

West Virginia<br>Behavioral Risk Factor Surveillance System Report 2015

# West Virginia Behavioral Risk Factor Surveillance System Report 2015 

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## Introduction

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

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

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

## Highlights of Findings

## Health Status

- West Virginia ranked $2^{\text {nd }}$ highest nationally in the prevalence of general health of adults as either fair or poor.
- Over one-fourth of West Virginia adults (25.9\%) considered their health to be either fair or poor.
- Fair/poor health was most common among groups of adults aged 55-64, those with less than a high school education, and those who have an annual household income of less than \$15,000.
- The prevalence of fair or poor health was highest in Boone, Fayette, Lincoln, Logan, McDowell, Mingo, Nicholas, Webster, and Wyoming counties.
- West Virginia ranked the highest in the nation for the prevalence of poor physical health, poor mental health, and activity limitations due to poor physical or mental health.


## Impairment

- Over one-fourth of West Virginia adults were disabled because of a physical, mental, or emotional problem (28.3\%), which was the highest nationwide.
- More than half of adults with an annual household income of less than \$15,000 were disabled (53.5\%).
- The prevalence of disability was highest in Boone, Logan, McDowell, Mingo, Webster, and Wyoming counties.
- About 13.1\% of West Virginia adults use special equipment such as a cane, a wheelchair, a special bed, or a special telephone, which ranks West Virginia the highest in the nation.
- Among those who are disabled, $36.6 \%$ use special equipment, the $3^{\text {rd }}$ highest in the nation.


## EXECUTIVE SUMMARY

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


## Health Care Access

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


## Weight Status

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


## Physical Activity

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


## EXECUTIVE SUMMARY

## Nutrition

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


## Tobacco Use

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


## Alcohol Consumption

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


## Seat Belt Use

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


## Cholesterol Testing

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


## EXECUTIVE SUMMARY

## Diabetes Testing

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


## HIV Testing

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


## Immunization

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


## Hypertension

- Approximately $42.7 \%$ of West Virginia adults have been told by a health care professional that they have hypertension which ranked the State the highest in the nation.
- The prevalence of hypertension was highest among those aged 65 and older, those with less than a high school education, and those with an annual household income of less than \$15,000.
- The prevalence of hypertension was significantly higher in Lincoln, Logan, McDowell, Mingo, and Wayne counties than in the rest of the State.
- More than three-fourths (79.7\%) of those with hypertension are taking medication for it.


## High Cholesterol

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


## EXECUTIVE SUMMARY

## Cardiovascular Disease

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


## Diabetes

- More than 1 in 10 West Virginia adults had diabetes (14.5\%) which ranked West Virginia the $3^{\text {rd }}$ highest nationally.
- The prevalence of diabetes was highest among those aged 65 and older, those with less than a high school education, and those with an annual household income of less than \$15,000.
- The prevalence of diabetes was significantly higher in Grant, Logan, McDowell, and Wayne counties than the State as a whole.
- Approximately $9.7 \%$ of West Virginia adults had borderline or pre-diabetes.
- The prevalence of borderline or pre-diabetes was highest among those aged 55 and older, those with less than a high school education, and those with a household income of less than \$15,000 a year.


## Cancer

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


## Respiratory Diseases

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


## EXECUTIVE SUMMARY

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


## Arthritis

- More than 1 in 3 West Virginia adults had arthritis (38.0\%) which ranked West Virginia highest in the nation.
- Arthritis prevalence was highest among those aged 65 and older, those with less than a high school education, and those with an annual household income of less than $\$ 15,000$.
- The prevalence of arthritis was highest in Fayette, Lincoln, Logan, McDowell, Nicholas, Webster, and Wyoming counties.
- Among those with arthritis, 57.3\% experienced activity limitations.
- Approximately $45.6 \%$ of those with arthritis experienced work limitations and $26.7 \%$ experienced social activity limitations.


## Kidney Disease

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


## Comorbidities

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


## Depression \& Anxiety

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


## EXECUTIVE SUMMARY

## Cognitive Decline

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


## ESTIMATED NUMBER OF PERSONS WITH DISEASE OR RISK FACTOR

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

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

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


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

## Definition of Common Terms

## Risk Factor

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

## Prevalence

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

## Confidence Intervals

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

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

The Behavioral Risk Factor Surveillance System (BRFSS) was established by the U.S. Centers for Disease Control and Prevention (CDC) based in Atlanta in order to permit states to determine the prevalence of certain health risk factors and health conditions among their adult populations. West Virginia, through the West Virginia Department of Health and Human Resources, Bureau for Public Health (WVBPH) became one of the 15 initial participants in 1984. Since then, the system has expanded to include all 50 states, the District of Columbia, Guam, and Puerto Rico.

The technique of interviewing a random sample of state residents by telephone offers quality control advantages and is a faster, more cost-effective way of obtaining this information than in-person interviews. Over time, trends that occur in risk factors can be monitored. Participation in the BRFSS has the additional benefit of permitting states to compare their data to each other and to the nation with estimates derived using the same methodologies. The data can be used by public health professionals and researchers to identify high-risk groups, establish health policy and priorities, and monitor the impact of health promotion efforts.

Twenty-four reports have been published by the WVBPH presenting survey results of the State's participation in the BRFSS since 1984. This report focuses on the 2015 risk factor prevalence estimates and compares them to the years 1984 through 2014. Table I.1 on the following page shows topics that have been included in the last 10 years of surveillance, many of which are examined in the present report.

## WHAT'S NEW FOR 2015

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

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

| Topic | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adverse Childhood Events |  |  |  |  |  |  |  |  |  | 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 |
| Cancer Screenings |  | X |  | X |  | X |  | X |  | X |  |
| Cardiovascular Disease | X | X | X | X | X | X | X | X | X | X | X |
| Cholesterol | X |  | X |  | X |  | X |  | X |  | X |
| Diabetes | X | X | X | X | X | X | X | X | X | X | X |
| Disability | X | X | X | X | X | X | X | X | X | X | X |
| Emotional Support/ Life Satisfaction | X | X | X | X | X | X |  |  |  |  |  |
| Falls |  | X |  | X |  | X |  | X |  | X |  |
| Fruits \& Vegetables | X |  | X |  | X |  | X |  | X |  | X |
| Health Insurance | X | X | X | X | X | X | X | X | X | X | X |
| Health Status | X | X | X | X | X | X | X | X | X | X | X |
| HPV Vaccine |  |  |  | X |  | X |  | X |  |  | X |
| Hypertension | X |  | 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 |  |
| 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 |
| Sexual Violence |  |  |  | X |  |  |  |  |  |  |  |
| Sleep |  |  |  |  | X | X |  |  | X | X |  |
| Tobacco Use |  |  |  | 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 the West Virginia Health Statistics Center (WVHSC) and the Centers for Disease Control and Prevention (CDC). The WVHSC provides telephones, office space, interviewers, and supervision of the data collection. Approximately $50 \%$ of the cost is supported through financial assistance from the CDC. A standardized set of core questions and survey protocols, computerassisted telephone interviewing software, data processing services, and analytic consultation are also provided by the CDC.

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

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

## SAMPLE SELECTION

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

According to 2015 state-level estimates from the National Health Interview Survey, 96.1\% of West Virginia households have telephones, with $61.4 \%$ of households having landline telephones. In addition, a growing number of adults ( $38.6 \%$ ) live in wireless-only households. In order to better represent these latter residents, the 2015 West Virginia dataset includes data from interviews conducted by cell phone. The addition of cell phone only households improves coverage of certain population groups including the young and those with lower socioeconomic status. CDC provides banks of telephone numbers (landline and cell phone) that are presumed to contain household numbers. Calls were made until each number resulted in a completed interview or a refusal or was disqualified. A number was disqualified if it was nonresidential or nonworking, if there was no eligible respondent available during the survey, or if the selected respondent was unable to communicate. Additionally, a land line number was disqualified if it had been called at least 15 times without success (encompassing a minimum of three attempts each during afternoons, evenings, and weekends). Within each household, the actual respondent was chosen randomly to avoid possible biases related to the time of day and household telephone answering
preferences. Since the number of adult residents and the number of telephone lines may differ from household to household, resulting in different probabilities of being selected, data were weighted to compensate for this bias.

## DEMOGRAPHIC CHARACTERISTICS OF THE WV BRFSS SAMPLE

The demographic characteristics of the samples in 2015, both unweighted and weighted to the West Virginia population, are presented in Table M.1. Data were weighted according to the process described later in this chapter in order to more accurately estimate the actual prevalence of behavioral risk factors in the adult population of West Virginia.

Table M. 1 Demographic Summary: WVBRFSS, 2015

| Demographic Characteristic | Number of Interviews | Percent of Unweighted Sample | Percent of Weighted Sample |
| :---: | :---: | :---: | :---: |
| Total | 5,957 | 100.0 | 100.0 |
| Sex |  |  |  |
| Male | 2,678 | 45.0 | 48.9 |
| Female | 3,279 | 55.0 | 51.1 |
| Race/Ethnicity |  |  |  |
| White, Non-Hispanic | 5,533 | 93.8 | 93.1 |
| Black, Non-Hispanic | 177 | 3.0 | 3.5 |
| Other, Non-Hispanic | 74 | 1.3 | 1.5 |
| Multiracial, Non-Hispanic | 68 | 1.2 | 0.9 |
| Hispanic | 49 | 0.8 | 1.1 |
| Age |  |  |  |
| 18-24 | 380 | 6.4 | 11.8 |
| 25-34 | 596 | 10.1 | 14.7 |
| 35-44 | 748 | 12.7 | 15.4 |
| 45-54 | 989 | 16.8 | 16.6 |
| 55-64 | 1,372 | 23.2 | 18.2 |
| 65+ | 1,819 | 30.8 | 23.3 |
| Education |  |  |  |
| < High School (HS) HS or GED | 711 2,189 | 12.0 36.9 | 15.9 40.1 |
| Some College | 1,467 | 24.7 | 25.6 |
| College Degree | 1,569 | 26.4 | 17.1 |
| Household Income |  |  |  |
| <\$15,000 | 654 886 | 14.0 19.0 | 14.3 19.4 |
| \$15,000-\$24,999 $\$ 25,000-\$ 34,999$ | 886 | 19.0 12.0 | 19.4 |
| \$25,000-\$34,999 $\mathbf{\$ 3 5 , 0 0 0 - \$ 4 9 , 9 9 9}$ | 559 754 | 12.0 16.2 | 12.5 16.7 |
| \$50,000-\$74,999 | 728 | 15.3 | 14.9 |
| \$75,000+ | 1,090 | 23.4 | 22.2 |
| Marital Status |  |  |  |
| Married | 3,056 | 51.5 | 52.4 |
| Divorced | 958 | 16.1 13.1 | 12.9 8.9 |
| Separated | 127 | 2.1 | 2.0 |
| Never Married | 838 | 14.1 | 19.3 |
| Unmarried Couple | 178 | 3.0 | 4.5 |
| Employment Status |  |  |  |
| Employed for wages | 2,317 | 39.1 5.1 | 42.5 4.8 |
| Unemployed (>1 year) | 127 | 2.1 | 2.6 |
| Unemployed (<1 year) | 133 | 2.2 | 3.2 |
| Homemaker | 406 | 6.9 | 7.7 |
| Student | 156 | 2.6 | 4.0 |
| Retired | 1,721 | 29.0 | 22.0 |
| Unable to Work | 769 | 13.0 | 13.2 |

## LIMITATIONS

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

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

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

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

## ESTIMATES, CONFIDENCE INTERVALS, SIGNIFICANCE, AND RELIABILITY

The prevalence rates presented in this report are derived from surveying a sample of adults rather than all adults in the population; therefore, the rates are estimates of the true values. For this reason, estimates are presented together with their associated confidence intervals ( Cls ). A confidence interval is a range of values around an estimate, which reflects sampling error and represents the uncertainty of the estimate. This report presents $95 \%$ confidence intervals ( $95 \% \mathrm{Cl}$ ). Therefore, one can be $95 \%$ confident that the confidence interval contains the true value that is being estimated.

Significant is the term used in this report to describe when prevalence estimates have been tested and found to be significantly different from each other. Statistically significant differences between estimates are traditionally determined using statistical tests such as a t-test or chi-square test. However, this report uses the following, more conservative method for determining significance. Two prevalence estimates are said to be "significantly" different when the $95 \%$ confidence intervals associated with each of the estimates do not overlap.

Reliability refers to the precision of an estimate. If an estimate is termed reliable, there is confidence that the same, or a very similar, estimate would be obtained if the survey were to be repeated within the same time period. Estimates that are determined to be unreliable may not reflect the true prevalence and should be reported and interpreted with caution. Throughout this report, unreliable estimates are noted with this message: "Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6."

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

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

The $95 \%$ confidence interval of the estimate has a width or range greater than 20 (e.g., $95 \% \mathrm{Cl}=$ 10.0-30.5).

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

## WEIGHTING OF 2015 DATA RESULTS

Beginning in 2011, CDC changed the weighting procedures for the BRFSS. Prior to 2011, weights for the BRFSS data were calculated based on the sex and age distribution of the West Virginia population using a method known as post-stratification. For 2011 and future years, BRFSS weights are calculated using a method known as iterative proportional fitting or raking. This weighting method takes into account additional demographic factors allowing for a better fit to West Virginia's socio-demographic profile. The additional factors used in the raking method include age group by sex, detailed race/ ethnicity, education, marital status, tenure (rent or own home), gender by race/ethnicity, age group by race/ethnicity, and telephone sample source (landline or cell phone). Due to the addition of cell phone data and the new weighting methodology, 2011 and later results are not comparable to previous years of data. Although time trend graphs for state prevalence estimates are included in this report, they should be interpreted with caution as no direct comparison can be made between 1984-2010 and 2011-2015 statistics. Any changes between 2011 and previous years' statistics cannot be directly interpreted due to unknown comparability ratios. This is noted in time trend graphs in this report as a break in the line between 2010 and 2011 statistics.

## COUNTY-LEVEL DATA

County prevalence rates were calculated by using five (5) years of aggregated BRFSS data. The data were reweighted to be representative of West Virginia's Census 2010 age and sex population distribution by county. In previous years, some counties were grouped due to small sample sizes; however, beginning in 2011 all counties have an individual prevalence estimate. In this report, county estimates were compared to the total West Virginia estimate for the same time period. This method better identifies disparities between counties. It also clearly identifies counties in need of health promotion interventions. The county maps included in this report classify counties according to the degree of difference from the West Virginia prevalence. County estimates, rankings, and statistical comparison to overall West Virginia estimates can be found in Appendix B.

## PRESENTATION OF RESULTS

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

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

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

The risk factor sections also include West Virginia's rank among the BRFSS participants. For example, if diabetes-related questions were administered by all 53 BRFSS participants, ranking $1^{\text {st }}$ in diabetes would mean having the highest prevalence of diabetes among all the U.S. states and territories while ranking $53^{\text {rd }}$ would mean having the lowest prevalence. Some questions are not asked of all BRFSS participants. In these cases, the rankings are not presented. In addition, readers should note that differences between states often are less than one percentage point and that statistical significance was not tested when determining rankings. The prevalence estimates and rankings by state were calculated by WVHSC staff using the U.S. dataset provided by the CDC. State and county prevalence estimates and rankings for many risk factors are presented in Appendices A and B.
West Virginia Behavioral Risk Factor
Surveillance System Report
$\stackrel{1}{\sim}$

SECTION 1: HEALTH STATUS

## CHAPTER 1: HEALTH STATUS

## General Health

| Definition | Responding "Fair" or "Poor" to the question, "Would you say that in general your health is: Excellent, Very Good, Good, Fair, or Poor?" |
| :---: | :---: |
| Prevalence | WV: 25.9\% (95\% CI: 24.6-27.2) |
|  | U.S.: 17.7\% (95\% CI: 17.5-17.9) |
|  | West Virginia's prevalence of fair/poor health was significantly higher than the U.S. prevalence. West Virginia ranked the $2^{\text {nd }}$ highest among 53 BRFSS |
|  | participants. |
| Gender | Men: $25.2 \%$ (95\% CI: 23.3-27.1) |
|  | Women: $26.6 \%$ (95\% CI: 24.8-28.3) |
|  | There was no gender difference in the prevalence of fair or poor general health status. |
| Race/Ethnicity | White, Non-Hispanic: $26.2 \%$ (95\% CI: 24.9-27.6) |
|  | Black, Non-Hispanic: $19.4 \%$ (95\% Cl: 13.1-25.8) |
|  | Other, Non-Hispanic: *27.6\% (95\% CI: 13.6-41.7) |
|  | Multiracial, Non-Hispanic: *23.8\% (95\% CI: 13.3-34.3) |
|  | Hispanic: *22.3\% (95\% CI: 8.2-36.4) |
|  | There was no race/ethnicity difference in the prevalence of fair or poor health status. |
|  | * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6 |
| Age | The prevalence of fair or poor health significantly increased with increasing age. |
|  | The prevalence ranged from a low of $9.5 \%$ among the youngest adults to a high of $35.5 \%$ among those aged 55-64. |
| Education | Adults with less than a high school education had the highest prevalence of fair or poor health, with a prevalence of $49.5 \%$. Those with more education had a much lower prevalence, with the prevalence for college graduates of $9.3 \%$. Significant differences in prevalence were found between each educational bracket. |
| Household Income | The prevalence of fair or poor health was $54.1 \%$ in the lowest income group (less than $\$ 15,000$ annually). The lowest prevalence of fair or poor health ( $7.6 \%$ ) was among those in the highest income bracket ( $\$ 75,000$ or more annually). There were significant differences in the prevalence of fair or poor health between most income groups. |

## CHAPTER 1: HEALTH STATUS

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

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


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

## CHAPTER 1: HEALTH STATUS

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

WV Prevalence (2011-2015) - 25.5\%


## CHAPTER 1: HEALTH STATUS

## Physical Health

Definition Responding at least "14 days" or more to the question, "Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?"

Prevalence WV: $18.6 \%$ ( $95 \% \mathrm{Cl}: 17.4-19.8$ )
U.S.: 12.1\% (95\% CI: 11.9-12.2)

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

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

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

Age The prevalence of poor physical health generally increased with advancing age with a statistically significant difference between those aged 44 and under and those aged 45 and older. The prevalence ranged from a low of $6.1 \%$ among those aged 18-24 to a high of $25.6 \%$ among those aged 55-64.

Adults with less than a high school education had the highest prevalence of poor physical health, with a prevalence of $35.0 \%$. Those with more education had a lower prevalence, with a prevalence of $7.3 \%$ for college graduates. Significant differences were observed between all educational brackets.

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

## CHAPTER 1: HEALTH STATUS

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

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

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



## CHAPTER 1: HEALTH STATUS

## Mental Health

| Definition | Responding at least "14 days" or more to the question, "Now thinking about your mental health, which includes stress, depression, and problems with emotions, fo how many days during the past 30 days was your mental health not good?" |
| :---: | :---: |
| Prevalence | WV: 15.6\% (95\% CI: 14.5-16.7) |
|  | U.S.: 11.5\% (95\% CI: 11.3-11.7) |
|  | The WV prevalence of poor mental health was significantly higher than the U.S prevalence. West Virginia ranked the highest among 53 BRFSS participants. |
| Gender | Men: $12.6 \%$ (95\% CI: 11.1-14.1) |
|  | Women: 18.4\% (95\% CI: 16.9-20.0) |
|  | The prevalence of poor mental health was significantly higher among females than males. |
| Race/Ethnicity | White, Non-Hispanic: $15.2 \%$ (95\% CI: 14.1-16.4) |
|  | Black, Non-Hispanic: $16.5 \%$ (95\% Cl: 10.1-23.0) |
|  | Other, Non-Hispanic: *28.2\% (95\% CI: 14.0-42.4) |
|  | Multiracial, Non-Hispanic: *11.8\% (95\% CI: 3.5-20.1) |
|  | Hispanic: *19.8\% (95\% CI: 4.8-34.9) |
|  | There was no race/ethnicity difference in the prevalence of poor mental health status. |
|  | * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6. |

Age The prevalence of poor mental health varied with age. The prevalence of poor mental health was highest among those aged 45-54 (21.1\%) and lowest among those aged 65 and older (9.0\%). The prevalence of poor mental health was significantly lower among those aged 65 and older than among all other age groups other than among those aged 25-34.

Education Adults with less than a high school education had the highest prevalence of poor mental health, with a prevalence of $24.6 \%$, which was significantly higher than all other education groups. Those with more education had a lower prevalence, with the prevalence among college graduates of $8.3 \%$ which was significantly lower than all other education groups.

Household Income
Poor mental health was experienced by more than one of every three adults (35.6\%) in the lowest income group (less than \$15,000 annually) and the prevalence was significantly higher than all other income brackets. The lowest prevalence occurred for those in the highest income bracket of $\$ 75,000$ or more (7.5\%), significantly lower than all income brackets under \$35,000.

## CHAPTER 1: HEALTH STATUS

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

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



## Poor Health Limitations

| Definition | Responding to the question, "During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?" |
| :---: | :---: |
| Prevalence | At least 14 days |
|  | WV: 23.9\% (95\% CI: 22.2-25.6) |
|  | U.S.: 15.4\% (95\% CI: 15.2-15.7) |
|  | West Virginia ranked the highest among 53 BRFSS participants and was significantly higher than the U.S. prevalence. <br> Every day |
|  | WV: 14.3\% (95\% CI: 12.9-15.7) |
|  | U.S.: 7.7\% (95\% CI: 7.5-7.9) |
|  | West Virginia ranked the highest among 53 BRFSS participants and was significantly higher than the U.S. prevalence. |
| Gender | At least 14 days |

Men: 24.3\% (95\% CI: 21.6-27.0)
Women: 23.6\% (95\% CI: 21.4-25.8)
There was no gender difference in the prevalence of poor health limitations for at least 14 days in the past 30 days.

## Every day

Men: 16.0\% (95\% CI: 13.7-18.3)
Women: 12.9\% (95\% CI: 11.2-14.6)
There was no gender difference in the prevalence of poor health limitations every day in the past 30 days.

Race/Ethnicity No race/ethnicity statistics are reported due to unreliable estimates.
Age The prevalence of poor health limitations generally increased with age for both the 14 day indicator and the every day indicator.

Education The prevalence of poor health limitations was highest among those with the least amount of education and lowest among those with the most education for both the 14 day and every day indicators. Significant differences were observed between each level of education for the 14 day indicator and nearly all education levels for the every day indicator.

Household Income In general, the prevalence of poor health limitations declined with increasing annual household income for both the 14 day and every day indicators.

## 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, 2015

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

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

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

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

[^0]
## CHAPTER 1: HEALTH STATUS



## Physical, Mental, or Emotional Disability

| Definition | Responding "Yes" to the question, "Are you limited in any way in any activities because of physical, mental, or emotional problems?" |
| :---: | :---: |
| Prevalence | WV: 28.3\% (95\% CI: 27.0-29.6) |
|  | U.S.: 20.3\% (95\% Cl: 20.1-20.5) |
|  | The West Virginia prevalence of disability was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 53 BRFSS participants. |
| Gender | Men: 28.3\% (95\% CI: 26.3-30.3) |
|  | Women: 28.3\% (95\% CI: 26.6-30.1) |
|  | There was no gender difference in the prevalence of disability. |
| Race/Ethnicity | White, Non-Hispanic: $28.5 \%$ (95\% CI: 27.1-29.9) |
|  | Black, Non-Hispanic: 23.8\% (95\% Cl: 16.7-30.9) |
|  | Other, Non-Hispanic: *26.6\% (95\% Cl: 12.1-41.0) |
|  | Multiracial, Non-Hispanic: *37.3\% (95\% Cl: 23.7-50.8) |
|  | Hispanic: *17.9\% (95\% CI: 5.0-30.8) |
|  | There was no race/ethnicity difference in the prevalence of disability. <br> * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6. |

Age The prevalence of disability generally increased significantly with each age group under 55.

Education The prevalence of disability decreased significantly with each increasing educational attainment level.

Household Income
The prevalence of disability decreased with increasing household income. The prevalence of disability was highest among those with an annual household income of less than $\$ 15,000$ ( $53.5 \%$ ) and was significantly higher than the prevalence among all other income brackets. The prevalence of disability was lowest among those with a household income of $\$ 75,000$ or more per year (11.6\%) and was significantly lower than all other income brackets.

## CHAPTER 2: IMPAIRMENT

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

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



[^1]
## CHAPTER 2: IMPAIRMENT

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

WV Prevalence (2011-2015) - 29.0\%


## Use Special Equipment

| Definition | Responding "Yes" to the question, "Do you now have any health problem that <br> requires you to use special equipment, such as a cane, a wheelchair, a special <br> bed, or a special telephone?" |
| :--- | :--- |
| Prevalence | WV: $13.1 \%(95 \% \mathrm{Cl}: 12.2-14.1)$ |
|  | U.S.: $8.5 \%(95 \% \mathrm{Cl}: 8.4-8.7)$ |
| The West Virginia prevalence of the use of special equipment was significantly |  |
| higher than the U.S. prevalence. West Virginia ranked highest among the 53 |  |
|  | BRFSS participants. |

Gender

Race/Ethnicity

Age

Education The prevalence of the use of special equipment decreased with each increasing educational attainment level and was significantly higher among those with less than a high school education (26.9\%) than among all other educational attainment levels.

Household Income
Men: $13.5 \%$ ( $95 \% \mathrm{Cl}: 12.0-14.9$ )
Women: $12.8 \%$ ( $95 \% \mathrm{Cl}$ : 11.6-14.1)
There was no gender difference for the prevalence of the use of special equipment.

White, Non-Hispanic: $13.2 \%$ (95\% CI: 12.2-14.2)
Black, Non-Hispanic: $13.7 \%$ ( $95 \%$ Cl: 8.6-18.8)
Other, Non-Hispanic: *10.5\% (95\% CI: 0.0-22.5)
Multiracial, Non-Hispanic: *15.9\% (95\% CI: 6.2-25.6)
Hispanic: *6.5\% (95\% CI: 0.0-15.7)
There was no race/ethnicity difference in the prevalence of the use of special equipment.

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

The prevalence of use of special equipment increased with age. The prevalence of the use of special equipment was significantly higher among those aged 65 and older (23.3\%) than among all other age groups.

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

## CHAPTER 2: IMPAIRMENT

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

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

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



## Use of Special Equipment Among Disabled

| Definition | Prevalence of the use of special equipment among those reporting they are disabled. |
| :---: | :---: |
| Prevalence | WV: 36.6\% (95\% CI: 34.0-39.2) |
|  | U.S.: 31.9\% (95\% CI: 31.4-32.5) |
|  | The West Virginia prevalence of the use of special equipment among those who are disabled was significantly higher than the U.S. prevalence. West Virginia ranked the $3^{\text {rd }}$ highest among the 53 BRFSS participants. |
| Gender | Men: $37.8 \%$ (95\% CI: 33.8-41.7) |
|  | Women: 35.4\% (95\% CI: 32.0-38.9) |
|  | There was no gender difference for the prevalence of the use of special equipment among those who are disabled. |
| Race/Ethnicity | No race/ethnicity statistics are reported due to unreliable estimates. |
| Age | The prevalence of the use of special equipment among disabled increased with age. The prevalence of the use of special equipment among those who are disabled was significantly higher among those aged 65 and older than the prevalence among all other age groups under 55 . |
| Education | The prevalence of the use of special equipment among those who are disabled was highest among those with less than a high school education (52.0\%) and was significantly higher than the prevalence among all other educational attainment levels. |
| Household Income | The prevalence of the use of special equipment among those who are disabled was highest among those with an annual household income less than \$15,000 (47.5\%) and was significantly higher than the prevalence among those earning $\$ 25,000$ or more per year. |

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

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

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

Figure 2.4 Prevalence of Use Special Equipment Among Disabled by Year: WVBRFSS, 2011-2015


## Cognitive Difficulty

| Definition | Responding "Yes" to the question, "Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions?" |
| :---: | :---: |
| Prevalence | WV: 14.6\% (95\% CI: 13.6-15.7) |
|  | U.S.: 10.3\% (95\% CI: 10.2-10.5) |
|  | The West Virginia prevalence of cognitive difficulty was significantly higher than the U.S. prevalence. West Virginia ranked the $4^{\text {th }}$ highest among the 53 BRFSS participants. |
| Gender | Men: $13.7 \%$ (95\% CI: 12.2-15.3) |
|  | Women: 15.5\% (95\% CI: 14.0-17.0) |
|  | There was no gender difference for the prevalence of cognitive difficulty. |
| Race/Ethnicity | White, Non-Hispanic: $14.8 \%$ (95\% Cl: 13.7-15.9) |
|  | Black, Non-Hispanic: $10.1 \%$ (95\% Cl: 5.1-15.2) |
|  | Other, Non-Hispanic: *14.1\% (95\% CI: 4.1-24.0) |
|  | Multiracial, Non-Hispanic: *18.4\% (95\% CI: 7.5-29.2) |
|  | Hispanic: *12.2\% (95\% CI: 2.7-21.6) |
|  | There was no race/ethnicity difference in the prevalence of cognitive difficulty. <br> * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6. |

Age The prevalence of cognitive difficulty increased with age up to 45-54, and then decreased with age for those over 55 . The prevalence of cognitive difficulty was highest among those 45-54 (19.6\%), significantly higher than among those under 35 or those 65 and older (10.9\%).

The prevalence of cognitive difficulty decreased with increasing education. It was significantly higher among those with less than a high school education (28.5\%) than among all other educational attainment levels, and it was significantly lower among those with a college degree (7.1\%) than among all other educational attainment levels.

Household Income
The prevalence of cognitive difficulty generally decreased with increasing income. The prevalence of cognitive difficulty was significantly higher among those with an income of less than $\$ 15,000$ (36.5\%) than all income brackets $\$ 35,000$ or more.

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

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

## Difficulty Walking

| Definition | Responding "Yes" to the question, "Do you have serious difficulty walking or climbing stairs?" |
| :---: | :---: |
| Prevalence | WV: 22.7 (95\% CI: 21.4-23.9) |
|  | U.S.: 13.8\% (95\% CI: 13.6-13.9) |
|  | The West Virginia prevalence of difficulty walking was significantly higher than the U.S. prevalence. West Virginia ranked the highest among the 53 BRFSS participants. |
| Gender | Men: 20.5\% (95\% CI: 18.8-22.3) |
|  | Women: $24.7 \%$ (95\% CI: 23.0-26.4) |
|  | The prevalence of difficulty walking was significantly higher for women than it was for men. |
| Race/Ethnicity | White, Non-Hispanic: $22.9 \%$ ( $95 \%$ Cl: $21.6-24.1$ ) |
|  | Black, Non-Hispanic: $18.3 \%$ ( $95 \% \mathrm{Cl}: 12.3-24.3$ ) |
|  | Other, Non-Hispanic: *24.2\% (95\% CI: 9.7-38.6) |
|  | Multiracial, Non-Hispanic: *24.2\% (95\% CI: 12.6-35.7) |
|  | Hispanic: *14.8\% (95\% CI: 3.0-26.7) |
|  | There was no race/ethnic difference in the prevalence of difficulty walking. <br> * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6 . |
| Age | The prevalence of difficulty walking increased significantly between each age group up to $45-54$. It was highest among those 65 and older (35.5\%) and lowest among those 18-24 (2.3\%). |
| Education | The prevalence of difficulty walking decreased significantly with increasing education. It was highest among those with a less than a high school education (45.8\%) and lowest among those with a college degree (10.2\%). |
| Household Income | The prevalence of difficulty walking decreased with increasing income. It was highest among those with a household income less than \$15,000 (46.1\%), significantly higher than all other income levels, and was lowest among those with a household income of $\$ 75,000$ or more ( $5.8 \%$ ) significantly lower than all other income levels. |

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

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

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


## Difficulty Dressing or Bathing

| Definition | Responding "Yes" to the question, "Do you have difficulty dressing or bathing?" |
| :---: | :---: |
| Prevalence | WV: 5.6\% (95\% CI: 4.9-6.2) |
|  | U.S.: 3.8\% (95\% Cl: 3.7-3.9) |
|  | The West Virginia prevalence of difficulty dressing or bathing is significantly higher than the U.S. prevalence. West Virginia ranked the $4^{\text {th }}$ highest among the |
|  | 53 BRFSS participants. |
| Gender | Men: 5.5\% (95\% CI: 4.6-6.5) |
|  | Women: 5.6\% (95\% CI: 4.7-6.5) |
|  | There was no gender difference for the prevalence of difficulty dressing or bathing. |
| Race/Ethnicity | White, Non-Hispanic: $5.5 \%$ (95\% Cl: 4.8-6.2) |
|  | Black, Non-Hispanic: *7.5\% (95\% CI: 3.0-11.9) |
|  | Other, Non-Hispanic: *4.8\% (95\% CI: 0.0-10.2) |
|  | Multiracial, Non-Hispanic: *4.9\% (95\% CI: 0.0-10.6) |
|  | Hispanic: *3.0\% (95\% CI: 0.0-8.8) |
|  | There was no race/ethnicity difference in the prevalence of difficulty dressing or bathing. |

Age The prevalence of difficulty dressing or bathing was lowest among those 18-24 (0.5\%) and highest among those 55-64 (9.5\%), a significant difference.

The prevalence of difficulty dressing or bathing decreased with increasing education. It was significantly higher among those with less than a high school education (12.4\%) than among all other educational attainment levels and significantly lower among those with a college degree (1.9\%) than among all other educational attainment levels except those with some post high school education.

The prevalence of difficulty dressing or bathing decreased with increasing income. It was significantly higher among those with a household income of less than $\$ 15,000$ (16.3\%) than all other income levels.

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

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

[^2]
## Difficulty Doing Errands Alone

| Definition | Responding "Yes" to the question, "Because of a physical, mental, or emotional condition, do you have difficulty doing errands alone such as visiting a doctor's office or shopping?" |
| :---: | :---: |
| Prevalence | WV: 11.6\% (95\% CI: 10.6-12.5) |
|  | U.S.: 7.0\% (95\% CI: 6.8-7.1) |
|  | The West Virginia prevalence of difficulty doing errands alone was significantly higher than the U.S. prevalence. West Virginia ranked the highest among the 53 |
|  | BRFSS participants. |
| Gender | Men: 8.8\% (95\% CI: 7.5-10.0) |
|  | Women: $14.2 \%$ (95\% CI: 12.8-15.6) |
|  | The prevalence of difficulty doing errands alone was significantly higher among women than among men. |
| Race/Ethnicity | White, Non-Hispanic: $11.7 \%$ (95\% CI: 10.7-12.6) |
|  | Black, Non-Hispanic: 7.9\% (95\% CI: 3.7-12.2) |
|  | Other, Non-Hispanic: *15.4\% (95\% Cl: 2.3-28.5) |
|  | Multiracial, Non-Hispanic: *11.6\% (95\% Cl: 3.3-19.9) |
|  | Hispanic: *7.8\% (95\% CI: 0.1-15.6) |
|  | There was no race/ethnicity difference in the prevalence of difficulty doing errands alone. |

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

Education The prevalence of difficulty doing errands alone decreased significantly with each educational attainment level. It was highest among those with less than a high school education (24.7\%) and lowest among college graduates (4.2\%).

Household Income The prevalence of difficulty doing errands alone decreased with increasing income. It was highest among those with a household income of less than $\$ 15,000(28.3 \%)$, significantly higher than all other income levels and it was lowest among those with a household income of $\$ 75,000$ or more ( $2.2 \%$ ), significantly lower than all other income levels.

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

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

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


## Prevalence of Vision Impairment

| Definition | Responding "Yes" to the question, "Are you blind or do you have serious difficulty seeing, even when wearing glasses?" |
| :---: | :---: |
| Prevalence | WV: 8.0\% (95\% CI: 7.2-8.8) |
|  | U.S.: 4.6\% (95\% CI: 4.5-4.7) |
|  | The West Virginia prevalence of vision impairment was significantly higher than the U.S. prevalence. West Virginia ranked the $3^{\text {rd }}$ highest among 53 BRFSS participants. |
| Gender | Men: 6.9\% (95\% CI: 5.8-8.0) |
|  | Women: 9.0\% (95\% CI: 7.9-10.1) |
|  | There was no gender difference in the prevalence of vision impairment. |
| Race/Ethnicity | White, Non-Hispanic: $8.0 \%$ (95\% CI: 7.1-8.8) |
|  | Black, Non-Hispanic: 10.9\% (95\% Cl: 5.7-16.1) |
|  | Other, Non-Hispanic: *7.3\% (95\% Cl: 1.0-13.6) |
|  | Multiracial, Non-Hispanic: *9.6\% (95\% CI: 2.1-17.1) |
|  | Hispanic: *3.0\% (95\% CI: 0.0-7.4) |
|  | There was no race/ethnicity difference in the prevalence of vision impairment. <br> * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6. |

Age The prevalence of vision impairment was significantly higher among those 45 and older than for those under 45.

Education The prevalence of visual impairment decreased with increasing education. The prevalence of vision impairment was significantly higher among those with less than a high school education (15.6\%) than among all other educational attainment levels and significantly lower among those with a college degree (3.2\%) than among all other educational attainment levels.

Household Income
The prevalence of vision impairment was significantly higher among those with an annual household income of less than $\$ 15,000$ (17.9\%) than among all other income brackets \$25,000 or more.

## CHAPTER 2: IMPAIRMENT

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

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

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


## CHAPTER 3: HEALTH CARE ACCESS



## CHAPTER 3: HEALTH CARE ACCESS

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

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


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

## CHAPTER 3: HEALTH CARE ACCESS

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

WV Prevalence (2011-2015) - 19.2\%


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

## CHAPTER 3: HEALTH CARE ACCESS

## Primary Health Care Coverage

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

Private: "Your employer", "Someone else's employer", or "A plan that you or someone else buys on your own"
Medicare
Medicaid
Other: "The military, CHAMPUS, TriCare, or VA" or "Some other source" None (no coverage)

Prevalence Private: 46.5\% (95\% Cl: 45.0-48.1)
Medicare: 23.9\% (95\% CI: 22.7-25.1)
Medicaid: 16.6\% (95\% CI: 15.3-17.8)
Other: $\mathbf{4 . 5 \%}$ (95\% CI: 3.9-5.1)
None: 8.5\% (95\% CI: 7.5-9.4)
This question was part of a state added set of questions and national data are not available, therefore a U.S. comparison was not conducted.

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

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

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

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

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

## CHAPTER 3: HEALTH CARE ACCESS

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

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

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

[^3]
## CHAPTER 3: HEALTH CARE ACCESS

## No Personal Doctor or Health Care Provider

| Definition | Responding "No" to the question, "Do you have one person you think of as your <br> personal doctor or health care provider?" |
| :--- | :--- |
| Prevalence | WV: $\mathbf{2 1 . 0 \%}(95 \% \mathrm{Cl}: 19.7-22.3)$ |

Gender

Race/Ethnicity White, Non-Hispanic: 20.2\% (95\% CI: 18.8-21.5)
Black, Non-Hispanic: $31.7 \%$ (95\% CI: 23.6-39.8)
Other, Non-Hispanic: *41.5\% (95\% CI: 27.0-56.1)
Multiracial, Non-Hispanic: *28.9\% (95\% CI: 16.3-41.4)
Hispanic: *29.3\% (95\% CI: 13.9-44.6)
The prevalence of no personal doctor or health care provider was significantly higher among Black, Non-Hispanics and Other, Non-Hispanics than among White, Non-Hispanics.

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

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

There was a significant difference in the prevalence of no personal doctor or health care provider between those with less than a high school education ( $22.7 \%$ ) and those with a college degree ( $15.7 \%$ ). The prevalence of no personal doctor is significantly lower among college graduates than among all other educational attainment levels.

Those earning \$15,000-\$24,999 per year had the highest prevalence of not having a personal doctor or health care provider ( $24.1 \%$ ) which was significantly higher than those earning $\$ 75,000$ or more per year (16.7\%).

## CHAPTER 3: HEALTH CARE ACCESS

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

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



[^4]
## CHAPTER 3: HEALTH CARE ACCESS

## Could Not Afford Needed Medical Care

Definition | Responding "Yes" to the question, "Was there a time in the past 12 months |
| :--- |
| when you needed to see a doctor but could not because of cost?" |

Prevalence
WV: $13.8 \%(95 \% \mathrm{Cl}: 12.7-14.9)$
U.S.: $13.3 \%(95 \% \mathrm{Cl}: 13.0-13.5)$
The West Virginia prevalence of could not afford needed medical care was
equivalent to the national prevalence. West Virginia ranked the $16^{\text {th }}$ highest
among 53 BRFSS participants.

Gender

Race/Ethnicity

Age

Education The prevalence of could not afford needed medical care was significantly lower among college graduates (7.9\%) than among all other educational attainment levels.

The prevalence of could not afford needed medical care became steadily higher as household income declined. The prevalence of could not afford needed medical care was $6.9 \%$ for those earning $\$ 75,000$ per year or more and $23.4 \%$ for those earning less than $\$ 15,000$ per year. The prevalence of could not afford needed medical care was significantly higher among those earning less than $\$ 25,000$ than among those earning $\$ 35,000$ or more.

## CHAPTER 3: HEALTH CARE ACCESS

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

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



[^5]
## No Routine Checkup in Past Year

| Definition | Responding "More than a year ago" to the question, "About how long has it been since you last visited a doctor for a routine checkup? A routine checkup is a general physical exam, not an exam for a specific injury, illness, or condition." |
| :---: | :---: |
| Prevalence | WV: 20.2\% (95\% CI: 18.9-21.4) |
|  | U.S.: 29.9\% (95\% CI: 29.7-30.2) |
|  | The West Virginia prevalence of no checkup in the past year was significantly |
|  | lower than the national prevalence. West Virginia ranked the 2 lowest among 53 BRFSS participants. |
| Gender | Men: 24.0\% (95\% CI: 22.1-26.0) |
|  | Women: 16.4\% (95\% CI: 14.8-18.0) |
|  | The prevalence of no routine checkup in the past year was significantly higher among males than among females. |
| Race/Ethnicity | White, Non-Hispanic: $20.0 \%$ (95\% CI: 18.7-21.3) |
|  | Black, Non-Hispanic: $22.0 \%$ (95\% Cl: 14.6-29.3) |
|  | Other, Non-Hispanic: *25.4\% (95\% CI: 12.9-38.0) |
|  | Multiracial, Non-Hispanic: *22.8\% (95\% Cl: 11.9-33.7) |
|  | Hispanic: *22.7\% (95\% CI: 9.8-35.6) |
|  | There was no race/ethnicity difference in the prevalence of no checkup in the past year. |
|  | * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6. |

Age The prevalence of no checkup in the past year generally decreased as age increased. Those 65 and older had a relatively low prevalence of no checkup in the past year ( $7.6 \%$ ) while those aged $25-34$ had the highest prevalence ( $33.6 \%$ ). The prevalence of no checkup in the past year was significantly lower among those 55 and older than among those under 55.

Education The prevalence of no checkup in the past year was significantly lower among those with college degrees ( $16.4 \%$ ) than among those with some post-high school education (22.3\%).

Household Income The highest prevalence of no checkup in the past year was among those with an annual household income below $\$ 15,000(25.2 \%)$ and the lowest prevalence was among those with an annual household income of $\$ 75,000$ or more (17.3\%), a significant difference.

## CHAPTER 3: HEALTH CARE ACCESS

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

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



[^6]
## Overweight

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

Prevalence WV: $\mathbf{3 5 . 5 \%}$ ( $95 \% \mathrm{Cl}: 34.0-37.0$ )
U.S.: 35.7\% (95\% CI: 35.4-36.0)

The prevalence of overweight in West Virginia was similar to that for the U.S. West Virginia ranked the $27^{\text {th }}$ highest among 53 BRFSS participants.

Gender
$\begin{array}{ll}\text { Race/Ethnicity } & \text { White, Non-Hispanic: } 35.8 \% \text { ( } 95 \% \text { CI: } 34.2-37.3 \text { ) } \\ & \text { Black, Non-Hispanic: } 28.5 \% \text { ( } 95 \% \mathrm{CI}: 20.3-36.8 \text { ) } \\ & \text { Other, Non-Hispanic: *28.3\% (95\% CI: 14.4-42.1) } \\ & \text { Multiracial, Non-Hispanic: } 38.7 \% \text { (95\% CI: 24.4-53.0) } \\ & \text { Hispanic: *33.2\% (95\% CI: } 17.4-49.1 \text { ) } \\ & \text { There was no race/ethnicity difference in the prevalence of overweight. } \\ & \text { * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page } 6 .\end{array}$
Age The prevalence of overweight was lowest among those aged 18-24 (29.6\%) and highest among those aged 65 and older ( $39.8 \%$ ), a significant difference.

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

There was no difference in the prevalence of overweight between income brackets.

## CHAPTER 4: WEIGHT STATUS

Table 4.1 Overweight Prevalence by Demographic Characteristics: WVBRFSS, 2015

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

## CHAPTER 4: WEIGHT STATUS

## Obesity

| Definition | Body Mass Index (BMI) is a calculation that standardizes the meaning of the terms obesity and overweight, thereby improving the accuracy of comparisons. BMI is body weight in kilograms divided by height in meters squared ( $B M I=\mathrm{kg} / \mathrm{m}^{2}$ ). Obese is defined as a BMI of 30.0 or higher. |
| :---: | :---: |
| Prevalence | WV: 35.6\% (95\% CI: 34.1-37.1) |
|  | U.S.: 28.9\% (95\% CI: 28.6-29.1) |
|  | The prevalence of obesity was significantly higher in West Virginia than in the U.S |
|  |  |
| Gender | Men: 37.4\% (95\% CI: 35.2-39.5) |
|  | Women: $33.8 \%$ (95\% CI: 31.7-35.8) |
|  | There was no gender difference in the prevalence of obesity. |
| Race/Ethnicity | White, Non-Hispanic: 35.4\% (95\% CI: 33.9-36.9) |
|  | Black, Non-Hispanic: $44.0 \%$ (95\% Cl: 35.0-53.0) |
|  | Other, Non-Hispanic: *29.3\% (95\% CI: 13.9-44.8) |
|  | Multiracial, Non-Hispanic: *35.2\% (95\% CI: 21.0-49.4) |
|  | Hispanic: *35.9\% (95\% CI: 20.1-51.6) |
|  | There was no race/ethnicity difference in the prevalence of obesity. <br> * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6. |
| Age | The prevalence of obesity was lowest in those aged 18-24 (20.7\%), which was significantly lower than all other age groups. |
| Education | There was no difference in the prevalence of obesity between educationa attainment levels. |
| Household Inco | There was no difference in the prevalence of obesity between income brackets. |

## CHAPTER 4: WEIGHT STATUS

Table 4.2 Obesity Prevalence by Demographic Characteristics: WVBRFSS, 2015

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

## CHAPTER 4: WEIGHT STATUS

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

WV Prevalence (2011-2015) - 34.5\%


## Overweight or Obese

| Definition | Body Mass Index (BMI) is a calculation that standardizes the meaning of the terms obesity and overweight, thereby improving the accuracy of comparisons. BMI is body weight in kilograms divided by height in meters squared ( $\mathrm{BMI}=\mathrm{kg} / \mathrm{m}^{2}$ ). Overweight or obese is defined as a BMI of 25.0 or higher. |
| :---: | :---: |
| Prevalence | WV: 71.1\% (95\% CI: 69.7-72.5) |
|  | U.S.: 64.6\% (95\% CI: 64.3-64.9) |
|  | The prevalence of overweight or obese in West Virginia was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 53 BRFSS participants. |
| Gender | Men: 77.2\% (95\% CI: 75.2-79.2) |
|  | Women: $64.8 \%$ (95\% CI: 62.7-66.8) |
|  | Men had a significantly higher prevalence of overweight or obese than women. |
| Race/Ethnicity | White, Non-Hispanic: $71.2 \%$ (95\% CI: 69.7-72.7) |
|  | Black, Non-Hispanic: $72.6 \%$ (95\% CI: 63.9-81.2) |
|  | Other, Non-Hispanic: *57.6\% (95\% CI: 42.2-73.0) |
|  | Multiracial, Non-Hispanic: 73.9\% (95\% Cl: 61.7-86.0) |
|  | Hispanic: *69.1\% (95\% CI: 52.6-85.6) |
|  | There was no race/ethnic difference in the prevalence of overweight or obese. <br> * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6. |
| Age | The 18-24 age group had the lowest prevalence of overweight or obese (50.3\%) and was significantly lower than all other age groups. |
| Education | There was no significant difference in the prevalence of overweight or obese by educational attainment. |
| Household Income | The prevalence of overweight or obese was highest among those with an annual household income of $\$ 50,000-\$ 74,999$ ( $79.0 \%$ ), significantly higher than among those with an annual household income below \$25,000. |

## CHAPTER 4: WEIGHT STATUS

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

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


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

## CHAPTER 4: WEIGHT STATUS

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


## No Leisure-Time Physical Activity or Exercise

| Definition | Responding "No" to the question, "During the past month, other than your regular job, did you participate in any physical activities or exercise such as running, calisthenics, golf, gardening, or walking for exercise?" |
| :---: | :---: |
| Prevalence | WV: 30.8\% (95\% CI: 29.4-32.2) |
|  | U.S.: 26.1\% (95\% CI: 25.9-26.4) |
|  | The prevalence of physical inactivity was significantly higher in West Virginia than in the U.S. West Virginia ranked the $9^{\text {th }}$ highest among 53 BRFSS participants. |
| Gender | Men: 28.5\% (95\% CI: 26.5-30.6) |
|  | Women: 33.0\% (95\% CI: 31.1-35.0) |
|  | The prevalence of physical inactivity was significantly higher among females than among males. |
| Race/Ethnicity | White, Non-Hispanic: 30.9\% (95\% Cl: 29.5-32.4) |
|  | Black, Non-Hispanic: 33.9\% (95\% Cl: 25.9-42.0) |
|  | Other, Non-Hispanic: *24.3\% (95\% Cl: 10.3-38.3) |
|  | Multiracial, Non-Hispanic: *23.7\% (95\% CI: 12.5-35.0) |
|  | Hispanic: *30.2\% (95\% CI: 15.2-45.1) |
|  | There was no race/ethnic difference in the prevalence of physical inactivity. <br> * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6. |

Age The prevalence of physical inactivity generally increased with age with the lowest being among those 18-24 (16.4\%), significantly lower than all other age groups, and highest among those 65 and older (36.7\%).

Education The prevalence of physical inactivity decreased significantly with increasing education. The prevalence of physical inactivity among those lacking a high school education was $45.3 \%$, whereas only $18.5 \%$ of college graduates were physically inactive.

Household Income The prevalence of physical inactivity declined with increasing income levels. The prevalence of physical inactivity was significantly higher among adults with incomes of less than $\$ 15,000$ ( $40.4 \%$ ) than among persons with incomes of $\$ 35,000$ or more.

## CHAPTER 5: PHYSICAL ACTIVITY

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

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



[^7]
## CHAPTER 5: PHYSICAL ACTIVITY

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

WV Prevalence (2011-2015) - 31.4\%


## CHAPTER 5: PHYSICAL ACTIVITY

|  | Physical Activity Levels |
| :---: | :---: |
| Definition | Highly active is defined as doing enough physical activity to meet the 300 minute per week aerobic recommendation. <br> Active is defined as doing 150-300 minutes of aerobic physical activity per week. Insufficiently active is defined as doing insufficient physical activity (11-149 minutes per week). <br> Inactive is defined as doing no physical activity. |
| Prevalence | Highly Active: |
|  | WV: 32.8\% (95\% CI: 31.3-34.2) |
|  | U.S.: 31.1\% (95\% Cl: 30.9-31.4) |
|  | The prevalence of highly active in West Virginia was similar to that for the U.S. West Virginia ranked the $22^{\text {nd }}$ highest among 53 BRFSS participants. <br> Active: |
|  | WV: 14.8\% (95\% CI: 13.7-15.9) |
|  | U.S.: 19.3\% (95\% CI: 19.0-19.5) |
|  | The prevalence of active in West Virginia was significantly lower in West Virginia than in the U.S. West Virginia ranked lowest among 53 BRFSS participants. Insufficiently Active: |
|  | WV: 18.8\% (95\% CI: 17.5-20.0) |
|  | U.S.: 20.8\% (95\% CI: 20.5-21.1) |
|  | The prevalence of insufficiently active in West Virginia was significantly lower in West Virginia than in the U.S. West Virginia ranked the $13^{\text {th }}$ lowest among 53 |
|  | BRFSS participants. |
|  | Inactive: |
|  | WV: 33.7\% (95\% CI: 32.2-35.2) |
|  | U.S.: 28.8\% (95\%CI: 28.5-29.1) |
|  | The prevalence of inactive was significantly higher in West Virginia than in the U.S. West Virginia ranked the $9^{\text {th }}$ highest among 53 BRFSS participants. |
|  | U.S. West Virginia ranked the $9^{\text {th }}$ highest among 53 BRFSS participants. |
| Gender | Highly Active: |
|  | Men: 35.1\% (95\% CI: 32.9-37.4) |
|  | Women: 30.5\% (95\% CI: 28.6-32.5) |
|  | Men had a significantly higher prevalence of being highly active than women. Active: |
|  | Men: 14.5\% (95\% CI: 12.9-16.2) |
|  | Women: 15.0\% (95\% CI: 13.5-16.5) |
|  | There was no gender difference in the prevalence of the active level. Insufficiently Active: |

Men: 18.7\% (95\% CI: 16.8-20.5)
Women: 18.8\% (95\% CI: 17.2-20.5)
There was no gender difference in the prevalence of the insufficiently active level.

## CHAPTER 5: PHYSICAL ACTIVITY

|  | Inactive: |
| :---: | :---: |
|  | Men: 31.7\% (95\% CI: 29.5-33.9) |
|  | Women: 35.6\% (95\% CI: 33.6-37.6) |
|  | There was no gender difference in the prevalence of the inactive level. |
| Race/Ethnicity | No race/ethnicity statistics are reported due to unreliable estimates. |
| Age | There was no age difference in the prevalence of highly active or active. The prevalence of insufficiently active was significantly lower among those 65 and older ( $13.0 \%$ ) than among those under 35 years old. The prevalence of inactive generally increased with age and was significantly lower among those 18-24 (21.0\%) than among those 35 and over. |
| Education | The prevalence of highly active was significantly higher among college graduates than among those with a high school education or less than a high school education. The prevalence of active was significantly lower among those with less than a high school education than all other educational attainment levels and significantly higher among college graduates than among all other educational attainment levels. The prevalence of insufficient activity was significantly higher among those with some post-high school education and college graduates than among those with less than high school or high school education. The prevalence of inactive decreased significantly with each level of increasing education. |
| Household Income | The prevalence of physical inactivity declined with increasing income levels. The prevalence of physical inactivity was significantly higher among adults with incomes of less than $\$ 15,000$ (40.4\%) than among persons with incomes of $\$ 35,000$ or more. |

## CHAPTER 5: PHYSICAL ACTIVITY

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

| Characteristic | Highly Active |  |  | Active |  |  | Insufficiently Active |  |  | Inactive |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted Frequency | \% | 95\% Cl | Weighted Frequency | \% | 95\% Cl | Weighted Frequency | \% | 95\% Cl | Weighted Frequency | \% | 95\% CI |
| TOTAL | 195,701 | 28.5 | 26.5-30.6 | 237,860 | 33.0 | 31.1-35.0 | 237,860 | 33.0 | 31.1-35.0 | 433,562 | 30.8 | 29.4-32.2 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 228,484 | 35.1 | 32.9-37.4 | 94,514 | 14.5 | 12.9-16.2 | 121,373 | 18.7 | 16.8-20.. 5 | 206,146 | 31.7 | 29.5-33.9 |
| Female | 210,777 | 30.5 | 28.6-32.5 | 103,377 | 15.0 | 13.5-16.5 | 130,082 | 18.8 | 17.2-20.5 | 245,998 | 35.6 | 33.6-37.6 |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| 18-24 | 55,329 | 35.6 | 30.0-41.2 | 25,931 | 16.7 | 12.3-21.0 | 41,658 | 26.8 | 21.6-32.0 | 32,619 | 21.0 | 16.1-25.8 |
| 25-34 | 66,128 | 34.3 | 29.8-38.8 | 33,555 | 17.4 | 13.9-20.9 | 40,071 | 20.8 | 17.0-24.5 | 53,242 | 27.6 | 23.3-31.9 |
| 35-44 | 70,050 | 34.1 | 30.0-38.2 | 32,177 | 15.7 | 12.7-18.7 | 39,653 | 19.3 | 16.1-22.5 | 63,369 | 30.9 | 26.9-34.8 |
| 45-54 | 60,526 | 27.0 | 23.7-30.3 | 32,378 | 14.4 | 12.0-16.9 | 46,142 | 20.6 | 17.6-23.5 | 85,185 | 38.0 | 34.3-41.6 |
| 55-64 | 75,526 | 30.4 | 27.6-33.2 | 38,676 | 15.6 | 13.4-17.8 | 43,416 | 17.5 | 15.1-19.9 | 90,621 | 36.5 | 33.5-39.5 |
| 65+ | 111,702 | 35.8 | 33.2-38.4 | 35,174 | 11.3 | 9.7-12.9 | 40,514 | 13.0 | 11.2-14.8 | 124,301 | 39.9 | 37.2-42.6 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 58,607 | 28.2 | 24.0-32.4 | 17,005 | 8.2 | 5.8-10.5 | 29,139 | 14.0 | 10.8-17.2 | 103,231 | 49.6 | 45.1-54.1 |
| H.S. or G.E.D. | 168,453 | 31.7 | 29.4-34.1 | 71,902 | 13.5 | 11.8-15.3 | 87,681 | 16.5 | 14.6-18.4 | 202,778 | 38.2 | 35.8-40.6 |
| Some Post-H.S. | 122,165 | 33.5 | 30.6-36.4 | 61,555 | 16.9 | 14.5-19.2 | 83,583 | 22.9 | 20.3-25.6 | 97,323 | 26.7 | 24.0-29.4 |
| College Graduate | 89,685 | 38.0 | 35.2-40.8 | 47,068 | 19.9 | 17.6-22.3 | 51,052 | 21.6 | 19.2-24.1 | 48,387 | 20.5 | 18.2-22.8 |
| Income |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 44,541 | 29.5 | 25.2-33.8 | 16,677 | 11.1 | 8.4-13.8 | 22,980 | 15.2 | 11.7-18.8 | 66,679 | 44.2 | 39.6-48.8 |
| \$15,000-24,999 | 59,748 | 29.9 | 26.1-33.7 | 24,173 | 12.1 | 9.6-14.6 | 38,644 | 19.3 | 16.1-22.5 | 77,299 | 38.7 | 34.7-42.6 |
| \$25,000-34,999 | 43,468 | 33.3 | 28.5-38.1 | 21,031 | 16.1 | 12.3-19.9 | 22,267 | 17.0 | 13.2-20.9 | 43,855 | 33.6 | 28.7-38.4 |
| \$35,000-49,999 | 58,484 | 32.9 | 28.8-36.9 | 26,226 | 14.7 | 11.6-17.9 | 37,230 | 20.9 | 17.4-24.5 | 56,005 | 31.5 | 27.5-35.5 |
| \$50,000-74,999 | 54,020 | 34.1 | 29.9-38.3 | 24,589 | 15.5 | 12.4-18.7 | 32,153 | 20.3 | 16.7-23.9 | 47,744 | 30.1 | 28.0-34.3 |
| \$75,000+ | 81,664 | 34.6 | 31.2-38.1 | 47,643 | 20.2 | 17.2-23.2 | 54,648 | 23.2 | 19.9-26.4 | 51,972 | 22.0 | 19.1-25.0 |

## Physical Activity Recommendations

Definition

Prevalence Met aerobic recommendations only:
WV: 34.2\% (95\% CI: 32.7-35.7)
U.S.: 30.2\% (95\% CI: 30.0-30.5)

The prevalence of met aerobic recommendation only was significantly higher for West Virginia than for the U.S. West Virginia ranked the $10^{\text {th }}$ highest among 53 BRFSS participants.
Met muscle strengthening recommendation only:
WV: 7.1\% (95\% CI: 6.3-8.0)
U.S.: 9.9 (95\% CI: 9.7-10.1)

The prevalence of met muscle strengthening recommendation only was significantly lower for West Virginia than for the U.S. West Virginia ranked the $2^{\text {nd }}$ lowest among 53 BRFSS participants.
Met both aerobic and muscle strengthening recommendations:
WV: 13.8\% (95\% CI: 12.7-14.9)
U.S.: 20.3\% (95\% CI: 20.1-20.6)

The prevalence of met both aerobic and muscle strengthening recommendations was significantly lower for West Virginia than for the U.S. West Virginia ranked the $2^{\text {nd }}$ lowest.
Did not meet either aerobic or muscle strengthening recommendations:
WV: 44.9\% (95\% CI: 43.3-46.5)
U.S.: 39.6\% (95\% CI: 39.3-39.9)

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

| Gender | Met aerobic recommendation only: <br> Men: 35.3\% (95\% Cl: 33.1-37.5) <br> Women: 33.2\% (95\% CI: 31.2-35.1) <br> There was no gender difference in meeting aerobic recommendations only. <br> Met muscle strengthening recommendation only: <br> Men: 8.4\% (95\% CI: 7.0-9.8) <br> Women: 5.9\% (95\% CI: 4.9-6.9) <br> Men had a significantly higher prevalence of meeting muscle strengthening recommendation only than women. <br> Met both aerobic and muscle strengthening recommendations: <br> Men: 14.7\% (95\% CI: 13.0-16.4) <br> Women: 12.9\% (95\% CI: 11.5-14.4) <br> There was no gender difference in the prevalence of meeting both aerobic and muscle strengthening recommendations. <br> Did not meet either aerobic or muscle strengthening recommendations: <br> Men: 41.6\% (95\% CI: 39.3-43.9) <br> Women: 48.0\% (95\% CI: 45.9-50.1) <br> Women had a significantly higher prevalence of not meeting either aerobic or muscle strengthening activity recommendations than men. |
| :---: | :---: |
| Race/Ethnicity | No race/ethnicity statistics are reported due to unreliable estimates. |
| Age | The prevalence of meeting aerobic recommendation only was highest among those aged 65 and older ( $38.4 \%$ ), significantly higher than among those aged 1824 (26.7\%). The prevalence of meeting muscle strengthening recommendation only generally decreased with age and was significantly higher among those aged 18-24 (14.1\%) than among those 45 and older and significantly lower among those aged 65 and older (4.0\%) than among those under 45. The prevalence of meeting both aerobic and muscle strengthening recommendations was highest among those 18-24, significantly higher than among those 35 and older. The prevalence of meeting neither aerobic or muscle strengthening recommendation was highest among those aged 45-54 (51.6\%) which was significantly higher than those under age 45. |
| Education | There was no education difference in the prevalence of those meeting aerobic recommendation only. The prevalence of meeting muscle strengthening recommendation only was highest among those with some post-high school education (10.0\%), significantly higher than among those with less than a high school education (5.5\%) or those with high school education (5.4\%). The prevalence of meeting both aerobic and muscle strengthening recommendations was significantly lower among those with les than a high school education or with a high school education than among those with some college or college graduates. |

## CHAPTER 5: PHYSICAL ACTIVITY

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

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

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

## Fruit and Vegetable Consumption

| Definition | Consuming fewer than five servings of fruits and vegetables on a daily basis in the past month. |
| :---: | :---: |
| Prevalence | WV: 91.7\% (95\% CI: 90.9-92.6) |
|  | U.S.: 83.4\% (95\% CI: 83.2-83.6) |
|  | The prevalence of consuming fewer than five servings of fruits and vegetables daily was significantly higher in West Virginia than in the U.S. West Virginia ranked the $2^{\text {nd }}$ highest among 53 BRFSS participants. |
| Gender | Men: 94.0\% (95\% CI: 92.9-95.1) |
|  | Women: 89.6\% (95\% CI: 88.3-90.9) |
|  | The prevalence of consuming fewer than five servings of fruits and vegetables daily was significantly higher among men than among women. |
| Race/Ethnicity | White, Non-Hispanic 91.7\% (95\% Cl: 90.8-92.6) |
|  | Black, Non-Hispanic: 91.2\% (95\% CI: 85.6-96.9) |
|  | Other, Non-Hispanic: 97.0\% (95\% CI: 93.4-100.0) |
|  | Multiracial, Non-Hispanic: *84.2\% (95\% CI: 71.2-97.3) |
|  | Hispanic: *91.6\% (95\% CI: 84.0-99.3) |
|  | The prevalence of consuming fewer than five servings of fruits and vegetables daily was significantly higher among Other, Non-Hispanics than among White, Non-Hispanics. |
|  | * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6 |
| Age | There was no age difference in the prevalence of consuming fewer than five servings of fruits and vegetables daily. |
| Education | The prevalence of consuming fewer than five servings of fruits and vegetables daily was significantly higher among those with less than a high school education ( $95.2 \%$ ) and those with a high school education or GED (93.7\%) than among those with some post-high school education (90.6\%) or college graduates (86.1\%). |
| Household Income | In general, the prevalence of consuming fewer than five servings of fruits and vegetables daily declined with increasing income levels. The prevalence of consuming fewer than five servings of fruits and vegetables daily was significantly lower among adults with incomes of $\$ 75,000$ or more (87.4\%) than among adults with incomes less than $\$ 50,000$. |

## CHAPTER 6: NUTRITION

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

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

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

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

## CHAPTER 6: NUTRITION

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

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


## CHAPTER 7: TOBACCO USE

## Current Cigarette Smoking

| Definition | Current cigarette smoking is defined as smoking at least 100 cigarettes in one's lifetime and currently smoking every day or some days. |
| :---: | :---: |
| Prevalence | WV: 25.7\% (95\% CI: 24.3-27.1) |
|  | U.S.: 16.7\% (95\% CI: 16.5-17.0) |
|  | The West Virginia prevalence of current cigarette smoking was significantly higher than the national prevalence. West Virginia ranked the $3^{\text {rd }}$ highest among the 53 BRFSS participants. |
| Gender | Men: 25.7\% (95\% CI: 23.7-27.8) |
|  | Women: $25.7 \%$ (95\% CI: 23.8-27.5) |
|  | There was no gender difference in the prevalence of current cigarette smoking. |
| Race/Ethnicity | White, Non-Hispanic: $25.3 \%$ (95\% CI: 23.8-26.7) |
|  | Black, Non-Hispanic: 30.6\% (95\% Cl: 22.4-38.9) |
|  | Other, Non-Hispanic: *39.1\% (95\% Cl: 23.6-54.6) |
|  | Multiracial, Non-Hispanic: *35.6\% (95\% Cl: 22.3-48.9) |
|  | Hispanic: *26.3\% (95\% CI: 11.5-41.0) |
|  | There was no race/ethnicity difference in the prevalence of current cigarette smoking. |

Age The prevalence of current cigarette smoking was highest among those aged 25-34 (36.3\%), significantly higher than among those aged 18-24 (25.5\%) and among those aged 55 and older. The prevalence of current smoking was significantly lower among those 65 and older (10.7\%) than among all other age groups.

Education

Household Income
The prevalence of current cigarette smoking decreased with increasing education. It was lowest among college graduates (12.0\%) and was significantly lower than all other education groups. Adults with less than a high school degree had the highest prevalence of current cigarette smoking (37.7\%), and the prevalence was significantly higher than all other education groups.

The prevalence of current cigarette smoking decreased as annual household income increased. The highest prevalence of current cigarette smoking was among those earning less than $\$ 15,000$ per year (42.5\%), significantly higher than among those with income levels of $\$ 25,000$ or more per year. The lowest prevalence of smoking was among adults earning $\$ 75,000$ or more per year (13.9\%), significantly lower than those with incomes less than \$50,000.

## CHAPTER 7: TOBACCO USE

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

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


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

## CHAPTER 7: TOBACCO USE

Figure 7.2 Prevalence of Current Cigarette Smoking by County: WVBRFSS, 20112015

WV Prevalence (2011-2015) - 27.3\%


## Smoking Cessation

| Definition | Current smokers responding "Yes" to the question, "During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking?" |
| :---: | :---: |
| Prevalence | WV: 55.8\% (95\% CI: 52.6-58.9) |
|  | U.S.: $60.5 \%$ (95\% CI: 59.7-61.2) |
|  | The U.S. prevalence of smoking cessation was significantly higher than the West |
|  | Virginia prevalence. West Virginia ranked the $5^{\text {th }}$ lowest among 53 BRFSS participants. |
| Gender | Men: $53.0 \%$ (95\% CI: 48.3-57.7) |
|  | Women: 58.4\% (95\% CI: 54.1-62.6) |
|  | There was no gender difference in the prevalence of smoking cessation. |
| Race/Ethnicity | No race/ethnicity statistics are reported due to unreliable estimates. |
| Age | There was no age difference in the prevalence of smoking cessation. |
| Education | There was no educational attainment difference in the prevalence of smoking cessation. |
| Household Income | There was no annual household income difference in the prevalence of smoking cessation. |

## CHAPTER 7: TOBACCO USE

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

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



[^8]
## Smokeless Tobacco Use

| Definition | Responding "Every day" or "Some days" to the question, "Do you currently use chewing tobacco, snuff, or snus every day, some days, or not at all?" |
| :---: | :---: |
| Prevalence | WV: 9.3\% (95\% CI: 8.3-10.3) |
|  | U.S.: 3.7\% (95\% Cl: 3.5-3.8) |
|  | The West Virginia prevalence of smokeless tobacco use was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 53 BRFSS participants. |
| Gender | Men: 18.2\% (95\% CI: 16.3-20.0) |
|  | Women: $0.8 \%$ (95\% CI: 0.5-1.2) |
|  | There was a significant gender difference in the prevalence of smokeless tobacco use with men having a significantly higher prevalence than women. |
| Race/Ethnicity | No race/ethnicity statistics are reported due to unreliable estimates. |
| Age | The prevalence of smokeless tobacco use was highest among those aged 35-44 (13.6\%) and lowest among those aged 65 and older (5.0\%), a significant difference. |
| Education | College graduates had the lowest prevalence of smokeless tobacco use (5.0\%), and this prevalence was significantly lower than the prevalence among those with less than a high school education (12.3\%) and those with a high school degree (11.4\%). |

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

## CHAPTER 7: TOBACCO USE

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

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

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

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


## CHAPTER 7: TOBACCO USE

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

WV Prevalence (2011-2015) - 8.7\%


## Heavy Drinking

| Definition | Defined as the consumption of more than two drinks per day for men and more than one drink per day for women during the past month. |
| :---: | :---: |
| Prevalence | WV: 3.5\% (95\% CI: 2.9-4.1) |
|  | U.S.: 5.8\% (95\% Cl: 5.6-5.9) |
|  | The U.S. prevalence of heavy drinking was significantly higher than the West |
|  | Virginia prevalence. West Virginia ranked the lowest among the 53 BRFSS participants. |
| Gender | Men: 4.6\% (95\% CI: 3.6-5.7) |
|  | Women: $2.4 \%$ (95\% CI: 1.8-3.1) |
|  | The prevalence of heavy drinking was significantly higher among men than women. |
| Race/Ethnicity | No race/ethnicity statistics are reported due to unreliable estimates. |
| Age | The highest prevalence of heavy drinking was among those aged 25-34 (5.4\%) and the lowest prevalence was among those aged 65 and older (1.6\%). The prevalence of heavy drinking was significantly higher among those 18-34 and 45-54 than among those 65 and older. |
| Education | There was no educational attainment difference in the prevalence of heavy drinking. |
| Household Income | The prevalence of heavy drinking was significantly higher among those with an income of $\$ 75,000$ or more ( $5.9 \%$ ) than among those with an income of $\$ 15,000-$ $\$ 24,999$ ( $2.3 \%$ ). |

## CHAPTER 8: ALCOHOL USE

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

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

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


[^9]
## Binge Drinking

| Definition | Defined as the consumption of five or more alcoholic drinks for males, or four or more alcoholic drinks for females, on a single occasion during the past month. |
| :---: | :---: |
| Prevalence | WV: 10.6\% (95\% CI: 9.6-11.6) |
|  | U.S.: $16.3 \%$ (95\% CI: 16.0-16.5) |
|  | The U.S. prevalence of binge drinking was significantly higher than the West Virginia prevalence. West Virginia ranked the $2^{\text {nd }}$ lowest among 53 BRFSS |
|  | participants. |
| Gender | Men: 16.5\% (95\% CI: 14.7-18.4) |
|  | Women: 5.0\% (95\% Cl: 4.1-6.0) |
|  | Men had a significantly higher prevalence of binge drinking than women. |
| Race/Ethnicity | No race/ethnicity statistics are reported due to unreliable estimates. |
| Age | The prevalence of binge drinking decreased with increased age. The prevalence of binge drinking was significantly higher among those aged 18-24 (19.6\%) than |
|  | among those aged 55 and older. The prevalence of binge drinking was |
|  | significantly lower among those 65 and older (2.4\%) than among all other age groups. |
| Education | The prevalence of binge drinking was significantly lower among those with less than a high school education (6.5\%) than among those with some post-high school ( $12.3 \%$ ) and college graduates (11.9\%). |
| Household Income | The prevalence of binge drinking was significantly higher among those with an income of $\$ 75,000$ or more ( $16.1 \%$ ) than among those with an income of less than $\$ 25,000$. |

## CHAPTER 8: ALCOHOL CONSUMPTION

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

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

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

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


## CHAPTER 8: ALCOHOL USE

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

WV Prevalence (2011-2015) - 10.3\%


|  | Seldom or Never Wear Seatbelt |
| :---: | :---: |
| Definition | Responding "Seldom" or "Never" to the question, "How often do you use seat belts when you drive or ride in a car?" |
| Prevalence | WV: 4.3\% (95\% CI: 3.6-4.9) |
|  | U.S.: 2.8\% (95\% CI: 2.7-2.9) |
|  | The West Virginia prevalence of seldom or never wear a seat belt was significantly higher than the U.S. prevalence. West Virginia ranked the $13^{\text {th }}$ highest among the 53 BRFSS participants. |
| Gender | Men: 6.1\% (95\% CI: 4.9-7.3) |
|  | Women: 2.5\% (95\% CI: 1.8-3.1) |
|  | The prevalence of seldom or never wear a seat belt was significantly higher among men than among women. |
| Race/Ethnicity | No race/ethnicity statistics are reported due to unreliable estimates. |
| Age | The prevalence of seldom or never wear a seat belt was highest among those aged 25-34 (6.4\%), significantly higher than among those 65 and older (3.1\%). |
| Education | The prevalence of seldom or never wear a seat belt decreased with increasing educational attainment level and was significantly lower among college graduates (2.2\%) than among those with a high school education or G.E.D. (4.9\%) and among those with less than a high school education (6.7\%). |
| Household Income | There was no income difference in the prevalence of seldom or never wear a seatbelt. |

## CHAPTER 9: INJURY

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

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

[^10]ctor
$\sigma$



SECTION 3: PREVENTIVE PRACTICES

## Ever Had Cholesterol Checked

| Definition | Responding "Yes" to the question, "Have you ever had your blood cholesterol checked?" |
| :---: | :---: |
| Prevalence | WV: 85.7\% (95\% CI: 84.5-86.9) |
|  | U.S.: 81.4\% (95\% CI: 81.2-81.7) |
|  | West Virginia's prevalence of ever had cholesterol checked was significantly higher than the U.S. prevalence. West Virginia ranked the $7^{\text {th }}$ highest among 53 |
|  | BRFSS participants. |
| Gender | Men: 83.7\% (95\% CI: 81.8-85.5) |
|  | Women: 87.6\% (95\% CI: 86.1-89.1) |
|  | The prevalence of ever had cholesterol checked was significantly higher among women than among men. |
| Race/Ethnicity | White, Non-Hispanic: $86.3 \%$ (95\% CI: 85.1-87.4) |
|  | Black, Non-Hispanic: $76.4 \%$ ( $95 \% \mathrm{Cl}: 68.1-84.6$ ) |
|  | Other, Non-Hispanic: *70.6\% (95\% CI: 56.7-84.4) |
|  | Multiracial, Non-Hispanic: *83.0\% (95\% CI: 71.5-94.4) |
|  | Hispanic: *74.9\% (95\% CI: 60.6-89.2) |
|  | The prevalence of ever had cholesterol checked was significantly higher among |
|  | White, Non-Hispanic adults than among Black, Non-Hispanic and Other, Non- |
|  | * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6. |
| Age | The prevalence of ever had cholesterol checked significantly increased with increasing age. The prevalence ranged from a low of $61.7 \%$ among the youngest adults to a high of $97.2 \%$ among those aged 65 and older. |
| Education | The prevalence of ever had cholesterol checked was significantly higher among college graduates ( $90.8 \%$ ) than among all other educational attainment groups. |
| Household Income | The prevalence of ever had cholesterol checked was significantly lower among those with an annual household income of less than $\$ 15,000(80.3 \%)$ than among those earning $\$ 35,000$ or more per year. |

## CHAPTER 10: CHOLESTEROL TESTING

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

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

## Had Cholesterol Checked in Past 5 Years

| Definition | Reported having blood cholesterol checked and responding "Within the past 5 years" to the question, "About how long has it been since you last had your blood cholesterol checked?" |
| :---: | :---: |
| Prevalence | WV: 82.3\% (95\% CI: 81.1-83.6) |
|  | U.S.: 77.9\% (95\% CI: 77.7-78.2) |
|  | The West Virginia prevalence of had cholesterol checked in the past 5 years was significantly higher than the U.S. prevalence. West Virginia ranked the $7^{\text {th }}$ highest among the 53 BRFSS participants. |
| Gender | Men: 79.5\% (95\% CI: 77.5-81.5) |
|  | Women: 85.0\% (95\% CI: 83.4-86.6) |
|  | The prevalence of had cholesterol checked in the past 5 years was significantly higher among women than among men. |
| Race/Ethnicity | White, Non-Hispanic: 83.0\% (95\% CI: 81.7-84.5) |
|  | Black, Non-Hispanic: $73.7 \%$ (95\% Cl: 65.2-82.3) |
|  | Other, Non-Hispanic: *61.2\% (95\% CI: 45.9-76.4) |
|  | Multiracial, Non-Hispanic: *80.3\% (95\% CI: 68.5-92.1) |
|  | Hispanic: *72.2\% (95\% CI: 57.6-86.7) |
|  | The prevalence of had cholesterol checked in the past 5 years was significantly higher among White, Non-Hispanic adults than among Other, Non-Hispanic adults. <br> * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6. |

Age The prevalence of had cholesterol checked in the past 5 years was significantly higher among those aged 65 and older (95.6\%) than among all other age groups.

Education

Household Income
The prevalence of had cholesterol checked in the past 5 years was significantly higher among those with a college degree (88.1\%) than among all other educational attainment groups.

The prevalence of had cholesterol checked in the past 5 years was significantly lower among those with an annual household income of less than $\$ 15,000$ (76.9\%) than among those earning $\$ 35,000$ or more per year.

## CHAPTER 10: CHOLESTEROL TESTING

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

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

## Diabetes Test

| Definition | Reported not having diabetes and responding "Yes" to the question, "Have you <br> had a test for high blood sugar or diabetes within the past three years?" |
| :--- | :--- |
| Prevalence | WV: $64.5 \%$ ( $95 \%$ CI: $62.9-66.2$ ) <br> Because this question is part of a state selected optional module and complete <br> national data are not available, a U.S. comparison was not conducted. |
| Gender |  |
| Men: $60.9 \%$ ( $95 \%$ CI: $58.4-63.5$ ) |  |
| Women: $67.9 \%$ ( $95 \%$ CI: $65.7-70.1$ ) |  |
| The prevalence of had a diabetes test in the past year three years was significantly |  |
| higher among women than among men. |  |

## CHAPTER 11: DIABETES TESTING

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

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

## CHAPTER 12: HIV TESTING

## HIV Test

| Definition | Responding "Yes" to the question, "Have you ever been tested for HIV? Do not count tests you may have had as part of a blood donation. Include testing fluid from your mouth." |
| :---: | :---: |
| Prevalence | WV: 36.7\% (95\% CI: 35.1-38.2) |
|  | U.S.: 38.0\% (95\% CI: 37.7-38.3) |
|  | The West Virginia prevalence of ever had a HIV test was similar to the U.S. prevalence. West Virginia ranked $24^{\text {th }}$ among 53 BRFSS participants. |
| Gender | Men: 37.1\% (95\% CI: 34.7-39.4) |
|  | Women: 36.3\% (95\% CI: 34.2-38.4) |
|  | There was no gender difference in the prevalence of ever had a HIV test. |
| Race/Ethnicity | White, Non-Hispanic: $35.8 \%$ (95\% CI: 34.2-37.4) |
|  | Black, Non-Hispanic: $50.3 \%$ (95\% Cl: 41.2-59.4) |
|  | Other, Non-Hispanic: *26.4\% (95\% CI: 12.9-40.0) |
|  | Multiracial, Non-Hispanic: *54.5\% (95\% CI: 39.8-69.3) |
|  | Hispanic: *60.0\% (95\% CI: 43.1-77.0) |
|  | The prevalence of ever had a HIV test was significantly higher among Black, Non- |
|  | Hispanic; Multiracial, Non-Hispanic; and Hispanic adults than among White, Non -Hispanic adults. Additionally, the prevalence was higher among Black, Non- |
|  | Hispanic and Hispanic adults than among Other, Non-Hispanic adults. <br> * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6. |
| Age | The prevalence of ever had a HIV test was significantly higher among those aged |
|  | 25-44 than among all other age groups. |
| Education | The prevalence of ever had a HIV test was significantly higher among those with some college (39.4\%) or a college degree (40.7\%) than among high school graduates (32.9\%). |
| Household Income | There was no annual household income difference in the prevalence of ever had |

## CHAPTER 12: HIV TESTING

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

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

## CHAPTER 13: IMMUNIZATIONS

|  | Flu Vaccine |
| :---: | :---: |
| Definition | Responding "Yes" to the question, "During the past 12 months, have you had either a flu shot or a flu vaccine that was sprayed in your nose?" |
| Prevalence | WV: 47.3\% (95\% CI: 45.8-48.9) |
|  | U.S.: 40.3\% (95\% Cl: 40.0-40.6) |
|  | The West Virginia prevalence of had a flu vaccine in the past year was significantly higher than the U.S. prevalence. West Virginia ranked the $5^{\text {th }}$ highest among the 53 BRFSS participants. |
| Gender | Men: 43.2\% (95\% CI: 41.0-45.4) |
|  | Women: 51.3\% (95\% CI: 49.2-53.4) |
|  | The prevalence of had a flu vaccine in the past year was significantly higher among women than among men. |
| Race/Ethnicity | White, Non-Hispanic: $47.6 \%$ (95\% CI: 46.0-49.2) |
|  | Black, Non-Hispanic: $45.9 \%$ (95\% CI: 37.0-54.7) |
|  | Other, Non-Hispanic: *38.4\% (95\% Cl: 23.8-52.9) |
|  | Multiracial, Non-Hispanic: *35.4\% (95\% CI: 22.1-48.6) |
|  | Hispanic: *51.5\% (95\% CI: 34.8-68.2) |
|  | There was no race/ethnicity difference in the prevalence of had a flu vaccine in the past year. |
|  | * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6. |
| Age | The prevalence of had a flu vaccine in the past year was significantly higher among those aged 65 and older (69.1\%) than among all other age groups. |
| Education | The prevalence of had a flu vaccine in the past year was significantly higher among college graduates (55.4\%) than among those with some college (45.6\%) or a high school degree (44.6\%). |
| Household Income | There was no annual household income difference in the prevalence of had a flu vaccine in the past year. |

## CHAPTER 13: IMMUNIZATIONS

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

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

## Flu Vaccine, Ages 65 and Older

$\left.\begin{array}{ll}\text { Definition } & \begin{array}{l}\text { Responding "Yes" to the question, "During the past } 12 \text { months, have you had } \\ \text { either a flu shot or a flu vaccine that was sprayed in your nose?" Restricted to } \\ \text { adults aged } 65 \text { and older. }\end{array} \\ \text { Prevalence } & \begin{array}{l}\text { WV: } 69.1 \%(95 \% \mathrm{Cl}: 66.6-71.5) \\ \text { U.S.: } 60.5 \%(95 \% \mathrm{Cl}: 60.0-61.1) \\ \text { The West Virginia prevalence of had a flu vaccine in the past year among those } \\ \text { aged } 65 \text { and older was significantly higher than the U.S. prevalence. West } \\ \text { Virginia ranked the } 4{ }^{\text {th }} \text { highest among the } 53 \text { BRFSS participants. }\end{array} \\ \text { Gender } \\ \text { Men: } 69.1 \% \text { (95\% CI: } 65.4-72.9) \\ \text { Women: } 69.0 \% \text { ( } 95 \% \text { CI: } 65.8-72.3) \\ \text { There was no gender difference in the prevalence of had a flu vaccine in the } \\ \text { past year among those aged } 65 \text { and older. }\end{array}\right\}$

## CHAPTER 13: IMMUNIZATIONS

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

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

## Pneumonia Vaccine

| Definition | Responding "Yes" to the question, "A pneumonia shot or pneumococcal vaccine is usually given only once or twice in a person's lifetime and is different from the flu shot. Have you ever had a pneumonia shot?" |
| :---: | :---: |
| Prevalence | WV: 38.2\% (95\% CI: 36.7-39.6) |
|  | U.S.: 34.7\% (95\% CI: 34.4-35.0) |
|  | The West Virginia prevalence of ever had a pneumonia vaccine was significantly |
|  | 53 BRFSS participants. |
| Gender | Men: 37.3\% (95\% CI: 35.1-39.5) |
|  | Women: 38.9\% (95\% CI: 37.0-40.9) |
|  | There was no gender difference in the prevalence of ever had a pneumonia vaccine. |
| Race/Ethnicity | White, Non-Hispanic: $38.4 \%$ (95\% CI: 36.9-40.0) |
|  | Black, Non-Hispanic: $35.7 \%$ (95\% CI: 27.1-44.3) |
|  | Other, Non-Hispanic: *33.9\% (95\% CI: 20.0-47.8) |
|  | Multiracial, Non-Hispanic: *39.2\% (95\% CI: 25.0-53.3) |
|  | Hispanic: *23.9\% (95\% CI: 9.3-38.5) |
|  | There was no race/ethnicity difference in the prevalence of ever had a pneumonia vaccine. |
|  | * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6 . |
| Age | The prevalence of ever had a pneumonia vaccine was significantly higher among those aged 65 and older ( $70.1 \%$ ) than among all other age groups. |
| Education | The prevalence of ever had a pneumonia vaccine was highest among those with less than a high school education (49.1\%) and was significantly higher than the prevalence among all other educational attainment levels. |
| Household Income | The prevalence of ever had a pneumonia vaccine was significantly lower among those earning $\$ 50,000$ or more per year than among those with an annual household income of less than $\$ 50,000$. |

## CHAPTER 13: IMMUNIZATIONS

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

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

## Pneumonia Vaccine, Ages 65 and Older

| Definition | Responding "Yes" to the question, "A pneumonia shot or pneumococcal vaccine is usually given only once or twice in a person's lifetime and is different from the flu shot. Have you ever had a pneumonia shot?" Restricted to adults aged 65 and older. |
| :---: | :---: |
| Prevalence | WV: 70.1\% (95\% CI: 67.7-72.6) |
|  | U.S.: 71.3\% (95\% CI: 70.8-71.8) |
|  | The West Virginia prevalence of ever had a pneumonia vaccine among those aged 65 and older was similar to the U.S. prevalence. West Virginia ranked the $15^{\text {th }}$ lowest among the 53 BRFSS participants. |
| Gender | Men: 70.5\% (95\% CI: 66.8-74.3) |
|  | Women: $69.8 \%$ (95\% CI: 66.6-73.0) |
|  | There was no gender difference in the prevalence of ever had a pneumonia vaccine among those aged 65 and older. |
| Race/Ethnicity | No race/ethnicity statistics are reported due to unreliable estimates. |
| Education | There was no educational attainment difference in the prevalence of ever had a pneumonia vaccine among those aged 65 and older. |
| Household Income | There was no annual household income difference in the prevalence of ever had a pneumonia vaccine among those aged 65 and older. |

## CHAPTER 13: IMMUNIZATIONS

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

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

## CHAPTER 13: IMMUNIZATIONS

## Tetanus Vaccine

| Definition | Responding "Yes, received Tdap", "Yes, received tetanus shot, but not Tdap", or "Yes, received tetanus shot but not sure what type" to the question, "Since 2005, have you had a tetanus shot?" |
| :---: | :---: |
| Prevalence | WV: 63.9\% (95\% Cl: 62.3-65.4) |
|  | Because this question is part of a state selected optional module and complete national data are not available, a U.S. comparison was not conducted. |
| Gender | Men: 69.6\% (95\% CI: 67.4-71.8) |
|  | Women: 58.3\% (95\% CI: 56.2-60.5) |
|  | The prevalence of had a tetanus vaccine was significantly higher among men than women. |
| Race/Ethnicity | White, Non-Hispanic: 64.3\% (95\% CI: 62.7-65.9) |
|  | Black, Non-Hispanic: 55.2\% (95\% Cl: 45.8-64.6) |
|  | Other, Non-Hispanic: *57.6\% (95\% CI: 42.8-72.5) |
|  | Multiracial, Non-Hispanic: *74.5\% (95\% Cl: 62.8-86.3) |
|  | Hispanic: *60.3\% (95\% CI: 43.3-77.4) |
|  | There was no race/ethnic difference in the prevalence of had a tetanus vaccine. |

Age The prevalence of had a tetanus vaccine generally decreased with age. The prevalence of had a tetanus vaccine was significantly lower among those aged 65 and older (48.6\%) than among all other age groups. The prevalence was highest among those aged 18-24 (79.1\%) and was significantly higher than the prevalence among those aged 35 and older.

## Education

Household Income
The prevalence of had a tetanus vaccine was significantly higher among college graduates (70.3\%) than among those with less than a high school education (56.4\%) and among those with a high school education (62.2\%).

The prevalence of had a tetanus vaccine was significantly higher among those earning $\$ 75,000$ or more per year (71.1\%) than among those with an annual household income of less than \$35,000 a year.

## CHAPTER 13: IMMUNIZATIONS

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

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

## CHAPTER 13: IMMUNIZATIONS

## Tdap Vaccine

| Definition | Respondents who reported they had a tetanus vaccine and responding "Yes, <br> received Tdap" to the question, "Since 2005 , have you had a tetanus shot?" |
| :--- | :--- |
| Prevalence | WV: $21.6 \%(95 \% \mathrm{Cl}: 20.2-23.0)$ <br>  <br> Because this question is part of a state selected optional module and complete <br> national data are not available, a U.S. comparison was not conducted. |
| Gender |  |
|  | Men: $19.7 \%(95 \% \mathrm{CI}: 17.7-21.7)$ |
| Women: $23.4 \%(95 \% \mathrm{Cl}: 21.5-25.3)$ |  |
| There was no gender difference in the prevalence of had the Tdap vaccine. |  |

Age The prevalence of had the Tdap vaccine was significantly higher among those aged 18-24 (39.9\%) than among all other age groups.

Education

Household Income
The prevalence of had the Tdap vaccine was significantly higher among those with an annual household income of $\$ 75,000$ or more (29.7\%) than among those earning less than \$35,000 a year.

## CHAPTER 13: IMMUNIZATIONS

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

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

## Shingles Vaccine

| Definition | Responding "Yes" to the question, "Have you ever had the shingles or zoster vaccine?" Question asked among those aged 45 and older. |
| :---: | :---: |
| Prevalence | WV: 22.8\% (95\% CI: 21.3-24.3) |
|  | Because this question is part of a state selected optional module and complete national data are not available, a U.S. comparison was not conducted. |
| Gender | Men: 20.7\% (95\% CI: 18.6-22.9) |
|  | Women: $24.7 \%$ (95\% CI: 22.6-26.7) |
|  | There was no gender difference in the prevalence of had the shingles vaccine. |
| Race/Ethnicity | White, Non-Hispanic: $23.5 \%$ (95\% CI: 21.9-25.0) |
|  | Black, Non-Hispanic: *7.0\% (95\% Cl: 0.8-13.2) |
|  | Other, Non-Hispanic: *21.3\% (95\% CI: 4.6-37.9) |
|  | Multiracial, Non-Hispanic: *20.1\% (95\% CI: 4.2-36.1) |
|  | Hispanic: *0.0\% (95\% CI: 0.0-0.0) |
|  | The prevalence of had the shingles vaccine was significantly higher among |
|  | White, Non-Hispanic adults than among Black, Non-Hispanic adults and Hispanic adults. |

Age The prevalence of had the shingles vaccine was significantly higher among those aged 65 and older ( $36.2 \%$ ) than among all other age groups.

Education The prevalence of had the shingles vaccine was significantly higher among college graduates (32.2\%) than among all other educational attainment levels.

Household Income
The prevalence of had the shingles vaccine was significantly higher among those with an annual household income of $\$ 75,000$ or more ( $26.9 \%$ ) than among those earning less than $\$ 25,000$ per year.

## CHAPTER 13: IMMUNIZATIONS

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

| Characteristic | Men |  |  | Women |  |  | Total |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted <br> Frequency | $\%$ | $95 \% ~ C I$ | Weighted <br> Frequency | $\%$ | $95 \% \mathrm{Cl}$ | Weighted <br> Frequency | $\%$ | $95 \% \mathrm{Cl}$ |
| TOTAL | 67,817 | $\mathbf{2 0 . 7}$ | $18.6-22.9$ | 92,335 | $\mathbf{2 4 . 7}$ | $22.6-26.7$ | 160,152 | $\mathbf{2 2 . 8}$ | $21.3-24.3$ |
| Age |  |  |  |  |  |  |  |  |  |
| $45-54$ | 2,465 | $* 4.1$ | $1.4-6.8$ | 2,420 | $* 3.9$ | $1.5-6.3$ | 4,885 | $\mathbf{4 . 0}$ | $2.2-5.8$ |
| $55-64$ | 16,395 | $\mathbf{1 3 . 3}$ | $10.4-16.2$ | 21,528 | $\mathbf{1 6 . 8}$ | $13.8-19.8$ | 37,923 | $\mathbf{1 5 . 1}$ | $13.0-17.2$ |
| $65+$ | 48,778 | $\mathbf{3 4 . 6}$ | $30.7-38.5$ | 67,101 | $\mathbf{3 7 . 5}$ | $34.1-40.9$ | 115,879 | $\mathbf{3 6 . 2}$ | $33.7-38.8$ |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 9,763 | $\mathbf{1 4 . 6}$ | $9.4-19.8$ | 14,546 | $\mathbf{2 0 . 5}$ | $15.1-26.0$ | 24,309 | $\mathbf{1 7 . 7}$ | $13.9-21.5$ |
| H.S. or G.E.D. | 23,930 | $\mathbf{1 7 . 7}$ | $14.5-21.0$ | 40,235 | $\mathbf{2 4 . 7}$ | $21.5-27.9$ | 64,165 | $\mathbf{2 1 . 5}$ | $19.2-23.8$ |
| Some Post-H.S. | 17,325 | $\mathbf{2 3 . 9}$ | $19.1-28.7$ | 19,639 | $\mathbf{2 3 . 1}$ | $18.9-27.3$ | 36,964 | $\mathbf{2 3 . 5}$ | $20.3-26.6$ |
| College Graduate | 16,800 | $\mathbf{3 2 . 1}$ | $27.2-37.0$ | 17,681 | $\mathbf{3 2 . 3}$ | $27.7-36.8$ | 34,481 | $\mathbf{3 2 . 2}$ | $28.8-35.5$ |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 3,569 | $\mathbf{1 0 . 0}$ | $4.7-15.4$ | 9,716 | $\mathbf{2 0 . 2}$ | $14.5-25.9$ | 13,284 | $\mathbf{1 5 . 9}$ | $11.8-19.9$ |
| $\$ 15,000-24,999$ | 7,899 | $\mathbf{1 4 . 5}$ | $9.7-19.3$ | 13,244 | $\mathbf{2 2 . 1}$ | $17.2-26.9$ | 21,144 | $\mathbf{1 8 . 5}$ | $15.0-21.9$ |
| $\$ 25,000-34,999$ | 6,290 | $\mathbf{1 7 . 2}$ | $11.3-23.0$ | 7,644 | $\mathbf{2 2 . 2}$ | $15.6-28.9$ | 13,934 | $\mathbf{1 9 . 6}$ | $15.2-24.1$ |
| $\$ 35,000-49,999$ | 10,698 | $\mathbf{2 3 . 1}$ | $17.0-29.1$ | 13,305 | $\mathbf{2 7 . 3}$ | $21.5-33.2$ | 24,002 | $\mathbf{2 5 . 2}$ | $21.0-29.4$ |
| $\$ 50,000-74,999$ | 10,080 | $\mathbf{2 4 . 1}$ | $17.9-30.2$ | 9,655 | $\mathbf{2 5 . 1}$ | $18.8-31.4$ | 19,735 | $\mathbf{2 4 . 6}$ | $20.1-29.0$ |
| $\$ 75,000+$ | 15,725 | $\mathbf{2 9 . 4}$ | $23.8-35.1$ | 9,814 | $\mathbf{2 3 . 6}$ | $18.0-29.2$ | 25,539 | $\mathbf{2 6 . 9}$ | $22.9-30.9$ |

[^11]| HPV Vaccine |  |
| :---: | :---: |
| Definition | Responding "Yes" to the question, "A vaccine to prevent the human papillomavirus or HPV infection is available and is called the cervical cancer or genital warts vaccine, HPV shot, Gardasil or Cervarix. Have you ever had an HPV vaccination?" Responses restricted to adults aged 18-49. |
| Prevalence | WV: 16.9\% (95\% CI: $14.9-19.0$ ) |
|  | Because this question is part of a state selected optional module and complete national data are not available, a U.S. comparison was not conducted. |
| Gender | Men: 10.4\% (95\% Cl: 8.0-12.9) |
|  | Women: 23.0\% (95\% CI: 19.9-26.1) |
|  | The prevalence of ever had the HPV vaccine was significantly higher among women than men. |
| Race/Ethnicity | White, Non-Hispanic: $16.8 \%$ (95\% CI: 14.7-18.9) |
|  | Black, Non-Hispanic: $24.1 \%$ (95\% Cl: 11.5-36.7) |
|  | Other, Non-Hispanic: *11.0\% (95\% CI: 0.0-25.8) |
|  | Multiracial, Non-Hispanic: *16.9\% (95\% CI: 2.1-31.6) |
|  | Hispanic: *21.0\% (95\% Cl: 1.8-40.1) |
|  | There was no race/ethnicity difference in the prevalence of ever had the HPV vaccine. |
|  | * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6. |
| Age | The prevalence of ever had the HPV vaccine was significantly higher among those aged 18-24 (46.7\%) than among all other age groups. |
| Education | There was no educational attainment difference in the prevalence of ever had the HPV vaccine. |
| Household Income | There was no consistent annual household income difference in the prevalence of ever had the HPV vaccine. |

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Table 13.8 Prevalence of Ever Had the HPV Vaccine Among Those Aged 18-49 by Demographic Characteristics: WVBRFSS, 2015

| Characteristic | Men |  |  | Women |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted Frequency | \% | 95\% CI | Weighted Frequency | \% | 95\% CI | Weighted Frequency | \% | 95\% CI |
| TOTAL | 30,155 | 10.4 | 8.0-12.9 | 71,010 | 23.0 | 19.9-26.1 | 101,165 | 16.9 | 14.9-19.0 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-24 | 17,740 | 28.4 | 19.9-37.0 | 44,108 | 62.9 | 54.9-71.0 | 61,848 | 46.7 | 40.4-53.0 |
| 25-34 | 7,665 | 8.9 | 4.9-13.0 | 19,934 | 22.7 | 17.3-28.1 | 27,599 | 15.9 | 12.4-19.3 |
| 35-44 | 3,264 | *3.5 | 1.4-5.7 | 4,411 | 4.5 | 2.0-7.0 | 7,676 | 4.0 | 2.4-5.7 |
| 45-49 | 1,485 | *3.3 | 0.4-6.2 | 2,557 | *5.6 | 2.1-9.0 | 4,042 | 4.4 | 2.2-6.7 |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 1,516 | *5.2 | 0.5-9.9 | 7,243 | 19.8 | 10.0-29.5 | 8,759 | 13.4 | 7.3-19.4 |
| H.S. or G.E.D. | 12,826 | 10.3 | 6.4-14.2 | 22,918 | 24.8 | 18.8-30.7 | 35,745 | 16.4 | 13.0-19.9 |
| Some Post-H.S. | 11,603 | 13.4 | 8.2-18.7 | 28,310 | 26.7 | 21.1-32.4 | 39,913 | 20.8 | 16.8-24.7 |
| College Graduate | 4,210 | 8.7 | 4.4-13.1 | 12,539 | 17.3 | 12.7-21.8 | 16,749 | 13.9 | 10.6-17.2 |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 2,101 | *7.6 | 1.2-14.1 | 11,741 | 33.7 | 23.8-43.5 | 13,842 | 22.2 | 15.6-28.8 |
| \$15,000-24,999 | 2,557 | *7.7 | 1.9-13.5 | 13,171 | 28.8 | 19.8-37.7 | 15,728 | 19.9 | 13.9-25.9 |
| \$25,000-34,999 | 2,869 | *11.0 | 1.9-20.1 | 8,428 | 32.5 | 20.6-44.4 | 11,297 | 21.7 | 14.0-29.4 |
| \$35,000-49,999 | 4,248 | *11.3 | 4.0-18.7 | 5,533 | 14.0 | 7.0-21.0 | 9,782 | 12.7 | 7.7-17.8 |
| \$50,000-74,999 | 2,787 | *7.1 | 1.6-12.6 | 4,118 | 12.4 | 5.2-19.5 | 6,905 | 9.5 | 5.1-14.0 |
| \$75,000+ | 5,622 | 8.9 | 3.8-13.9 | 10,884 | 17.2 | 10.9-23.5 | 16,506 | 13.0 | 9.0-17.1 |

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

|  | HPV Vaccine - Full Course |
| :---: | :---: |
| Definition | Reporting they had the HPV vaccine and responding " 3 " to the question, "How many HPV shots did you receive?" Responses restricted to adults aged 18-49. |
| Prevalence | WV: $\mathbf{7 7 . 1 \%}$ (95\% CI: 70.9-83.3) <br> Because this question is part of a state selected optional module and complete national data are not available, a U.S. comparison was not conducted. |
| Gender | Men: $70.0 \%$ ( $95 \% \mathrm{CI}: 57.0-83.1$ ) <br> Women: 79.7\% (95\% CI: 72.6-86.7) <br> There was no gender difference in the prevalence of had the full course of the HPV vaccine. |
| Race/Ethnicity | No race/ethnicity statistics are reported due to unreliable estimates. |
| Age | There was no age difference in the prevalence of had the full course of the HPV vaccine. |
| Education | There was no educational attainment difference in the prevalence of had the full course of the HPV vaccine. |
| Household Income | There was no consistent annual household income difference in the prevalence of had the full course of the HPV vaccine. |

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Table 13.9 Prevalence of Had the Full Course of the HPV Vaccine Among Those Aged 18-49 by Demographic Characteristics: WVBRFSS, 2015

| Characteristic | Men |  |  | Women |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted Frequency | \% | 95\% CI | Weighted Frequency | \% | 95\% CI | Weighted Frequency | \% | 95\% CI |
| TOTAL | 15,509 | 70.0 | 57.0-83.1 | 49,508 | 79.7 | 72.6-86.7 | 65,017 | 77.1 | 70.9-83.3 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-24 | 9,360 | 68.4 | 50.0-86.8 | 34,030 | 82.0 | 73.5-90.5 | 43,389 | 78.6 | 70.7-86.5 |
| 25-34 | 3,973 | 76.7 | 54.5-98.8 | 12,737 | 79.2 | 67.3-91.0 | 16,710 | 78.6 | 68.3-88.8 |
| 35-44 | 1,611 | 75.9 | 48.2-100.0 | 1,267 | *42.4 | 7.1-77.7 | 2,878 | 56.3 | 28.1-84.5 |
| 45-49 | 565 | *48.6 | 0.0-99.2 | 1,475 | 94.5 | 83.2-100.0 | 2,040 | 74.9 | 46.7-100.0 |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 896 | *73.9 | 29.6-100.0 | 3,119 | 61.2 | 27.9-94.6 | 4,016 | 63.7 | 35.2-92.2 |
| H.S. or G.E.D. | 6,423 | 65.8 | 43.8-87.8 | 17,239 | 82.5 | 70.5-94.4 | 23,662 | 77.2 | 66.2-88.1 |
| Some Post-H.S. | 7,083 | 82.5 | 65.5-99.4 | 20,619 | 82.5 | 72.1-92.9 | 27,702 | 82.5 | 73.6-91.4 |
| College Graduate | 1,106 | *42.7 | 11.2-74.3 | 8,531 | 76.4 | 63.2-89.6 | 9,638 | 70.1 | 57.3-82.8 |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 426 | *25.6 | 0.0-69.1 | 6,680 | 64.7 | 45.8-83.7 | 7,106 | 59.3 | 41.3-77.3 |
| \$15,000-24,999 | 853 | 79.9 | 43.1-100.0 | 5,957 | 55.6 | 33.5-77.8 | 6,810 | 57.8 | 37.1-78.6 |
| \$25,000-34,999 | 2,389 | 90.9 | 72.3-100.0 | 7,310 | 95.4 | 86.5-100.0 | 9,700 | 94.3 | 86.2-100.0 |
| \$35,000-49,999 | 1,685 | 64.3 | 27.4-100.0 | 4,336 | 89.1 | 73.3-100.0 | 6,021 | 80.4 | 63.1-97.7 |
| \$50,000-74,999 | 1,417 | 80.5 | 50.9-100.0 | 3,230 | 90.8 | 77.2-100.0 | 4,647 | 87.4 | 74.2-100.0 |
| \$75,000+ | 2,058 | *45.6 | 9.9-81.3 | 8,020 | 80.2 | 64.4-96.0 | 10,078 | 69.4 | 52.5-86.4 |

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.
HPV Vaccine, Women Aged 18-26

| Definition | Responding "Yes" to the question, "A vaccine to prevent the human <br> papillomavirus or HPV infection is available and is called the cervical cancer or <br> genital warts vaccine, HPV shot, Gardasil or Cervarix. Have you ever had an <br> HPV vaccination?" Responses restricted to women aged 18-26. |
| :--- | :--- |
| Prevalence | WV: $\mathbf{6 0 . 1 \%}$ ( $95 \%$ CI: 52.7-67.4) <br> Because this question is part of a state selected optional module and complete <br> national data are not available, a U.S. comparison was not conducted. |
| Race/Ethnicity | No race/ethnicity statistics are reported due to unreliable estimates. |
| Age $\quad$There was no age difference in the prevalence of ever had the HPV vaccine <br> among women aged 18-26. |  |
| Education $\quad$There was no consistent educational attainment difference in the prevalence of <br> ever had the HPV vaccine among women aged 18-26. |  |
| There was no annual household income difference in the prevalence of ever had <br> the HPV vaccine among women aged 18-26. |  |

## CHAPTER 13: IMMUNIZATIONS

Table 13.10 Prevalence of Ever Had the HPV Vaccine Among Women Aged 18-26 by Demographic Characteristics: WVBRFSS, 2015

| Characteristic | Total |  |  |
| :--- | :---: | :---: | :---: |
|  | Weighted <br> Frequency | $\%$ | $95 \% ~ C I$ |
| TOTAL | 51,101 | $\mathbf{6 0 . 1}$ | $52.7-67.4$ |
| Age |  |  |  |
| $18-24$ | 44,108 | $\mathbf{6 2 . 9}$ | $54.7-71.1$ |
| $25-26$ | 6,993 | 46.6 | $31.2-62.1$ |
| Education |  |  |  |
| Less than H.S. | 5,134 | $\mathbf{5 5 . 2}$ | $29.7-80.6$ |
| H.S. or G.E.D. | 17,869 | $\mathbf{6 8 . 9}$ | $57.1-80.6$ |
| Some Post-H.S. | 23,621 | $\mathbf{6 1 . 3}$ | $49.9-72.7$ |
| College Graduate | 4,476 | $\mathbf{3 9 . 6}$ | $23.9-55.4$ |
| Income |  |  |  |
| Less than \$15,000 | 9,622 | $\mathbf{7 4 . 0}$ | $57.3-90.7$ |
| $\$ 15,000-24,999$ | 8,231 | $\mathbf{7 3 . 5}$ | $56.6-90.4$ |
| $\$ 25,000-34,999$ | 6,448 | $\mathbf{7 0 . 3}$ | $51.3-89.4$ |
| $\$ 35,000-49,999$ | 3,703 | $\mathbf{6 0 . 5}$ | $34.3-86.7$ |
| $\$ 50,000-74,999$ | 2,565 | $* 44.0$ | $16.5-71.6$ |
| $\$ 75,000+$ | 5,789 | $\mathbf{5 4 . 9}$ | $32.0-77.8$ |

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


## HPV Vaccine, Women Aged 18-26 - Full Course

| Definition | Reporting they had the HPV vaccine and responding "Yes" to the question, "A <br> vaccine to prevent the human papillomavirus or HPV infection is available and is <br> called the cervical cancer or genital warts vaccine, HPV shot, Gardasil or <br> Cervarix. Have you ever had an HPV vaccination?" Responses restricted to <br> women aged 18-26. |
| :--- | :--- |
| Prevalence | WV: 82.7\% (95\% CI: 74.9-90.5) <br> Because this question is part of a state selected optional module and complete <br> national data are not available, a U.S. comparison was not conducted. |
| Race/Ethnicity | No race/ethnicity statistics are reported due to unreliable estimates. |
| Age $\quad$There was no age difference in the prevalence of had the full course of the HPV <br> vaccine among women aged 18-26. |  |
| Education $\quad$There was no educational attainment difference in the prevalence of had the full <br> course of the HPV vaccine among women aged 18-26. |  |
| Household Income $\quad$There was no annual household income difference in the prevalence of had the <br> full course of the HPV vaccine among women aged 18-26. |  |

## CHAPTER 13: IMMUNIZATIONS

Table 13.11 Prevalence of Had the Full Course of the HPV Vaccine Among Women Aged 18-26 by Demographic Characteristics: WVBRFSS, 2015

| Characteristic | Total |  |  |
| :--- | :---: | :---: | :---: |
|  | Weighted <br> Frequency | $\%$ | $95 \% \mathrm{Cl}$ |
| TOTAL | 39,183 | $\mathbf{8 2 . 7}$ | $74.9-90.5$ |
| Age |  |  |  |
| $18-24$ | 34,030 | $\mathbf{8 2 . 0}$ | $73.4-90.5$ |
| $25-26$ |  | $\mathbf{8 8 . 2}$ | $72.5-100.0$ |
| Education | 1,940 | *49.6 | $10.4-88.7$ |
| Less than H.S. | 15,168 | $\mathbf{9 0 . 7}$ | $81.9-99.5$ |
| H.S. or G.E.D. | 18,376 | $\mathbf{8 2 . 6}$ | $71.5-93.7$ |
| Some Post-H.S. | 3,699 | $\mathbf{8 2 . 6}$ | $61.0-100.0$ |
| College Graduate |  |  |  |
| Income | 5,829 | $\mathbf{6 4 . 9}$ | $44.2-85.5$ |
| Less than \$15,000 | 4,683 | $\mathbf{6 2 . 4}$ | $35.3-89.5$ |
| $\$ 15,000-24,999$ | 5,681 | $\mathbf{9 4 . 2}$ | $82.9-100.0$ |
| $\$ 25,000-34,999$ | 3,335 | $\mathbf{9 0 . 1}$ | $70.8-100.0$ |
| $\$ 35,000-49,999$ | 2,360 | $\mathbf{1 0 0 . 0}$ | $100.0-100.0$ |
| $\$ 50,000-74,999$ | 4,793 | $\mathbf{9 2 . 1}$ | $76.7-100.0$ |
| $\$ 75,000+$ |  |  |  |

[^12]
## Hypertension Prevalence

| Definition | Responding "Yes" to the question, "Have you ever been told by a doctor, nurse, or other health professional that you have high blood pressure?" |
| :---: | :---: |
| Prevalence | WV: 42.7\% (95\% CI: 41.2-44.1) |
|  | U.S.: 32.0\% (95\% CI: 31.7-32.3) |
|  | West Virginia's prevalence of hypertension was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 53 BRFSS participants. |
| Gender | Men: 44.4\% (95\% CI: 42.2-46.6) |
|  | Women: 41.1\% (95\% CI: 39.1-43.0) |
|  | There was no gender difference in the prevalence of hypertension. |
| Race/Ethnicity | White, Non-Hispanic: 42.9\% (95\% CI: 41.4-44.4) |
|  | Black, Non-Hispanic: 47.1\% (95\% Cl: 38.5-55.8) |
|  | Other, Non-Hispanic: *41.8\% (95\% Cl: 27.0-56.7) |
|  | Multiracial, Non-Hispanic: *31.8\% (95\% Cl: 20.0-43.6) |
|  | Hispanic: *18.8\% (95\% Cl: 6.8-30.9) |
|  | There was no race/ethnicity difference in the prevalence of hypertension. <br> * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6. |


| Age | The prevalence of hypertension significantly increased with increasing age. The <br> prevalence ranged from a low of $11.3 \%$ among the youngest adults to a high of <br> $65.7 \%$ among those aged 65 and older. |
| :--- | :--- |
| Education | Adults with less than a high school education had the highest prevalence of <br> hypertension $(56.8 \%)$ and was significantly higher than the prevalence among <br> those with some college and college graduates. |
| Household Income $\quad$The prevalence of hypertension was $51.5 \%$ in the lowest income group (less than <br> $\$ 15,000$ annually). The lowest prevalence of hypertension ( $30.4 \%$ ) was among <br> those in the highest income bracket ( $\$ 75,000$ or more annually) and was <br> significantly lower than the prevalence among all other income groups. |  |

## CHAPTER 14: HYPERTENSION

Table 14.1 Hypertension Prevalence by Demographic Characteristics: WVBRFSS, 2015

| Characteristic | Men |  |  | Women |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted Frequency | \% | 95\% CI | Weighted Frequency | \% | 95\% CI | Weighted Frequency | \% | 95\% CI |
| TOTAL | 318,554 | 44.4 | 42.2-46.6 | 307,999 | 41.1 | 39.1-43.0 | 626,552 | 42.7 | 41.2-44.1 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-24 | 10,237 | 11.7 | 6.7-16.6 | 9,067 | 10.9 | 6.0-15.7 | 19,303 | 11.3 | 7.8-14.7 |
| 25-34 | 22,838 | 21.0 | 15.7-26.2 | 18,450 | 17.5 | 12.6-22.4 | 41,288 | 19.3 | 15.7-22.9 |
| 35-44 | 38,593 | 34.2 | 28.7-39.8 | 35,420 | 31.8 | 26.3-37.3 | 74,013 | 33.0 | 29.1-36.9 |
| 45-54 | 63,856 | 52.9 | 47.7-58.2 | 50,088 | 41.4 | 36.6-46.1 | 113,944 | 47.1 | 43.6-50.7 |
| 55-64 | 80,455 | 61.2 | 57.0-65.4 | 69,687 | 51.9 | 47.8-55.9 | 150,141 | 56.5 | 53.5-59.4 |
| 65+ | 100,813 | 66.0 | 62.2-69.8 | 122,671 | 65.4 | 62.2-68.7 | 223,484 | 65.7 | 63.2-68.2 |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 64,870 | 57.3 | 51.0-63.5 | 66,617 | 56.4 | 50.5-62.2 | 131,488 | 56.8 | 52.6-61.1 |
| H.S. or G.E.D. | 140,710 | 46.3 | 42.8-49.8 | 140,103 | 49.4 | 46.2-52.7 | 280,813 | 47.8 | 45.4-50.2 |
| Some Post-H.S. | 69,101 | 37.5 | 33.4-41.7 | 67,813 | 32.3 | 28.8-35.8 | 136,914 | 34.7 | 32.0-37.4 |
| College Graduate | 43,084 | 37.9 | 33.9-41.9 | 33,069 | 24.1 | 21.2-27.0 | 76,154 | 30.4 | 27.9-32.8 |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 37,597 | 52.6 | 45.5-59.8 | 45,688 | 50.6 | 44.8-56.3 | 83,284 | 51.5 | 47.0-56.0 |
| \$15,000-24,999 | 51,597 | 50.6 | 44.7-56.5 | 58,825 | 49.9 | 44.8-55.0 | 110,423 | 50.2 | 46.4-54.1 |
| \$25,000-34,999 | 33,802 | 44.9 | 38.0-51.9 | 27,761 | 41.9 | 35.3-48.5 | 61,563 | 43.5 | 38.7-48.3 |
| \$35,000-49,999 | 41,346 | 43.7 | 37.8-49.7 | 36,620 | 39.0 | 33.4-44.7 | 77,966 | 41.4 | 37.3-45.5 |
| \$50,000-74,999 | 43,927 | 48.5 | 42.5-54.6 | 29,246 | 37.4 | 31.6-43.2 | 73,174 | 43.4 | 39.1-47.6 |
| \$75,000+ | 50,561 | 36.9 | 32.2-41.5 | 25,963 | 22.6 | 18.6-26.6 | 46,524 | 30.4 | 27.2-33.5 |

Figure 14.1 Hypertension Prevalence by Year:
WVBRFSS, 1985-2015


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

## CHAPTER 14: HYPERTENSION

Figure 14.2 Hypertension Prevalence by County: WVBRFSS, 2007, 2009, 2011, 2013, 2015


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

## CHAPTER 14: HYPERTENSION

## Hypertension Medication

| Definition | Reported having been told they have high blood pressure and responding "Yes" to the question, "Are you currently taking medicine for your high blood pressure?" |
| :---: | :---: |
| Prevalence | WV: 79.7\% (95\% CI: 77.8-81.6) |
|  | U.S.: 77.3\% (95\% CI: 76.9-77.7) |
|  | The West Virginia prevalence of taking medication for hypertension was significantly higher than the U.S. prevalence. West Virginia ranked the $14^{\text {th }}$ highest among the 53 BRFSS participants. |
| Gender | Men: 78.4\% (95\% CI: 75.7-81.2) |
|  | Women: 80.9\% (95\% CI: 78.3-83.6) |
|  | There was no gender difference in the prevalence of taking medication for hypertension. |
| Race/Ethnicity | White, Non-Hispanic: 80.1\% (95\% CI: 78.1-82.1) |
|  | Black, Non-Hispanic: 81.3\% (95\% CI: 71.5-91.2) |
|  | Other, Non-Hispanic: *68.6\% (95\% CI: 44.5-92.8) |
|  | Multiracial, Non-Hispanic: *69.5\% (95\% CI: 49.4-89.6) |
|  | Hispanic: *45.2\% (95\% CI: 10.5-79.8) |
|  | There was no race/ethnicity difference in the prevalence of taking medication for hypertension. |
|  | * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6. |
| Age | The prevalence of taking medication for hypertension increased with advancing age. The prevalence ranged from a low of $24.4 \%$ among those aged $18-24$ to a high of $92.4 \%$ among those aged 65 and older. |
| Education | There was no educational attainment difference in the prevalence of taking medication for hypertension. |
| Household Income | There was no difference in the prevalence of taking medication for hypertension between income brackets. |

## CHAPTER 14: HYPERTENSION

Table 14.2 Use of Hypertension Medication by Demographic Characteristics:
WVBRFSS, 2015

| Characteristic | Men |  |  | Women |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted Frequency | \% | 95\% CI | Weighted Frequency | \% | 95\% CI | Weighted Frequency | \% | 95\% Cl |
| TOTAL | 249,887 | 78.4 | 75.7-81.2 | 248,986 | 80.9 | 78.3-83.6 | 498,873 | 79.7 | 77.8-81.6 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-24 | 2,707 | *26.4 | 7.1-45.8 | 2,000 | *22.1 | 2.2-41.9 | 4,707 | *24.4 | 10.5-38.2 |
| 25-34 | 7,483 | *32.8 | 19.9-45.7 | 7,634 | *41.4 | 25.9-56.9 | 15,117 | 36.6 | 26.6-46.6 |
| 35-44 | 23,555 | *61.0 | 50.8-71.2 | 22,453 | *63.7 | 53.0-74.4 | 46,008 | 62.3 | 54.9-69.7 |
| 45-54 | 51,972 | 81.4 | 75.9-86.8 | 40,445 | 80.7 | 74.6-86.9 | 92,417 | 81.1 | 77.0-85.2 |
| 55-64 | 70,520 | 87.7 | 83.7-91.6 | 59,923 | 86.0 | 81.9-90.1 | 130,443 | 86.9 | 84.0-89.7 |
| 65+ | 92,190 | 91.4 | 88.7-94.2 | 114,106 | 93.1 | 90.9-95.4 | 206,296 | 92.4 | 90.6-94.1 |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 51,173 | 78.9 | 72.2-85.5 | 54,516 | 81.8 | 75.5-88.2 | 105,689 | 80.4 | 75.8-85.0 |
| H.S. or G.E.D. | 109,881 | 78.1 | 73.7-82.4 | 115,327 | 82.3 | 78.4-86.2 | 225,208 | 80.2 | 77.3-83.1 |
| Some Post-H.S. | 52,784 | 76.4 | 70.5-82.3 | 51,272 | 76.0 | 70.2-81.8 | 104,056 | 76.2 | 72.0-80.3 |
| College Graduate | 35,331 | 82.0 | 76.5-87.5 | 27,476 | 83.1 | 77.8-88.4 | 62,807 | 82.5 | 78.6-86.3 |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 28,933 | 77.0 | 69.2-84.8 | 36,895 | 80.8 | 74.2-87.3 | 65,828 | 79.0 | 74.0-84.0 |
| \$15,000-24,999 | 39,146 | 75.9 | 68.3-83.5 | 45,011 | 76.5 | 70.0-83.0 | 84,157 | 76.2 | 71.2-81.2 |
| \$25,000-34,999 | 27,075 | 80.1 | 72.0-88.1 | 21,791 | 78.5 | 69.3-87.7 | 48,866 | 79.4 | 73.3-85.4 |
| \$35,000-49,999 | 33,711 | 81.5 | 74.3-88.8 | 29,348 | 80.6 | 71.7-89.4 | 63,059 | 81.1 | 75.4-86.8 |
| \$50,000-74,999 | 34,440 | 78.4 | 70.7-86.1 | 22,231 | 76.0 | 66.8-85.2 | 56,672 | 77.4 | 71.5-83.4 |
| \$75,000+ | 39,710 | 78.5 | 71.6-85.5 | 21,196 | 81.6 | 73.4-89.9 | 60,906 | 79.6 | 74.2-85.0 |

[^13]
## High Cholesterol

| Definition | Responding "Yes" to the question, "Have you ever had your blood cholesterol checked?" and responding "Yes" to the question, "Have you ever been told by a doctor, nurse, or other health professional that your blood cholesterol is high?" |
| :---: | :---: |
| Prevalence | WV: 39.0\% (95\% CI: 37.5-40.5) |
|  | U.S.: 36.5\% (95\% CI: 36.2-36.8) |
|  | The WV prevalence of high cholesterol was significantly higher than the U.S. prevalence. West Virginia ranked the $9^{\text {th }}$ highest among 53 BRFSS participants. |
| Gender | Men: $40.3 \%$ (95\% CI: 37.9-42.6) |
|  | Women: $37.8 \%$ (95\% CI: 35.8-39.8) |
|  | There was no gender difference in the prevalence of high cholesterol. |
| Race/Ethnicity | White, Non-Hispanic: 39.7\% (95\% CI: 38.1-41.3) |
|  | Black, Non-Hispanic: $28.9 \%$ (95\% Cl: 20.5-37.3) |
|  | Other, Non-Hispanic: *28.0\% (95\% CI: 10.2-45.7) |
|  | Multiracial, Non-Hispanic: *29.4\% (95\% CI: 16.9-41.8) |
|  | Hispanic: ${ }^{*} 19.1 \%$ (95\% CI: 6.7-31.6) |
|  | The prevalence of high cholesterol was significantly higher among White, Non- |
|  | Hispanic adults than among Black, Non-Hispanic adults and Hispanic adults. <br> * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6 . |
| Age | The prevalence of high cholesterol increased with age and was highest among those aged 45 and older, significantly higher than among those younger than 45 . |
| Education | The prevalence of high cholesterol was highest among those with less than a high school education (51.9\%), significantly higher than among all other educational attainment levels. |
| Household Income | The prevalence of high cholesterol was highest among those with an annual household income of less than $\$ 15,000(50.8 \%)$ and was significantly higher than the prevalence among those with an income of $\$ 25,000$ or more. |

## CHAPTER 15: HIGH CHOLESTEROL

Table 15.1 Prevalence of High Cholesterol by Demographic Characteristics: WVBRFSS, 2015

| Characteristic | Men |  |  | Women |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted Frequency | \% | 95\% Cl | Weighted Frequency | \% | 95\% Cl | Weighted Frequency | \% | 95\% Cl |
| TOTAL | 231,961 | 40.3 | 37.9-42.6 | 239,457 | 37.8 | 35.8-39.8 | 471,418 | 39.0 | 37.5-40.5 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-24 | 4,407 | *8.8 | 2.5-15.2 | 1,700 | *3.8 | 0.4-7.2 | 6,107 | 6.5 | 2.8-10.2 |
| 25-34 | 11,942 | 18.0 | 11.3-24.7 | 8,954 | 12.1 | 7.3-16.9 | 20,896 | 14.9 | 10.8-18.9 |
| 35-44 | 31,747 | 35.9 | 29.6-42.2 | 27,491 | 29.4 | 23.9-35.0 | 59,238 | 32.6 | 28.4-36.8 |
| 45-54 | 47,686 | 46.0 | 40.3-51.7 | 46,275 | 42.8 | 37.8-47.8 | 93,962 | 44.4 | 40.6-48.2 |
| 55-64 | 61,752 | 51.3 | 46.7-55.9 | 63,401 | 49.5 | 45.3-53.6 | 125,153 | 50.4 | 47.3-53.4 |
| 65+ | 72,664 | 50.4 | 46.3-54.5 | 89,838 | 50.3 | 46.7-53.8 | 162,501 | 50.3 | 47.7-53.0 |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 46,595 | 52.6 | 45.6-59.6 | 49,335 | 51.3 | 45.1-57.6 | 95,930 | 51.9 | 47.3-56.6 |
| H.S. or G.E.D. | 89,542 | 38.2 | 34.5-41.8 | 94,614 | 39.3 | 36.0-42.6 | 184,155 | 38.7 | 36.3-41.2 |
| Some Post-H.S. | 58,026 | 38.4 | 33.8-43.0 | 59,338 | 34.7 | 30.8-38.6 | 117,363 | 36.4 | 33.5-39.4 |
| College Graduate | 37,527 | 37.4 | 33.2-41.6 | 35,691 | 28.8 | 25.4-32.1 | 73,218 | 32.6 | 30.0-35.3 |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 28,507 | 54.9 | 46.8-63.1 | 33,572 | 47.7 | 41.4-54.0 | 62,080 | 50.8 | 45.7-55.8 |
| \$15,000-24,999 | 38,762 | 46.3 | 40.0-52.6 | 40,266 | 40.8 | 35.5-46.0 | 79,028 | 43.3 | 39.3-47.4 |
| \$25,000-34,999 | 19,590 | 32.5 | 25.5-39.5 | 21,139 | 37.8 | 31.0-44.6 | 40,729 | 35.0 | 30.1-39.9 |
| \$35,000-49,999 | 32,434 | 42.0 | 35.7-48.3 | 32,488 | 38.8 | 33.1-44.5 | 64,922 | 40.3 | 36.1-44.5 |
| \$50,000-74,999 | 32,993 | 42.2 | 35.9-48.5 | 26,561 | 38.0 | 32.3-43.8 | 59,555 | 40.2 | 35.9-44.5 |
| \$75,000+ | 44,379 | 36.7 | 31.8-41.6 | 26,418 | 26.4 | 21.8-30.9 | 70,798 | 32.0 | 28.7-35.4 |

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


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

## CHAPTER 15: HIGH CHOLESTEROL

Figure 15.2 Prevalence of High Cholesterol by County: WVBRFSS, 2007, 2009, 2011, 2013, 2015


## Heart Attack

| Definition | Responding "Yes" to the question, "Has a doctor, nurse, or other health professional ever told you that you had a heart attack, also called a myocardial infarction?" |
| :---: | :---: |
| Prevalence | WV: 7.0\% (95\% CI: 6.3-7.7) |
|  | U.S.: 4.3\% (95\% CI: 4.2-4.4) |
|  | The West Virginia prevalence of heart attack was significantly higher than the |
|  | U.S. prevalence. West Virginia ranked the highest among 53 BRFSS participants. |
| Gender | Men: 9.1\% (95\% CI: 8.0-10.3) |
|  | Women: 5.0\% (95\% CI: 4.2-5.8) |
|  | The prevalence of heart attack was significantly higher among men than among women. |
| Race/Ethnicity | White, Non-Hispanic: 7.0\% (95\% CI: 6.3-7.8) |
|  | Black, Non-Hispanic: 9.1\% (95\% Cl: 4.5-13.6) |
|  | Other, Non-Hispanic: *7.0\% (95\% CI: 1.6-12.3) |
|  | Multiracial, Non-Hispanic: *6.1\% (95\% Cl: 0.0-12.3) |
|  | Hispanic: *2.0\% (95\% CI: 0.0-6.0) |
|  | There was no race/ethnicity difference in the prevalence of heart attack. <br> * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6. |

Age The prevalence of heart attack was highest among those aged 65 and older (15.1\%), significantly higher than all other age groups.

Education The prevalence of heart attack was significantly higher among those with less than a high school education (12.9\%) than all other educational attainment groups. College graduates had the lowest heart attack prevalence (2.6\%), significantly lower than all other educational attainment groups.

Household Income
The prevalence of heart attack decreased with increasing household income. The prevalence of heart attack was highest among those with an annual household income of less than $\$ 15,000(12.0 \%)$ and was significantly higher than the prevalence among those earning $\$ 25,000$ or more. The prevalence of heart attack was lowest among those with a household income of $\$ 75,000$ or more per year (2.8\%) and was significantly lower than among those earning less than \$35,000 annually.

## CHAPTER 16: CARDIOVASCULAR DISEASE

Table 16.1 Heart Attack Prevalence by Demographic Characteristics: WVBRFSS, 2015

| Characteristic | Men |  |  | Women |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted Frequency | \% | 95\% Cl | Weighted <br> Frequency | \% | 95\% Cl | Weighted <br> Frequency | \% | 95\% Cl |
| TOTAL | 65,553 | 9.1 | 8.0-10.3 | 37,392 | 5.0 | 4.2-5.8 | 102,945 | 7.0 | 6.3-7.7 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-24 | 0 | 0.0 | 0.0-0.0 | 0 | 0.0 | 0.0-0.0 | 0 | 0.0 | 0.0-0.0 |
| 25-34 | 0 | 0.0 | 0.0-0.0 | 2,126 | 2.0 | 0.2-3.9 | 2,126 | 1.0 | 0.1-1.9 |
| 35-44 | 3,479 | 3.1 | 1.0-5.2 | 939 | 0.8 | 0.0-1.7 | 4,419 | 2.0 | 0.8-3.1 |
| 45-54 | 9,527 | 7.9 | 5.0-10.8 | 7,428 | 6.2 | 3.9-8.4 | 16,955 | 7.0 | 5.2-8.8 |
| 55-64 | 20,982 | 16.0 | 12.8-19.2 | 7,293 | 5.4 | 3.6-7.3 | 28,275 | 10.6 | 8.8-12.5 |
| 65+ | 31,262 | 20.5 | 17.3-23.8 | 19,605 | 10.6 | 8.2-12.9 | 50,866 | 15.1 | 13.1-17.0 |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 18,319 | 16.0 | 12.0-20.1 | 11,499 | 9.8 | 6.5-13.1 | 29,818 | 12.9 | 10.3-15.5 |
| H.S. or G.E.D. | 28,356 | 9.4 | 7.6-11.2 | 15,358 | 5.4 | 4.1-6.8 | 43,713 | 7.5 | 6.3-8.6 |
| Some Post-H.S. | 14,502 | 7.9 | 6.0-9.8 | 8,176 | 3.9 | 2.6-5.3 | 22,678 | 5.8 | 4.6-6.9 |
| College Graduate | 4,272 | 3.8 | 2.5-5.0 | 2,359 | 1.7 | 0.9-2.6 | 6,631 | 2.6 | 1.9-3.4 |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 11,075 | 15.8 | 11.2-20.4 | 8,046 | 9.0 | 5.9-12.0 | 19,121 | 12.0 | 9.3-14.6 |
| \$15,000-24,999 | 13,693 | 13.4 | 9.7-17.1 | 8,070 | 6.9 | 4.7-9.1 | 21,764 | 9.9 | 7.8-12.0 |
| \$25,000-34,999 | 7,024 | 9.4 | 5.8-13.1 | 2,342 | 3.5 | 1.4-5.6 | 9,366 | 6.6 | 4.5-8.8 |
| \$35,000-49,999 | 6,735 | 7.1 | 4.5-9.7 | 1,950 | 2.1 | 0.5-3.7 | 8,685 | 4.6 | 3.1-6.1 |
| \$50,000-74,999 | 6,906 | 7.6 | 4.8-10.4 | 1,820 | 2.3 | 0.6-4.0 | 8,726 | 5.2 | 3.5-6.9 |
| \$75,000+ | 6,117 | 4.5 | 2.7-6.2 | 1,002 | 0.9 | 0.0-1.7 | 7,119 | 2.8 | 1.8-3.9 |

[^14]
## Angina or Coronary Heart Disease

| Definition | Responding "Yes" to the question, "Has a doctor, nurse, or other health professional ever told you that you had angina or coronary heart disease?" |
| :---: | :---: |
| Prevalence | WV: 7.4\% (95\% CI: 6.7-8.1) |
|  | U.S.: 4.1\% (95\% CI: 4.0-4.2) |
|  | The West Virginia prevalence of coronary heart disease was significantly higher than the U.S. prevalence. West Virginia ranked highest among the 53 BRFSS participants. |
| Gender | Men: 8.9\% (95\% CI: 7.7-10.1) |
|  | Women: 6.0\% (95\% CI: 5.2-6.9) |
|  | The prevalence of coronary heart disease was significantly higher among men than among women. |
| Race/Ethnicity | White, Non-Hispanic: $7.5 \%$ (95\% CI: 6.7-8.3) |
|  | Black, Non-Hispanic: 5.7\% (95\% Cl: 2.2-9.2) |
|  | Other, Non-Hispanic: *6.5\% (95\% CI: 0.5-12.5) |
|  | Multiracial, Non-Hispanic: *9.6\% (95\% CI: 1.9-17.2) |
|  | Hispanic: *2.0\% (95\% CI: 0.0-6.0) |
|  | The prevalence of coronary heart disease was significantly higher among White, Non-Hispanic adults than among Hispanic adults. <br> * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6. |

Age The prevalence of coronary heart disease increased with age. The prevalence of coronary heart disease was significantly higher among those aged 65 and older (16.2\%) than among all other age groups.

Education

Household Income
The prevalence of coronary heart disease decreased with each increasing educational attainment level and was significantly higher among those with less than a high school education (11.9\%) than among those with some college or a college degree.

The prevalence of coronary heart disease was significantly higher among those with an annual household income of less than $\$ 15,000(12.1 \%)$ than among all those earning $\$ 75,000$ or more annually (3.0\%).

## CHAPTER 16: CARDIOVASCULAR DISEASE

Table 16.2 Angina or Coronary Heart Disease Prevalence by Demographic Characteristics: WVBRFSS, 2015

| Characteristic | Men |  |  | Women |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted <br> Frequency | \% | 95\% CI | Weighted <br> Frequency | \% | 95\% CI | Weighted <br> Frequency | \% | 95\% CI |
| TOTAL | 63,060 | 8.9 | 7.7-10.1 | 45,048 | 6.0 | 5.2-6.9 | 108,108 | 7.4 | 6.7-8.1 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-24 | 735 | *0.8 | 0.0-2.5 | 0 | *0.0 | 0.0-0.0 | 735 | *0.4 | 0.0-1.3 |
| 25-34 | 2,332 | *2.1 | 0.0-4.4 | 953 | *0.9 | 0.0-1.9 | 3,285 | *1.5 | 0.3-2.8 |
| 35-44 | 3,261 | *2.9 | 0.8-5.0 | 2,544 | *2.3 | 0.5-4.0 | 5,805 | 2.6 | 1.2-4.0 |
| 45-54 | 8,467 | 7.1 | 4.4-9.9 | 6,379 | 5.3 | 3.2-7.4 | 14,846 | 6.2 | 4.5-7.9 |
| 55-64 | 18,824 | 14.6 | 11.2-17.9 | 10,139 | 7.6 | 5.4-9.7 | 28,963 | 11.0 | 9.0-13.0 |
| 65+ | 29,441 | 19.8 | 16.6-23.0 | 24,615 | 13.4 | 10.9-15.8 | 54,056 | 16.2 | 14.3-18.2 |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 15,441 | 14.1 | 9.7-18.5 | 11,548 | 9.9 | 6.7-13.1 | 26,989 | 11.9 | 9.2-14.6 |
| H.S. or G.E.D. | 26,074 | 8.6 | 6.9-10.4 | 20,451 | 7.3 | 5.7-8.8 | 46,525 | 8.0 | 6.8-9.2 |
| Some Post-H.S. | 14,511 | 7.9 | 5.9-9.9 | 8,381 | 4.0 | 2.8-5.2 | 22,892 | 5.8 | 4.7-7.0 |
| College Graduate | 7,034 | 6.2 | 4.4-8.0 | 4,585 | 3.3 | 2.1-4.6 | 11,619 | 4.6 | 3.6-5.7 |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 9,892 | 14.4 | 9.2-19.6 | 9,300 | 10.3 | 7.1-13.5 | 19,192 | 12.1 | 9.2-15.0 |
| \$15,000-24,999 | 12,346 | 12.3 | 8.6-15.9 | 10,607 | 9.1 | 6.4-11.8 | 22,953 | 10.5 | 8.3-12.8 |
| \$25,000-34,999 | 6,487 | 8.7 | 5.1-12.3 | 1,916 | 2.9 | 1.2-4.6 | 8,403 | 6.0 | 3.9-8.1 |
| \$35,000-49,999 | 6,651 | 7.0 | 4.5-9.5 | 3,757 | 4.0 | 1.8-6.2 | 10,408 | 5.5 | 3.9-7.2 |
| \$50,000-74,999 | 9,713 | 10.9 | 7.2-14.5 | 2,867 | 3.7 | 1.7-5.7 | 12,580 | 7.5 | 5.3-9.7 |
| \$75,000+ | 5,450 | 4.0 | 2.5-5.5 | 1,985 | *1.7 | 0.6-2.9 | 7,435 | 3.0 | 2.0-3.9 |

[^15]|  | Stroke |
| :---: | :---: |
| Definition | Responding "Yes" to the question, "Has a doctor, nurse, or other health professional ever told you that you had a stroke?" |
| Prevalence | WV: 4.7\% (95\% CI: 4.1-5.3) |
|  | U.S.: 3.0\% (95\% Cl: 2.9-3.1) |
|  | The West Virginia prevalence of stroke was significantly higher than the U.S. prevalence. West Virginia ranked the highest among the 53 BRFSS participants. |
| Gender | Men: 4.2\% (95\% CI: 3.3-5.0) |
|  | Women: 5.3\% (95\% CI: 4.4-6.2) |
|  | There was no gender difference for the prevalence of stroke. |
| Race/Ethnicity | No race/ethnicity statistics are reported due to unreliable estimates. |
| Age | The prevalence of stroke increased with age. The prevalence of stroke was significantly higher among those aged 65 and older (8.7\%) than the prevalence among all other age groups under age 45 . |
| Education | The prevalence of stroke was highest among those with less than a high school education ( $11.2 \%$ ) and was significantly higher than the prevalence among all other educational attainment levels. |
| Household Income | The prevalence of stroke was highest among those with an annual household income less than $\$ 15,000$ ( $9.4 \%$ ) and was significantly higher than the prevalence among those earning $\$ 25,000$ or more per year. |

## CHAPTER 16: CARDIOVASCULAR DISEASE

Table 16.3 Stroke Prevalence by Demographic Characteristics: WVBRFSS, 2015

| Characteristic | Men |  |  | Women |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted Frequency | \% | 95\% CI | Weighted <br> Frequency | \% | 95\% CI | Weighted Frequency | \% | 95\% Cl |
| TOTAL | 29,744 | 4.2 | 3.3-5.0 | 39,800 | 5.3 | 4.4-6.2 | 69,544 | 4.7 | 4.1-5.3 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-24 | 226 | *0.3 | 0.0-0.8 | 437 | *0.5 | 0.0-1.6 | 663 | *0.4 | 0.0-0.9 |
| 25-34 | 426 | *0.4 | 0.0-1.1 | 2,117 | *2.0 | 0.2-3.8 | 2,543 | *1.2 | 0.2-2.2 |
| 35-44 | 2,039 | *1.8 | 0.3-3.3 | 3,875 | *3.5 | 1.2-5.7 | 5,914 | 2.7 | 1.3-4.0 |
| 45-54 | 5,985 | 5.0 | 2.7-7.3 | 7,940 | 6.6 | 4.1-9.0 | 13,925 | 5.8 | 4.1-7.5 |
| 55-64 | 7,514 | 5.7 | 3.5-8.0 | 9,118 | 6.8 | 4.7-8.9 | 16,632 | 6.3 | 4.7-7.8 |
| 65+ | 13,554 | 8.9 | 6.7-11.2 | 16,039 | 8.6 | 6.5-10.6 | 29,593 | 8.7 | 7.2-10.3 |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 11,598 | 10.3 | 6.8-13.7 | 14,306 | 12.1 | 8.5-15.8 | 25,904 | 11.2 | 8.7-13.8 |
| H.S. or G.E.D. | 11,656 | 3.8 | 2.7-5.0 | 14,552 | 5.1 | 3.8-6.5 | 26,208 | 4.5 | 3.6-5.4 |
| Some Post-H.S. | 4,624 | 2.5 | 1.4-3.7 | 6,759 | 3.2 | 2.1-4.4 | 11,383 | 2.9 | 2.1-3.7 |
| College Graduate | 1,762 | 1.6 | 0.8-2.3 | 4,183 | 3.0 | 1.8-4.3 | 5,945 | 2.4 | 1.6-3.1 |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 5,504 | 7.9 | 4.5-11.4 | 9,404 | 10.5 | 7.2-13.8 | 14,908 | 9.4 | 7.0-11.8 |
| \$15,000-24,999 | 7,952 | 7.8 | 4.8-10.8 | 8,497 | 7.2 | 4.7-9.7 | 16,450 | 7.5 | 5.5-9.4 |
| \$25,000-34,999 | 2,558 | 3.4 | 1.5-5.4 | 2,052 | *3.1 | 0.5-5.7 | 4,610 | 3.3 | 1.7-4.9 |
| \$35,000-49,999 | 3,064 | *3.2 | 1.2-5.2 | 5,327 | 5.7 | 3.0-8.3 | 8,391 | 4.5 | 2.8-6.1 |
| \$50,000-74,999 | 1,706 | *1.9 | 0.6-3.1 | 1,118 | *1.4 | 0.2-2.6 | 2,824 | 1.7 | 0.8-2.6 |
| \$75,000+ | 2,782 | *2.0 | 0.8-3.3 | 1,331 | *1.2 | 0.0-2.3 | 4,113 | 1.6 | 0.8-2.5 |

[^16]
## Cardiovascular Disease

| Definition | Responding "Yes" to any of the questions, "Has a doctor, nurse, or other health professional ever told you that you had any of the following?" "... ever told you had a heart attack, also called a myocardial infarction?", "...ever told you had angina or coronary heart disease?", "... ever told you had a stroke?" |
| :---: | :---: |
| Prevalence | WV: 14.0\% (95\% CI: 13.0 -14.9) |
|  | U.S.: 8.4\% (95\% Cl: 8.2-8.5) |
|  | The West Virginia prevalence of cardiovascular disease was significantly higher than the U.S. prevalence. West Virginia ranked the highest among the 53 BRFSS participants. |
| Gender | Men: $15.7 \%$ (95\% CI: 14.2-17.2) |
|  | Women: $12.3 \%$ (95\% CI: 11.1-13.6) |
|  | The prevalence of cardiovascular disease was significantly higher among men than among women. |
| Race/Ethnicity | White, Non-Hispanic: $14.2 \%$ (95\% CI: 13.1-15.2) |
|  | Black, Non-Hispanic: $13.8 \%$ (95\% Cl: 8.4-19.3) |
|  | Other, Non-Hispanic: *12.1\% (95\% CI: 4.4-19.8) |
|  | Multiracial, Non-Hispanic: *12.2\% (95\% CI: 3.8-20.7) |
|  | Hispanic: *3.0\% (95\% Cl: 0.0-7.4) |
|  | The prevalence of cardiovascular disease was significantly higher among White, |
|  | Non-Hispanic and Black, Non-Hispanic adults than among Hispanic adults. <br> * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6. |

Age The prevalence of cardiovascular disease increased with age. The prevalence of cardiovascular disease was significantly higher among those aged 65 and older (28.9\%) than among all other age groups.

Education The prevalence of cardiovascular disease was highest among those with less than a high school education (26.0\%) and was significantly higher than the prevalence among all other educational attainment levels.

Household Income The prevalence of cardiovascular disease was highest among those with an annual household income less than $\$ 15,000(24.8 \%)$ and was significantly higher than the prevalence among those earning $\$ 25,000$ or more per year.

## CHAPTER 16: CARDIOVASCULAR DISEASE

Table 16.4 Cardiovascular Disease Prevalence by Demographic Characteristics: WVBRFSS, 2015

| Characteristic | Men |  |  | Women |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted <br> Frequency | \% | 95\% CI | Weighted <br> Frequency | \% | 95\% CI | Weighted <br> Frequency | \% | 95\% Cl |
| TOTAL | 111,666 | 15.7 | 14.2-17.2 | 92,036 | 12.3 | 11.1-13.6 | 203,702 | 14.0 | 13.0-14.9 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-24 | 961 | *1.1 | 0.0-2.8 | 437 | *0.5 | 0.0-1.6 | 1,398 | *0.8 | 0.0-1.8 |
| 25-34 | 2,758 | *2.5 | 0.1-4.9 | 4,400 | *4.2 | 1.6-6.7 | 7,158 | 3.3 | 1.6-5.1 |
| 35-44 | 6,291 | 5.7 | 3.0-8.3 | 6,394 | 5.7 | 2.9-8.6 | 12,685 | 5.7 | 3.8-7.6 |
| 45-54 | 15,685 | 13.2 | 9.6-16.8 | 15,813 | 13.1 | 9.8-16.4 | 31,498 | 13.2 | 10.7-15.6 |
| 55-64 | 33,164 | 25.5 | 21.5-29.5 | 20,257 | 15.1 | 12.1-18.1 | 53,421 | 20.2 | 17.7-22.7 |
| 65+ | 52,504 | 34.9 | 31.1-38.8 | 44,116 | 24.0 | 20.9-27.1 | 96,619 | 28.9 | 26.5-31.4 |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 30,933 | 27.8 | 22.4-33.2 | 28,471 | 24.3 | 19.4-29.1 | 59,404 | 26.0 | 22.4-29.6 |
| H.S. or G.E.D. | 45,512 | 15.1 | 12.9-17.4 | 38,942 | 13.8 | 11.7-15.9 | 84,455 | 14.5 | 13.0-16.1 |
| Some Post-H.S. | 24,892 | 13.6 | 11.0-16.2 | 16,542 | 7.9 | 6.1-9.7 | 41,434 | 10.6 | 9.0-12.1 |
| College Graduate | 10,225 | 9.0 | 7.0-11.1 | 7,997 | 5.8 | 4.3-7.4 | 18,222 | 7.3 | 6.0-8.6 |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 18,548 | 27.2 | 21.0-33.5 | 20,496 | 22.9 | 18.2-27.5 | 39,043 | 24.8 | 21.0-28.5 |
| \$15,000-24,999 | 22,398 | 22.2 | 17.5-26.9 | 20,025 | 17.2 | 13.6-20.7 | 42,423 | 19.5 | 16.6-22.4 |
| \$25,000-34,999 | 10,587 | 14.4 | 10.1-18.7 | 5,724 | 8.6 | 5.0-12.2 | 16,312 | 11.7 | 8.8-14.5 |
| \$35,000-49,999 | 12,404 | 13.1 | 9.6-16.7 | 9,059 | 9.7 | 6.2-13.1 | 21,463 | 11.4 | 8.9-13.9 |
| \$50,000-74,999 | 13,644 | 15.1 | 11.0-19.2 | 4,236 | 5.4 | 3.0-7.8 | 17,880 | 10.6 | 8.1-13.1 |
| \$75,000+ | 11,290 | 8.3 | 5.9-10.6 | 3,089 | 2.7 | 1.2-4.2 | 14,379 | 5.7 | 4.3-7.2 |

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


[^17]
## CHAPTER 16: CARDIOVASCULAR DISEASE

Figure 16.2 Cardiovascular Disease Prevalence by County: WVBRFSS, 2011-2015

WV Prevalence (2011-2015) - 13.8\%


|  | Diabetes Prevalence |
| :---: | :---: |
| Definition | Responding "Yes" to the question, "Has doctor, nurse, or other health professional ever told you that you have diabetes?" |
| Prevalence | WV: 14.5\% (95\% CI: 13.5-15.4) |
|  | U.S.: 10.5\% (95\% CI: 10.3-10.7) |
|  | The West Virginia prevalence of diabetes was significantly higher than the U.S. prevalence. West Virginia ranked the $3^{\text {rd }}$ highest among the 53 BRFSS participants. |
| Gender | Men: $14.7 \%$ (95\% CI: 13.3-16.2) |
|  | Women: 14.2\% (95\% CI: 12.9-15.5) |
|  | There was no gender difference for the prevalence of diabetes. |
| Race/Ethnicity | White, Non-Hispanic: $14.6 \%$ (95\% CI: 13.5-15.6) |
|  | Black, Non-Hispanic: 17.4\% (95\% Cl: 10.9-23.9) |
|  | Other, Non-Hispanic: *13.6\% (95\% CI: 5.4-21.9) |
|  | Multiracial, Non-Hispanic: *13.1\% (95\% CI: 4.4-21.7) |
|  | Hispanic: *4.1\% (95\% Cl: 0.0-9.1) |
|  | The prevalence of diabetes was significantly higher among White, Non-Hispanic and Black, Non-Hispanic adults than among Hispanic adults. <br> * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6. |
| Age | The prevalence of diabetes increased with age. The prevalence of diabetes was significantly higher among those aged 65 and older (25.7\%) than among those under age 55. |
| Education | The prevalence of diabetes decreased with increasing education. It was significantly higher among those with less than a high school education (22.1\%) than among all other educational attainment levels. |
| Household Income | The prevalence of diabetes decreased as income increased. The prevalence of diabetes was significantly higher among those with an annual household income of less than $\$ 15,000$ ( $21.2 \%$ ) than all income brackets over $\$ 35,000$. The diabetes prevalence was significantly lower among those earning \$75,000 or more a year (9.2\%) than among those earning less than \$35,000. |

## CHAPTER 17: DIABETES

Table 17.1 Diabetes Prevalence by Demographic Characteristics: WVBRFSS, 2015

| Characteristic | Men |  |  | Women |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted <br> Frequency | \% | 95\% CI | Weighted <br> Frequency | \% | 95\% CI | Weighted <br> Frequency | \% | 95\% CI |
| TOTAL | 105,814 | 14.7 | 13.3-16.2 | 106,460 | 14.2 | 12.9-15.5 | 212,274 | 14.5 | 13.5-15.4 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-24 | 1,454 | *1.6 | 0.0-3.3 | 1,615 | 2.0 | 0.0-4.0 | 3,069 | *1.8 | 0.5-3.1 |
| 25-34 | 3,843 | *3.5 | 1.1-5.9 | 2,730 | 2.6 | 0.6-4.6 | 6,573 | 3.1 | 1.5-4.6 |
| 35-44 | 10,700 | 9.5 | 6.2-12.8 | 9,780 | 8.8 | 5.6-12.0 | 20,479 | 9.1 | 6.8-11.4 |
| 45-54 | 17,722 | 14.7 | 10.9-18.5 | 20,784 | 17.2 | 13.4-21.0 | 38,506 | 15.9 | 13.2-18.6 |
| 55-64 | 28,608 | 21.8 | 18.1-25.6 | 27,538 | 20.5 | 17.1-23.8 | 56,146 | 21.1 | 18.6-23.6 |
| 65+ | 43,208 | 28.5 | 24.9-32.2 | 43,801 | 23.4 | 20.4-26.3 | 87,009 | 25.7 | 23.4-28.0 |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 24,652 | 21.7 | 16.8-26.6 | 26,534 | 22.4 | 17.8-27.0 | 51,185 | 22.1 | 18.7-25.4 |
| H.S. or G.E.D. | 42,360 | 13.9 | 11.7-16.2 | 49,458 | 17.5 | 15.2-19.8 | 91,818 | 15.6 | 14.0-17.3 |
| Some Post-H.S. | 24,108 | 13.1 | 10.5-15.8 | 21,776 | 10.4 | 8.3-12.4 | 45,884 | 11.7 | 10.0-13.3 |
| College Graduate | 14,694 | 12.9 | 10.3-15.5 | 8,691 | 6.3 | 4.7-8.0 | 23,386 | 9.3 | 7.8-10.8 |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 15,016 | 21.0 | 15.3-26.8 | 19,228 | 21.3 | 16.8-25.7 | 34,243 | 21.2 | 17.6-24.7 |
| \$15,000-24,999 | 20,156 | 19.9 | 15.6-24.3 | 20,484 | 17.4 | 13.8-21.0 | 40,640 | 18.6 | 15.8-21.3 |
| \$25,000-34,999 | 11,264 | 15.0 | 10.4-19.6 | 10,597 | 16.0 | 11.4-20.6 | 21,862 | 15.5 | 12.2-18.7 |
| \$35,000-49,999 | 13,036 | 13.8 | 10.0-17.5 | 12,109 | 12.9 | 9.3-16.5 | 25,144 | 13.3 | 10.7-16.0 |
| \$50,000-74,999 | 12,415 | 13.7 | 9.7-17.7 | 7,120 | 9.2 | 6.0-12.3 | 19,535 | 11.6 | 9.0-14.2 |
| \$75,000+ | 16,637 | 12.1 | 9.2-15.1 | 6,629 | 5.8 | 3.4-8.1 | 23,266 | 9.2 | 7.3-11.1 |

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


[^18]
## CHAPTER 17: DIABETES

Figure 17.2 Diabetes Prevalence by County: WVBRFSS, 2011-2015

WV Prevalence (2011-2015) - 13.3\%


## Pre-Diabetes or Borderline Diabetes

| Definition | Responding "Yes" to the question, "Have you ever been told by a doctor or <br> other health professional that you have pre-diabetes or borderline diabetes?" |
| :--- | :--- |
| Prevalence | WV: $9.7 \%(95 \% \mathrm{CI}: 8.7-10.6)$ <br> Because this question is part of a state selected optional module and complete <br> national data are not available, a U.S. comparison was not conducted. |
| Gender | Men: $9.3 \%(95 \% \mathrm{Cl}: 8.0-10.6)$ <br>  <br> Women: $10.0 \%(95 \% \mathrm{Cl}: 8.7-11.3)$ |
| There was no gender difference in the prevalence of pre-diabetes or borderline |  |
| diabetes. |  |

Age The prevalence of pre-diabetes or borderline diabetes generally increased with age. The prevalence of pre-diabetes or borderline diabetes was significantly higher among those aged 55 and older than among those aged 44 and younger.

The prevalence of pre-diabetes or borderline diabetes generally decreased with higher levels of educational attainment.

Household Income
The prevalence of pre-diabetes or borderline diabetes generally decreased with increasing income. It was highest among those with a household income less than $\$ 15,000$ (14.4\%), significantly higher than among those earning $\$ 50,000$ or more. It was lowest among those with a household income of $\$ 75,000$ or more (6.3\%), significantly lower than among those earning less than \$25,000 a year.

## CHAPTER 17: DIABETES

Table 17.2 Prevalence of Pre-Diabetes or Borderline Diabetes by Demographic Characteristics: WVBRFSS, 2015

| Characteristic | Men |  |  | Women |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted Frequency | \% | 95\% CI | Weighted Frequency | \% | 95\% CI | Weighted Frequency | \% | 95\% CI |
| TOTAL | 56,174 | 9.3 | 8.0-10.6 | 63,674 | 10.0 | 8.7-11.3 | 119,848 | 9.7 | 8.7-10.6 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-24 | 832 | *1.0 | 0.0-2.3 | 3,108 | *3.9 | 0.8-7.0 | 3,940 | *2.4 | 0.7-4.0 |
| 25-34 | 4,236 | *4.0 | 1.4-6.7 | 3,343 | *3.3 | 1.1-5.6 | 7,579 | 3.7 | 2.0-5.4 |
| 35-44 | 5,619 | 5.7 | 2.7-8.7 | 11,450 | 11.4 | 7.1-15.6 | 17,069 | 8.6 | 6.0-11.2 |
| 45-54 | 11,670 | 11.4 | 7.5-15.4 | 9,549 | 9.6 | 6.7-12.5 | 21,220 | 10.5 | 8.1-13.0 |
| 55-64 | 16,586 | 16.4 | 12.7-20.1 | 15,145 | 14.4 | 11.1-17.7 | 31,730 | 15.4 | 12.9-17.9 |
| 65+ | 16,912 | 15.7 | 12.3-19.0 | 19,883 | 13.9 | 11.1-16.6 | 36,795 | 14.6 | 12.5-16.7 |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 11,715 | 13.2 | 8.3-18.1 | 10,549 | 11.6 | 7.4-15.7 | 22,265 | 12.4 | 9.2-15.6 |
| H.S. or G.E.D. | 25,888 | 10.1 | 8.0-12.2 | 27,506 | 11.9 | 9.5-14.2 | 53,394 | 10.9 | 9.3-12.5 |
| Some Post-H.S. | 9,086 | 5.8 | 3.9-7.6 | 15,549 | 8.4 | 6.1-10.6 | 24,636 | 7.2 | 5.7-8.6 |
| College Graduate | 9,192 | 9.5 | 7.0-12.0 | 9,591 | 7.6 | 5.7-9.5 | 18,783 | 8.4 | 6.9-9.9 |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 8,589 | 15.5 | 9.4-21.7 | 9,553 | 13.6 | 9.4-17.7 | 18,142 | 14.4 | 10.8-18.0 |
| \$15,000-24,999 | 8,913 | 11.0 | 6.9-15.1 | 10,426 | 10.8 | 7.2-14.4 | 19,339 | 10.9 | 8.2-13.6 |
| \$25,000-34,999 | 3,952 | 6.2 | 3.2-9.3 | 6,397 | 11.9 | 7.0-16.8 | 10,349 | 8.8 | 6.0-11.7 |
| \$35,000-49,999 | 9,142 | 11.3 | 7.2-15.3 | 8,512 | 10.4 | 6.0-14.8 | 17,654 | 10.8 | 7.8-13.8 |
| \$50,000-74,999 | 4,285 | 5.7 | 3.1-8.3 | 6,238 | 8.8 | 5.6-12.1 | 10,522 | 7.2 | 5.1-9.3 |
| \$75,000+ | 8,530 | 7.2 | 4.7-9.7 | 5,673 | 5.3 | 3.1-7.6 | 14,203 | 6.3 | 4.6-8.0 |

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


## CHAPTER 18: CANCER

|  | Skin Cancer Prevalence |
| :---: | :---: |
| Definition | Responding "Yes" to the question, "Has a doctor, nurse, or other health professional ever told you that you had skin cancer?" |
| Prevalence | WV: 7.7\% (95\% CI: 7.0-8.4) |
|  | U.S.: 5.9\% (95\% CI: 5.8-6.0) |
|  | The West Virginia prevalence of skin cancer is significantly higher than the U.S. prevalence. West Virginia ranked the $5^{\text {th }}$ highest among the 53 BRFSS participants. |
| Gender | Men: 8.5\% (95\% Cl: 7.4-9.6) |
|  | Women: 7.0\% (95\% CI: 6.1-7.9) |
|  | There was no gender difference in the prevalence of skin cancer. |
| Race/Ethnicity | White, Non-Hispanic: $8.1 \%$ (95\% CI: 7.3-8.8) |
|  | Black, Non-Hispanic: *3.4\% (95\% CI: 0.4-6.4) |
|  | Other, Non-Hispanic: *2.5\% (95\% CI: 0.0-6.8) |
|  | Multiracial, Non-Hispanic: *5.9\% (95\% CI: 0.1-11.8) |
|  | Hispanic: *2.2\% (95\% CI: 0.0-6.4) |
|  | The prevalence of skin cancer was significantly higher among White, NonHispanic adults than among Black, Non-Hispanic; Other, Non-Hispanic; and |
|  | Hispanic adults. <br> * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6. |
| Age | The prevalence of skin cancer was significantly higher among those aged 65 and older (20.4\%) than among all other age groups. |
| Education | There was no consistent educational attainment difference in the prevalence of skin cancer. |
| Household Income | There was no consistent annual household income difference in prevalence of skin cancer. |

## CHAPTER 18: CANCER

Table 18.1 Skin Cancer Prevalence by Demographic Characteristics: WVBRFSS, 2015

| Characteristic | Men |  |  | Women |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted Frequency | \% | 95\% CI | Weighted Frequency | \% | 95\% Cl | Weighted <br> Frequency | \% | 95\% CI |
| TOTAL | 60,805 | 8.5 | 7.4-9.6 | 52,329 | 7.0 | 6.1-7.9 | 113,133 | 7.7 | 7.0-8.4 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-24 | 1,193 | *1.4 | 0.0-3.3 | 0 | *0.0 | 0.0-0.0 | 1,193 | *0.7 | 0.0-1.7 |
| 25-34 | 1,437 | *1.3 | 0.0-3.1 | 1,082 | *1.0 | 0.0-0.2 | 2,519 | *1.2 | 0.1-2.3 |
| 35-44 | 2,526 | *2.2 | 0.5-4.0 | 2,459 | *2.2 | 0.6-3.8 | 4,985 | 2.2 | 1.0-3.4 |
| 45-54 | 5,899 | 4.9 | 2.6-7.1 | 5,029 | 4.2 | 2.5-5.9 | 10,929 | 4.5 | 3.1-6.0 |
| 55-64 | 12,870 | 9.8 | 7.2-12.4 | 10,247 | 7.6 | 5.5-9.7 | 23,117 | 8.7 | 7.0-10.4 |
| 65+ | 36,361 | 24.0 | 20.6-27.4 | 32,880 | 17.6 | 14.8-20.3 | 69,241 | 20.4 | 18.3-22.6 |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 14,275 | 12.5 | 8.8-16.3 | 10,676 | 9.1 | 5.9-12.2 | 24,951 | 10.8 | 8.3-13.2 |
| H.S. or G.E.D. | 20,685 | 6.8 | 5.2-8.4 | 23,632 | 8.4 | 6.7-10.0 | 44,316 | 7.6 | 6.4-8.7 |
| Some Post-H.S. | 15,076 | 8.2 | 6.1-10.4 | 10,377 | 4.9 | 3.6-6.3 | 25,453 | 6.5 | 5.2-7.7 |
| College Graduate | 10,769 | 9.5 | 7.3-11.6 | 7,165 | 5.2 | 3.7-6.8 | 17,934 | 7.1 | 5.8-8.4 |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 5,933 | 8.3 | 4.7-12.0 | 5,829 | 6.5 | 3.8-9.2 | 11,762 | 7.3 | 5.1-9.5 |
| \$15,000-24,999 | 10,008 | 9.9 | 6.5-13.4 | 9,128 | 7.8 | 5.4-10.2 | 19,137 | 8.8 | 6.8-10.8 |
| \$25,000-34,999 | 6,444 | 8.6 | 5.0-12.1 | 4,129 | 6.2 | 3.5-8.9 | 10,572 | 7.5 | 5.2-9.7 |
| \$35,000-49,999 | 10,126 | 10.7 | 7.3-14.1 | 6,256 | 6.7 | 4.2-9.1 | 16,382 | 8.7 | 6.6-10.8 |
| \$50,000-74,999 | 5,644 | 6.2 | 3.9-8.6 | 3,755 | 4.8 | 2.7-6.9 | 9,399 | 5.6 | 4.0-7.2 |
| \$75,000+ | 11,446 | 8.4 | 6.1-10.7 | 5,524 | 4.8 | 2.9-6.7 | 16,970 | 6.8 | 5.2-8.3 |

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


## CHAPTER 18: CANCER

## Other Cancer Prevalence

| Definition | Responding "Yes" to the question, "Has a doctor, nurse, or other health professional ever told you that you had any other types of cancer?" |
| :---: | :---: |
| Prevalence | WV: 7.9\% (95\% CI: 7.2-8.6) |
|  | U.S.: 6.6\% (95\% CI: 6.5-6.7) |
|  | The West Virginia prevalence of other cancer was significantly higher than the U.S. prevalence. West Virginia ranked the $4^{\text {th }}$ highest among the 53 BRFSS participants. |
| Gender | Men: 5.9\% (95\% CI: 5.0-6.9) |
|  | Women: 9.8\% (95\% CI: 8.7-10.9) |
|  | The prevalence of other cancer was significantly higher among women than among men. |
| Race/Ethnicity | White, Non-Hispanic: $8.1 \%$ (95\% CI: 7.3-8.8) |
|  | Black, Non-Hispanic: $6.7 \%$ (95\% Cl: 3.0-10.4) |
|  | Other, Non-Hispanic: *3.9\% (95\% Cl: 0.0-8.5) |
|  | Multiracial, Non-Hispanic: *7.9\% (95\% CI: 1.1-14.7) |
|  | Hispanic: *2.8\% (95\% CI: 0.0-7.0) |
|  | The prevalence of other cancer was significantly higher among White, NonHispanic adults than among Hispanic adults. |
|  | * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6. |
| Age | The prevalence of other cancer was significantly higher among those aged 65 and older (16.8\%) than among all other age groups. |
| Education | The prevalence of other cancer was significantly higher among those with less than a high school education (12.3\%) than among any other educational attainment levels. |
| Household Income | The prevalence of other cancer decreased with increasing income. It was highest among those with a household income of less than \$15,000 (11.7\%) and was significantly higher than among those earning $\$ 35,000$ or more per year. |

## CHAPTER 18: CANCER

Table 18.2 Other Cancer Prevalence by Demographic Characteristics: WVBRFSS, 2015

| Characteristic | Men |  |  | Women |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted Frequency | \% | 95\% CI | Weighted Frequency | \% | 95\% CI | Weighted <br> Frequency | \% | 95\% CI |
| TOTAL | 42,772 | 5.9 | 5.0-6.9 | 73,249 | 9.8 | 8.7-10.9 | 116,021 | 7.9 | 7.2-8.6 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-24 | 458 | *0.5 | 0.0-1.5 | 103 | *0.1 | 0.0-0.4 | 560 | *0.3 | 0.0-0.9 |
| 25-34 | 1,987 | *1.8 | 0.0-3.7 | 4,147 | *3.9 | 1.5-6.4 | 6,134 | 2.9 | 1.3-4.4 |
| 35-44 | 1,794 | *1.6 | 0.2-3.0 | 8,975 | 8.1 | 5.1-11.1 | 10,769 | 4.8 | 3.1-6.5 |
| 45-54 | 5,548 | 4.6 | 2.2-7.0 | 11,574 | 9.6 | 6.8-12.4 | 17,122 | 7.1 | 5.3-8.9 |
| 55-64 | 8,294 | 6.3 | 4.0-8.7 | 15,833 | 11.8 | 9.3-14.3 | 24,126 | 9.1 | 7.4-10.8 |
| 65+ | 24,691 | 16.2 | 13.2-19.2 | 32,383 | 17.3 | 14.6-19.9 | 57,074 | 16.8 | 14.8-18.8 |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 10,273 | 9.0 | 5.5-12.6 | 18,258 | 15.5 | 11.6-19.5 | 28,531 | 12.3 | 9.7-15.0 |
| H.S. or G.E.D. | 16,453 | 5.4 | 4.0-6.8 | 25,705 | 9.1 | 7.4-10.8 | 42,158 | 7.2 | 6.1-8.3 |
| Some Post-H.S. | 9,522 | 5.2 | 3.4-7.0 | 17,978 | 8.6 | 6.6-10.5 | 27,500 | 7.0 | 5.6-8.3 |
| College Graduate | 5,544 | 4.9 | 3.3-6.4 | 11,307 | 8.3 | 6.4-10.1 | 16,851 | 6.7 | 5.5-8.0 |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 6,561 | 9.2 | 4.9-13.5 | 12,236 | 13.7 | 10.1-17.3 | 18,797 | 11.7 | 8.9-14.5 |
| \$15,000-24,999 | 7,762 | 7.6 | 4.7-10.5 | 13,540 | 11.5 | 8.3-14.7 | 21,303 | 9.7 | 7.5-11.9 |
| \$25,000-34,999 | 4,783 | 6.4 | 3.3-9.4 | 6,298 | 9.5 | 6.2-12.9 | 11,081 | 7.8 | 5.6-10.1 |
| \$35,000-49,999 | 4,112 | 4.3 | 2.4-6.3 | 8,337 | 8.9 | 5.8-11.9 | 12,449 | 6.6 | 4.8-8.4 |
| \$50,000-74,999 | 3,616 | 4.0 | 2.0-6.0 | 6,070 | 7.8 | 5.0-10.5 | 9,686 | 5.8 | 4.1-7.4 |
| \$75,000+ | 6,945 | 5.1 | 3.1-7.0 | 6,329 | 5.5 | 3.4-7.6 | 13,273 | 5.3 | 3.8-6.7 |

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## CHAPTER 18: CANCER

## Overall Cancer Prevalence

| Definition | Responding "Yes" to either of the questions, "Has a doctor, nurse, or other health professional ever told you that you had skin cancer" "Has a doctor, nurse, or other health professional ever told you that you had any other types of cancer?" |
| :---: | :---: |
| Prevalence | WV: 14.1\% (95\% CI: 13.2-15.1) |
|  | U.S.: 11.3\% (95\% CI: 11.1-11.4) |
|  | The West Virginia prevalence of cancer was significantly higher than the U.S. prevalence. West Virginia ranked the $3^{\text {rd }}$ highest among 53 BRFSS participants. |
| Gender | Men: $13.2 \%$ (95\% CI: 11.8-14.6) |
|  | Women: $15.0 \%$ (95\% CI: 13.7-16.3) |
|  | There was no gender difference in the prevalence of cancer. |
| Race/Ethnicity | White, Non-Hispanic: 14.6\% (95\% CI: 13.6-15.6) |
|  | Black, Non-Hispanic: $8.5 \%$ (95\% CI: 4.2-12.8) |
|  | Other, Non-Hispanic: *6.3\% (95\% CI: 0.0-12.6) |
|  | Multiracial, Non-Hispanic: *10.3\% (95\% CI: 2.8-17.8) |
|  | Hispanic: *4.9\% (95\% CI: 0.0-10.9) |
|  | The prevalence of cancer was significantly higher among White, Non-Hispanic adults than among Black, Non-Hispanic; Other, Non-Hispanic; and Hispanic adults. |
|  | * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6. |
| Age | The prevalence of cancer was significantly higher among those aged 55 and older than among those aged 54 and younger. |
| Education | The prevalence of cancer decreased with increasing education. The prevalence of cancer was significantly higher among those with less than a high school education (20.7\%) than among all other educational attainment levels. |
| Household Income | The prevalence of cancer was significantly higher among those with an annua household income of less than $\$ 15,000$ ( $17.5 \%$ ) than among all other income brackets over \$50,000. |

## CHAPTER 18: CANCER

Table 18.3 Cancer Prevalence by Demographic Characteristics: WVBRFSS, 2015

| Characteristic | Men |  |  | Women |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted Frequency | \% | 95\% CI | Weighted <br> Frequency | \% | 95\% CI | Weighted Frequency | \% | 95\% Cl |
| TOTAL | 94,502 | 13.2 | 11.8-14.6 | 112,264 | 15.0 | 13.7-16.3 | 206,766 | 14.1 | 13.2-15.1 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-24 | 1,651 | *1.9 | 0.0-4.0 | 103 | *0.1 | 0.0-0.4 | 1,753 | *1.0 | 0.0-2.2 |
| 25-34 | 3,424 | *3.1 | 0.6-5.7 | 5,230 | 5.0 | 2.3-7.7 | 8,654 | 4.0 | 2.2-5.9 |
| 35-44 | 4,321 | 3.8 | 1.6-6.1 | 11,434 | 10.3 | 7.0-13.6 | 15,754 | 7.0 | 5.0-9.1 |
| 45-54 | 10,985 | 9.1 | 6.0-12.2 | 14,911 | 12.4 | 9.4-15.5 | 25,896 | 10.8 | 8.6-13.0 |
| 55-64 | 20,127 | 15.4 | 12.1-18.7 | 23,671 | 17.6 | 14.6-20.6 | 43,798 | 16.5 | 14.3-18.7 |
| 65+ | 53,477 | 35.3 | 31.4-39.2 | 56,285 | 30.0 | 26.8-33.3 | 109,762 | 32.4 | 29.9-34.9 |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 22,737 | 20.0 | 15.3-24.7 | 25,027 | 21.3 | 16.8-25.8 | 47,764 | 20.7 | 17.4-24.0 |
| H.S. or G.E.D. | 33,666 | 11.1 | 9.1-13.1 | 44,136 | 15.6 | 13.4-17.8 | 77,802 | 13.3 | 11.8-14.7 |
| Some Post-H.S. | 22,246 | 12.1 | 9.5-14.8 | 26,464 | 12.6 | 10.4-14.9 | 48,710 | 12.4 | 10.7-14.1 |
| College Graduate | 14,872 | 13.1 | 10.6-15.6 | 16,158 | 11.8 | 9.6-14.1 | 31,031 | 12.4 | 10.7-14.1 |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 11,612 | 16.4 | 11.1-21.7 | 16,546 | 18.5 | 14.3-22.6 | 28,158 | 17.5 | 14.3-20.8 |
| \$15,000-24,999 | 16,237 | 16.1 | 12.0-20.3 | 21,140 | 18.1 | 14.3-21.8 | 37,377 | 17.2 | 14.4-20.0 |
| \$25,000-34,999 | 9,370 | 12.5 | 8.2-16.8 | 9,196 | 13.9 | 9.9-17.8 | 18,566 | 13.1 | 10.2-16.1 |
| \$35,000-49,999 | 13,032 | 13.8 | 10.0-17.5 | 13,211 | 14.0 | 10.4-17.7 | 26,243 | 13.9 | 11.3-16.5 |
| \$50,000-74,999 | 8,874 | 9.8 | 6.8-12.8 | 8,634 | 11.1 | 7.8-14.3 | 17,508 | 10.4 | 8.2-12.6 |
| \$75,000+ | 17,127 | 12.6 | 9.6-15.5 | 10,870 | 9.5 | 6.7-12.2 | 27,997 | 11.2 | 9.1-13.2 |

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


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## CHAPTER 18: CANCER

Figure 18.2 Cancer Prevalence by County: WVBRFSS, 2011-2015

WV Prevalence (2011-2015) - 13.4\%


## CHAPTER 19: RESPIRATORY DISEASES

|  | Lifetime Asthma |
| :---: | :---: |
| Definition | Responding "Yes" to the question, "Has a doctor, nurse, or other health professional ever told you that you had asthma?" |
| Prevalence | WV: 15.1 (95\% CI: 14.0-16.2) |
|  | U.S.: 13.8\% (95\% CI: 13.6-14.0) |
|  | The West Virginia prevalence of lifetime asthma was similar to the U.S. prevalence. West Virginia ranked the $16^{\text {th }}$ highest among 53 BRFSS participants. |
| Gender | Men: 12.7\% (95\% CI: 11.2-14.2) |
|  | Women: 17.3\% (95\% CI: 15.8-18.9) |
|  | The prevalence of lifetime asthma was significantly higher among women than among men. |
| Race/Ethnicity | White, Non-Hispanic: $15.1 \%$ (95\% CI: 14.0-16.2) |
|  | Black, Non-Hispanic: $18.5 \%$ (95\% Cl: 11.1-25.8) |
|  | Other, Non-Hispanic: *13.8\% (95\% CI: 5.1-22.6) |
|  | Multiracial, Non-Hispanic: *15.6\% (95\% CI: 6.0-25.1) |
|  | Hispanic: *10.8\% (95\% CI: 2.6-18.9) |
|  | There was no race/ethnicity difference in the prevalence of lifetime asthma . <br> * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6. |
| Age | There was no age difference in the prevalence of lifetime asthma. |
| Education | The prevalence of lifetime asthma was significantly higher among those with less than a high school education (21.6\%) than among all other educational attainment levels. |
| Household Income | The prevalence of lifetime asthma was highest among those with a household income of less than $\$ 15,000$ per year ( $24.3 \%$ ), and lowest among those with an income of $\$ 75,000$ per year ( $9.9 \%$ ), a significant difference. |

## CHAPTER 19: RESPIRATORY DISEASES

Table 19.1 Lifetime Asthma Prevalence by Demographic Characteristics:
WVBRFSS, 2015

| Characteristic | Men |  |  | Women |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted Frequency | \% | 95\% CI | Weighted Frequency | \% | 95\% CI | Weighted Frequency | \% | 95\% CI |
| TOTAL | 91,279 | 12.7 | 11.2-14.2 | 129,825 | 17.3 | 15.8-18.9 | 221,104 | 15.1 | 14.0-16.2 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-24 | 11,078 | 12.5 | 7.5-17.5 | 14,787 | 17.9 | 11.9-23.9 | 25,865 | 15.1 | 11.2-19.0 |
| 25-34 | 16,472 | 15.1 | 10.2-19.9 | 18,739 | 17.9 | 13.4-22.3 | 35,211 | 16.4 | 13.1-19.7 |
| 35-44 | 14,283 | 12.7 | 8.7-16.6 | 20,565 | 18.6 | 14.0-23.1 | 34,848 | 15.6 | 12.6-18.6 |
| 45-54 | 15,476 | 12.8 | 9.1-16.5 | 19,853 | 16.4 | 12.9-20.0 | 35,328 | 14.6 | 12.0-17.2 |
| 55-64 | 15,183 | 11.6 | 8.6-14.6 | 24,851 | 18.5 | 15.3-21.7 | 40,034 | 15.1 | 12.9-17.3 |
| 65+ | 18,517 | 12.2 | 9.5-14.8 | 30,021 | 16.1 | 13.4-18.7 | 48,538 | 14.3 | 12.4-16.2 |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 19,644 | 17.4 | 12.6-22.2 | 30,109 | 25.6 | 20.6-30.6 | 49,754 | 21.6 | 18.1-25.1 |
| H.S. or G.E.D. | 37,550 | 12.4 | 10.0-14.7 | 49,945 | 17.7 | 15.2-20.1 | 87,495 | 14.9 | 13.2-16.6 |
| Some Post-H.S. | 24,232 | 13.1 | 10.1-16.2 | 28,786 | 13.8 | 10.9-16.6 | 53,018 | 13.5 | 11.4-15.5 |
| College Graduate | 9,330 | 8.2 | 5.8-10.5 | 20,902 | 15.2 | 12.5-18.0 | 30,232 | 12.0 | 10.2-13.9 |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 15,546 | 21.8 | 15.7-27.9 | 23,588 | 26.3 | 21.3-31.4 | 39,134 | 24.3 | 20.4-28.2 |
| \$15,000-24,999 | 20,031 | 19.7 | 14.9-24.5 | 24,169 | 20.5 | 16.4-24.6 | 44,201 | 20.1 | 17.0-23.3 |
| \$25,000-34,999 | 9,813 | 13.1 | 8.3-17.9 | 10,332 | 15.7 | 10.6-20.8 | 20,145 | 14.3 | 10.8-17.8 |
| \$35,000-49,999 | 7,776 | 8.2 | 5.0-11.4 | 13,530 | 14.4 | 10.4-18.4 | 21,306 | 11.3 | 8.7-13.9 |
| \$50,000-74,999 | 8,903 | 9.8 | 5.8-13.9 | 9,451 | 12.1 | 8.2-16.0 | 18,354 | 10.9 | 8.1-13.7 |
| \$75,000+ | 10,315 | 7.5 | 5.0-10.0 | 14,577 | 12.7 | 9.4-16.0 | 24,892 | 9.9 | 7.9-11.9 |

## CHAPTER 19: RESPIRATORY DISEASES

## Current Asthma

| Definition | Responding "Yes" to the lifetime asthma question, and "Yes" to the question, "Do you still have asthma?" |
| :---: | :---: |
| Prevalence | WV: $10.8 \%$ (95\% CI: 9.9-11.8) |
|  | U.S.: 8.8\% (95\% CI: 8.7-9.0) |
|  | The West Virginia prevalence of current asthma was significantly higher than the U.S. prevalence. West Virginia ranked the $6^{\text {th }}$ highest among 53 BRFSS participants. |
| Gender | Men: $7.8 \%$ (95\% Cl: 6.6-9.0) |
|  | Women: $13.7 \%$ (95\% CI: 12.4-15.1) |
|  | The prevalence of current asthma was significantly higher among women than among men. |
| Race/Ethnicity | White, Non-Hispanic: $10.9 \%$ (95\% CI: 9.9-11.8) |
|  | Black, Non-Hispanic: 12.0\% (95\% CI: 6.2-17.8) |
|  | Other, Non-Hispanic: *10.5\% (95\% CI: 2.9-18.1) |
|  | Multiracial, Non-Hispanic: *11.7\% (95\% CI: 2.9-20.5) |
|  | Hispanic: *8.3\% (95\% CI: 1.6-14.9) |
|  | There was no race/ethnicity difference in the prevalence of current asthma. <br> * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6 . |
| Age | The prevalence of current asthma was significantly higher among those 55-64 (12.7\%) than among those 18-24 (7.3\%). |
| Education | The prevalence of current asthma was significantly higher among those with less than a high school education (18.3\%) than among all other education levels. |
| Household Income | The prevalence of current asthma was significantly higher among those earning less than $\$ 25,000$ a year than among those with an annual household income of $\$ 25,000$ or more. |

## CHAPTER 19: RESPIRATORY DISEASES

Table 19.2 Current Asthma Prevalence by Demographic Characteristics: WVBRFSS, 2015

| Characteristic | Men |  |  | Women |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted Frequency | \% | 95\% CI | Weighted <br> Frequency | \% | 95\% Cl | Weighted <br> Frequency | \% | 95\% CI |
| TOTAL | 56,043 | 7.8 | 6.6-9.0 | 102,485 | 13.7 | 12.4-15.1 | 158,528 | 10.8 | 9.9-11.8 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-24 | 3,585 | *4.1 | 1.3-6.8 | 8,896 | 10.8 | 5.9-15.8 | 12,481 | 7.3 | 4.5-10.1 |
| 25-34 | 9,444 | 8.6 | 4.8-12.5 | 13,291 | 12.8 | 9.0-16.6 | 22,735 | 10.7 | 8.0-13.4 |
| 35-44 | 8,246 | 7.3 | 4.3-10.4 | 17,735 | 16.0 | 11.7-20.3 | 25,981 | 11.6 | 9.0-14.3 |
| 45-54 | 9,449 | 7.8 | 5.0-10.7 | 17,064 | 14.1 | 10.8-17.4 | 26,513 | 11.0 | 8.8-13.1 |
| 55-64 | 12,129 | 9.3 | 6.5-12.1 | 21,279 | 15.9 | 12.9-19.0 | 33,408 | 12.7 | 10.6-14.8 |
| 65+ | 13,189 | 8.7 | 6.4-11.1 | 23,212 | 12.4 | 10.1-14.8 | 36,402 | 10.8 | 9.1-12.4 |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 15,551 | 13.8 | 9.5-18.1 | 26,375 | 22.6 | 17.8-27.4 | 41,926 | 18.3 | 15.1-21.5 |
| H.S. or G.E.D. | 23,725 | 7.8 | 6.0-9.7 | 39,928 | 14.2 | 12.0-16.4 | 63,653 | 10.9 | 9.4-12.3 |
| Some Post-H.S. | 11,074 | 6.0 | 4.1-7.9 | 20,776 | 10.0 | 7.6-12.4 | 31,851 | 8.1 | 6.5-9.7 |
| College Graduate | 5,170 | 4.5 | 2.7-6.4 | 15,405 | 11.3 | 8.8-13.7 | 20,575 | 8.2 | 6.6-9.8 |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 13,046 | 18.4 | 12.5-24.3 | 19,944 | 22.4 | 17.6-27.2 | 32,990 | 20.6 | 16.9-24.4 |
| \$15,000-24,999 | 12,074 | 11.9 | 8.1-15.7 | 21,761 | 18.5 | 14.5-22.5 | 33,835 | 15.4 | 12.6-18.2 |
| \$25,000-34,999 | 6,341 | 8.5 | 4.6-12.5 | 6,389 | 9.7 | 5.7-13.8 | 12,729 | 9.1 | 6.3-11.9 |
| \$35,000-49,999 | 4,269 | 4.5 | 2.2-6.8 | 11,843 | 12.6 | 8.8-16.3 | 16,113 | 8.6 | 6.3-10.8 |
| \$50,000-74,999 | 2,988 | 3.3 | 1.1-5.5 | 6,787 | 8.7 | 5.2-12.2 | 9,775 | 5.8 | 3.8-7.8 |
| \$75,000+ | 6,761 | 4.9 | 2.8-7.0 | 10,137 | 8.9 | 6.2-11.6 | 16,898 | 6.7 | 5.0-8.4 |

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


[^21]
## CHAPTER 19: RESPIRATORY DISEASES

Figure 19.2 Current Asthma Prevalence by County: WVBRFSS, 2011-2015

WV Prevalence (2011-2015) - 10.1\%


## CHAPTER 19: RESPIRATORY DISEASES

## Chronic Obstructive Pulmonary Disease

| Definition | Responding "Yes" to the question, "Has a doctor, nurse, or other health professional ever told you that you have chronic obstructive pulmonary disease or COPD, emphysema, or chronic bronchitis?" |
| :---: | :---: |
| Prevalence | WV: $13.3 \%$ (95\% CI: 12.4-14.3) |
|  | U.S.: $6.3 \%$ (95\% CI: 6.1-6.4) |
|  | The prevalence of chronic obstructive pulmonary disease (COPD) was significantly higher in West Virginia than in the U.S. West Virginia ranked the highest among 53 BRFSS participants. |
| Gender | Men: $12.2 \%$ (95\% CI: 10.7-13.6) |
|  | Women: $14.5 \%$ (95\% CI: 13.1-15.8) |
|  | There was no gender difference in the prevalence of COPD. |
| Race/Ethnicity | White, Non-Hispanic: 13.8\% (95\% CI: 12.7-14.8) |
|  | Black, Non-Hispanic: $7.9 \%$ (95\% CI: 3.3-12.5) |
|  | Other, Non-Hispanic: *6.8\% (95\% CI: 0.5-13.0) |
|  | Multiracial, Non-Hispanic: *10.9\% (95\% CI: 3.0-18.7) |
|  | Hispanic: *5.1\% (95\% CI: 0.0-13.0) |
|  | The prevalence of COPD was significantly higher among White, Non-Hispanic adults than among Black, Non-Hispanic adults. |
|  | * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6. |
| Age | The highest prevalence of COPD was among those aged 65 and older (20.8\%), significantly higher than the prevalence among those aged 54 and younger. |
| Education | Those with less than a high school education had the highest prevalence of COPD (27.6\%), significantly higher than all other educational attainment levels. |
| Household Income | The prevalence of COPD was highest among those with an income of less than $\$ 15,000$ per year ( $26.3 \%$ ) and lowest among those with an income of $\$ 75,000$ or more per year (4.3\%), a significant difference. |

## CHAPTER 19: RESPIRATORY DISEASES

Table 19.3 Chronic Obstructive Pulmonary Disease (COPD) Prevalence by Demographic Characteristics: WVBRFSS, 2015

| Characteristic | Men |  |  | Women |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted <br> Frequency | \% | 95\% CI | Weighted <br> Frequency | \% | 95\% CI | Weighted <br> Frequency | \% | 95\% CI |
| TOTAL | 87,089 | 12.2 | 10.7-13.6 | 108,379 | 14.5 | 13.1-15.8 | 195,468 | 13.3 | 12.4-14.3 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-24 | 4,592 | *5.2 | 1.3-9.1 | 2,289 | *2.7 | 0.5-5.0 | 6,880 | 4.0 | 1.7-6.3 |
| 25-34 | 7,076 | 6.5 | 2.9-10.1 | 3,317 | *3.2 | 1.0-5.3 | 10,394 | 4.8 | 2.7-7.0 |
| 35-44 | 8,536 | 7.6 | 4.3-10.9 | 12,096 | 10.9 | 7.4-14.4 | 20,632 | 9.2 | 6.8-11.6 |
| 45-54 | 10,443 | 8.7 | 5.6-11.8 | 24,036 | 19.9 | 15.9-23.8 | 34,478 | 14.3 | 11.8-16.8 |
| 55-64 | 24,430 | 18.8 | 15.1-22.5 | 26,380 | 19.7 | 16.4-23.0 | 50,810 | 19.3 | 16.8-21.7 |
| 65+ | 31,773 | 20.9 | 17.6-24.2 | 38,765 | 20.8 | 17.9-23.7 | 70,538 | 20.8 | 18.6-23.0 |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 27,685 | 24.5 | 19.2-29.8 | 35,920 | 30.5 | 25.5-35.6 | 63,605 | 27.6 | 23.9-31.2 |
| H.S. or G.E.D. | 36,252 | 12.0 | 9.8-14.1 | 46,012 | 16.3 | 14.0-18.5 | 82,264 | 14.0 | 12.5-15.6 |
| Some Post-H.S. | 17,027 | 9.3 | 6.8-11.7 | 20,042 | 9.6 | 7.5-11.7 | 37,069 | 9.4 | 7.8-11.0 |
| College Graduate | 5,603 | 4.9 | 3.3-6.5 | 6,321 | 4.6 | 3.1-6.1 | 11,924 | 4.8 | 3.7-5.8 |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 17,534 | 24.7 | 18.6-30.9 | 24,720 | 27.5 | 22.5-32.5 | 42,254 | 26.3 | 22.4-30.2 |
| \$15,000-24,999 | 18,656 | 18.4 | 13.8-23.0 | 24,888 | 21.2 | 17.2-25.2 | 43,544 | 19.9 | 16.9-22.9 |
| \$25,000-34,999 | 12,852 | 17.1 | 11.9-22.4 | 8,530 | 12.9 | 8.4-17.3 | 21,382 | 15.1 | 11.6-18.6 |
| \$35,000-49,999 | 8,100 | 8.5 | 5.5-11.6 | 12,050 | 12.8 | 9.3-16.4 | 20,150 | 10.7 | 8.3-13.0 |
| \$50,000-74,999 | 5,129 | 5.7 | 2.7-8.6 | 4,436 | 5.7 | 3.1-8.2 | 9,566 | 5.7 | 3.7-7.6 |
| \$75,000+ | 6,783 | 4.9 | 3.1-6.8 | 3,939 | 3.4 | 1.7-5.1 | 10,722 | 4.3 | 3.0-5.5 |

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



## CHAPTER 19: RESPIRATORY DISEASES

Figure 19.4 Prevalence of Chronic Obstructive Pulmonary Disease (COPD) by County: WVBRFSS, 2011-2015

WV Prevalence (2011-2015) - 11.3\%


## Arthritis Prevalence

| Definition | Responding "Yes" to the question, "Has a doctor, nurse, or other health professional ever told you that you have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia?" |
| :---: | :---: |
| Prevalence | WV: 38.0\% (95\% Cl: 36.6-39.4) |
|  | U.S.: 24.7\% (95\% CI: 24.5-24.9) |
|  | The prevalence of arthritis was significantly higher in West Virginia than in the |
|  | U.S. West Virginia ranked the highest among 53 BRFSS participants. |
| Gender | Men: 36.3\% (95\% CI: 34.2-38.4) |
|  | Women: 39.6\% (95\% CI: 37.7-41.5) |
|  | There was no gender difference in the prevalence of arthritis. |
| Race/Ethnicity | White, Non-Hispanic: $38.5 \%$ (95\% CI: $37.0-39.9$ ) |
|  | Black, Non-Hispanic: 34.5\% (95\% Cl: 26.6-42.4) |
|  | Other, Non-Hispanic: *30.2\% (95\% CI: 16.3-44.1) |
|  | Multiracial, Non-Hispanic: *38.5\% (95\% Cl: 25.6-51.4) |
|  | Hispanic: *26.3\% (95\% CI: 12.0-40.5) |
|  | There was no race/ethnicity difference in the prevalence of arthritis. <br> * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6 . |

Age The prevalence of arthritis significantly increased with age. The prevalence of arthritis was significantly higher among those aged 55 and older than among those younger than 55 .

The prevalence of arthritis was highest among those with less than a high school education (54.9\%) and was significantly higher than all other educational attainment groups. The arthritis prevalence was lowest among those with a college degree ( $26.7 \%$ ) and was significantly lower than all other education groups.

Household Income
The prevalence of arthritis was significantly higher among those with an annual household income of less than $\$ 15,000$ (55.3\%) than among those earning $\$ 25,000$ or more per year. The arthritis prevalence was significantly lower among than those earning $\$ 75,000$ or more per year (24.2\%) than among all other income brackets.

## CHAPTER 20: ARTHRITIS

Table 20.1 Prevalence of Arthritis by Demographic Characteristics: WVBRFSS, 2015

| Characteristic | Men |  |  | Women |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted Frequency | \% | 95\% Cl | Weighted Frequency | \% | 95\% Cl | Weighted Frequency | \% | 95\% CI |
| TOTAL | 260,604 | 36.3 | 34.2-38.4 | 296,186 | 39.6 | 37.7-41.5 | 556,790 | 38.0 | 36.6-39.4 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-24 | 4,272 | *4.8 | 1.5-8.1 | 1,533 | 1.8 | 0.2-3.5 | 5,805 | 3.4 | 1.5-5.3 |
| 25-34 | 13,187 | 12.1 | 7.8-16.4 | 15,757 | 15.0 | 10.6-19.5 | 28,944 | 13.5 | 10.4-16.6 |
| 35-44 | 32,324 | 28.7 | 23.5-34.0 | 31,205 | 28.1 | 22.9-33.4 | 63,530 | 28.4 | 24.7-32.1 |
| 45-54 | 48,701 | 40.4 | 35.1-45.6 | 54,396 | 45.1 | 40.3-49.8 | 103,098 | 42.7 | 39.2-46.3 |
| 55-64 | 76,468 | 58.5 | 54.2-62.8 | 71,129 | 53.2 | 49.1-57.2 | 147,597 | 55.8 | 52.8-58.8 |
| 65+ | 83,983 | 55.1 | 51.1-59.1 | 118,574 | 63.7 | 60.4-67.0 | 202,557 | 59.8 | 57.3-62.4 |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 64,262 | 56.3 | 50.1-62.6 | 62,888 | 53.6 | 47.7-59.5 | 127,150 | 54.9 | 50.6-59.3 |
| H.S. or G.E.D. | 107,600 | 35.4 | 32.2-38.6 | 125,540 | 44.6 | 41.4-47.8 | 233,140 | 39.8 | 37.5-42.1 |
| Some Post-H.S. | 57,256 | 31.2 | 27.3-35.1 | 70,090 | 33.4 | 29.9-36.9 | 127,346 | 32.4 | 29.8-35.0 |
| College Graduate | 30,568 | 27.0 | 23.4-30.5 | 36,351 | 26.5 | 23.4-29.7 | 66,919 | 26.7 | 24.4-29.1 |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 38,334 | 53.6 | 46.5-60.8 | 50,676 | 56.6 | 50.7-62.4 | 89,010 | 55.3 | 50.7-59.8 |
| \$15,000-24,999 | 46,140 | 45.4 | 39.7-51.2 | 58,333 | 49.6 | 44.4-54.7 | 104,473 | 47.6 | 43.8-51.5 |
| \$25,000-34,999 | 33,879 | 45.4 | 38.4-52.5 | 27,498 | 41.6 | 35.0-48.1 | 61,376 | 43.6 | 38.8-48.5 |
| \$35,000-49,999 | 32,401 | 34.4 | 28.9-39.8 | 34,407 | 36.7 | 31.2-42.2 | 66,808 | 35.5 | 31.6-39.4 |
| \$50,000-74,999 | 31,613 | 35.0 | 29.4-40.6 | 21,760 | 27.9 | 22.7-33.0 | 53,373 | 31.7 | 27.9-35.6 |
| \$75,000+ | 34,438 | 25.2 | 21.1-29.2 | 26,427 | 23.1 | 19.1-27.2 | 60,865 | 24.2 | 21.3-27.1 |

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


[^22]
## CHAPTER 20: ARTHRITIS

Figure 20.2 Arthritis Prevalence by County: WVBRFSS, 2011-2015

WV Prevalence (2011-2015) - 37.3\%


## Activity Limitations

| Definition | Reported having been told they have arthritis and responding "Yes" to the question, "Are you now limited in any way in any of your usual activities because of arthritis or joint symptoms?" |
| :---: | :---: |
| Prevalence | WV: 57.3\% (95\% CI: 55.0-59.6) |
|  | U.S.: 50.1\% (95\% CI: 49.6-50.7) |
|  | The West Virginia prevalence of activity limitations due to arthritis was significantly higher than the national prevalence. West Virginia ranked the highest among 53 BRFSS participants. |
| Gender | Men: 55.8\% (95\% CI: 52.3-59.3) |
|  | Women: $58.6 \%$ (95\% CI: 55.6-61.7) |
|  | There was no gender difference in the prevalence of activity limitations due to arthritis. |
| Race/Ethnicity | No race/ethnicity statistics are reported due to unreliable estimates. |
| Age | There was no consistent age difference in the prevalence of activity limitations due to arthritis. |
| Education | The prevalence of activity limitations due to arthritis was significantly higher among those with less than a high school education (65.2\%) and those with some post high school education ( $53.4 \%$ ) than among college graduates (51.6\%). |
| Household Income | The prevalence of activity limitations due to arthritis became steadily lower as household income increased. The prevalence of activity limitations due to arthritis was $40.8 \%$ for those earning $\$ 75,000$ or more per year and $74.3 \%$ for those earning less than $\$ 15,000$ per year. The prevalence of activity limitations due to arthritis was significantly higher among those earning less than $\$ 25,000$ than among those earning more than $\$ 35,000$. |

## CHAPTER 20: ARTHRITIS

Table 20.2 Prevalence of Activity Limitations Due to Arthritis by Demographic Characteristics: WVBRFSS, 2015

| Characteristic | Men |  |  | Women |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted Frequency | \% | 95\% CI | Weighted Frequency | \% | 95\% CI | Weighted Frequency | \% | 95\% CI |
| TOTAL | 137,129 | 55.8 | 52.3-59.3 | 165,437 | 58.6 | 55.6-61.7 | 302,566 | 57.3 | 55.0-59.6 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-24 | 1,237 | *32.4 | 0.0-69.4 | 460 | *30.0 | 0.0-67.9 | 1,698 | *31.7 | 3.2-60.3 |
| 25-34 | 7,297 | *63.3 | 44.6-82.1 | 7,000 | *50.6 | 33.6-67.6 | 14,297 | *56.4 | 43.5-69.3 |
| 35-44 | 18,626 | *61.5 | 50.6-72.4 | 16,790 | *56.8 | 45.2-68.5 | 35,416 | 59.2 | 51.2-67.2 |
| 45-54 | 25,742 | 56.0 | 47.3-64.7 | 36,800 | 71.4 | 64.6-78.1 | 62,542 | 64.1 | 58.7-69.6 |
| 55-64 | 40,912 | 56.4 | 50.4-62.5 | 44,169 | 65.1 | 59.5-70.6 | 85,081 | 60.6 | 56.5-64.7 |
| 65+ | 41,964 | 52.4 | 46.8-58.0 | 59,139 | 51.3 | 46.9-55.7 | 101,104 | 51.8 | 48.3-55.2 |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 37,353 | 63.4 | 55.3-71.4 | 39,711 | 67.1 | 59.9-74.2 | 77,064 | 65.2 | 59.9-70.6 |
| H.S. or G.E.D. | 59,241 | 57.8 | 52.5-63.1 | 66,180 | 56.0 | 51.3-60.6 | 125,422 | 56.8 | 53.3-60.3 |
| Some Post-H.S. | 26,516 | 48.6 | 41.4-55.8 | 38,880 | 57.2 | 51.0-63.4 | 65,396 | 53.4 | 48.7-58.1 |
| College Graduate | 13,746 | 46.6 | 39.0-54.2 | 20,013 | 55.7 | 48.9-62.6 | 33,759 | 51.6 | 46.5-56.7 |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 27,822 | 75.8 | 67.9-83.7 | 35,903 | 73.2 | 66.7-79.6 | 63,724 | 74.3 | 69.3-79.3 |
| \$15,000-24,999 | 26,600 | 60.4 | 52.5-68.3 | 36,182 | 65.7 | 59.1-72.2 | 62,783 | 63.3 | 58.3-68.4 |
| \$25,000-34,999 | 18,193 | 55.5 | 45.2-65.8 | 14,234 | 53.6 | 43.9-63.3 | 32,428 | 54.7 | 47.5-61.8 |
| \$35,000-49,999 | 14,751 | 48.0 | 38.6-57.3 | 15,877 | 48.6 | 39.0-58.1 | 30,628 | 48.3 | 41.6-55.0 |
| \$50,000-74,999 | 12,889 | 41.3 | 32.1-50.5 | 8,796 | *41.5 | 31.3-51.7 | 21,686 | 41.4 | 34.5-48.3 |
| \$75,000+ | 11,364 | 35.5 | 26.4-44.7 | 12,030 | 47.6 | 37.6-57.6 | 23,395 | 40.8 | 34.1-47.6 |

[^23]
## CHAPTER 20: ARTHRITIS

|  | Work Limitations |
| :---: | :---: |
| Definition | Reported having been told they have arthritis and responding "Yes" to the question, "Do arthritis or joint symptoms now affect whether you work, the type of work you do, or the amount of work you do?" |
| Prevalence | WV: 45.6\% (95\% CI: 43.3-48.0) |
|  | U.S.: 35.5\% (95\% Cl: 35.0-36.0) |
|  | The West Virginia prevalence of work limitations due to arthritis was significantly higher than the national prevalence. West Virginia ranked the $4^{\text {th }}$ highest among 53 BRFSS participants. |
| Gender | Men: 45.3\% (95\% CI: 41.7-48.8) |
|  | Women: 46.0\% (95\% CI: 42.9-49.0) |
|  | There was no gender difference in the prevalence of work limitations due to arthritis. |
| Race/Ethnicity | No race/ethnicity statistics are reported due to unreliable estimates. |
| Age | There was no consistent age difference in the prevalence of work limitations due to arthritis. |
| Education | The prevalence of work limitations due to arthritis was significantly higher among those with less than a high school education (55.2\%) than among those with a high school education (44.2\%) or college graduates (33.8\%). Additionally, the prevalence of work limitations due to arthritis was significantly lower among college graduates than among all other educational attainment levels. |
| Household Income | The prevalence of work limitations due to arthritis became steadily lower as household income increased. The prevalence of work limitations due to arthritis was significantly higher among those earning less than $\$ 15,000$ per year (65.9\%) than among all other income brackets. |

## CHAPTER 20: ARTHRITIS

Table 20.3 Prevalence of Work Limitations Due to Arthritis by Demographic Characteristics: WVBRFSS, 2015

| Characteristic | Men |  |  | Women |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted Frequency | \% | 95\% CI | Weighted Frequency | \% | 95\% CI | Weighted <br> Frequency | \% | 95\% Cl |
| TOTAL | 109,990 | 45.3 | 41.7-48.8 | 128,435 | 46.0 | 42.9-49.0 | 238,425 | 45.6 | 43.3-48.0 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-24 | 1,880 | *49.3 | 11.7-86.9 | 460 | *30.0 | 0.0-67.9 | 2,341 | *43.8 | 13.7-73.8 |
| 25-34 | 5,232 | *44.2 | 24.6-63.9 | 8,063 | *58.3 | 41.8-74.7 | 13,295 | *51.8 | 38.9-64.7 |
| 35-44 | 15,030 | *51.4 | 40.0-62.8 | 14,090 | *47.5 | 36.1-58.9 | 29,121 | 49.4 | 41.4-57.5 |
| 45-54 | 22,252 | 48.9 | 40.0-57.9 | 31,605 | 62.4 | 55.3-69.4 | 53,857 | 56.0 | 50.3-61.7 |
| 55-64 | 35,249 | 49.3 | 43.1-55.6 | 36,483 | 54.6 | 48.8-60.4 | 71,732 | 51.9 | 47.6-56.2 |
| 65+ | 28,856 | 36.3 | 31.0-41.6 | 36,906 | 32.3 | 28.2-36.4 | 65,762 | 33.9 | 30.7-37.2 |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 30,976 | 52.9 | 44.5-61.4 | 33,445 | 57.6 | 50.0-65.1 | 64,421 | 55.2 | 49.6-60.9 |
| H.S. or G.E.D. | 46,707 | 46.1 | 40.7-51.6 | 49,923 | 42.6 | 38.0-47.2 | 96,630 | 44.2 | 40.7-47.8 |
| Some Post-H.S. | 22,854 | 42.7 | 35.6-49.8 | 31,822 | 47.2 | 41.0-53.4 | 54,676 | 45.2 | 40.5-49.9 |
| College Graduate | 9,181 | 31.2 | 23.9-38.5 | 12,929 | 36.0 | 29.3-42.7 | 22,110 | 33.8 | 28.9-38.8 |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 24,113 | 66.2 | 57.1-75.4 | 31,298 | 65.7 | 58.7-72.6 | 55,411 | 65.9 | 60.3-71.5 |
| \$15,000-24,999 | 22,891 | 53.6 | 45.3-62.0 | 30,005 | 54.9 | 48.1-61.8 | 52,895 | 54.4 | 49.1-59.7 |
| \$25,000-34,999 | 16,029 | 49.2 | 38.8-59.5 | 13,710 | 52.1 | 42.4-61.8 | 29,739 | 50.5 | 43.3-57.7 |
| \$35,000-49,999 | 13,623 | 44.3 | 35.0-53.6 | 10,937 | 33.4 | 24.5-42.4 | 24,561 | 38.7 | 32.2-45.2 |
| \$50,000-74,999 | 8,524 | 27.3 | 19.3-35.3 | 6,469 | *30.9 | 20.8-41.0 | 14,993 | 28.8 | 22.5-35.1 |
| \$75,000+ | 7,344 | 23.6 | 14.8-32.5 | 7,242 | *28.8 | 19.9-37.8 | 14,586 | 25.9 | 19.6-32.2 |

[^24]
## Social Activity Limitations

| Definition | Reported having been told they have arthritis and responding "A Lot" to the question, "During the past 30 days, to what extent has your arthritis or joint symptoms interfered with our normal social activities, such as going shopping, to the movies, or to religious or social gatherings?" |
| :---: | :---: |
| Prevalence | WV: 26.7\% (95\% CI: 24.6-28.8) |
|  | U.S.: 20.2\% (95\% CI: 19.7-20.6) |
|  | The West Virginia prevalence of social activity limitations due to arthritis was significantly higher than the U.S. prevalence. West Virginia ranked the $7^{\text {th }}$ highest among 53 BRFSS participants. |
| Gender | Men: $25.6 \%$ (95\% CI: 22.3-28.8) |
|  | Women: 27.7\% (95\% CI: 24.9-30.5) |
|  | There was no gender difference in the prevalence of social activity limitations due to arthritis. |
| Race/Ethnicity | No race/ethnicity statistics are reported due to unreliable estimates. |
| Age | There was no consistent age difference in the prevalence of social activity limitations due to arthritis. |
| Education | The prevalence of social activity limitations due to arthritis was significantly higher among those with less than a high school education (39.6\%) than among all other educational attainment levels. Additionally, prevalence of social activity limitations due to arthritis was significantly lower among college graduates ( $13.2 \%$ ) than among all other educational attainment levels. |
| Household Income | The prevalence of social activity limitations due to arthritis was significantly higher among those with an annual household income of less than $\$ 15,000$ ( $46.2 \%$ ) than all other income brackets. The prevalence of social activity limitations due to arthritis was significantly lower among those earning \$75,000 or more per year (9.1\%) than among those earning less than $\$ 50,000$ a year. |

## CHAPTER 20: ARTHRITIS

Table 20.4 Prevalence of Social Activity Limitations Due to Arthritis by Demographic Characteristics: WVBRFSS, 2015

| Characteristic | Men |  |  | Women |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted Frequency | \% | 95\% CI | Weighted <br> Frequency | \% | 95\% Cl | Weighted Frequency | \% | 95\% CI |
| TOTAL | 62,079 | 25.6 | 22.3-28.8 | 77,648 | 27.7 | 24.9-30.5 | 139,727 | 26.7 | 24.6-28.8 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-24 | 0 | *0.0 | 0.0-0.0 | 0 | *0.0 | 0.0-0.0 | 0 | *0.0 | 0.0-0.0 |
| 25-34 | 2,373 | *19.5 | 3.1-35.9 | 4,670 | *33.8 | 17.7-49.9 | 7,043 | *27.1 | 15.5-38.7 |
| 35-44 | 8,075 | *27.0 | 16.8-37.2 | 8,223 | 27.7 | 17.9-37.5 | 16,298 | 27.4 | 20.3-34.4 |
| 45-54 | 12,342 | 26.8 | 18.6-35.0 | 19,628 | 38.1 | 30.9-45.2 | 31,970 | 32.7 | 27.3-38.2 |
| 55-64 | 22,428 | 31.6 | 25.5-37.8 | 19,307 | 29.0 | 23.6-34.5 | 41,735 | 30.4 | 26.2-34.5 |
| 65+ | 16,175 | 20.6 | 16.1-25.2 | 24,887 | 21.7 | 18.0-25.4 | 41,062 | 21.3 | 18.4-24.1 |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 23,614 | 40.3 | 32.0-48.7 | 22,997 | 38.9 | 31.6-46.2 | 46,610 | 39.6 | 34.1-45.1 |
| H.S. or G.E.D. | 24,848 | 24.8 | 20.0-29.5 | 29,823 | 25.5 | 21.5-29.5 | 54,670 | 25.2 | 22.1-28.3 |
| Some Post-H.S. | 9,836 | 18.1 | 12.6-23.7 | 19,402 | 28.7 | 23.0-34.4 | 29,239 | 24.0 | 19.9-28.0 |
| College Graduate | 3,782 | 12.8 | 7.6-18.0 | 4,856 | 13.5 | 8.8-18.2 | 8,638 | 13.2 | 9.7-16.7 |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 17,932 | 48.8 | 39.0-58.7 | 21,507 | 44.3 | 37.1-51.5 | 39,439 | 46.2 | 40.3-52.2 |
| \$15,000-24,999 | 13,475 | 31.4 | 23.3-39.5 | 19,007 | 34.9 | 28.3-41.4 | 32,482 | 33.3 | 28.2-38.5 |
| \$25,000-34,999 | 8,675 | 26.8 | 17.5-36.2 | 6,336 | 23.9 | 15.1-32.7 | 15,011 | 25.5 | 19.0-32.0 |
| \$35,000-49,999 | 5,676 | 18.5 | 11.5-25.4 | 6,555 | 20.1 | 11.8-28.4 | 12,230 | 19.3 | 13.9-24.8 |
| \$50,000-74,999 | 2,625 | 8.4 | 3.7-13.1 | 2,987 | 14.1 | 6.8-21.4 | 5,612 | 10.7 | 6.6-14.8 |
| \$75,000+ | 1,765 | 5.6 | 1.7-9.6 | 3,380 | 13.4 | 6.7-20.1 | 5,145 | 9.1 | 5.3-12.9 |

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


## Kidney Disease Prevalence

| Definition | Responding "Yes" to the question, "Has a doctor, nurse, or other health professional ever told you that you have kidney disease?" |
| :---: | :---: |
| Prevalence | WV: 3.6\% (95\% CI: 3.1-4.2) |
|  | U.S.: 2.7\% (95\% CI: 2.6-2.8) |
|  | The prevalence of kidney disease was significantly higher in West Virginia than in the U.S. West Virginia ranked the $3^{\text {rd }}$ highest among 53 BRFSS participants. |
| Gender | Men: 3.6\% (95\% CI: 2.9-4.4) |
|  | Women: 3.6\% (95\% Cl: 2.9-4.4) |
|  | There was no gender difference in the prevalence of kidney disease. |
| Race/Ethnicity | No race/ethnicity statistics are reported due to unreliable estimates. |
| Age | The prevalence of kidney disease was significantly higher among those aged 65 and older ( $7.3 \%$ ) than among all other age groups. |
| Education | The prevalence of kidney disease was highest among those with less than a high school education (7.1\%) and was significantly higher than all other educational attainment groups. |
| Household Income | The prevalence of kidney disease was significantly higher among those with an annual household income of less than $\$ 15,000(8.2 \%)$ than among those earning $\$ 25,000$ or more per year. The kidney disease prevalence was significantly lower among than those earning $\$ 75,000$ or more per year ( $1.5 \%$ ) than among those earning $\$ 25,000$ or less. |

## CHAPTER 21: KIDNEY DISEASE

Table 21.1 Prevalence of Kidney Disease by Demographic Characteristics: WVBRFSS, 2015

| Characteristic | Men |  |  | Women |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted <br> Frequency | \% | 95\% CI | Weighted <br> Frequency | \% | 95\% CI | Weighted <br> Frequency | \% | 95\% CI |
| TOTAL | 26,081 | 3.6 | 2.9-4.4 | 27,340 | 3.6 | 2.9-4.4 | 53,421 | 3.6 | 3.1-4.2 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-24 | 396 | *0.4 | 0.0-1.3 | 0 | *0.0 | 0.0-0.0 | 396 | *0.2 | 0.0-0.7 |
| 25-34 | 242 | *0.2 | 0.0-0.7 | 2,068 | *2.0 | 0.5-3.5 | 2,310 | *1.1 | 0.3-1.8 |
| 35-44 | 1,962 | *1.7 | 0.4-3.1 | 3,805 | *3.4 | 1.4-5.5 | 5,768 | 2.6 | 1.3-3.8 |
| 45-54 | 3,948 | 3.3 | 1.5-5.0 | 5,589 | 4.6 | 2.6-6.7 | 9,537 | 4.0 | 2.6-5.3 |
| 55-64 | 6,077 | 4.6 | 2.5-6.8 | 4,504 | 3.4 | 2.0-4.7 | 10,582 | 4.0 | 2.7-5.3 |
| 65+ | 13,455 | 8.9 | 6.4-11.3 | 11,374 | 6.1 | 4.3-7.8 | 24,828 | 7.3 | 5.9-8.8 |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 8,796 | 7.7 | 4.5-11.0 | 7,583 | 6.5 | 3.8-9.1 | 16,379 | 7.1 | 5.0-9.2 |
| H.S. or G.E.D. | 10,537 | 3.5 | 2.4-4.5 | 9,345 | 3.3 | 2.3-4.3 | 19,882 | 3.4 | 2.7-4.1 |
| Some Post-H.S. | 4,181 | 2.3 | 1.0-3.5 | 7,182 | 3.4 | 2.1-4.8 | 11,363 | 2.9 | 2.0-3.8 |
| College Graduate | 2,566 | 2.3 | 1.2-3.3 | 3,230 | 2.4 | 1.3-3.4 | 5,797 | 2.3 | 1.5-3.1 |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 7,557 | 10.6 | 6.2-15.0 | 5,615 | 6.2 | 3.6-8.9 | 13,172 | 8.2 | 5.7-10.6 |
| \$15,000-24,999 | 5,654 | 5.6 | 3.2-8.0 | 5,461 | 4.7 | 2.7-6.6 | 11,116 | 5.1 | 3.6-6.6 |
| \$25,000-34,999 | 1,919 | *2.6 | 0.7-4.5 | 1,646 | *2.5 | 0.7-4.2 | 3,565 | 2.5 | 1.2-3.8 |
| \$35,000-49,999 | 2,369 | *2.5 | 1.0-4.0 | 1,140 | *1.2 | 0.1-2.3 | 3,509 | 1.9 | 0.9-2.8 |
| \$50,000-74,999 | 963 | *1.1 | 0.1-2.0 | 1,640 | *2.1 | 0.6-3.6 | 2,603 | 1.5 | 0.7-2.4 |
| \$75,000+ | 2,698 | 2.0 | 0.8-3.1 | 2,664 | *2.3 | 0.8-3.8 | 5,361 | 2.1 | 1.2-3.0 |

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



## CHAPTER 22: COMORBIDITIES

## Comorbid Health Conditions and Risk Factors

Many behavioral risk factors and health conditions are interrelated. For example, physical activity and nutrition are related to obesity, which is related to cardiovascular disease. Comorbidity is the presence of more than one health condition or risk factor in an individual at the same time. Identifying common comorbid factors is important to understanding how to prevent and reduce serious health conditions and chronic diseases. The purpose of this chapter is to introduce some of the common comorbidities among West Virginia adults in 2015 (see Figure 22.1 and Table 22.1). For definitions of risk factors and health conditions, please refer to appropriate chapter in this report.

Figure 22.1 Comorbidities: The Prevalence of Multiple Risk Behaviors and/or Health Conditions Among Adults: WVBRFSS, 2015


Percentage of Adults with Both Conditions/Risk Factors

| CHAPTER 22: COMORBIDIIES |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Table 22.1 Comorbidities: The Prevalence of Multiple Risk Behaviors and/or Health Conditions Among Adults: WVBRFSS, 2015 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| \% of Total Population | Fair/Poor Health | No <br> Health Coverage | No Exercise | Obese | Current <br> Smoker | CVD | Diabetes | Current <br> Asthma | Disabled | Cancer | Arthritis | Hypertension | Depression |
| Fair/Poor Health | $\begin{gathered} 25.9 \\ (24.6-27.2) \end{gathered}$ | $\begin{gathered} 1.6 \\ (1.2-2.0) \end{gathered}$ | $\begin{gathered} 12.5 \\ (11.5-13.5) \end{gathered}$ | $\begin{gathered} 11.8 \\ (10.8-12.8) \end{gathered}$ | $\begin{gathered} 8.7 \\ (7.8-9.6) \end{gathered}$ | $\begin{gathered} 8.4 \\ (7.6-9.2) \end{gathered}$ | $\begin{gathered} 7.6 \\ (6.9-8.4) \end{gathered}$ | $\begin{gathered} 5.7 \\ (5.0-6.3) \end{gathered}$ | $\begin{gathered} 16.9 \\ (15.8-18.0) \end{gathered}$ | $\begin{gathered} 6.0 \\ (5.3-6.6) \end{gathered}$ | $\begin{gathered} 17.1 \\ (16.0-18.2) \end{gathered}$ | $\begin{gathered} 16.8 \\ (15.8-17.9) \end{gathered}$ | $\begin{gathered} 11.2 \\ (10.3-12.1) \end{gathered}$ |
| No Health Coverage | $\begin{gathered} 1.6 \\ (1.2-2.0) \end{gathered}$ | $\begin{gathered} 7.6 \\ (6.7-8.4) \end{gathered}$ | $\begin{gathered} 2.0 \\ (1.6-2.4) \end{gathered}$ | $\begin{gathered} 2.5 \\ (2.0-3.0) \\ \hline \end{gathered}$ | $\begin{gathered} 3.2 \\ (2.6-3.8) \end{gathered}$ | $\begin{gathered} 0.5 \\ (0.3-0.8) \\ \hline \end{gathered}$ | $\begin{gathered} 0.4 \\ (0.2-0.6) \end{gathered}$ | $\begin{gathered} 0.8 \\ (0.6-1.1) \end{gathered}$ | $\begin{gathered} 1.3 \\ (1.0-1.7) \end{gathered}$ | $\begin{gathered} 0.4 \\ (0.3-0.6) \end{gathered}$ | $\begin{gathered} 1.7 \\ (1.4-2.1) \end{gathered}$ | $\begin{gathered} 2.0 \\ (1.6-2.5) \end{gathered}$ | $\begin{gathered} 1.6 \\ (1.2-2.1) \end{gathered}$ |
| No Exercise | $\begin{gathered} 12.5 \\ (11.5-13.5) \end{gathered}$ | $\begin{gathered} 2.0 \\ (1.6-2.4) \end{gathered}$ | $\begin{gathered} 30.8 \\ (29.4-32.2) \end{gathered}$ | $\begin{gathered} 12.9 \\ (11.8-14.0) \end{gathered}$ | $\begin{gathered} 9.9 \\ (8.9-10.9) \end{gathered}$ | $\begin{gathered} 5.5 \\ (4.8-6.1) \end{gathered}$ | $\begin{gathered} 6.1 \\ (5.4-6.8) \end{gathered}$ | $\begin{gathered} 4.5 \\ (3.9-5.1) \end{gathered}$ | $\begin{gathered} 12.9 \\ (11.9-13.9) \end{gathered}$ | $\begin{gathered} 5.0 \\ (4.4-5.6) \end{gathered}$ | $\begin{gathered} 14.5 \\ (13.5-15.5) \end{gathered}$ | $\begin{gathered} 16.0 \\ (14.9-17.1) \end{gathered}$ | $\begin{gathered} 9.4 \\ (8.5-10.3) \end{gathered}$ |
| Obese | $\begin{gathered} 11.8 \\ (10.8-12.8) \end{gathered}$ | $\begin{gathered} 2.5 \\ (2.0-3.0) \end{gathered}$ | $\begin{gathered} 12.9 \\ (11.8-14.0) \end{gathered}$ | $\begin{gathered} 35.6 \\ (34.1-37.1) \\ \hline \end{gathered}$ | $\begin{gathered} 7.6 \\ (6.8-8.5) \end{gathered}$ | $\begin{gathered} 5.4 \\ (4.8-6.1) \end{gathered}$ | $\begin{gathered} 8.1 \\ (7.3-8.9) \end{gathered}$ | $\begin{gathered} 4.6 \\ (4.0-5.2) \end{gathered}$ | $\begin{gathered} 13.1 \\ (12.1-14.1) \end{gathered}$ | $\begin{gathered} 4.9 \\ (4.3-5.5) \end{gathered}$ | $\begin{gathered} 16.6 \\ (15.5-17.7) \\ \hline \end{gathered}$ | $\begin{gathered} 20.1 \\ (18.9-21.4) \end{gathered}$ | $\begin{gathered} 10.1 \\ (9.2-11.1) \\ \hline \end{gathered}$ |
| Current Smoking | $\begin{gathered} 8.7 \\ (7.8-9.6) \end{gathered}$ | $\begin{gathered} 3.2 \\ (2.6-3.8) \end{gathered}$ | $\begin{gathered} 9.9 \\ (8.9-10.9) \end{gathered}$ | $\begin{gathered} 7.6 \\ (6.8-8.5) \end{gathered}$ | $\begin{gathered} 25.7 \\ (24.3-27.1) \end{gathered}$ | $\begin{gathered} 3.5 \\ (3.0-4.1) \\ \hline \end{gathered}$ | $\begin{gathered} 3.3 \\ (2.8-3.9) \end{gathered}$ | $\begin{gathered} 3.4 \\ (2.9-4.0) \end{gathered}$ | $\begin{gathered} 9.2 \\ (8.3-10.1) \end{gathered}$ | $\begin{gathered} 2.4 \\ (2.0-2.9) \end{gathered}$ | $\begin{gathered} 9.9 \\ (9.0-10.8) \end{gathered}$ | $\begin{gathered} 10.0 \\ (9.1-10.9) \end{gathered}$ | $\begin{gathered} 9.0 \\ (8.1-9.9) \end{gathered}$ |
| CVD | $\begin{gathered} 8.4 \\ (7.6-9.2) \end{gathered}$ | $\begin{gathered} \hline \mathbf{0 . 5} \\ (0.3-0.8) \end{gathered}$ | $\begin{gathered} \hline 5.5 \\ (4.8-6.1) \end{gathered}$ | $\begin{gathered} 5.4 \\ (4.8-6.1) \end{gathered}$ | $\begin{gathered} \hline 3.5 \\ (3.0-4.1) \end{gathered}$ | $\begin{gathered} \hline 14.0 \\ (13.0-14.9) \end{gathered}$ | $\begin{gathered} \hline 4.7 \\ (4.1-5.3) \end{gathered}$ | $\begin{gathered} \hline 2.7 \\ (2.2-3.2) \end{gathered}$ | $\begin{gathered} \hline 8.2 \\ (7.4-9.0) \end{gathered}$ | $\begin{gathered} \hline 3.9 \\ (3.4-4.4) \end{gathered}$ | $\begin{gathered} \hline 8.9 \\ (8.1-9.7) \end{gathered}$ | $\begin{gathered} 10.6 \\ (9.7-11.5) \end{gathered}$ | $\begin{gathered} 4.6 \\ (4.0-5.2) \end{gathered}$ |
| Diabetes | $\begin{gathered} 7.6 \\ (6.9-8.4) \\ \hline \end{gathered}$ | $\begin{gathered} 0.4 \\ (0.2-0.6) \end{gathered}$ | $\begin{gathered} 6.1 \\ (5.4-6.8) \end{gathered}$ | $\begin{gathered} 8.1 \\ (7.3-8.9) \\ \hline \end{gathered}$ | $\begin{gathered} 3.3 \\ (2.8-3.9) \end{gathered}$ | $\begin{gathered} 4.7 \\ (4.1-5.3) \end{gathered}$ | $\begin{gathered} 14.5 \\ (13.5-15.4) \end{gathered}$ | $\begin{gathered} 2.7 \\ (2.2-3.2) \end{gathered}$ | $\begin{gathered} 7.1 \\ (6.4-7.9) \end{gathered}$ | $\begin{gathered} 3.7 \\ (3.2-4.2) \end{gathered}$ | $\begin{gathered} 9.0 \\ (8.2-9.8) \\ \hline \end{gathered}$ | $\begin{gathered} 11.0 \\ (10.1-11.8) \end{gathered}$ | $\begin{gathered} 4.5 \\ (3.9-5.1) \end{gathered}$ |
| Current Asthma | $\begin{gathered} 5.7 \\ (5.0-6.3) \end{gathered}$ | $\begin{gathered} 0.8 \\ (0.6-1.1) \end{gathered}$ | $\begin{gathered} 4.5 \\ (3.9-5.1) \end{gathered}$ | $\begin{gathered} 4.6 \\ (4.0-5.2) \end{gathered}$ | $\begin{gathered} 3.4 \\ (2.9-4.0) \end{gathered}$ | $\begin{gathered} 2.7 \\ (2.2-3.2) \end{gathered}$ | $\begin{gathered} 2.7 \\ (2.2-3.2) \end{gathered}$ | $\begin{gathered} 10.8 \\ (9.9-11.8) \end{gathered}$ | $\begin{gathered} 5.6 \\ (4.9-6.3) \end{gathered}$ | $\begin{gathered} 2.6 \\ (2.2-3.1) \end{gathered}$ | $\begin{gathered} 6.0 \\ (5.3-6.7) \end{gathered}$ | $\begin{gathered} 5.6 \\ (5.0-6.3) \end{gathered}$ | $\begin{gathered} 4.5 \\ (3.9-5.2) \end{gathered}$ |
| Disabled | $\begin{gathered} 16.9 \\ (15.8-18.0) \end{gathered}$ | $\begin{gathered} 1.3 \\ (1.0-1.7) \\ \hline \end{gathered}$ | $\begin{gathered} 12.9 \\ (11.9-13.9) \end{gathered}$ | $\begin{gathered} 13.1 \\ (12.1-14.1) \end{gathered}$ | $\begin{gathered} 9.2 \\ (8.3-10.1) \end{gathered}$ | $\begin{gathered} 8.2 \\ (7.4-9.0) \\ \hline \end{gathered}$ | $\begin{gathered} 7.1 \\ (6.4-7.9) \\ \hline \end{gathered}$ | $\begin{gathered} 5.6 \\ (4.9-6.3) \end{gathered}$ | $\begin{gathered} 28.3 \\ (27.0-29.6) \\ \hline \end{gathered}$ | $\begin{gathered} 6.3 \\ (5.6-6.9) \end{gathered}$ | $\begin{gathered} 19.9 \\ (18.7-21.0) \\ \hline \end{gathered}$ | $\begin{gathered} 17.4 \\ (16.3-18.5) \\ \hline \end{gathered}$ | $\begin{gathered} 12.4 \\ (11.4-13.4) \end{gathered}$ |
| Cancer | $\begin{gathered} 6.0 \\ (5.3-6.6) \\ \hline \end{gathered}$ | $\begin{gathered} 0.4 \\ (0.3-0.6) \\ \hline \end{gathered}$ | $\begin{gathered} 5.0 \\ (4.4-5.6) \end{gathered}$ | $\begin{gathered} 4.9 \\ (4.3-5.5) \end{gathered}$ | $\begin{gathered} 2.4 \\ (2.0-2.9) \end{gathered}$ | $\begin{gathered} 3.9 \\ (3.4-4.4) \\ \hline \end{gathered}$ | $\begin{gathered} 3.7 \\ (3.2-4.2) \\ \hline \end{gathered}$ | $\begin{gathered} 2.6 \\ (2.2-3.1) \end{gathered}$ | $\begin{gathered} 6.3 \\ (5.6-6.9) \\ \hline \end{gathered}$ | $\begin{gathered} 14.1 \\ (13.2-15.1) \\ \hline \end{gathered}$ | $\begin{gathered} 8.5 \\ (7.8-9.3) \\ \hline \end{gathered}$ | $\begin{gathered} 8.5 \\ (7.8-9.3) \\ \hline \end{gathered}$ | $\begin{gathered} 4.2 \\ (3.7-4.8) \end{gathered}$ |
| Arthritis | $\begin{gathered} 17.1 \\ (16.0-18.2) \end{gathered}$ | $\begin{gathered} 1.7 \\ (1.4-2.1) \end{gathered}$ | $\begin{gathered} 14.5 \\ (13.5-15.5) \end{gathered}$ | $\begin{gathered} 16.6 \\ (15.5-17.7) \end{gathered}$ | $\begin{gathered} 9.9 \\ (9.0-10.8) \end{gathered}$ | $\begin{gathered} 8.9 \\ (8.1-9.7) \end{gathered}$ | $\begin{gathered} 9.0 \\ (8.2-9.8) \end{gathered}$ | $\begin{gathered} 6.0 \\ (5.3-6.7) \end{gathered}$ | $\begin{gathered} 19.9 \\ (18.7-21.0) \end{gathered}$ | $\begin{gathered} 8.5 \\ (7.8-9.3) \end{gathered}$ | $\begin{gathered} 38.0 \\ (36.6-39.4) \\ \hline \end{gathered}$ | $\begin{gathered} 23.6 \\ (22.4-24.8) \end{gathered}$ | $\begin{gathered} 12.8 \\ (11.8-13.8) \\ \hline \end{gathered}$ |
| Hypertension | $\begin{gathered} 16.8 \\ (15.8-17.9) \\ \hline \end{gathered}$ | $\begin{gathered} 2.0 \\ (1.6-2.5) \end{gathered}$ | $\begin{gathered} 16.0 \\ (14.9-17.1) \\ \hline \end{gathered}$ | $\begin{gathered} 20.1 \\ (18.9-21.4) \end{gathered}$ | $\begin{gathered} 10.0 \\ (9.1-10.9) \end{gathered}$ | $\begin{gathered} 10.6 \\ (9.7-11.5) \end{gathered}$ | $\begin{gathered} 11.0 \\ (10.1-11.8) \end{gathered}$ | $\begin{gathered} 5.6 \\ (5.0-6.3) \end{gathered}$ | $\begin{gathered} 17.4 \\ (16.3-18.5) \end{gathered}$ | $\begin{gathered} 8.5 \\ (7.8-9.3) \end{gathered}$ | $\begin{gathered} 23.6 \\ (22.4-24.8) \end{gathered}$ | $\begin{gathered} 42.7 \\ (41.2-44.1) \end{gathered}$ | $\begin{gathered} 11.8 \\ (10.9-12.7) \end{gathered}$ |
| Depression | $\begin{gathered} 11.2 \\ (10.3-12.1) \end{gathered}$ | $\begin{gathered} 1.6 \\ (1.2-2.1) \end{gathered}$ | $\begin{gathered} \hline 9.4 \\ (8.5-10.3) \end{gathered}$ | $\begin{gathered} 10.1 \\ (9.2-11.1) \end{gathered}$ | $\begin{gathered} 9.0 \\ (8.1-9.9) \end{gathered}$ | $\begin{gathered} 4.6 \\ (4.0-5.2) \end{gathered}$ | $\begin{gathered} 4.5 \\ (3.9-5.1) \end{gathered}$ | $\begin{gathered} 4.5 \\ (3.9-5.2) \end{gathered}$ | $\begin{gathered} 12.4 \\ (11.4-13.4) \end{gathered}$ | $\begin{gathered} 4.2 \\ (3.7-4.8) \end{gathered}$ | $\begin{gathered} 12.8 \\ (11.8-13.8) \end{gathered}$ | $\begin{gathered} 11.8 \\ (10.9-12.7) \end{gathered}$ | $\begin{gathered} 23.1 \\ (21.8-24.4) \end{gathered}$ |

[^25]
## Ever Diagnosed with Depression

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

Prevalence

Gender

Race/Ethnicity

Age

Education

Household Income

WV: 23.1\% (95\% CI: 21.8-24.4)
U.S.: $\mathbf{1 7 . 6 \%}$ (95\% CI: 17.4-17.8)

The West Virginia prevalence of ever diagnosed with depression was significantly higher than the U.S. prevalence. West Virginia ranked the $4^{\text {th }}$ highest among 53 BRFSS participants.

Men: 17.2\% (95\% CI: 15.5-18.9)
Women: $28.7 \%$ ( $95 \% \mathrm{Cl}: 26.9-30.6$ )
The prevalence of ever diagnosed with depression was significantly higher among females than among males.

White, Non-Hispanic: $23.4 \%$ ( $95 \% \mathrm{Cl}: 22.1-24.7$ )
Black, Non-Hispanic: $18.4 \%$ ( $95 \%$ Cl: 11.3-25.4)
Other, Non-Hispanic: *19.4\% (95\% CI: 6.5-32.4)
Multiracial, Non-Hispanic: *29.7\% (95\% CI: 17.8-41.6)
Hispanic: *23.5\% (95\% CI: 8.7-38.2)
There was no race/ethnicity difference in the prevalence of ever diagnosed with depression.

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

The prevalence of ever diagnosed with depression was lowest among those 65 and older ( $15.7 \%$ ), which was significantly lower than all age groups between the ages of 25-64. The prevalence of ever diagnosed with depression was highest among those 45-54 (30.3\%), significantly higher than among those under 35 and those over 65.

The prevalence of ever diagnosed with depression decreased as educational attainment level increased and was significantly higher among those with less than a high school education (32.2\%) than among all other educational attainment levels and significantly lower among college graduates (15.7\%) than among all other attainment levels.

The prevalence of ever diagnosed with depression generally decreased with increasing household income and was highest among those with an income less than $\$ 15,000$ ( $42.9 \%$ ), significantly higher than among all other income levels. The prevalence of ever diagnosed with depression was lowest among those with an income of $\$ 75,000$ or more ( $14.0 \%$ ), which was significantly lower than among those with an income of less than $\$ 35,000$.

## CHAPTER 23: DEPRESSION

Table 23.1 Prevalence of Ever Diagnosed with Depression by Demographic Characteristics: WVBRFSS, 2015

| Characteristic | Men |  |  | Women |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted Frequency | \% | 95\% CI | Weighted Frequency | \% | 95\% CI | Weighted Frequency | \% | 95\% Cl |
| TOTAL | 123,327 | 17.2 | 15.5-18.9 | 214,921 | 28.7 | 26.9-30.6 | 338,248 | 23.1 | 21.8-24.4 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-24 | 11,364 | 12.9 | 7.8-17.9 | 22,395 | 27.1 | 20.4-33.9 | 33,759 | 19.8 | 15.5-24.1 |
| 25-34 | 16,148 | 14.9 | 10.1-19.7 | 32,316 | 30.8 | 25.2-36.5 | 48,464 | 22.7 | 19.0-26.5 |
| 35-44 | 25,578 | 22.7 | 17.9-27.6 | 37,897 | 34.0 | 28.6-39.4 | 63,475 | 28.3 | 24.7-32.0 |
| 45-54 | 26,587 | 22.1 | 17.5-26.6 | 46,620 | 38.4 | 33.8-43.1 | 73,207 | 30.3 | 27.0-33.6 |
| 55-64 | 22,707 | 17.3 | 13.9-20.8 | 41,772 | 31.3 | 27.6-35.1 | 64,479 | 24.4 | 21.8-27.0 |
| 65+ | 20,256 | 13.4 | 10.8-16.0 | 32,690 | 17.5 | 14.8-20.1 | 52,946 | 15.7 | 13.8-17.5 |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 30,403 | 27.2 | 21.5-33.0 | 43,488 | 36.9 | 31.3-42.5 | 73,891 | 32.2 | 28.2-36.2 |
| H.S. or G.E.D. | 52,320 | 17.2 | 14.6-19.8 | 85,840 | 30.4 | 27.4-33.4 | 138,160 | 23.6 | 21.6-25.6 |
| Some Post-H.S. | 27,488 | 15.0 | 12.0-18.0 | 58,743 | 28.1 | 24.6-31.6 | 86,231 | 22.0 | 19.6-24.3 |
| College Graduate | 12,659 | 11.1 | 8.5-13.7 | 26,850 | 19.6 | 16.6-22.6 | 39,508 | 15.7 | 13.7-17.8 |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 29,091 | 40.9 | 33.8-48.0 | 39,998 | 44.4 | 38.7-50.1 | 69,089 | 42.9 | 38.4-47.3 |
| \$15,000-24,999 | 22,164 | 21.9 | 17.1-26.8 | 43,960 | 37.4 | 32.4-42.4 | 66,123 | 30.3 | 26.7-33.8 |
| \$25,000-34,999 | 15,427 | 20.6 | 14.9-26.3 | 17,571 | 26.5 | 20.4-32.5 | 32,997 | 23.3 | 19.2-27.5 |
| \$35,000-49,999 | 11,234 | 11.9 | 8.4-15.4 | 19,369 | 20.6 | 16.0-25.2 | 30,603 | 16.2 | 13.3-19.2 |
| \$50,000-74,999 | 12,961 | 14.6 | 10.3-18.9 | 19,576 | 25.3 | 19.9-30.6 | 32,537 | 19.5 | 16.1-23.0 |
| \$75,000+ | 10,903 | 8.0 | 5.4-10.6 | 24,386 | 21.3 | 17.0-25.6 | 35,289 | 14.0 | 11.6-16.5 |

Figure 23.1 Prevalence of Ever Diagnosed with Depression by Year:


## CHAPTER 23: DEPRESSION

Figure 23.2 Prevalence of Ever Diagnosed with Depression by County: WVBRFSS, 2011-2015

WV Prevalence (2011-2015) - 21.9\%


## Current Depression

| Definition | Current depression is defined using responses to the Anxiety and Depression module, which is based on the Patient Health Questionnaire 8 (PHQ-8), a screening tool used for depression. The questions cover eight categories of depressive symptoms experienced in the past two weeks. A rating scale was used to calculate the severity of the symptoms and anyone experiencing a score of 10 or higher was considered to have symptoms consistent with current depression. If any response to the eight questions was missing, respondent was excluded from analysis. |
| :---: | :---: |
| Prevalence | WV: $\mathbf{1 3 . 7 \%}$ ( $95 \%$ Cl: 12.6-14.9) <br> This question was part of a state added module and national data are not available, therefore, a U.S. comparison was not conducted. |
| Gender | Men: $11.3 \%$ ( $95 \% \mathrm{Cl}: 9.8-12.9$ ) <br> Women: $16.1 \%$ (95\% CI: 14.4-17.7) <br> The prevalence of current depression was significantly higher among females than among males. |
| Race/Ethnicity | White, Non-Hispanic: $13.7 \%$ ( $95 \%$ CI: 12.5-14.8) <br> Black, Non-Hispanic: $15.0 \%$ ( $95 \%$ CI: 7.5-22.4) <br> Other, Non-Hispanic: *12.4\% (95\% CI: 2.1-22.6) <br> Multiracial, Non-Hispanic: *17.7\% (95\% CI: 7.3-28.2) <br> Hispanic: *11.5\% (95\% CI: 0.0-23.9) <br> There was no race/ethnicity difference in the prevalence of current depression. <br> * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6 . |

Age The prevalence of current depression was highest among those aged 45-54 (19.1\%) and lowest among those 65 and older (6.9\%) which was a significantly lower than all other age groups.

Education The prevalence of current depression was significantly higher among those with less than a high school education (23.0\%) than among all other educational attainment levels and was significantly lower among college graduates (6.7\%) than among all other educational attainment levels.

Household Income The prevalence of current depression generally decreased with increasing household income and was highest among those with an income less than $\$ 15,000$ (34.8\%), significantly higher than among all other income levels. The prevalence of current depression was lowest among those with an income of $\$ 75,000$ or more (5.4\%), which was significantly lower than among those with an income of less than $\$ 35,000$.

## CHAPTER 23: DEPRESSION

Table 23.2 Prevalence of Current Depression by Demographic Characteristics:
WVBRFSS, 2015

| Characteristic | Men |  |  | Women |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted Frequency | \% | 95\% Cl | Weighted Frequency | \% | 95\% Cl | Weighted Frequency | \% | 95\% Cl |
| TOTAL | 68,787 | 11.3 | 9.8-12.9 | 101,215 | 16.1 | 14.4-17.7 | 170,002 | 13.7 | 12.6-14.9 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-24 | 7,759 | 10.6 | 5.3-15.9 | 11,308 | 15.7 | 9.8-21.6 | 19,067 | 13.1 | 9.1-17.1 |
| 25-34 | 9,123 | 10.3 | 6.0-14.6 | 14,224 | 17.1 | 12.2-22.0 | 23,347 | 13.6 | 10.3-16.8 |
| 35-44 | 12,226 | 12.7 | 8.5-16.9 | 21,702 | 22.7 | 17.4-27.9 | 33,928 | 17.7 | 14.3-21.1 |
| 45-54 | 15,255 | 14.7 | 10.6-18.8 | 23,649 | 23.5 | 19.1-28.0 | 38,904 | 19.1 | 16.0-22.1 |
| 55-64 | 14,445 | 12.5 | 9.2-15.8 | 20,372 | 17.2 | 13.9-20.5 | 34,817 | 14.9 | 12.5-17.2 |
| 65+ | 9,700 | 7.6 | 5.2-10.0 | 9,725 | 6.3 | 4.5-8.1 | 19,425 | 6.9 | 5.4-8.3 |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 16,564 | 19.2 | 13.7-24.8 | 24,142 | 26.6 | 20.7-32.4 | 40,706 | 23.0 | 18.9-27.1 |
| H.S. or G.E.D. | 27,833 | 10.9 | 8.6-13.3 | 38,995 | 16.6 | 13.9-19.3 | 66,828 | 13.7 | 11.9-15.4 |
| Some Post-H.S. | 19,547 | 11.9 | 8.8-14.9 | 27,675 | 15.6 | 12.6-18.6 | 47,222 | 13.8 | 11.7-16.0 |
| College Graduate | 4,843 | 4.7 | 2.7-6.8 | 10,403 | 8.2 | 6.1-10.4 | 15,246 | 6.7 | 5.2-8.2 |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 18,230 | 32.1 | 24.6-39.6 | 27,469 | 37.0 | 30.9-43.0 | 45,699 | 34.8 | 30.1-39.6 |
| \$15,000-24,999 | 12,245 | 14.3 | 9.7-18.9 | 20,506 | 21.5 | 16.6-26.4 | 32,751 | 18.1 | 14.7-21.5 |
| \$25,000-34,999 | 6,971 | 10.7 | 6.1-15.4 | 6,665 | 11.4 | 6.8-15.9 | 13,636 | 11.0 | 7.8-14.3 |
| \$35,000-49,999 | 5,840 | 6.8 | 3.9-9.7 | 6,011 | 7.3 | 4.5-10.1 | 11,851 | 7.0 | 5.0-9.0 |
| \$50,000-74,999 | 5,896 | 7.2 | 3.8-10.7 | 7,520 | 10.4 | 6.7-14.1 | 13,416 | 8.7 | 6.2-11.2 |
| \$75,000+ | 4,835 | 3.9 | 2.0-5.9 | 7,345 | 7.1 | 4.3-9.9 | 12,180 | 5.4 | 3.7-7.1 |

## Depression Severity

| Definition | Five categories of depression severity were defined based on the previous <br> rating scale for current depression with the following classifications: mild depression <br> (5-9), moderate depression (10-14), moderately severe depression (15-19), and <br> severe depression (20-24). |
| :--- | :--- |
| Prevalence | Mild Depression |

Gender Mild Depression
Men: 17.7\% (95\% CI: 15.9-19.6)
Women: 21.4\% (95\% CI: 19.6-23.2)
Moderate Depression
Men: 7.1\% (95\% CI: 5.8-8.3)
Women: 8.5\% (95\% CI: 7.3-9.7)
Moderately Severe Depression
Men: 2.7\% (95\% CI: 1.9-3.5)
Women: 5.3\% (95\% Cl: 4.3-6.4)
Severe Depression
Men: 1.5\% (95\% CI: 0.9-2.1)
Women: 2.2\% (95\% CI: 1.6-2.9)
The prevalence of mild depression, moderate depression, moderately severe depression, and severe depression were significantly higher among females than among males.

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

Age The prevalence of mild depression was significantly higher among those 25-34 ( $23.4 \%$ ) than among those 65 and older (16.4\%) and the prevalence of mild depression was significantly lower among those 65 and older than all other age groups. The prevalence of moderately severe depression was lowest among those 65 and older (1.7\%), significantly lower than among those between the ages of 35-64. The prevalence of severe depression was lowest among those 65 and older (0.3\%), which was significantly lower than among those aged 25-64.

## CHAPTER 23: DEPRESSION

## Education

The prevalence of mild depression was significantly lower among those with a college degree (14.4\%) than among those with less than a high school degree or those with a high school degree. The prevalence of moderate depression was significantly higher among those with less than a high school education (11.8\%) than among those with a high school degree (7.0\%) and among college graduates (4.8\%). The prevalence of moderately severe depression was lower among college graduates (1.2\%) than among all other educational attainment levels. The prevalence of severe depression was significantly higher among those with less than a high school education (4.2\%) than among those with more than a high school education.

Household Income The prevalence of mild depression was significantly lower among those with an income of $\$ 75,000$ (15.1\%) than among those with an income below $\$ 35,000$. The prevalence of moderate depression was significantly higher among those with an income below \$15,000 ( $14.7 \%$ ) than among those with an income of $\$ 25,000$ or more. The prevalence of moderately severe depression and severe depression were significantly higher among those with an income less than $\$ 15,000$ than among all other income levels.
Table 23.3 Depression Severity by Demographic Characteristics: WVBRFSS, 2015

| Characteristic | Mild |  |  | Moderate |  |  | Moderately Severe |  |  | Severe |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted Frequency | \% | 95\% CI | Weighted Frequency | \% | 95\% CI | Weighted Frequency | \% | 95\% CI | Weighted Frequency | \% | 95\% CI |
| TOTAL | 242,826 | 19.6 | 18.3-20.9 | 96,603 | 7.8 | 6.9-8.7 | 50,161 | 4.0 | 3.4-4.7 | 23,238 | 1.9 | 1.4-2.3 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 107,898 | 17.7 | 15.9-19.6 | 43,047 | 7.0 | 5.8-8.3 | 16,579 | 2.7 | 1.9-3.5 | 9,161 | 1.5 | 0.9-2.1 |
| Female | 134,929 | 21.4 | 19.6-23.2 | 53,556 | 8.5 | 7.3-9.7 | 33,582 | 5.3 | 4.3-6.4 | 14,077 | 2.2 | 1.6-2.9 |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| 18-24 | 29,829 | 20.5 | 15.7-25.3 | 10,607 | 7.3 | 4.2-10.4 | 6,404 | 4.4 | 2.0-6.8 | 2,056 | 1.4 | 0.1-2.7 |
| 25-34 | 40,241 | 23.4 | 19.2-27.6 | 16,824 | 9.8 | 6.9-12.7 | 3,533 | 2.1 | 0.9-3.2 | 2,990 | 1.7 | 0.6-2.9 |
| 35-44 | 36,400 | 19.0 | 15.5-22.4 | 17,238 | 9.0 | 6.5-11.5 | 10,956 | 5.7 | 3.5-7.9 | 5,734 | 3.0 | 1.6-4.4 |
| 45-54 | 42,617 | 20.9 | 17.7-24.1 | 19,483 | 9.5 | 7.3-11.8 | 11,985 | 5.9 | 4.1-7.6 | 7,435 | 3.6 | 2.1-5.2 |
| 55-64 | 46,477 | 19.8 | 17.2-22.4 | 18,510 | 7.9 | 6.2-9.6 | 12,048 | 5.1 | 3.6-6.7 | 4,258 | 1.8 | 1.1-2.6 |
| 65+ | 46,566 | 16.4 | 14.3-18.5 | 13,940 | 4.9 | 3.6-6.2 | 4,720 | 1.7 | 1.0-2.4 | 765 | 0.3 | 0.0-0.5 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 43,155 | 24.4 | 20.2-28.6 | 20,840 | 11.8 | 8.7-14.8 | 12,381 | 7.0 | 4.5-9.5 | 7,485 | 4.2 | 2.3-6.1 |
| H.S. or G.E.D. | 105,544 | 21.6 | 19.4-23.7 | 34,234 | 7.0 | 5.7-8.3 | 22,161 | 4.5 | 3.4-5.7 | 10,433 | 2.1 | 1.4-2.8 |
| Some Post-H.S. | 61,193 | 17.9 | 15.5-20.3 | 30,644 | 9.0 | 7.1-10.8 | 12,799 | 3.7 | 2.7-4.8 | 3,780 | 1.1 | 0.5-1.7 |
| College Graduate | 32,802 | 14.4 | 12.2-16.5 | 10,885 | 4.8 | 3.4-6.1 | 2,820 | 1.2 | 0.6-1.8 | 1,541 | *0.7 | 0.3-1.1 |
| Income |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 29,089 | 22.2 | 18.2-26.2 | 19,279 | 14.7 | 11.3-18.1 | 17,657 | 13.5 | 10.0-16.9 | 8,763 | 6.7 | 4.2-9.2 |
| \$15,000-24,999 | 44,327 | 24.5 | 20.8-28.2 | 18,616 | 10.3 | 7.6-12.9 | 9,448 | 5.2 | 3.1-7.3 | 4,687 | 2.6 | 1.3-3.9 |
| \$25,000-34,999 | 28,941 | 23.4 | 18.9-27.9 | 8,096 | 6.6 | 4.0-9.1 | 3,185 | *2.6 | 0.9-4.2 | 2,355 | *1.9 | 0.4-3.4 |
| \$35,000-49,999 | 32,144 | 19.1 | 15.6-22.5 | 7,320 | 4.3 | 2.7-5.9 | 2,764 | *1.6 | 0.6-2.6 | 1,767 | *1.0 | 0.3-1.8 |
| \$50,000-74,999 | 28,828 | 18.7 | 15.1-22.3 | 9,919 | 6.4 | 4.2-8.7 | 3,249 | 2.1 | 0.9-3.3 | 249 | ${ }^{*} 0.2$ | 0.0-0.5 |
| \$75,000+ | 34,052 | 15.1 | 12.2-17.9 | 9,755 | 4.3 | 2.8-5.9 | 1,688 | ${ }^{*} 0.7$ | 0.2-1.3 | 737 | *0.3 | 0.0-0.6 |

[^26]
## Ever Diagnosed with Anxiety

| Definition |  |
| :--- | :--- |
| ever | Responding "Yes" to the question, "Has a doctor or other healthcare provider <br> told you that you have an anxiety disorder (including acute stress disorder, <br> anxiety, generalized anxiety disorder, obsessive-compulsive disorder, panic <br> disorder, phobia, post-traumatic stress disorder, or social anxiety disorder?" |
| Prevalence | WV: 21.0.\% (95\% CI: 19.7-22.3) |
| This question was part of a state added module and national data are not |  |
| available, therefore, a U.S. comparison was not conducted. |  |

## CHAPTER 24: ANXIETY

Table 24.1 Prevalence of Ever Diagnosed with Anxiety by Demographic Characteristics: WVBRFSS, 2015

| Characteristic | Men |  |  | Women |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted Frequency | \% | 95\% CI | Weighted Frequency | \% | 95\% CI | Weighted Frequency | \% | 95\% CI |
| TOTAL | 102,301 | 15.6 | 14.0-17.3 | 180,516 | 26.1 | 24.2-27.9 | 282,817 | 21.0 | 19.7-22.3 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-24 | 10,213 | 12.8 | 7.5-18.1 | 22,891 | 29.9 | 22.7-37.0 | 33,104 | 21.2 | 16.6-25.7 |
| 25-34 | 13,713 | 14.6 | 9.9-19.3 | 30,660 | 33.3 | 27.3-39.3 | 44,372 | 23.8 | 19.9-27.7 |
| 35-44 | 17,758 | 17.5 | 12.9-22.1 | 35,437 | 34.4 | 28.7-40.1 | 53,195 | 26.0 | 22.3-29.8 |
| 45-54 | 24,862 | 22.2 | 17.5-26.9 | 31,764 | 28.6 | 24.2-33.0 | 56,626 | 25.4 | 22.2-28.6 |
| 55-64 | 18,060 | 14.7 | 11.4-17.9 | 32,320 | 25.5 | 21.8-29.3 | 50,380 | 20.2 | 17.7-22.7 |
| 65+ | 17,415 | 12.3 | 9.7-14.9 | 26,790 | 15.1 | 12.6-17.6 | 44,204 | 13.9 | 12.0-15.7 |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 23,325 | 23.4 | 17.7-29.2 | 37,209 | 34.8 | 29.1-40.6 | 60,535 | 29.3 | 25.2-33.4 |
| H.S. or G.E.D. | 41,785 | 15.2 | 12.7-17.7 | 68,351 | 26.4 | 23.4-29.4 | 110,136 | 20.6 | 18.6-22.6 |
| Some Post-H.S. | 24,325 | 14.0 | 11.0-17.0 | 52,418 | 26.9 | 23.3-30.5 | 76,743 | 20.8 | 18.4-23.2 |
| College Graduate | 12,866 | 12.4 | 9.4-15.3 | 22,536 | 17.2 | 14.2-20.2 | 35,403 | 15.1 | 12.9-17.2 |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 23,293 | 35.6 | 28.3-42.8 | 34,489 | 41.0 | 35.1-46.9 | 57,783 | 38.6 | 34.0-43.2 |
| \$15,000-24,999 | 17,059 | 18.6 | 14.0-23.2 | 38,901 | 36.1 | 31.0-41.3 | 55,960 | 28.1 | 24.5-31.7 |
| \$25,000-34,999 | 14,902 | 21.8 | 15.7-28.0 | 14,833 | 23.9 | 17.9-29.9 | 29,735 | 22.8 | 18.5-27.1 |
| \$35,000-49,999 | 9,891 | 11.0 | 7.6-14.4 | 18,496 | 21.0 | 16.1-25.9 | 28,387 | 15.9 | 12.9-19.0 |
| \$50,000-74,999 | 11,542 | 13.7 | 9.5-17.9 | 11,769 | 15.8 | 11.5-20.1 | 23,311 | 14.7 | 11.7-17.7 |
| \$75,000+ | 9,231 | 7.3 | 4.8-9.9 | 20,663 | 19.2 | 15.1-23.4 | 29,894 | 12.8 | 10.4-15.2 |

## Current Treatment for Mental Health

| Definition | Responding "Yes" to the question, "Are you now taking medicine or receiving treatment from a doctor or other health professional for any type of mental health condition or emotional problem?" |
| :---: | :---: |
| Prevalence | WV: 16.8\% (95\% CI: 15.7-18.0) |
|  | This question was part of a state added module and national data are not available, therefore, a U.S. comparison was not conducted. |
| Gender | Men: $11.5 \%$ (95\% CI: 10.0-13.0) |
|  | Women: $21.9 \%$ (95\% CI: 20.2-23.6) |
|  | The prevalence of current treatment for mental health was significantly higher among females than among males. |
| Race/Ethnicity | White, Non-Hispanic: $17.1 \%$ (95\% CI: 16.0-18.3) |
|  | Black, Non-Hispanic: $9.1 \%$ (95\% CI: 4.2-13.9) |
|  | Other, Non-Hispanic: *13.1\% (95\% CI: 0.6-25.5) |
|  | Multiracial, Non-Hispanic: *12.2\% (95\% CI: 3.4-20.9) |
|  | Hispanic: *18.8\% (95\% CI: 5.5-32.1) |
|  | The prevalence of current treatment for mental health was significantly higher among White, Non-Hispanics than among Black, Non-Hispanics. <br> * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6 . |
| Age | The prevalence of current treatment for mental health was highest among those |
|  | 45-54 ( $23.8 \%$ ), significantly higher than among those aged 34 and younger and among those aged 65 and older. The prevalence of current treatment for mental health was lowest among those 65 and older (11.4\%), which was significantly lower than among those aged 35-64. |
| Education | The prevalence of current treatment for mental health was significantly higher among those with less than a high school education (22.9\%) than among all other educational attainment levels except those with some post-high school education, and was significantly lower among college graduates (15.1\%) than among all other educational attainment levels except those with a high school education or G.E.D. |
| Household Income | The prevalence of current treatment for mental health decreased with increasing household income and was highest among those with an income less than $\$ 15,000(30.7 \%)$, significantly higher than among all other income levels over $\$ 25,000$. The prevalence of current treatment for mental health was lowest among those with an income of $\$ 75,000$ or more ( $10.6 \%$ ), which was significantly lower than among those with an income of less than $\$ 35,000$. |

## CHAPTER 25: CURRENT TREATMENT FOR MENTAL HEALTH

Table 25.1 Current Treatment for Mental Health by Demographic Characteristics:
WVBRFSS, 2015

| Characteristic | Men |  |  | Women |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted Frequency | \% | 95\% Cl | Weighted Frequency | \% | 95\% Cl | Weighted Frequency | \% | 95\% Cl |
| TOTAL | 75,594 | 11.5 | 10.0-13.0 | 152,024 | 21.9 | 20.2-23.6 | 227,619 | 16.8 | 15.7-18.0 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-24 | 8,917 | 11.2 | 6.3-16.1 | 12,088 | 15.8 | 10.1-21.4 | 21,005 | 13.4 | 9.7-17.2 |
| 25-34 | 6,355 | 6.7 | 3.3-10.1 | 21,112 | 22.9 | 17.5-28.4 | 27,467 | 14.7 | 11.4-18.0 |
| 35-44 | 14,543 | 14.2 | 10.2-18.3 | 26,162 | 25.0 | 20.0-30.1 | 40,706 | 19.7 | 16.4-23.0 |
| 45-54 | 17,792 | 15.8 | 11.5-20.2 | 35,406 | 32.0 | 27.3-36.7 | 53,199 | 23.8 | 20.6-27.1 |
| 55-64 | 14,800 | 12.1 | 8.9-15.2 | 33,331 | 26.4 | 22.7-30.0 | 48,132 | 19.3 | 16.9-21.8 |
| 65+ | 12,906 | 9.0 | 6.8-11.3 | 23,561 | 13.3 | 11.0-15.6 | 36,467 | 11.4 | 9.8-13.0 |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 17,229 | 17.1 | 11.7-22.5 | 30,292 | 28.3 | 22.8-33.8 | 47,520 | 22.9 | 19.0-26.7 |
| H.S. or G.E.D. | 27,303 | 9.9 | 7.9-11.9 | 56,348 | 21.7 | 18.9-24.5 | 83,651 | 15.6 | 13.9-17.4 |
| Some Post-H.S. | 20,962 | 12.0 | 9.2-14.8 | 44,706 | 22.9 | 19.6-26.2 | 65,668 | 17.8 | 15.5-20.0 |
| College Graduate | 9,766 | 9.3 | 6.8-11.8 | 20,679 | 15.8 | 13.0-18.6 | 30,445 | 12.9 | 11.0-14.8 |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 18,640 | 27.6 | 20.5-34.7 | 28,140 | 33.2 | 27.7-38.8 | 46,780 | 30.7 | 26.3-35.1 |
| \$15,000-24,999 | 15,352 | 16.7 | 12.1-21.3 | 30,821 | 28.7 | 23.9-33.5 | 46,173 | 23.1 | 19.8-26.5 |
| \$25,000-34,999 | 7,991 | 11.8 | 7.4-16.1 | 13,245 | 21.3 | 15.7-27.0 | 21,236 | 16.3 | 12.8-19.9 |
| \$35,000-49,999 | 7,358 | 8.2 | 5.1-11.2 | 16,960 | 19.2 | 14.6-23.8 | 24,318 | 13.6 | 10.8-16.4 |
| \$50,000-74,999 | 7,469 | 8.8 | 5.7-12.0 | 12,813 | 17.3 | 12.9-21.7 | 20,283 | 12.8 | 10.1-15.5 |
| \$75,000+ | 7,031 | 5.6 | 3.5-7.6 | 17,710 | 16.4 | 12.6-20.2 | 24,741 | 10.6 | 8.5-12.7 |


|  | Confusion or Memory Loss |
| :---: | :---: |
| Definition | Responding "Yes" to the question, "During the past 12 months, have you experienced confusion or memory loss that is happening more often or is getting worse?" Question asked of respondents aged 45 and older. |
| Prevalence | WV: 10.0\% (95\% CI: 8.9-11.1) |
|  | Because this question is part of a state selected optional module and complete national data are not available, a U.S. comparison was not conducted. |
| Gender | Men: 10.3\% (95\% CI: 8.6-12.0) |
|  | Women: 9.7\% (95\% Cl: 8.3-11.2) |
|  | There was no gender difference in the prevalence of cognitive decline in past year. |
| Race/Ethnicity | No race/ethnicity statistics are reported due to unreliable estimates. |
| Age | The prevalence of cognitive decline in past year was significantly lower among those aged 65 and older (7.7\%) than among those younger than 65. |
| Education | The prevalence of cognitive decline in past year was significantly higher among those with less than a high school education (16.5\%) than among all other educational attainment groups. |
| Household Income | The prevalence of cognitive decline in past year was significantly higher among those with an annual household income of less than $\$ 15,000$ (22.6\%) than all other income brackets. |

## CHAPTER 26: COGNITIVE DECLINE

Table 26.1 Prevalence of Cognitive Decline in the Past Year Among Those Aged 45 and Older by Demographic Characteristics: WVBRFSS, 2015

| Characteristic | Men |  |  | Women |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted Frequency | \% | 95\% CI | Weighted <br> Frequency | \% | 95\% CI | Weighted Frequency | \% | 95\% CI |
| TOTAL | 39,586 | 10.3 | 8.6-12.0 | 41,220 | 9.7 | 8.3-11.2 | 80,805 | 10.0 | 8.9-11.1 |
| Age |  |  |  |  |  |  |  |  |  |
| 45-54 | 12,530 | 11.0 | 7.3-14.7 | 13,942 | 12.7 | 9.3-16.0 | 26,472 | 11.8 | 9.3-14.3 |
| 55-64 | 13,117 | 10.6 | 7.8-13.3 | 15,085 | 11.8 | 9.1-14.6 | 28,202 | 11.2 | 9.3-13.2 |
| 65+ | 13,659 | 9.5 | 6.9-12.0 | 11,152 | 6.2 | 4.5-7.9 | 24,811 | 7.7 | 6.2-9.1 |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 13,627 | 17.8 | 12.3-23.3 | 11,601 | 15.1 | 10.5-19.7 | 25,228 | 16.5 | 12.9-20.1 |
| H.S. or G.E.D. | 14,786 | 9.2 | 6.8-11.5 | 17,532 | 9.9 | 7.7-12.1 | 32,317 | 9.5 | 7.9-11.1 |
| Some Post-H.S. | 7,754 | 9.1 | 5.7-12.6 | 8,421 | 8.2 | 5.7-10.8 | 16,176 | 8.7 | 6.6-10.7 |
| College Graduate | 3,419 | 5.6 | 3.2-7.9 | 3,665 | 5.5 | 3.3-7.7 | 7,085 | 5.5 | 3.9-7.1 |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 8,759 | 20.9 | 14.1-27.8 | 12,745 | 23.9 | 17.7-30.2 | 21,504 | 22.6 | 18.0-27.3 |
| \$15,000-24,999 | 8,406 | 13.5 | 8.7-18.3 | 7,711 | 11.4 | 7.9-14.9 | 16,118 | 12.4 | 9.5-15.4 |
| \$25,000-34,999 | 5,177 | 12.0 | 6.8-17.3 | 2,568 | 6.5 | 2.9-10.1 | 7,745 | 9.4 | 6.1-12.7 |
| \$35,000-49,999 | 4,181 | 7.8 | 4.0-11.5 | 3,798 | 6.9 | 3.8-10.1 | 7,979 | 7.3 | 4.9-9.8 |
| \$50,000-74,999 | 3,703 | 7.1 | 3.2-11.0 | 2,781 | *6.3 | 2.5-10.0 | 6,484 | 6.7 | 4.0-9.4 |
| \$75,000+ | 3,440 | *5.3 | 1.5-9.0 | 2,084 | *4.0 | 1.6-6.5 | 5,524 | 4.7 | 2.3-7.1 |

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


## Day-to-Day Household Activities/Chores

| Definition | Gave up household activities or chores: Responding "Always" or "Usually" to the <br> question, "During the past 12 months, as a result of confusion or memory loss, <br> how often have you given up day-to-day household activities or chores you used <br> to do, such as cooking, cleaning, taking medications, driving, or paying bills?" <br> Need assistance with activities: Responding "Always" or "Usually" to the <br> question, "As a result of confusion or memory loss, how often do you need <br> assistance with these day-to-day activities?" <br> Rarely or never get help with activities: Responding "Never" or "Rarely" to the <br> question, "When you need help with these day-to-day activities, how often are <br> you able to get the help that you need?" |
| :--- | :--- |
| Prevalence | Gave up household activities or chores: $17.2 \%$ ( $95 \%$ CI: 12.6-21.7) <br> Need assistance with activities: $16.2 \% ~(95 \% ~ C l: ~ 11.9-20.4) ~$ |
| Rarely or never get help with activities: $13.9 \%$ ( $95 \%$ CI: $7.6-20.2$ ) |  |
| Because these questions are part of a state select optional module and |  |
| complete national data are not available, a U.S. comparison was not conducted. |  |

## CHAPTER 26: COGNITIVE DECLINE

Table 26.2 Prevalence of Effects of Cognitive Decline on Day-to-Day Household Activities or Chores by Demographic Characteristics: WVBRFSS, 2015

| Characteristic | Usually or Always Gave Up Activities in Past Year |  |  | Usually or Always Need Assistance With Activities |  |  | Rarely or Never Get Help With Activities |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted Frequency | \% | 95\% CI | Weighted Frequency | \% | 95\% Cl | Weighted Frequency | \% | 95\% Cl |
| TOTAL | 14,506 | 17.2 | 12.6-21.7 | 13,691 | 16.2 | 11.9-20.4 | 3,992 | 13.9 | 7.6-20.2 |
| Gender |  |  |  |  |  |  |  |  |  |
| Male | 7,533 | 18.4 | 11.2-25.6 | 5,672 | 13.9 | 8.0-19.8 | 1,682 | *13.2 | 4.8-21.6 |
| Female | 6,973 | 16.1 | 10.4-21.7 | 8,019 | 18.3 | 12.3-24.3 | 2,310 | *14.4 | 5.4-23.5 |
| Age |  |  |  |  |  |  |  |  |  |
| 45-54 | 5,293 | 18.9 | 10.2-27.7 | 5,769 | 20.8 | 12.1-29.4 | 1,258 | *11.2 | 1.4-21.0 |
| 55-64 | 4,691 | 16.0 | 9.2-22.9 | 3,735 | 12.6 | 6.4-18.9 | 2,078 | 23.3 | 9.7-36.8 |
| 65+ | 4,522 | 17.5 | 8.9-26.0 | 3,985 | 15.3 | 8.1-22.5 | 656 | *8.3 | 0.0-16.7 |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 4,325 | 16.7 | 7.5-25.9 | 5,118 | 20.0 | 10.9-29.1 | 1,815 | *18.8 | 5.1-32.4 |
| H.S. or G.E.D. | 6,274 | 18.2 | 11.8-24.7 | 5,954 | 17.1 | 10.7-23.5 | 2,177 | 18.1 | 8.2-28.0 |
| Some Post-H.S. | 3,394 | 20.3 | 8.7-31.8 | 2,197 | *13.0 | 4.5-21.6 | 0 | 0.0 | 0.0-0.0 |
| College Graduate | 513 | *7.0 | 0.4-13.6 | 421 | *5.7 | 0.0-11.3 | 0 | 0.0 | 0.0-0.0 |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 3,979 | 17.6 | 9.0-26.2 | 5,698 | 25.2 | 15.1-35.2 | 955 | *9.2 | 0.0-18.9 |
| \$15,000-24,999 | 2,037 | 18.9 | 8.6-29.3 | 1,759 | *10.7 | 3.5-17.9 | 850 | *16.7 | 2.4-31.1 |
| \$25,000-34,999 | 1,693 | *21.7 | 4.9-38.5 | 1,176 | *14.7 | 0.0-29.6 | 306 | *12.2 | 0.0-29.3 |
| \$35,000-49,999 | 1,536 | *18.4 | 3.6-33.1 | 622 | *7.4 | 0.0-15.2 | 280 | *25.2 | 0.0-56.7 |
| \$50,000-74,999 | 73 | *1.1 | 0.0-3.2 | 498 | *7.4 | 0.0-17.3 | 644 | *34.1 | 0.0-73.1 |
| \$75,000+ | 268 | *4.5 | 0.0-11.5 | 130 | *2.1 | 0.0-6.4 | 0 | 0.0 | 0.0-0.0 |

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


## Work/Social Activities

| Definition | Responding "Always" or "Usually" to the question, "During the past 12 months, <br> how often has confusion of memory loss interfered with your ability to work, <br> volunteer, or engage in social activities outside the home?" |
| :--- | :--- |
| Prevalence | WV: $\mathbf{1 8 . 3 \%}$ ( $95 \% \mathrm{Cl}: 13.9-22.6$ ) <br> Because this question is part of a state selected optional module and complete <br> national data are not available, a U.S. comparison was not conducted. |
| Gender | Men: $14.7 \%$ ( $95 \% \mathrm{CI}: 8.9-20.5$ ) <br> Women: $21.7 \%(95 \%$ CI: 15.3-28.0) <br> There was no gender difference in the prevalence of cognitive decline interfered <br> with work or social activities in past year. |
| Race/Ethnicity | No race/ethnicity statistics are reported due to unreliable estimates. |
| Age $\quad$There was no age difference in the prevalence of cognitive decline interfered <br> with work or social activities in past year. |  |
| Education $\quad$There was no educational attainment difference in the prevalence of cognitive <br> decline interfered with work or social activities in past year. |  |
| Household Income $\quad$There was no annual household income difference in the prevalence of cognitive <br> decline interfered with work or social activities in past year. |  |

## CHAPTER 26: COGNITIVE DECLINE

Table 26.3 Prevalence of Cognitive Decline Interfered With Work or Social Activities in Past Year by Demographic Characteristics: WVBRFSS, 2015

| Characteristic | Total |  |  |
| :---: | :---: | :---: | :---: |
|  | Weighted Frequency | \% | 95\% Cl |
| TOTAL | 15,132 | 18.3 | 13.9-22.6 |
| Age |  |  |  |
| 45-54 | 6,422 | 23.7 | 14.8-32.6 |
| 55-64 | 5,130 | 18.1 | 10.9-25.3 |
| 65+ | 3,097 | 11.9 | 5.8-18.0 |
| Education |  |  |  |
| Less than H.S. | 4,352 | 17.5 | 9.2-25.7 |
| H.S. or G.E.D. | 6,748 | 19.9 | 13.1-26.7 |
| Some Post-H.S. | 3,087 | 18.5 | 8.6-28.5 |
| College Graduate | 945 | *12.9 | 2.6-23.1 |
| Income |  |  |  |
| Less than \$15,000 | 5,885 | 26.4 | 16.6-36.2 |
| \$15,000-24,999 | 2,565 | 15.8 | 7.4-24.2 |
| \$25,000-34,999 | 758 | *10.4 | 0.3-20.5 |
| \$35,000-49,999 | 635 | *7.9 | 0.0-16.1 |
| \$50,000-74,999 | 498 | *7.4 | 0.0-17.4 |
| \$75,000+ | 501 | *8.3 | 0.0-17.9 |

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


## Discussed with Doctor

| Definition | Responding "Yes" to the question, "Have you or anyone else discussed your confusion or memory loss with a health care professional?" |
| :---: | :---: |
| Prevalence | WV: 46.5\% (95\% CI: 40.8-52.2) |
|  | Because this question is part of a state selected optional module and complete national data are not available, a U.S. comparison was not conducted. |
| Gender | Men: 41.9\% (95\% CI: 33.4-50.5) |
|  | Women: $50.7 \%$ (95\% CI: 43.2-58.3) |
|  | There was no gender difference in the prevalence of discussed cognitive decline with doctor. |
| Race/Ethnicity | No race/ethnicity statistics are reported due to unreliable estimates. |
| Age | There was no age difference in the prevalence of discussed cognitive decline with doctor. |
| Education | The prevalence of discussed cognitive decline with doctor was significantly lower among those with less than a high school education (35.2\%) than among those with some college (60.8\%). |
| Household Income | There was no annual household income difference in the prevalence of discussed cognitive decline with doctor. |

## CHAPTER 26: COGNITIVE DECLINE

Table 26.4 Prevalence of Discussed Cognitive Decline With Doctor by Demographic Characteristics: WVBRFSS, 2015

| Characteristic | Men |  |  | Women |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted Frequency | \% | 95\% CI | Weighted Frequency | \% | 95\% CI | Weighted <br> Frequency | \% | 95\% CI |
| TOTAL | 17,205 | 41.9 | 33.4-50.5 | 22,167 | 50.7 | 43.2-58.3 | 39,372 | 46.5 | 40.8-52.2 |
| Age |  |  |  |  |  |  |  |  |  |
| 45-54 | 5,156 | *41.4 | 24.1-58.7 | 7,681 | *50.8 | 37.1-64.5 | 12,837 | *46.6 | 35.6-57.5 |
| 55-64 | 4,423 | *32.7 | 19.9-45.5 | 8,615 | *53.6 | 41.4-65.8 | 13,038 | 44.0 | 35.1-53.0 |
| 65+ | 7,346 | *49.7 | 36.1-63.3 | 5,345 | *46.7 | 32.5-60.9 | 12,691 | 48.4 | 38.6-58.2 |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 4,395 | *31.0 | 15.8-46.2 | 4,631 | *40.4 | 24.3-56.4 | 9,027 | *35.2 | 24.1-46.2 |
| H.S. or G.E.D. | 5,850 | *39.0 | 26.3-51.7 | 10,465 | *52.9 | 41.9-63.9 | 16,315 | 46.9 | 38.4-55.3 |
| Some Post-H.S. | 5,364 | *65.7 | 47.9-83.5 | 4,828 | *56.2 | 40.5-71.9 | 10,192 | *60.8 | 48.9-72.8 |
| College Graduate | 1,595 | *43.6 | 22.5-64.7 | 2,243 | *58.5 | 37.9-79.2 | 3,838 | *51.3 | 36.5-66.0 |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 3,879 | *42.2 | 24.7-59.7 | 4,342 | *32.6 | 19.4-45.8 | 8,221 | *36.5 | 25.8-47.2 |
| \$15,000-24,999 | 2,900 | *34.5 | 16.5-52.5 | 5,047 | *62.9 | 47.4-78.4 | 7,947 | *48.4 | 36.0-60.7 |
| \$25,000-34,999 | 3,252 | *62.5 | 40.2-84.7 | 1,660 | *64.7 | 38.3-91.1 | 4,912 | *63.2 | 45.8-80.5 |
| \$35,000-49,999 | 1,684 | *38.9 | 15.2-62.6 | 2,517 | *62.5 | 41.0-83.9 | 4,201 | *50.3 | 33.2-67.3 |
| \$50,000-74,999 | 1,540 | *41.6 | 12.2-71.0 | 1,350 | *44.6 | 15.4-73.8 | 2,890 | *42.9 | 22.2-63.7 |
| \$75,000+ | 831 | *22.6 | 1.3-43.9 | 1,328 | *55.1 | 24.5-85.6 | 2,159 | *35.4 | 14.9-56.0 |

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

| State | Fair or Poor Health |  | Obesity |  | Physical <br> Inactivity |  | Current <br> Smoking |  | Cardiovascular Disease |  | Diabetes |  | Cancer |  | Arthritis |  | Depression |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | Rank | \% | Rank | \% | Rank | \% | Rank | \% | Rank | \% | Rank | \% | Rank | \% | Rank | \% | Rank |
| Alabama | 22.2 | 6 | 35.6 | 2 | 31.9 | 7 | 21.4 | 11 | 11.1 | 5 | 13.5 | 4 | 14.0 | 7 | 33.3 | 2 | 22.1 | 7 |
| Alaska | 13.6 | 46 | 29.8 | 27 | 22.0 | 43 | 19.1 | 17 | 6.0 | 52 | 7.6 | 50 | 7.6 | 51 | 21.2 | 47 | 16.0 | 46 |
| Arizona | 18.8 | 14 | 28.4 | 36 | 24.7 | 34 | 14.0 | 46 | 8.0 | 25 | 10.1 | 26 | 13.6 | 9 | 23.6 | 35 | 18.5 | 32 |
| Arkansas | 23.8 | 3 | 34.5 | 6 | 34.2 | 3 | 24.9 | 4 | 10.9 | 6 | 12.6 | 8 | 12.4 | 19 | 29.7 | 7 | 23.5 | 3 |
| California | 18.0 | 19 | 24.2 | 49 | 20.0 | 49 | 11.7 | 51 | 16.5 | 49 | 10.0 | 27 | 9.7 | 46 | 19.1 | 50 | 12.9 | 50 |
| Colorado | 13.9 | 42 | 20.2 | 53 | 17.9 | 53 | 15.6 | 38 | 6.2 | 51 | 6.8 | 53 | 11.7 | 29 | 22.7 | 44 | 19.3 | 25 |
| Connecticut | 14.9 | 35 | 25.3 | 44 | 23.5 | 37 | 13.5 | 50 | 7.2 | 44 | 9.3 | 34 | 11.5 | 32 | 24.5 | 31 | 17.6 | 37 |
| Delaware | 17.6 | 24 | 29.7 | 29 | 29.4 | 13 | 17.4 | 28 | 9.3 | 17 | 11.5 | 13 | 12.9 | 15 | 28.1 | 13 | 17.8 | 36 |
| D.C. | 12.0 | 53 | 22.1 | 52 | 19.4 | 50 | 16.0 | 34 | 6.8 | 46 | 8.5 | 42 | 8.4 | 50 | 18.5 | 52 | 18.0 | 35 |
| Florida | 18.4 | 17 | 26.8 | 37 | 26.2 | 26 | 15.8 | 37 | 9.4 | 15 | 11.3 | 17 | 14.6 | 1 | 25.9 | 23 | 16.5 | 42 |
| Georgia | 18.1 | 18 | 30.7 | 21 | 27.3 | 17 | 17.7 | 25 | 9.2 | 20 | 11.3 | 18 | 11.7 | 28 | 24.6 | 28 | 18.3 | 33 |
| Guam | 19.8 | 11 | 31.6 | 14 | 31.1 | 8 | 27.4 | 1 | 6.5 | 48 | 12.0 | 9 | 4.1 | 53 | 15.8 | 53 | 9.4 | 53 |
| Hawaii | 13.6 | 47 | 22.7 | 51 | 22.5 | 41 | 14.1 | 45 | 6.2 | 50 | 8.5 | 41 | 9.5 | 48 | 18.9 | 51 | 11.6 | 52 |
| Idaho | 14.6 | 40 | 28.6 | 35 | 21.2 | 47 | 13.8 | 48 | 7.3 | 43 | 8.1 | 48 | 13.0 | 12 | 25.3 | 26 | 19.7 | 21 |
| Illinois | 16.4 | 28 | 30.8 | 19 | 24.8 | 32 | 15.1 | 42 | 8.1 | 22 | 9.9 | 28 | 9.8 | 45 | 23.3 | 39 | 15.3 | 49 |
| Indiana | 18.8 | 15 | 31.3 | 16 | 29.4 | 12 | 20.6 | 13 | 10.0 | 11 | 11.4 | 15 | 11.2 | 34 | 27.6 | 16 | 20.4 | 16 |
| lowa | 13.0 | 48 | 32.1 | 12 | 26.3 | 25 | 18.1 | 23 | 7.6 | 35 | 8.8 | 39 | 12.1 | 21 | 25.9 | 24 | 19.0 | 26 |
| Kansas | 15.7 | 32 | 34.2 | 7 | 26.5 | 23 | 17.7 | 24 | 7.9 | 27 | 9.7 | 31 | 12.2 | 20 | 24.5 | 29 | 19.4 | 24 |
| Kentucky | 22.2 | 5 | 34.6 | 5 | 32.5 | 5 | 25.9 | 2 | 12.1 | 2 | 13.4 | 5 | 14.1 | 5 | 32.0 | 4 | 18.7 | 30 |
| Louisiana | 21.9 | 7 | 36.2 | 1 | 31.9 | 6 | 21.9 | 9 | 10.9 | 7 | 12.7 | 6 | 11.1 | 36 | 27.9 | 14 | 20.1 | 18 |
| Maine | 16.1 | 30 | 30.0 | 25 | 24.8 | 33 | 19.5 | 16 | 9.7 | 12 | 9.9 | 29 | 14.5 | 2 | 31.0 | 5 | 24.0 | 2 |
| Maryland | 13.9 | 44 | 28.9 | 33 | 24.1 | 36 | 15.1 | 43 | 7.9 | 28 | 10.3 | 25 | 10.3 | 42 | 23.5 | 36 | 16.3 | 43 |
| Massachusetts | 14.6 | 39 | 24.3 | 48 | 26.5 | 24 | 14.0 | 47 | 7.6 | 32 | 8.9 | 37 | 11.6 | 30 | 24.1 | 34 | 20.9 | 14 |
| Michigan | 17.7 | 22 | 31.2 | 17 | 25.5 | 29 | 20.7 | 12 | 9.2 | 18 | 10.7 | 20 | 11.8 | 26 | 30.0 | 6 | 19.7 | 20 |
| Minnesota | 12.4 | 51 | 26.1 | 41 | 21.8 | 44 | 16.2 | 33 | 6.7 | 47 | 7.6 | 51 | 11.1 | 35 | 21.6 | 45 | 18.9 | 27 |
| Mississippi | 23.6 | 4 | 35.6 | 3 | 36.8 | 2 | 22.5 | 5 | 11.2 | 3 | 14.7 | 2 | 11.9 | 24 | 28.6 | 11 | 18.2 | 34 |
| Missouri | 17.8 | 21 | 32.4 | 11 | 27.0 | 20 | 22.3 | 6 | 10.7 | 8 | 11.5 | 14 | 13.1 | 10 | 29.3 | 8 | 21.8 | 8 |
| Montana | 15.1 | 34 | 23.6 | 50 | 22.5 | 40 | 18.9 | 20 | 7.6 | 33 | 7.9 | 49 | 14.1 | 4 | 26.8 | 20 | 19.9 | 19 |
| Nebraska | 13.9 | 41 | 31.4 | 15 | 25.3 | 30 | 17.1 | 31 | 7.5 | 37 | 8.8 | 38 | 11.6 | 31 | 23.4 | 37 | 17.5 | 38 |
| Nevada | 17.6 | 23 | 26.7 | 38 | 24.7 | 35 | 17.5 | 26 | 7.7 | 30 | 9.7 | 32 | 10.6 | 40 | 21.5 | 46 | 16.6 | 41 |
| New Hampshire | 12.1 | 52 | 26.3 | 40 | 22.6 | 38 | 15.9 | 36 | 7.4 | 41 | 8.1 | 47 | 12.9 | 13 | 26.6 | 22 | 20.9 | 12 |
| New Jersey | 16.0 | 31 | 25.6 | 43 | 27.2 | 18 | 13.5 | 49 | 7.1 | 45 | 9.0 | 36 | 9.8 | 44 | 22.9 | 41 | 12.7 | 51 |
| New Mexico | 20.8 | 10 | 28.8 | 34 | 22.6 | 39 | 17.5 | 27 | 8.0 | 26 | 11.5 | 12 | 10.6 | 39 | 24.5 | 30 | 20.2 | 17 |
| New York | 16.8 | 25 | 25.0 | 46 | 29.3 | 14 | 15.2 | 40 | 7.4 | 39 | 9.8 | 30 | 9.6 | 47 | 23.4 | 38 | 15.7 | 47 |
| North Carolina | 19.2 | 13 | 30.1 | 23 | 26.2 | 27 | 19.0 | 19 | 9.2 | 19 | 10.7 | 22 | 13.1 | 11 | 26.9 | 18 | 18.8 | 29 |
| North Dakota | 13.9 | 43 | 31.0 | 18 | 26.8 | 21 | 18.7 | 21 | 7.3 | 42 | 8.7 | 40 | 9.9 | 43 | 22.9 | 42 | 18.8 | 28 |
| Ohio | 16.5 | 26 | 29.8 | 28 | 27.0 | 19 | 21.6 | 10 | 9.3 | 16 | 11.0 | 19 | 11.8 | 27 | 28.4 | 12 | 19.6 | 22 |
| Oklahoma | 21.8 | 8 | 33.9 | 8 | 33.2 | 4 | 22.2 | 7 | 10.7 | 9 | 11.7 | 11 | 10.7 | 38 | 27.7 | 15 | 22.7 | 6 |
| Oregon | 18.6 | 16 | 30.1 | 24 | 18.8 | 52 | 17.1 | 30 | 7.7 | 31 | 10.7 | 21 | 14.0 | 6 | 26.8 | 21 | 26.7 | 1 |
| Pennsylvania | 16.4 | 27 | 30.0 | 26 | 27.8 | 16 | 18.1 | 22 | 9.5 | 13 | 10.4 | 23 | 12.6 | 18 | 29.2 | 9 | 18.5 | 31 |
| Puerto Rico | 36.4 | 1 | 29.5 | 30 | 48.1 | 1 | 10.7 | 52 | 10.4 | 10 | 16.5 | 1 | 5.2 | 52 | 22.8 | 43 | 17.1 | 40 |
| Rhode Island | 16.2 | 29 | 26.0 | 42 | 28.1 | 15 | 15.5 | 39 | 7.5 | 36 | 9.0 | 35 | 12.0 | 22 | 26.9 | 19 | 21.3 | 10 |
| South Carolina | 18.0 | 20 | 31.7 | 13 | 26.7 | 22 | 19.7 | 15 | 9.5 | 14 | 11.8 | 10 | 12.7 | 16 | 29.1 | 10 | 19.5 | 23 |
| South Dakota | 13.7 | 45 | 30.4 | 22 | 21.5 | 46 | 20.1 | 14 | 8.6 | 21 | 9.3 | 33 | 12.0 | 23 | 24.3 | 33 | 16.1 | 44 |
| Tennessee | 21.1 | 9 | 33.8 | 9 | 30.4 | 10 | 21.9 | 8 | 11.2 | 4 | 12.7 | 7 | 12.9 | 14 | 32.0 | 3 | 21.2 | 11 |
| Texas | 19.4 | 12 | 32.4 | 10 | 29.5 | 11 | 15.2 | 41 | 8.0 | 23 | 11.4 | 16 | 8.9 | 49 | 20.0 | 48 | 16.1 | 45 |
| Utah | 12.5 | 50 | 24.5 | 47 | 20.3 | 48 | 9.1 | 53 | 5.5 | 53 | 7.0 | 52 | 11.5 | 33 | 19.6 | 49 | 20.8 | 15 |
| Vermont | 12.6 | 49 | 25.1 | 45 | 22.2 | 42 | 16.0 | 35 | 8.0 | 24 | 8.2 | 46 | 12.6 | 17 | 27.0 | 17 | 22.8 | 5 |
| Virginia | 15.2 | 33 | 29.2 | 31 | 25.1 | 31 | 16.5 | 32 | 7.5 | 38 | 10.3 | 24 | 10.8 | 37 | 23.2 | 40 | 15.7 | 48 |
| Washington | 14.9 | 36 | 26.4 | 39 | 19.0 | 51 | 15.0 | 44 | 7.6 | 34 | 8.4 | 43 | 11.9 | 25 | 24.5 | 32 | 21.7 | 9 |
| West Virginia | 25.9 | 2 | 35.6 | 4 | 30.8 | 9 | 25.7 | 3 | 14.0 | 1 | 14.5 | 3 | 14.1 | 3 | 38.0 | 1 | 23.1 | 4 |
| Wisconsin | 14.6 | 38 | 30.7 | 20 | 21.6 | 45 | 17.3 | 29 | 7.4 | 40 | 8.4 | 45 | 10.5 | 41 | 24.7 | 27 | 17.5 | 39 |
| Wyoming | 14.9 | 37 | 29.0 | 32 | 26.2 | 28 | 19.1 | 18 | 7.8 | 29 | 8.4 | 44 | 14.0 | 8 | 25.9 | 25 | 20.9 | 13 |
| United States | 17.7 |  | 28.9 |  | 26.1 |  | 16.7 |  | 8.4 |  | 10.5 |  | 11.3 |  | 24.7 |  | 17.6 |  |

Source: Centers for Disease Control \& Prevention, 2014 Behavioral Risk Factor Surveillance System data; West Virginia Health Statistics Center, 2016

| County | Fair or Poor <br> Health |  |  | Disability |  |  | No Health Care <br> Coverage (18-64) |  |  | Obesity |  |  | Obese or Overweight |  |  | Physical Inactivity |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | Rank | Sig | \% | Rank | Sig. | \% | Rank | Sig. | \% | Rank | Sig. | \% | Rank | Sig. | \% | Rank | Sig. |
| Barbour | 26.2 | 25 | ns | 26.4 | 39 | ns | 30.7 | 2 | H | 35.1 | 32 | ns | 72.0 | 20 | ns | 38.2 | 7 | ns |
| Berkeley | 21.7 | 47 | L | 24.3 | 49 | L | 18.9 | 34 | ns | 34.8 | 34 | ns | 71.5 | 25 | ns | 27.6 | 46 | L |
| Boone | 37.3 | 3 | H | 37.1 | 7 | H | 20.6 | 22 | ns | 35.6 | 30 | ns | 74.5 | 9 | ns | 32.7 | 29 | ns |
| Braxton | 27.9 | 21 | ns | 25.2 | 43 | ns | 22.1 | 14 | ns | 29.9 | 51 | ns | 68.9 | 40 | ns | 31.8 | 33 | ns |
| Brooke | 26.4 | 24 | ns | 31.5 | 19 | ns | 19.1 | 31 | ns | 35.5 | 31 | ns | 69.8 | 35 | ns | 32.5 | 30 | ns |
| Cabell | 21.2 | 50 | L | 26.0 | 41 | ns | 19.4 | 29 | ns | 30.3 | 50 | L | 66.7 | 46 | ns | 28.9 | 42 | ns |
| Calhoun | 32.1 | 12 | ns | 31.3 | 20 | ns | *22.9 | 11 | ns | 31.7 | 47 | ns | *63.3 | 52 | ns | 29.1 | 41 | ns |
| Clay | 32.2 | 11 | ns | 34.0 | 11 | ns | 21.4 | 17 | ns | 40.4 | 9 | ns | 76.3 | 6 | ns | 42.0 | 1 | H |
| Doddridge | 25.1 | 31 | ns | 22.6 | 50 | ns | *27.2 | 4 | ns | *37.4 | 19 | ns | 76.9 | 5 | ns | *32.3 | 31 | ns |
| Fayette | 33.6 | 8 | H | 32.6 | 15 | ns | 17.9 | 40 | ns | 37.7 | 18 | ns | 69.7 | 36 | ns | 35.4 | 18 | ns |
| Gilmer | *25.3 | 29 | ns | *27.9 | 33 | ns | *20.8 | 21 | ns | *42.8 | 3 | ns | *80.5 | 1 | ns | *41.5 | 2 | ns |
| Grant | 28.0 | 20 | ns | 30.3 | 23 | ns | *23.1 | 10 | ns | *41.7 | 5 | ns | 77.8 | 3 | ns | 36.1 | 15 | ns |
| Greenbrier | 27.0 | 23 | ns | 32.6 | 14 | ns | 22.8 | 12 | ns | 33.6 | 41 | ns | 66.6 | 48 | ns | 33.2 | 26 | ns |
| Hampshire | 28.4 | 19 | ns | 27.5 | 36 | ns | 15.3 | 50 | ns | 36.9 | 20 | ns | 71.6 | 23 | ns | 28.7 | 43 | ns |
| Hancock | 25.7 | 26 | ns | 24.8 | 48 | ns | 20.4 | 23 | ns | 38.3 | 17 | ns | 74.3 | 10 | ns | 36.1 | 16 | ns |
| Hardy | 23.0 | 42 | ns | 21.6 | 52 | L | 11 | 55 | L | 38.3 | 15 | ns | 78.9 | 2 | H | 36.3 | 12 | ns |
| Harrison | 23.2 | 40 | ns | 29.8 | 26 | ns | 20.9 | 20 | ns | 33.5 | 43 | ns | 70.9 | 28 | ns | 33.3 | 25 | ns |
| Jackson | 23.1 | 41 | ns | 25.4 | 42 | ns | 17.4 | 44 | ns | 32.6 | 45 | ns | 69.6 | 38 | ns | 30.9 | 36 | ns |
| Jefferson | 12.7 | 55 | L | 21.5 | 53 | L | 15.9 | 49 | ns | 31.9 | 46 | ns | 63.2 | 53 | L | 24.7 | 52 | L |
| Kanawha | 23.2 | 39 | L | 28.4 | 30 | ns | 18.9 | 33 | ns | 33.8 | 40 | ns | 68.6 | 41 | ns | 30.3 | 37 | ns |
| Lewis | 24.3 | 33 | ns | 27.5 | 35 | ns | 16.9 | 46 | ns | 36.9 | 21 | ns | 71.0 | 27 | ns | 28.5 | 44 | ns |
| Lincoln | 33.5 | 9 | H | 35.5 | 8 | ns | 18 | 39 | ns | 38.8 | 14 | ns | 72.5 | 16 | ns | 36.1 | 14 | ns |
| Logan | 35.9 | 5 | H | 38.0 | 5 | H | 24.3 | 6 | ns | 40.9 | 7 | H | 73.4 | 13 | ns | 39.1 | 5 | H |
| Marion | 21.0 | 51 | L | 24.9 | 47 | L | 18.7 | 36 | ns | 31.5 | 48 | ns | 66.7 | 45 | ns | 25.8 | 50 | L |
| Marshall | 23.4 | 36 | ns | 29.2 | 29 | ns | 19.7 | 25 | ns | 34.7 | 36 | ns | 70.6 | 29 | ns | 27.1 | 48 | ns |
| Mason | 22.4 | 45 | ns | 27.4 | 38 | ns | 17.4 | 43 | ns | 36.4 | 26 | ns | 75.0 | 8 | ns | 38.7 | 6 | H |
| McDowell | 43.2 | 1 | H | 42.2 | 2 | H | 23.8 | 7 | ns | 47.1 | 1 | H | 72.2 | 17 | ns | 36.3 | 11 | ns |
| Mercer | 28.9 | 15 | ns | 30.0 | 24 | ns | 21.4 | 16 | ns | 34.6 | 37 | ns | 71.8 | 22 | ns | 35.1 | 19 | ns |
| Mineral | 19.1 | 53 | L | 28.2 | 31 | ns | 19.1 | 32 | ns | 36.6 | 24 | ns | 66.6 | 47 | ns | 23.5 | 54 | L |
| Mingo | 35.8 | 6 | H | 37.9 | 6 | H | 18.5 | 37 | ns | 39.3 | 12 | ns | 74.2 | 11 | ns | 40.8 | 3 | H |
| Monongalia | 15.7 | 54 | L | 20.3 | 54 | L | 14.2 | 51 | L | 27.2 | 55 | L | 61.3 | 54 | L | 23.0 | 55 | L |
| Monroe | 25.1 | 30 | ns | 32.3 | 16 | ns | 24.5 | 5 | ns | 27.6 | 54 | ns | 61.2 | 55 | ns | 31.8 | 34 | ns |
| Morgan | 24.3 | 34 | ns | 27.5 | 37 | ns | 19.4 | 27 | ns | 38.3 | 16 | ns | 70.4 | 30 | ns | 29.6 | 38 | ns |
| Nicholas | 31.8 | 13 | H | 34.1 | 10 | ns | 22.3 | 13 | ns | 36.5 | 25 | ns | 70.1 | 31 | ns | 36.8 | 9 | ns |
| Ohio | 19.6 | 52 | L | 26.3 | 40 | ns | 12.8 | 53 | L | 29.0 | 52 | L | 64.4 | 50 | ns | 23.9 | 53 | L |
| Pendleton | 21.3 | 49 | ns | *29.5 | 28 | ns | 13.6 | 52 | ns | *44.4 | 2 | ns | 77.7 | 4 | ns | *32.1 | 32 | ns |
| Pleasants | 21.5 | 48 | ns | 29.8 | 25 | ns | 16.5 | 48 | ns | *34.0 | 39 | ns | *69.7 | 37 | ns | 25.7 | 51 | ns |
| Pocahontas | 28.7 | 17 | ns | 27.7 | 34 | ns | *27.9 | 3 | ns | 30.8 | 49 | ns | 64.0 | 51 | ns | 27.4 | 47 | ns |
| Preston | 23.4 | 37 | ns | 25.0 | 46 | ns | 16.9 | 45 | ns | 33.5 | 42 | ns | 65.9 | 49 | ns | 33.2 | 27 | ns |
| Putnam | 23.4 | 38 | ns | 25.0 | 45 | L | 12.2 | 54 | L | 32.9 | 44 | ns | 72.2 | 18 | ns | 27.8 | 45 | ns |
| Raleigh | 27.8 | 22 | ns | 31.5 | 18 | ns | 19.4 | 28 | ns | 34.9 | 33 | ns | 71.2 | 26 | ns | 31.6 | 35 | ns |
| Randolph | 25.4 | 28 | ns | 29.5 | 27 | ns | 19.1 | 30 | ns | 35.6 | 29 | ns | 70.1 | 32 | ns | 29.2 | 40 | ns |
| Ritchie | 33.7 | 7 | ns | 38.9 | 4 | ns | 21.2 | 19 | ns | *41.7 | 6 | ns | 70.0 | 33 | ns | 35.7 | 17 | ns |
| Roane | 28.6 | 18 | ns | 30.6 | 21 | ns | 16.5 | 47 | ns | 39.7 | 11 | ns | 71.6 | 24 | ns | 33.2 | 28 | ns |
| Summers | 32.4 | 10 | ns | 31.7 | 17 | ns | 18.8 | 35 | ns | 34.1 | 38 | ns | 71.9 | 21 | ns | 33.5 | 23 | ns |
| Taylor | 22.9 | 43 | ns | 22.5 | 51 | L | 21.6 | 15 | ns | 36.7 | 22 | ns | 72.1 | 19 | ns | 34.9 | 21 | ns |
| Tucker | 24.4 | 32 | ns | 18.8 | 55 | L | *23.2 | 9 | ns | *40.7 | 8 | ns | 73.9 | 12 | ns | 36.6 | 10 | ns |
| Tyler | 22.3 | 46 | ns | 28.2 | 32 | ns | 21.3 | 18 | ns | 28.0 | 53 | ns | 67.4 | 43 | ns | 37.3 | 8 | ns |
| Upshur | 22.7 | 44 | ns | 25.0 | 44 | ns | 17.8 | 41 | ns | 35.7 | 28 | ns | 66.9 | 44 | ns | 26.4 | 49 | ns |
| Wayne | 28.7 | 16 | ns | 33.4 | 13 | ns | 17.8 | 42 | ns | 35.8 | 27 | ns | 68.0 | 42 | ns | 35.0 | 20 | ns |
| Webster | *40.5 | 2 | H | 40.6 | 3 | H | *31.0 | 1 | ns | *40.0 | 10 | ns | 75.2 | 7 | ns | 36.2 | 13 | ns |
| Wetzel | 30.3 | 14 | ns | 33.4 | 12 | ns | 18.4 | 38 | ns | 36.6 | 23 | ns | 69.8 | 34 | ns | 33.4 | 24 | ns |
| Wirt | 23.8 | 35 | ns | *34.4 | 9 | ns | *23.5 | 8 | ns | *42.7 | 4 | ns | *72.8 | 15 | ns | *34.2 | 22 | ns |
| Wood | 25.7 | 27 | ns | 30.5 | 22 | ns | 20 | 24 | ns | 34.7 | 35 | ns | 69.6 | 39 | ns | 29.4 | 39 | ns |
| Wyoming | 36.2 | 4 | H | 42.7 | 1 | H | 19.5 | 26 | ns | 39.2 | 13 | ns | 73.3 | 14 | ns | 40.6 | 4 | H |
| West Virginia |  | 25.5 |  |  | 25.2 |  |  | 23.7 |  |  | 34.5 |  |  | 68.8 |  |  | 31.4 |  |

Source: West Virginia Behavioral Risk Factor Surveillance System (WVBRFSS), West Virginia Health Statistics Center, 2015.
Sig. - Indicates whether county prevalence estimate is significantly different than WV prevalence. $\mathrm{H}=$ significantly higher, $\mathrm{ns}=$ not significantly different, $\mathrm{L}=$ significantly lower.
estimate - use caution when reporting and interpreting. See discussion on page 5 about unreliable estimates.

| County | < 5 Servings of Fruits \& Vegetables** |  |  | Current Smoking |  |  | Smokeless Tobacco Use |  |  | Binge Drinking |  |  | Hypertension** |  |  | High Cholesterol** |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | Rank | Sig | \% | Rank | Sig. | \% | Rank | Sig. | \% | Rank | Sig. | \% | Rank | Sig. | \% | Rank | Sig. |
| Barbour | 87.5 | 25 | ns | 34.9 | 3 | ns | 11.1 | 18 | ns | *6.3 | 48 | ns | 41.2 | 18 | ns | 49.9 | 7 | H |
| Berkeley | 86.4 | 38 | ns | 28.7 | 27 | ns | 5.9 | 48 | L | 10.8 | 16 | ns | 30.9 | 53 | L | 38.0 | 42 | ns |
| Boone | 90.2 | 8 | ns | 33.1 | 6 | ns | 11.5 | 15 | ns | 8.8 | 34 | ns | 43.7 | 11 | ns | 42.0 | 25 | ns |
| Braxton | 85.5 | 46 | ns | 23.6 | 45 | ns | 13.7 | 8 | ns | 7.5 | 42 | ns | 36.1 | 44 | ns | 40.3 | 31 | ns |
| Brooke | 87.7 | 24 | ns | 29.6 | 19 | ns | 7.1 | 43 | ns | 14.1 | 9 | ns | 38.2 | 33 | ns | 35.3 | 49 | ns |
| Cabell | 87.1 | 30 | ns | 29.7 | 17 | ns | 5.6 | 52 | L | 12.3 | 12 | ns | 36.6 | 41 | ns | 40.7 | 29 | ns |
| Calhoun | 83.0 | 53 | ns | *37.2 | 2 | ns | *8.9 | 33 | ns | 17.6 | 2 | ns | 36.5 | 43 | ns | *36.4 | 47 | ns |
| Clay | 92.0 | 5 | ns | 26.8 | 33 | ns | 14.0 | 7 | ns | *6.0 | 49 | ns | 48.0 | 3 | ns | *52.6 | 3 | H |
| Doddridge | 87.3 | 28 | ns | 22.0 | 50 | ns | *13.0 | 10 | ns | *4.9 | 53 | L | 24.9 | 55 | L | *31.5 | 53 | ns |
| Fayette | 88.2 | 18 | ns | 29.4 | 22 | ns | 11.4 | 16 | ns | 9.3 | 31 | ns | 40.4 | 22 | ns | 37.4 | 44 | ns |
| Gilmer | 96.7 | 1 | H | *29.3 | 23 | ns | *22.7 | 1 | ns | ${ }^{*} 17.3$ | 3 | ns | *38.4 | 30 | ns | *49.3 | 9 | ns |
| Grant | 85.3 | 48 | ns | 13.9 | 55 | L | 18.8 | 2 | H | *4.6 | 54 | L | 43.3 | 12 | ns | 43.9 | 22 | ns |
| Greenbrier | 86.3 | 40 | ns | 26.0 | 38 | ns | 9.9 | 29 | ns | 9.8 | 26 | ns | 40.7 | 21 | ns | 39.1 | 38 | ns |
| Hampshire | 83.9 | 51 | ns | 28.2 | 29 | ns | 6.7 | 45 | ns | 12.2 | 13 | ns | 37.8 | 35 | ns | 39.2 | 37 | ns |
| Hancock | 86.6 | 34 | ns | 29.8 | 16 | ns | 4.4 | 53 | L | 10.6 | 18 | ns | 37.5 | 37 | ns | 37.9 | 43 | ns |
| Hardy | 85.8 | 44 | ns | 25.9 | 39 | ns | 10.3 | 24 | ns | 9.4 | 30 | ns | 35.8 | 45 | ns | 33.8 | 50 | ns |
| Harrison | 86.6 | 35 | ns | 26.5 | 35 | ns | 10.3 | 25 | ns | 8.3 | 37 | ns | 36.6 | 42 | ns | 42.1 | 24 | ns |
| Jackson | 87.5 | 27 | ns | 27.1 | 32 | ns | 9.6 | 31 | ns | 6.4 | 47 | L | 41.5 | 17 | ns | 41.2 | 28 | ns |
| Jefferson | 83.4 | 52 | ns | 26.3 | 36 | ns | 4.1 | 55 | L | 15.1 | 7 | H | 32.1 | 51 | L | 36.8 | 46 | ns |
| Kanawha | 87.8 | 21 | ns | 26.1 | 37 | ns | 6.4 | 46 | L | 10.6 | 17 | ns | 38.6 | 28 | ns | 40.5 | 30 | ns |
| Lewis | 87.5 | 26 | ns | 30.2 | 13 | ns | 11.6 | 14 | ns | 7.1 | 44 | ns | 44.9 | 9 | ns | 45.8 | 14 | ns |
| Lincoln | 93.4 | 2 | H | 29.5 | 21 | ns | 17.7 | 3 | H | 11.6 | 14 | ns | 48.0 | 2 | H | 46.2 | 13 | ns |
| Logan | 89.0 | 13 | ns | 33.0 | 7 | H | 10.9 | 20 | ns | 7.6 | 41 | ns | 46.9 | 5 | H | 44.4 | 19 | ns |
| Marion | 85.9 | 42 | ns | 24.7 | 42 | ns | 10.8 | 23 | ns | 10.3 | 24 | ns | 34.1 | 50 | ns | 36.0 | 48 | ns |
| Marshall | 85.4 | 47 | ns | 23.6 | 44 | ns | 8.0 | 37 | ns | 14.6 | 8 | ns | 34.7 | 47 | ns | 44.9 | 18 | ns |
| Mason | 91.9 | 6 | H | 30.8 | 11 | ns | 7.1 | 44 | ns | 7.9 | 39 | ns | 43.2 | 13 | ns | 39.7 | 34 | ns |
| McDowell | 87.3 | 29 | ns | 30.7 | 12 | ns | 8.0 | 36 | ns | 9.8 | 27 | ns | 46.1 | 6 | H | 49.2 | 10 | H |
| Mercer | 89.9 | 9 | ns | 29.7 | 18 | ns | 7.9 | 39 | ns | 8.4 | 36 | ns | 40.3 | 23 | ns | 41.9 | 26 | ns |
| Mineral | 86.0 | 41 | ns | 26.8 | 34 | ns | 8.0 | 38 | ns | 14.1 | 10 | ns | 37.3 | 40 | ns | 38.2 | 41 | ns |
| Mingo | 91.3 | 7 | H | 32.4 | 8 | ns | 9.6 | 32 | ns | 5.3 | 51 | L | 47.3 | 4 | H | 49.4 | 8 | H |
| Monongalia | 86.3 | 39 | ns | 19.9 | 53 | L | 5.8 | 49 | L | 24.7 | 1 | H | 26.7 | 54 | L | 30.8 | 55 | L |
| Monroe | 85.7 | 45 | ns | 24.8 | 41 | ns | 11.7 | 13 | ns | 8.1 | 38 | ns | 40.2 | 24 | ns | 51.3 | 4 | H |
| Morgan | 86.9 | 33 | ns | 21.1 | 51 | ns | 6.2 | 47 | ns | *4.1 | 55 | L | 37.4 | 38 | ns | 43.9 | 21 | ns |
| Nicholas | 88.7 | 15 | ns | 31.3 | 9 | ns | 14.9 | 6 | H | 10.3 | 23 | ns | 42.7 | 14 | ns | 39.3 | 36 | ns |
| Ohio | 88.4 | 16 | ns | 28.9 | 26 | ns | *4.2 | 54 | L | 17.0 | 4 | H | 31.6 | 52 | L | 39.0 | 39 | ns |
| Pendleton | 85.0 | 49 | ns | *22.5 | 48 | ns | *9.8 | 30 | ns | *6.4 | 46 | ns | *35.6 | 46 | ns | *50.3 | 6 | ns |
| Pleasants | 89.6 | 10 | ns | 24.8 | 40 | ns | 15.5 | 4 | ns | *10.6 | 19 | ns | *34.2 | 49 | ns | *31.6 | 52 | ns |
| Pocahontas | 82.3 | 54 | ns | 14.8 | 54 | L | *10.1 | 26 | ns | *7.4 | 43 | ns | 34.4 | 48 | ns | 37.1 | 45 | ns |
| Preston | 88.1 | 19 | ns | 29.6 | 20 | ns | 10.8 | 22 | ns | 12.9 | 11 | ns | 37.3 | 39 | ns | 38.5 | 40 | ns |
| Putnam | 86.5 | 36 | ns | 22.3 | 49 | L | 7.7 | 41 | ns | 10.6 | 20 | ns | 41.1 | 19 | ns | 44.1 | 20 | ns |
| Raleigh | 87.8 | 22 | ns | 27.2 | 31 | ns | 10.0 | 27 | ns | 7.7 | 40 | ns | 39.6 | 26 | ns | 43.0 | 23 | ns |
| Randolph | 85.8 | 43 | ns | 28.3 | 28 | ns | 10.0 | 28 | ns | 8.9 | 33 | ns | 37.8 | 34 | ns | 39.9 | 33 | ns |
| Ritchie | 89.4 | 11 | ns | 29.2 | 24 | ns | *12.4 | 12 | ns | *10.5 | 21 | ns | *45.2 | 8 | ns | *39.6 | 35 | ns |
| Roane | 88.3 | 17 | ns | 33.6 | 5 | ns | 11.3 | 17 | ns | 11.4 | 15 | ns | 39.2 | 27 | ns | 45.7 | 15 | ns |
| Summers | 86.4 | 37 | ns | 20.7 | 52 | ns | *5.7 | 50 | ns | 8.9 | 32 | ns | 39.7 | 25 | ns | 51.3 | 5 | H |
| Taylor | 86.9 | 32 | ns | 27.8 | 30 | ns | 7.7 | 42 | ns | 9.4 | 29 | ns | 38.3 | 32 | ns | *32.8 | 51 | L |
| Tucker | *74.5 | 55 | ns | 23.6 | 43 | ns | *8.8 | 34 | ns | *5.2 | 52 | L | *42.2 | 16 | ns | 31.4 | 54 | ns |
| Tyler | 87.9 | 20 | ns | *31.1 | 10 | ns | *10.9 | 21 | ns | 15.9 | 5 | ns | 38.5 | 29 | ns | *47.7 | 12 | ns |
| Upshur | 84.2 | 50 | ns | 22.8 | 46 | ns | 11.1 | 19 | ns | 10.4 | 22 | ns | 38.3 | 31 | ns | 45.0 | 17 | ns |
| Wayne | 88.9 | 14 | ns | 28.9 | 25 | ns | 8.6 | 35 | ns | 7.0 | 45 | ns | 44.1 | 10 | H | 39.9 | 32 | ns |
| Webster | 92.8 | 3 | ns | *41.9 | 1 | H | *15.1 | 5 | ns | *9.8 | 28 | ns | 48.2 | 1 | ns | *58.3 | 1 | H |
| Wetzel | 89.3 | 12 | ns | 29.9 | 15 | ns | 12.4 | 11 | ns | 8.6 | 35 | ns | 45.9 | 7 | ns | 45.3 | 16 | ns |
| Wirt | 92.2 | 4 | ns | *22.7 | 47 | ns | *7.8 | 40 | ns | *15.8 | 6 | ns | *41.0 | 20 | ns | *54.2 | 2 | ns |
| Wood | 87.0 | 31 | ns | 30.1 | 14 | ns | 5.6 | 51 | L | 9.9 | 25 | ns | 37.5 | 36 | ns | 41.3 | 27 | ns |
| Wyoming | 87.8 | 23 | ns | 33.7 | 4 | ns | 13.4 | 9 | ns | 5.3 | 50 | L | 42.3 | 15 | ns | 48.4 | 11 | ns |
| West Virginia |  | 87.4 |  |  | 16.7 |  |  | 8.7 |  |  | 10.3 |  |  | 38.3 |  |  | 40.7 |  |

Source: West Virginia Behavioral Risk Factor Surveillance System (WVBRFSS), West Virginia Health Statistics Center, 2015.
Sig. - Indicates whether county prevalence estimate is significantly different than WV prevalence. $\mathrm{H}=$ significantly higher, $n \mathrm{n}=$ not significantly different, $\mathrm{L}=$ significantly lower.

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

P ** This question was asked 2007-2015 (odd years).

| County | Cardiovascular Disease |  |  | Diabetes |  |  | Cancer |  |  | Current Asthma |  |  | COPD |  |  | Arthritis |  |  | Depression |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | Rank | Sig | \% | Rank | Sig. | \% | Rank | Sig. | \% | Rank | Sig. | \% | Rank | Sig. | \% | Rank | Sig. | \% | Rank | Sig. |
| Barbour | 15.6 | 16 | ns | 16.3 | 6 | ns | 15.4 | 6 | ns | 13.1 | 8 | ns | 12.8 | 20 | ns | 37.2 | 38 | ns | 22.4 | 24 | ns |
| Berkeley | 11.1 | 45 | L | 9.9 | 50 | L | 9.0 | 53 | L | 10.2 | 28 | ns | 8.3 | 45 | L | 32.3 | 51 | L | 20.7 | 34 | ns |
| Boone | 18.2 | 5 | H | 15.7 | 10 | ns | 14.5 | 17 | ns | 10.5 | 24 | ns | 14.5 | 9 | ns | 40.5 | 21 | ns | 31.1 | 1 | H |
| Braxton | 15.0 | 21 | ns | 13.3 | 28 | ns | 13.3 | 29 | ns | 13.4 | 5 | ns | 12.2 | 24 | ns | 38.0 | 33 | ns | 20.6 | 35 | ns |
| Brooke | 14.5 | 25 | ns | 14.4 | 22 | ns | 13.0 | 35 | ns | 11.5 | 17 | ns | 9.9 | 37 | ns | 37.3 | 37 | ns | 19.0 | 42 | ns |
| Cabell | 12.4 | 35 | ns | 13.1 | 33 | ns | 12.2 | 41 | ns | 12.0 | 12 | ns | 9.9 | 36 | ns | 31.0 | 53 | L | 22.7 | 22 | ns |
| Calhoun | *9.5 | 52 | ns | 12.1 | 37 | ns | 15.5 | 5 | ns | *13.9 | 4 | ns | 9.5 | 38 | ns | 37.3 | 36 | ns | 22.1 | 28 | ns |
| Clay | 17.1 | 9 | ns | 15.5 | 14 | ns | 7.4 | 54 | L | 11.1 | 19 | ns | 11.8 | 28 | ns | 41.6 | 18 | ns | 25.8 | 8 | ns |
| Doddridge | 10.0 | 50 | ns | 11.5 | 42 | ns | 14.7 | 14 | ns | *7.5 | 48 | ns | 14.0 | 11 | ns | *40.0 | 23 | ns | 13.8 | 54 | L |
| Fayette | 14.6 | 23 | ns | 13.4 | 27 | ns | 15.1 | 8 | ns | 9.9 | 30 | ns | 16.3 | 5 | H | 42.4 | 10 | H | 26.5 | 6 | H |
| Gilmer | *16.8 | 11 | ns | ${ }^{*} 16.3$ | 7 | ns | *7.1 | 55 | L | *18.0 | 2 | ns | *5.3 | 55 | L | *33.9 | 46 | ns | *10.5 | 55 | L |
| Grant | 18.2 | 6 | ns | 22.1 | 1 | H | 14.4 | 18 | ns | *18.3 | 1 | ns | 7.5 | 47 | ns | 42.4 | 11 | ns | 16.0 | 49 | ns |
| Greenbrier | 13.0 | 30 | ns | 13.1 | 32 | ns | 14.2 | 19 | ns | 8.9 | 35 | ns | 13.1 | 16 | ns | 41.2 | 20 | ns | 22.7 | 21 | ns |
| Hampshire | 12.5 | 33 | ns | 12.9 | 34 | ns | 12.9 | 37 | ns | 8.8 | 38 | ns | 10.6 | 32 | ns | 37.2 | 39 | ns | 21.6 | 31 | ns |
| Hancock | 10.5 | 48 | ns | 14.6 | 20 | ns | 11.1 | 48 | ns | 7.4 | 49 | ns | 8.9 | 43 | ns | 34.5 | 44 | ns | 19.5 | 40 | ns |
| Hardy | 12.7 | 32 | ns | 11.3 | 43 | ns | 11.0 | 49 | ns | 7.0 | 51 | ns | 7.8 | 46 | ns | 31.8 | 52 | ns | 15.6 | 50 | L |
| Harrison | 12.0 | 38 | ns | 13.2 | 31 | ns | 13.9 | 24 | ns | 11.7 | 14 | ns | 13.0 | 17 | ns | 39.2 | 28 | ns | 21.7 | 30 | ns |
| Jackson | 12.4 | 36 | ns | 11.7 | 40 | ns | 13.8 | 25 | ns | 8.8 | 37 | ns | 13.0 | 19 | ns | 37.9 | 35 | ns | 20.1 | 38 | ns |
| Jefferson | 8.4 | 54 | L | 9.0 | 53 | L | 9.6 | 51 | L | 8.3 | 43 | ns | 5.7 | 53 | L | 22.1 | 54 | L | 17.7 | 46 | ns |
| Kanawha | 14.5 | 24 | ns | 14.4 | 21 | ns | 13.3 | 30 | ns | 8.5 | 40 | L | 9.5 | 40 | L | 35.0 | 41 | ns | 22.6 | 23 | ns |
| Lewis | 15.5 | 17 | ns | 15.9 | 9 | ns | 14.6 | 16 | ns | 10.6 | 22 | ns | 10.9 | 30 | ns | 41.9 | 14 | ns | 17.4 | 48 | ns |
| Lincoln | 17.5 | 7 | ns | 16.3 | 8 | ns | 15.6 | 4 | ns | 12.1 | 11 | ns | 13.3 | 15 | ns | 44.8 | 6 | H | 25.4 | 10 | ns |
| Logan | 18.4 | 4 | H | 18.4 | 4 | H | 13.4 | 28 | ns | 13.3 | 6 | ns | 17.2 | 4 | H | 44.6 | 7 | H | 26.7 | 5 | ns |
| Marion | 11.9 | 40 | ns | 10.2 | 49 | L | 12.9 | 36 | ns | 12.1 | 10 | ns | 9.3 | 41 | ns | 32.8 | 49 | L | 20.3 | 36 | ns |
| Marshall | 12.1 | 37 | ns | 11.7 | 41 | ns | 15.7 | 3 | ns | 10.9 | 21 | ns | 12.2 | 25 | ns | 39.2 | 26 | ns | 24.1 | 16 | ns |
| Mason | 12.4 | 34 | ns | 10.8 | 48 | ns | 13.8 | 26 | ns | 8.2 | 44 | ns | 13.0 | 18 | ns | 42.3 | 12 | ns | 15.5 | 51 | L |
| McDowell | 20.1 | 2 | H | 20.5 | 2 | H | 12.4 | 40 | ns | 16.2 | 3 | H | 18.2 | 3 | H | 48.4 | 2 | H | 25.2 | 11 | ns |
| Mercer | 14.4 | 27 | ns | 13.8 | 25 | ns | 12.9 | 38 | ns | 9.7 | 32 | ns | 15.3 | 7 | H | 39.7 | 24 | ns | 25.9 | 7 | H |
| Mineral | 11.1 | 43 | ns | 11.2 | 44 | ns | 13.2 | 32 | ns | 7.7 | 47 | ns | 9.1 | 42 | ns | 33.4 | 48 | ns | 17.5 | 47 | ns |
| Mingo | 19.2 | 3 | H | 15.0 | 16 | ns | 11.5 | 45 | ns | 12.6 | 9 | ns | 20.2 | 1 | H | 41.7 | 16 | ns | 25.4 | 9 | ns |
| Monongalia | 7.9 | 55 | L | 8.8 | 54 | L | 9.4 | 52 | L | 8.4 | 41 | ns | 6.8 | 51 | L | 21.4 | 55 | L | 18.3 | 44 | L |
| Monroe | 10.8 | 47 | ns | 15.2 | 15 | ns | 13.2 | 33 | ns | 6.7 | 52 | ns | 9.5 | 39 | ns | 38.2 | 32 | ns | 22.1 | 27 | ns |
| Morgan | 16.4 | 12 | ns | 13.3 | 30 | ns | 14.8 | 13 | ns | 8.5 | 39 | ns | 12.4 | 23 | ns | 35.0 | 42 | ns | 24.1 | 17 | ns |
| Nicholas | 15.2 | 19 | ns | 12.0 | 38 | ns | 14.1 | 22 | ns | 9.7 | 33 | ns | 14.5 | 8 | ns | 45.7 | 4 | H | 24.6 | 13 | ns |
| Ohio | 10.8 | 46 | ns | 12.3 | 36 | ns | 11.3 | 47 | ns | 10.4 | 25 | ns | 7.4 | 48 | L | 34.9 | 43 | ns | 18.8 | 43 | ns |
| Pendleton | 11.9 | 39 | ns | 14.8 | 18 | ns | 12.0 | 42 | ns | *10.3 | 26 | ns | *6.3 | 52 | ns | *41.4 | 19 | ns | *24.3 | 14 | ns |
| Pleasants | 9.9 | 51 | ns | 15.7 | 12 | ns | 14.0 | 23 | ns | *6.7 | 53 | ns | *5.5 | 54 | L | 38.4 | 31 | ns | 14.7 | 52 | ns |
| Pocahontas | 14.7 | 22 | ns | 13.3 | 29 | ns | 11.5 | 46 | ns | 10.1 | 29 | ns | 10.1 | 33 | ns | 41.7 | 17 | ns | 21.4 | 33 | ns |
| Preston | 9.2 | 53 | L | 9.8 | 51 | L | 9.8 | 50 | L | 9.9 | 31 | ns | 7.0 | 49 | L | 33.7 | 47 | ns | 19.6 | 39 | ns |
| Putnam | 11.7 | 41 | ns | 11.1 | 47 | ns | 12.8 | 39 | ns | 8.1 | 45 | ns | 8.5 | 44 | L | 35.5 | 40 | ns | 22.1 | 26 | ns |
| Raleigh | 15.2 | 18 | ns | 12.7 | 35 | ns | 14.2 | 20 | ns | 11.5 | 18 | ns | 12.6 | 21 | ns | 40.3 | 22 | ns | 23.4 | 19 | ns |
| Randolph | 13.4 | 28 | ns | 13.7 | 26 | ns | 14.9 | 11 | ns | 13.2 | 7 | ns | 10.6 | 31 | ns | 38.9 | 29 | ns | 20.1 | 37 | ns |
| Ritchie | 14.4 | 26 | ns | 15.6 | 13 | ns | 13.2 | 31 | ns | *10.5 | 23 | ns | 11.7 | 29 | ns | 41.8 | 15 | ns | 19.2 | 41 | ns |
| Roane | 17.1 | 10 | ns | 15.7 | 11 | ns | 14.1 | 21 | ns | 6.5 | 54 | ns | 14.3 | 10 | ns | 37.9 | 34 | ns | 23.5 | 18 | ns |
| Summers | 15.0 | 20 | ns | 14.7 | 19 | ns | 16.3 | 2 | ns | 8.1 | 46 | ns | 13.8 | 12 | ns | 39.6 | 25 | ns | 21.5 | 32 | ns |
| Taylor | 11.1 | 44 | ns | 11.2 | 45 | ns | 13.5 | 27 | ns | 8.9 | 36 | ns | 12.1 | 26 | ns | 38.7 | 30 | ns | 22.3 | 25 | ns |
| Tucker | 10.0 | 49 | ns | 9.5 | 52 | ns | 14.8 | 12 | ns | 11.6 | 16 | ns | 10.1 | 34 | ns | 32.7 | 50 | ns | 13.8 | 53 | L |
| Tyler | 11.2 | 42 | ns | 11.2 | 46 | ns | 15.3 | 7 | ns | *7.1 | 50 | ns | 12.6 | 22 | ns | 45.3 | 5 | ns | 25.1 | 12 | ns |
| Upshur | 12.7 | 31 | ns | 8.8 | 55 | L | 15.1 | 9 | ns | 10.9 | 20 | ns | 6.9 | 50 | L | 34.1 | 45 | ns | 17.9 | 45 | ns |
| Wayne | 16.1 | 14 | ns | 17.1 | 5 | H | 17.4 | 1 | H | 11.9 | 13 | ns | 13.8 | 13 | ns | 42.2 | 13 | ns | 28.1 | 3 | H |
| Webster | 15.8 | 15 | ns | 20.1 | 3 | ns | 11.7 | 43 | ns | *8.4 | 42 | ns | 19.1 | 2 | H | *48.9 | 1 | H | 28.5 | 2 | ns |
| Wetzel | 17.1 | 8 | ns | 11.9 | 39 | ns | 13.0 | 34 | ns | 10.2 | 27 | ns | 10.0 | 35 | ns | 43.7 | 9 | ns | 24.1 | 15 | ns |
| Wirt | 16.2 | 13 | ns | 13.9 | 24 | ns | 11.6 | 44 | ns | *4.9 | 55 | L | 13.5 | 14 | ns | *46.7 | 3 | ns | 22.0 | 29 | ns |
| Wood | 13.3 | 29 | ns | 14.4 | 23 | ns | 14.7 | 15 | ns | 8.9 | 34 | ns | 12.0 | 27 | ns | 39.2 | 27 | ns | 23.0 | 20 | ns |
| Wyoming | 20.3 | 1 | H | 14.9 | 17 | ns | 15.1 | 10 | ns | 11.7 | 15 | ns | 15.4 | 6 | ns | 44.0 | 8 | H | 27.8 | 4 | ns |
| West Virginia | 13.8 |  |  | 13.3 |  |  | 13.4 |  |  | 10.1 |  |  | 11.3 |  |  | 37.3 |  |  | 21.9 |  |  |

Source: West Virginia Behavioral Risk Factor Surveillance System (WVBRFSS), West Virginia Health Statistics Center, 2015.
Sig. - Indicates whether county prevalence estimate is significantly different than WV prevalence. $\mathrm{H}=$ significantly higher, $\mathrm{ns}=$ not significantly different, $\mathrm{L}=$ significantly lower.


[^0]:    * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

[^1]:    *Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years.

[^2]:    * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

[^3]:    * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

[^4]:    *Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years.

[^5]:    *Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years.

[^6]:    *Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years.

[^7]:    *Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years.

[^8]:    *Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years

[^9]:    *Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years.

[^10]:    * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

[^11]:    * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

[^12]:    * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

[^13]:    * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

[^14]:    * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

[^15]:    * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

[^16]:    * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

[^17]:    *Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years.

[^18]:    *Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years.

[^19]:    * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6 .

[^20]:    *Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years.

[^21]:    *Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years.

[^22]:    *Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years.

[^23]:    * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

[^24]:    * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

[^25]:    Table interpretation: Each cell represents the percentage of West Virginia adults with both of the conditions/risk factors. For example, 6.0\% of West Virginia adults have both asthma and arthritis.

[^26]:    * Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

