

# Tobacco Use in West Virginia 2018

West Virginia Health Statistics Center



## Data for Adults:

**Behavioral Risk Factor Surveillance System (BRFSS)** - BRFSS is a landline and cell phone survey that collects information on health risk behaviors, preventive health practices, and health care access primarily related to chronic disease and injury. BRFSS, established by the U.S. CDC, is implemented in all 50 states, District of Columbia, and several territories. The HSC has been collecting WV BRFSS data since 1984, and approximately 6,000 adults participate each year. Prevalence of cigarette and smokeless tobacco use, never-smoking and former smoking, and quitting smoking are obtained from BRFSS. BRFSS is the largest health survey in the world.

**Vital Statistics System (VSS)** - The Vital Registration Office, established in 1917, is the state's official repository of birth, death, marriage, and divorce records. These records are collectively referred to as Vital Records:

**Birth Certificate Data** - The *Certificate of Live Birth* form provides data on percentage of women who smoked during their pregnancy, their cigarette consumption, prenatal care and health insurance coverage. County data is routinely analyzed for the 20,000+ births in WV. Women usually complete the certificate while they are in the hospital.

**Death Certificate Data** - Rates of death can be calculated for smoking-related diseases.

**Smoking-Attributable Mortality, Morbidity and Economic Costs (SAMMEC)** - Death data (causes of death from 23 smoking-related categories) and BRFSS data are used to determine smoking-attributable mortality, years of potential life lost, and productivity losses using methodology detailed in the U.S. Surgeon General's Report *The Health Consequences of Smoking --- 50 years of progress* (December 2014).

## Data for Youth:

**Youth Tobacco Survey (YTS)** - YTS is a school-based survey of students in grades 6-12 in regular public schools in WV, administered in the spring of odd-numbered years. State-level data are collected from 80+ questions all focusing on prevalence of tobacco product use, attitudes/knowledge and influences, access to tobacco, secondhand smoke exposure, etc. The YTS is a collaboration between the WV Division of Tobacco Prevention and the WV Department of Education, and supported by the HSC and U.S. CDC.

## Other:

**U.S. Census** - The U.S. Census provides population data for many demographic characteristics (age, sex, race, and Hispanic origin) for the U.S., states and counties. These data are important in weighting of data sets, estimating populations, and calculating death rates. The census is conducted every 10 years, with postcensal estimates available every year and intercensal estimates available every 10 years.

**Economic Data** - Tobacco sales and tax data from the WV Department of Tax and Revenue are used to determine cigarette consumption per smoker and per capita, and to project decreased consumption that may result from tax increases.

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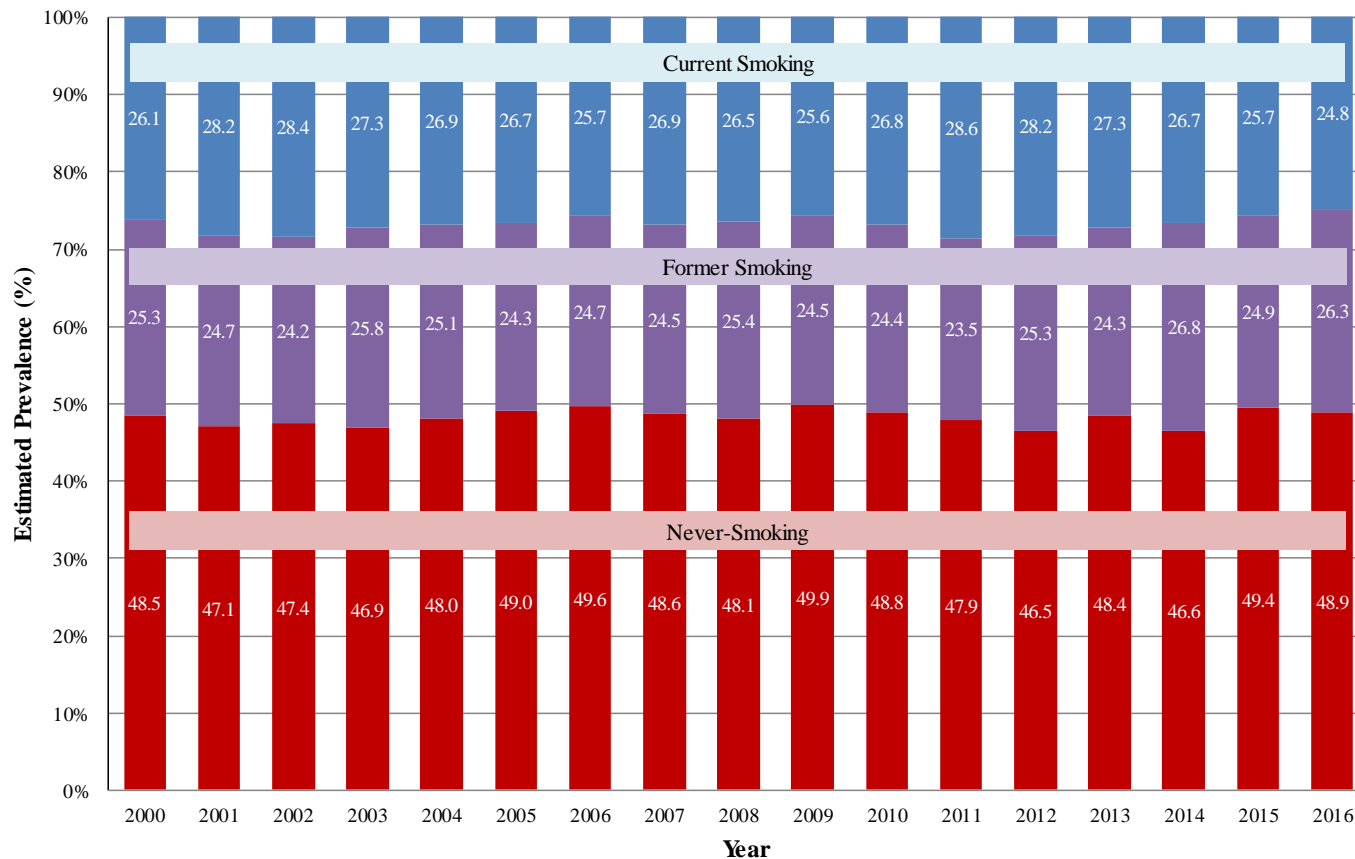
### Prevalence of Current Cigarette Smoking Among Adults by Demographic Characteristics, West Virginia, 2016 BRFSS

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

Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System

Current cigarette smoking is defined as having smoked 100 or more cigarettes in a lifetime and currently smoking cigarettes every day or some days.

### Prevalence of Never, Former, and Current Cigarette Smoking Among West Virginia Adults



Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System (BRFSS)

Note: In 2011 there were changes made to the weighting methodology and the sample composition in BRFSS, therefore the 2011 prevalence data and beyond are not directly comparable to previous years of BRFSS data.

Current smoking is defined as having smoked 100 or more cigarettes in a lifetime and currently smoking cigarettes every day or some days. Former smoking is defined as having smoked 100 or more cigarettes in a lifetime, but not currently smoking cigarettes now. Never-smoking is defined as smoking less than 100 cigarettes in a lifetime.

## Prevalence of Never, Former, and Current Cigarette Smoking Among West Virginia Adults



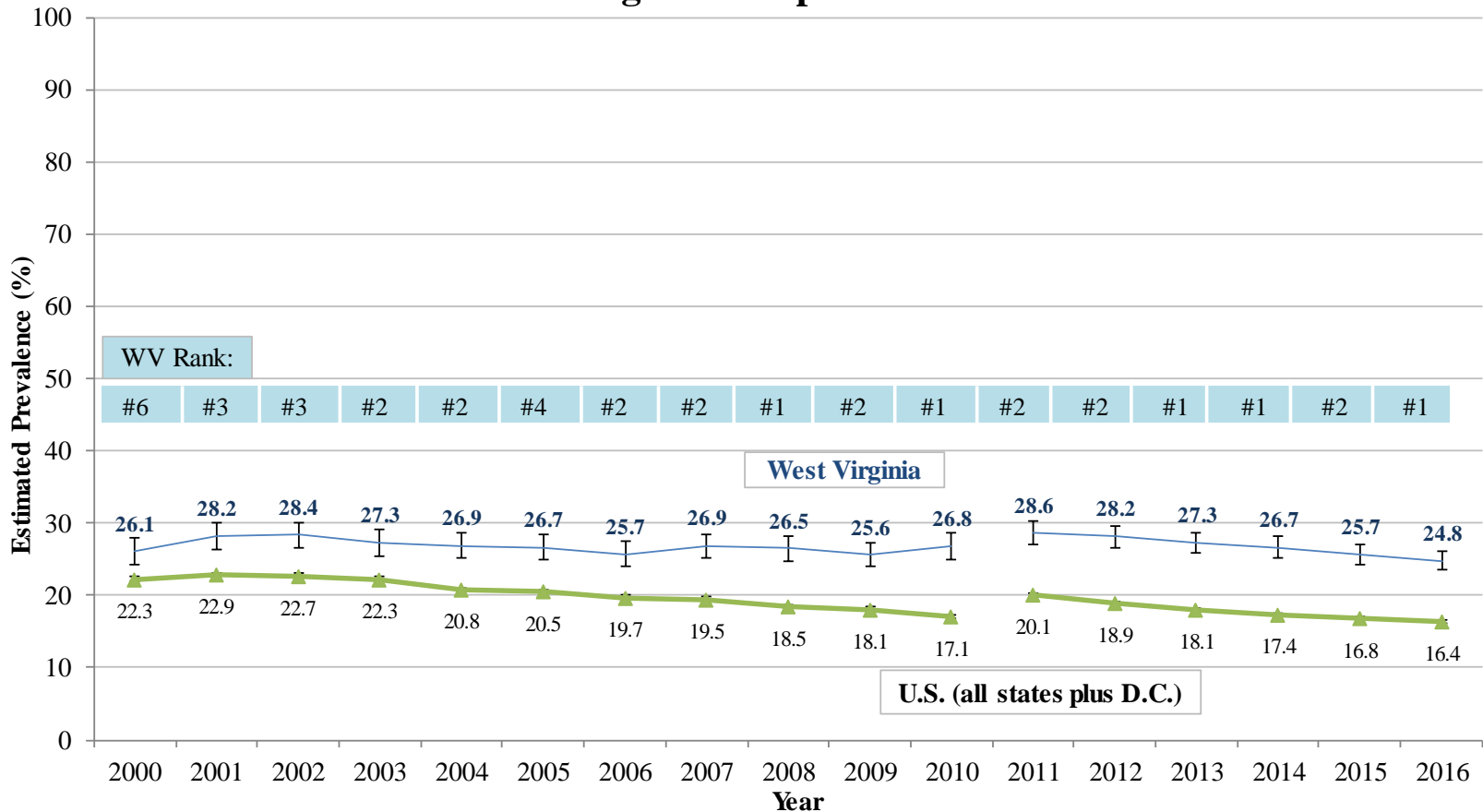
Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System (BRFSS)

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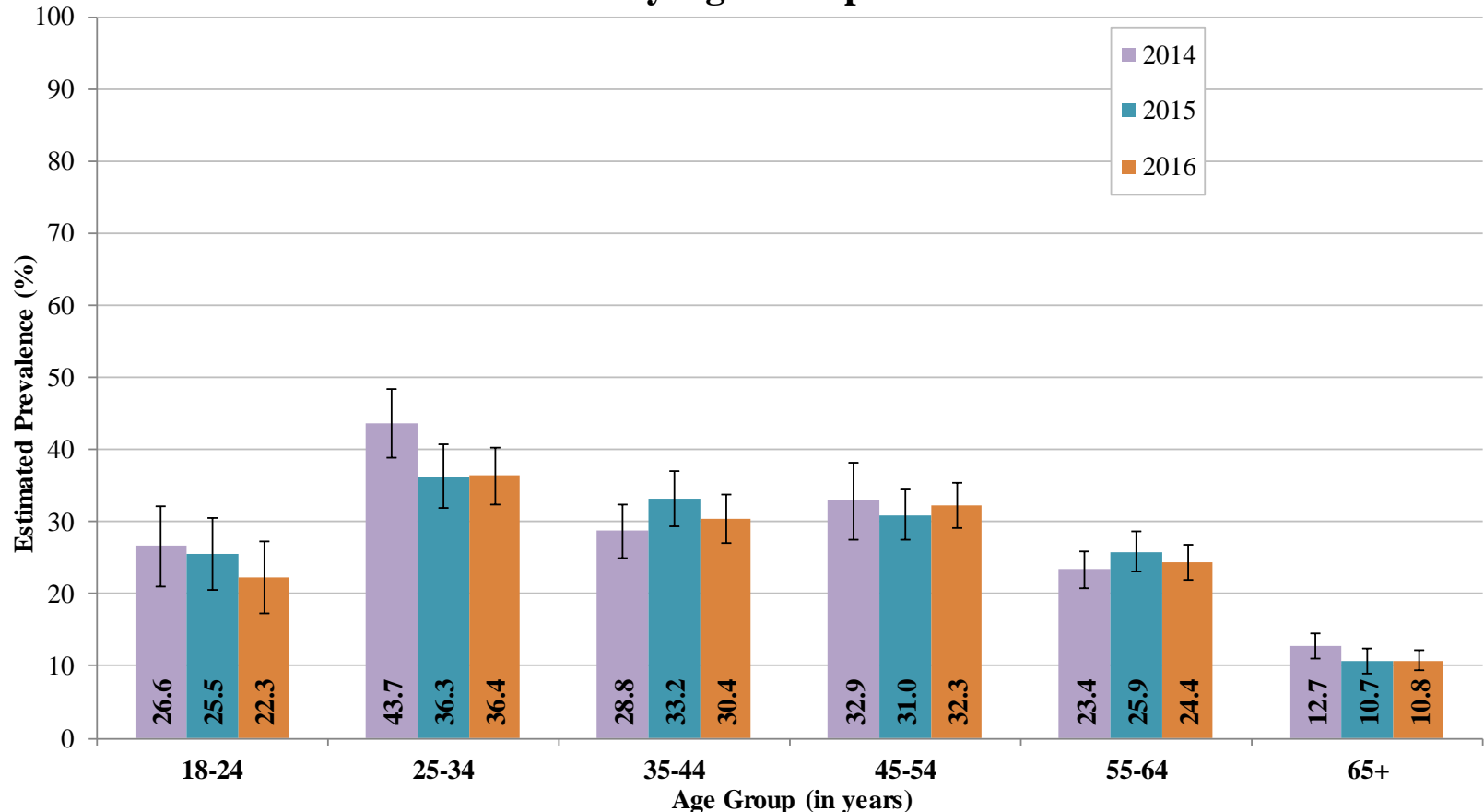


## Prevalence of Current Cigarette Smoking Among Adults, West Virginia Compared to U.S.



Data Sources : West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System (BRFSS); U.S. Centers for Disease Control and Prevention, BRFSS.  
 Note: In 2011 there were changes made to the weighting methodology and the sample composition in BRFSS, therefore the 2011 prevalence data and beyond are not directly comparable to previous years of BRFSS data. Error bars represent the 95% Confidence Interval as associated with the prevalence estimate for West Virginia.  
 Current smoking is defined as having smoked 100 or more cigarettes in a lifetime and currently smoking cigarettes every day or some days. The U.S. (all states plus District of Columbia) average is the mean. Numbers inside text box indicate West Virginia's rank in current smoking prevalence compared to all other states plus District of Columbia (1=highest prevalence).

## Prevalence of Current Cigarette Smoking Among West Virginia Adults, by Age Group

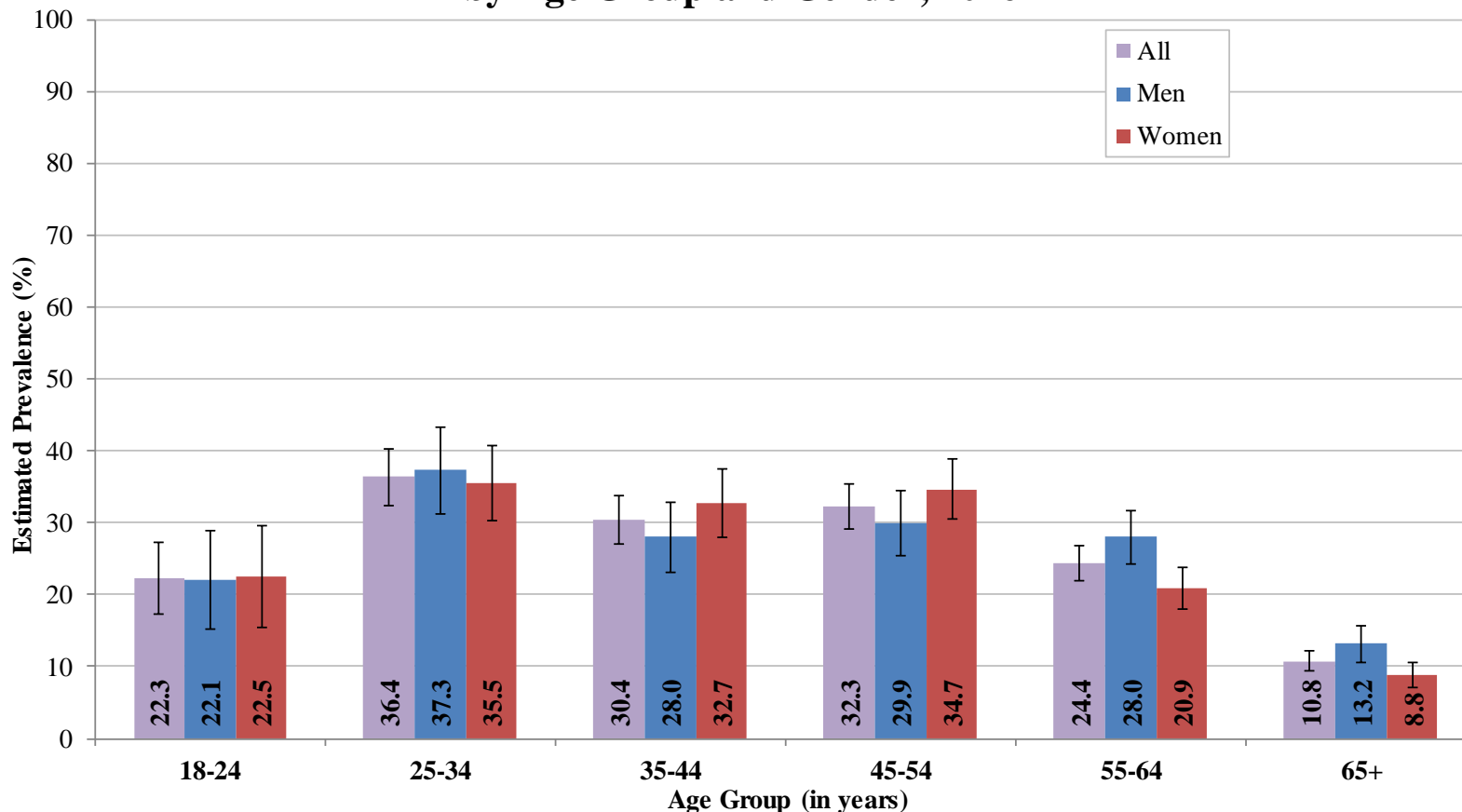


Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System (BRFSS)

Note: In 2011 there were changes made to the weighting methodology and the sample composition in BRFSS, therefore the 2011 prevalence data and beyond are not directly comparable to previous years of BRFSS data. Error bars represent the 95% Confidence Interval associated with the prevalence estimate.

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### Prevalence of Current Cigarette Smoking Among West Virginia Adults, by Age Group and Gender, 2016

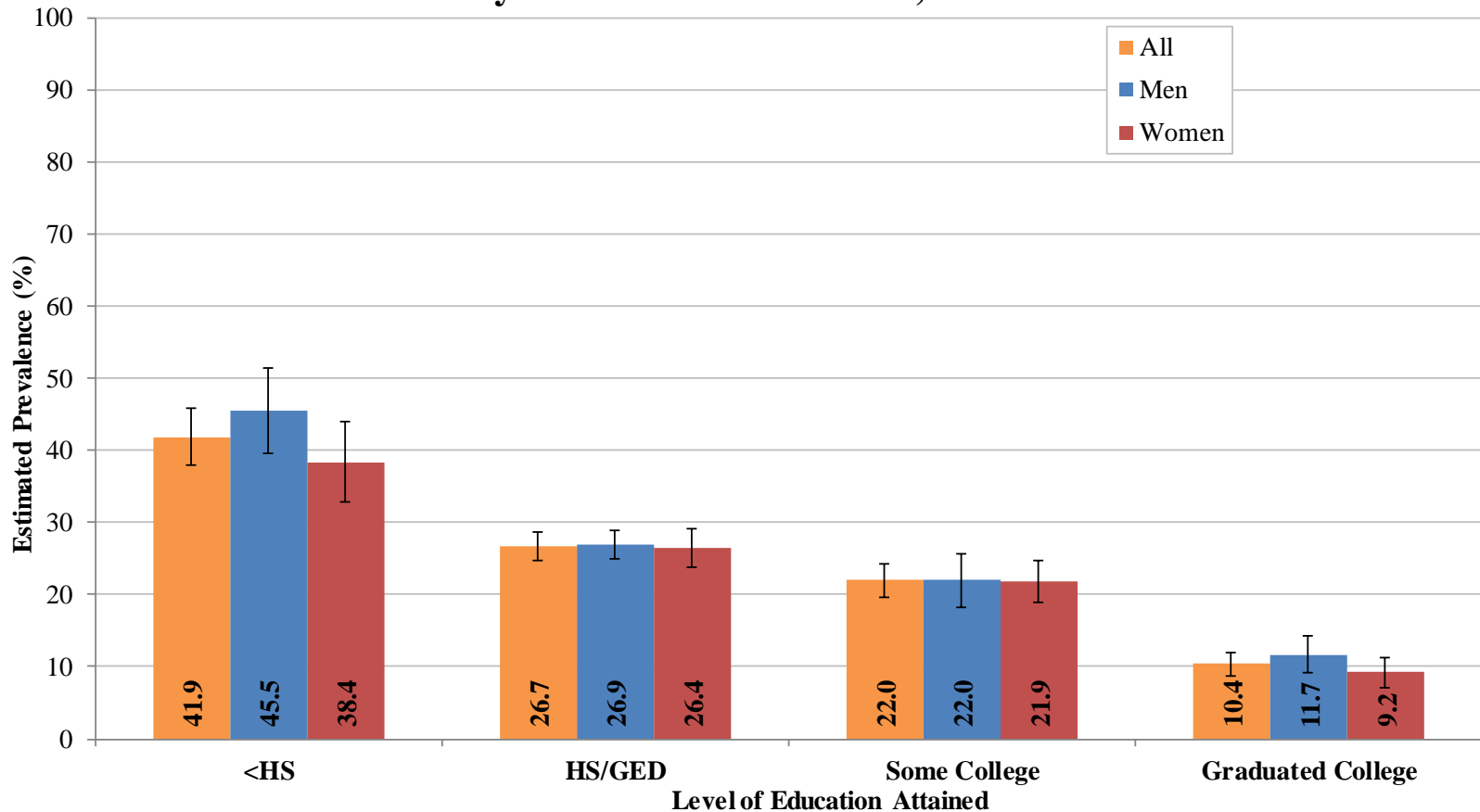


Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System (BRFSS)

Note: In 2011 there were changes made to the weighting methodology and the sample composition in BRFSS, therefore the 2011 prevalence data and beyond are not directly comparable to previous years of BRFSS data. Error bars represent the 95% Confidence Interval associated with the prevalence estimate.

Current smoking is defined as having smoked 100 or more cigarettes in a lifetime and currently smoking cigarettes every day or some days.

### Prevalence of Current Cigarette Smoking Among West Virginia Adults, by Education and Gender, 2016

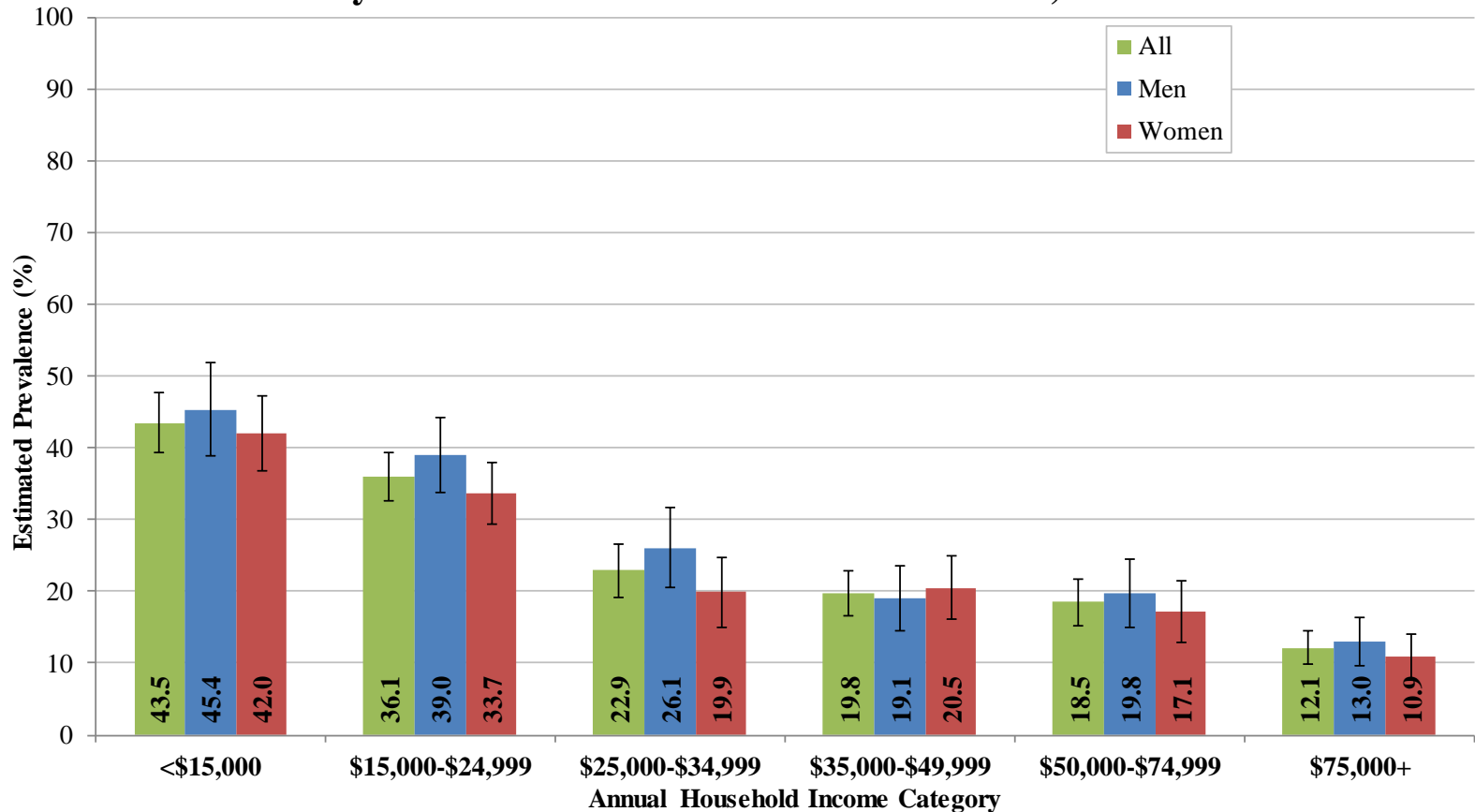


Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System (BRFSS)

Note: In 2011 there were changes made to the weighting methodology and the sample composition in BRFSS, therefore the 2011 prevalence data and beyond are not directly comparable to previous years of BRFSS data. Error bars represent the 95% Confidence Interval associated with the prevalence estimate.

Current smoking is defined as having smoked 100 or more cigarettes in a lifetime and currently smoking cigarettes every day or some days.

### Prevalence of Current Cigarette Smoking Among West Virginia Adults, by Annual Household Income and Gender, 2016

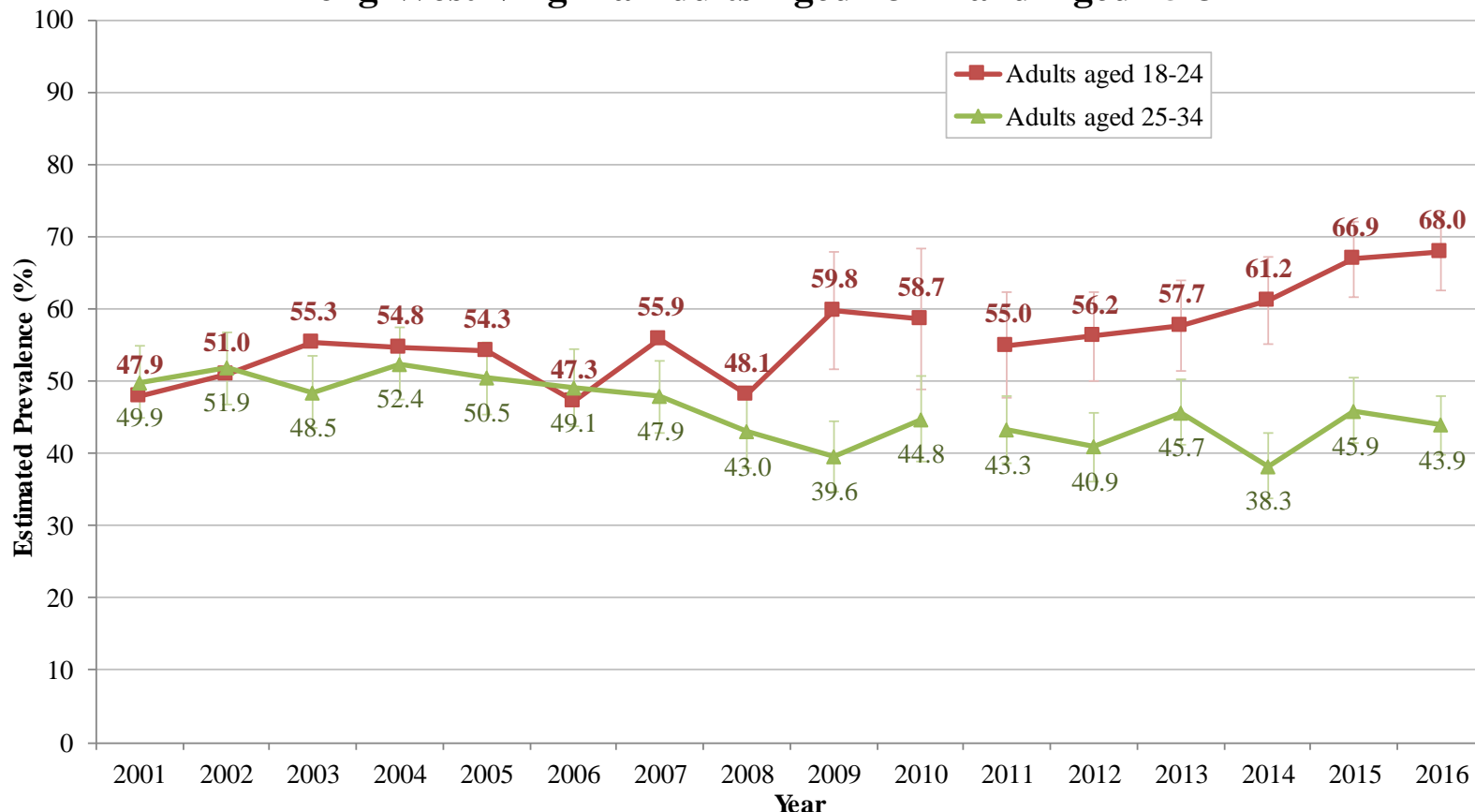


Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System (BRFSS)

Note: In 2011 there were changes made to the weighting methodology and the sample composition in the BRFSS, therefore the 2011 prevalence data and beyond are not directly comparable to previous years of BRFSS data. Error bars represent the 95% Confidence Interval associated with the prevalence estimate.

Current smoking is defined as having smoked 100 or more cigarettes in a lifetime and currently smoking cigarettes every day or some days.

### Prevalence of Never-Cigarette Smoking Among West Virginia Adults Aged 18-24 and Aged 25-34

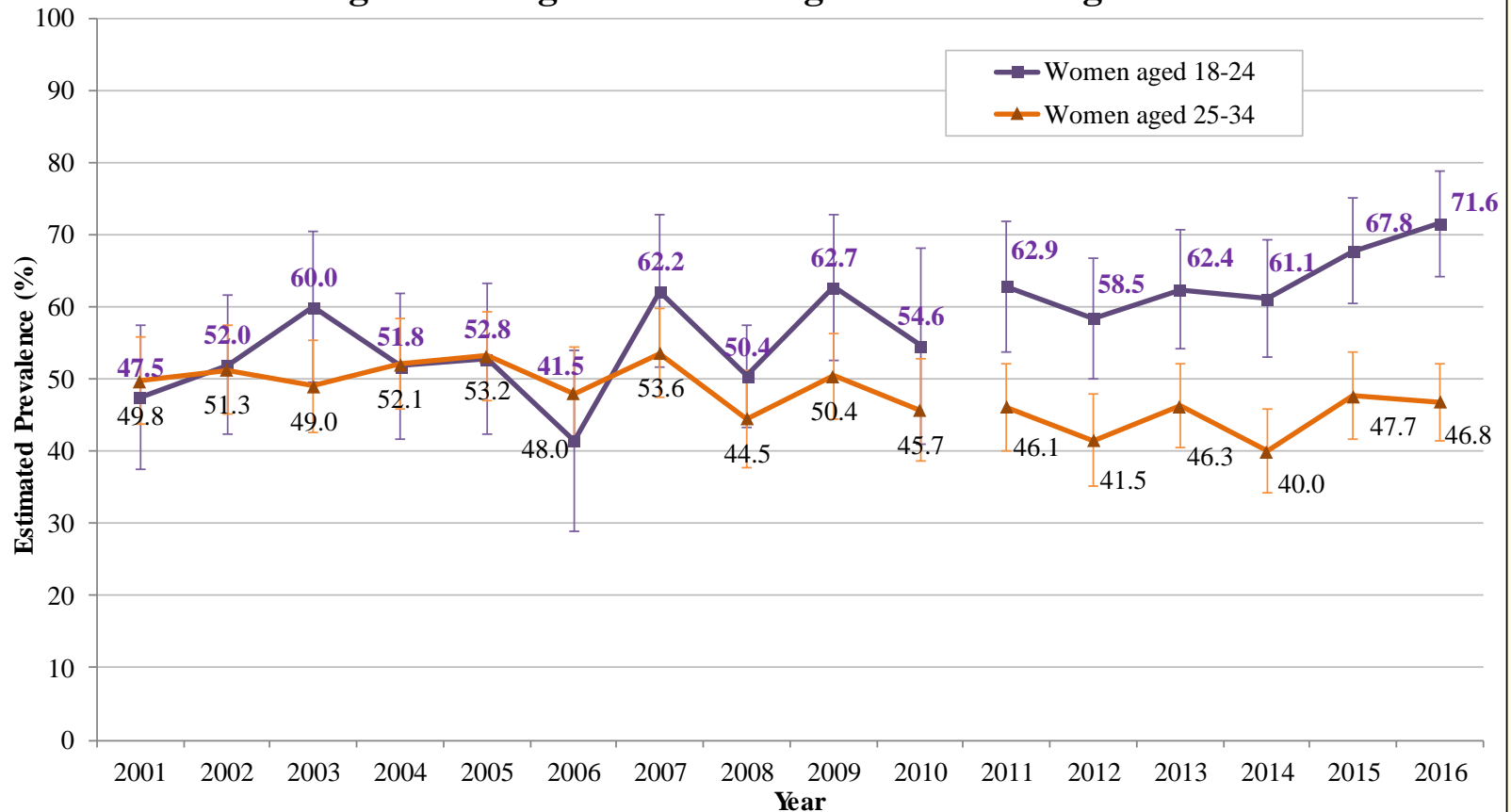


Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System (BRFSS)

Note: In 2011 there were changes made to the weighting methodology and the sample composition in BRFSS, therefore the 2011 prevalence data and beyond are not directly comparable to previous years of BRFSS data. Error bars represent the 95% Confidence Interval associated with the prevalence estimate.

Never-smoking is defined as smoking less than 100 cigarettes in a lifetime.

### Prevalence of Never-Cigarette Smoking Among West Virginia Women Aged 18-24 and Aged 25-34

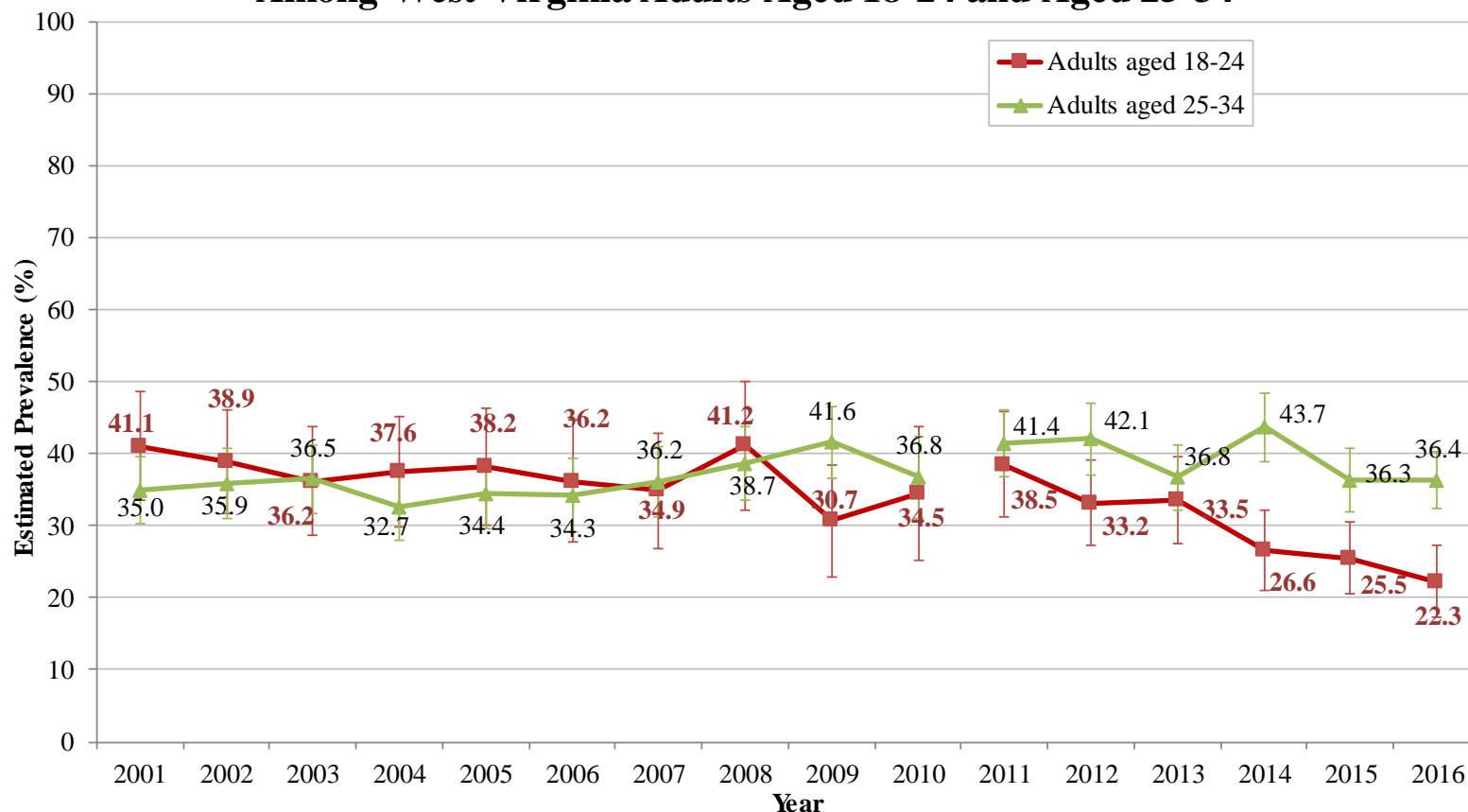


Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System (BRFSS)

Note: In 2011 there were changes made to the weighting methodology and the sample composition in BRFSS, therefore the 2011 prevalence data and beyond are not directly comparable to previous years of BRFSS data. Error bars represent the 95% Confidence Interval associated with the prevalence estimate.

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### Prevalence of Current Cigarette Smoking Among West Virginia Adults Aged 18-24 and Aged 25-34



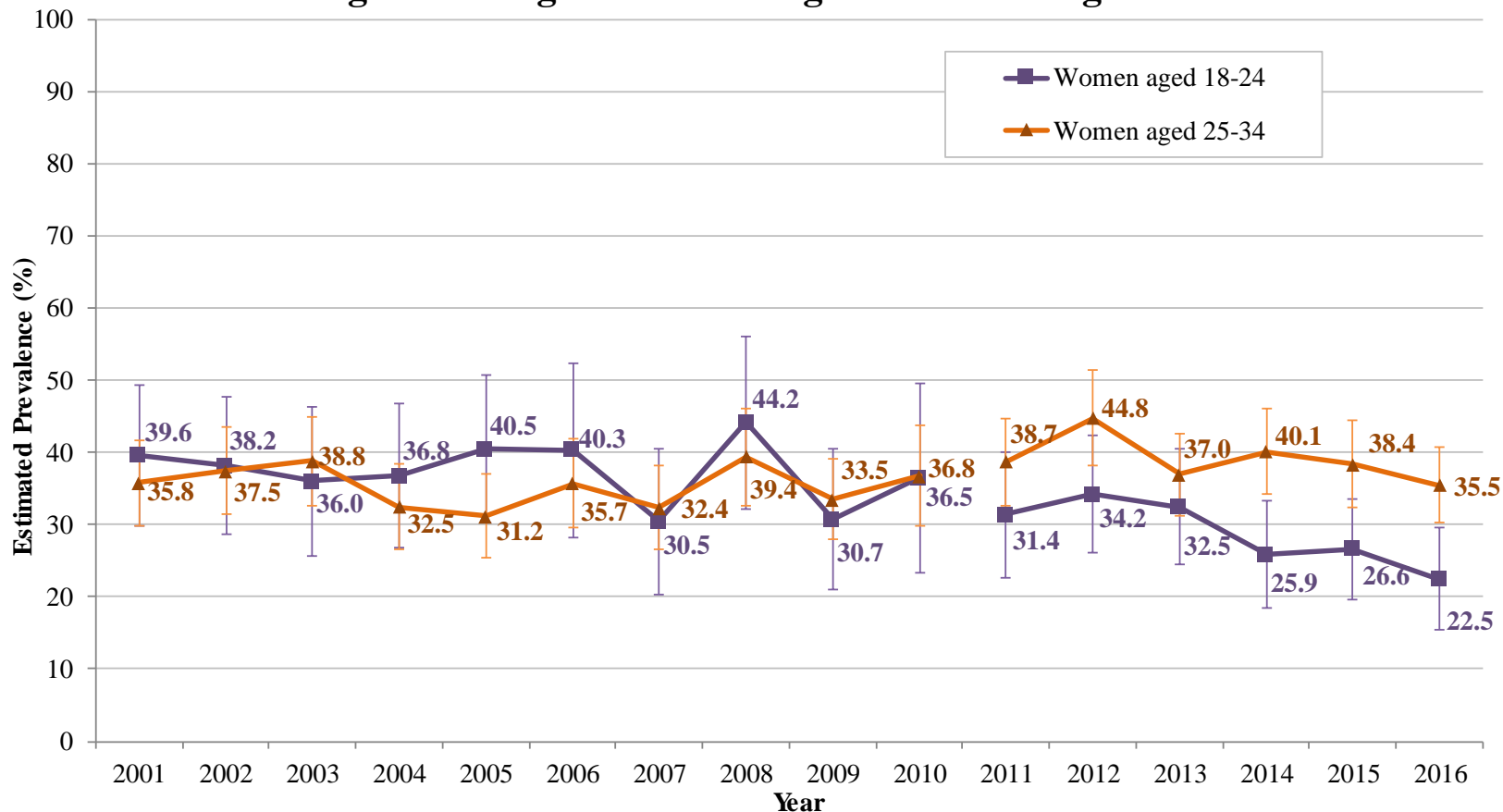
Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System (BRFSS)

Note: In 2011 there were changes made to the weighting methodology and the sample composition in BRFSS, therefore the 2011 prevalence data and beyond are not directly comparable to previous years of BRFSS data. Error bars represent the 95% Confidence Interval associated with the prevalence estimate.

Current smoking is defined as having smoked 100 or more cigarettes in a lifetime and currently smoking cigarettes every day or some days.



### Prevalence of Current Cigarette Smoking Among West Virginia Women Aged 18-24 and Aged 25-34

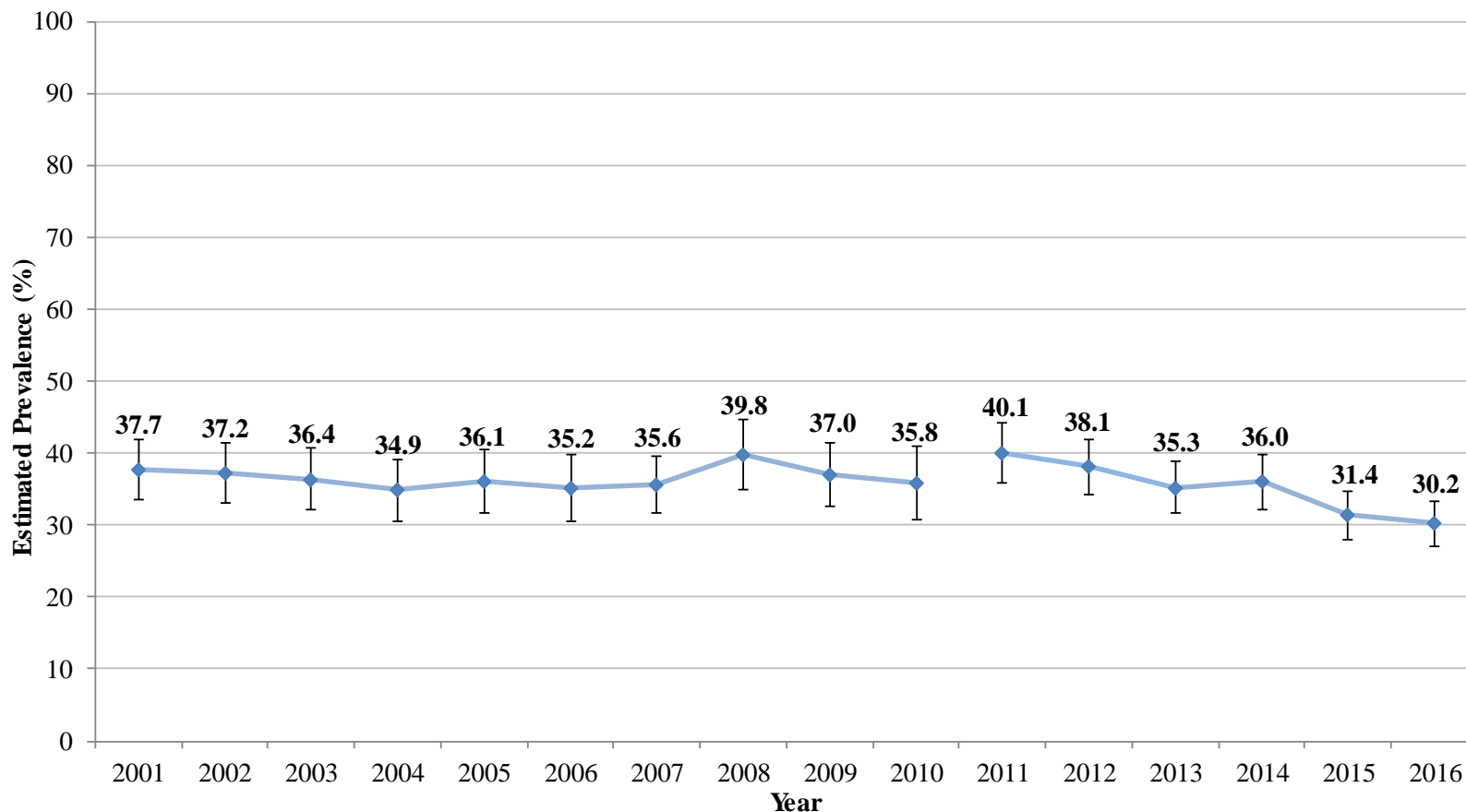


Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System (BRFSS)

Note: In 2011 there were changes made to the weighting methodology and the sample composition in BRFSS, therefore the 2011 prevalence data and beyond are not directly comparable to previous years of BRFSS data. Error bars represent the 95% Confidence Interval associated with the prevalence estimate.

Current smoking is defined as having smoked 100 or more cigarettes in a lifetime and currently smoking cigarettes every day or some days.

### Prevalence of Current Cigarette Smoking Among West Virginia Adults Aged 18-34

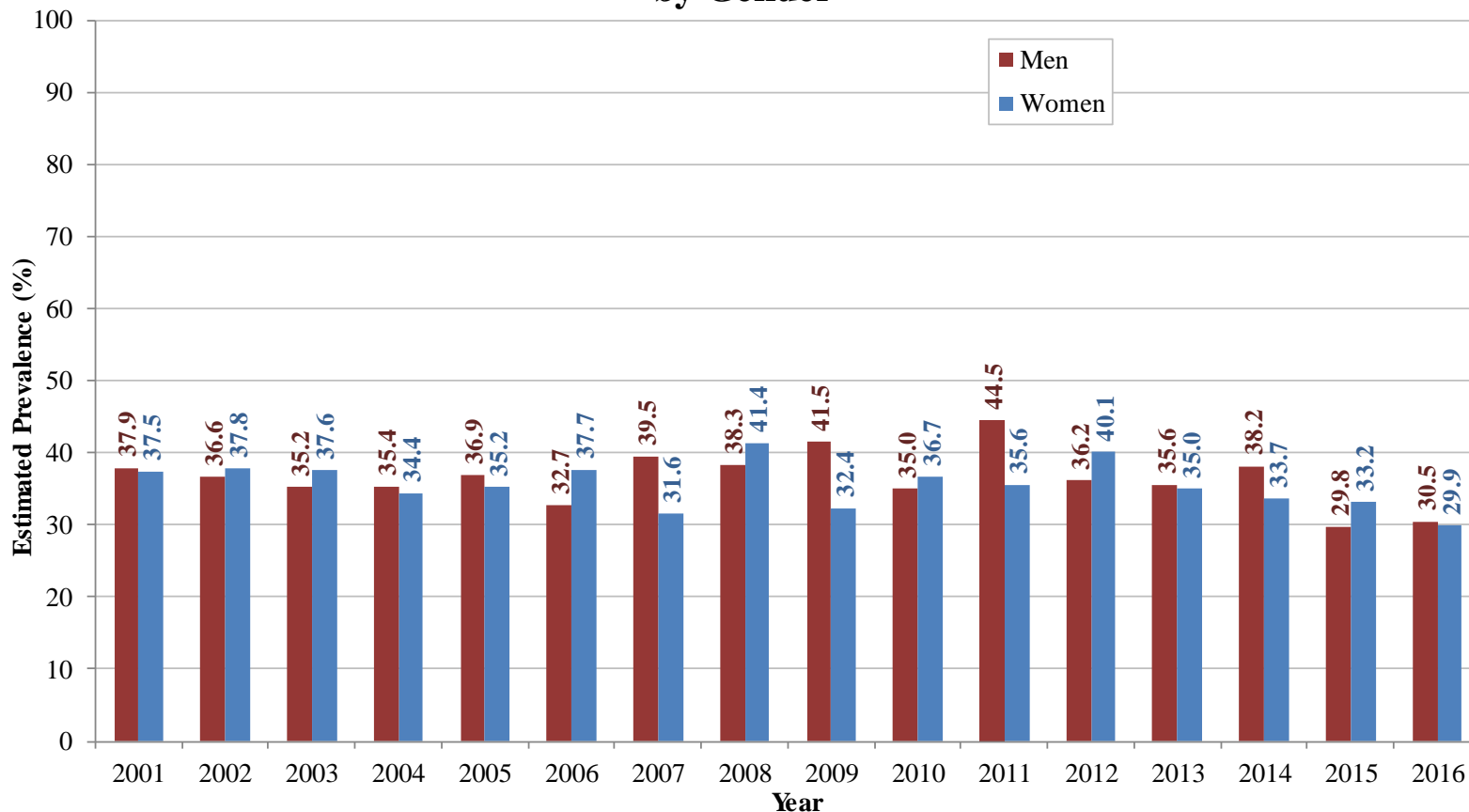


Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System (BRFSS)

Note: In 2011 there were changes made to the weighting methodology and the sample composition in BRFSS, therefore the 2011 prevalence data and beyond are not directly comparable to previous years of BRFSS data. Error bars represent the 95% Confidence Interval associated with the prevalence estimate.

Current smoking is defined as having smoked 100 or more cigarettes in a lifetime and currently smoking cigarettes every day or some days.

### Prevalence of Current Cigarette Smoking Among West Virginia Adults Aged 18-34, by Gender

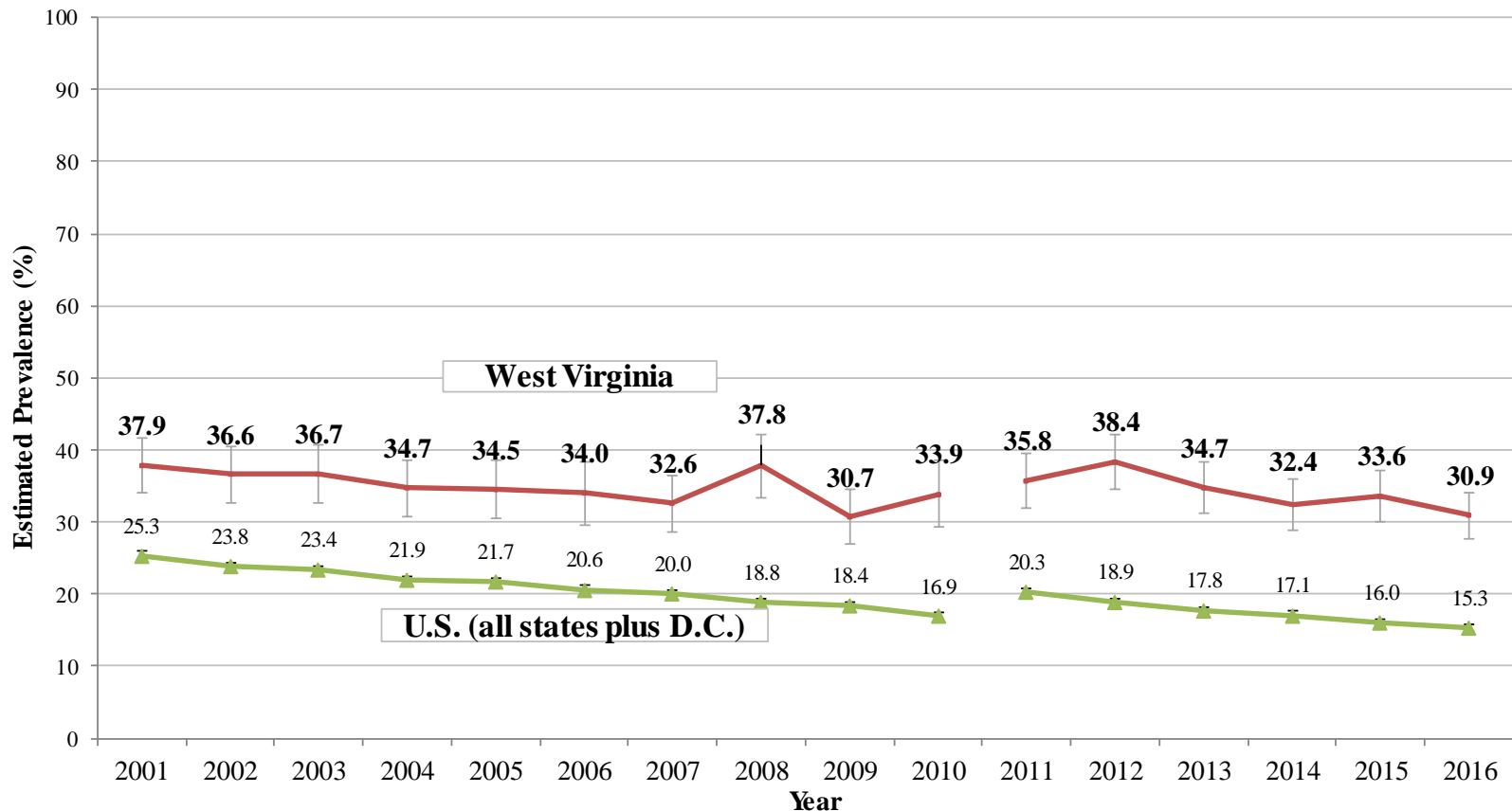


Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System (BRFSS)

Note: In 2011 there were changes made to the weighting methodology and the sample composition in BRFSS, therefore the 2011 prevalence data and beyond are not directly comparable to previous years of BRFSS data.

Current smoking is defined as having smoked 100 or more cigarettes in a lifetime and currently smoking cigarettes every day or some days.

## Prevalence of Current Cigarette Smoking Among Women of Child-Bearing Age (18-44 years), West Virginia Compared to U.S.

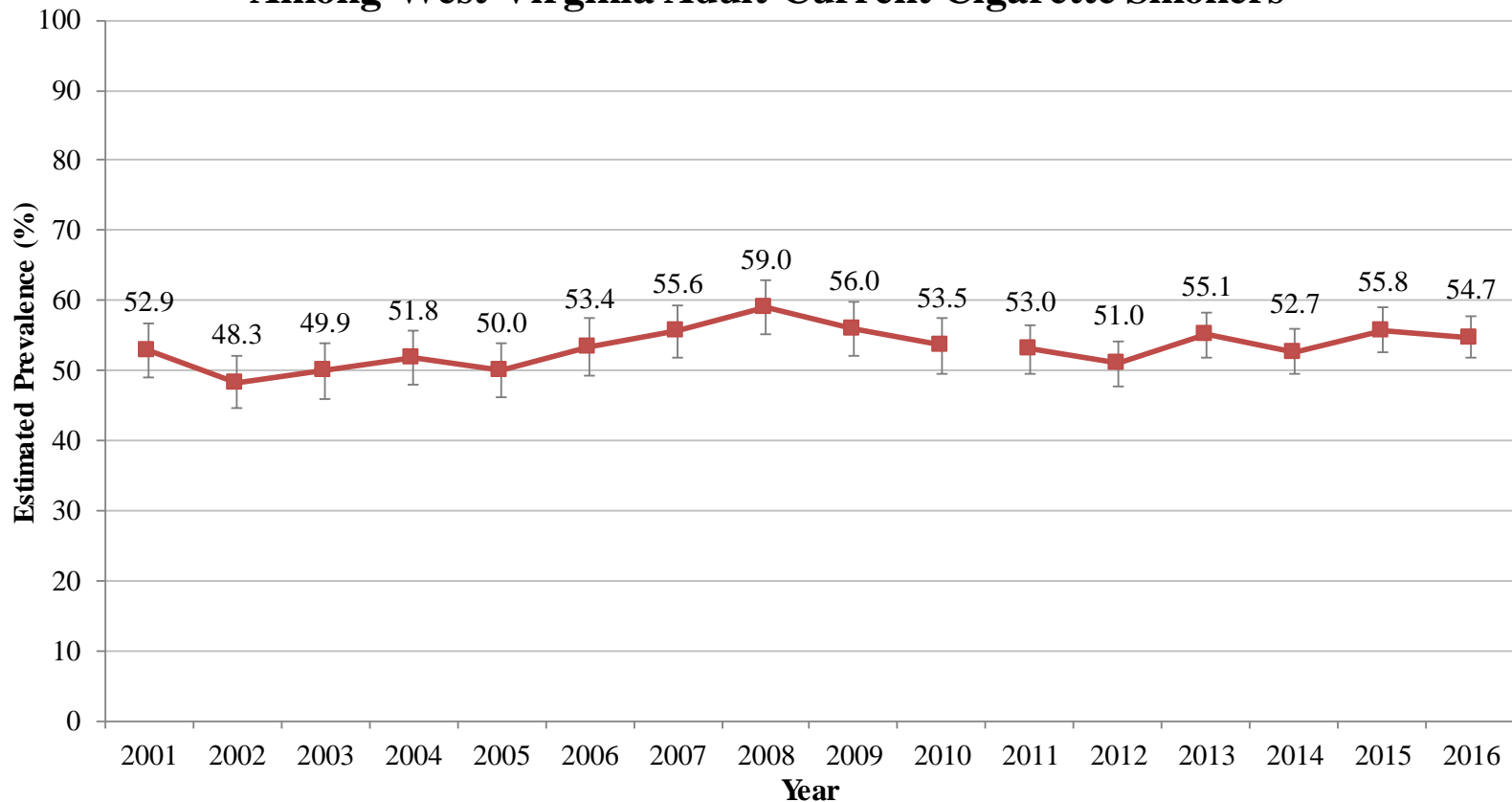


Data Sources: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System (BRFSS); U.S. Centers for Disease Control and Prevention, BRFSS.

Note: In 2011 there were changes made to the weighting methodology and the sample composition in BRFSS, therefore the 2011 prevalence data and beyond are not directly comparable to previous years of BRFSS data. Error bars represent the 95% Confidence Interval associated with the prevalence estimate. The U.S. (all states plus District of Columbia) average is the mean.

Current smoking is defined as having smoked 100 or more cigarettes in a lifetime and currently smoking cigarettes every day or some days.

## Prevalence of Quit Attempts Among West Virginia Adult Current Cigarette Smokers

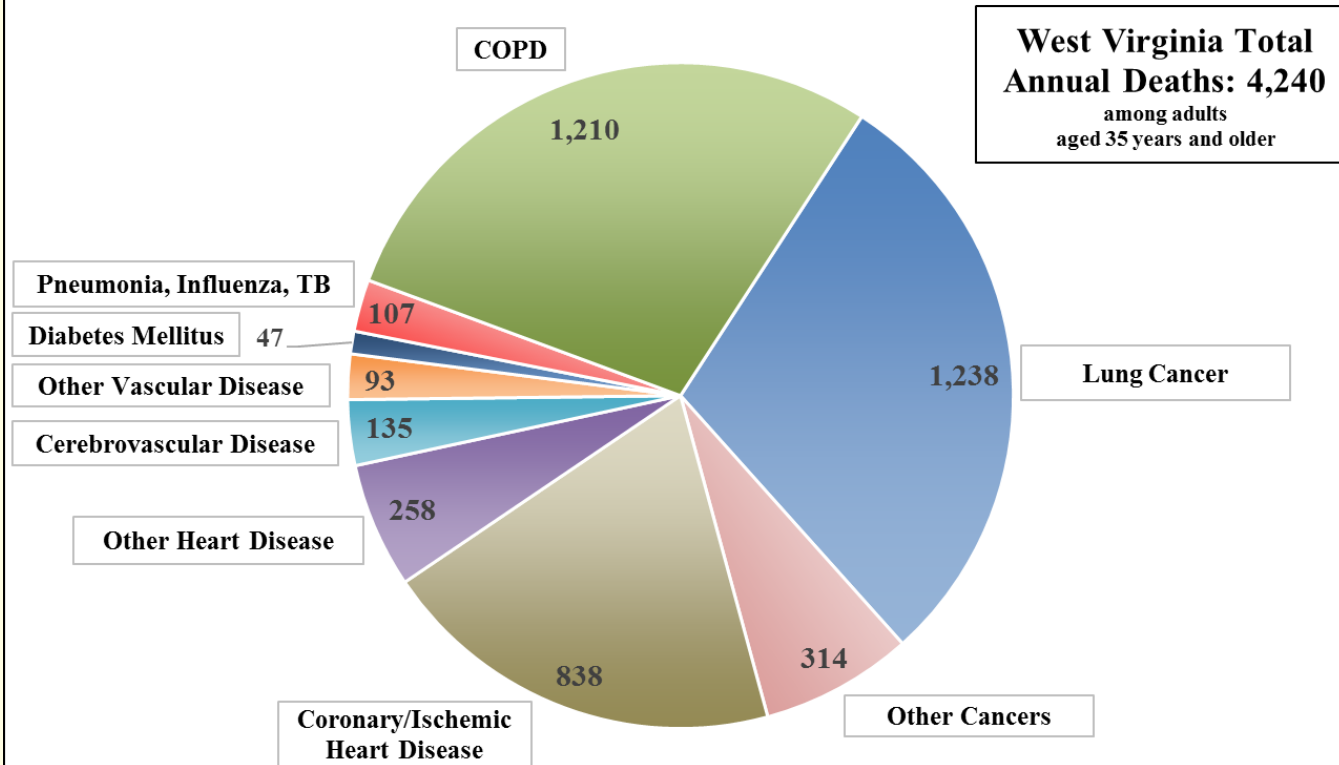


Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System (BRFSS)

Note: In 2011 there were changes made to the weighting methodology and the sample composition in BRFSS, therefore the 2011 prevalence data and beyond are not directly comparable to previous years of BRFSS data. Error bars represent the 95% Confidence Interval associated with the prevalence estimate.

A quit attempt is defined as having stopped smoking for one day or longer in the past 12 months, in an effort to quit smoking. Current smoking is defined as having smoked 100 or more cigarettes in a lifetime and currently smoking cigarettes every day or some days.

## Average Annual Smoking-Attributable Deaths in West Virginia, 2009-2013



Data Sources: West Virginia Health Statistics Center, West Virginia Behavioral Risk Factor Surveillance System, West Virginia Vital Statistics System; *The Health Consequences of Smoking: 50 Years of Progress* (December 2014). Methodology for estimating smoking-related deaths is explained in Chapter 12 (Smoking-Attributable Morbidity, Mortality and Economic Costs) of the U.S. Surgeon General's Report *The Health Consequences of Smoking: 50 Years of Progress* (December 2014). West Virginia-specific estimates were derived by using data from the West Virginia Behavioral Risk Factor Surveillance System, West Virginia Vital Statistics System, and national-level data provided in the U.S. Surgeon General's Report. Estimates are based on current and former cigarette smoking and associated deaths among adults aged 35 years and older by analyzing 23 causes of death.

## Prevalence of Adult Current Tobacco Use by County WV BRFSS 2012-2016

County	Estimated Prevalence (%)	Rank	Significance	Weighted Frequency
Barbour	39.7	9	ns	5,134
Berkeley	31.0	41	ns	25,477
Boone	38.3	13	ns	6,965
Braxton	35.4	23	ns	3,986
Brooke	32.1	37	ns	6,138
Cabell	33.0	33	ns	25,100
Calhoun	47.1	2	H	2,801
Clay	37.9	14	ns	2,585
Doddridge	*41.3	7	ns	2,785
Fayette	35.6	21	ns	12,574
Gilmer	*38.7	12	ns	2,780
Grant	31.9	38	ns	2,967
Greenbrier	34.5	28	ns	9,783
Hampshire	34.0	30	ns	6,248
Hancock	29.7	49	ns	7,032
Hardy	31.5	39	ns	3,443
Harrison	33.8	31	ns	18,033
Jackson	34.2	29	ns	7,600
Jefferson	28.3	52	ns	11,877
Kanawha	30.1	48	L	44,906
Lewis	35.3	24	ns	4,580
Lincoln	44.7	3	H	7,318
Logan	38.9	11	H	10,746
Marion	36.5	18	ns	16,337
Marshall	30.6	45	ns	7,802
Mason	35.4	22	ns	7,441
McDowell	37.8	15	ns	5,939
Mercer	35.6	20	ns	17,258
<b>West Virginia</b>	<b>33.2</b>			<b>481,190</b>
West Virginia: MEN	40.4			285,823
West Virginia: WOMEN	26.4			195,367

Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System (BRFSS). Note that the prevalence among MEN is significantly higher than the prevalence among WOMEN.

## Notes:

1. Current Tobacco Use is defined as having smoked cigarettes or used smokeless tobacco every day or some days.
2. \*Data may be unreliable due to n<50, CI width> 20, or RSE>30, and should be interpreted with caution.
3. Rank #1=highest prevalence, #55=lowest prevalence
4. Significance - Indicates whether county prevalence estimate is significantly different than WV prevalence. H = significantly higher, ns = not significantly different, L = significantly lower

### Prevalence of Adult Current Tobacco Use by County WV BRFSS 2012-2016 (continued)

County	Estimated Prevalence (%)	Rank	Significance	Weighted Frequency
Mineral	35.0	26	ns	7,650
Mingo	39.2	10	ns	7,736
Monongalia	24.6	54	L	20,978
Monroe	36.8	17	ns	3,847
Morgan	27.1	53	ns	3,740
Nicholas	41.5	5	H	8,405
Ohio	30.2	47	ns	10,425
Pendleton	24.4	55	ns	1,419
Pleasants	*30.8	43	ns	1,874
Pocahontas	30.9	42	ns	2,118
Preston	35.2	25	ns	9,438
Putnam	28.8	50	L	12,383
Raleigh	34.6	27	ns	20,979
Randolph	37.8	16	ns	8,789
Ritchie	32.6	35	ns	2,591
Roane	40.5	8	ns	4,557
Summers	31.1	40	ns	3,305
Taylor	30.7	44	ns	4,073
Tucker	*28.7	51	ns	1,583
Tyler	33.1	32	ns	2,378
Upshur	32.5	36	ns	6,303
Wayne	36.1	19	ns	11,473
Webster	*47.9	1	H	3,368
Wetzel	41.5	6	H	5,227
Wirt	*30.6	46	ns	1,379
Wood	32.8	34	ns	21,877
Wyoming	43.2	4	H	7,561
<b>West Virginia</b>	<b>33.2</b>			<b>481,190</b>
West Virginia: MEN	40.4			285,823
West Virginia: WOMEN	26.4			195,367

Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System (BRFSS). Note that the prevalence among MEN is significantly higher than the prevalence among WOMEN.

Notes:

1. Current Tobacco Use is defined as having smoked cigarettes or used smokeless tobacco every day or some days.
2. \*Data may be unreliable due to n<50, CI width> 20, or RSE>30, and should be interpreted with caution.
3. Rank #1=highest prevalence, #55=lowest prevalence
4. Significance - Indicates whether county prevalence estimate is significantly different than WV prevalence. H = significantly higher, ns = not significantly different, L = significantly lower



## Prevalence of Adult Current Cigarette Smoking by County WV BRFSS 2012-2016

County	Estimated Prevalence (%)	Rank	Significance	Weighted Frequency
Barbour	33.4	4	ns	4,314
Berkeley	26.7	31	ns	21,940
Boone	29.9	9	ns	5,435
Braxton	23.6	43	ns	2,651
Brooke	26.7	32	ns	5,096
Cabell	29.4	14	ns	22,395
Calhoun	38.0	1	H	2,262
Clay	26.5	33	ns	1,808
Doddridge	*29.6	12	ns	1,994
Fayette	28.4	22	ns	10,065
Gilmer	*22.6	49	ns	1,623
Grant	15.0	55	L	1,390
Greenbrier	26.0	34	ns	7,359
Hampshire	26.9	28	ns	4,953
Hancock	27.5	26	ns	6,520
Hardy	23.6	42	ns	2,587
Harrison	25.7	37	ns	13,711
Jackson	26.9	29	ns	5,995
Jefferson	23.9	40	ns	10,038
Kanawha	25.4	38	ns	37,830
Lewis	29.4	15	ns	3,811
Lincoln	30.6	7	ns	5,010
Logan	29.1	18	ns	8,000
Marion	28.4	23	ns	12,682
Marshall	24.3	39	ns	6,202
Mason	29.9	8	ns	6,271
McDowell	29.7	10	ns	4,659
Mercer	29.0	19	ns	14,046
<b>West Virginia</b>	<b>26.5</b>			<b>384,532</b>
Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System (BRFSS)				

## Notes:

1. Current Cigarette Smoking is defined as smoking every day or some days.
2. \* Data may be unreliable due to n<50, CI width> 20, or RSE>30, and should be interpreted with caution.
3. Rank #1=highest prevalence, #55=lowest prevalence
4. Significance - Indicates whether county prevalence estimate is significantly different than WV prevalence. H = significantly higher, ns = not significantly different, L = significantly lower

## Prevalence of Adult Current Cigarette Smoking by County WV BRFSS 2012-2016 (continued)

County	Estimated Prevalence (%)	Rank	Significance	Weighted Frequency
Mineral	28.2	24	ns	6,160
Mingo	29.7	11	ns	5,857
Monongalia	19.3	53	L	16,463
Monroe	23.7	41	ns	2,470
Morgan	21.7	51	ns	3,003
Nicholas	30.7	6	ns	6,226
Ohio	27.3	27	ns	9,413
Pendleton	17.1	54	L	995
Pleasants	22.9	47	ns	1,394
Pocahontas	22.5	50	ns	1,547
Preston	26.9	30	ns	7,220
Putnam	22.9	48	ns	9,845
Raleigh	27.7	25	ns	16,824
Randolph	29.2	17	ns	6,803
Ritchie	28.8	20	ns	2,290
Roane	29.3	16	ns	3,298
Summers	23.6	44	ns	2,507
Taylor	25.9	36	ns	3,444
Tucker	23.1	46	ns	1,273
Tyler	25.9	35	ns	1,866
Upshur	23.2	45	ns	4,506
Wayne	29.5	13	ns	9,382
Webster	34.1	3	ns	2,400
Wetzel	32.7	5	ns	4,127
Wirt	*21.6	52	ns	976
Wood	28.7	21	ns	19,183
Wyoming	35.1	2	H	6,147
<b>West Virginia</b>	<b>26.5</b>			<b>384,532</b>
Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System (BRFSS)				

## Notes:

1. Current Cigarette Smoking is defined as smoking every day or some days.
2. \* Data may be unreliable due to n<50, CI width> 20, or RSE>30, and should be interpreted with caution.
3. Rank #1=highest prevalence, #55=lowest prevalence
4. Significance - Indicates whether county prevalence estimate is significantly different than WV prevalence. H = significantly higher, ns = not significantly different, L = significantly lower

### Prevalence of Adult Current Smokeless Tobacco Use by County WV BRFSS 2012-2016

County	Estimated Prevalence (%)	Rank	Significance	Weighted Frequency
Barbour	9.1	34	ns	1,178
Berkeley	5.4	52	L	4,476
Boone	12.1	16	ns	2,197
Braxton	13.6	7	ns	1,517
Brooke	8.8	37	ns	1,699
Cabell	5.5	51	L	4,191
Calhoun	10.9	21	ns	653
Clay	15.2	5	ns	1,039
Doddridge	*13.1	10	ns	885
Fayette	10.3	24	ns	3,669
Gilmer	*16.3	4	ns	1,184
Grant	18.9	2	H	1,762
Greenbrier	10.2	27	ns	2,890
Hampshire	10.2	26	ns	1,880
Hancock	*4.4	54	L	1,039
Hardy	10.2	25	ns	1,123
Harrison	10.6	23	ns	5,665
Jackson	9.8	31	ns	2,191
Jefferson	5.0	53	L	2,102
Kanawha	6.4	48	L	9,619
Lewis	11.0	20	ns	1,426
Lincoln	18.9	1	H	3,099
Logan	12.8	12	ns	3,527
Marion	10.9	22	ns	4,856
Marshall	8.8	38	ns	2,256
Mason	7.6	44	ns	1,593
McDowell	10.2	28	ns	1,614
Mercer	8.2	42	ns	3,954
<b>West Virginia: All Adults</b>	<b>8.9</b>			<b>128,757</b>
West Virginia: MEN	17.2			121,987
West Virginia: WOMEN	0.9			6,770

Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System (BRFSS). The prevalence of current smokeless tobacco use at the county level cannot be provided by gender due to the resulting data that may be unreliable. Note that the prevalence among MEN is disproportionately higher than the prevalence among WOMEN.

Notes:

1. Current Tobacco Use is defined as having smoked cigarettes or used smokeless tobacco every day or some days.
2. \*Data may be unreliable due to n<50, CI width> 20, or RSE>30, and should be interpreted with caution.
3. Rank #1=highest prevalence, #55=lowest prevalence
4. Significance - Indicates whether county prevalence estimate is significantly different than WV prevalence. H = significantly higher, ns = not significantly different, L = significantly lower

## Prevalence of Adult Current Smokeless Tobacco Use by County WV BRFSS 2012-2016 (continued)

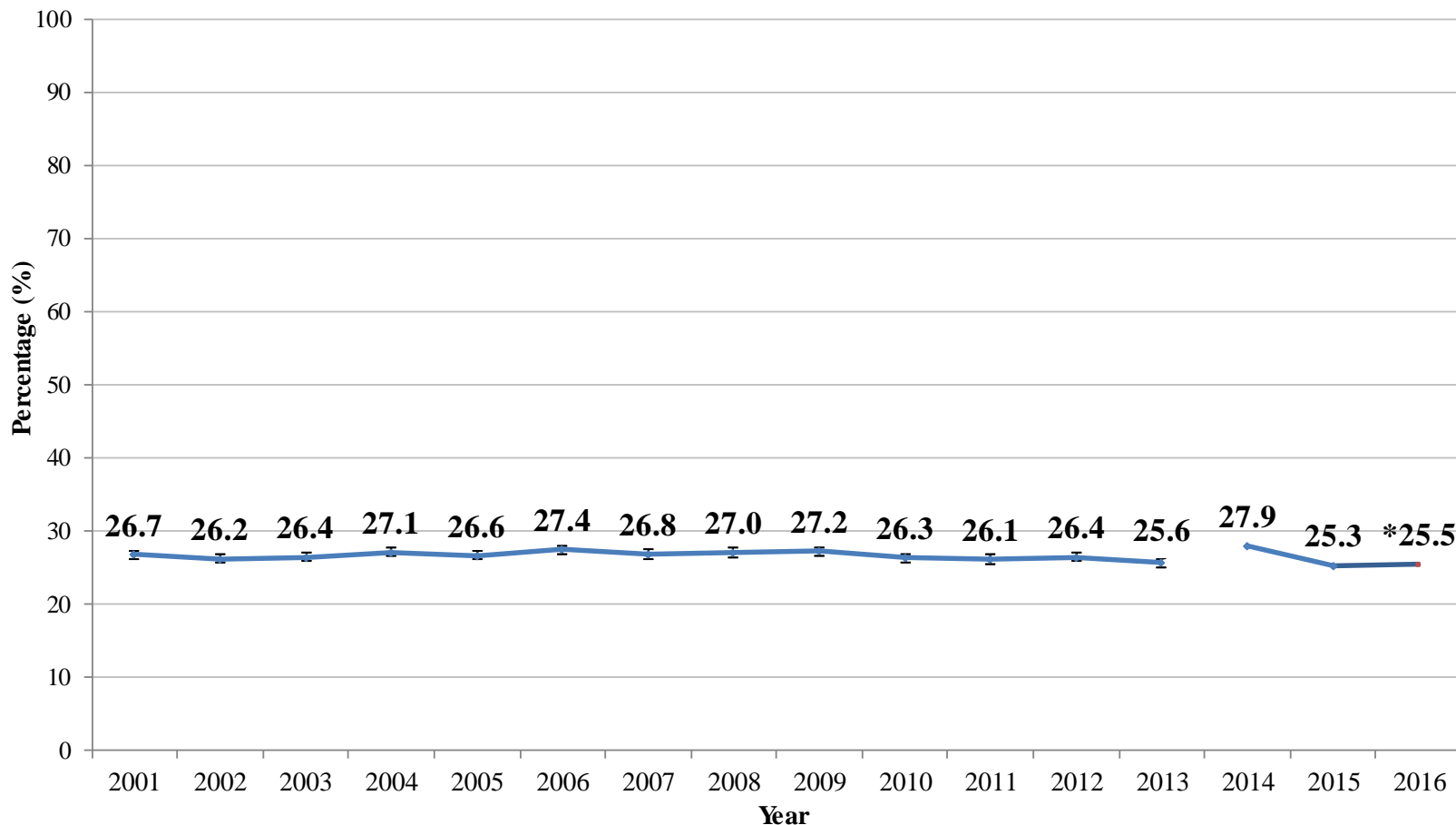
County	Estimated Prevalence (%)	Rank	Significance	Weighted Frequency
Mineral	9.0	35	ns	1,967
Mingo	12.6	13	ns	2,485
Monongalia	6.3	50	L	5,402
Monroe	13.8	6	ns	1,443
Morgan	*7.7	43	ns	1,064
Nicholas	12.6	14	ns	2,548
Ohio	*3.8	55	L	1,298
Pendleton	*7.2	46	ns	424
Pleasants	*13.4	9	ns	814
Pocahontas	*8.9	36	ns	626
Preston	10.0	30	ns	2,691
Putnam	8.6	40	ns	3,715
Raleigh	9.7	32	ns	5,882
Randolph	11.8	18	ns	2,760
Ritchie	*8.5	41	ns	681
Roane	13.1	11	ns	1,477
Summers	7.5	45	ns	798
Taylor	6.7	47	ns	885
Tucker	*9.1	33	ns	503
Tyler	*10.1	29	ns	731
Upshur	11.0	19	ns	2,142
Wayne	8.7	39	ns	2,769
Webster	*16.7	3	ns	1,177
Wetzel	12.0	17	ns	1,517
Wirt	12.2	15	ns	551
Wood	6.4	49	L	4,264
Wyoming	13.5	8	ns	2,368
<b>West Virginia: All Adults</b>	<b>8.9</b>			<b>128,757</b>
West Virginia: MEN	17.2			121,987
West Virginia: WOMEN	0.9			6,770

Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System (BRFSS). The prevalence of current smokeless tobacco use at the county level cannot be provided by gender due to the resulting data that may be unreliable. Note that the prevalence among MEN is disproportionately higher than the prevalence among WOMEN.

## Notes:

1. Current Tobacco Use is defined as having smoked cigarettes or used smokeless tobacco every day or some days.
2. \*Data may be unreliable due to n<50, CI width> 20, or RSE>30, and should be interpreted with caution.
3. Rank #1=highest prevalence, #55=lowest prevalence
4. Significance - Indicates whether county prevalence estimate is significantly different than WV prevalence. H = significantly higher, ns = not significantly different, L = significantly lower

## Percentage of West Virginia Women Who Smoked Cigarettes During Pregnancy

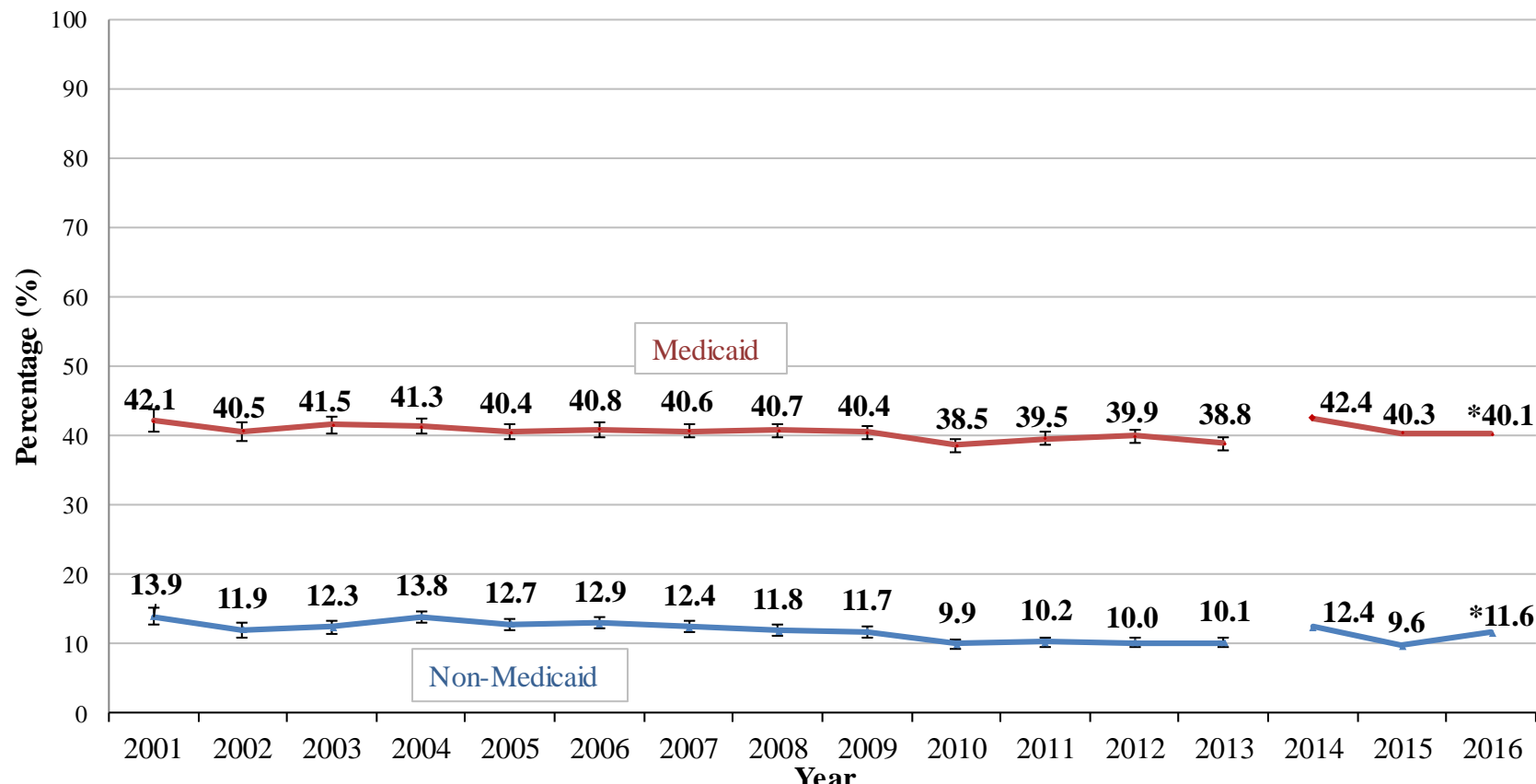


Data Sources: West Virginia Health Statistics Center, Vital Statistics System (VSS); CDC, National Center for Health Statistics.

Note: By 2014, the majority of states plus District of Columbia began using the standardized birth certificate form, which varied slightly from forms in previous years, therefore 2014 data and beyond may not be comparable to previous years of birth data from VSS. VSS birth data is analyzed from women who have had a live birth. Error bars represent the 95% Confidence Interval associated with the percentage.

\*Data for 2016 are preliminary.

## Percentage of West Virginia Women Who Smoked Cigarettes During Pregnancy, by Medicaid or Other Health Care Coverage

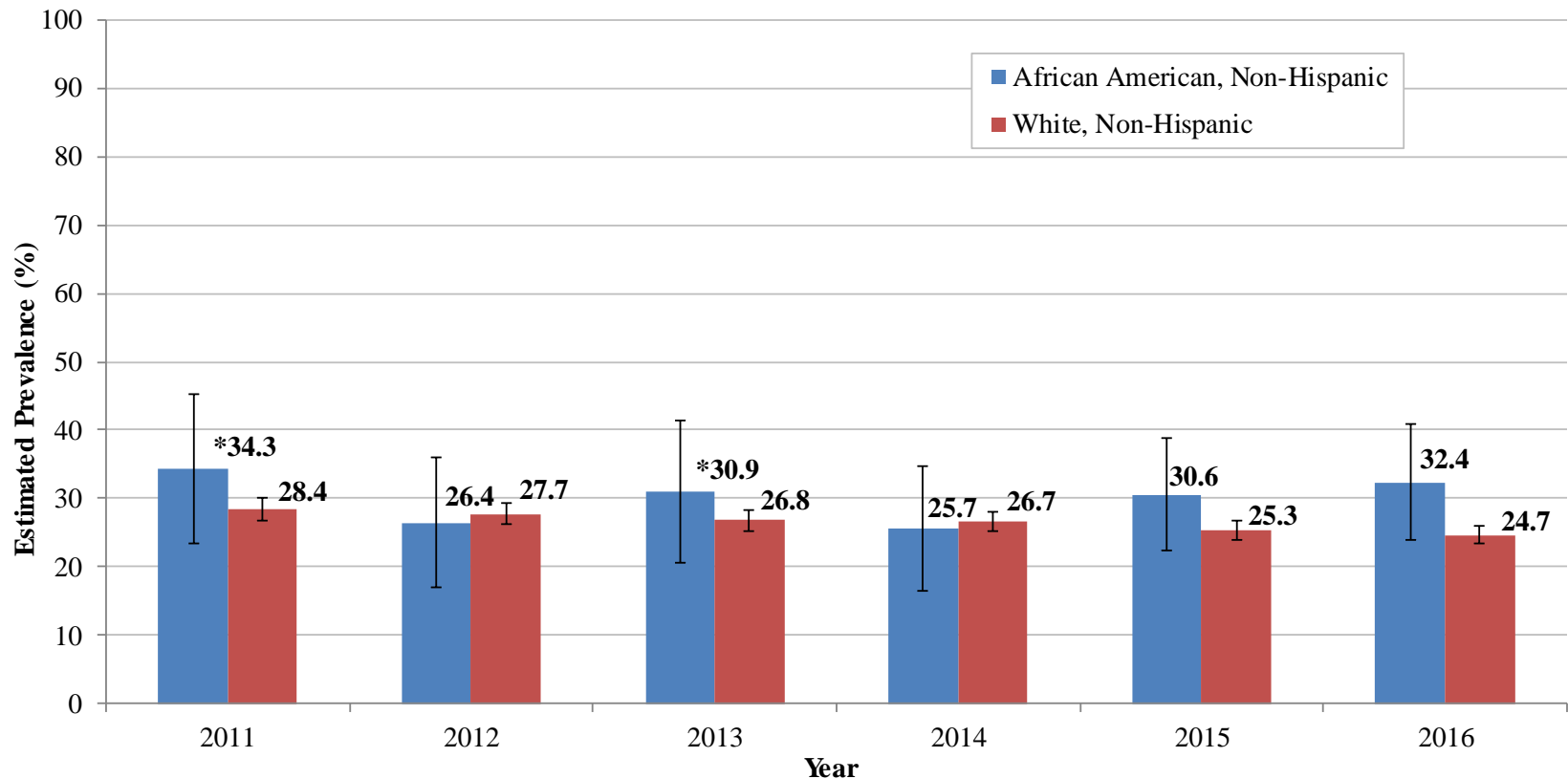


Data Source: West Virginia Health Statistics Center, Vital Statistics System (VSS)

Note: By 2014, the majority of states plus District of Columbia began using the standardized birth certificate form, which varied slightly from forms in previous years, therefore 2014 data and beyond may not be comparable to previous years of birth data from VSS. VSS birth data is analyzed from women who have had a live birth. Error bars represent the 95% Confidence Interval associated with the percentage.

\*Data for 2016 are preliminary.

### Prevalence of Current Cigarette Smoking Among West Virginia Adults, by Race



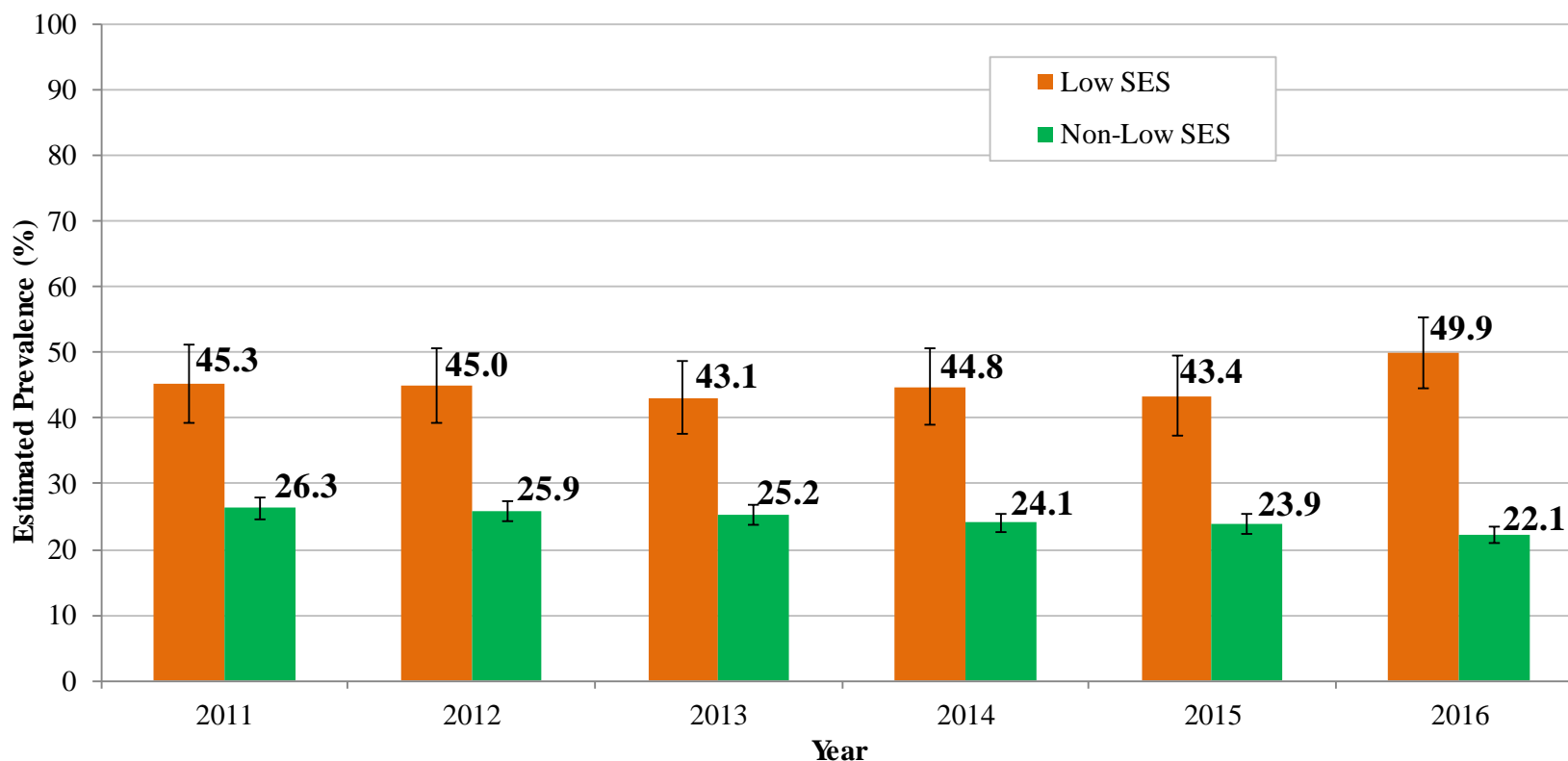
Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System (BRFSS)

Note: In 2011 there were changes made to the weighting methodology and the sample composition in BRFSS, therefore the 2011 prevalence data and beyond are not directly comparable to previous years of BRFSS data. Black, Non-Hispanic are those adults who prefer to identify themselves as Black or African American, Non-Hispanic; White, Non-Hispanic are those who prefer to identify themselves as Caucasian or White, Non-Hispanic. Analysis of other race categories did not provide reliable data. Error bars represent the 95% Confidence Interval associated with the prevalence estimate.

\*Data may be unreliable due to n<50, CI width >20, or RSE>30, and should be interpreted with caution.

Current smoking is defined as having smoked 100 or more cigarettes in a lifetime and currently smoking cigarettes every day or some days.

## Prevalence of Current Cigarette Smoking Among West Virginia Adults, by Socioeconomic Status



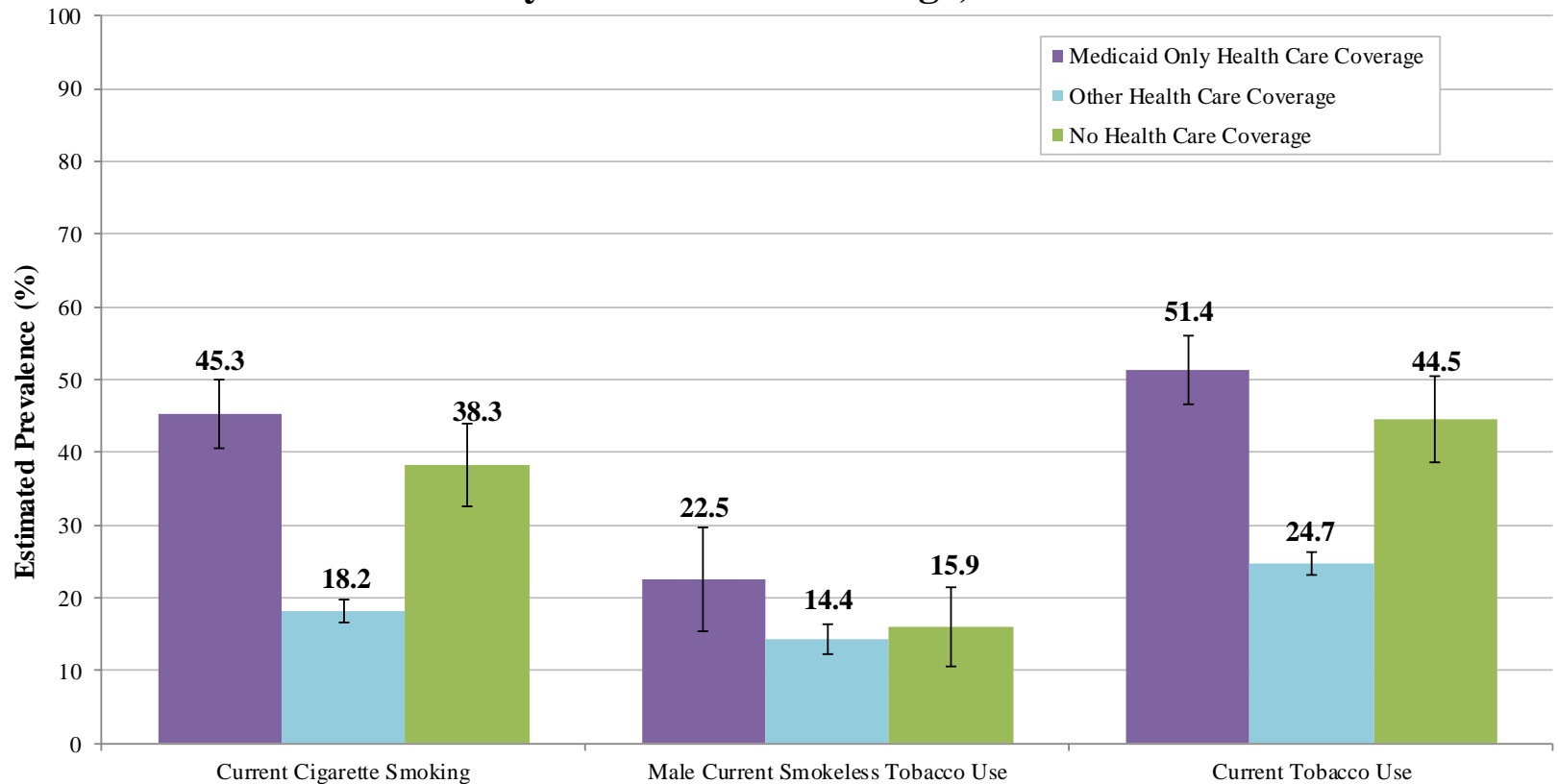
Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System (BRFSS)

Note: In 2011 there were changes made to the weighting methodology and the sample composition in BRFSS, therefore the 2011 prevalence data and beyond are not directly comparable to previous years of BRFSS data. Error bars represent the 95% Confidence Interval associated with the prevalence estimate. Low socioeconomic status (SES) is defined as having an annual household income of less than \$25,000 and education level less than high school.

Current smoking is defined as having smoked 100 or more cigarettes in a lifetime and currently smoking cigarettes every day or some days.



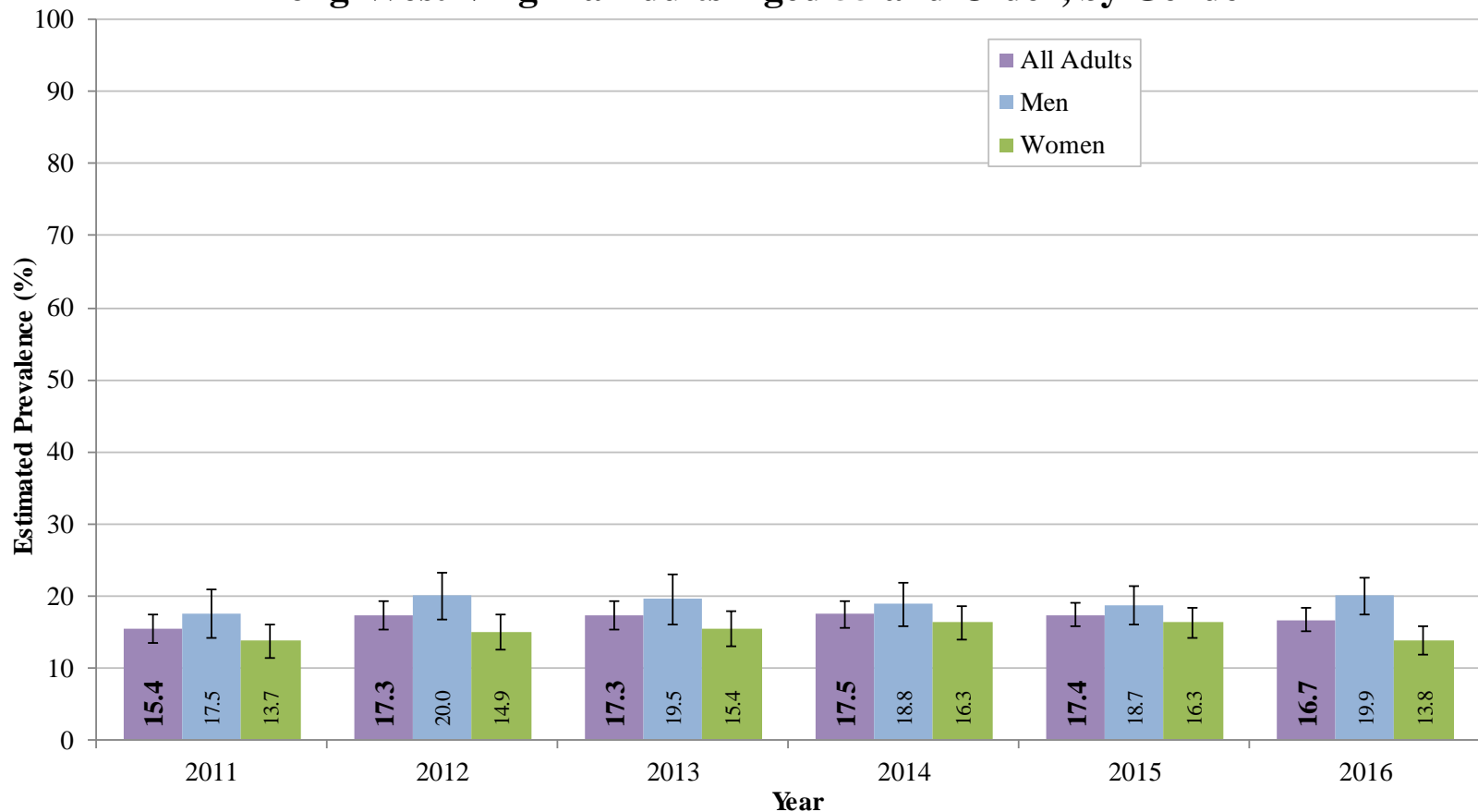
## Prevalence of Tobacco Use Among West Virginia Adults, by Health Care Coverage, 2016



Data Source: West Virginia Health Statistics Center, West Virginia Behavioral Risk Factor Surveillance System

Current smoking is defined as having smoked 100 or more cigarettes in a lifetime and currently smoking cigarettes every day or some days. Current smokeless tobacco use is defined as the use of smokeless tobacco every day or some days, and is presented as prevalence among males only. Current tobacco use is defined as the use of cigarettes or smokeless tobacco use, every day or some days. Respondents indicated their health care coverage as having Medicaid only, other type of coverage, or no coverage.

## Prevalence of Current Cigarette Smoking Among West Virginia Adults Aged 55 and Older, by Gender

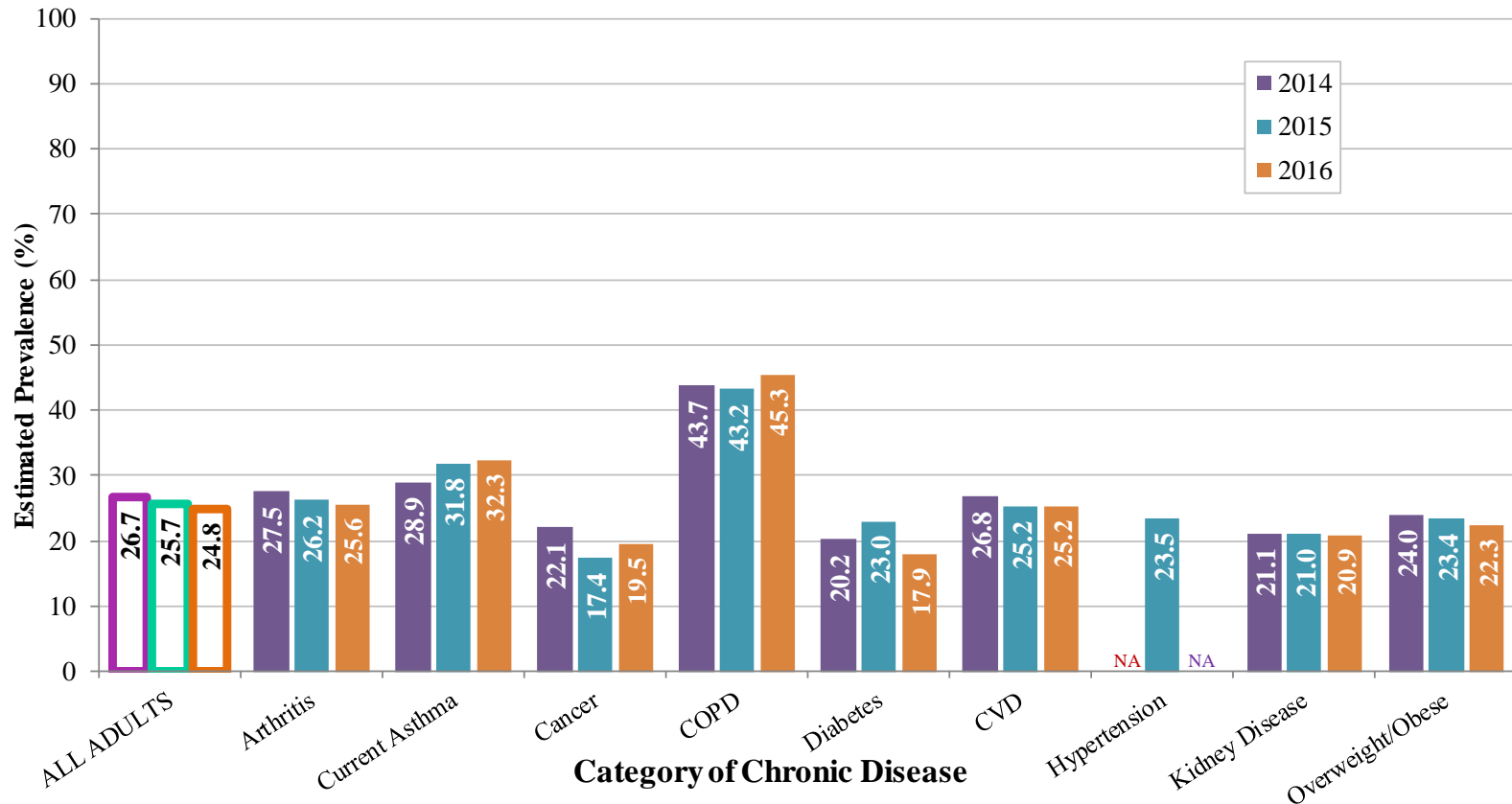


Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System (BRFSS)

Note: In 2011 there were changes made to the weighting methodology and the sample composition in BRFSS, therefore the 2011 prevalence data and beyond are not directly comparable to previous years of BRFSS data. Error bars represent the 95% Confidence Interval associated with the prevalence estimate.

Current smoking is defined as having smoked 100 or more cigarettes in a lifetime and currently smoking cigarettes every day or some days.

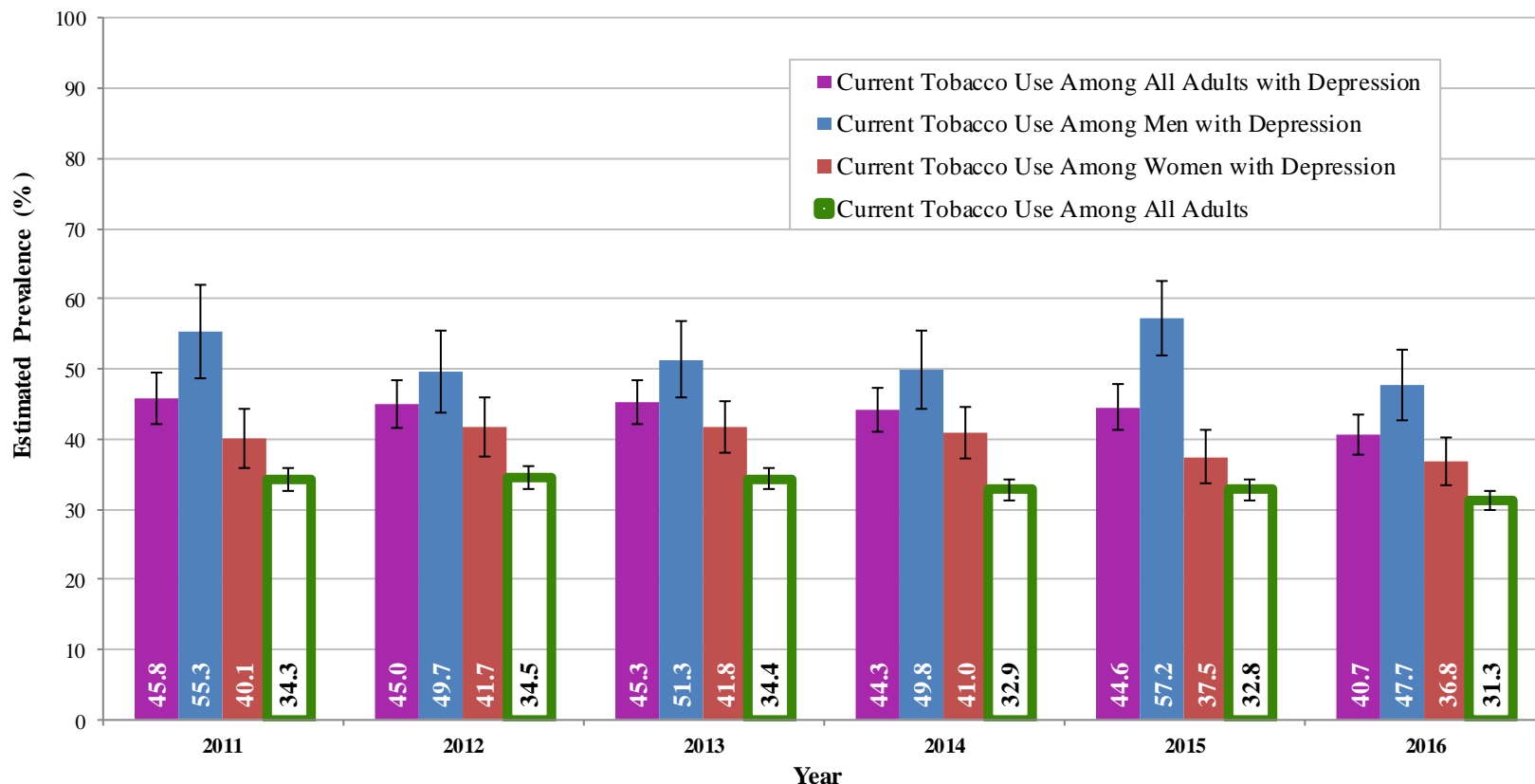
## Prevalence of Current Cigarette Smoking Among West Virginia Adults Diagnosed with a Chronic Disease, Compared to All West Virginia Adults



Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System

Current smoking is defined as having smoked 100 or more cigarettes in a lifetime and currently smoking cigarettes every day or some days. The current cigarette smoking prevalence for ALL ADULTS in West Virginia was 24.8% in 2016. A diagnosis of chronic disease indicates that the respondent had been diagnosed by a doctor, nurse or other healthcare professional: Asthma diagnosis refers to those adults who currently have asthma; COPD represents Chronic Obstructive Pulmonary Disease; CVD (cardiovascular disease) includes heart attack (MI), angina/coronary heart disease, or stroke; Hypertension represents high blood pressure; Kidney disease does not include kidney stones, bladder infection or incontinence; Overweight/Obese is defined as BMI of 25 or higher, calculated from weight and height. BMI 30 or higher (obesity) is considered a chronic disease.

## Prevalence of Current Tobacco Use Among West Virginia Adults Diagnosed with Depression, Compared to All West Virginia Adults

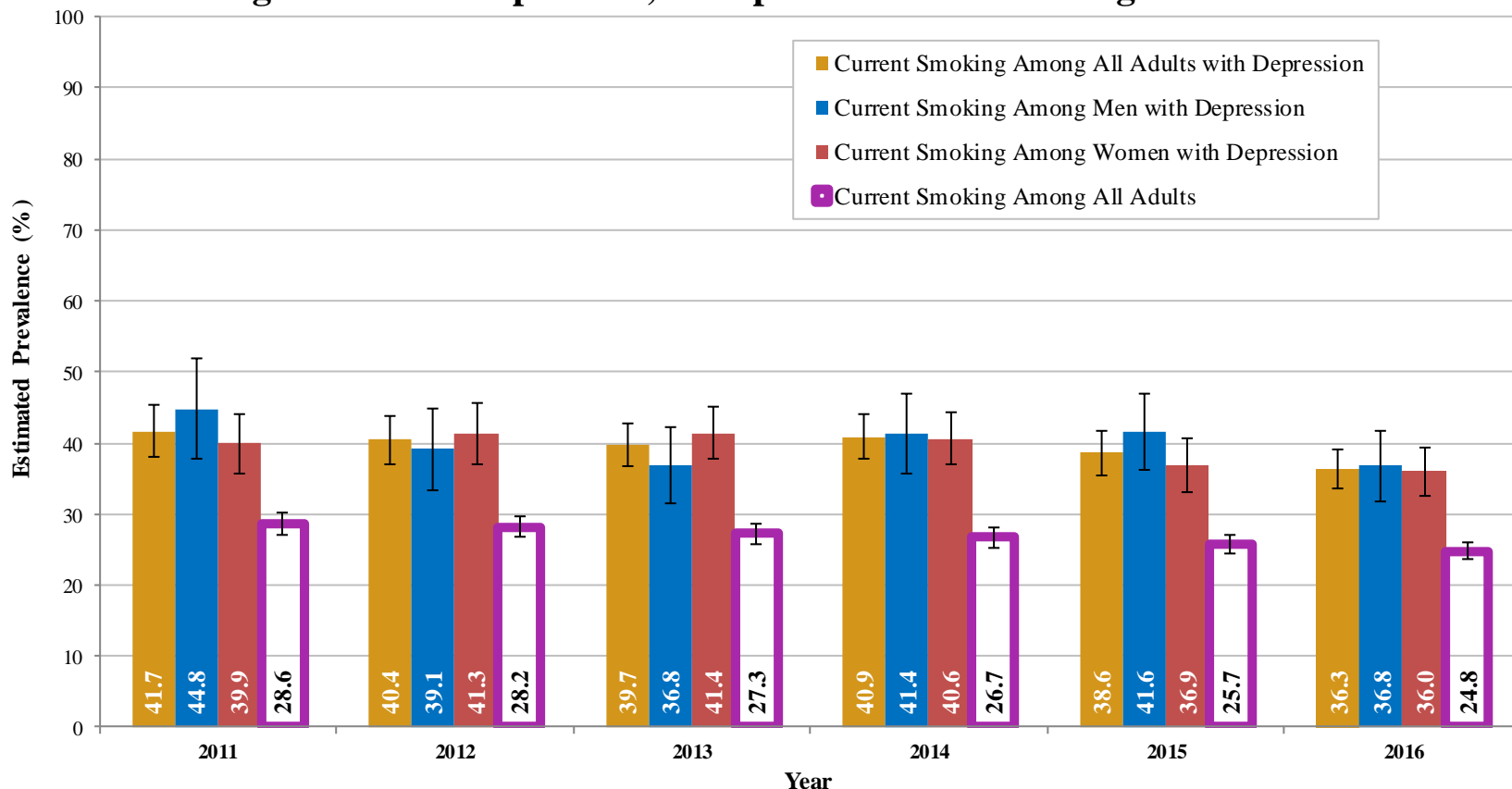


Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System

Error bars represent the 95% Confidence Interval associated with the prevalence estimate.

Current tobacco use is defined as the use of cigarettes or smokeless tobacco, every day or some days. The depression diagnosis indicates that the respondent has been diagnosed by a doctor, nurse, or other healthcare professional as having a depressive disorder.

## Prevalence of Current Cigarette Smoking Among West Virginia Adults Diagnosed with Depression, Compared to All West Virginia Adults

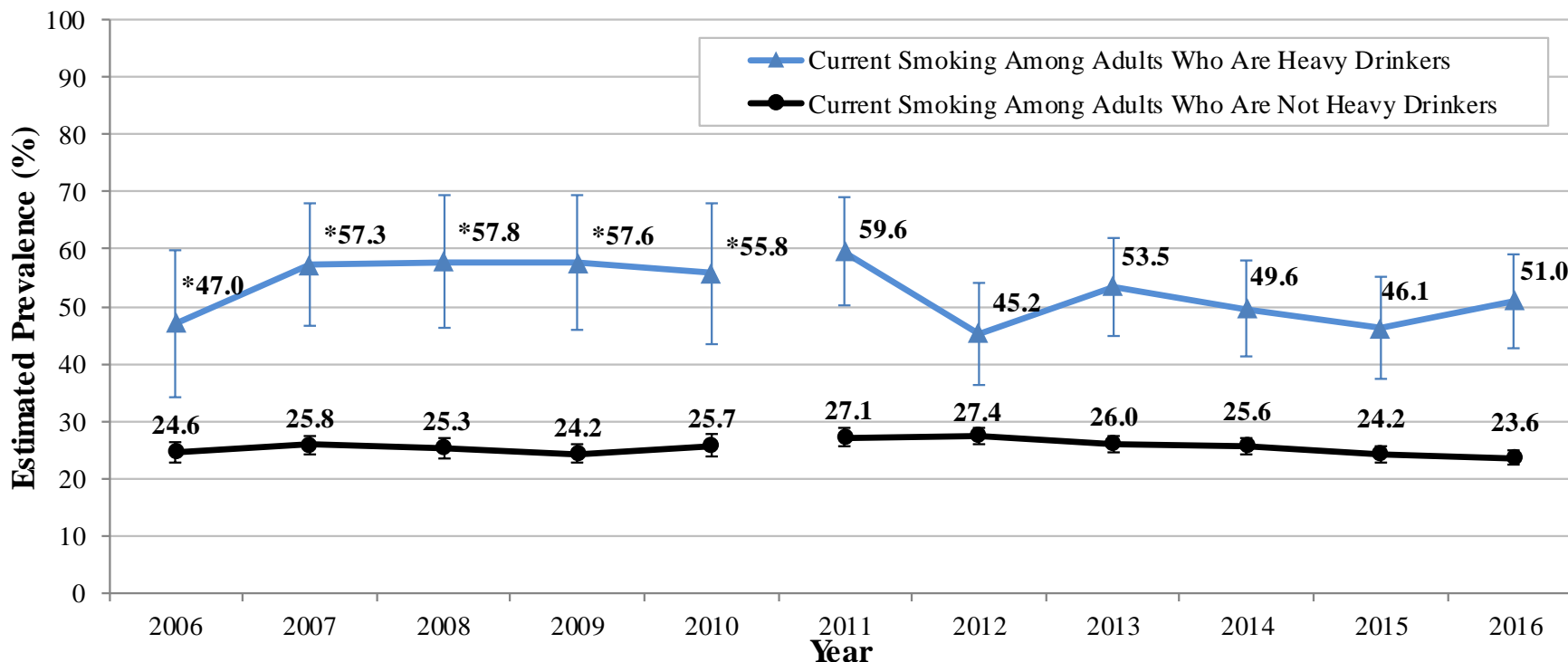


Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System

Error bars represent the 95% Confidence Interval associated with the prevalence estimate.

Current smoking is defined as having smoked 100 or more cigarettes in a lifetime and currently smoking cigarettes every day or some days. The depression diagnosis indicates that the respondent has been diagnosed by a doctor, nurse, or other healthcare professional as having a depressive disorder.

## Prevalence of Current Cigarette Smoking Among West Virginia Adults, Heavy Drinkers Compared to Not Heavy Drinkers



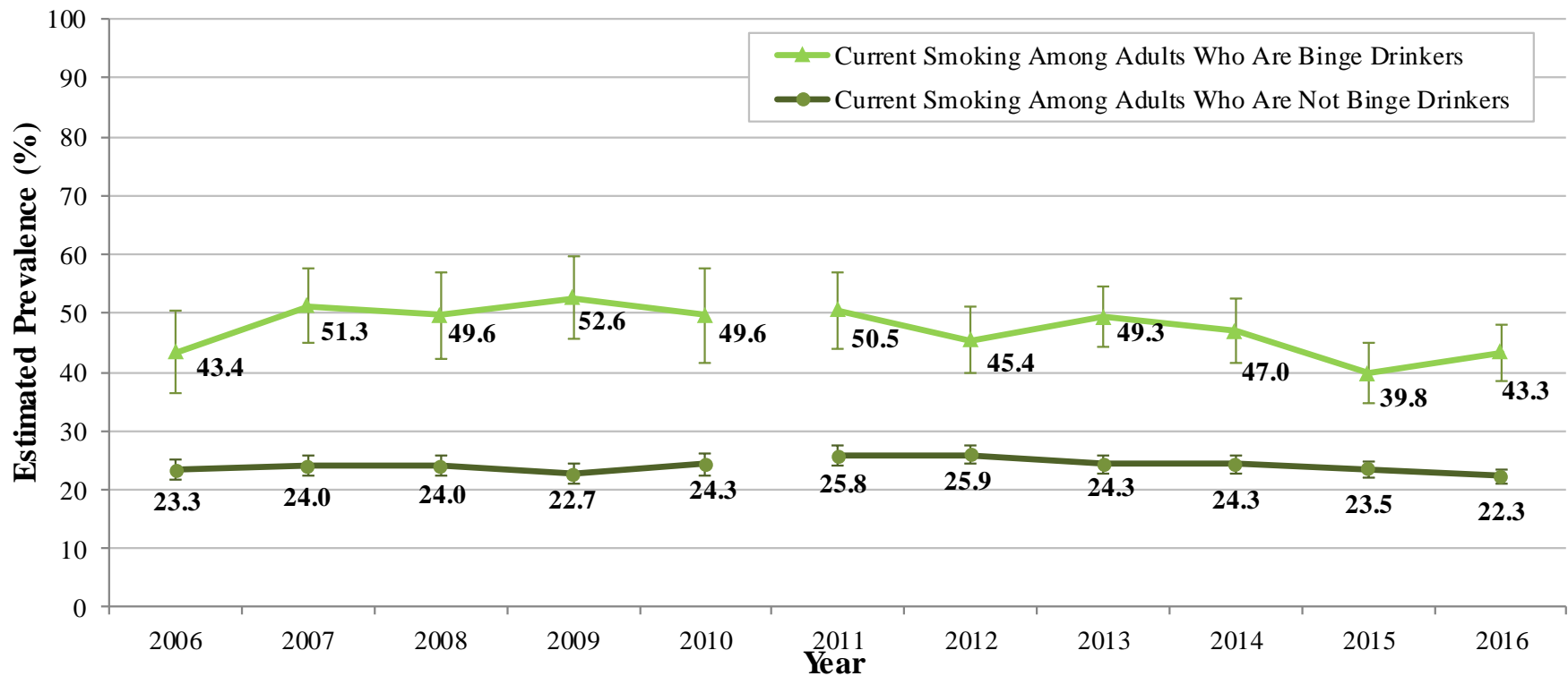
Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System (BRFSS)

Note: In 2011 there were changes made to the weighting methodology and the sample composition in BRFSS, therefore the 2011 prevalence data and beyond are not directly comparable to previous years of BRFSS data. Error bars represent the 95% Confidence Interval associated with the prevalence estimate.

\*Data may be unreliable due to  $n < 50$ ,  $CI \text{ width} > 20$ , or  $RSE > 30$ , and should be interpreted with caution.

Current smoking is defined as having smoked 100 or more cigarettes in a lifetime and currently smoking cigarettes every day or some days. Heavy drinking is defined (for men) as drinking an average of more than 2 drinks per day, and (for women) more than 1 drink per day, in the past 30 days.

## Prevalence of Current Cigarette Smoking Among West Virginia Adults, Binge Drinkers Compared to Not Binge Drinkers



Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System (BRFSS)

Note: In 2011 there were changes made to the weighting methodology and the sample composition in BRFSS, therefore the 2011 prevalence data and beyond are not directly comparable to previous years of BRFSS data. Error bars represent the 95% Confidence Interval associated with the prevalence estimate.

Current smoking is defined as having smoked 100 or more cigarettes in a lifetime and currently smoking cigarettes every day or some days. Binge drinking is defined (for men) as drinking 5 or more drinks on one occasion, and (for women) drinking 4 or more drinks on one occasion, in the past 30 days.

## Prevalence of Current Smokeless Tobacco Use by Demographic Characteristics West Virginia, 2016 BRFSS

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

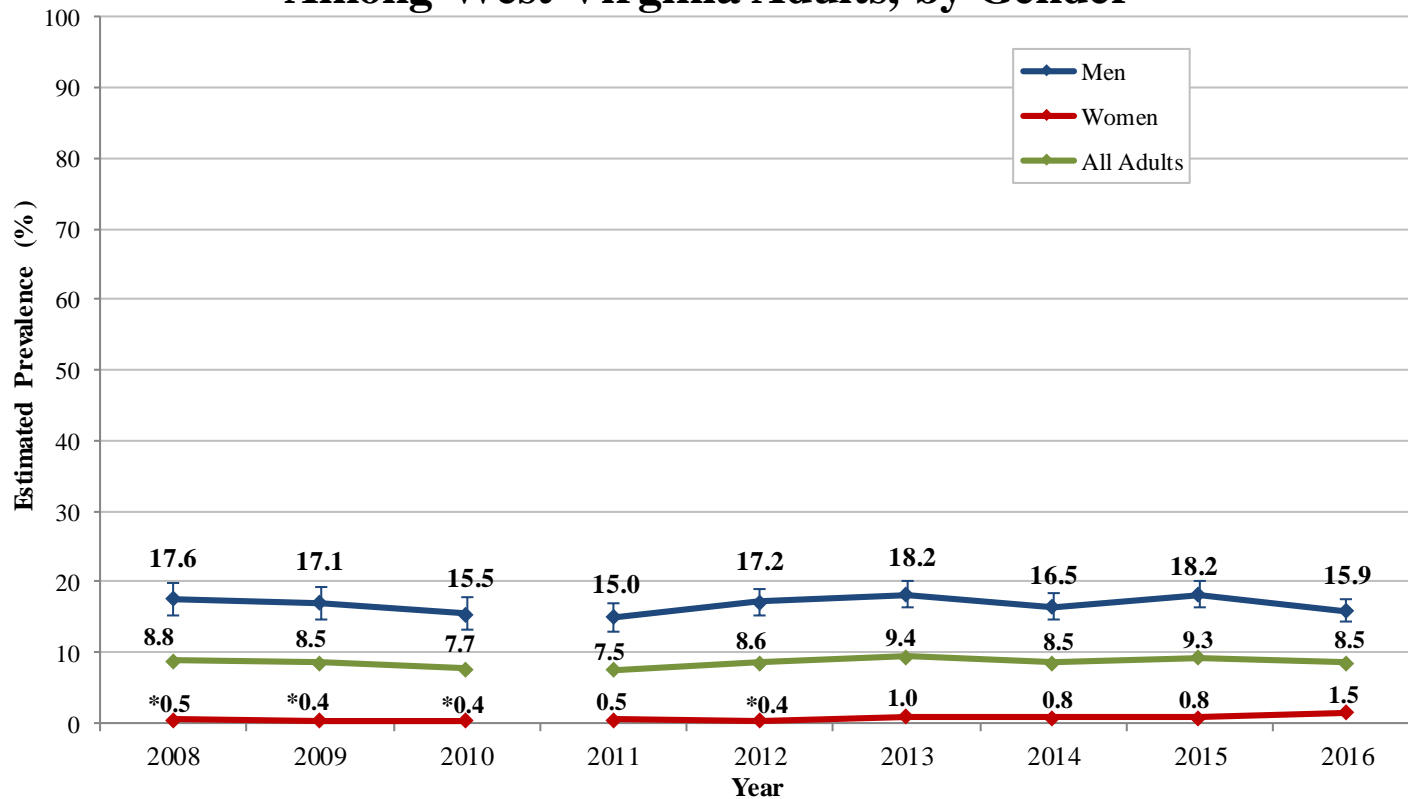
Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System

\*Data may be unreliable due to n<50, CI width >20, or RSE>30, and should be interpreted with caution.

Current smokeless tobacco use is defined as using any smokeless tobacco product every day or some days.



## Prevalence of Current Smokeless Tobacco Use Among West Virginia Adults, by Gender



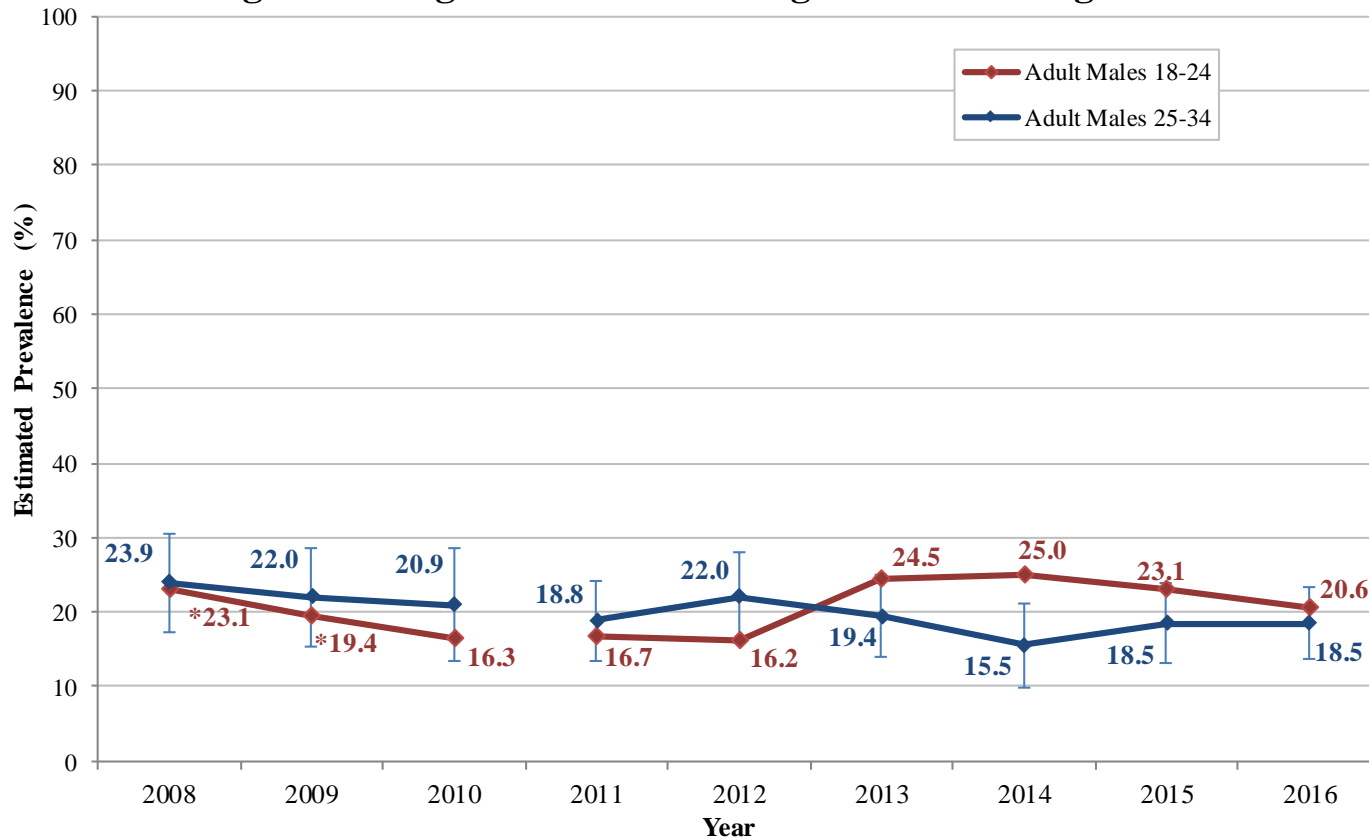
Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System (BRFSS)

Note: In 2011 there were changes made to the weighting methodology and the sample composition in BRFSS, therefore the 2011 prevalence data and beyond are not directly comparable to previous years of BRFSS data. Error bars represent the 95% Confidence Interval associated with the prevalence estimate for adult men.

\*Data may be unreliable due to  $n < 50$ ,  $CI \text{ width} > 20$ , or  $RSE > 30$ , and should be interpreted with caution.

Current smokeless tobacco use is defined as the use of smokeless tobacco every day or some days.

### Prevalence of Current Smokeless Tobacco Use Among West Virginia Adult Males Aged 18-24 and Aged 25-34



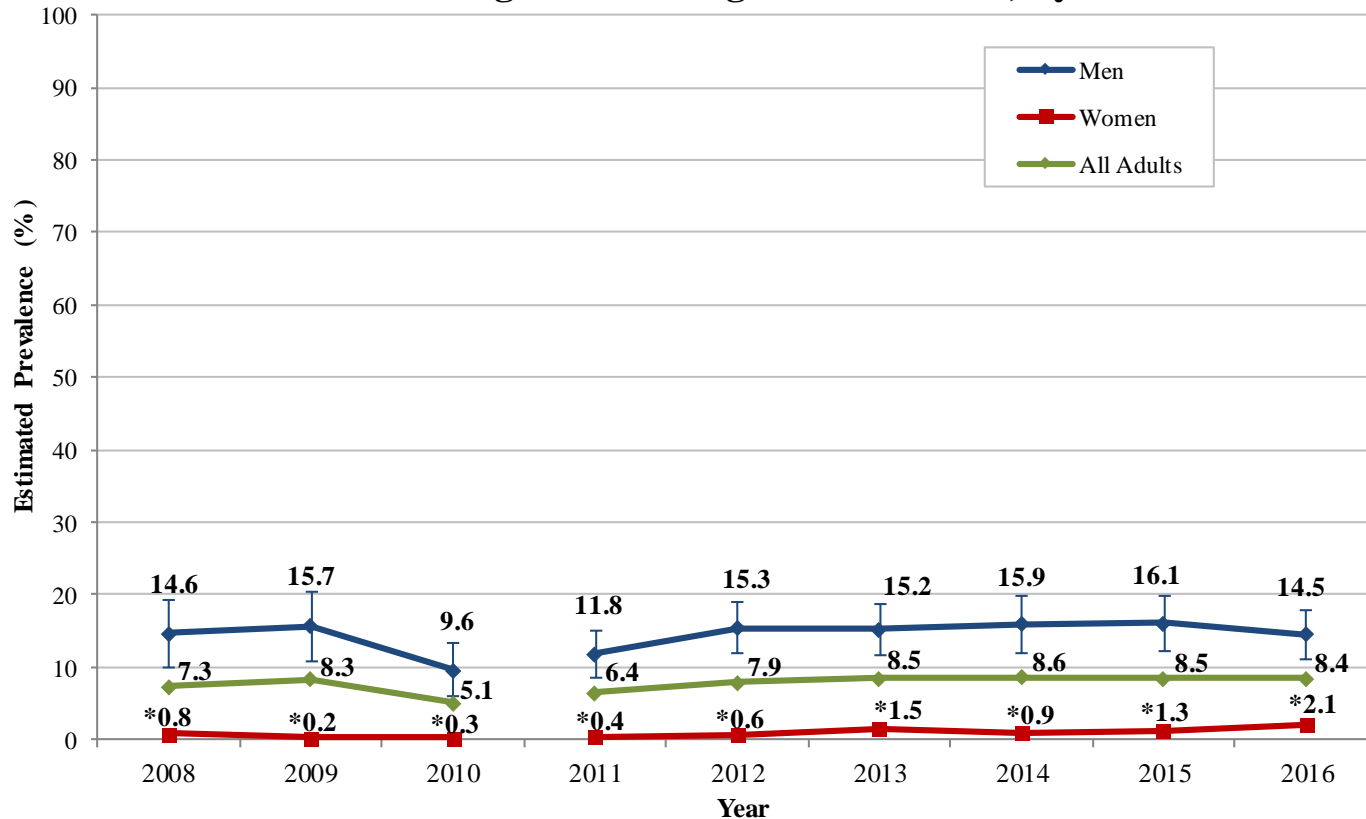
Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System (BRFSS)

Note: In 2011 there were changes made to the weighting methodology and the sample composition in BRFSS, therefore the 2011 prevalence data and beyond are not directly comparable to previous years of BRFSS data. Error bars represent the 95% Confidence Interval associated with the prevalence estimate for males aged 25-34.

\*Data may be unreliable due to n<50, CI width>20, or RSE>30, and should be interpreted with caution.

Current smokeless tobacco use is defined as the use of smokeless tobacco every day or some days.

### Prevalence of Dual Use Among West Virginia Adults: Current Smokeless Tobacco Use Among Current Cigarette Smokers, by Gender



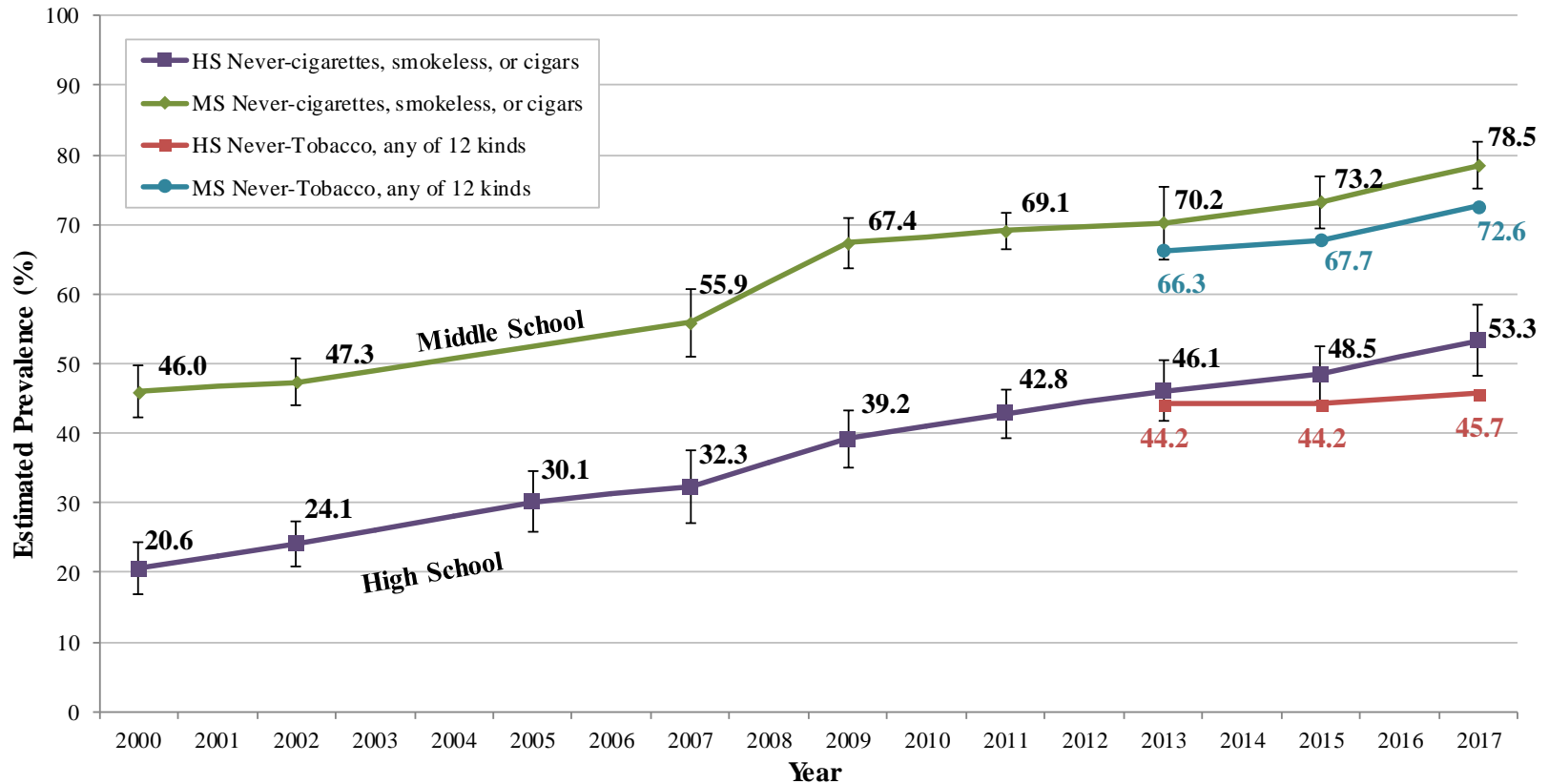
Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System (BRFSS)

Note: In 2011 there were changes made to the weighting methodology and the sample composition in BRFSS, therefore the 2011 prevalence data and beyond are not directly comparable to previous years of BRFSS data. Error bars represent the 95% Confidence Interval associated with the prevalence estimate for men.

\*Data may be unreliable due to n<50, CI width>20, or RSE>30, and should be interpreted with caution.

Dual use is defined as the use of smokeless tobacco every day or some days among current smokers (defined as adults who have smoked 100 or more cigarettes in their lifetime and are currently smoking cigarettes every day or some days).

## Prevalence of Never-Tobacco Use Among West Virginia Youth



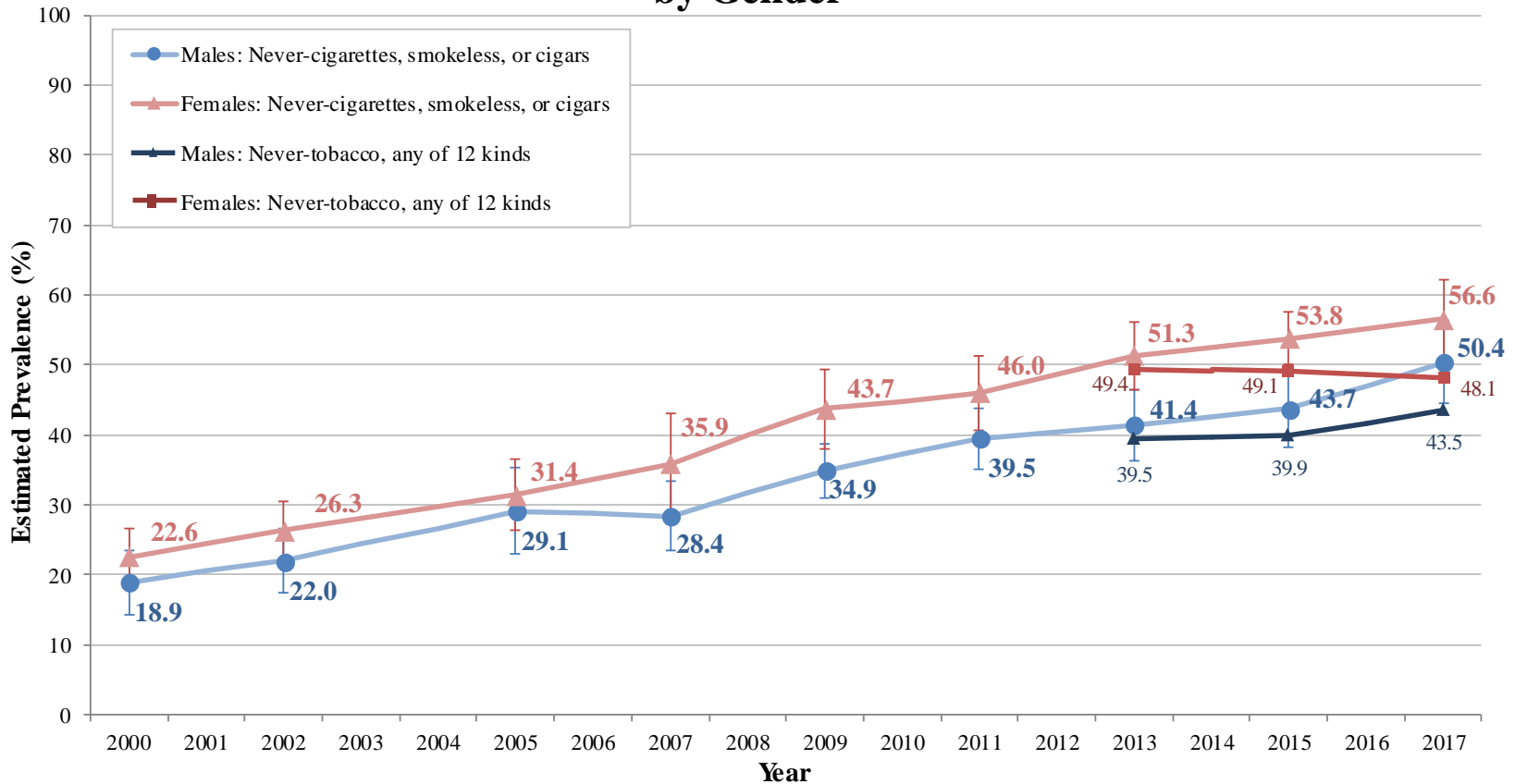
Data Source: West Virginia Division of Tobacco Prevention, Youth Tobacco Survey

Error bars represent the 95% Confidence Interval associated with the prevalence estimate.

Never-tobacco use was defined as never having tried cigarettes, smokeless tobacco, or cigars. Note that never-use of pipes was not included in this definition because the survey question was unavailable. Beginning in 2013, data on a variety of tobacco products (cigarettes, smokeless, cigars, pipe tobacco, roll-your-own, flavored cigarettes, clove and flavored cigars, hookah, snus, dissolvables, and e-cigs) were collected, however due to changes in the questionnaire, the definition of "never use of any kind of tobacco" changed slightly.

Graph prepared by the West Virginia Health Statistics Center.

## Prevalence of Never-Tobacco Use Among West Virginia High School Students, by Gender



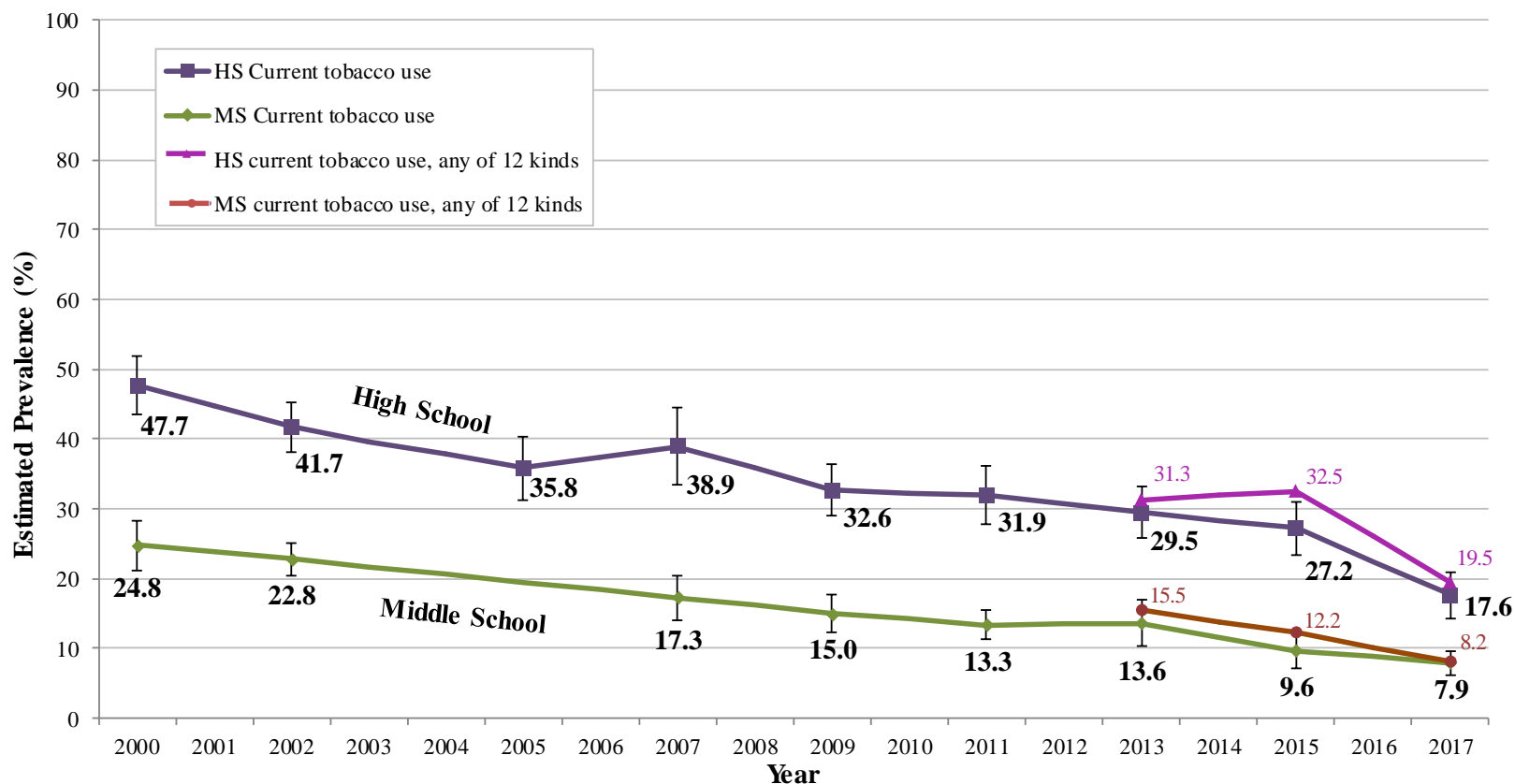
Data Source: West Virginia Division of Tobacco Prevention, Youth Tobacco Survey

Error bars represent the 95% Confidence Interval associated with the prevalence estimate.

Never-tobacco use is defined as never having tried cigarettes, smokeless tobacco, or cigars. Note that never-use of pipes is not included in this definition because the survey question was unavailable. Beginning in 2013, data on a variety of tobacco products (cigarettes, smokeless, cigars, pipe tobacco, roll-your-own, flavored cigarettes, clove and flavored cigars, hookah, snus, dissolvables, and e-cigs) were collected, however due to changes in the questionnaire, the definition of "never use of any kind of tobacco" changed slightly.

Graph prepared by the West Virginia Health Statistics Center.

## Prevalence of Current Tobacco Use Among West Virginia Youth



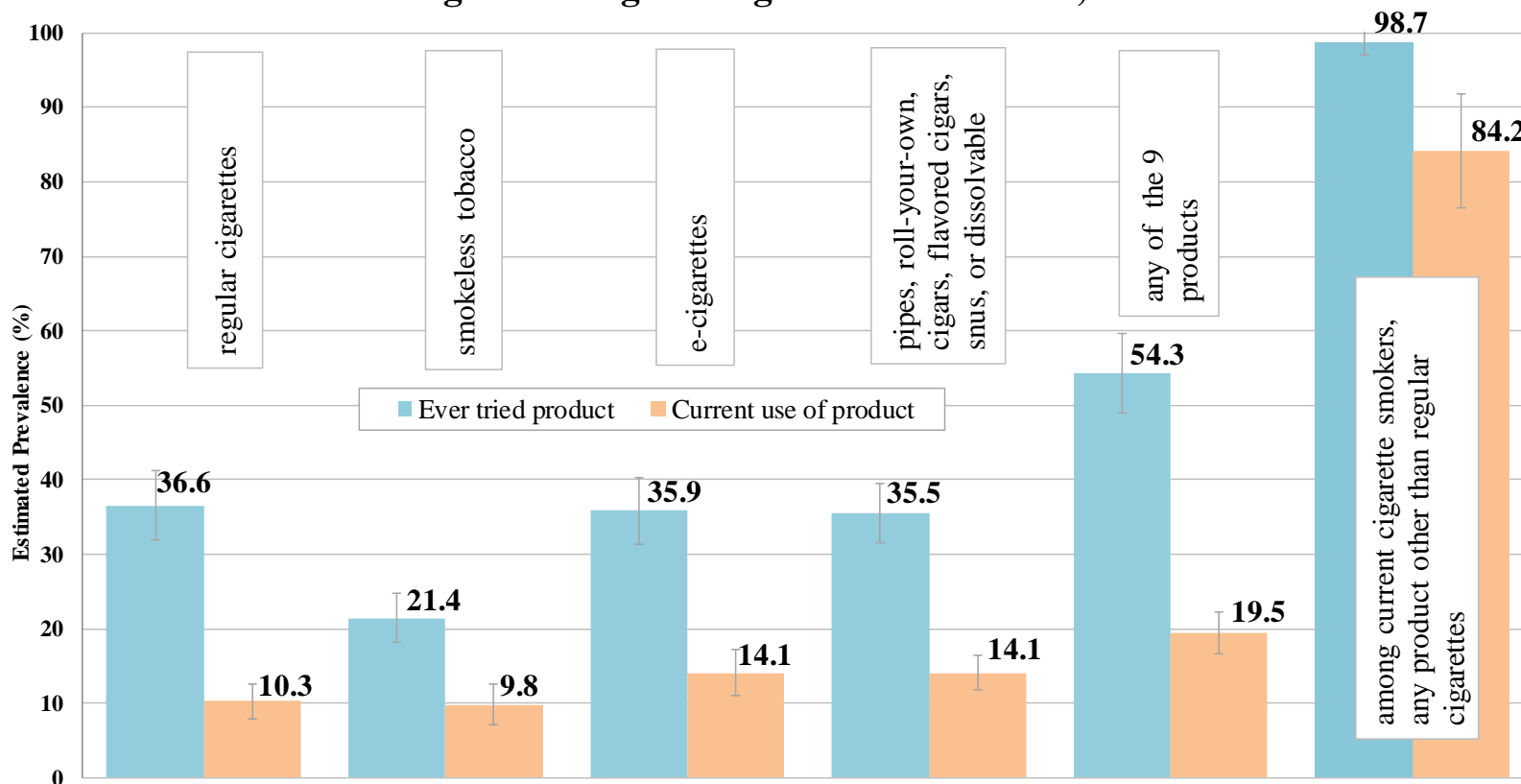
Data Source: West Virginia Division of Tobacco Prevention, Youth Tobacco Survey

Error bars represent the 95% Confidence Interval associated with the prevalence estimate.

Current tobacco use was defined as the use of cigarettes, smokeless tobacco, cigars, or pipes on one or more days in the past 30 days. Beginning in 2013, data on a variety of tobacco products (cigarettes, smokeless, cigars, pipe tobacco, roll-your-own, flavored cigarettes, clove and flavored cigars, hookah, snus, dissolvables, and e-cigs) were collected, however due to changes in the questionnaire, the definition of "current use of any kind of tobacco" changed slightly.

Graph prepared by the West Virginia Health Statistics Center.

### Prevalence of Ever Trying and Current Use of Various Tobacco Products Among West Virginia High School Students, 2017



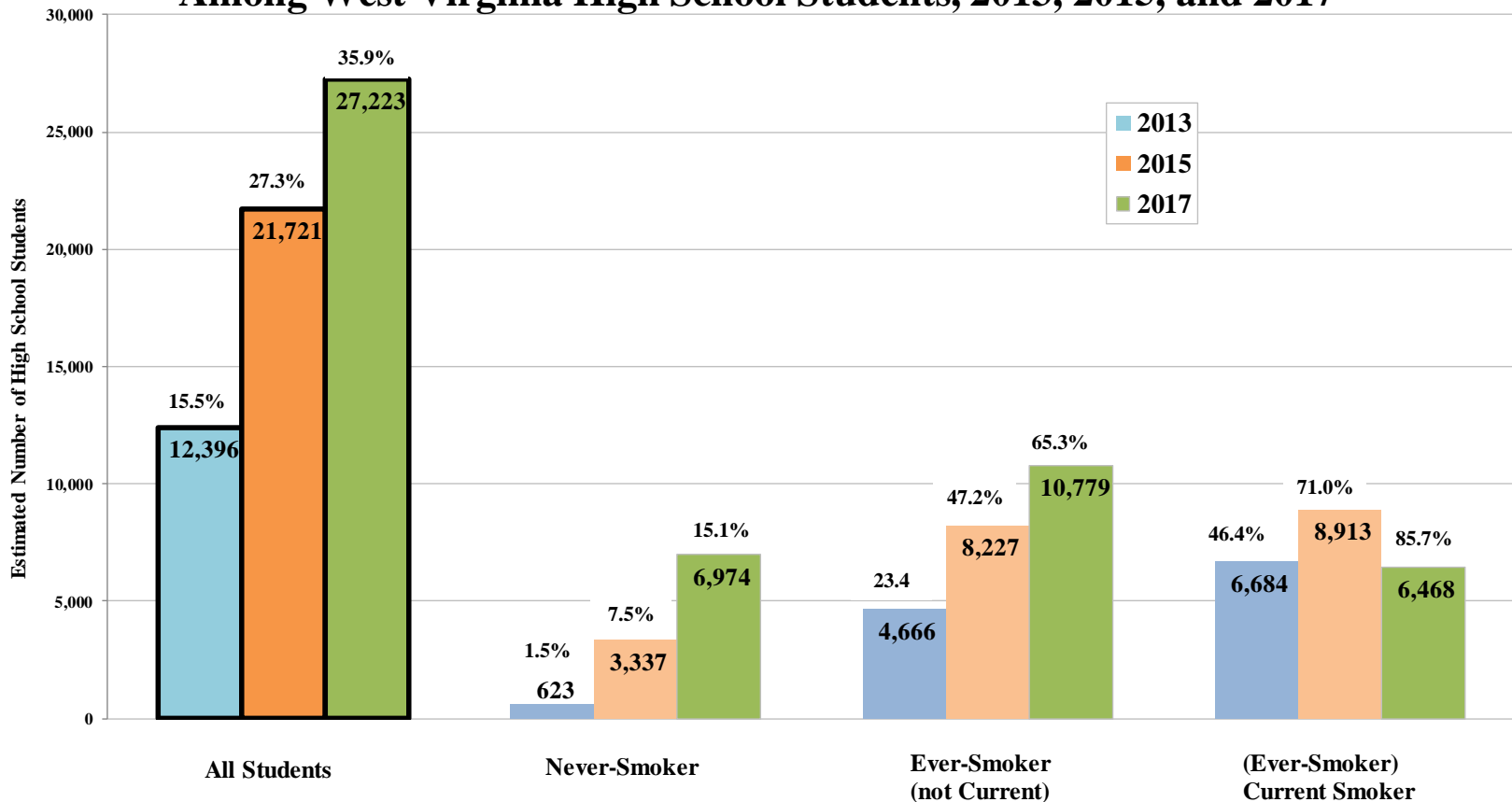
Data Source: West Virginia Division of Tobacco Prevention, Youth Tobacco Survey

Error bars represent the 95% Confidence Interval associated with the prevalence estimate.

Ever trying is defined as ever trying a product, even one time. Current use is defined as use on one or more days in the past 30 days. The 2017 survey questions included many products: regular cigarettes, smokeless, pipes (not waterpipes), roll-your-own cigarettes, cigars, flavored cigars, snus, dissolvable tobacco products, and e-cigs. Students may be represented in multiple categories. Note: Bidis are prohibited for sale or distribution in West Virginia, therefore data on this product are not analyzed.

Graph prepared by the West Virginia Health Statistics Center.

## Weighted Frequencies and Prevalence of Ever Trying E-Cigs Among West Virginia High School Students, 2013, 2015, and 2017



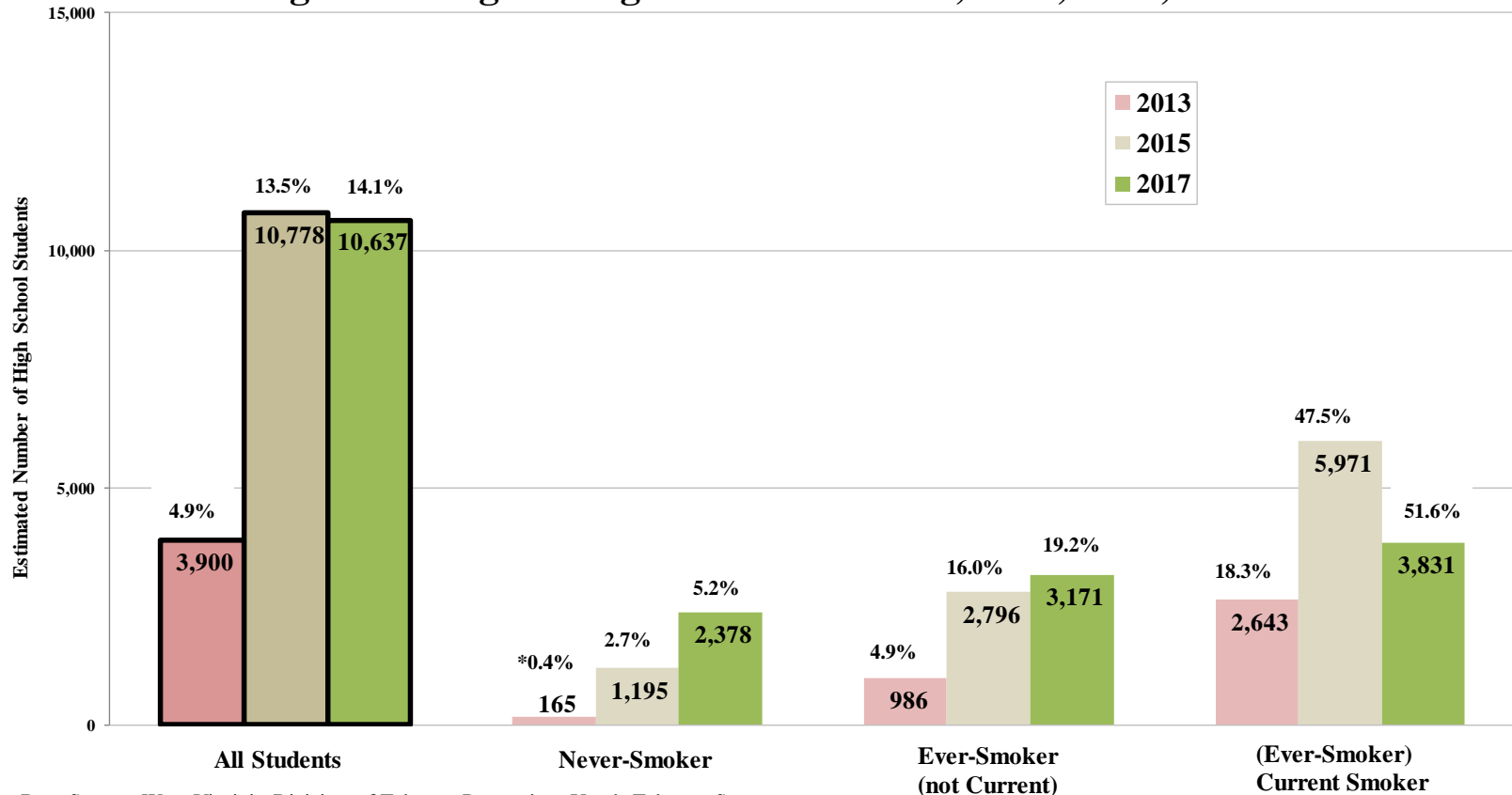
Data Source: West Virginia Division of Tobacco Prevention, Youth Tobacco Survey

Students were classified as either never-smokers (not ever tried cigarettes, not even one or two puffs) or ever-smokers (tried cigarettes, even one or two puffs). Among ever-smokers, students were either not current smokers (not smoking any days in the past 30 days) or current smokers (smoking any days in the past 30 days). E-cig questions were first asked in 2013, and ever trying e-cigs is defined as using e-cigs even just one time. Weighted frequencies and prevalence are indicated by each bar. Due to missing or inconsistent student responses, the sum of weighted frequencies of subgroups may not equal the weighted frequency of All Students.

Graph prepared by the West Virginia Health Statistics Center.



## Weighted Frequencies and Prevalence of Current Use of E-Cigs Among West Virginia High School Students, 2013, 2015, and 2017



Data Source: West Virginia Division of Tobacco Prevention, Youth Tobacco Survey

\*Data may be unreliable due to  $n < 50$ ,  $CI \text{ width} > 20$ , or  $RSE > 30$ , and should be interpreted with caution.

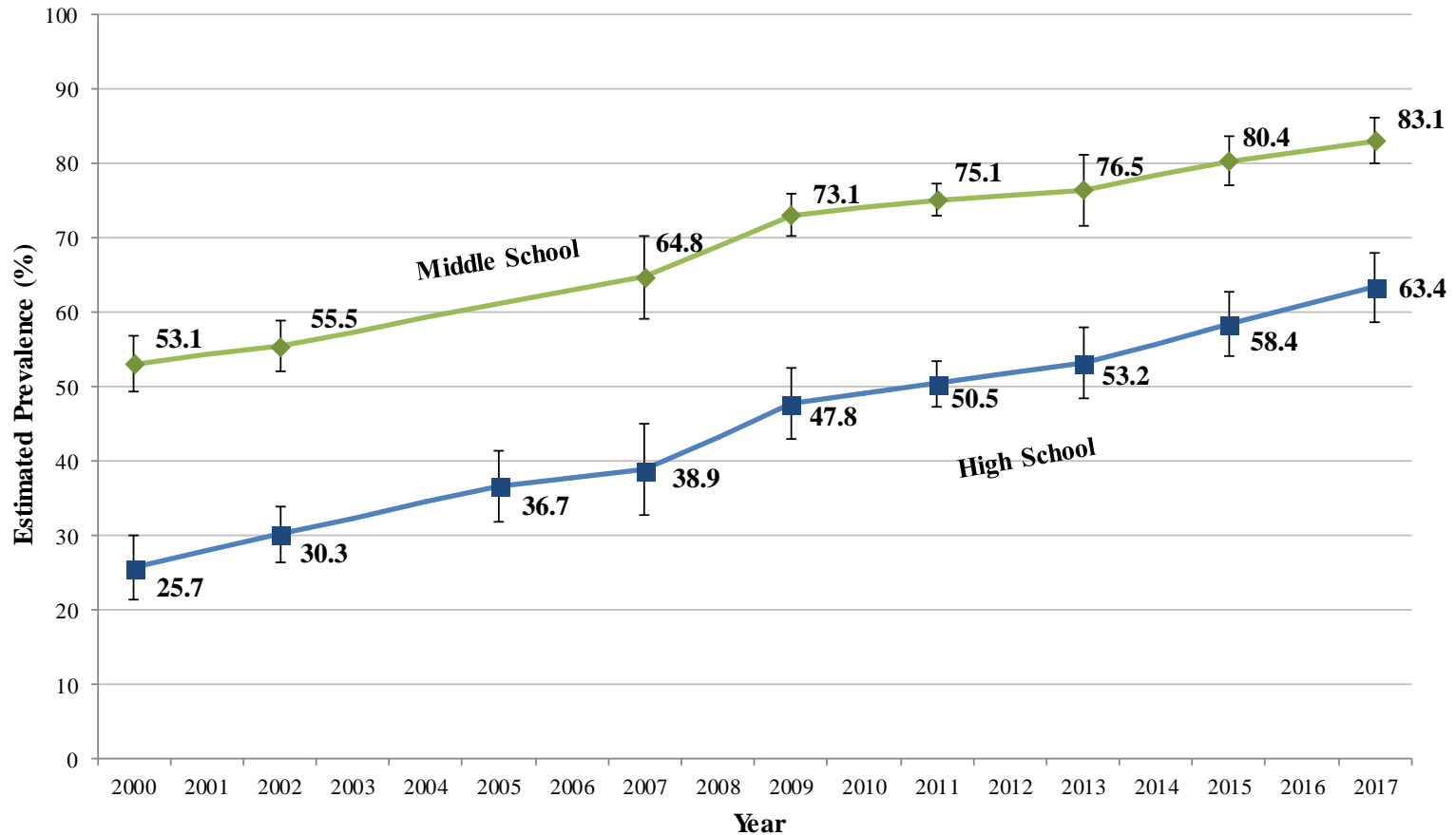
Students were classified as either never-smokers (not ever tried cigarettes, not even one or two puffs) or ever-smokers (tried cigarettes, even one or two puffs).

Among ever-smokers, students were either not current smokers (not smoking any days in the past 30 days) or current smokers (smoking any days in the past 30 days).

E-cig questions were first asked in 2013, and current use of e-cigs is defined as using e-cigs on any days in the past 30 days. Weighted frequencies and prevalence are indicated by each bar. Due to missing or inconsistent student responses, the sum of weighted frequencies of subgroups may not equal the weighted frequency of All Students.

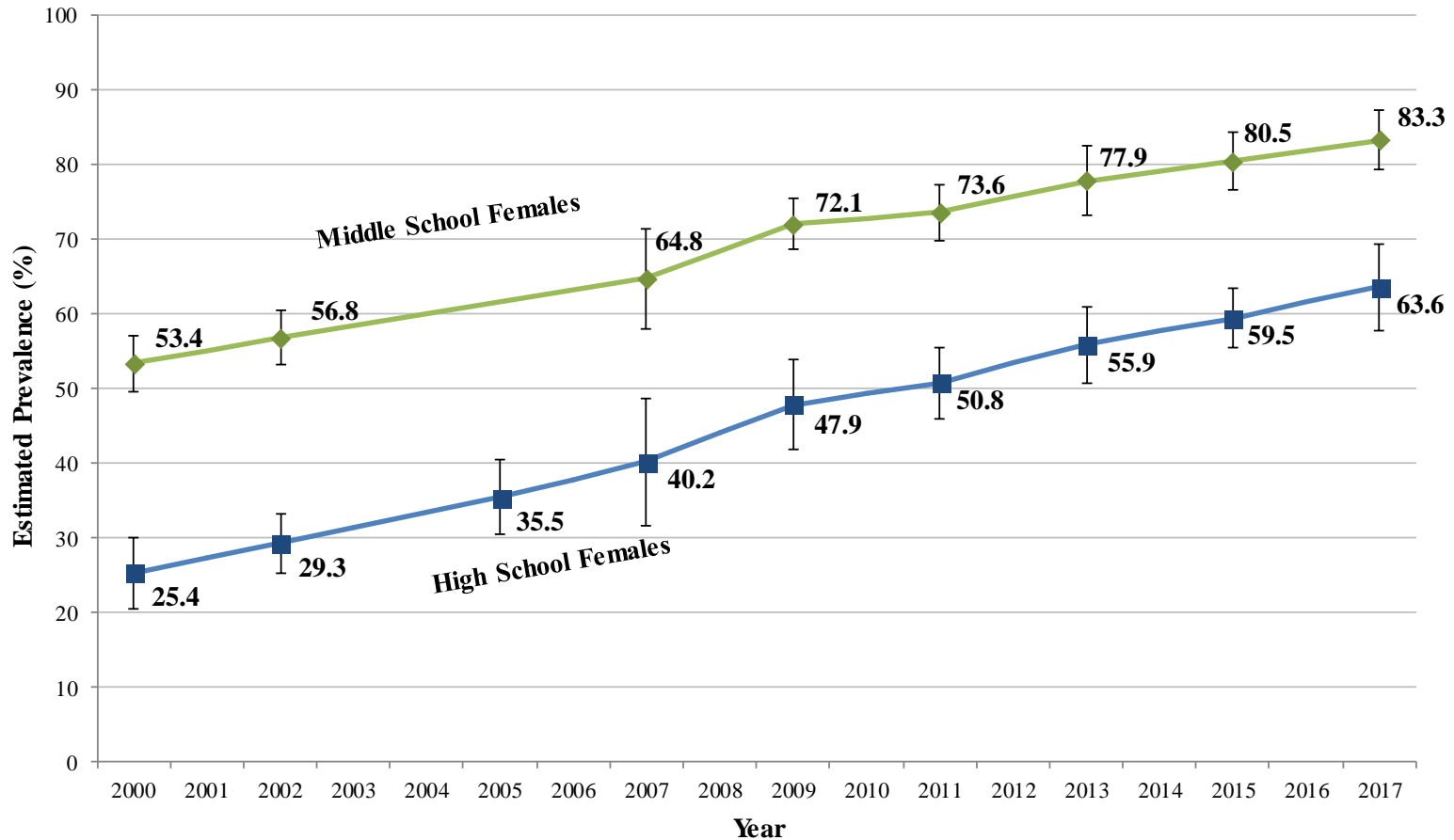
Graph prepared by the West Virginia Health Statistics Center.

## Prevalence of Never-Cigarette Smoking Among West Virginia Youth



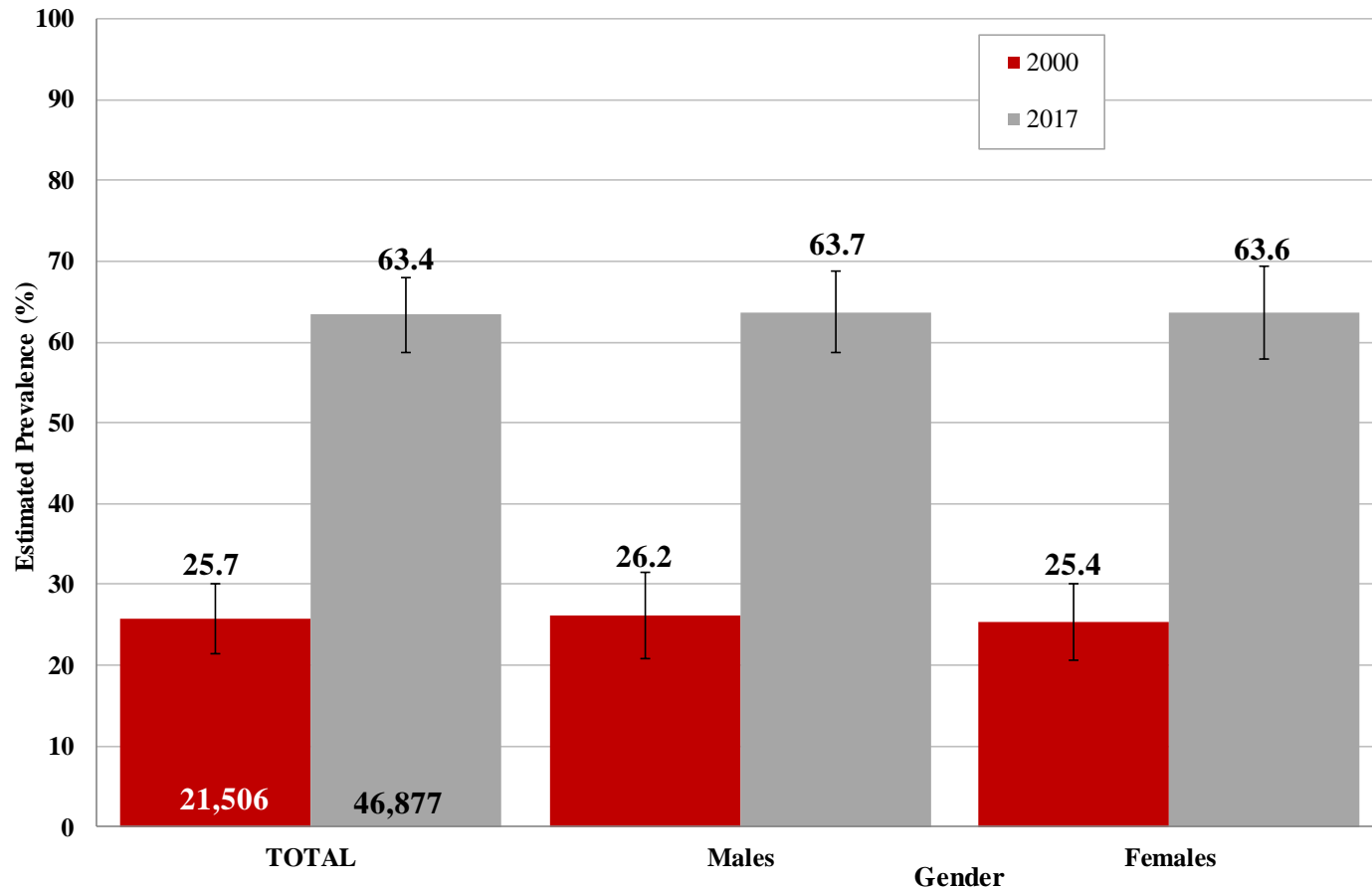
Data Source: West Virginia Division of Tobacco Prevention, Youth Tobacco Survey  
 Error bars represent the 95% Confidence Interval associated with the prevalence estimate.  
 Never-smoking is defined as never having smoked cigarettes, not even one or two puffs.  
 Graph prepared by the West Virginia Health Statistics Center.

### Prevalence of Never-Cigarette Smoking Among West Virginia Youth Females



Data Source: West Virginia Division of Tobacco Prevention, Youth Tobacco Survey  
 Error bars represent the 95% Confidence Interval associated with the prevalence estimate.  
 Never-smoking is defined as never having smoked cigarettes, not even one or two puffs.  
 Graph prepared by the West Virginia Health Statistics Center.

### Prevalence of Never-Cigarette Smoking Among West Virginia High School Students, by Gender, 2000 Compared to 2017



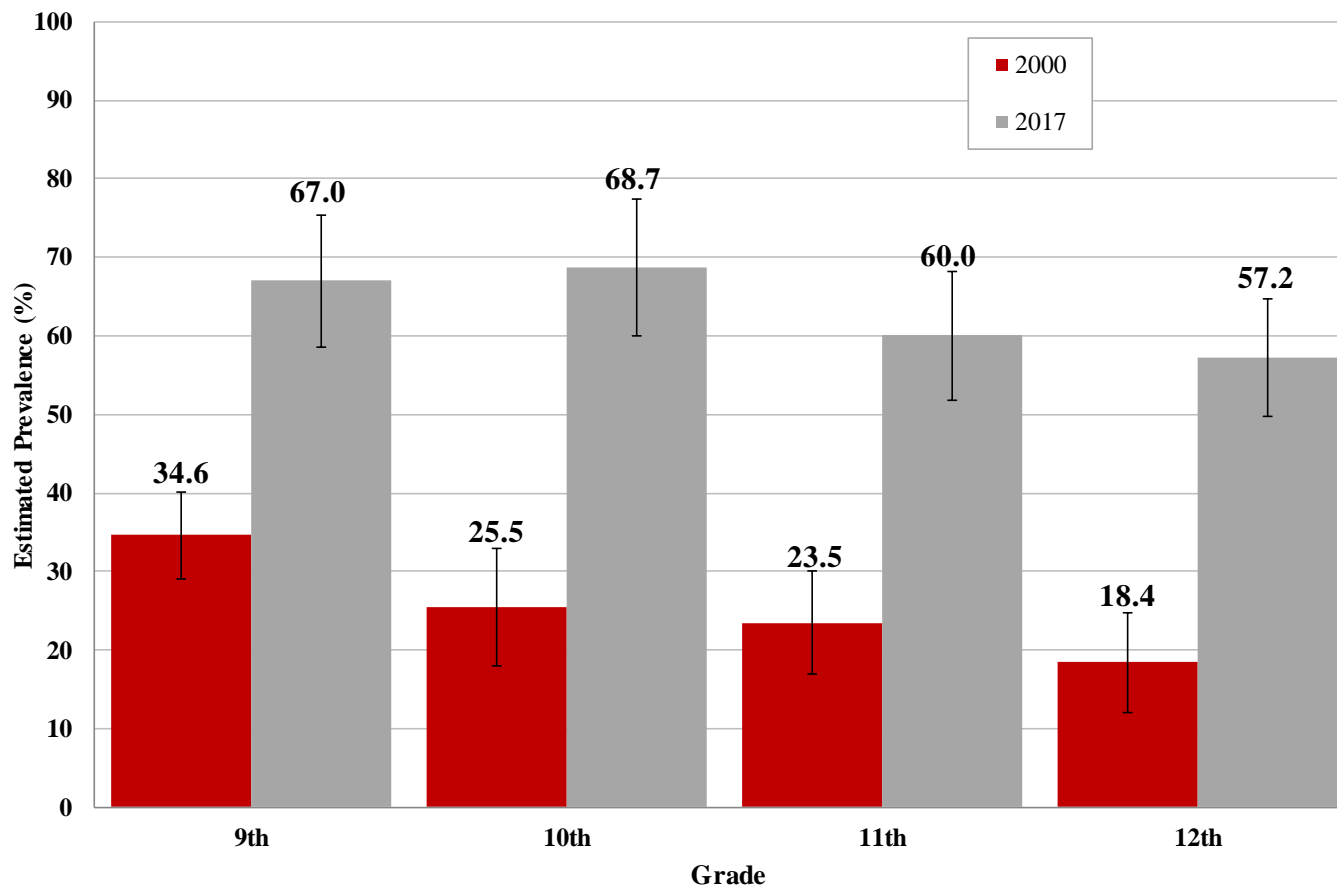
Data Source: West Virginia Division of Tobacco Prevention, Youth Tobacco Survey

Error bars represent the 95% Confidence Interval associated with the prevalence estimate.

Never-smoking is defined as never having smoked cigarettes, not even one or two puffs. Weighted frequencies are at the base of bars for Total.

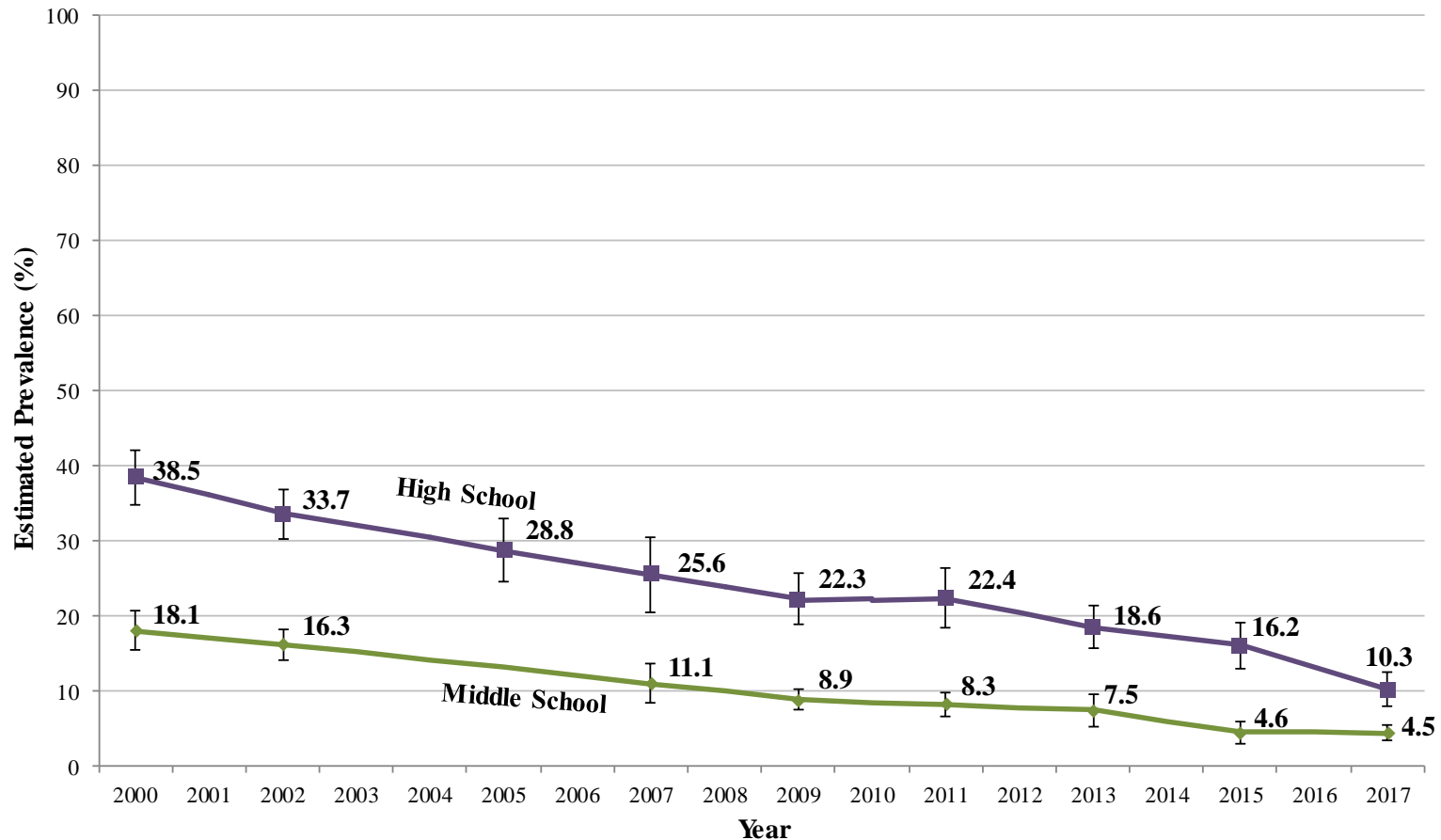
Graph prepared by the West Virginia Health Statistics Center.

### Prevalence of Never-Cigarette Smoking Among West Virginia High School Students, by Grade, 2000 Compared to 2017



Data Source: West Virginia Division of Tobacco Prevention, Youth Tobacco Survey  
 Error bars represent the 95% Confidence Interval associated with the prevalence estimate.  
 Never-smoking is defined as never having smoked cigarettes, not even one or two puffs.  
 Graph prepared by the West Virginia Health Statistics Center.

## Prevalence of Current Cigarette Smoking Among West Virginia Youth



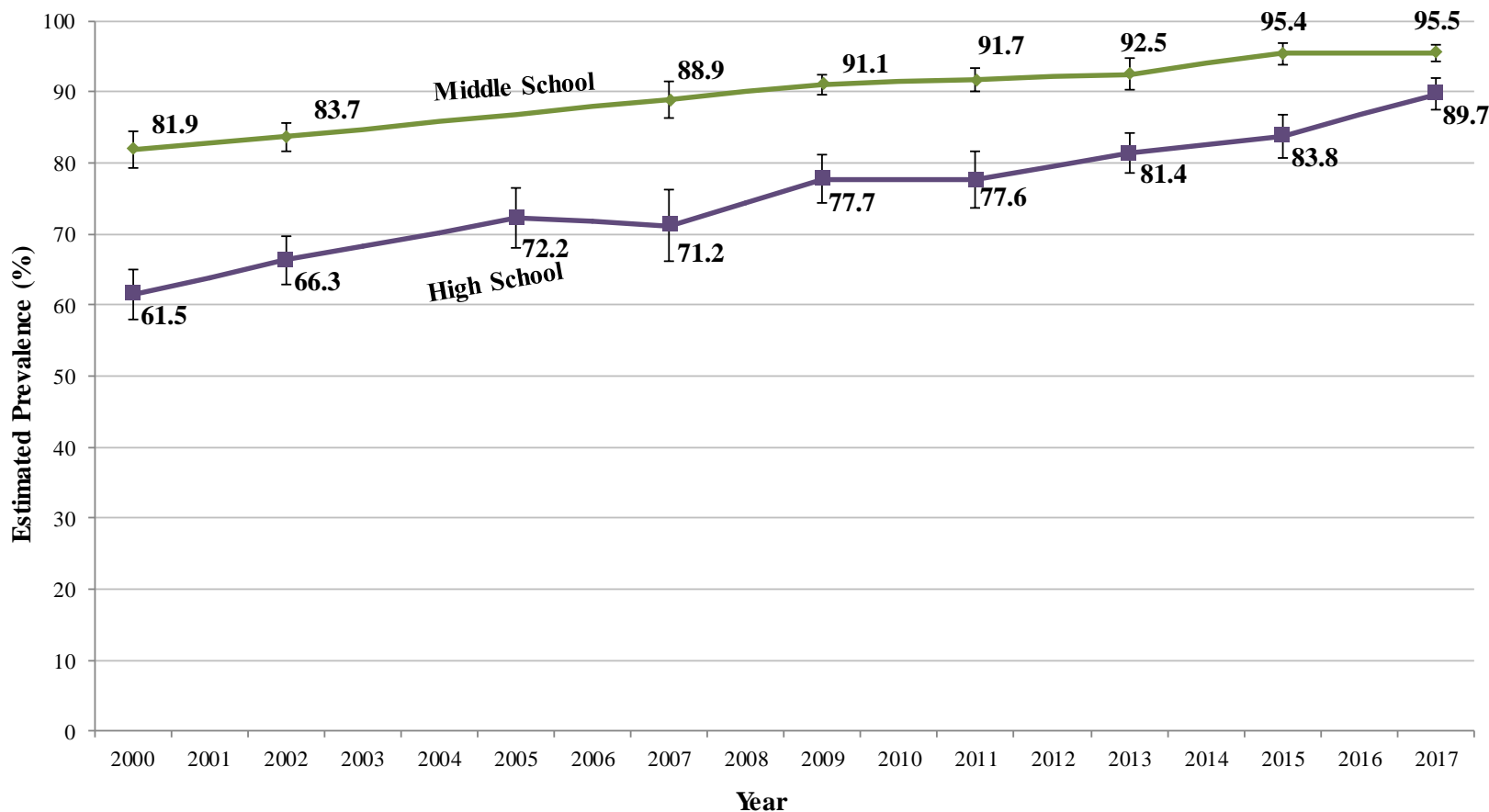
Data Source: West Virginia Division of Tobacco Prevention, Youth Tobacco Survey

Error bars represent the 95% Confidence Interval associated with the prevalence estimate.

Current cigarette smoking is defined as having smoked cigarettes on one or more days in the past 30 days.

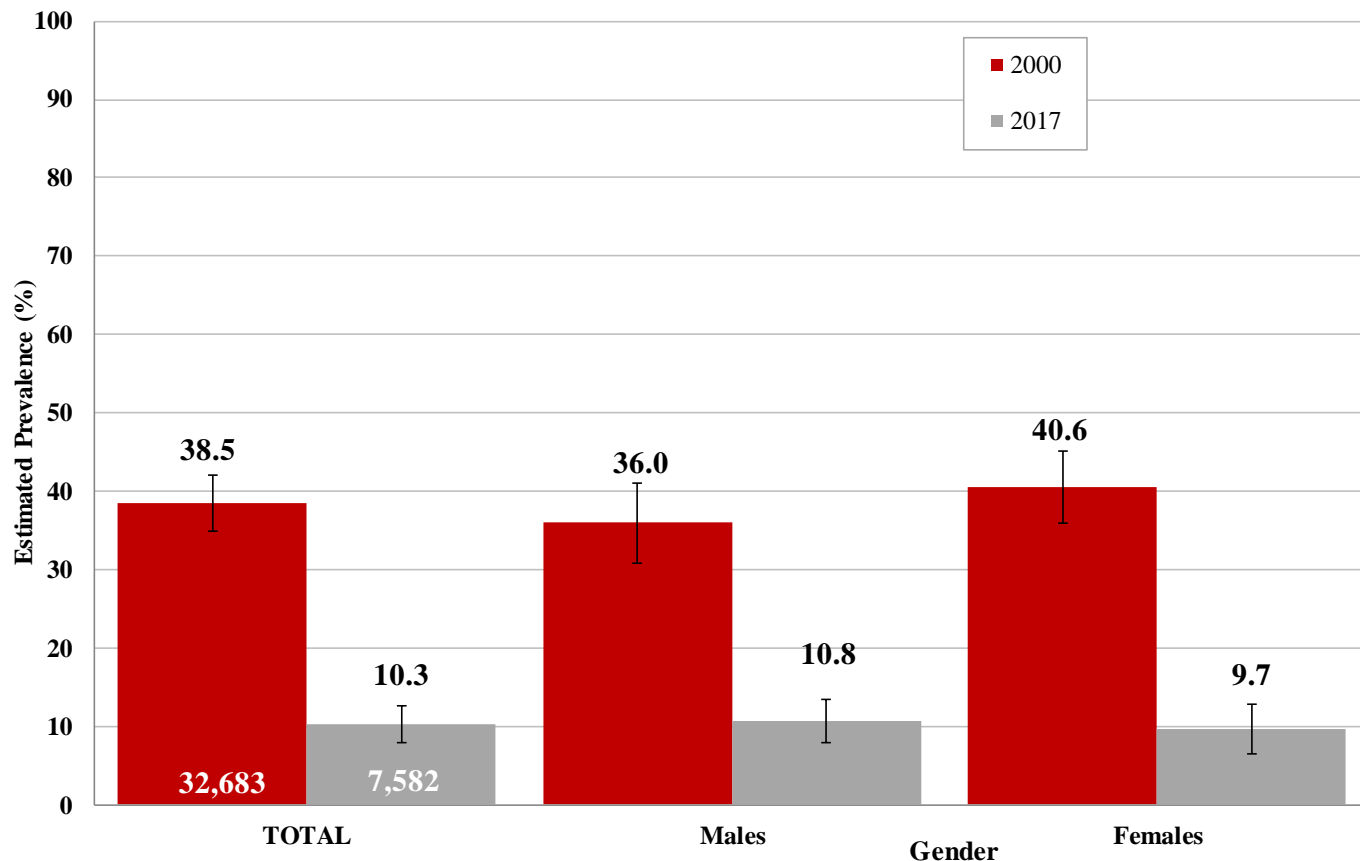
Graph prepared by the West Virginia Health Statistics Center.

### Prevalence of Not Currently Smoking Cigarettes Among West Virginia Youth



Data Source: West Virginia Division of Tobacco Prevention, Youth Tobacco Survey  
 Error bars represent the 95% Confidence Interval associated with the prevalence estimate.  
 Not currently smoking cigarettes is defined as not smoking a single cigarette in the past 30 days.  
 Graph prepared by the West Virginia Health Statistics Center.

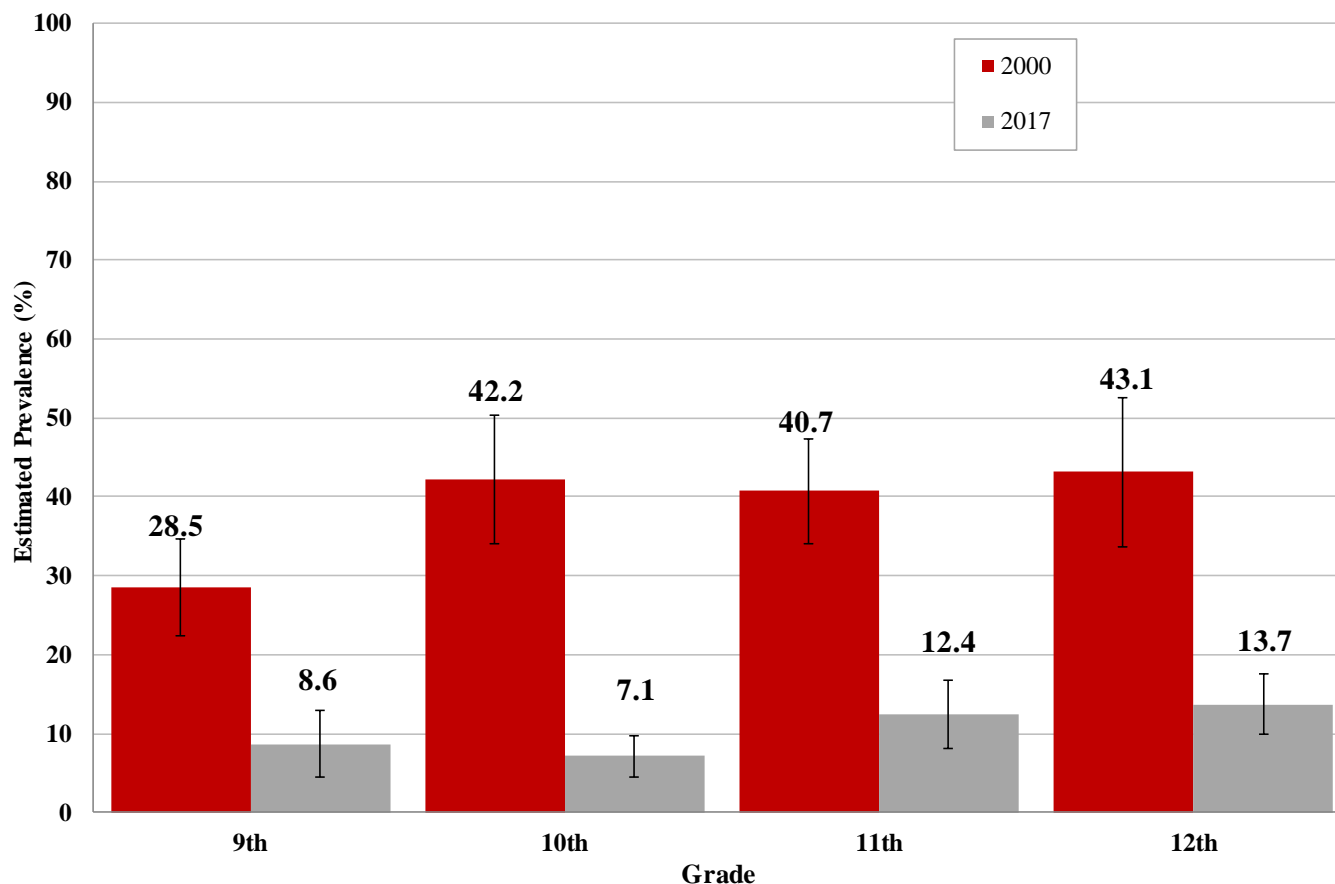
### Prevalence of Current Cigarette Smoking Among West Virginia High School Students, by Gender, 2000 Compared to 2017



Data Source: West Virginia Division of Tobacco Prevention, Youth Tobacco Survey  
 Error bars represent the 95% Confidence Interval associated with the prevalence estimate.  
 Current cigarette smoking is defined as having smoked cigarettes on one or more days in the past 30 days. Weighted frequencies are at the base of bars for Total.  
 Graph prepared by the West Virginia Health Statistics Center.

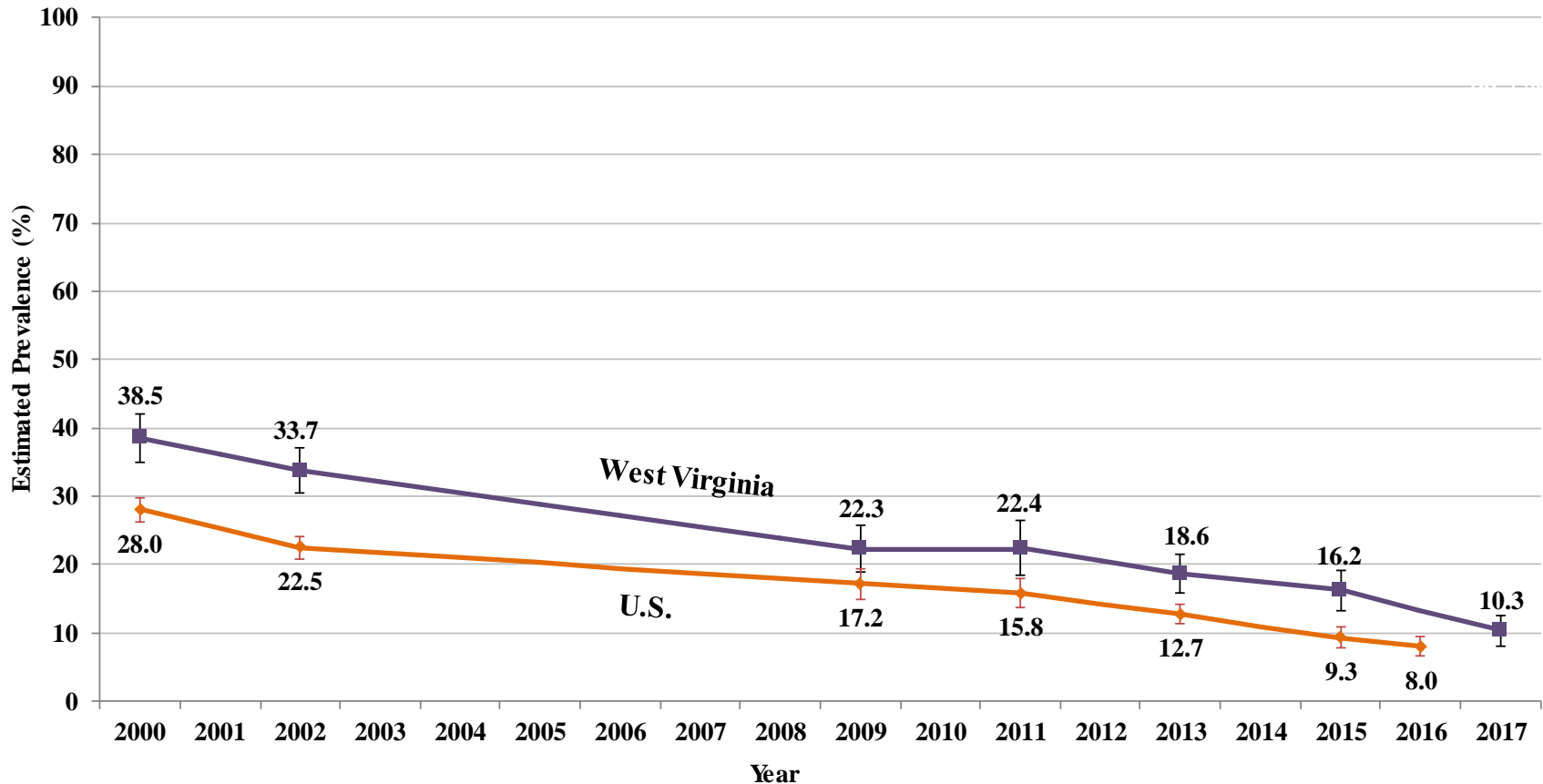


### Prevalence of Current Cigarette Smoking Among West Virginia High School Students, by Grade, 2000 Compared to 2017



Data Source: West Virginia Division of Tobacco Prevention, Youth Tobacco Survey  
 Error bars represent the 95% Confidence Interval associated with the prevalence estimate.  
 Current cigarette smoking is defined as having smoked cigarettes on one or more days in the past 30 days.  
 Graph prepared by the West Virginia Health Statistics Center.

## Prevalence of Current Cigarette Smoking Among High School Students, West Virginia Compared to U.S.



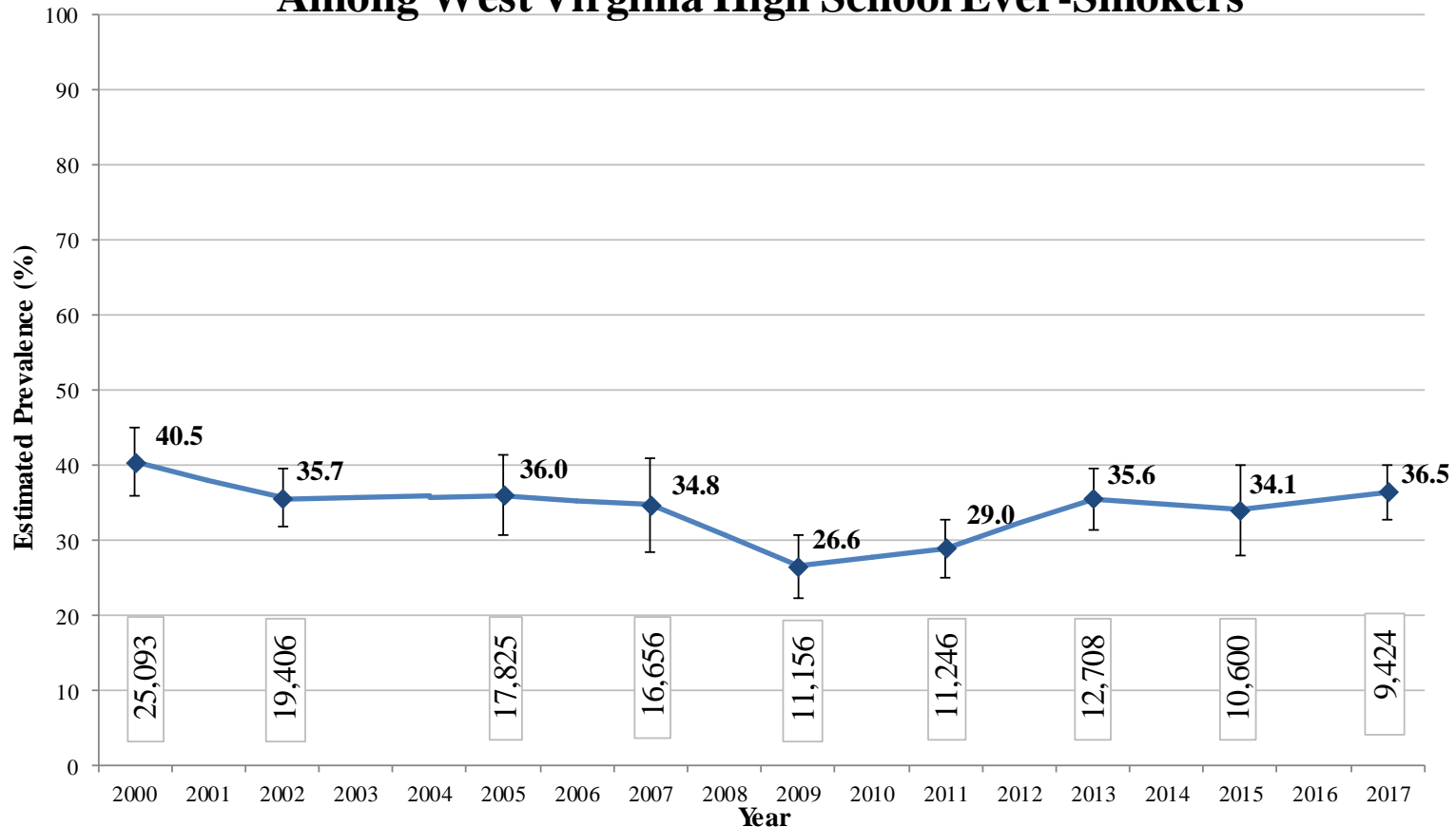
Data Sources: West Virginia Division of Tobacco Prevention, Youth Tobacco Survey; National Youth Tobacco Survey, data obtained from journal articles in *Morbidity and Mortality Weekly Report* (CDC).

Error bars represent the 95% Confidence Interval associated with the prevalence estimate.

Current cigarette smoking is defined as having smoked cigarettes on one or more days in the past 30 days.

Graph prepared by the West Virginia Health Statistics Center.

## Prevalence of Cigarette Smoking Age-of-Onset by Age 12 Among West Virginia High School Ever-Smokers



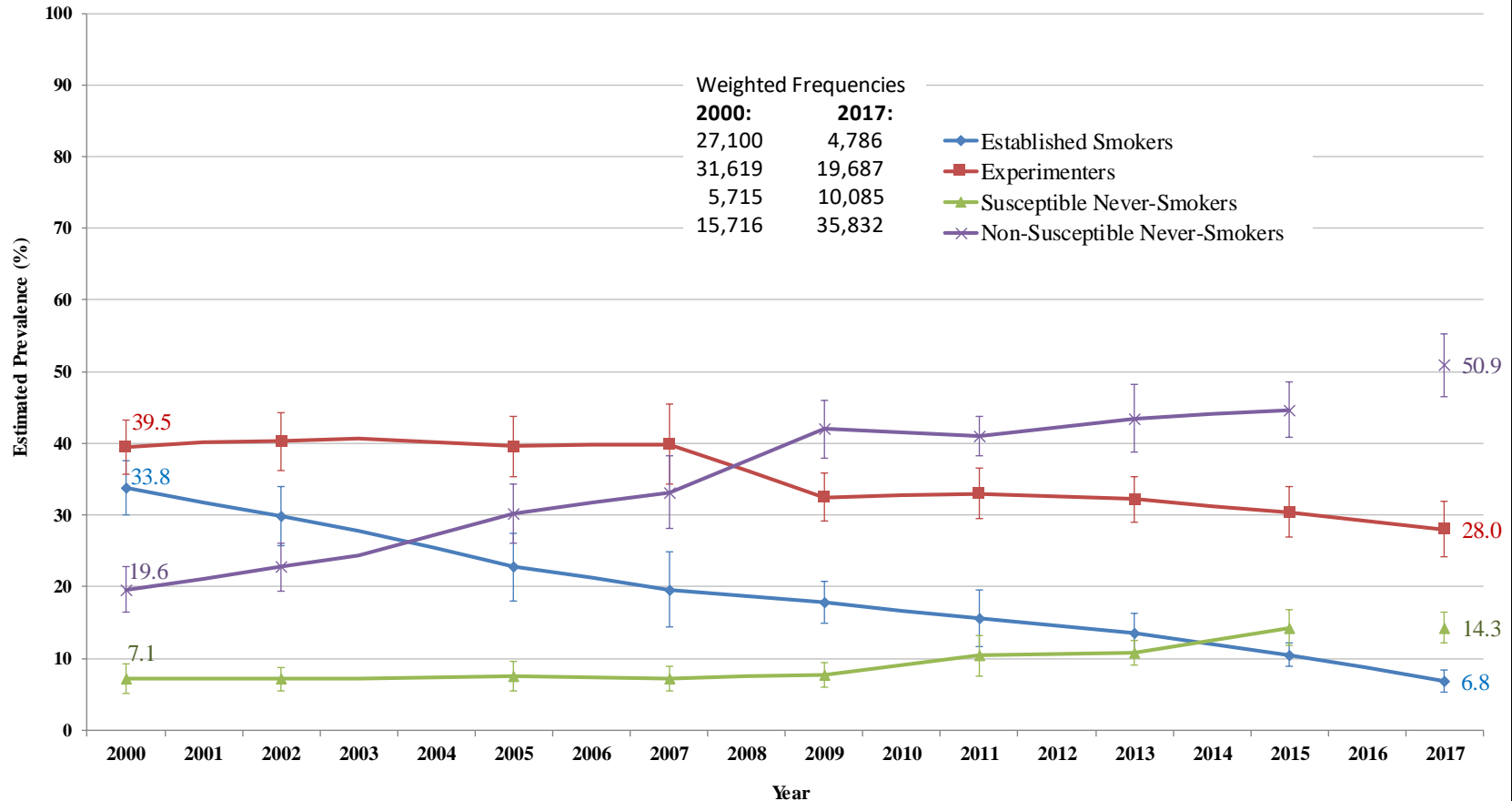
Data Source: West Virginia Division of Tobacco Prevention, Youth Tobacco Survey

Error bars represent the 95% Confidence Interval associated with the prevalence estimate.

Ever-smoking is defined as ever having smoked cigarettes, even one or two puffs. The age-of-onset question is defined as having smoked a cigarette, even one or two puffs, by age 12. Weighted frequencies are indicated in text boxes.

Graph prepared by the West Virginia Health Statistics Center.

### Prevalence of Susceptibility Index Indicators Among West Virginia High School Students

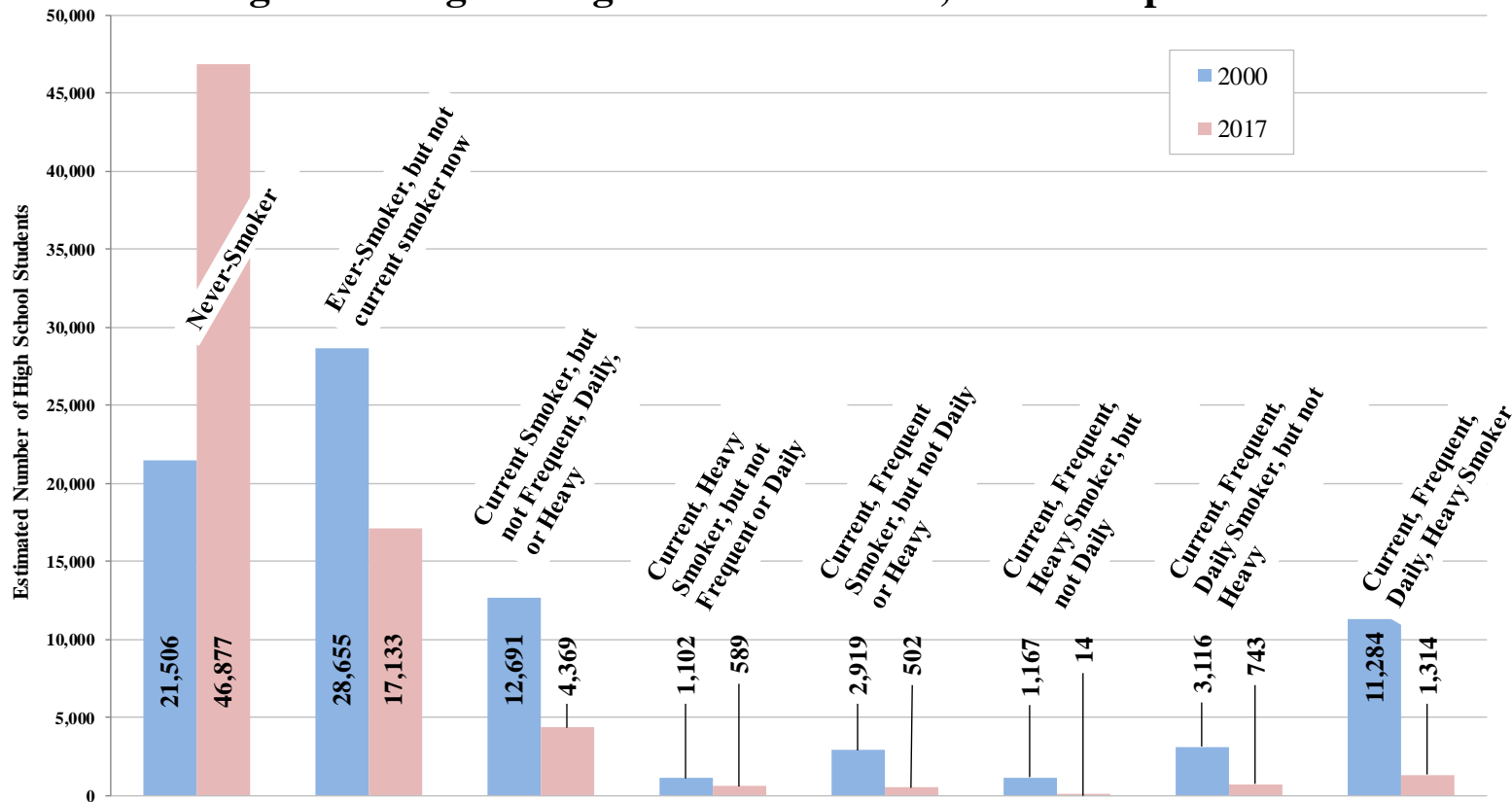


Data Source: West Virginia Division of Tobacco Prevention, Youth Tobacco Survey

The Susceptibility Index is a concept developed by CDC using responses from five YTS questions relating to cigarettes, and places all students into one of four categories: non-susceptible never-smokers, susceptible never-smokers, experimenters, and established smokers. Changes in response options for 2017 survey resulted in slightly different analysis for non-susceptible never-smokers, and susceptible never-smokers.

The weighted frequencies are provided in the Legend. From 2000 to 2017, high school student enrollment declined by about 10%. Due to missing or inconsistent student responses, the total of weighted frequencies may not equal student enrollment.

## Weighted Frequencies of Cigarette Smoking Indicators Among West Virginia High School Students, 2000 Compared to 2017

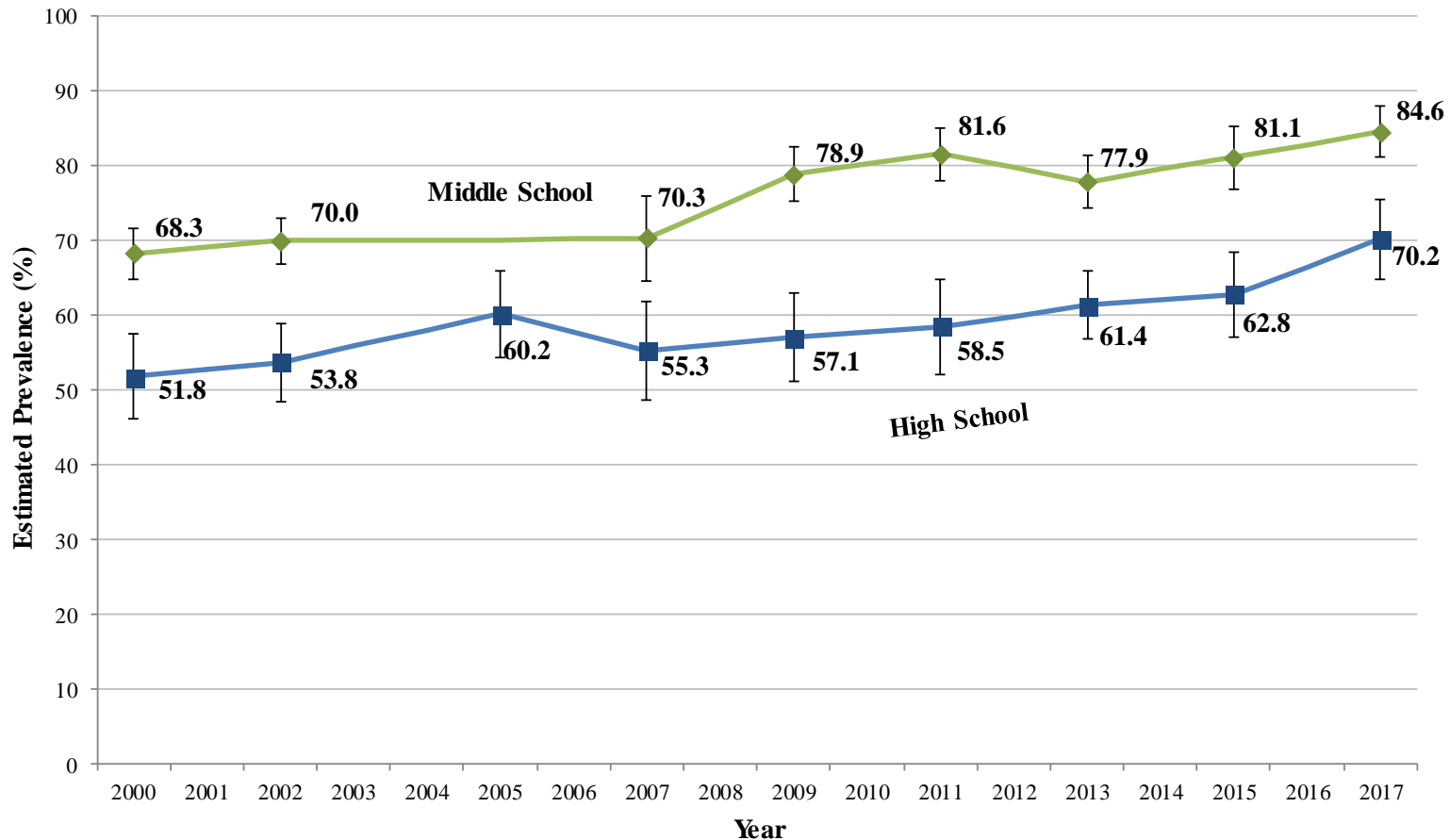


Data Source: West Virginia Division of Tobacco Prevention, Youth Tobacco Survey

Students were classified as either never-smokers (not ever tried cigarettes, not even one or two puffs) or ever-smokers (tried cigarettes, even one or two puffs). Among ever-smokers, students were either not current smokers (not smoking any days in the past 30 days) or current smokers (smoking any days in the past 30 days). Frequent smokers were those who smoked 20 days or more in the past 30 days. Daily smokers were those who smoked on all days in the past 30 days. Heavy smokers were those who smoked 6 or more cigarettes on any day in the past 30 days. Weighted frequencies are indicated by each bar. From 2000 to 2017, high school student enrollment declined by about 10%. Due to missing or inconsistent student responses, the total of weighted frequencies may not equal student enrollment.

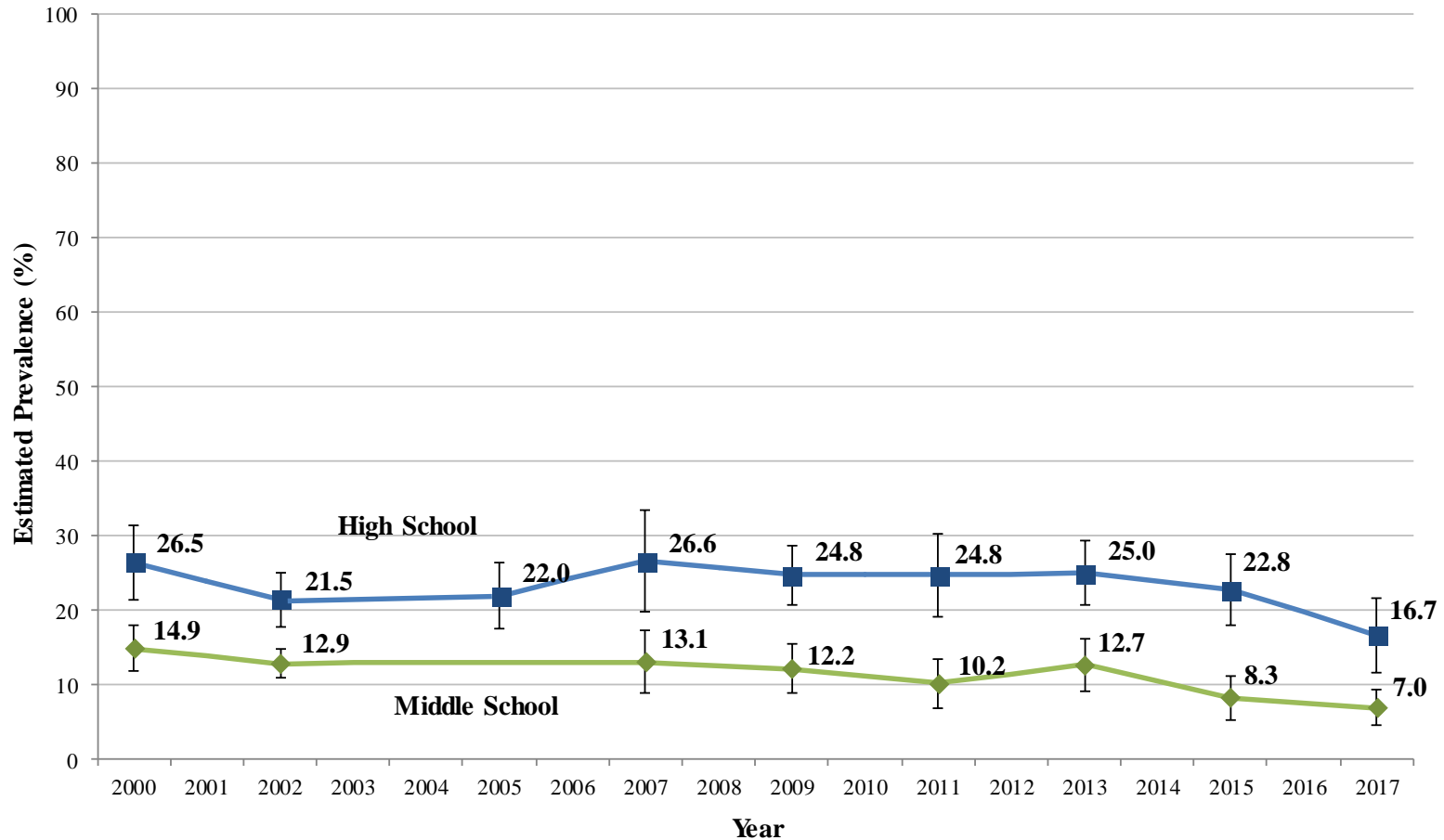
Graph prepared by the West Virginia Health Statistics Center.

### Prevalence of Never-Smokeless Tobacco Use Among West Virginia Youth Males



Data Source: West Virginia Division of Tobacco Prevention, Youth Tobacco Survey  
 Error bars represent the 95% Confidence Interval associated with the prevalence estimate.  
 Never-smokeless tobacco use is defined as never having tried smokeless tobacco.  
 Graph prepared by the West Virginia Health Statistics Center.

### Prevalence of Current Smokeless Tobacco Use Among West Virginia Youth Males



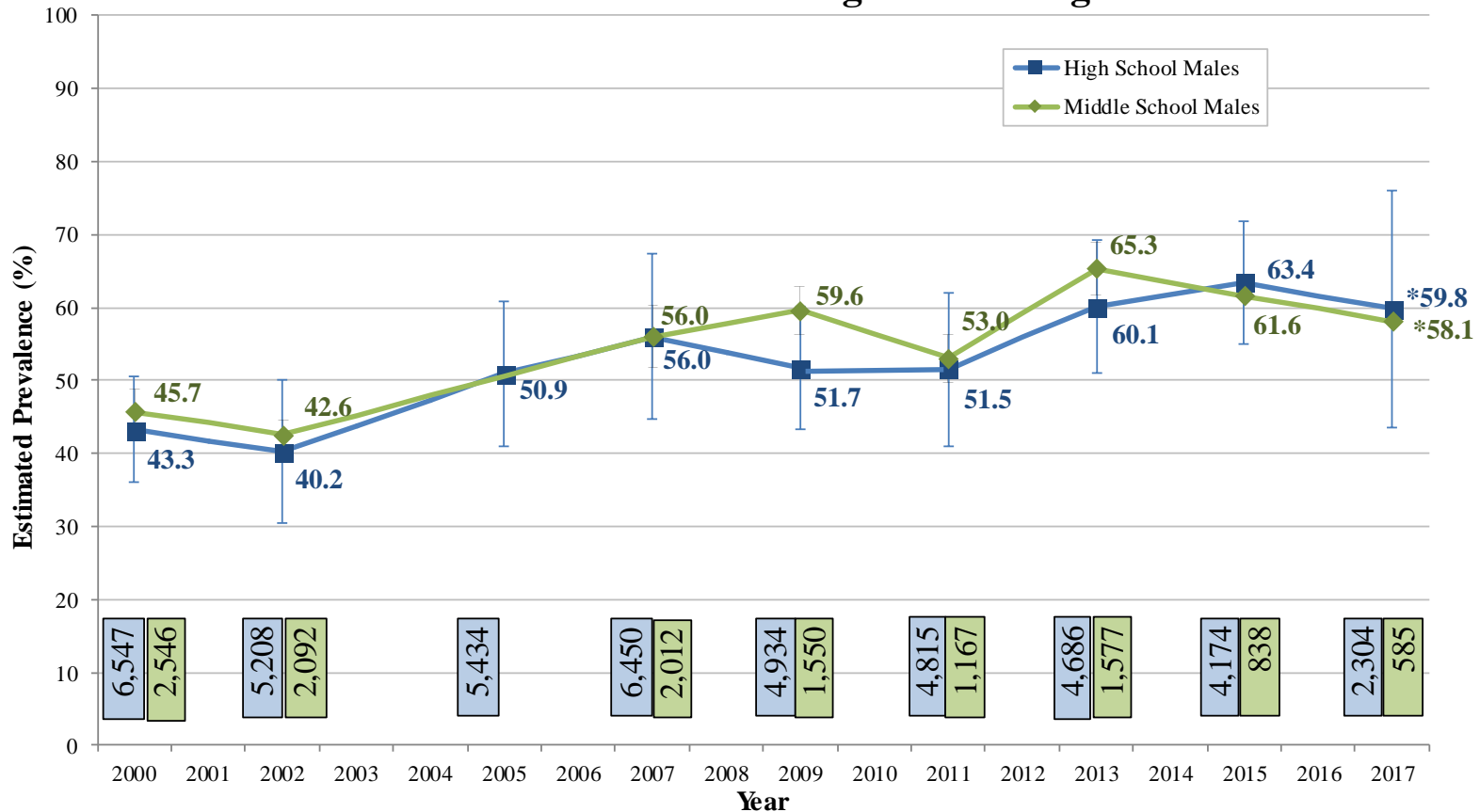
Data Source: West Virginia Division of Tobacco Prevention, Youth Tobacco Survey

Error bars represent the 95% Confidence Interval associated with the prevalence estimate.

Current smokeless tobacco use is defined as use of smokeless tobacco on one or more days in the past 30 days.

Graph prepared by the West Virginia Health Statistics Center.

## Prevalence of Dual Use Among West Virginia Youth Males: Current Smokeless Tobacco Use Among Current Cigarette Smokers



Data Source: West Virginia Division of Tobacco Prevention, Youth Tobacco Survey

Error bars represent the 95% Confidence Interval associated with the prevalence estimate for high school males.

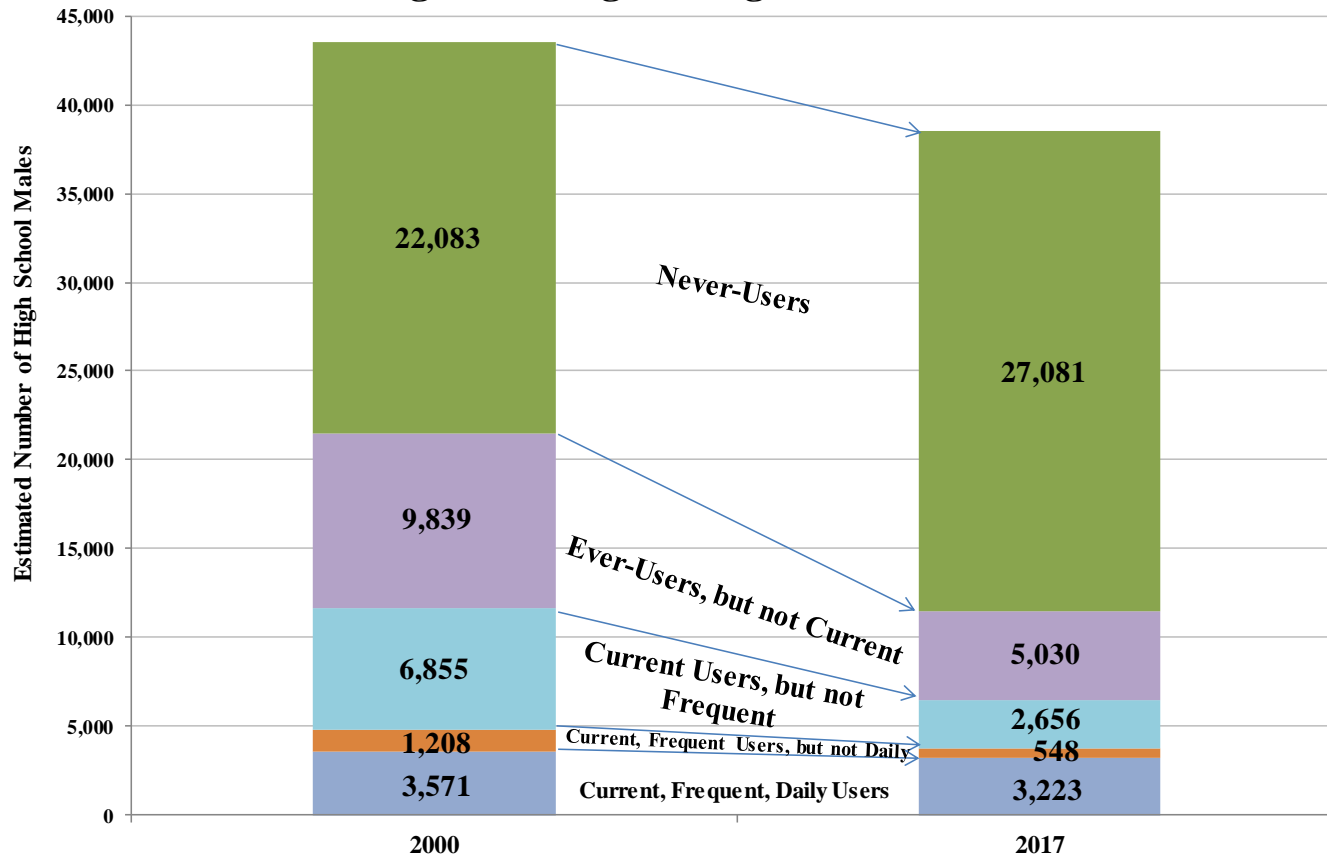
\*Data may be unreliable due to  $n < 50$ ,  $CI \text{ width} > 20$ , or  $RSE > 30$ , and should be interpreted with caution.

Dual use is defined as the use of smokeless tobacco on one or more days in the past 30 days, among current smokers (defined as smoking cigarettes on one or more days in the past 30 days). Weighted frequencies are indicated in text boxes.

Graph prepared by the West Virginia Health Statistics Center.



### Weighted Frequencies of Smokeless Tobacco Use Indicators Among West Virginia High School Males



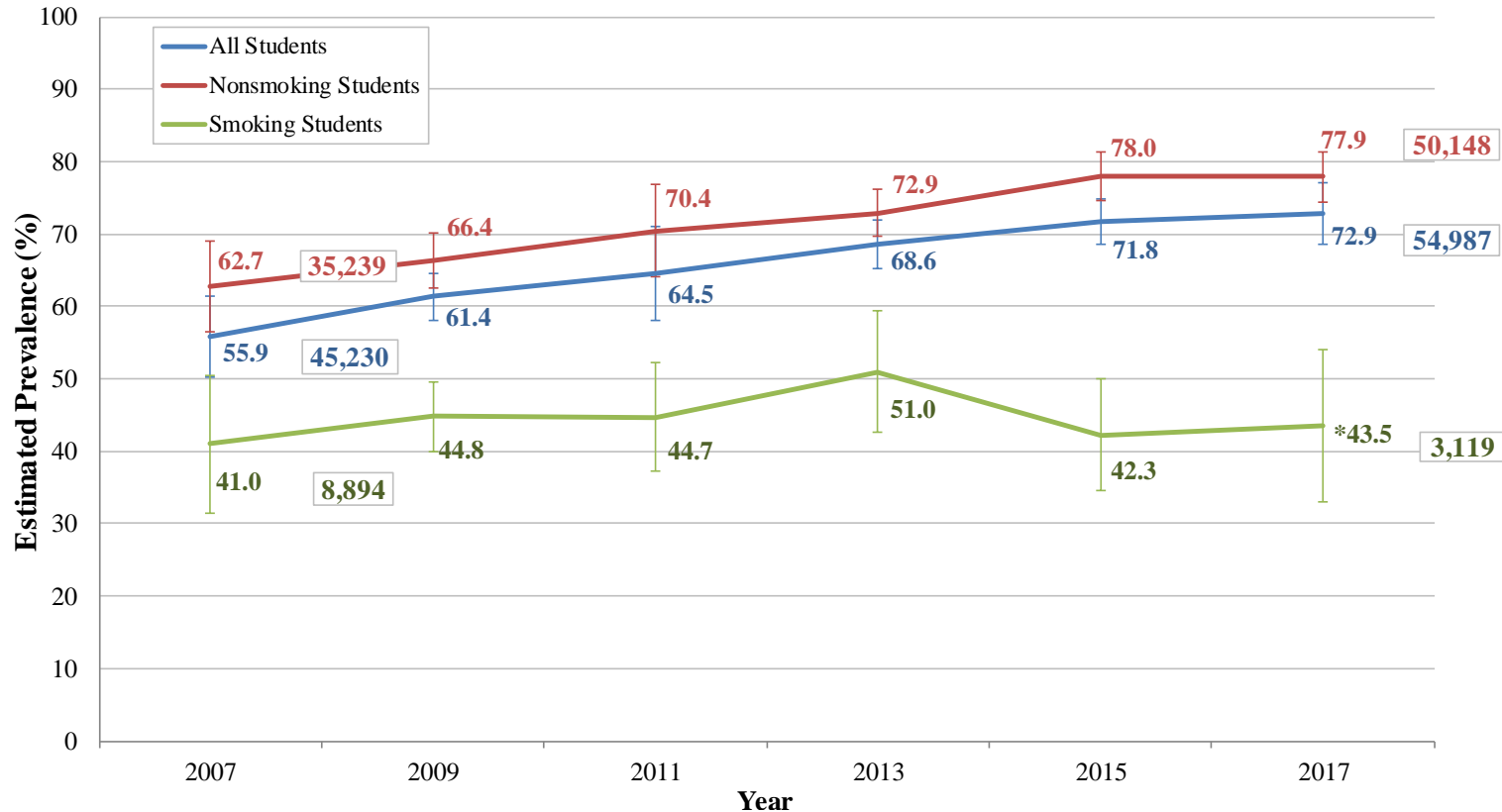
Data Source: West Virginia Division of Tobacco Prevention, Youth Tobacco Survey

Students were either never-users (not ever tried smokeless tobacco, not even a small amount) or ever-users (tried in any amount).

Among ever-users, students were either not current users (not using anytime in the past 30 days) or current users (using anytime in the past 30 days). Frequent users were those who used 20 days or more in the past 30 days. Daily users were those who used on all days in the past 30 days.

Graph prepared by the West Virginia Health Statistics Center.

## Prevalence of Living in a Smoke-Free Home Among West Virginia High School Students, by Smoking Status



Data Source: West Virginia Division of Tobacco Prevention, Youth Tobacco Survey

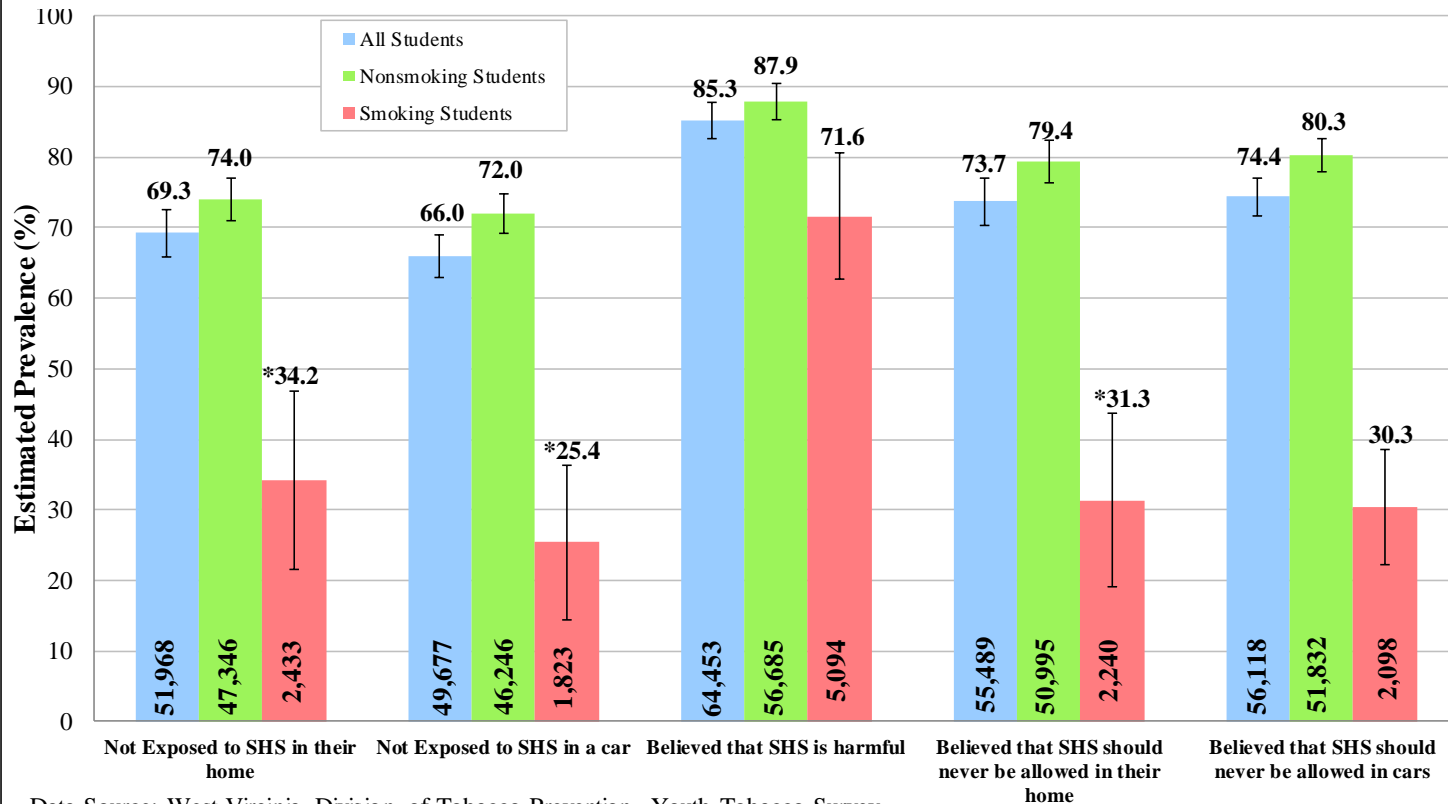
Error bars represent the 95% Confidence Interval associated with the prevalence estimate.

\*Data may be unreliable due to n<50, CI width>20, or RSE>30, and should be interpreted with caution.

Smoking students are those who have smoked cigarettes on one or more days in the past 30 days; nonsmoking students are those who have not smoked cigarettes on any of the past 30 days. A smoke-free home is defined as one where smoking is never allowed inside. Weighted frequencies for 2007 and 2017 are indicated in text boxes.

Graph prepared by the West Virginia Health Statistics Center.

## Prevalence of Exposure and Attitudes Concerning Secondhand Smoke (SHS) Among West Virginia High School Students, by Smoking Status, 2017



Data Source: West Virginia Division of Tobacco Prevention, Youth Tobacco Survey

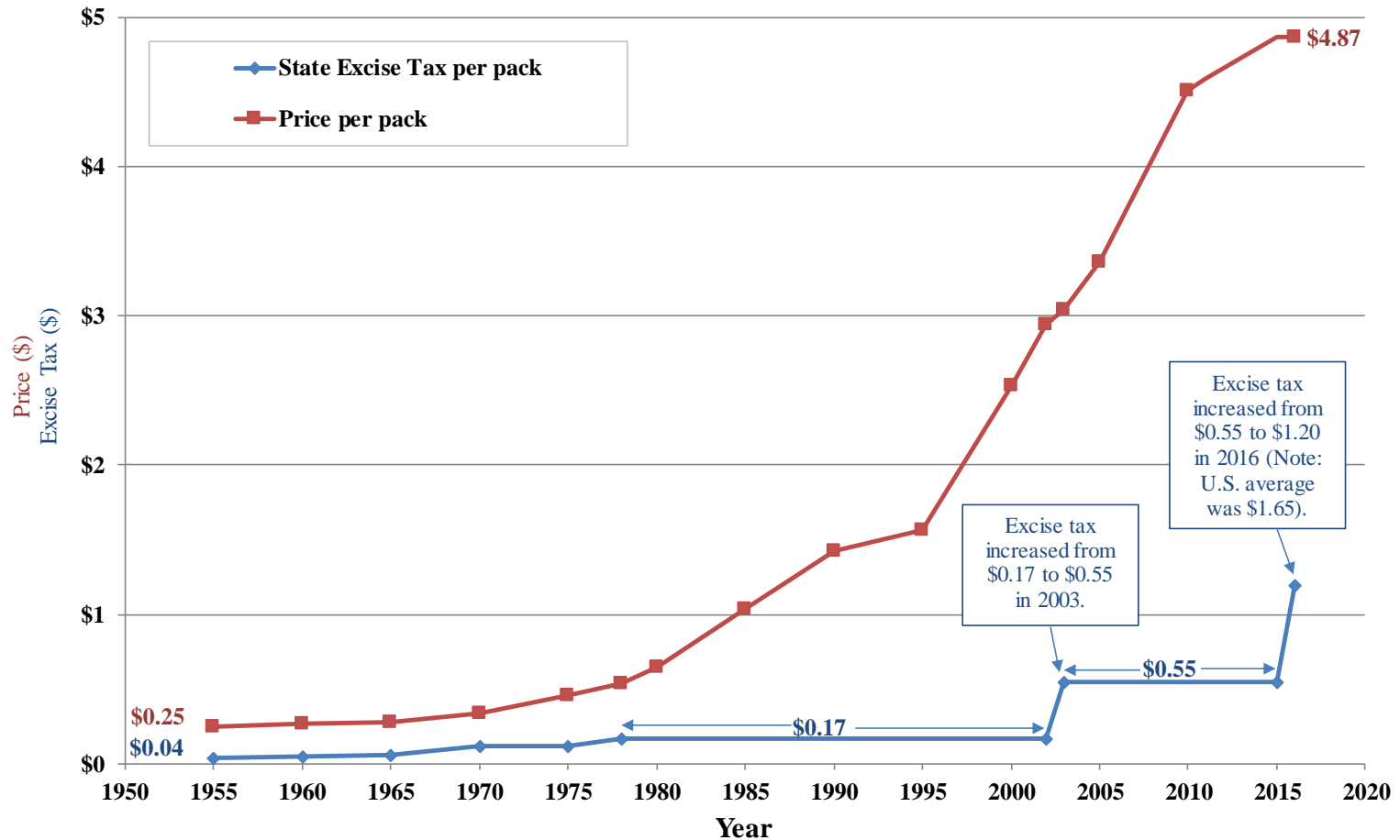
Error bars represent the 95% Confidence Interval associated with the prevalence estimate.

\*Data may be unreliable due to  $n < 50$ ,  $CI \text{ width} > 20$ , or  $RSE > 30$ , and should be interpreted with caution.

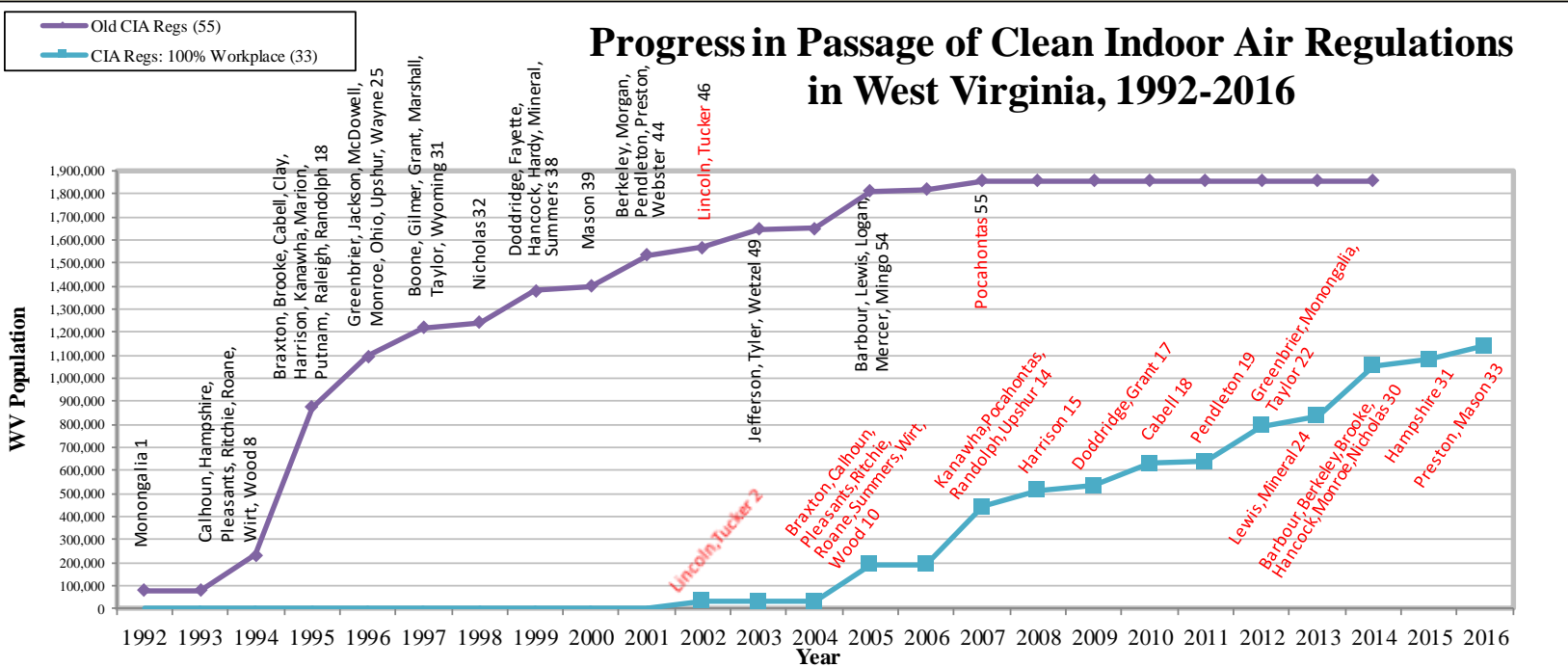
Smoking students are those who have smoked cigarettes on one or more days in the past 30 days; nonsmoking students are those who have not smoked cigarettes on any of the past 30 days. Survey responses indicated if the student was exposed to secondhand smoke (SHS) in their home during the past 7 days, exposed to SHS in a vehicle during the past 7 days, believed that SHS was very or somewhat harmful to one's health, believed that tobacco smoke should never be allowed in their home, believed that tobacco smoke should never be allowed in cars. The weighted frequencies are provided inside each bar.

Graph prepared by the West Virginia Health Statistics Center.

## Price of Cigarettes Compared to State Excise Tax in West Virginia



Data Sources: *The Tax Burden on Tobacco*, Orzechowski and Walker, Historical Compilation Vol. 50, 2015; West Virginia Legislature, Enrolled Senate Bill 1012 (passed June 13, 2016); U.S. average state excise data obtained from Campaign for Tobacco-Free Kids, State Cigarette Excise Tax Rates and Rankings.  
Graph prepared by the West Virginia Health Statistics Center.



Data Sources: West Virginia Division of Tobacco Prevention; U. S. Census (1990-2014, September 2016). In 2007, all 55 counties (or 100% of the 2007 population of 1,834,052) in West Virginia had some type of indoor smoking restrictions. A county indicated in **RED** denotes that the regulation meets the standard of "100% Workplace coverage," which prohibits smoking in all enclosed non-hospitality workplaces, restaurants, bars, gaming, and vehicles used as a place of employment. The number beside each county group indicates the cumulative number of counties with regulations at that point in time.

For More Information and Data Reports Contact:

## West Virginia Health Statistics Center

<http://www.wvdhhr.org/bph/hsc/statserv/publist.asp>

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