



# West Virginia Behavioral Risk Factor Surveillance System Report 2016

# **West Virginia Behavioral Risk Factor Surveillance System Report 2016**

Bill J. Crouch  
Cabinet Secretary  
West Virginia Department of Health and Human Resources

Rahul Gupta, MD, MPH, MBA, FACP  
Commissioner and State Health Officer  
Bureau for Public Health

Anne Williams, RN, BSN, MS-HCA  
Deputy Commissioner, Health Improvement  
Bureau for Public Health

Daniel M. Christy, MPA  
Director  
Health Statistics Center



## Report Prepared By

Birgit Shanholtzer, MA  
Director, Epidemiology & Statistical Services (through December 22, 2017)

## Editing and Data Verification By

Kathi Elkins, MBA, Epidemiologist  
Allysa Crews, MS, Epidemiologist  
Epidemiology & Statistical Services  
P. Fred King, BRFSS Consultant

## Division of Behavioral Surveillance Staff

Phillipa Lewin, Division Director  
John McLaury, Programmer/Analyst

## 2016 BRFSS Interviewers

Gale Ardman, Arn Brigode, Carol Burgess, Mima Chapman, Sara Elliott,  
Veronica Bunch, Mike Guinn, Janet Willis, Laura Harbert, Newman Jackson,  
Sandi Johnson, Patricia Lindell, Ryan McCallister, Deborah Pack, Linda Smith

This publication was paid for in part by the West Virginia Behavioral Risk Factor Surveillance System of the West Virginia Department of Health and Human Resources with support from Cooperative Agreement Number U58SO000062 from the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention.

### Suggested Citation

All material appearing in this report is in the public domain and may be reproduced freely. Please acknowledge the source with the following citation:

WV Department of Health and Human Resources, Health Statistics Center. (2018). *West Virginia Behavioral Risk Factor Surveillance System Report, 2016*.

### Additional Information Available

To access additional Health Statistics Center publications, visit  
[www.wvdhhr.org/bph/hsc](http://www.wvdhhr.org/bph/hsc)  
or call (304) 558-9100.

*The Health Statistics Center can do customized reports and data analysis for grants, formal research, agency use, or specific community health planning activities. If you have questions about the data in this report, or believe you may need additional information, please call (304) 558-9100 and ask for the author of this report or an Epidemiology Unit staff member.*



# 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 2016 as well as county data combined for the latest available five years (2012 through 2016).

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 2<sup>nd</sup> highest nationally in the prevalence of general health of adults as either fair or poor.
- ◆ More than one-fourth of West Virginia adults (26.3%) considered their health to be either fair or poor.
- ◆ Fair or poor health was most common among groups of adults aged 55-64, those with less than a high school education, and those who have an annual household income of less than \$15,000.
- ◆ The prevalence of fair or poor health was highest in Boone, Fayette, Lincoln, Logan, McDowell, Mercer, Mingo, and Wyoming counties.
- ◆ West Virginia ranked 1<sup>st</sup> highest in the nation for the prevalence of poor physical health, poor mental health, and activity limitations due to poor physical or mental health.

### Impairment

- ◆ The prevalence of difficulty concentrating, remembering, or making decisions was 16.4% among West Virginians, compared to 10.8% nationally, which ranked the state 1<sup>st</sup> highest nationally.
- ◆ More than one-fifth of West Virginians had serious difficulty walking or climbing stairs (22.3%).
- ◆ Approximately 5.7% of West Virginia adults had difficulty bathing or dressing.
- ◆ The prevalence of having difficulty doing errands alone among West Virginians was 10.7%, significantly higher than the national prevalence of 6.8%.
- ◆ Approximately 8.5% of West Virginia adults are blind or have serious vision impairment, the 2<sup>nd</sup> highest in the nation.
- ◆ The prevalence of deafness or serious hearing impairment was 13.3%, which was 1<sup>st</sup> highest in the nation.

## EXECUTIVE SUMMARY

### Health Care Access

- ◆ The prevalence of no health care coverage among West Virginia adults aged 18-64 was at an all time low of 9.3%, compared to 14.1% nationally.
- ◆ The prevalence of no health care coverage among those aged 18-64 was highest in Barbour and Logan counties.
- ◆ Nearly half of West Virginia adults have private insurance (45.1%), followed by Medicare (24.3%) and Medicaid (15.9%).
- ◆ Nearly one-fifth of all adults do not have a personal doctor or health care provider (19.5%).
- ◆ Approximately 14.6% of West Virginia adults could not afford needed medical care in the past year.
- ◆ More than one-fifth of West Virginia adults did not have a routine checkup in the past year (21.4%).

### Weight Status

- ◆ The prevalence of obesity in West Virginia was 37.7%, which was 1<sup>st</sup> highest in the nation.
- ◆ The prevalence of obesity was significantly higher in Fayette, Logan, and McDowell counties than in the rest of the state.
- ◆ More than two-thirds (70.9%) of West Virginia adults were overweight or obese, the 2<sup>nd</sup> highest in the U.S.
- ◆ The prevalence of overweight or obese was highest among men, those aged 45-54, those with a high school education, and those with an annual household income of \$50,000-\$74,999.

### Physical Activity

- ◆ More than one-fourth of West Virginia adults (28.5%) did not participate in leisure-time physical activity or exercise, which ranked West Virginia 11<sup>th</sup> highest in the nation.
- ◆ The prevalence of physical inactivity was significantly higher among females than males.
- ◆ Physical inactivity was highest among those aged 65 and older, those with less than a high school education, and those with annual household income of less than \$15,000.
- ◆ The prevalence of physical inactivity was significantly higher in Grant, Logan, McDowell, Mercer, Mingo, Webster, and Wyoming counties than the rest of the state.

### Tobacco Use

- ◆ Nearly one-fourth of adults (24.8%) currently smoke cigarettes every day or some days, which ranked West Virginia the 2<sup>nd</sup> highest nationally.
- ◆ The prevalence of current smoking was highest among those aged 25-34, those with less than a high school education, and those with an annual household income of less than \$15,000.
- ◆ The prevalence of current cigarette smoking was highest in Calhoun and Wyoming counties.
- ◆ Approximately 54.7% of current smokers had tried to quit smoking in the past year, which was the 46<sup>th</sup> highest (equating to 9<sup>th</sup> lowest) in the nation.
- ◆ West Virginia ranked the 2<sup>nd</sup> highest in the nation in the prevalence of smokeless tobacco use (8.5%) among adults.
- ◆ The prevalence of smokeless tobacco use was highest in Grant and Lincoln counties.
- ◆ The prevalence of respondents who currently use e-cigarettes was 4.7%, similar to the U.S. prevalence, and was highest among adults aged 18-24.

## EXECUTIVE SUMMARY

### Alcohol Consumption

- ◆ The West Virginia heavy drinking prevalence was 3.5%, which was the 54<sup>th</sup> highest (equating to 1<sup>st</sup> lowest) in the nation.
- ◆ The prevalence of binge drinking among West Virginia adults was 11.3%, the 54<sup>th</sup> highest (equating to 1<sup>st</sup> lowest) in the nation.
- ◆ Binge drinking was highest among men, those aged 18-24, college graduates, and those with a household income of \$75,000 or more per year.
- ◆ The prevalence of binge drinking was significantly higher in Marshall, Monongalia, and Ohio counties than the rest of the state.

### Seat Belt Use

- ◆ Approximately 4.1% of West Virginia adults seldom or never wear a seat belt when they drive or ride in a car.
- ◆ Men had a significantly higher prevalence of seldom or never wear a seat belt when they drive or ride in a car than women.
- ◆ The prevalence of seldom or never wear a seatbelt was highest among those aged 25-34, those with less than a high school or high school education, and those with an annual household income of \$25,000-\$34,999.

### Falls

- ◆ More than one-fourth of West Virginia adults over age 45 reported falling at least once in the past year (31.8%).
- ◆ The prevalence of falling at least once in the past year was highest among those aged 55-64, those with less than a high school education, and those earning less than \$15,000 per year.
- ◆ Among those who fell in the past year, the prevalence of having an injury from that fall was 39.0%.

### Sleep

- ◆ More than one-third of West Virginia adults get an inadequate amount of sleep (39.9%).
- ◆ The prevalence of sleep problems and daytime sleep among West Virginia adults was 31.4% and 28.2%, respectively.
- ◆ Additionally, 49.1% of West Virginia adults snore and 17.1% have sleep apnea.

### Sunburn

- ◆ More than one-fifth of West Virginia adults (21.5%) had at least one sunburn in the past year.
- ◆ The prevalence of sunburn was highest among men, those aged 25-34, college graduates, and those with an annual household income of \$50,000 or more.

## EXECUTIVE SUMMARY

### Sugar-Sweetened Beverages

- ◆ More than one-fourth of West Virginia adults (28.8%) consume soda or pop on a daily basis.
- ◆ The prevalence of daily soda or pop consumption was highest among men, those aged 25-34, and those with less than a high school education.
- ◆ Nearly one in five West Virginia adults (19.1%) consume sugar-added beverages on a daily basis.
- ◆ The prevalence of daily consumption of sugar-added beverages was highest among males, those aged 18-24, and those with a high school education or less.
- ◆ Approximately 39.2% of West Virginia adults consume either soda, pop, or a sugar-added beverage on a daily basis.

### Tooth Loss

- ◆ More than half of West Virginia adults (59.4%) had one or more teeth removed because of gum disease, the 2<sup>nd</sup> highest in the nation.
- ◆ Approximately 29.3% of West Virginia adults have six or more missing teeth, which was 1<sup>st</sup> highest in the nation.
- ◆ The prevalence of six or more missing teeth was highest among those aged 65 and older, those with less than a high school education, and those with an annual household income of \$15,000 or less.
- ◆ About 30.4% of West Virginia adults aged 65 and older have all their teeth missing, which was 1<sup>st</sup> highest in the nation.
- ◆ The prevalence of all teeth missing among those aged 65 and older was highest among those with less than a high school education and among those with an annual income of \$15,000 or less.

### HIV Risk

- ◆ Few West Virginia adults are at high risk for developing HIV (4.6%), the 52<sup>nd</sup> highest (equating to 3<sup>rd</sup> lowest) in the nation.
- ◆ The prevalence of high risk for HIV was highest among men, those aged 18-24, and those with less than a high school education.

### Dental Visit

- ◆ More than half of West Virginia adults had a dental visit in the past year (57.6%), which was the 50<sup>th</sup> highest (equating to 5<sup>th</sup> lowest) in the nation.
- ◆ The prevalence of a dental visit in the past year was highest among women, those aged 18-24, college graduates, and those earning \$75,000 or more per year.

### Diabetes Testing

- ◆ Among West Virginia adults who do not have diabetes, 62.9% have had a diabetes test in the past 3 years.
- ◆ The prevalence of had a diabetes test in the past 3 years was highest among those aged 65 and older, college graduates, and those with an annual income of \$25,000-\$34,999.



## EXECUTIVE SUMMARY

### HIV Testing

- ◆ More than one-third of West Virginia adults (34.5%) have been tested for HIV.
- ◆ The prevalence of HIV testing was highest among those aged 25-34, those with less than a high school education, and those earning less than \$15,000 per year.

### Menu Labeling

- ◆ Nearly half of West Virginia adults (47.2%) use calorie information provided on menus.
- ◆ The prevalence of using calorie information on menus was highest among women, college graduates, and those with an annual household income of \$75,000 or more.

### Immunization

- ◆ About 44.6% of all adults and 67.5% of seniors had a flu vaccination in the past 12 months.
- ◆ The prevalence of ever had a pneumonia vaccination was 39.5% among all adults and 72.7% among those aged 65 and older.
- ◆ Approximately 62.3% of West Virginia adults have received a tetanus vaccine since 2005 and 35.8% of those reported they had the Tdap vaccine.

### Cancer Screening

- ◆ The prevalence of had a mammogram in the past 2 years among women aged 50-74 was 77.8%, similar to the U.S. prevalence.
- ◆ The prevalence of had a Pap test in the past 3 years among women aged 21-65 was 79.5%, similar to the U.S. prevalence.
- ◆ Among West Virginia men aged 40 and older, 52.9% discussed the advantages of the prostate specific antigen (PSA) test with a doctor, 31.8% discussed the disadvantages of the PSA test with a doctor, 52.5% had a doctor who recommended having the PSA test, and 42.7% had a PSA test in the past 2 years.
- ◆ Among adults aged 50-75, 10.0% had a Fecal Occult Blood Test (FOBT) test in the past year and 16.8% had a FOBT test in the past 3 years.
- ◆ Among adults aged 50-75, 63.3% had a colonoscopy in the past 10 years, similar to the U.S. prevalence.
- ◆ More than two-thirds of West Virginia adults aged 50-75 had at least one of the recommended colorectal cancer screenings (67.0%), which was similar to the U.S. prevalence.

## EXECUTIVE SUMMARY

### Cardiovascular Disease

- ◆ West Virginia ranked 1<sup>st</sup> highest in the nation in the prevalence of heart attack (7.5%) and coronary heart disease (8.0%).
- ◆ West Virginia ranked the 7<sup>th</sup> highest in the nation in the prevalence of stroke (4.4%).
- ◆ The overall cardiovascular disease prevalence was 1<sup>st</sup> highest in the nation at 14.6%.
- ◆ The prevalence of cardiovascular disease was highest among men, those aged 65 and older, those with less than a high school education, and those with an annual household income less than \$15,000.
- ◆ The prevalence of cardiovascular disease was significantly higher in Grant, Logan, McDowell, Mingo, and Wyoming counties than the state as a whole.
- ◆ More than half of West Virginia adults (50.8%) are currently watching or reducing their sodium intake.

### Diabetes

- ◆ More than 1 in 10 West Virginia adults had diabetes (15.0%), which ranked West Virginia the 2<sup>nd</sup> highest nationally.
- ◆ The prevalence of diabetes was highest among those aged 65 and older, those with less than a high school education, and those with an annual household income of less than \$15,000.
- ◆ The prevalence of diabetes was significantly higher in Grant, Logan, McDowell, and Wayne counties than the state as a whole.
- ◆ Among West Virginia adults with diabetes, 24.3% had 2 or more A1C test in the past year and 48.0% have taken a diabetes self-management class.
- ◆ Approximately 11.0% of West Virginia adults had borderline or pre-diabetes.
- ◆ The prevalence of borderline or pre-diabetes was highest among those aged 65 and older and those with less than a high school education.

### Cancer

- ◆ Approximately 7.4% of West Virginia adults had ever had skin cancer and 8.1% had ever had some other type of cancer.
- ◆ About 1 in 7 West Virginia adults had been diagnosed with cancer, but were still living (14.0%), which ranked West Virginia the 3<sup>rd</sup> highest for overall cancer prevalence.
- ◆ Cancer prevalence was highest among adults aged 65 and older and those with an annual household income of \$25,000-\$34,999.
- ◆ Among cancer survivors, 35.4% received a written summary of all cancer treatments and 4.9% participated in a clinical trial.
- ◆ Among cancer survivors, 63.9% received instructions about routine cancer check-ups after treatment and 76.2% of those were written instructions.



## EXECUTIVE SUMMARY

### Respiratory Diseases

- ◆ Approximately 16.2% of West Virginia adults have ever been diagnosed with asthma and 11.8% of West Virginia adults currently had asthma.
- ◆ Women had significantly higher prevalence of both lifetime and current asthma than men.
- ◆ The prevalence of both lifetime asthma and current asthma was highest among those with less than a high school education and those with an annual household income of less than \$15,000.
- ◆ The prevalence of current asthma was significantly higher in Harrison and McDowell counties than the rest of the state.
- ◆ The prevalence of chronic obstructive pulmonary disease or COPD in West Virginia was 13.9%, which was 1<sup>st</sup> highest in the nation.
- ◆ The prevalence of COPD was highest among adults aged 55-64, 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, Lincoln, Logan, McDowell, Mercer, and Mingo counties than the rest of the state.

### Arthritis

- ◆ More than 1 in 3 West Virginia adults had arthritis (38.9%), which ranked West Virginia 1<sup>st</sup> highest in the nation.
- ◆ Arthritis prevalence was highest among those aged 65 and older, those with less than a high school education, and those with an annual household income of less than \$15,000.
- ◆ The prevalence of arthritis was highest in Fayette, Logan, McDowell, Mingo, Nicholas, Wetzel, and Wyoming counties.

### Kidney Disease

- ◆ The prevalence of kidney disease in West Virginia was 3.6% and was the 9<sup>th</sup> highest in the nation.
- ◆ Kidney disease prevalence was highest among seniors, those with low educational attainment, and those with low income.

### Depression

- ◆ About 23.8% of West Virginia adults had depression, which ranked the state the 2<sup>nd</sup> highest in the nation.
- ◆ The prevalence of depression was significantly higher among women than men.
- ◆ The prevalence of depression was highest among those aged 45-54, those with less than a high school education, and those with an annual household income less than \$15,000.
- ◆ The prevalence of depression was significantly higher in Boone, Fayette, Raleigh, Wayne, Webster, and Wyoming counties than the rest of the state.



## EXECUTIVE SUMMARY

### Comorbidities

- ◆ Approximately 1 in 6 West Virginia adults (17.3%) were both obese and had arthritis.
- ◆ About 1 in 6 West Virginia adults (14.8%) had arthritis and did not exercise.
- ◆ About 1 in 8 West Virginia adults (12.9%) were obese and did not exercise.
- ◆ About 1 in 11 West Virginia adults (9.2%) were obese and had diabetes.
- ◆ Approximately 1 in 20 West Virginia adults (5.3%) had both cardiovascular disease and diabetes.
- ◆ About 1 in 11 West Virginia adults (8.7%) were current smokers who had depression.

## ESTIMATED NUMBER OF PERSONS WITH DISEASE OR RISK FACTOR

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

**Table ES.1 Percentage and Number of Persons Estimated with Disease or Risk Factor (Among Adults Aged 18 and Older or Appropriate Subset): WVBRFSS 2016**

Risk Factor/Chronic Disease/Health-Related Factor	Percentage Prevalence Estimate (%)	Estimated Number of Adults	Risk Factor/Chronic Disease/Health-Related Factor	Percentage Prevalence Estimate (%)	Estimated Number of Adults
General Health Is Fair or Poor	26.3	383,371	Fall in Past Year	31.8	259,747
Poor Physical Health	18.2	261,301	Injury from a Fall in Past Year	39.0	100,791
Poor Mental Health	16.5	238,332	Dental Visit	57.6	836,851
Cognitive Difficulty	16.4	236,051	Diabetes Test	62.9	737,823
Difficulty Walking	22.3	321,908	HIV Test	34.5	459,332
Difficulty Dressing or Bathing	5.7	82,201	Flu Vaccine	44.6	633,422
Difficulty Doing Errands Alone	10.7	154,195	Pneumonia Vaccination (ages 65 and older)	72.7	242,481
Vision Impairment	8.5	122,993	Tetanus Vaccine	62.3	792,622
Hearing Impairment	13.3	193,170	Tdap Vaccine	35.8	283,654
No Health Care Coverage (Ages 18-64)	9.3	102,605	Mammogram	77.8	236,435
No Personal Doctor or Health Care Provider	19.5	285,470	Pap Test	79.5	309,526
Unable to Afford Needed Medical Care	14.6	212,899	Fecal Occult Blood Test (FOBT)	16.8	99,661
No Routine Medical Checkup in Past Year	21.4	310,047	Colonoscopy	63.3	373,449
Overweight (BMI 25.0-29.9)	33.3	453,396	Colorectal Cancer Screening Recommendation	67.0	394,855
Obesity (BMI 30.0+)	37.7	512,868	Heart Attack	7.5	109,038
Overweight or Obese (BMI 25.0+)	70.9	966,265	Coronary Heart Disease	8.0	115,410
No Leisure-Time Physical Activity	28.5	417,367	Stroke	4.4	64,273
Current Cigarette Smoking	24.8	356,382	Cardiovascular Disease	14.6	212,011
Smoking Cessation	54.7	194,772	Diabetes	15.0	218,960
Smokeless Tobacco Use	8.5	123,004	Borderline or Pre-Diabetes	11.0	133,947
Current E-Cigarette Use	4.7	67,082	Cancer	14.0	203,869
Heavy Drinking	3.5	49,993	Current Asthma	11.8	171,816
Binge Drinking	11.3	160,264	Chronic Obstructive Pulmonary Disease	13.9	203,034
Seldom or Never Wear a Seatbelt	4.1	58,164	Arthritis	38.9	566,093
			Kidney Disease	3.6	52,943
			Depression	23.8	347,415



## Definition of Common Terms

### **Risk Factor**

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

### **Prevalence**

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

### **Confidence Intervals**

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

### **Significant**

Significant is the term used to describe prevalence estimates that have been tested and found to be statistically different. In this report, a difference is said to be significant when the 95% confidence intervals (CIs) associated with each of the prevalence estimates do not overlap. In other words, it can be stated with 95% certainty that the difference found between the two prevalence estimates is not a random occurrence. Identifying differences as significant can detect changes in prevalence over time and direct attention to characteristics associated with a particular health condition or risk behavior. In this report, adjectives such as slight, minor, and little may be used to describe less reliable differences, those for which the confidence intervals do overlap. See Methodology on page 6 for additional discussion.

# TABLE OF CONTENTS

EXECUTIVE SUMMARY .....	iii
<b>TABLE OF CONTENTS.....</b>	<b>xiii</b>
INTRODUCTION .....	1
METHODOLOGY .....	3
<b>SECTION 1: HEALTH INDICATORS.....</b>	<b>9</b>
CHAPTER 1: HEALTH STATUS .....	10
<i>General Health</i> .....	10
<i>Physical Health</i> .....	13
<i>Mental Health</i> .....	15
<i>Poor Health Limitations</i> .....	17
CHAPTER 2: IMPAIRMENT.....	20
<i>Cognitive Difficulty</i> .....	20
<i>Difficulty Walking</i> .....	22
<i>Difficulty Dressing or Bathing</i> .....	24
<i>Difficulty Doing Errands Alone</i> .....	26
<i>Vision Impairment</i> .....	28
<i>Hearing Impairment</i> .....	30
CHAPTER 3: HEALTH CARE ACCESS .....	32
<i>No Health Care Coverage (among adults aged 18-64)</i> .....	32
<i>Primary Health Care Coverage</i> .....	35
<i>No Personal Doctor or Health Care Provider</i> .....	37
<i>Could Not Afford Needed Medical Care</i> .....	39
<i>No Routine Checkup in Past Year</i> .....	41
<b>SECTION 2: RISK BEHAVIORS .....</b>	<b>43</b>
CHAPTER 4: WEIGHT STATUS.....	44
<i>Overweight</i> .....	44
<i>Obesity</i> .....	46
<i>Overweight or Obese</i> .....	49
CHAPTER 5: PHYSICAL ACTIVITY.....	52
<i>No Leisure-Time Physical Activity or Exercise</i> .....	52
CHAPTER 6: TOBACCO USE .....	55
<i>Current Cigarette Smoking</i> .....	55
<i>Smoking Cessation</i> .....	58
<i>Smokeless Tobacco Use</i> .....	60
<i>E-Cigarettes</i> .....	63
CHAPTER 7: ALCOHOL CONSUMPTION.....	65
<i>Heavy Drinking</i> .....	65
<i>Binge Drinking</i> .....	67

# TABLE OF CONTENTS

CHAPTER 8: INJURY .....	70
<i>Seldom or Never Wear Seatbelt</i> .....	70
<i>Falls in Past Year</i> .....	72
<i>Fall Injury</i> .....	74
CHAPTER 9: SLEEP .....	76
<i>Inadequate Sleep</i> .....	76
<i>Sleep Problems</i> .....	78
<i>Daytime Sleep</i> .....	80
<i>Snoring</i> .....	82
<i>Sleep Apnea</i> .....	84
CHAPTER 10: SUNBURN .....	86
<i>Sunburn in Past Year</i> .....	86
CHAPTER 11: SUGAR-SWEETENED BEVERAGES .....	88
<i>Soda or Pop</i> .....	88
<i>Sugar-Added Beverages</i> .....	90
<i>Any Soda or Sugar-Added Beverage</i> .....	92
CHAPTER 12: TOOTH LOSS .....	94
<i>One or More Missing Teeth</i> .....	94
<i>Six or More Missing Teeth</i> .....	96
<i>All Teeth Missing, Ages 65 and Older</i> .....	98
CHAPTER 13: HIV RISK.....	100
<i>High Risk for HIV</i> .....	100
<b>SECTION 3: PREVENTIVE PRACTICES.....</b>	<b>103</b>
CHAPTER 14: ORAL HEALTH .....	104
<i>Dental Visit</i> .....	104
CHAPTER 15: DIABETES TESTING .....	106
<i>Diabetes Test</i> .....	106
CHAPTER 16: HIV TESTING .....	108
<i>HIV Test</i> .....	108
CHAPTER 17: MENU LABELLING .....	110
<i>Calorie Information on Menu</i> .....	110
CHAPTER 18: IMMUNIZATION .....	112
<i>Flu Vaccine</i> .....	112
<i>Flu Vaccine, Ages 65 and Older</i> .....	114
<i>Pneumonia Vaccine</i> .....	116
<i>Pneumonia Vaccine, Ages 65 and Older</i> .....	118
<i>Tetanus Vaccine</i> .....	120
<i>Tdap Vaccine</i> .....	122



## TABLE OF CONTENTS

CHAPTER 19: CANCER SCREENING.....	124
<i>Breast Cancer Screening</i> .....	124
<i>Cervical Cancer Screening</i> .....	126
<i>Prostate Cancer Screening</i> .....	129
<i>Colorectal Cancer Screening</i> .....	133
<b>SECTION 4: CHRONIC DISEASES.....</b>	<b>141</b>
CHAPTER 20: CARDIOVASCULAR DISEASE .....	142
<i>Heart Attack</i> .....	142
<i>Angina or Coronary Heart Disease</i> .....	144
<i>Stroke</i> .....	146
<i>Cardiovascular Disease</i> .....	148
<i>Sodium Intake</i> .....	151
CHAPTER 21: DIABETES .....	153
<i>Diabetes Prevalence</i> .....	153
<i>A1C Testing</i> .....	156
<i>Diabetes Education Class</i> .....	158
<i>Pre-Diabetes or Borderline Diabetes</i> .....	160
CHAPTER 22: CANCER .....	162
<i>Skin Cancer Prevalence</i> .....	162
<i>Other Cancer Prevalence</i> .....	164
<i>Overall Cancer Prevalence</i> .....	166
<i>Cancer Survivorship</i> .....	169
CHAPTER 23: RESPIRATORY DISEASES .....	173
<i>Lifetime Asthma</i> .....	173
<i>Current Asthma</i> .....	175
<i>Chronic Obstructive Pulmonary Disease</i> .....	178
CHAPTER 24: ARTHRITIS .....	181
<i>Arthritis Prevalence</i> .....	181
CHAPTER 25: KIDNEY DISEASE .....	184
<i>Kidney Disease Prevalence</i> .....	184
CHAPTER 26: DEPRESSION.....	186
<i>Ever Diagnosed with Depression</i> .....	186
CHAPTER 27: COMORBIDITIES .....	189
Appendix A .....	191
Appendix B.....	192



## Introduction

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

The Behavioral Risk Factor Surveillance System (BRFSS) was established by the U.S. Centers for Disease Control and Prevention (CDC) based in Atlanta in order to permit states to determine the prevalence of certain health risk factors and health conditions among their adult populations. West Virginia, through the West Virginia Department of Health and Human Resources (DHHR), Bureau for Public Health (BPH), 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-five reports have been published by the DHHR presenting survey results of the State's participation in the BRFSS since 1984. This report focuses on the 2016 risk factor prevalence estimates and compares them to the years 1984 through 2015. 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 2016

In 2016, West Virginia opted to ask several Optional Modules including: Pre-Diabetes, Sugar-Sweetened Beverages, Menu Labeling, Sleep Disorders, and Excess Sun Exposure. State-added questions for 2016 included type of insurance, sodium intake, A1C testing, diabetes education, cancer treatment, and clinical trials.

**Table I.1 Topics Administered in the Survey: WVBRFSS, 2006-2016**

Topic	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Adverse Childhood Events									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
Asthma	X	X	X	X	X	X	X	X	X	X	X
Cancer				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	X	X	
Emotional Support/ Life Satisfaction	X	X	X	X	X						
Falls	X		X		X		X		X		X
Fruits & Vegetables		X		X		X		X		X	
Health Insurance	X	X	X	X	X	X	X	X	X	X	X
Health Status	X	X	X	X	X	X	X	X	X	X	X
HPV Vaccine			X		X		X			X	X
Hypertension		X		X		X		X		X	
Immunization	X	X	X	X	X	X	X	X	X	X	X
Intimate Partner Violence	X	X									
Leisure-Time Physical Activity	X	X	X	X	X	X	X	X	X	X	X
Obesity	X	X	X	X	X	X	X	X	X	X	X
Oral Health	X		X		X		X		X		X
Osteoporosis			X				X				
Routine Checkup	X	X	X	X	X	X	X	X	X	X	X
Seatbelt Use	X		X		X	X	X	X	X	X	X
Sexual Violence			X								
Sleep				X	X			X	X		X
Tobacco Use			X		X	X	X	X	X	X	X
Weight Control				X		X					



## Methodology

The survey is conducted by the method known as Computer Assisted Telephone Interviewing (CATI) and represents a collaborative effort between DHHR HSC and the CDC. The HSC provides telephones, office space, interviewers, and supervision of the data collection. Approximately 50% of the cost is supported through financial assistance from the CDC. A standardized set of core questions and survey protocols, computer-assisted telephone interviewing software, data processing services, and analytic consultation are also provided by the CDC.

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

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

### SAMPLE SELECTION

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

According to 2015 state-level estimates from the National Health Interview Survey, 96.1% of West Virginia households have telephones, with 61.4% of households having landline telephones. In addition, a growing number of adults (38.6%) live in wireless-only households. In order to better represent the latter residents, the 2016 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 2016, 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, 2016

Demographic Characteristic	Number of Interviews	Percent of Unweighted Sample	Percent of Weighted Sample
<b>Total</b>	<b>7,151</b>	<b>100.0</b>	<b>100.0</b>
<u>Sex</u>			
Male	3,161	44.2	49.0
Female	3,990	55.8	51.0
<u>Race/Ethnicity</u>			
White, Non-Hispanic	6,675	94.1	92.9
Black, Non-Hispanic	187	2.6	3.5
Other, Non-Hispanic	88	1.2	1.5
Multiracial, Non-Hispanic	97	1.4	0.9
Hispanic	46	0.7	1.2
<u>Age</u>			
18-24	365	5.2	11.6
25-34	757	10.7	14.8
35-44	898	12.7	15.3
45-54	1,186	16.7	16.2
55-64	1,661	23.4	18.2
65+	2,227	31.4	23.9
<u>Education</u>			
< High School (HS)	827	11.6	15.1
HS or GED	2,632	36.9	40.1
Some College	1,718	24.1	27.2
College Degree	1,962	27.5	17.6
<u>Household Income</u>			
<\$15,000	795	13.7	14.0
\$15,000-\$24,999	1,193	20.5	22.0
\$25,000-\$34,999	739	12.7	12.6
\$35,000-\$49,999	852	14.6	15.0
\$50,000-\$74,999	845	14.5	14.9
\$75,000+	1,394	24.0	21.5
<u>Marital Status</u>			
Married	3,820	53.5	52.0
Divorced	1,148	16.1	13.2
Widowed	890	12.5	8.9
Separated	147	2.1	1.8
Never Married	955	13.4	20.4
Unmarried Couple	173	2.4	3.6
<u>Employment Status</u>			
Employed for wages	2,806	39.4	42.7
Self-Employed	390	5.5	5.4
Unemployed (>1 year)	156	2.2	2.9
Unemployed (<1 year)	155	2.2	2.8
Homemaker	448	6.3	6.7
Student	162	2.3	4.2
Retired	2,060	28.9	22.2
Unable to Work	953	13.4	13.0



## LIMITATIONS

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

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

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


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

## ESTIMATES, CONFIDENCE INTERVALS, SIGNIFICANCE, AND RELIABILITY

The prevalence rates presented in this report are derived from surveying a sample of adults rather than all adults in the population; therefore, the rates are estimates of the true values. For this reason, estimates are presented together with their associated confidence intervals (CIs). 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 prevalence estimates have been tested and found to be significantly different from each other. Statistically significant differences between estimates are traditionally determined using statistical tests such as a t-test or chi-square test. However, this report uses the following, more conservative method for determining significance. Two prevalence estimates are said to be “significantly” different when the 95% 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 6.”



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

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

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

The estimate has a relative standard error (RSE) of 30.0% or higher. The RSE is obtained by dividing the standard error of the estimate by the estimate itself.

## **WEIGHTING OF 2016 DATA RESULTS**

Beginning in 2011, CDC changed the weighting procedures for the BRFSS. Prior to 2011, weights for the BRFSS data were calculated based on the sex and age distribution of the West Virginia population using a method known as post-stratification. For 2011 and future years, BRFSS weights are calculated using a method known as iterative proportional fitting or raking. This weighting method takes into account additional demographic factors allowing for a better fit to West Virginia's socio-demographic profile. The additional factors used in the raking method include age group by sex, detailed race/ethnicity, education, marital status, tenure (rent or own home), gender by race/ethnicity, age group by race/ethnicity, and telephone sample source (landline or cell phone). Due to the addition of cell phone data and the new weighting methodology, 2011 and later results are not comparable to previous years of data. Although time trend graphs for state prevalence estimates are included in this report, they should be interpreted with caution as no direct comparison can be made between 1984-2010 and 2011-2016 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 data are presented in a variety of ways, including by state rank, yearly state and national prevalence, and demographic variables. It should be stressed that the risk factor prevalence estimates for the demographic variables (age, sex, race/ethnicity, education, and income) show the percentages of persons **within the group** – not in the total survey sample – who report the behavior being examined.

This method of presenting risk factor prevalence facilitates identification of at-risk populations for health promotion efforts. Each demographic table in this report shows the weighted frequency or estimated number of West Virginia adults who exhibit a behavior or condition, the weighted prevalence estimate (%), and the 95% 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 1<sup>st</sup> 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 often are less than one percentage point and that statistical significance was not tested when determining rankings. The prevalence estimates and rankings by state were calculated by 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.

Please note that some health measures are presented positively, so that the desired public health improvement would be reflected in prevalences approaching 100%. These include the following:

- Smoking Cessation (Chapter 6)
- Dental Visit (Chapter 14)
- Diabetes Testing (Chapter 15)
- HIV Testing (Chapter 16)
- Menu Labeling (Chapter 17)
- Immunization (Chapter 18)
- Cancer Screening (Chapter 19)
- Sodium Intake (Chapter 20)
- A1C Testing and Diabetes Education Class (Chapter 21)
- Cancer Survivorship (Chapter 22)

# West Virginia Behavioral Risk Factor Surveillance System Report

2016



## SECTION 1: HEALTH STATUS

## CHAPTER 1: HEALTH STATUS

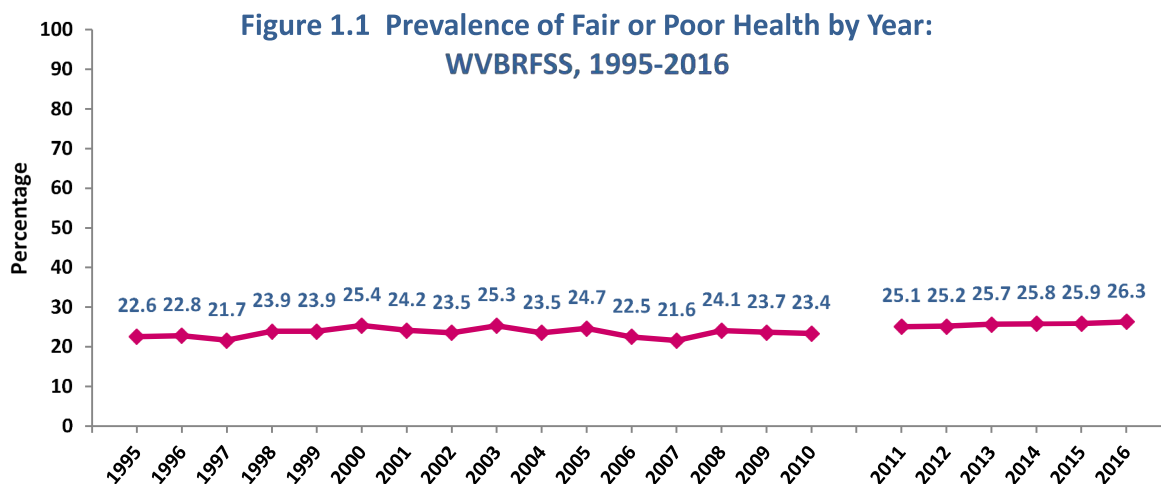
### General Health

<b>Definition</b>	Responding “Fair” or “Poor” to the question, “Would you say that in general your health is: Excellent, Very Good, Good, Fair, or Poor?”
<b>Prevalence</b>	<b>WV: 26.3%</b> (95% CI: 25.1-27.5) <b>U.S.: 18.0%</b> (95% CI: 17.7-18.2) West Virginia’s prevalence of fair or poor health was significantly higher than the U.S. prevalence. West Virginia ranked the 2 <sup>nd</sup> highest among 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 26.2% (95% CI: 24.4-27.9) <b>Women:</b> 26.4% (95% CI: 24.8-28.0) There was no significant gender difference in the prevalence of fair or poor general health status.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 26.1% (95% CI: 24.9-27.3) <b>Black, Non-Hispanic:</b> 31.1% (95% CI: 23.3-38.9) <b>Other, Non-Hispanic:</b> 19.2% (95% CI: 10.3-28.2) <b>Multiracial, Non-Hispanic:</b> *32.1 (95% CI: 21.5-42.7) <b>Hispanic:</b> *29.2% (95% CI: 13.6-44.7) There was no significant race/ethnicity difference in the prevalence of fair or poor health status. <small>* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</small>
<b>Age</b>	The prevalence of fair or poor health significantly increased with increasing age. The prevalence ranged from a low of 12.4% among adults aged 25-34 to a high of 36.8% among those aged 55-64.
<b>Education</b>	Adults with less than a high school education had the highest prevalence of fair or poor health, with a prevalence of 49.8%. Those with more education had a much lower prevalence, with the prevalence for college graduates of 10.1%. Significant differences in prevalence were found between each educational attainment group.
<b>Household Income</b>	The prevalence of fair or poor health was 47.8% in the lowest annual household income group (less than \$15,000). The lowest prevalence of fair or poor health (7.3%) was among those in the highest income bracket (\$75,000 or more annually). There were significant differences in the prevalence of fair or poor health between most income groups.

## CHAPTER 1: HEALTH STATUS

**Table 1.1 Prevalence of Fair or Poor Health by Demographic Characteristics: WVBRFSS, 2016**

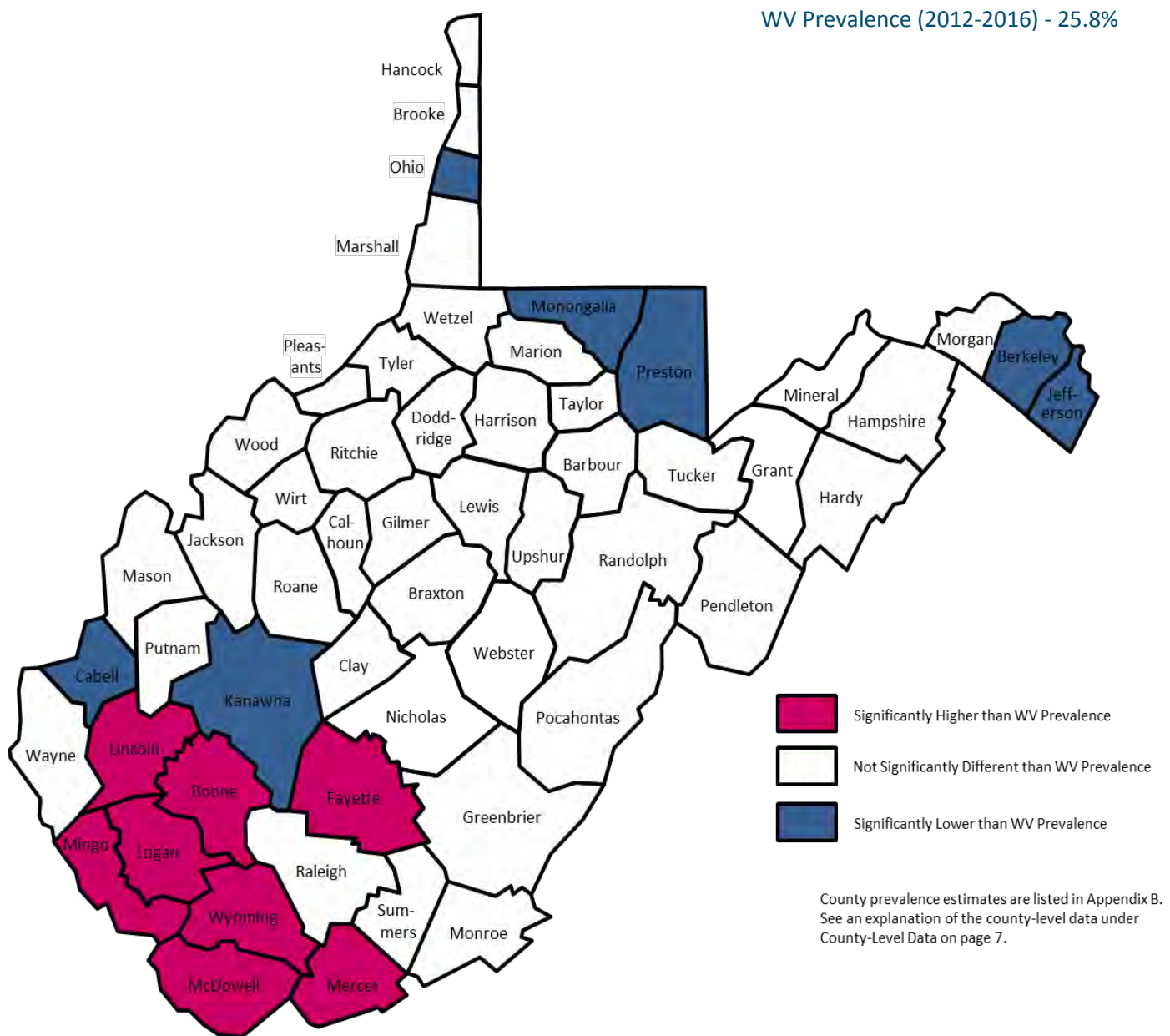
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	186,829	<b>26.2</b>	24.4-27.9	196,542	<b>26.4</b>	24.8-28.0	383,371	<b>26.3</b>	25.1-27.5
<b>Age</b>									
18-24	9,398	<b>10.8</b>	5.5-16.1	12,839	<b>15.6</b>	9.6-21.5	22,236	<b>13.1</b>	9.1-17.1
25-34	13,590	<b>12.5</b>	8.1-16.8	13,070	<b>12.4</b>	8.9-15.9	26,661	<b>12.4</b>	9.6-15.2
35-44	22,190	<b>19.9</b>	15.5-24.3	23,668	<b>21.4</b>	17.2-25.5	45,857	<b>20.6</b>	17.6-23.7
45-54	32,991	<b>28.1</b>	23.6-32.5	37,688	<b>32.1</b>	28.0-36.2	70,679	<b>30.1</b>	27.0-33.1
55-64	53,181	<b>40.9</b>	36.9-44.8	44,112	<b>32.9</b>	29.5-36.4	97,293	<b>36.8</b>	34.2-39.5
65+	54,437	<b>34.9</b>	31.4-38.4	64,663	<b>34.1</b>	31.1-37.1	119,100	<b>34.5</b>	32.2-36.7
<b>Education</b>									
Less than H.S.	56,458	<b>51.8</b>	46.0-57.6	52,453	<b>47.7</b>	42.3-53.2	108,910	<b>49.8</b>	45.8-53.8
H.S. or G.E.D.	78,648	<b>26.2</b>	23.5-28.9	82,187	<b>28.8</b>	26.2-31.4	160,835	<b>27.5</b>	25.6-29.3
Some Post-H.S.	38,247	<b>21.7</b>	18.3-25.2	48,854	<b>22.2</b>	19.5-24.9	87,101	<b>22.0</b>	19.8-24.1
College Graduate	13,232	<b>10.3</b>	8.3-12.4	12,741	<b>9.9</b>	8.0-11.8	25,973	<b>10.1</b>	8.7-11.5
<b>Income</b>									
Less than \$15,000	36,878	<b>50.0</b>	43.5-56.5	41,332	<b>45.9</b>	40.7-51.1	78,209	<b>47.8</b>	43.6-51.9
\$15,000 - 24,999	46,756	<b>39.7</b>	34.5-44.9	49,570	<b>35.0</b>	30.8-39.2	96,325	<b>37.1</b>	33.9-40.4
\$25,000 - 34,999	23,015	<b>31.6</b>	25.9-37.3	17,477	<b>22.9</b>	18.3-27.5	40,492	<b>27.2</b>	23.5-30.9
\$35,000 - 49,999	17,705	<b>19.9</b>	15.5-24.2	17,232	<b>19.8</b>	15.6-24.1	34,937	<b>19.8</b>	16.8-22.9
\$50,000 - 74,999	14,108	<b>15.0</b>	11.0-18.9	10,873	<b>13.4</b>	9.9-17.0	24,981	<b>14.3</b>	11.6-16.9
\$75,000+	10,582	<b>7.4</b>	5.4-9.3	8,105	<b>7.3</b>	4.8-9.9	18,687	<b>7.3</b>	5.8-8.9



\*Due to changes in sample composition and weighting methodology, 2011-2016 results are not directly comparable to previous years.

## CHAPTER 1: HEALTH STATUS

Figure 1.2 Prevalence of Fair or Poor Health by County: WVBRFSS, 2012-2016



## CHAPTER 1: HEALTH STATUS

### Physical Health

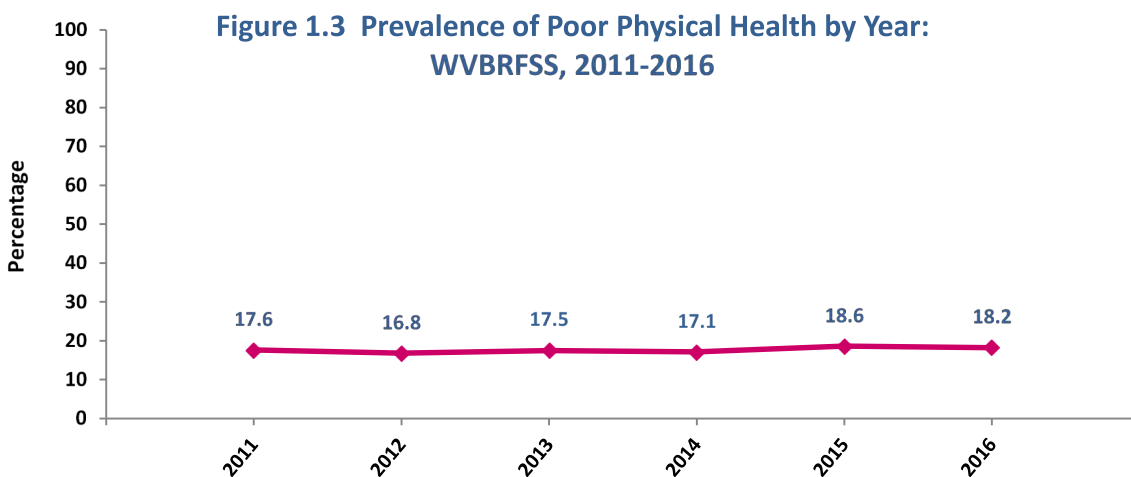
<b>Definition</b>	Responding at least “14 days” or more to the question, “Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?”
<b>Prevalence</b>	<b>WV: 18.2%</b> (95% CI: 17.1-19.2) <b>U.S.: 12.1%</b> (95% CI: 11.9-12.3) West Virginia ranked 1 <sup>st</sup> highest among 54 BRFSS participants. West Virginia’s prevalence was significantly higher than the U.S. prevalence of poor physical health.
<b>Gender</b>	<b>Men:</b> 18.0% (95% CI: 16.5-19.6) <b>Women:</b> 18.3% (95% CI: 16.9-19.6) There was no significant gender difference in the prevalence of poor physical health.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 18.1% (95% CI: 17.1-19.2) <b>Black, Non-Hispanic:</b> 15.0% (95% CI: 9.1-20.9) <b>Other, Non-Hispanic:</b> 15.5% (95% CI: 7.1-24.0) <b>Multiracial, Non-Hispanic:</b> *30.1% (95% CI: 19.8-40.4) <b>Hispanic:</b> *21.2% (95% CI: 6.7-35.6) The prevalence of poor physical health status was significantly higher among Multiracial, Non-Hispanic adults than among White, Non-Hispanic adults. <small>* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</small>
<b>Age</b>	The prevalence of poor physical health generally increased with advancing age with a statistically significant difference between those aged 44 and under and those aged 45 and older. The prevalence ranged from a low of 4.9% among those aged 18-24 to a high of 26.9% among those aged 55-64.
<b>Education</b>	Adults with less than a high school education had the highest prevalence of poor physical health, with a prevalence of 31.9%. Those with more education had a lower prevalence, with a prevalence of 8.3% for college graduates. Significant differences were observed between most educational attainment groups.
<b>Household Income</b>	The prevalence of poor physical health was highest among adults in the lowest household income group of less than \$15,000 annually (37.1%), which was significantly higher than all other income groups. The prevalence of poor physical health was lowest among those in the highest income bracket of \$75,000 or more (5.4%), which was significantly lower than all other income groups.

## CHAPTER 1: HEALTH STATUS

**Table 1.2 Prevalence of Poor Physical Health by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	127,340	<b>18.0</b>	16.5-19.6	133,960	<b>18.3</b>	16.9-19.6	261,301	<b>18.2</b>	17.1-19.2
<b>Age</b>									
18-24	2,806	<b>*3.3</b>	0.4-6.1	5,364	<b>6.6</b>	2.7-10.4	8,169	<b>4.9</b>	2.5-7.3
25-34	9,789	<b>9.0</b>	5.3-12.6	8,899	<b>8.6</b>	5.7-11.5	18,689	<b>8.8</b>	6.4-11.1
35-44	16,283	<b>14.8</b>	10.9-18.8	18,831	<b>17.1</b>	13.4-20.8	35,114	<b>16.0</b>	13.3-18.7
45-54	24,517	<b>21.1</b>	17.0-25.3	27,796	<b>23.8</b>	20.1-27.5	52,313	<b>22.5</b>	19.7-25.3
55-64	37,249	<b>29.1</b>	25.4-32.8	32,294	<b>24.7</b>	21.5-27.9	69,543	<b>26.9</b>	24.4-29.3
65+	36,558	<b>23.7</b>	20.5-26.9	40,039	<b>21.7</b>	19.1-24.3	76,597	<b>22.6</b>	20.6-24.6
<b>Education</b>									
Less than H.S.	38,431	<b>36.5</b>	30.8-42.1	29,656	<b>27.4</b>	22.8-32.0	68,087	<b>31.9</b>	28.2-35.5
H.S. or G.E.D.	50,808	<b>17.0</b>	14.8-19.2	56,856	<b>20.5</b>	18.2-22.7	107,664	<b>18.7</b>	17.1-20.3
Some Post-H.S.	28,328	<b>16.3</b>	13.2-19.3	35,530	<b>16.4</b>	14.0-18.8	63,858	<b>16.3</b>	14.4-18.2
College Graduate	9,529	<b>7.5</b>	5.7-9.3	11,611	<b>9.0</b>	7.2-10.8	21,140	<b>8.3</b>	7.0-9.5
<b>Income</b>									
Less than \$15,000	27,630	<b>38.7</b>	32.3-45.2	31,775	<b>35.8</b>	30.9-40.7	59,405	<b>37.1</b>	33.2-41.1
\$15,000 - 24,999	33,014	<b>28.2</b>	23.6-32.8	30,594	<b>21.8</b>	18.5-25.1	63,608	<b>24.7</b>	21.9-27.5
\$25,000 - 34,999	14,897	<b>20.7</b>	15.8-25.7	12,151	<b>16.2</b>	12.3-20.2	27,048	<b>18.4</b>	15.3-21.6
\$35,000 - 49,999	12,124	<b>13.6</b>	9.8-17.4	11,998	<b>13.9</b>	9.9-17.9	24,122	<b>13.7</b>	11.0-16.5
\$50,000 - 74,999	9,297	<b>9.8</b>	6.7-12.9	9,676	<b>12.0</b>	8.7-15.4	18,972	<b>10.9</b>	8.6-13.1
\$75,000+	6,305	<b>4.4</b>	2.8-6.0	7,383	<b>6.7</b>	4.5-8.9	13,688	<b>5.4</b>	4.1-6.7

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





## CHAPTER 1: HEALTH STATUS

### Mental Health

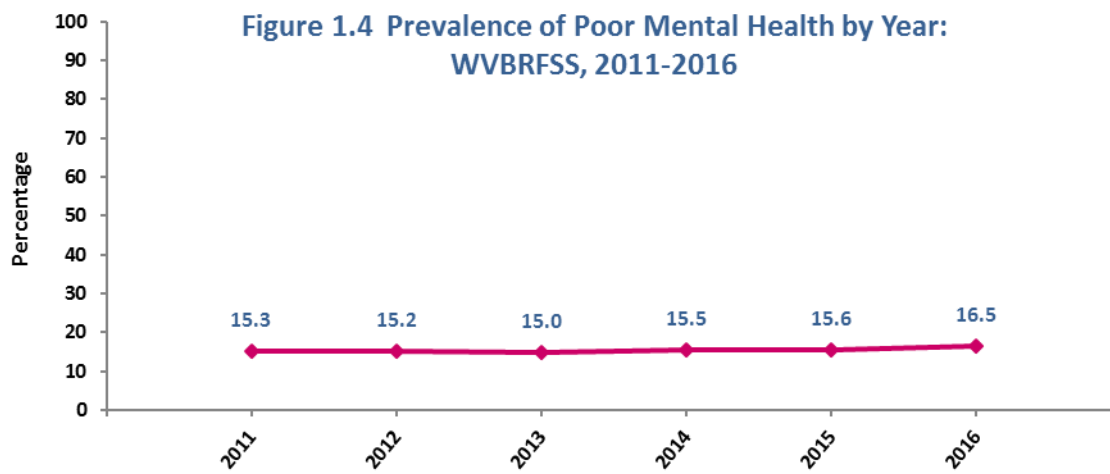
<b>Definition</b>	Responding at least “14 days” or more to the question, “Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?”
<b>Prevalence</b>	<b>WV: 16.5%</b> (95% CI: 15.5-17.6) <b>U.S.: 11.7%</b> (95% CI: 11.5-11.9) The WV prevalence of poor mental health was significantly higher than the U.S. prevalence. West Virginia ranked 1 <sup>st</sup> highest among 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 13.9% (95% CI: 12.4-15.4) <b>Women:</b> 19.0% (95% CI: 17.5-20.6) The prevalence of poor mental health was significantly higher among females than males.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 16.3% (95% CI: 15.2-17.4) <b>Black, Non-Hispanic:</b> 21.7% (95% CI: 14.5-28.9) <b>Other, Non-Hispanic:</b> 15.6% (95% CI: 7.1-24.1) <b>Multiracial, Non-Hispanic:</b> 21.2% (95% CI: 12.0-30.4) <b>Hispanic:</b> *11.3% (95% CI: 0.8-21.7) There was no race/ethnicity difference in the prevalence of poor mental health status. <small>* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</small>
<b>Age</b>	The prevalence of poor mental health varied with age. The prevalence of poor mental health was highest among those aged 45-54 (21.2%) and lowest among those aged 65 and older (9.7%). The prevalence of poor mental health was significantly lower among those aged 65 and older than among all other age groups.
<b>Education</b>	Adults with less than a high school education had the highest prevalence of poor mental health, with a prevalence of 27.8%, which was significantly higher than all other education groups. The prevalence of poor mental health was significantly lower among college graduates (9.0%) than among all other educational attainment groups.
<b>Household Income</b>	The prevalence of poor mental health was significantly higher among those with an annual household income of less than \$15,000 (34.7%) than among all other income brackets. The prevalence of poor mental health was significantly lower among those with an annual household income of \$50,000 or more (7.0%) than among all other income brackets.



## CHAPTER 1: HEALTH STATUS

**Table 1.3 Prevalence of Poor Mental Health by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	98,633	<b>13.9</b>	12.4-15.4	139,698	<b>19.0</b>	17.5-20.6	238,332	<b>16.5</b>	15.5-17.6
<b>Age</b>									
18-24	10,600	<b>12.5</b>	7.0-17.9	19,699	<b>24.2</b>	17.4-31.1	30,299	<b>18.2</b>	13.8-22.6
25-34	18,159	<b>16.6</b>	11.9-21.2	21,024	<b>20.5</b>	16.0-24.9	39,183	<b>18.5</b>	15.2-21.7
35-44	19,139	<b>17.2</b>	13.1-21.3	23,006	<b>21.0</b>	17.0-25.1	42,145	<b>19.1</b>	16.2-21.9
45-54	17,068	<b>14.7</b>	11.3-18.2	32,314	<b>27.7</b>	23.8-31.6	49,382	<b>21.2</b>	18.6-23.9
55-64	19,705	<b>15.3</b>	12.3-18.2	22,999	<b>17.4</b>	14.6-20.2	42,704	<b>16.4</b>	14.3-18.4
65+	13,090	<b>8.5</b>	6.4-10.5	19,836	<b>10.7</b>	8.8-12.6	32,926	<b>9.7</b>	8.3-11.1
<b>Education</b>									
Less than H.S.	27,005	<b>25.3</b>	20.1-30.5	32,379	<b>30.2</b>	25.0-35.4	59,383	<b>27.8</b>	24.1-31.4
H.S. or G.E.D.	40,398	<b>13.5</b>	11.2-15.8	53,107	<b>18.9</b>	16.5-21.3	93,505	<b>16.1</b>	14.5-17.8
Some Post-H.S.	22,147	<b>12.7</b>	9.9-15.4	40,037	<b>18.5</b>	15.8-21.2	62,184	<b>15.9</b>	13.9-17.9
College Graduate	8,970	<b>7.1</b>	5.2-8.9	14,020	<b>10.9</b>	8.7-13.1	22,990	<b>9.0</b>	7.6-10.4
<b>Income</b>									
Less than \$15,000	20,023	<b>27.5</b>	21.6-33.4	35,791	<b>40.7</b>	35.5-45.9	55,814	<b>34.7</b>	30.8-38.7
\$15,000 - 24,999	24,475	<b>21.0</b>	16.4-25.5	35,954	<b>25.7</b>	21.6-29.8	60,429	<b>23.6</b>	20.5-26.6
\$25,000 - 34,999	10,387	<b>14.3</b>	9.8-18.8	13,089	<b>17.3</b>	12.5-22.0	23,476	<b>15.8</b>	12.5-19.1
\$35,000 - 49,999	11,399	<b>13.0</b>	9.1-16.8	16,056	<b>18.5</b>	14.2-22.8	27,455	<b>15.7</b>	12.8-18.6
\$50,000 - 74,999	5,797	<b>6.2</b>	3.2-9.1	6,371	<b>7.9</b>	5.2-10.6	12,168	<b>7.0</b>	4.9-9.0
\$75,000+	8,829	<b>6.2</b>	3.9-8.4	8,804	<b>8.1</b>	5.4-10.7	17,633	<b>7.0</b>	5.2-8.7



### Poor Health Limitations

<b>Definition</b>	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?”
<b>Prevalence</b>	<p><i>At least 14 days</i></p> <p><b>WV: 23.6%</b> (95% CI: 22.0-25.2) <b>U.S.: 15.7%</b> (95% CI: 15.4-16.0)</p> <p>West Virginia ranked 1<sup>st</sup> highest among 54 BRFSS participants and was significantly higher than the U.S. prevalence.</p> <p><i>Every day</i></p> <p><b>WV: 13.4%</b> (95% CI: 12.1-14.6) <b>U.S.: 7.9%</b> (95% CI: 7.6-8.1)</p> <p>West Virginia ranked 1<sup>st</sup> highest among 54 BRFSS participants and was significantly higher than the U.S. prevalence.</p>
<b>Gender</b>	<p><i>At least 14 days</i></p> <p><b>Men:</b> 25.3% (95% CI: 22.8-27.8) <b>Women:</b> 22.3% (95% CI: 20.3-24.2)</p> <p>There was no gender difference in the prevalence of poor health limitations for at least 14 days in the past 30 days.</p> <p><i>Every day</i></p> <p><b>Men:</b> 15.6% (95% CI: 13.6-17.7) <b>Women:</b> 11.5% (95% CI: 10.1-13.0)</p> <p>The prevalence of poor health limitations every day in the past 30 days was significantly higher among men than among women.</p>
<b>Race/Ethnicity</b>	No race/ethnicity statistics are reported due to unreliable estimates.
<b>Age</b>	The prevalence of poor health limitations generally increased with age for both the 14 day indicator and the every day indicator.
<b>Education</b>	The prevalence of poor health limitations was highest among those with the least amount of education and lowest among those with the most education for both the 14 day and every day indicators. Significant differences were observed between each level of education for the 14 day indicator and nearly all education levels for the every day indicator.
<b>Household Income</b>	In general, the prevalence of poor health limitations declined with increasing annual household income for both the 14 day and every day indicators.

## 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, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	87,466	<b>25.3</b>	22.8-27.8	96,751	<b>22.3</b>	20.3-24.2	184,217	<b>23.6</b>	22.0-25.2
<b>Age</b>									
18-24	3,397	<b>*7.9</b>	1.8-14.1	8,169	<b>15.4</b>	8.0-22.7	11,567	<b>12.1</b>	7.1-17.0
25-34	7,788	<b>14.8</b>	8.5-21.1	7,677	<b>12.6</b>	7.8-17.4	15,465	<b>13.6</b>	9.7-17.5
35-44	14,961	<b>27.6</b>	20.6-34.7	13,606	<b>19.7</b>	14.7-24.6	28,568	<b>23.2</b>	19.0-27.4
45-54	17,057	<b>30.5</b>	24.0-37.1	21,627	<b>28.5</b>	23.6-33.5	38,684	<b>29.4</b>	25.4-33.3
55-64	23,222	<b>33.1</b>	27.8-38.4	22,089	<b>28.3</b>	24.0-32.6	45,311	<b>30.6</b>	27.2-34.0
65+	20,853	<b>30.3</b>	25.2-35.4	22,796	<b>23.9</b>	20.1-27.7	43,649	<b>26.6</b>	23.5-29.7
<b>Education</b>									
Less than H.S.	28,882	<b>42.4</b>	35.2-49.6	25,112	<b>36.8</b>	30.3-43.3	53,994	<b>39.6</b>	34.7-44.4
H.S. or G.E.D.	34,453	<b>25.2</b>	21.3-29.1	41,208	<b>24.8</b>	21.5-28.1	75,660	<b>25.0</b>	22.5-27.5
Some Post-H.S.	18,747	<b>21.2</b>	16.3-26.1	22,363	<b>17.2</b>	14.0-20.4	41,110	<b>18.8</b>	16.1-21.6
College Graduate	5,270	<b>10.2</b>	6.9-13.5	7,912	<b>11.3</b>	8.5-14.2	13,183	<b>10.8</b>	8.7-13.0
<b>Income</b>									
Less than \$15,000	22,141	<b>42.6</b>	34.9-50.3	26,259	<b>38.9</b>	33.1-44.8	48,400	<b>40.5</b>	35.8-45.2
\$15,000 - 24,999	23,841	<b>33.7</b>	27.2-40.2	21,261	<b>24.1</b>	19.5-28.7	45,102	<b>28.4</b>	24.5-32.3
\$25,000 - 34,999	8,235	<b>24.0</b>	16.5-31.5	8,597	<b>18.6</b>	13.0-24.2	16,832	<b>20.9</b>	16.4-25.5
\$35,000 - 49,999	7,106	<b>17.9</b>	11.8-24.0	8,199	<b>17.1</b>	11.1-23.1	15,305	<b>17.4</b>	13.2-21.7
\$50,000 - 74,999	5,853	<b>16.5</b>	9.9-23.1	3,997	<b>9.7</b>	5.6-13.7	9,850	<b>12.8</b>	9.1-16.6
\$75,000+	1,853	<b>3.6</b>	1.5-5.6	5,670	<b>10.4</b>	6.2-14.6	7,522	<b>7.1</b>	4.6-9.5

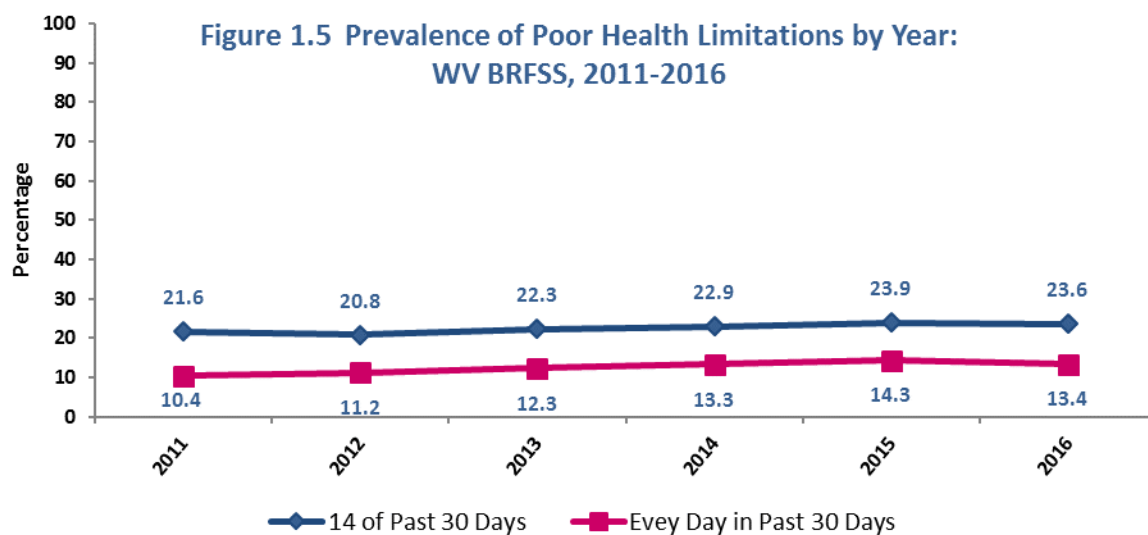
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

**Table 1.5 Prevalence of Poor Health Limitations at Every Day in the Past 30 Days by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	54,054	<b>15.6</b>	13.6-17.7	50,198	<b>11.5</b>	10.1-13.0	104,251	<b>13.4</b>	12.1-14.6
<b>Age</b>									
18-24	1,023	<b>*2.4</b>	0.0-5.8	1,600	<b>*3.0</b>	0.0-6.0	2,623	<b>*2.7</b>	0.5-5.0
25-34	4,504	<b>*8.6</b>	3.5-13.6	4,119	<b>6.8</b>	3.3-10.3	8,624	<b>7.6</b>	4.6-10.6
35-44	7,671	<b>14.2</b>	8.6-19.8	6,532	<b>9.4</b>	6.0-12.8	14,203	<b>11.5</b>	8.4-14.7
45-54	10,948	<b>19.6</b>	13.9-25.3	11,356	<b>15.0</b>	11.0-18.9	22,305	<b>16.9</b>	13.6-20.3
55-64	16,456	<b>23.5</b>	18.8-28.2	12,104	<b>15.5</b>	12.1-18.9	28,560	<b>19.3</b>	16.4-22.2
65+	13,264	<b>19.3</b>	14.9-23.7	14,124	<b>14.8</b>	11.6-18.1	27,388	<b>16.7</b>	14.1-19.3
<b>Education</b>									
Less than H.S.	16,614	<b>24.4</b>	18.3-30.4	13,461	<b>19.7</b>	14.7-24.8	30,075	<b>22.1</b>	18.1-26.0
H.S. or G.E.D.	23,234	<b>17.0</b>	13.7-20.2	20,224	<b>12.2</b>	9.8-14.5	43,458	<b>14.4</b>	12.4-16.3
Some Post-H.S.	11,139	<b>12.6</b>	8.6-16.6	12,144	<b>9.3</b>	6.9-11.8	23,283	<b>10.7</b>	8.5-12.8
College Graduate	3,067	<b>5.9</b>	3.4-8.5	4,213	<b>6.0</b>	3.8-8.3	7,280	<b>6.0</b>	4.3-7.7
<b>Income</b>									
Less than \$15,000	12,670	<b>24.4</b>	18.0-30.8	15,252	<b>22.6</b>	17.9-27.4	27,922	<b>23.4</b>	19.5-27.2
\$15,000 - 24,999	15,237	<b>21.6</b>	15.9-27.2	10,034	<b>11.4</b>	8.3-14.5	25,271	<b>15.9</b>	12.8-19.0
\$25,000 - 34,999	5,806	<b>16.9</b>	10.3-23.5	4,585	<b>9.9</b>	5.6-14.3	10,391	<b>12.9</b>	9.1-16.7
\$35,000 - 49,999	3,335	<b>8.4</b>	4.2-12.6	2,821	<b>5.9</b>	2.8-8.9	6,156	<b>7.0</b>	4.5-9.5
\$50,000 - 74,999	3,250	<b>9.2</b>	4.0-14.3	1,811	<b>*4.4</b>	1.5-7.3	5,061	<b>6.6</b>	3.8-9.4
\$75,000+	1,562	<b>*3.0</b>	1.1-4.9	2,672	<b>4.9</b>	2.1-7.7	4,234	<b>4.0</b>	2.3-5.7

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

## CHAPTER 1: HEALTH STATUS



## CHAPTER 2: IMPAIRMENT

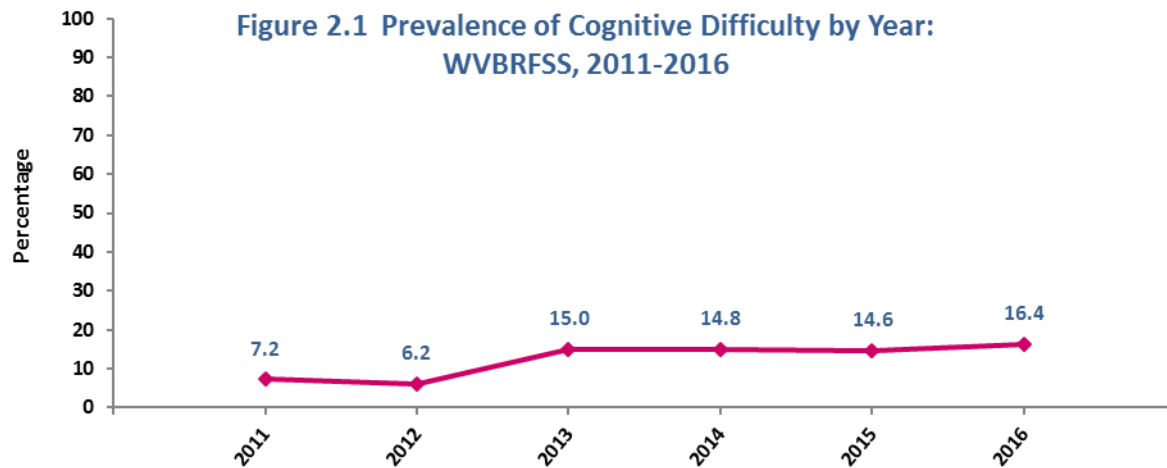
### Cognitive Difficulty

<b>Definition</b>	Responding “Yes” to the question, “Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions?”
<b>Prevalence</b>	<b>WV: 16.4%</b> (95% CI: 15.3-17.5) <b>U.S.: 10.8%</b> (95% CI: 10.6-11.0) The West Virginia prevalence of cognitive difficulty was significantly higher than the U.S. prevalence. West Virginia ranked 1 <sup>st</sup> highest among the 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 15.3% (95% CI: 13.7-16.9) <b>Women:</b> 17.4% (95% CI: 16.0-18.9) There was no gender difference for the prevalence of cognitive difficulty.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 16.0% (95% CI: 15.0-17.1) <b>Black, Non-Hispanic:</b> 18.2% (95% CI: 10.5-26.0) <b>Other, Non-Hispanic:</b> *19.0% (95% CI: 9.0-29.1) <b>Multiracial, Non-Hispanic:</b> *30.8% (95% CI: 18.5-43.0) <b>Hispanic:</b> *21.4% (95% CI: 7.3-35.6) There was no race/ethnicity difference in the prevalence of cognitive difficulty. <small>* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</small>
<b>Age</b>	The prevalence of cognitive difficulty was highest among those aged 45-54 (22.1%), significantly higher than the prevalence among those aged 25-34 (13.3%) and those aged 55 and older.
<b>Education</b>	The prevalence of cognitive difficulty was significantly higher among those with less than a high school education (32.2%) than among all other educational attainment levels. The prevalence was significantly lower among those with a college degree (7.8%) than among all other educational attainment levels.
<b>Household Income</b>	The prevalence of cognitive difficulty generally decreased with increasing income. The prevalence of cognitive difficulty was significantly higher among those with an income of less than \$15,000 (34.3%) than all other income brackets.

## CHAPTER 2: IMPAIRMENT

**Table 2.1 Prevalence of Cognitive Difficulty by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	107,610	<b>15.3</b>	13.7-16.9	128,442	<b>17.4</b>	16.0-18.9	236,051	<b>16.4</b>	15.3-17.5
<b>Age</b>									
18-24	11,450	<b>13.4</b>	7.4-19.3	14,931	<b>18.5</b>	12.0-25.0	26,381	<b>15.9</b>	11.5-20.3
25-34	12,698	<b>11.9</b>	7.5-16.2	15,457	<b>14.7</b>	11.0-18.5	28,155	<b>13.3</b>	10.4-16.2
35-44	17,805	<b>16.4</b>	12.3-20.5	20,602	<b>18.8</b>	14.9-22.8	38,407	<b>17.6</b>	14.8-20.5
45-54	21,490	<b>18.5</b>	14.5-22.4	29,675	<b>25.7</b>	21.8-29.5	51,165	<b>22.1</b>	19.3-24.8
55-64	22,376	<b>17.4</b>	14.3-20.6	22,177	<b>16.8</b>	14.0-19.6	44,553	<b>17.1</b>	15.0-19.2
65+	21,136	<b>13.7</b>	11.1-16.2	25,296	<b>13.4</b>	11.3-15.5	46,432	<b>13.5</b>	11.9-15.2
<b>Education</b>									
Less than H.S.	34,846	<b>32.9</b>	27.2-38.5	34,827	<b>31.6</b>	26.4-36.8	69,673	<b>32.2</b>	28.4-36.0
H.S. or G.E.D.	43,297	<b>14.6</b>	12.2-17.0	50,378	<b>18.0</b>	15.7-20.3	93,676	<b>16.2</b>	14.6-17.9
Some Post-H.S.	21,505	<b>12.4</b>	9.6-15.3	31,269	<b>14.4</b>	12.0-16.7	52,774	<b>13.5</b>	11.7-15.3
College Graduate	7,962	<b>6.3</b>	4.5-8.0	11,967	<b>9.4</b>	7.3-11.4	19,929	<b>7.8</b>	6.5-9.2
<b>Income</b>									
Less than \$15,000	24,181	<b>33.2</b>	26.9-39.5	31,502	<b>35.1</b>	30.1-40.2	55,683	<b>34.3</b>	30.3-38.2
\$15,000 - 24,999	28,083	<b>24.0</b>	19.1-28.9	30,452	<b>21.7</b>	17.8-25.7	58,535	<b>22.8</b>	19.7-25.9
\$25,000 - 34,999	8,971	<b>12.4</b>	8.8-16.0	12,785	<b>16.8</b>	12.7-21.0	21,756	<b>14.7</b>	11.9-17.5
\$35,000 - 49,999	12,783	<b>14.3</b>	10.2-18.5	10,702	<b>12.3</b>	8.7-15.9	23,485	<b>13.3</b>	10.6-16.1
\$50,000 - 74,999	5,702	<b>6.1</b>	3.4-8.8	6,989	<b>8.6</b>	5.7-11.6	12,692	<b>7.3</b>	5.3-9.3
\$75,000+	6,148	<b>4.3</b>	2.4-6.3	5,343	<b>4.9</b>	3.0-6.8	11,491	<b>4.6</b>	3.2-5.9



## CHAPTER 2: IMPAIRMENT

### Difficulty Walking

<b>Definition</b>	Responding “Yes” to the question, “Do you have serious difficulty walking or climbing stairs?”
<b>Prevalence</b>	<b>WV: 22.3%</b> (95% CI: 21.2-23.4) <b>U.S.: 13.7%</b> (95% CI: 13.5-13.9) The West Virginia prevalence of difficulty walking was significantly higher than the U.S. prevalence. West Virginia ranked 1 <sup>st</sup> highest among the 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 21.5% (95% CI: 19.9-23.1) <b>Women:</b> 23.1% (95% CI: 21.6-24.5) There was no gender difference in the prevalence of difficulty walking.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 22.3% (95% CI: 21.2-23.4) <b>Black, Non-Hispanic:</b> 21.9% (95% CI: 15.2-28.6) <b>Other, Non-Hispanic:</b> 21.4% (95% CI: 11.7-31.1) <b>Multiracial, Non-Hispanic:</b> *29.5% (95% CI: 18.7-40.3) <b>Hispanic:</b> *22.0% (95% CI: 7.8-36.1) There was no race/ethnic difference in the prevalence of difficulty walking. * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.
<b>Age</b>	The prevalence of difficulty walking increased with age and was highest among those 65 and older (35.3%) and lowest among those 18-24 (2.7%).
<b>Education</b>	The prevalence of difficulty walking decreased with increasing educational attainment and was highest among those with less than a high school education (39.1%) and was significantly higher than all other educational attainment groups. The prevalence of difficulty walking was lowest among those with a college degree (9.6%) and was significantly lower than all other education groups.
<b>Household Income</b>	The prevalence of difficulty walking decreased with increasing household income and was significantly higher among those with an annual household income less than \$15,000 (42.4%) than all other income brackets. The prevalence of difficulty walking was significantly lower among those with an annual household income of \$75,000 or more (6.0%) than all other income groups.

## CHAPTER 2: IMPAIRMENT

**Table 2.2 Prevalence of Difficulty Walking by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	151,811	<b>21.5</b>	19.9-23.1	170,097	<b>23.1</b>	21.6-24.5	321,908	<b>22.3</b>	21.2-23.4
<b>Age</b>									
18-24	1,317	<b>*1.5</b>	0.0-3.3	3,160	<b>*3.9</b>	0.9-7.0	4,477	<b>*2.7</b>	0.9-4.4
25-34	6,896	<b>6.4</b>	3.1-9.7	5,873	<b>5.6</b>	3.2-8.0	12,769	<b>6.0</b>	4.0-8.0
35-44	14,819	<b>13.6</b>	9.7-17.4	15,866	<b>14.5</b>	10.8-18.1	30,685	<b>14.0</b>	11.3-16.7
45-54	29,284	<b>25.2</b>	20.9-29.6	30,142	<b>26.1</b>	22.2-29.9	59,426	<b>25.6</b>	22.7-28.6
55-64	49,031	<b>38.1</b>	34.1-42.0	42,264	<b>32.0</b>	28.5-35.4	91,295	<b>35.0</b>	32.4-37.6
65+	49,963	<b>32.2</b>	28.7-35.6	71,690	<b>38.0</b>	34.9-41.0	121,653	<b>35.3</b>	33.1-37.6
<b>Education</b>									
Less than H.S.	44,872	<b>42.0</b>	36.3-47.7	39,908	<b>36.2</b>	31.3-41.2	84,780	<b>39.1</b>	35.3-42.9
H.S. or G.E.D.	61,047	<b>20.5</b>	18.1-22.9	75,030	<b>26.7</b>	24.2-29.2	136,077	<b>23.5</b>	21.8-25.3
Some Post-H.S.	34,866	<b>20.1</b>	16.8-23.3	41,595	<b>19.1</b>	16.6-21.5	76,461	<b>19.5</b>	17.5-21.5
College Graduate	11,026	<b>8.7</b>	6.8-10.6	13,412	<b>10.5</b>	8.5-12.4	24,438	<b>9.6</b>	8.2-10.9
<b>Income</b>									
Less than \$15,000	32,503	<b>44.3</b>	37.9-50.8	36,595	<b>40.7</b>	35.7-45.8	69,097	<b>42.4</b>	38.3-46.4
\$15,000 - 24,999	39,017	<b>33.1</b>	28.3-38.0	37,443	<b>26.7</b>	23.1-30.2	76,460	<b>29.6</b>	26.7-32.6
\$25,000 - 34,999	18,345	<b>25.3</b>	20.2-30.4	18,138	<b>23.9</b>	19.3-28.4	36,483	<b>24.6</b>	21.2-28.0
\$35,000 - 49,999	14,918	<b>16.7</b>	12.7-20.7	16,520	<b>19.0</b>	15.0-23.0	31,439	<b>17.8</b>	15.0-20.7
\$50,000 - 74,999	9,174	<b>9.8</b>	6.8-12.7	12,271	<b>15.2</b>	11.2-19.1	21,444	<b>12.3</b>	9.8-14.7
\$75,000+	7,785	<b>5.5</b>	3.8-7.2	7,397	<b>6.8</b>	4.6-9.0	15,182	<b>6.0</b>	4.7-7.4

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



### Difficulty Dressing or Bathing

<b>Definition</b>	Responding “Yes” to the question, “Do you have difficulty dressing or bathing?”
<b>Prevalence</b>	<b>WV: 5.7%</b> (95% CI: 5.1-6.3) <b>U.S.: 3.7%</b> (95% CI: 3.6-3.8) The West Virginia prevalence of difficulty dressing or bathing was significantly higher than the U.S. prevalence. West Virginia ranked the 4 <sup>th</sup> highest among the 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 6.2% (95% CI: 5.2-7.2) <b>Women:</b> 5.2% (95% CI: 4.4-6.0) There was no gender difference for the prevalence of difficulty dressing or bathing.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 5.6% (95% CI: 5.0-6.3) <b>Black, Non-Hispanic:</b> *6.9% (95% CI: 2.4-11.4) <b>Other, Non-Hispanic:</b> *3.7% (95% CI: 0.0-8.7) <b>Multiracial, Non-Hispanic:</b> *2.6% (95% CI: 0.0-5.3) <b>Hispanic:</b> *9.7% (95% CI: 0.0-21.6) There was no race/ethnicity difference in the prevalence of difficulty dressing or bathing. <small>* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</small>
<b>Age</b>	The prevalence of difficulty dressing or bathing was significantly higher among those aged 45 and older than among those aged 34 and younger.
<b>Education</b>	The prevalence of difficulty dressing or bathing was significantly higher among those with less than a high school education (10.1%) than among all other educational attainment levels and significantly lower among those with a college degree (2.5%) than among all other educational attainment levels.
<b>Household Income</b>	The prevalence of difficulty dressing or bathing was significantly higher among those with an annual household income of less than \$15,000 (15.4%) than all other income levels.

## CHAPTER 2: IMPAIRMENT

**Table 2.3 Prevalence of Difficulty Dressing or Bathing by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	43,895	<b>6.2</b>	5.2-7.2	38,306	<b>5.2</b>	4.4-6.0	82,201	<b>5.7</b>	5.1-6.3
<b>Age</b>									
18-24	881	<b>*1.0</b>	0.0-2.5	571	<b>*0.7</b>	0.0-1.7	1,452	<b>*0.9</b>	0.0-1.7
25-34	3,421	<b>*3.2</b>	0.8-5.6	2,265	<b>*2.2</b>	0.5-3.8	5,685	<b>2.7</b>	1.2-4.1
35-44	6,600	<b>6.0</b>	3.2-8.9	4,607	<b>4.2</b>	2.2-6.2	11,207	<b>5.1</b>	3.4-6.9
45-54	8,072	<b>7.0</b>	4.2-9.7	9,440	<b>8.2</b>	5.6-10.7	17,512	<b>7.6</b>	5.7-9.4
55-64	12,276	<b>9.5</b>	7.1-12.0	8,905	<b>6.7</b>	5.0-8.5	21,182	<b>8.1</b>	6.6-9.6
65+	12,072	<b>7.8</b>	5.7-9.8	12,157	<b>6.4</b>	4.9-8.0	24,229	<b>7.0</b>	5.8-8.3
<b>Education</b>									
Less than H.S.	14,642	<b>13.7</b>	9.6-17.8	7,204	<b>6.6</b>	4.2-8.9	21,845	<b>10.1</b>	7.7-12.4
H.S. or G.E.D.	15,944	<b>5.4</b>	4.1-6.6	17,611	<b>6.3</b>	4.9-7.6	33,556	<b>5.8</b>	4.9-6.7
Some Post-H.S.	10,128	<b>5.8</b>	3.7-7.9	10,357	<b>4.7</b>	3.3-6.1	20,485	<b>5.2</b>	4.0-6.4
College Graduate	3,181	<b>2.5</b>	1.4-3.6	3,134	<b>2.4</b>	1.4-3.5	6,316	<b>2.5</b>	1.7-3.2
<b>Income</b>									
Less than \$15,000	13,718	<b>18.7</b>	13.4-24.1	11,365	<b>12.7</b>	9.3-16.0	25,084	<b>15.4</b>	12.4-18.4
\$15,000 - 24,999	8,720	<b>7.4</b>	4.9-10.0	8,875	<b>6.3</b>	4.4-8.2	17,595	<b>6.8</b>	5.3-8.4
\$25,000 - 34,999	5,785	<b>8.0</b>	4.7-11.2	2,811	<b>3.7</b>	1.8-5.6	8,596	<b>5.8</b>	3.9-7.7
\$35,000 - 49,999	4,472	<b>5.0</b>	2.5-7.5	3,332	<b>3.8</b>	1.7-5.9	7,803	<b>4.4</b>	2.8-6.1
\$50,000 - 74,999	2,098	<b>*2.2</b>	0.6-3.9	1,095	<b>*1.4</b>	0.4-2.4	3,193	<b>1.8</b>	0.8-2.8
\$75,000+	1,197	<b>*0.8</b>	0.1-1.6	1,441	<b>*1.3</b>	0.2-2.5	2,639	<b>*1.0</b>	0.4-1.7

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

### Difficulty Doing Errands Alone

<b>Definition</b>	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?”
<b>Prevalence</b>	<b>WV: 10.7%</b> (95% CI: 9.9-11.5) <b>U.S.: 6.8%</b> (95% CI: 6.7-7.0) The West Virginia prevalence of difficulty doing errands alone was significantly higher than the U.S. prevalence. West Virginia ranked the 4 <sup>th</sup> highest among the 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 8.9% (95% CI: 7.7-10.1) <b>Women:</b> 12.5% (95% CI: 11.3-13.6) The prevalence of difficulty doing errands alone was significantly higher among women than among men.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 10.5% (95% CI: 9.6-11.3) <b>Black, Non-Hispanic:</b> 14.5% (95% CI: 8.3-20.6) <b>Other, Non-Hispanic:</b> *10.8% (95% CI: 3.3-18.2) <b>Multiracial, Non-Hispanic:</b> *17.3% (95% CI: 6.9-27.7) <b>Hispanic:</b> *8.1% (95% CI: 0.0-19.5) There was no race/ethnicity difference in the prevalence of difficulty doing errands alone. <small>* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</small>
<b>Age</b>	The prevalence of difficulty doing errands alone was generally higher among higher age groups. The prevalence of difficulty doing errands alone was lowest among those 18-24 (5.1%) and highest among those 65 and older (14.3%), a significant difference.
<b>Education</b>	The prevalence of difficulty doing errands alone was significantly higher among those with less than a high school education (22.5%) than all other educational attainment groups. The prevalence was significantly lower among college graduates (4.2%) than among all other education groups.
<b>Household Income</b>	The prevalence of difficulty doing errands alone was highest among those with an annual household income of less than \$15,000 (27.9%), significantly higher than all other income levels. The prevalence was significantly lower among those with an annual household income of \$75,000 or more (2.2%) than among those earning less than \$50,000 per year.

## CHAPTER 2: IMPAIRMENT

**Table 2.4 Prevalence of Difficulty Doing Errands Alone by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	62,513	<b>8.9</b>	7.7-10.1	91,681	<b>12.5</b>	11.3-13.6	154,195	<b>10.7</b>	9.9-11.5
<b>Age</b>									
18-24	3,725	<b>*4.3</b>	1.1-7.6	4,807	<b>*6.0</b>	2.2-9.8	8,532	<b>5.1</b>	2.6-7.6
25-34	3,939	<b>*3.7</b>	1.0-6.4	4,995	<b>4.8</b>	2.5-7.0	8,934	<b>4.2</b>	2.5-6.0
35-44	10,996	<b>10.1</b>	6.7-13.5	11,097	<b>10.1</b>	7.1-13.2	22,093	<b>10.1</b>	7.8-12.4
45-54	12,098	<b>10.5</b>	7.3-13.6	19,985	<b>17.3</b>	13.8-20.7	32,083	<b>13.9</b>	11.5-16.2
55-64	15,282	<b>11.9</b>	9.2-14.5	17,055	<b>13.0</b>	10.5-15.4	32,337	<b>12.4</b>	10.6-14.2
65+	15,741	<b>10.2</b>	7.9-12.4	33,236	<b>17.7</b>	15.3-20.1	48,977	<b>14.3</b>	12.6-16.0
<b>Education</b>									
Less than H.S.	24,336	<b>22.9</b>	17.8-27.9	24,211	<b>22.2</b>	17.9-26.5	48,547	<b>22.5</b>	19.2-25.8
H.S. or G.E.D.	23,073	<b>7.8</b>	6.2-9.4	41,505	<b>14.8</b>	12.8-16.9	64,578	<b>11.2</b>	9.9-12.5
Some Post-H.S.	10,780	<b>6.2</b>	4.4-8.1	19,362	<b>8.9</b>	7.1-10.7	30,142	<b>7.7</b>	6.4-9.0
College Graduate	4,325	<b>3.4</b>	2.2-4.7	6,446	<b>5.0</b>	3.6-6.5	10,771	<b>4.2</b>	3.3-5.2
<b>Income</b>									
Less than \$15,000	19,974	<b>27.3</b>	21.4-33.2	25,420	<b>28.4</b>	23.8-32.9	45,393	<b>27.9</b>	24.2-31.5
\$15,000 - 24,999	12,526	<b>10.7</b>	7.8-13.7	20,911	<b>14.9</b>	11.9-18.0	33,437	<b>13.0</b>	10.9-15.2
\$25,000 - 34,999	6,854	<b>9.5</b>	5.8-13.2	5,698	<b>7.5</b>	4.8-10.2	12,552	<b>8.5</b>	6.2-10.7
\$35,000 - 49,999	4,231	<b>4.8</b>	2.4-7.1	6,287	<b>7.2</b>	4.6-9.9	10,519	<b>6.0</b>	4.2-7.8
\$50,000 - 74,999	2,506	<b>2.7</b>	1.1-4.2	4,288	<b>5.3</b>	2.9-7.7	6,793	<b>3.9</b>	2.5-5.3
\$75,000+	2,304	<b>*1.6</b>	0.5-2.7	3,286	<b>3.0</b>	1.4-4.6	5,590	<b>2.2</b>	1.3-3.2

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

## CHAPTER 2: IMPAIRMENT

### Vision Impairment

<b>Definition</b>	Responding “Yes” to the question, “Are you blind or do you have serious difficulty seeing, even when wearing glasses?”
<b>Prevalence</b>	<b>WV: 8.5%</b> (95% CI: 7.8-9.3) <b>U.S.: 4.7%</b> (95% CI: 4.6-4.9) The West Virginia prevalence of vision impairment was significantly higher than the U.S. prevalence. West Virginia ranked the 2 <sup>nd</sup> highest among 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 7.6% (95% CI: 6.6-8.7) <b>Women:</b> 9.4% (95% CI: 8.3-10.4) There was no gender difference in the prevalence of vision impairment.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 8.3% (95% CI: 7.6-9.1) <b>Black, Non-Hispanic:</b> 12.0% (95% CI: 6.0-18.0) <b>Other, Non-Hispanic:</b> *9.9% (95% CI: 3.1-16.7) <b>Multiracial, Non-Hispanic:</b> *18.3% (95% CI: 7.1-29.5) <b>Hispanic:</b> *3.6% (95% CI: 0.0-8.5) There was no race/ethnicity difference in the prevalence of vision impairment. * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.
<b>Age</b>	The prevalence of vision impairment was significantly higher among those aged 45 and older than among those aged 44 or younger.
<b>Education</b>	The prevalence of visual impairment was significantly higher among those with less than a high school education (15.9%) than among all other educational attainment levels. The prevalence was significantly lower among those with a college degree (3.7%) than among all other educational attainment levels.
<b>Household Income</b>	The prevalence of vision impairment was significantly higher among those with an annual household income of less than \$15,000 (19.0%) than among all other income brackets.

## CHAPTER 2: IMPAIRMENT

**Table 2.5 Prevalence of Vision Impairment by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	53,882	<b>7.6</b>	6.6-8.7	69,112	<b>9.4</b>	8.3-10.4	122,993	<b>8.5</b>	7.8-9.3
<b>Age</b>									
18-24	3,434	<b>*4.0</b>	1.0-7.0	5,567	<b>*6.9</b>	2.6-11.2	9,001	<b>5.4</b>	2.8-8.0
25-34	2,012	<b>*1.9</b>	0.5-3.3	5,684	<b>5.4</b>	2.8-8.0	7,696	<b>3.6</b>	2.2-5.1
35-44	4,805	<b>4.4</b>	2.0-6.8	7,104	<b>6.5</b>	3.9-9.0	11,909	<b>5.4</b>	3.7-7.2
45-54	11,011	<b>9.5</b>	6.5-12.4	14,016	<b>12.1</b>	9.2-14.9	25,027	<b>10.8</b>	8.7-12.8
55-64	14,347	<b>11.1</b>	8.6-13.7	14,605	<b>11.1</b>	8.7-13.4	28,953	<b>11.1</b>	9.4-12.8
65+	18,085	<b>11.6</b>	9.3-14.0	22,136	<b>11.8</b>	9.8-13.7	40,221	<b>11.7</b>	10.2-13.2
<b>Education</b>									
Less than H.S.	16,821	<b>15.7</b>	11.6-19.8	17,623	<b>16.1</b>	12.1-20.0	34,443	<b>15.9</b>	13.1-18.7
H.S. or G.E.D.	22,073	<b>7.4</b>	5.9-8.9	26,908	<b>9.6</b>	8.0-11.2	48,981	<b>8.5</b>	7.4-9.6
Some Post-H.S.	10,302	<b>5.9</b>	4.0-7.8	19,766	<b>9.1</b>	7.1-11.1	30,069	<b>7.7</b>	6.3-9.1
College Graduate	4,556	<b>3.6</b>	2.3-4.9	4,814	<b>3.8</b>	2.5-5.0	9,370	<b>3.7</b>	2.8-4.6
<b>Income</b>									
Less than \$15,000	12,292	<b>16.7</b>	12.2-21.3	18,784	<b>20.8</b>	16.7-24.9	31,076	<b>19.0</b>	15.9-22.0
\$15,000 - 24,999	10,555	<b>9.0</b>	6.3-11.7	17,251	<b>12.3</b>	9.5-15.1	27,806	<b>10.8</b>	8.8-12.7
\$25,000 - 34,999	5,696	<b>7.8</b>	4.8-10.9	8,485	<b>11.2</b>	7.1-15.3	14,181	<b>9.6</b>	7.0-12.1
\$35,000 - 49,999	6,014	<b>6.7</b>	4.0-9.5	3,837	<b>4.4</b>	2.4-6.4	9,851	<b>5.6</b>	3.9-7.3
\$50,000 - 74,999	3,591	<b>*3.8</b>	1.5-6.1	3,498	<b>4.3</b>	2.3-6.4	7,089	<b>4.1</b>	2.5-5.6
\$75,000+	3,189	<b>2.2</b>	1.1-3.4	2,763	<b>2.5</b>	1.1-4.0	5,952	<b>2.4</b>	1.4-3.3

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

## CHAPTER 2: IMPAIRMENT

### Hearing Impairment

<b>Definition</b>	Responding “Yes” to the question, “Are you deaf or do you have serious difficulty hearing?”
<b>Prevalence</b>	<b>WV: 13.3%</b> (95% CI: 12.5-14.2) <b>U.S.: 5.8%</b> (95% CI: 5.7-6.0) The West Virginia prevalence of hearing impairment was significantly higher than the U.S. prevalence. West Virginia ranked 1 <sup>st</sup> highest among 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 17.0% (95% CI: 15.6-18.5) <b>Women:</b> 9.9% (95% CI: 8.8-10.9) The prevalence of hearing impairment was significantly higher among males than among females.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 13.4% (95% CI: 12.5-14.3) <b>Black, Non-Hispanic:</b> 9.8% (95% CI: 4.7-14.9) <b>Other, Non-Hispanic:</b> 15.6% (95% CI: 6.7-24.5) <b>Multiracial, Non-Hispanic:</b> 14.2% (95% CI: 6.6-21.9) <b>Hispanic:</b> *10.9% (95% CI: 2.3-19.4) There was no race/ethnicity difference in the prevalence of hearing impairment. * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.
<b>Age</b>	The prevalence of hearing impairment was highest among those aged 65 and older (26.8%) and was significantly higher than among all other age groups.
<b>Education</b>	The prevalence of hearing impairment was significantly higher among those with less than a high school education (18.8%) than among those with some college (10.8%) or a college degree (8.2%).
<b>Household Income</b>	The prevalence of hearing impairment was significantly higher among those with an annual household income of less than \$15,000 (17.1%) than among those earning \$35,000 or more per year.

## CHAPTER 2: IMPAIRMENT

**Table 2.6 Prevalence of Hearing Impairment by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	120,206	<b>17.0</b>	15.6-18.5	72,964	<b>9.9</b>	8.8-10.9	193,170	<b>13.3</b>	12.5-14.2
<b>Age</b>									
18-24	4,217	<b>*4.9</b>	1.1-8.7	2,439	<b>*3.0</b>	0.4-5.6	6,656	<b>4.0</b>	1.7-6.3
25-34	7,185	<b>6.6</b>	3.7-9.5	2,328	<b>*2.2</b>	0.7-3.7	9,513	<b>4.5</b>	2.8-6.1
35-44	9,632	<b>8.8</b>	5.8-11.9	6,420	<b>5.8</b>	3.6-8.1	16,052	<b>7.3</b>	5.4-9.2
45-54	17,532	<b>15.1</b>	11.5-18.6	9,683	<b>8.3</b>	5.9-10.8	27,215	<b>11.7</b>	9.5-13.9
55-64	27,525	<b>21.3</b>	18.0-24.5	13,257	<b>10.0</b>	7.8-12.2	40,782	<b>15.6</b>	13.6-17.6
65+	54,023	<b>34.9</b>	31.4-38.4	38,188	<b>20.2</b>	17.6-22.8	92,211	<b>26.8</b>	24.7-29.0
<b>Education</b>									
Less than H.S.	26,524	<b>24.9</b>	20.0-29.7	14,261	<b>12.9</b>	9.7-16.1	40,785	<b>18.8</b>	15.9-21.7
H.S. or G.E.D.	55,308	<b>18.6</b>	16.2-20.9	33,219	<b>11.8</b>	9.9-13.6	88,527	<b>15.3</b>	13.7-16.8
Some Post-H.S.	24,299	<b>13.9</b>	11.3-16.5	18,260	<b>8.4</b>	6.6-10.1	42,559	<b>10.8</b>	9.3-12.3
College Graduate	13,692	<b>10.8</b>	8.7-12.9	7,225	<b>5.6</b>	4.1-7.1	20,917	<b>8.2</b>	6.9-9.5
<b>Income</b>									
Less than \$15,000	13,527	<b>18.5</b>	13.8-23.2	14,322	<b>15.9</b>	12.2-19.5	27,850	<b>17.1</b>	14.1-20.0
\$15,000 - 24,999	27,322	<b>23.2</b>	18.8-27.6	14,384	<b>10.2</b>	7.8-12.5	41,706	<b>16.1</b>	13.7-18.5
\$25,000 - 34,999	15,221	<b>20.9</b>	16.3-25.5	7,087	<b>9.3</b>	6.1-12.5	22,307	<b>15.0</b>	12.2-17.8
\$35,000 - 49,999	13,125	<b>14.7</b>	11.0-18.4	5,738	<b>6.6</b>	4.3-9.0	18,863	<b>10.7</b>	8.5-12.9
\$50,000 - 74,999	10,357	<b>11.0</b>	7.9-14.1	5,635	<b>7.0</b>	4.4-9.5	15,992	<b>9.1</b>	7.1-11.2
\$75,000+	14,895	<b>10.4</b>	8.0-12.9	6,173	<b>5.6</b>	3.5-7.7	21,067	<b>8.3</b>	6.7-10.0

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



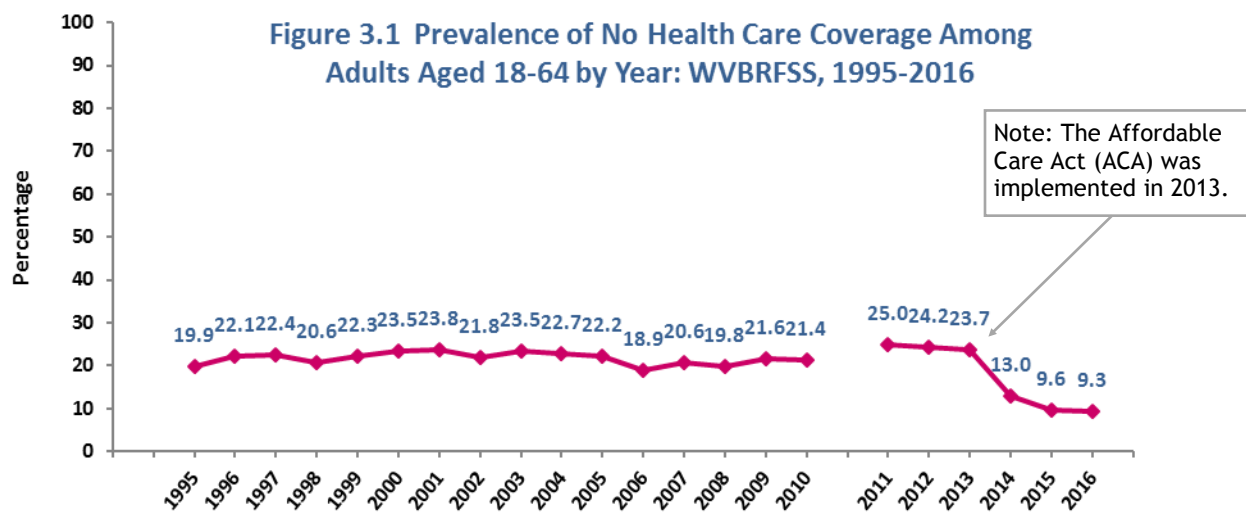
### No Health Care Coverage (among adults aged 18-64)

<b>Definition</b>	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.
<b>Prevalence</b>	<b>WV: 9.3%</b> (95% CI: 8.2-10.4) <b>U.S.: 14.1%</b> (95% CI: 13.8-14.3) The prevalence of no health care coverage among those aged 18-64 was significantly lower in West Virginia than in the U.S. West Virginia ranked the 41 <sup>st</sup> highest among 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 10.8% (95% CI: 9.1-12.5) <b>Women:</b> 7.8% (95% CI: 6.5-9.2) There was no gender difference in the prevalence of no health care coverage among those aged 18-64.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 9.2% (95% CI: 8.0-10.3) <b>Black, Non-Hispanic:</b> *9.7% (95% CI: 3.7-15.6) <b>Other, Non-Hispanic:</b> *10.2% (95% CI: 1.4-19.0) <b>Multiracial, Non-Hispanic:</b> *8.7% (95% CI: 1.1-16.3) <b>Hispanic:</b> *21.8% (95% CI: 5.2-38.5) There was no race/ethnicity difference in the prevalence of no health care coverage among those aged 18-64. <small>* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</small>
<b>Age</b>	The highest prevalence of no health care coverage was among those aged 18-24 (13.3%) and was significantly higher than among those aged 45-64.
<b>Education</b>	Those with less than high school education had the highest prevalence of no health care coverage among those aged 18-64 (12.3%) and was significantly higher than the prevalence among college graduates. The prevalence of no health care coverage among those aged 18-64 was significantly lower among college graduates (4.4%) than all other educational attainment levels.
<b>Household Income</b>	The prevalence of no health care coverage among those aged 18-64 was highest among those with a household income of \$15,000-\$24,999 per year (13.2%). The prevalence of no health care coverage among those aged 18-64 was significantly lower among those with a household income of \$75,000 or more per year (2.4%) than all other income groups.

## CHAPTER 3: HEALTH CARE ACCESS

**Table 3.1 Prevalence of No Health Care Coverage Among Adults Aged 18-64 by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	59,821	<b>10.8</b>	9.1-12.5	42,784	<b>7.8</b>	6.5-9.2	102,605	<b>9.3</b>	8.2-10.4
<b>Age</b>									
18-24	12,613	<b>14.5</b>	8.0-21.0	9,626	<b>12.0</b>	6.5-17.5	22,239	<b>13.3</b>	9.0-17.6
25-34	17,253	<b>15.8</b>	11.2-20.4	8,732	<b>8.3</b>	5.3-11.3	25,986	<b>12.1</b>	9.3-14.9
35-44	12,140	<b>10.9</b>	7.5-14.4	10,532	<b>9.5</b>	6.2-12.9	22,672	<b>10.2</b>	7.8-12.6
45-54	10,194	<b>8.7</b>	6.0-11.3	6,807	<b>5.8</b>	3.7-7.8	17,000	<b>7.2</b>	5.5-8.9
55-64	7,621	<b>5.8</b>	4.0-7.7	7,087	<b>5.3</b>	3.7-6.9	14,708	<b>5.6</b>	4.3-6.8
<b>Education</b>									
Less than H.S.	10,908	<b>13.6</b>	8.7-18.6	8,366	<b>11.0</b>	5.8-16.2	19,274	<b>12.3</b>	8.7-15.9
H.S. or G.E.D.	28,511	<b>12.3</b>	9.5-15.1	20,568	<b>10.6</b>	8.0-13.2	49,079	<b>11.5</b>	9.6-13.5
Some Post-H.S.	15,111	<b>10.5</b>	7.0-14.1	10,105	<b>5.9</b>	4.0-7.7	25,216	<b>8.0</b>	6.1-9.9
College Graduate	5,291	<b>5.4</b>	3.2-7.6	3,745	<b>3.6</b>	2.1-5.0	9,036	<b>4.4</b>	3.1-5.7
<b>Income</b>									
Less than \$15,000	8,948	<b>14.9</b>	8.8-20.9	5,470	<b>8.0</b>	4.3-11.8	14,418	<b>11.2</b>	7.7-14.7
\$15,000 - 24,999	11,634	<b>13.5</b>	9.1-17.9	12,722	<b>12.9</b>	8.9-16.9	24,355	<b>13.2</b>	10.2-16.1
\$25,000 - 34,999	7,390	<b>14.8</b>	8.9-20.7	5,212	<b>10.0</b>	4.7-15.3	12,602	<b>12.3</b>	8.4-16.3
\$35,000 - 49,999	7,499	<b>11.6</b>	6.1-17.1	5,290	<b>8.1</b>	4.5-11.7	12,789	<b>9.8</b>	6.6-13.1
\$50,000 - 74,999	7,414	<b>9.2</b>	4.1-14.3	3,817	<b>6.0</b>	2.9-9.1	11,230	<b>7.8</b>	4.6-11.0
\$75,000+	4,086	<b>3.3</b>	1.4-5.2	1,298	<b>1.3</b>	0.2-2.4	5,383	<b>2.4</b>	1.2-3.6

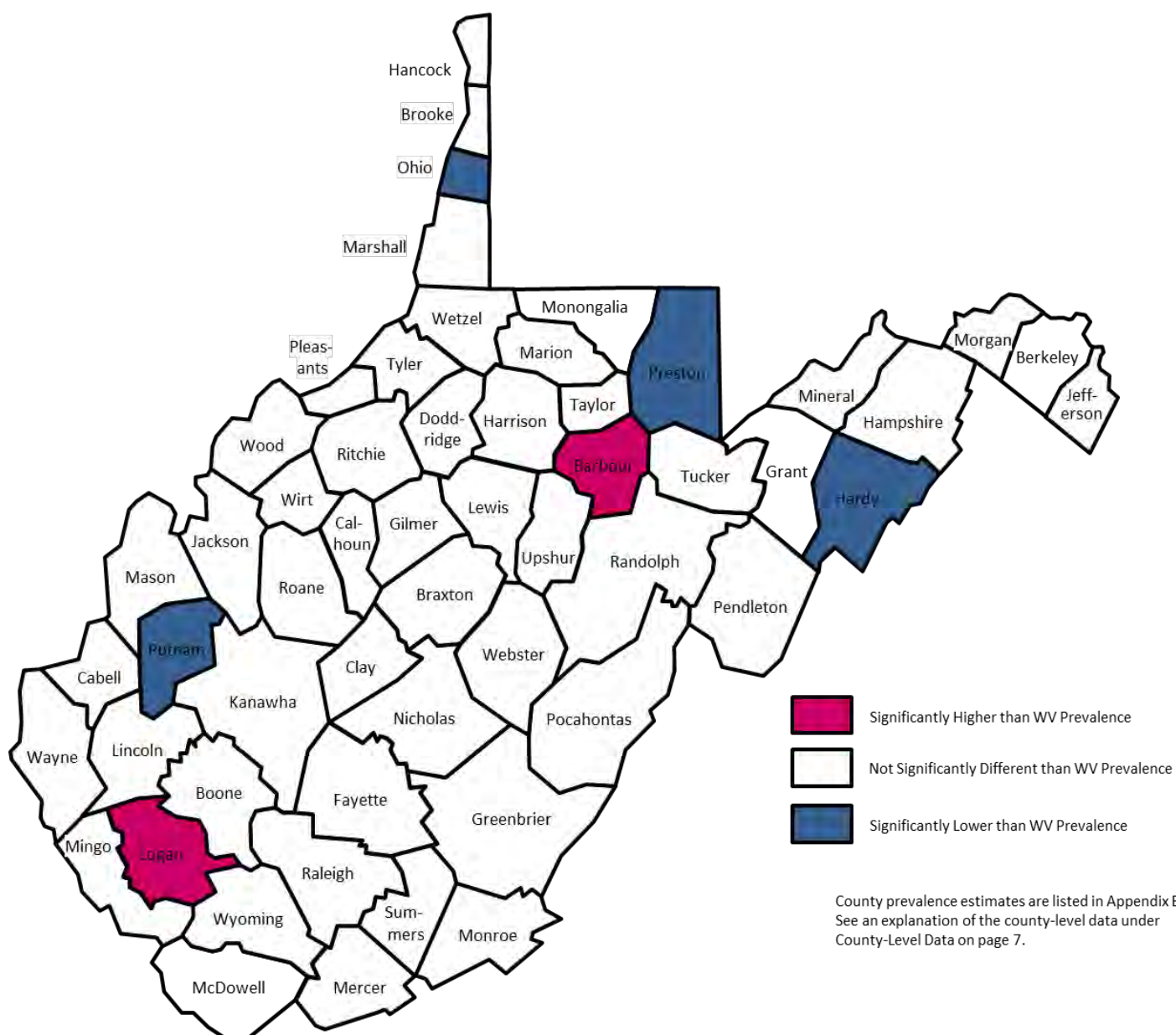


\*Due to changes in sample composition and weighting methodology, 2011-2016 results are not directly comparable to previous years.

## CHAPTER 3: HEALTH CARE ACCESS

**Figure 3.2 Prevalence of No Health Care Coverage Among Adults Aged 18-64 by County: WVBRFSS, 2012-2016**

WV Prevalence (2012-2016) - 16.1%



### Primary Health Care Coverage

#### Definition

Responding “Yes” to the question, “Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare, or Indian Health Service?” and responding as follows to the state-added question, “What type of health care coverage do you use to pay for most of your medical care?”

Private: Your employer, someone else’s employer, or a plan that you or someone else buys on your own

Medicare

Medicaid

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

None (no coverage)

#### Prevalence

**Private: 45.1%** (95% CI: 43.5-46.7)

**Medicare: 24.3%** (95% CI: 23.1-25.5)

**Medicaid: 15.9%** (95% CI: 14.7-17.1)

**Other: 4.9%** (95% CI: 4.2-5.5)

**None: 9.8%** (95% CI: 8.7-10.9)

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

#### Gender

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

#### Race/Ethnicity

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

#### Age

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

#### Education

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

#### Household Income

The prevalence of private insurance increased significantly with each income bracket while the prevalence of Medicaid, Medicare, or None generally decreased significantly with increasing income.

## CHAPTER 3: HEALTH CARE ACCESS

**Table 3.2 Prevalence of Primary Health Care Coverage by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Private		Medicare		Medicaid		Other		None	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>TOTAL</b>	45.1	43.5-46.7	<b>24.3</b>	23.1-25.5	<b>15.9</b>	14.7-17.1	4.9	4.2-5.5	<b>9.8</b>	8.7-10.9
<b>Gender</b>										
Male	46.2	43.8-48.6	<b>21.1</b>	19.4-22.9	<b>13.3</b>	11.6-15.0	7.5	6.3-8.7	<b>11.9</b>	10.1-13.6
Female	44.1	42.0-46.2	<b>27.2</b>	25.5-28.9	<b>18.4</b>	16.7-20.1	2.4	1.7-3.1	<b>7.9</b>	6.6-9.2
<b>Age</b>										
18-24	53.8	47.1-60.5	<b>*2.3</b>	0.3-4.2	<b>21.8</b>	16.5-27.1	3.2	0.8-5.6	<b>18.9</b>	13.1-24.7
25-34	51.8	47.2-56.5	<b>3.7</b>	1.9-5.5	<b>25.0</b>	21.0-28.9	2.8	1.2-4.4	<b>16.7</b>	13.0-20.4
35-44	56.9	52.6-61.1	<b>3.3</b>	1.9-4.7	<b>22.1</b>	18.5-25.7	4.0	2.4-5.7	<b>13.7</b>	10.6-16.9
45-54	57.0	53.4-60.7	<b>8.3</b>	6.2-10.4	<b>19.8</b>	16.9-22.8	5.2	3.5-7.0	<b>9.6</b>	7.4-11.8
55-64	57.3	54.2-60.3	<b>14.9</b>	12.7-17.2	<b>14.7</b>	12.5-16.9	5.6	4.1-7.1	<b>7.4</b>	5.8-9.0
65+	13.0	11.3-14.7	<b>76.1</b>	73.9-78.4	<b>2.8</b>	1.9-3.7	6.5	5.2-7.9	<b>1.6</b>	0.9-2.3
<b>Education</b>										
Less than H.S.	19.7	15.9-23.4	<b>33.7</b>	29.7-37.7	<b>30.5</b>	26.4-34.7	3.5	1.8-5.1	<b>12.6</b>	9.2-16.1
H.S. or G.E.D.	40.8	38.3-43.4	<b>26.4</b>	24.4-28.4	<b>16.4</b>	14.5-18.3	4.8	3.7-5.9	<b>11.6</b>	9.7-13.5
Some Post-H.S.	50.5	47.4-53.6	<b>20.7</b>	18.4-22.9	<b>13.8</b>	11.6-16.0	6.2	4.7-7.7	<b>8.8</b>	6.8-10.9
College Graduate	68.9	66.3-71.4	<b>16.5</b>	14.6-18.3	<b>5.5</b>	4.1-6.9	4.3	3.2-5.3	<b>4.9</b>	3.5-6.3
<b>Income</b>										
Less than \$15,000	6.3	3.7-8.9	<b>31.2</b>	27.2-35.3	<b>45.2</b>	40.5-49.9	4.4	2.5-6.3	<b>12.9</b>	9.2-16.6
\$15,000 - 24,999	20.0	16.8-23.2	<b>33.5</b>	30.1-36.8	<b>28.0</b>	24.5-31.5	5.9	4.1-7.6	<b>12.7</b>	10.0-15.5
\$25,000 - 34,999	41.0	36.4-45.7	<b>27.7</b>	23.8-31.6	<b>12.9</b>	9.6-16.2	6.7	4.5-9.0	<b>11.7</b>	8.1-15.2
\$35,000 - 49,999	59.2	54.8-63.6	<b>21.6</b>	18.3-24.8	<b>4.9</b>	2.9-7.0	4.6	2.8-6.4	<b>9.7</b>	6.6-12.9
\$50,000 - 74,999	71.9	67.8-76.1	<b>13.2</b>	10.7-15.7	<b>*1.9</b>	0.3-3.4	4.7	2.9-6.5	<b>8.3</b>	5.0-11.6
\$75,000+	83.5	80.9-86.1	<b>8.7</b>	7.1-10.3	<b>*0.7</b>	0.2-1.3	4.1	2.4-5.8	<b>3.0</b>	1.6-4.4

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

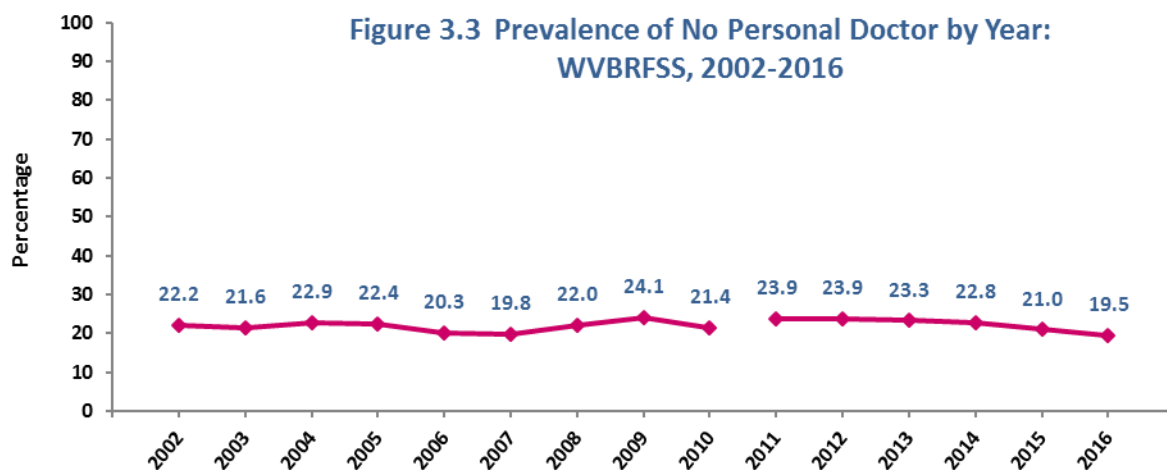
### No Personal Doctor or Health Care Provider

<b>Definition</b>	Responding “No” to the question, “Do you have one person you think of as your personal doctor or health care provider?”
<b>Prevalence</b>	<b>WV: 19.5%</b> (95% CI: 18.3-20.7) <b>U.S.: 21.9%</b> (95% CI: 21.6-22.1) West Virginia ranked the 34 <sup>th</sup> highest among 54 BRFSS participants. The West Virginia prevalence of no personal doctor or health care provider was significantly lower than the U.S. prevalence.
<b>Gender</b>	<b>Men:</b> 25.7% (95% CI: 23.7-27.6) <b>Women:</b> 13.6% (95% CI: 12.2-15.0) The prevalence of no personal doctor or health care provider was significantly higher among men than among women.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 19.0% (95% CI: 17.8-20.3) <b>Black, Non-Hispanic:</b> 28.5% (95% CI: 20.5-36.4) <b>Other, Non-Hispanic:</b> *24.1% (95% CI: 13.7-34.5) <b>Multiracial, Non-Hispanic:</b> 20.0% (95% CI: 10.3-29.6) <b>Hispanic:</b> *30.1% (95% CI: 14.1-46.1) The prevalence of no personal doctor or health care provider was significantly higher among Black, Non-Hispanic adults than among White, Non-Hispanic adults. <small>* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</small>
<b>Age</b>	The prevalence of no personal doctor or health care provider was significantly higher among those aged 18-24 (39.9%) than among all other age groups 35 and older. The age group 65 and older had a relatively low prevalence of no personal doctor or health care provider (4.5%), significantly lower than all other age groups.
<b>Education</b>	There was a significant difference in the prevalence of no personal doctor or health care provider between those with less than a high school education (21.9%) and those with a college degree (15.5%).
<b>Household Income</b>	The prevalence of not having a personal doctor or health care provider was significantly higher among those with an annual household income of less than \$15,000 (26.2%) than among those earning \$75,000 or more per year (17.4%).

## CHAPTER 3: HEALTH CARE ACCESS

**Table 3.3 Prevalence of No Personal Doctor or Health Care Provider by Demographics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	183,982	<b>25.7</b>	23.7-27.6	101,489	<b>13.6</b>	12.2-15.0	285,470	<b>19.5</b>	18.3-20.7
<b>Age</b>									
18-24	39,938	<b>45.8</b>	37.6-54.1	27,659	<b>33.6</b>	26.4-40.8	67,596	<b>39.9</b>	34.3-45.4
25-34	54,316	<b>49.7</b>	43.6-55.7	28,276	<b>26.8</b>	22.1-31.5	82,592	<b>38.4</b>	34.5-42.4
35-44	34,922	<b>31.2</b>	26.2-36.2	16,745	<b>15.2</b>	11.6-18.7	51,666	<b>23.2</b>	20.1-26.4
45-54	25,117	<b>21.3</b>	17.4-25.3	13,363	<b>11.3</b>	8.4-14.2	38,480	<b>16.3</b>	13.8-18.8
55-64	19,730	<b>15.1</b>	12.4-17.9	9,079	<b>6.8</b>	4.9-8.6	28,809	<b>10.9</b>	9.2-12.5
65+	9,635	<b>6.1</b>	4.4-7.9	5,993	<b>3.1</b>	2.1-4.2	15,628	<b>4.5</b>	3.5-5.5
<b>Education</b>									
Less than H.S.	31,080	<b>28.4</b>	22.9-33.9	17,487	<b>15.6</b>	11.0-20.3	48,567	<b>21.9</b>	18.3-25.5
H.S. or G.E.D.	82,359	<b>27.3</b>	24.1-30.5	40,743	<b>14.3</b>	12.0-16.6	123,102	<b>21.0</b>	19.0-23.0
Some Post-H.S.	44,545	<b>25.1</b>	21.1-29.1	29,020	<b>13.2</b>	10.8-15.6	73,565	<b>18.5</b>	16.2-20.8
College Graduate	25,616	<b>20.1</b>	16.9-23.2	14,238	<b>11.0</b>	8.6-13.4	39,854	<b>15.5</b>	13.5-17.5
<b>Income</b>									
Less than \$15,000	23,859	<b>32.3</b>	25.8-38.7	19,430	<b>21.3</b>	16.6-26.1	43,289	<b>26.2</b>	22.3-30.2
\$15,000 - 24,999	33,649	<b>28.5</b>	23.3-33.6	20,459	<b>14.4</b>	11.1-17.7	54,108	<b>20.8</b>	17.8-23.8
\$25,000 - 34,999	16,426	<b>22.5</b>	17.2-27.8	10,971	<b>14.4</b>	9.8-18.9	27,396	<b>18.3</b>	14.9-21.8
\$35,000 - 49,999	21,531	<b>24.0</b>	18.6-29.3	11,100	<b>12.8</b>	8.9-16.6	32,631	<b>18.5</b>	15.1-21.8
\$50,000 - 74,999	25,577	<b>27.1</b>	21.4-32.9	7,839	<b>9.7</b>	6.2-13.1	33,416	<b>19.1</b>	15.4-22.7
\$75,000+	34,349	<b>23.9</b>	19.6-28.1	9,885	<b>8.9</b>	6.3-11.5	44,235	<b>17.4</b>	14.6-20.1



\*Due to changes in sample composition and weighting methodology, 2011-2016 results are not directly comparable to previous years.

### Could Not Afford Needed Medical Care

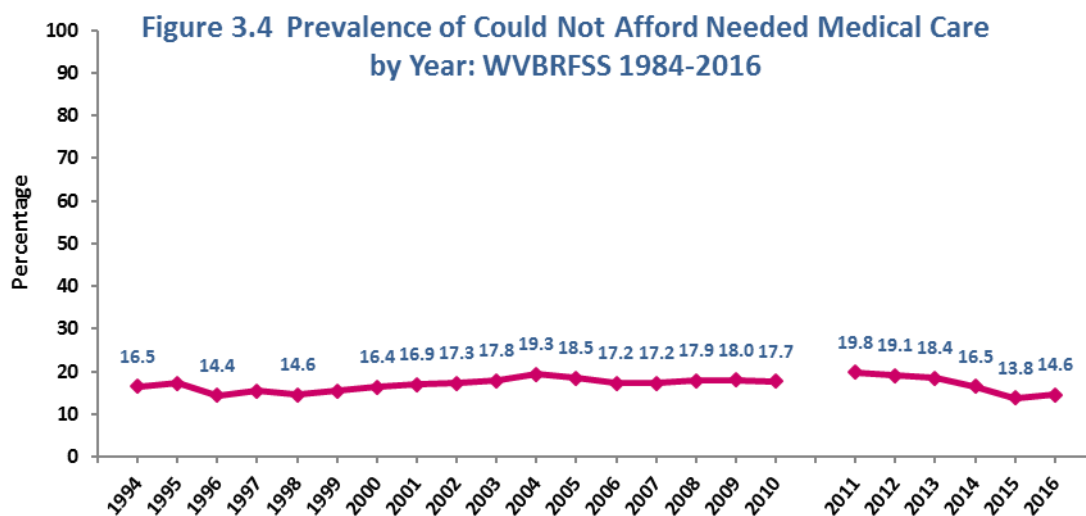
<b>Definition</b>	Responding “Yes” to the question, “Was there a time in the past 12 months when you needed to see a doctor but could not because of cost?”
<b>Prevalence</b>	<b>WV: 14.6%</b> (95% CI: 13.5-15.6) <b>U.S.: 13.1%</b> (95% CI: 12.8-13.3) The West Virginia prevalence of could not afford needed medical care was significantly higher than the U.S. prevalence. West Virginia ranked the 41 <sup>st</sup> highest among 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 14.6% (95% CI: 13.0-16.2) <b>Women:</b> 14.5% (95% CI: 13.2-15.9) There was no gender difference in the prevalence of could not afford needed medical care.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 14.4% (95% CI: 13.4-15.5) <b>Black, Non-Hispanic:</b> 12.4% (95% CI: 6.5-18.3) <b>Other, Non-Hispanic:</b> 18.8% (95% CI: 9.1-28.4) <b>Multiracial, Non-Hispanic:</b> *20.8% (95% CI: 8.6-33.1) <b>Hispanic:</b> *24.3% (95% CI: 8.5-40.1) There was no race/ethnicity difference in the prevalence of could not afford needed medical care. <small>* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</small>
<b>Age</b>	The prevalence of could not afford needed medical care was significantly lower among those aged 65 and older (5.5%) than among all other age groups.
<b>Education</b>	The prevalence of could not afford needed medical care was significantly lower among college graduates (8.0%) than among all other educational attainment levels.
<b>Household Income</b>	The prevalence of could not afford needed medical care was significantly higher among those with an annual household income of less than \$25,000 than among those earning \$35,000 or more per year.



## CHAPTER 3: HEALTH CARE ACCESS

**Table 3.4 Prevalence of Could Not Afford Needed Medical Care by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	104,492	<b>14.6</b>	13.0-16.2	108,407	<b>14.5</b>	13.2-15.9	212,899	<b>14.6</b>	13.5-15.6
<b>Age</b>									
18-24	15,697	<b>18.0</b>	11.3-24.7	14,011	<b>17.0</b>	11.0-23.0	29,708	<b>17.5</b>	13.0-22.0
25-34	23,037	<b>21.0</b>	15.9-26.2	18,157	<b>17.2</b>	13.3-21.2	41,194	<b>19.2</b>	15.9-22.4
35-44	18,451	<b>16.6</b>	12.6-20.6	21,670	<b>19.6</b>	15.5-23.7	40,122	<b>18.1</b>	15.2-20.9
45-54	19,093	<b>16.2</b>	12.6-19.9	21,070	<b>17.9</b>	14.6-21.1	40,163	<b>17.1</b>	14.6-19.5
55-64	20,638	<b>15.8</b>	12.9-18.8	20,515	<b>15.3</b>	12.7-18.0	41,153	<b>15.6</b>	13.6-17.6
65+	6,958	<b>4.4</b>	2.8-6.0	12,120	<b>6.3</b>	4.8-7.9	19,078	<b>5.5</b>	4.4-6.6
<b>Education</b>									
Less than H.S.	24,803	<b>22.7</b>	17.5-27.9	21,375	<b>19.1</b>	14.6-23.6	46,178	<b>20.9</b>	17.4-24.3
H.S. or G.E.D.	39,718	<b>13.2</b>	11.0-15.4	43,154	<b>15.1</b>	12.9-17.3	82,873	<b>14.1</b>	12.6-15.7
Some Post-H.S.	29,835	<b>16.9</b>	13.3-20.5	33,188	<b>15.1</b>	12.6-17.5	63,023	<b>15.9</b>	13.8-18.0
College Graduate	10,136	<b>7.9</b>	5.9-10.0	10,534	<b>8.1</b>	6.3-10.0	20,670	<b>8.0</b>	6.7-9.4
<b>Income</b>									
Less than \$15,000	17,429	<b>23.6</b>	17.6-29.6	16,203	<b>17.8</b>	13.9-21.7	33,632	<b>20.4</b>	16.9-23.9
\$15,000 - 24,999	26,115	<b>22.2</b>	17.5-26.8	27,795	<b>19.6</b>	16.0-23.1	53,909	<b>20.8</b>	17.9-23.6
\$25,000 - 34,999	13,197	<b>18.2</b>	13.0-23.3	9,634	<b>12.6</b>	9.0-16.3	22,832	<b>15.3</b>	12.2-18.5
\$35,000 - 49,999	9,561	<b>10.6</b>	6.4-14.9	13,965	<b>16.1</b>	12.0-20.1	23,526	<b>13.3</b>	10.4-16.3
\$50,000 - 74,999	9,439	<b>10.0</b>	6.3-13.6	10,868	<b>13.4</b>	9.5-17.3	20,308	<b>11.6</b>	8.9-14.2
\$75,000+	8,440	<b>5.9</b>	3.6-8.1	6,947	<b>6.3</b>	3.7-8.8	15,388	<b>6.0</b>	4.4-7.7



\*Due to changes in sample composition and weighting methodology, 2011-2016 results are not directly comparable to previous years.

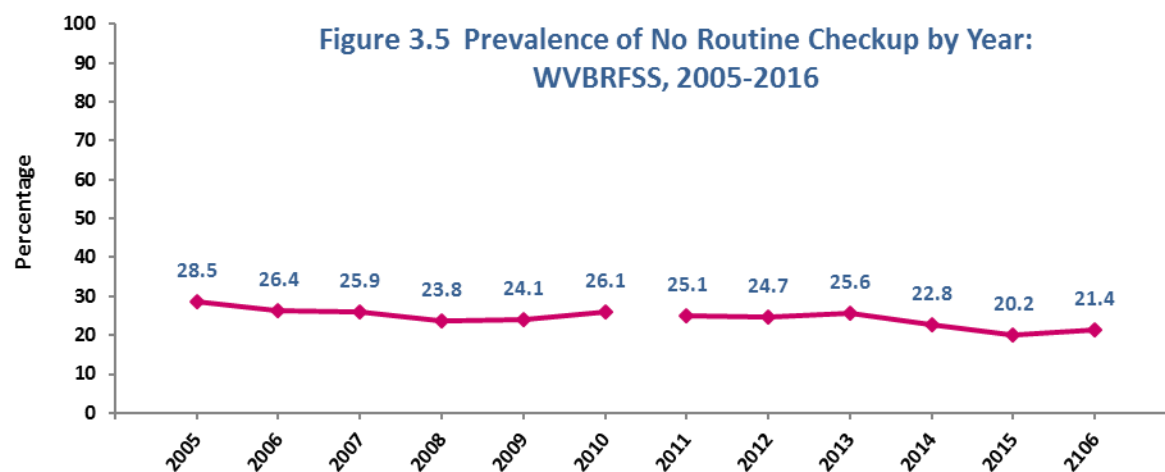
### No Routine Checkup in Past Year

<b>Definition</b>	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.”
<b>Prevalence</b>	<b>WV: 21.4%</b> (95% CI: 20.2-22.7) <b>U.S.: 28.6%</b> (95% CI: 28.4-28.9) The West Virginia prevalence of no checkup in the past year was significantly lower than the national prevalence. West Virginia ranked the 49 <sup>th</sup> highest among 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 26.5% (95% CI: 24.5-28.5) <b>Women:</b> 16.6% (95% CI: 15.1-18.0) The prevalence of no routine checkup in the past year was significantly higher among males than among females.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 21.5% (95% CI: 20.2-22.7) <b>Black, Non-Hispanic:</b> 19.2% (95% CI: 12.0-26.5) <b>Other, Non-Hispanic:</b> *22.8% (95% CI: 12.6-33.0) <b>Multiracial, Non-Hispanic:</b> *22.5% (95% CI: 10.9-34.1) <b>Hispanic:</b> *29.6% (95% CI: 13.7-45.5) There was no race/ethnicity difference in the prevalence of no checkup in the past year. <small>* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</small>
<b>Age</b>	The prevalence of no checkup in the past year was significantly lower among those aged 65 and older (5.8%) than all other age groups. In general, the prevalence of no checkup in the past year was significantly higher among those aged 18-44 than among those aged 45 and older.
<b>Education</b>	There was no educational attainment difference in the prevalence of no checkup in the past year.
<b>Household Income</b>	There was no annual household income difference in the prevalence of no checkup in the past year.

## CHAPTER 3: HEALTH CARE ACCESS

**Table 3.5 Prevalence of No Routine Checkup by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	187,846	<b>26.5</b>	24.5-28.5	122,201	<b>16.6</b>	15.1-18.0	310,047	<b>21.4</b>	20.2-22.7
<b>Age</b>									
18-24	38,859	<b>45.0</b>	36.6-53.3	20,661	<b>25.9</b>	19.4-32.4	59,520	<b>35.8</b>	30.3-41.4
25-34	51,265	<b>47.9</b>	41.8-54.0	26,916	<b>26.1</b>	21.4-30.7	78,181	<b>37.2</b>	33.2-41.2
35-44	35,925	<b>32.5</b>	27.5-37.6	30,642	<b>27.9</b>	23.3-32.5	66,567	<b>30.2</b>	26.8-33.6
45-54	27,941	<b>23.8</b>	19.8-27.9	19,976	<b>17.0</b>	13.7-20.4	47,917	<b>20.4</b>	17.8-23.1
55-64	23,183	<b>17.8</b>	14.8-20.9	14,536	<b>10.9</b>	8.6-13.2	37,719	<b>14.3</b>	12.4-16.2
65+	10,672	<b>6.9</b>	5.0-8.7	9,187	<b>4.9</b>	3.6-6.1	19,859	<b>5.8</b>	4.7-6.9
<b>Education</b>									
Less than H.S.	28,559	<b>26.3</b>	21.0-31.7	15,212	<b>13.9</b>	9.9-17.9	43,772	<b>20.1</b>	16.7-23.5
H.S. or G.E.D.	80,507	<b>27.0</b>	23.8-30.3	49,169	<b>17.5</b>	15.1-19.9	129,675	<b>22.4</b>	20.4-24.5
Some Post-H.S.	47,545	<b>27.0</b>	22.8-31.3	37,518	<b>17.2</b>	14.5-19.9	85,063	<b>21.6</b>	19.1-24.0
College Graduate	30,684	<b>24.2</b>	20.9-27.6	20,147	<b>15.7</b>	13.1-18.2	50,831	<b>19.9</b>	17.8-22.1
<b>Income</b>									
Less than \$15,000	24,186	<b>33.0</b>	26.5-39.4	16,404	<b>18.3</b>	14.0-22.6	40,589	<b>24.9</b>	21.1-28.7
\$15,000 - 24,999	32,123	<b>27.4</b>	22.2-32.5	25,622	<b>18.3</b>	14.8-21.8	57,745	<b>22.4</b>	19.4-25.5
\$25,000 - 34,999	15,991	<b>22.0</b>	16.5-27.5	11,159	<b>14.7</b>	10.6-18.7	27,150	<b>18.3</b>	14.8-21.7
\$35,000 - 49,999	23,645	<b>26.7</b>	20.9-32.4	14,637	<b>16.8</b>	12.5-21.2	38,282	<b>21.8</b>	18.2-25.5
\$50,000 - 74,999	23,987	<b>25.4</b>	19.9-31.0	11,882	<b>14.8</b>	10.8-18.8	35,868	<b>20.5</b>	17.0-24.1
\$75,000+	36,759	<b>25.9</b>	21.7-30.2	17,626	<b>16.1</b>	12.7-19.4	54,385	<b>21.6</b>	18.8-24.5



\*Due to changes in sample composition and weighting methodology, 2011-2016 results are not directly comparable to previous years.

# West Virginia Behavioral Risk Factor Surveillance System Report

2016



## SECTION 2: RISK BEHAVIORS

## CHAPTER 4: WEIGHT STATUS

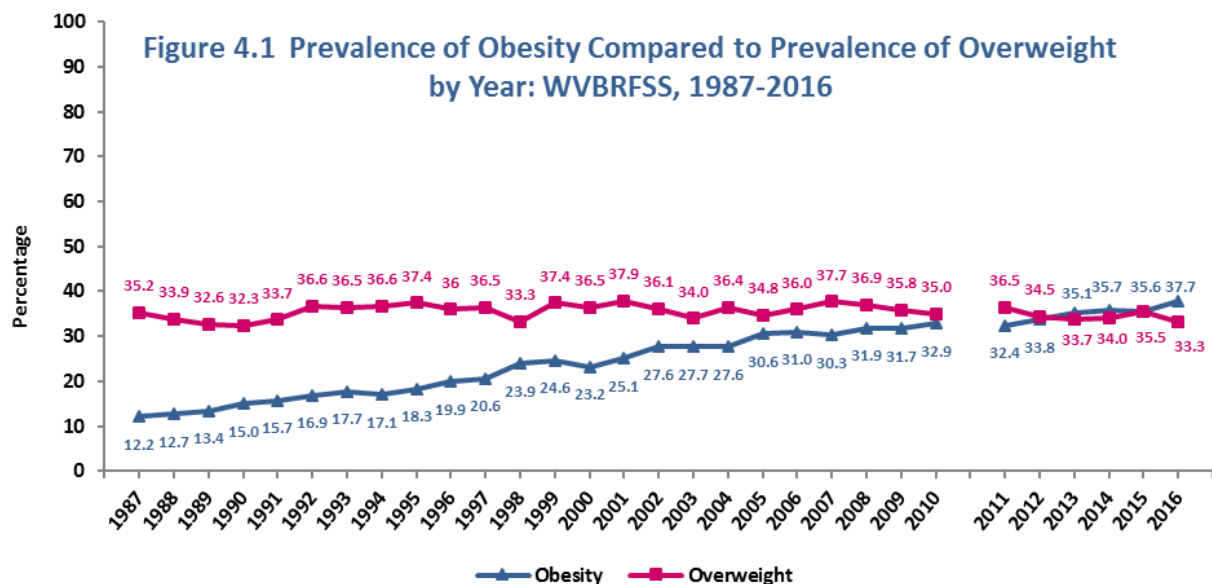
### Overweight

<b>Definition</b>	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.
<b>Prevalence</b>	<b>WV: 33.3%</b> (95% CI: 32.0-34.6) <b>U.S.: 35.2%</b> (95% CI: 34.9-35.5) The prevalence of overweight in West Virginia was significantly lower than the U.S. prevalence. West Virginia ranked the 51 <sup>st</sup> highest among 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 37.8% (95% CI: 35.8-39.9) <b>Women:</b> 28.6% (95% CI: 26.9-30.4) The prevalence of overweight was significantly higher among males than among females.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 33.4% (95% CI: 32.0-34.7) <b>Black, Non-Hispanic:</b> 34.1% (95% CI: 25.7-42.5) <b>Other, Non-Hispanic:</b> *25.6% (95% CI: 15.1-36.1) <b>Multiracial, Non-Hispanic:</b> *23.6% (95% CI: 13.5-33.7) <b>Hispanic:</b> *37.1% (95% CI: 20.2-53.9) There was no race/ethnicity difference in the prevalence of overweight. * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.
<b>Age</b>	The prevalence of overweight was significantly lower among those aged 18-24 (25.0%) than among those aged 55 and older. The prevalence of overweight was significantly higher among those aged 65 and older (39.6%) than all other age groups.
<b>Education</b>	There was no educational attainment difference in the prevalence of overweight.
<b>Household Income</b>	There was no annual household income difference in the prevalence of overweight.

## CHAPTER 4: WEIGHT STATUS

**Table 4.1 Overweight Prevalence by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	260,705	<b>37.8</b>	35.8-39.9	192,692	<b>28.6</b>	26.9-30.4	453,396	<b>33.3</b>	32.0-34.6
<b>Age</b>									
18-24	20,730	<b>24.6</b>	17.4-31.7	18,324	<b>25.4</b>	18.5-32.3	39,055	<b>25.0</b>	20.0-29.9
25-34	38,494	<b>36.7</b>	30.8-42.6	24,837	<b>26.1</b>	21.0-31.2	63,331	<b>31.7</b>	27.7-35.6
35-44	41,694	<b>39.3</b>	34.0-44.7	25,176	<b>24.5</b>	20.2-28.8	66,871	<b>32.0</b>	28.5-35.5
45-54	41,489	<b>36.4</b>	31.7-41.0	28,187	<b>26.4</b>	22.4-30.4	69,676	<b>31.5</b>	28.5-34.6
55-64	47,114	<b>37.4</b>	33.4-41.3	37,018	<b>30.3</b>	26.7-33.9	84,131	<b>33.9</b>	31.2-36.5
65+	69,968	<b>46.1</b>	42.5-49.6	58,344	<b>33.9</b>	30.9-37.0	128,312	<b>39.6</b>	37.3-42.0
<b>Education</b>									
Less than H.S.	38,858	<b>37.8</b>	32.2-43.5	29,939	<b>28.5</b>	23.7-33.4	68,797	<b>33.1</b>	29.4-36.8
H.S. or G.E.D.	102,673	<b>35.3</b>	32.1-38.5	73,757	<b>29.4</b>	26.6-32.2	176,430	<b>32.6</b>	30.4-34.7
Some Post-H.S.	65,787	<b>38.5</b>	34.2-42.8	57,270	<b>28.6</b>	25.3-31.9	123,057	<b>33.2</b>	30.5-35.8
College Graduate	53,107	<b>42.9</b>	39.2-46.6	31,455	<b>27.0</b>	23.8-30.2	84,562	<b>35.2</b>	32.7-37.7
<b>Income</b>									
Less than \$15,000	21,965	<b>31.0</b>	25.1-37.0	24,036	<b>27.4</b>	22.6-32.3	46,001	<b>29.0</b>	25.3-32.8
\$15,000 - 24,999	43,790	<b>38.2</b>	32.9-43.5	37,355	<b>28.7</b>	24.7-32.7	81,145	<b>33.2</b>	29.9-36.5
\$25,000 - 34,999	28,565	<b>39.7</b>	33.7-45.6	18,992	<b>27.0</b>	21.6-32.3	47,557	<b>33.4</b>	29.4-37.4
\$35,000 - 49,999	34,295	<b>39.3</b>	33.5-45.0	24,609	<b>31.6</b>	26.5-36.7	58,904	<b>35.6</b>	31.8-39.5
\$50,000 - 74,999	35,594	<b>38.0</b>	32.4-43.5	23,879	<b>31.9</b>	26.6-37.3	59,474	<b>35.3</b>	31.4-39.2
\$75,000+	59,918	<b>42.4</b>	38.1-46.8	27,138	<b>26.7</b>	22.8-30.6	87,056	<b>35.9</b>	32.8-38.9



\*Due to changes in sample composition and weighting methodology, 2011-2016 results are not directly comparable to previous years.

## CHAPTER 4: WEIGHT STATUS

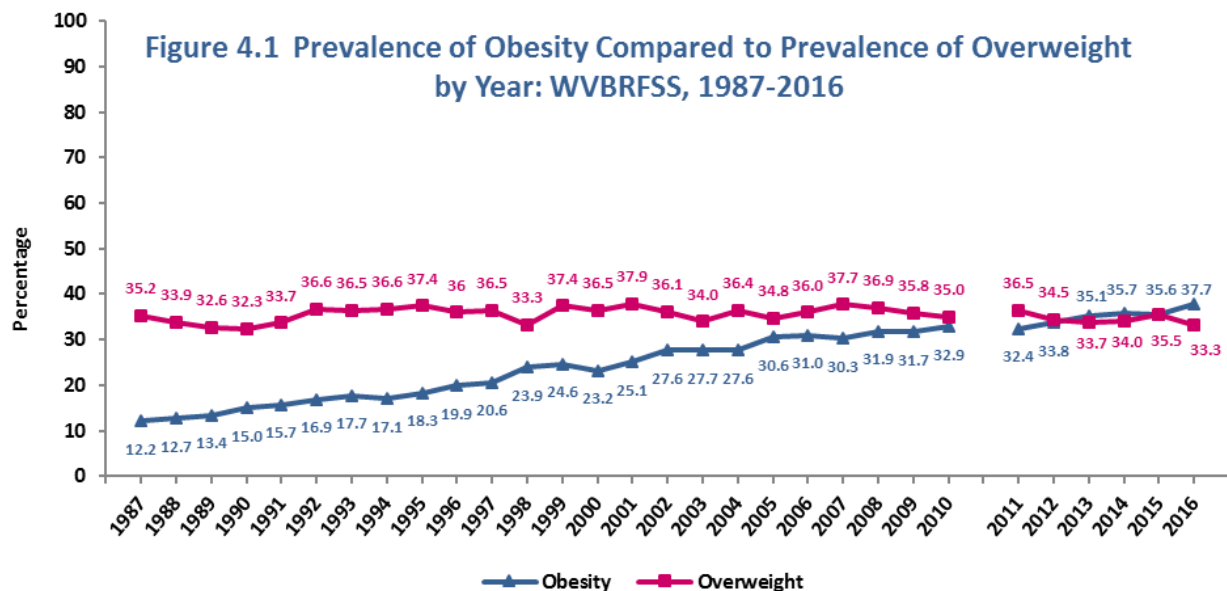
### Obesity

<b>Definition</b>	Body Mass Index (BMI) is a calculation that standardizes the meaning of the terms obesity and overweight, thereby improving the accuracy of comparisons. BMI is body weight in kilograms divided by height in meters squared ( $BMI = kg/m^2$ ). Obese is defined as a BMI of 30.0 or higher.
<b>Prevalence</b>	<b>WV: 37.7%</b> (95% CI: 36.3-39.0) <b>U.S.: 29.6%</b> (95% CI: 29.3-29.9) The prevalence of obesity was significantly higher in West Virginia than in the U.S. West Virginia ranked 1 <sup>st</sup> highest among 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 37.9% (95% CI: 35.9-40.0) <b>Women:</b> 37.4% (95% CI: 35.5-39.2) There was no gender difference in the prevalence of obesity.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 37.6% (95% CI: 36.1-39.0) <b>Black, Non-Hispanic:</b> 43.9% (95% CI: 35.1-52.7) <b>Other, Non-Hispanic:</b> *32.0% (95% CI: 20.1-43.8) <b>Multiracial, Non-Hispanic:</b> *45.1% (95% CI: 32.7-57.5) <b>Hispanic:</b> *31.0% (95% CI: 14.5-47.5) There was no race/ethnicity difference in the prevalence of obesity. <small>* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</small>
<b>Age</b>	The prevalence of obesity was lowest among those aged 18-24 (26.0%), significantly lower than all other age groups except 65 and older (32.4%). The prevalence of obesity was highest among those aged 45-54 (46.7%) and was significantly higher than the prevalence among those aged 34 and younger and those aged 65 and older.
<b>Education</b>	The prevalence of obesity was highest among those with a high school education (40.7%) and was significantly higher than the prevalence among those with less than a high school education (33.9%) and among college graduates (32.3%).
<b>Household Income</b>	The prevalence of obesity was significantly higher among those with an annual household income of \$25,000-\$74,999 than among those earning \$75,000 or more per year.

## CHAPTER 4: WEIGHT STATUS

**Table 4.2 Obesity Prevalence by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	261,252	<b>37.9</b>	35.9-40.0	251,616	<b>37.4</b>	35.5-39.2	512,868	<b>37.7</b>	36.3-39.0
<b>Age</b>									
18-24	24,812	<b>29.4</b>	21.6-37.3	15,920	<b>22.1</b>	15.3-28.8	40,732	<b>26.0</b>	20.8-31.3
25-34	35,881	<b>34.2</b>	28.3-40.1	34,927	<b>36.7</b>	31.3-42.1	70,808	<b>35.4</b>	31.4-39.4
35-44	43,603	<b>41.1</b>	35.8-46.5	41,638	<b>40.5</b>	35.4-45.6	85,241	<b>40.8</b>	37.1-44.5
45-54	53,659	<b>47.0</b>	42.1-51.9	49,503	<b>46.3</b>	41.8-50.9	103,162	<b>46.7</b>	43.4-50.0
55-64	55,801	<b>44.2</b>	40.2-48.2	51,881	<b>42.4</b>	38.7-46.2	107,682	<b>43.4</b>	40.6-46.1
65+	47,497	<b>31.3</b>	27.9-34.6	57,426	<b>33.4</b>	30.3-36.5	104,923	<b>32.4</b>	30.1-34.7
<b>Education</b>									
Less than H.S.	32,194	<b>31.3</b>	25.7-37.0	38,218	<b>36.4</b>	31.1-41.7	70,412	<b>33.9</b>	30.0-37.8
H.S. or G.E.D.	119,275	<b>41.0</b>	37.7-44.3	101,429	<b>40.4</b>	37.4-43.5	220,703	<b>40.7</b>	38.5-43.0
Some Post-H.S.	64,964	<b>38.0</b>	33.7-42.3	79,055	<b>39.5</b>	36.0-43.0	144,019	<b>38.8</b>	36.1-41.6
College Graduate	44,689	<b>36.1</b>	32.6-39.6	32,915	<b>28.2</b>	25.1-31.4	77,604	<b>32.3</b>	29.9-34.7
<b>Income</b>									
Less than \$15,000	23,064	<b>32.6</b>	26.4-38.8	34,304	<b>39.1</b>	33.9-44.3	57,368	<b>36.2</b>	32.2-40.2
\$15,000 - 24,999	41,155	<b>35.9</b>	30.7-41.1	51,636	<b>39.7</b>	35.2-44.2	92,791	<b>37.9</b>	34.5-41.4
\$25,000 - 34,999	28,693	<b>39.8</b>	33.7-46.0	32,951	<b>46.8</b>	40.8-52.7	61,644	<b>43.3</b>	39.0-47.5
\$35,000 - 49,999	35,248	<b>40.4</b>	34.6-46.1	31,899	<b>40.9</b>	35.5-46.4	67,147	<b>40.6</b>	36.7-44.6
\$50,000 - 74,999	42,099	<b>44.9</b>	39.1-50.7	30,700	<b>41.0</b>	35.5-46.6	72,799	<b>43.2</b>	39.1-47.3
\$75,000+	52,927	<b>37.5</b>	33.2-41.8	28,263	<b>27.9</b>	23.7-32.0	81,190	<b>33.4</b>	30.4-36.5



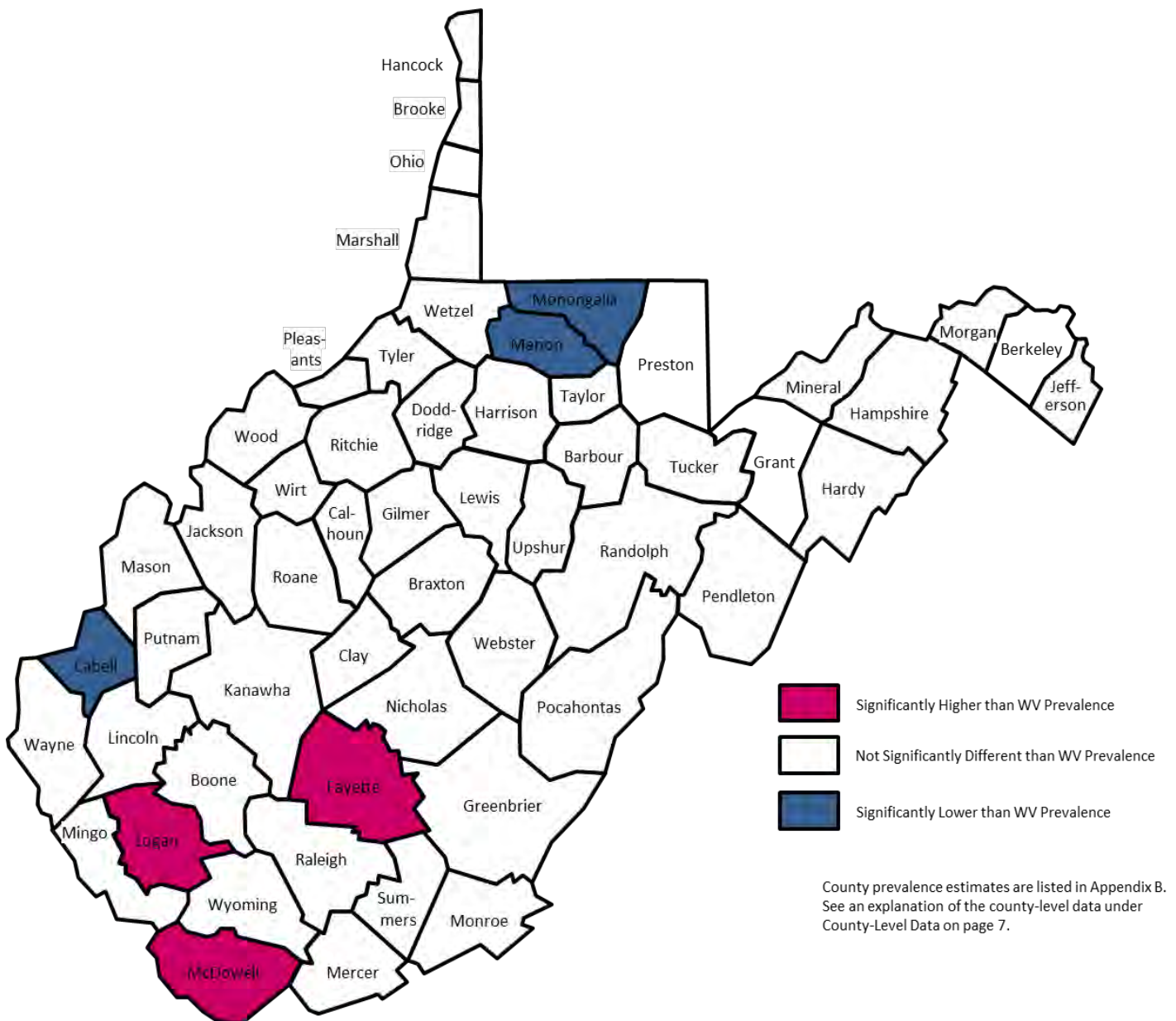
\*Due to changes in sample composition and weighting methodology, 2011-2016 results are not directly comparable to previous years.



## CHAPTER 4: WEIGHT STATUS

**Figure 4.2 Obesity Prevalence (Body Mass Index of 30.0 or Higher) by County: WVBRFSS, 2012-2016**

WV Prevalence (2012-2016) - 35.6%



## CHAPTER 4: WEIGHT STATUS

### Overweight or Obese

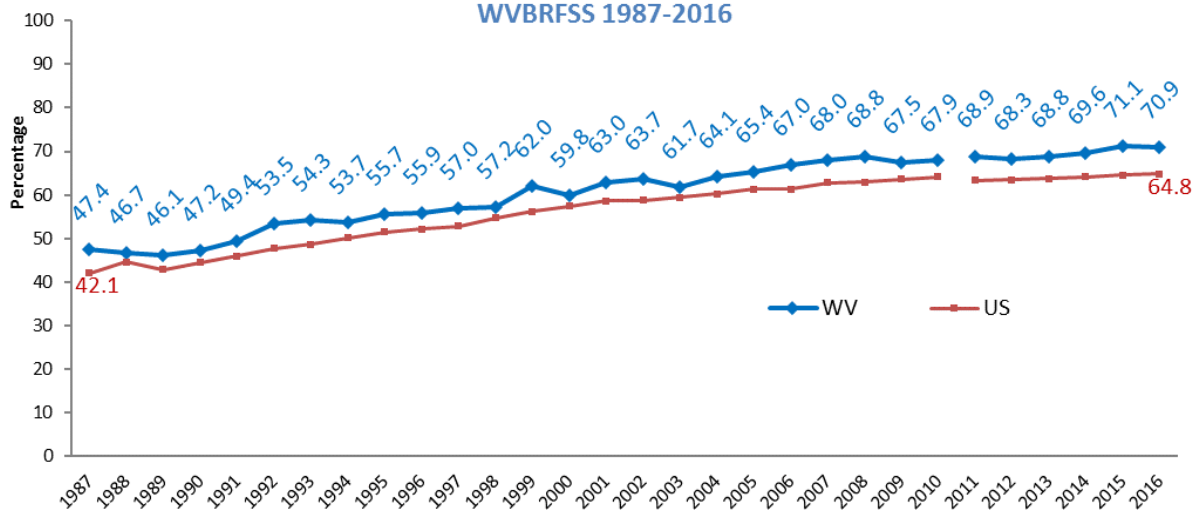
<b>Definition</b>	Body Mass Index (BMI) is a calculation that standardizes the meaning of the terms obesity and overweight, thereby improving the accuracy of comparisons. BMI is body weight in kilograms divided by height in meters squared ( $BMI = \text{kg}/\text{m}^2$ ). Overweight or obese is defined as a BMI of 25.0 or higher.
<b>Prevalence</b>	<b>WV: 70.9%</b> (95% CI: 69.6-72.3) <b>U.S.: 64.8%</b> (95% CI: 64.5-65.1) The prevalence of overweight or obese in West Virginia was significantly higher than the U.S. prevalence. West Virginia ranked the 2 <sup>nd</sup> highest among 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 75.7% (95% CI: 73.9-77.6) <b>Women:</b> 66.0% (95% CI: 64.2-67.9) Men had a significantly higher prevalence of overweight or obese than women.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 70.9% (95% CI: 69.6-72.3) <b>Black, Non-Hispanic:</b> 78.0% (95% CI: 70.1-85.9) <b>Other, Non-Hispanic:</b> *57.6% (95% CI: 45.2-70.0) <b>Multiracial, Non-Hispanic:</b> *68.7% (95% CI: 56.4-81.1) <b>Hispanic:</b> *68.1% (95% CI: 51.3-84.9) There was no race/ethnicity difference in the prevalence of overweight or obese. <small>* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</small>
<b>Age</b>	The 18-24 age group had the lowest prevalence of overweight or obese (51.0%) and was significantly lower than all other age groups. The prevalence of overweight or obese was highest among those aged 45-54 (78.2%) and was significantly higher than the prevalence among those aged 18-34 and those aged 65 and older (72.0%).
<b>Education</b>	The prevalence of overweight or obese was highest among those with a high school education (73.3%) and was significantly higher than the prevalence among those with less than a high school education (67.0%) and among college graduates (67.5%).
<b>Household Income</b>	The prevalence of overweight or obese was significantly higher among those with an annual household income of \$25,000-\$74,999 than among those earning less than \$15,000 per year (65.3%) or those earning \$75,000 or more per year (69.3%).

## CHAPTER 4: WEIGHT STATUS

**Table 4.3 Overweight or Obese Prevalence by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	521,957	<b>75.7</b>	73.9-77.6	444,308	<b>66.0</b>	64.2-67.9	966,265	<b>70.9</b>	69.6-72.3
<b>Age</b>									
18-24	45,542	<b>54.0</b>	45.6-62.4	34,244	<b>47.5</b>	39.3-55.7	79,786	<b>51.0</b>	45.1-56.9
25-34	74,375	<b>70.9</b>	65.3-76.5	59,764	<b>62.8</b>	57.5-68.1	134,139	<b>67.1</b>	63.2-70.9
35-44	85,297	<b>80.4</b>	76.1-84.8	66,814	<b>65.0</b>	60.1-70.0	152,111	<b>72.9</b>	69.5-76.2
45-54	95,149	<b>83.4</b>	79.9-86.9	77,690	<b>72.7</b>	68.7-76.8	172,839	<b>78.2</b>	75.5-80.9
55-64	102,915	<b>81.6</b>	78.5-84.7	88,899	<b>72.7</b>	69.4-76.0	191,813	<b>77.2</b>	75.0-79.5
65+	117,465	<b>77.3</b>	74.2-80.4	115,769	<b>67.3</b>	64.3-70.3	233,234	<b>72.0</b>	69.8-74.2
<b>Education</b>									
Less than H.S.	71,052	<b>69.2</b>	63.4-74.9	68,157	<b>65.0</b>	59.3-70.6	139,209	<b>67.0</b>	63.0-71.1
H.S. or G.E.D.	221,947	<b>76.3</b>	73.4-79.2	175,186	<b>69.9</b>	66.9-72.8	397,133	<b>73.3</b>	71.2-75.4
Some Post-H.S.	130,751	<b>76.5</b>	72.5-80.5	136,324	<b>68.1</b>	64.7-71.5	267,075	<b>72.0</b>	69.4-74.6
College Graduate	97,796	<b>79.0</b>	76.0-82.1	64,370	<b>55.2</b>	51.6-58.9	162,166	<b>67.5</b>	65.0-70.0
<b>Income</b>									
Less than \$15,000	45,029	<b>63.6</b>	57.1-70.2	58,340	<b>66.5</b>	61.4-71.7	103,369	<b>65.3</b>	61.2-69.3
\$15,000 - 24,999	84,946	<b>74.1</b>	69.4-78.8	88,991	<b>68.5</b>	64.1-72.9	173,936	<b>71.1</b>	67.9-74.3
\$25,000 - 34,999	57,258	<b>79.5</b>	74.5-84.5	51,943	<b>73.7</b>	68.3-79.2	109,201	<b>76.6</b>	72.9-80.4
\$35,000 - 49,999	69,543	<b>79.6</b>	74.4-84.8	56,508	<b>72.5</b>	67.7-77.4	126,051	<b>76.3</b>	72.7-79.9
\$50,000 - 74,999	77,694	<b>82.9</b>	78.7-87.1	54,579	<b>73.0</b>	67.8-78.2	132,273	<b>78.5</b>	75.2-81.8
\$75,000+	112,845	<b>79.9</b>	76.0-83.8	55,401	<b>54.6</b>	49.9-59.2	168,246	<b>69.3</b>	66.2-72.4

**Figure 4.3 Prevalence of Overweight or Obese by Year: WVBRFSS 1987-2016**

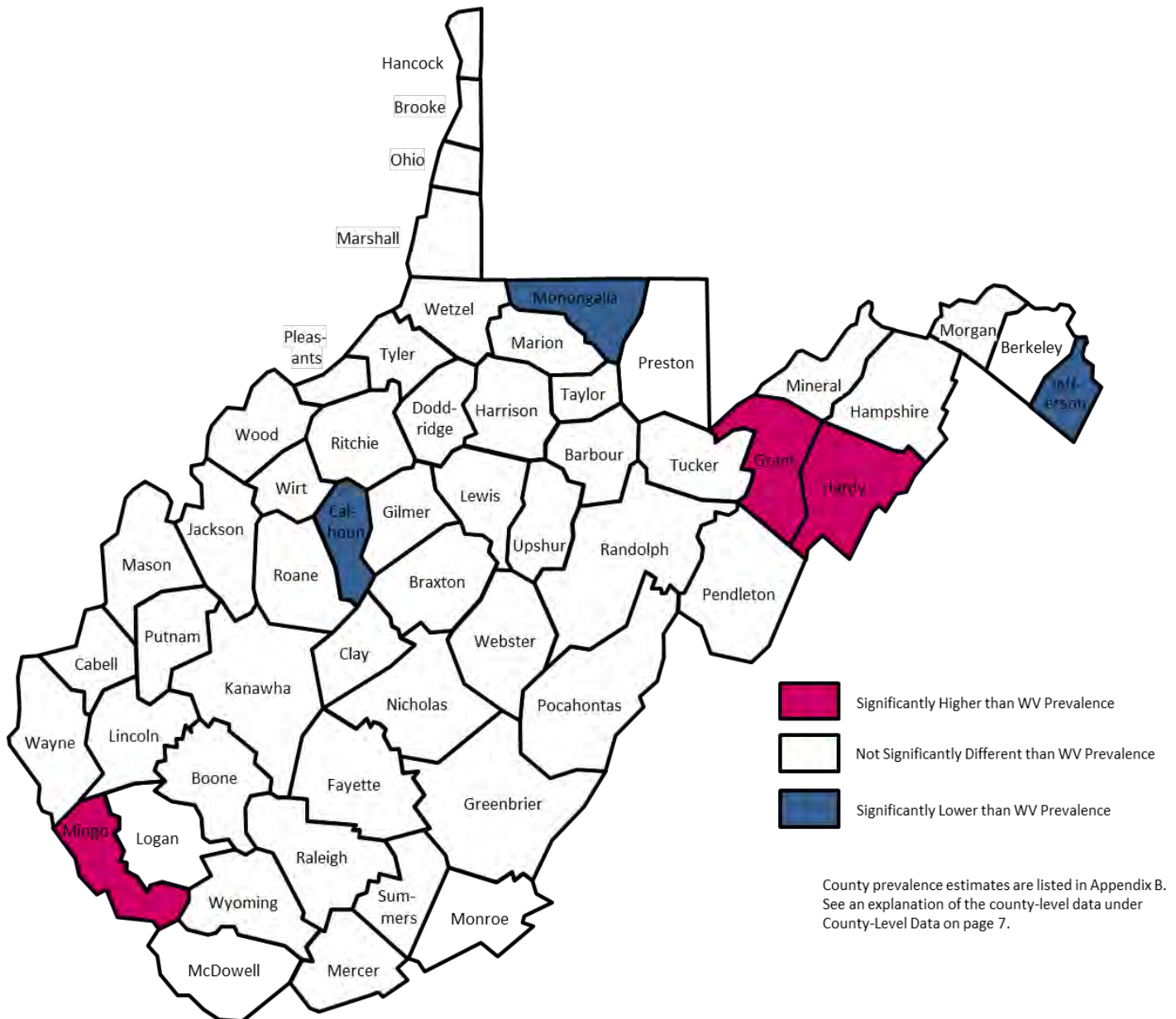


\*Due to changes in sample composition and weighting methodology, 2011-2016 results are not directly comparable to previous years.

## CHAPTER 4: WEIGHT STATUS

**Figure 4.4 Overweight or Obese Prevalence (Body Mass Index of 25.0 or Higher) by County: WVBRFSS, 2012-2016**

WV Prevalence (2012-2016) - 69.7%



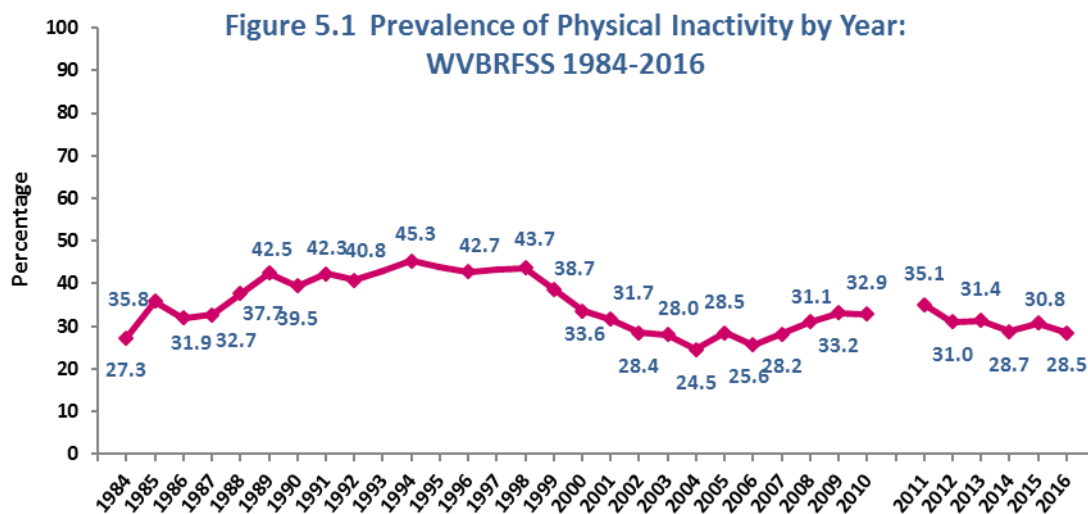
### No Leisure-Time Physical Activity or Exercise

<b>Definition</b>	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?”
<b>Prevalence</b>	<b>WV: 28.5%</b> (95% CI: 27.3-29.8) <b>U.S.: 24.4%</b> (95% CI: 24.2-24.7) The prevalence of physical inactivity was significantly higher in West Virginia than in the U.S. West Virginia ranked the 11 <sup>th</sup> highest among 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 25.1% (95% CI: 23.3-27.0) <b>Women:</b> 31.8% (95% CI: 30.1-33.4) The prevalence of physical inactivity was significantly higher among females than among males.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 28.5% (95% CI: 27.2-29.8) <b>Black, Non-Hispanic:</b> 32.0% (95% CI: 23.7-40.3) <b>Other, Non-Hispanic:</b> *28.5% (95% CI: 17.6-39.3) <b>Multiracial, Non-Hispanic:</b> *25.5% (95% CI: 15.5-35.6) <b>Hispanic:</b> *26.6% (95% CI: 11.9-41.3) There was no race/ethnicity difference in the prevalence of physical inactivity. * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.
<b>Age</b>	The prevalence of physical inactivity was significantly higher among those aged 45 and older than among those aged 44 and younger.
<b>Education</b>	The prevalence of physical inactivity was significantly higher among those with less than a high school education (44.0%) than among all other educational attainment levels. The prevalence of physical inactivity was significantly lower among college graduates (14.4%) than among all other educational attainment groups.
<b>Household Income</b>	The prevalence of physical inactivity was significantly higher among adults with an annual household income of less than \$15,000 (39.2%) than among those with incomes of \$35,000 or more. The prevalence of physical inactivity was significantly lower among those earning \$75,000 or more per year (15.1%) than among all other income brackets.

## CHAPTER 5: PHYSICAL ACTIVITY

**Table 5.1 Prevalence of Physical Inactivity by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	180,062	<b>25.1</b>	23.3-27.0	237,305	<b>31.8</b>	30.1-33.4	417,367	<b>28.5</b>	27.3-29.8
<b>Age</b>									
18-24	12,475	<b>14.3</b>	7.5-21.1	19,840	<b>24.1</b>	17.5-30.7	32,315	<b>19.1</b>	14.3-23.8
25-34	18,633	<b>17.1</b>	12.4-21.8	21,903	<b>20.8</b>	16.5-25.1	40,537	<b>18.9</b>	15.7-22.1
35-44	21,793	<b>19.5</b>	15.0-24.0	30,155	<b>27.2</b>	22.8-31.7	51,948	<b>23.3</b>	20.2-26.5
45-54	37,278	<b>31.8</b>	27.2-36.4	43,537	<b>36.8</b>	32.6-41.0	80,815	<b>34.3</b>	31.2-37.4
55-64	42,014	<b>32.1</b>	28.3-35.9	48,047	<b>35.9</b>	32.4-39.4	90,061	<b>34.0</b>	31.4-36.6
65+	47,211	<b>30.1</b>	26.8-33.4	72,525	<b>38.0</b>	35.0-41.0	119,736	<b>34.4</b>	32.2-36.7
<b>Education</b>									
Less than H.S.	48,456	<b>44.2</b>	38.5-50.0	48,918	<b>43.8</b>	38.4-49.2	97,374	<b>44.0</b>	40.1-47.9
H.S. or G.E.D.	78,876	<b>26.2</b>	23.3-29.1	110,822	<b>38.8</b>	36.0-41.7	189,698	<b>32.3</b>	30.3-34.4
Some Post-H.S.	36,288	<b>20.6</b>	17.0-24.1	55,889	<b>25.4</b>	22.5-28.3	92,177	<b>23.2</b>	21.0-25.5
College Graduate	16,032	<b>12.5</b>	10.2-14.9	21,090	<b>16.3</b>	13.8-18.8	37,122	<b>14.4</b>	12.7-16.1
<b>Income</b>									
Less than \$15,000	28,679	<b>38.8</b>	32.5-45.1	36,017	<b>39.5</b>	34.5-44.6	64,696	<b>39.2</b>	35.2-43.1
\$15,000 - 24,999	37,086	<b>31.4</b>	26.4-36.3	49,505	<b>34.9</b>	30.9-39.0	86,591	<b>33.3</b>	30.2-36.5
\$25,000 - 34,999	19,984	<b>27.7</b>	22.4-32.9	27,148	<b>35.5</b>	30.0-41.0	47,132	<b>31.7</b>	27.9-35.5
\$35,000 - 49,999	21,908	<b>24.4</b>	19.2-29.6	25,673	<b>29.6</b>	24.7-34.5	47,581	<b>26.9</b>	23.4-30.5
\$50,000 - 74,999	18,615	<b>19.7</b>	14.4-25.0	19,668	<b>24.3</b>	19.8-28.8	38,283	<b>21.8</b>	18.3-25.3
\$75,000+	18,334	<b>12.8</b>	9.8-15.7	20,017	<b>18.1</b>	14.6-21.5	38,351	<b>15.1</b>	12.8-17.3



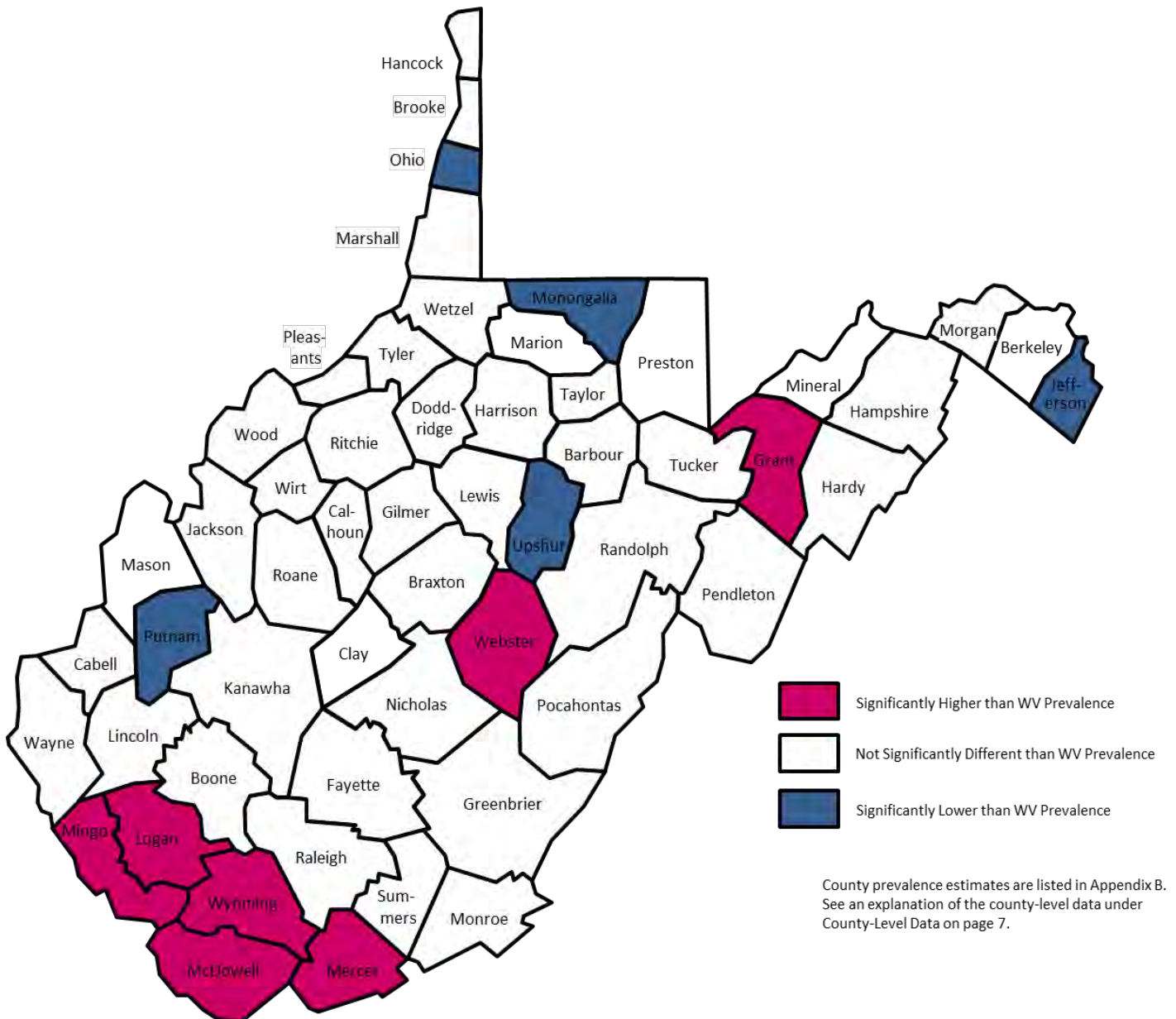
\*Due to changes in sample composition and weighting methodology, 2011-2016 results are not directly comparable to previous years.



## CHAPTER 5: PHYSICAL ACTIVITY

Figure 5.2 Prevalence of Physical Inactivity by County : WVBRFSS, 2012-2016

WV Prevalence (2012-2016) - 30.1%



### Current Cigarette Smoking

<b>Definition</b>	Current cigarette smoking is defined as smoking at least 100 cigarettes in one's lifetime and currently smoking every day or some days.
<b>Prevalence</b>	<b>WV: 24.8%</b> (95% CI: 23.6-26.1) <b>U.S.: 16.3%</b> (95% CI: 16.1-16.5) The West Virginia prevalence of current cigarette smoking was significantly higher than the national prevalence. West Virginia ranked the 2 <sup>nd</sup> highest among the 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 25.8% (95% CI: 23.9-27.7) <b>Women:</b> 23.9% (95% CI: 22.2-25.5) There was no gender difference in the prevalence of current cigarette smoking.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 24.7% (95% CI: 23.5-26.0) <b>Black, Non-Hispanic:</b> 32.4% (95% CI: 23.9-40.8) <b>Other, Non-Hispanic:</b> 20.9% (95% CI: 11.6-30.2) <b>Multiracial, Non-Hispanic:</b> 26.9% (95% CI: 17.2-36.7) <b>Hispanic:</b> *17.8% (95% CI: 4.1-31.5) There was no race/ethnicity difference in the prevalence of current cigarette smoking. <small>* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</small>
<b>Age</b>	The prevalence of current cigarette smoking was highest among those aged 25-34 (36.4%), significantly higher than among those aged 18-24 (22.3%) and among those aged 55 and older. The prevalence of current smoking was significantly lower among those aged 65 and older (10.8%) than among all other age groups.
<b>Education</b>	The prevalence of current cigarette smoking was significantly higher among those with less than a high school degree (41.9%) than among all other educational attainment groups. The prevalence of current cigarette smoking was significantly lower among college graduates (10.4%) than among all other education groups.
<b>Household Income</b>	The prevalence of current cigarette smoking was significantly higher among those earning less than \$15,000 per year (43.5%) than the prevalence among those with income levels of \$25,000 or more per year. The prevalence of smoking was significantly lower among adults with an annual household income of \$75,000 or more per year (12.1%) than among all other income brackets.

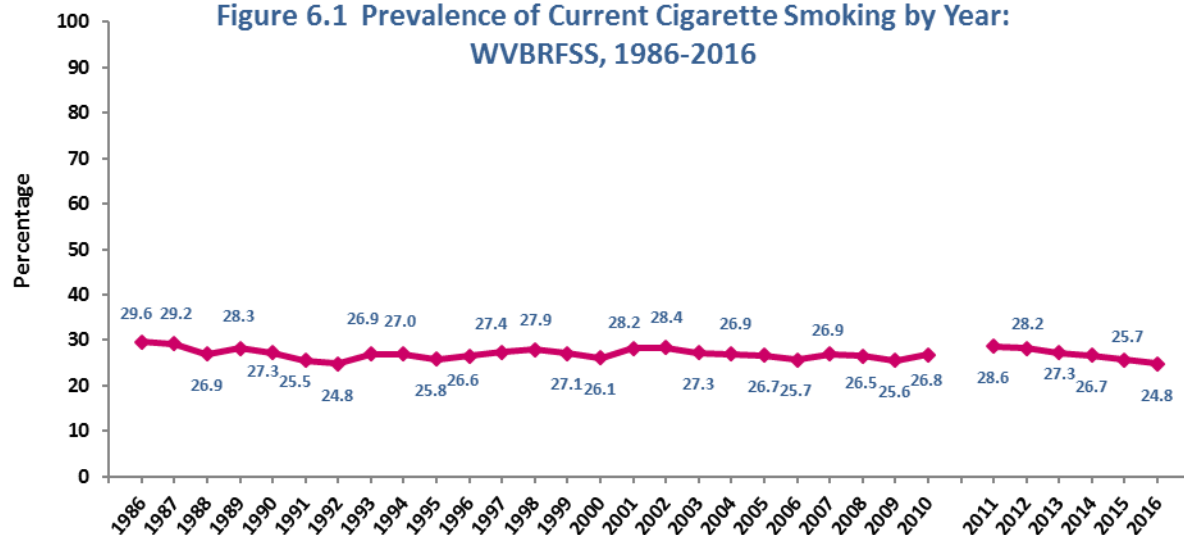


## CHAPTER 6: TOBACCO USE

**Table 6.1 Prevalence of Current Cigarette Smoking by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	181,088	<b>25.8</b>	23.9-27.7	175,294	<b>23.9</b>	22.2-25.5	356,382	<b>24.8</b>	23.6-26.1
<b>Age</b>									
18-24	19,005	<b>22.1</b>	15.2-29.0	18,072	<b>22.5</b>	15.4-29.5	37,077	<b>22.3</b>	17.4-27.2
25-34	39,839	<b>37.3</b>	31.3-43.3	37,275	<b>35.5</b>	30.2-40.8	77,115	<b>36.4</b>	32.4-40.4
35-44	30,628	<b>28.0</b>	23.1-33.0	35,651	<b>32.7</b>	28.0-37.5	66,278	<b>30.4</b>	26.9-33.8
45-54	34,530	<b>29.9</b>	25.3-34.4	40,149	<b>34.7</b>	30.5-39.0	74,679	<b>32.3</b>	29.2-35.4
55-64	35,786	<b>28.0</b>	24.4-31.6	27,454	<b>20.9</b>	18.0-23.9	63,240	<b>24.4</b>	22.1-26.8
65+	20,292	<b>13.2</b>	10.6-15.7	16,562	<b>8.8</b>	7.1-10.5	36,854	<b>10.8</b>	9.3-12.3
<b>Education</b>									
Less than H.S.	48,227	<b>45.5</b>	39.6-51.4	41,937	<b>38.4</b>	32.9-43.9	90,164	<b>41.9</b>	37.9-45.9
H.S. or G.E.D.	79,741	<b>26.9</b>	23.9-29.9	73,812	<b>26.4</b>	23.8-29.1	153,554	<b>26.7</b>	24.7-28.7
Some Post-H.S.	38,064	<b>22.0</b>	18.3-25.6	47,850	<b>21.9</b>	19.0-24.9	85,914	<b>22.0</b>	19.7-24.3
College Graduate	14,674	<b>11.7</b>	9.2-14.2	11,694	<b>9.2</b>	7.1-11.2	26,368	<b>10.4</b>	8.8-12.0
<b>Income</b>									
Less than \$15,000	33,070	<b>45.4</b>	38.8-52.0	37,714	<b>42.0</b>	36.7-47.2	70,784	<b>43.5</b>	39.4-47.7
\$15,000 - 24,999	45,702	<b>39.0</b>	33.8-44.3	46,916	<b>33.7</b>	29.3-38.0	92,617	<b>36.1</b>	32.8-39.5
\$25,000 - 34,999	18,919	<b>26.1</b>	20.5-31.7	15,102	<b>19.9</b>	15.1-24.7	34,020	<b>22.9</b>	19.3-26.6
\$35,000 - 49,999	17,062	<b>19.1</b>	14.6-23.7	17,754	<b>20.5</b>	16.0-25.0	34,816	<b>19.8</b>	16.6-23.0
\$50,000 - 74,999	18,439	<b>19.8</b>	15.0-24.5	13,832	<b>17.1</b>	12.8-21.4	32,271	<b>18.5</b>	15.3-21.8
\$75,000+	18,515	<b>13.0</b>	9.7-16.4	11,860	<b>10.9</b>	7.8-14.0	30,375	<b>12.1</b>	9.8-14.4

**Figure 6.1 Prevalence of Current Cigarette Smoking by Year: WVBRFSS, 1986-2016**

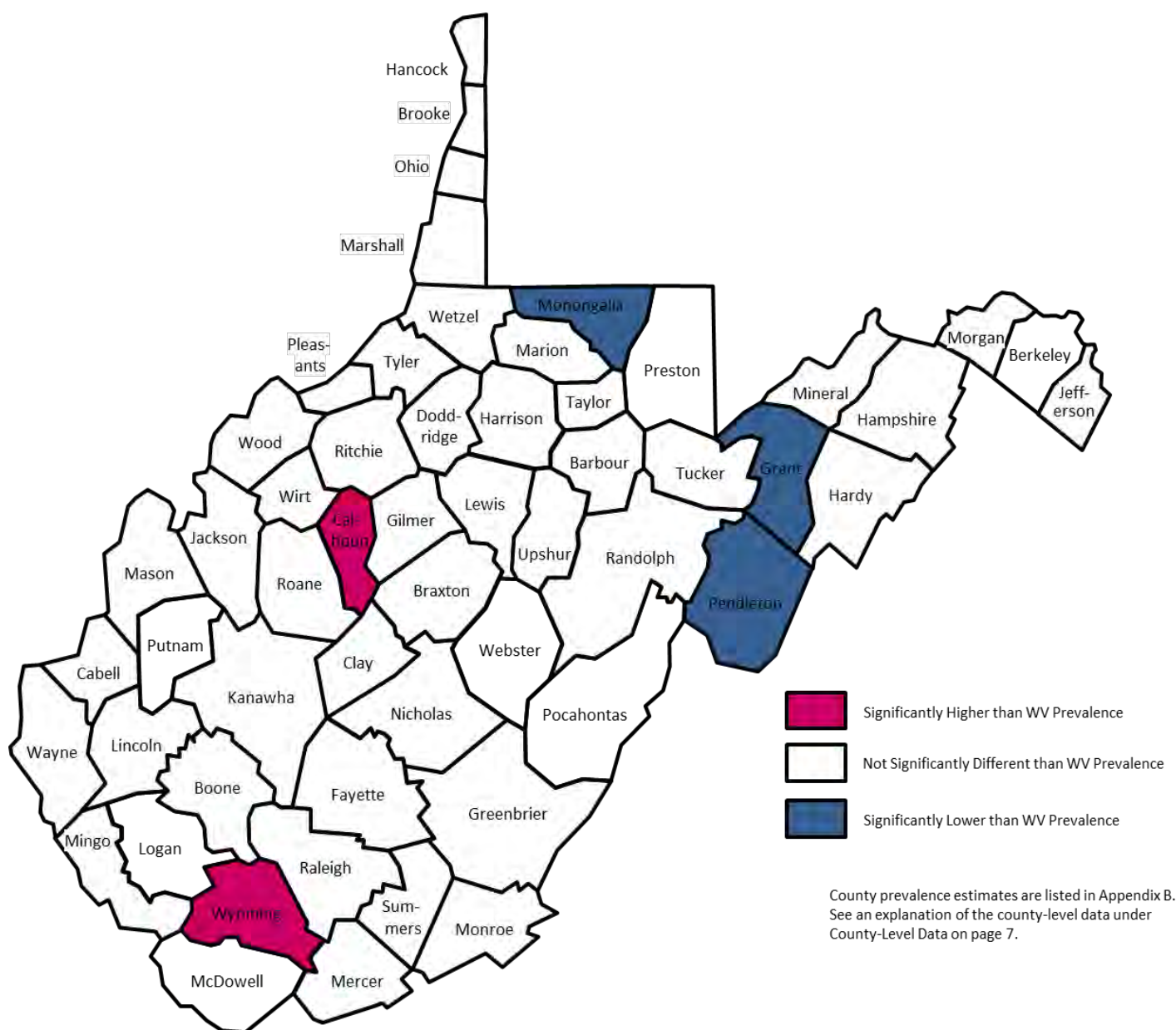


\*Due to changes in sample composition and weighting methodology, 2011-2016 results are not directly comparable to previous years.

## CHAPTER 6: TOBACCO USE

**Figure 6.2 Prevalence of Current Cigarette Smoking by County: WVBRFSS, 2012-2016**

WV Prevalence (2012-2016) - 26.5%



### Smoking Cessation

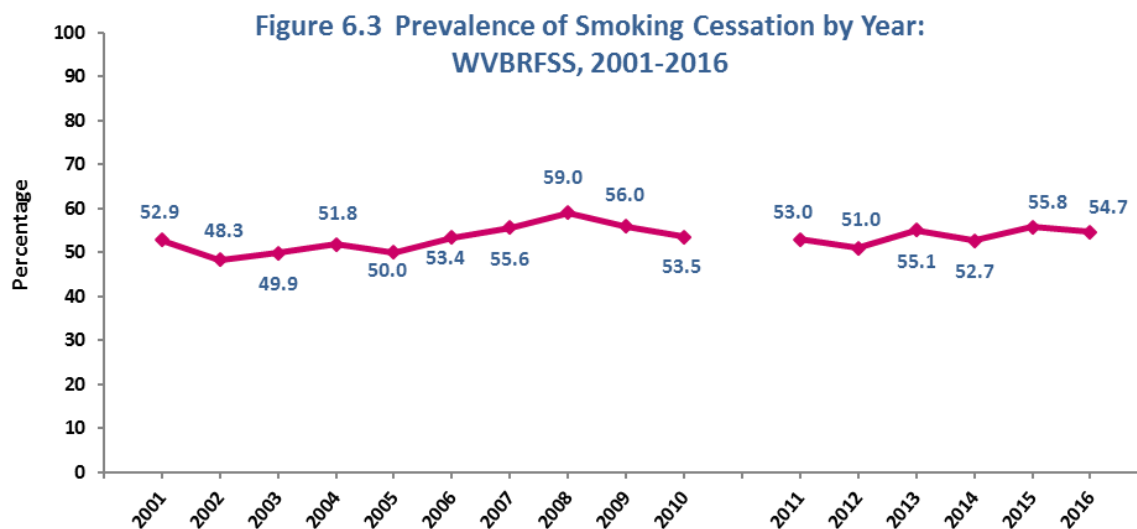
<b>Definition</b>	Current smokers responding “Yes” to the question, “During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking?”
<b>Prevalence</b>	<b>WV: 54.7%</b> (95% CI: 51.8-57.6) <b>U.S.: 59.3%</b> (95% CI: 58.6-59.9) The West Virginia prevalence of smoking cessation was significantly lower than the U.S. prevalence. West Virginia ranked the 46 <sup>th</sup> highest among 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 53.7% (95% CI: 49.4-58.0) <b>Women:</b> 55.7% (95% CI: 51.7-59.7) There was no gender difference in the prevalence of smoking cessation.
<b>Race/Ethnicity</b>	No race/ethnicity statistics are reported due to unreliable estimates.
<b>Age</b>	The prevalence of smoking cessation was significantly higher among those aged 34 and younger than among those aged 55 and older.
<b>Education</b>	There was no educational attainment difference in the prevalence of smoking cessation.
<b>Household Income</b>	There was no annual household income difference in the prevalence of smoking cessation.

## CHAPTER 6: TOBACCO USE

**Table 6.2 Prevalence of Smoking Cessation by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	97,130	<b>53.7</b>	49.4-58.0	97,642	<b>55.7</b>	51.7-59.7	194,772	<b>54.7</b>	51.8-57.6
<b>Age</b>									
18-24	11,256	<b>*59.2</b>	41.9-76.5	13,384	<b>*74.1</b>	58.1-90.0	24,640	<b>*66.5</b>	54.5-78.4
25-34	24,959	<b>62.6</b>	52.8-72.5	22,495	<b>60.3</b>	51.3-69.4	47,453	<b>61.5</b>	54.8-68.3
35-44	15,868	<b>*51.8</b>	41.3-62.3	20,842	<b>58.5</b>	49.8-67.1	36,711	<b>55.4</b>	48.6-62.2
45-54	19,372	<b>56.1</b>	46.9-65.3	20,281	<b>50.6</b>	42.8-58.4	39,653	<b>53.1</b>	47.1-59.1
55-64	15,889	<b>44.4</b>	36.7-52.1	13,141	<b>47.9</b>	39.9-55.8	29,030	<b>45.9</b>	40.4-51.4
65+	9,400	<b>*46.9</b>	36.5-57.3	7,499	<b>45.3</b>	35.3-55.3	16,899	<b>46.2</b>	38.9-53.4
<b>Education</b>									
Less than H.S.	26,993	<b>56.0</b>	47.1-64.8	22,165	<b>52.9</b>	43.4-62.3	49,158	<b>54.5</b>	48.1-61.0
H.S. or G.E.D.	42,480	<b>53.4</b>	47.0-59.9	38,429	<b>52.1</b>	46.1-58.1	80,909	<b>52.8</b>	48.4-57.2
Some Post-H.S.	20,833	<b>54.7</b>	45.4-64.1	30,335	<b>63.4</b>	56.4-70.4	51,167	<b>59.6</b>	53.8-65.3
College Graduate	6,825	<b>*46.5</b>	35.1-57.9	6,714	<b>*57.4</b>	46.0-68.8	13,538	<b>51.3</b>	43.2-59.5
<b>Income</b>									
Less than \$15,000	19,959	<b>60.4</b>	50.7-70.0	21,252	<b>56.4</b>	48.2-64.7	41,211	<b>58.3</b>	52.0-64.6
\$15,000 - 24,999	25,215	<b>55.2</b>	46.5-63.8	28,863	<b>61.5</b>	53.9-69.2	54,077	<b>58.4</b>	52.6-64.2
\$25,000 - 34,999	8,390	<b>*44.4</b>	31.8-56.9	6,740	<b>*44.6</b>	30.8-58.4	15,130	<b>44.5</b>	35.2-53.8
\$35,000 - 49,999	9,237	<b>*54.9</b>	41.9-68.0	8,820	<b>*49.7</b>	37.2-62.1	18,057	<b>52.2</b>	43.2-61.3
\$50,000 - 74,999	8,117	<b>*44.0</b>	30.8-57.2	8,675	<b>*62.7</b>	49.7-75.7	16,792	<b>52.0</b>	42.3-61.8
\$75,000+	10,253	<b>*55.4</b>	41.6-69.2	7,903	<b>*66.6</b>	52.2-81.1	18,156	<b>*59.8</b>	49.7-69.9

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



\*Due to changes in sample composition and weighting methodology, 2011-2016 results are not directly comparable to previous years.

### Smokeless Tobacco Use

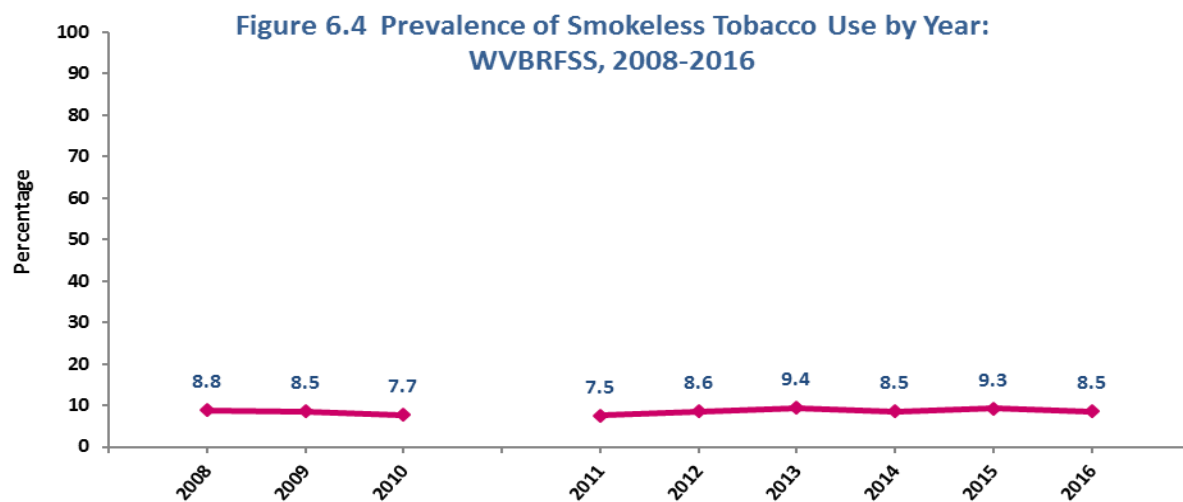
<b>Definition</b>	Responding “Every day” or “Some days” to the question, “Do you currently use chewing tobacco, snuff, or snus every day, some days, or not at all?”
<b>Prevalence</b>	<b>WV: 8.5%</b> (95% CI: 7.7-9.4) <b>U.S.: 3.6%</b> (95% CI: 3.5-3.7) The West Virginia prevalence of smokeless tobacco use was significantly higher than the U.S. prevalence. West Virginia ranked the 2 <sup>nd</sup> highest among 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 15.9% (95% CI: 14.3-17.5) <b>Women:</b> 1.5% (95% CI: 1.0-2.0) The prevalence of smokeless tobacco use was significantly higher among men than among women.
<b>Race/Ethnicity</b>	No race/ethnicity statistics are reported due to unreliable estimates.
<b>Age</b>	The prevalence of smokeless tobacco use was significantly higher among those aged 54 and younger than among those aged 65 and older (5.2%).
<b>Education</b>	The prevalence of smokeless tobacco use was significantly higher among those with a high school education or less than among those with some college or a college degree.
<b>Household Income</b>	There was no income difference in the prevalence of smokeless tobacco use.

## CHAPTER 6: TOBACCO USE

**Table 6.3 Prevalence of Smokeless Tobacco Use by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	111,799	<b>15.9</b>	14.3-17.5	11,205	<b>1.5</b>	1.0-2.0	123,004	<b>8.5</b>	7.7-9.4
<b>Age</b>									
18-24	17,652	<b>20.6</b>	13.9-27.3	2,419	<b>*3.0</b>	0.4-5.6	20,070	<b>12.1</b>	8.3-15.9
25-34	19,909	<b>18.5</b>	13.6-23.4	1,517	<b>*1.4</b>	0.2-2.7	21,426	<b>10.1</b>	7.4-12.8
35-44	18,953	<b>17.3</b>	13.2-21.5	1,649	<b>*1.5</b>	0.2-2.8	20,602	<b>9.4</b>	7.2-11.7
45-54	23,052	<b>19.9</b>	15.8-23.9	635	<b>*0.5</b>	0.0-1.2	23,687	<b>10.2</b>	8.1-12.4
55-64	17,776	<b>13.9</b>	11.0-16.7	1,175	<b>*0.9</b>	0.2-1.6	18,951	<b>7.3</b>	5.8-8.8
65+	14,224	<b>9.2</b>	7.0-11.4	3,811	<b>2.0</b>	1.0-3.1	18,035	<b>5.2</b>	4.1-6.4
<b>Education</b>									
Less than H.S.	22,130	<b>20.8</b>	15.8-25.8	2,831	<b>*2.6</b>	0.6-4.6	24,962	<b>11.5</b>	8.8-14.3
H.S. or G.E.D.	54,098	<b>18.3</b>	15.6-20.9	5,199	<b>1.9</b>	1.0-2.7	59,297	<b>10.3</b>	8.8-11.8
Some Post-H.S.	25,788	<b>14.9</b>	11.7-18.1	1,886	<b>*0.9</b>	0.2-1.5	27,674	<b>7.1</b>	5.5-8.6
College Graduate	9,782	<b>7.7</b>	5.6-9.8	1,288	<b>*1.0</b>	0.3-1.7	11,071	<b>4.3</b>	3.2-5.5
<b>Income</b>									
Less than \$15,000	10,519	<b>14.4</b>	9.5-19.4	1,791	<b>*2.0</b>	0.5-3.5	12,311	<b>7.6</b>	5.1-10.0
\$15,000 - 24,999	22,896	<b>19.5</b>	14.8-24.2	2,326	<b>*1.7</b>	0.3-3.0	25,222	<b>9.8</b>	7.4-12.2
\$25,000 - 34,999	11,682	<b>16.1</b>	11.5-20.7	679	<b>*0.9</b>	0.0-2.4	12,362	<b>8.3</b>	5.9-10.8
\$35,000 - 49,999	10,333	<b>11.6</b>	7.8-15.3	1,474	<b>*1.7</b>	0.0-3.5	11,807	<b>6.7</b>	4.6-8.8
\$50,000 - 74,999	16,720	<b>17.8</b>	13.3-22.4	754	<b>*0.9</b>	0.0-1.9	17,473	<b>10.0</b>	7.4-12.6
\$75,000+	21,147	<b>14.9</b>	11.6-18.2	1,448	<b>*1.3</b>	0.1-2.6	22,595	<b>9.0</b>	7.0-11.0

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

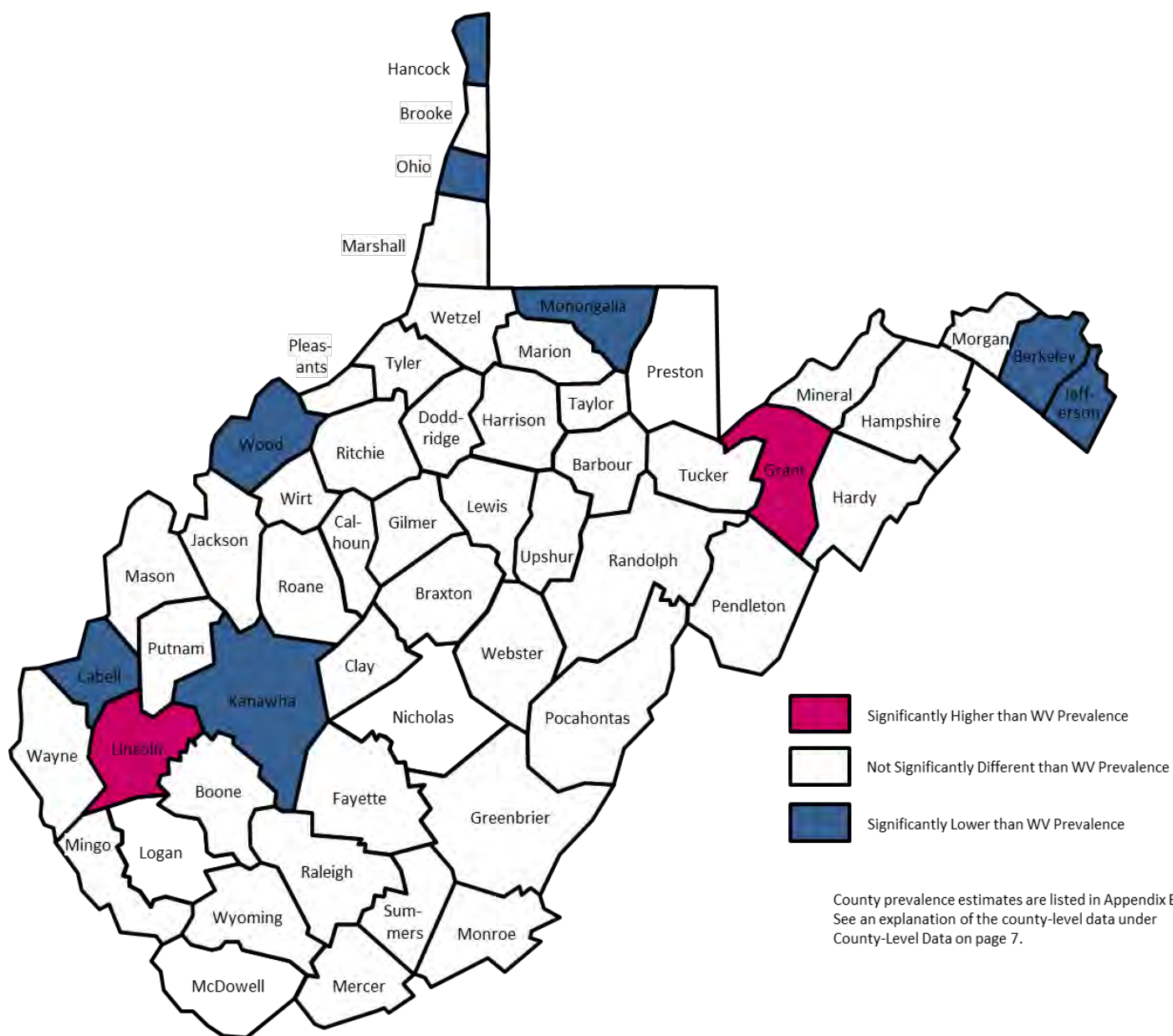


\*Due to changes in sample composition and weighting methodology, 2011-2016 results are not directly comparable to previous years.

## CHAPTER 6: TOBACCO USE

Figure 6.5 Prevalence of Smokeless Tobacco Use by County: WVBRFSS, 2012-2016

WV Prevalence (2012-2016) - 8.9%



### E-Cigarettes

<b>Definition</b>	Responding “Every day” or “Some days” to the question, “Do you now use e-cigarettes or other electronic “vaping” products every day, some days, or not at all?”
<b>Prevalence</b>	<b>WV: 4.7%</b> (95% CI: 4.0-5.3) <b>U.S.: 4.5%</b> (95% CI: 4.4-4.6) The West Virginia prevalence of currently use e-cigarettes was equivalent to the U.S. prevalence. West Virginia ranked the 29 <sup>th</sup> highest among 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 4.9% (95% CI: 3.9-5.9) <b>Women:</b> 4.4% (95% CI: 3.5-5.3) There was no gender difference in the prevalence of currently use e-cigarettes.
<b>Race/Ethnicity</b>	No race/ethnicity statistics are reported due to unreliable estimates.
<b>Age</b>	The prevalence of currently use e-cigarettes was significantly higher among those aged 18-24 (10.8%) than among those aged 45 and older.
<b>Education</b>	The prevalence of currently use e-cigarettes was significantly higher among those with less than a high school education (8.5%) than among those with a high school or college degree.
<b>Household Income</b>	The prevalence of currently use e-cigarettes was significantly higher among those with an annual household income of less than \$25,000 than among those earning \$50,000 or more per year.



## CHAPTER 6: TOBACCO USE

**Table 6.4 Prevalence of Currently Use E-Cigarettes by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	34,448	<b>4.9</b>	3.9-5.9	32,633	<b>4.4</b>	3.5-5.3	67,082	<b>4.7</b>	4.0-5.3
<b>Age</b>									
18-24	10,943	<b>12.8</b>	7.2-18.3	6,903	<b>*8.6</b>	3.2-13.9	17,846	<b>10.8</b>	6.9-14.6
25-34	6,740	<b>6.3</b>	3.6-8.9	5,326	<b>5.1</b>	2.7-7.5	12,066	<b>5.7</b>	3.9-7.5
35-44	7,155	<b>6.6</b>	3.9-9.2	6,025	<b>5.5</b>	3.2-7.9	13,180	<b>6.0</b>	4.3-7.8
45-54	4,134	<b>3.6</b>	1.8-5.3	5,523	<b>4.8</b>	2.9-6.7	9,658	<b>4.2</b>	2.9-5.4
55-64	3,771	<b>2.9</b>	1.5-4.3	6,068	<b>4.6</b>	3.0-6.2	9,840	<b>3.8</b>	2.7-4.8
65+	1,704	<b>*1.1</b>	0.4-1.8	2,788	<b>1.5</b>	0.8-2.2	4,492	<b>1.3</b>	0.8-1.8
<b>Education</b>									
Less than H.S.	9,292	<b>8.7</b>	5.4-12.0	9,068	<b>8.3</b>	4.2-12.3	18,360	<b>8.5</b>	5.9-11.1
H.S. or G.E.D.	8,053	<b>2.7</b>	1.6-3.8	11,951	<b>4.3</b>	3.0-5.5	20,003	<b>3.5</b>	2.6-4.3
Some Post-H.S.	14,237	<b>8.2</b>	5.5-10.9	9,525	<b>4.4</b>	3.0-5.8	23,762	<b>6.1</b>	4.6-7.5
College Graduate	2,866	<b>2.3</b>	1.2-3.4	2,090	<b>1.6</b>	0.8-2.5	4,956	<b>1.9</b>	1.3-2.6
<b>Income</b>									
Less than \$15,000	6,702	<b>9.2</b>	5.1-13.2	5,866	<b>6.6</b>	3.9-9.2	12,568	<b>7.7</b>	5.4-10.1
\$15,000 - 24,999	8,916	<b>7.6</b>	4.7-10.5	9,809	<b>7.0</b>	4.0-10.1	18,725	<b>7.3</b>	5.2-9.4
\$25,000 - 34,999	4,718	<b>6.5</b>	3.5-9.5	2,479	<b>*3.3</b>	1.3-5.2	7,197	<b>4.8</b>	3.1-6.6
\$35,000 - 49,999	3,094	<b>*3.5</b>	0.2-6.8	3,378	<b>*3.9</b>	1.6-6.2	6,472	<b>3.7</b>	1.7-5.7
\$50,000 - 74,999	2,659	<b>*2.8</b>	0.8-4.9	2,138	<b>*2.6</b>	0.8-4.5	4,797	<b>2.7</b>	1.4-4.1
\$75,000+	3,201	<b>*2.3</b>	0.9-3.6	3,885	<b>*3.6</b>	1.4-5.7	7,086	<b>2.8</b>	1.6-4.0

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

## CHAPTER 7: ALCOHOL CONSUMPTION

### Heavy Drinking

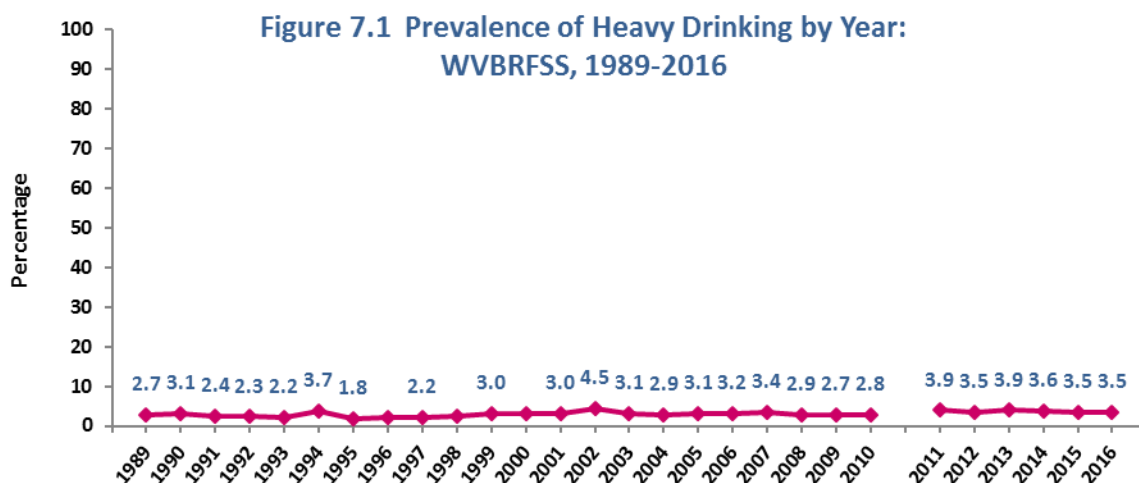
<b>Definition</b>	Defined as the consumption of more than two drinks per day for men and more than one drink per day for women during the past month.
<b>Prevalence</b>	<b>WV: 3.5%</b> (95% CI: 3.0-4.1) <b>U.S.: 6.4%</b> (95% CI: 6.2-6.5) The West Virginia prevalence of heavy drinking was significantly lower than the U.S. prevalence. West Virginia ranked 54 <sup>th</sup> highest among the 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 4.6% (95% CI: 3.7-5.5) <b>Women:</b> 2.5% (95% CI: 1.8-3.2) The prevalence of heavy drinking was significantly higher among men than women.
<b>Race/Ethnicity</b>	No race/ethnicity statistics are reported due to unreliable estimates.
<b>Age</b>	The prevalence of heavy drinking was significantly higher among those aged 18-24 (6.7%) than among those aged 65 and older (1.6%).
<b>Education</b>	There was no educational attainment difference in the prevalence of heavy drinking.
<b>Household Income</b>	There was no annual household income difference in the prevalence of heavy drinking.

## CHAPTER 7: ALCOHOL CONSUMPTION

**Table 7.1 Prevalence of Heavy Drinking by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	31,698	<b>4.6</b>	3.7-5.5	18,295	<b>2.5</b>	1.8-3.2	49,993	<b>3.5</b>	3.0-4.1
<b>Age</b>									
18-24	5,572	<b>*6.7</b>	2.6-10.8	5,178	<b>*6.6</b>	1.8-11.5	10,750	<b>6.7</b>	3.5-9.8
25-34	3,731	<b>*3.6</b>	1.4-5.8	3,542	<b>3.4</b>	1.5-5.4	7,273	<b>3.5</b>	2.0-5.0
35-44	6,934	<b>6.5</b>	3.7-9.4	2,105	<b>*1.9</b>	0.8-3.1	9,038	<b>4.2</b>	2.7-5.8
45-54	5,883	<b>5.2</b>	3.1-7.3	4,196	<b>3.6</b>	1.9-5.4	10,079	<b>4.4</b>	3.1-5.8
55-64	5,441	<b>4.3</b>	2.7-6.0	1,826	<b>1.4</b>	0.7-2.1	7,268	<b>2.8</b>	2.0-3.7
65+	4,137	<b>2.7</b>	1.6-3.9	1,377	<b>*0.7</b>	0.2-1.2	5,514	<b>1.6</b>	1.0-2.2
<b>Education</b>									
Less than H.S.	5,747	<b>5.6</b>	2.9-8.3	1,821	<b>*1.7</b>	0.0-4.5	7,569	<b>3.6</b>	1.7-5.5
H.S. or G.E.D.	12,492	<b>4.3</b>	2.9-5.8	7,580	<b>2.7</b>	1.6-3.9	20,072	<b>3.6</b>	2.6-4.5
Some Post-H.S.	7,973	<b>4.7</b>	2.8-6.6	4,239	<b>2.0</b>	0.9-3.0	12,212	<b>3.2</b>	2.1-4.2
College Graduate	5,486	<b>4.4</b>	2.9-5.9	4,655	<b>3.7</b>	2.2-5.1	10,141	<b>4.0</b>	3.0-5.1
<b>Income</b>									
Less than \$15,000	3,449	<b>4.8</b>	2.1-7.6	802	<b>*0.9</b>	0.0-2.0	4,251	<b>2.7</b>	1.3-4.0
\$15,000 - 24,999	5,846	<b>5.1</b>	2.5-7.7	4,490	<b>*3.2</b>	0.8-5.7	10,336	<b>4.1</b>	2.3-5.9
\$25,000 - 34,999	3,315	<b>4.6</b>	2.0-7.2	1,366	<b>*1.8</b>	0.2-3.4	4,682	<b>3.2</b>	1.7-4.7
\$35,000 - 49,999	3,951	<b>4.5</b>	1.9-7.1	2,109	<b>*2.5</b>	0.4-4.6	6,060	<b>3.5</b>	1.8-5.2
\$50,000 - 74,999	3,699	<b>*4.0</b>	1.6-6.4	3,171	<b>*3.9</b>	1.5-6.4	6,870	<b>4.0</b>	2.3-5.7
\$75,000+	7,050	<b>5.1</b>	3.1-7.1	4,556	<b>4.2</b>	2.4-6.0	11,606	<b>4.7</b>	3.3-6.1

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



\*Due to changes in sample composition and weighting methodology, 2011-2016 results are not directly comparable to previous years.

## CHAPTER 7: ALCOHOL CONSUMPTION

### Binge Drinking

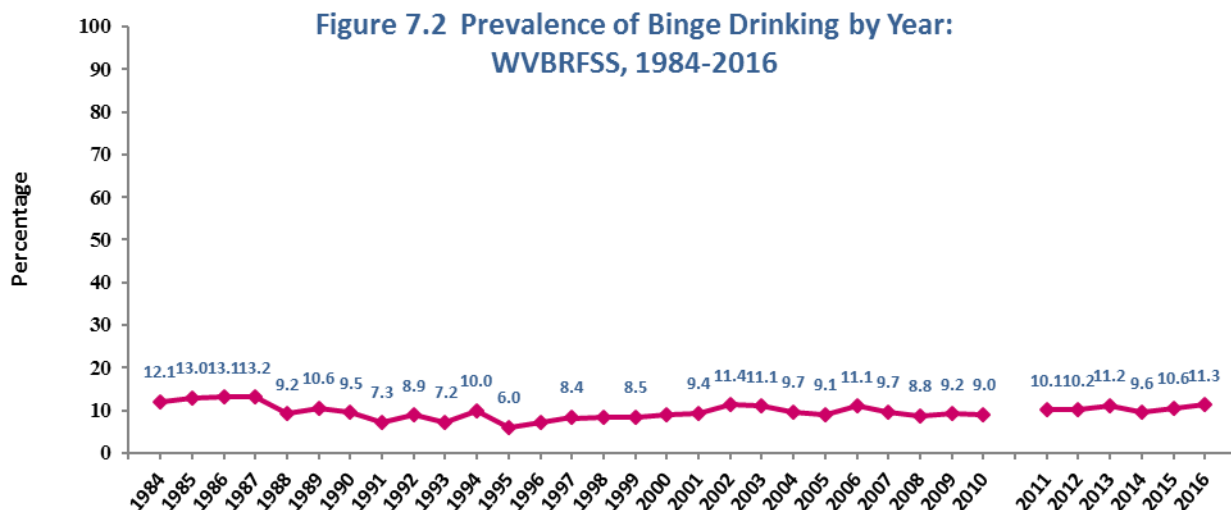
<b>Definition</b>	Defined as the consumption of five or more alcoholic drinks for males, or four or more alcoholic drinks for females, on a single occasion during the past month.
<b>Prevalence</b>	<b>WV: 11.3%</b> (95% CI: 10.4-12.3) <b>U.S.: 16.9%</b> (95% CI: 16.6-17.1) The West Virginia prevalence of binge drinking was significantly lower than the U.S. prevalence. West Virginia ranked the 54 <sup>th</sup> highest among 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 16.8% (95% CI: 15.1-18.5) <b>Women:</b> 6.2% (95% CI: 5.2-7.2) The prevalence of binge drinking was significantly higher among men than among women.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 11.3% (95% CI: 10.3-12.3) <b>Black, Non-Hispanic:</b> 15.6% (95% CI: 9.2-22.0) <b>Other, Non-Hispanic:</b> *4.0% (95% CI: 0.3-7.7) <b>Multiracial, Non-Hispanic:</b> *11.9% (95% CI: 4.6-19.1) <b>Hispanic:</b> *9.8% (95% CI: 0.1-19.5) There was no race/ethnicity difference in the prevalence of binge drinking. * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.
<b>Age</b>	The prevalence of binge drinking was significantly higher among those aged 18-24 (23.2%) than among those aged 35 and older. The prevalence of binge drinking was significantly lower among those 65 and older (2.3%) than among all other age groups.
<b>Education</b>	The prevalence of binge drinking was significantly higher among college graduates (14.2%) than among those with less than a high school education (9.0%) or those with a high school degree (10.6%).
<b>Household Income</b>	The prevalence of binge drinking was significantly higher among those with an annual household income of \$75,000 or more (15.8%) than among those with an income of \$25,000-\$49,999 a year.

## CHAPTER 7: ALCOHOL CONSUMPTION

**Table 7.2 Prevalence of Binge Drinking by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	115,300	<b>16.8</b>	15.1-18.5	44,964	<b>6.2</b>	5.2-7.2	160,264	<b>11.3</b>	10.4-12.3
<b>Age</b>									
18-24	23,231	<b>28.1</b>	20.6-35.5	14,043	<b>18.0</b>	11.6-24.5	37,273	<b>23.2</b>	18.3-28.2
25-34	28,453	<b>27.6</b>	22.1-33.1	10,056	<b>9.8</b>	6.8-12.7	38,509	<b>18.7</b>	15.5-21.9
35-44	23,139	<b>21.7</b>	17.2-26.2	7,893	<b>7.3</b>	4.9-9.7	31,031	<b>14.5</b>	11.9-17.1
45-54	18,991	<b>16.6</b>	13.0-20.2	8,354	<b>7.3</b>	5.0-9.6	27,346	<b>11.9</b>	9.8-14.0
55-64	14,699	<b>11.7</b>	9.2-14.2	3,685	<b>2.8</b>	1.7-4.0	18,384	<b>7.2</b>	5.8-8.5
65+	6,787	<b>4.5</b>	2.9-6.0	862	<b>*0.5</b>	0.1-0.8	7,649	<b>2.3</b>	1.5-3.0
<b>Education</b>									
Less than H.S.	14,664	<b>14.1</b>	9.8-18.4	4,428	<b>*4.1</b>	1.0-7.2	19,091	<b>9.0</b>	6.3-11.6
H.S. or G.E.D.	44,703	<b>15.5</b>	12.9-18.1	14,701	<b>5.4</b>	3.7-7.0	59,404	<b>10.6</b>	9.0-12.1
Some Post-H.S.	31,594	<b>18.7</b>	15.0-22.3	14,507	<b>6.7</b>	4.9-8.6	46,102	<b>12.0</b>	10.0-13.9
College Graduate	24,339	<b>19.6</b>	16.5-22.7	11,328	<b>8.9</b>	6.8-11.0	35,667	<b>14.2</b>	12.3-16.1
<b>Income</b>									
Less than \$15,000	15,191	<b>21.4</b>	15.5-27.3	4,424	<b>5.0</b>	2.6-7.4	19,615	<b>12.3</b>	9.3-15.4
\$15,000 - 24,999	20,611	<b>17.9</b>	13.3-22.4	7,488	<b>5.4</b>	2.7-8.1	28,099	<b>11.1</b>	8.5-13.6
\$25,000 - 34,999	8,193	<b>11.5</b>	7.6-15.4	3,705	<b>4.9</b>	2.5-7.3	11,898	<b>8.1</b>	5.8-10.4
\$35,000 - 49,999	11,582	<b>13.3</b>	9.1-17.4	4,428	<b>5.2</b>	2.5-7.9	16,010	<b>9.3</b>	6.8-11.7
\$50,000 - 74,999	17,296	<b>18.8</b>	14.1-23.5	6,425	<b>8.0</b>	4.5-11.5	23,721	<b>13.8</b>	10.8-16.8
\$75,000+	28,053	<b>20.2</b>	16.3-24.0	11,115	<b>10.3</b>	7.3-13.2	39,168	<b>15.8</b>	13.3-18.4

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

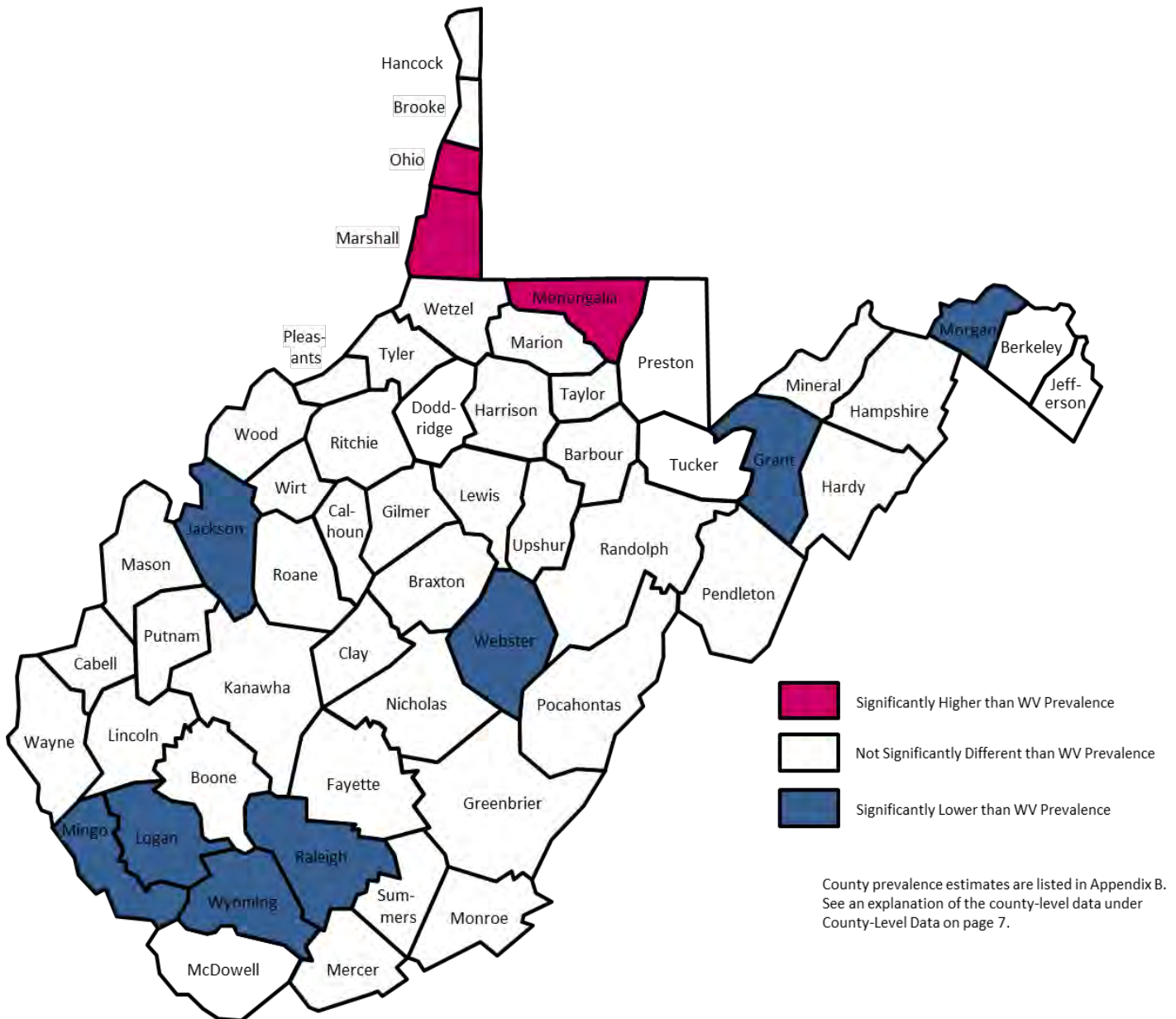


\*Due to changes in sample composition and weighting methodology, 2011-2016 results are not directly comparable to previous years.

## CHAPTER 7: ALCOHOL CONSUMPTION

Figure 7.3 Prevalence of Binge Drinking by County: WVBRFSS, 2012-2016

WV Prevalence (2012-2016) - 10.6%



### Seldom or Never Wear Seatbelt

<b>Definition</b>	Responding “Seldom” or “Never” to the question, “How often do you use seat belts when you drive or ride in a car?”
<b>Prevalence</b>	<b>WV: 4.1%</b> (95% CI: 3.5-4.7) <b>U.S.: 2.8%</b> (95% CI: 2.7-2.9) The West Virginia prevalence of seldom or never wear a seat belt was significantly higher than the U.S. prevalence. West Virginia ranked the 16 <sup>th</sup> highest among the 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 6.0% (95% CI: 5.0-7.1) <b>Women:</b> 2.2% (95% CI: 1.7-2.8) The prevalence of seldom or never wear a seat belt was significantly higher among men than among women.
<b>Race/Ethnicity</b>	No race/ethnicity statistics are reported due to unreliable estimates.
<b>Age</b>	The prevalence of seldom or never wear a seat belt was highest among those aged 25-34 (6.2%), significantly higher than among those 65 and older (2.8%).
<b>Education</b>	The prevalence of seldom or never wear a seat belt was significantly lower among college graduates (2.2%) than among those with a high school degree (5.0%) and among those with less than a high school education (5.0%).
<b>Household Income</b>	There was no income difference in the prevalence of seldom or never wear a seatbelt.

## CHAPTER 8: INJURY

**Table 8.1 Prevalence of Seldom or Never Wear a Seatbelt: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	41,998	<b>6.0</b>	5.0-7.1	16,165	<b>2.2</b>	1.7-2.8	58,164	<b>4.1</b>	3.5-4.7
<b>Age</b>									
18-24	3,399	<b>*4.1</b>	0.9-7.2	2,293	<b>*2.9</b>	0.0-5.9	5,692	<b>*3.5</b>	1.3-5.7
25-34	8,556	<b>8.1</b>	4.5-11.8	4,258	<b>4.1</b>	2.0-6.3	12,814	<b>6.2</b>	4.0-8.3
35-44	9,700	<b>8.9</b>	5.5-12.3	1,950	<b>*1.8</b>	0.6-3.0	11,651	<b>5.4</b>	3.5-7.2
45-54	6,790	<b>5.9</b>	3.5-8.2	2,340	<b>2.0</b>	0.9-3.1	9,130	<b>4.0</b>	2.6-5.3
55-64	7,095	<b>5.6</b>	3.7-7.4	1,848	<b>*1.4</b>	0.5-2.3	8,943	<b>3.5</b>	2.4-4.5
65+	6,058	<b>4.0</b>	2.5-5.4	3,477	<b>1.9</b>	1.1-2.6	9,535	<b>2.8</b>	2.0-3.6
<b>Education</b>									
Less than H.S.	7,750	<b>7.4</b>	4.1-10.8	2,773	<b>*2.6</b>	1.0-4.2	10,523	<b>5.0</b>	3.1-6.9
H.S. or G.E.D.	21,244	<b>7.2</b>	5.5-9.0	7,194	<b>2.6</b>	1.5-3.7	28,439	<b>5.0</b>	3.9-6.1
Some Post-H.S.	8,958	<b>5.2</b>	3.2-7.3	4,541	<b>2.1</b>	1.2-3.0	13,499	<b>3.5</b>	2.4-4.5
College Graduate	3,880	<b>3.1</b>	1.8-4.4	1,657	<b>1.3</b>	0.6-2.0	5,537	<b>2.2</b>	1.4-2.9
<b>Income</b>									
Less than \$15,000	5,752	<b>8.2</b>	4.6-11.8	961	<b>*1.1</b>	0.2-2.0	6,713	<b>4.2</b>	2.5-5.9
\$15,000 - 24,999	6,306	<b>5.4</b>	2.8-8.0	5,998	<b>4.4</b>	2.6-6.2	12,305	<b>4.8</b>	3.3-6.4
\$25,000 - 34,999	6,051	<b>8.4</b>	4.7-12.1	2,489	<b>*3.3</b>	0.8-5.8	8,540	<b>5.8</b>	3.6-8.0
\$35,000 - 49,999	6,691	<b>7.6</b>	4.4-10.8	948	<b>*1.1</b>	0.0-2.2	7,640	<b>4.4</b>	2.7-6.1
\$50,000 - 74,999	3,523	<b>3.8</b>	1.6-6.0	852	<b>*1.1</b>	0.2-1.9	4,375	<b>2.5</b>	1.3-3.8
\$75,000+	7,654	<b>5.4</b>	3.0-7.8	705	<b>*0.7</b>	0.1-1.2	8,359	<b>3.4</b>	2.0-4.8

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



### Falls in Past Year

<b>Definition</b>	Responding “1” or more to the question, “In the past 12 months, how many times have you fallen? By a fall, we mean when a person unintentionally comes to rest on the ground or another lower level.” Asked among those aged 45 and older.
<b>Prevalence</b>	<b>WV: 31.8%</b> (95% CI: 30.3-33.2) <b>U.S.: 28.4%</b> (95% CI: 28.1-28.8) The West Virginia prevalence of falls in the past year was significantly higher than the U.S. prevalence. West Virginia ranked the 11 <sup>th</sup> highest among the 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 32.0% (95% CI: 29.8-34.3) <b>Women:</b> 31.5% (95% CI: 29.6-33.5) There was no gender difference in the prevalence of falls in the past year.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 31.4% (95% CI: 29.9-32.9) <b>Black, Non-Hispanic:</b> 26.4% (95% CI: 17.0-35.9) <b>Other, Non-Hispanic:</b> *47.6% (95% CI: 32.5-62.8) <b>Multiracial, Non-Hispanic:</b> *44.5% (95% CI: 30.5-58.5) <b>Hispanic:</b> *52.2% (95% CI: 28.7-75.7) There was no race/ethnicity difference in the prevalence of falls in the past year. <small>* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</small>
<b>Age</b>	The prevalence of falls in the past year was significantly higher among those aged 55-64 (34.9%) than among those aged 65 and older (29.8%).
<b>Education</b>	The prevalence of falls in the past year was significantly higher among those with less than a high school education (37.5%) than among college graduates (27.8%).
<b>Household Income</b>	The prevalence of falls in the past year was significantly higher among those with an annual household income of less than \$15,000 (46.4%) than among all other income brackets.

## CHAPTER 8: INJURY

**Table 8.2 Prevalence of Falls in the Past Year Among Adults Aged 45 and Older: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	123,923	<b>32.0</b>	29.8-34.3	135,824	<b>31.5</b>	29.6-33.5	259,747	<b>31.8</b>	30.3-33.2
<b>Age</b>									
45-54	32,125	<b>28.8</b>	24.3-33.3	37,719	<b>33.8</b>	29.7-37.9	69,844	<b>31.3</b>	28.2-34.4
55-64	45,367	<b>36.9</b>	32.9-40.8	42,434	<b>33.0</b>	29.5-36.5	87,801	<b>34.9</b>	32.3-37.6
65+	46,033	<b>30.6</b>	27.3-34.0	53,937	<b>29.1</b>	26.3-32.0	99,970	<b>29.8</b>	27.6-32.0
<b>Education</b>									
Less than H.S.	27,777	<b>40.0</b>	33.6-46.5	23,162	<b>34.8</b>	29.0-40.6	50,939	<b>37.5</b>	33.1-41.8
H.S. or G.E.D.	52,045	<b>31.5</b>	28.0-34.9	53,473	<b>29.2</b>	26.2-32.1	105,519	<b>30.3</b>	28.0-32.5
Some Post-H.S.	27,231	<b>32.1</b>	27.3-36.9	39,536	<b>34.2</b>	30.4-38.0	66,766	<b>33.3</b>	30.3-36.3
College Graduate	16,870	<b>25.3</b>	21.6-29.0	19,653	<b>30.4</b>	26.5-34.2	36,524	<b>27.8</b>	25.1-30.5
<b>Income</b>									
Less than \$15,000	18,656	<b>45.2</b>	37.6-52.8	23,584	<b>47.3</b>	41.1-53.5	42,240	<b>46.4</b>	41.5-51.2
\$15,000 - 24,999	25,976	<b>40.0</b>	34.1-46.0	25,610	<b>33.2</b>	28.6-37.9	51,586	<b>36.3</b>	32.6-40.1
\$25,000 - 34,999	14,479	<b>30.1</b>	23.9-36.3	15,180	<b>29.6</b>	24.1-35.2	29,660	<b>29.8</b>	25.7-34.0
\$35,000 - 49,999	16,195	<b>30.7</b>	24.6-36.9	16,498	<b>30.3</b>	24.9-35.7	32,694	<b>30.5</b>	26.4-34.6
\$50,000 - 74,999	13,585	<b>28.5</b>	22.4-34.7	10,299	<b>22.8</b>	17.5-28.0	23,885	<b>25.7</b>	21.6-29.8
\$75,000+	17,534	<b>24.7</b>	20.2-29.2	15,094	<b>26.6</b>	21.7-31.4	32,628	<b>25.5</b>	22.2-28.8

### Fall Injury

<b>Definition</b>	Responding “1” or more to the question, “How many of these falls caused an injury? By an injury, we mean the fall caused you to limit your regular activities for at least a day or to go see a doctor.” Asked among adults aged 45 and older who had responded they had fallen at least once in the past year.
<b>Prevalence</b>	<b>WV: 39.0%</b> (95% CI: 36.3-41.8) <b>U.S.: 38.8%</b> (95% CI: 38.2-39.4) The West Virginia prevalence of injured from a fall in the past year was equivalent to the U.S. prevalence. West Virginia ranked the 21 <sup>st</sup> highest among the 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 32.0% (95% CI: 27.9-36.0) <b>Women:</b> 45.5% (95% CI: 41.8-49.2) The prevalence of injured from a fall in the past year was significantly higher among women than among men.
<b>Race/Ethnicity</b>	No race/ethnicity statistics are reported due to unreliable estimates.
<b>Age</b>	There was no age difference in the prevalence of injured from a fall in the past year.
<b>Education</b>	There was no educational attainment difference in the prevalence of injured from a fall in the past year.
<b>Household Income</b>	The prevalence of injured from a fall in the past year was significantly higher among those with an annual household income of less than \$15,000 (52.0%) than among all other income brackets except the \$35,000-\$49,999 per year income group.

## CHAPTER 8: INJURY

**Table 8.3 Prevalence of Injured from a Fall in the Past Year Among Adults Aged 45 and Older: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	39,413	<b>32.0</b>	27.9-36.0	61,378	<b>45.5</b>	41.8-49.2	100,791	<b>39.0</b>	36.3-41.8
<b>Age</b>									
45-54	12,244	<b>38.3</b>	29.1-47.6	17,074	<b>46.1</b>	38.6-53.5	29,319	<b>42.5</b>	36.6-48.4
55-64	14,297	<b>31.8</b>	25.3-38.4	19,287	<b>45.5</b>	38.9-52.0	33,584	<b>38.4</b>	33.8-43.1
65+	12,706	<b>27.6</b>	21.7-33.5	24,291	<b>45.3</b>	39.5-51.1	36,997	<b>37.1</b>	32.9-41.3
<b>Education</b>									
Less than H.S.	8,880	<b>32.2</b>	22.2-42.2	10,425	<b>*46.6</b>	36.3-56.9	19,305	<b>38.6</b>	31.4-45.9
H.S. or G.E.D.	16,796	<b>32.4</b>	26.2-38.7	23,651	<b>44.2</b>	38.2-50.3	40,447	<b>38.4</b>	34.1-42.8
Some Post-H.S.	8,580	<b>31.7</b>	23.1-40.3	19,641	<b>49.9</b>	43.0-56.8	28,221	<b>42.5</b>	37.0-48.0
College Graduate	5,156	<b>30.6</b>	22.7-38.5	7,661	<b>39.0</b>	31.5-46.4	12,817	<b>35.1</b>	29.7-40.5
<b>Income</b>									
Less than \$15,000	8,874	<b>*48.7</b>	36.9-60.5	12,813	<b>54.6</b>	45.6-63.7	21,687	<b>52.0</b>	44.8-59.3
\$15,000 - 24,999	6,945	<b>26.7</b>	18.3-35.2	11,875	<b>46.6</b>	38.1-55.1	18,821	<b>36.6</b>	30.4-42.7
\$25,000 - 34,999	5,090	<b>*35.2</b>	23.7-46.6	5,723	<b>*37.8</b>	27.2-48.4	10,813	<b>36.5</b>	28.7-44.3
\$35,000 - 49,999	6,144	<b>*37.9</b>	26.0-49.9	6,021	<b>*36.5</b>	26.3-46.7	12,165	<b>37.2</b>	29.4-45.1
\$50,000 - 74,999	3,257	<b>*24.0</b>	13.2-34.7	5,121	<b>*49.7</b>	36.7-62.7	8,378	<b>35.1</b>	26.3-43.9
\$75,000+	4,377	<b>25.2</b>	15.7-34.8	5,232	<b>*34.7</b>	24.3-45.1	9,608	<b>29.6</b>	22.5-36.7

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

### Inadequate Sleep

<b>Definition</b>	Responding “6” or fewer hours to the question, “On average, how many hours of sleep do you get in a 24-hour period?”
<b>Prevalence</b>	<p><b>WV: 39.9%</b> (95% CI: 38.5-41.3)  <b>U.S.: 34.6%</b> (95% CI: 34.4-34.9)</p> <p>The West Virginia prevalence of inadequate sleep was significantly higher than the U.S. prevalence. West Virginia ranked the 4<sup>th</sup> highest among 54 BRFSS participants.</p>
<b>Gender</b>	<p><b>Men:</b> 39.4% (95% CI: 37.3-41.4)  <b>Women:</b> 40.4% (95% CI: 38.6-42.2)</p> <p>There was no gender difference in the prevalence of inadequate sleep.</p>
<b>Race/Ethnicity</b>	<p><b>White, Non-Hispanic:</b> 39.6% (95% CI: 38.2-41.0)  <b>Black, Non-Hispanic:</b> 54.4% (95% CI: 45.7-63.1)  <b>Other, Non-Hispanic:</b> *31.5% (95% CI: 20.6-42.4)  <b>Multiracial, Non-Hispanic:</b> *45.6% (95% CI: 33.3-57.9)  <b>Hispanic:</b> *31.7% (95% CI: 15.9-47.5)</p> <p>The prevalence of inadequate sleep was significantly higher among Black, Non-Hispanic adults than White, Non-Hispanic adults.</p> <p>* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</p>
<b>Age</b>	<p>The prevalence of inadequate sleep was significantly lower among those aged 65 and older (28.8%) than among all other age groups except the 18-24 age group. The prevalence of inadequate sleep was highest among those aged 45-54 (49.6%) and was significantly higher than among those aged 55 and older and those aged 18-24.</p>
<b>Education</b>	<p>The prevalence of inadequate sleep was significantly higher among those with less than a high school education (46.9%) than among high school (40.5%) or college graduates (30.4%). The prevalence of inadequate sleep was significantly lower among college graduates than among all other educational attainment groups.</p>
<b>Household Income</b>	<p>The prevalence of inadequate sleep was significantly higher among those with an annual household income of less than \$25,000 than among those with an income of \$50,000 or more per year.</p>

## CHAPTER 9: SLEEP

**Table 9.1 Prevalence of Inadequate Sleep by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	278,638	<b>39.4</b>	37.3-41.4	297,229	<b>40.4</b>	38.6-42.2	575,867	<b>39.9</b>	38.5-41.3
<b>Age</b>									
18-24	25,223	<b>29.3</b>	21.9-36.8	34,568	<b>42.2</b>	34.5-49.9	59,791	<b>35.6</b>	30.1-41.1
25-34	47,924	<b>44.0</b>	37.9-50.1	42,794	<b>41.2</b>	35.9-46.5	90,718	<b>42.6</b>	38.6-46.7
35-44	51,850	<b>47.1</b>	41.7-52.4	49,300	<b>44.9</b>	39.9-49.8	101,151	<b>46.0</b>	42.3-49.6
45-54	54,350	<b>46.5</b>	41.7-51.3	61,305	<b>52.7</b>	48.4-57.0	115,655	<b>49.6</b>	46.4-52.8
55-64	55,204	<b>42.8</b>	38.8-46.7	52,074	<b>39.5</b>	35.9-43.1	107,278	<b>41.1</b>	38.4-43.8
65+	42,503	<b>27.7</b>	24.5-31.0	55,247	<b>29.7</b>	26.9-32.6	97,750	<b>28.8</b>	26.7-31.0
<b>Education</b>									
Less than H.S.	50,080	<b>47.4</b>	41.5-53.4	50,453	<b>46.4</b>	40.9-52.0	100,533	<b>46.9</b>	42.9-51.0
H.S. or G.E.D.	116,771	<b>39.2</b>	36.0-42.4	117,224	<b>41.9</b>	38.9-44.8	233,995	<b>40.5</b>	38.3-42.7
Some Post-H.S.	74,546	<b>42.4</b>	38.0-46.7	88,530	<b>40.7</b>	37.3-44.2	163,077	<b>41.5</b>	38.8-44.2
College Graduate	37,240	<b>29.3</b>	25.9-32.7	40,604	<b>31.5</b>	28.3-34.7	77,844	<b>30.4</b>	28.1-32.7
<b>Income</b>									
Less than \$15,000	39,368	<b>54.8</b>	48.2-61.4	44,926	<b>50.4</b>	45.1-55.7	84,294	<b>52.4</b>	48.2-56.5
\$15,000 - 24,999	49,033	<b>42.1</b>	36.7-47.4	66,212	<b>47.4</b>	43.0-51.8	115,245	<b>45.0</b>	41.5-48.4
\$25,000 - 34,999	29,225	<b>40.7</b>	34.5-46.8	31,951	<b>42.4</b>	36.5-48.2	61,176	<b>41.5</b>	37.3-45.8
\$35,000 - 49,999	33,966	<b>38.4</b>	32.6-44.1	32,973	<b>38.0</b>	32.8-43.1	66,939	<b>38.2</b>	34.3-42.0
\$50,000 - 74,999	33,323	<b>35.3</b>	29.8-40.8	28,105	<b>35.1</b>	29.8-40.4	61,429	<b>35.2</b>	31.3-39.0
\$75,000+	48,060	<b>33.6</b>	29.5-37.8	32,956	<b>29.9</b>	25.8-33.9	81,016	<b>32.0</b>	29.0-35.0

### Sleep Problems

<b>Definition</b>	Responding “7” or more days to the question, “Over the last 2 weeks, how many days have you had trouble falling asleep or staying asleep or sleeping too much?”
<b>Prevalence</b>	<b>WV: 31.4%</b> (95% CI: 29.4-33.3) Because this question was part of an optional module and complete national data are not available, a U.S. comparison was not conducted.
<b>Gender</b>	<b>Men:</b> 30.5% (95% CI: 27.6-33.5) <b>Women:</b> 32.2% (95% CI: 29.6-34.8) There was no gender difference in the prevalence of sleep problems.
<b>Race/Ethnicity</b>	No race/ethnicity statistics are reported due to unreliable estimates.
<b>Age</b>	The prevalence of sleep problems was significantly lower among those aged 65 and older (25.0%) than among those aged 35-64.
<b>Education</b>	The prevalence of sleep problems was significantly higher among those with less than a high school education (40.4%) than among college graduates (22.3%). The prevalence of sleep problems was significantly lower among college graduates than among all other educational attainment groups.
<b>Household Income</b>	The prevalence of sleep problems was significantly higher among those with an annual household income of less than \$15,000 (47.3%) than among those with an income of \$25,000 or more per year.

## CHAPTER 9: SLEEP

**Table 9.2 Prevalence of Sleep Problems by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	90,811	<b>30.5</b>	27.6-33.5	106,712	<b>32.2</b>	29.6-34.8	197,523	<b>31.4</b>	29.4-33.3
<b>Age</b>									
18-24	9,811	<b>*30.1</b>	18.0-42.1	13,749	<b>*36.6</b>	25.6-47.6	23,560	<b>33.6</b>	25.4-41.7
25-34	13,960	<b>31.6</b>	22.6-40.6	11,549	<b>26.8</b>	19.7-33.9	25,509	<b>29.2</b>	23.5-35.0
35-44	16,593	<b>35.5</b>	27.7-43.3	14,887	<b>31.4</b>	24.4-38.4	31,480	<b>33.4</b>	28.2-38.7
45-54	15,352	<b>31.0</b>	24.4-37.6	22,433	<b>41.2</b>	34.8-47.6	37,785	<b>36.4</b>	31.7-41.0
55-64	17,070	<b>30.5</b>	24.8-36.2	22,410	<b>39.0</b>	33.5-44.4	39,480	<b>34.8</b>	30.8-38.7
65+	18,025	<b>26.8</b>	21.8-31.8	21,168	<b>23.6</b>	19.8-27.5	39,193	<b>25.0</b>	21.9-28.1
<b>Education</b>									
Less than H.S.	17,885	<b>42.4</b>	33.2-51.6	19,046	<b>38.6</b>	30.8-46.5	36,931	<b>40.4</b>	34.4-46.4
H.S. or G.E.D.	39,661	<b>31.8</b>	27.3-36.3	40,711	<b>33.6</b>	29.2-38.0	80,373	<b>32.7</b>	29.5-35.8
Some Post-H.S.	23,116	<b>29.5</b>	23.4-35.7	32,601	<b>31.6</b>	26.9-36.2	55,717	<b>30.7</b>	26.9-34.4
College Graduate	10,034	<b>19.4</b>	14.7-24.1	14,354	<b>24.9</b>	20.6-29.2	24,388	<b>22.3</b>	19.1-25.5
<b>Income</b>									
Less than \$15,000	12,711	<b>45.3</b>	35.3-55.3	18,375	<b>48.8</b>	40.7-56.9	31,086	<b>47.3</b>	41.0-53.6
\$15,000 - 24,999	21,615	<b>40.2</b>	32.4-48.0	23,030	<b>35.2</b>	29.1-41.3	44,644	<b>37.4</b>	32.6-42.3
\$25,000 - 34,999	9,613	<b>29.6</b>	21.3-37.9	11,713	<b>34.6</b>	26.6-42.6	21,326	<b>32.2</b>	26.4-38.0
\$35,000 - 49,999	8,211	<b>21.2</b>	14.2-28.2	10,941	<b>28.6</b>	21.4-35.8	19,151	<b>24.9</b>	19.8-30.0
\$50,000 - 74,999	9,251	<b>23.2</b>	15.9-30.6	10,937	<b>28.9</b>	21.4-36.5	20,187	<b>26.0</b>	20.7-31.3
\$75,000+	12,602	<b>21.6</b>	16.0-27.2	12,112	<b>24.6</b>	18.5-30.7	24,715	<b>23.0</b>	18.8-27.1

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



### Daytime Sleep

<b>Definition</b>	Responding “1” or more days to the question, “Over the last 2 weeks, how many days did you unintentionally fall asleep during the day?”
<b>Prevalence</b>	<b>WV: 28.2%</b> (95% CI: 26.4-30.1) Because this question was part of an optional module and complete national data are not available, a U.S. comparison was not conducted.
<b>Gender</b>	<b>Men:</b> 26.8% (95% CI: 24.1-29.6) <b>Women:</b> 29.5% (95% CI: 27.0-31.9) There was no gender difference in the prevalence of daytime sleep.
<b>Race/Ethnicity</b>	No race/ethnicity statistics are reported due to unreliable estimates.
<b>Age</b>	The prevalence of daytime sleep was significantly higher among those aged 65 and older (38.4%) than among all other age groups.
<b>Education</b>	The prevalence of daytime sleep was significantly higher among those with less than a high school education (36.9%) than among adults with some college and college graduates.
<b>Household Income</b>	The prevalence of daytime sleep was significantly higher among those with an annual household income of less than \$25,000 than among those with an income of \$50,000 or more per year.

## CHAPTER 9: SLEEP

**Table 9.3 Prevalence of Daytime Sleep by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	79,922	<b>26.8</b>	24.1-29.6	98,109	<b>29.5</b>	27.0-31.9	178,031	<b>28.2</b>	26.4-30.1
<b>Age</b>									
18-24	6,210	<b>*18.9</b>	8.2-29.6	8,713	<b>23.1</b>	13.7-32.5	14,923	<b>21.1</b>	14.1-28.2
25-34	9,625	<b>21.7</b>	13.7-29.6	10,078	<b>23.8</b>	16.8-30.7	19,703	<b>22.7</b>	17.4-28.0
35-44	12,761	<b>27.4</b>	20.1-34.7	11,732	<b>24.6</b>	18.0-31.1	24,492	<b>26.0</b>	21.1-30.9
45-54	10,357	<b>20.9</b>	15.1-26.6	13,568	<b>25.1</b>	19.4-30.7	23,925	<b>23.0</b>	19.0-27.1
55-64	15,110	<b>27.0</b>	21.6-32.5	18,532	<b>31.9</b>	26.7-37.0	33,642	<b>29.5</b>	25.7-33.2
65+	25,695	<b>38.3</b>	32.9-43.6	35,056	<b>38.5</b>	34.2-42.9	60,751	<b>38.4</b>	35.1-41.8
<b>Education</b>									
Less than H.S.	14,570	<b>35.2</b>	26.3-44.1	18,932	<b>38.3</b>	30.5-46.1	33,502	<b>36.9</b>	31.0-42.8
H.S. or G.E.D.	34,803	<b>27.8</b>	23.5-32.1	40,593	<b>33.5</b>	29.3-37.7	75,396	<b>30.6</b>	27.6-33.6
Some Post-H.S.	18,649	<b>23.7</b>	18.2-29.1	27,244	<b>26.1</b>	21.9-30.3	45,893	<b>25.1</b>	21.7-28.4
College Graduate	11,785	<b>22.5</b>	18.0-27.1	11,340	<b>19.6</b>	15.6-23.5	23,125	<b>21.0</b>	18.0-24.0
<b>Income</b>									
Less than \$15,000	8,033	<b>28.9</b>	20.0-37.8	14,372	<b>37.2</b>	29.8-44.6	22,405	<b>33.7</b>	28.0-39.4
\$15,000 - 24,999	16,930	<b>31.1</b>	23.8-38.4	21,536	<b>32.7</b>	26.7-38.6	38,466	<b>31.9</b>	27.3-36.6
\$25,000 - 34,999	9,806	<b>29.8</b>	21.4-38.2	11,950	<b>34.4</b>	26.7-42.2	21,756	<b>32.2</b>	26.5-37.9
\$35,000 - 49,999	11,539	<b>29.5</b>	21.3-37.8	11,074	<b>28.5</b>	21.8-35.3	22,613	<b>29.0</b>	23.7-34.4
\$50,000 - 74,999	9,883	<b>24.7</b>	17.8-31.6	7,350	<b>19.6</b>	13.7-25.6	17,233	<b>22.3</b>	17.7-26.9
\$75,000+	12,062	<b>20.6</b>	15.4-25.7	7,339	<b>14.9</b>	10.4-19.4	19,401	<b>18.0</b>	14.5-21.4

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

**Snoring**

<b>Definition</b>	Responding “Yes” to the question, “Have you ever been told that you snore loudly?”
<b>Prevalence</b>	<b>WV: 49.1%</b> (95% CI: 47.0-51.2) Because this question was part of an optional module and complete national data are not available, a U.S. comparison was not conducted.
<b>Gender</b>	<b>Men:</b> 55.3% (95% CI: 52.1-58.5) <b>Women:</b> 43.6% (95% CI: 40.9-46.3) The prevalence of snoring was significantly higher among men than women.
<b>Race/Ethnicity</b>	No race/ethnicity statistics are reported due to unreliable estimates.
<b>Age</b>	The prevalence of snoring was significantly higher among those aged 45-64 than among those aged 18-44 or 65 and older. The prevalence of snoring was significantly lower among those aged 18-24 (28.2%) than among those aged 35 and older.
<b>Education</b>	The prevalence of snoring was significantly higher among high school graduates (52.0%) and those with some college (51.2%) than among college graduates (40.9%).
<b>Household Income</b>	There was no annual household income difference in the prevalence of snoring.

## CHAPTER 9: SLEEP

**Table 9.4 Prevalence of Snoring by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	166,158	<b>55.3</b>	52.1-58.5	146,083	<b>43.6</b>	40.9-46.3	312,241	<b>49.1</b>	47.0-51.2
<b>Age</b>									
18-24	10,037	<b>*29.9</b>	17.9-42.0	10,214	<b>26.6</b>	17.1-36.2	20,251	<b>28.2</b>	20.6-35.8
25-34	18,659	<b>42.7</b>	33.4-51.9	13,376	<b>31.2</b>	23.4-38.9	32,035	<b>37.0</b>	30.9-43.1
35-44	24,461	<b>52.2</b>	44.1-60.2	20,309	<b>42.7</b>	35.2-50.1	44,770	<b>47.4</b>	41.9-52.9
45-54	32,535	<b>64.9</b>	58.1-71.7	31,833	<b>58.2</b>	51.8-64.6	64,368	<b>61.4</b>	56.7-66.1
55-64	38,442	<b>68.8</b>	63.2-74.4	32,268	<b>55.4</b>	49.9-60.9	70,710	<b>62.0</b>	58.0-65.9
65+	41,226	<b>59.6</b>	54.3-64.9	37,193	<b>40.7</b>	36.4-45.1	78,419	<b>48.9</b>	45.4-52.3
<b>Education</b>									
Less than H.S.	23,009	<b>52.7</b>	43.8-61.7	21,270	<b>42.5</b>	34.7-50.3	44,279	<b>47.3</b>	41.3-53.2
H.S. or G.E.D.	73,293	<b>57.9</b>	53.0-62.7	56,667	<b>46.0</b>	41.5-50.5	129,960	<b>52.0</b>	48.7-55.4
Some Post-H.S.	43,194	<b>55.6</b>	48.8-62.4	49,751	<b>47.9</b>	43.0-52.9	92,946	<b>51.2</b>	47.1-55.3
College Graduate	26,547	<b>51.1</b>	45.4-56.8	18,395	<b>31.7</b>	27.0-36.5	44,942	<b>40.9</b>	37.1-44.6
<b>Income</b>									
Less than \$15,000	12,816	<b>45.7</b>	35.7-55.7	17,641	<b>45.1</b>	37.3-53.0	30,458	<b>45.4</b>	39.2-51.5
\$15,000 - 24,999	30,568	<b>55.6</b>	47.8-63.4	29,128	<b>43.9</b>	37.6-50.1	59,696	<b>49.2</b>	44.2-54.1
\$25,000 - 34,999	21,092	<b>64.0</b>	55.3-72.7	15,795	<b>46.4</b>	38.1-54.7	36,886	<b>55.1</b>	48.9-61.2
\$35,000 - 49,999	21,815	<b>55.9</b>	46.5-65.3	17,966	<b>46.8</b>	39.2-54.5	39,781	<b>51.4</b>	45.3-57.5
\$50,000 - 74,999	24,366	<b>60.6</b>	52.5-68.7	15,300	<b>40.5</b>	32.7-48.2	39,666	<b>50.9</b>	45.1-56.6
\$75,000+	33,684	<b>58.2</b>	51.5-64.9	17,776	<b>36.1</b>	29.6-42.7	51,460	<b>48.1</b>	43.3-52.8

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

### Sleep Apnea

<b>Definition</b>	Responding “Yes” to the question, “Has anyone ever observed that you stop breathing during your sleep?”
<b>Prevalence</b>	<b>WV: 17.1%</b> (95% CI: 15.5-18.6) Because this question was part of an optional module and complete national data are not available, a U.S. comparison was not conducted.
<b>Gender</b>	<b>Men:</b> 20.2% (95% CI: 17.8-22.7) <b>Women:</b> 14.3% (95% CI: 12.3-16.2) The prevalence of sleep apnea was significantly higher among men than among women.
<b>Race/Ethnicity</b>	No race/ethnicity statistics are reported due to unreliable estimates.
<b>Age</b>	The prevalence of sleep apnea was significantly higher among those aged 45-64 (22.9%) than among those aged 18-34 and 65 and older.
<b>Education</b>	The prevalence of sleep apnea was significantly higher among those with less than a high school education (26.1%) than among all other educational attainment groups.
<b>Household Income</b>	The prevalence of sleep apnea was significantly higher among those with an annual household income of less than \$15,000 (23.0%) than among those with an income of \$75,000 or more per year (11.4%).

## CHAPTER 9: SLEEP

**Table 9.5 Prevalence of Sleep Apnea by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	60,775	<b>20.2</b>	17.8-22.7	47,921	<b>14.3</b>	12.3-16.2	108,696	<b>17.1</b>	15.5-18.6
<b>Age</b>									
18-24	3,387	<b>*10.1</b>	1.6-18.6	4,842	<b>*13.0</b>	4.7-21.3	8,230	<b>11.6</b>	5.6-17.6
25-34	5,106	<b>11.6</b>	5.2-18.0	3,127	<b>7.3</b>	3.3-11.2	8,233	<b>9.4</b>	5.6-13.2
35-44	9,775	<b>21.0</b>	14.5-27.6	5,994	<b>12.5</b>	7.4-17.7	15,769	<b>16.7</b>	12.6-20.9
45-54	13,680	<b>27.4</b>	21.1-33.7	10,345	<b>18.8</b>	13.8-23.9	24,026	<b>22.9</b>	18.9-26.9
55-64	13,947	<b>25.1</b>	19.8-30.4	12,200	<b>20.8</b>	16.2-25.4	26,148	<b>22.9</b>	19.4-26.4
65+	14,400	<b>20.8</b>	16.3-25.3	11,412	<b>12.4</b>	9.5-15.4	25,812	<b>16.0</b>	13.4-18.6
<b>Education</b>									
Less than H.S.	14,252	<b>33.1</b>	24.4-41.8	9,944	<b>20.0</b>	12.9-27.1	24,195	<b>26.1</b>	20.5-31.7
H.S. or G.E.D.	22,754	<b>18.0</b>	14.5-21.5	17,054	<b>13.8</b>	10.8-16.8	39,808	<b>16.0</b>	13.6-18.3
Some Post-H.S.	15,138	<b>19.2</b>	14.2-24.2	15,532	<b>14.9</b>	11.5-18.2	30,670	<b>16.7</b>	13.9-19.6
College Graduate	8,632	<b>16.7</b>	12.8-20.6	5,392	<b>9.3</b>	6.5-12.1	14,023	<b>12.8</b>	10.4-15.1
<b>Income</b>									
Less than \$15,000	7,703	<b>27.2</b>	18.5-35.9	7,769	<b>19.9</b>	13.7-26.1	15,472	<b>23.0</b>	17.8-28.1
\$15,000 - 24,999	14,231	<b>26.0</b>	19.2-32.7	9,474	<b>14.2</b>	9.6-18.8	23,706	<b>19.5</b>	15.6-23.5
\$25,000 - 34,999	5,791	<b>17.8</b>	10.8-24.9	5,731	<b>16.5</b>	10.6-22.4	11,522	<b>17.2</b>	12.6-21.7
\$35,000 - 49,999	6,310	<b>16.2</b>	10.5-22.0	6,887	<b>17.7</b>	12.3-23.2	13,197	<b>17.0</b>	13.0-21.0
\$50,000 - 74,999	6,856	<b>17.0</b>	10.9-23.1	4,188	<b>11.1</b>	6.3-16.0	11,044	<b>14.1</b>	10.2-18.1
\$75,000+	9,008	<b>15.4</b>	10.8-20.1	3,266	<b>6.6</b>	3.7-9.5	12,274	<b>11.4</b>	8.5-14.3

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

### Sunburn in Past Year

<b>Definition</b>	Responding “1” or more to the question, “In the past 12 months, how many times did you have a red or painful sunburn that lasted a day or more?”
<b>Prevalence</b>	<b>WV: 21.5%</b> (95% CI: 20.2-22.7) Because this question was part of an optional module and complete national data are not available, a U.S. comparison was not conducted.
<b>Gender</b>	<b>Men:</b> 23.3% (95% CI: 21.4-25.2) <b>Women:</b> 19.7% (95% CI: 18.1-21.3) The prevalence of had a sunburn in the past year was significantly higher among men than among women.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 22.4% (95% CI: 21.1-23.7) <b>Black, Non-Hispanic:</b> *3.3% (95% CI: 0.6-6.1) <b>Other, Non-Hispanic:</b> *6.5% (95% CI: 0.0-13.4) <b>Multiracial, Non-Hispanic:</b> 17.0% (95% CI: 7.4-26.5) <b>Hispanic:</b> *23.8% (95% CI: 7.9-39.7) The prevalence of had a sunburn in the past year was significantly higher among White, Non-Hispanic adults and Multiracial, Non-Hispanic adults than among Black, Non-Hispanic adults. <small>* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</small>
<b>Age</b>	The prevalence of had a sunburn in the past year was significantly higher among those aged 18-54 than among those aged 55 and older.
<b>Education</b>	The prevalence of had a sunburn in the past year was significantly higher among college graduates (26.5%) than among those with less than a high school education (14.6%) or those with a high school degree (20.4%).
<b>Household Income</b>	The prevalence of had a sunburn in the past year was significantly higher among those with an annual household income of \$50,000 or more than among those with an income of less than \$35,000 a year.

## CHAPTER 10: SUNBURN

**Table 10.1 Prevalence of Had a Sunburn in the Past Year by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	154,448	<b>23.3</b>	21.4-25.2	138,620	<b>19.7</b>	18.1-21.3	293,068	<b>21.5</b>	20.2-22.7
<b>Age</b>									
18-24	22,801	<b>29.7</b>	21.6-37.8	23,895	<b>33.2</b>	25.5-41.0	46,696	<b>31.4</b>	25.8-37.0
25-34	42,258	<b>43.8</b>	37.4-50.2	35,277	<b>35.9</b>	30.6-41.1	77,535	<b>39.8</b>	35.6-44.0
35-44	32,174	<b>31.3</b>	26.2-36.4	34,361	<b>32.8</b>	28.0-37.7	66,534	<b>32.1</b>	28.5-35.6
45-54	29,277	<b>26.5</b>	22.3-30.7	23,891	<b>21.2</b>	17.6-24.9	53,168	<b>23.8</b>	21.1-26.6
55-64	15,944	<b>12.8</b>	10.2-15.5	13,993	<b>11.0</b>	8.6-13.4	29,936	<b>11.9</b>	10.1-13.7
65+	11,510	<b>7.7</b>	5.8-9.6	7,065	<b>3.8</b>	2.8-4.9	18,575	<b>5.6</b>	4.5-6.6
<b>Education</b>									
Less than H.S.	16,937	<b>17.1</b>	12.0-22.2	12,600	<b>12.2</b>	8.2-16.1	29,537	<b>14.6</b>	11.4-17.8
H.S. or G.E.D.	64,006	<b>22.9</b>	19.8-26.0	47,274	<b>17.7</b>	15.1-20.3	111,281	<b>20.4</b>	18.3-22.4
Some Post-H.S.	38,610	<b>23.6</b>	19.7-27.5	49,037	<b>23.5</b>	20.3-26.7	87,647	<b>23.5</b>	21.0-26.0
College Graduate	34,894	<b>29.2</b>	25.6-32.7	29,552	<b>23.9</b>	20.8-27.0	64,446	<b>26.5</b>	24.1-28.9
<b>Income</b>									
Less than \$15,000	12,990	<b>20.4</b>	14.7-26.1	14,566	<b>17.5</b>	13.1-21.8	27,556	<b>18.7</b>	15.2-22.2
\$15,000 - 24,999	21,942	<b>19.1</b>	14.4-23.8	21,378	<b>15.9</b>	12.4-19.5	43,321	<b>17.4</b>	14.5-20.3
\$25,000 - 34,999	12,489	<b>18.6</b>	13.2-23.9	10,460	<b>14.1</b>	9.6-18.7	22,950	<b>16.2</b>	12.8-19.7
\$35,000 - 49,999	22,336	<b>26.6</b>	21.2-32.0	19,353	<b>22.9</b>	18.1-27.7	41,689	<b>24.7</b>	21.1-28.4
\$50,000 - 74,999	28,720	<b>32.3</b>	26.5-38.2	19,492	<b>25.5</b>	20.4-30.5	48,212	<b>29.2</b>	25.2-33.1
\$75,000+	35,865	<b>27.0</b>	22.9-31.0	29,673	<b>28.2</b>	24.0-32.4	65,538	<b>27.5</b>	24.5-30.4



## CHAPTER 11: SUGAR-SWEETENED BEVERAGES

### Soda or Pop

<b>Definition</b>	Responding “1” or more times per day to the question, “During the past 30 days, how often did you drink regular soda or pop that contains sugar? Do not include diet soda or diet pop.”
<b>Prevalence</b>	<b>WV: 28.8%</b> (95% CI: 27.5-30.1) Because this question was part of an optional module and complete national data are not available, a U.S. comparison was not conducted.
<b>Gender</b>	<b>Men:</b> 30.9% (95% CI: 28.9-33.0) <b>Women:</b> 26.8% (95% CI: 25.1-28.6) The prevalence of daily soda or pop consumption was significantly higher among men than among women.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 29.2% (95% CI: 27.8-30.6) <b>Black, Non-Hispanic:</b> 22.2% (95% CI: 14.8-29.5) <b>Other, Non-Hispanic:</b> 18.5% (95% CI: 9.0-28.1) <b>Multiracial, Non-Hispanic:</b> *31.8% (95% CI: 18.8-44.9) <b>Hispanic:</b> *22.0% (95% CI: 7.3-36.6) There was no race/ethnicity difference in the prevalence of daily soda or pop consumption. <small>* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</small>
<b>Age</b>	The prevalence of daily soda or pop consumption was significantly higher among those aged 18-54 than among those aged 55 and older. The prevalence of daily soda or pop consumption was significantly lower among those 65 and older (14.1%) than among all other age groups.
<b>Education</b>	The prevalence of daily soda or pop consumption was significantly higher among those with less than a high school education or a high school degree than among those with some college or college graduates. The prevalence of daily soda or pop consumption was significantly lower among college graduates (15.7%) than among all other educational attainment levels.
<b>Household Income</b>	The prevalence of daily soda or pop consumption was significantly higher among those with an annual household income of less than \$25,000 than among those earning \$50,000 or more per year.

## CHAPTER 11: SUGAR-SWEETENED BEVERAGES

**Table 11.1 Prevalence of Daily Soda or Pop Consumption by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	204,805	<b>30.9</b>	28.9-33.0	188,155	<b>26.8</b>	25.1-28.6	392,959	<b>28.8</b>	27.5-30.1
<b>Age</b>									
18-24	28,311	<b>36.6</b>	28.1-45.0	28,231	<b>39.2</b>	31.2-47.3	56,542	<b>37.9</b>	32.0-43.7
25-34	45,755	<b>46.4</b>	40.0-52.8	40,447	<b>41.1</b>	35.7-46.6	86,202	<b>43.8</b>	39.6-48.0
35-44	39,935	<b>38.8</b>	33.4-44.2	36,386	<b>34.7</b>	29.9-39.6	76,321	<b>36.7</b>	33.1-40.4
45-54	36,319	<b>32.8</b>	28.2-37.4	37,757	<b>33.7</b>	29.5-37.9	74,075	<b>33.3</b>	30.1-36.4
55-64	28,984	<b>23.5</b>	20.0-27.0	22,370	<b>17.7</b>	14.9-20.5	51,354	<b>20.6</b>	18.3-22.8
65+	24,379	<b>16.5</b>	13.7-19.4	22,032	<b>12.1</b>	9.9-14.2	46,411	<b>14.1</b>	12.3-15.8
<b>Education</b>									
Less than H.S.	37,819	<b>38.4</b>	32.4-44.3	37,066	<b>36.2</b>	30.6-41.8	74,885	<b>37.3</b>	33.2-41.3
H.S. or G.E.D.	95,916	<b>34.4</b>	31.1-37.7	82,933	<b>31.0</b>	28.1-33.9	178,849	<b>32.7</b>	30.5-34.9
Some Post-H.S.	50,230	<b>30.5</b>	26.2-34.8	50,378	<b>24.3</b>	21.2-27.3	100,608	<b>27.0</b>	24.4-29.6
College Graduate	20,327	<b>17.0</b>	14.1-19.9	17,778	<b>14.4</b>	12.0-16.9	38,105	<b>15.7</b>	13.8-17.6
<b>Income</b>									
Less than \$15,000	21,291	<b>32.5</b>	26.3-38.8	28,839	<b>34.7</b>	29.5-40.0	50,130	<b>33.8</b>	29.7-37.8
\$15,000 - 24,999	39,615	<b>34.5</b>	29.2-39.8	46,378	<b>34.8</b>	30.4-39.2	85,993	<b>34.7</b>	31.3-38.1
\$25,000 - 34,999	24,149	<b>35.5</b>	29.3-41.6	18,876	<b>25.5</b>	20.1-31.0	43,025	<b>30.3</b>	26.2-34.4
\$35,000 - 49,999	26,639	<b>31.9</b>	26.2-37.5	22,864	<b>27.2</b>	22.2-32.3	49,503	<b>29.5</b>	25.7-33.3
\$50,000 - 74,999	20,860	<b>23.2</b>	17.6-28.7	17,253	<b>22.5</b>	17.7-27.2	38,113	<b>22.9</b>	19.2-26.5
\$75,000+	32,519	<b>24.5</b>	20.2-28.8	17,195	<b>16.3</b>	13.0-19.7	49,715	<b>20.9</b>	18.0-23.7

## CHAPTER 11: SUGAR-SWEETENED BEVERAGES

### Sugar-Added Beverage

<b>Definition</b>	Responding “1” or more times per day to the question, “During the past 30 days, how often did you drink sugar-sweetened fruit drinks (such as Kool-Aid and lemonade), sweet tea, and sports or energy drinks (such as Gatorade and Red Bull)? Do not include 100% fruit juice, diet drinks, or artificially sweetened drinks.”
<b>Prevalence</b>	<b>WV: 19.1%</b> (95% CI: 17.9-20.3) Because this question was part of an optional module and complete national data are not available, a U.S. comparison was not conducted.
<b>Gender</b>	<b>Men:</b> 22.1% (95% CI: 20.2-24.1) <b>Women:</b> 16.1% (95% CI: 14.7-17.6) The prevalence of daily sugar-added beverage consumption was significantly higher among men than among women.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 19.0% (95% CI: 17.7-20.2) <b>Black, Non-Hispanic:</b> 26.6% (95% CI: 18.0-35.1) <b>Other, Non-Hispanic:</b> 15.5% (95% CI: 6.5-24.4) <b>Multiracial, Non-Hispanic:</b> *16.4% (95% CI: 5.6-27.2) <b>Hispanic:</b> *13.2% (95% CI: 1.9-24.6) There was no race/ethnicity difference in the prevalence of daily sugar-added beverage consumption. <small>* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</small>
<b>Age</b>	The prevalence of daily sugar-added beverage consumption was significantly higher among those aged 18-44 than among those aged 55 and older. The prevalence of daily sugar-added beverage consumption was significantly lower among those 65 and older (8.4%) than among all other age groups.
<b>Education</b>	The prevalence of daily sugar-added beverage consumption was significantly lower among college graduates (13.3%) than among all other educational attainment groups.
<b>Household Income</b>	There was no annual household income difference in the prevalence of daily sugar-added beverage consumption.

## CHAPTER 11: SUGAR-SWEETENED BEVERAGES

**Table 11.2 Prevalence of Daily Sugar-Added Beverage Consumption by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	146,202	<b>22.1</b>	20.2-24.1	112,942	<b>16.1</b>	14.7-17.6	259,144	<b>19.1</b>	17.9-20.3
<b>Age</b>									
18-24	25,146	<b>32.8</b>	24.3-41.3	18,983	<b>26.7</b>	19.4-34.0	44,129	<b>29.8</b>	24.2-35.5
25-34	31,389	<b>32.2</b>	25.9-38.4	21,140	<b>21.5</b>	17.0-26.0	52,528	<b>26.8</b>	22.9-30.7
35-44	30,314	<b>29.4</b>	24.2-34.5	22,570	<b>21.5</b>	17.3-25.8	52,884	<b>25.4</b>	22.1-28.8
45-54	23,681	<b>21.5</b>	17.4-25.6	19,803	<b>17.6</b>	14.2-21.0	43,484	<b>19.5</b>	16.9-22.2
55-64	20,651	<b>16.7</b>	13.8-19.7	16,867	<b>13.4</b>	10.7-16.0	37,518	<b>15.0</b>	13.1-17.0
65+	14,331	<b>9.7</b>	7.7-11.8	13,314	<b>7.3</b>	5.7-8.9	27,645	<b>8.4</b>	7.1-9.7
<b>Education</b>									
Less than H.S.	22,004	<b>22.3</b>	17.1-27.4	18,186	<b>17.9</b>	13.3-22.5	40,189	<b>20.1</b>	16.6-23.5
H.S. or G.E.D.	68,455	<b>24.7</b>	21.5-27.9	47,079	<b>17.7</b>	15.2-20.1	115,534	<b>21.3</b>	19.2-23.3
Some Post-H.S.	36,912	<b>22.5</b>	18.6-26.4	33,766	<b>16.3</b>	13.5-19.0	70,678	<b>19.0</b>	16.7-21.3
College Graduate	18,449	<b>15.4</b>	12.6-18.2	13,911	<b>11.3</b>	9.0-13.5	32,360	<b>13.3</b>	11.5-15.1
<b>Income</b>									
Less than \$15,000	13,652	<b>21.4</b>	15.6-27.2	16,364	<b>20.1</b>	15.6-24.5	30,016	<b>20.7</b>	17.1-24.2
\$15,000 - 24,999	28,835	<b>25.2</b>	20.2-30.3	26,110	<b>19.6</b>	16.0-23.2	54,945	<b>22.2</b>	19.1-25.2
\$25,000 - 34,999	14,176	<b>20.8</b>	15.2-26.4	11,427	<b>15.5</b>	10.5-20.5	25,603	<b>18.0</b>	14.3-21.8
\$35,000 - 49,999	16,496	<b>19.6</b>	15.0-24.2	11,089	<b>13.2</b>	9.4-17.1	27,585	<b>16.4</b>	13.4-19.4
\$50,000 - 74,999	21,360	<b>23.8</b>	18.1-29.6	10,807	<b>14.1</b>	10.0-18.2	32,167	<b>19.4</b>	15.7-23.0
\$75,000+	28,958	<b>21.7</b>	17.4-26.0	12,884	<b>12.3</b>	9.1-15.4	41,842	<b>17.6</b>	14.7-20.4

## CHAPTER 11: SUGAR-SWEETENED BEVERAGES

### Any Soda or Sugar-Added Beverage

<b>Definition</b>	Daily consumption of soda, pop, or any sugar-added beverage.
<b>Prevalence</b>	<b>WV: 39.2%</b> (95% CI: 37.7-40.6) Because these questions were part of an optional module and complete national data are not available, a U.S. comparison was not conducted.
<b>Gender</b>	<b>Men:</b> 42.5% (95% CI: 40.3-44.7) <b>Women:</b> 36.0% (95% CI: 34.2-37.9) The prevalence of daily soda, pop, or any sugar-added beverage consumption was significantly higher among men than among women.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 39.4% (95% CI: 37.9-40.8) <b>Black, Non-Hispanic:</b> 41.0% (95% CI: 32.0-50.1) <b>Other, Non-Hispanic:</b> *28.0% (95% CI: 16.7-39.4) <b>Multiracial, Non-Hispanic:</b> *42.5% (95% CI: 29.1-55.9) <b>Hispanic:</b> *28.8% (95% CI: 13.0-44.6) There was no race/ethnicity difference in the prevalence of daily soda, pop, or any sugar-added beverage consumption. * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.
<b>Age</b>	The prevalence of daily soda, pop, or any sugar-added beverage consumption was significantly higher among those aged 18-54 than among those aged 55 and older. The prevalence of daily soda, pop, or any sugar-added beverage consumption was significantly lower among those 65 and older (20.9%) than among all other age groups.
<b>Education</b>	The prevalence of daily soda, pop, or any sugar-added beverage consumption was significantly higher among those with less than a high school education (46.6%) or a high school degree (43.5%) than among those with some college (38.2%) or college graduates (24.8%).
<b>Household Income</b>	The prevalence of daily soda, pop, or any sugar-added beverage consumption was significantly higher among those with an annual household income of less than \$25,000 than among those earning \$50,000 or more per year.

## CHAPTER 11: SUGAR-SWEETENED BEVERAGES

**Table 11.3 Prevalence of Daily Soda, Pop, or Any Sugar-Added Beverage Consumption by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	280,155	<b>42.5</b>	40.3-44.7	251,928	<b>36.0</b>	34.2-37.9	532,083	<b>39.2</b>	37.7-40.6
<b>Age</b>									
18-24	38,753	<b>50.9</b>	42.0-59.7	37,372	<b>51.7</b>	43.6-59.7	76,125	<b>51.2</b>	45.3-57.2
25-34	57,442	<b>58.5</b>	52.4-64.7	49,438	<b>50.2</b>	44.7-55.7	106,881	<b>54.4</b>	50.2-58.5
35-44	55,381	<b>53.7</b>	48.1-59.2	48,443	<b>46.3</b>	41.2-51.5	103,824	<b>50.0</b>	46.2-53.8
45-54	49,149	<b>44.5</b>	39.6-49.3	47,688	<b>42.5</b>	38.1-46.9	96,836	<b>43.5</b>	40.2-46.7
55-64	42,913	<b>35.1</b>	31.2-38.9	34,610	<b>27.5</b>	24.1-30.8	77,523	<b>31.2</b>	28.6-33.8
65+	35,103	<b>23.9</b>	20.8-27.1	33,180	<b>18.4</b>	15.9-20.9	68,282	<b>20.9</b>	18.9-22.9
<b>Education</b>									
Less than H.S.	48,798	<b>49.8</b>	43.7-55.8	44,118	<b>43.6</b>	37.9-49.2	92,916	<b>46.6</b>	42.5-50.7
H.S. or G.E.D.	128,438	<b>46.3</b>	42.9-49.8	108,199	<b>40.5</b>	37.5-43.6	236,637	<b>43.5</b>	41.2-45.8
Some Post-H.S.	69,782	<b>42.5</b>	38.0-47.0	72,039	<b>34.8</b>	31.3-38.2	141,820	<b>38.2</b>	35.4-41.0
College Graduate	32,625	<b>27.4</b>	23.9-30.8	27,573	<b>22.4</b>	19.5-25.3	60,198	<b>24.8</b>	22.6-27.1
<b>Income</b>									
Less than \$15,000	30,441	<b>47.2</b>	40.5-54.0	37,554	<b>45.6</b>	40.2-51.0	67,995	<b>46.3</b>	42.1-50.5
\$15,000 - 24,999	53,416	<b>46.6</b>	41.1-52.0	58,559	<b>44.1</b>	39.6-48.6	111,975	<b>45.2</b>	41.7-48.7
\$25,000 - 34,999	30,345	<b>44.6</b>	38.3-50.9	24,604	<b>33.3</b>	27.5-39.1	54,949	<b>38.7</b>	34.4-43.0
\$35,000 - 49,999	34,340	<b>41.2</b>	35.2-47.1	29,655	<b>35.3</b>	30.0-40.6	63,995	<b>38.2</b>	34.3-42.2
\$50,000 - 74,999	33,676	<b>37.4</b>	31.4-43.3	24,000	<b>31.3</b>	26.0-36.5	57,677	<b>34.6</b>	30.5-38.6
\$75,000+	49,279	<b>37.1</b>	32.5-41.8	25,609	<b>24.3</b>	20.4-28.3	74,888	<b>31.5</b>	28.3-34.7

### One or More Missing Teeth

<b>Definition</b>	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.”
<b>Prevalence</b>	<b>WV: 59.4%</b> (95% CI: 58.0-60.7) <b>U.S.: 44.1%</b> (95% CI: 43.8-44.4) The West Virginia prevalence of one or more missing teeth was significantly higher than the U.S. prevalence. West Virginia ranked the 2 <sup>nd</sup> highest among 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 57.8% (95% CI: 55.7-59.9) <b>Women:</b> 60.9% (95% CI: 59.1-62.7) There was no gender difference in the prevalence of one or more missing teeth.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 59.4% (95% CI: 58.0-60.9) <b>Black, Non-Hispanic:</b> 69.2% (95% CI: 60.6-77.8) <b>Other, Non-Hispanic:</b> *60.9% (95% CI: 49.2-72.6) <b>Multiracial, Non-Hispanic:</b> *50.1% (95% CI: 38.4-61.9) <b>Hispanic:</b> *31.8% (95% CI: 17.8-45.8) There was no race/ethnicity difference in the prevalence of one or more missing teeth. <small>* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</small>
<b>Age</b>	The prevalence of one or more missing teeth was significantly different between each age group with the lowest prevalence among those aged 18-24 (15.0%) and the highest prevalence among those aged 65 and older (85.9%).
<b>Education</b>	The prevalence of one or more missing teeth was significantly different between each educational attainment level with the lowest prevalence among college graduates (35.3%) and the highest prevalence among those with less than a high school education (81.1%).
<b>Household Income</b>	The prevalence of one or more missing teeth was significantly higher among those with an annual household income of less than \$50,000 than among those earning \$50,000 or more per year.

## CHAPTER 12: TOOTH LOSS

**Table 12.1 Prevalence of One or More Missing Teeth by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	407,030	<b>57.8</b>	55.7-59.9	448,744	<b>60.9</b>	59.1-62.7	855,774	<b>59.4</b>	58.0-60.7
<b>Age</b>									
18-24	11,390	<b>13.2</b>	7.3-19.2	13,925	<b>16.9</b>	10.9-22.9	25,314	<b>15.0</b>	10.8-19.2
25-34	34,635	<b>31.8</b>	26.0-37.6	40,744	<b>39.1</b>	33.7-44.4	75,379	<b>35.4</b>	31.4-39.3
35-44	52,609	<b>48.0</b>	42.6-53.4	58,404	<b>53.2</b>	48.2-58.2	111,013	<b>50.6</b>	46.9-54.3
45-54	71,397	<b>61.5</b>	56.8-66.1	75,576	<b>64.5</b>	60.5-68.6	146,973	<b>63.0</b>	59.9-66.1
55-64	101,658	<b>79.2</b>	76.1-82.3	99,400	<b>75.3</b>	72.2-78.3	201,058	<b>77.2</b>	75.0-79.4
65+	134,098	<b>87.6</b>	85.4-89.7	157,488	<b>84.6</b>	82.5-86.8	291,586	<b>85.9</b>	84.4-87.5
<b>Education</b>									
Less than H.S.	85,940	<b>80.7</b>	75.4-86.0	89,667	<b>81.5</b>	76.5-86.6	175,607	<b>81.1</b>	77.5-84.8
H.S. or G.E.D.	182,842	<b>61.9</b>	58.5-65.3	194,499	<b>69.3</b>	66.3-72.2	377,341	<b>65.5</b>	63.2-67.8
Some Post-H.S.	91,722	<b>52.3</b>	47.9-56.7	119,923	<b>55.2</b>	51.7-58.7	211,645	<b>53.9</b>	51.1-56.7
College Graduate	45,730	<b>36.2</b>	32.8-39.6	44,274	<b>34.5</b>	31.3-37.6	90,004	<b>35.3</b>	33.0-37.6
<b>Income</b>									
Less than \$15,000	53,112	<b>73.3</b>	67.0-79.6	69,114	<b>77.2</b>	72.3-82.1	122,226	<b>75.4</b>	71.5-79.3
\$15,000 - 24,999	81,033	<b>69.3</b>	63.8-74.8	99,266	<b>70.8</b>	66.4-75.1	180,299	<b>70.1</b>	66.6-73.5
\$25,000 - 34,999	53,895	<b>74.4</b>	68.9-79.9	48,955	<b>64.8</b>	59.0-70.7	102,850	<b>69.5</b>	65.4-73.6
\$35,000 - 49,999	57,240	<b>64.7</b>	58.8-70.6	50,616	<b>59.1</b>	53.8-64.4	107,856	<b>61.9</b>	58.0-65.9
\$50,000 - 74,999	44,015	<b>46.9</b>	41.2-52.6	41,680	<b>51.7</b>	46.3-57.2	85,694	<b>49.1</b>	45.1-53.1
\$75,000+	55,320	<b>38.7</b>	34.4-42.9	37,217	<b>33.8</b>	29.6-37.9	92,538	<b>36.5</b>	33.5-39.5



### Six or More Missing Teeth

<b>Definition</b>	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.”
<b>Prevalence</b>	<b>WV: 29.3%</b> (95% CI: 28.1-30.5) <b>U.S.: 15.0%</b> (95% CI: 14.8-15.2) The West Virginia prevalence of six or more missing teeth was significantly higher than the U.S. prevalence. West Virginia ranked 1 <sup>st</sup> highest among 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 27.8% (95% CI: 26.1-29.5) <b>Women:</b> 30.8% (95% CI: 29.1-32.4) There was no gender difference in the prevalence of six or more missing teeth.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 29.5% (95% CI: 28.2-30.7) <b>Black, Non-Hispanic:</b> 30.1% (95% CI: 22.7-37.6) <b>Other, Non-Hispanic:</b> *35.2% (95% CI: 23.8-46.6) <b>Multiracial, Non-Hispanic:</b> *33.1% (95% CI: 22.2-44.0) <b>Hispanic:</b> *5.2% (95% CI: 0.3-10.2) There was no race/ethnicity difference in the prevalence of six or more missing teeth. <small>* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</small>
<b>Age</b>	The prevalence of six or more missing teeth was significantly different between each age group. The prevalence of six or more missing teeth was highest among those aged 65 and older (57.5%) and lowest among those aged 18-24 (1.8%).
<b>Education</b>	The prevalence of six or more missing teeth was significantly different between each educational attainment group. The prevalence of six or more missing teeth was highest among those with less than a high school education (56.1%) and lowest among college graduates (8.7%).
<b>Household Income</b>	The prevalence of six or more missing teeth was significantly higher among those with an annual household income of less than \$35,000 among those earning \$35,000 or more per year.

## CHAPTER 12: TOOTH LOSS

**Table 12.2 Prevalence of Six or More Missing Teeth by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	195,904	<b>27.8</b>	26.1-29.5	226,686	<b>30.8</b>	29.1-32.4	422,590	<b>29.3</b>	28.1-30.5
<b>Age</b>									
18-24	1,286	<b>*1.5</b>	0.0-3.3	1,732	<b>*2.1</b>	0.0-4.2	3,017	<b>*1.8</b>	0.4-3.2
25-34	5,918	<b>5.4</b>	2.4-8.4	9,517	<b>9.1</b>	5.9-12.4	15,436	<b>7.2</b>	5.0-9.5
35-44	14,646	<b>13.4</b>	9.6-17.1	18,502	<b>16.8</b>	13.1-20.6	33,149	<b>15.1</b>	12.5-17.8
45-54	26,678	<b>23.0</b>	18.8-27.1	36,932	<b>31.5</b>	27.5-35.6	63,610	<b>27.3</b>	24.3-30.2
55-64	56,598	<b>44.1</b>	40.1-48.1	53,950	<b>40.8</b>	37.2-44.5	110,548	<b>42.5</b>	39.7-45.2
65+	90,591	<b>59.1</b>	55.7-62.6	104,608	<b>56.2</b>	53.2-59.3	195,199	<b>57.5</b>	55.2-59.8
<b>Education</b>									
Less than H.S.	59,291	<b>55.7</b>	49.7-61.7	62,219	<b>56.6</b>	50.9-62.2	121,510	<b>56.1</b>	52.0-60.2
H.S. or G.E.D.	89,889	<b>30.4</b>	27.6-33.2	105,580	<b>37.6</b>	34.8-40.4	195,469	<b>33.9</b>	31.9-35.9
Some Post-H.S.	35,192	<b>20.1</b>	17.0-23.1	47,820	<b>22.0</b>	19.4-24.6	83,012	<b>21.1</b>	19.2-23.1
College Graduate	11,402	<b>9.0</b>	7.1-10.9	10,789	<b>8.4</b>	6.6-10.2	22,191	<b>8.7</b>	7.4-10.0
<b>Income</b>									
Less than \$15,000	33,873	<b>46.7</b>	40.3-53.2	45,362	<b>50.7</b>	45.3-56.0	79,235	<b>48.9</b>	44.8-53.0
\$15,000 - 24,999	47,626	<b>40.7</b>	35.7-45.8	57,063	<b>40.7</b>	36.5-44.9	104,689	<b>40.7</b>	37.5-43.9
\$25,000 - 34,999	32,848	<b>45.3</b>	39.2-51.5	25,509	<b>33.8</b>	28.5-39.0	58,356	<b>39.4</b>	35.4-43.5
\$35,000 - 49,999	22,849	<b>25.8</b>	21.1-30.6	21,368	<b>24.9</b>	20.6-29.3	44,218	<b>25.4</b>	22.2-28.6
\$50,000 - 74,999	11,662	<b>12.4</b>	9.1-15.7	13,475	<b>16.7</b>	12.8-20.6	25,137	<b>14.4</b>	11.9-17.0
\$75,000+	13,400	<b>9.4</b>	7.0-11.7	8,909	<b>8.1</b>	5.6-10.6	22,309	<b>8.8</b>	7.1-10.5

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

### All Teeth Missing, Aged 65 and Older

<b>Definition</b>	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.
<b>Prevalence</b>	<b>WV: 30.4%</b> (95% CI: 28.2-32.6) <b>U.S.: 14.5%</b> (95% CI: 14.1-14.8) 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 1 <sup>st</sup> highest among 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 30.9% (95% CI: 27.5-34.3) <b>Women:</b> 30.0% (95% CI: 27.1-33.0) There was no gender difference in the prevalence of all teeth missing among those aged 65 and older.
<b>Race/Ethnicity</b>	No race/ethnicity statistics are reported due to unreliable estimates.
<b>Education</b>	The prevalence of all teeth missing among those aged 65 and older was significantly different between each educational attainment level. The prevalence of all teeth missing among those aged 65 and older was highest among those with less than a high school education (60.8%) and lowest among college graduates (7.7%).
<b>Household Income</b>	The prevalence of all teeth missing among those aged 65 and older was significantly higher among those with an annual household income of less than \$15,000 (57.0%) than among all other income groups. The prevalence of all teeth missing among those aged 65 and older was significantly lower among those with an annual household income of \$75,000 or more (6.7%) than among those earning less than \$50,000 per year.

## CHAPTER 12: TOOTH LOSS

**Table 12.3 Prevalence of All Teeth Missing Among Those Aged 65 and Older by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	47,261	<b>30.9</b>	27.5-34.3	55,913	<b>30.0</b>	27.1-33.0	103,174	<b>30.4</b>	28.2-32.6
<b>Education</b>									
Less than H.S.	16,687	<b>59.3</b>	49.8-68.7	21,178	<b>62.0</b>	54.0-70.0	37,865	<b>60.8</b>	54.6-66.9
H.S. or G.E.D.	21,280	<b>32.1</b>	26.9-37.4	25,637	<b>29.9</b>	25.6-34.2	46,917	<b>30.9</b>	27.6-34.2
Some Post-H.S.	6,877	<b>22.4</b>	15.4-29.4	7,535	<b>17.1</b>	12.6-21.7	14,412	<b>19.3</b>	15.4-23.2
College Graduate	2,416	<b>8.6</b>	5.0-12.2	1,445	<b>6.6</b>	3.4-9.8	3,861	<b>7.7</b>	5.3-10.2
<b>Income</b>									
Less than \$15,000	7,501	<b>*59.5</b>	46.5-72.5	12,464	<b>55.6</b>	46.8-64.4	19,965	<b>57.0</b>	49.7-64.3
\$15,000 - 24,999	13,556	<b>43.1</b>	34.7-51.5	14,694	<b>36.2</b>	29.7-42.7	28,250	<b>39.2</b>	34.0-44.4
\$25,000 - 34,999	7,969	<b>35.6</b>	26.5-44.7	6,578	<b>28.3</b>	19.9-36.7	14,547	<b>31.9</b>	25.7-38.0
\$35,000 - 49,999	4,805	<b>19.7</b>	12.5-27.0	3,435	<b>16.9</b>	9.3-24.4	8,240	<b>18.4</b>	13.2-23.7
\$50,000 - 74,999	1,770	<b>*13.1</b>	4.1-22.2	1,464	<b>*9.4</b>	3.7-15.1	3,234	<b>11.1</b>	5.9-16.4
\$75,000+	1,356	<b>*7.7</b>	2.9-12.5	532	<b>*5.2</b>	0.0-10.8	1,889	<b>6.7</b>	3.1-10.4

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

### High Risk for HIV

<b>Definition</b>	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?”
<b>Prevalence</b>	<b>WV: 4.6%</b> (95% CI: 3.9-5.3) <b>U.S.: 6.2%</b> (95% CI: 6.0-6.3) The West Virginia prevalence of high risk for HIV was significantly lower than the U.S. prevalence. West Virginia ranked the 52 <sup>nd</sup> highest among 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 5.7% (95% CI: 4.6-6.8) <b>Women:</b> 3.6% (95% CI: 2.8-4.4) The prevalence of high risk for HIV was significantly higher among men than among women.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 4.4% (95% CI: 3.7-5.1) <b>Black, Non-Hispanic:</b> 11.3% (95% CI: 5.2-17.4) <b>Other, Non-Hispanic:</b> *4.2% (95% CI: 0.0-8.4) <b>Multiracial, Non-Hispanic:</b> *8.3% (95% CI: 1.2-15.5) <b>Hispanic:</b> *3.5% (95% CI: 0.0-8.3) The prevalence of high risk for HIV was significantly higher among Black, Non-Hispanic adults than among White, Non-Hispanic adults. <small>* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</small>
<b>Age</b>	The prevalence of high risk for HIV was significantly higher among those aged 18-24 (15.2%) than among all other age groups.
<b>Education</b>	The prevalence of high risk for HIV was significantly higher among those with less than a high school education (6.8%) than among college graduates (3.3%).
<b>Household Income</b>	There was no annual household income difference in the prevalence of high risk for HIV.

## CHAPTER 13: HIV RISK

**Table 13.1 Prevalence of High Risk for HIV by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	39,204	<b>5.7</b>	4.6-6.8	25,836	<b>3.6</b>	2.8-4.4	65,041	<b>4.6</b>	3.9-5.3
<b>Age</b>									
18-24	13,933	<b>16.6</b>	10.5-22.8	10,510	<b>13.6</b>	8.3-18.9	24,443	<b>15.2</b>	11.1-19.3
25-34	11,415	<b>10.9</b>	7.2-14.5	5,980	<b>5.9</b>	3.3-8.4	17,395	<b>8.4</b>	6.2-10.7
35-44	4,772	<b>4.5</b>	2.4-6.5	5,631	<b>5.3</b>	3.1-7.4	10,403	<b>4.9</b>	3.4-6.4
45-54	4,337	<b>3.8</b>	1.8-5.8	2,777	<b>2.4</b>	1.2-3.7	7,114	<b>3.1</b>	2.0-4.3
55-64	2,546	<b>2.0</b>	0.9-3.0	760	<b>*0.6</b>	0.1-1.1	3,305	<b>1.3</b>	0.7-1.9
65+	1,969	<b>*1.3</b>	0.4-2.2	179	<b>*0.1</b>	0.0-0.3	2,148	<b>*0.6</b>	0.2-1.1
<b>Education</b>									
Less than H.S.	6,762	<b>6.6</b>	3.4-9.7	7,295	<b>7.0</b>	3.7-10.3	14,057	<b>6.8</b>	4.5-9.0
H.S. or G.E.D.	14,676	<b>5.0</b>	3.3-6.8	6,771	<b>2.5</b>	1.4-3.5	21,447	<b>3.8</b>	2.8-4.8
Some Post-H.S.	11,375	<b>6.6</b>	4.3-9.0	9,750	<b>4.6</b>	3.0-6.1	21,125	<b>5.5</b>	4.1-6.9
College Graduate	6,391	<b>5.1</b>	3.2-7.0	2,020	<b>*1.6</b>	0.6-2.6	8,411	<b>3.3</b>	2.3-4.4
<b>Income</b>									
Less than \$15,000	4,794	<b>6.9</b>	3.2-10.5	5,664	<b>6.5</b>	3.7-9.3	10,458	<b>6.7</b>	4.4-8.9
\$15,000 - 24,999	7,066	<b>6.1</b>	2.7-9.4	7,315	<b>5.4</b>	3.1-7.7	14,381	<b>5.7</b>	3.7-7.7
\$25,000 - 34,999	4,783	<b>6.6</b>	3.3-10.0	892	<b>*1.2</b>	0.1-2.3	5,675	<b>3.9</b>	2.1-5.6
\$35,000 - 49,999	3,580	<b>4.1</b>	1.9-6.3	3,333	<b>*3.9</b>	1.2-6.6	6,914	<b>4.0</b>	2.3-5.7
\$50,000 - 74,999	4,736	<b>5.1</b>	2.4-7.8	1,145	<b>*1.4</b>	0.0-2.9	5,882	<b>3.4</b>	1.8-5.0
\$75,000+	8,300	<b>5.9</b>	3.4-8.5	1,573	<b>*1.5</b>	0.0-3.0	9,873	<b>4.0</b>	2.4-5.6

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



# West Virginia Behavioral Risk Factor Surveillance System Report

2016



## SECTION 3: PREVENTIVE PRACTICES



### Dental Visit

<b>Definition</b>	Responding “Within the past year” to the question, “How long has it been since you last visited a dentist or a dental clinic for any reason? Include visits to dental specialists, such as orthodontists.”
<b>Prevalence</b>	<p><b>WV: 57.6%</b> (95% CI: 56.2-59.0)  <b>U.S.: 65.7%</b> (95% CI: 65.5-66.0)</p> <p>The West Virginia prevalence of had a dental visit in the past year was significantly lower than the U.S. prevalence. West Virginia ranked 50<sup>th</sup> highest among 54 BRFSS participants.</p>
<b>Gender</b>	<p><b>Men:</b> 54.6% (95% CI: 52.6-56.7)  <b>Women:</b> 60.5% (95% CI: 58.7-62.3)</p> <p>The prevalence of had a dental visit in the past year was significantly higher among women than among men.</p>
<b>Race/Ethnicity</b>	<p><b>White, Non-Hispanic:</b> 57.9% (95% CI: 56.5-59.3)  <b>Black, Non-Hispanic:</b> 56.6% (95% CI: 47.9-65.2)  <b>Other, Non-Hispanic:</b> *47.5% (95% CI: 35.3-59.6)  <b>Multiracial, Non-Hispanic:</b> *42.2% (95% CI: 30.3-54.0)  <b>Hispanic:</b> *55.1% (95% CI: 38.3-71.8)</p> <p>There was no race/ethnicity difference in the prevalence of had had a dental visit in the past year.</p> <p>* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</p>
<b>Age</b>	The prevalence of had a dental visit in the past year was significantly higher among those aged 18-44 than among those aged 65 and older (52.5%).
<b>Education</b>	The prevalence of had a dental visit in the past year was significantly lower among those with less than a high school education (34.3%) than all other educational attainment levels. Additionally, the prevalence of had a dental visit in the past year was significantly higher among college graduates (80.8%) than all other educational attainment levels.
<b>Household Income</b>	The prevalence of had a dental visit in the past year was significantly lower among those with an annual household income of less than \$15,000 (33.6%) than among all other income groups. The prevalence of had a dental visit in the past year was significantly higher among those with an income of \$75,000 or more (81.2%) than among all other income levels.

## CHAPTER 14: ORAL HEALTH

**Table 14.1 Prevalence of Had a Dental Visit in the Past Year by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	388,948	<b>54.6</b>	52.6-56.7	447,902	<b>60.5</b>	58.7-62.3	836,851	<b>57.6</b>	56.2-59.0
<b>Age</b>									
18-24	56,868	<b>65.9</b>	58.0-73.7	57,284	<b>69.8</b>	62.5-77.1	114,153	<b>67.8</b>	62.4-73.1
25-34	62,965	<b>58.0</b>	51.9-64.0	67,116	<b>64.2</b>	59.1-69.2	130,080	<b>61.0</b>	57.0-65.0
35-44	65,541	<b>58.9</b>	53.6-64.2	70,350	<b>63.6</b>	58.7-68.4	135,892	<b>61.2</b>	57.6-64.8
45-54	57,001	<b>48.5</b>	43.7-53.3	69,448	<b>59.1</b>	54.8-63.4	126,449	<b>53.8</b>	50.6-57.0
55-64	66,608	<b>51.1</b>	47.1-55.0	78,107	<b>58.7</b>	55.1-62.4	144,715	<b>54.9</b>	52.2-57.6
65+	78,517	<b>50.7</b>	47.1-54.3	101,207	<b>54.0</b>	50.9-57.2	179,723	<b>52.5</b>	50.2-54.9
<b>Education</b>									
Less than H.S.	32,204	<b>29.7</b>	24.0-35.3	42,968	<b>38.8</b>	33.4-44.2	75,172	<b>34.3</b>	30.4-38.2
H.S. or G.E.D.	145,886	<b>49.0</b>	45.6-52.3	148,969	<b>52.9</b>	49.9-55.9	294,855	<b>50.9</b>	48.6-53.1
Some Post-H.S.	111,728	<b>63.1</b>	59.0-67.3	146,679	<b>67.2</b>	64.1-70.4	258,407	<b>65.4</b>	62.8-68.0
College Graduate	98,850	<b>77.6</b>	74.6-80.7	108,597	<b>84.0</b>	81.5-86.5	207,447	<b>80.8</b>	78.8-82.8
<b>Income</b>									
Less than \$15,000	21,083	<b>29.0</b>	22.9-35.1	33,570	<b>37.3</b>	32.1-42.6	54,653	<b>33.6</b>	29.6-37.7
\$15,000 - 24,999	46,356	<b>39.3</b>	34.0-44.5	67,114	<b>47.6</b>	43.2-52.0	113,470	<b>43.8</b>	40.4-47.2
\$25,000 - 34,999	32,088	<b>44.2</b>	38.1-50.3	43,707	<b>57.6</b>	52.0-63.3	75,794	<b>51.0</b>	46.8-55.3
\$35,000 - 49,999	52,261	<b>58.6</b>	52.8-64.4	52,913	<b>61.6</b>	56.3-66.8	105,174	<b>60.1</b>	56.2-64.0
\$50,000 - 74,999	66,571	<b>70.5</b>	65.4-75.7	63,385	<b>78.8</b>	74.3-83.4	129,956	<b>74.3</b>	70.9-77.8
\$75,000+	110,781	<b>77.4</b>	73.5-81.4	95,380	<b>86.1</b>	82.9-89.4	206,161	<b>81.2</b>	78.6-83.9

## CHAPTER 15: DIABETES TESTING

### Diabetes Test

<b>Definition</b>	Reported not having diabetes and responding “Yes” to the question, “Have you had a test for high blood sugar or diabetes within the past three years?”
<b>Prevalence</b>	<b>WV: 62.9%</b> (95% CI: 61.4-64.5) Because this question is part of a state selected optional module and complete national data are not available, a U.S. comparison was not conducted.
<b>Gender</b>	<b>Men:</b> 61.2% (95% CI: 58.9-63.6) <b>Women:</b> 64.5% (95% CI: 62.5-66.5) There was no gender difference in the prevalence of had a diabetes test in the past 3 years.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 63.1% (95% CI: 61.5-64.7) <b>Black, Non-Hispanic:</b> 56.8% (95% CI: 46.9-66.6) <b>Other, Non-Hispanic:</b> *63.7% (95% CI: 50.8-76.7) <b>Multiracial, Non-Hispanic:</b> *62.7% (95% CI: 48.3-77.0) <b>Hispanic:</b> *56.6% (95% CI: 38.4-74.8) There was no race/ethnicity difference in the prevalence of had a diabetes test in the past 3 years. <small>* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</small>
<b>Age</b>	The prevalence of had a diabetes test in the past 3 years was significantly higher among those aged 55 and older than among those aged 54 and younger.
<b>Education</b>	The prevalence of had a diabetes test in the past 3 years was significantly lower among those with less than a high school education (54.8%) than all other educational attainment levels.
<b>Household Income</b>	The prevalence of had a diabetes test in the past 3 years was significantly lower among those with an annual household income of less than \$15,000 (55.4%) than the prevalence among those with an income of \$50,000 or more.

## CHAPTER 15: DIABETES TESTING

**Table 15.1 Prevalence of Had a Diabetes Test in the Past Three Years by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	347,308	<b>61.2</b>	58.9-63.6	390,515	<b>64.5</b>	62.5-66.5	737,823	<b>62.9</b>	61.4-64.5
<b>Age</b>									
18-24	27,056	<b>35.5</b>	26.8-44.1	30,851	<b>43.9</b>	35.7-52.1	57,907	<b>39.5</b>	33.6-45.5
25-34	45,943	<b>48.0</b>	41.6-54.4	54,305	<b>56.1</b>	50.7-61.6	100,248	<b>52.1</b>	47.9-56.3
35-44	58,426	<b>61.1</b>	55.4-66.8	61,060	<b>62.0</b>	56.9-67.1	119,486	<b>61.6</b>	57.7-65.4
45-54	61,856	<b>65.6</b>	60.5-70.6	64,985	<b>66.8</b>	62.3-71.3	126,841	<b>66.2</b>	62.8-69.6
55-64	68,217	<b>71.7</b>	67.5-75.8	74,577	<b>74.8</b>	71.1-78.5	142,793	<b>73.3</b>	70.5-76.0
65+	84,239	<b>77.9</b>	74.3-81.6	101,623	<b>73.2</b>	70.0-76.5	185,861	<b>75.3</b>	72.9-77.7
<b>Education</b>									
Less than H.S.	43,545	<b>55.2</b>	48.3-62.2	47,033	<b>54.3</b>	47.9-60.8	90,578	<b>54.8</b>	50.0-59.5
H.S. or G.E.D.	147,694	<b>61.2</b>	57.5-64.9	144,768	<b>63.3</b>	60.0-66.6	292,462	<b>62.2</b>	59.7-64.7
Some Post-H.S.	83,583	<b>59.4</b>	54.4-64.4	121,679	<b>67.9</b>	64.3-71.5	205,262	<b>64.2</b>	61.1-67.2
College Graduate	72,189	<b>68.6</b>	64.6-72.6	76,601	<b>69.5</b>	65.9-73.1	148,790	<b>69.1</b>	66.4-71.8
<b>Income</b>									
Less than \$15,000	28,312	<b>56.3</b>	48.5-64.1	37,792	<b>54.7</b>	48.5-60.9	66,105	<b>55.4</b>	50.5-60.2
\$15,000 - 24,999	55,081	<b>58.5</b>	52.4-64.5	71,572	<b>63.0</b>	58.0-68.1	126,652	<b>60.9</b>	57.1-64.8
\$25,000 - 34,999	38,256	<b>69.6</b>	62.8-76.4	43,638	<b>70.0</b>	64.1-75.9	81,894	<b>69.8</b>	65.3-74.3
\$35,000 - 49,999	42,315	<b>59.8</b>	53.0-66.5	46,261	<b>64.9</b>	59.1-70.8	88,576	<b>62.4</b>	57.9-66.8
\$50,000 - 74,999	48,673	<b>62.9</b>	56.6-69.2	43,790	<b>66.6</b>	60.9-72.3	92,462	<b>64.6</b>	60.3-68.9
\$75,000+	79,500	<b>66.3</b>	61.5-71.1	70,336	<b>71.1</b>	66.8-75.4	149,837	<b>68.5</b>	65.2-71.7

### HIV Test

<b>Definition</b>	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.”
<b>Prevalence</b>	<b>WV: 34.5%</b> (95% CI: 33.1-35.8) <b>U.S.: 38.4%</b> (95% CI: 38.1-38.7) The West Virginia prevalence of ever had a HIV test was significantly lower than the U.S. prevalence. West Virginia ranked 30 <sup>th</sup> highest among 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 34.4% (95% CI: 32.3-36.5) <b>Women:</b> 34.5% (95% CI: 32.7-36.4) There was no gender difference in the prevalence of ever had a HIV test.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 33.3% (95% CI: 31.9-34.8) <b>Black, Non-Hispanic:</b> 57.1% (95% CI: 48.0-66.3) <b>Other, Non-Hispanic:</b> *35.7% (95% CI: 23.7-47.7) <b>Multiracial, Non-Hispanic:</b> *52.2% (95% CI: 39.5-64.8) <b>Hispanic:</b> *29.0% (95% CI: 14.6-43.4) The prevalence of ever had a HIV test was significantly higher among Black, Non-Hispanic adults than among White, Non-Hispanic adults. <small>* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</small>
<b>Age</b>	The prevalence of ever had a HIV test was significantly higher among those aged 25-54 than among all other age groups.
<b>Education</b>	The prevalence of ever had a HIV test was significantly lower among high school graduates (29.7%) than among all other educational attainment levels.
<b>Household Income</b>	The prevalence of ever had a HIV test was significantly higher among those with an annual household income of less than \$15,000 (43.9%) than among those with an income of \$25,000 or more.

## CHAPTER 16: HIV TESTING

**Table 16.1 Prevalence of Ever Had a HIV Test by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	223,202	<b>34.4</b>	32.3-36.5	236,130	<b>34.5</b>	32.7-36.4	459,332	<b>34.5</b>	33.1-35.8
<b>Age</b>									
18-24	18,944	<b>22.8</b>	15.7-29.9	27,653	<b>36.7</b>	29.2-44.3	46,597	<b>29.4</b>	24.2-34.7
25-34	48,642	<b>48.4</b>	42.0-54.7	58,193	<b>60.7</b>	55.4-66.1	106,835	<b>54.4</b>	50.2-58.6
35-44	46,472	<b>45.4</b>	39.9-51.0	56,496	<b>53.9</b>	48.8-59.0	102,968	<b>49.7</b>	46.0-53.5
45-54	44,870	<b>42.2</b>	37.3-47.1	48,564	<b>44.9</b>	40.5-49.4	93,435	<b>43.6</b>	40.3-46.9
55-64	39,357	<b>33.5</b>	29.5-37.4	27,809	<b>23.1</b>	20.0-26.3	67,166	<b>28.2</b>	25.7-30.8
65+	24,063	<b>17.6</b>	14.7-20.5	16,284	<b>9.3</b>	7.5-11.2	40,347	<b>13.0</b>	11.3-14.6
<b>Education</b>									
Less than H.S.	35,044	<b>36.7</b>	30.6-42.8	40,270	<b>41.6</b>	35.8-47.4	75,314	<b>39.2</b>	35.0-43.4
H.S. or G.E.D.	86,496	<b>31.5</b>	28.3-34.8	72,280	<b>27.8</b>	24.9-30.6	158,776	<b>29.7</b>	27.5-31.9
Some Post-H.S.	58,106	<b>36.1</b>	31.6-40.5	79,220	<b>38.6</b>	35.1-42.2	137,326	<b>37.5</b>	34.7-40.3
College Graduate	43,556	<b>37.0</b>	33.3-40.7	44,360	<b>36.7</b>	33.2-40.1	87,916	<b>36.8</b>	34.3-39.4
<b>Income</b>									
Less than \$15,000	26,395	<b>40.1</b>	33.3-47.0	38,139	<b>46.9</b>	41.4-52.5	64,534	<b>43.9</b>	39.6-48.2
\$15,000 - 24,999	41,897	<b>38.9</b>	33.4-44.4	51,301	<b>40.1</b>	35.7-44.6	93,197	<b>39.6</b>	36.1-43.1
\$25,000 - 34,999	23,246	<b>33.6</b>	27.4-39.7	19,906	<b>28.1</b>	22.1-34.0	43,152	<b>30.8</b>	26.5-35.0
\$35,000 - 49,999	25,292	<b>31.4</b>	25.5-37.3	25,184	<b>30.4</b>	25.5-35.4	50,475	<b>30.9</b>	27.0-34.8
\$50,000 - 74,999	29,161	<b>32.8</b>	27.3-38.3	24,525	<b>31.6</b>	26.3-36.9	53,686	<b>32.2</b>	28.4-36.1
\$75,000+	44,401	<b>34.1</b>	29.6-38.5	37,215	<b>36.1</b>	31.7-40.5	81,616	<b>35.0</b>	31.8-38.1

### Calorie Information on Menu

<b>Definition</b>	Responding “Always,” “Most of the time,” “About half the time,” or “Sometimes” to the question, “The next question is about eating out at fast food and chain restaurants. When calorie information is available in the restaurant, how often does this information help you decide what to order?”
<b>Prevalence</b>	<b>WV: 47.2%</b> (95% CI: 45.7-48.7) Because this question is part of a state selected optional module and complete national data are not available, a U.S. comparison was not conducted.
<b>Gender</b>	<b>Men:</b> 38.4% (95% CI: 36.2-40.5) <b>Women:</b> 55.5% (95% CI: 53.6-57.5) The prevalence of use calorie information on menu was significantly higher among women than among men.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 47.3% (95% CI: 45.8-48.8) <b>Black, Non-Hispanic:</b> 41.5% (95% CI: 32.0-51.0) <b>Other, Non-Hispanic:</b> *56.9% (95% CI: 42.8-71.0) <b>Multiracial, Non-Hispanic:</b> *43.6% (95% CI: 30.8-56.4) <b>Hispanic:</b> *51.9% (95% CI: 33.4-70.4) There was no race/ethnicity difference in the prevalence of use calorie information on menu. <small>* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</small>
<b>Age</b>	There was no age difference in the prevalence of use calorie information on menu.
<b>Education</b>	The prevalence of use calorie information on menu was significantly lower among those with less than a high school education (37.4%) and high school graduates (39.9%) than those with some college (52.2%) and college graduates (62.2%).
<b>Household Income</b>	The prevalence of use calorie information on menu was significantly lower among those with an annual household income of less than \$15,000 (38.1%) than among those earning \$35,000 or more per year. The prevalence of use calorie information on menu was significantly higher among those with an annual household income of \$75,000 or more (57.8%) than among all other income groups.

## CHAPTER 17: MENU LABELLING

**Table 17.1 Prevalence of Use Calorie Information on Menu by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	228,223	<b>38.4</b>	36.2-40.5	349,565	<b>55.5</b>	53.6-57.5	577,787	<b>47.2</b>	45.7-48.7
<b>Age</b>									
18-24	32,280	<b>45.3</b>	36.3-54.4	34,686	<b>51.7</b>	43.3-60.1	66,966	<b>48.4</b>	42.2-54.6
25-34	30,820	<b>34.3</b>	28.1-40.5	52,866	<b>58.3</b>	52.7-63.9	83,685	<b>46.4</b>	42.0-50.7
35-44	38,711	<b>40.7</b>	35.0-46.3	53,318	<b>54.5</b>	49.2-59.9	92,029	<b>47.7</b>	43.8-51.6
45-54	37,343	<b>37.1</b>	32.2-41.9	60,373	<b>59.0</b>	54.4-63.6	97,715	<b>48.1</b>	44.7-51.6
55-64	41,286	<b>37.4</b>	33.2-41.6	68,103	<b>60.2</b>	56.3-64.1	109,389	<b>48.9</b>	46.0-51.9
65+	47,138	<b>37.5</b>	33.7-41.3	77,000	<b>50.1</b>	46.8-53.5	124,138	<b>44.4</b>	41.9-47.0
<b>Education</b>									
Less than H.S.	24,252	<b>29.8</b>	23.7-35.9	36,192	<b>45.0</b>	38.8-51.2	60,444	<b>37.4</b>	33.0-41.8
H.S. or G.E.D.	81,519	<b>32.7</b>	29.3-36.1	113,834	<b>47.4</b>	44.2-50.7	195,354	<b>39.9</b>	37.6-42.3
Some Post-H.S.	65,524	<b>43.5</b>	38.8-48.3	113,127	<b>59.0</b>	55.4-62.7	178,651	<b>52.2</b>	49.3-55.2
College Graduate	56,928	<b>50.1</b>	46.2-54.0	86,308	<b>74.0</b>	70.9-77.1	143,235	<b>62.2</b>	59.7-64.8
<b>Income</b>									
Less than \$15,000	14,710	<b>28.5</b>	21.5-35.6	29,748	<b>45.7</b>	39.6-51.7	44,459	<b>38.1</b>	33.5-42.7
\$15,000 - 24,999	33,579	<b>34.9</b>	29.3-40.4	56,614	<b>48.4</b>	43.6-53.2	90,192	<b>42.3</b>	38.6-46.0
\$25,000 - 34,999	23,784	<b>39.3</b>	32.7-45.9	34,706	<b>52.6</b>	46.5-58.7	58,490	<b>46.2</b>	41.7-50.8
\$35,000 - 49,999	28,226	<b>35.4</b>	29.4-41.3	47,691	<b>59.2</b>	53.8-64.6	75,916	<b>47.4</b>	43.2-51.5
\$50,000 - 74,999	33,838	<b>40.1</b>	34.3-46.0	44,768	<b>60.3</b>	54.7-65.9	78,606	<b>49.6</b>	45.4-53.7
\$75,000+	61,814	<b>47.0</b>	42.5-51.6	73,090	<b>71.7</b>	67.4-76.0	134,904	<b>57.8</b>	54.5-61.1



### Flu Vaccine

<b>Definition</b>	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?”
<b>Prevalence</b>	<b>WV: 44.6%</b> (95% CI: 43.3-46.0) <b>U.S.: 38.4%</b> (95% CI: 38.1-38.6) The West Virginia prevalence of had a flu vaccine in the past year was significantly higher than the U.S. prevalence. West Virginia ranked the 4 <sup>th</sup> highest among the 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 40.6% (95% CI: 38.6-42.6) <b>Women:</b> 48.5% (95% CI: 46.7-50.4) The prevalence of had a flu vaccine in the past year was significantly higher among women than among men.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 44.9% (95% CI: 43.5-46.3) <b>Black, Non-Hispanic:</b> 43.3% (95% CI: 34.7-51.8) <b>Other, Non-Hispanic:</b> *48.2% (95% CI: 35.8-60.6) <b>Multiracial, Non-Hispanic:</b> *31.9% (95% CI: 21.4-42.4) <b>Hispanic:</b> *26.2% (95% CI: 12.3-40.1) There was no race/ethnicity difference in the prevalence of had a flu vaccine in the past year. <small>* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</small>
<b>Age</b>	The prevalence of had a flu vaccine in the past year was significantly higher among those aged 55 and older than among those aged 54 and younger.
<b>Education</b>	The prevalence of had a flu vaccine in the past year was significantly higher among college graduates (53.8%) than among all other educational attainment groups.
<b>Household Income</b>	The prevalence of had a flu vaccine in the past year was significantly lower among those with an annual household income of less than \$15,000 (36.8%) than among those earning \$35,000 or more per year.

## CHAPTER 18: IMMUNIZATION

**Table 18.1 Prevalence of Had a Flu Vaccine in the Past Year by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	281,456	<b>40.6</b>	38.6-42.6	351,966	<b>48.5</b>	46.7-50.4	633,422	<b>44.6</b>	43.3-46.0
<b>Age</b>									
18-24	17,678	<b>21.5</b>	14.9-28.2	28,709	<b>36.8</b>	29.1-44.6	46,387	<b>29.0</b>	23.8-34.2
25-34	23,428	<b>22.4</b>	17.5-27.4	35,332	<b>34.7</b>	29.6-39.9	58,760	<b>28.5</b>	24.9-32.1
35-44	32,971	<b>30.4</b>	25.5-35.2	38,287	<b>35.4</b>	30.7-40.1	71,258	<b>32.9</b>	29.5-36.3
45-54	41,160	<b>35.8</b>	31.2-40.4	48,638	<b>42.1</b>	37.9-46.4	89,799	<b>39.0</b>	35.8-42.1
55-64	61,959	<b>48.6</b>	44.6-52.6	71,150	<b>54.7</b>	51.0-58.3	133,108	<b>51.7</b>	49.0-54.4
65+	103,143	<b>67.2</b>	63.8-70.6	126,340	<b>67.7</b>	64.8-70.6	229,483	<b>67.5</b>	65.3-69.7
<b>Education</b>									
Less than H.S.	34,183	<b>32.7</b>	27.3-38.0	46,701	<b>43.2</b>	37.7-48.6	80,885	<b>38.0</b>	34.2-41.9
H.S. or G.E.D.	117,776	<b>40.4</b>	37.2-43.6	130,559	<b>47.6</b>	44.6-50.6	248,335	<b>43.9</b>	41.7-46.1
Some Post-H.S.	64,405	<b>37.7</b>	33.5-41.8	102,972	<b>48.0</b>	44.5-51.5	167,376	<b>43.4</b>	40.7-46.1
College Graduate	64,962	<b>51.7</b>	48.0-55.3	71,206	<b>55.8</b>	52.4-59.3	136,168	<b>53.8</b>	51.2-56.3
<b>Income</b>									
Less than \$15,000	24,261	<b>34.2</b>	28.2-40.3	33,711	<b>39.0</b>	34.0-44.0	57,972	<b>36.8</b>	33.0-40.7
\$15,000 - 24,999	43,002	<b>36.7</b>	31.8-41.7	67,379	<b>48.9</b>	44.4-53.3	110,381	<b>43.3</b>	39.9-46.7
\$25,000 - 34,999	28,145	<b>38.9</b>	33.1-44.8	36,709	<b>49.0</b>	43.2-54.8	64,854	<b>44.1</b>	39.9-48.2
\$35,000 - 49,999	38,315	<b>44.1</b>	38.3-49.8	42,381	<b>49.3</b>	44.0-54.5	80,696	<b>46.7</b>	42.7-50.6
\$50,000 - 74,999	37,591	<b>40.4</b>	34.9-46.0	40,569	<b>50.5</b>	45.0-56.0	78,160	<b>45.1</b>	41.2-49.1
\$75,000+	63,442	<b>45.2</b>	40.8-49.6	55,247	<b>50.9</b>	46.4-55.3	118,689	<b>47.7</b>	44.5-50.8

### Flu Vaccine, Ages 65 and Older

<b>Definition</b>	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.
<b>Prevalence</b>	<b>WV: 67.5%</b> (95% CI: 65.3-69.7) <b>U.S.: 58.6%</b> (95% CI: 58.1-59.2) The West Virginia prevalence of had a flu vaccine in the past year among those aged 65 and older was significantly higher than the U.S. prevalence. West Virginia ranked 1 <sup>st</sup> highest among the 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 67.2% (95% CI: 63.8-70.6) <b>Women:</b> 67.7% (95% CI: 64.8-70.6) There was no gender difference in the prevalence of had a flu vaccine in the past year among those aged 65 and older.
<b>Race/Ethnicity</b>	No race/ethnicity statistics are reported due to unreliable estimates.
<b>Education</b>	The prevalence of had a flu vaccine in the past year among those aged 65 and older was significantly lower among those with less than a high school education (59.2%) than among those with some college (70.9%) and college graduates (73.8%).
<b>Household Income</b>	The prevalence of had a flu vaccine in the past year among those aged 65 and older was significantly lower among those with an annual household income of less than \$15,000 per year (57.5%) than among those earning \$75,000 or more per year (74.1%).

## CHAPTER 18: IMMUNIZATION

**Table 18.2 Prevalence of Had a Flu Vaccine in the Past Year Among Those Aged 65 and Older by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	103,143	<b>67.2</b>	63.8-70.6	126,340	<b>67.7</b>	64.8-70.6	229,483	<b>67.5</b>	65.3-69.7
<b>Education</b>									
Less than H.S.	15,486	<b>55.6</b>	46.1-65.0	21,149	<b>62.1</b>	54.0-70.2	36,636	<b>59.2</b>	53.0-65.3
H.S. or G.E.D.	45,006	<b>68.1</b>	62.8-73.4	56,981	<b>66.5</b>	62.2-70.8	101,987	<b>67.2</b>	63.8-70.6
Some Post-H.S.	22,145	<b>70.6</b>	63.3-78.0	31,449	<b>71.2</b>	65.7-76.7	53,594	<b>70.9</b>	66.5-75.4
College Graduate	20,505	<b>73.3</b>	67.7-78.9	16,390	<b>74.5</b>	68.4-80.5	36,895	<b>73.8</b>	69.7-77.9
<b>Income</b>									
Less than \$15,000	7,638	<b>*61.3</b>	48.5-74.1	12,246	<b>55.4</b>	46.4-64.4	19,884	<b>57.5</b>	50.1-64.9
\$15,000 - 24,999	20,699	<b>65.5</b>	57.5-73.5	28,548	<b>69.7</b>	63.6-75.7	49,247	<b>67.8</b>	62.9-72.7
\$25,000 - 34,999	13,320	<b>59.2</b>	49.7-68.6	17,008	<b>72.7</b>	64.8-80.5	30,329	<b>66.0</b>	59.8-72.2
\$35,000 - 49,999	17,750	<b>72.9</b>	64.9-81.0	13,825	<b>67.7</b>	59.2-76.2	31,574	<b>70.6</b>	64.7-76.4
\$50,000 - 74,999	9,609	<b>*70.6</b>	60.4-80.8	11,003	<b>70.7</b>	61.3-80.2	20,612	<b>70.7</b>	63.7-77.6
\$75,000+	12,953	<b>73.3</b>	65.4-81.3	7,856	<b>75.3</b>	65.7-84.9	20,809	<b>74.1</b>	67.9-80.2

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

### Pneumonia Vaccine

<b>Definition</b>	Responding “Yes” to the question, “A pneumonia shot or pneumococcal vaccine is usually given only once or twice in a person’s lifetime and is different from the flu shot. Have you ever had a pneumonia shot?”
<b>Prevalence</b>	<b>WV: 39.5%</b> (95% CI: 38.2-40.9) <b>U.S.: 34.8%</b> (95% CI: 34.5-35.0) The West Virginia prevalence of ever had a pneumonia vaccine was significantly higher than the U.S. prevalence. West Virginia ranked the 3 <sup>rd</sup> highest among the 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 38.7% (95% CI: 36.7-40.8) <b>Women:</b> 40.3% (95% CI: 38.5-42.1) There was no gender difference in the prevalence of ever had a pneumonia vaccine.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 39.6% (95% CI: 38.2-40.9) <b>Black, Non-Hispanic:</b> 42.3% (95% CI: 33.5-51.2) <b>Other, Non-Hispanic:</b> *39.8% (95% CI: 27.9-51.7) <b>Multiracial, Non-Hispanic:</b> *43.1% (95% CI: 31.3-54.9) <b>Hispanic:</b> *23.3% (95% CI: 9.6-37.0) There was no race/ethnicity difference in the prevalence of ever had a pneumonia vaccine. <small>* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</small>
<b>Age</b>	The prevalence of ever had a pneumonia vaccine was significantly higher among those aged 65 and older (72.7%) than among all other age groups.
<b>Education</b>	The prevalence of ever had a pneumonia vaccine was significantly higher among those with less than a high school education (45.5%) than the prevalence among those with some college (38.2%) or college graduates (33.7%).
<b>Household Income</b>	The prevalence of ever had a pneumonia vaccine was significantly lower among those with an annual household income of \$75,000 or more (25.7%) than all other income groups.

## CHAPTER 18: IMMUNIZATION

**Table 18.3 Prevalence of Ever Had a Pneumonia Vaccine by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	250,470	<b>38.7</b>	36.7-40.8	279,698	<b>40.3</b>	38.5-42.1	530,168	<b>39.5</b>	38.2-40.9
<b>Age</b>									
18-24	23,392	<b>35.3</b>	26.1-44.5	13,797	<b>21.1</b>	14.1-28.1	37,189	<b>28.2</b>	22.3-34.1
25-34	18,768	<b>20.3</b>	15.0-25.7	15,020	<b>16.3</b>	11.7-20.8	33,788	<b>18.3</b>	14.8-21.8
35-44	19,437	<b>19.0</b>	14.7-23.3	20,958	<b>20.1</b>	15.9-24.2	40,395	<b>19.5</b>	16.5-22.5
45-54	30,950	<b>27.8</b>	23.4-32.2	36,286	<b>32.3</b>	28.2-36.4	67,237	<b>30.1</b>	27.0-33.1
55-64	51,296	<b>41.6</b>	37.6-45.6	54,562	<b>42.4</b>	38.7-46.1	105,858	<b>42.0</b>	39.3-44.7
65+	105,781	<b>71.0</b>	67.6-74.4	136,700	<b>74.0</b>	71.2-76.7	242,481	<b>72.7</b>	70.5-74.8
<b>Education</b>									
Less than H.S.	39,193	<b>41.1</b>	35.2-47.1	51,315	<b>49.4</b>	43.9-55.0	90,508	<b>45.5</b>	41.4-49.5
H.S. or G.E.D.	108,816	<b>39.8</b>	36.5-43.0	109,887	<b>42.1</b>	39.1-45.0	218,703	<b>40.9</b>	38.7-43.1
Some Post-H.S.	61,087	<b>37.9</b>	33.6-42.3	79,143	<b>38.3</b>	35.0-41.7	140,231	<b>38.2</b>	35.5-40.8
College Graduate	41,373	<b>35.6</b>	32.1-39.1	38,923	<b>31.9</b>	28.8-35.1	80,296	<b>33.7</b>	31.4-36.1
<b>Income</b>									
Less than \$15,000	27,833	<b>41.8</b>	35.3-48.4	39,448	<b>47.8</b>	42.5-53.2	67,281	<b>45.2</b>	41.0-49.3
\$15,000 - 24,999	45,931	<b>42.7</b>	37.3-48.2	62,175	<b>47.3</b>	43.0-51.7	108,106	<b>45.3</b>	41.8-48.7
\$25,000 - 34,999	30,972	<b>43.5</b>	37.4-49.6	31,788	<b>42.7</b>	37.0-48.3	62,760	<b>43.1</b>	38.9-47.2
\$35,000 - 49,999	33,102	<b>40.5</b>	34.6-46.3	32,511	<b>39.4</b>	34.2-44.6	65,612	<b>39.9</b>	36.0-43.8
\$50,000 - 74,999	29,547	<b>34.1</b>	28.7-39.5	23,990	<b>31.1</b>	26.3-35.9	53,536	<b>32.7</b>	29.0-36.4
\$75,000+	33,176	<b>25.6</b>	22.0-29.3	26,934	<b>25.9</b>	22.1-29.6	60,110	<b>25.7</b>	23.1-28.4

### Pneumonia Vaccine, Ages 65 and Older

<b>Definition</b>	Responding “Yes” to the question, “A pneumonia shot or pneumococcal vaccine is usually given only once or twice in a person’s lifetime and is different from the flu shot. Have you ever had a pneumonia shot?” Restricted to adults aged 65 and older.
<b>Prevalence</b>	<b>WV: 72.7%</b> (95% CI: 70.5-74.8) <b>U.S.: 72.0%</b> (95% CI: 71.5-72.4) The West Virginia prevalence of ever had a pneumonia vaccine among those aged 65 and older was similar to the U.S. prevalence. West Virginia ranked the 31 <sup>st</sup> highest among the 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 71.0% (95% CI: 67.6-74.4) <b>Women:</b> 74.0% (95% CI: 71.2-76.7) There was no gender difference in the prevalence of ever had a pneumonia vaccine among those aged 65 and older.
<b>Race/Ethnicity</b>	No race/ethnicity statistics are reported due to unreliable estimates.
<b>Education</b>	There was no educational attainment difference in the prevalence of ever had a pneumonia vaccine among those aged 65 and older.
<b>Household Income</b>	There was no annual household income difference in the prevalence of ever had a pneumonia vaccine among those aged 65 and older.

## CHAPTER 18: IMMUNIZATION

**Table 18.4 Prevalence of Ever Had a Pneumonia Vaccine Among Those Aged 65 and Older by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	105,781	<b>71.0</b>	67.6-74.4	136,700	<b>74.0</b>	71.2-76.7	242,481	<b>72.7</b>	70.5-74.8
<b>Education</b>									
Less than H.S.	16,021	<b>64.7</b>	54.8-74.6	24,116	<b>72.1</b>	64.5-79.6	40,137	<b>68.9</b>	62.8-75.0
H.S. or G.E.D.	46,630	<b>71.1</b>	65.9-76.3	62,995	<b>74.1</b>	70.0-78.2	109,625	<b>72.8</b>	69.5-76.0
Some Post-H.S.	22,015	<b>71.7</b>	64.3-79.1	32,709	<b>74.1</b>	68.7-79.5	54,725	<b>73.1</b>	68.7-77.5
College Graduate	21,115	<b>76.1</b>	70.8-81.4	16,451	<b>76.0</b>	69.6-82.3	37,565	<b>76.0</b>	72.0-80.1
<b>Income</b>									
Less than \$15,000	7,855	<b>*66.5</b>	53.8-79.3	15,803	<b>71.4</b>	63.2-79.7	23,658	<b>69.7</b>	62.8-76.7
\$15,000 - 24,999	21,022	<b>71.3</b>	63.0-79.6	31,587	<b>78.4</b>	73.0-83.7	52,609	<b>75.4</b>	70.7-80.1
\$25,000 - 34,999	14,062	<b>64.0</b>	54.5-73.4	17,171	<b>73.6</b>	65.6-81.5	31,233	<b>68.9</b>	62.7-75.1
\$35,000 - 49,999	17,122	<b>71.0</b>	62.5-79.4	15,052	<b>75.0</b>	67.1-82.9	32,174	<b>72.8</b>	66.9-78.7
\$50,000 - 74,999	10,153	<b>75.0</b>	65.3-84.7	11,636	<b>75.9</b>	66.5-85.3	21,789	<b>75.5</b>	68.8-82.2
\$75,000+	11,741	<b>67.3</b>	58.9-75.7	8,780	<b>85.0</b>	76.6-93.3	20,521	<b>73.9</b>	67.6-80.1

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



### Tetanus Vaccine

<b>Definition</b>	Responding “Yes, received Tdap,” “Yes, received tetanus shot but not Tdap,” or “Yes, received tetanus shot but not sure what type” to the question, “Since 2005, have you had a tetanus shot?”
<b>Prevalence</b>	<b>WV: 62.3%</b> (95% CI: 60.9-63.7) <b>U.S.: 59.9%</b> (95% CI: 59.6-60.2) The West Virginia prevalence of had tetanus vaccine was significantly higher than the U.S. prevalence. West Virginia ranked the 21 <sup>st</sup> highest among the 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 67.6% (95% CI: 65.6-69.6) <b>Women:</b> 57.1% (95% CI: 55.2-59.0) The prevalence of had a tetanus vaccine was significantly higher among men than women.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 62.5% (95% CI: 61.0-63.9) <b>Black, Non-Hispanic:</b> 59.8% (95% CI: 50.7-68.8) <b>Other, Non-Hispanic:</b> *58.4% (95% CI: 45.6-71.2) <b>Multiracial, Non-Hispanic:</b> *70.3% (95% CI: 59.5-81.2) <b>Hispanic:</b> *51.9% (95% CI: 34.0-69.7) There was no race/ethnic difference in the prevalence of had a tetanus vaccine. * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.
<b>Age</b>	The prevalence of had a tetanus vaccine generally decreased with age. The prevalence of had a tetanus vaccine was significantly lower among those aged 65 and older (45.5%) than among all other age groups. The prevalence was highest among those aged 18-24 (81.0%) and was significantly higher than the prevalence among those aged 35 and older.
<b>Education</b>	The prevalence of had a tetanus vaccine was significantly higher among college graduates (69.0%) than among those with less than a high school education (54.2%) and those with a high school education (59.6%).
<b>Household Income</b>	The prevalence of had a tetanus vaccine was significantly higher among those earning \$75,000 or more per year (70.9%) than among those with an annual household income of less than \$50,000.

## CHAPTER 18: IMMUNIZATION

**Table 18.5 Prevalence of Had a Tetanus Vaccine by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	423,422	<b>67.6</b>	65.6-69.6	369,200	<b>57.1</b>	55.2-59.0	792,622	<b>62.3</b>	60.9-63.7
<b>Age</b>									
18-24	62,139	<b>81.5</b>	74.3-88.6	55,167	<b>80.4</b>	73.8-87.0	117,306	<b>81.0</b>	76.1-85.8
25-34	74,779	<b>77.7</b>	72.3-83.0	65,859	<b>70.5</b>	65.5-75.6	140,638	<b>74.2</b>	70.5-77.9
35-44	72,634	<b>73.0</b>	68.0-78.1	62,504	<b>64.1</b>	58.9-69.3	135,138	<b>68.6</b>	65.0-72.3
45-54	72,510	<b>69.9</b>	65.1-74.7	56,308	<b>54.5</b>	50.0-59.1	128,818	<b>62.3</b>	58.9-65.6
55-64	70,702	<b>61.2</b>	57.1-65.3	61,143	<b>52.2</b>	48.3-56.1	131,845	<b>56.6</b>	53.8-59.5
65+	69,024	<b>52.0</b>	48.1-55.8	65,136	<b>40.2</b>	37.0-43.4	134,159	<b>45.5</b>	43.0-48.0
<b>Education</b>									
Less than H.S.	56,376	<b>59.2</b>	53.1-65.4	44,788	<b>48.9</b>	43.1-54.8	101,164	<b>54.2</b>	49.9-58.4
H.S. or G.E.D.	178,979	<b>67.9</b>	64.7-71.2	124,755	<b>50.7</b>	47.5-53.9	303,734	<b>59.6</b>	57.3-61.9
Some Post-H.S.	108,502	<b>71.0</b>	66.9-75.1	121,860	<b>62.5</b>	59.0-66.0	230,363	<b>66.3</b>	63.6-68.9
College Graduate	79,434	<b>69.6</b>	66.1-73.1	77,688	<b>68.5</b>	65.1-71.8	157,123	<b>69.0</b>	66.6-71.5
<b>Income</b>									
Less than \$15,000	40,652	<b>63.0</b>	56.5-69.6	46,015	<b>58.7</b>	53.3-64.1	86,667	<b>60.7</b>	56.5-64.9
\$15,000 - 24,999	71,775	<b>66.9</b>	61.8-71.9	66,652	<b>54.7</b>	50.1-59.2	138,427	<b>60.4</b>	57.0-63.8
\$25,000 - 34,999	38,992	<b>59.5</b>	53.2-65.9	36,061	<b>52.4</b>	46.4-58.5	75,053	<b>55.9</b>	51.5-60.3
\$35,000 - 49,999	51,153	<b>66.0</b>	60.2-71.9	45,564	<b>57.1</b>	51.7-62.5	96,717	<b>61.5</b>	57.5-65.5
\$50,000 - 74,999	60,878	<b>72.4</b>	66.7-78.2	42,400	<b>58.2</b>	52.5-63.9	103,278	<b>65.8</b>	61.8-69.9
\$75,000+	91,061	<b>71.9</b>	67.8-76.0	64,901	<b>69.4</b>	65.1-73.8	155,962	<b>70.9</b>	67.9-73.9

### Tdap Vaccine

<b>Definition</b>	Respondents who reported they had a tetanus vaccine and responding “Yes, received Tdap” to the question, “Since 2005, have you had a tetanus shot?”
<b>Prevalence</b>	<b>WV: 35.8%</b> (95% CI: 33.9-37.6) <b>U.S.: 39.0%</b> (95% CI: 38.6-39.4) The West Virginia prevalence of had the Tdap vaccine was significantly lower than the U.S. prevalence. West Virginia ranked the 36 <sup>th</sup> highest among the 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 29.6% (95% CI: 27.0-32.1) <b>Women:</b> 42.9% (95% CI: 40.3-45.5) The prevalence of had the Tdap vaccine was significantly higher among women than men.
<b>Race/Ethnicity</b>	<b>No race/ethnicity statistics are reported due to unreliable estimates.</b>
<b>Age</b>	The prevalence of had the Tdap vaccine was significantly higher among those aged 18-24 (49.3%) than among those aged 35 and older. The prevalence of had the Tdap vaccine was significantly lower among those aged 65 and older (25.9%) than among those 18-44.
<b>Education</b>	The prevalence of had the Tdap vaccine was significantly higher among college graduates (48.4%) than among all other educational attainment groups.
<b>Household Income</b>	The prevalence of had the Tdap vaccine was significantly higher among those with an annual household income of \$75,000 or more (41.5%) than among those earning less than \$15,000 a year (28.5%).

## CHAPTER 18: IMMUNIZATION

**Table 18.6 Prevalence of Had the Tdap Vaccine Among Those Who Had a Tetanus Vaccine by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	125,305	<b>29.6</b>	27.0-32.1	158,350	<b>42.9</b>	40.3-45.5	283,654	<b>35.8</b>	33.9-37.6
<b>Age</b>									
18-24	27,444	<b>44.2</b>	34.5-53.8	30,370	<b>55.1</b>	45.9-64.2	57,815	<b>49.3</b>	42.6-56.0
25-34	27,535	<b>36.8</b>	29.9-43.8	34,998	<b>53.1</b>	46.3-60.0	62,533	<b>44.5</b>	39.5-49.4
35-44	20,088	<b>27.7</b>	22.0-33.3	27,275	<b>43.6</b>	37.3-50.0	47,363	<b>35.0</b>	30.8-39.3
45-54	16,441	<b>22.7</b>	17.8-27.5	20,918	<b>37.1</b>	31.5-42.8	37,359	<b>29.0</b>	25.3-32.7
55-64	18,216	<b>25.8</b>	21.2-30.4	24,138	<b>39.5</b>	34.3-44.7	42,354	<b>32.1</b>	28.6-35.6
65+	15,113	<b>21.9</b>	17.6-26.2	19,687	<b>30.2</b>	25.7-34.8	34,801	<b>25.9</b>	22.8-29.1
<b>Education</b>									
Less than H.S.	14,732	<b>26.1</b>	18.4-33.8	15,261	<b>34.1</b>	25.7-42.4	29,992	<b>29.6</b>	24.0-35.3
H.S. or G.E.D.	49,664	<b>27.7</b>	23.7-31.8	42,220	<b>33.8</b>	29.4-38.3	91,884	<b>30.3</b>	27.2-33.3
Some Post-H.S.	28,941	<b>26.7</b>	21.6-31.8	56,851	<b>46.7</b>	41.8-51.5	85,793	<b>37.2</b>	33.6-40.9
College Graduate	31,967	<b>40.2</b>	35.6-44.9	44,017	<b>56.7</b>	52.2-61.1	75,985	<b>48.4</b>	45.1-51.6
<b>Income</b>									
Less than \$15,000	9,721	<b>23.9</b>	15.9-31.9	14,999	<b>32.6</b>	25.7-39.5	24,720	<b>28.5</b>	23.3-33.8
\$15,000 - 24,999	22,114	<b>30.8</b>	23.9-37.7	28,273	<b>42.4</b>	35.9-49.0	50,386	<b>36.4</b>	31.6-41.2
\$25,000 - 34,999	11,746	<b>30.1</b>	22.2-38.0	14,793	<b>41.0</b>	32.2-49.9	26,539	<b>35.4</b>	29.4-41.3
\$35,000 - 49,999	13,643	<b>26.7</b>	20.1-33.3	23,033	<b>50.6</b>	43.2-57.9	36,677	<b>37.9</b>	32.7-43.1
\$50,000 - 74,999	17,202	<b>28.3</b>	22.0-34.6	19,455	<b>45.9</b>	38.2-53.6	36,657	<b>35.5</b>	30.5-40.5
\$75,000+	30,470	<b>33.5</b>	28.3-38.6	34,191	<b>52.7</b>	46.9-58.4	64,661	<b>41.5</b>	37.5-45.4

### Breast Cancer Screening

#### Definition

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

Responding “Yes” to the question, “A mammogram is an x-ray of each breast to look for breast cancer. Have you ever had a mammogram?” and responding “Within the past 2 years” to the question, “How long has it been since you had your last mammogram?” Restricted to women aged 40 and older.

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

Responding “Yes” to the question, “A mammogram is an x-ray of each breast to look for breast cancer. Have you ever had a mammogram?” and responding “Within the past 2 years” to the question, “How long has it been since you had your last mammogram?” Restricted to women aged 50-74, per recommended guidelines.

#### Prevalence

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

**WV: 72.5%** (95% CI: 70.6-74.4)

**U.S.: 72.6%** (95% CI: 72.2-73.1)

The West Virginia prevalence of had a mammogram in the past 2 years among women aged 40 and older was similar to the U.S. prevalence. West Virginia ranked the 26<sup>th</sup> highest among the 54 BRFSS participants.

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

**WV: 77.8%** (95% CI: 75.7-79.9)

**U.S.: 78.4%** (95% CI: 77.9-78.9)

The West Virginia prevalence of had a mammogram in the past 2 years among women aged 50-74 was similar to the U.S. prevalence. West Virginia ranked the 26<sup>th</sup> highest among the 54 BRFSS participants.

#### Race/Ethnicity

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

**White, Non-Hispanic:** 72.5% (95% CI: 70.5-74.4)

**Black, Non-Hispanic:** 79.5% (95% CI: 70.0-89.0)

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

**White, Non-Hispanic:** 77.8% (95% CI: 75.6-80.0)

**Black, Non-Hispanic:** \*83.8% (95% CI: 73.1-94.4)

There was no race/ethnic difference comparing White, Non-Hispanic women to Black, Non-Hispanic women in the prevalence of either screening measure. Data for other race/ethnicity were not reported due to unreliable estimates.

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

#### Age

The prevalence of had a mammogram in the past 2 years among women aged 40 and older was significantly higher among those aged 55-64 (78.8%) than among those aged 40-54. There was no age difference in the prevalence of had a mammogram in the past 2 years among women aged 50-74.

## CHAPTER 19: CANCER SCREENING

**Household Income** The prevalence of had a mammogram in the past 2 years among women aged 40 and older was significantly lower among those with an annual household income of less than \$15,000 (63.7%) than among those earning \$75,000 or more per year (83.5%). The prevalence of had a mammogram in the past 2 years among women aged 50-74 was significantly lower among those with an annual household income of less than \$15,000 (67.3%) than among those earning \$75,000 or more per year (87.2%).

**Table 19.1 Prevalence of Had a Mammogram in the Past 2 Years by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Women Aged 40 and Older			Women Aged 50-74		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	346,527	<b>72.5</b>	70.6-74.4	236,435	<b>77.8</b>	75.7-79.9
<b>Age</b>						
35-44	29,989	<b>55.2</b>	48.1-62.4			
45-54	81,118	<b>71.2</b>	67.2-75.2	51,449	<b>74.1</b>	68.9-79.3
55-64	101,869	<b>78.8</b>	75.7-81.8	101,869	<b>78.8</b>	75.7-81.8
65+	133,551	<b>74.0</b>	71.3-76.8	83,117	<b>79.0</b>	75.7-82.3
<b>Education</b>						
Less than H.S.	47,121	<b>64.2</b>	58.5-69.9	31,246	<b>70.5</b>	63.6-77.4
H.S. or G.E.D.	146,119	<b>73.7</b>	70.7-76.6	99,084	<b>78.2</b>	74.9-81.5
Some Post-H.S.	93,997	<b>72.7</b>	69.2-76.3	67,633	<b>77.9</b>	74.1-81.7
College Graduate	58,871	<b>77.0</b>	73.6-80.4	38,363	<b>83.6</b>	80.0-87.2
<b>Income</b>						
Less than \$15,000	35,394	<b>63.7</b>	57.9-69.6	23,020	<b>67.3</b>	60.2-74.4
\$15,000 - 24,999	62,535	<b>69.4</b>	64.9-73.8	37,906	<b>75.5</b>	70.2-80.7
\$25,000 - 34,999	39,751	<b>74.3</b>	68.9-79.7	28,834	<b>77.1</b>	71.2-83.0
\$35,000 - 49,999	44,943	<b>75.5</b>	70.3-80.6	33,936	<b>79.8</b>	74.4-85.2
\$50,000 - 74,999	38,479	<b>70.8</b>	65.0-76.7	28,159	<b>78.9</b>	72.6-85.2
\$75,000+	55,760	<b>83.5</b>	79.8-87.3	38,725	<b>87.2</b>	83.4-90.9

### Cervical Cancer Screening

#### Definition

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

Responding “Yes” to the question, “A Pap test is a test for cancer of the cervix. Have you ever had a Pap test?” Restricted to women aged 18 and older.

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

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

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

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

#### Prevalence

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

**WV: 93.0%** (95% CI: 91.8-94.1)

**U.S.: 89.3%** (95% CI: 89.0-89.6)

The West Virginia prevalence of ever had a Pap test among women aged 18 and older was significantly higher than the U.S. prevalence. West Virginia ranked the 2<sup>nd</sup> highest among the 54 BRFSS participants.

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

**WV: 79.5%** (95% CI: 77.3-81.7)

**U.S.: 80.1%** (95% CI: 79.6-80.6)

The West Virginia prevalence of had a Pap test in the past 3 years among women aged 21-65 was similar to the U.S. prevalence. West Virginia ranked the 24<sup>th</sup> lowest among the 54 BRFSS participants.

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

**WV: 44.8%** (95% CI: 42.6-47.0)

**U.S.: 41.4%** (95% CI: 40.9-41.8)

The West Virginia prevalence of ever had a HPV test among women aged 18 and older was significantly higher than the U.S. prevalence. West Virginia ranked the 10<sup>th</sup> highest among the 54 BRFSS participants.

#### Race/Ethnicity

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

**White, Non-Hispanic:** 93.2% (95% CI: 92.1-94.4)

**Black, Non-Hispanic:** 90.4% (95% CI: 82.5-98.3)

**Other, Non-Hispanic:** \*85.2% (95% CI: 71.4-99.1)

**Multiracial, Non-Hispanic:** 95.5% (95% CI: 88.8-100.0)

**Hispanic:** \*80.4% (95% CI: 59.4-100.0)

There was no race/ethnic difference in the prevalence of ever having a Pap test. No race/ethnicity statistics are reported for Pap test within 3 years, and ever had HPV test, due to unreliable estimates.

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

### Education

The prevalence of ever had a Pap test among women aged 18 and older was significantly lower among those with less than a high school education (89.1%) than among college graduates (95.5%). The prevalence of had a Pap test in the past 3 years among women aged 21-65 was significantly lower among those with less than a high school education (69.2%) than among those with some college (83.5%) and college graduates (88.0%). The prevalence of ever had a HPV test among women aged 18 and older was significantly lower among those with less than a high school education (41.7%) than among college graduates (55.4%).

### Household Income

The prevalence of ever had a Pap test among women aged 18 and older was significantly lower among those with an annual household income of less than \$25,000 than among those earning \$50,000 or more per year. The prevalence of had a Pap test in the past 3 years among women aged 21-65 was significantly lower among those with an annual household income of less than \$25,000 (75.6%) than among those earning \$75,000 or more per year (90.0%). There was no annual household income difference in the prevalence of ever had a HPV test among women aged 18 and older.



## CHAPTER 19: CANCER SCREENING

**Table 19.2 Prevalence of Cervical Cancer Screening by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Ever Had a Pap Test (Women Aged 18 and Older)			Had a Pap Test in the Past 3 Years (Women Aged 21-65)			Ever Had a HPV Test (Women Aged 18 and Older)		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	672,621	<b>93.0</b>	91.8-94.1	309,526	<b>79.5</b>	77.3-81.7	232,421	<b>44.8</b>	42.6-47.0
<b>Age</b>									
18-24	49,534	<b>64.3</b>	56.8-71.9	29,948	<b>72.8</b>	62.9-82.6	32,264	<b>48.9</b>	40.4-57.4
25-34	98,037	<b>96.0</b>	93.9-98.1	82,452	<b>87.1</b>	83.3-90.8	56,961	<b>74.8</b>	69.6-79.9
35-44	104,407	<b>96.6</b>	94.5-98.6	70,242	<b>79.4</b>	74.7-84.2	54,543	<b>67.5</b>	61.8-73.1
45-54	112,532	<b>97.7</b>	96.3-99.1	59,891	<b>75.7</b>	71.0-80.3	38,221	<b>47.6</b>	42.4-52.7
55-64	126,957	<b>97.7</b>	96.7-98.8	61,584	<b>78.0</b>	74.0-82.1	31,987	<b>36.0</b>	31.7-40.3
65+	175,970	<b>94.7</b>	93.3-96.1	5,409	<b>78.0</b>	65.5-90.5	17,351	<b>14.0</b>	11.5-16.5
<b>Education</b>									
Less than H.S.	93,877	<b>89.1</b>	84.9-93.2	33,728	<b>69.2</b>	61.0-77.5	32,014	<b>41.7</b>	35.1-48.3
H.S. or G.E.D.	256,168	<b>93.2</b>	91.4-94.9	97,725	<b>73.9</b>	69.8-78.0	69,231	<b>36.4</b>	32.8-39.9
Some Post-H.S.	200,261	<b>93.1</b>	91.0-95.2	99,188	<b>83.5</b>	80.1-87.0	78,783	<b>50.1</b>	46.0-54.2
College Graduate	121,625	<b>95.5</b>	93.7-97.3	78,729	<b>88.0</b>	85.0-91.1	52,234	<b>55.4</b>	51.3-59.5
<b>Income</b>									
Less than \$15,000	79,199	<b>90.7</b>	87.3-94.2	34,456	<b>75.6</b>	68.9-82.3	29,363	<b>45.1</b>	38.8-51.4
\$15,000 - 24,999	125,144	<b>92.1</b>	89.3-94.8	52,616	<b>75.6</b>	69.9-81.2	45,066	<b>43.4</b>	38.3-48.5
\$25,000 - 34,999	72,356	<b>96.1</b>	93.1-99.1	27,863	<b>78.2</b>	70.6-85.9	23,526	<b>43.0</b>	36.2-49.9
\$35,000 - 49,999	81,158	<b>94.1</b>	91.0-97.3	38,873	<b>79.9</b>	74.1-85.7	27,503	<b>44.7</b>	38.3-51.1
\$50,000 - 74,999	78,008	<b>97.3</b>	95.2-99.3	41,492	<b>84.1</b>	78.5-89.6	30,498	<b>55.6</b>	49.1-62.0
\$75,000+	104,568	<b>96.8</b>	94.9-98.7	67,392	<b>90.0</b>	86.7-93.4	39,620	<b>53.0</b>	47.7-58.4

### Prostate Cancer Screening

#### Definition

##### *Doctor discussed advantages of PSA test*

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

##### *Doctor discussed disadvantages of PSA test*

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

#### Prevalence

##### *Doctor discussed advantages of PSA test*

**WV: 52.9%** (95% CI: 50.6-55.2)

**U.S.: 57.8%** (95% CI: 57.3-58.3)

The West Virginia prevalence of doctor discussed advantages of PSA test among men aged 40 and older was significantly lower than the U.S. prevalence. West Virginia ranked the 48<sup>th</sup> highest among the 54 BRFSS participants.

##### *Doctor discussed disadvantages of PSA test*

**WV: 31.8%** (95% CI: 29.6-33.9)

**U.S.: 26.8%** (95% CI: 26.3-27.2)

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

#### Race/Ethnicity

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

#### Age

Both the prevalence of doctor discussed advantages of PSA test and the prevalence of doctor discussed disadvantages of PSA test were significantly higher among those aged 55 and older than among those aged 54 and younger.

#### Education

The prevalence of doctor discussed advantages of PSA test was significantly lower among those with less than a high school education (40.9%) than among all other educational attainment groups. There was no education difference in the prevalence of doctor discussed disadvantages of PSA test.

#### Household Income

The prevalence of doctor discussed advantages of PSA test was significantly lower among those with an annual household income less than \$15,000 (40.4%) than among those earning \$50,000 or more. There was no income difference in the prevalence of doctor discussed disadvantages of PSA test.

## CHAPTER 19: CANCER SCREENING

**Table 19.3 Prevalence of Discussed PSA Test with Doctor Among Men Aged 40 and Older by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Discussed Advantages of PSA Test			Discussed Disadvantages of PSA Test		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	230,672	<b>52.9</b>	50.6-55.2	137,507	<b>31.8</b>	29.6-33.9
<b>Age</b>						
35-44	13,114	<b>24.4</b>	17.7-31.1	9,198	<b>17.2</b>	11.5-22.9
45-54	44,717	<b>39.9</b>	35.1-44.6	25,907	<b>23.0</b>	18.9-27.1
55-64	76,203	<b>62.2</b>	58.2-66.2	44,694	<b>37.0</b>	33.0-40.9
65+	95,689	<b>65.9</b>	62.3-69.5	57,229	<b>39.9</b>	36.2-43.5
<b>Education</b>						
Less than H.S.	30,443	<b>40.9</b>	34.6-47.2	22,018	<b>29.1</b>	23.3-34.9
H.S. or G.E.D.	93,300	<b>51.1</b>	47.5-54.7	55,571	<b>30.8</b>	27.5-34.1
Some Post-H.S.	58,087	<b>57.0</b>	52.0-62.0	32,356	<b>32.0</b>	27.5-36.5
College Graduate	48,728	<b>64.1</b>	60.0-68.2	27,563	<b>36.7</b>	32.7-40.7
<b>Income</b>						
Less than \$15,000	19,230	<b>40.4</b>	33.3-47.5	12,497	<b>26.8</b>	20.4-33.2
\$15,000 - 24,999	34,361	<b>47.2</b>	41.3-53.0	21,421	<b>29.4</b>	24.2-34.6
\$25,000 - 34,999	26,854	<b>53.6</b>	46.7-60.4	15,047	<b>30.1</b>	23.8-36.4
\$35,000 - 49,999	31,759	<b>53.4</b>	47.0-59.8	15,661	<b>26.4</b>	20.9-32.0
\$50,000 - 74,999	36,124	<b>62.7</b>	56.4-69.0	20,107	<b>35.7</b>	29.7-41.8
\$75,000+	48,440	<b>56.6</b>	51.6-61.7	29,078	<b>33.9</b>	29.4-38.4

### Prostate Cancer Screening (continued)

#### Definition

##### *Doctor recommended having a PSA test*

Responding “Yes” to the question, “Has a doctor, nurse, or other health professional ever recommended that you have a PSA test?”

Restricted to men aged 40 and older.

##### *Had a PSA test in the past 2 years*

Responding “Yes” to the question, “Have you ever had a PSA test?” and responding “Within the past 2 years” to the question, “How long has it been since you had your last PSA test?”

Restricted to men aged 40 and older.

#### Prevalence

##### *Doctor recommended having a PSA test*

**WV: 52.5%** (95% CI: 50.2-54.8)

**U.S.: 50.7%** (95% CI: 50.2-51.2)

The West Virginia prevalence of doctor recommended having a PSA test among men aged 40 and older was similar to the U.S. prevalence. West Virginia ranked the 17<sup>th</sup> highest among the 54 BRFSS participants.

##### *Had a PSA test in the past 2 years*

**WV: 42.7%** (95% CI: 40.5-45.0)

**U.S.: 40.1%** (95% CI: 39.6-40.6)

The West Virginia prevalence of had a PSA test in the past 2 years among men aged 40 and older was similar to the U.S. prevalence. West Virginia ranked the 18<sup>th</sup> highest among the 54 BRFSS participants.

#### Race/Ethnicity

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

#### Age

The prevalence of doctor recommended having a PSA test was significantly higher among those aged 65 and older (69.3%) than among all other age groups. The prevalence of had a PSA test in the past 2 years was significantly higher among those aged 65 and older (62.1%) than among all other age groups.

#### Education

The prevalence of doctor recommended having a PSA test was significantly lower among those with less than a high school education (43.6%) than among those with some college (55.5%) and college graduates (60.1%). The prevalence of had a PSA test in the past 2 years was significantly lower among those with less than a high school education (27.8%) than among all other education groups.

## CHAPTER 19: CANCER SCREENING

**Household Income** The prevalence of doctor recommended having a PSA test was significantly lower among those with an annual household income of less than \$15,000 (38.4%) than among those earning \$25,000 or more per year. The prevalence of had a PSA test in the past 2 years among men aged 40 and older was significantly lower among those with an annual household income of less than \$15,000 (26.3%) than among those earning \$25,000 or more.

**Table 19.4 Prevalence of PSA Test Among Men Aged 40 and Older by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Doctor Recommended PSA Test			Had a PSA Test in the Past 2 Years		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	228,365	<b>52.5</b>	50.2-54.8	180,089	<b>42.7</b>	40.5-45.0
<b>Age</b>						
35-44	8,902	<b>16.9</b>	11.1-22.7	6,771	<b>13.2</b>	7.9-18.4
45-54	43,301	<b>38.6</b>	33.9-43.4	29,014	<b>26.0</b>	21.8-30.3
55-64	74,977	<b>61.1</b>	57.1-65.0	57,372	<b>48.4</b>	44.3-52.6
65+	100,533	<b>69.3</b>	65.7-72.8	86,932	<b>62.1</b>	58.4-65.9
<b>Education</b>						
Less than H.S.	33,327	<b>43.6</b>	37.3-49.9	20,369	<b>27.8</b>	22.1-33.5
H.S. or G.E.D.	92,991	<b>51.5</b>	47.9-55.1	77,407	<b>43.9</b>	40.3-47.5
Some Post-H.S.	56,227	<b>55.5</b>	50.5-60.5	43,287	<b>44.5</b>	39.6-49.5
College Graduate	45,706	<b>60.1</b>	55.9-64.3	38,912	<b>52.6</b>	48.4-56.9
<b>Income</b>						
Less than \$15,000	17,903	<b>38.4</b>	31.4-45.4	11,956	<b>26.3</b>	20.1-32.5
\$15,000 - 24,999	34,260	<b>47.1</b>	41.3-53.0	26,280	<b>37.6</b>	31.9-43.4
\$25,000 - 34,999	27,552	<b>54.8</b>	48.0-61.6	22,624	<b>46.0</b>	39.1-52.9
\$35,000 - 49,999	31,475	<b>54.3</b>	47.8-60.8	24,867	<b>43.2</b>	36.9-49.5
\$50,000 - 74,999	33,468	<b>58.2</b>	51.8-64.5	27,450	<b>48.7</b>	42.4-55.1
\$75,000+	46,079	<b>53.8</b>	48.8-58.8	39,433	<b>47.2</b>	42.3-52.2

## CHAPTER 19: 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.

##### *Had a FOBT in the past 3 years*

Responding “Yes” to the question, “A blood stool test is a test that may use a special kit at home to determine whether the stool contains blood. Have you ever had this test using a home kit?” and responding “Within the past 3 years” to the question, “How long has it been since you had your last blood stool test using a home kit?”

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

#### Prevalence

##### *Had a FOBT in the past year*

**WV: 10.0%** (95% CI: 9.0-11.1)

**U.S.: 10.6%** (95% CI: 10.3-10.9)

The West Virginia prevalence of had a FOBT in the past year among adults aged 50-75 was similar to the U.S. prevalence. West Virginia ranked the 12<sup>th</sup> highest among the 54 BRFSS participants.

##### *Had a FOBT in the past 3 years*

**WV: 16.8%** (95% CI: 15.5-18.2)

**U.S.: 17.5%** (95% CI: 17.2-17.8)

The West Virginia prevalence of had a FOBT in the past 3 years among adults aged 50-75 was similar to the U.S. prevalence. West Virginia ranked the 13<sup>th</sup> highest among the 54 BRFSS participants.

#### Gender

##### *Had a FOBT in the past year*

**Men: 10.9%** (95% CI: 9.2-12.6)

**Women: 9.2%** (95% CI: 7.9-10.6)

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

##### *Had a FOBT in the past 3 years*

**Men: 17.3%** (95% CI: 15.3-19.3)

**Women: 16.4%** (95% CI: 14.6-18.1)

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

#### Race/Ethnicity

##### *Had a FOBT in the past 3 years*

**White, Non-Hispanic: 16.6%** (95% CI: 15.3-18.0)

**Black, Non-Hispanic: 18.3%** (95% CI: 10.1-26.6)

**Other, Non-Hispanic: \*17.3%** (95% CI: 4.2-30.3)

**Multiracial, Non-Hispanic: \*26.1%** (95% CI: 12.1-40.2)

**Hispanic: \*9.0%** (95% CI: 0.0-19.9)

## CHAPTER 19: CANCER SCREENING

**Race/Ethnicity (cont'd)** There was no race/ethnic difference in the prevalence of had a FOBT in past 3 years. Statistics for had a FOBT in past year are not reported due to unreliable estimates.

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

**Age** The prevalence of had a FOBT in the past year was significantly higher among those aged 65 and older (13.5%) than among all other age groups. The prevalence of had a FOBT in the past 3 years was also significantly higher among those aged 65 and older (22.9%) than among all other age groups.

**Education** There was no educational attainment difference in the prevalence of had a FOBT in the past year or the prevalence of had a FOBT in the past 3 years.

**Household Income** The prevalence of had a FOBT in the past year was significantly higher among those with an annual household income of \$15,000-\$24,999 (13.9%) than among those earning \$50,000 or more per year. The prevalence of had a FOBT in the past 3 years was significantly higher among those earning \$15,000-\$24,999 (20.9%) per year than among those earning \$75,000 or more (12.5%).

**Table 19.5 Prevalence of Had a FOBT in the Past Year Among Those Aged 50-75 by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	31,028	<b>10.9</b>	9.2-12.6	28,296	<b>9.2</b>	7.9-10.6	59,324	<b>10.0</b>	9.0-11.1
<b>Age</b>									
50-54	1,891	<b>*3.0</b>	1.0-5.1	4,562	<b>6.7</b>	3.9-9.4	6,453	<b>4.9</b>	3.2-6.7
55-64	14,144	<b>11.3</b>	8.7-13.9	10,693	<b>8.3</b>	6.4-10.3	24,836	<b>9.8</b>	8.2-11.4
65-75	14,993	<b>15.4</b>	12.2-18.6	13,041	<b>11.8</b>	9.4-14.3	28,035	<b>13.5</b>	11.5-15.5
<b>Education</b>									
Less than H.S.	5,406	<b>11.6</b>	6.8-16.3	5,096	<b>11.4</b>	7.1-15.8	10,502	<b>11.5</b>	8.2-14.7
H.S. or G.E.D.	13,418	<b>10.9</b>	8.2-13.6	12,589	<b>9.7</b>	7.5-11.9	26,007	<b>10.3</b>	8.6-12.0
Some Post-H.S.	7,648	<b>11.6</b>	8.3-15.0	5,652	<b>6.6</b>	4.3-8.8	13,300	<b>8.8</b>	6.8-10.7
College Graduate	4,556	<b>9.4</b>	6.5-12.2	4,958	<b>10.6</b>	7.8-13.5	9,514	<b>10.0</b>	8.0-12.0
<b>Income</b>									
Less than \$15,000	4,413	<b>13.4</b>	7.9-18.9	4,045	<b>11.6</b>	7.1-16.0	8,458	<b>12.5</b>	8.9-16.0
\$15,000 - 24,999	7,155	<b>15.6</b>	10.3-20.8	6,372	<b>12.4</b>	8.7-16.0	13,528	<b>13.9</b>	10.7-17.0
\$25,000 - 34,999	4,365	<b>12.5</b>	7.5-17.4	2,758	<b>7.3</b>	3.5-11.1	7,123	<b>9.8</b>	6.7-12.9
\$35,000 - 49,999	3,810	<b>9.5</b>	5.6-13.5	4,947	<b>11.4</b>	7.2-15.6	8,756	<b>10.5</b>	7.6-13.4
\$50,000 - 74,999	3,681	<b>10.0</b>	5.6-14.3	1,581	<b>*4.4</b>	1.8-7.0	5,262	<b>7.2</b>	4.6-9.8
\$75,000+	3,610	<b>6.9</b>	4.1-9.6	3,170	<b>7.2</b>	4.4-10.0	6,780	<b>7.0</b>	5.0-9.0

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

## CHAPTER 19: CANCER SCREENING

**Table 19.6 Prevalence of Had a FOBT in the Past 3 Years Among Those Aged 50-75 by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	49,402	<b>17.3</b>	15.3-19.3	50,259	<b>16.4</b>	14.6-18.1	99,661	<b>16.8</b>	15.5-18.2
<b>Age</b>									
50-54	3,820	<b>6.1</b>	3.3-9.0	7,032	<b>10.3</b>	6.9-13.6	10,852	<b>8.3</b>	6.1-10.5
55-64	21,646	<b>17.3</b>	14.2-20.3	19,525	<b>15.2</b>	12.6-17.8	41,171	<b>16.2</b>	14.2-18.2
65-75	23,936	<b>24.6</b>	20.8-28.3	23,701	<b>21.5</b>	18.4-24.6	47,638	<b>22.9</b>	20.5-25.4
<b>Education</b>									
Less than H.S.	8,407	<b>18.0</b>	12.2-23.7	8,236	<b>18.5</b>	13.1-23.8	16,643	<b>18.2</b>	14.3-22.1
H.S. or G.E.D.	19,939	<b>16.2</b>	13.1-19.3	22,505	<b>17.4</b>	14.5-20.2	42,444	<b>16.8</b>	14.7-18.9
Some Post-H.S.	11,882	<b>18.1</b>	14.0-22.2	11,566	<b>13.4</b>	10.4-16.5	23,448	<b>15.4</b>	13.0-17.9
College Graduate	9,175	<b>18.8</b>	14.9-22.7	7,952	<b>17.0</b>	13.5-20.5	17,126	<b>17.9</b>	15.3-20.6
<b>Income</b>									
Less than \$15,000	6,154	<b>18.7</b>	12.4-24.9	6,200	<b>17.8</b>	12.4-23.1	12,354	<b>18.2</b>	14.1-22.3
\$15,000 - 24,999	9,647	<b>21.0</b>	15.0-26.9	10,765	<b>20.9</b>	16.2-25.5	20,412	<b>20.9</b>	17.2-24.7
\$25,000 - 34,999	6,929	<b>19.8</b>	13.9-25.6	5,345	<b>14.2</b>	9.0-19.3	12,275	<b>16.9</b>	13.0-20.7
\$35,000 - 49,999	6,825	<b>17.1</b>	12.0-22.2	8,007	<b>18.4</b>	13.5-23.3	14,832	<b>17.8</b>	14.2-21.3
\$50,000 - 74,999	6,311	<b>17.1</b>	11.8-22.4	4,070	<b>11.3</b>	7.1-15.5	10,381	<b>14.2</b>	10.8-17.6
\$75,000+	6,427	<b>12.2</b>	8.5-15.9	5,708	<b>12.9</b>	9.1-16.7	12,135	<b>12.5</b>	9.9-15.2



### Colorectal Cancer Screening (continued)

<b>Definition</b>	<p>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?”</p> <p>Restricted to adults aged 50-75, per screening recommendations.</p>
<b>Prevalence</b>	<p><b>WV: 63.3%</b> (95% CI: 61.5-65.1) <b>U.S.: 63.3%</b> (95% CI: 62.9-63.7)</p> <p>The West Virginia prevalence of had a colonoscopy in the past 10 years among those aged 50-75 was similar to the U.S. prevalence. West Virginia ranked the 29<sup>th</sup> highest among the 54 BRFSS participants.</p>
<b>Gender</b>	<p><b>Men:</b> 61.3% (95% CI: 58.6-64.1) <b>Women:</b> 65.1% (95% CI: 62.7-67.5)</p> <p>There was no gender difference in the prevalence of had a colonoscopy in the past 10 years among those aged 50-75.</p>
<b>Race/Ethnicity</b>	<p>No race/ethnicity statistics are reported due to unreliable estimates.</p>
<b>Age</b>	<p>The prevalence of had a colonoscopy in the past 10 years was significantly higher among those aged 65 and older (73.9%) than among all other age groups.</p>
<b>Education</b>	<p>The prevalence of had a colonoscopy in the past 10 years was significantly higher among college graduates (74.5%) than among all other educational attainment groups. The prevalence of had a colonoscopy in the past 10 years was significantly lower among those with less than a high school education (48.3%) than among all other educational attainment levels.</p>
<b>Household Income</b>	<p>The prevalence of had a colonoscopy in the past 10 years was significantly lower among those with an annual household income of less than \$35,000 than among those earning \$50,000 or more per year.</p>

## CHAPTER 19: CANCER SCREENING

**Table 19.7 Prevalence of Had a Colonoscopy in the Past 10 Years Among Those Aged 50-75 by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	174,552	<b>61.3</b>	58.6-64.1	198,898	<b>65.1</b>	62.7-67.5	373,449	<b>63.3</b>	61.5-65.1
<b>Age</b>									
50-54	22,626	<b>36.7</b>	30.5-42.9	32,946	<b>48.1</b>	42.2-53.9	55,572	<b>42.7</b>	38.4-47.0
55-64	78,244	<b>62.6</b>	58.7-66.5	86,694	<b>67.6</b>	64.1-71.1	164,938	<b>65.2</b>	62.5-67.8
65-75	73,682	<b>75.2</b>	71.3-79.1	79,257	<b>72.8</b>	69.3-76.4	152,939	<b>73.9</b>	71.3-76.6
<b>Education</b>									
Less than H.S.	20,414	<b>44.4</b>	36.6-52.2	23,103	<b>52.4</b>	45.0-59.9	43,516	<b>48.3</b>	42.9-53.7
H.S. or G.E.D.	74,803	<b>61.2</b>	57.1-65.4	80,901	<b>62.8</b>	59.0-66.5	155,704	<b>62.0</b>	59.2-64.8
Some Post-H.S.	41,689	<b>62.7</b>	57.1-68.2	61,267	<b>71.0</b>	66.8-75.3	102,955	<b>67.4</b>	64.0-70.8
College Graduate	37,647	<b>76.4</b>	72.1-80.7	33,518	<b>72.5</b>	68.1-76.9	71,165	<b>74.5</b>	71.4-77.6
<b>Income</b>									
Less than \$15,000	15,925	<b>49.0</b>	40.5-57.5	18,744	<b>55.7</b>	48.3-63.2	34,670	<b>52.4</b>	46.7-58.1
\$15,000 - 24,999	26,623	<b>58.3</b>	51.2-65.3	30,334	<b>59.6</b>	53.6-65.5	56,957	<b>58.9</b>	54.4-63.5
\$25,000 - 34,999	18,459	<b>52.2</b>	44.3-60.1	24,265	<b>64.6</b>	58.0-71.2	42,724	<b>58.6</b>	53.4-63.8
\$35,000 - 49,999	24,211	<b>60.5</b>	53.0-68.0	27,912	<b>64.6</b>	58.2-70.9	52,123	<b>62.6</b>	57.7-67.5
\$50,000 - 74,999	25,365	<b>68.7</b>	61.8-75.7	26,083	<b>72.0</b>	65.4-78.6	51,448	<b>70.3</b>	65.6-75.1
\$75,000+	38,808	<b>72.3</b>	66.8-77.7	33,033	<b>75.0</b>	69.7-80.4	71,811	<b>73.5</b>	69.7-77.4

### Colorectal Cancer Screening (continued)

<b>Definition</b>	<p>Respondents who received one or more of the recommended colorectal cancer screening tests:</p> <ul style="list-style-type: none"><li>FOBT within the past year</li><li>sigmoidoscopy within the past 5 years and FOBT within the past 3 years</li><li>colonoscopy within the past 10 years</li></ul> <p>Restricted to adults aged 50-75, per screening recommendations.</p>
<b>Prevalence</b>	<p><b>WV: 67.0%</b> (95% CI: 65.2-68.7) <b>U.S.: 67.6%</b> (95% CI: 67.2-68.0)</p> <p>The West Virginia prevalence of met colorectal cancer screening recommendation among those aged 50-75 was similar to the U.S. prevalence. West Virginia ranked the 28<sup>th</sup> highest among the 54 BRFSS participants.</p>
<b>Gender</b>	<p><b>Men:</b> 65.4% (95% CI: 62.7-68.1) <b>Women:</b> 68.4% (95% CI: 66.1-70.8)</p> <p>There was no gender difference in the prevalence of met colorectal cancer screening recommendation among those aged 50-75.</p>
<b>Race/Ethnicity</b>	<p>No race/ethnicity statistics are reported due to unreliable estimates.</p>
<b>Age</b>	<p>The prevalence of met colorectal cancer screening recommendation was significantly higher among those aged 65 and older (78.2%) than among all other age groups.</p>
<b>Education</b>	<p>The prevalence of met colorectal cancer screening recommendation among those aged 50-75 was significantly lower among those with less than a high school education (54.6%) than among all other educational attainment levels. The prevalence of met colorectal cancer screening recommendation among those aged 50-75 was significantly higher among college graduates (77.2%) than among all other educational attainment groups.</p>
<b>Household Income</b>	<p>The prevalence of met colorectal cancer screening recommendation among those aged 50-75 was significantly lower among those with an annual household income of less than \$15,000 (57.5%) than among those earning \$50,000 or more per year.</p>

## CHAPTER 19: CANCER SCREENING

**Table 19.8 Prevalence of Met Colorectal Cancer Screening Recommendation Among Those Aged 50-75 by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	186,408	<b>65.4</b>	62.7-68.1	208,447	<b>68.4</b>	66.1-70.8	394,855	<b>67.0</b>	65.2-68.7
<b>Age</b>									
50-54	23,421	<b>38.0</b>	31.7-44.3	35,892	<b>52.6</b>	46.8-58.5	59,313	<b>45.7</b>	41.3-50.1
55-64	83,518	<b>66.9</b>	63.1-70.7	89,998	<b>70.4</b>	67.0-73.8	173,517	<b>68.7</b>	66.1-71.3
65-75	79,469	<b>80.5</b>	77.0-84.0	82,556	<b>76.0</b>	72.6-79.4	162,026	<b>78.2</b>	75.7-80.6
<b>Education</b>									
Less than H.S.	24,352	<b>52.8</b>	44.8-60.8	24,936	<b>56.5</b>	49.1-64.0	49,288	<b>54.6</b>	49.2-60.1
H.S. or G.E.D.	79,775	<b>65.2</b>	61.1-69.3	85,453	<b>66.7</b>	63.0-70.4	165,228	<b>66.0</b>	63.2-68.7
Some Post-H.S.	43,526	<b>65.4</b>	59.9-71.0	62,778	<b>73.0</b>	68.8-77.2	106,304	<b>69.7</b>	66.3-73.1
College Graduate	38,755	<b>78.2</b>	74.1-82.4	35,170	<b>76.1</b>	71.9-80.3	73,925	<b>77.2</b>	74.2-80.2
<b>Income</b>									
Less than \$15,000	17,631	<b>55.0</b>	46.3-63.7	20,186	<b>59.9</b>	52.5-67.3	37,817	<b>57.5</b>	51.8-63.2
\$15,000 - 24,999	29,924	<b>65.0</b>	58.3-71.8	32,604	<b>63.9</b>	58.0-69.8	62,528	<b>64.4</b>	60.0-68.9
\$25,000 - 34,999	21,006	<b>59.2</b>	51.4-67.0	25,132	<b>67.4</b>	60.9-73.9	46,139	<b>63.4</b>	58.3-68.5
\$35,000 - 49,999	25,662	<b>63.2</b>	55.7-70.6	29,731	<b>68.8</b>	62.7-74.9	55,393	<b>66.0</b>	61.2-70.8
\$50,000 - 74,999	26,060	<b>70.9</b>	64.0-77.7	26,712	<b>73.8</b>	67.2-80.3	52,771	<b>72.3</b>	67.6-77.0
\$75,000+	39,482	<b>73.5</b>	68.1-78.9	33,888	<b>77.4</b>	72.2-82.6	73,371	<b>75.3</b>	71.5-79.1



# West Virginia Behavioral Risk Factor Surveillance System Report

2016



## SECTION 4: CHRONIC DISEASES

### Heart Attack

<b>Definition</b>	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?”
<b>Prevalence</b>	<b>WV: 7.5%</b> (95% CI: 6.8-8.1) <b>U.S.: 4.3%</b> (95% CI: 4.2-4.5) The West Virginia prevalence of heart attack was significantly higher than the U.S. prevalence. West Virginia ranked 1 <sup>st</sup> highest among 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 9.2% (95% CI: 8.2-10.3) <b>Women:</b> 5.8% (95% CI: 5.0-6.5) The prevalence of heart attack was significantly higher among men than among women.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 7.4% (95% CI: 6.8-8.1) <b>Black, Non-Hispanic:</b> *5.8% (95% CI: 2.3-9.3) <b>Other, Non-Hispanic:</b> *9.5% (95% CI: 2.6-16.4) <b>Multiracial, Non-Hispanic:</b> 17.6% (95% CI: 7.8-27.5) <b>Hispanic:</b> *3.2% (95% CI: 0.0-7.6) There was no race/ethnicity difference in the prevalence of heart attack. <small>* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</small>
<b>Age</b>	The prevalence of heart attack was significantly higher among those aged 65 and older (15.5%) than among all other age groups.
<b>Education</b>	The prevalence of heart attack was significantly higher among those with less than a high school education (13.9%) than all other educational attainment groups. College graduates had the lowest heart attack prevalence (3.3%), significantly lower than all other educational attainment groups.
<b>Household Income</b>	The prevalence of heart attack was significantly higher among those with an annual household income of less than \$35,000 than the prevalence among those earning \$75,000 or more.

## CHAPTER 20: CARDIOVASCULAR DISEASE

**Table 20.1 Heart Attack Prevalence by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	66,014	<b>9.2</b>	8.2-10.3	43,024	<b>5.8</b>	5.0-6.5	109,038	<b>7.5</b>	6.8-8.1
<b>Age</b>									
18-24	0	<b>*0.0</b>	0.0-0.0	0	<b>*0.0</b>	0.0-0.0	0	<b>*0.0</b>	0.0-0.0
25-34	614	<b>*0.6</b>	0.0-1.3	1,329	<b>*1.3</b>	0.0-2.5	1,942	<b>*0.9</b>	0.2-1.6
35-44	4,480	<b>4.0</b>	1.8-6.2	2,909	<b>*2.6</b>	1.1-4.2	7,389	<b>3.3</b>	2.0-4.7
45-54	9,412	<b>8.1</b>	5.1-11.1	5,446	<b>4.6</b>	2.9-6.4	14,859	<b>6.3</b>	4.6-8.1
55-64	19,892	<b>15.3</b>	12.4-18.2	11,077	<b>8.3</b>	6.2-10.4	30,969	<b>11.8</b>	10.0-13.5
65+	31,617	<b>20.1</b>	17.3-23.0	22,036	<b>11.6</b>	9.6-13.6	53,652	<b>15.5</b>	13.8-17.2
<b>Education</b>									
Less than H.S.	19,134	<b>17.6</b>	13.4-21.8	11,431	<b>10.2</b>	7.5-13.0	30,565	<b>13.9</b>	11.3-16.4
H.S. or G.E.D.	27,137	<b>9.0</b>	7.5-10.6	17,936	<b>6.3</b>	5.0-7.6	45,073	<b>7.7</b>	6.7-8.8
Some Post-H.S.	13,801	<b>7.8</b>	5.9-9.7	10,876	<b>5.0</b>	3.6-6.3	24,678	<b>6.2</b>	5.1-7.3
College Graduate	5,942	<b>4.7</b>	3.3-6.0	2,624	<b>2.0</b>	1.2-2.8	8,566	<b>3.3</b>	2.6-4.1
<b>Income</b>									
Less than \$15,000	6,614	<b>8.9</b>	5.8-12.1	8,650	<b>9.5</b>	6.9-12.2	15,264	<b>9.3</b>	7.2-11.3
\$15,000 - 24,999	17,415	<b>14.8</b>	11.3-18.3	13,133	<b>9.3</b>	7.1-11.6	30,548	<b>11.8</b>	9.8-13.8
\$25,000 - 34,999	8,549	<b>11.8</b>	8.2-15.4	3,940	<b>5.2</b>	2.9-7.4	12,489	<b>8.4</b>	6.3-10.5
\$35,000 - 49,999	7,802	<b>8.7</b>	5.9-11.5	4,554	<b>5.2</b>	3.0-7.5	12,356	<b>7.0</b>	5.2-8.8
\$50,000 - 74,999	5,369	<b>5.7</b>	3.5-7.9	2,078	<b>*2.6</b>	1.0-4.2	7,447	<b>4.3</b>	2.9-5.7
\$75,000+	5,209	<b>3.6</b>	2.4-4.9	919	<b>*0.8</b>	0.1-1.5	6,128	<b>2.4</b>	1.6-3.2

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



### Angina or Coronary Heart Disease

<b>Definition</b>	Responding “Yes” to the question, “Has a doctor, nurse, or other health professional ever told you that you had angina or coronary heart disease?”
<b>Prevalence</b>	<b>WV: 8.0%</b> (95% CI: 7.3-8.6) <b>U.S.: 4.3%</b> (95% CI: 4.2-4.4) The West Virginia prevalence of coronary heart disease was significantly higher than the U.S. prevalence. West Virginia ranked 1 <sup>st</sup> highest among the 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 9.5% (95% CI: 8.4-10.5) <b>Women:</b> 6.5% (95% CI: 5.7-7.3) The prevalence of coronary heart disease was significantly higher among men than among women.
<b>Race/Ethnicity</b>	No race/ethnicity statistics are reported due to unreliable estimates.
<b>Age</b>	The prevalence of coronary heart disease was significantly higher among those aged 65 and older (18.2%) than among all other age groups.
<b>Education</b>	The prevalence of coronary heart disease was significantly higher among those with less than a high school education (10.5%) than among college graduates (4.5%). The prevalence of coronary heart disease was significantly lower among college graduates than among all other educational attainment levels.
<b>Household Income</b>	The prevalence of coronary heart disease was significantly higher among those with an annual household income of less than \$50,000 than among all those earning \$50,000 or more per year.

## CHAPTER 20: CARDIOVASCULAR DISEASE

**Table 20.2 Angina or Coronary Heart Disease Prevalence by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	67,466	<b>9.5</b>	8.4-10.5	47,944	<b>6.5</b>	5.7-7.3	115,410	<b>8.0</b>	7.3-8.6
<b>Age</b>									
18-24	0	<b>*0.0</b>	0.0-0.0	0	<b>*0.0</b>	0.0-0.0	0	<b>*0.0</b>	0.0-0.0
25-34	880	<b>*0.8</b>	0.0-1.9	586	<b>*0.6</b>	0.0-1.2	1,466	<b>*0.7</b>	0.0-1.3
35-44	4,630	<b>4.1</b>	1.8-6.5	3,727	<b>3.4</b>	1.6-5.2	8,357	<b>3.8</b>	2.3-5.3
45-54	6,821	<b>5.8</b>	3.6-8.0	4,699	<b>4.0</b>	2.5-5.6	11,520	<b>4.9</b>	3.6-6.3
55-64	18,374	<b>14.3</b>	11.5-17.2	12,244	<b>9.3</b>	7.1-11.4	30,618	<b>11.8</b>	10.0-13.6
65+	36,282	<b>23.5</b>	20.5-26.6	26,174	<b>13.9</b>	11.8-16.0	62,456	<b>18.2</b>	16.4-20.0
<b>Education</b>									
Less than H.S.	12,836	<b>11.9</b>	8.6-15.3	10,134	<b>9.2</b>	6.6-11.8	22,970	<b>10.5</b>	8.4-12.6
H.S. or G.E.D.	29,605	<b>9.9</b>	8.3-11.6	20,292	<b>7.2</b>	5.8-8.6	49,897	<b>8.6</b>	7.5-9.7
Some Post-H.S.	17,214	<b>9.7</b>	7.5-12.0	13,804	<b>6.3</b>	4.9-7.8	31,017	<b>7.9</b>	6.6-9.1
College Graduate	7,811	<b>6.1</b>	4.6-7.6	3,715	<b>2.9</b>	1.8-3.9	11,526	<b>4.5</b>	3.6-5.4
<b>Income</b>									
Less than \$15,000	6,621	<b>9.2</b>	5.9-12.4	10,253	<b>11.5</b>	8.6-14.4	16,873	<b>10.5</b>	8.3-12.6
\$15,000 - 24,999	17,074	<b>14.6</b>	11.2-18.0	12,840	<b>9.1</b>	6.9-11.3	29,914	<b>11.6</b>	9.7-13.5
\$25,000 - 34,999	9,479	<b>13.1</b>	9.3-16.8	5,278	<b>7.0</b>	4.2-9.8	14,757	<b>10.0</b>	7.6-12.3
\$35,000 - 49,999	8,315	<b>9.3</b>	6.4-12.2	5,693	<b>6.6</b>	4.2-9.0	14,008	<b>8.0</b>	6.1-9.8
\$50,000 - 74,999	4,451	<b>4.8</b>	2.9-6.6	3,044	<b>3.8</b>	1.9-5.7	7,494	<b>4.3</b>	3.0-5.6
\$75,000+	7,780	<b>5.4</b>	3.7-7.1	2,120	<b>*1.9</b>	0.8-3.1	9,900	<b>3.9</b>	2.8-5.0

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

### Stroke

<b>Definition</b>	Responding “Yes” to the question, “Has a doctor, nurse, or other health professional ever told you that you had a stroke?”
<b>Prevalence</b>	<p><b>WV: 4.4%</b> (95% CI: 3.9-4.9)  <b>U.S.: 3.2%</b> (95% CI: 3.1-3.3)</p> <p>The West Virginia prevalence of stroke was significantly higher than the U.S. prevalence. West Virginia ranked the 7<sup>th</sup> highest among the 54 BRFSS participants.</p>
<b>Gender</b>	<p><b>Men:</b> 4.6% (95% CI: 3.8-5.4)  <b>Women:</b> 4.2% (95% CI: 3.6-4.9)</p> <p>There was no gender difference for the prevalence of stroke.</p>
<b>Race/Ethnicity</b>	<p><b>White, Non-Hispanic:</b> 4.1% (95% CI: 3.6-4.6)  <b>Black, Non-Hispanic:</b> 10.9% (95% CI: 5.5-16.2)  <b>Other, Non-Hispanic:</b> *7.8% (95% CI: 1.0-14.6)  <b>Multiracial, Non-Hispanic:</b> *5.1% (95% CI: 0.8-9.4)  <b>Hispanic:</b> *0.8% (95% CI: 0.0-2.5)</p> <p>The prevalence of stroke was significantly higher among Black, Non-Hispanic adults than among White, Non-Hispanic adults.</p> <p>* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</p>
<b>Age</b>	The prevalence of stroke was significantly higher among those aged 65 and older (9.2%) than among all other age groups.
<b>Education</b>	The prevalence of stroke was significantly higher among those with less than a high school education (7.3%) than among those with some college (3.6%) and college graduates (2.6%).
<b>Household Income</b>	The prevalence of stroke was significantly higher among those with an annual household income less than \$15,000 (8.0%) than among those earning \$35,000 or more per year.

## CHAPTER 20: CARDIOVASCULAR DISEASE

**Table 20.3 Stroke Prevalence by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	32,820	<b>4.6</b>	3.8-5.4	31,452	<b>4.2</b>	3.6-4.9	64,273	<b>4.4</b>	3.9-4.9
<b>Age</b>									
18-24	386	<b>*0.4</b>	0.0-1.3	0	<b>*0.0</b>	0.0-0.0	386	<b>*0.2</b>	0.0-0.7
25-34	993	<b>*0.9</b>	0.0-2.2	1,214	<b>*1.2</b>	0.2-2.1	2,207	<b>*1.0</b>	0.2-1.8
35-44	2,612	<b>*2.3</b>	0.5-4.2	2,194	<b>*2.0</b>	0.6-3.4	4,806	<b>2.2</b>	1.0-3.3
45-54	4,718	<b>4.0</b>	1.9-6.1	4,211	<b>3.6</b>	2.0-5.1	8,929	<b>3.8</b>	2.5-5.1
55-64	8,323	<b>6.4</b>	4.4-8.4	7,692	<b>5.8</b>	4.1-7.4	16,015	<b>6.1</b>	4.8-7.3
65+	15,788	<b>10.1</b>	7.8-12.5	16,070	<b>8.5</b>	6.7-10.3	31,858	<b>9.2</b>	7.8-10.7
<b>Education</b>									
Less than H.S.	9,648	<b>8.9</b>	5.8-12.0	6,460	<b>5.8</b>	3.7-8.0	16,107	<b>7.3</b>	5.4-9.2
H.S. or G.E.D.	12,634	<b>4.2</b>	3.0-5.4	14,241	<b>5.0</b>	3.8-6.2	26,874	<b>4.6</b>	3.8-5.4
Some Post-H.S.	6,360	<b>3.6</b>	2.1-5.1	8,055	<b>3.7</b>	2.6-4.8	14,415	<b>3.6</b>	2.7-4.6
College Graduate	4,011	<b>3.1</b>	2.0-4.3	2,545	<b>2.0</b>	1.2-2.7	6,556	<b>2.6</b>	1.8-3.3
<b>Income</b>									
Less than \$15,000	5,735	<b>7.8</b>	4.3-11.3	7,406	<b>8.2</b>	5.7-10.6	13,141	<b>8.0</b>	6.0-10.1
\$15,000 - 24,999	8,398	<b>7.1</b>	4.6-9.7	7,066	<b>5.0</b>	3.5-6.5	15,464	<b>6.0</b>	4.5-7.4
\$25,000 - 34,999	4,430	<b>6.1</b>	3.2-8.9	3,067	<b>4.0</b>	1.7-6.4	7,496	<b>5.0</b>	3.2-6.9
\$35,000 - 49,999	1,575	<b>*1.8</b>	0.3-3.2	3,267	<b>3.8</b>	1.9-5.6	4,841	<b>2.7</b>	1.6-3.9
\$50,000 - 74,999	2,992	<b>3.2</b>	1.5-4.9	2,260	<b>*2.8</b>	1.1-4.5	5,252	<b>3.0</b>	1.8-4.2
\$75,000+	1,115	<b>*0.8</b>	0.1-1.4	1,198	<b>*1.1</b>	0.3-1.9	2,313	<b>0.9</b>	0.4-1.4

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

### Cardiovascular Disease

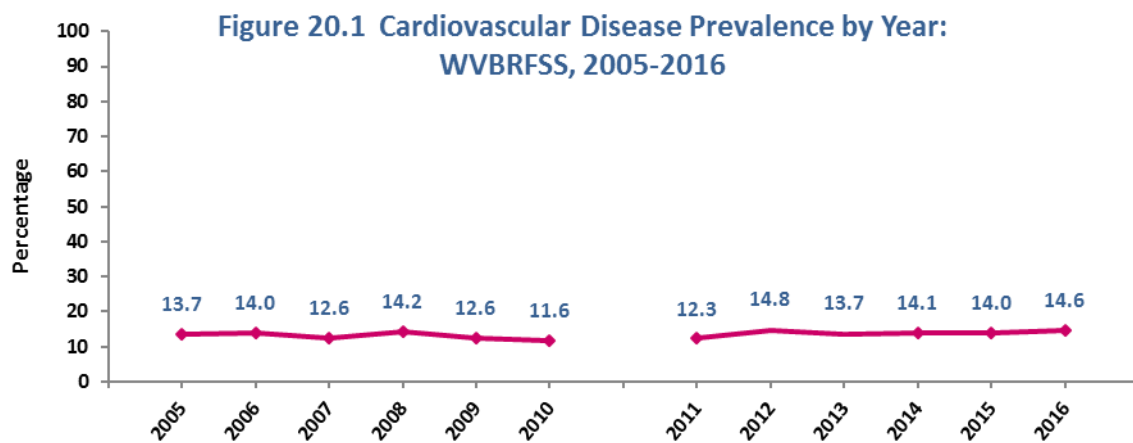
<b>Definition</b>	Responding “Yes” to any of the questions, “Has a doctor, nurse, or other health professional ever told you that you had any of the following: 1) heart attack, also called a myocardial infarction; 2) angina or coronary heart disease; 3) a stroke?”
<b>Prevalence</b>	<b>WV: 14.6%</b> (95% CI: 13.7-15.5) <b>U.S.: 8.7%</b> (95% CI: 8.6-8.9) The West Virginia prevalence of cardiovascular disease was significantly higher than the U.S. prevalence. West Virginia ranked 1 <sup>st</sup> highest among the 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 17.0% (95% CI: 15.6-18.4) <b>Women:</b> 12.3% (95% CI: 11.2-13.4) The prevalence of cardiovascular disease was significantly higher among men than among women.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 14.4% (95% CI: 13.5-15.3) <b>Black, Non-Hispanic:</b> 17.0% (95% CI: 10.8-23.3) <b>Other, Non-Hispanic:</b> *20.2% (95% CI: 10.1-30.3) <b>Multiracial, Non-Hispanic:</b> *25.4% (95% CI: 14.7-36.1) <b>Hispanic:</b> *6.1% (95% CI: 0.5-11.8) There was no race/ethnicity difference in the prevalence of cardiovascular disease. * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.
<b>Age</b>	The prevalence of cardiovascular disease increased was significantly higher among those aged 65 and older (31.3%) than among all other age groups.
<b>Education</b>	The prevalence of cardiovascular disease was significantly higher among those with less than a high school education (22.8%) than among all other educational attainment levels. The prevalence of cardiovascular disease was significantly lower among college graduates (7.6%) than among all other educational attainment levels.
<b>Household Income</b>	The prevalence of cardiovascular disease was significantly higher among those with an annual household income less than \$50,000 than the prevalence among those earning \$50,000 or more per year.

## CHAPTER 20: CARDIOVASCULAR DISEASE

**Table 20.4 Cardiovascular Disease Prevalence by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	120,895	<b>17.0</b>	15.6-18.4	91,117	<b>12.3</b>	11.2-13.4	212,011	<b>14.6</b>	13.7-15.5
<b>Age</b>									
18-24	386	<b>*0.4</b>	0.0-1.3	0	<b>*0.0</b>	0.0-0.0	386	<b>*0.2</b>	0.0-0.7
25-34	2,037	<b>*1.9</b>	0.2-3.5	3,129	<b>3.0</b>	1.3-4.7	5,167	<b>2.4</b>	1.2-3.6
35-44	9,187	<b>8.2</b>	5.1-11.4	6,939	<b>6.4</b>	3.9-8.9	16,126	<b>7.3</b>	5.3-9.3
45-54	15,704	<b>13.5</b>	9.9-17.1	10,539	<b>9.0</b>	6.6-11.4	26,243	<b>11.2</b>	9.1-13.4
55-64	32,970	<b>25.6</b>	22.1-29.1	22,444	<b>17.0</b>	14.2-19.8	55,414	<b>21.2</b>	19.0-23.5
65+	60,129	<b>38.7</b>	35.2-42.2	47,326	<b>25.1</b>	22.4-27.9	107,455	<b>31.3</b>	29.1-33.5
<b>Education</b>									
Less than H.S.	30,766	<b>28.6</b>	23.6-33.6	18,993	<b>17.2</b>	13.7-20.7	49,759	<b>22.8</b>	19.8-25.9
H.S. or G.E.D.	50,747	<b>17.1</b>	14.9-19.2	40,545	<b>14.4</b>	12.5-16.3	91,292	<b>15.8</b>	14.3-17.2
Some Post-H.S.	26,430	<b>14.9</b>	12.2-17.7	24,538	<b>11.3</b>	9.4-13.2	50,969	<b>12.9</b>	11.3-14.6
College Graduate	12,783	<b>10.0</b>	8.1-11.9	6,733	<b>5.2</b>	3.9-6.5	19,516	<b>7.6</b>	6.4-8.8
<b>Income</b>									
Less than \$15,000	16,144	<b>22.1</b>	17.0-27.1	19,070	<b>21.3</b>	17.5-25.2	35,214	<b>21.7</b>	18.5-24.8
\$15,000 - 24,999	29,192	<b>25.0</b>	20.7-29.3	23,127	<b>16.6</b>	13.7-19.5	52,319	<b>20.4</b>	17.9-22.9
\$25,000 - 34,999	16,540	<b>22.8</b>	17.9-27.7	8,489	<b>11.3</b>	7.9-14.8	25,029	<b>17.0</b>	13.9-20.0
\$35,000 - 49,999	13,317	<b>14.9</b>	11.3-18.5	10,570	<b>12.2</b>	8.9-15.4	23,887	<b>13.5</b>	11.1-16.0
\$50,000 - 74,999	8,898	<b>9.6</b>	6.8-12.3	5,736	<b>7.1</b>	4.4-9.8	14,634	<b>8.4</b>	6.5-10.4
\$75,000+	10,947	<b>7.6</b>	5.6-9.7	3,483	<b>3.2</b>	1.8-4.6	14,429	<b>5.7</b>	4.4-7.0

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

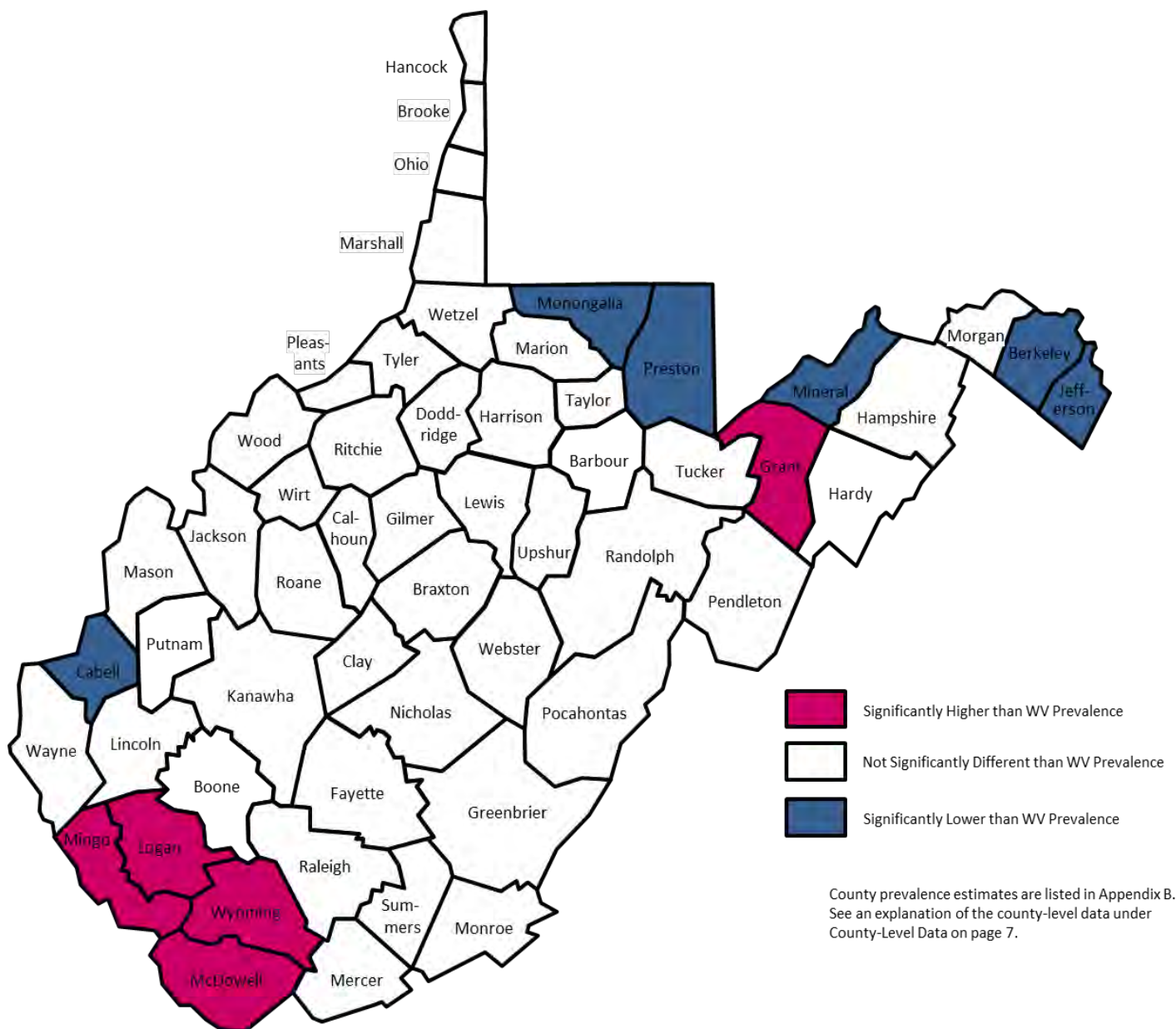


\*Due to changes in sample composition and weighting methodology, 2011-2016 results are not directly comparable to previous years.

## CHAPTER 20: CARDIOVASCULAR DISEASE

Figure 20.2 Cardiovascular Disease Prevalence by County: WVBRFSS, 2012-2016

WV Prevalence (2012-2016) - 14.2%



### Sodium Intake

<b>Definition</b>	Responding “Yes” to any of the question, “Are you currently watching or reducing your sodium or salt intake?”
<b>Prevalence</b>	<b>WV: 50.8%</b> (95% CI: 49.3-52.4) Because this question was a state-added question and complete national data are not available, a U.S. comparison was not conducted.
<b>Gender</b>	<b>Men:</b> 50.4% (95% CI: 48.0-52.8) <b>Women:</b> 51.2% (95% CI: 49.2-53.3) There was no gender difference in the prevalence of watching sodium intake.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 50.2% (95% CI: 48.6-51.8) <b>Black, Non-Hispanic:</b> 60.5% (95% CI: 50.9-70.0) <b>Other, Non-Hispanic:</b> *59.2% (95% CI: 45.0-73.5) <b>Multiracial, Non-Hispanic:</b> *59.3% (95% CI: 45.2-73.5) <b>Hispanic:</b> *49.2% (95% CI: 29.2-69.3) There was no race/ethnicity difference in the prevalence of watching sodium intake. * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.
<b>Age</b>	The prevalence of watching sodium intake was significantly higher among those aged 45 and older than among those aged 44 and younger.
<b>Education</b>	There was no educational attainment difference in the prevalence of watching sodium intake.
<b>Household Income</b>	There was no annual household income difference in the prevalence of watching sodium intake.



## CHAPTER 20: CARDIOVASCULAR DISEASE

**Table 20.5 Prevalence of Watching Sodium Intake by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	263,441	<b>50.4</b>	48.0-52.8	289,443	<b>51.2</b>	49.2-53.3	552,884	<b>50.8</b>	49.3-52.4
<b>Age</b>									
18-24	15,769	<b>27.4</b>	18.8-35.9	16,523	<b>28.0</b>	20.1-35.9	32,292	<b>27.7</b>	21.9-33.5
25-34	27,404	<b>37.0</b>	30.0-44.0	28,449	<b>38.4</b>	32.3-44.4	55,853	<b>37.7</b>	33.1-42.3
35-44	33,547	<b>41.2</b>	35.0-47.5	33,829	<b>41.4</b>	35.7-47.2	67,376	<b>41.3</b>	37.1-45.6
45-54	46,006	<b>50.6</b>	45.2-56.1	45,237	<b>50.8</b>	45.9-55.8	91,243	<b>50.7</b>	47.0-54.4
55-64	63,762	<b>65.2</b>	60.8-69.5	58,158	<b>55.7</b>	51.6-59.8	121,921	<b>60.3</b>	57.3-63.3
65+	76,216	<b>63.8</b>	59.9-67.7	105,099	<b>69.0</b>	65.8-72.2	181,315	<b>66.7</b>	64.2-69.2
<b>Education</b>									
Less than H.S.	43,905	<b>54.7</b>	48.1-61.2	44,205	<b>52.6</b>	46.5-58.8	88,110	<b>53.6</b>	49.1-58.1
H.S. or G.E.D.	108,594	<b>49.5</b>	45.7-53.2	114,929	<b>52.9</b>	49.5-56.2	223,523	<b>51.2</b>	48.6-53.7
Some Post-H.S.	65,651	<b>50.2</b>	45.1-55.3	84,986	<b>51.7</b>	47.7-55.6	150,638	<b>51.0</b>	47.9-54.2
College Graduate	44,794	<b>48.9</b>	44.6-53.1	45,060	<b>45.9</b>	42.0-49.8	89,854	<b>47.3</b>	44.4-50.2
<b>Income</b>									
Less than \$15,000	25,220	<b>48.2</b>	40.9-55.6	37,393	<b>55.0</b>	49.1-61.0	62,613	<b>52.1</b>	47.4-56.7
\$15,000 - 24,999	46,231	<b>50.6</b>	44.6-56.5	54,464	<b>51.6</b>	46.6-56.6	100,696	<b>51.1</b>	47.3-55.0
\$25,000 - 34,999	32,037	<b>59.1</b>	52.3-65.9	35,021	<b>59.2</b>	52.9-65.5	67,058	<b>59.1</b>	54.5-63.8
\$35,000 - 49,999	33,711	<b>52.1</b>	45.1-59.2	34,107	<b>50.2</b>	44.2-56.2	67,819	<b>51.1</b>	46.5-55.7
\$50,000 - 74,999	38,914	<b>54.1</b>	47.7-60.5	28,086	<b>45.6</b>	39.5-51.7	67,000	<b>50.2</b>	45.7-54.7
\$75,000+	46,879	<b>46.2</b>	41.1-51.3	37,301	<b>44.2</b>	39.3-49.2	84,181	<b>45.3</b>	41.7-48.9

### Diabetes Prevalence

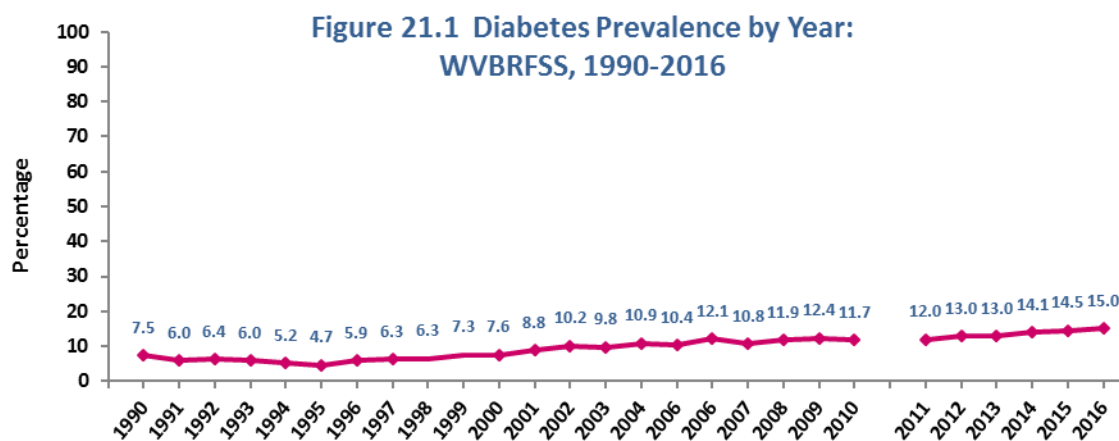
<b>Definition</b>	Responding “Yes” to the question, “Has a doctor, nurse, or other health professional ever told you that you have diabetes?”
<b>Prevalence</b>	<b>WV: 15.0%</b> (95% CI: 14.0-15.9) <b>U.S.: 10.8%</b> (95% CI: 10.6-11.0) The West Virginia prevalence of diabetes was significantly higher than the U.S. prevalence. West Virginia ranked the 2 <sup>nd</sup> highest among the 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 15.2% (95% CI: 13.8-16.5) <b>Women:</b> 14.8% (95% CI: 13.5-16.0) There was no gender difference in the prevalence of diabetes.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 14.9% (95% CI: 14.0-15.9) <b>Black, Non-Hispanic:</b> 16.0% (95% CI: 10.4-21.5) <b>Other, Non-Hispanic:</b> 14.9% (95% CI: 6.5-23.3) <b>Multiracial, Non-Hispanic:</b> 16.1% (95% CI: 8.3-23.9) <b>Hispanic:</b> *11.9% (95% CI: 0.2-23.5) There was no race/ethnicity difference in the prevalence of diabetes. * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.
<b>Age</b>	The prevalence of diabetes was significantly higher among those aged 55 and older than among those under age 55.
<b>Education</b>	The prevalence of diabetes was significantly higher among those with less than a high school education (21.2%) than among all other educational attainment levels.
<b>Household Income</b>	The prevalence of diabetes was significantly higher among those with an annual household income of less than \$15,000 (19.4%) than among those earning \$50,000 or more per year. The diabetes prevalence was significantly lower among those earning \$75,000 or more a year (7.4%) than among all other income groups.

## CHAPTER 21: DIABETES

**Table 21.1 Diabetes Prevalence by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	108,651	<b>15.2</b>	13.8-16.5	110,310	<b>14.8</b>	13.5-16.0	218,960	<b>15.0</b>	14.0-15.9
<b>Age</b>									
18-24	2,055	<b>*2.4</b>	0.0-5.1	2,379	<b>*2.9</b>	0.3-5.4	4,434	<b>*2.6</b>	0.8-4.5
25-34	2,969	<b>*2.7</b>	0.9-4.6	3,670	<b>*3.5</b>	1.0-5.9	6,640	<b>3.1</b>	1.6-4.6
35-44	8,205	<b>7.3</b>	4.5-10.2	7,947	<b>7.2</b>	4.5-9.9	16,152	<b>7.3</b>	5.3-9.2
45-54	19,268	<b>16.4</b>	12.6-20.3	17,828	<b>15.1</b>	12.0-18.2	37,097	<b>15.7</b>	13.3-18.2
55-64	31,009	<b>23.8</b>	20.3-27.2	30,215	<b>22.5</b>	19.4-25.6	61,224	<b>23.1</b>	20.8-25.5
65+	44,541	<b>28.4</b>	25.2-31.7	46,972	<b>24.7</b>	22.0-27.3	91,513	<b>26.4</b>	24.3-28.4
<b>Education</b>									
Less than H.S.	26,079	<b>23.9</b>	18.9-28.9	20,802	<b>18.6</b>	14.8-22.4	46,881	<b>21.2</b>	18.1-24.3
H.S. or G.E.D.	43,200	<b>14.3</b>	12.3-16.4	47,831	<b>16.8</b>	14.7-18.8	91,032	<b>15.5</b>	14.1-17.0
Some Post-H.S.	25,182	<b>14.2</b>	11.6-16.8	29,405	<b>13.4</b>	11.1-15.6	54,587	<b>13.7</b>	12.0-15.4
College Graduate	14,189	<b>11.1</b>	9.1-13.1	11,964	<b>9.3</b>	7.5-11.1	26,153	<b>10.2</b>	8.8-11.5
<b>Income</b>									
Less than \$15,000	15,771	<b>21.4</b>	15.9-26.8	16,240	<b>17.8</b>	14.4-21.3	32,012	<b>19.4</b>	16.3-22.5
\$15,000 - 24,999	21,774	<b>18.4</b>	14.6-22.3	25,428	<b>18.0</b>	14.8-21.1	47,202	<b>18.2</b>	15.7-20.6
\$25,000 - 34,999	14,087	<b>19.3</b>	14.7-24.0	13,220	<b>17.3</b>	12.8-21.8	27,307	<b>18.3</b>	15.1-21.5
\$35,000 - 49,999	13,965	<b>15.6</b>	11.9-19.2	13,642	<b>15.7</b>	12.2-19.2	27,607	<b>15.6</b>	13.1-18.2
\$50,000 - 74,999	12,180	<b>12.9</b>	9.6-16.2	8,382	<b>10.4</b>	7.4-13.3	20,561	<b>11.7</b>	9.5-14.0
\$75,000+	13,794	<b>9.6</b>	7.3-11.9	4,915	<b>4.4</b>	2.7-6.1	18,710	<b>7.4</b>	5.9-8.8

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

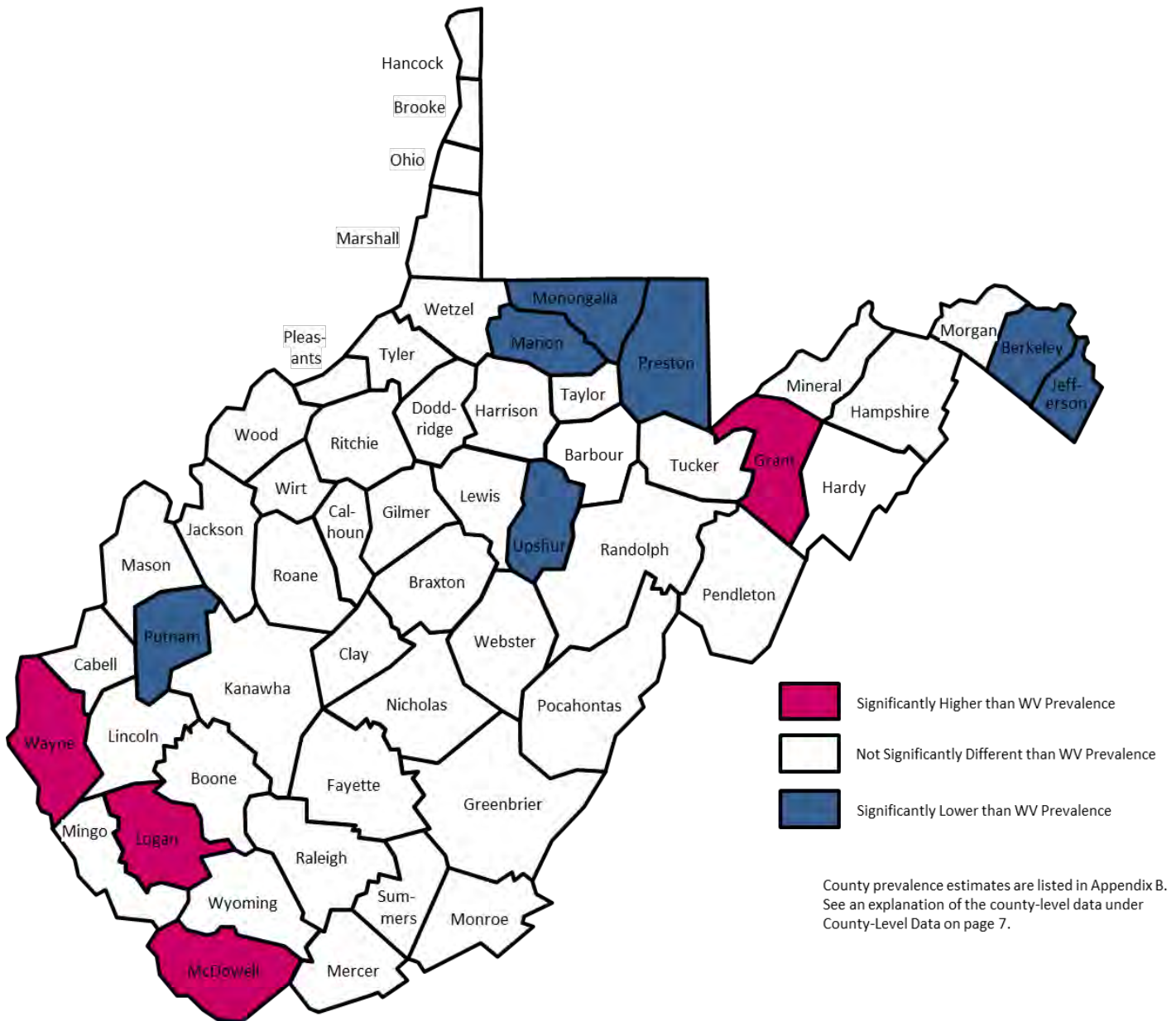


\*Due to changes in sample composition and weighting methodology, 2011-2016 results are not directly comparable to previous years.

## CHAPTER 21: DIABETES

Figure 21.2 Diabetes Prevalence by County: WVBRFSS, 2012-2016

WV Prevalence (2012-2016) - 13.9%



### A1C Testing

<b>Definition</b>	Responding “2” or more to the question, “A test for A1C (read as “A one C”) measures the average level of blood sugar over the past three months. About how many times in the past 12 months has a doctor, nurse, or other health professional checked you for A1C?” Restricted to those who reported they have diabetes.
<b>Prevalence</b>	<b>WV: 24.3%</b> (95% CI: 23.0-25.7) Because this question was a state-added question and complete national data are not available, a U.S. comparison was not conducted.
<b>Gender</b>	<b>Men:</b> 24.5% (95% CI: 22.5-26.5) <b>Women:</b> 24.2% (95% CI: 22.3-26.0) There was no gender difference in the prevalence of had at least 2 A1C tests in the past year.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 24.1% (95% CI: 22.7-25.4) <b>Black, Non-Hispanic:</b> 31.9% (95% CI: 22.7-41.1) <b>Other, Non-Hispanic:</b> *37.4% (95% CI: 22.6-52.2) <b>Multiracial, Non-Hispanic:</b> *22.6% (95% CI: 11.6-33.7) <b>Hispanic:</b> *11.5% (95% CI: 2.2-20.7) There was no race/ethnicity difference in the prevalence of had at least 2 A1C tests in the past year. <small>* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</small>
<b>Age</b>	The prevalence of had at least 2 A1C tests in the past year was significantly higher among those aged 55 and older than among those aged 54 and younger.
<b>Education</b>	The prevalence of had at least 2 A1C tests in the past year was significantly lower among college graduates (17.2%) than among all other educational attainment levels.
<b>Household Income</b>	The prevalence of had at least 2 A1C tests in the past year was significantly lower among those earning \$75,000 or more a year (16.3%) than among all other income groups.

## CHAPTER 21: DIABETES

**Table 21.2 Prevalence of Had at Least 2 A1C Tests in the Past Year by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	114,875	<b>24.5</b>	22.5-26.5	120,443	<b>24.2</b>	22.3-26.0	235,318	<b>24.3</b>	23.0-25.7
<b>Age</b>									
18-24	1,560	<b>*2.9</b>	0.0-6.8	3,150	<b>*6.0</b>	1.5-10.4	4,710	<b>*4.4</b>	1.4-7.4
25-34	5,470	<b>7.9</b>	4.2-11.7	6,008	<b>8.9</b>	5.0-12.7	11,479	<b>8.4</b>	5.7-11.1
35-44	10,988	<b>14.9</b>	10.0-19.8	11,746	<b>16.0</b>	11.3-20.8	22,734	<b>15.5</b>	12.1-18.9
45-54	20,661	<b>25.3</b>	20.2-30.3	22,110	<b>27.1</b>	22.4-31.8	42,771	<b>26.2</b>	22.7-29.6
55-64	31,713	<b>36.6</b>	31.9-41.3	30,759	<b>32.4</b>	28.2-36.5	62,472	<b>34.4</b>	31.3-37.5
65+	44,209	<b>43.5</b>	39.1-47.9	45,666	<b>36.7</b>	33.0-40.3	89,875	<b>39.7</b>	36.9-42.6
<b>Education</b>									
Less than H.S.	18,974	<b>28.2</b>	21.9-34.6	21,123	<b>29.4</b>	23.6-35.2	40,097	<b>28.8</b>	24.6-33.1
H.S. or G.E.D.	48,577	<b>24.5</b>	21.3-27.7	51,484	<b>27.1</b>	24.0-30.2	100,061	<b>25.8</b>	23.6-28.0
Some Post-H.S.	31,424	<b>26.2</b>	22.0-30.4	33,682	<b>23.0</b>	19.7-26.3	65,106	<b>24.5</b>	21.8-27.1
College Graduate	15,786	<b>19.0</b>	15.8-22.3	14,002	<b>15.6</b>	12.8-18.4	29,789	<b>17.2</b>	15.1-19.4
<b>Income</b>									
Less than \$15,000	10,789	<b>24.3</b>	17.4-31.3	14,609	<b>25.2</b>	20.0-30.5	25,398	<b>24.9</b>	20.6-29.1
\$15,000 - 24,999	22,245	<b>27.2</b>	22.0-32.5	27,557	<b>29.9</b>	25.1-34.8	49,802	<b>28.7</b>	25.1-32.2
\$25,000 - 34,999	15,902	<b>32.4</b>	25.8-39.0	15,545	<b>29.1</b>	23.1-35.0	31,447	<b>30.6</b>	26.2-35.1
\$35,000 - 49,999	15,379	<b>25.6</b>	19.8-31.4	16,047	<b>25.3</b>	20.1-30.4	31,426	<b>25.4</b>	21.6-29.3
\$50,000 - 74,999	15,410	<b>23.9</b>	18.6-29.3	12,533	<b>22.4</b>	17.5-27.3	27,943	<b>23.2</b>	19.5-26.9
\$75,000+	17,823	<b>19.0</b>	15.1-23.0	9,676	<b>12.9</b>	9.2-16.6	27,499	<b>16.3</b>	13.6-19.0

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

### Diabetes Education Class

<b>Definition</b>	Responding “Yes” to the question, “Have you ever taken a course or class in how to manage your diabetes yourself?” Restricted to those who reported they had diabetes.
<b>Prevalence</b>	<b>WV: 48.0%</b> (95% CI: 44.3-51.6) Because this question was a state-added question and complete national data are not available, a U.S. comparison was not conducted.
<b>Gender</b>	<b>Men:</b> 46.6% (95% CI: 41.0-52.1) <b>Women:</b> 49.2% (95% CI: 44.4-54.0) There was no gender difference in the prevalence of taken a diabetes education class.
<b>Race/Ethnicity</b>	No race/ethnicity statistics are reported due to unreliable estimates.
<b>Age</b>	There was no age difference in the prevalence of taken a diabetes education class.
<b>Education</b>	The prevalence of taken a diabetes education class was significantly higher among college graduates (64.0%) than among all other educational attainment levels.
<b>Household Income</b>	There was no annual household income difference in the prevalence of taken a diabetes education class.

## CHAPTER 21: DIABETES

**Table 21.3 Prevalence of Taken a Diabetes Education Class by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	38,507	<b>46.6</b>	41.0-52.1	46,367	<b>49.2</b>	44.4-54.0	84,874	<b>48.0</b>	44.3-51.6
<b>Age</b>									
18-24	636	<b>*40.8</b>	0.0-100.0	846	<b>*35.6</b>	0.0-74.3	1,482	<b>*37.6</b>	2.2-73.1
25-34	1,895	<b>*79.2</b>	51.3-100.0	684	<b>*20.8</b>	0.6-41.0	2,580	<b>*45.4</b>	21.5-69.3
35-44	3,728	<b>*82.9</b>	62.7-100.0	4,089	<b>*54.6</b>	34.9-74.3	7,817	<b>*65.2</b>	50.0-80.4
45-54	6,627	<b>*41.0</b>	27.9-54.1	8,502	<b>*53.5</b>	41.6-65.4	15,129	<b>47.2</b>	38.2-56.2
55-64	11,329	<b>49.2</b>	39.4-59.0	12,542	<b>50.2</b>	41.4-59.0	23,871	<b>49.7</b>	43.2-56.3
65+	14,174	<b>40.7</b>	33.1-48.4	19,010	<b>48.5</b>	41.6-55.4	33,184	<b>44.8</b>	39.7-50.0
<b>Education</b>									
Less than H.S.	7,225	<b>*37.2</b>	23.7-50.7	6,980	<b>*38.3</b>	26.7-49.9	14,205	<b>37.7</b>	28.8-46.6
H.S. or G.E.D.	16,607	<b>49.9</b>	41.2-58.6	20,620	<b>49.6</b>	42.3-57.0	37,227	<b>49.8</b>	44.1-55.4
Some Post-H.S.	8,333	<b>*41.8</b>	31.3-52.4	12,097	<b>50.3</b>	40.9-59.6	20,431	<b>46.5</b>	39.5-53.5
College Graduate	6,341	<b>*63.1</b>	52.6-73.6	6,670	<b>*65.0</b>	54.8-75.1	13,011	<b>64.0</b>	56.7-71.3
<b>Income</b>									
Less than \$15,000	6,511	<b>*56.9</b>	41.0-72.8	6,422	<b>*47.3</b>	35.8-58.7	12,933	<b>51.7</b>	42.0-61.3
\$15,000 - 24,999	8,015	<b>*44.6</b>	32.4-56.8	9,739	<b>*45.5</b>	34.7-56.3	17,754	<b>45.1</b>	37.0-53.2
\$25,000 - 34,999	5,340	<b>*48.1</b>	32.9-63.3	5,692	<b>*48.0</b>	34.6-61.3	11,032	<b>*48.0</b>	38.0-58.1
\$35,000 - 49,999	4,613	<b>*42.6</b>	28.8-56.4	5,841	<b>*48.4</b>	35.5-61.3	10,453	<b>45.6</b>	36.2-55.1
\$50,000 - 74,999	5,016	<b>*51.4</b>	35.9-67.0	4,618	<b>*63.7</b>	48.2-79.3	9,633	<b>*56.7</b>	45.5-67.9
\$75,000+	5,308	<b>*55.1</b>	40.4-69.8	2,623	<b>*50.6</b>	30.9-70.3	7,930	<b>*53.5</b>	41.7-65.4

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



### Pre-Diabetes or Borderline Diabetes

<b>Definition</b>	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?”
<b>Prevalence</b>	<b>WV: 11.0%</b> (95% CI: 10.1-11.9) Because this question is part of a state selected optional module and complete national data are not available, a U.S. comparison was not conducted.
<b>Gender</b>	<b>Men:</b> 11.9% (95% CI: 10.5-13.3) <b>Women:</b> 10.3% (95% CI: 9.1-11.4) There was no gender difference in the prevalence of pre-diabetes or borderline diabetes.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 10.8% (95% CI: 9.9-11.8) <b>Black, Non-Hispanic:</b> 16.1% (95% CI: 9.6-22.6) <b>Other, Non-Hispanic:</b> *12.3% (95% CI: 2.5-22.1) <b>Multiracial, Non-Hispanic:</b> *20.1% (95% CI: 8.2-32.0) <b>Hispanic:</b> *2.4% (95% CI: 0.0-5.9) There was no race/ethnicity difference in the prevalence of pre-diabetes or borderline diabetes. * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.
<b>Age</b>	The prevalence of pre-diabetes or borderline diabetes was significantly higher among those aged 55 and older than among those aged 44 and younger.
<b>Education</b>	The prevalence of pre-diabetes or borderline diabetes was significantly higher among those with less than a high school education (13.4%) than among college graduates (9.0%).
<b>Household Income</b>	There was no annual household income difference in the prevalence of pre-diabetes or borderline diabetes.

## CHAPTER 21: DIABETES

**Table 21.4 Prevalence of Pre-Diabetes or Borderline Diabetes by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	69,841	<b>11.9</b>	10.5-13.3	64,106	<b>10.3</b>	9.1-11.4	133,947	<b>11.0</b>	10.1-11.9
<b>Age</b>									
18-24	3,122	<b>*3.9</b>	0.7-7.1	3,909	<b>*5.2</b>	1.8-8.5	7,031	<b>4.5</b>	2.2-6.8
25-34	5,793	<b>5.8</b>	3.0-8.6	3,222	<b>3.2</b>	1.3-5.1	9,016	<b>4.5</b>	2.8-6.2
35-44	9,618	<b>9.6</b>	6.1-13.1	7,546	<b>7.5</b>	4.8-10.1	17,165	<b>8.5</b>	6.3-10.7
45-54	11,935	<b>12.4</b>	8.9-15.9	13,538	<b>13.7</b>	10.4-16.9	25,473	<b>13.0</b>	10.7-15.4
55-64	17,323	<b>17.6</b>	14.1-21.1	14,735	<b>14.4</b>	11.4-17.5	32,058	<b>16.0</b>	13.7-18.3
65+	21,598	<b>19.5</b>	16.1-22.8	20,667	<b>14.5</b>	12.0-17.0	42,264	<b>16.7</b>	14.6-18.7
<b>Education</b>									
Less than H.S.	12,067	<b>14.8</b>	10.3-19.3	10,946	<b>12.1</b>	8.6-15.6	23,013	<b>13.4</b>	10.6-16.2
H.S. or G.E.D.	30,699	<b>12.2</b>	10.1-14.4	26,024	<b>11.1</b>	9.1-13.2	56,723	<b>11.7</b>	10.2-13.2
Some Post-H.S.	16,346	<b>11.2</b>	8.3-14.0	17,602	<b>9.5</b>	7.4-11.5	33,948	<b>10.2</b>	8.5-11.9
College Graduate	10,599	<b>9.7</b>	7.3-12.2	9,534	<b>8.4</b>	6.5-10.2	20,134	<b>9.0</b>	7.5-10.5
<b>Income</b>									
Less than \$15,000	9,171	<b>16.7</b>	11.4-21.9	7,824	<b>10.8</b>	7.4-14.3	16,996	<b>13.4</b>	10.4-16.4
\$15,000 - 24,999	12,260	<b>12.8</b>	9.0-16.6	10,934	<b>9.5</b>	7.0-12.0	23,193	<b>11.0</b>	8.8-13.2
\$25,000 - 34,999	6,856	<b>12.3</b>	7.8-16.8	9,192	<b>14.8</b>	10.4-19.3	16,049	<b>13.6</b>	10.5-16.8
\$35,000 - 49,999	8,799	<b>12.0</b>	8.0-15.9	8,336	<b>11.5</b>	8.1-14.9	17,135	<b>11.7</b>	9.1-14.3
\$50,000 - 74,999	8,608	<b>10.9</b>	7.4-14.4	6,721	<b>9.7</b>	6.6-12.9	15,329	<b>10.3</b>	8.0-12.7
\$75,000+	11,610	<b>9.4</b>	6.7-12.1	8,491	<b>8.2</b>	5.5-10.9	20,101	<b>8.8</b>	6.9-10.8

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

### Skin Cancer Prevalence

<b>Definition</b>	Responding “Yes” to the question, “Has a doctor, nurse, or other health professional ever told you that you had skin cancer?”
<b>Prevalence</b>	<b>WV: 7.4%</b> (95% CI: 6.7-8.0) <b>U.S.: 5.9%</b> (95% CI: 5.8-6.0) The West Virginia prevalence of skin cancer was significantly higher than the U.S. prevalence. West Virginia ranked the 8 <sup>th</sup> highest among the 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 7.5% (95% CI: 6.6-8.5) <b>Women:</b> 7.2% (95% CI: 6.3-8.1) There was no gender difference in the prevalence of skin cancer.
<b>Race/Ethnicity</b>	No race/ethnicity statistics are reported due to unreliable estimates.
<b>Age</b>	The prevalence of skin cancer was significantly higher among those aged 65 and older (17.5%) than among all other age groups.
<b>Education</b>	There was no educational attainment difference in the prevalence of skin cancer.
<b>Household Income</b>	There was no annual household income difference in the prevalence of skin cancer.

## CHAPTER 22: CANCER

**Table 22.1 Skin Cancer Prevalence by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	53,735	<b>7.5</b>	6.6-8.5	53,779	<b>7.2</b>	6.3-8.1	107,514	<b>7.4</b>	6.7-8.0
<b>Age</b>									
18-24	1,376	<b>*1.6</b>	0.0-3.4	1,061	<b>*1.3</b>	0.0-2.8	2,436	<b>*1.4</b>	0.3-2.6
25-34	227	<b>*0.2</b>	0.0-0.5	778	<b>*0.7</b>	0.0-1.6	1,005	<b>*0.5</b>	0.0-0.9
35-44	2,954	<b>*2.7</b>	1.0-4.3	3,357	<b>3.0</b>	1.4-4.7	6,311	<b>2.8</b>	1.7-4.0
45-54	4,136	<b>3.5</b>	1.9-5.2	7,299	<b>6.2</b>	4.2-8.2	11,435	<b>4.9</b>	3.6-6.2
55-64	12,560	<b>9.6</b>	7.3-11.9	12,763	<b>9.5</b>	7.3-11.8	25,323	<b>9.6</b>	8.0-11.2
65+	32,317	<b>20.7</b>	17.8-23.6	28,257	<b>14.8</b>	12.6-17.1	60,574	<b>17.5</b>	15.7-19.3
<b>Education</b>									
Less than H.S.	6,174	<b>5.7</b>	3.4-8.0	9,250	<b>8.3</b>	5.6-10.9	15,424	<b>7.0</b>	5.3-8.8
H.S. or G.E.D.	25,610	<b>8.5</b>	7.0-10.1	21,723	<b>7.6</b>	6.1-9.1	47,332	<b>8.1</b>	7.0-9.2
Some Post-H.S.	11,656	<b>6.6</b>	4.7-8.4	15,543	<b>7.1</b>	5.6-8.6	27,199	<b>6.9</b>	5.7-8.0
College Graduate	10,295	<b>8.1</b>	6.4-9.8	7,112	<b>5.5</b>	4.0-7.0	17,406	<b>6.8</b>	5.7-7.9
<b>Income</b>									
Less than \$15,000	4,747	<b>6.5</b>	3.8-9.2	6,579	<b>7.2</b>	4.8-9.6	11,326	<b>6.9</b>	5.1-8.7
\$15,000 - 24,999	8,506	<b>7.2</b>	5.0-9.4	10,196	<b>7.2</b>	5.3-9.1	18,702	<b>7.2</b>	5.8-8.7
\$25,000 - 34,999	6,207	<b>8.5</b>	5.4-11.7	7,136	<b>9.3</b>	6.0-12.6	13,343	<b>8.9</b>	6.7-11.2
\$35,000 - 49,999	8,430	<b>9.4</b>	6.5-12.3	4,859	<b>5.6</b>	3.6-7.6	13,289	<b>7.5</b>	5.8-9.3
\$50,000 - 74,999	5,818	<b>6.2</b>	3.9-8.5	4,526	<b>5.6</b>	3.2-8.0	10,344	<b>5.9</b>	4.3-7.6
\$75,000+	9,291	<b>6.5</b>	4.6-8.3	7,924	<b>7.2</b>	4.9-9.4	17,215	<b>6.8</b>	5.3-8.2

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

### Other Cancer Prevalence

<b>Definition</b>	Responding “Yes” to the question, “Has a doctor, nurse, or other health professional ever told you that you had any other types of cancer?”
<b>Prevalence</b>	<b>WV: 8.1%</b> (95% CI: 7.4-8.8) <b>U.S.: 6.5%</b> (95% CI: 6.4-6.7) The West Virginia prevalence of other cancer was significantly higher than the U.S. prevalence. West Virginia ranked the 4 <sup>th</sup> highest among the 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 5.8% (95% CI: 5.0-6.7) <b>Women:</b> 10.3% (95% CI: 9.3-11.3) The prevalence of other cancer was significantly higher among women than among men.
<b>Race/Ethnicity</b>	No race/ethnicity statistics are reported due to unreliable estimates.
<b>Age</b>	The prevalence of other cancer was significantly higher among those aged 65 and older (16.9%) than among all other age groups.
<b>Education</b>	The prevalence of other cancer was significantly higher among those with less than a high school education (9.7%) than among college graduates (6.3%).
<b>Household Income</b>	The prevalence of other cancer was significantly higher among those with an annual household income of less than \$50,000 than among those earning \$75,000 or more per year (4.4%).

## CHAPTER 22: CANCER

**Table 22.2 Other Cancer Prevalence by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	41,702	<b>5.8</b>	5.0-6.7	76,863	<b>10.3</b>	9.3-11.3	118,565	<b>8.1</b>	7.4-8.8
<b>Age</b>									
18-24	447	<b>*0.5</b>	0.0-1.5	1,288	<b>*1.6</b>	0.0-3.4	1,735	<b>*1.0</b>	0.0-2.0
25-34	278	<b>*0.3</b>	0.0-0.8	6,148	<b>5.8</b>	2.9-8.8	6,426	<b>3.0</b>	1.5-4.5
35-44	2,128	<b>*1.9</b>	0.5-3.3	6,331	<b>5.8</b>	3.4-8.1	8,459	<b>3.8</b>	2.5-5.2
45-54	2,842	<b>2.4</b>	1.0-3.8	11,007	<b>9.3</b>	6.8-11.9	13,849	<b>5.9</b>	4.4-7.4
55-64	10,212	<b>7.8</b>	5.5-10.2	18,390	<b>13.7</b>	11.2-16.2	28,602	<b>10.8</b>	9.1-12.5
65+	25,795	<b>16.6</b>	13.9-19.2	32,706	<b>17.2</b>	14.9-19.5	58,501	<b>16.9</b>	15.2-18.7
<b>Education</b>									
Less than H.S.	7,648	<b>7.1</b>	4.4-9.7	13,637	<b>12.2</b>	9.0-15.5	21,285	<b>9.7</b>	7.6-11.8
H.S. or G.E.D.	17,156	<b>5.7</b>	4.4-7.0	32,018	<b>11.3</b>	9.6-13.0	49,174	<b>8.4</b>	7.3-9.5
Some Post-H.S.	9,604	<b>5.4</b>	3.7-7.1	22,202	<b>10.1</b>	8.1-12.1	31,806	<b>8.0</b>	6.7-9.4
College Graduate	7,294	<b>5.7</b>	4.3-7.1	8,854	<b>6.8</b>	5.3-8.4	16,148	<b>6.3</b>	5.2-7.3
<b>Income</b>									
Less than \$15,000	4,549	<b>6.2</b>	3.3-9.1	11,527	<b>12.7</b>	9.4-15.9	16,076	<b>9.8</b>	7.6-12.0
\$15,000 - 24,999	7,271	<b>6.2</b>	4.0-8.4	15,869	<b>11.3</b>	8.9-13.6	23,140	<b>9.0</b>	7.3-10.6
\$25,000 - 34,999	5,064	<b>6.9</b>	4.2-9.7	12,427	<b>16.3</b>	11.8-20.7	17,491	<b>11.7</b>	9.0-14.4
\$35,000 - 49,999	5,841	<b>6.5</b>	4.1-8.9	8,122	<b>9.4</b>	6.4-12.3	13,962	<b>7.9</b>	6.0-9.8
\$50,000 - 74,999	3,891	<b>4.1</b>	2.3-6.0	6,541	<b>8.1</b>	5.3-10.9	10,433	<b>5.9</b>	4.3-7.6
\$75,000+	5,934	<b>4.1</b>	2.6-5.7	5,197	<b>4.7</b>	3.0-6.4	11,131	<b>4.4</b>	3.2-5.5

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

### Overall Cancer Prevalence

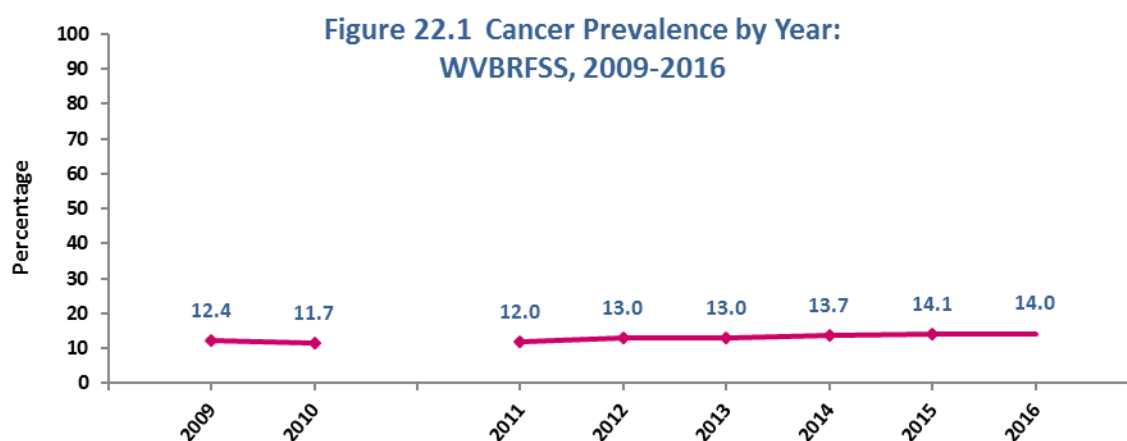
<b>Definition</b>	Responding “Yes” to either of the questions, “Has a doctor, nurse, or other health professional ever told you that you had skin cancer” or “Has a doctor, nurse, or other health professional ever told you that you had any other types of cancer?”
<b>Prevalence</b>	<b>WV: 14.0%</b> (95% CI: 13.1-14.8) <b>U.S.: 11.2%</b> (95% CI: 11.0-11.4) The West Virginia prevalence of cancer was significantly higher than the U.S. prevalence. West Virginia ranked the 3 <sup>rd</sup> highest among 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 12.1% (95% CI: 10.9-13.2) <b>Women:</b> 15.8% (95% CI: 14.6-17.0) The prevalence of cancer was significantly higher among women than among men.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 14.5% (95% CI: 13.6-15.4) <b>Black, Non-Hispanic:</b> *5.2% (95% CI: 1.9-8.4) <b>Other, Non-Hispanic:</b> *10.1% (95% CI: 3.6-16.5) <b>Multiracial, Non-Hispanic:</b> 10.4% (95% CI: 4.5-16.4) <b>Hispanic:</b> *7.0 (95% CI: 0.6-13.3) There was no race/ethnicity difference in the prevalence of cancer. * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.
<b>Age</b>	The prevalence of cancer was significantly higher among those aged 55 and older than among those aged 54 and younger.
<b>Education</b>	There was no educational attainment difference in the prevalence of cancer.
<b>Household Income</b>	The prevalence of cancer was significantly lower among those with an annual household income of \$75,000 or more (10.4%) than among those earning \$15,000-\$49,999 per year.

## CHAPTER 22: CANCER

**Table 22.3 Cancer Prevalence by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	86,011	<b>12.1</b>	10.9-13.2	117,858	<b>15.8</b>	14.6-17.0	203,869	<b>14.0</b>	13.1-14.8
<b>Age</b>									
18-24	1,823	<b>*2.1</b>	0.0-4.1	2,348	<b>*2.9</b>	0.5-5.2	4,172	<b>*2.5</b>	0.9-4.0
25-34	505	<b>*0.5</b>	0.0-1.0	6,533	<b>6.2</b>	3.3-9.2	7,038	<b>3.3</b>	1.8-4.8
35-44	4,881	<b>4.4</b>	2.2-6.5	8,950	<b>8.2</b>	5.5-10.9	13,832	<b>6.3</b>	4.5-8.0
45-54	6,799	<b>5.8</b>	3.7-8.0	16,849	<b>14.3</b>	11.2-17.3	23,648	<b>10.1</b>	8.2-12.0
55-64	22,306	<b>17.1</b>	14.0-20.2	28,587	<b>21.3</b>	18.3-24.3	50,893	<b>19.2</b>	17.1-21.4
65+	49,530	<b>31.9</b>	28.5-35.2	53,334	<b>28.0</b>	25.2-30.8	102,864	<b>29.7</b>	27.6-31.9
<b>Education</b>									
Less than H.S.	12,043	<b>11.2</b>	7.9-14.5	19,399	<b>17.4</b>	13.6-21.1	31,442	<b>14.3</b>	11.8-16.8
H.S. or G.E.D.	38,374	<b>12.8</b>	10.9-14.7	48,019	<b>16.9</b>	14.8-19.0	86,393	<b>14.8</b>	13.4-16.2
Some Post-H.S.	19,847	<b>11.2</b>	8.8-13.6	35,279	<b>16.1</b>	13.7-18.5	55,126	<b>13.9</b>	12.2-15.6
College Graduate	15,747	<b>12.3</b>	10.3-14.4	15,009	<b>11.6</b>	9.6-13.6	30,756	<b>12.0</b>	10.5-13.4
<b>Income</b>									
Less than \$15,000	8,408	<b>11.5</b>	7.8-15.2	15,789	<b>17.4</b>	13.7-21.0	24,197	<b>14.8</b>	12.1-17.4
\$15,000 - 24,999	14,755	<b>12.6</b>	9.6-15.6	23,305	<b>16.6</b>	13.7-19.4	38,059	<b>14.8</b>	12.7-16.8
\$25,000 - 34,999	10,072	<b>13.8</b>	10.0-17.7	16,539	<b>21.6</b>	16.8-26.5	26,611	<b>17.8</b>	14.7-21.0
\$35,000 - 49,999	13,193	<b>14.8</b>	11.2-18.3	12,514	<b>14.5</b>	11.1-17.9	25,707	<b>14.6</b>	12.2-17.1
\$50,000 - 74,999	8,649	<b>9.2</b>	6.5-12.0	10,030	<b>12.4</b>	9.0-15.8	18,679	<b>10.7</b>	8.5-12.8
\$75,000+	13,700	<b>9.5</b>	7.3-11.8	12,742	<b>11.5</b>	8.8-14.2	26,441	<b>10.4</b>	8.7-12.1

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



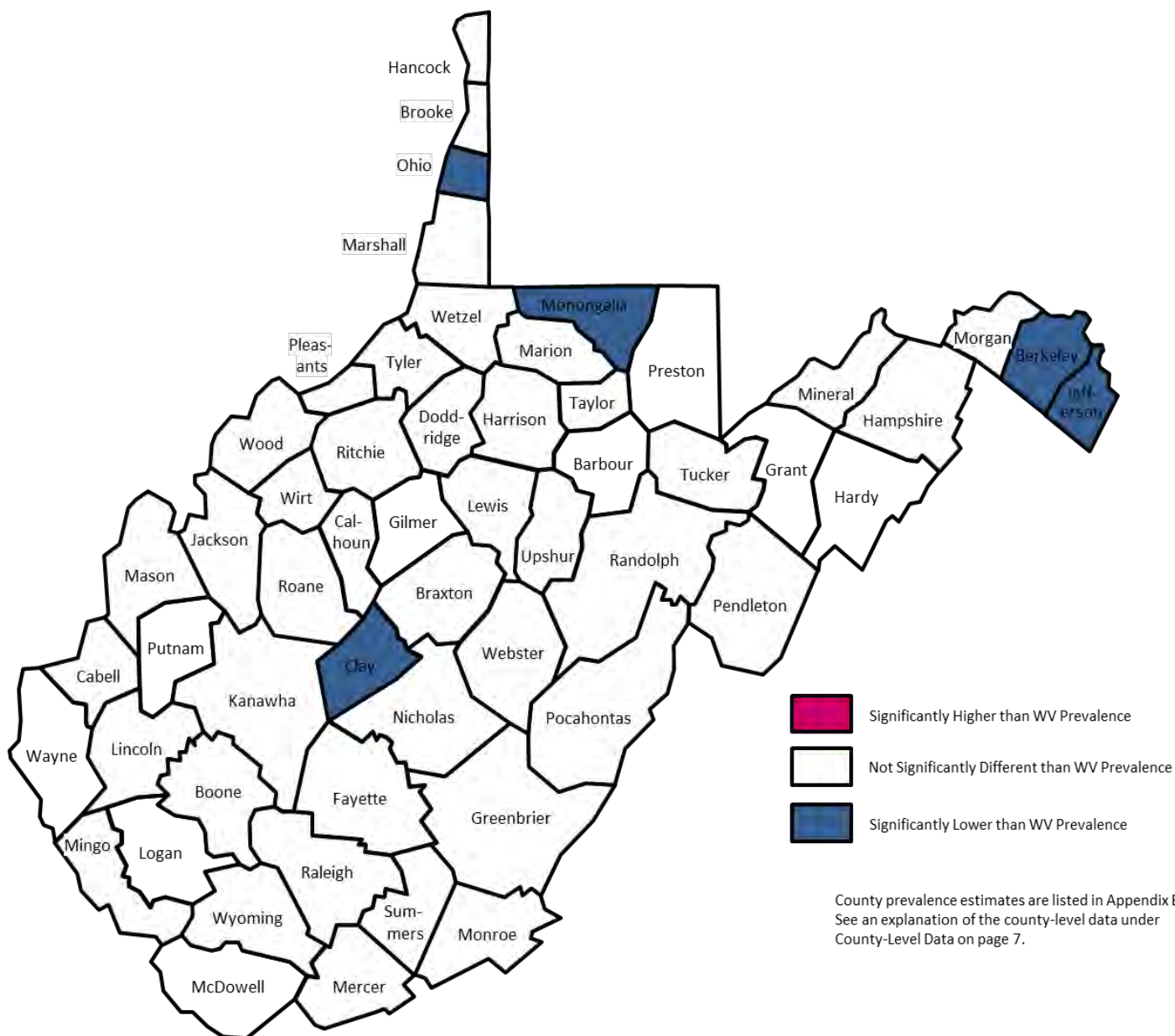
\*Due to changes in sample composition and weighting methodology, 2011-2016 results are not directly comparable to previous years.



## CHAPTER 22: CANCER

Figure 22.2 Cancer Prevalence by County: WVBRFSS, 2012-2016

WV Prevalence (2012-2016) - 13.6%



### Cancer Survivorship

Respondents who indicated that they had been diagnosed with skin cancer or any other type of cancer, and men diagnosed with prostate cancer, were asked these additional questions:

#### Definition

##### *Given a written summary of cancer treatments*

Responding “Yes” to the question, “Did any doctor, nurse or other health professional ever give you a written summary of all the cancer treatments that you have received?”

##### *Participated in a clinical trial*

Responding “Yes” to the question, “Did you participate in a clinical trial as part of your cancer treatment?”

##### *Received instructions about routine cancer check-ups after treatment*

Responding “Yes” to the question, “Have you ever received instructions from a doctor, nurse, or other health professional about where you should return or who you should see for routine cancer check-ups after completing your treatment for cancer?”

##### *Check-up instructions were written*

Responding in the affirmative to the above indicator and “Yes” to the question, “Were these instructions written down or printed on paper for you?”

All indicators are restricted to cancer survivors.

#### Prevalence

##### *Given a written summary of cancer treatments*

**WV: 35.4%** (95% CI: 31.8-38.9)

##### *Participated in a clinical trial*

**WV: 4.9%** (95% CI: 3.4-6.5)

##### *Received instructions about routine cancer check-ups after treatment*

**WV: 63.9%** (95% CI: 60.3-67.5)

##### *Check-up instructions were written*

**WV: 76.2%** (95% CI: 72.4-80.1)

Because these questions were state-added questions, U.S. data are not available for comparison.

#### Gender

##### *Given a written summary of cancer treatments*

**Men: 32.2%** (95% CI: 26.7-37.7)

**Women: 37.6%** (95% CI: 32.9-42.3)

There was no gender difference in the prevalence of given a written summary of cancer treatment.

##### *Participated in a clinical trial*

**Men: 4.2%** (95% CI: 1.8-6.7)

**Women: 5.4%** (95% CI: 3.4-7.4)

There was no gender difference in the prevalence of participated in a clinical trial.

### Gender

#### *Received instructions about routine cancer check-ups after treatment*

**Men:** 64.2% (95% CI: 58.5-69.9)

**Women:** 63.6% (95% CI: 58.9-68.3)

There was no gender difference in the prevalence of received instructions about routine cancer check-ups after treatment.

#### *Check-up instructions were written*

**Men:** 74.7% (95% CI: 68.3-81.2)

**Women:** 77.3% (95% CI: 72.5-82.0)

There was no gender difference in the prevalence of check-up instructions were written.

### Race/Ethnicity

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

### Age

There was no age difference in the prevalence of given a written summary of cancer treatment. The prevalence of participated in a clinical trial was significantly higher among those aged 55-64 (8.5%) than among those aged 65 and older (2.5%). There was no age difference in the prevalence of received instructions about routine cancer check-ups after treatment. There was no age difference in the prevalence of check-up instructions were written.

### Education

There was no educational attainment difference in the prevalence of given a written summary of cancer treatment. There was no educational attainment difference in the prevalence of participated in a clinical trial. There was no educational attainment difference in the prevalence of received instructions about routine cancer check-ups after treatment. There was no educational attainment difference in the prevalence of check-up instructions were written.

### Household Income

There was no annual household income difference in the prevalence of given a written summary of cancer treatment. There was no annual household income difference in the prevalence of participated in a clinical trial. There was no annual household income difference in the prevalence of received instructions about routine cancer check-ups after treatment. There was no annual household income difference in the prevalence of check-up instructions were written.

## CHAPTER 22: CANCER

**Table 22.4 Prevalence of Cancer Survivorship Indictors by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Given Written Summary of Cancer Treatments			Participated in a Clinical Trial		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	52,946	<b>35.4</b>	31.8-38.9	7,637	<b>4.9</b>	3.4-6.5
<b>Gender</b>						
Male	19,984	<b>32.2</b>	26.7-37.7	2,718	<b>4.2</b>	1.8-6.7
Female	32,962	<b>37.6</b>	32.9-42.3	4,918	<b>5.4</b>	3.4-7.4
<b>Age</b>						
18-24	2,342	<b>*62.6</b>	29.6-95.7	0	<b>*0.0</b>	0.0-0.0
25-34	2,441	<b>*51.1</b>	26.4-75.8	471	<b>*9.9</b>	0.0-23.2
35-44	3,730	<b>*44.6</b>	26.2-63.0	335	<b>*3.7</b>	0.0-8.9
45-54	6,836	<b>*36.7</b>	26.0-47.4	1,681	<b>*8.7</b>	2.5-15.0
55-64	13,286	<b>37.1</b>	30.0-44.1	3,197	<b>8.5</b>	4.5-12.5
65+	24,011	<b>31.0</b>	26.6-35.5	1,952	<b>2.5</b>	1.0-3.9
<b>Education</b>						
Less than H.S.	8,281	<b>33.0</b>	23.3-42.8	1,549	<b>*6.2</b>	0.7-11.7
H.S. or G.E.D.	22,297	<b>35.4</b>	29.8-41.0	2,314	<b>3.6</b>	1.7-5.5
Some Post-H.S.	13,620	<b>34.0</b>	27.1-40.9	2,415	<b>5.7</b>	2.6-8.8
College Graduate	8,748	<b>40.9</b>	33.5-48.3	1,358	<b>5.9</b>	2.8-9.1
<b>Income</b>						
Less than \$15,000	5,592	<b>30.4</b>	20.6-40.2	2,099	<b>*11.4</b>	3.7-19.2
\$15,000 - 24,999	11,008	<b>38.9</b>	30.8-47.0	1,007	<b>*3.4</b>	0.7-6.1
\$25,000 - 34,999	6,239	<b>30.4</b>	20.8-40.1	666	<b>*3.2</b>	0.2-6.1
\$35,000 - 49,999	6,396	<b>*35.3</b>	24.7-46.0	485	<b>*2.5</b>	0.0-5.4
\$50,000 - 74,999	4,787	<b>*38.4</b>	26.2-50.6	274	<b>*2.0</b>	0.0-5.0
\$75,000+	7,978	<b>38.8</b>	29.2-48.5	1,491	<b>*7.3</b>	2.8-11.7

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

## CHAPTER 22: CANCER

**Table 22.5 Prevalence of Cancer Survivorship Indicators by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Received Instructions About Routine Check-ups After Treatment			Check-up Instructions Were Written		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	98,314	<b>63.9</b>	60.3-67.5	72,234	<b>76.2</b>	72.4-80.1
<b>Gender</b>						
Male	41,154	<b>64.2</b>	58.5-69.9	29,625	<b>74.7</b>	68.3-81.2
Female	57,160	<b>63.6</b>	58.9-68.3	42,608	<b>77.3</b>	72.5-82.0
<b>Age</b>						
18-24	1,424	<b>*38.1</b>	6.0-70.2	1,424	<b>*100.0</b>	100.0-100.0
25-34	3,937	<b>*82.4</b>	65.5-99.3	3,541	<b>*89.9</b>	76.2-100.0
35-44	5,812	<b>*70.6</b>	54.5-86.7	4,955	<b>*90.7</b>	73.5-100.0
45-54	12,959	<b>*67.3</b>	56.4-78.1	10,675	<b>82.4</b>	73.0-91.7
55-64	25,964	<b>68.3</b>	61.5-75.2	18,746	<b>75.4</b>	67.7-83.1
65+	47,753	<b>60.5</b>	55.7-65.4	32,488	<b>71.1</b>	65.4-76.9
<b>Education</b>						
Less than H.S.	15,203	<b>*59.8</b>	49.6-70.0	11,543	<b>*75.9</b>	65.4-86.4
H.S. or G.E.D.	40,951	<b>64.3</b>	58.6-70.0	30,066	<b>75.7</b>	69.5-81.9
Some Post-H.S.	26,623	<b>62.8</b>	56.0-69.7	19,513	<b>76.4</b>	68.7-84.1
College Graduate	15,385	<b>69.2</b>	62.1-76.3	11,112	<b>78.5</b>	71.2-85.8
<b>Income</b>						
Less than \$15,000	10,656	<b>*56.8</b>	46.1-67.5	8,160	<b>*79.0</b>	67.4-90.5
\$15,000 - 24,999	18,488	<b>63.0</b>	55.0-71.0	12,263	<b>69.5</b>	59.7-79.2
\$25,000 - 34,999	14,223	<b>69.0</b>	59.4-78.7	10,856	<b>79.2</b>	69.3-89.2
\$35,000 - 49,999	11,773	<b>*62.6</b>	52.4-72.7	9,358	<b>80.0</b>	70.1-89.9
\$50,000 - 74,999	9,588	<b>*72.5</b>	61.1-83.9	7,430	<b>*79.0</b>	67.5-90.6
\$75,000+	13,138	<b>*64.9</b>	54.6-75.2	9,449	<b>*76.9</b>	65.8-88.0

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

### Lifetime Asthma

<b>Definition</b>	Responding “Yes” to the question, “Has a doctor, nurse, or other health professional ever told you that you had asthma?”
<b>Prevalence</b>	<b>WV: 16.2%</b> (95% CI: 15.1-17.3) <b>U.S.: 13.6%</b> (95% CI: 13.4-13.8) The West Virginia prevalence of lifetime asthma was significantly higher than the U.S. prevalence. West Virginia ranked the 8 <sup>th</sup> highest among 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 14.3% (95% CI: 12.7-15.9) <b>Women:</b> 18.0% (95% CI: 16.5-19.5) The prevalence of lifetime asthma was significantly higher among women than among men.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 16.1% (95% CI: 15.0-17.2) <b>Black, Non-Hispanic:</b> 18.9% (95% CI: 11.3-26.5) <b>Other, Non-Hispanic:</b> 14.2% (95% CI: 6.3-22.1) <b>Multiracial, Non-Hispanic:</b> *24.8% (95% CI: 12.8-36.9) <b>Hispanic:</b> *4.7% (95% CI: 0.0-12.7) There was no race/ethnicity difference in the prevalence of lifetime asthma . * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.
<b>Age</b>	The prevalence of lifetime asthma was significantly higher among those aged 18-24 (20.9%) than among those aged 65 and older (13.3%).
<b>Education</b>	The prevalence of lifetime asthma was significantly higher among those with less than a high school education (23.3%) than among all other educational attainment levels.
<b>Household Income</b>	The prevalence of lifetime asthma was significantly higher among those with an annual household income of less than \$15,000 per year (23.3%) than among those with an income of \$25,000 or more per year.

## CHAPTER 23: RESPIRATORY DISEASES

**Table 23.1 Lifetime Asthma Prevalence by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	102,286	<b>14.3</b>	12.7-15.9	134,297	<b>18.0</b>	16.5-19.5	236,583	<b>16.2</b>	15.1-17.3
<b>Age</b>									
18-24	19,028	<b>21.8</b>	14.5-29.2	16,313	<b>19.9</b>	13.2-26.5	35,341	<b>20.9</b>	15.9-25.9
25-34	18,569	<b>17.0</b>	12.1-21.8	16,800	<b>15.9</b>	12.1-19.7	35,369	<b>16.4</b>	13.4-19.5
35-44	17,077	<b>15.3</b>	11.3-19.2	22,960	<b>20.7</b>	16.5-25.0	40,037	<b>18.0</b>	15.1-20.9
45-54	14,042	<b>12.0</b>	8.9-15.1	24,599	<b>20.8</b>	17.3-24.3	38,640	<b>16.4</b>	14.1-18.8
55-64	16,990	<b>13.0</b>	10.3-15.7	22,897	<b>17.2</b>	14.4-19.9	39,887	<b>15.1</b>	13.2-17.0
65+	16,348	<b>10.5</b>	8.3-12.7	29,902	<b>15.7</b>	13.4-18.0	46,250	<b>13.3</b>	11.7-14.9
<b>Education</b>									
Less than H.S.	21,040	<b>19.4</b>	14.7-24.1	30,252	<b>27.1</b>	22.2-32.1	51,293	<b>23.3</b>	19.9-26.7
H.S. or G.E.D.	41,370	<b>13.8</b>	11.2-16.3	45,722	<b>16.0</b>	13.8-18.3	87,092	<b>14.9</b>	13.1-16.6
Some Post-H.S.	25,009	<b>14.1</b>	10.9-17.4	41,028	<b>18.7</b>	16.0-21.4	66,037	<b>16.7</b>	14.6-18.8
College Graduate	14,700	<b>11.5</b>	9.0-14.0	17,142	<b>13.3</b>	11.1-15.5	31,842	<b>12.4</b>	10.7-14.1
<b>Income</b>									
Less than \$15,000	14,735	<b>20.1</b>	14.6-25.6	23,391	<b>25.8</b>	21.3-30.3	38,127	<b>23.3</b>	19.8-26.8
\$15,000 - 24,999	21,247	<b>17.9</b>	13.6-22.3	27,907	<b>19.7</b>	16.0-23.3	49,155	<b>18.9</b>	16.1-21.7
\$25,000 - 34,999	7,266	<b>10.0</b>	5.9-14.1	14,745	<b>19.3</b>	14.3-24.3	22,011	<b>14.8</b>	11.5-18.0
\$35,000 - 49,999	9,439	<b>10.5</b>	6.8-14.3	10,078	<b>11.6</b>	8.2-15.0	19,517	<b>11.1</b>	8.5-13.6
\$50,000 - 74,999	13,661	<b>14.5</b>	9.5-19.4	13,248	<b>16.4</b>	12.0-20.8	26,909	<b>15.4</b>	12.0-18.7
\$75,000+	14,530	<b>10.1</b>	7.2-13.0	14,522	<b>13.1</b>	10.2-16.0	29,051	<b>11.4</b>	9.3-13.5

### Current Asthma

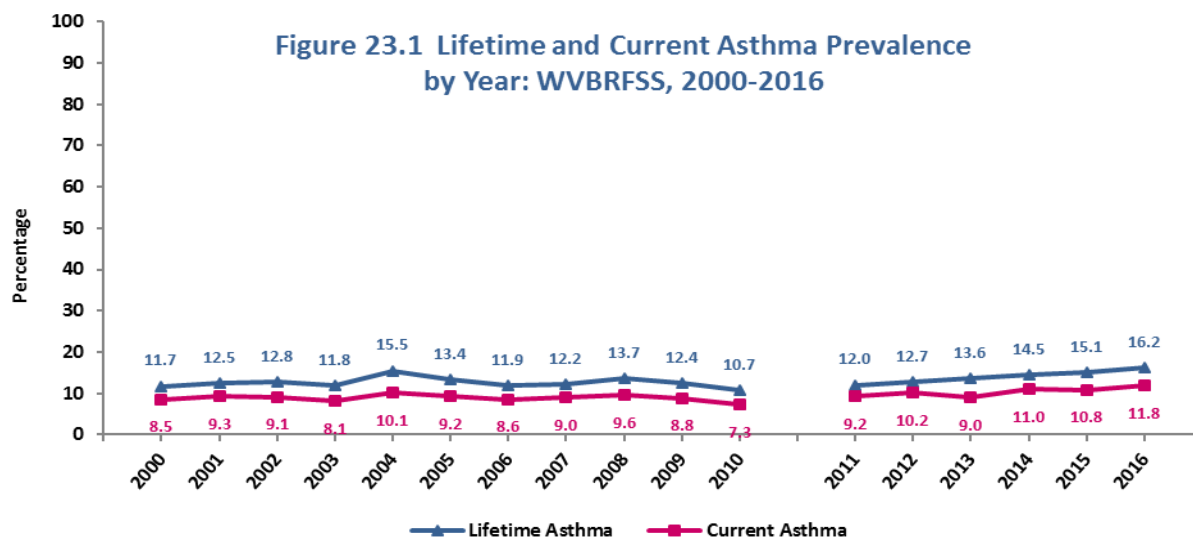
<b>Definition</b>	Responding “Yes” to the lifetime asthma question and “Yes” to the question, “Do you still have asthma?”
<b>Prevalence</b>	<p><b>WV: 11.8%</b> (95% CI: 10.9-12.7)  <b>U.S.: 8.9%</b> (95% CI: 8.7-9.1)</p> <p>The West Virginia prevalence of current asthma was significantly higher than the U.S. prevalence. West Virginia ranked the 2<sup>nd</sup> highest among 54 BRFSS participants.</p>
<b>Gender</b>	<p><b>Men:</b> 8.6% (95% CI: 7.4-9.8)  <b>Women:</b> 14.8% (95% CI: 13.5-16.2)</p> <p>The prevalence of current asthma was significantly higher among women than among men.</p>
<b>Race/Ethnicity</b>	<p><b>White, Non-Hispanic:</b> 11.6% (95% CI: 10.7-12.6)  <b>Black, Non-Hispanic:</b> 16.3% (95% CI: 8.8-23.9)  <b>Other, Non-Hispanic:</b> *11.3% (95% CI: 3.9-18.6)  <b>Multiracial, Non-Hispanic:</b> 13.3% (95% CI: 6.4-20.2)  <b>Hispanic:</b> *4.7% (95% CI: 0.0-12.7)</p> <p>There was no race/ethnicity difference in the prevalence of current asthma.  * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</p>
<b>Age</b>	There was no age difference in the prevalence of current asthma.
<b>Education</b>	The prevalence of current asthma was significantly higher among those with less than a high school education (19.2%) than among all other education levels.
<b>Household Income</b>	The prevalence of current asthma was significantly higher among those with an annual household income of less than \$15,000 (19.7%) than among those earning \$25,000 or more per year.



## CHAPTER 23: RESPIRATORY DISEASES

**Table 23.2 Current Asthma Prevalence by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	61,396	<b>8.6</b>	7.4-9.8	110,420	<b>14.8</b>	13.5-16.2	171,816	<b>11.8</b>	10.9-12.7
<b>Age</b>									
18-24	9,500	<b>11.1</b>	5.5-16.7	12,638	<b>15.4</b>	9.1-21.7	22,138	<b>13.2</b>	9.0-17.4
25-34	8,007	<b>7.3</b>	4.1-10.6	14,096	<b>13.4</b>	9.9-16.9	22,103	<b>10.3</b>	7.9-12.7
35-44	8,741	<b>7.8</b>	4.9-10.7	17,379	<b>15.7</b>	11.9-19.6	26,119	<b>11.8</b>	9.3-14.2
45-54	10,594	<b>9.1</b>	6.3-11.8	20,640	<b>17.5</b>	14.2-20.8	31,234	<b>13.3</b>	11.1-15.5
55-64	12,705	<b>9.8</b>	7.4-12.2	19,600	<b>14.7</b>	12.1-17.3	32,304	<b>12.3</b>	10.5-14.0
65+	11,617	<b>7.5</b>	5.6-9.3	25,310	<b>13.3</b>	11.2-15.5	36,927	<b>10.7</b>	9.2-12.2
<b>Education</b>									
Less than H.S.	14,720	<b>13.6</b>	9.8-17.4	27,526	<b>24.7</b>	19.8-29.6	42,246	<b>19.2</b>	16.1-22.4
H.S. or G.E.D.	25,707	<b>8.6</b>	6.6-10.6	41,530	<b>14.6</b>	12.4-16.8	67,237	<b>11.5</b>	10.0-13.0
Some Post-H.S.	12,328	<b>7.0</b>	4.7-9.3	28,701	<b>13.1</b>	10.8-15.4	41,028	<b>10.4</b>	8.8-12.0
College Graduate	8,473	<b>6.7</b>	4.7-8.6	12,511	<b>9.7</b>	7.8-11.6	20,984	<b>8.2</b>	6.8-9.6
<b>Income</b>									
Less than \$15,000	11,742	<b>16.0</b>	10.8-21.2	20,590	<b>22.7</b>	18.4-27.1	32,332	<b>19.7</b>	16.4-23.1
\$15,000 - 24,999	13,340	<b>11.3</b>	7.8-14.8	24,364	<b>17.2</b>	13.6-20.8	37,705	<b>14.5</b>	12.0-17.1
\$25,000 - 34,999	3,683	<b>5.1</b>	2.2-8.0	12,613	<b>16.5</b>	11.7-21.4	16,297	<b>11.0</b>	8.0-13.9
\$35,000 - 49,999	4,475	<b>5.0</b>	2.4-7.6	7,698	<b>8.9</b>	5.9-11.9	12,173	<b>6.9</b>	4.9-8.9
\$50,000 - 74,999	5,971	<b>6.3</b>	3.6-9.1	9,041	<b>11.2</b>	7.5-14.9	15,012	<b>8.6</b>	6.3-10.8
\$75,000+	7,626	<b>5.3</b>	3.2-7.4	10,478	<b>9.5</b>	6.9-12.0	18,104	<b>7.1</b>	5.5-8.8

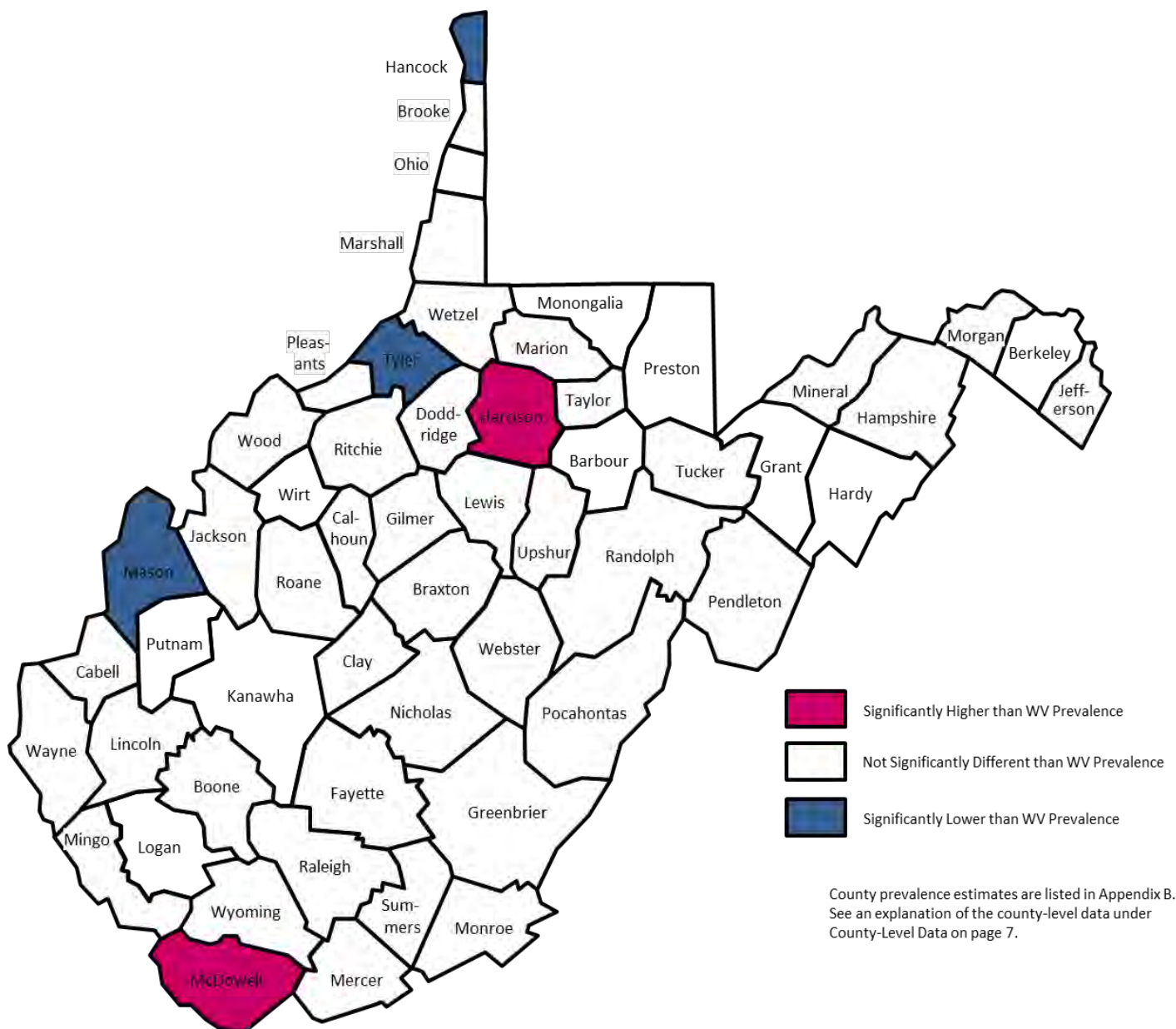


\*Due to changes in sample composition and weighting methodology, 2011-2016 results are not directly comparable to previous years.

## CHAPTER 23: RESPIRATORY DISEASES

**Figure 23.2 Current Asthma Prevalence by County: WVBRFSS, 2012-2016**

WV Prevalence (2012-2016) - 10.6%



### Chronic Obstructive Pulmonary Disease

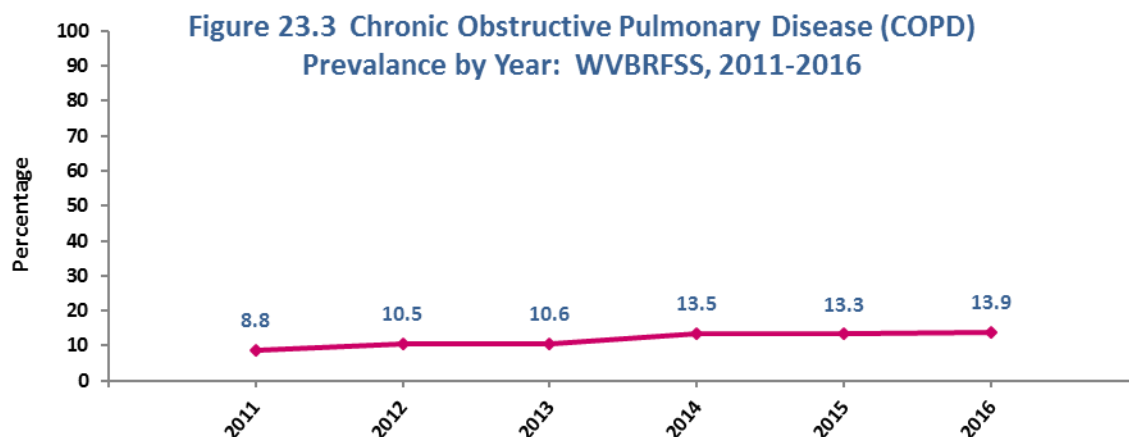
<b>Definition</b>	Responding “Yes” to the question, “Has a doctor, nurse, or other health professional ever told you that you have chronic obstructive pulmonary disease or COPD, emphysema, or chronic bronchitis?”
<b>Prevalence</b>	<b>WV: 13.9%</b> (95% CI: 13.0-14.9) <b>U.S.: 6.5%</b> (95% CI: 6.3-6.6) The West Virginia prevalence of chronic obstructive pulmonary disease (COPD) was significantly higher than the U.S. prevalence. West Virginia ranked 1 <sup>st</sup> highest among 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 12.7% (95% CI: 11.3-14.0) <b>Women:</b> 15.1% (95% CI: 13.8-16.4) There was no gender difference in the prevalence of COPD.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 13.5% (95% CI: 12.6-14.5) <b>Black, Non-Hispanic:</b> 17.8% (95% CI: 10.5-25.0) <b>Other, Non-Hispanic:</b> 19.8% (95% CI: 10.4-29.2) <b>Multiracial, Non-Hispanic:</b> *23.5% (95% CI: 13.2-33.8) <b>Hispanic:</b> *12.4% (95% CI: 0.4-24.4) There was no race/ethnicity difference in the prevalence of COPD. <small>* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</small>
<b>Age</b>	The prevalence of COPD was significantly higher among those aged 45 and older than among those aged 44 and younger.
<b>Education</b>	There were significant differences in the prevalence of COPD between each educational attainment level with the highest prevalence among those with less than a high school education (28.3%) and the lowest prevalence among college graduates (5.4%).
<b>Household Income</b>	The prevalence of COPD was significantly higher among those with an annual household income of less than \$15,000 (26.5%) than among all other income groups.

## CHAPTER 23: RESPIRATORY DISEASES

**Table 23.3 Prevalence of Chronic Obstructive Pulmonary Disease (COPD) by Demographic Characteristics: WVBFRSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	90,454	<b>12.7</b>	11.3-14.0	112,581	<b>15.1</b>	13.8-16.4	203,034	<b>13.9</b>	13.0-14.9
<b>Age</b>									
18-24	3,880	<b>*4.5</b>	0.5-8.5	3,391	<b>*4.1</b>	0.0-8.3	7,271	<b>*4.3</b>	1.4-7.2
25-34	5,840	<b>5.3</b>	2.3-8.3	5,454	<b>5.2</b>	2.9-7.5	11,295	<b>5.3</b>	3.3-7.2
35-44	7,925	<b>7.1</b>	4.5-9.8	11,533	<b>10.5</b>	7.3-13.7	19,458	<b>8.8</b>	6.7-10.9
45-54	15,286	<b>13.0</b>	9.5-16.5	25,313	<b>21.4</b>	17.8-25.1	40,599	<b>17.2</b>	14.7-19.8
55-64	26,153	<b>20.1</b>	16.9-23.4	29,737	<b>22.2</b>	19.1-25.2	55,890	<b>21.2</b>	18.9-23.4
65+	31,183	<b>20.1</b>	17.2-23.0	36,614	<b>19.3</b>	16.9-21.8	67,797	<b>19.7</b>	17.8-21.5
<b>Education</b>									
Less than H.S.	27,730	<b>25.5</b>	20.5-30.4	34,466	<b>31.2</b>	26.2-36.1	62,196	<b>28.3</b>	24.9-31.8
H.S. or G.E.D.	38,664	<b>12.9</b>	10.8-15.0	44,028	<b>15.5</b>	13.4-17.5	82,692	<b>14.2</b>	12.7-15.6
Some Post-H.S.	17,337	<b>9.8</b>	7.5-12.1	26,683	<b>12.2</b>	10.1-14.2	44,020	<b>11.1</b>	9.6-12.6
College Graduate	6,592	<b>5.2</b>	3.7-6.6	7,247	<b>5.6</b>	4.2-7.0	13,840	<b>5.4</b>	4.4-6.4
<b>Income</b>									
Less than \$15,000	15,092	<b>20.6</b>	15.5-25.6	28,264	<b>31.4</b>	26.8-36.1	43,356	<b>26.5</b>	23.1-30.0
\$15,000 - 24,999	24,194	<b>20.7</b>	16.5-25.0	26,933	<b>19.0</b>	15.6-22.5	51,127	<b>19.8</b>	17.1-22.5
\$25,000 - 34,999	10,378	<b>14.3</b>	10.0-18.5	9,735	<b>12.7</b>	9.2-16.3	20,113	<b>13.5</b>	10.7-16.2
\$35,000 - 49,999	9,530	<b>10.6</b>	7.4-13.8	7,565	<b>8.8</b>	6.0-11.5	17,095	<b>9.7</b>	7.6-11.8
\$50,000 - 74,999	6,422	<b>6.8</b>	4.0-9.6	5,930	<b>7.3</b>	4.3-10.3	12,352	<b>7.0</b>	5.0-9.1
\$75,000+	6,017	<b>4.2</b>	2.7-5.7	8,733	<b>7.9</b>	5.2-10.6	14,751	<b>5.8</b>	4.3-7.3

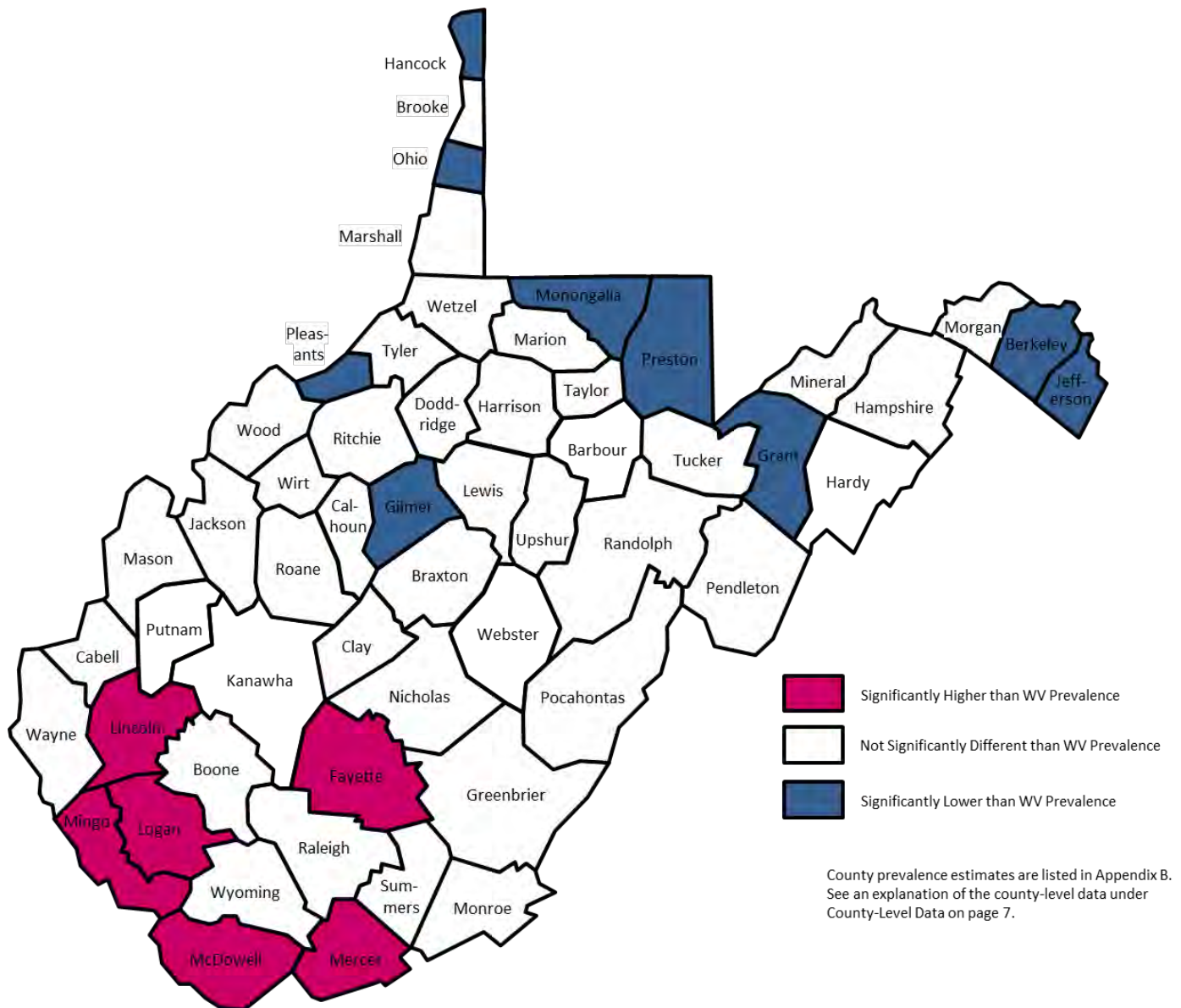
\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.



## CHAPTER 23: RESPIRATORY DISEASES

**Figure 23.4 Prevalence of Chronic Obstructive Pulmonary Disease (COPD) by County: WVBRFSS, 2012-2016**

WV Prevalence (2012-2016) - 12.4%



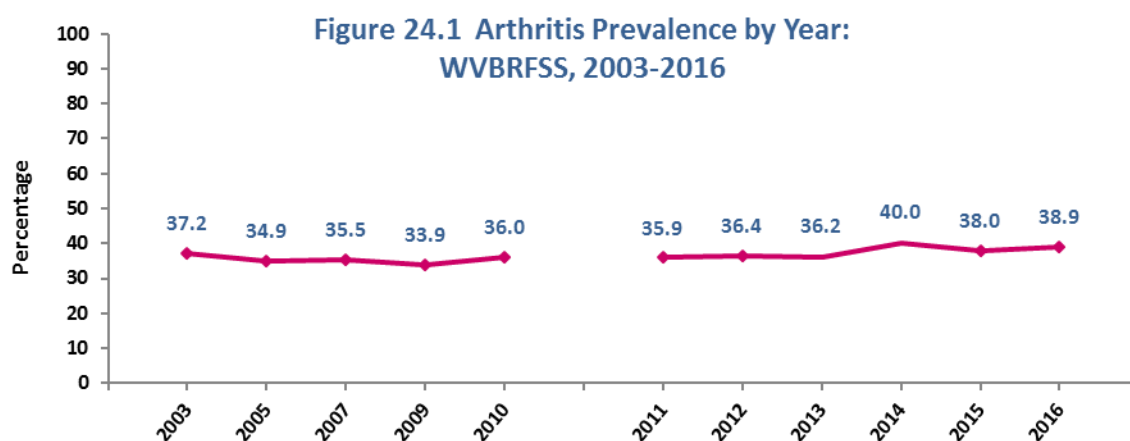
### Arthritis Prevalence

<b>Definition</b>	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?”
<b>Prevalence</b>	<b>WV: 38.9%</b> (95% CI: 37.6-40.2) <b>U.S.: 25.3%</b> (95% CI: 25.1-25.6) The West Virginia prevalence of arthritis was significantly higher than the U.S. prevalence. West Virginia ranked 1 <sup>st</sup> highest among 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 35.9% (95% CI: 34.0-37.8) <b>Women:</b> 41.7% (95% CI: 40.0-43.5) The prevalence of arthritis was significantly higher among women than men.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 38.9% (95% CI: 37.6-40.3) <b>Black, Non-Hispanic:</b> 35.0% (95% CI: 26.8-43.3) <b>Other, Non-Hispanic:</b> *44.4% (95% CI: 32.5-56.3) <b>Multiracial, Non-Hispanic:</b> *47.6% (95% CI: 35.4-59.8) <b>Hispanic:</b> *26.2% (95% CI: 12.4-40.0) There was no race/ethnicity difference in the prevalence of arthritis. * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.
<b>Age</b>	The prevalence of arthritis was significantly higher among those aged 65 and older (63.7%) than among all other age groups. The prevalence of arthritis was significantly lower among those aged 18-34 than among all other age groups.
<b>Education</b>	The prevalence of arthritis was significantly higher among those with less than a high school education (52.0%) than all other educational attainment groups. The arthritis prevalence was significantly lower among college graduates (26.2%) than among all other education groups.
<b>Household Income</b>	The prevalence of arthritis was significantly higher among those with an annual household income of less than \$15,000 (49.1%) than among those earning \$35,000 or more per year. The arthritis prevalence was significantly lower among those earning \$75,000 or more per year (24.1%) than among all other income groups.

## CHAPTER 24: ARTHRITIS

**Table 24.1 Prevalence of Arthritis by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	255,341	<b>35.9</b>	34.0-37.8	310,752	<b>41.7</b>	40.0-43.5	566,093	<b>38.9</b>	37.6-40.2
<b>Age</b>									
18-24	8,443	<b>9.8</b>	4.4-15.1	7,741	<b>9.4</b>	4.3-14.6	16,184	<b>9.6</b>	5.9-13.3
25-34	13,433	<b>12.3</b>	8.0-16.5	12,859	<b>12.2</b>	8.9-15.5	26,292	<b>12.2</b>	9.5-14.9
35-44	26,459	<b>24.0</b>	19.3-28.6	27,283	<b>24.7</b>	20.4-29.1	53,742	<b>24.3</b>	21.2-27.5
45-54	43,906	<b>37.4</b>	32.8-42.1	56,218	<b>47.8</b>	43.5-52.1	100,125	<b>42.6</b>	39.4-45.8
55-64	70,809	<b>55.1</b>	51.2-59.0	74,943	<b>56.0</b>	52.4-59.6	145,752	<b>55.6</b>	52.9-58.2
65+	91,469	<b>58.6</b>	55.1-62.1	128,745	<b>67.9</b>	65.1-70.7	220,214	<b>63.7</b>	61.5-65.9
<b>Education</b>									
Less than H.S.	56,043	<b>51.7</b>	45.9-57.6	58,351	<b>52.4</b>	46.9-57.8	114,394	<b>52.0</b>	48.0-56.0
H.S. or G.E.D.	109,253	<b>36.6</b>	33.6-39.7	131,332	<b>46.3</b>	43.4-49.2	240,586	<b>41.3</b>	39.2-43.5
Some Post-H.S.	59,795	<b>33.9</b>	29.9-37.8	83,189	<b>37.9</b>	34.7-41.1	142,984	<b>36.1</b>	33.6-38.6
College Graduate	29,457	<b>23.2</b>	20.4-26.0	37,453	<b>29.0</b>	26.1-31.9	66,910	<b>26.2</b>	24.1-28.2
<b>Income</b>									
Less than \$15,000	33,152	<b>45.1</b>	38.7-51.5	47,476	<b>52.3</b>	47.0-57.6	80,628	<b>49.1</b>	45.0-53.2
\$15,000 - 24,999	51,116	<b>43.2</b>	38.0-48.5	64,770	<b>45.9</b>	41.6-50.3	115,886	<b>44.7</b>	41.3-48.1
\$25,000 - 34,999	31,344	<b>43.7</b>	37.6-49.7	34,963	<b>45.9</b>	40.3-51.6	66,307	<b>44.8</b>	40.7-49.0
\$35,000 - 49,999	32,669	<b>36.7</b>	31.3-42.1	36,202	<b>41.6</b>	36.6-46.7	68,871	<b>39.1</b>	35.4-42.8
\$50,000 - 74,999	24,738	<b>26.4</b>	21.7-31.0	29,145	<b>36.1</b>	31.0-41.2	53,883	<b>30.9</b>	27.4-34.4
\$75,000+	32,100	<b>22.4</b>	19.1-25.7	28,920	<b>26.2</b>	22.4-29.9	61,021	<b>24.1</b>	21.6-26.5



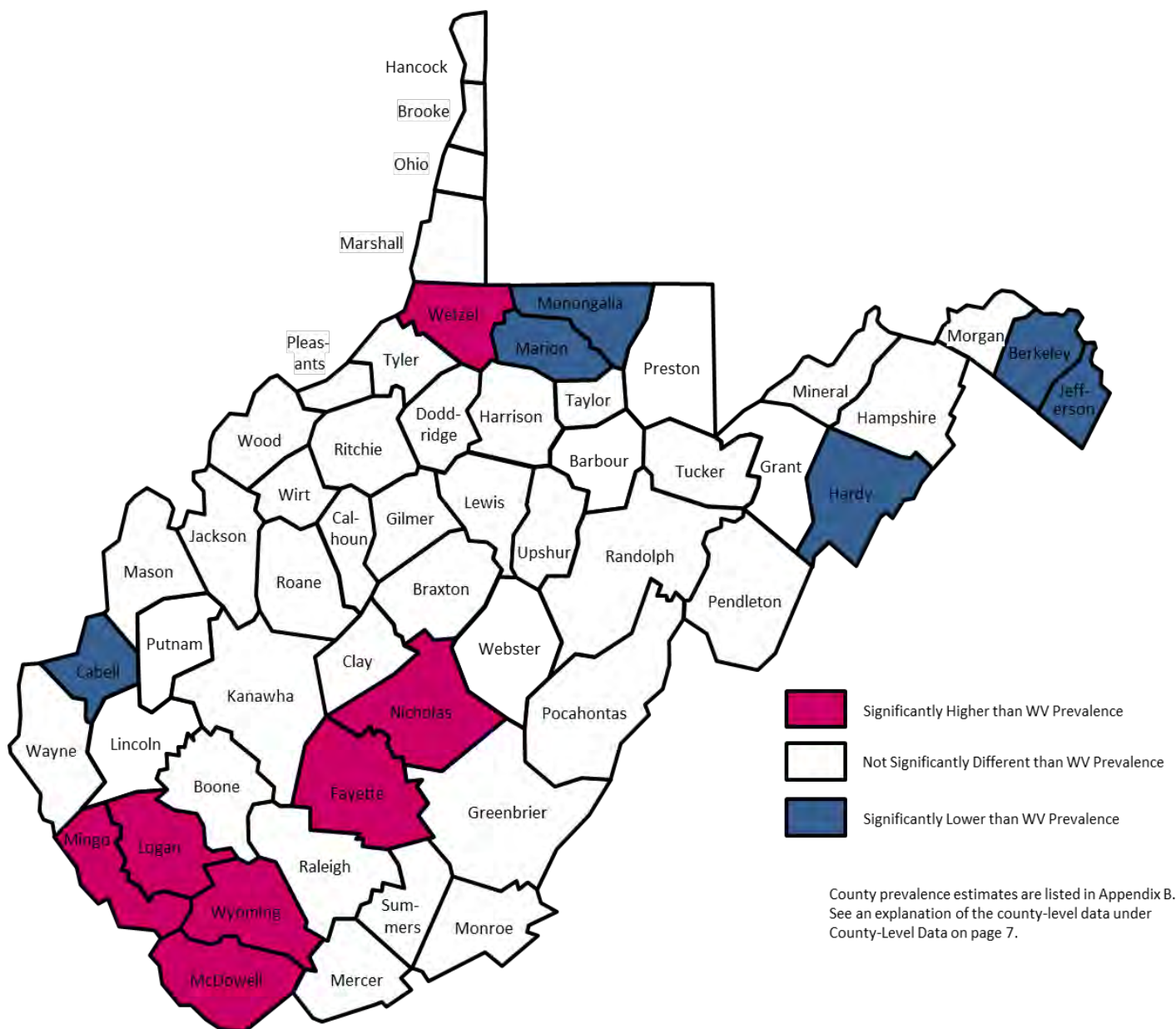
\*Due to changes in sample composition and weighting methodology, 2011-2016 results are not directly comparable to previous years.



## CHAPTER 24: ARTHRITIS

Figure 24.2 Arthritis Prevalence by County: WVBRFSS, 2012-2016

WV Prevalence (2012-2016) - 37.9%





### Kidney Disease Prevalence

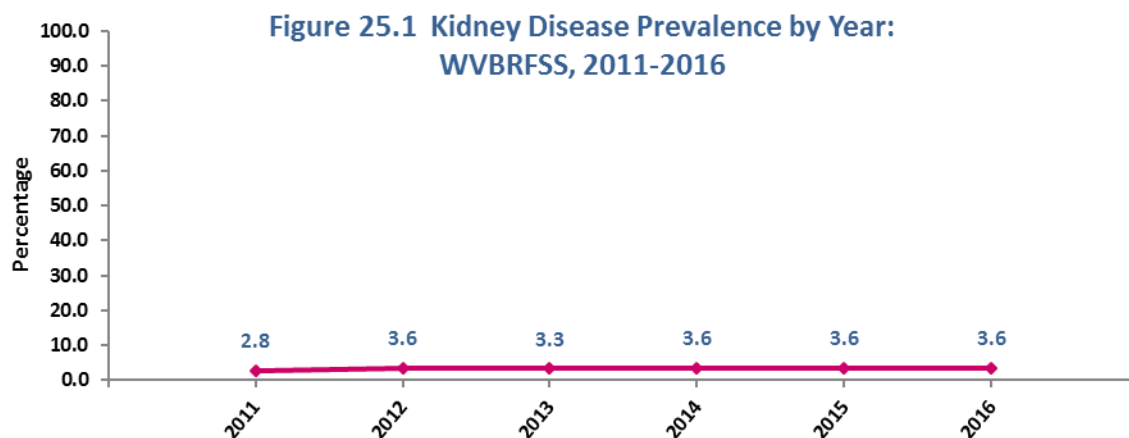
<b>Definition</b>	Responding “Yes” to the question, “Has a doctor, nurse, or other health professional ever told you that you have kidney disease?”
<b>Prevalence</b>	<b>WV: 3.6%</b> (95% CI: 3.2-4.1) <b>U.S.: 3.0%</b> (95% CI: 2.9-3.0) The West Virginia prevalence of kidney disease was significantly higher than the U.S. prevalence. West Virginia ranked the 9 <sup>th</sup> highest among 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 3.2% (95% CI: 2.6-3.8) <b>Women:</b> 4.0% (95% CI: 3.4-4.7) There was no gender difference in the prevalence of kidney disease.
<b>Race/Ethnicity</b>	No race/ethnicity statistics are reported due to unreliable estimates.
<b>Age</b>	The prevalence of kidney disease was significantly higher among those aged 65 and older (7.6%) than among all other age groups.
<b>Education</b>	There was no educational attainment difference in the prevalence of kidney disease.
<b>Household Income</b>	The prevalence of kidney disease was significantly higher among those with an annual household income of less than \$35,000 than among those earning \$50,000 or more per year.

## CHAPTER 25: KIDNEY DISEASE

**Table 25.1 Prevalence of Kidney Disease by Demographic Characteristics: WVBRFSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	22,734	<b>3.2</b>	2.6-3.8	30,209	<b>4.0</b>	3.4-4.7	52,943	<b>3.6</b>	3.2-4.1
<b>Age</b>									
18-24	282	<b>*0.3</b>	0.0-1.0	352	<b>*0.4</b>	0.0-1.1	634	<b>*0.4</b>	0.0-0.8
25-34	199	<b>*0.2</b>	0.0-0.5	2,268	<b>*2.2</b>	0.7-3.6	2,468	<b>*1.1</b>	0.4-1.9
35-44	1,569	<b>*1.4</b>	0.3-2.5	3,212	<b>2.9</b>	1.3-4.5	4,781	<b>2.1</b>	1.2-3.1
45-54	2,610	<b>*2.2</b>	0.7-3.7	3,514	<b>3.0</b>	1.6-4.4	6,124	<b>2.6</b>	1.6-3.6
55-64	5,738	<b>4.4</b>	2.8-6.0	7,046	<b>5.3</b>	3.5-7.0	12,784	<b>4.8</b>	3.7-6.0
65+	12,336	<b>7.9</b>	6.0-9.9	13,816	<b>7.3</b>	5.7-8.8	26,152	<b>7.6</b>	6.3-8.8
<b>Education</b>									
Less than H.S.	3,932	<b>3.6</b>	1.7-5.5	6,995	<b>6.3</b>	4.0-8.5	10,927	<b>5.0</b>	3.5-6.4
H.S. or G.E.D.	9,124	<b>3.0</b>	2.1-4.0	12,017	<b>4.2</b>	3.1-5.3	21,141	<b>3.6</b>	2.9-4.3
Some Post-H.S.	5,831	<b>3.3</b>	2.0-4.6	7,207	<b>3.3</b>	2.2-4.3	13,038	<b>3.3</b>	2.5-4.1
College Graduate	3,847	<b>3.0</b>	1.9-4.1	3,990	<b>3.1</b>	2.0-4.2	7,837	<b>3.0</b>	2.3-3.8
<b>Income</b>									
Less than \$15,000	1,957	<b>*2.7</b>	0.9-4.4	7,144	<b>7.9</b>	5.5-10.3	9,102	<b>5.6</b>	4.0-7.1
\$15,000 - 24,999	5,150	<b>4.4</b>	2.6-6.2	6,021	<b>4.3</b>	2.8-5.7	11,170	<b>4.3</b>	3.2-5.4
\$25,000 - 34,999	2,941	<b>4.0</b>	1.9-6.2	3,821	<b>5.0</b>	2.8-7.2	6,762	<b>4.6</b>	3.0-6.1
\$35,000 - 49,999	4,709	<b>5.2</b>	2.8-7.6	2,970	<b>3.4</b>	1.5-5.3	7,679	<b>4.3</b>	2.8-5.9
\$50,000 - 74,999	1,852	<b>*2.0</b>	0.8-3.2	1,451	<b>*1.8</b>	0.5-3.1	3,304	<b>1.9</b>	1.0-2.8
\$75,000+	1,892	<b>*1.3</b>	0.5-2.1	1,520	<b>*1.4</b>	0.4-2.3	3,412	<b>1.3</b>	0.7-2.0

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



### Ever Diagnosed with Depression

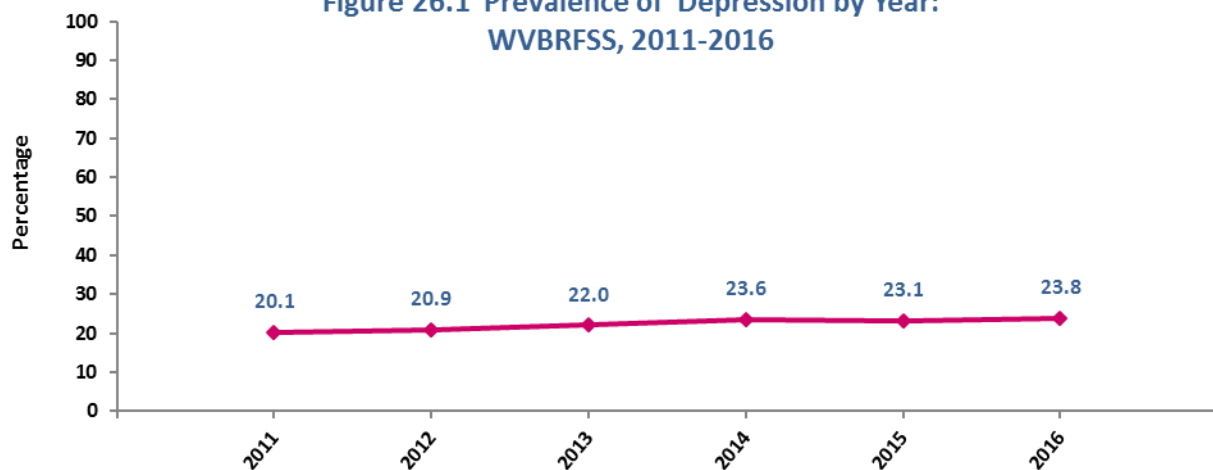
<b>Definition</b>	Responding “Yes” to the question, “Has a doctor, nurse, or other health professional ever told you that you have a depressive disorder (including depression, major depression, dysthymia, or minor depression)?”
<b>Prevalence</b>	<b>WV: 23.8%</b> (95% CI: 22.7-25.0) <b>U.S.: 16.6%</b> (95% CI: 16.4-16.8) The West Virginia prevalence of depression was significantly higher than the U.S. prevalence. West Virginia ranked the 2 <sup>nd</sup> highest among 54 BRFSS participants.
<b>Gender</b>	<b>Men:</b> 17.7% (95% CI: 16.1-19.3) <b>Women:</b> 29.7% (95% CI: 28.0-31.4) The prevalence of depression was significantly higher among women than among men.
<b>Race/Ethnicity</b>	<b>White, Non-Hispanic:</b> 23.7% (95% CI: 22.5-24.9) <b>Black, Non-Hispanic:</b> 21.8% (95% CI: 14.2-29.4) <b>Other, Non-Hispanic:</b> *26.9% (95% CI: 16.5-37.3) <b>Multiracial, Non-Hispanic:</b> *29.9% (95% CI: 18.2-41.7) <b>Hispanic:</b> *30.2% (95% CI: 14.7-45.8) There was no race/ethnicity difference in the prevalence of depression. <small>* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.</small>
<b>Age</b>	The prevalence of depression was significantly lower among those aged 65 and older (17.8%) than among those aged 35-64.
<b>Education</b>	The prevalence of depression was significantly higher among those with less than a high school education (35.6%) than among all other educational attainment levels. The prevalence of depression was significantly lower among college graduates (17.3%) than among all other education groups.
<b>Household Income</b>	The prevalence of depression was significantly higher among those with an annual household income less than \$15,000 (40.0%) than among all other income levels. The prevalence of depression was significantly lower among those with an income of \$75,000 or more per year (13.7%) than among those with an income of less than \$50,000.

## CHAPTER 26: DEPRESSION

**Table 26.1 Prevalence of Ever Diagnosed with Depression by Demographic Characteristics: WVBFRSS, 2016**

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	126,037	<b>17.7</b>	16.1-19.3	221,377	<b>29.7</b>	28.0-31.4	347,415	<b>23.8</b>	22.7-25.0
<b>Age</b>									
18-24	11,669	<b>13.4</b>	7.9-19.0	28,006	<b>34.3</b>	26.8-41.7	39,675	<b>23.5</b>	18.7-28.4
25-34	18,658	<b>17.1</b>	12.5-21.7	30,553	<b>29.0</b>	24.2-33.7	49,211	<b>22.9</b>	19.6-26.2
35-44	22,592	<b>20.2</b>	15.9-24.5	35,176	<b>32.2</b>	27.6-36.8	57,768	<b>26.2</b>	23.0-29.3
45-54	23,790	<b>20.3</b>	16.3-24.3	45,465	<b>38.5</b>	34.3-42.7	69,255	<b>29.4</b>	26.5-32.3
55-64	26,777	<b>20.7</b>	17.5-23.9	41,831	<b>31.3</b>	27.9-34.7	68,608	<b>26.1</b>	23.7-28.4
65+	22,099	<b>14.3</b>	11.7-16.8	39,571	<b>20.8</b>	18.3-23.2	61,670	<b>17.8</b>	16.0-19.6
<b>Education</b>									
Less than H.S.	30,942	<b>28.5</b>	23.1-33.9	47,594	<b>42.6</b>	37.1-48.0	78,536	<b>35.6</b>	31.7-39.5
H.S. or G.E.D.	47,454	<b>15.9</b>	13.5-18.3	76,523	<b>27.0</b>	24.4-29.6	123,977	<b>21.3</b>	19.5-23.1
Some Post-H.S.	30,612	<b>17.3</b>	14.2-20.4	69,426	<b>31.7</b>	28.5-34.8	100,038	<b>25.3</b>	23.0-27.5
College Graduate	16,862	<b>13.2</b>	10.8-15.6	27,560	<b>21.4</b>	18.5-24.2	44,421	<b>17.3</b>	15.4-19.2
<b>Income</b>									
Less than \$15,000	25,180	<b>34.2</b>	28.1-40.3	40,541	<b>44.8</b>	39.6-50.0	65,721	<b>40.0</b>	36.0-44.0
\$15,000 - 24,999	29,167	<b>24.9</b>	20.1-29.7	52,666	<b>37.4</b>	33.1-41.7	81,833	<b>31.7</b>	28.5-35.0
\$25,000 - 34,999	11,458	<b>15.9</b>	11.2-20.6	19,309	<b>25.4</b>	20.4-30.4	30,767	<b>20.8</b>	17.3-24.2
\$35,000 - 49,999	15,230	<b>17.0</b>	12.8-21.2	23,169	<b>26.7</b>	21.9-31.5	38,399	<b>21.8</b>	18.6-25.0
\$50,000 - 74,999	10,673	<b>11.3</b>	7.9-14.7	17,534	<b>21.7</b>	17.3-26.0	28,207	<b>16.1</b>	13.3-18.8
\$75,000+	13,218	<b>9.2</b>	6.7-11.7	21,659	<b>19.6</b>	16.0-23.2	34,877	<b>13.7</b>	11.6-15.9

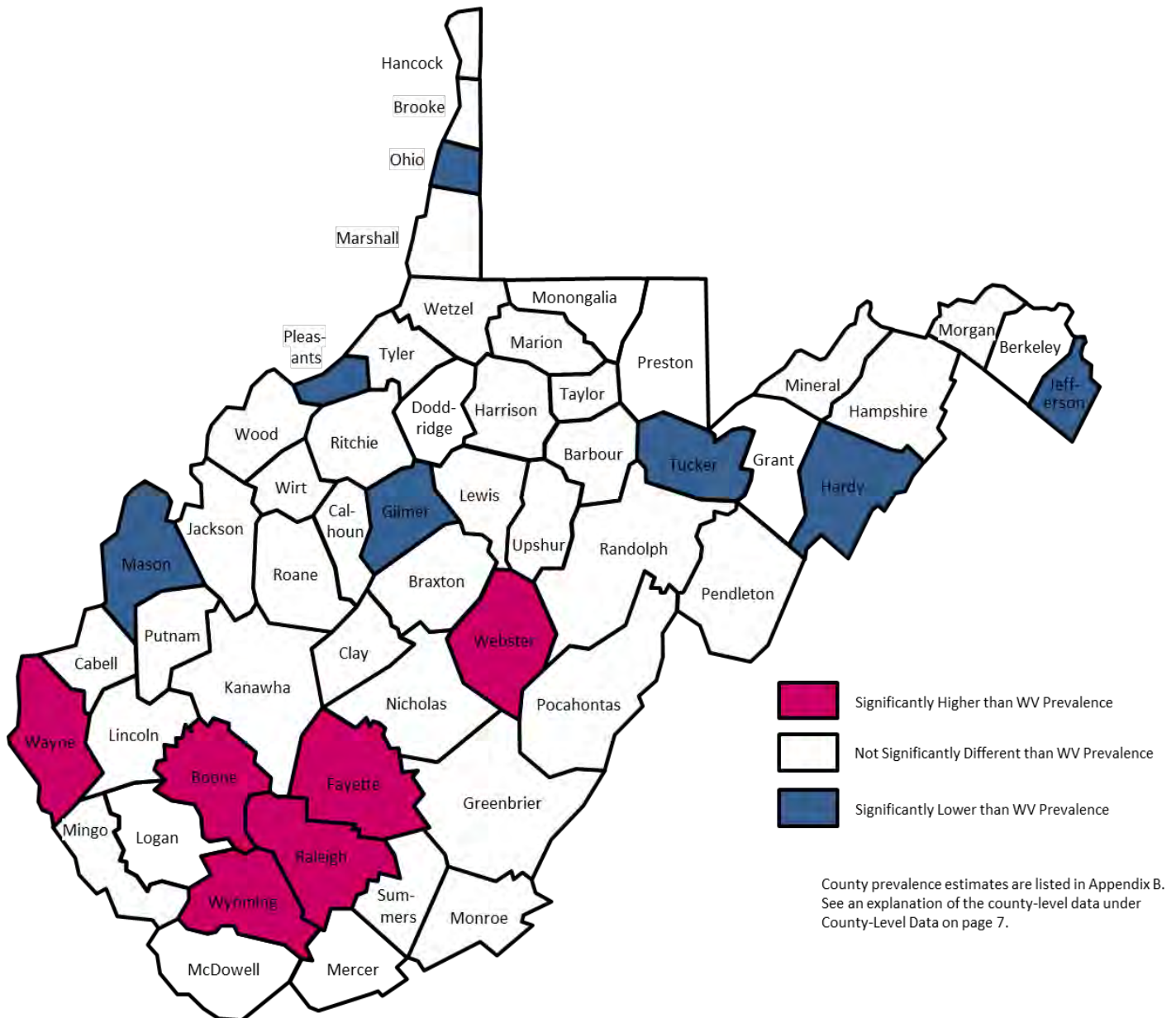
**Figure 26.1 Prevalence of Depression by Year: WVBFRSS, 2011-2016**



## CHAPTER 26: DEPRESSION

**Figure 26.2 Prevalence of Ever Diagnosed with Depression by County: WVBRFSS, 2012-2016**

WV Prevalence (2012-2016) - 22.7%

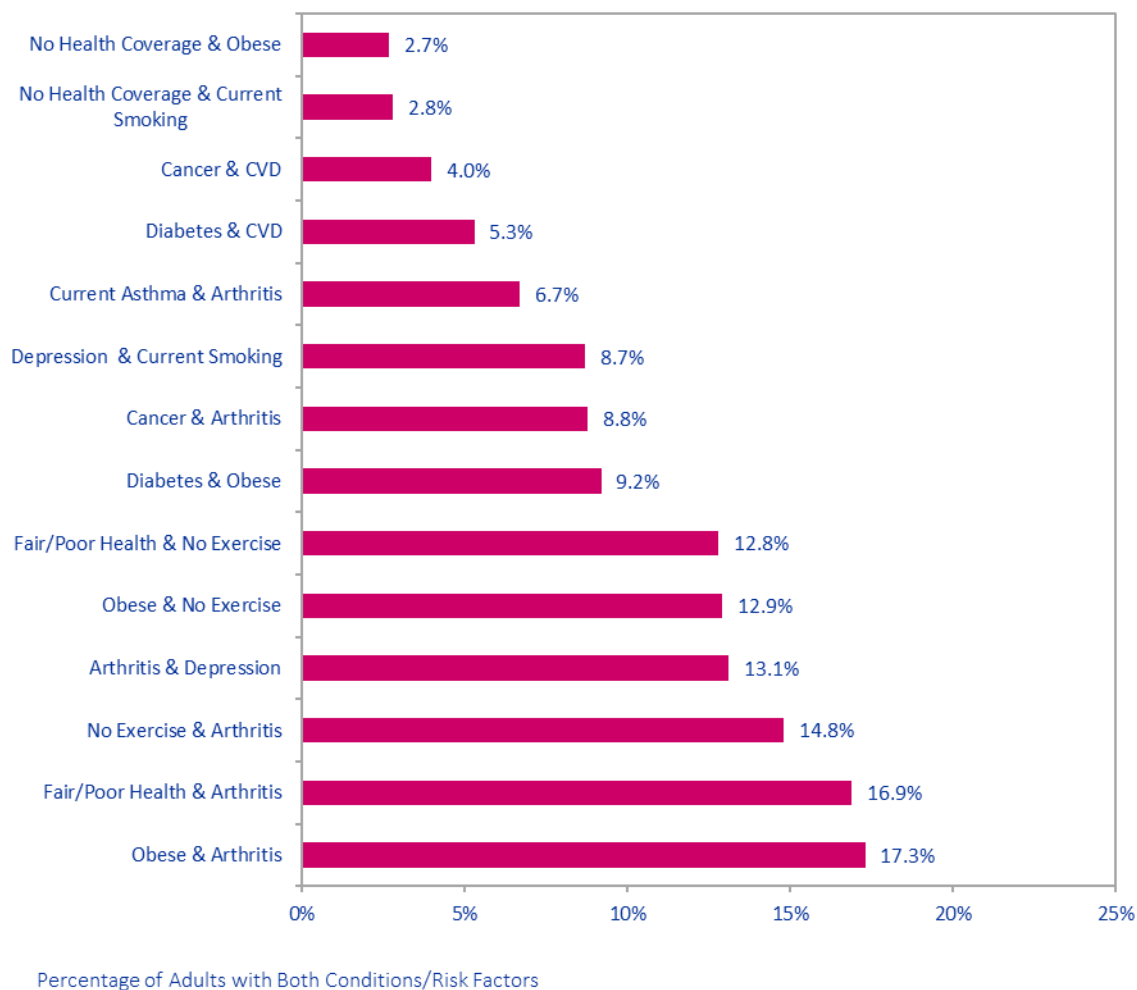


## CHAPTER 27: COMORBIDITIES

### 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 2016 (see Figure 21.1 and Table 21.1). For definitions of risk factors and health conditions, please refer to appropriate chapter in this report.

**Figure 27.1 Comorbidities: The Prevalence of Multiple Risk Behaviors and/or Health Conditions Among Adults: WVBRFSS, 2016**



## CHAPTER 21: COMORBIDITIES

**Table 27.1 Comorbidities: The Prevalence of Multiple Risk Behaviors and/or Health Conditions Among Adults: WVBRFSS, 2016**

% of Total Population	Fair/Poor Health	No Health Coverage	No Exercise	Obese	Current Smoking	CVD	Diabetes	Current Asthma	Cancer	Arthritis	Depression
Fair/Poor Health	26.3 (25.1-27.5)	1.5 (1.1-1.9)	12.8 (11.9-13.7)	12.3 (11.4-13.2)	9.2 (8.3-10.0)	8.3 (7.6-9.0)	7.8 (7.1-8.4)	5.3 (4.7-6.0)	5.9 (5.3-6.5)	16.9 (15.9-17.9)	11.5 (10.6-12.3)
No Health Coverage	1.5 (1.1-1.9)	7.3 (6.5-8.2)	2.3 (1.8-2.8)	2.7 (2.1-3.3)	2.8 (2.3-3.3)	0.4 (0.3-0.6)	0.5 (0.3-0.7)	1.1 (0.7-1.4)	0.3 (0.1-0.4)	1.7 (1.4-2.1)	1.6 (1.2-2.0)
No Exercise	12.8 (11.9-13.7)	2.3 (1.8-2.8)	28.5 (27.3-29.8)	12.9 (11.9-13.9)	8.7 (7.9-9.5)	5.9 (5.3-6.5)	6.5 (5.9-7.2)	4.6 (4.0-5.2)	5.1 (4.6-5.6)	14.8 (13.8-15.7)	9.7 (8.9-10.5)
Obese	12.3 (11.4-13.2)	2.7 (2.1-3.3)	12.9 (11.9-13.9)	37.7 (36.3-39.0)	7.5 (6.7-8.3)	6.1 (5.5-6.7)	9.2 (8.4-10.0)	5.4 (4.7-6.1)	5.3 (4.7-5.9)	17.3 (16.3-18.4)	11.0 (10.1-11.9)
Current Smoking	9.2 (8.3-10.0)	2.8 (2.3-3.3)	8.7 (7.9-9.5)	7.5 (6.7-8.3)	24.8 (23.6-26.1)	3.8 (3.2-4.4)	2.7 (2.2-3.2)	2.7 (2.2-3.2)	2.7 (2.3-3.2)	10.0 (9.1-10.8)	8.7 (7.8-9.5)
CVD	8.3 (7.6-9.0)	0.4 (0.3-0.6)	5.9 (5.3-6.5)	6.1 (5.5-6.7)	3.7 (3.2-4.2)	14.6 (13.7-15.5)	5.3 (4.7-5.8)	2.6 (2.2-3.0)	4.0 (3.5-4.4)	9.5 (8.8-10.3)	4.9 (4.3-5.4)
Diabetes	7.8 (7.1-8.4)	0.5 (0.3-0.7)	6.5 (5.9-7.2)	9.2 (8.4-10.0)	2.7 (2.2-3.2)	15.0 (14.0-15.9)	5.3 (4.7-5.8)	2.5 (2.1-2.9)	3.4 (3.0-3.9)	9.1 (8.4-9.8)	4.9 (4.4-5.5)
Current Asthma	5.3 (4.7-6.0)	1.1 (0.7-1.4)	4.6 (4.0-5.2)	5.4 (4.7-6.1)	3.8 (3.2-4.4)	2.6 (2.2-3.0)	2.5 (2.1-2.9)	11.8 (10.9-12.7)	2.2 (1.8-2.6)	6.7 (6.0-7.4)	5.0 (4.3-5.6)
Cancer	5.9 (5.3-6.5)	0.3 (0.1-0.4)	5.1 (4.6-5.6)	5.3 (4.7-5.9)	2.7 (2.3-3.2)	4.0 (3.5-4.4)	3.4 (3.0-3.9)	2.2 (1.8-2.6)	14.0 (13.1-14.8)	8.8 (8.1-9.4)	3.8 (3.4-4.3)
Arthritis	16.9 (15.9-17.9)	1.7 (1.4-2.1)	14.8 (13.8-15.7)	17.3 (16.3-18.4)	10.0 (9.1-10.8)	9.5 (8.8-10.3)	9.1 (8.4-9.8)	6.7 (6.0-7.4)	38.9 (37.6-40.2)	13.1 (12.2-14.0)	23.8 (22.7-25.0)
Depression	11.5 (10.6-12.3)	1.6 (1.2-2.0)	9.7 (8.9-10.5)	11.0 (10.1-11.9)	8.7 (7.8-9.5)	4.9 (4.3-5.4)	4.9 (4.3-5.5)	5.0 (4.3-5.6)	3.8 (3.4-4.3)	13.1 (12.2-14.0)	23.8 (22.7-25.0)

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

**Appendix A**  
**Behavioral Risk Factor Prevalence in 50 States, District of Columbia, and Territories**  
**United States, 2016**

State	Fair or Poor Health		Obesity		Physical Inactivity		Current Smoking		Cardiovascular Disease		Diabetes		Cancer		Arthritis		Depression	
	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank
Alabama	22.6	5	35.7	3	29.4	8	21.5	10	12.3	4	14.6	3	14.1	2	33.5	3	22.0	10
Alaska	13.8	49	31.4	22	19.1	47	19.0	17	5.9	52	7.5	52	8.3	50	23.9	40	14.2	46
Arizona	18.6	18	29.0	31	23.1	31	14.7	39	9.1	20	10.8	23	12.9	12	26.0	25	16.7	31
Arkansas	25.6	3	35.7	4	32.5	2	23.6	4	12.9	3	13.5	5	13.9	5	33.4	5	23.7	3
California	17.8	25	25.0	50	20.5	39	11.0	51	6.6	49	10.2	31	9.5	47	18.9	51	13.5	48
Colorado	14.5	42	22.3	54	15.8	53	15.6	35	6.5	50	6.6	54	11.6	28	23.0	46	18.5	22
Connecticut	14.4	45	26.0	45	21.3	36	13.3	49	7.6	45	9.8	34	11.7	24	25.1	31	15.9	38
Delaware	16.4	29	30.7	26	26.6	16	17.7	25	9.0	21	10.6	25	12.5	17	26.7	22	16.6	33
D.C.	11.6	54	22.6	53	16.2	52	14.7	40	6.0	51	7.7	51	6.9	51	16.9	54	16.7	30
Florida	19.5	15	27.4	39	29.8	4	15.5	36	9.8	15	11.8	13	14.6	1	24.8	34	14.2	47
Georgia	19.1	16	31.4	21	29.4	9	17.9	23	9.4	19	12.1	11	10.3	42	25.4	29	16.6	34
Guam	21.8	8	28.3	36	29.6	7	25.1	1	7.2	48	10.0	32	3.3	54	17.1	53	8.3	53
Hawaii	14.8	40	23.8	51	20.8	37	13.1	50	7.5	46	10.5	27	9.4	48	21.9	48	12.1	51
Idaho	15.9	34	27.4	40	20.2	41	14.5	41	7.7	42	8.9	43	11.7	25	24.0	39	15.2	43
Illinois	18.0	22	31.6	19	23.9	24	15.8	34	7.9	36	10.4	30	10.7	37	24.8	33	16.5	36
Indiana	18.5	19	32.5	12	26.8	15	21.1	11	10.0	12	11.5	15	10.7	35	27.8	16	15.9	39
Iowa	13.9	48	32.0	15	22.7	33	16.7	30	8.4	28	9.3	39	11.7	23	25.5	28	14.8	45
Kansas	15.4	38	31.2	23	23.5	26	17.2	26	8.4	30	9.4	37	11.5	29	25.0	32	16.5	35
Kentucky	22.5	6	34.2	7	29.8	5	24.5	3	13.5	2	13.1	6	13.1	10	33.5	4	23.2	4
Louisiana	21.9	7	35.5	5	29.1	10	22.8	5	10.8	10	12.1	10	10.1	44	27.8	15	19.9	17
Maine	16.4	31	29.9	29	20.6	38	19.8	15	10.1	11	10.6	26	13.9	6	33.8	2	21.1	14
Maryland	14.4	43	29.9	28	23.1	29	13.7	47	7.7	40	10.8	24	10.6	38	24.5	38	15.4	42
Massachusetts	14.1	46	23.6	52	20.0	42	13.6	48	8.2	31	9.3	40	11.4	30	25.2	30	18.7	20
Michigan	18.0	23	32.5	11	23.9	25	20.4	12	9.9	14	11.2	20	12.8	13	32.0	6	22.0	9
Minnesota	12.7	52	27.8	37	18.0	49	15.2	38	7.2	47	8.4	46	10.7	36	22.4	47	17.2	29
Mississippi	23.2	4	37.3	2	30.3	3	22.7	6	12.1	6	13.6	4	11.1	34	31.3	7	18.8	19
Missouri	19.0	17	31.7	18	24.9	21	22.1	8	10.8	9	11.5	16	13.1	9	30.6	9	21.7	11
Montana	15.6	37	25.5	48	19.9	44	18.5	19	8.4	27	8.1	49	13.9	4	27.6	18	19.5	18
Nebraska	14.7	41	32.0	14	22.4	34	17.0	29	7.8	37	8.8	44	11.2	32	24.6	37	17.8	26
Nevada	20.9	10	25.8	46	24.7	22	16.5	32	9.0	22	11.1	22	9.8	45	23.7	42	17.2	28
New Hampshire	14.1	47	26.6	44	19.3	46	18.0	21	8.0	35	9.0	42	13.3	8	27.6	19	22.1	7
New Jersey	17.5	26	27.3	41	29.8	6	14.0	45	8.2	33	9.2	41	10.4	40	23.2	45	12.1	50
New Mexico	21.7	9	28.3	35	20.3	40	16.6	31	8.8	24	11.6	14	10.3	41	27.7	17	18.3	23
New York	16.9	27	25.5	47	26.3	17	14.2	44	7.7	41	10.5	28	8.9	49	23.7	43	11.7	52
North Carolina	18.3	21	31.8	17	23.3	28	17.9	24	9.7	17	11.3	18	12.6	15	26.1	24	18.3	24
North Dakota	14.8	39	31.9	16	22.2	35	19.8	14	8.4	29	8.6	45	10.3	43	23.3	44	15.0	44
Ohio	18.0	24	31.5	20	25.9	19	22.5	7	9.6	18	11.1	21	11.7	22	30.5	10	17.4	27
Oklahoma	20.2	13	32.8	9	28.5	12	19.6	16	10.9	8	12.0	12	11.7	26	28.3	13	22.0	8
Oregon	16.4	30	28.7	33	17.2	51	16.2	33	8.6	25	9.5	36	13.4	7	27.2	20	25.0	1
Pennsylvania	16.6	28	30.3	27	22.9	32	18.0	22	9.8	16	11.3	17	12.1	20	30.1	11	18.7	21
Puerto Rico	34.3	1	30.7	24	41.7	1	10.6	52	12.2	5	15.3	1	5.9	52	23.8	41	18.2	25
Rhode Island	15.6	36	26.6	43	24.4	23	14.4	42	7.7	43	9.8	33	12.5	18	27.0	21	22.3	5
South Carolina	20.0	14	32.3	13	26.9	14	20.0	13	9.9	13	13.0	7	12.7	14	30.1	12	20.5	16
South Dakota	13.0	51	29.6	30	18.9	48	18.1	20	8.8	23	7.9	50	11.8	21	25.8	26	15.7	40
Tennessee	20.5	11	34.8	6	28.4	13	22.1	9	11.4	7	12.7	9	12.6	16	31.0	8	21.1	13
Texas	18.3	20	33.6	8	25.2	20	14.3	43	7.6	44	11.2	19	9.7	46	21.6	49	12.5	49
Utah	11.7	53	25.3	49	15.7	54	8.8	53	5.5	53	7.2	53	11.4	31	19.8	50	21.5	12
Vermont	13.5	50	27.1	42	19.5	45	17.0	28	7.8	38	8.4	47	13.0	11	28.0	14	22.2	6
Virgin Islands	20.3	12	32.5	10	26.1	18	6.6	54	5.0	54	12.7	8	4.8	53	17.3	52	5.8	54
Virginia	16.3	32	29.0	32	23.3	27	15.3	37	8.2	32	10.4	29	10.5	39	25.5	27	15.9	37
Washington	14.4	44	28.6	34	17.6	50	13.9	46	7.8	39	9.4	38	11.6	27	24.6	36	21.0	15
West Virginia	26.3	2	37.7	1	28.5	11	24.8	2	14.6	1	15.0	2	14.0	3	38.9	1	23.8	2
Wisconsin	16.0	33	30.7	25	20.0	43	17.1	27	8.5	26	9.8	35	11.2	33	24.8	35	16.7	32
Wyoming	15.7	35	27.7	38	23.1	30	18.9	18	8.2	34	8.3	48	12.1	19	26.4	23	15.5	41
<b>United States</b>	<b>18.0</b>		<b>29.6</b>		<b>24.4</b>		<b>16.3</b>		<b>8.7</b>		<b>10.8</b>		<b>11.2</b>		<b>25.3</b>		<b>16.6</b>	

Source: Centers for Disease Control & Prevention, 2016 Behavioral Risk Factor Surveillance System data; West Virginia Department of Health and Human Resources, Health Statistics Center, 2016



**Appendix B**  
**2012-2016 WV Behavioral Risk Factors and Health Conditions by County**

County	Fair or Poor Health			No Health Care Coverage (18-64)			Obesity			Obese or Overweight			Physical Inactivity		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
Barbour	25.9	31	ns	26.6	2	H	37.7	25	ns	71.0	30	ns	33.4	18	ns
Berkeley	21.6	48	L	15.8	34	ns	35.6	36	ns	71.9	23	ns	27.3	43	ns
Boone	36.1	5	H	16.9	27	ns	35.9	32	ns	74.2	10	ns	30.4	31	ns
Braxton	26.0	28	ns	21.5	7	ns	30.4	50	ns	66.0	48	ns	32.8	22	ns
Brooke	22.2	46	ns	15.2	39	ns	38.1	21	ns	71.3	28	ns	30.6	30	ns
Cabell	21.3	50	L	17.6	21	ns	30.8	47	L	67.2	45	ns	27.7	41	ns
Calhoun	28.8	20	ns	15.2	41	ns	28.5	53	ns	59.6	55	L	26.9	45	ns
Clay	32.7	10	ns	16.6	29	ns	36.6	31	ns	77.4	5	ns	37.9	7	ns
Doddridge	*28.0	21	ns	*28.3	1	ns	*36.6	30	ns	78.4	4	ns	*34.6	11	ns
Fayette	34.1	8	H	17.6	20	ns	40.9	6	H	70.8	31	ns	34.4	12	ns
Gilmer	*23.2	40	ns	*23.9	3	ns	*51.5	1	ns	*81.5	2	ns	*34.4	13	ns
Grant	27.9	22	ns	19.2	14	ns	43.6	4	ns	82.5	1	H	39.1	5	H
Greenbrier	26.7	23	ns	16.0	32	ns	32.5	44	ns	69.3	36	ns	30.8	29	ns
Hampshire	26.1	27	ns	14.4	44	ns	37.6	26	ns	73.4	17	ns	26.4	47	ns
Hancock	25.9	30	ns	17.3	22	ns	39.8	14	ns	73.9	13	ns	33.1	19	ns
Hardy	25.1	35	ns	7.5	55	L	37.0	28	ns	79.0	3	H	34.7	9	ns
Harrison	25.1	33	ns	17.3	23	ns	34.6	41	ns	71.1	29	ns	33.0	20	ns
Jackson	23.0	42	ns	14.9	42	ns	34.4	42	ns	67.1	46	ns	26.9	44	ns
Jefferson	14.4	55	L	14.6	43	ns	31.7	46	ns	63.8	52	L	23.3	52	L
Kanawha	23.1	41	L	15.4	37	ns	35.1	40	ns	69.5	35	ns	29.0	33	ns
Lewis	23.4	39	ns	15.4	38	ns	38.0	22	ns	69.3	37	ns	28.4	37	ns
Lincoln	34.3	7	H	17.1	24	ns	40.0	12	ns	74.0	12	ns	35.0	8	ns
Logan	37.4	2	H	21.9	5	H	42.4	5	H	72.0	22	ns	38.7	6	H
Marion	22.5	45	ns	15.6	36	ns	30.7	48	L	66.2	47	ns	26.4	46	ns
Marshall	23.5	38	ns	16.6	28	ns	38.5	19	ns	73.5	16	ns	27.3	42	ns
Mason	21.6	47	ns	12.4	49	ns	38.9	18	ns	72.8	19	ns	33.6	16	ns
McDowell	44.4	1	H	20.5	9	ns	46.3	2	H	73.6	15	ns	40.1	3	H
Mercer	29.5	14	H	19.1	15	ns	35.7	34	ns	71.6	25	ns	34.3	14	H
Mineral	21.3	49	ns	17.1	25	ns	35.5	37	ns	68.3	41	ns	25.7	49	ns
Mingo	37.0	3	H	15.2	40	ns	39.4	17	ns	76.0	7	H	40.5	2	H
Monongalia	14.7	54	L	12.6	48	ns	27.1	55	L	60.4	54	L	22.0	55	L
Monroe	26.4	24	ns	18.5	17	ns	29.6	52	ns	61.9	53	ns	27.9	40	ns
Morgan	25.9	32	ns	19.3	13	ns	40.4	8	ns	72.7	20	ns	31.1	27	ns
Nicholas	30.6	11	ns	20.8	8	ns	39.8	15	ns	71.9	24	ns	33.0	21	ns
Ohio	18.1	53	L	9.3	54	L	30.5	49	ns	64.1	51	ns	24.3	51	L
Pendleton	19.1	52	ns	11.0	51	ns	*40.1	10	ns	*73.7	14	ns	28.0	39	ns
Pleasants	24.8	36	ns	*10.3	53	ns	*39.9	13	ns	*76.1	6	ns	24.8	50	ns
Pocahontas	26.3	26	ns	*22.4	4	ns	27.3	54	ns	64.4	50	ns	22.7	54	ns
Preston	20.5	51	L	11.5	50	L	34.3	43	ns	67.5	44	ns	29.5	32	ns
Putnam	22.9	44	ns	10.5	52	L	35.3	39	ns	72.5	21	ns	25.8	48	L
Raleigh	29.0	18	ns	14.3	45	ns	36.8	29	ns	71.4	27	ns	31.3	26	ns
Randolph	26.0	29	ns	15.7	35	ns	35.6	35	ns	68.1	43	ns	28.9	34	ns
Ritchie	28.9	19	ns	20.0	10	ns	*45.7	3	ns	74.1	11	ns	34.7	10	ns
Roane	29.3	15	ns	13.4	47	ns	38.4	20	ns	71.5	26	ns	28.7	35	ns
Summers	32.9	9	ns	18.1	19	ns	32.4	45	ns	68.9	40	ns	32.5	23	ns
Taylor	26.3	25	ns	17.0	26	ns	37.5	27	ns	69.0	39	ns	32.3	24	ns
Tucker	29.2	16	ns	*19.9	11	ns	39.5	16	ns	75.0	9	ns	33.6	17	ns
Tyler	23.0	43	ns	19.3	12	ns	29.9	51	ns	65.0	49	ns	31.8	25	ns
Upshur	25.1	34	ns	15.9	33	ns	37.7	24	ns	68.1	42	ns	23.0	53	L
Wayne	29.0	17	ns	13.5	46	ns	37.8	23	ns	69.2	38	ns	31.1	28	ns
Webster	34.9	6	ns	21.9	6	ns	*40.5	7	ns	75.0	8	ns	*43.5	1	H
Wetzel	30.5	12	ns	16.2	31	ns	35.5	38	ns	70.5	32	ns	28.5	36	ns
Wirt	29.6	13	ns	*18.9	16	ns	*40.1	11	ns	*70.1	34	ns	*33.9	15	ns
Wood	24.2	37	ns	16.5	30	ns	35.9	33	ns	70.2	33	ns	28.2	38	ns
Wyoming	36.3	4	H	18.1	18	ns	40.3	9	ns	73.0	18	ns	39.6	4	H
<b>West Virginia</b>	<b>25.8</b>			<b>16.1</b>			<b>35.6</b>			<b>69.7</b>			<b>30.1</b>		

Source: West Virginia Behavioral Risk Factor Surveillance System (WVBRFSS), West Virginia Department of Health and Human Resources, Health Statistics Center, 2016.

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

\* Unreliable prevalence estimate - use caution when reporting and interpreting. See discussion on page 6 about unreliable estimates.

**Appendix B, continued**  
**2012-2016 WV Behavioral Risk Factors and Health Conditions by County**

County	Current Smoking			Smokeless Tobacco Use			Binge Drinking			Cardiovascular Disease			Diabetes		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
Barbour	33.4	4	ns	9.1	34	ns	8.0	39	ns	16.2	12	ns	16.8	8	ns
Berkeley	26.7	31	ns	5.4	52	L	11.7	19	ns	11.2	45	L	10.3	50	L
Boone	29.9	9	ns	12.1	16	ns	9.0	32	ns	18.0	8	ns	15.3	16	ns
Braxton	23.6	43	ns	13.6	7	ns	6.9	48	ns	13.6	27	ns	14.1	28	ns
Brooke	26.7	32	ns	8.8	37	ns	16.6	4	ns	15.5	16	ns	15.6	15	ns
Cabell	29.4	14	ns	5.5	51	L	12.5	14	ns	11.8	42	L	13.2	34	ns
Calhoun	38.0	1	H	10.9	21	ns	13.6	9	ns	*9.5	53	ns	10.5	49	ns
Clay	26.5	33	ns	15.2	5	ns	*7.8	42	ns	16.7	11	ns	14.4	27	ns
Doddridge	*29.6	12	ns	*13.1	10	ns	*8.5	36	ns	10.9	47	ns	11.3	46	ns
Fayette	28.4	22	ns	10.3	24	ns	9.7	29	ns	16.1	13	ns	16.0	11	ns
Gilmer	*22.6	49	ns	*16.3	4	ns	*12.7	12	ns	*14.6	22	ns	*16.9	7	ns
Grant	15.0	55	L	18.9	2	H	*5.6	52	L	21.8	1	H	22.0	1	H
Greenbrier	26.0	34	ns	10.2	27	ns	11.0	25	ns	12.7	35	ns	14.1	29	ns
Hampshire	26.9	28	ns	10.2	26	ns	11.4	21	ns	12.5	36	ns	14.8	19	ns
Hancock	27.5	26	ns	*4.4	54	L	11.3	22	ns	11.8	41	ns	14.1	30	ns
Hardy	23.6	42	ns	10.2	25	ns	8.2	38	ns	12.8	33	ns	10.8	48	ns
Harrison	25.7	37	ns	10.6	23	ns	8.9	34	ns	12.3	38	ns	14.7	20	ns
Jackson	26.9	29	ns	9.8	31	ns	6.8	49	L	13.0	30	ns	12.0	43	ns
Jefferson	23.9	40	ns	5.0	53	L	13.4	10	ns	8.8	54	L	8.6	55	L
Kanawha	25.4	38	ns	6.4	48	L	11.6	20	ns	14.5	23	ns	14.6	23	ns
Lewis	29.4	15	ns	11.0	20	ns	7.3	46	ns	14.6	21	ns	15.9	13	ns
Lincoln	30.6	7	ns	18.9	1	H	12.4	15	ns	18.7	7	ns	17.8	6	ns
Logan	29.1	18	ns	12.8	12	ns	6.1	50	L	19.6	5	H	20.0	3	H
Marion	28.4	23	ns	10.9	22	ns	12.1	16	ns	12.2	39	ns	10.3	51	L
Marshall	24.3	39	ns	8.8	38	ns	15.3	6	H	13.1	29	ns	12.4	40	ns
Mason	29.9	8	ns	7.6	44	ns	7.6	43	ns	14.0	26	ns	11.7	44	ns
McDowell	29.7	10	ns	10.2	28	ns	7.9	41	ns	20.7	4	H	19.6	4	H
Mercer	29.0	19	ns	8.2	42	ns	8.0	40	ns	15.3	18	ns	12.7	39	ns
Mineral	28.2	24	ns	9.0	35	ns	15.2	7	ns	10.9	46	L	12.4	41	ns
Mingo	29.7	11	ns	12.6	13	ns	3.4	55	L	21.5	2	H	16.3	10	ns
Monongalia	19.3	53	L	6.3	50	L	24.8	1	H	7.8	55	L	8.7	54	L
Monroe	23.7	41	ns	13.8	6	ns	8.4	37	ns	12.9	31	ns	15.9	12	ns
Morgan	21.7	51	ns	*7.7	43	ns	5.6	51	L	14.4	24	ns	15.9	14	ns
Nicholas	30.7	6	ns	12.6	14	ns	12.0	17	ns	15.2	19	ns	12.8	38	ns
Ohio	27.3	27	ns	*3.8	55	L	15.9	5	H	12.1	40	ns	11.4	45	ns
Pendleton	17.1	54	L	*7.2	46	ns	*17.3	2	ns	10.0	51	ns	15.3	17	ns
Pleasants	22.9	47	ns	*13.4	9	ns	*14.3	8	ns	9.9	52	ns	14.6	24	ns
Pocahontas	22.5	50	ns	*8.9	36	ns	9.1	31	ns	12.9	32	ns	12.9	36	ns
Preston	26.9	30	ns	10.0	30	ns	13.2	11	ns	10.2	50	L	9.6	52	L
Putnam	22.9	48	ns	8.6	40	ns	11.9	18	ns	12.4	37	ns	11.1	47	L
Raleigh	27.7	25	ns	9.7	32	ns	7.2	47	L	15.5	17	ns	13.7	31	ns
Randolph	29.2	17	ns	11.8	18	ns	9.7	28	ns	14.2	25	ns	13.6	33	ns
Ritchie	28.8	20	ns	*8.5	41	ns	*10.1	26	ns	11.8	43	ns	16.5	9	ns
Roane	29.3	16	ns	13.1	11	ns	8.7	35	ns	15.9	14	ns	14.4	26	ns
Summers	23.6	44	ns	7.5	45	ns	8.9	33	ns	15.8	15	ns	13.6	32	ns
Taylor	25.9	36	ns	6.7	47	ns	9.4	30	ns	11.6	44	ns	12.3	42	ns
Tucker	23.1	46	ns	*9.1	33	ns	*7.5	44	ns	10.5	49	ns	13.0	35	ns
Tyler	25.9	35	ns	*10.1	29	ns	12.5	13	ns	10.6	48	ns	14.5	25	ns
Upshur	23.2	45	ns	11.0	19	ns	11.1	23	ns	12.8	34	ns	9.4	53	L
Wayne	29.5	13	ns	8.7	39	ns	7.4	45	ns	15.2	20	ns	19.0	5	H
Webster	34.1	3	ns	*16.7	3	ns	*5.5	53	L	17.7	9	ns	20.1	2	ns
Wetzel	32.7	5	ns	12.0	17	ns	11.0	24	ns	17.6	10	ns	12.9	37	ns
Wirt	*21.6	52	ns	12.2	15	ns	*16.8	3	ns	19.1	6	ns	14.9	18	ns
Wood	28.7	21	ns	6.4	49	L	10.0	27	ns	13.2	28	ns	14.7	21	ns
Wyoming	35.1	2	H	13.5	8	ns	4.9	54	L	21.0	3	H	14.7	22	ns
<b>West Virginia</b>	<b>26.5</b>			<b>8.9</b>			<b>10.6</b>			<b>14.2</b>			<b>13.9</b>		

Source: West Virginia Behavioral Risk Factor Surveillance System (WVBRFSS), West Virginia Department of Health and Human Resources, Health Statistics Center, 2016.  
 Sig. - Indicates whether county prevalence estimate is significantly different than WV prevalence. H = significantly higher, ns = not significantly different, L = significantly lower.  
 \* Unreliable prevalence estimate - use caution when reporting and interpreting. See discussion on page 6 about unreliable estimates.

**Appendix B, Continued**  
**2012-2016 WV Behavioral Risk Factors and Health Conditions by County**

County	Cancer			Current Asthma			COPD			Arthritis			Depression		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
Barbour	15.9	6	ns	12.5	11	ns	14.3	17	ns	39.8	28	ns	23.5	25	ns
Berkeley	9.8	51	L	11.0	26	ns	8.8	46	L	32.3	49	L	21.3	33	ns
Boone	15.4	11	ns	9.8	34	ns	16.9	7	ns	41.6	16	ns	28.6	3	H
Braxton	13.8	26	ns	13.2	7	ns	14.9	12	ns	43.5	11	ns	23.8	21	ns
Brooke	11.9	41	ns	11.2	21	ns	11.0	37	ns	37.3	37	ns	19.2	44	ns
Cabell	11.7	44	ns	12.0	14	ns	11.0	36	ns	31.3	52	L	22.9	28	ns
Calhoun	15.5	10	ns	13.2	8	ns	13.1	26	ns	38.2	34	ns	20.4	37	ns
Clay	9.0	55	L	*6.5	53	ns	10.2	39	ns	39.6	29	ns	24.3	16	ns
Doddridge	11.4	48	ns	*8.5	41	ns	14.0	18	ns	*36.6	39	ns	14.8	50	ns
Fayette	14.2	20	ns	12.1	12	ns	18.6	3	H	43.0	12	H	27.2	5	H
Gilmer	9.3	52	ns	*7.0	52	ns	*5.4	54	L	*32.8	47	ns	10.6	54	L
Grant	18.5	1	ns	12.8	9	ns	8.1	49	L	43.8	10	ns	16.6	48	ns
Greenbrier	14.7	17	ns	8.4	45	ns	14.9	14	ns	41.1	19	ns	22.6	29	ns
Hampshire	11.8	43	ns	7.8	48	ns	12.5	29	ns	38.3	33	ns	20.5	36	ns
Hancock	11.4	47	ns	6.3	54	L	8.6	47	L	35.7	43	ns	19.8	40	ns
Hardy	10.3	50	ns	9.4	37	ns	9.2	44	ns	29.5	53	L	14.0	52	L
Harrison	14.6	18	ns	14.2	4	H	14.3	16	ns	40.0	27	ns	23.2	27	ns
Jackson	13.2	34	ns	8.5	43	ns	13.6	21	ns	38.4	32	ns	21.1	34	ns
Jefferson	9.1	54	L	8.7	40	ns	6.8	53	L	23.3	54	L	14.8	51	L
Kanawha	13.0	35	ns	9.2	39	ns	10.8	38	ns	36.1	41	ns	23.7	22	ns
Lewis	15.1	13	ns	10.8	29	ns	11.2	34	ns	40.9	21	ns	19.6	42	ns
Lincoln	15.9	5	ns	14.0	6	ns	17.2	5	H	44.4	7	ns	27.2	6	ns
Logan	11.9	42	ns	14.2	5	ns	17.1	6	H	46.2	5	H	26.6	10	ns
Marion	13.5	29	ns	11.0	25	ns	10.1	40	ns	32.4	48	L	22.3	31	ns
Marshall	15.1	14	ns	10.7	31	ns	11.4	33	ns	39.3	30	ns	25.5	14	ns
Mason	14.1	21	ns	7.3	51	L	14.9	13	ns	42.6	13	ns	16.7	47	L
McDowell	13.0	36	ns	16.7	2	H	20.6	1	H	49.5	1	H	26.7	9	ns
Mercer	13.4	31	ns	11.5	17	ns	16.2	9	H	40.3	24	ns	26.0	13	ns
Mineral	12.6	38	ns	8.5	42	ns	9.7	43	ns	32.3	50	ns	19.7	41	ns
Mingo	12.5	39	ns	14.8	3	ns	20.2	2	H	44.0	9	H	27.1	7	ns
Monongalia	9.2	53	L	8.4	44	ns	7.4	51	L	21.3	55	L	19.6	43	ns
Monroe	14.0	23	ns	8.2	46	ns	9.7	42	ns	37.5	36	ns	23.4	26	ns
Morgan	16.0	3	ns	11.2	20	ns	13.5	23	ns	31.4	51	ns	24.3	17	ns
Nicholas	15.2	12	ns	11.2	22	ns	14.9	11	ns	44.0	8	H	26.4	11	ns
Ohio	10.4	49	L	11.1	24	ns	8.2	48	L	33.7	45	ns	18.1	46	L
Pendleton	12.9	37	ns	*10.8	30	ns	*7.1	52	ns	36.7	38	ns	16.0	49	ns
Pleasants	13.5	30	ns	*9.3	38	ns	*4.2	55	L	*40.2	26	ns	*8.5	55	L
Pocahontas	11.7	45	ns	11.9	15	ns	11.5	30	ns	40.4	23	ns	22.6	30	ns
Preston	11.6	46	ns	11.3	19	ns	7.6	50	L	33.3	46	ns	19.2	45	ns
Putnam	13.9	24	ns	9.5	36	ns	10.0	41	ns	36.4	40	ns	23.6	24	ns
Raleigh	14.8	16	ns	11.5	18	ns	13.8	20	ns	41.1	18	ns	26.2	12	H
Randolph	15.7	8	ns	11.7	16	ns	13.1	25	ns	37.9	35	ns	21.9	32	ns
Ritchie	13.2	33	ns	10.5	32	ns	11.4	32	ns	40.3	25	ns	19.9	38	ns
Roane	12.3	40	ns	7.4	50	ns	13.5	22	ns	40.8	22	ns	23.7	23	ns
Summers	17.1	2	ns	7.9	47	ns	14.5	15	ns	42.1	14	ns	24.1	19	ns
Taylor	13.6	28	ns	10.8	28	ns	12.9	27	ns	41.2	17	ns	24.0	20	ns
Tucker	15.0	15	ns	11.1	23	ns	13.3	24	ns	34.4	44	ns	13.3	53	L
Tyler	13.3	32	ns	*3.9	55	L	11.4	31	ns	41.7	15	ns	20.6	35	ns
Upshur	15.9	4	ns	10.9	27	ns	8.9	45	ns	36.1	42	ns	19.8	39	ns
Wayne	15.5	9	ns	12.1	13	ns	14.0	19	ns	41.0	20	ns	27.9	4	H
Webster	13.9	25	ns	*18.3	1	ns	17.9	4	ns	*47.2	3	ns	*35.2	1	H
Wetzel	13.6	27	ns	9.8	33	ns	11.1	35	ns	46.7	4	H	26.8	8	ns
Wirt	14.3	19	ns	*7.7	49	ns	15.5	10	ns	*47.8	2	ns	24.5	15	ns
Wood	14.1	22	ns	9.6	35	ns	12.6	28	ns	38.7	31	ns	24.2	18	ns
Wyoming	15.7	7	ns	12.7	10	ns	16.2	8	ns	44.5	6	H	29.6	2	H
<b>West Virginia</b>	<b>13.6</b>			<b>10.6</b>			<b>12.4</b>			<b>37.9</b>			<b>22.7</b>		

Source: West Virginia Behavioral Risk Factor Surveillance System (WVBRFSS), West Virginia Department of Health and Human Resources, Health Statistics Center, 2016.

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

\* Unreliable prevalence estimate - use caution when reporting and interpreting. See discussion on page 6 about unreliable estimates.