

State of Virginia Epidemiological Profile: Alcohol 2017

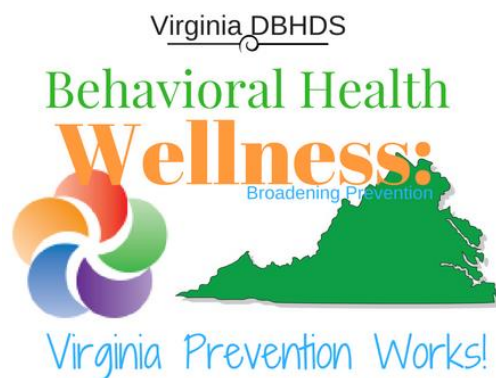


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Executive Summary

Introduction

According to the Department of Health and Human Servicesⁱ, alcohol is the most used substance among youth and adults in the United States. The National Survey on Drug Use and Health (NSDUH) reports that 86.4% of people 18 years and older reported having consumed alcohol at some point during their lifetime, and 70.1% reported that they drank in the past year. The same survey revealed that 33.1% of all 15-year-olds have had at least one drink in their lifetime.ⁱⁱ

There are many risk factors that have been identified as predictors of alcohol use. Among those, socioeconomic indicators such as poverty and unemployment are particularly important to discuss in the context of a state epidemiological profile. National research regarding the influence of socioeconomic status on heavy alcohol consumption has provided contradictory findings due to differing definitions of poverty and categorization of hazardous alcohol consumption across studies. However, there is some evidence showing the positive relationship between chronic poverty, long-term involuntary unemployment, and problematic alcohol consumption. In one study, data from the U.S. National Longitudinal Survey of Youth was used to demonstrate that longer durations of poverty and unemployment across a span of 13 years significantly predicted heavy drinking.ⁱⁱⁱ The link between heavy alcohol consumption and low socioeconomic status could be explained in part by the fact that people with low socioeconomic status are exposed to more stressors than the average person and possess fewer social and psychological resources to help with coping. Though the relationship between poverty and heavy alcohol consumption exists, data was not available to explore this relationship in Virginia.

The negative consequences of alcohol abuse are both individual and societal. Risky behaviors, such as drunk driving and unprotected sex, often occur when alcohol is consumed. The National Highway Traffic Safety Administration estimates that in 2014, alcohol-impaired driving fatalities accounted for 31% of all driving fatalities.^{iv} In addition, approximately 97,000 college students between the ages of 18 and 24 report experiencing alcohol-related sexual assault or date rape each year.^v Long-term consequences of chronic alcohol use include liver disease and death. NSDUH estimates that alcohol related deaths claim 88,000 lives every year, making alcohol the fourth leading cause of preventable death in the United States.^{vi} Alcohol abuse, as defined by 4 drinks or more in a single day and 8 drinks or more during a week for females and 5 drinks or more in a single day and 15 drinks or more during a week for males, imposes a heavy economic burden. In 2010 alcohol abuse cost the United States \$249 billion, according to the American Journal of Preventative Medicine.^{vii}

Children, partners, and other family members of individuals who abuse alcohol are considerably affected by the consequences of another's actions. In 2012, according to the National Survey on Drug Use and Health, an estimated 7.5 million children younger than the age of 18 (10.5% of all children) lived with a parent who had an alcohol use disorder in the past year.^{viii} Research shows that children who grow up being exposed

to family alcohol problems are four times more likely to develop an alcohol problem themselves when compared to other children.^{ix} In addition, these children have an increased risk of developing depression, anxiety disorders, problems with cognitive and verbal skills, and parental abuse or neglect.^x The National Child Abuse and Neglect Data System (NCANDS) reports that caregiver alcohol abuse is a major risk factor for child abuse and maltreatment. Of the estimated 683,00 children who were victims of abuse and neglect nationwide in 2015, 10.3% reported caregiver alcohol abuse.^{xi} Additionally, intimate partner violence is associated with a variety of negative health behaviors, alcohol abuse being one of them.^{xii}

Alcohol is a controversial substance. Awareness of facts and current trends regarding its use can help drive health communication campaigns and prevention programs targeting alcohol consumption in Virginia. This profile looks at specific health indicators related to alcohol consumption and consequences of its use among youth and adults in Virginia.

Purpose

This epidemiological profile was created to serve as a resource on current consumption and consequence patterns of alcohol use among youth and adults in Virginia. It is intended for state-level administrators, community-level prevention planners, and other stakeholders, such as the State Epidemiological Outcomes Workgroup (SEOW). This report combines multiple sources of health data in one comprehensive document to aid data-informed decision-making concerning alcohol abuse prevention efforts.

The data synthesized in this report is derived from state and national health data collected through multiple surveillance instruments and programs including; the Behavioral Risk Factor Surveillance System (BRFSS), Youth Risk Behavioral Surveillance Survey (YRBSS), Community Consumer Submission 3 (CCS3), Virginia Medical Examiner Database System (VMEDS), and Virginia Youth Survey (VYS). This report was funded by the Partnership for Success grant (PFS) awarded to the Virginia Department of Behavioral Health and Developmental Services (DBHDS) by the Substance Abuse and Mental Health Services Administration (SAMHSA).

Data Overview

The majority of state-level data included in this profile can also be found on the Virginia Social Indicator Dashboard, which can be publicly accessed at virginiapreventionworks.org. The Virginia Social Indicator Dashboard is a compilation of behavioral health data from multiple agencies and organizations across the state. The purpose of the dashboard is to centralize key indicators of behavioral health and wellness as a resource for needs assessments, epidemiological monitoring and intervention program planning. The diverse set of indicators included in this profile were selected according to their ability to provide information on both consumption and consequence of alcohol use. Indicators with comparable national data were prioritized over those without. Finally, indicators were selected that included demographic

variables to investigate health disparities. For more information on each specific data source see appendix A.

Data Limitations

Utilizing data from multiple sources allows for a more complete picture of statewide alcohol use, though there is potential for data gaps. There were no comparable national estimates available for some of the statewide indicators, such as those pertaining mental health and overdose data. This discrepancy is due to the difference in survey instruments across state and national agencies, as well as privacy regulations regarding data transparency. Additionally, the data presented in this report do not reveal the underlying motive for alcohol use and abuse. Supplemental data and research are necessary to understand the personal and environmental factors connected to alcohol use.

There was insufficient data on middle school youth making it challenging to form an accurate picture of alcohol consumption and consequence in this population. Additionally, many minority and special populations are also underrepresented or indistinguishable in the data. The majority of indicators do not include information about veteran or student status, although the alcohol consumption patterns of these special populations may differ from the general public. Additionally, inferences cannot be drawn about small minority populations, such as Pacific Islanders and Native Americans, because of the small number of individuals reporting for each group. Finally, research demonstrates the detrimental effects of alcohol abuse on the family unit, including contributing to an increased risk of child abuse and neglect, intimate partner violence, and fetal-alcohol syndrome. However, there is a lack of reliable Virginia-specific trend data available to directly show the effects of alcohol on these adverse circumstances.

Although a variety of data gaps exist, they do not preclude the interpretation of the data for the purpose of alcohol abuse prevention efforts among high school and adult populations. The indicators included in this epidemiological profile are of critical importance to understanding the present state of alcohol use and abuse in Virginia.

State Demographic Overview

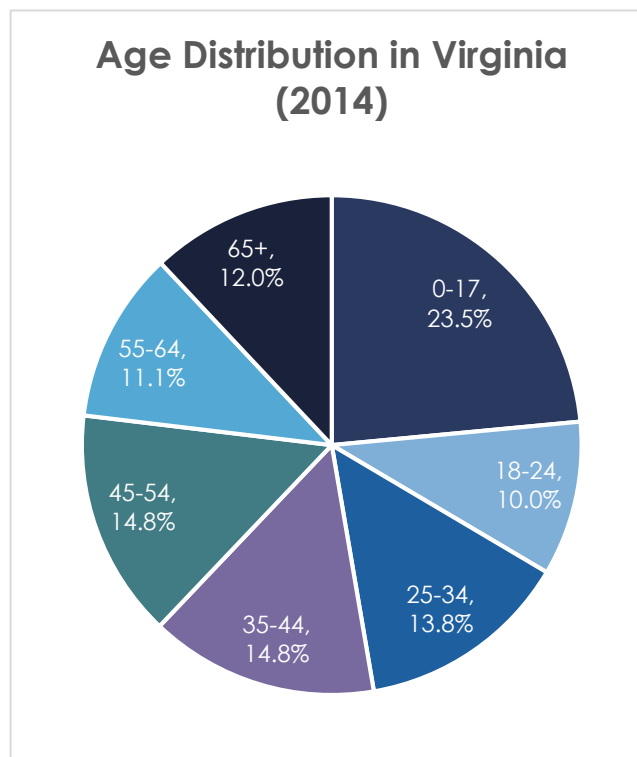
Population Demographics

Located halfway between New York and Florida on the mid-Atlantic coast, Virginia is a historically rich state with a diverse population. According to 2016 U.S. Census estimates, Virginia is home to just over 8.4 million people, or 2.6% of the nation's residents, which makes it the 12th largest state in the union in terms of population.

Virginia is organized into 95 counties and 39 cities. Since the official 2010 Census, the state's population has increased by an estimated 410,784 people, or 5.1%, which is about on par with national population growth since 2010. Urban areas are continuing to see an increase in population while rural areas are steadily declining in residents. According to 2015 U.S. Census estimates, the four most populated cities in Virginia are Virginia Beach (452,745), Norfolk (246,393), Chesapeake (235,429), and Richmond (220,289).

Age

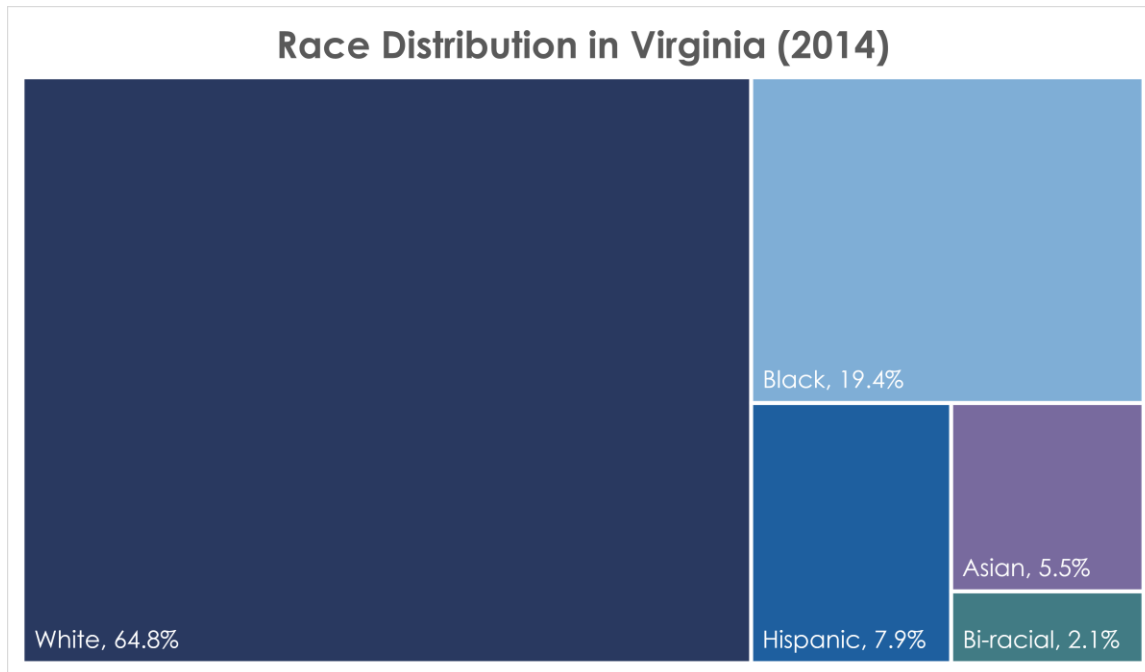
The population distribution by age in Virginia is similar to that of the United States. The largest age category consisted of children and teens ages 17 and under, with this group comprising 23.5% of the state's population. Young adults ages 18-24 comprised 10.0% of the overall state population. Adults ages 25-64 made up 54.5% of the population and older adults 65+ made up 12.0% of the population. In 2014, the median age was 37.7, which represents a 1.7% increase in the median age from 2005. This figure indicates that Virginia's population is aging slightly overall.



Race and Ethnicity

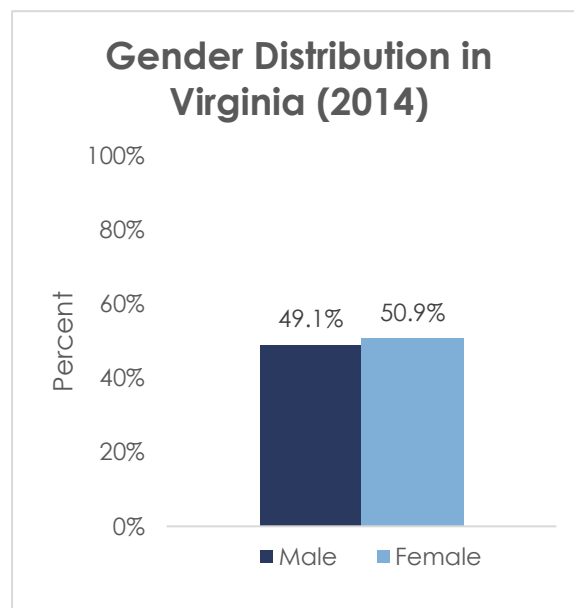
According to the most recent U.S. Census estimates, the largest racial group residing in Virginia is White and makes up approximately 64.8% of the population. About a fifth of the population, or 19.4%, identify as Black. In 2014, the percentage of people living in Virginia who identify as Hispanic/Latino ethnicity was 7.9% and about 2.1% of people identify as belonging to two or more races. Other minority groups include Native Hawaiian or Other Pacific Islander, of which 0.1% identify. Lastly, 0.2% of people identify

as solely American Indian and/or Alaska Native. Approximately 11.7% of the population residing in Virginia report being born in a foreign country.



Gender

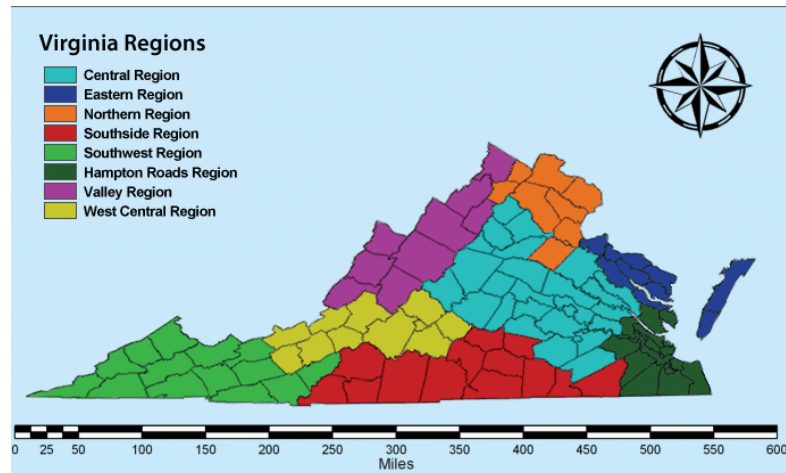
Roughly 4 million people, or 50.9% of the total population is female and 3.9 million people, or 49.1% of the population is male. The younger age ranges have relatively equal male to female ratios, however only 32.0% of the population 85 and older is male, making the majority of Virginia's senior citizens female.



Income and Poverty

According to American Community Survey 5-year estimates, the median household income in the state of Virginia for 2015 was \$65,000 per year, which ranks considerably higher than the average U.S figure of just under \$54,000 per year. Income earning varied considerably by region. People residing in northern Virginia consistently reported average per capita income earnings between \$65,000-\$70,000, which is about \$15,000 higher than other regions in Virginia.^{xiii} The Southside region and the Southwest region reported the lowest average per capita personal income earnings at around \$33,000 per year.

Recent data from 2014 show that more than 1 in 10 residents in Virginia were living below the poverty level. The Census Bureau defined the poverty level for a single individual as \$12,071 in 2014. The percentage of people whose income in the past 12 months fell below the poverty level was 11.5% of all families and 15.6% of all people. Virginia has the 11th lowest poverty rate in the nation, yet there is still considerable regional variation. In 2014, poverty rates rose slightly in five regions: Northern, Southside, Southwest, Valley, and West Central. Poverty rates fell slightly in the Central, Eastern, and Hampton Roads regions. The Southside region continues to rank the highest in the state in terms of poverty level at 20.3% and the Northern region continues to have the smallest poverty level at 7.0%.



Source: <http://vaperforms.virginia.gov/Regions/regionsMap.php>

Trend Summary

Alcohol-Related Consumption and Consequences Among Youth

In this report, youth are defined as middle school and high school students between 6th and 12th grade. Youth data consistently indicate that smaller percentages of youth in Virginia report drinking and abusing alcohol relative to the United States as a whole. According to the 2015 Virginia Youth Survey (VYS), about half of high school students surveyed, regardless of gender and race, report drinking alcohol anytime during their life. The percentage of high school youth in Virginia who report using alcohol in their lifetime has significantly¹ decreased between 2011 and 2015 from 60.5% to 50.7%. Lifetime alcohol use among high school students was significantly higher in the U.S. than in Virginia across all indicators in which high school youth were surveyed. The percentage of high school youth who report using alcohol in the past 30 days in 2015 was approximately 23.4%. This percentage has been decreasing since 2011 and is lower than the United States average by about 10 percentage points. The percentage of high school youth in Virginia who reported binge drinking in the past 30 days significantly decreased from 15.7% in 2011 to 11.0% in 2015. This figure has remained lower than the U.S. average since 2011, before which there is no reliable data available. Although figures for high school youth alcohol consumption are consistently lower than national averages, continued prevention efforts are important as early initiation to alcohol consumption raises the potential for developmental delays and increases the likelihood of lifelong abuse and dependence on alcohol.^{xiv}

Less data is available on alcohol consumption in the middle school youth population, however existing figures show that there has been a small decline in the percentage of those reporting consuming their first alcoholic beverage before age 11. This decrease from 9.3% in 2013 to 7.9% in 2015 was not a statistically significant change and there is no national average for comparison.

The percentage of Virginia high school students who report drunk driving in the past 30-days has increased by a half percent from 6.5% in 2013 to 7.0% in 2015, yet is still lower than the national average of 7.8%. From 2013 to 2015, reported drunk driving has increased among every racial group of Virginia high school students. Despite the increasing percentage of reported drunk driving, the percentage of Virginia middle and high school students who report riding with a drunk driver has steadily decreased since 2013 and is below the national average (VYS & YRBSS).

¹ This, and every instance thereafter of significant/ly refers to statistical significance, i.e. the comparison of indicator data between years measured using a t-test yields a p-value of < 0.05. These calculations were performed using the CDC's Youth Online data analysis software. Source: Centers for Disease Control and Prevention (CDC). 1991-2015 High School Youth Risk Behavior Survey Data. Available at <http://nccd.cdc.gov/youthonline/>.

Alcohol-Related Consumption and Consequences Among Adults

Available data on alcohol consumption patterns among adults indicate that Virginia is similar to the United States as a whole. Adults are defined as anyone 18 years and older. In 2015, 5.9% of adults in Virginia and the United States reported heavy alcohol consumption within the past 30 days (BRFSS). This figure has remained relatively stable since 2011 at national and state levels. This figure is cause for concern because heavy drinking over a prolonged period of time is highly correlated with chronic liver disease and other negative health and social consequences. In 2015, just over half of adults in Virginia and the United States reported drinking alcohol within the past 30 days. This figure has also remained stagnant both statewide and nationally since 2011. In 2015, 16.4% of adults in Virginia and the U.S. reported binge drinking within the past 30 days. This figure was comparable to U.S. adult binge drinking percentages. Binge drinking is highly correlated with acute alcohol deaths and motor vehicle accident deaths.

The measurable effects of alcohol use and abuse on families is limited by sparse available data, yet surveillance of alcohol consumption during pregnancy has been collected in varying capacities since 1987. According to the Pregnancy Risk Assessment Monitoring System (PRAMS), the percentage of Virginia mothers who report drinking any alcohol during pregnancy has risen and fallen throughout the years surveyed, yet there is an overall increasing trend demonstrated by the initial figure of 9.3% in 2009 and the final figure of 12.1% in 2013.

The rate of adults receiving direct and contracted mental health services from community service boards (CSBs)² who also report alcohol use has increased from 26.7 per 10,000 people in 2008 to 31.8 per 10,000 people in 2015 (CCS3). However, the percent of total mental health intakes that noted alcohol use has remained relatively consistent over the past 8 years, hovering around 22.2% in 2015. This suggests that more people are accessing mental health services who also report alcohol use, but the overall percentage of intakes reporting use has remained relatively stable over time. In comparison, the percentage of alcohol-related substance abuse intakes and rate of services has been steadily decreasing since 2008. The percent of alcohol-related substance abuse intakes has slightly decreased from 33.1% in 2008 to 29.6% in 2015. The rate of people receiving alcohol-related substance abuse services in Virginia has decreased from 31.1 per 10,000 people in 2008 to 21.2 per 10,000 people in 2015. There is no comparable national level data available for these indicators.

The statewide rate of alcohol-related fatal overdoses has been slightly increasing since 2007, the latest figure from 2014 stands at 1.5 deaths per 10,000 people (VMEDS). In 2014 there were 133 alcohol-related overdose deaths in Virginia; the most common demographic represented were White males between the ages of 45-54 years old. Lastly, the rate of suicides among individuals with an alcohol problem in Virginia has increased from 1.6 per 100,000 people in 2003 to 2.6 per 100,000 people in 2012 (OCME).

² A community service board is the point of entry into the publicly-funded system of services for mental health, intellectual disability, and substance abuse.

Summary of Alcohol-Related Indicator Trends

The table below summarizes data trends and latest figures for the consumption and consequence indicators present in this report. Overall alcohol consumption trends are decreasing in the United States and Virginia.

Indicator Trend Summary & Latest Figures: United States and Virginia

SEE APPENDIX A FOR MORE INFORMATION ABOUT INDICATOR DATA SOURCES

Indicator	Latest U.S. Figure (2015)	U.S. Trend	Latest Virginia Figure (2015)	Virginia Trend
Consumption				
Consumption before Age 11: Middle Schoolers (VYS & YRBSS)	n/a	n/a	7.9%	↓
Lifetime Alcohol Consumption: High Schoolers (VYS & YRBSS)	63.2%	↓	50.7%	↓
Past 30 Day Alcohol Use: High Schoolers (VYS & YRBSS)	32.8%	↓	23.4%	↓
Past 30 Day Binge Drinking: High schoolers (VYS & YRBSS)	17.7%	↓	11.0%	↓
Past 30 Day Alcohol Use: Adults (BRFSS)	54.0%	-	54.0%	-
Heavy Alcohol Consumption: Adults (BRFSS)	5.9%	-	5.9%	-
Past 30 Day Binge Drinking: Adults (BRFSS)	16.3%	-	16.3%	-
Mothers Who Drank Any Alcohol During Pregnancy (PRAMS)	n/a	n/a	12.1% (2013)	↑
Consequence				
Past 30 Days Riding with a Drunk Driver: High Schoolers (VYS & YRBSS)	20.0%	↓	15.6%	↓
Past 30 Days Riding with a Drunk Driver: Middle Schoolers (VYS & YRBSS)	n/a	n/a	14.1%	↓
Past 30 Days Driving After Drinking: High Schoolers (VYS & YRBSS)	7.8%	-	7.0%	-
Mental Health Intakes Noting Alcohol Use (CCS3)	n/a	n/a	22.2%	-
Substance Abuse Intakes Noting Alcohol Use (CCS3)	n/a	n/a	29.6%	↓
Alcohol-Related Fatal Overdoses (VMEDS)	n/a	n/a	1.5 per 100,000 people (2014)	-
Alcohol-Related Suicide Deaths (OCME)	n/a	n/a	2.6 per 100,000 people (2012)	↑

Key: (↓) = decreasing trend; (↑) = increasing trend; (-) = stable; (n/a) = no data available

Consumption Data

About the Indicators

Alcohol is the most frequently consumed drug nationally and statewide by both youth and adults. Alcohol consumption data tracks past 30-day use, lifetime use, binge drinking, and heavy drinking. Reported use of alcohol in the past 30 days is a common measure of recent alcohol use. All consumption data figures are represented in percent of the population surveyed.

Data Sources

Youth

Virginia Youth Survey (VYS)

Youth Risk Behavioral Surveillance Survey (YRBSS)

Adults

Behavioral Risk Factor Surveillance System (BRFSS)

Pregnancy Risk Assessment Monitoring System (PRAMS)

Section Summary

Youth

Alcohol consumption among youth in Virginia has been steadily decreasing across all indicators since 2011. A smaller percentage of Virginia youth consume and abuse alcohol in comparison to national averages.

Adults

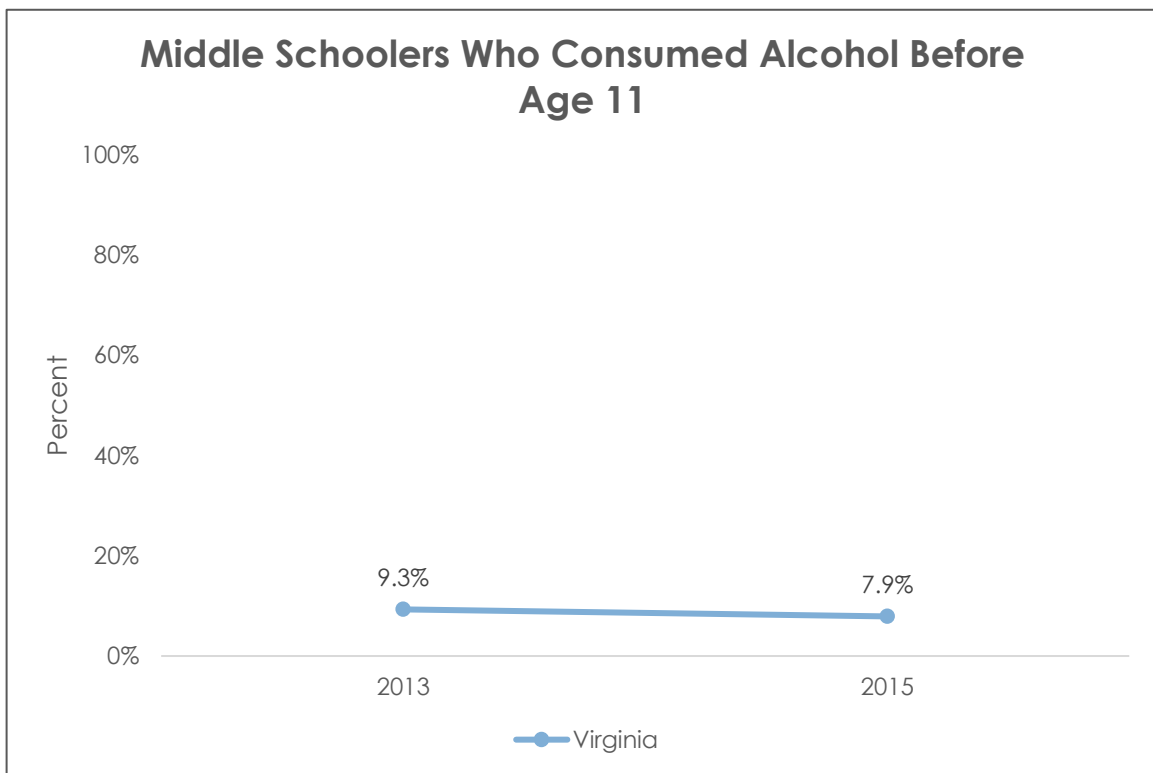
Data indicate that alcohol consumption and abuse percentages among adults in Virginia have remained stagnant since 2011. Past 30-day use, heavy drinking, and binge drinking among adults in Virginia is similar to national average percentages.

Data Source: Virginia Youth Survey & Youth Risk Behavioral Surveillance Survey

Alcohol Use Before Age 11 Among Middle School Youth

Indicator Description: Percentage of middle school students (grades 6-8) who report drinking before age 11. Alcohol use was defined as drinking beer, wine, wine coolers, and liquor such as rum, gin, vodka, or whisky. Drinking alcohol does not include drinking a few sips of wine for religious purposes.

Between 2013 and 2015, there was a small decrease in the percentage of middle school youth who reported consuming their first alcohol beverage before age 11. However, this was not a significant change.



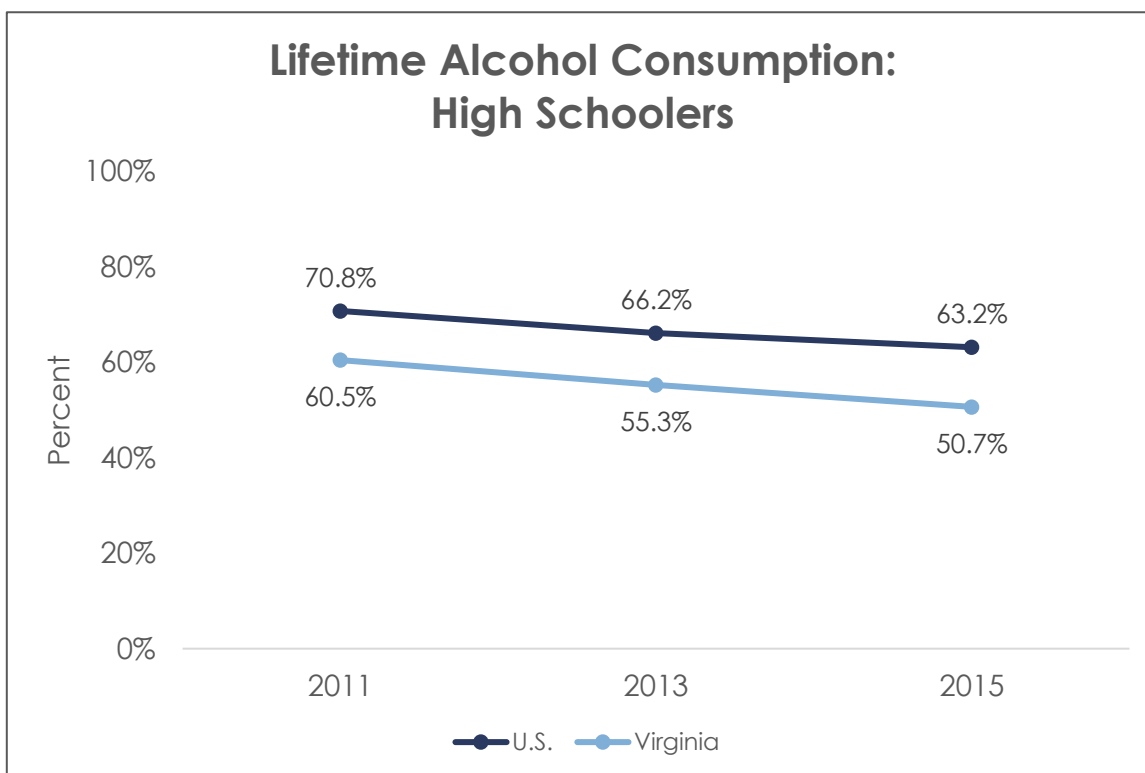
Find more information about this indicator, including demographic trends, on the Virginia Social Indicator Dashboard under the **Virginia Youth Survey – Middle School (VDH)** tab.

Data Source: Virginia Youth Survey & Youth Risk Behavioral Surveillance Survey

Lifetime Alcohol Use Among High School Youth

Indicator Description: Percentage of high school students (grades 9-12) who report drinking alcohol at some point in their lifetime. Alcohol use was defined as drinking beer, wine, wine coolers, and liquor such as rum, gin, vodka, or whisky. Drinking alcohol does not include drinking a few sips of wine for religious purposes.

The percentage of high school youth in Virginia who report using alcohol in their lifetime significantly decreased between 2011 and 2015.



Find more information about this indicator, including demographic trends, on the Virginia Social Indicator Dashboard under the **Virginia Youth Survey – High School (VDH)** tab.

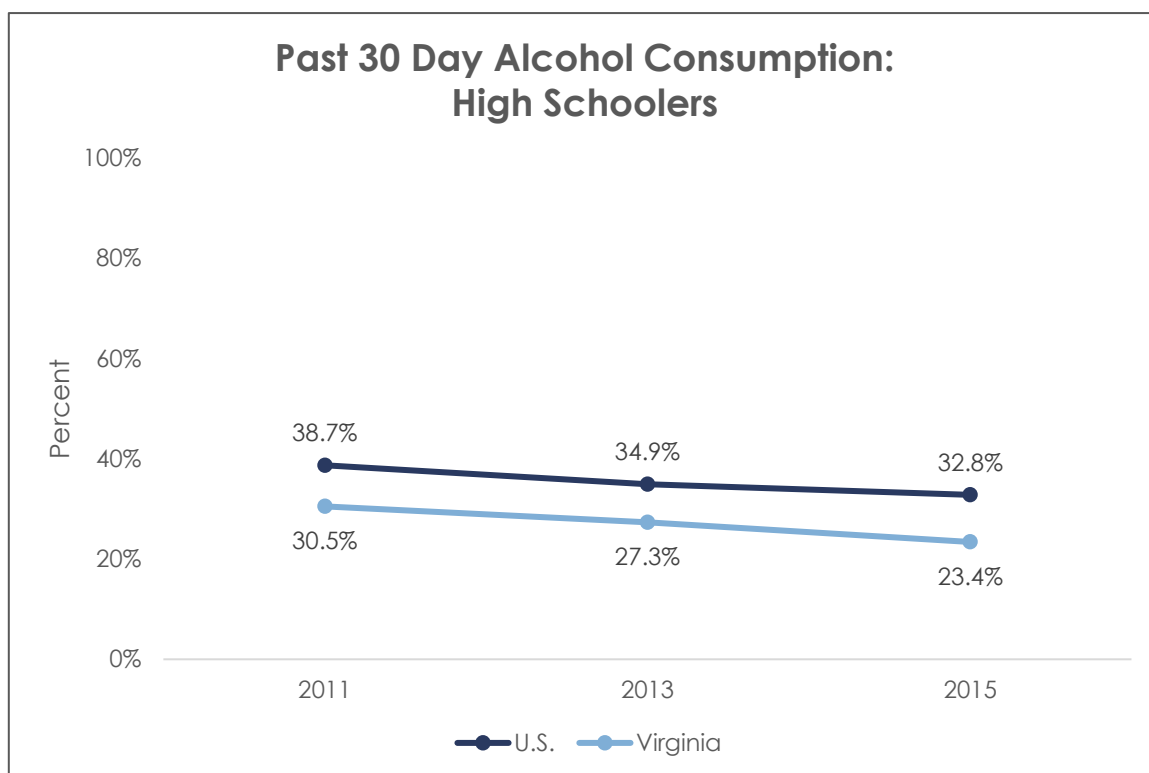
Lifetime alcohol use among high school students was significantly higher in the U.S. than in Virginia.

Data Source: Virginia Youth Survey & Youth Risk Behavioral Surveillance Survey

Past 30 Day Alcohol Use Among High School Youth

Indicator Description: Percentage of high school students (grades 9-12) who report drinking alcohol in the past 30 days. Alcohol use was defined as drinking beer, wine, wine coolers, and liquor such as rum, gin, vodka, or whisky. Drinking alcohol does not include drinking a few sips of wine for religious purposes.

The percentage of high school youth in Virginia who report using alcohol in the past 30 days has significantly decreased between 2011 and 2015.



Find more information about this indicator, including demographic trends, on the Virginia Social Indicator Dashboard under the **Virginia Youth Survey – High School (VDH)** tab.

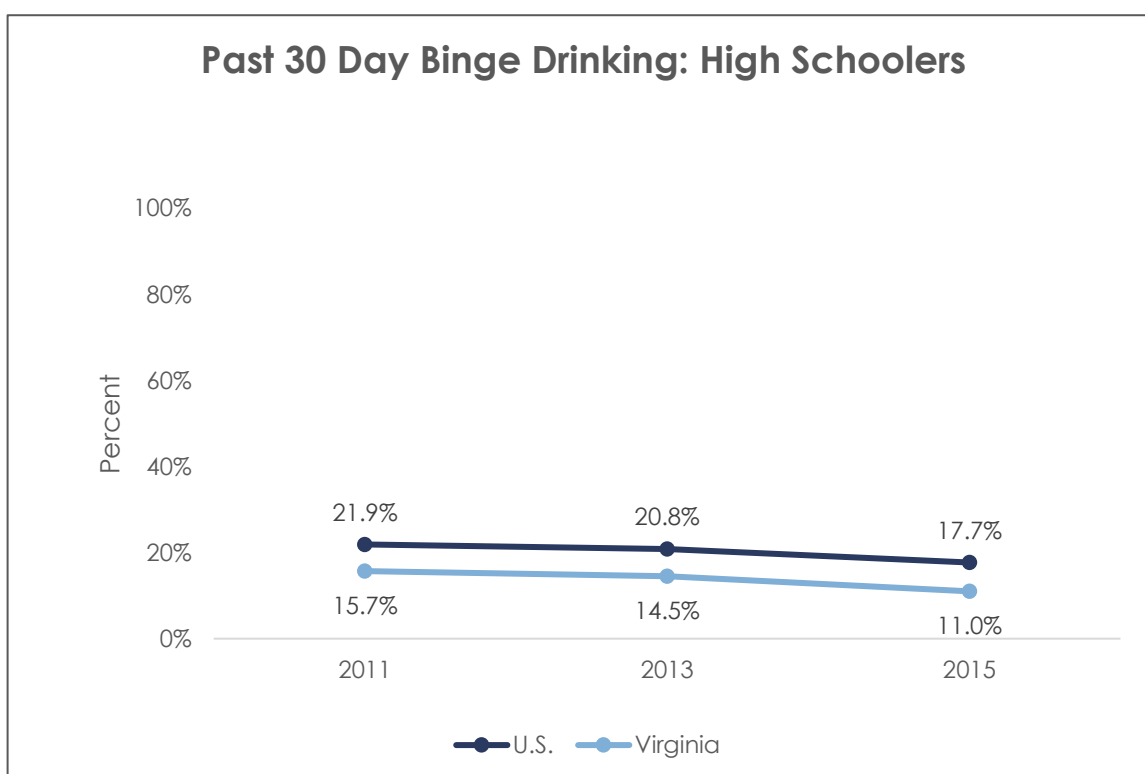
Past 30-day alcohol use among high school students was significantly higher in the U.S. than in Virginia.

Data Source: Virginia Youth Survey & Youth Risk Behavioral Surveillance Survey

Past 30 Day Binge Drinking Among High School Youth

Indicator Description: Percentage of high school students (grades 9-12) who report binge drinking in the past 30 days. Binge drinking was defined as having 5 or more drinks of alcohol in a row, within a couple of hours.

The percentage of high school youth in Virginia who reported binge drinking in the past 30 days significantly decreased between 2011 and 2015.



Find more information about this indicator, including demographic trends, on the Virginia Social Indicator Dashboard under the **Virginia Youth Survey – High School (VDH)** tab.

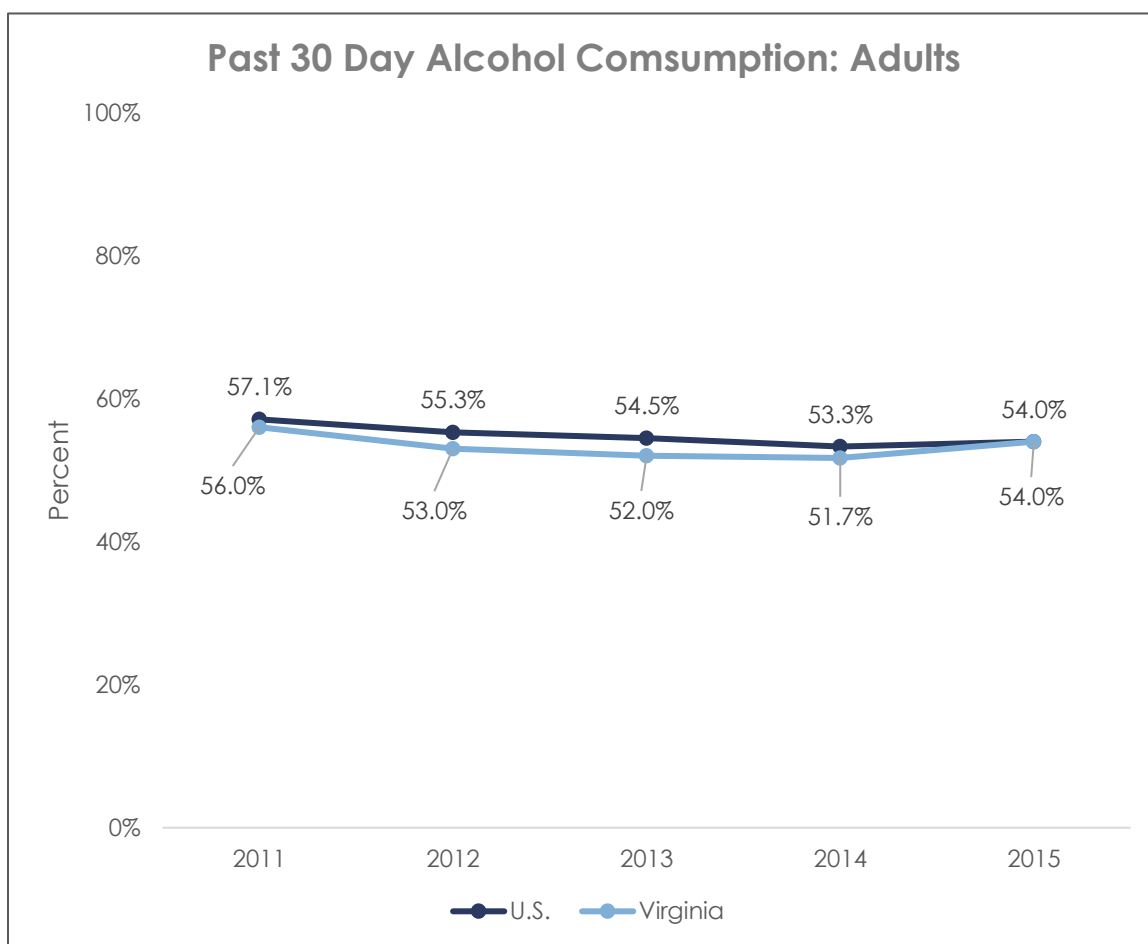
Binge drinking in the past 30 days among high school students was significantly higher in the U.S. than in Virginia.

Data Source: Behavioral Risk Factor Surveillance System

Past 30 Day Alcohol Use Among Adults

Indicator Description: Percentage of adults who report drinking at least one alcoholic beverage in the past 30 days. Alcohol use was defined as drinking beer, wine, a malt beverage, or liquor.

In 2015, just over half of adults in Virginia and the U.S. reported drinking alcohol within the past 30 days.



Rates of past 30 day alcohol consumption are similar over time for Virginia and the U.S.

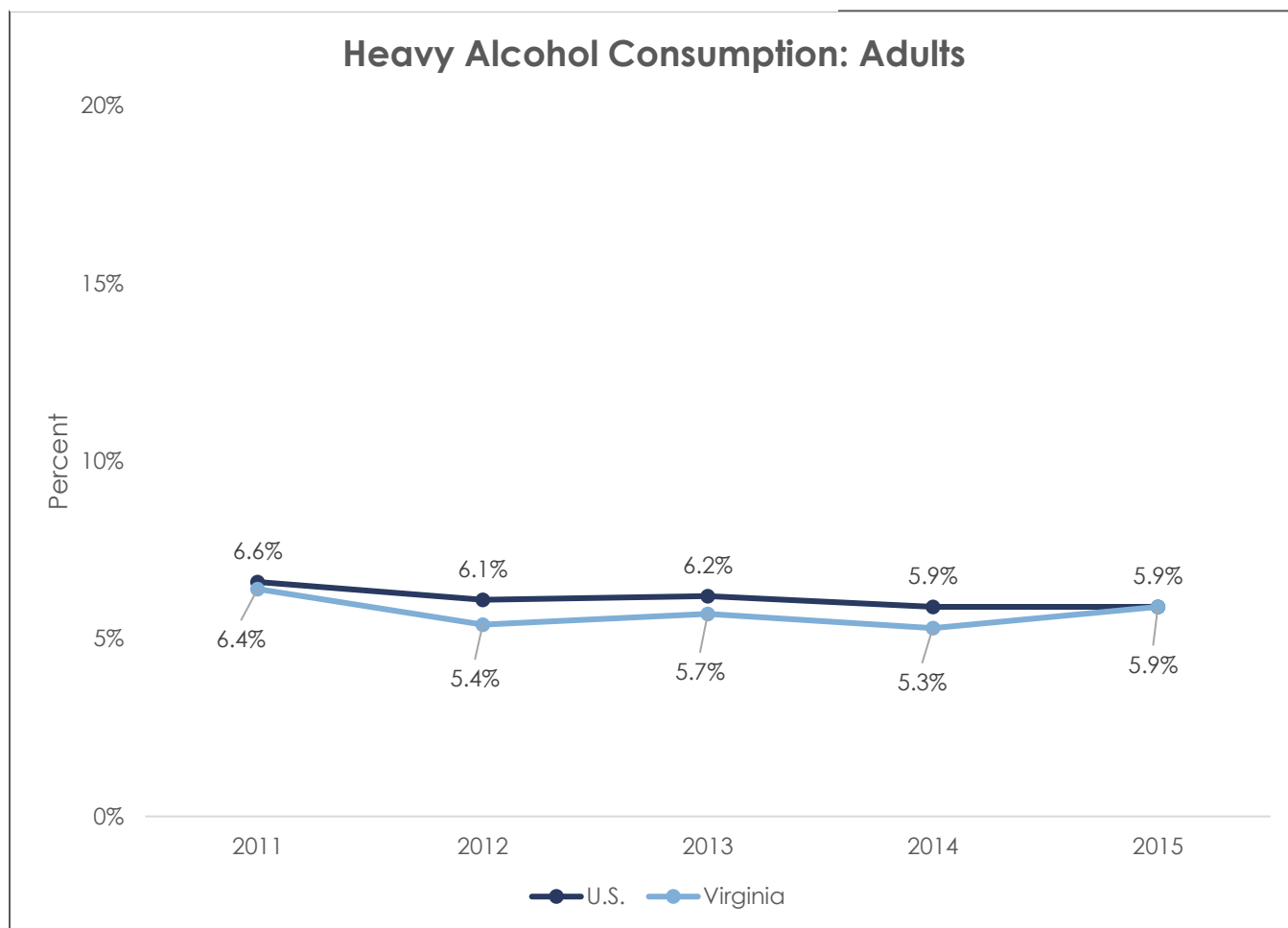
Data Source: Behavioral Risk Factor Surveillance System

Heavy Alcohol Consumption Among Adults

Indicator Description: Percentage of adults who report heavy drinking. Heavy drinking was defined as having 15 or more drinks of alcohol per week for men and 8 or more drinks of alcohol per week for women.

In 2015, 5.9% of adults in Virginia and the U.S. reported heavy alcohol consumption within the past 30 days.

NOTE: Y-AXIS MAX VALUE IS 20%



Rates of adult heavy alcohol consumption are similar over time for Virginia and the U.S.

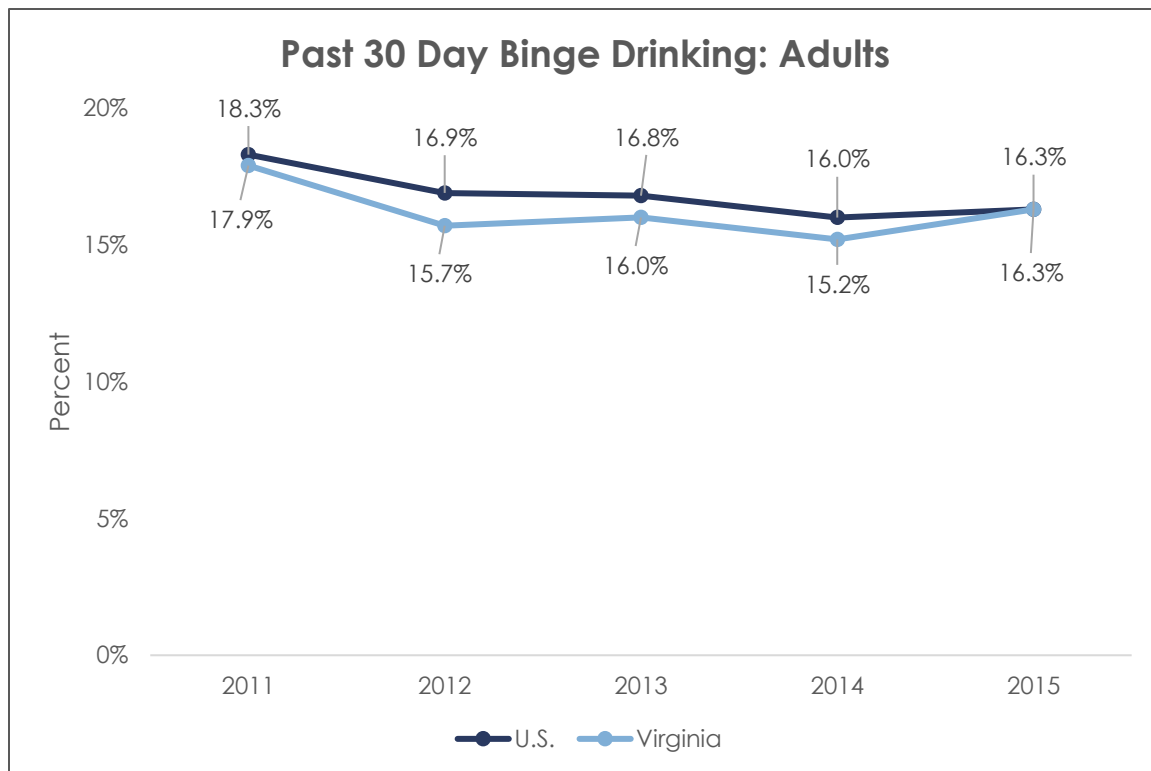
Data Source: Behavioral Risk Factor Surveillance System

Past 30 Day Binge Drinking Among Adults

Indicator Description: Percentage of adults who report binge drinking in the past 30 days. Binge drinking was defined as having 5 or more drinks of alcohol for men and 4 or more drinks of alcohol for women.

The proportion of adults reporting binge drinking in Virginia decreased slightly from 17.9% in 2011 to 16.3% in 2015.

NOTE: Y-AXIS MAX VALUE IS 20%



State and National trends of past 30 day binge drinking among adults are similar, with neither demonstrating much change overtime.

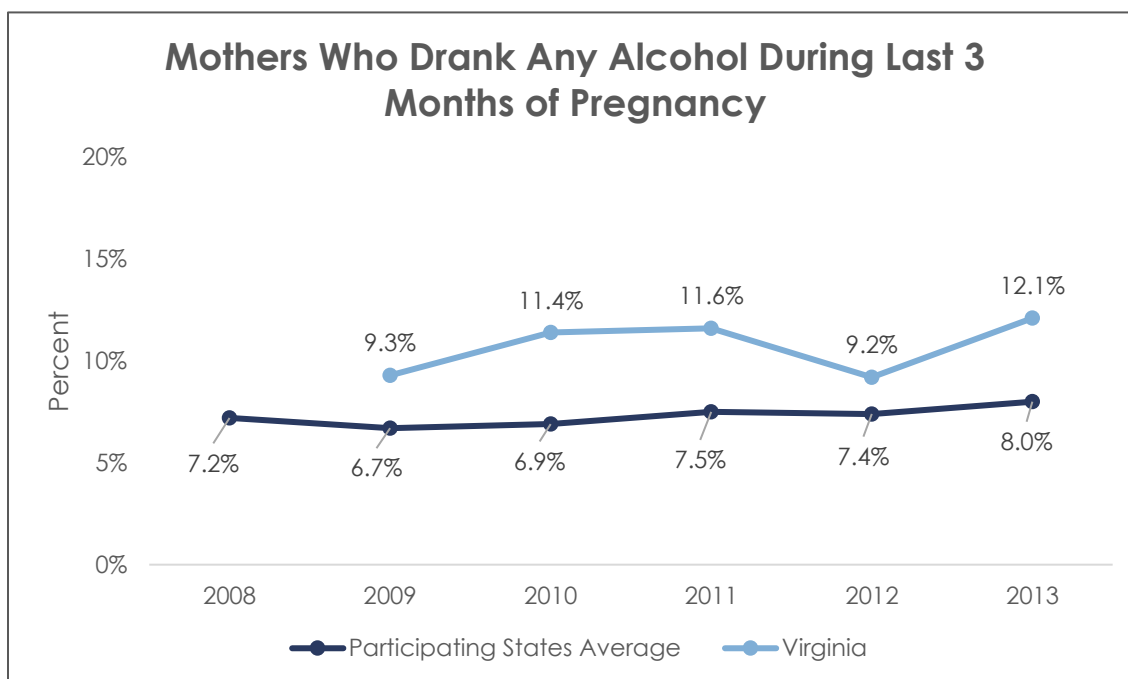
Data Source: Pregnancy Risk Assessment Monitoring System

Mothers Who Drank Any Alcohol During the Last Three Months of Pregnancy

Indicator Description: The percentage of women who had a recent live birth and indicated use of any alcohol during pregnancy from 2008-2013. The survey sample includes approximately 1,200 women annually from each state who are randomly selected to participate in PRAMS. Not all states participate in the PRAMS survey, therefore U.S. figures presented below are comprised of an average of participating states³.

In 2013, 12.1% of surveyed Virginia mothers reported drinking any alcohol during pregnancy.

NOTE: Y-AXIS MAX VALUE IS 20%



The rate of mothers who reported drinking any alcohol during the last three months of pregnancy was higher in Virginia than in the U.S.

³ WA, OR, WY, UT, CO, NE, OK, MN, WI, MI, OH, WV, MD, PA, NY, VT, MA, ME, RI, DE, NC, GA, TH, AR, MS, NJ, MD, A K, and HI.

Consequence Data

About the Indicators

Adverse effects of drinking include risky behaviors, such as driving while drunk or driving with a drunk driver. Societal consequences include the use of alcohol related mental health services. Other adverse consequences include harm to self by acute intoxication leading to death.

Data Sources

Youth

Virginia Youth Survey (VYS)

Youth Risk Behavioral Surveillance Survey (YRBSS)

All Ages

Community Consumer Submission 3 (CCS3)

Virginia Medical Examiner Database System (VMEDS)

Office of the Chief Medical Examiner (OCME)

Section Summary

Youth

The percentage of Virginia high school students who report drunk driving in the past 30-days has increased since 2013 and is now comparable to the national average, which is 7.8%. From 2013 to 2015, reported drunk driving increased among every racial group of Virginia high school students. The percentage of Virginia middle and high schoolers who report riding with a drunk driver has steadily decreased since 2013 and is below the national average.

Adult

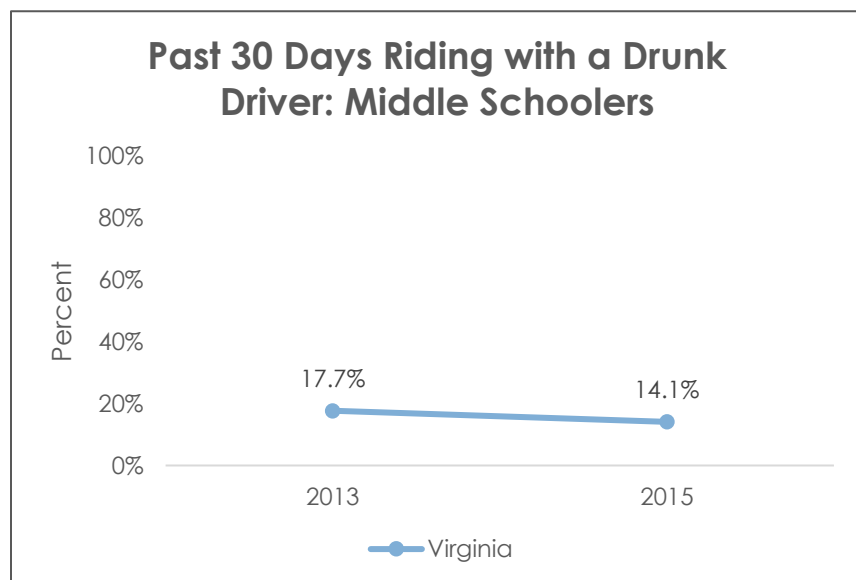
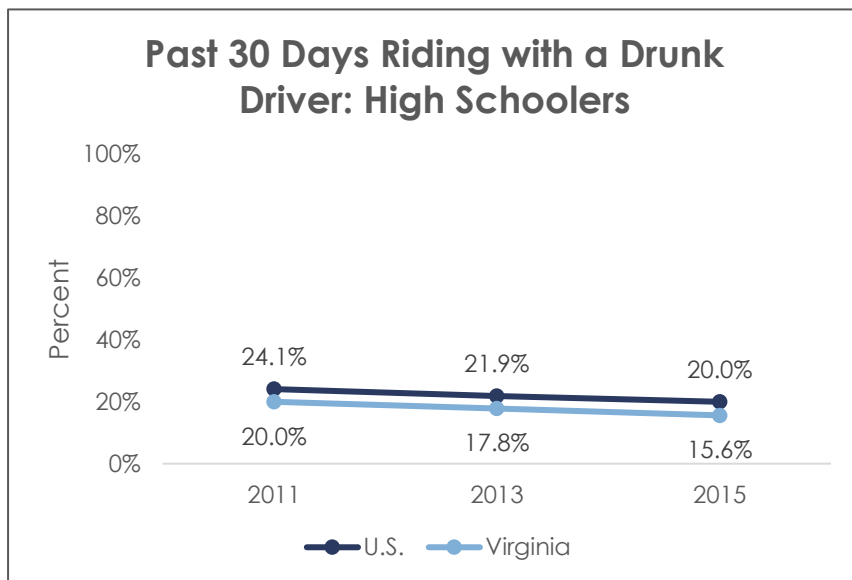
The percent of mental health intakes that noted alcohol use has remained relatively consistent over the past 8 years. In comparison, the percentage of substance abuse intakes noting alcohol use has been steadily decreasing since 2008. The statewide rate of alcohol-related fatal overdoses is increasing. White males between the ages of 45-54 are over represented in alcohol-related overdose cases.

Data Source: Virginia Youth Survey & Youth Risk Behavioral Surveillance Survey

Riding with a Drunk Driver Among High School and Middle School Youth

Indicator Description: Percentage of high school students (grades 9-12) and middle school students (grades 6-8) who report riding in a car or other vehicle driven by someone who had been drinking alcohol in the past 30 days.

Similar to U.S. trends, the percentage of high schoolers in Virginia who report riding with a drunk driver in the past 30 days has decreased.



The percentage of middle schoolers in Virginia who report riding with a drunk driver in the past 30 days has decreased.

Find more information about this indicator, including demographic trends, on the Virginia Social Indicator Dashboard under the **Virginia Youth Survey – High School (VDH)** and **Virginia Youth Survey – Middle School (VDH)** tabs.

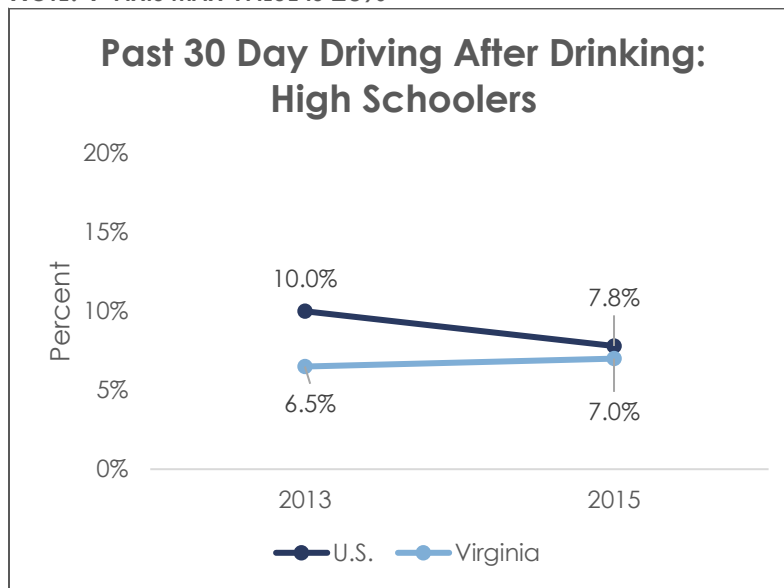
Data Source: Virginia Youth Survey & Youth Risk Behavioral Surveillance Survey

Driving after Drinking Among High School Youth

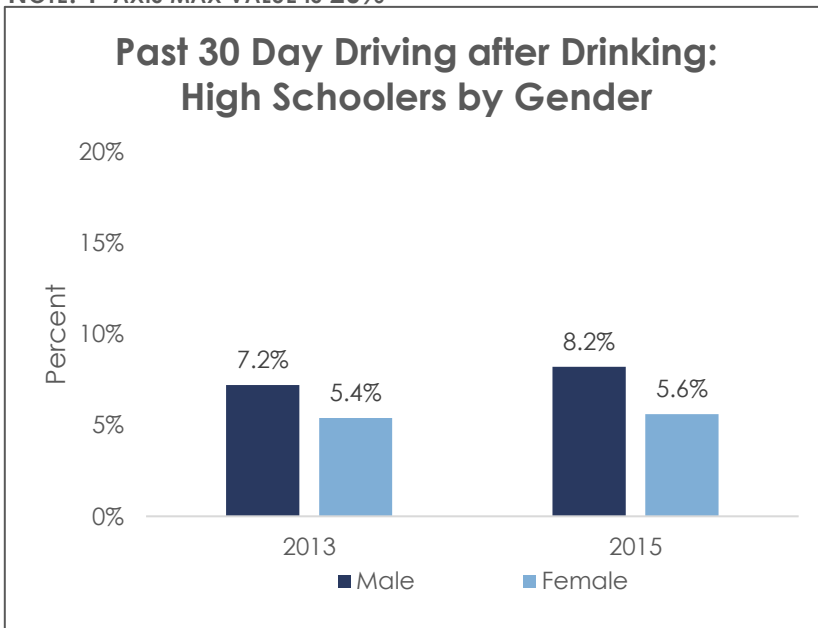
Indicator Description: Percentage of high school students (grades 9-12) who report driving a car or other vehicle after drinking alcohol in the past 30 days.

In 2013, a significantly smaller percentage of Virginia high school youth drove drunk in the past 30 days, compared to the U.S. average. By 2015, this difference was no longer significant.

NOTE: Y-AXIS MAX VALUE IS 20%



NOTE: Y-AXIS MAX VALUE IS 20%



A higher percentage of male high schoolers in Virginia reported driving drunk compared to females.

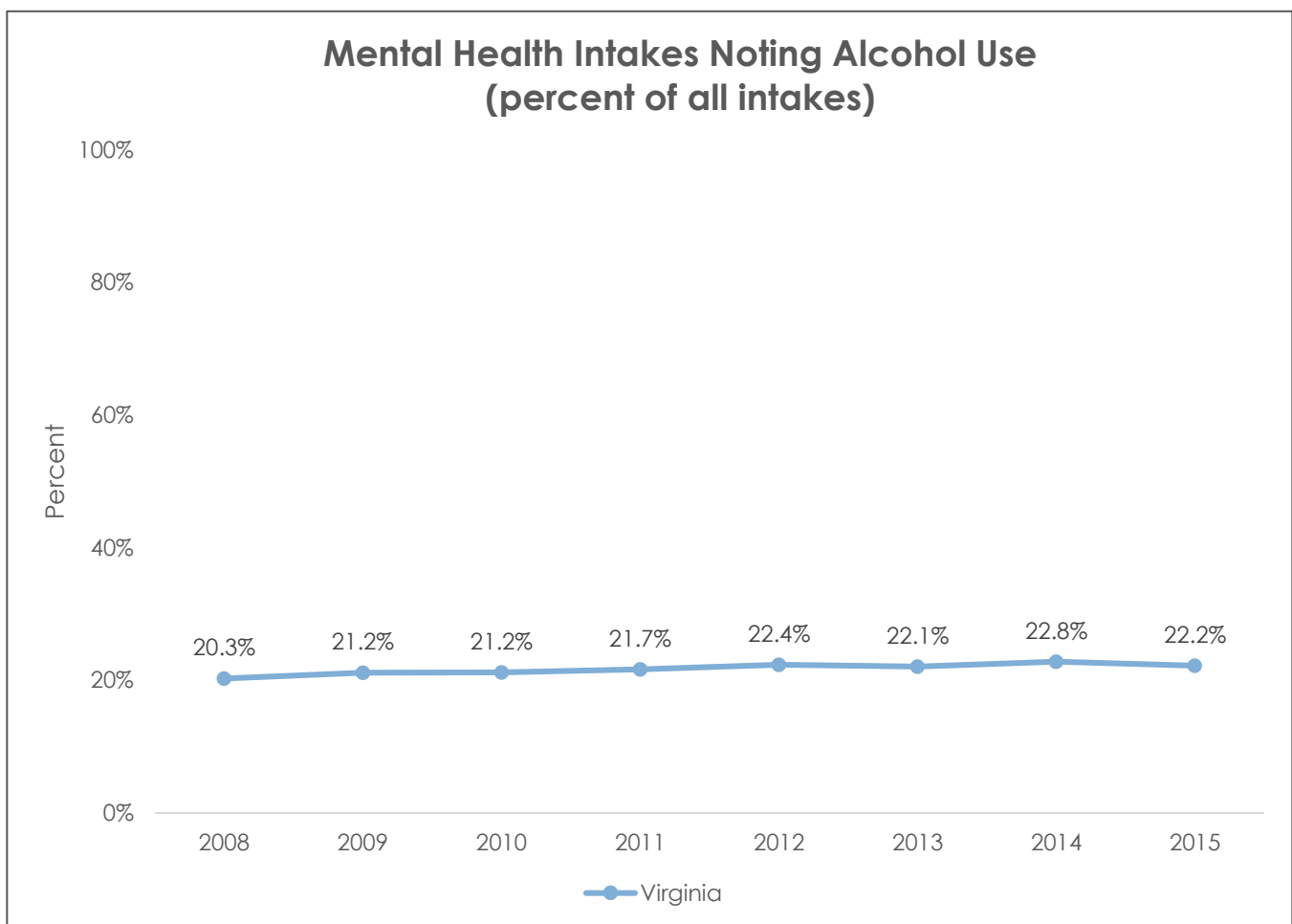
Find more information about this indicator, including demographic trends, on the Virginia Social Indicator Dashboard under the **Virginia Youth Survey – High School (VDH)** tab.

Data Source: Community Consumer Submission 3

Mental Health Intakes Noting Alcohol Use

Indicator Description: Mental health intakes noting alcohol use refers to the percentage of people reporting alcohol use at the time of entry into direct or contracted mental health services from CSBs.

The percent of mental health intakes that noted alcohol use has remained mostly consistent from 2008 to 2015.



Find more information about this indicator, including demographic trends, on the Virginia Social Indicator Dashboard under the **Mental Health (DBHDS)** tab.

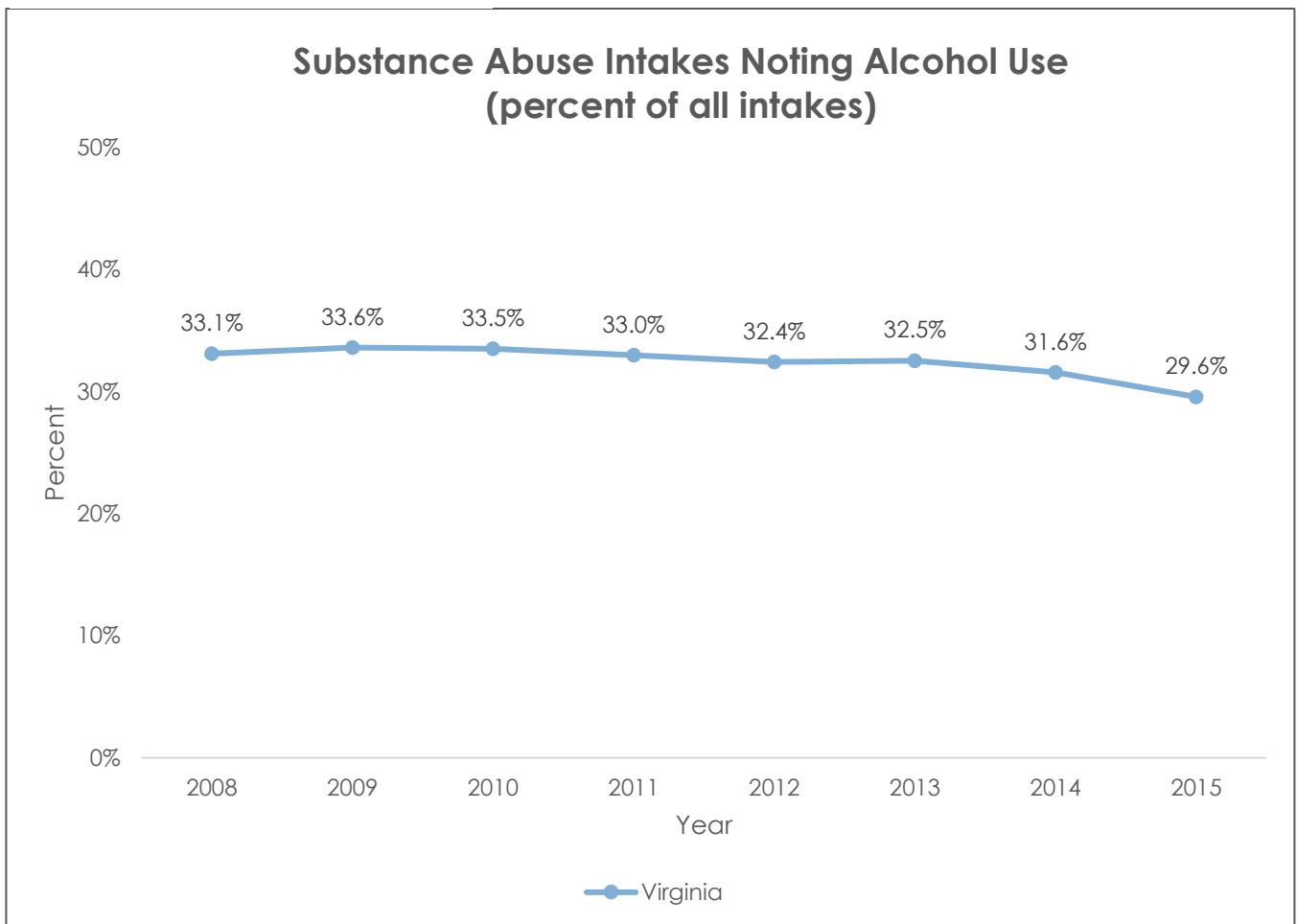
Data Source: Community Consumer Submission 3

Substance Abuse Intakes Noting Alcohol Use

Indicator Description: Substance abuse intakes noting alcohol use refers to the percentage of people who report alcohol use at time of entry into direct or contracted substance abuse services from CSBs.

Almost 1/3 of people receiving substance abuse services note alcohol use.

NOTE: Y-AXIS MAX VALUE IS 50%



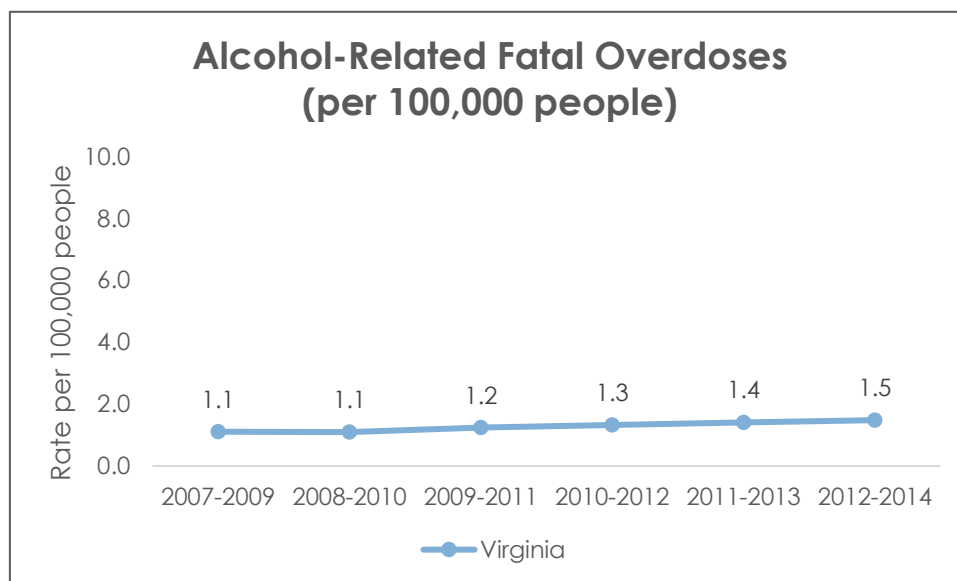
Find more information about this indicator, including demographic trends, on the Virginia Social Indicator Dashboard under the **Behavioral Health Services (DBHDS)** tab.

Data Source: Virginia Medical Examiner Database System

Alcohol-Related Fatal Overdoses

Indicator Description: Number of people whose primary cause of death involved a >0.08% blood alcohol content (BAC).

The statewide rate of alcohol-related fatal overdoses has remained consistent.



Alcohol Overdose Death Demographics, 2012-2014

	2012-2014 (% overdose cases)	2012-2014 (% state population)
Gender		
Male	76.1%	49.1%
Female	23.7%	50.9%
Age		
0-12	0.0%	16.5%
13-17	0.0%	6.5%
18-20	2.0%	4.3%
21-24	5.2%	5.8%
25-34	21.8%	13.8%
35-44	26.3%	13.8%
45-54	32.8%	14.8%
55-64	10.8%	12.0%
65+	~1%	12.5%
Race		
White	79.3%	71.4%
Black	14.2%	19.7%
Asian/Pac Island	0.4%	5.6%
Two or more	4.8%	2.5%

In 2014 there were 133 alcohol related overdose deaths in Virginia; White males between the ages of 45-54 are over represented in alcohol-related overdose cases.

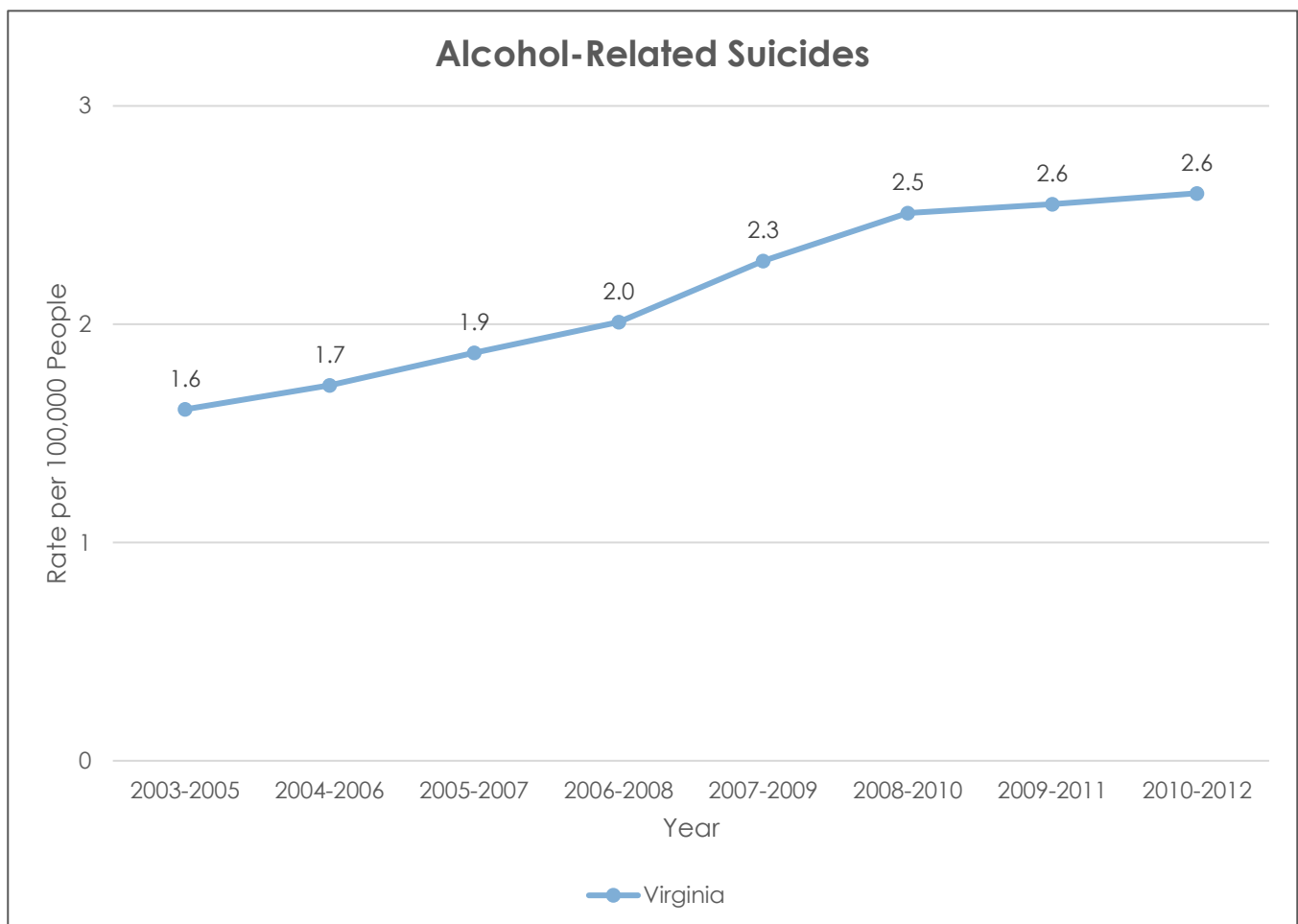
Find more information about this indicator, including demographic trends, on the Virginia Social Indicator Dashboard under the **Overdoses (OCME)** tab.

Data Source: Office of the Chief Medical Examiner

Alcohol-Related Suicide

Indicator Description: Number of people who died by suicide between the years of 2003-2012 where an alcohol problem was present. Data include suicide deaths due to drowning, fall, firearm, hanging, poisoning, sharp instrument, and other.

The rate of suicides among individuals with an alcohol problem in Virginia has increased from 1.6 per 100,000 people to 2.6 per 100,000 people over the past ten years.



Find more information about this indicator, including demographic trends, on the Virginia Social Indicator Dashboard under the **Suicides (OCME)** tab

Appendix A. Data Sources

State Data Resources

Community Consumer Submission 3 (CCS3): Developed by the Department of Behavioral Health and Developmental Services (DBHDS) in collaboration with the Data Management Committee of the Virginia Association of Community Services Boards. CCS3 provides data for comparisons and trends of the numbers and characteristics of individuals receiving direct and contracted mental health, developmental, and substance abuse services from CSBs.

Office of the Chief Medical Examiner (OCME): Data is courtesy of the National Virginia Violent Death Reporting System (NVDRS) through the Virginia Department of Health. The NVDRS is a violent death surveillance system that gathers information on six types of violent deaths – homicides, suicides, accidental firearm deaths, legal interventions, death due to acts of terrorism, and undetermined deaths likely related to violence. This data is collected using a variety of death investigation sources such as forensic pathology, law enforcement, forensic science, and vital records.

Pregnancy Risk Assessment Monitoring System (PRAMS): PRAMS is an ongoing state-specific, population-based surveillance system that provides data about pregnancy and the first few months after birth. Annually approximately 1,200 Virginia resident women with a recent live birth are randomly selected to participate in a survey designed to identify groups of women and infants with elevated risk for health problems, to monitor changes in health status, and to measure progress towards goals in improving the health of mothers and infants. Virginia PRAMS is a collaboration between the Virginia Department of Health and the Centers for Disease Control and Prevention (CDC).

Virginia Youth Survey (VYS): The Young Adult Survey was funded by the Centers for Disease Control and Prevention (CDC) and collaboratively developed by the Department of Health, Virginia Foundation for Healthy Youth, and Department of Education. This survey collects information from middle and high school youth about attitudes, perceptions and health risk behaviors that lead to death, disability, and social problems among youth in Virginia. It is administered every odd year in randomly selected Virginia public schools.

Virginia Medical Examiner Database System (VMEDS): Drug mortality data are courtesy of the Virginia Medical Examiner Database System (VMEDS). VMEDS is an internal agency database which contains detailed information on all deaths reported to the Office of the Chief Medical Examiner (OCME), regardless of whether the OCME accepted the case or not. Data includes accepted cases of either full autopsy or external exams, and accidental and undetermined fatal drug overdoses. Due to the nature of law enforcement and OCME death investigation, all deaths are based upon locality of occurrence and not residential status of the decedent.

National Data Resources

Youth Risk Behavioral Surveillance Survey (YRBSS) – A national school-based survey conducted by the CDC in collaboration with other local surveys through state, territorial and tribal governments, as well as local education and health agencies. The YRBSS monitors six types of health-risk behaviors that contribute to the leading causes of death and disability among youth and young adults: behaviors that contribute to unintentional injuries and violence, sexual behaviors related to unintended pregnancy and sexually transmitted infections, alcohol and other drug use, tobacco use, unhealthy dietary behaviors, and inadequate physical activity. This survey is used to determine the prevalence of health behaviors, track health behavior trends, and produce comparable data for monitoring progress towards achieving the Healthy People objectives.

Behavioral Risk Factor Surveillance System (BRFSS) – The nation's premier system of health-related telephone surveys that collect state data about U.S. residents regarding their health-related risk behaviors, chronic health conditions, and use of preventative services. This survey is primarily used to target and build health promotion activities across the United States.

ⁱ **U.S. Department of Health and Human Services.** [The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking](#). Rockville, MD: U.S. Department of Health and Human Services; 2007.

ⁱⁱ **Center for Behavioral Health Statistics and Quality.** [2015 National Survey on Drug Use and Health: Detailed Tables](#). Substance Abuse and Mental Health Services Administration, Rockville, MD; 2016.

ⁱⁱⁱ **Mossakowski, K. N.** (2008). Is the duration of poverty and unemployment a risk factor for heavy drinking? *Social Science & Medicine*, 67(6), 947-955. doi:10.1016/j.socscimed.2008.05.019

^{iv} **National Center for Statistics and Analysis.** *2014 Crash Data Key Findings (Traffic Safety Facts Crash Stats*. Report No. DOT HS 812 219). Washington, DC: National Highway Traffic Safety Administration, 2015

^v **Hingson, R.; Heeren, T.; Winter, M.;** et al. Magnitude of alcohol-related mortality and morbidity among U.S. college students ages 18–24: Changes from 1998 to 2001. *Annual Review of Public Health* 26:259–279, 2005.

^{vi} **Substance Abuse and Mental Health Services Administration (SAMHSA).** 2015 National Survey on Drug Use and Health (NSDUH). Table 2.19B—Alcohol Use in Lifetime, Past Year, and Past Month, by Detailed Age Category: Percentages, 2014 and 2015.

^{vii} **Sacks, J.J.; Gonzales, K.R.; Bouchery, E.E.;** et al. 2010 national and state costs of excessive alcohol consumption. *American Journal of Preventive Medicine* 49(5):e73–e79, 2015.

^{viii} **Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).** See American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th edition). Washington, DC.

^{ix} **Anda, R. F., Whitfield, C. L., Felitti, V. J., Chapman, D., Edwards, V. J., Dube, S. R., & Williamson, D. F.** (2002). Adverse childhood experiences, alcoholic parents, and later risk of alcoholism and depression. *Psychiatric Services*, 53(8), 1001-1009.

^x **Substance Abuse and Mental Health Services Administration.** (2004). Children of alcoholics: A guide to community action. Retrieved from <http://store.samhsa.gov/shin/content/MS939/MS939.pdf>

^{xi} **Child Welfare Information Gateway**. (2017.) Child maltreatment 2015: Summary of key findings. Washington, DC: U.S. Department of Health and Human Services, Children's Bureau.

<https://www.childwelfare.gov/pubPDFs/canstats.pdf>

^{xii} **Heise L, Garcia-Moreno C**. 2002. Violence by intimate partners. In: Krug E, Dahlberg LL, Mercy JA, et al., editors. World report on violence and health. Geneva (Switzerland): World Health Organization. p. 87-121.

^{xiii} **Tiffany Julian and Robert Kominski**, " Education and Synthetic Work-Life Earnings Estimates," Table 2-B: Median Synthetic Work-Life Earnings by Education, Race/Ethnicity, and Gender, All Workers, U.S. Census Bureau, July 2011. www.census.gov/prod/2011pubs/acs-14.pdf

^{xiv} **National Institute on Alcohol Abuse and Alcoholism** (NIAAA). *Alcohol Alert*, No. 67, "Underage Drinking," 2006.