

2016

Maryland Young Adult Survey on Alcohol, 2016

Summary Report



Maryland Young Adult Survey on Alcohol: 2016: SUMMARY REPORT

University of Maryland School of Pharmacy
Behavioral Health Research Team

Fadia T. Shaya, PhD, MPH, Principal Investigator

Nicole Sealfon, MPH
Marianne Gibson, MS
Kimberly Stinchcomb, MPH
Priyanka Gaitonde, MS

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Executive Summary

This report provides a summary of findings from the Maryland Young Adult Survey on Alcohol (MYSA). Alcohol misuse is a growing public health concern across the US with a multitude of negative outcomes. Maryland is no exception; in 2013, 150,000 Marylanders ages 12-20 reported consuming alcohol in the past month and over 1 million ages 12 and over reported binge drinking in the past month (1). Alcohol-related fatalities in Maryland, which includes deaths due to multi-drug use, have risen to up to 270 in 2014 (4). In the 18-25-year-old age group, 83,000 Marylanders reported alcohol dependence or abuse in 2013 (1). In an effort to address underage drinking, binge drinking, and the associated consequences, Maryland launched the Maryland Strategic Prevention Framework 1 (MSPF1) in 24 jurisdictions and MSPF2 in 9 jurisdictions. MSPF is funded by the Department of Health and Mental Hygiene's Behavioral Health Administration (BHA) and implemented in collaboration with University of Maryland's School of Pharmacy (UMSOP).

The MYSA was conducted to provide data for the needs assessment conducted by jurisdictions participating in MSPF2. The objective of this survey was to collect statewide practices, perceptions, and associated behaviors surrounding alcohol use. Over 6,500 Marylanders participated. Key findings include:

- **Alcohol Use:** Almost 90% of respondents reported using alcohol in the past month. Approximately 55% of respondents reported binge drinking and 17.65 report heavy alcohol use in the past month.
- **Drinking and Driving:** The majority of those who reported driving under the influence were in the 21-25 age group.
- **Risky Behaviors/Consequences of Drinking:** In the past 12 months, the most common consequences of drinking reported were blacking out, doing something regretful, or having unprotected sex. The majority of those who reported experiencing consequences of drinking or risky behavior also reported binge drinking more than 5 days a month.
- **Poly-Drug Use:** Marijuana is the drug most commonly paired with alcohol consumption. The least common is heroin.

After a brief overview of the alcohol misuse problem in Maryland, this report presents highlights of the MYSA findings. Specifically, we have provided data on alcohol consumption as well as consequences of drinking, risky behaviors, and poly-drug use.

Acknowledgements:

The Maryland Young Adult Survey on Alcohol was designed and conducted by the Behavioral Health Research Team, within the University of Maryland School of Pharmacy's Department of Pharmaceutical Health Research Services (PHSR). Funding was provided by the Maryland Department of Health and Mental Hygiene's Behavioral Health Administration. The Pharmaceutical Research Computing center, also within PHSR, provided data analysis services. We would like to acknowledge the efforts of local prevention coordinators who assisted in the recruitment efforts. We also would like to thank the 6,591 Marylanders who shared their views on alcohol misuse in their communities.

Suggested Citation

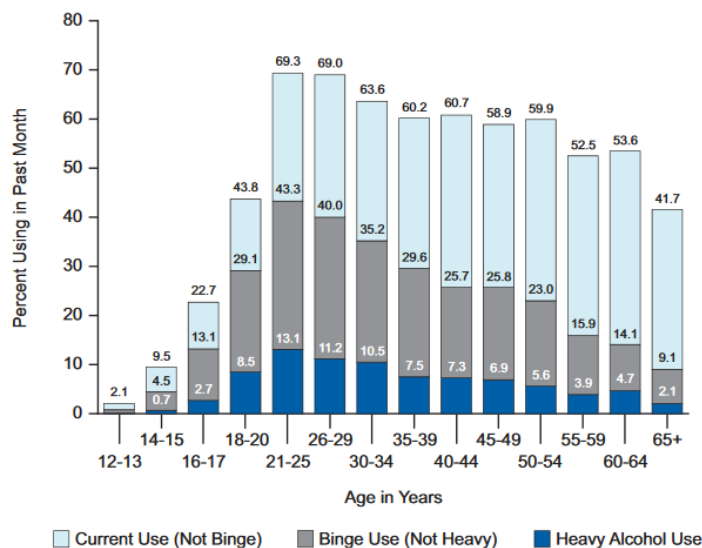
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Background: Alcohol Misuse and its Outcomes

Alcohol is a commonly used drug in the United States. According to the 2013 National Survey on Drug Use and Health (NSDUH), more than half (52.13%) of people aged 12 and over in the United States are current alcohol users, defined as any alcohol use in the past 30 days (1). In Maryland, reported past month alcohol use is even higher, at 58.37% (1). Although alcohol use is legal in adults over age 21, underage use and excessive use (binge drinking and heavy alcohol use) have many serious public health implications.

In 2013 the rate of past month underage alcohol use (ages 12-20) in the United States was 23.52%, slightly higher than the rate in Maryland, 22.89% (1). Nationally in 2013, past month alcohol use in young adults aged 18-20 and 21-25 was 43.8% and 69.3% respectively (3).

The National Institute on Alcohol Abuse and Alcoholism defines binge alcohol use as “a pattern of drinking that brings blood alcohol concentration levels to 0.08 g/dL,” which typically occurs after about four drinks for women and five drinks for men over a 2-hour time span (2). According to the 2013 NSDUH, nationally 22.92% of



Source: Results from the 2013 National Survey on Drug Use and Health: Summary of National Findings, NSDUH (9)

Figure 1: Current, Binge, and Heavy Alcohol Use among Persons Aged 12 or Older, by Age: 2013

Table 1: Percent Alcohol Use in the United States and Maryland in 2013

	Maryland	United States
Past Month Alcohol Use (ages 12+)	58.37	52.13
Past month Binge Alcohol Use (ages 12+)	23.09	22.92
Past Month Underage Alcohol Use (ages 12-20)	22.89	23.52
Past Month Binge Alcohol Use (ages 18-25)	38.70	39.38

Source: Data from the 2013 NSDUH (1)

people aged 12 or older were past month binge drinkers (1,9). Within that group, 38.70% of young adults age 18-25 reported binge drinking (1). The rates in Maryland in 2013 were slightly higher than national rates with 23.09% of those ages 12 or older and 39.38% of those ages 18-25 reporting current binge drinking (1). SAMSHA defines heavy alcohol use as drinking five or more drinks during the same occasion on 5 or more days in the past 30 days (7). In 2013, 6.3% of the U.S. population age 12 or older reported heavy drinking (13.1%) occurs in 21-25 year olds (8).

Alcohol misuse is associated with numerous personal, social, and economic consequences. The number of alcohol related fatalities (including fatalities as a result of polysubstance

use) in Maryland increased 69% from 2010 (160 deaths) to 2014 (270 deaths), and 13% from

2013 (238 deaths) to 2014 (270 deaths) (4). In 2014, alcohol-impaired driving fatalities accounted for 31% of all driving fatalities in the United States (5). Teen drivers are 3 times more likely than experienced drivers to be in a fatal crash, yet nearly 1 million high school teens drank alcohol and drove in 2011 (12). Underage drinking also increases the risk of academic failure, abuse of other drugs, changes in brain development, sexual assault, and suicide (10,11). Results from the 2013 NSDUH show that adults who had their first drink at age 14 or earlier were more likely to be classified with alcohol dependence or abuse than those who had their first drink at age 21 or older (14.8 vs 2.3 percent) (8).

Binge drinking is strongly predictive of alcohol-related harm, even more so than frequency of drinking (6). Those who binge drink are 14 times more likely to report drinking and driving than non-binge drinkers (13). Binge drinking is also associated with numerous health problems including but not limited to alcohol poisoning, sexually transmitted disease, unintended pregnancy, cardiovascular disease, liver disease, and neurological damage (14,15). In the 18-25 age group, 13.11% experienced past year alcohol dependence or abuse, which is more than double other age groups (1). That same age group has the lowest perception of great risk of drinking five or more drinks once or twice a week at 35.13% (1).

Beyond the health implications, drinking is also associated with financial consequences. In 2010, excessive drinking cost the U.S. approximately \$249 billion from losses in productivity, health care, crime, and other expenses (9). Despite the consequences, only 7.2% of persons aged 12 or older with alcohol dependence or abuse in Maryland from 2008-2012 received treatment (16). Although trends of underage and binge drinking are decreasing, the high prevalence and associated consequences make ongoing prevention interventions a necessity.

Maryland's Response

In order to address underage drinking and binge drinking in Maryland, the Behavioral Health Administration (BHA) received Partnership for Success funding, referred to hereafter as MSPF2, from the Substance Abuse and Mental Health Services Administration (SAMHSA). MSPF2 applies SAMHSA's Strategic Prevention Framework (SPF), which is a data driven approach to identify and address priorities for substance abuse prevention. Specific indicators of reduction of alcohol misuse include a reduction in the number of youth age 12-20 reporting past month alcohol use and the number of young persons, ages 18-25 reporting past month binge drinking. Noting a gap in statewide data related to alcohol use among young adults, the Behavioral Health Research Team (BHRT), housed within the Department of Pharmaceutical Health Services Research (PHSR) at the University of Maryland School of Pharmacy administered the Maryland Young Adult Survey on Alcohol (MYSA). MSPF jurisdictions used data collected from the MYSA in their needs assessment process in order to help identify their community's needs and capacity in addressing the outlined priorities.

Survey Planning and Implementation

MYSA is a 39-item web-based survey created to assess the drinking behaviors and attitudes of young adults in Maryland. MYSA included questions on alcohol consumption, availability, perception of risk, attitudes and behavior and consequences of underage drinking and binge drinking. Survey questions were derived from previously administered surveys for similar target populations, including the Maryland College Alcohol Survey 2013, Youth Risk Behavior Survey, National College Health Assessment II 2011, Vermont Young Adult Survey 2014, National Survey on Drug Use and Health 2012 and the Core Alcohol and Drug Survey 2013. A list of survey questions along with the source of the question is located in Appendix 1.

The survey targeted 18-25 year olds in order to capture data on a population with high consumption rates and low perception of risk. MYSA also captured jurisdiction level data so that the jurisdictions participating in MSPF2 were able to identify their specific needs and streamline prevention resources accordingly to have the most impact on the identified priorities.

The survey was deployed over five weeks in March and April of 2016. Participants were required to be (1) at least 18 years of age up to 25 years of age and (2) a resident of Maryland. Web-based methods were deemed necessary and appropriate due to their



Figure 2: MYSA PDF advertisement

various advantages in reaching a statewide audience. When compared to traditional survey recruitment and administration methods, online tools have greater reach with quick turnover at a fraction of the resources. The primary method of recruitment was via social media outlets including Facebook, Instagram and Twitter. Additional recruitment methods including direct outreach using a QR code card (Figure 2) and the state prevention network. The survey itself was administered through SurveyMonkey, an online survey design and dissemination tool. Social media ads (Figures 3-5) were used to target specific demographic groups as well as geographic areas. In order to enhance recruitment, respondents could participate in weekly drawings to win a \$50 gift card and a final drawing for a \$100 gift card.

Institutional Review Boards at the University of Maryland Baltimore and the Department of Health and Mental Hygiene reviewed and granted this study exempt status.

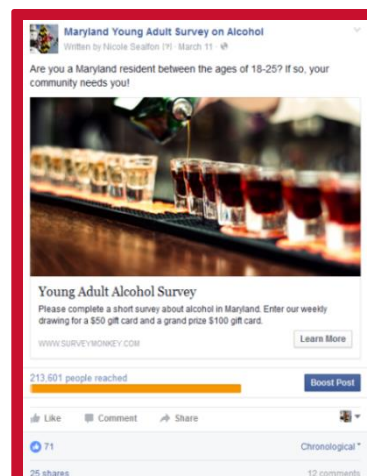


Figure 3: Facebook ad

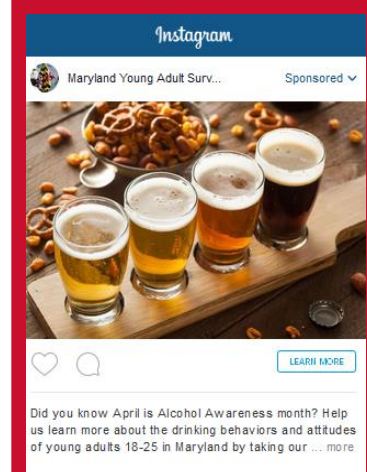


Figure 4: Instagram ad



Figure 5: Twitter ad

Table 2: MYSAs Respondents Demographics

Demographics	Freq. (n)	MYSAs %	State* %
Race			
Non-Hispanic White	3412	74.9%	60.5%
Non-Hispanic Black	422	9.3%	30.1%
Hispanic	297	6.5%	9.0%
Asian	143	3.1%	6.1%
American Indian	130	2.9%	N/A
Pacific Islander	34	0.8%	N/A
Other	116	2.6%	4.8%
Gender			
Female	2586	57%	51.6%
Male	1839	40%	48.4%
Transgender	35	1%	N/A
Age**			
18-20	2990	45.36	N/A
21-25	3298	50.04	N/A

* From US census, 2013

** The sum of percentages is not equal to 100 as responses from participants <18 or >25 were omitted.

Sample Characteristics

At the conclusion of the survey, 6,591 responses were collected, with 6,288 surveys being deemed usable. Participants were able to skip questions at will, so not all questions have representation from the full sample population.

Respondents' demographics are shown in Table 2. The gender breakdown was 57% female and 40% male respectively. The race distribution is also not representative of state demographics with 74.9% white and only 9.3% Non-Hispanic Black respondents in our survey versus 30.1% in the state. We received slightly more respondents from the 21-25 age group (3,298) than 18-20 (2,990). While all 24 jurisdictions were represented, participation varied widely ranging from 16 (0.02%) in Somerset County to 1,016 (15.4%) in Anne Arundel County (Figure 6). Counts of respondents by jurisdiction are included in Appendix II.

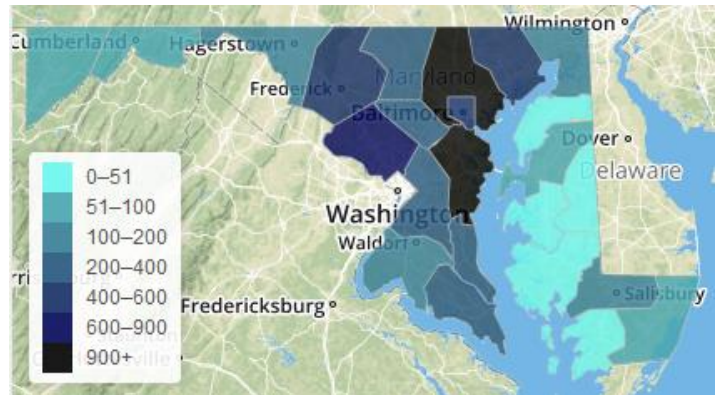


Figure 6: Number of Respondents by County

Highlight of Survey Findings

Past 30-day Alcohol Use

MYSA asked several questions about alcohol use among respondents in the past 30 days, including: 1) How many days was alcohol consumed? 2) How many drinks you usually had when alcohol was consumed? 3) What was the greatest number of drinks had on any occasion of alcohol use?

Binge drinking was assessed by asking the following question: In the past 30 days, how many days did you binge drink? The Centers for Disease Control (CDC) defines binge drinking as consuming ≥ 5 drinks in 2 hours for men and ≥ 4 drinks for women. For the purpose of simplicity of analysis and interpretation of findings, we categorized the magnitude of binge drinking as 0 days, 1 to 4 days and ≥ 5 days.

The overall response to the alcohol use questions and the response categorization by gender and age group is presented in Figures 7 to 9. Approximately 10.4% of the respondents did not have alcohol in the past 30 days. The overall percentage of responders who consumed alcohol on at least 1 day in the past 30 days was high (almost 90%) (Figure 7). The highest percentage of respondents (~35%) had alcohol during 1-4 days in past 30 days. Among individuals who reported drinking alcohol 5-10 days or over 10 days in the past 30 days, a higher percentage belonged to the 21-25 (61.2%, 70.5%) age group as compared to the 18-20 age group (Figure 7). A higher percentage of females reported that they did not have alcohol (66.1%), had it on 1-4 days (63%), or had on 5-10 days (56.1%) during past month (Figure 7). The percentage of males was higher among respondents who had alcohol for > 10 days (54.1%) during the past month. The average number of days that individuals consumed alcohol was higher among the 21-25 age group (8.9 days \pm 7.6) as compared to the 18-20 age group (5.7 days \pm 6.3). The average number of days that males consumed alcohol was higher (9.1 days \pm 8) as compared to females (6.3 days \pm 6.3).

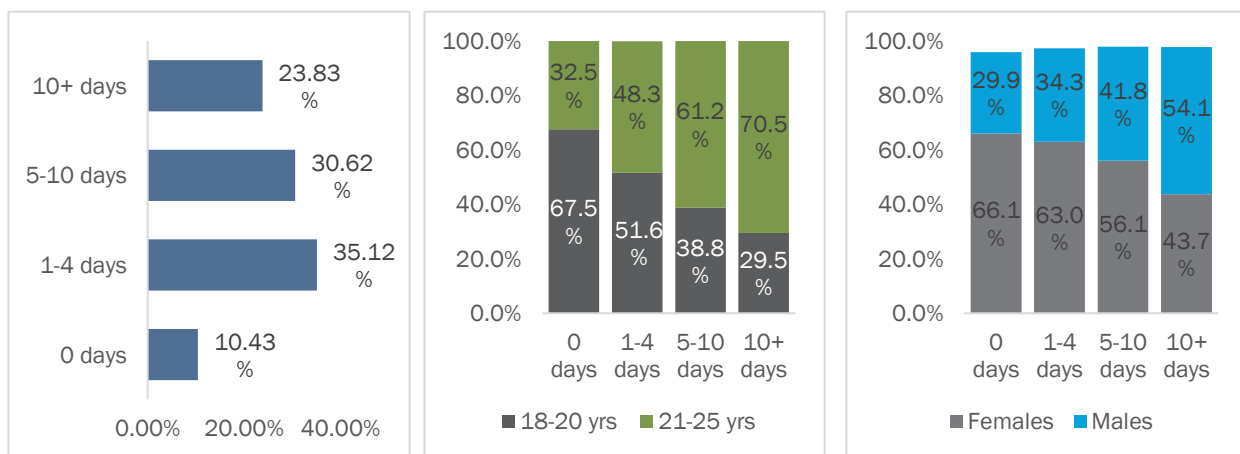


Figure 7: Number of days' alcohol was consumed in the past 30 days (current alcohol use) as reported by MYSA. Overall (left), by age (center), and by gender (right).

The majority of respondents (54.62%) stated that in the past 30 days when they drank, they had 1-4 drinks; while the lowest percentage of respondents did not have a single drink (7.8%) (Figure 8). Almost 38% of respondents reported that when they drank alcohol in the past month, they were usually binge drinking (5 or more drinks in one sitting). Of the individuals who reported drinking 1-4 drinks or > 10 drinks in one sitting, higher percentages were within the 21-25 age group whereas more 18-20 year olds reported 0 drinks or 5-10 drinks at a time in the past month (Figure 8). A higher percentage of females were consuming 1-4 drinks (62.9%) and >10 drinks (51.2%) in the past month (Figure 8). The average number of drinks consumed by individuals belonging to 18-20 age group was higher (2.6 drinks \pm 5.9) as compared to the 21-25 age group (1.88 drinks \pm 6.2) while males had more number of drinks on an average (2.7 drinks \pm 6.6) as compared to females (1.6 drinks \pm 5.3).

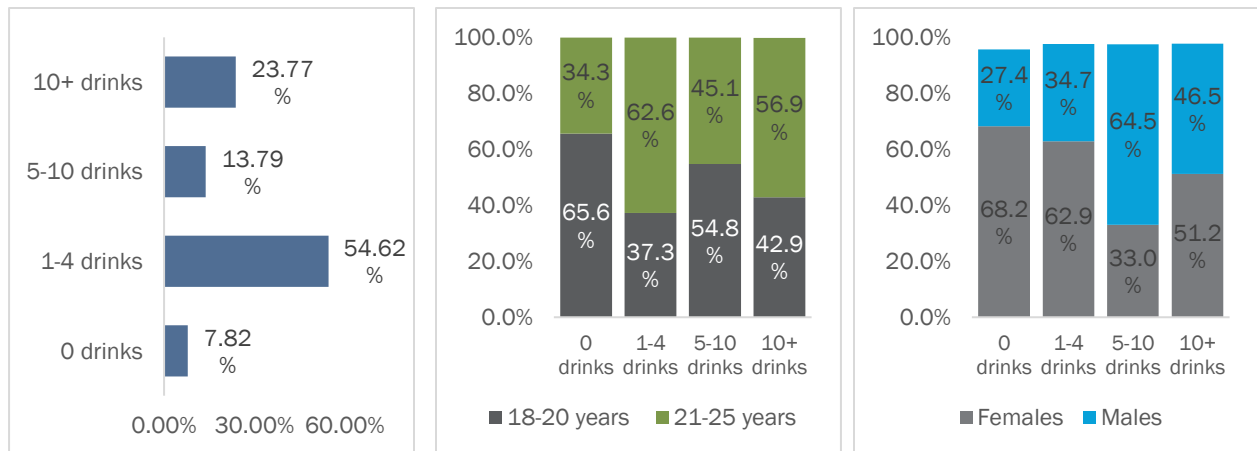


Figure 8: Average number of drinks consumed at one time in the past 30 days. Overall (left), by age (center), and by gender (right).

Overall, a higher percentage of respondents (~45%) did not binge drink and 17.65% of respondents reported heavy drinking, defined as binge drinking 5 or more days in the past month (Figure 9). The distribution of frequency of binge drinking is approximately consistent across 18-20 and 21-25 year olds considering there were more 21-25-year-old survey respondents (Figure 9). A higher percentage of females, binge drank alcohol for 1-4 days (55.2%) while a higher percentage of males (57.3%) binge drank for \geq 5 days (Figure 9).

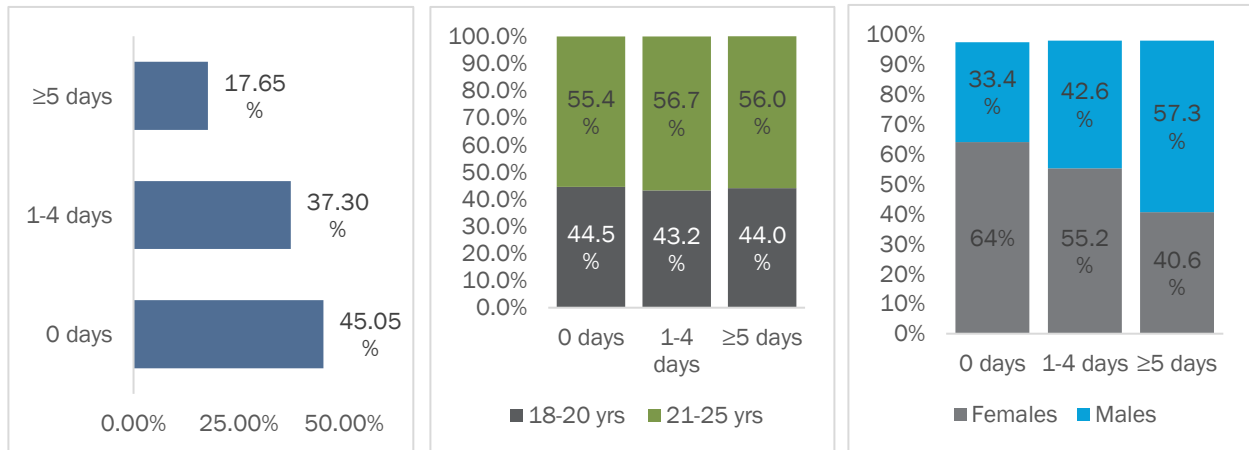


Figure 9: Frequency of Binge Drinking in the past 30 days. Overall (left), by age (center), by gender (right).

Reported past 30-day alcohol use and past 30-day binge drinking were considerably higher in MYSA than NSDUH (Table 3). There are some notable differences between the collection methods of the two surveys, which may help explain the variation in results. The NSDUH collects data through face-to-face interviews at the participant’s household, administered with audio computer-assisted self-interviewing (ACASI) for confidentiality as well as computer-assisted personal interviewing for less sensitive items. The NSDUH includes participants from a representative sample of the population of US residents age 12 or older. As stated above in Survey Implementation, MYSA is conducted using only online tools and targeted at 18-25 year olds. Respondents can answer questions at their convenience, on their schedule and at their own pace. There is no direct contact with another person; therefore, they may be more willing to share sensitive information regarding their personal behaviors. However, because of the sampling methods, the MYSA population sample is less likely to represent the MD population as a whole. In addition, because social media advertisements include images of people with alcoholic beverages, individuals may be more likely to take the survey if they have interest in the topic (current drinkers).

Table 3: Comparison of Reported Alcohol Consumption by Survey (percentage)

Maryland Alcohol Consumption	NSDUH	MYSA
Past 30 day Alcohol Use (age 18-25)	64.85	89.57
Past 30 day Binge Drinking (age 18-25)	39.38	54.95

Risky Behaviors and Consequences of Drinking

Risky behaviors associated with drinking and driving were assessed through two questions: 1) Within the last 12 months, have you driven under the influence of alcohol and 2) In the past 30 days, how often have you driven when you think you may have had too much drink?

Among the total number of respondents who answered the first question (4646), 697 (~15%) reported that they drove under the influence of alcohol in the past 12 months. Among individuals who answered “yes” to driving under the influence, a higher percentage belongs to 21-25 age group (72%) as compared to 18-20 years (Figure 10).

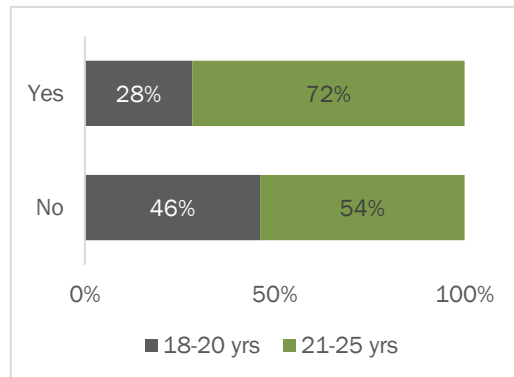


Figure 10: Percent of respondents who reported driving under the influence of alcohol in the past 12 months.

For the second question, “In the past 30 days, how often have you driven when you think you may have had too much drink?”, respondents could select the following options: regularly, fairly often, rarely, just once, never, and don’t know. We converted the responses into a binary response as “never” and combined the others into “at least once”. Overall, the majority of individuals reported that they did not drive after having too much to drink, however 18.3% report that they did at least once (Figure 11). Of those who drove after drinking too much, a higher proportion are among the 21-25 age group (69.6%) compared to 18-20 age group (Figure 11). A higher percentage of females also reported driving after having too much to drink (53.5%) (Figure 11).

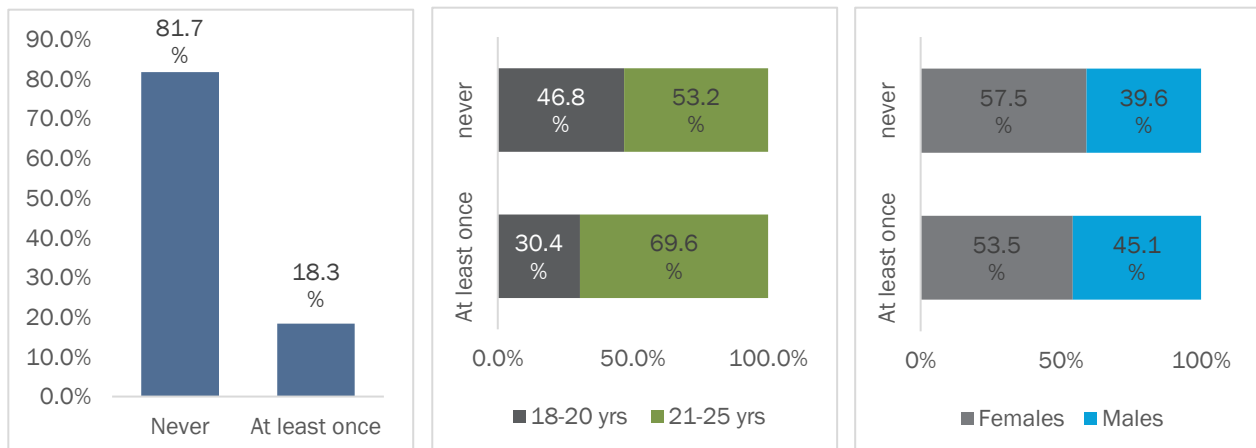


Figure 11: Frequency of driving after having too much to drink* in the past 30 days.

*Too much to drink is not defined or quantified but represents the respondents’ personal opinions

Data suggest that the majority (71.51%) of individuals think it is “somewhat likely” or “very likely” that they will be caught drinking and driving. Less than 5% of respondents reported that they feel is very unlikely they will be caught drinking and driving.

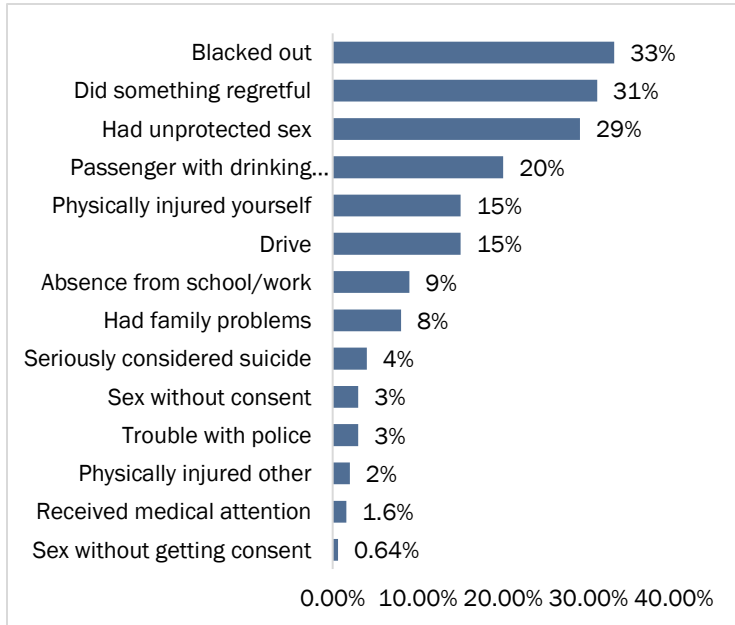


Figure 12: Percent of respondents who experienced consequences of drinking or performed risky behaviors after drinking in the past 12 months.

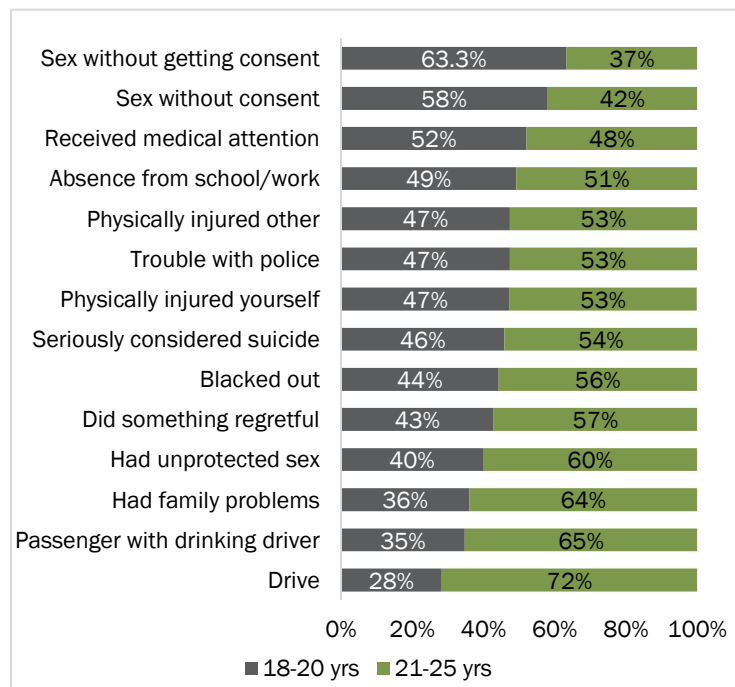


Figure 13: Distribution of risky behaviors and consequences of drinking after alcohol consumption by age group

MYSA asked questions regarding 14 risky behaviors that may occur after alcohol consumption and noted their frequency among the respondents. For each question asking about a risky behavior or consequence respondents could select either “yes”, “no”, “don’t drink”. Figure 12 below shows the frequency of respondents reporting “yes” to a particular identified risky behavior. Among all the direct consequences after drinking among drinkers in the past 12 months, the most frequent occurrence was “blackout” followed by “doing something regretful”. The least reported consequence was having sex without getting consent from the partner.

In Figure 13, the distribution of the occurrence of risky behaviors is presented by age group: 18-20 years and 21-25 years. Overall, the percentage of respondents saying “yes” to the above-mentioned risky behaviors after alcohol consumption is higher among 21-25 age group as compared to 18-20 age group. However, among the following consequences: having sex without consent, having sex without getting consent and receiving medical attention, the percentage distribution is higher among the 18-20 age group compared to 21-25 age group.

Overall, the data suggest that young adults do not recognize the risks of alcohol consumption and binge drinking. When asked if there is a risk of self-harm after binge drinking once or twice a week, approximately 32% of respondents said “don’t know/can’t say”. Alternatively, the majority of respondents (69%) said they agree or strongly agree that drinking alcohol is fun.

In order to assess whether frequency of binge drinking is associated with risky behaviors or consequences of drinking, the distribution of individuals who responded “yes” to a given behavior/consequence with the number of days of binge drinking in the past month (1-4 vs > 5) (Figure 14) was reviewed. Heavy drinkers reported an occurrence of each behavior or consequence more than those who binge drink 1-4 days a month. The risky behaviors most reported among respondents drinking excessively for 5 days and over were problems with family, absence from school/work, having sex without giving or getting consent, and self-injury.

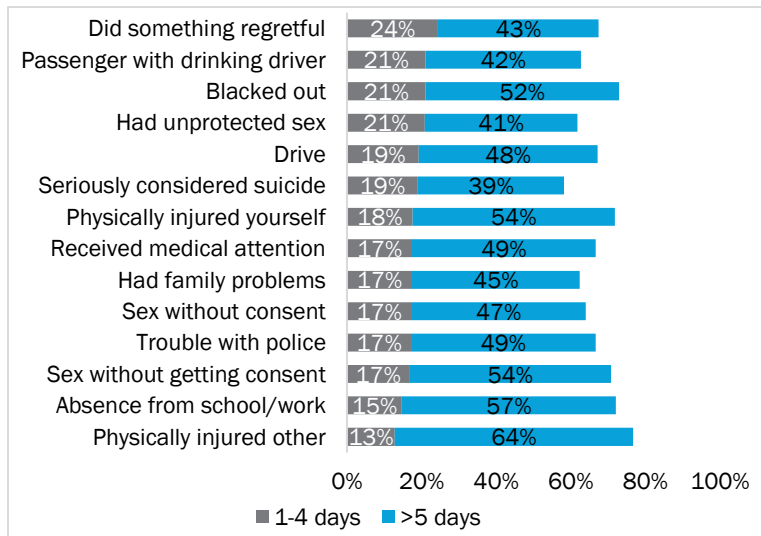


Figure 14: Distribution of past year risky behaviors and consequences of drinking by frequency of binge drinking in the past month.

*The sum of percentages is less than 100 as responses from those

Polysubstance use was measured through the following question, “during the past 30 days, have you used any of these substances while drinking?” Respondents could select “yes” or “no”. Figure 15, shows the distribution of individuals who responded “yes” to concomitant use of these substances with alcohol.

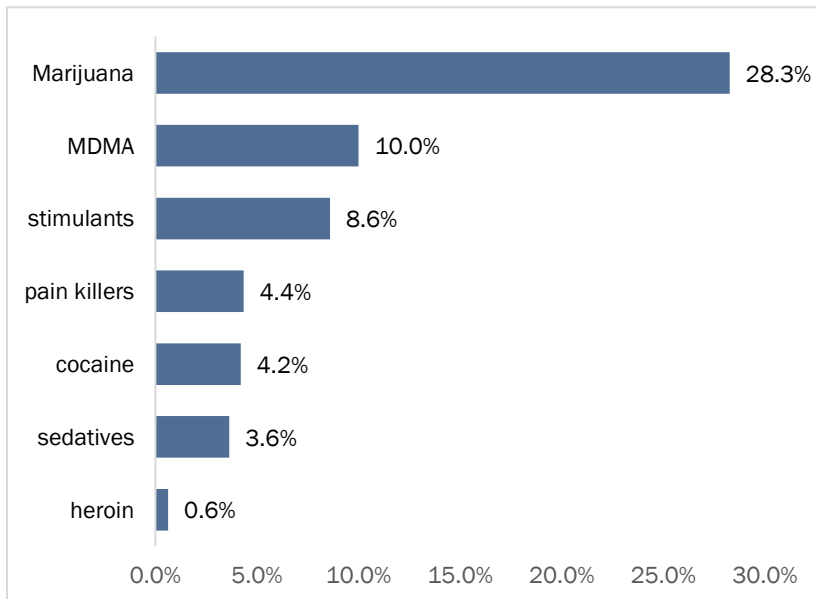


Figure 15: Percentage of reported poly-drug use.

Among respondents consuming alcohol, the substance most used while drinking in the past 30 days was marijuana (28.3%) followed by MDMA (10%). The substance used least with alcohol was heroin. Approximately 15% of respondents reported that there is a great risk of harming themselves when combining alcohol and marijuana. The majority of respondents considered all other poly-drug use a great risk.

Conclusions/Future Plans

The data gathered show that alcohol use and binge drinking among 18-25 year olds in Maryland is high. Although people are experiencing consequences of drinking, they continue to consume alcohol to excess. There is value in focusing on reducing binge drinking and increasing knowledge on the risks associated with heavy drinking practices, as it appears that frequency of binge drinking is a risk factor for serious consequences such as blacking out, unprotected sex, or doing something regretful.

Through MSPF2, nine jurisdictions in Maryland are implementing strategies to reduce underage drinking and binge drinking. These efforts will help address specific intervening variables and contributing factors at the local level with the ultimate goal of reducing rates of underage and binge drinking.

Using web-based tools, a large statewide sample was obtained in a limited timeframe. This method was ideal for this survey because it enabled us to reach the target population and collect responses on a sensitive topic. Although the sample was large, it is not representative of state demographics. The survey may have also produced exaggerated rates of alcohol consumption, as people who are interested in alcohol may have been more likely to take part. Therefore, caution is warranted when interpreting the findings of this survey and generalization to the entire state is not feasible.

MYSA captures local-level data on drinking habits and of a high-risk population. To our knowledge, it is Maryland's first statewide survey to collect data on alcohol consumption and related behaviors in 18-25 year olds both in and out of college. In addition to providing data for MSPF2, MYSA data will be used to fuel future research endeavors. Moving forward, the survey will be conducted bi-annually in order to capture data trends and measure the impact of local level underage drinking and binge drinking prevention efforts.

Appendix

I. Survey Questions and Response Options by Source

	Question	Response	Source
Demographics	Age	A. Under 18(<i>disqualify</i>) B. 18 to 21 C. 21 to 25 years D. Over 25 (<i>disqualify</i>)	
	Gender	A. Male B. Female C. Transgender	
	County of Residence	<i>Counties...</i>	
	Race	<i>Allow multiple</i> White Black/African American Hispanic Asian Other	
	Are you a student?	A. No B. Yes, in college or vocational school, full time C. Yes, in college or vocational school, part-time D. Yes, in high school or a GED program E. Yes, in some other type of school	
	What is your employment status?	A. Employed for wages (full-time) B. Employed for wages (part-time) C. Self-employed D. Not employed and looking for work E. Not employed and not looking for work	
	What is your sexual orientation?	A. Lesbian, gay, or homosexual B. Straight or heterosexual C. Bisexual D. Something Else E. Prefer not to answer	
	Military Status	A. Active Duty B. Veteran C. Civilian: No military service D. No response	
	How did you hear about the survey?	FB Ad WOM Google QR Card Twitter Other	
	(My) Consumption		
Current consumption	During the past 12 months, how often did you have at least one drink of alcohol?	A. Never (skip logic) B. Less than monthly C. Monthly D. Weekly E. Daily	MD-CAS
	During the past 30 days, on how many days did you have at least one drink of alcohol?	Indicate a number between 0 and 30	MD-CAS
	During the past month, on the days that you drank, how many drinks did you usually have?	Indicate a number	MD-CAS

	During the past 30 days, what is the greatest number of drinks that you had on any occasion?	Indicate a number	MD-CAS
Binge	In the past 30 days, on how many days did you have 5 or more drinks (male) or 4 or more drinks (female) of alcohol in a row, that is, within a couple of hours?	Indicate a number between 0 and 30	Youth Risk Behavior Survey (YRBS) Spring 2013, Maryland (High school)
Drinking and other substances	During the past 30 days, have you used any of these substances while drinking? Select all that apply	<input type="checkbox"/> Yes/No (skip logic) <input type="checkbox"/> Marijuana <input type="checkbox"/> Pain Killers (e.g., OxyContin, Vicodin, Codeine) <input type="checkbox"/> Sedatives (e.g., Xanax, Valium) <input type="checkbox"/> Stimulants (e.g., Ritalin, Adderall) <input type="checkbox"/> Cocaine <input type="checkbox"/> Heroin <input type="checkbox"/> MDMA (molly or ecstasy) <input type="checkbox"/> Other	
Type of alcohol	During the past 30 days, which of the following did you drink? Remember to include any type of alcohol that was part of mixed alcoholic beverage you drank. Please check all that apply.	A. Beer B. Flavored alcoholic beverages (e.g., Smirnoff Ice, Mike's Hard Lemonade, Bartles & Jaymes) C. Wine/Champagne D. Grain Alcohol (e.g., Everclear, Gemclear) E. Liquor such as vodka, rum, tequila, bourbon, whiskey or scotch F. Other, please specify	MD-CAS
Lifetime consumption	How old were you when you had your first drink of alcohol other than a few sips?	A. 8 years old or younger B. 9 or 10 years old C. 11 or 12 years old D. 13 or 14 years old E. 15 or 16 years old F. 17 or 18 years old G. 19 or 20 years old H. 21 years old or older	Youth Risk Behavior Survey (YRBS) Spring 2013, Maryland (High school) MD-CAS
Current consumption	Consequences		
Binge	Within the last 12 months, have you experienced any of the following when drinking alcohol? (Mark one for each line): a. Did something you later regretted b. "Blacked out" or forgot where you were or what you did -Had family problems -Been absent from school or work -Been a passenger in a vehicle in which the driver was under the influence of alcohol c. Got in trouble with the police d. Had sex with someone without giving your consent e. Had sex with someone without	<i>For each subtitle provide options:</i> A. Yes B. No C. Don't drink D. N/A	National College Health Assessment II (ACHA-NCHA) - 2011

	<p>getting their consent</p> <p>f. Had unprotected sex</p> <p>g. Physically injured yourself</p> <p>h. Physically injured another person</p> <p>i. Received medical attention (EMT, hospitalized)</p> <p>j. Seriously considered suicide</p>		
	<p>During the last 12 months, when you partied/socialized, how often did you:</p> <p>Alternate non-alcoholic with alcoholic beverages</p> <p>Avoid drinking games</p> <p>Choose not to drink alcohol</p> <p>Determine, in advance, not to exceed a set number of drinks</p> <p>Eat before and/or during drinking</p> <p>Have a friend let you know when you had enough</p> <p>Keep track of how many drinks you were having</p> <p>Pace your drink to 1 or fewer per hour</p> <p>Stick with only one kind of alcohol when drinking</p>	<p>For each option:</p> <p>A. N/A, don't drink</p> <p>B. Never</p> <p>C. Rarely</p> <p>D. Sometimes</p> <p>E. Most of the time</p> <p>F. Always</p>	<p>National College Health Assessment II (ACHA-NCHA) - 2011</p>
Sources of Alcohol/Ease of access			
	<p>During the past 30 days, how did you usually get the alcohol you drank? Please check all that apply.</p>	<p><input type="checkbox"/> I bought it at a store such as a liquor store, convenience store, supermarket, discount store or gas station</p> <p><input type="checkbox"/> I bought it at a restaurant, bar or club</p> <p><input type="checkbox"/> I bought it at public event such as a sporting event or concert</p> <p><input type="checkbox"/> I gave someone else money to buy it for me</p> <p><input type="checkbox"/> Someone gave it to me</p> <p><input type="checkbox"/> I took it from a store or family member</p> <p><input type="checkbox"/> I got it some other way</p>	<p>MD-CAS</p>
	<p>The most recent time you purchased alcohol in a store, what form of ID did you show to the clerk?</p>	<p>A. I was not asked to show any ID</p> <p>B. Someone else's real ID</p> <p>C. A fake or altered ID</p> <p>D. My own real ID</p> <p>E. Other</p> <p>F. Don't remember</p>	<p>Vermont YAS 2014</p>
	<p>The most recent time you purchased alcohol at a restaurant or bar, what form of ID did you show to the server?</p>	<p>A. I was not asked to show any ID</p> <p>B. Someone else's real ID</p> <p>C. A fake or altered ID</p> <p>D. My own real ID</p> <p>E. Other</p> <p>F. Don't remember</p>	<p>Vermont YAS 2014</p>
Perception of Risk			
	<p>How much do people risk harming themselves physically and in other ways when they have five or more drinks of an alcoholic beverage <u>once or twice a week</u>?</p>	<p>A. No risk</p> <p>B. Slight risk</p> <p>C. Moderate risk</p> <p>D. Great risk</p> <p>E. "Don't know/can't say"</p>	<p>National Survey on Drug Use and Health (NSDUH) - 2012</p>

	In your county, what is the likelihood of: a. getting caught by the police if you were drinking and driving	A. Very likely B. Somewhat likely C. Somewhat unlikely D. Very unlikely E. I don't know	Adapted from below questions
	How much do people risk harming themselves physically and in other ways when they drink alcohol in combination with: Marijuana Pain Killers Sedatives Stimulants Heroin	A. No risk B. Slight risk C. Moderate risk D. Great risk E. "Don't know/can't say"	
	Perceptions about alcohol consumption	<i>("my attitude is...")</i>	
	Rate the degree to which you agree or disagree with the following statements. Drinking alcohol: a. ... is fun b. ... helps people make friends c. ... makes it easier to deal with stress	A. Strongly agree B. Agree C. Neutral D. Disagree E. Strongly disagree	Maryland Collaborative, 2013 + Core alcohol and drug survey 2013 (below)
	Perception of Peer Disapproval /Injunctive Norms	<i>(my friends' attitudes are...)</i>	
	With injunctive and descriptive norms, self-other differences (SODs) are greater if: (1) asked about a distant, vague, unfamiliar reference group (eg. "most people your age", vs "close friends"), (2) vaguely stated questions: (ex. "How often do your friends drink", vs "how many times did your friends drink in the last week". Since descriptive norms rely recall, it's best to ask questions in a way that enhances accurate recall.	http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2431131/	
	Please specify how strongly you agree or disagree with each of the following statements. Most of my close friends expect me to drink alcohol Most people in my school expect me to drink alcohol Most people my age expect me to drink alcohol	A. Strongly disagree B. Disagree C. Neither agree or disagree D. Agree E. Strongly Agree	MD-CAS
	Access to Treatment		
	Would you know where to go to seek help if you were concerned about your drinking habits?	A. Yes B. No	
	Additional Comments regarding alcohol		
		Open Ended Answer	

II. Maryland Young Adult Survey on Alcohol Results

Respondent Characteristics

County	N	%
Allegany	87	1.3%
Anne Arundel	1016	15.4%
Baltimore	936	14.2%
Baltimore City	421	6.4%
Calvert	227	3.4%
Caroline	44	0.7%
Carroll	313	4.7%
Cecil	168	2.5%
Charles	111	1.7%
Dorchester	27	0.4%
Frederick	424	6.4%
Garrett	73	1.1%
Harford	419	6.4%
Howard	390	5.9%
Kent	26	0.4%
Montgomery	773	11.7%
Prince George's	395	6.0%
Queen Anne's	72	1.1%
Somerset	16	0.2%
St. Mary's	203	3.1%
Talbot	38	0.6%
Washington	175	2.7%
Wicomico	162	2.5%
Worcester	75	1.1%
Total	6591	100%

Gender	N	%
Female	2586	57%
Male	1839	40%
Transgender	35	1%
Total	4545	100%
Age group	N	%
<18	215	3%
18-20	2990	45%
21-25	3298	50%
>25	88	1%
Total	6591	100%

Race	N	%
non-hispanic white	3412	74.9%
non-hispanic black	422	9.3%
hispanic	297	6.5%
asian	143	3.1%
american indian	130	2.9%
pacific islander	34	0.8%
other	116	2.6%
Total	4554	100%
Sexual orientation	N	%
Straight/heterosexual	3890	85.3%
Lesbian/gay	162	3.6%
Bisexual	330	7.2%
Other	66	1.5%
Prefer not to answer	112	2.5%
Total	4560	100%
Are you a student?	N	%
No	1674	36.7%
Yes in college or vocational school, fulltime	1954	42.8%
Yes in college or vocational school, part-time	536	11.8%
Yes, in high school/GED	296	6.5%
Yes, in some other type of school	102	2.2%
Total	4562	100%
Employment status	N	%
Not employed, not looking for work	459	10.1%
Employed, full time	1851	40.6%
Employed, part time	1727	37.9%
Not employed but looking	519	11.4%
Total	4556	100%
Military service	N	%
Never served	4440	97.5%
On active duty for training reserves	28	0.6%
Now on active duty	45	1.0%
On active duty in past not now	40	0.9%
Total	4553	100%

Education	N	%
Less than high school	222	4.9%
Completed High school	1108	24.3%
Finished high school but not college	1859	40.8%
Associate degree	390	8.6%
Bachelor degree	871	19.1%
Graduate degree	102	2.2%
Total	4552	100%
How did you hear about the survey?	N	%
Facebook Advertisement	3952	62.85%
Instagram	1196	19.02%
Other (please specify)	452	7.19%
Postcard with QR code	64	1.02%
Shared on Facebook Page	529	8.41%
Twitter	95	1.51%
Total	6288	100%

Questions about alcohol consumption

Age had the first drink of alcohol	N	%
11 or 12 years old	295	4.8%
13 or 14 years old	1188	19.32%
15 or 16 years old	1983	32.25%
17 or 18 years old	1644	26.74%
19 or 20 years old	418	6.8%
21 years old or older	199	3.24%
8 years old or younger	77	1.25%
9 or 10 years old	70	1.14%
I have never had a drink	274	4.46%
Total	6148	100%

Past 12 months, how often that they have at least one drink of alcohol?	N	%
Daily	352	5.72%
Less than monthly	1214	19.74%
Monthly	1332	21.66%
Never	468	7.61%
Weekly	2784	45.27%
Total	6150	100%

Last 30 days, how many days that you have at least 1 drink	N	%
0	533	10.43%
1 to 4	1794	35.11%
5 to 10	1565	30.63%
10+	1218	23.84%
Total	5110	100%
During the past 30 days, on the days you drank, how many drinks did you usually have?	N	%
0	387	8.95%
1 to 4	2702	62.46%
5 to 10	1064	24.6%
10+	173	4%
Total	4326	100%
In the past 30 days, how many days did you binge drink?	N	%
0	2288	45.04%
1 to 4	1895	37.3%
5 AND MORE	897	17.66%
Total	5080	100%
Binge drinking	N	%
NO	1820	35.62%
YES	3289	64.38%
Total	5109	100%
During the past 30 days, have you used marijuana while drinking?	N	%
NO	3562	70.45%
YES	1494	29.55%
Total	5056	100%
In the past 30 days, have you used painkillers while drinking?	N	%
NO	4595	95.63%
YES	210	4.37%
Total	4805	100%
In the past 30 days, have you used sedatives while drinking?	N	%
NO	4634	96.32%
YES	177	3.68%
Total	4811	100%
In the past 30 days, have you used stimulants while drinking?	N	%
NO	4402	91.33%
YES	418	8.67%
Total	4820	100%

In the past 30 days, have you used Cocaine while drinking?	N	%
NO	4606	95.8%
YES	202	4.2%
Total	4808	100%
In the past 30 days, have you used Heroin while drinking?	N	%
NO	4719	99.37%
YES	30	0.63%
Total	4749	100%
In the past 30 days, have you used MDMA while drinking.	N	%
NO	4692	98.12%
YES	90	1.88%
Total	4782	100%
Other (please specify)	N	%
Antianxiety	2	1.32%
Antidepressants	6	3.97%
Misclassification	10	6.62%
DMT	1	0.66%
GHB	1	0.66%
LSD	15	9.93%
Multiple	9	5.96%
Mushroom	6	3.97%
Nicotine	21	13.91%
None	74	49.01%
Poppers	1	0.66%
Suboxone	1	0.66%
Unknown	3	1.99%
Vape	1	0.66%
During the past 30 days, did you drink beer?	3397	100%
During the past 30 days, did you drink flavored alcoholic beverages?	1854	100%
During the past 30 days, did you drink Wine/Champagne?	2407	100%
During the past 30 days, did you drink Grain Alcohol?	309	100%
During the past 30 days, did you drink Liquor?	3806	100%
Other alcohol classes		
Misclassification	77	35%
Mixed	32	14.55%
Moonshine	21	9.55%
Not Applicable	3	1.36%
None	87	39.55%

Consequences when consuming alcohol

Within the last 12 months, did something you later regretted	N	%
Don't drink	74	1.56%
N/A	60	1.27%
No	3140	66.24%
Yes	1466	30.93%
Within the last 12 months, did you blacked out" or forgot where you were or what you did	N	%
Don't drink	89	1.88%
N/A	88	1.86%
No	3049	64.32%
Yes	1514	31.94%
Within the last 12 months, did you have Family Problems?	N	%
Don't drink	79	1.67%
N/A	73	1.54%
No	4227	89.27%
Yes	356	7.52%
Within the last 12 months, have you been absent from school or work?	N	%
Don't drink	83	1.75%
N/A	73	1.54%
No	4143	87.59%
Yes	431	9.11%
Within the last 12 months, have you driven under the influence of alcohol	N	%
Don't drink	78	1.65%
N/A	88	1.86%
No	3877	81.91%
Yes	690	14.58%
Within the last 12 months, have you been a passenger in a vehicle in which the driver was under the influence of alcohol	N	%
Don't drink	81	1.71%
N/A	71	1.5%
No	3666	77.41%
Yes	918	19.38%
Within the last 12 months, have you got in trouble with the police	N	%
Don't drink	78	1.65%
N/A	57	1.2%
No	4467	94.34%
Yes	133	2.81%

Within the last 12 months, have you had sex with someone without giving your consent	N	%
Don't drink	74	1.56%
N/A	57	1.2%
No	4445	93.88%
Yes	159	3.36%
Within the last 12 months, have you had sex with someone without getting their consent	N	%
Don't drink	71	1.5%
N/A	59	1.25%
No	4574	96.62%
Yes	30	0.63%
Within the last 12 months, have you had unprotected sex	N	%
Don't drink	71	1.5%
N/A	62	1.31%
No	3226	68.15%
Yes	1375	29.05%
Within the last 12 months, have you physically injured yourself	N	%
Don't drink	71	1.5%
N/A	46	0.97%
No	3891	82.33%
Yes	718	15.19%
Within the last 12 months, have you physically injured another person	N	%
Don't drink	75	1.59%
N/A	53	1.12%
No	4485	94.88%
Yes	114	2.41%
Within the last 12 months, have you received medical attention (EMT, hospitalized)	N	%
Don't drink	76	1.61%
N/A	55	1.16%
No	4531	95.69%
Yes	73	1.54%
Within the last 12 months, have you seriously considered suicide	N	%
Don't drink	76	1.61%
N/A	80	1.69%
No	4384	92.61%
Yes	194	4.1%
In the past 30 days, how often have you driven when you think you may have had too much drink?	N	%
Don't Know	38	0.8%
Fairly Often	80	1.69%
Just once	409	8.63%
Never	3838	81%
Rarely	341	7.2%
Regularly	32	0.68%
Total	4738	100%

During the last 12 months, when you partied/socialized, how often did you alternate non-alcoholic with alcoholic beverages	N	%
Always	278	5.91%
Most of time	546	11.61%
N/A, don't drink	172	3.66%
Never	807	17.16%
Rarely	1194	25.39%
Sometimes	1705	36.26%
Total	4702	100%
During the last 12 months, when you partied/socialized, how often did you avoid drinking games	N	%
Always	377	8.02%
Most of the time	397	8.44%
N/A, don't drink	268	5.7%
Never	1422	30.24%
Rarely	1175	24.98%
Sometimes	1064	22.62%
Total	4703	100%
During the last 12 months, when you partied/socialized, how often did you choose not to drink alcohol	N	%
Always	73	1.57%
Most of the time	425	9.11%
N/A, don't drink	174	3.73%
Never	821	17.6%
Rarely	1293	27.72%
Sometimes	1878	40.27%
Total	4664	100%
During the last 12 months, when you partied/socialized, how often did you determine in advance not to exceed a set number of drink	N	%
Always	402	8.62%
Most of the time	601	12.89%
N/A, don't drink	203	4.35%
Never	1079	23.13%
Rarely	893	19.15%
Sometimes	1486	31.86%
Total	4664	100%

During the last 12 months, when you partied/socialized, how often did you eat before and/or during drinking	N	%
Always	1009	21.49%
Most of the time	1123	23.92%
N/A, don't drink	218	4.64%
Never	134	2.85%
Rarely	429	9.14%
Sometimes	1782	37.96%
Total	4695	100%
During the last 12 months, when you partied/socialized, how often did you have a friend let you know when you had enough	N	%
Always	369	7.85%
Most of the time	393	8.36%
N/A, don't drink	297	6.32%
Never	1629	34.64%
Rarely	931	19.8%
Sometimes	1083	23.03%
Total	4702	100%
During the last 12 months, when you partied/socialized, how often did you keep track of how many drinks you were having	N	%
Always	878	18.66%
Most of the time	696	14.79%
N/A, don't drink	221	4.7%
Never	635	13.49%
Rarely	804	17.08%
Sometimes	1472	31.28%
Total	4706	100%
During the last 12 months, when you partied/socialized, how often did you Pace your drinks to 1 or fewer per hour	N	%
Always	247	5.24%
Most of the time	382	8.11%
N/A, don't drink	230	4.88%
Never	1416	30.04%
Rarely	1203	25.53%
Sometimes	1235	26.2%
Total	4713	100%

During the last 12 months, when you partied/socialized, how often did you stick with only one kind of alcohol when drinking	N	%
Always	321	6.81%
Most of the time	724	15.37%
N/A, don't drink	207	4.39%
Never	774	16.43%
Rarely	1061	22.52%
Sometimes	1624	34.47%

Alcohol availability

Method to buy alcohol in the past 30 days	N	%
During the past 30 days, I bought my alcohol drink at a store such as a liquor store, convenience store, supermarket, discount store or gas station	2700	61.8%
During the past 30 days, I bought my alcohol drink at a restaurant, bar or club	2382	54.52%
During the past 30 days, I bought my alcohol drink at a public event such as a sporting event or concert	613	14.03%
During the past 30 days, I gave someone else money to my alcohol drink for me	1048	24%
During the past 30 days, someone gave the alcohol drink to me?	1863	42.64%
During the past 30 days, I took the alcohol drink from a store or family member	239	5.47%
During the past 30 days, I got my alcohol drink some OTHER way	343	7.85%
Total (multiple responses allowed)	9188	100%
The most recent time you purchased alcohol in a store, what form of ID did you show to the clerk?	N	%
A fake or altered ID	253	5.86%
Don't remember	229	5.3%
I was not asked to show ID	577	13.36%
My own real ID	2309	53.45%
Other	845	19.56%
Someone else's real ID	107	2.48%

The most recent time you purchased alcohol at a restaurant or bar, what form of ID did you show to the server?	N	%
A fake or altered ID	258	5.98%
Don't remember	245	5.68%
I was not asked to show ID	668	15.48%
My own real ID	2262	52.41%
Other	824	19.09%
Someone else's real ID	59	1.37%

Perceptions and attitudes about alcohol

How much do people risk harming themselves physically and in other ways when they have five or more drinks of an alcoholic beverage once or twice a week?	N	%
Don't know/can't decide	404	8.55
Great risk	1513	32.01
Moderate risk	1774	37.54
No risk	192	4.06
Slight risk	843	17.84
How much do people risk harming themselves physically and in other ways when they drink alcohol in combination with Marijuana	N	%
Don't know/can't decide	423	8.98
Great risk	713	15.14
Moderate risk	1029	21.86
No risk	1051	22.32
Slight risk	1492	31.69
How much do people risk harming themselves physically and in other ways when they drink alcohol in combination with Pain Killers (e.g., OxyContin, Vicodin)	N	%
Don't know/can't decide	380	8.08
Great risk	3136	66.71
Moderate risk	881	18.74
No risk	82	1.74
Slight risk	222	4.72
How much do people risk harming themselves physically and in other ways when they drink alcohol in combination with Sedatives (e.g., Xanax, Valium)	N	%
Don't know/can't decide	430	9.15
Great risk	3173	67.54
Moderate risk	781	16.62
No risk	92	1.96
Slight risk	222	4.73

How much do people risk harming themselves physically and in other ways when they drink alcohol in combination with Stimulants (e.g., Ritalin, Adderall, Concerta)	N	%
Don't know/can't decide	473	10.06
Great risk	2628	55.9
Moderate risk	1098	23.36
No risk	120	2.55
Slight risk	382	8.13
How much do people risk harming themselves physically and in other ways when they drink alcohol in combination with Heroin	N	%
Don't know	520	11.09
Great risk	3720	79.37
Moderate risk	332	7.08
No risk	63	1.34
Slight risk	52	1.11
In your county, what is the likelihood of getting caught by the police if you were drinking and driving?	N	%
Don't know	594	12.56
Somewhat likely	2019	42.69
Somewhat unlikely	520	11
Very likely	1363	28.82
Very unlikely	233	4.93
Rate the degree to which you agree or disagree with the following statements. Drinking alcohol is fun	N	%
Agree	2099	44.4
Disagree	263	5.56
Neutral	1066	22.55
Strongly Agree	1161	24.56
Strongly Disagree	139	2.94
Rate the degree to which you agree or disagree with the following statements. Drinking alcohol helps people making friends	N	%
Agree	1826	38.69
Disagree	601	12.74
Neutral	1494	31.66
Strongly Agree	607	12.86
Strongly Disagree	191	4.05

Rate the degree to which you agree or disagree with the following statements. Drinking alcohol makes it easier to deal with stress	N	%
Agree	1466	31.02
Disagree	916	19.38
Neutral	1428	30.22
Strongly Agree	600	12.7
Strongly Disagree	316	6.69
How strongly you agree or disagree with: Most of my close friends expect me to drink alcohol	N	%
Agree	1067	22.56
Disagree	1256	26.56
Neither Agree or Disagree	1461	30.89
Strongly Agree	446	9.43
Strongly Disagree	499	10.55
How strongly you agree or disagree with: Most people my age expect me to drink alcohol	N	%
Agree	1895	40.11
Disagree	666	14.1
Neither Agree or Disagree	1093	23.13
Strongly Agree	845	17.88
Strongly Disagree	226	4.78
Would you know where to go to seek help if you were concerned about your drinking habits?	N	%
No	974	20.64
Yes	3745	79.36

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