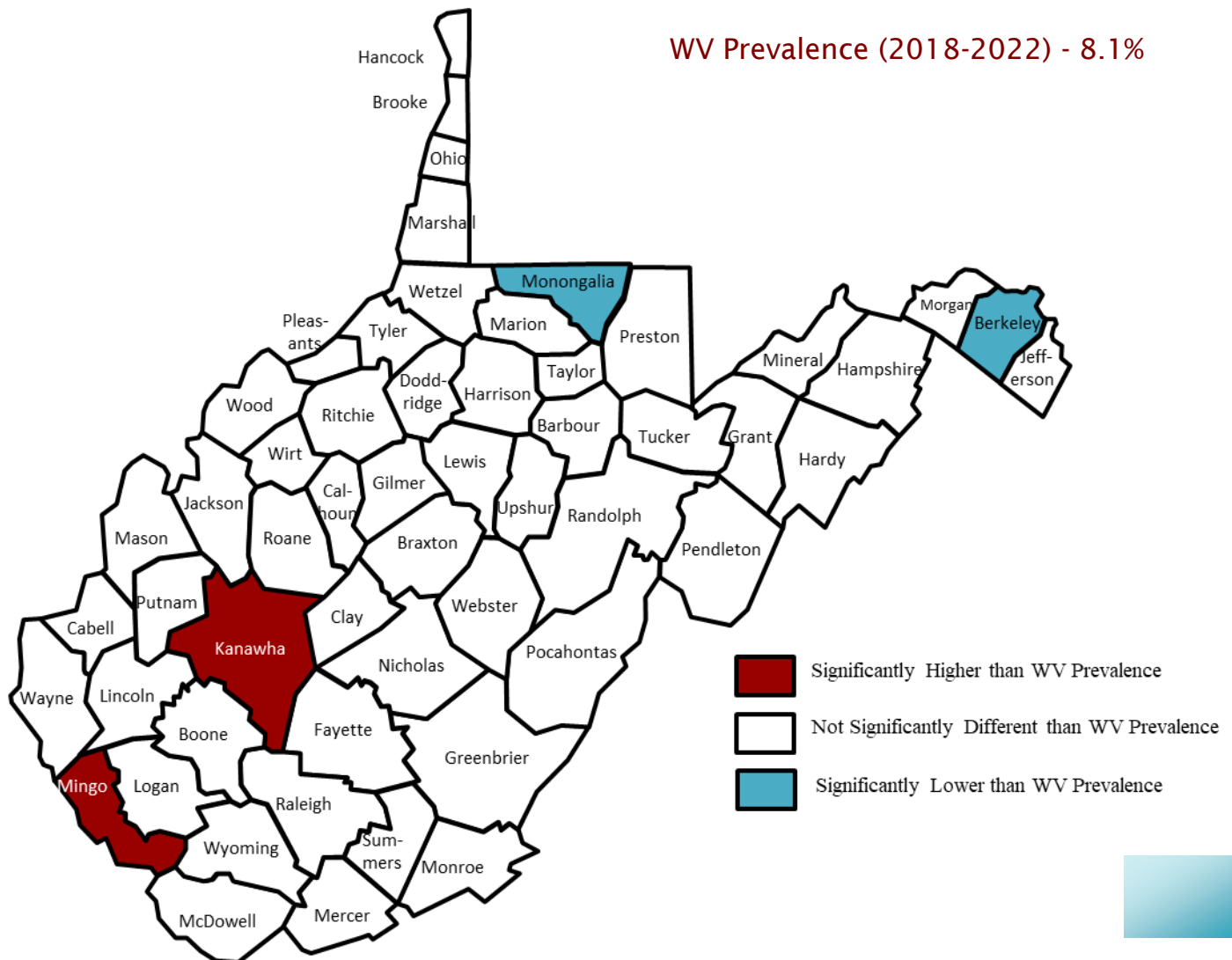


# CHAPTER 19: Cancer

**FIGURE 19.1 PREVALENCE OF SKIN CANCER BY YEAR, WVBRFSS 2013-2022**



**Figure 19.2 Prevalence of Skin Cancer by County: WVBRFSS, 2018-2022**



# CHAPTER 19: Cancer

## 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: 10.8%** (95% CI: 9.9-11.7)

**U.S.: 8.1%** (95% CI: 8.0-8.3)

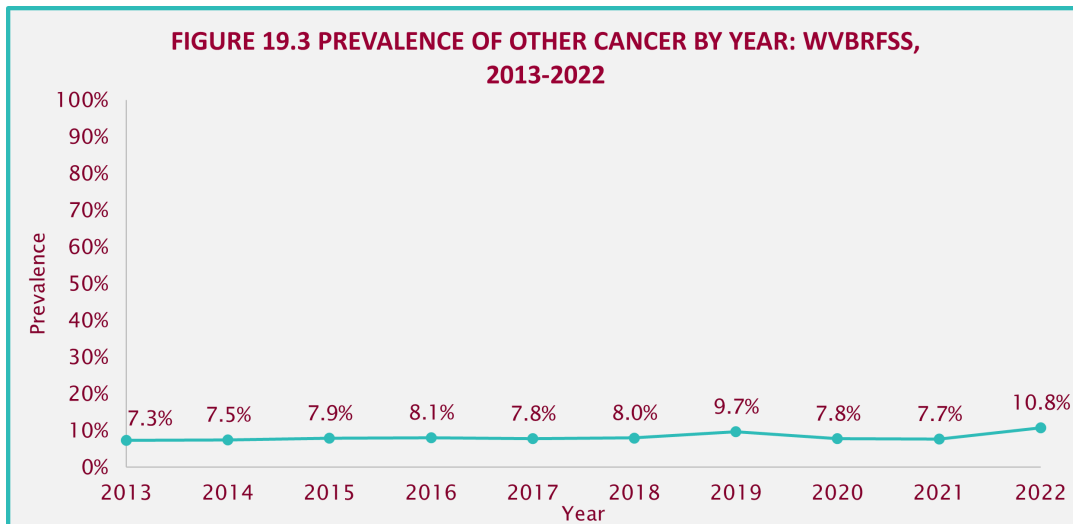
The West Virginia prevalence of other cancer was significantly higher than the U.S. prevalence. West Virginia ranked the highest among the 54 BRFSS participants.

**Table 19.2 Prevalence of Other Cancer by Demographic Characteristics: WVBRFSS, 2022**

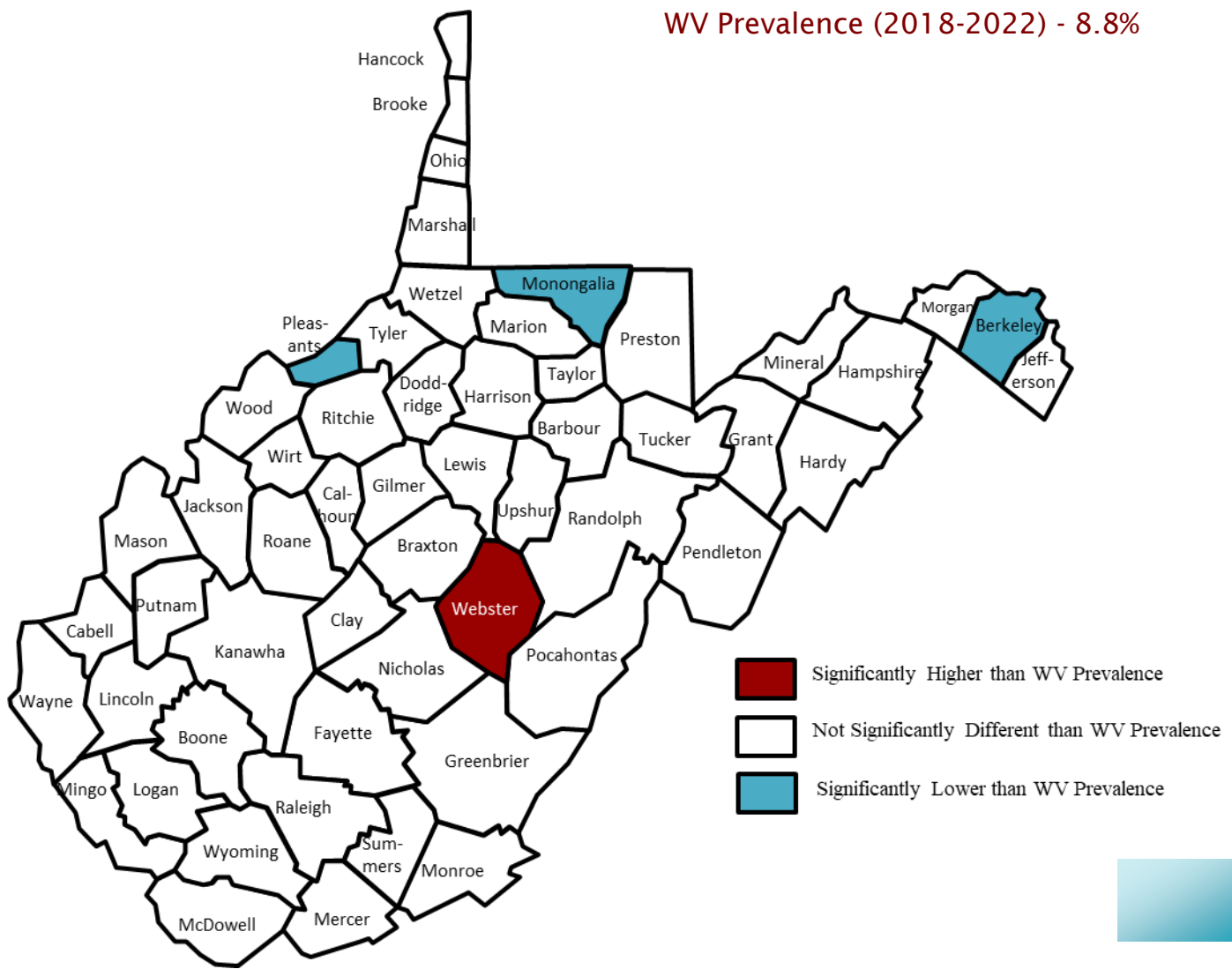
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	64,860	<b>9.3</b>	8-10.5	88,337	<b>12.3</b>	10.9-13.7	153,197	<b>10.8</b>	9.9-11.7
<b>Age</b>									
18-24	714	<b>0.9*</b>	0.0-2.5	.	.	.	714	<b>0.4*</b>	0.0-1.3
25-34	951	<b>0.9*</b>	0.0-2.1	3,929	<b>4.0*</b>	1.1-6.8	4,880	<b>2.4*</b>	0.8-3.9
35-44	1,006	<b>1.0*</b>	0.0-2.1	6,275	<b>6.2</b>	3.5-8.9	7,281	<b>3.5</b>	2.0-5.0
45-54	3,156	<b>3.0</b>	1.3-4.8	11,218	<b>10.7</b>	7.0-14.4	14,373	<b>6.9</b>	4.8-9.0
55-64	11,220	<b>9.6</b>	6.4-12.8	21,144	<b>17.0</b>	13.1-21.0	32,364	<b>13.4</b>	10.8-16.0
65+	47,654	<b>26.9</b>	23.2-30.5	45,427	<b>21.7</b>	18.8-24.7	93,080	<b>24.1</b>	21.8-26.4
<b>Education</b>									
Less than H.S.	11,515	<b>13.0</b>	7.4-18.5	15,343	<b>18.7</b>	12.5-24.9	26,858	<b>15.7</b>	11.6-19.8
H.S. or G.E.D.	23,239	<b>7.8</b>	6.0-9.7	34,069	<b>12.7</b>	10.3-15.0	57,308	<b>10.1</b>	8.7-11.6
Some Post-H.S.	17,212	<b>9.6</b>	7.3-12.0	24,962	<b>11.7</b>	9.3-14.0	42,174	<b>10.7</b>	9.1-12.4
College Graduate	12,894	<b>9.6</b>	7.4-11.8	13,885	<b>9.0</b>	7.1-10.9	26,779	<b>9.3</b>	7.9-10.7
<b>Income</b>									
Less than \$15,000	1,859	<b>4.6*</b>	1.3-7.9	11,865	<b>18.6</b>	12.6-24.6	13,723	<b>13.2</b>	9.2-17.1
\$15,000 - 24,999	6,915	<b>11.8</b>	6.8-16.8	14,089	<b>15.3</b>	10.8-19.7	21,004	<b>13.9</b>	10.6-17.3
\$25,000 - 34,999	12,168	<b>14.8</b>	10.3-19.4	12,294	<b>13.0</b>	9.3-16.7	24,463	<b>13.8</b>	10.9-16.7
\$35,000 - 49,999	9,934	<b>11.4</b>	7.7-15.0	7,817	<b>9.3</b>	6.0-12.7	17,752	<b>10.4</b>	7.9-12.8
\$50,000 - 74,999	10,262	<b>10.1</b>	6.9-13.3	11,215	<b>12.0</b>	7.9-16.0	21,477	<b>11.0</b>	8.4-13.6
\$75,000+	10,282	<b>5.0</b>	3.4-6.6	13,258	<b>8.3</b>	6.1-10.6	23,540	<b>6.4</b>	5.1-7.8

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

# CHAPTER 19: Cancer



**Figure 19.4 Prevalence of Other Cancer by County: WVBRFSS, 2018-2022**



# CHAPTER 19: Cancer

## Overall Cancer Prevalence

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

**Prevalence** **WV: 16.0%** (95% CI: 14.9-17.1)  
**U.S.: 11.5%** (95% CI: 11.3-11.7)

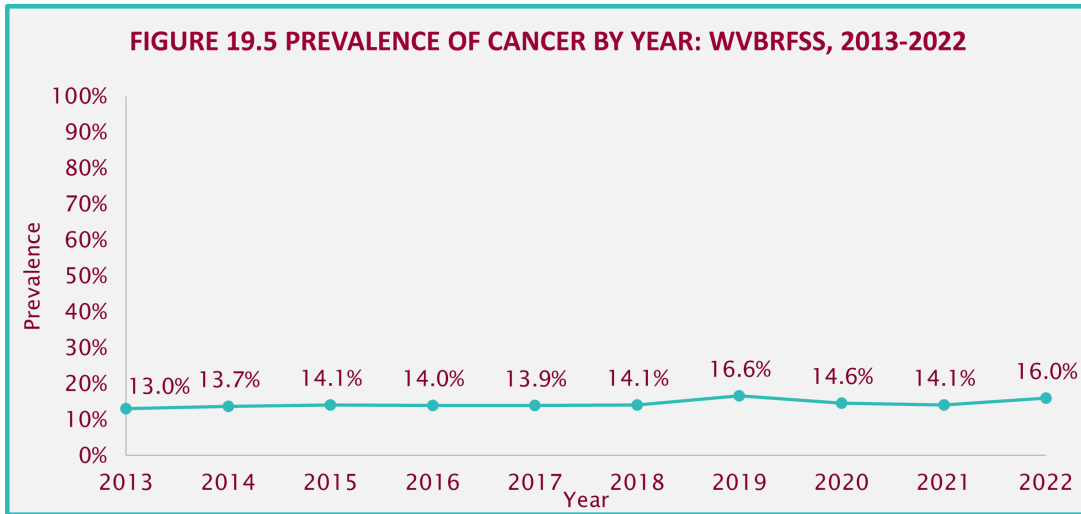
The West Virginia prevalence of cancer was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 54 BRFSS participants.

**Table 19.3 Prevalence of Cancer by Demographic Characteristics: WVBRFSS, 2022**

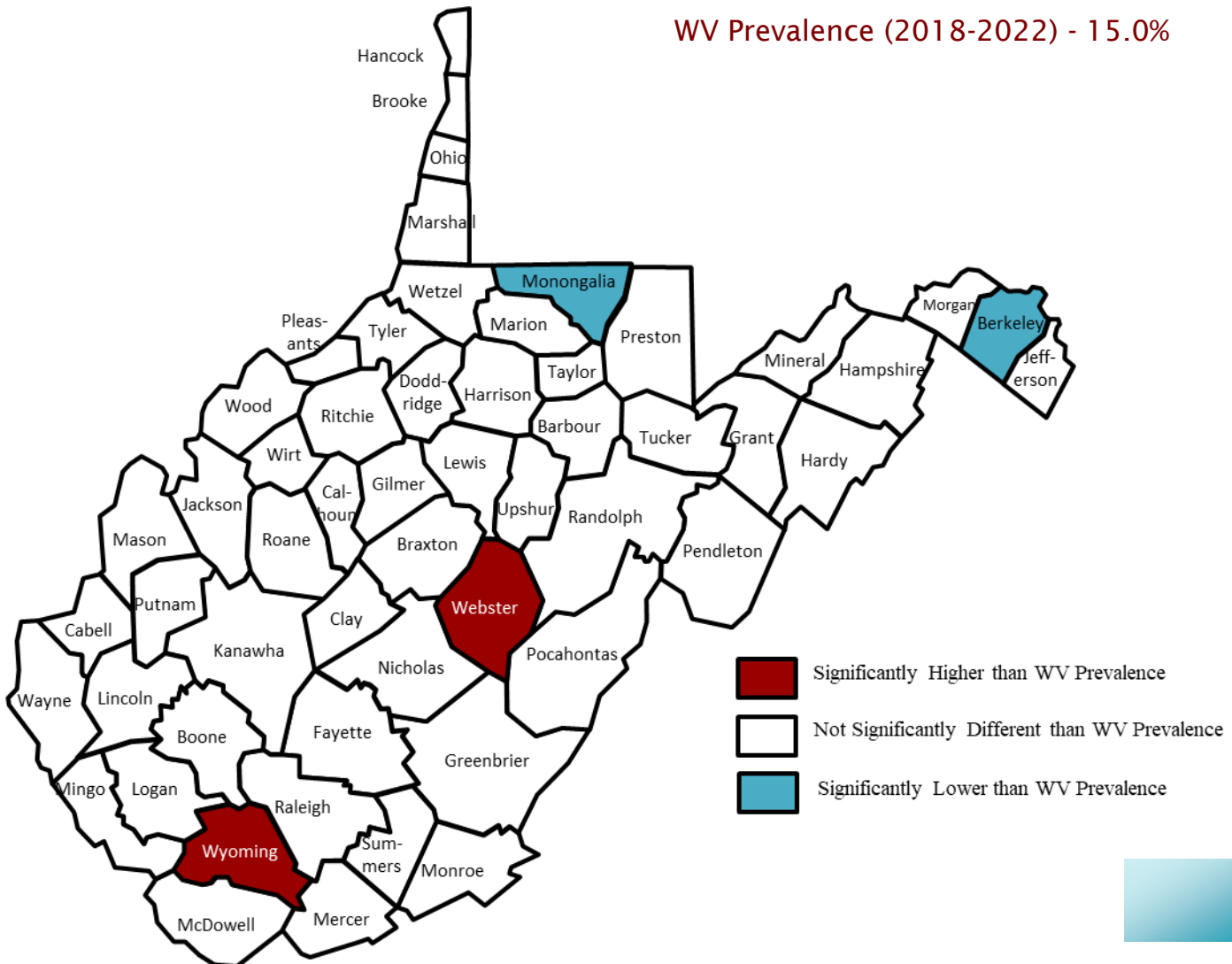
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	97,614	14.0	12.5-15.6	128,105	17.9	16.2-19.5	225,719	16.0	14.9-17.1
<b>Age</b>									
18-24	2,038	2.4*	0.0-5.2	1,826	2.4*	0.0-5.9	3,864	2.4*	0.2-4.6
25-34	951	0.9*	0.0-2.1	3,929	4.0*	1.1-6.9	4,880	2.4*	0.8-3.9
35-44	1,303	1.2*	0.0-2.6	8,060	7.9	4.9-11.0	9,363	4.5	2.9-6.2
45-54	7,468	7.2	4.1-10.3	15,756	15.1	11.0-19.1	23,223	11.2	8.6-13.7
55-64	19,262	16.6	12.6-20.5	27,933	22.7	18.4-26.9	47,195	19.7	16.8-22.6
65+	66,432	37.9	34.0-41.8	69,955	33.7	30.3-37.0	136,387	35.6	33.0-38.2
<b>Education</b>									
Less than H.S.	15,753	18.0	11.6-24.3	20,653	25.4	18.5-32.3	36,406	21.5	16.8-26.2
H.S. or G.E.D.	36,190	12.3	10.1-14.5	46,332	17.3	14.7-20.0	82,522	14.7	13.0-16.4
Some Post-H.S.	25,146	14.1	11.2-17.1	38,096	17.9	14.9-20.8	63,242	16.2	14.1-18.3
College Graduate	20,447	15.2	12.6-17.9	22,722	14.8	12.4-17.1	43,168	15.0	13.2-16.8
<b>Income</b>									
Less than \$15,000	4,282	10.6	4.7-16.5	13,518	21.2	15.0-27.5	17,801	17.1	12.6-21.6
\$15,000 - 24,999	10,394	17.9	11.9-23.9	19,355	21.2	15.8-26.6	29,749	19.9	15.8-24.0
\$25,000 - 34,999	15,750	19.2	14.1-24.4	17,041	18.1	13.8-22.3	32,791	18.6	15.3-21.9
\$35,000 - 49,999	12,960	15.0	10.8-19.2	12,632	15.1	10.9-19.3	25,592	15.0	12.1-18.0
\$50,000 - 74,999	15,383	15.2	11.3-19.0	18,545	19.9	15.0-24.9	33,929	17.5	14.3-20.6
\$75,000+	20,401	9.9	7.7-12.1	22,479	14.1	11.3-16.9	42,880	11.7	10.0-13.5

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

# CHAPTER 19: Cancer



**Figure 19.6 Prevalence of Cancer by County: WVBRFSS, 2018-2022**



# CHAPTER 20: Respiratory Disease

## 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: 18.4%** (95% CI: 17.0-19.8)  
**U.S.: 15.2%** (95% CI: 15.0-15.5)

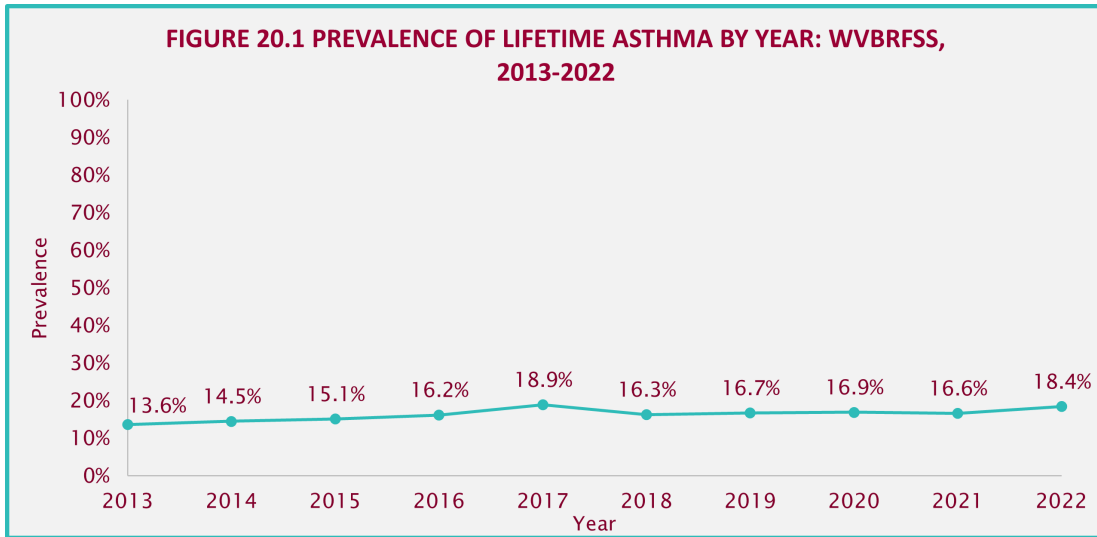
The West Virginia prevalence of lifetime asthma was significantly higher than the U.S. prevalence. West Virginia ranked the fifth highest among 54 BRFSS participants.

**Table 20.1 Prevalence of Lifetime Asthma by Demographic Characteristics: WVBRFSS, 2022**

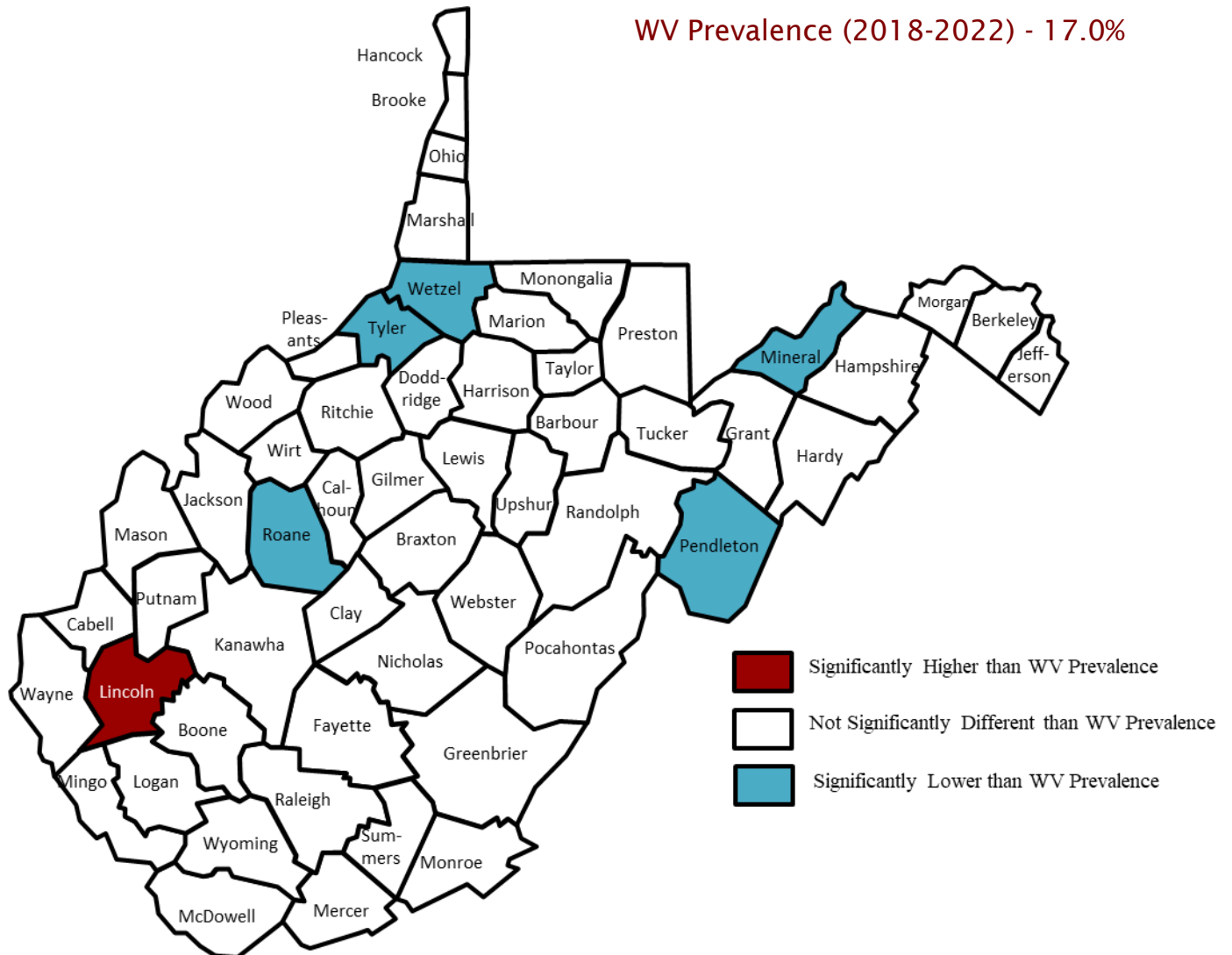
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	109,999	<b>15.7</b>	13.7-17.8	150,583	<b>20.9</b>	19.1-22.8	260,582	<b>18.4</b>	17.0-19.8
<b>Age</b>									
18-24	24,781	<b>30.5</b>	20.8-40.2	16,886	<b>22.7</b>	14.2-31.3	41,667	<b>26.8</b>	20.2-33.3
25-34	15,830	<b>14.8</b>	8.7-20.8	16,484	<b>16.7</b>	12.1-21.3	32,314	<b>15.7</b>	11.9-19.5
35-44	18,244	<b>17.4</b>	12.1-22.7	22,133	<b>21.6</b>	16.7-26.5	40,377	<b>19.5</b>	15.9-23.1
45-54	17,207	<b>16.5</b>	11.8-21.2	25,665	<b>24.4</b>	19.6-29.1	42,873	<b>20.4</b>	17.1-23.8
55-64	16,677	<b>14.2</b>	10.5-17.9	27,722	<b>22.4</b>	18.1-26.7	44,399	<b>18.4</b>	15.5-21.3
65+	16,122	<b>9.1</b>	7.0-11.1	40,125	<b>19.2</b>	16.3-22.2	56,247	<b>14.6</b>	12.7-16.4
<b>Education</b>									
Less than H.S.	14,945	<b>17.0</b>	10.8-23.1	21,520	<b>26.6</b>	19.5-33.7	36,465	<b>21.6</b>	16.9-26.3
H.S. or G.E.D.	45,388	<b>15.3</b>	12.1-18.6	56,040	<b>20.9</b>	17.6-24.2	101,428	<b>18.0</b>	15.7-20.3
Some Post-H.S.	30,671	<b>17.2</b>	12.7-21.6	42,990	<b>20.1</b>	16.9-23.3	73,661	<b>18.8</b>	16.1-21.4
College Graduate	18,995	<b>14.2</b>	10.8-17.5	29,796	<b>19.2</b>	16.2-22.2	48,791	<b>16.9</b>	14.6-19.1
<b>Income</b>									
Less than \$15,000	11,955	<b>29.5*</b>	18.5-40.4	21,805	<b>34.2</b>	26.7-41.7	33,760	<b>32.4</b>	26.1-38.6
\$15,000 - 24,999	12,473	<b>20.8</b>	14.2-27.5	22,752	<b>24.7</b>	18.9-30.4	35,225	<b>23.2</b>	18.8-27.5
\$25,000 - 34,999	16,115	<b>20.0</b>	13.1-26.9	16,353	<b>17.3</b>	12.5-22.0	32,467	<b>18.5</b>	14.4-22.6
\$35,000 - 49,999	15,122	<b>17.2</b>	11.4-23.1	17,720	<b>21.2</b>	15.9-26.4	32,842	<b>19.1</b>	15.2-23.1
\$50,000 - 74,999	11,111	<b>10.9</b>	7.0-14.8	16,283	<b>17.4</b>	12.8-22.0	27,394	<b>14.0</b>	11.0-17.0
\$75,000+	23,448	<b>11.4</b>	8.3-14.4	24,772	<b>15.5</b>	12.4-18.6	48,221	<b>13.2</b>	11.0-15.4

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

# CHAPTER 20: Respiratory Disease



**Figure 20.2 Prevalence of Lifetime Asthma by County: WVBRFSS, 2018-2022**



## CHAPTER 20: Respiratory Disease

### Current Asthma

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

**Prevalence** **WV: 12.9%** (95% CI: 11.7-14.1)  
**U.S.: 9.9%** (95% CI: 9.7-10.1)

The West Virginia prevalence of current asthma was significantly higher than the U.S. prevalence. West Virginia ranked the fifth highest among 54 BRFSS participants.

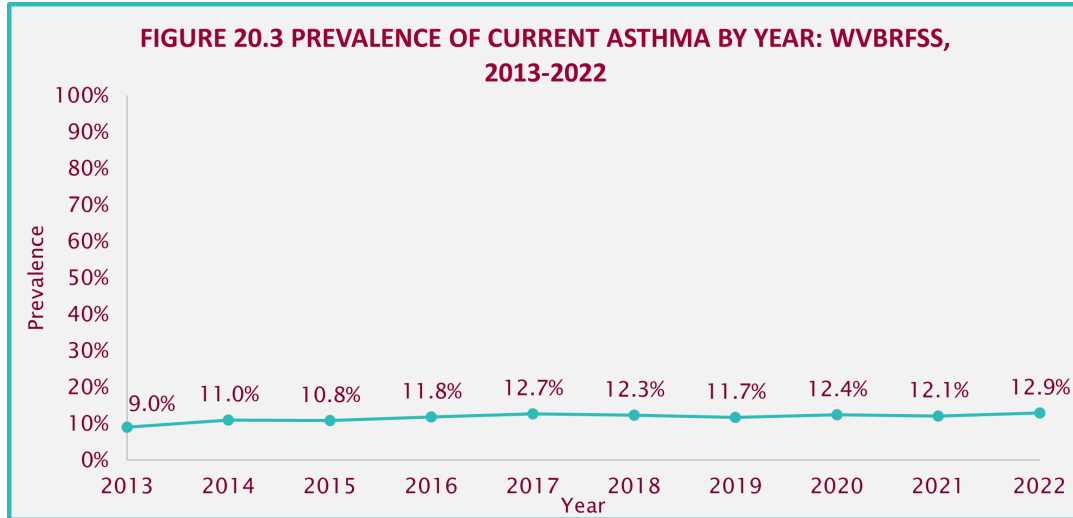
**Table 20.2 Prevalence of Current Asthma by Demographic Characteristics: WVBRFSS, 2022**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	64,146	<b>9.3</b>	7.6-10.9	117,249	<b>16.4</b>	14.7-18.2	181,395	<b>12.9</b>	11.7-14.1
<b>Age</b>									
18-24	12,212	<b>15.2</b>	6.9-23.5	13,686	<b>18.9</b>	10.6-27.1	25,898	<b>16.9</b>	11.1-22.8
25-34	7,240	<b>6.8*</b>	2.2-11.4	10,124	<b>10.4</b>	6.6-14.2	17,364	<b>8.5</b>	5.5-11.5
35-44	8,403	<b>8.1</b>	4.5-11.8	17,260	<b>16.9</b>	12.3-21.5	25,663	<b>12.5</b>	9.5-15.4
45-54	11,330	<b>10.9</b>	6.8-14.9	21,182	<b>20.2</b>	15.8-24.6	32,512	<b>15.5</b>	12.5-18.6
55-64	13,174	<b>11.3</b>	8.0-14.6	23,584	<b>19.1</b>	15.0-23.1	36,758	<b>15.3</b>	12.6-17.9
65+	11,552	<b>6.5</b>	4.8-8.3	30,408	<b>14.7</b>	12.2-17.2	41,960	<b>10.9</b>	9.3-12.5
<b>Education</b>									
Less than H.S.	8,268	<b>9.6</b>	4.9-14.2	17,355	<b>21.8</b>	15.2-28.4	25,623	<b>15.4</b>	11.4-19.5
H.S. or G.E.D.	26,456	<b>9.0</b>	6.5-11.5	44,583	<b>16.8</b>	13.8-19.9	71,039	<b>12.7</b>	10.7-14.7
Some Post-H.S.	20,223	<b>11.4</b>	7.4-15.3	32,252	<b>15.2</b>	12.3-18.0	52,474	<b>13.4</b>	11.1-15.8
College Graduate	9,199	<b>6.9</b>	4.7-9.1	22,822	<b>14.8</b>	12.1-17.5	32,022	<b>11.1</b>	9.3-12.9
<b>Income</b>									
Less than \$15,000	9,224	<b>22.8*</b>	12.2-33.4	19,642	<b>30.8</b>	23.4-38.2	28,865	<b>27.7</b>	21.6-33.8
\$15,000 - 24,999	9,216	<b>15.7</b>	9.6-21.7	19,746	<b>21.5</b>	16.0-27.1	28,963	<b>19.2</b>	15.1-23.4
\$25,000 - 34,999	9,433	<b>11.9</b>	6.5-17.4	14,215	<b>15.1</b>	10.6-19.7	23,648	<b>13.7</b>	10.1-17.2
\$35,000 - 49,999	7,964	<b>9.2</b>	4.9-13.5	13,711	<b>16.6</b>	12.0-21.1	21,675	<b>12.8</b>	9.7-15.9
\$50,000 - 74,999	5,773	<b>5.7</b>	3.0-8.4	12,234	<b>13.2</b>	9.0-17.4	18,006	<b>9.3</b>	6.8-11.8
\$75,000+	12,440	<b>6.1</b>	3.7-8.4	16,342	<b>10.3</b>	7.8-12.7	28,783	<b>7.9</b>	6.2-9.6

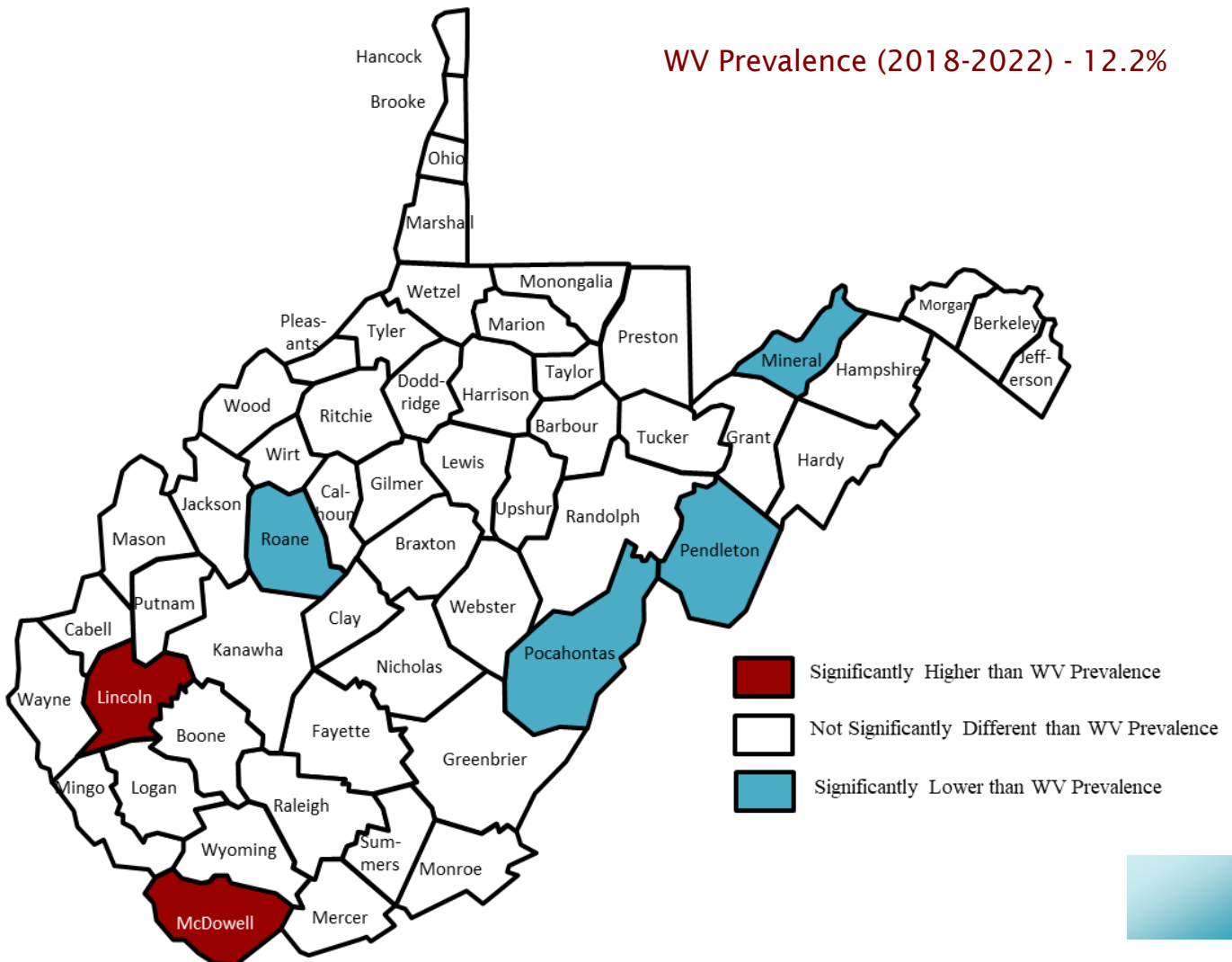
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.



# CHAPTER 20: Respiratory Disease



**Figure 20.4 Prevalence of Current Asthma by County: WVBRFSS, 2018-2022**



# CHAPTER 20: Respiratory Disease

## 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: 14.0%** (95% CI: 12.8-15.1)

**U.S.: 6.8%** (95% CI: 6.6-6.9)

The West Virginia prevalence of chronic obstructive pulmonary disease (COPD) was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 54 BRFSS participants.

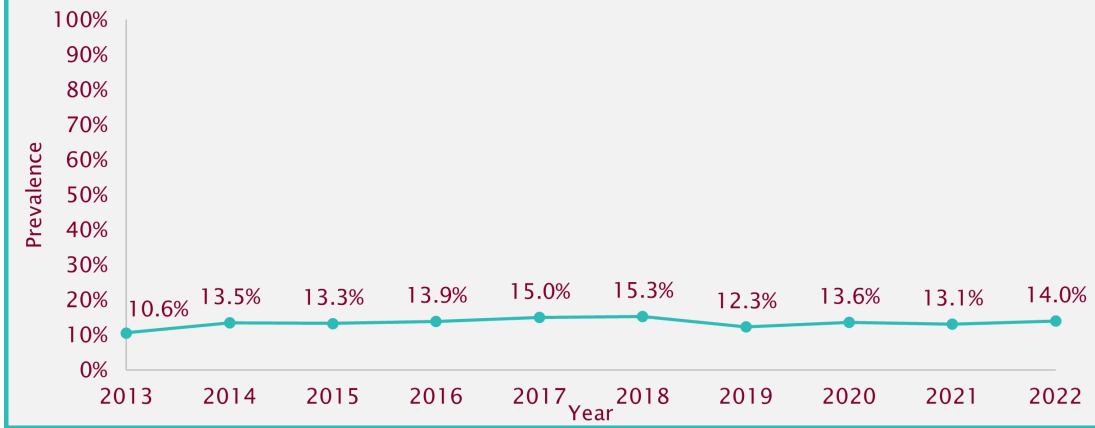
**Table 20.3 Prevalence of Chronic Obstructive Pulmonary Disease (COPD) by Demographic Characteristics: WVBRFSS, 2022**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	90,062	12.9	11.2-14.6	107,857	15.0	13.4-16.6	197,919	14.0	12.8-15.1
<b>Age</b>									
18-24	2,461	3.0*	0.0-7.0	7,750	10.2*	3.9-16.5	10,211	6.4	2.7-10.1
25-34	8,259	7.7*	2.1-13.4	3,474	3.6*	1.0-6.1	11,733	5.7	2.5-9.0
35-44	7,325	7.0	3.2-10.7	8,660	8.4	5.2-11.7	15,985	7.7	5.2-10.2
45-54	15,825	15.2	10.3-20.0	16,237	15.4	11.4-19.4	32,063	15.3	12.2-18.4
55-64	20,294	17.5	13.4-21.5	26,131	21.0	16.9-25.2	46,425	19.3	16.4-22.2
65+	35,664	20.1	17.0-23.2	45,411	21.8	18.9-24.8	81,075	21.0	18.9-23.2
<b>Education</b>									
Less than H.S.	24,344	27.5	20.0-35.0	27,477	33.3	25.6-40.9	51,821	30.3	24.9-35.7
H.S. or G.E.D.	36,054	12.2	9.8-14.5	40,754	15.2	12.8-17.7	76,808	13.6	11.9-15.3
Some Post-H.S.	21,494	12.1	8.5-15.7	29,080	13.6	11.0-16.2	50,573	12.9	10.8-15.1
College Graduate	8,171	6.1	4.4-7.7	10,405	6.7	5.1-8.4	18,576	6.4	5.3-7.6
<b>Income</b>									
Less than \$15,000	13,049	32.2*	20.4-44.0	20,477	32.2*	24.1-39.3	33,527	31.9	25.3-38.4
\$15,000 - 24,999	17,169	28.9	21.7-36.1	22,900	24.7	19.4-30.1	40,069	26.4	22.0-30.7
\$25,000 - 34,999	14,202	17.3	11.8-22.9	19,194	20.2	15.4-25.1	33,396	18.9	15.2-22.5
\$35,000 - 49,999	11,673	13.3	8.7-17.9	10,133	12.1	8.3-15.9	21,806	12.7	9.7-15.7
\$50,000 - 74,999	10,105	9.9	6.0-13.8	9,543	10.2	6.7-13.6	19,648	10.0	7.4-12.7
\$75,000+	9,670	4.7	2.7-6.6	6,004	3.8	2.1-5.4	15,674	4.3	3.0-5.6

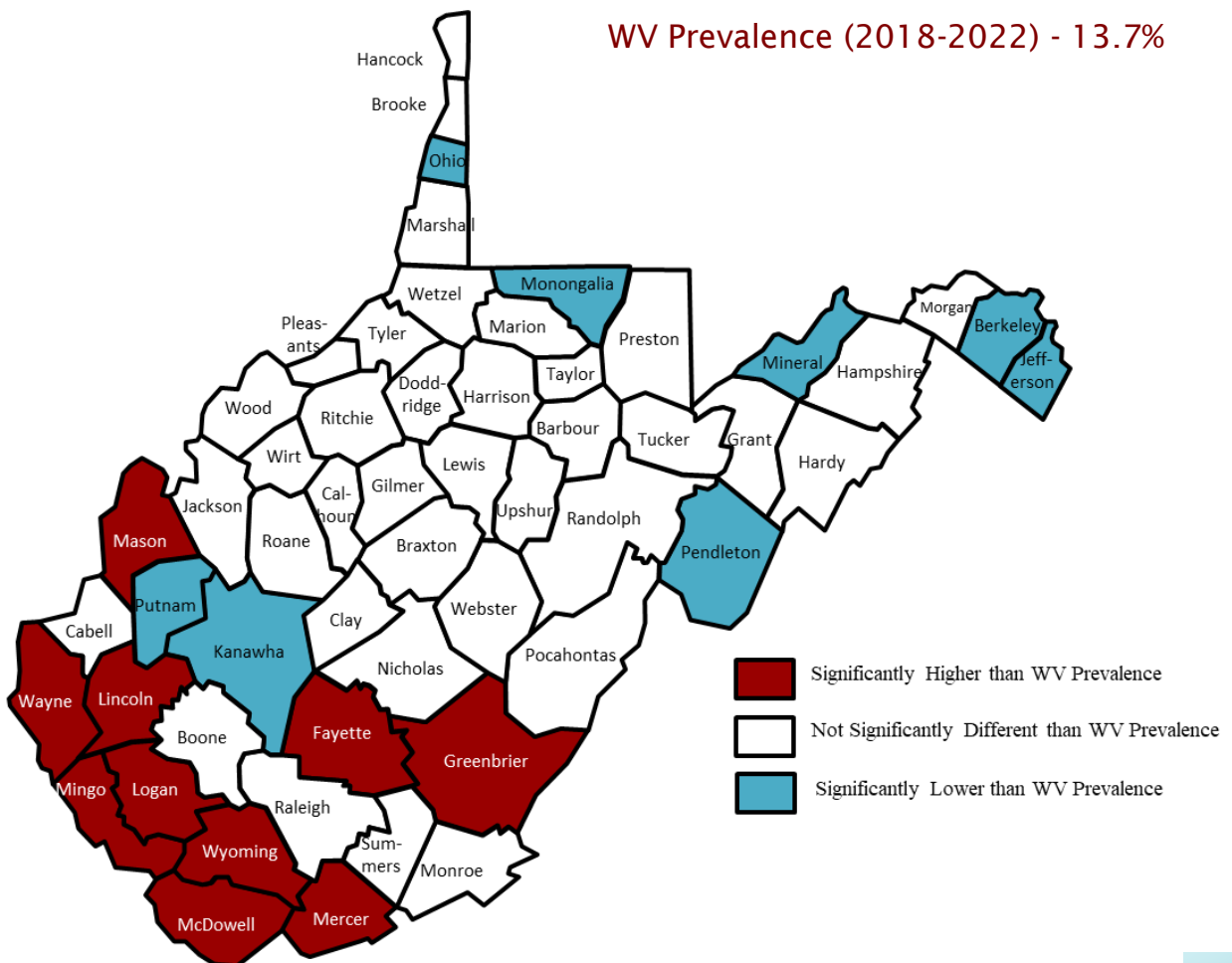
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.

# CHAPTER 20: Respiratory Disease

**FIGURE 20.5 PREVALENCE OF COPD BY YEAR: WVBRFSS, 2013-2022**



**Figure 20.6 Prevalence of Chronic Obstructive Pulmonary Disease (COPD) by County: WVBRFSS, 2018-2022**



# CHAPTER 21: Arthritis

## Arthritis Prevalence

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

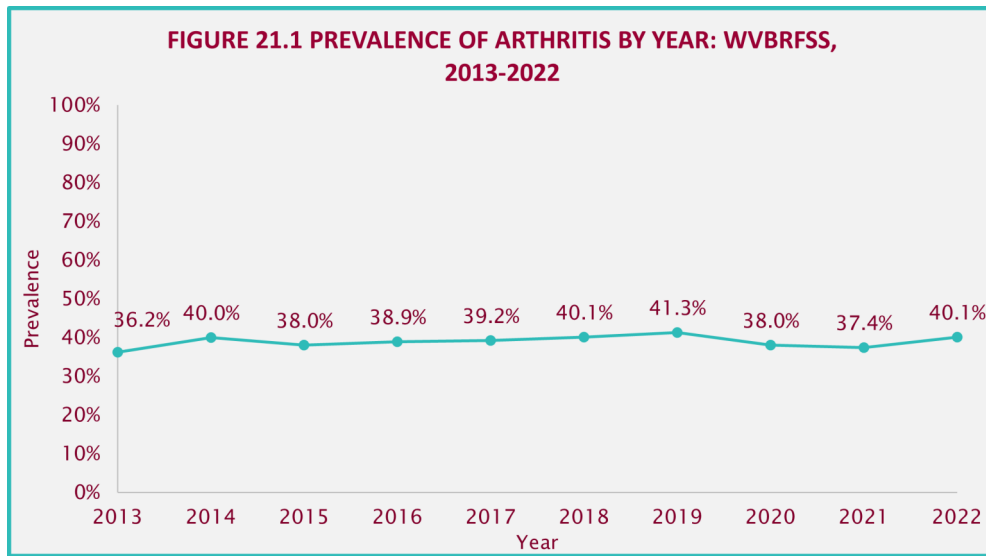
**Prevalence** **WV: 40.1%** (95% CI: 38.5-41.7)  
**U.S.: 26.6%** (95% CI: 26.4-26.9)  
 The West Virginia prevalence of arthritis was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 54 BRFSS participants.

**Table 21.1 Prevalence of Arthritis by Demographic Characteristics: WVBRFSS, 2022**

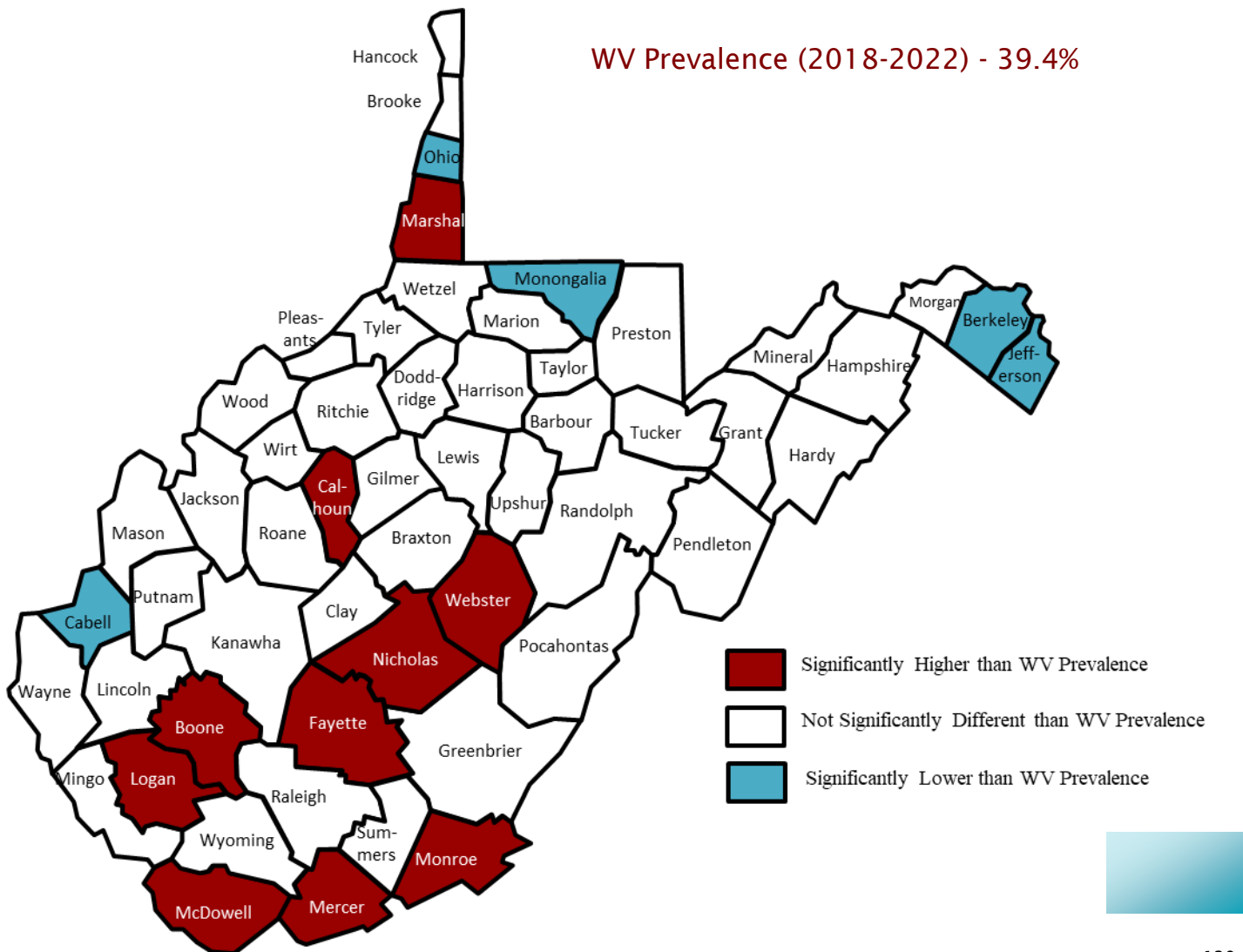
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	249,814	<b>35.9</b>	33.5-38.3	317,980	<b>44.2</b>	42-46.4	567,794	<b>40.1</b>	38.5-41.7
<b>Age</b>									
18-24	3,291	<b>4.0*</b>	0.0-8.1	5,171	<b>6.9*</b>	1.9-11.9	8,461	<b>5.4</b>	2.3-8.6
25-34	13,105	<b>12.2</b>	5.8-18.6	14,425	<b>14.6</b>	9.9-19.4	27,530	<b>13.4</b>	9.4-17.4
35-44	18,416	<b>17.7</b>	12.4-23.0	26,996	<b>26.3</b>	21.1-31.6	45,412	<b>22.0</b>	18.2-25.7
45-54	40,353	<b>38.6</b>	32.7-44.5	46,566	<b>44.1</b>	38.8-49.5	86,918	<b>41.4</b>	37.4-45.4
55-64	65,915	<b>56.6</b>	51.3-62.0	76,820	<b>61.9</b>	57.0-66.7	142,736	<b>59.3</b>	55.7-62.9
65+	106,651	<b>60.3</b>	56.4-64.3	145,800	<b>70.0</b>	66.8-73.2	252,451	<b>65.6</b>	63.0-68.1
<b>Education</b>									
Less than H.S.	45,643	<b>52.5</b>	43.9-61.1	49,343	<b>60.1</b>	52.0-68.2	94,987	<b>56.2</b>	50.2-62.1
H.S. or G.E.D.	107,997	<b>36.5</b>	32.7-40.3	122,303	<b>45.7</b>	41.9-49.5	230,300	<b>40.8</b>	38.1-43.6
Some Post-H.S.	57,672	<b>32.6</b>	28.0-37.2	93,899	<b>43.9</b>	39.8-47.9	151,571	<b>38.8</b>	35.7-41.8
College Graduate	38,150	<b>28.5</b>	24.8-32.2	51,744	<b>33.4</b>	29.9-36.9	89,894	<b>31.1</b>	28.6-33.7
<b>Income</b>									
Less than \$15,000	22,910	<b>56.2*</b>	44.7-67.7	37,409	<b>57.5</b>	49.2-65.9	60,318	<b>57.0</b>	50.2-63.8
\$15,000 - 24,999	31,422	<b>53.3</b>	44.6-62.0	47,922	<b>51.8</b>	45.2-58.5	79,344	<b>52.4</b>	47.1-57.7
\$25,000 - 34,999	32,674	<b>40.1</b>	33.1-47.1	48,075	<b>50.7</b>	44.5-56.8	80,749	<b>45.8</b>	41.1-50.5
\$35,000 - 49,999	33,523	<b>38.5</b>	31.5-45.4	36,633	<b>43.9</b>	37.5-50.3	70,156	<b>41.1</b>	36.4-45.9
\$50,000 - 74,999	37,581	<b>37.2</b>	30.8-43.7	38,065	<b>40.5</b>	34.7-46.4	75,646	<b>38.8</b>	34.4-43.2
\$75,000+	51,058	<b>24.8</b>	21.1-28.5	48,098	<b>30.1</b>	26.1-34.2	99,155	<b>27.1</b>	24.4-29.8

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

# CHAPTER 21: Arthritis



**Figure 21.2 Prevalence of Arthritis by County: WVBRFSS, 2018-2022**



# CHAPTER 22: 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?”

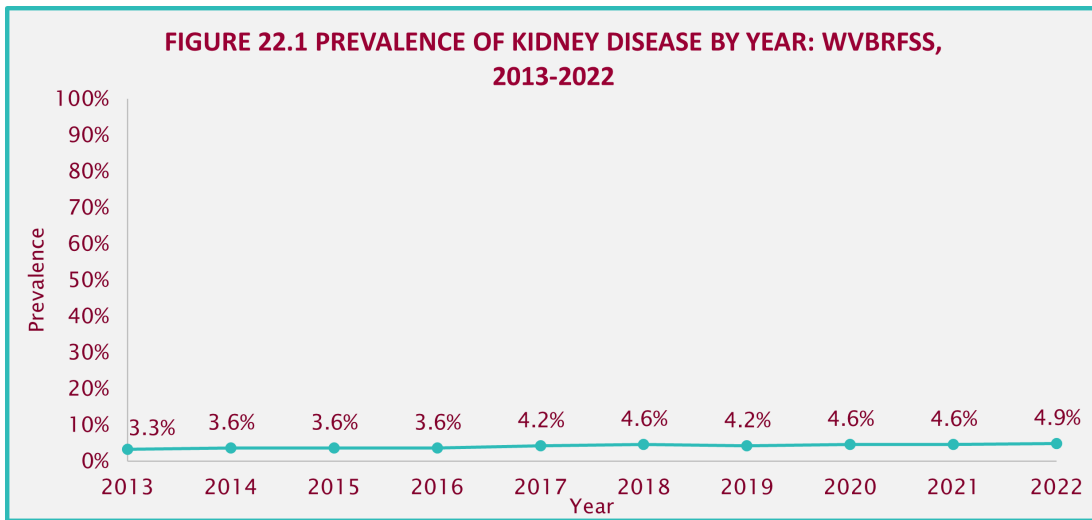
**Prevalence** **WV: 4.9%** (95% CI: 4.2-5.5)  
**U.S.: 3.7%** (95% CI: 3.6-3.8)  
 The West Virginia prevalence of kidney disease was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 54 BRFSS participants.

**Table 22.1 Prevalence of Kidney Disease by Demographic Characteristics: WVBRFSS, 2022**

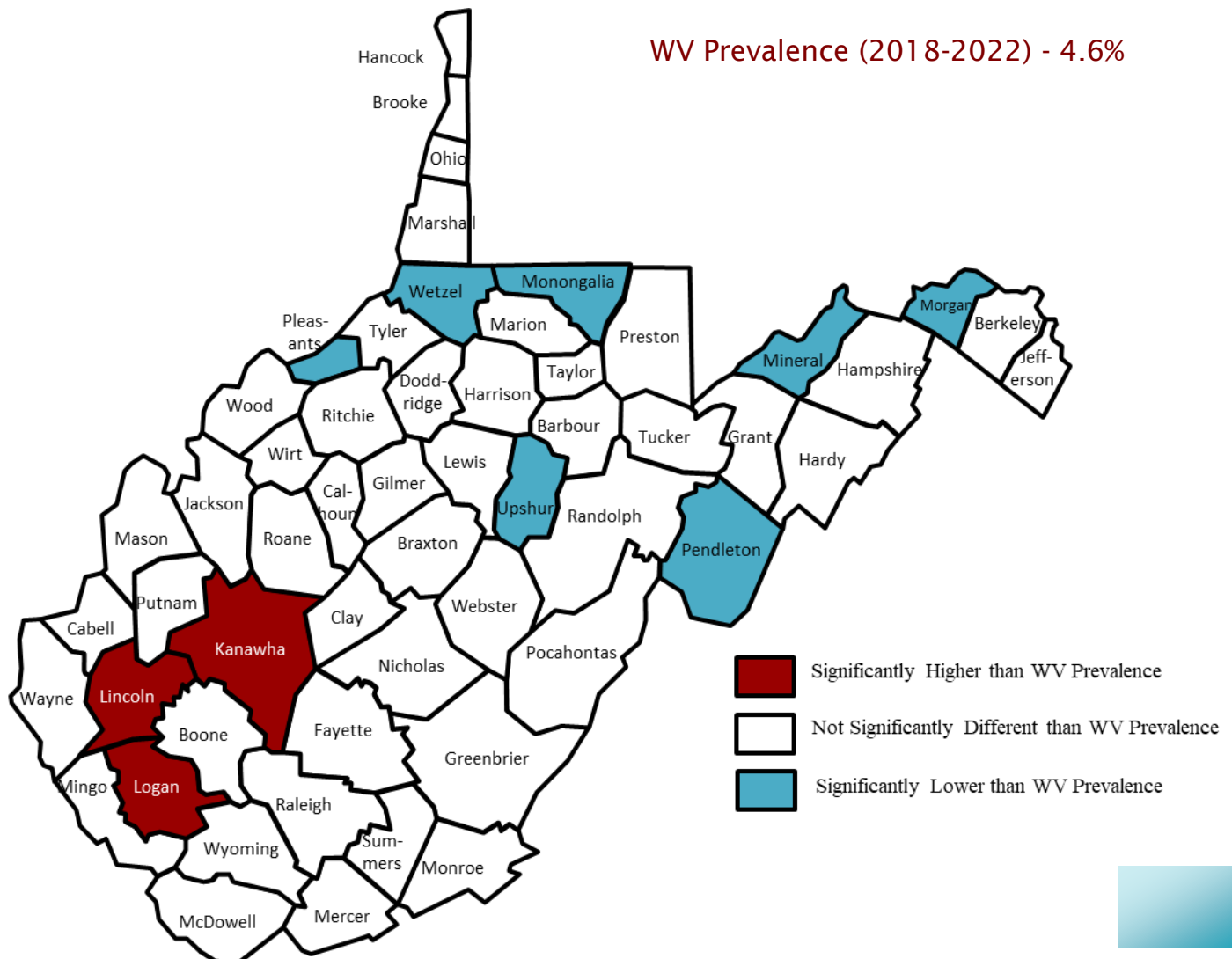
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	28,441	4.1	3.2-4.9	40,746	5.7	4.7-6.7	69,188	4.9	4.2-5.5
<b>Age</b>									
18-24	.	.	.	523	0.7*	0.0-2.1	523	0.3*	0.0-1.0
25-34	1,790	1.7*	0.0-4.3	977	1.0*	0.0-2.0	2,768	1.4*	0.0-2.8
35-44	728	0.7*	0.0-1.6	2,367	2.3*	0.8-3.9	3,095	1.5*	0.6-2.4
45-54	5,005	4.8	2.4-7.2	4,886	4.7	2.0-7.3	9,891	4.7	2.9-6.5
55-64	6,261	5.3	3.0-7.7	10,600	8.5	5.6-11.5	16,861	7.0	5.1-8.9
65+	14,656	8.3	6.3-10.3	21,393	10.3	8.0-12.7	36,049	9.4	7.8-11.0
<b>Education</b>									
Less than H.S.	3,985	4.6*	1.9-7.3	11,373	14.0	8.3-19.7	15,358	9.1	6.0-12.3
H.S. or G.E.D.	12,510	4.2	2.7-5.7	15,209	5.7	4.1-7.2	27,719	4.9	3.8-6.0
Some Post-H.S.	7,490	4.2	2.7-5.8	9,809	4.6	3.2-6.0	17,300	4.4	3.4-5.5
College Graduate	4,457	3.3	2.0-4.6	4,354	2.8	1.8-3.9	8,811	3.1	2.2-3.9
<b>Income</b>									
Less than \$15,000	2,134	5.5*	1.5-9.6	7,165	11.2	6.0-16.4	9,299	9.1	5.4-12.7
\$15,000 - 24,999	4,646	7.8	3.6-11.9	8,043	8.7	5.4-12.1	12,690	8.3	5.7-10.9
\$25,000 - 34,999	4,362	5.3	2.7-8.0	5,107	5.4	3.1-7.7	9,469	5.4	3.6-7.1
\$35,000 - 49,999	2,798	3.2	1.5-4.9	4,395	5.2	2.7-7.8	7,193	4.2	2.7-5.7
\$50,000 - 74,999	4,566	4.5	2.3-6.7	2,508	2.7	1.3-4.1	7,074	3.6	2.3-4.9
\$75,000+	3,909	1.9	0.9-2.9	2,327	1.5	0.6-2.3	6,236	1.7	1.1-2.4

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

# CHAPTER 22: Kidney Disease



**Figure 22.2 Prevalence of Kidney Disease by County: WVBRFSS, 2018-2022**



# CHAPTER 23: Depression

## Ever Diagnosed with Depression

**Definition** Responding “Yes” to the question, “Has a doctor, nurse, or other health professional ever told you that you have a depressive disorder (including depression, major depression, dysthymia, or minor depression)?”

**Prevalence** **WV: 26.9%** (95% CI: 25.4-28.5)  
**U.S.: 20.6%** (95% CI: 20.4-20.9)  
 The West Virginia prevalence of depression was significantly higher than the U.S. prevalence. West Virginia ranked the third highest among 54 BRFSS participants.

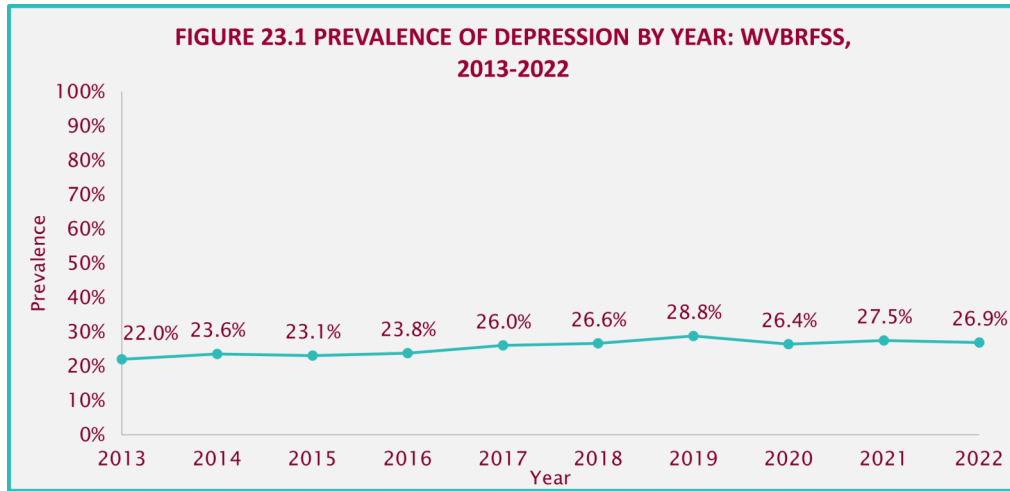
**Table 23.1 Prevalence of Depression by Demographic Characteristics: WVBRFSS, 2022**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	138,158	<b>19.8</b>	17.7-22.0	243,334	<b>33.7</b>	31.6-35.9	381,492	<b>26.9</b>	25.4-28.5
<b>Age</b>									
18-24	15,363	<b>18.6</b>	10.8-26.4	30,559	<b>40.1</b>	30.1-50.0	45,923	<b>28.9</b>	22.5-35.3
25-34	24,980	<b>23.7</b>	16.1-31.3	41,444	<b>42.0</b>	35.3-48.7	66,424	<b>32.5</b>	27.4-37.7
35-44	24,067	<b>23.1</b>	17.5-28.8	34,229	<b>33.4</b>	27.7-39.0	58,297	<b>28.2</b>	24.2-32.2
45-54	28,131	<b>27.1</b>	21.7-32.4	39,648	<b>37.6</b>	32.4-42.9	67,779	<b>32.4</b>	28.6-36.2
55-64	23,708	<b>20.2</b>	16.0-24.4	44,560	<b>35.9</b>	31.1-40.7	68,268	<b>28.3</b>	25.0-31.5
65+	21,650	<b>12.2</b>	9.7-14.7	52,107	<b>25.0</b>	21.9-28.1	73,757	<b>19.1</b>	17.0-21.2
<b>Education</b>									
Less than H.S.	21,619	<b>24.6</b>	17.4-31.8	34,166	<b>41.2</b>	33.2-49.2	55,785	<b>32.6</b>	27.1-38.2
H.S. or G.E.D.	51,391	<b>17.5</b>	14.2-20.7	94,256	<b>35.2</b>	31.4-38.9	145,646	<b>25.9</b>	23.4-28.4
Some Post-H.S.	42,738	<b>24.0</b>	19.4-28.7	68,166	<b>31.8</b>	28.0-35.7	110,904	<b>28.3</b>	25.3-31.3
College Graduate	22,410	<b>16.7</b>	13.4-19.9	46,510	<b>30.1</b>	26.4-33.7	68,919	<b>23.8</b>	21.3-26.4
<b>Income</b>									
Less than \$15,000	17,744	<b>44.0*</b>	32.2-55.8	32,647	<b>50.2</b>	42-58.4	50,390	<b>47.8</b>	41.1-54.5
\$15,000 - 24,999	15,716	<b>26.5</b>	19.5-33.6	36,661	<b>39.6</b>	33.2-46.0	52,377	<b>34.5</b>	29.6-39.4
\$25,000 - 34,999	22,912	<b>27.9</b>	21.3-34.6	38,715	<b>40.8</b>	34.6-47.0	61,626	<b>34.8</b>	30.2-39.5
\$35,000 - 49,999	17,499	<b>20.1</b>	14.1-26.2	26,137	<b>31.3</b>	25.2-37.5	43,636	<b>25.6</b>	21.3-29.9
\$50,000 - 74,999	15,265	<b>15.2</b>	10.2-20.2	31,866	<b>33.9</b>	28.1-39.8	47,131	<b>24.3</b>	20.3-28.2
\$75,000+	24,716	<b>12.0</b>	9.1-14.9	41,109	<b>25.7</b>	21.7-29.8	65,824	<b>18.0</b>	15.6-20.4

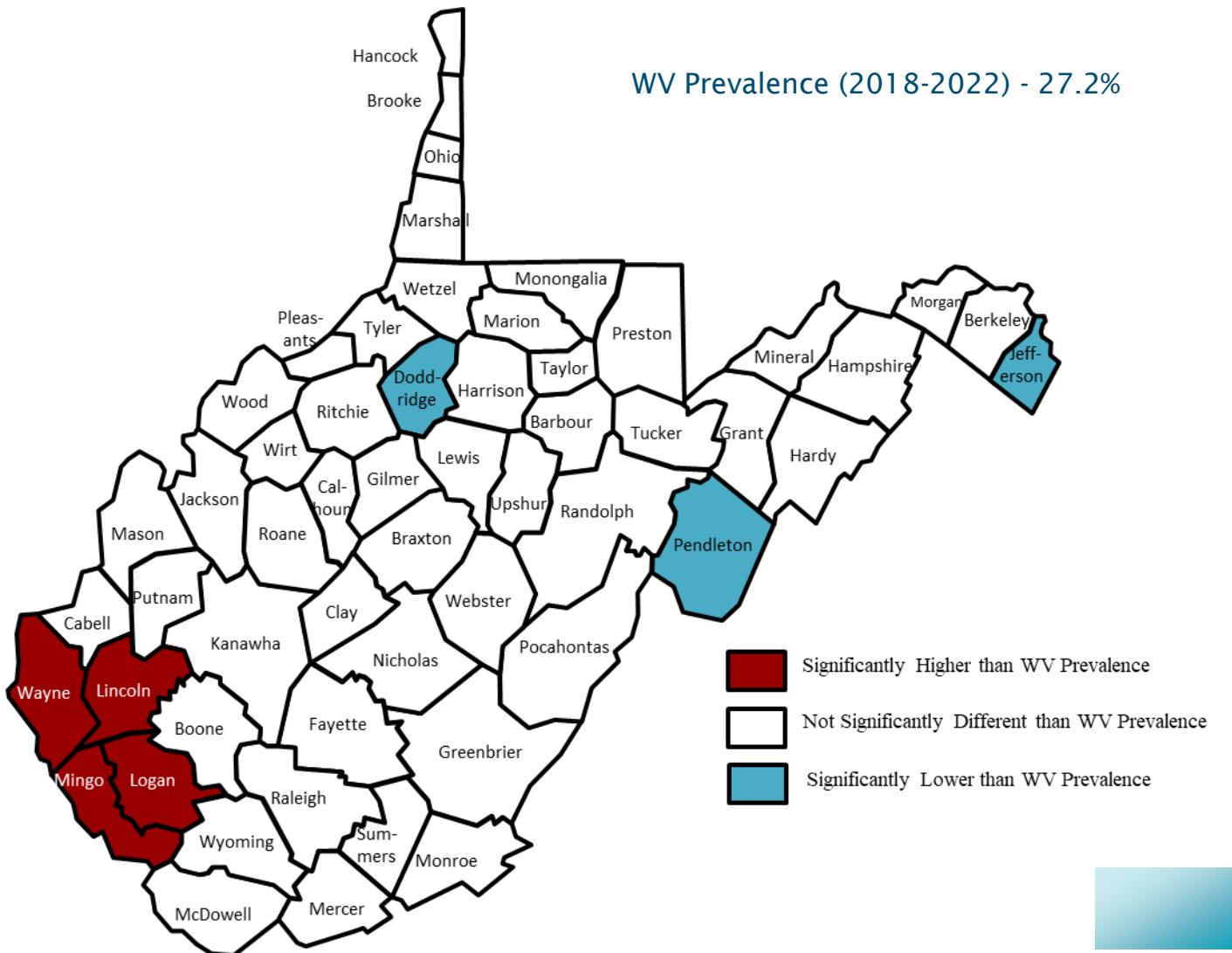
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 7.



# CHAPTER 23: Depression



**Figure 23.2 Prevalence of Depression by County: WVBRFSS, 2018-2022**

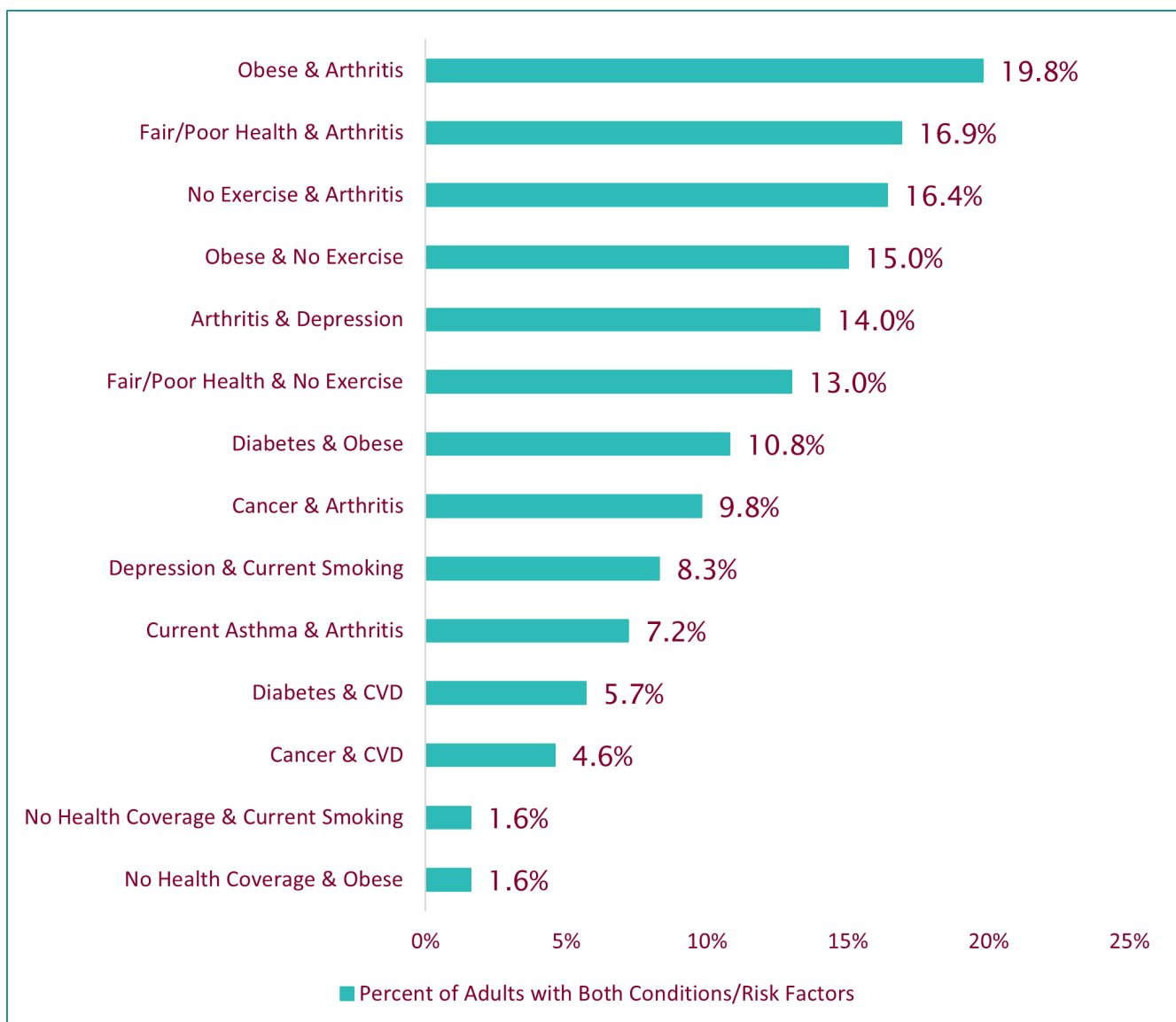


## CHAPTER 24: Comorbidities

### Comorbid Health Conditions and Risk Factors

Many behavioral risk factors and health conditions are interrelated. For example, physical activity and nutrition are related to obesity, which is related to cardiovascular disease. Comorbidity is the presence of more than one health condition or risk factor in an individual at the same time. Identifying common comorbid factors is important to understanding how to prevent and reduce serious health conditions and chronic diseases. The purpose of this chapter is to introduce some of the common comorbidities among West Virginia adults in 2022 (see Figure 26.1 and Table 26.1). For definitions of risk factors and health conditions, please refer to appropriate chapter in this report.

**Figure 24.1 Comorbidities: The Prevalence of Multiple Risk Behaviors and/or Health Conditions Among Adults: WVBRFSS, 2022**



## CHAPTER 24: Comorbidities

**Table 24.1 Comorbidities: The Prevalence of Multiple Risk Behaviors and/or Health Conditions Among Adults: WVBRFSS, 2022**

% of Total Population	No health Coverage	Obese	Cancer	CVD	Diabetes	Current Asthma	Arthritis	Smoking	Depression	Fair/Poor Health	No Exercise
No Health Coverage	7.2 (1.1-2.1)	1.6 (1.1-2.1)	0.2* (0.1-0.3)	0.2* (0.1-0.4)	0.4 (0.2-0.6)	0.4* (0.1-0.7)	1.1 (0.7-1.5)	1.6 (1.1-2.0)	1.2 (0.8-1.7)	1.0 (0.6-1.5)	1.3 (0.8-1.7)
Obese	1.6 (1.1-2.1)	41.0 (39.3-42.8)	6.4 (5.6-7.1)	5.9 (5.2-6.7)	10.8 (9.8-11.8)	5.9 (5.1-6.8)	19.8 (18.5-21.2)	7.9 (6.9-8.9)	13.1 (11.9-14.3)	12.7 (11.6-13.9)	15.0 (13.8-16.2)
Cancer	0.2* (0.1-0.3)	6.4 (5.6-7.1)	16.0 (14.9-17.1)	4.6 (3.9-5.2)	4.5 (3.9-5.2)	2.2 (1.8-2.7)	9.8 (9.0-10.7)	2.9 (2.4-3.4)	4.5 (3.8-5.1)	6.8 (6.1-7.6)	6.3 (5.6-7.1)
CVD	0.2* (0.1-0.4)	5.9 (5.2-6.7)	4.6 (3.9-5.2)	14.6 (13.5-15.8)	5.7 (5.0-6.4)	2.6 (2.1-3.1)	10.1 (9.2-11.0)	4.1 (3.4-4.7)	5.0 (4.3-5.7)	8.4 (7.6-9.3)	6.4 (6.0-7.5)
Diabetes	0.4 (0.2-0.6)	10.8 (9.8-11.8)	4.5 (3.9-5.2)	5.7 (5.0-6.4)	17.4 (16.2-18.6)	3.3 (2.7-3.9)	11.9 (10.9-13.0)	3.2 (2.6-3.8)	5.7 (5.0-6.4)	9.1 (8.2-10.0)	8.0 (7.2-8.9)
Current Asthma	0.4* (0.1-0.7)	5.9 (5.1-6.8)	2.2 (1.8-2.7)	2.6 (2.1-3.1)	3.3 (2.7-3.9)	12.9 (11.7-14.1)	7.2 (6.4-8.0)	3.5 (2.8-4.2)	6.0 (5.1-6.8)	5.7 (4.9-6.4)	5.2 (4.4-6.0)
Arthritis	1.1 (0.7-1.5)	19.8 (18.5-21.2)	9.8 (9.0-10.7)	10.1 (9.2-11.0)	11.9 (10.9-13.0)	7.2 (6.4-8.0)	40.1 (38.5-41.7)	9.2 (8.2-10.2)	14.0 (12.8-15.1)	16.9 (15.7-18.0)	16.4 (15.2-17.5)
Smoking	1.6 (1.1-2.0)	7.9 (6.9-8.9)	2.9 (2.4-3.4)	4.1 (3.4-4.7)	3.2 (2.6-3.8)	3.5 (2.8-4.2)	9.2 (8.2-10.2)	21.0 (19.5-22.5)	8.3 (7.3-9.4)	7.4 (6.5-8.3)	8.3 (7.3-9.2)
Depression	1.2 (0.8-1.7)	13.1 (11.9-14.3)	4.5 (3.8-5.1)	5.0 (4.3-5.7)	5.7 (5.0-6.4)	6.0 (5.1-6.8)	26.9 (25.4-28.5)	8.3 (7.3-9.4)	26.9 (25.4-28.5)	11.6 (10.5-12.7)	10.4 (9.4-11.5)
Fair/Poor Health	1.0 (0.6-1.5)	12.7 (11.6-13.9)	6.8 (6.1-7.6)	8.4 (7.6-9.3)	9.1 (8.2-10.0)	5.7 (4.9-6.4)	16.9 (15.7-18.0)	7.4 (6.5-8.3)	11.6 (10.5-12.7)	25.4 (24.0-26.9)	13.0 (11.9-14.0)
No exercise	1.3 (0.8-1.7)	15.0 (13.8-16.2)	6.3 (5.6-7.1)	6.4 (6.0-7.5)	8.0 (7.2-8.9)	5.2 (4.4-6.0)	30.2 (28.7-31.8)	8.3 (7.3-9.2)	10.4 (9.4-11.5)	13.0 (11.9-14.0)	30.2 (28.7-31.8)

Table interpretation: Each cell represents the percentage of West Virginia adults with both of the conditions/risk

# West Virginia Behavioral Risk Factor Surveillance System Report



## Appendices

2022

## Appendix A Behavioral Risk Factors Prevalence in 50 States, District of Columbia, and

State	Fair or Poor		Obesity		Physical Inactivity		Current Asthma		Cardiovascular		Diabetes		Cancer		Arthritis		Depression	
	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank
Alabama	23.2	5	38.3	6.0	29.1	6	9.6	41	13.1	3.0	15.5	6	13.9	5	34.2	2	24.0	14
Alaska	15.7	38	32.1	37.0	21.5	40	10.7	24	8.2	46.0	8.7	50	8.8	50	23.7	46	20.3	32
Arizona	19.2	15	33.2	31.0	23.4	29	9.7	39	9.5	22.0	12.7	17	13.8	7	25.6	41	20.2	33
Arkansas	23.8	4	37.4	13.0	31.1	3	10.5	26	13.4	2.0	15.7	5	13.0	11	33.9	4	26.6	4
California	18.2	21	28.1	49.0	21.9	39	8.7	50	7.1	51.0	11.5	30	10.3	45	20.4	52	18.1	43
Colorado	14.0	51	25.0	53.0	16.8	53	10.8	21	7.0	52.0	8.1	53	11.5	32	23.8	45	21.3	29
Connecticut	14.4	45	30.6	44.0	23.1	33	12.4	6	8.2	47.0	10.7	37	11.3	33	27.0	31	19.3	39
Delaware	16.6	32	37.9	8.0	23.5	27	9.9	37	9.3	24.0	13.9	12	12.9	12	27.7	26	19.9	35
District of Columbia	11.5	54	24.3	54.0	15.1	54	11.1	15	6.3	54.0	8.0	54	7.7	51	18.0	54	19.6	36
Florida	17.4	25	31.6	40.0	24.5	21	9.3	44	9.9	15.0	12.2	20	14.7	2	28.4	19	17.8	47
Georgia	18.5	19	37.0	14.0	23.8	26	9.6	42	9.2	25.0	12.1	22	10.8	39	25.5	42	19.2	40
Guam	18.3	20	32.7	35.0	28.0	8	6.9	54	9.7	19.0	21.6	1	3.3	54	19.5	53	11.7	53
Hawaii	14.0	52	25.9	52.0	21.3	43	9.1	46	7.3	50.0	11.7	25	9.1	48	22.9	49	12.5	52
Idaho	15.7	39	33.2	32.0	21.5	41	11.1	16	8.6	39.0	9.9	43	12.5	17	26.6	34	22.7	20
Illinois	16.9	30	33.3	30.0	22.8	34	8.7	49	8.5	40.0	12.0	23	10.7	40	26.8	33	17.7	48
Indiana	19.3	14	37.7	10.0	27.5	10	11.0	17	10.5	12.0	12.7	18	11.8	29	29.3	16	22.8	19
Iowa	16.2	33	37.4	12.0	25.9	14	9.7	40	8.8	35.0	11.6	28	12.3	20	27.0	30	18.5	41
Kansas	16.0	35	35.7	17.0	23.3	31	10.7	23	8.9	34.0	11.4	32	12.3	21	26.9	32	19.5	37
Kentucky	21.9	6	37.7	9.0	26.4	11	10.8	22	12.4	4.0	14.8	9	12.6	16	33.5	5	25.8	8
Louisiana	21.7	7	40.1	2.0	28.3	7	10.0	34	11.5	7.0	14.7	10	10.4	44	31.1	10	26.4	6
Maine	15.9	36	33.1	34.0	22.6	36	13.1	2	11.0	10.0	11.1	34	14.6	3	32.6	7	26.3	7
Maryland	15.0	42	33.2	33.0	21.2	44	10.3	30	8.0	48.0	11.9	24	10.4	43	26.0	36	18.1	42
Massachusetts	13.8	53	27.2	50.0	21.3	42	11.3	14	8.7	37.0	10.5	38	12.1	25	26.2	35	21.6	27
Michigan	17.1	27	34.5	23.0	23.9	25	11.9	9	9.8	17.0	11.6	27	11.8	28	30.1	12	23.0	18
Minnesota	14.0	50	33.6	27.0	20.5	46	9.9	38	8.3	44.0	10.2	41	11.5	31	24.8	43	23.5	16
Mississippi	24.6	3	39.5	4.0	31.9	2	9.4	43	12.1	5.0	15.3	7	11.1	35	33.9	3	20.5	31
Missouri	18.6	17	36.4	16.0	25.3	17	10.4	28	10.3	14.0	11.7	26	12.3	22	29.8	13	21.8	23
Montana	17.0	28	30.5	45.0	19.6	49	11.7	11	9.0	30.0	8.4	51	13.6	8	30.8	11	24.5	13
Nebraska	15.1	41	35.3	20.0	24.7	19	8.1	52	8.3	45.0	10.8	36	11.1	36	25.6	40	17.0	50
Nevada	21.3	8	33.5	28.0	26.1	12	10.1	32	9.5	23.0	10.1	42	11.1	34	25.7	39	18.0	44
New Hampshire	15.0	44	30.2	46.0	20.0	47	13.1	3	9.1	29.0	9.7	44	14.0	4	29.2	17	25.2	9
New Jersey	15.4	40	29.1	48.0	23.3	30	8.9	48	8.4	42.0	10.8	35	10.2	46	23.4	47	14.6	51
New Mexico	20.2	12	32.4	36.0	24.2	22	10.4	27	9.0	32.0	12.6	19	10.9	38	27.8	25	21.0	30
New York	17.0	29	30.1	47.0	25.6	15	10.3	31	8.4	43.0	11.3	33	10.0	47	24.4	44	17.8	46
North Carolina	18.5	18	34.1	25.0	23.1	32	9.2	45	9.8	16.0	12.1	21	12.1	26	28.0	23	21.7	25
North Dakota	14.4	46	35.4	19.0	24.0	24	10.4	29	8.7	38.0	9.6	46	11.0	37	27.1	28	21.6	28
Ohio	18.7	16	38.1	7.0	25.1	18	11.4	13	11.2	9.0	13.1	14	12.7	15	31.3	9	25.0	10
Oklahoma	20.7	10	40.0	3.0	29.5	5	12.3	7	11.5	8.0	13.3	13	10.6	41	29.8	14	26.9	2
Oregon	17.7	23	30.9	42.0	19.0	50	11.5	12	9.7	18.0	10.3	39	13.1	9	28.2	22	24.0	15
Pennsylvania	18.0	22	33.3	29.0	22.5	37	10.1	33	10.7	11.0	11.5	31	12.3	18	31.9	8	21.7	26
Puerto Rico	30.4	1	34.1	26.0	43.6	1	12.2	8	9.7	20.0	17.7	2	6.2	52	25.9	37	17.5	49
Rhode Island	17.1	26	30.8	43.0	24.2	23	13.3	1	8.7	36.0	11.5	29	12.2	23	27.0	29	22.3	21
South Carolina	17.5	24	35.0	22.0	26.0	13	9.0	47	9.6	21.0	12.9	15	13.0	10	29.8	15	20.0	34
South Dakota	15.0	43	36.8	15.0	23.4	28	8.3	51	8.9	33.0	9.1	48	10.6	42	27.1	27	17.9	45
Tennessee	20.4	11	38.9	5.0	27.7	9	11.7	10	11.7	6.0	14.8	8	12.3	19	33.4	6	29.2	1
Texas	20.1	13	35.5	18.0	25.5	16	7.9	53	9.0	31.0	13.9	11	9.0	49	22.2	51	19.4	38
Utah	14.1	49	31.1	41.0	16.9	52	11.0	18	6.6	53.0	8.7	49	12.1	24	22.5	50	26.5	5
Vermont	14.3	48	26.8	51.0	19.8	48	12.9	4	9.2	27.0	8.4	52	13.8	6	28.7	18	24.8	12
Virgin Islands	21.3	9	32.1	38.0	24.6	20	9.9	36	10.5	13.0	15.9	4	4.0	53	23.4	48	9.5	54
Virginia	16.8	31	35.2	21.0	20.9	45	9.9	35	9.2	26.0	12.8	16	12.7	14	27.9	24	21.8	24
Washington	15.8	37	31.7	39.0	17.5	51	10.9	19	7.7	49.0	9.7	45	11.6	30	25.8	38	25.0	11
West Virginia	25.4	2	41.0	1.0	30.2	4	12.9	5	14.6	1.0	17.4	3	16.0	1	40.1	1	26.9	3
Wisconsin	16.1	34	37.7	11.0	21.9	38	10.9	20	9.2	28.0	10.3	40	12.0	27	28.4	21	23.0	17
Wyoming	14.3	47	34.2	24.0	22.6	35	10.5	25	8.4	41.0	9.3	47	12.7	13	28.4	20	22.1	22
<b>United States</b>	<b>18</b>		<b>33.3</b>		<b>23.9</b>		<b>9.9</b>		<b>9.2</b>		<b>12.1</b>		<b>11.5</b>		<b>26.6</b>		<b>20.6</b>	

Source: Centers for Disease Control & Prevention, 2022 Behavioral Risk Factor Surveillance System data; West Virginia Department of Health and Human Services Health Statistics Center, 2022

## Appendix B 2018-2022 WV Behavioral Risk Factors and Health Conditions by County

County	Fair or Poor			No Health Care Coverage (18-64)			Obesity			Obese or Overweight			Cardiovascular Disease			Diabetes		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
Barbour	30.8	12	NS	7.5*	38	NS	40.1	34	NS	72.6	38	NS	15.1	32	NS	20.4	6	NS
Berkeley	18.9	51	L	9.3	31	NS	39.8	36	NS	72.5	40	NS	11.5	52	L	12.9	50	L
Boone	34.9	7	H	8.1	34	NS	51.6	1	H	79.6	4	H	18.3	11	NS	26.0	1	H
Braxton	22.8	39	NS	6.0*	44	NS	37	48	NS	72.5	39	NS	16.1	25	NS	15.6	37	NS
Brooke	22.6	40	NS	9.8*	26	NS	35.4	50	NS	70.4	49	NS	15.7	28	NS	20.2	8	NS
Cabell	21.8	41	NS	10.8	21	NS	38.8	42	NS	70.4	48	NS	11.7	49	L	12.4	52	L
Calhoun	37.4*	5	NS	11.7*	13	NS	44.0*	17	NS	78.0*	8	NS	24.0*	3	NS	16.2	33	NS
Clay	23.6	36	NS	13.8*	6	NS	46.3*	9	NS	70.3*	50	NS	20.8	6	NS	17.9	21	NS
Doddridge	23.1	38	NS	8.3*	33	NS	46.5*	7	NS	73.4*	34	NS	15.5	29	NS	14.3	46	NS
Fayette	31.6	10	H	11.6	14	NS	38.7	43	NS	71.9	42	NS	16.2	23	NS	19.8	11	NS
Gilmer	24.5*	32	NS	11.3*	17	NS	41.4*	27	NS	74.2*	25	NS	16.0*	26	NS	17.7	24	NS
Grant	27.5	20	NS	5.9*	45	NS	46.5*	8	NS	80.8	2	H	11.7	50	NS	18.7	13	NS
Greenbrier	24.6	31	NS	7.4	40	NS	40.3	31	NS	73.3	35	NS	16.6	18	NS	17.5	26	NS
Hampshire	25.3	27	NS	7.4*	41	NS	40.3	30	NS	72.0	41	NS	15.2	31	NS	14.2	47	NS
Hancock	24.6	30	NS	5.2*	49	NS	41.4	26	NS	71.1	46	NS	12.6	48	NS	18.6	14	NS
Hardy	28.8	16	NS	9.2*	32	NS	36.7	49	NS	74.4	23	NS	13.9	40	NS	18.0	20	NS
Harrison	25	28	NS	11.5	15	NS	39.6	37	NS	74.2	27	NS	16.1	24	NS	18.1	19	NS
Jackson	20.7	46	NS	10.7	22	NS	38.3	44	NS	74.9	19	NS	13.0	45	NS	15.4	39	NS
Jefferson	16.2	54	L	11.4	16	NS	33.7	54	L	70.9	47	NS	12.9	46	NS	15.0	44	NS
Kanawha	21.7	43	L	8	35	NS	38.2	45	NS	71.3	45	NS	15.0	34	NS	15.5	38	NS
Lewis	26	24	NS	11.9	11	NS	49.2	4	NS	73.5	33	NS	11.4	53	NS	12.6	51	NS
Lincoln	37.1	6	H	12.1	10	NS	50	3	H	78.8	6	H	16.3	21	NS	19.9	9	NS
Logan	37.6	4	H	7	43	NS	43.7	19	NS	75.7	18	NS	20.7	7	H	21.2	5	H
Marion	25.6	26	NS	7.8	36	NS	38.1	46	NS	69.7	51	NS	13.5	41	NS	15.4	40	NS
Marshall	24	34	NS	9.3	30	NS	42.5	23	NS	77.5	10	NS	16.7	17	NS	15.1	42	NS
Mason	28.4	18	NS	14.8	4	NS	49	5	H	78.8	7	NS	17.3	16	NS	16.0	35	NS
McDowell	42.8	1	H	20.8*	1	NS	44.2	14	NS	78.9	5	NS	27.7	1	H	25.4	2	H
Mercer	30.4	14	H	9.8	27	NS	40.2	32	NS	72.7	36	NS	16.4	19	NS	17.0	29	NS
Mineral	19.5	49	L	5.7*	47	NS	40.1	33	NS	74.0	30	NS	12.6	47	NS	16.8	30	NS
Mingo	42	3	H	11.1	19	NS	44.4	12	NS	76.5	16	NS	22.1	5	H	19.9	10	NS
Monongalia	15	55	L	9.9	25	NS	31.4	55	L	64.4	54	L	8.2	55	L	9.6	55	L
Monroe	30.7	13	NS	12.5*	9	NS	34.5	52	NS	74.3	24	NS	20.1	9	NS	17.3	27	NS
Morgan	17.4	53	L	9.7*	28	NS	37.6	47	NS	65.5	53	NS	9.4	54	L	15.7	36	NS
Nicholas	27.5	19	NS	10.1	24	NS	39.4	39	NS	71.6	43	NS	15.1	33	NS	18.1	17	NS
Ohio	23.9	35	NS	7.5	39	NS	34.0	53	NS	71.5	44	NS	13.3	43	NS	12.2	53	L
Pendleton	20.3	48	NS	11.2*	18	NS	39.8	35	NS	80.7	3	H	17.5	15	NS	17.1	28	NS
Pleasants	20.4	47	NS	2.1*	54	L	44.2*	13	NS	77.1*	13	NS	14.6	37	NS	11.8	54	NS
Pocahontas	27.3	21	NS	18.2*	2	NS	43.8	18	NS	77.2	12	NS	17.8	13	NS	18.1	18	NS
Preston	20.9	45	NS	13.7	7	NS	43.2	22	NS	76.5	15	NS	13.4	42	NS	18.6	15	NS
Putnam	18.3	52	L	5.7	46	L	44.2	15	NS	74.9	20	NS	11.6	51	L	15.0	43	NS
Raleigh	27.1	22	NS	7.6	37	NS	41.9	24	NS	74.1	28	NS	14.8	36	NS	17.8	22	NS
Randolph	24.4	33	NS	16.2	3	NS	35.4	51	NS	63.7	55	L	14.3	38	NS	16.0	34	NS
Ritchie	26.4	23	NS	14.1	5	NS	43.7	20	NS	73.7	32	NS	13.3	44	NS	17.7	25	NS
Roane	24.7	29	NS	11.9	12	NS	44.1	16	NS	74.8	21	NS	16.3	20	NS	17.7	23	NS
Summers	32.2	8	NS	5.6*	48	NS	50.9	2	H	74.2	26	NS	15.3	30	NS	16.4	32	NS
Taylor	21.8	42	NS	7.3*	42	NS	43.4	21	NS	74.0	31	NS	15.9	27	NS	22.3	3	NS
Tucker	28.6*	17	NS	0.8*	55	L	39.6*	38	NS	74.1	29	NS	17.8*	14	NS	16.6	31	NS
Tyler	18.9	50	NS	2.7*	52	L	47.8*	6	NS	77.8	9	NS	17.8	12	NS	21.9	4	NS
Upshur	25.8	25	NS	9.3	29	NS	40.9	28	NS	74.4	22	NS	14.9	35	NS	13.2	49	NS
Wayne	29.2	15	NS	12.5	8	NS	41.7	25	NS	77.2	11	NS	20.3	8	H	19.1	12	NS
Webster	42.7*	2	H	3.2*	51	NS	39.3*	40	NS	84.8	1	H	23.0	4	NS	20.3	7	NS
Wetzel	21.1	44	NS	10.8*	20	NS	45.5	10	NS	77.0	14	NS	16.2	22	NS	14.9	45	NS
Wirt	31*	11	NS	2.4*	53	L	38.9*	41	NS	66.9*	52	NS	24.4*	2	NS	13.3*	48	NS
Wood	23.4	37	NS	10.2	23	NS	40.5	29	NS	72.6	37	NS	13.9	39	NS	15.3	41	NS
Wyoming	31.7	9	H	4.6*	50	L	44.5	11	NS	76.1	17	NS	19.2	10	NS	18.4	16	NS
<b>West Virginia</b>	<b>24.7</b>			<b>9.5</b>			<b>40.0</b>			<b>72.6</b>			<b>14.6</b>			<b>16.2</b>		

Source: West Virginia Behavioral Risk Factor Surveillance System (WVBRFSS), West Virginia Health Statistics Center, 2022.  
 Sig. - Indicates whether county prevalence estimate is significantly different than WV prevalence. H= significantly higher, ns = not significantly different, L= significantly lower.  
 \* Unreliable prevalence estimate - use caution when reporting and interpreting. See discussion on page 5 about unreliable estimates.

**Appendix B (continued)**  
**2018-2022 WV Behavioral Risk Factors and Health Conditions by County**

County	Current Smoking			Smokeless Tobacco			E-cigarette Use**			Binge Drinking			Physical Inactivity		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
Barbour	20.3	40	NS	10.2	22	NS	6.4*	20	NS	7.7*	48	NS	32.9	20	NS
Berkeley	24.8	20	NS	5.6	49	L	7.7	9	NS	15.0	11	NS	27.4	41	NS
Boone	19.8	44	NS	13.8	7	NS	7.5	10	NS	8.6	41	NS	38.4	6	H
Braxton	31.2	2	NS	8.9	30	NS	4.7*	39	ns	8.2*	45	NS	33.2	19	NS
Brooke	27.2	11	NS	9.4	27	NS	1.5*	54	L	15.4	8	NS	26.4	46	NS
Cabell	20.1	43	NS	4.9	53	L	7.3	12	NS	14.4	13	NS	26.5	45	NS
Calhoun	30.2*	5	NS	18.2	1	H	4.7*	38	NS	3.8*	55	L	41.8*	2	NS
Clay	22.4	31	NS	8.4*	34	NS	4.5*	42	NS	5.6*	51	NS	28.1	39	NS
Doddridge	22.3*	32	NS	8.8*	31	NS	10.3*	1	NS	8.5*	42	NS	27.5	40	NS
Fayette	30.6	4	H	8.4	33	NS	6.3	23	NS	13.5	15	NS	35.8	12	H
Gilmer	18.6	45	NS	9.5*	25	NS	9.9*	2	NS	15.5*	7	NS	23.7	52	NS
Grant	17.8	49	NS	11.8*	17	NS	4.0*	46	NS	15.6	6	NS	36.7*	9	NS
Greenbrier	21.5	35	NS	9.6	24	NS	5.6	34	NS	8.2	46	L	28.6	37	NS
Hampshire	26.1	14	NS	7.7	40	NS	3.8*	48	L	12.3	19	NS	26.4	47	NS
Hancock	21	36	NS	7.0	43	NS	5.3	37	NS	14.8	12	NS	26.3	48	NS
Hardy	26.2	12	NS	9.4	26	NS	1.6	53	L	10.1	31	NS	29.2	32	NS
Harrison	22.9	29	NS	6.2	46	NS	7.0	15	NS	9.4	38	NS	30.5	28	NS
Jackson	25	17	NS	11.5	18	NS	6.0	30	NS	12.0	20	NS	25.9	49	NS
Jefferson	20.7	38	NS	4.1	55	L	8.1	8	NS	15.8	5	NS	21.7	54	L
Kanawha	22.1	34	NS	6.0	47	L	6.5	19	NS	13.9	14	NS	29.2	33	NS
Lewis	25.7	15	NS	12.5	11	NS	1.5*	55	L	15.3*	9	NS	31.3	26	NS
Lincoln	24.1	24	NS	14.2	5	H	4.2*	45	NS	9.8	34	NS	37.1	7	H
Logan	29.9	6	H	10.8	21	NS	6.1	29	NS	10.2	30	NS	40.1	3	H
Marion	23.1	28	NS	9.0	29	NS	7.4	11	NS	11.2	21	NS	28.8	34	NS
Marshall	27.3	10	NS	7.2	42	NS	6.4	21	NS	16.5	4	NS	28.8	35	NS
Mason	29.8	7	NS	8.1	38	NS	3.6	49	L	12.4	18	NS	36.5	10	NS
McDowell	24.1	23	NS	13.4	10	NS	3.8*	47	NS	3.9*	54	L	36.8	8	NS
Mercer	22.2	33	NS	8.4	35	NS	8.1	7	NS	9.6	37	NS	33.5	17	NS
Mineral	18.5	47	NS	7.8	39	NS	7.2	13	NS	11.0	24	NS	26.5	44	NS
Mingo	27.7	9	NS	11.3	20	NS	5.8	31	NS	7.6	49	L	43.5	1	H
Monongalia	16.9	51	L	5.0	52	L	9.4	3	H	21.0	1	H	19.9	55	L
Monroe	24.9	18	NS	12.0	15	NS	6.4*	22	NS	13.1*	17	NS	30.5	27	NS
Morgan	22.7	30	NS	5.9*	48	NS	4.6*	40	NS	10.6	26	NS	24.8	50	NS
Nicholas	26.1	13	NS	9.6	23	NS	3.5*	50	L	7.7	47	L	33.9	14	NS
Ohio	24.6	22	NS	5.3	50	NS	5.8	32	NS	17.8	3	H	24.8	51	NS
Pendleton	13.5	54	L	7.6*	41	NS	2.4*	51	L	9.9*	33	NS	31.4	25	NS
Pleasants	16.4	52	NS	17.5	2	NS	4.4*	43	NS	9.8*	35	NS	32.7*	22	NS
Pocahontas	20.2	41	NS	8.8	32	NS	4.5*	41	NS	10.0*	32	NS	29.5	31	NS
Preston	24.8	21	NS	11.5	19	NS	8.7	5	NS	10.6	27	NS	28.2	38	NS
Putnam	16.2	53	L	6.5	45	NS	5.3	36	NS	11.0	23	NS	26.6	43	NS
Raleigh	23.8	25	NS	12.1	14	H	5.7	33	NS	11.2	22	NS	32.3	23	NS
Randolph	24.8	19	NS	14.9	3	H	4.2*	44	NS	10.9	25	NS	31.5	24	NS
Ritchie	16.9	50	NS	13.9	6	NS	9.0*	4	NS	8.8*	39	NS	36.2	11	NS
Roane	18.6	46	NS	9.3	28	NS	7.2	14	NS	10.3	29	NS	27.1	42	NS
Summers	25.6	16	NS	8.2*	36	NS	6.2*	27	NS	4.4*	52	L	39.4	5	H
Taylor	23.4	27	NS	14.6	4	NS	6.7*	17	NS	8.8	40	NS	33.5	16	NS
Tucker	11.6*	55	L	4.6*	54	NS	1.9*	52	L	8.3*	43	NS	23.3*	53	NS
Tyler	32.0*	1	NS	13.8*	8	NS	7.0*	16	NS	15.2*	10	NS	35.5*	13	NS
Upshur	20.5	39	NS	11.9	16	NS	6.6	18	NS	10.5	28	NS	30.2	30	NS
Wayne	30.9	3	H	8.1	37	NS	6.3	25	NS	9.7	36	NS	32.8	21	NS
Webster	18.1	48	NS	12.4	13	NS	6.2*	28	NS	4.1*	53	L	33.8	15	NS
Wetzel	20.7	37	NS	12.5	12	NS	5.5*	35	NS	18.1	2	NS	28.6	36	NS
Wirt	20.2	42	NS	5.1*	51	NS	6.3*	26	NS	8.2*	44	NS	33.4*	18	NS
Wood	23.8	26	NS	7.0	44	NS	8.7	6	NS	13.4	16	NS	30.3	29	NS
Wyoming	28.6	8	NS	13.5	9	NS	6.3	24	NS	6.0*	50	L	39.9	4	H
<b>West Virginia</b>	<b>22.9</b>			<b>8.3</b>			<b>6.6</b>			<b>12.2</b>			<b>30.0</b>		

Source: West Virginia Behavioral Risk Factor Surveillance System (WVBRFSS), West Virginia Health Statistics Center, 2022.  
 Sig. - Indicates whether county prevalence estimate is significantly different than WV prevalence. H = significantly higher, ns = not significantly different, L = significantly lower.  
 \* Unreliable prevalence estimate - use caution when reporting and interpreting. See discussion on page 5 about unreliable estimates.

**Appendix B (continued)**  
**2018-2022 WV Behavioral Risk Factors and Health Conditions by County**

County	Cancer			Current Asthma			COPD			Arthritis			Depression		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
Barbour	11.0	51	NS	12.1	28	NS	9.9	46	NS	39.4	37	NS	23.9	42	NS
Berkeley	10.9	52	L	12.0	29	NS	10.2	45	L	33.6	52	L	25.6	28	NS
Boone	16.8	15	NS	12.8	21	NS	17.2	15	NS	49.9	6	H	29.3	16	NS
Braxton	14.9	33	NS	11.4	35	NS	13.2	28	NS	42.6	26	NS	21.9	50	NS
Brooke	16.7	16	NS	8.6	49	NS	9.5	48	NS	39.7	36	NS	25.4	31	NS
Cabell	12.7	47	NS	11.9	31	NS	13.6	26	NS	34.5	51	L	29.7	14	NS
Calhoun	11.2	50	NS	18.9*	4	NS	24.2*	3	NS	60.9*	1	H	32.1*	6	NS
Clay	17.7	12	NS	13.9	13	NS	12.1	32	NS	49.5*	8	NS	24.9	35	NS
Doddridge	21.0	4	NS	11.2*	39	NS	13.4	27	NS	49.3*	9	NS	15.3	55	L
Fayette	14.6	37	NS	13.0	20	NS	19.1	11	H	46.7	11	H	28.1	21	NS
Gilmer	14.2	40	NS	15.9*	8	NS	9.7*	47	NS	34.6*	50	NS	24.5*	39	NS
Grant	10.5	54	NS	12.2	27	NS	17.0	17	NS	46.2*	14	NS	31.6	8	NS
Greenbrier	18.3	9	NS	12.7	23	NS	18.1	14	H	39.7	35	NS	23.6	44	NS
Hampshire	15.0	31	NS	14.6	12	NS	14.6	23	NS	39.8	34	NS	25.7	27	NS
Hancock	16.0	19	NS	13.4	18	NS	14.5	24	NS	41.6	31	NS	24.1	41	NS
Hardy	12.8	46	NS	13.3	19	NS	11.6	38	NS	38.9	41	NS	21.0	53	NS
Harrison	15.4	25	NS	13.5	16	NS	12.5	31	NS	39.0	39	NS	28.4	19	NS
Jackson	15.5	23	NS	11.0	40	NS	14.9	22	NS	39.2	38	NS	23.1	45	NS
Jefferson	14.0	41	NS	12.4	25	NS	9.4	49	L	32.9	54	L	21.6	51	L
Kanawha	16.3	17	NS	11.0	38	NS	11.3	41	L	36.8	45	NS	27.1	24	NS
Lewis	14.9	32	NS	17.1	5	NS	17.1	16	NS	38.0	42	NS	31.1	9	NS
Lincoln	19.3	8	NS	19.8	3	H	19.4	10	H	46.1	16	NS	35.1	2	H
Logan	18.2	10	NS	10.9	42	NS	22.5	6	H	51.0	4	H	34.0	3	H
Marion	15.1	30	NS	11.6	33	NS	11.5	39	NS	36.9	44	NS	25.1	34	NS
Marshall	15.4	24	NS	12.7	22	NS	16.1	20	NS	49.6	7	H	24.6	37	NS
Mason	13.3	43	NS	9.6	48	NS	21.0	8	H	43.4	25	NS	25.2	33	NS
McDowell	16.0	20	NS	21.2	2	H	26.4	1	H	51.1	3	H	30.9	10	NS
Mercer	17.2	13	NS	15.2	10	NS	18.9	12	H	45.0	19	H	29.0	17	NS
Mineral	12.7	48	NS	7.9	52	L	9.0	53	L	34.9	49	NS	23.8	43	NS
Mingo	20.1	6	NS	11.9	32	NS	23.1	4	H	45.6	18	NS	38.5	1	H
Monongalia	9.8	55	L	10.0	45	NS	7.3	54	L	23.7	55	L	26.2	25	NS
Monroe	17.7	11	NS	16.0	7	NS	16.9	19	NS	50.4	5	H	22.3	48	NS
Morgan	15.1	29	NS	10.6	44	NS	9.0	52	NS	38.9	40	NS	22.6	46	NS
Nicholas	14.8	35	NS	12.2	26	NS	13.1	29	NS	47.9	10	H	29.3	15	NS
Ohio	14.5	38	NS	11.3	36	NS	9.0	51	L	33.6	53	L	30.0	12	NS
Pendleton	15.7	22	NS	6.9	54	L	4.0*	55	L	46.7	12	NS	18.2	54	L
Pleasants	10.8	53	NS	11.5*	34	NS	11.3*	40	NS	37.9*	43	NS	29.8*	13	NS
Pocahontas	13.2	44	NS	5.2*	55	L	9.4	50	NS	42.0	29	NS	25.9	26	NS
Preston	14.6	36	NS	12.0	30	NS	11.8	36	NS	40.8	32	NS	28.3	20	NS
Putnam	16.3	18	NS	10.9	41	NS	10.7	44	L	35.6	48	NS	24.5	38	NS
Raleigh	15.8	21	NS	11.2	37	NS	14.4	25	NS	41.8	30	NS	27.3	23	NS
Randolph	14.9	34	NS	13.7	14	NS	12.0	34	NS	43.8	24	NS	27.4	22	NS
Ritchie	12.9	45	NS	15.0	11	NS	12.0	33	NS	42.0	27	NS	21.2	52	NS
Roane	15.3	26	NS	8.3	50	L	12.0	35	NS	44.0	23	NS	25.4	29	NS
Summers	19.9	7	NS	9.9	46	NS	18.2	13	NS	44.7	21	NS	25.3	32	NS
Taylor	12.2	49	NS	10.9	43	NS	11.7	37	NS	46.2	15	NS	22.0	49	NS
Tucker	20.2	5	NS	16.1	6	NS	11.0	43	NS	36.8*	46	NS	24.7	36	NS
Tyler	21.9	2	NS	7.5*	53	NS	17.0	18	NS	44.1*	22	NS	24.4	40	NS
Upshur	15.3	27	NS	9.8	47	NS	11.0	42	NS	36.5	47	NS	22.3	47	NS
Wayne	14.4	39	NS	15.7	9	NS	19.8	9	H	44.8	20	NS	33.0	5	H
Webster	24.4	1	H	13.4	17	NS	21.9	7	NS	53.3*	2	H	25.4	30	NS
Wetzel	16.9	14	NS	8.2	51	NS	12.5	30	NS	40.0	33	NS	28.9	18	NS
Wirt	13.5*	42	NS	24.4*	1	NS	24.5*	2	NS	46.6*	13	NS	31.9*	7	NS
Wood	15.2	28	NS	12.5	24	NS	15.0	21	NS	42.0	28	NS	30.5	11	NS
Wyoming	21.0	3	H	13.6	15	NS	23.0	5	H	45.7	17	NS	33.3	4	NS
<b>West Virginia</b>	<b>15.0</b>			<b>12.2</b>			<b>13.7</b>			<b>39.4</b>			<b>27.2</b>		

Source: West Virginia Behavioral Risk Factor Surveillance System (WVBRFSS), West Virginia Health Statistics Center, 2022.  
 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.