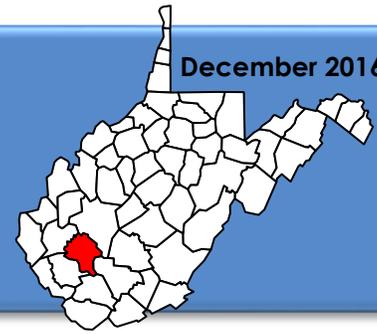


# BOONE COUNTY

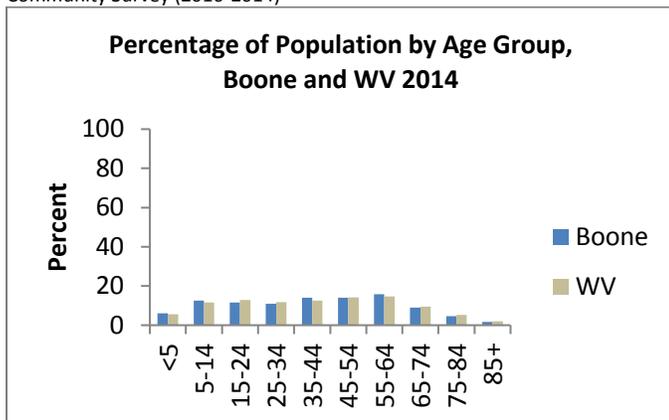


## Behavioral Health Epidemiological County Profile

### Demographic Data

|  |       | Boone  | WV        |
|--|-------|--------|-----------|
| <b>Population</b>                      |       | 24,257 | 1,853,881 |
| <b>Race</b>                            | White | 98.4%  | 93.6%     |
|  | Black | 0.9%   | 3.2%      |
|  | Other | 0.7%   | 3.2%      |
| <b>Median age</b>                      |       | 41.6   | 41.6      |
| <b>Labor force*</b>                    |       | 45.9%  | 54.3%     |
| <b>Median household income*</b>        |       | 42,740 | 41,576    |
| <b>Income below poverty level*</b>     |       | 16.6%  | 13.1%     |
| <b>High school graduate or higher*</b> |       | 77.6%  | 84.4%     |
| <b>Civilian veterans*</b>              |       | 9.2%   | 10.6%     |

Source: US Census Bureau, 2014 population estimates, \*American Community Survey (2010-2014)



### Population by Age Group 2014

| Age   | Boone |       | WV      |       |
|-------|-------|-------|---------|-------|
|       | #     | %     | #       | %     |
| <5    | 1,465 | 6.0%  | 103,044 | 5.6%  |
| 5-14  | 3,066 | 12.6% | 214,204 | 11.6% |
| 15-24 | 2,780 | 11.5% | 238,019 | 12.8% |
| 25-34 | 2,637 | 10.9% | 219,567 | 11.8% |
| 35-44 | 3,386 | 14.0% | 233,375 | 12.6% |
| 45-54 | 3,390 | 14.0% | 263,350 | 14.2% |
| 55-64 | 3,829 | 15.8% | 270,697 | 14.6% |
| 65-74 | 2,169 | 8.9%  | 175,725 | 9.5%  |
| 75-84 | 1,118 | 4.6%  | 98,022  | 5.3%  |
| 85+   | 417   | 1.7%  | 37,878  | 2.0%  |

Source: US Census Bureau, 2014 population estimates

### Adult Behavioral Health Risk Factors: 2010-2014

| Indicator                                | Boone  | WV    | Rank in WV* |
|--|--------|-------|-------------|
| <b>Fair/Poor Health</b>                  | 37.9%† | 25.0% | 3           |
| <b>No Health Insurance (ages 18-64)</b>  | 22.5%  | 21.5% | 25          |
| <b>No Leisure Time Physical Activity</b> | 33.6%  | 31.8% | 26          |
| <b>Obesity</b>                           | 33.6%  | 34.0% | 34          |
| <b>Diabetes</b>                          | 14.1%  | 12.8% | 21          |
| <b>Cardiovascular Disease</b>            | 20.6%† | 13.3% | 1           |
| <b>Current Asthma</b>                    | 10.3%  | 9.3%  | 24          |
| <b>Disability</b>                        | 36.9%† | 29.0% | 7           |
| <b>Arthritis</b>                         | 43.0%  | 36.9% | 10          |
| <b>Cancer</b>                            | 14.0%  | 12.3% | 7           |
| <b>Depression</b>                        | 30.3%† | 21.6% | 1           |

Source: WV Health Statistics Center, Behavioral Risk Factor Surveillance System.

There are 55 counties in West Virginia; 1<sup>st</sup> highest rate and 55<sup>th</sup> lowest rate. Significance: † Indicates county was significantly higher than state. †† Indicates state was significantly higher than county. § Indicates unreliable prevalence estimate - use caution when reporting and interpreting.

#### INSIDE

|                                   |   |
|-----------------------------------|---|
| Alcohol Consumption               | 2 |
| Alcohol Risk & Protective Factors | 2 |
| Alcohol Consequences              | 3 |
| Tobacco Consumption               | 3 |
| Tobacco Risk & Protective Factors | 4 |
| Tobacco Consequences              | 4 |
| Drug Consumption                  | 4 |
| Drug Risk & Protective Factors    | 5 |
| Drug Consequences                 | 6 |
| Mental Health                     | 6 |

## Alcohol Consumption

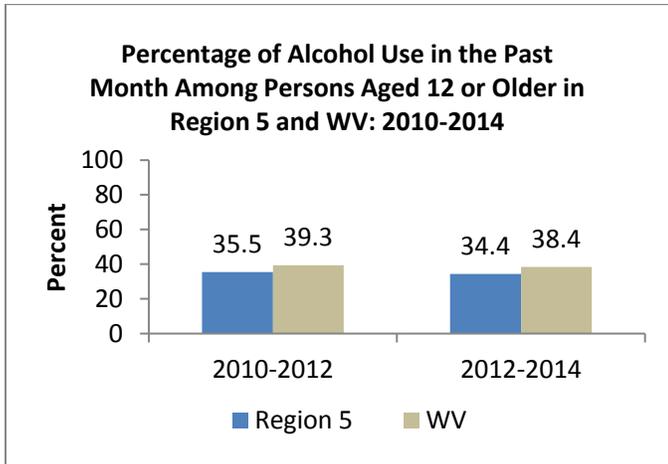
### Alcohol Use Among Adults: 2010-2014

| Indicator      | Boone | WV    | Rank in WV* |
|----------------|-------|-------|-------------|
| Binge Drinking | 7.7%  | 10.0% | 38          |

Source: WV Health Statistics Center, Behavioral Risk Factor Surveillance System

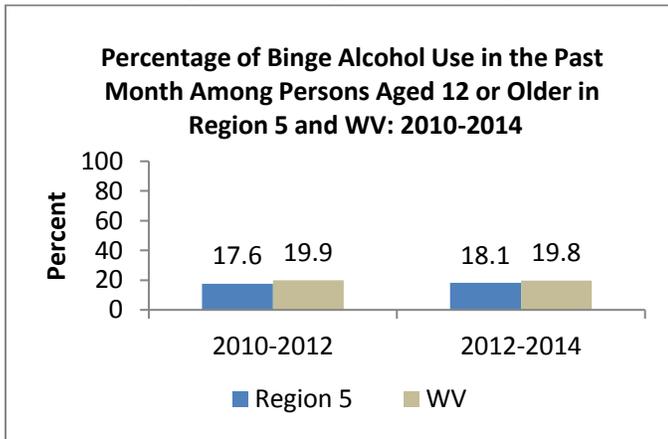
\*There are 55 counties in West Virginia; 1<sup>st</sup> highest rate and 55<sup>th</sup> lowest rate.

### Alcohol Use Among Persons 12 and Older



Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health (NSDUH), 2010, 2011, 2012, 2013, and 2014 (2010 Data - Revised March 2012)

Note: Region 5 is made up of the following counties: Boone, Cabell, Clay, Kanawha, Lincoln, Logan, Mason, Mingo, Putnam, and Wayne.



Source: NSDUH, 2010-2014 (2010 Data - Revised March 2012)

Note: Binge Alcohol Use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days. See previous definition of Region 5.

### Underage Drinking (Those Aged 12-20)

#### Alcohol Use in the Past Month Among Persons Aged 12 to 20 in Region 5 and WV: 2010-2014

|          | 2010-2012 | 2012-2014 |
|----------|-----------|-----------|
| Region 5 | 21.9%     | 19.2%     |
| WV       | 26.2%     | 22.2%     |

#### Binge Alcohol Use in the Past Month Among Persons Aged 12 to 20 in Region 5 and WV: 2010-2014

|          | 2010-2012 | 2012-2014 |
|----------|-----------|-----------|
| Region 5 | 15.5%     | 14.6%     |
| WV       | 20.1%     | 17.3%     |

Source: NSDUH, 2010-2014 (2010 Data - Revised March 2012)

Note: See previous definitions for binge drinking among persons 12 and older. See previous definition of Region 5.

## Alcohol Risk & Protective Factors

#### Perceptions of Great Risk of Having Five or More Drinks of an Alcoholic Beverage Once or Twice a Week Among Persons Aged 12 or Older in Region 5 and WV: 2010-2014

|          | 2010-2012 | 2012-2014 |
|----------|-----------|-----------|
| Region 5 | 41.2%     | 42.0%     |
| WV       | 41.4%     | 41.6%     |

#### Alcohol Dependence or Abuse in the Past Year Among Persons Aged 12 or Older in Region 5 and WV: 2010-2014

|          | 2010-2012 | 2012-2014 |
|----------|-----------|-----------|
| Region 5 | 4.8%      | 5.9%      |
| WV       | 5.6%      | 6.2%      |

#### Alcohol Dependence in the Past Year Among Persons Aged 12 or Older in Region 5 and WV: 2010-2014

|          | 2010-2012 | 2012-2014 |
|----------|-----------|-----------|
| Region 5 | 2.7%      | 3.0%      |
| WV       | 3.0%      | 3.1%      |

#### Needing But Not Receiving Treatment for Alcohol Use in the Past Year Among Persons Aged 12 or Older in Region 5 and WV: 2010-2014

|          | 2010-2012 | 2012-2014 |
|----------|-----------|-----------|
| Region 5 | 4.5%      | 5.5%      |
| WV       | 5.3%      | 5.9%      |

Source: NSDUH, 2010-2014 (2010 Data - Revised March 2012)

Note: Dependence or abuse is based on definitions found in the 4<sup>th</sup> edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). Needing But Not Receiving Treatment refers to respondents classified as needing treatment for alcohol, but not receiving treatment for an alcohol problem at a specialty facility (i.e., drug and alcohol rehabilitation facilities [inpatient or outpatient], hospitals [inpatient only], and mental health centers). See previous definition of Region 5.

## Alcohol Related Consequences

2013 Morbidity Rates per 10,000 Discharges

|                              | Boone | WV    | Rank in WV* |
|------------------------------|-------|-------|-------------|
| Alcohol Related Diagnosis    | 115.1 | 332.2 | 26          |
| Alcohol Dependence Diagnosis | 90.2  | 176.3 | 30          |

Source: WV Health Care Authority

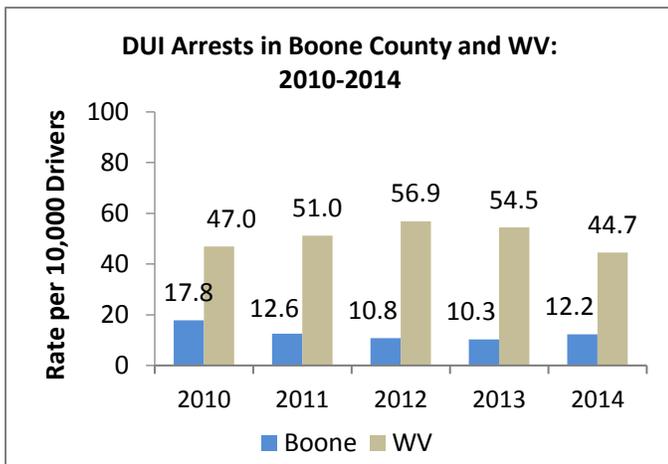
\*There are 55 counties in West Virginia; 1<sup>st</sup> highest rate and 55<sup>th</sup> lowest rate.

2010-2014 Mortality Rates per 100,000 Population

|                         | Boone | WV   | Rank in WV |
|-------------------------|-------|------|------------|
| Chronic Liver-Cirrhosis | 20.6  | 15.1 | 5          |

Source: WV Health Statistics Center, Vital Statistics System

\*There are 55 counties in West Virginia; 1<sup>st</sup> highest rate and 55<sup>th</sup> lowest rate.



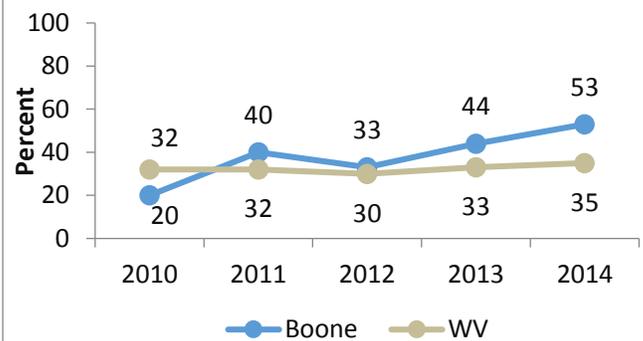
DUI Arrests in Boone County and WV: 2010-2014

|                             | 2010  | 2011  | 2012  | 2013  | 2014  |
|-----------------------------|-------|-------|-------|-------|-------|
| <b>Boone</b>                |       |       |       |       |       |
| Number of DUI arrests       | 30    | 27    | 18    | 17    | 20    |
| DUI rate per 10,000 drivers | 17.8  | 12.6  | 10.8  | 10.3  | 12.2  |
| <b>WV</b>                   |       |       |       |       |       |
| Number of DUI arrests       | 6,141 | 6,705 | 7,443 | 7,130 | 5,834 |
| DUI rate per 10,000 drivers | 47.0  | 51.0  | 56.9  | 54.5  | 44.7  |

Source: WV State Police UCR Section

Note: The DUI arrest data should be interpreted with caution due to the fact that not all law enforcement agencies have reported their DUI arrests (approximately 100 agencies are missing from this dataset).

Percentage of Total Killed in Crashes with Driver Blood Alcohol Concentration (BAC) of .01+ for Boone County and WV: 2010-2014



Source: National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS)

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown.

## Tobacco Consumption

Tobacco Use Among Adults: 2010-2014

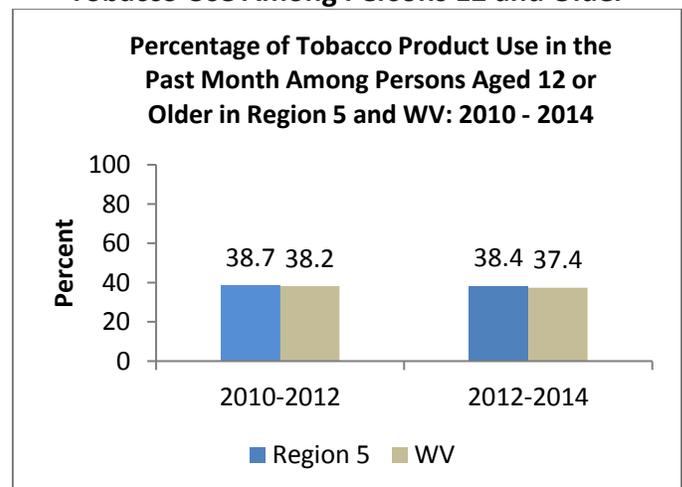
| Indicator         | Boone | WV    | Rank in WV* |
|-------------------|-------|-------|-------------|
| Cigarette Smoking | 31.8% | 27.5% | 10          |

Source: WV Health Statistics Center, Behavioral Risk Factor Surveillance System

\*There are 55 counties in West Virginia; 1<sup>st</sup> highest rate and 55<sup>th</sup> lowest rate.

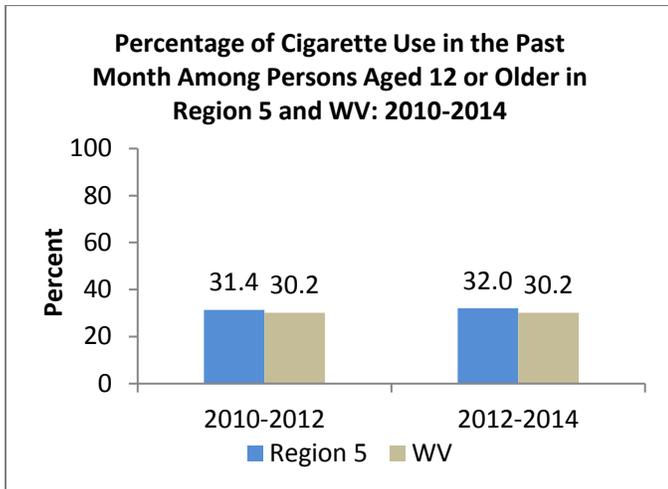
Significance: † Indicates county was significantly higher than state. †† Indicates state was significantly higher than county. § Indicates unreliable prevalence estimate - use caution when reporting and interpreting.

Tobacco Use Among Persons 12 and Older



Source: NSDUH, 2010-2014 (2010 Data - Revised March 2012)

Note: Tobacco Products include cigarettes, smokeless tobacco (i.e., chewing tobacco or snuff), cigars or pipe tobacco. See previous definition of Region 5.



Source: NSDUH, 2010-2014 (2010 Data - Revised March 2012)  
 Note: See previous definition of Region 5.

## Tobacco Risk & Protective Factors

### Perceptions of Great Risk of Smoking One or More Packs of Cigarettes Per Day Among Persons Aged 12 or Older in Region 5 and WV: 2010-2014

|                 | 2010-2012 | 2012-2014 |
|-----------------|-----------|-----------|
| <b>Region 5</b> | 65.1%     | 63.0%     |
| <b>WV</b>       | 66.5%     | 63.6%     |

Source: NSDUH, 2010-2014 (2010 Data - Revised March 2012)  
 Note: See previous definition of Region 5.

## Tobacco Consequences

### 2010-2014 Mortality Rates per 100,000 Population

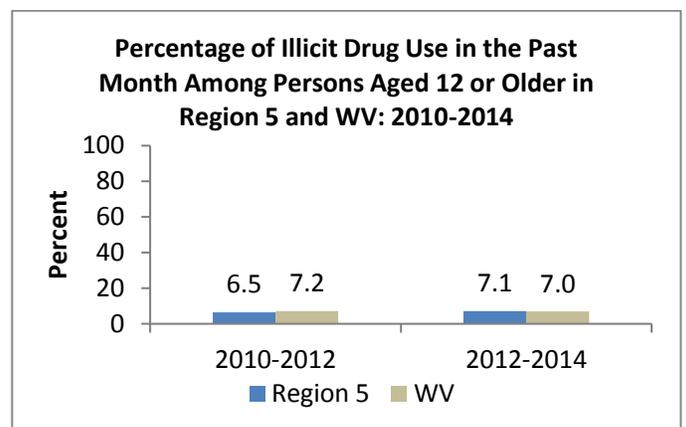
|  | Boone   | WV    | Rank in WV* |
|--|---------|-------|-------------|
| <b>Lung/Bronchus/Trachea Cancer</b>          | 107.2†  | 80.2  | 7           |
| <b>Chronic Obstructive Pulmonary Disease</b> | 99.8    | 81.9  | 15          |
| <b>Cardiovascular Disease</b>                | 306.1†† | 343.4 | 45          |

Source: WV Health Statistics Center, Vital Statistics System  
 \*There are 55 counties in West Virginia; 1<sup>st</sup> highest rate and 55<sup>th</sup> lowest rate.  
 Significance: † Indicates county was significantly higher than state. †† Indicates state was significantly higher than county.



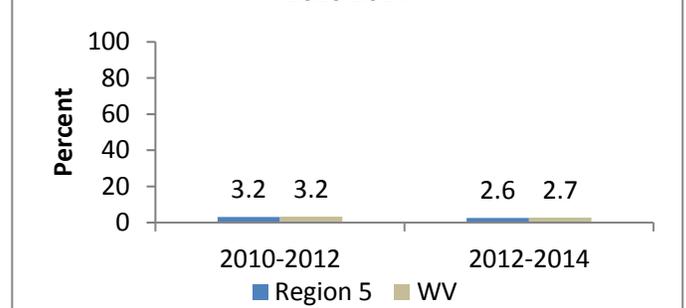
## Drug Consumption

### Drug Use Among Persons 12 and Older

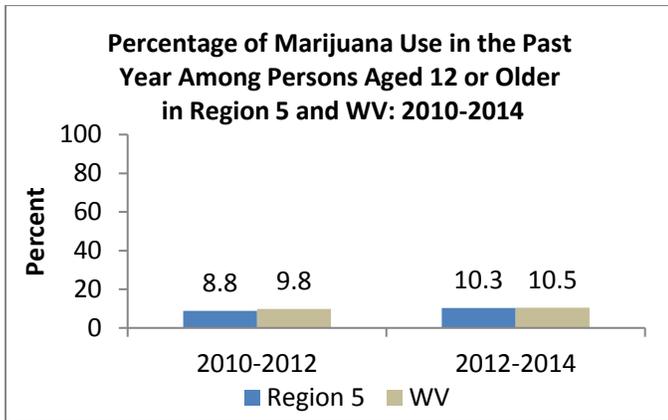


Source: NSDUH, 2010-2014 (2010 Data - Revised March 2012)  
 Note: Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically, including data from original methamphetamine questions but not including new methamphetamine items added in 2005 and 2006. See previous definition of Region 5.

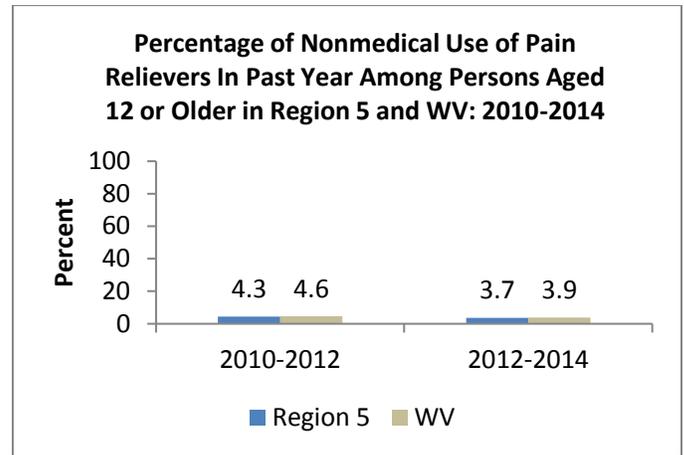
### Percentage of Illicit Drug Use Other Than Marijuana in the Past Month Among Persons Aged 12 or Older in Region 5 and WV: 2010-2014



Source: NSDUH, 2010-2014 (2010 Data - Revised March 2012)  
 Note: Illicit Drugs Other Than Marijuana includes cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically, including data from original methamphetamine questions but not including new methamphetamine items added in 2005 and 2006. See previous definition of Region 5.



Source: NSDUH, 2010-2014 (2010 Data - Revised March 2012)  
 Note: See previous definition of Region 5.



Source: NSDUH, 2010-2014 (2010 Data - Revised March 2012)  
 Note: See previous definition of Region 5.

## Drug Risk & Protective Factors

### Perceptions of Great Risk of Smoking Marijuana Once a Month Among Persons Aged 12 or Older in Region 5 and WV: 2010-2014

|          | 2010-2012 | 2012-2014 |
|----------|-----------|-----------|
| Region 5 | 37.6%     | 33.8%     |
| WV       | 37.1%     | 33.5%     |

### Illicit Drug Dependence or Abuse in the Past Year Among Persons Aged 12 or Older in Region 5 and WV: 2010-2014

|          | 2010-2012 | 2012-2014 |
|----------|-----------|-----------|
| Region 5 | 3.0%      | 3.1%      |
| WV       | 2.8%      | 2.8%      |

### Illicit Drug Dependence in the Past Year Among Persons Aged 12 or Older in Region 5 and WV: 2010-2014

|          | 2010-2012 | 2012-2014 |
|----------|-----------|-----------|
| Region 5 | 2.2%      | 2.1%      |
| WV       | 2.1%      | 2.0%      |

### Needing But Not Receiving Treatment for Illicit Drug Use in the Past Year Among Persons Aged 12 or Older in Region 5 and WV: 2010-2014

|          | 2010-2012 | 2012-2014 |
|----------|-----------|-----------|
| Region 5 | 2.6%      | 2.8%      |
| WV       | 2.5%      | 2.5%      |

Source: NSDUH, 2010-2014 (2010 Data - Revised March 2012)  
 Note: Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically, including data from original methamphetamine questions but not including new methamphetamine items added in 2005 and 2006. Dependence or abuse is based on definitions found in the 4<sup>th</sup> edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). Needing But Not Receiving Treatment refers to respondents classified as needing treatment for illicit drugs, but not receiving treatment for an illicit drug problem at a specialty facility (i.e., drug and alcohol rehabilitation facilities [inpatient or outpatient], hospitals [inpatient only], and mental health centers). See previous definition of Region 5.

### Marijuana Use in the Past Month Among Persons Aged 12 or Older in Region 5 and WV: 2010-2014

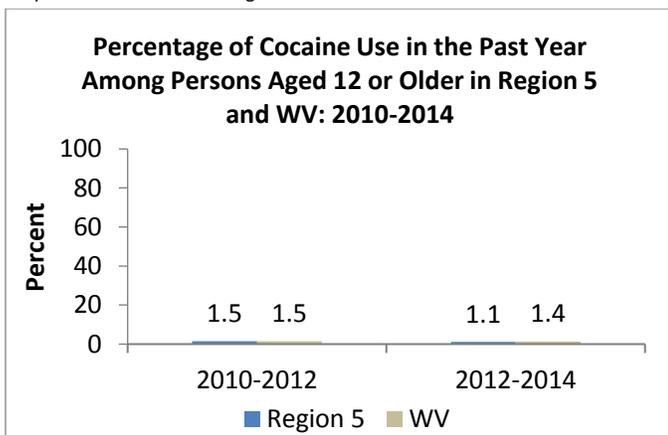
|          | 2010-2012 | 2012-2014 |
|----------|-----------|-----------|
| Region 5 | 4.9%      | 5.8%      |
| WV       | 5.6%      | 5.8%      |

Source: NSDUH, 2010-2014 (2010 Data - Revised March 2012)  
 Note: See previous definition of Region 5.

### First Use of Marijuana Among Persons Aged 12 or Older in Region 5 and WV: 2010-2014

|          | 2010-2012 | 2012-2014 |
|----------|-----------|-----------|
| Region 5 | 1.2%      | 1.3%      |
| WV       | 1.6%      | 1.4%      |

Source: NSDUH, 2010-2014 (2010 Data - Revised March 2012)  
 Note: Average annual marijuana initiation rate =  $100 * \{[X1 \div (0.5 * X1 + X2)] \div 2\}$ , where X1 is the number of marijuana initiates in the past 24 months and X2 is the number of persons who never used marijuana. Both of the computation components, X1 and X2, are based on a survey-weighted hierarchical Bayes estimation approach. The age group is based on a respondent's age at the time of the interview, not his or her age at first use. See previous definition of Region 5.



Source: NSDUH, 2010-2014 (2010 Data - Revised March 2012)  
 Note: See previous definition of Region 5.

## Drug Consequences

### 2013 Morbidity Rates per 10,000 Discharges

|                               | Boone | WV    | Rank in WV* |
|-------------------------------|-------|-------|-------------|
| <b>Drug Related Diagnosis</b> | 186.9 | 441.5 | 18          |

Source: WV Health Care Authority

There are 55 counties in West Virginia; 1<sup>st</sup> highest rate and 55<sup>th</sup> lowest rate.

### 2010-2014 Mortality Rates per 100,000 Population

|                      | Boone | WV   | Rank in WV* |
|----------------------|-------|------|-------------|
| <b>Drug Overdose</b> | 89.9† | 32.0 | 3           |

Source: WV Health Statistics Center, Vital Statistics System

\*There are 55 counties in West Virginia; 1<sup>st</sup> highest rate and 55<sup>th</sup> lowest rate.

Significance: † Indicates county was significantly higher than state. ††

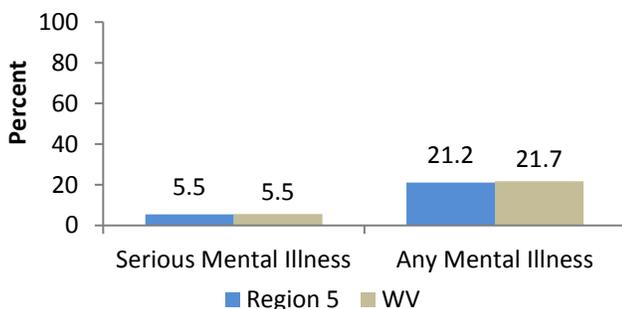
Indicates state was significantly higher than county.



## Mental Health

### Mental Health Among Persons 18 and Older

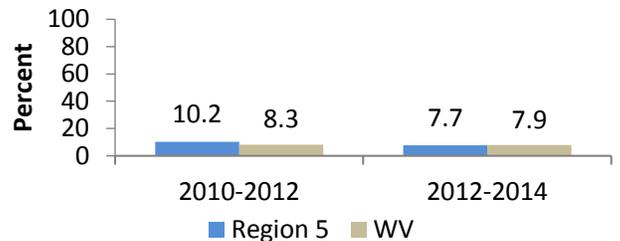
#### Percentage of Mental Illness in the Past Year Among Persons Age 18 and Older in Region 5 and WV: 2012-2014



Source: NSDUH, 2010-2014 (2010 Data - Revised March 2012)

Note: See previous definition of Region 5.

#### Percentage of Having Had at Least One Major Depressive Episode in the Past Year Among Persons Age 18 or Older in Region 5 and WV: 2010-2014



Source: NSDUH, 2010-2014 (2010 Data - Revised March 2012)

Note: See previous definition of Region 5.

## Suicide

### Had Serious Thoughts of Suicide in the Past Year Among Persons Aged 18 or Older in Region 5 and WV: 2010-2014

|                 | 2010-2012 | 2012-2014 |
|-----------------|-----------|-----------|
| <b>Region 5</b> | 4.8%      | 4.8%      |
| <b>WV</b>       | 4.6%      | 4.6%      |

Source: NSDUH, 2010-2014 (2010 Data - Revised March 2012)

Note: See previous definition of Region 5.

### 2010-2014 Mortality Rates per 100,000 Population

|                | Boone | WV   | Rank in WV* |
|----------------|-------|------|-------------|
| <b>Suicide</b> | 21.4  | 17.4 | 13          |

Source: WV Health Statistics Center, Vital Statistics System

\*There are 55 counties in West Virginia; 1<sup>st</sup> highest rate and 55<sup>th</sup> lowest rate.

Significance: † Indicates county was significantly higher than state. ††

Indicates state was significantly higher than county.



## Homelessness

### Reported Point-In-Time Sheltered Subpopulations in 2015

|                         | KVC* |       | WV    |       |
|-------------------------|------|-------|-------|-------|
|                         | #    | %     | #     | %     |
| Chronically Homeless    | 45   | 13.2% | 226   | 16.1% |
| Veterans                | 33   | 9.7%  | 227   | 16.2% |
| Mental Illness          | 119  | 34.9% | 410   | 29.2% |
| Chronic Substance Abuse | 72   | 21.1% | 301   | 21.5% |
| <b>Total Sheltered</b>  | 341  |       | 1,403 |       |

### Reported Point-In-Time Unsheltered Subpopulations in 2015

|                          | KVC* |       | WV  |       |
|--------------------------|------|-------|-----|-------|
|                          | #    | %     | #   | %     |
| Chronically Homeless     | 18   | 40.9% | 160 | 37.0% |
| Veterans                 | 4    | 9.1%  | 78  | 18.1% |
| Mental Illness           | 18   | 40.9% | 198 | 45.8% |
| Chronic Substance Abuse  | 10   | 22.7% | 154 | 35.6% |
| HIV/AIDS                 | NA   | NA    | 3   | 0.7%  |
| Domestic Violence        | NA   | NA    | 66  | 15.3% |
| <b>Total Unsheltered</b> | 44   |       | 432 |       |

Source: West Virginia Coalition to End Homelessness, West Virginia Point in Time Count Statewide Report, January 2015

Note: The Point-in-Time Count is conducted during one night in the end of January for a count of all homeless persons. The unsheltered count of the homeless population is likely underreported and should be used with caution. Subpopulation data is not mutually exclusive. Comparing the total is not an accurate representation as one person may have all five characteristics, while some persons may only have one or fewer. \*The Kanawha Valley Collective (KVC) is made up of the following counties: Boone, Clay, Kanawha, and Putnam.

## Domestic Violence

### Individuals Served by the West Virginia Coalition Against Domestic Violence (WVCADV) by Shelter Status in Boone County in 2012

| Shelter Status | Number |
|----------------|--------|
| Sheltered      | 7      |
| Non-sheltered  | 214    |

### Domestic Violence Survivors Served by WVCADV by Behavioral Health Status in Boone County in 2012

| Behavioral Health Status                 | Number | Percent |
|--|--------|---------|
| Identified as having a mental disability | *      | *       |
| Referred to a mental health provider     | *      | *       |

### Domestic Violence Abusers Served by WVCADV by Behavioral Health Status in Boone County in 2012

| Behavioral Health Status                            | Number | Percent |
|---|--------|---------|
| Substance abuse identified as contributing to abuse | 73     | 22.5%   |
| Referred to a mental health provider                | *      | *       |

Source: WV Coalition Against Domestic Violence

Note: All indicators are self-reported from the survivor.

\*Values based on 5 or fewer are suppressed to protect the confidentiality of the person.

For additional resources visit the West Virginia Department of Health and Human Resources, Bureau for Behavioral Health and Health Facilities (BBHF) at:  
[www.wvdhhr.org/bhbf](http://www.wvdhhr.org/bhbf)