

# Alcohol Consumption and Binge Drinking



Analysis of 2022 Mississippi Behavioral Risk Factor Surveillance System (BRFSS) Data

July 29, 2024



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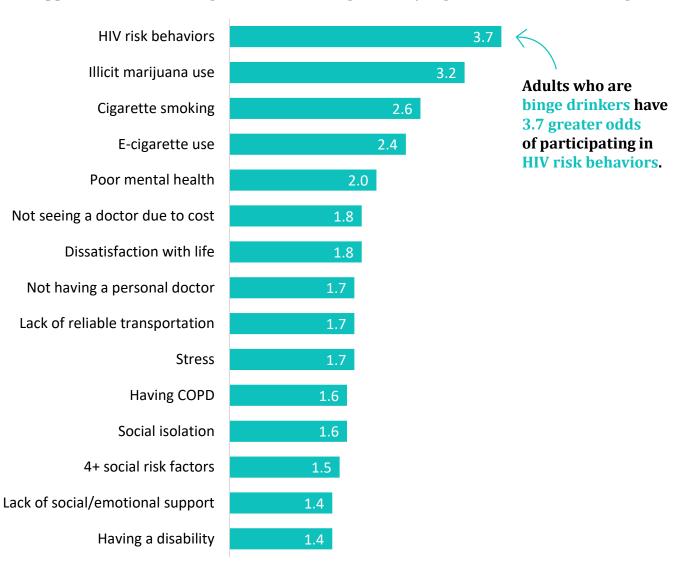
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# **SUMMARY OF FINDINGS**

# Binge Drinking in Mississippi

- Binge drinking is defined as having 5 or more drinks on one occasion (for men) or 4 or more drinks on one occasion (for women).
- Approximately **1** in **7** adults (13.5%) were current binge drinkers in Mississippi in 2022.
- Binge drinking was found to be higher among **men**, **younger adults**, and adults with **higher annual household incomes**.
- The prevalence of binge drinking remained stable from 2014 (12.8%) to 2022 (13.5%).

# Mississippi adults who are binge drinkers have significantly higher odds of the following:



# **Important Information**

# **About BRFSS**

- The Mississippi Behavioral Risk Factor Surveillance System (BRFSS) is conducted annually to monitor the prevalence of behaviors that contribute to the leading causes of morbidity and mortality among adults in our state.
- The 2022 Mississippi BRFSS was completed by 4,239 Mississippians aged 18 years or older.

# **About This Report**

- The estimates in this report are weighted to represent the adult population of Mississippi.
- Some estimates in this report are based on a cell size (numerator) of less than 20. Use caution when interpreting and comparing these estimates. Cell sizes for each estimate are included in each topic's respective data table.
- For BRFSS data, CDC recommends not interpreting percentages where the denominator is based upon fewer than 50 non-weighted respondents or the relative standard error (RSE) of the estimate is greater than 30%. In the tables of this report, results replaced with a dash (-) indicate a sample size of less than 50 or an RSE greater than 30%.
- The difference between two estimates is considered statistically significant (also stated as "significantly higher/lower" or "significant" in this report) if the 95% confidence intervals do not overlap.
- Multiple logistic regression was used to calculate adjusted odds ratios and 95% confidence intervals for factors associated with alcohol consumption. The odds ratios are adjusted by sex, race, age group, education level, and annual household income. If the confidence interval for the odds ratio does not include the number 1.00, then the calculated odds ratio is considered statistically significant.
- In this report, "Other Race" refers to adults who reported their race/ethnicity as anything other than White, Non-Hispanic (NH) or Black, NH.
- In the 2022 MS BRFSS, the numbers of responses for individual races and ethnicities contained in the "Other Race" demographic group (Table A, below) were too low to allow for meaningful estimates. To request additional race/ethnicity data, please submit a data request using MSDH's online form.

Table A. Races and Ethnicities Included in the "Other Races/Ethnicities" Demographic Group								
	TOTAL 2022 SURVEY SAMPLE							
Race/Ethnicity	Unweighted Total	Weighted Total	Weighted Percent					
American Indian or Alaskan Native, Non-Hispanic	26	36,684	1.66					
Asian, Non-Hispanic	29	32,004	1.45					
Any race, Hispanic	67	82,236	3.77					
Multiracial, Non-Hispanic	24	22,608	1.03					
Native Hawaiian or Pacific Islander, Non-Hispanic	1	1,131	0.05					
Other race, Non-Hispanic	0	0	0.0					
Total "Other Races/Ethnicities" Demographic Group	147	174,663	7.96					

# Survey Questions for Each Topic in This Report (2022 MS BRFSS Survey)

# **Current Alcohol Consumption**

• During the past 30 days, how many days per week or per month did you have at least one drink of any alcoholic beverage? (Core Section 14: Alcohol Consumption)

# <u>Current Binge Drinking</u>

- During the past 30 days, how many days per week or per month did you have at least one drink of any alcoholic beverage? (Core Section 14: Alcohol Consumption)
- Considering all types of alcoholic beverages, how many times during the past 30 days did you have 5 or more drinks for men or 4 or more drinks for women on an occasion? (Core Section 14: Alcohol Consumption)

# Health Care Access (All questions from Core Section 3: Health Care Access)

- Health Insurance: What is the current primary source of your health insurance?
- **Personal Doctor:** Do you have one person (or a group of doctors) that you think of as your personal health care provider?
- **Doctor Cost:** Was there a time in the past 12 months when you needed to see a doctor but could not because you could not afford it?
- Routine Checkup: About how long has it been since you last visited a doctor for a routine checkup?

# Self-Reported Health Status

- **General Health:** Would you say that in general your health is excellent, very good, good, fair, or poor? (Core Section 1: Health Status)
- **Physical Health:** Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good? (*Core Section 2: Healthy Days*)
- **Mental Health:** Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good? (*Core Section 2: Healthy Days*)

# <u>Health Conditions</u> (All questions from Core Section 7: Chronic Health Conditions)

- **Arthritis:** Has a doctor, nurse, or other health professional ever told you that you had some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia? (Core Section 7: Chronic Health Conditions)
- **Cancer** (All questions from Core Section 7: Chronic Health Conditions):
  - Has a doctor, nurse, or other health professional ever told you that you had skin cancer that is not melanoma?
  - Has a doctor, nurse, or other health professional ever told you that you had melanoma or any other types of cancer?

# Survey Questions for Each Topic in This Report (continued) (2022 MS BRFSS Survey)

- **Cardiovascular Disease (CVD)** (All questions from Core Section 7: Chronic Health Conditions):
  - Has a doctor, nurse, or other health professional ever told you that you had a heart attack, also called a myocardial infarction?
  - Has a doctor, nurse, or other health professional ever told you that you had angina or coronary heart disease?
  - Has a doctor, nurse, or other health professional ever told you that you had a stroke?
- Chronic Obstructive Pulmonary Disease (COPD): Has a doctor, nurse, or other health professional ever told you that you had COPD (chronic obstructive pulmonary disease), emphysema, or chronic bronchitis? (Core Section 7: Chronic Health Conditions)
- **Depression:** Has a doctor, nurse, or other health professional ever told you that you had a depressive disorder (including depression, major depression, dysthymia, or minor depression)?
- **Diabetes:** Has a doctor, nurse, or other health professional ever told you that you had diabetes? (*Core Section 7: Chronic Health Conditions*)
- **Disability** (All questions from Core Section 9: Disability):
  - Are you deaf or do you have serious difficulty hearing?
  - Are you blind or do you have serious difficulty seeing, even when wearing glasses?
  - Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions?
  - Do you have serious difficulty walking or climbing stairs?
  - Do you have difficulty dressing or bathing?
  - Because of a physical, mental, or emotional condition, do you have difficulty doing errands alone such as visiting a doctor's office or shopping?
- **Obesity** (All questions from Core Section 8: Demographics):
  - About how much do you weight without shoes?
  - About how tall are you without shoes?

# Health Risk Behaviors

- **Current Cigarette Smoking** (Core Section 12: Tobacco Use):
  - Have you smoked at least 100 cigarettes in your entire life?
  - Do you now smoke cigarettes every day, some days, or not at all?
- **Current E-Cigarette Use:** Would you say you have never used e-cigarettes or other electronic vaping products in your entire life or now use them every day, use them some days, or used them in the past but do not currently use them at all? (*Core Section 12: Tobacco Use*)
- **Current Illicit Marijuana Use:** During the past 30 days, on how many days did you use marijuana or cannabis? (*Module 17: Marijuana Use*)
- **Inadequate Sleep:** On average, how many hours of sleep do you get in a 24-hour period? (*Core Section 5: Inadequate Sleep*)

# Survey Questions for Each Topic in This Report (continued) (2022 MS BRFSS Survey)

# Health Risk Behaviors continued

• HIV Risk Behaviors (All questions from Core Section 16: HIV/AIDS):

I am going to read you a list. When I am done, please tell me if any of the situations apply to you. You do not need to tell me which one.

- You have injected any drug other than those prescribed for you in the past year.
- You have been treated for a sexually transmitted disease or STD in the past year.
- You have given or received money or drugs in exchange for sex in the past year.
- You had anal sex without a condom in the past year.
- You had four or more sex partners in the past year.

Do any of these situations apply to you?

• **Sedentary Lifestyle:** During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise? (*Core Section 4: Exercise*)

# Social Determinants of Health (All from Module 16: Social Determinants and Health Equity)

- **Life Satisfaction:** In general, how satisfied are you with your life?
- **Social/Emotional Support:** How often do you get the social and emotional support that you need?
- **Social Isolation:** How often do you feel socially isolated from others?
- **Lost Employment/Reduced Hours:** In the past 12 months have you lost employment or had reduced hours?
- **Receiving Food Stamps/SNAP:** During the past 12 months, have you received food stamps, also called SNAP, the Supplemental Nutrition Assistance Program on an EBT card?
- **Food Insecurity:** During the past 12 months how often did the food that you bought not last, and you didn't have money to get more?
- **Housing Insecurity:** During the last 12 months, was there a time when you were not able to pay your mortgage, rent or utility bills?
- **Threatened Utilities:** During the last 12 months was there a time when an electric, gas, oil, or water company threatened to shut off services?
- Lack of Reliable Transportation: During the past 12 months has a lack of reliable transportation kept you from medical appointments, meetings, work, or from getting things needed for daily living?
- **Stress:** Stress means a situation in which a person feels tense, restless, nervous or anxious or is unable to sleep at night because their mind is troubled all the time. Within the last 30 days, how often have you felt this kind of stress?

# **Current Alcohol Use**

In this report, a **current alcohol user** is defined as an adult who reported that they have had at least one drink of any alcoholic beverage during the last 30 days.

# Overall

• Approximately 2 in 5 adults (42.3%) were current alcohol users.

# Sex (Figure 1.1)

• The percentage of current alcohol use was **significantly higher** among **men** (49.1%) compared to women (36.1%).

# Race/Ethnicity (Figure 1.2)

• The percentage of current alcohol use was **highest** among adults of **other races/ethnicities** (45.1%), followed by White, NH (42.1%) and Black, NH (41.6%) adults. However, there were **no significant differences** in percentage of current alcohol use among the race/ethnicity groups.

# Age (Figure 1.3)

• The percentage of current alcohol use was **significantly higher** among adults aged **25-34 years** (55.0%) **and 35-44 years** (50.0%) compared to adults aged 55-64 years (39.5%) and 65+ years (25.2%).

# **Educational Attainment (Figure 1.4)**

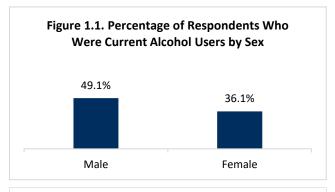
• The percentage of current alcohol use increased as education level increased and was **significantly higher** among adults who completed **some college** (46.9%) **and** adults who **graduated college** (49.3%) compared to adults who did not graduate high school (30.2%) and adults whose highest level of education was high school graduation (37.9%).

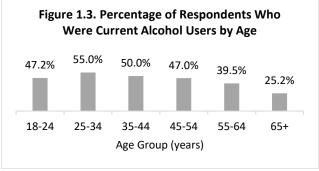
# Annual Household Income (Figure 1.5)

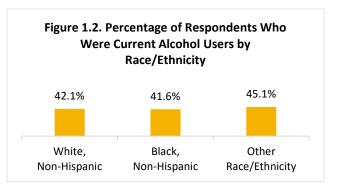
• The percentage of current alcohol use increased as annual household income increased and was **significantly higher** among adults whose household income was **\$75,000 or more** (57.0%) compared to adults whose household income was \$35,000 to \$49,999 (45.6%) or lower.

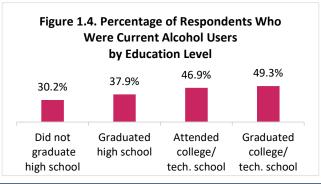
# Trend (Figure 1.6)

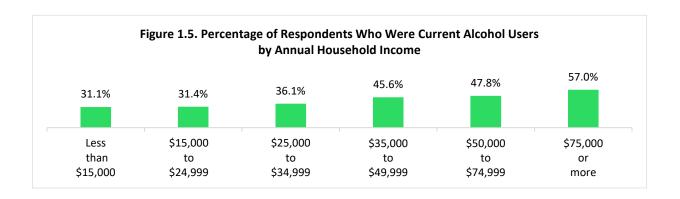
• The percentage of current alcohol use **increased** from 38.8% in 2014 to 42.3% in 2022; however, the difference between the two estimates is **not statistically significant**.

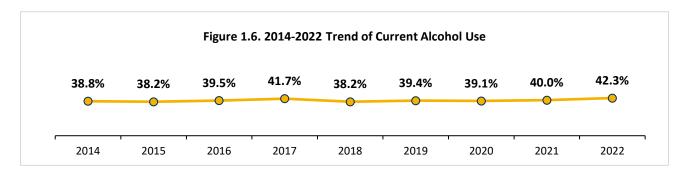












1103 001	isumed at least o	ne alcoholic bevera	age iii tile past	ou days	
DEMOGRAPHIC	RESPO	ONDENTS		Yes	
GROUPS	TOTAL	WEIGHTED	N <sup>(1)</sup>	% <sup>(2)</sup>	C.I. (95%
TOTAL	3,929	2,095,113	1,640	42.3	40.3-44.
Male	1,746	1,003,141	838	49.1	46.1-52.
Female	2,183	1,091,972	802	36.1	33.4-38.
White, Non-Hispanic (NH)	2,332	1,195,595	992	42.1	39.6-44.
Black, Non-Hispanic (NH)	1.386	696.328	564	41.6	38.2-44.
Other Races/Ethnicities	133	152,874	56	45.1	35.0-55.
18-24 years	402	279,113	202	47.2	40.9-53.
25-34 years	523	344,281	297	55.0	49.8-60.
35-44 years	571	318,646	288	50.0	44.8-55.
45-54 years	629	296,402	294	47.0	42.2-51.
55-64 years	720	340,543	275	39.5	34.5-44.
65+ years	1,047	123,442	270	25.2	21.6-28.
Less than H.S.	364	90,446	106	30.2	24.0-36.
H.S. or G.E.D.	1,001	624,648	348	37.9	34.2-41.
Some Post-H.S.	1,234	723,366	551	46.9	43.5-50.
College Graduate	1,319	442,333	633	49.3	45.8-52.
Less than \$15,000	279	156,868	84	31.1	23.6-38.
\$15,000-\$24,999	452	242,672	147	31.4	26.0-36.
\$25,000-\$34,999	513	295,067	194	36.1	30.6-41.
\$35,000-\$49,999	530	279,111	223	45.6	40.2-50.
\$50,000-\$74,999	529	277,877	235	47.8	41.9-53.

<sup>(1)</sup> Unweighted number

<sup>(2)</sup> Weighted percent

Note: Denominator excludes respondents with do not know/refused/missing responses

# **Current Binge Drinking**

In this report, a **current binge drinker** is defined as an adult who reported that they had 5 or more drinks on one occasion (if male) or 4 or more drinks on one occasion (if female) in the past 30 days.

# Overall

• Approximately 1 in 7 adults (13.5%) were current binge drinkers.

# Sex (Figure 2.1)

• The percentage of current binge drinking was **significantly higher** among **men** (19.0%) compared to women (8.5%).

# Race/Ethnicity (Figure 2.2)

• The percentage of current binge drinking was **highest** among adults of **other races/ethnicities** (15.6%), followed by White, NH (14.4%), and Black, NH (11.5%) adults. However, there were **no statistically significant differences** in percentage among race/ethnicity groups.

# Age (Figure 2.3)

• The percentage of current binge drinking increased as age decreased and was **significantly higher** among adults aged **18-24 years** (22.0%) **and 25-34 years** (20.1%) compared to adults aged 55-64 years (10.6%) and 65+ years (4.5%).

# Educational Attainment (Figure 2.4)

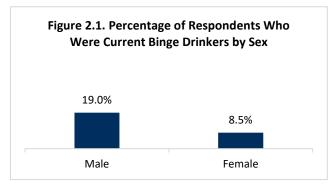
• The percentage of current binge drinking was **highest** among adults whose highest level of education was **high school graduation** (14.7%). However, there were **no statistically significant differences** in percentage among education level groups.

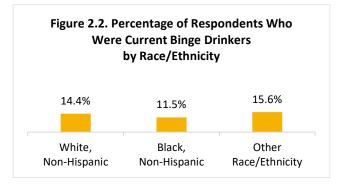
# Annual Household Income (Figure 2.5)

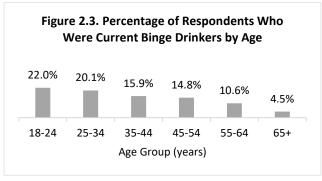
• The percentage of current binge drinking was **significantly higher** among adults whose annual household income was **\$75,000 or more** (16.6%) compared to adults whose annual household income was \$35,000 to \$49,999 (9.9%).

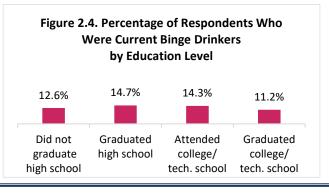
# Trend (Figure 2.6)

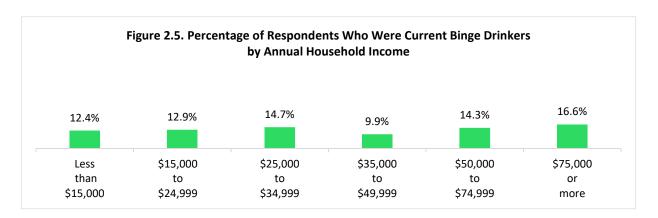
• The percentage of current binge drinking **increased** from 12.8% in 2014 to 13.5% in 2022; however, the difference between the two estimates is **not statistically significant**.











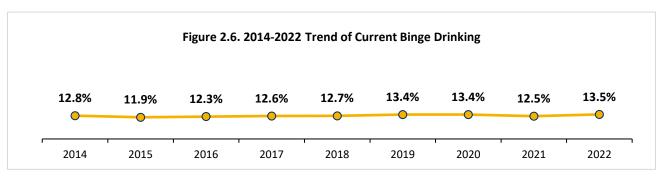


TABLE 2. Current Binge Drinking  Males having five or more drinks on one occasion / Females having four or more drinks on one occasion)								
DEMOGRAPHIC	RESPO	ONDENTS	Yes					
GROUPS	TOTAL	WEIGHTED	N <sup>(1)</sup>	% <sup>(2)</sup>	C.I. (95%			
TOTAL	3,859	2,054,621	483	13.5	(12.1-14.9			
Male	1,709	977,976	299	19.0	(16.6-21.4			
Female	2,150	1,076,645	184	8.5	(7.0-10.0			
White, Non-Hispanic (NH)	2,302	1,178,553	310	14.4	(12.6-16.2			
Black, Non-Hispanic (NH)	1,353	679,319	146	11.5	(9.3-13.6)			
Other Races/Ethnicities	129	148,201	21	15.6	(7.9-23.3)			
18-24 years	393	272,958	85	22.0	(16.5-27.4			
25-34 years	510	334,208	106	20.1	(16.0-24.1			
35-44 years	560	311,519	85	15.9	(12.2-19.6			
45-54 years	620	292,031	87	14.8	(11.1-18.4			
55-64 years	705	333,147	76	10.6	(7.9-13.3)			
65+ years	1,034	485,250	42	4.5	(2.7-6.4)			
Less than H.S.	351	290,618	44	12.6	(8.3-17.0			
H.S. or G.E.D.	979	614,749	126	14.7	(11.8-17.5			
Some Post-H.S.	1,211	707,305	164	14.3	(11.9-16.7			
College Graduate	1,307	436,625	148	11.2	(9.2-13.2			
Less than \$15,000	274	154,947	33	12.4	(7.5-17.3			
\$15,000-\$24,999	442	237,370	51	12.9	(9.0-16.8)			
\$25,000-\$34,999	506	290,420	62	14.7	(10.0-19.4			
\$35,000-\$49,999	519	272,711	49	9.9	(7.0-12.8)			
\$50,000-\$74,999	525	275,928	65	14.3	(10.2-18.5			
\$75,000+	947	472,172	147	16.6	(13.6-19.6			

Note: Denominator excludes respondents with do not know/refused/missing responses

<sup>(2)</sup> Weighted percent

# **Binge Drinking and Health Care Access**

# **CONSIDERATIONS**

- When interpreting these results, it is important to keep in mind the existence of potential confounding factors, such as socioeconomic characteristics. For example, the percentage of current binge drinking is highest among younger age groups, which also have higher rates of not having any health insurance.
- To help clarify the relationship between current binge drinking and health care access, we have included results of logistic regression analyses. The odds ratios presented below were adjusted by age, race, sex, education level, and annual household income.

# No Health Care Coverage

- The percentage of not having any health care coverage was **higher** among **binge drinkers** (12.4%) compared to non-binge drinkers (9.5%). However, the difference was **not statistically significant**.
- The odds of not having any health care coverage among binge drinkers are 0.9 (95% CI 0.6-1.4) times the odds for non-binge drinkers. In other words, the odds of not having any health care coverage are **decreased by 10%** for binge drinkers. This finding is **not statistically significant**.

# NO ROUTINE CHECK-UP IN PAST YEAR

- The percentage of not having a routine check-up in the past year was **significantly higher** among **binge drinkers** (31.3%) compared to non-binge drinkers (18.4%).
- The odds of not having a routine check-up among binge drinkers are 1.3 (95% CI 1.0-1.8) times the
  odds for non-binge drinkers. The odds of not having a routine check-up are increased by 30% for
  binge drinkers. This finding is not statistically significant.

### **COULD NOT SEE DOCTOR DUE TO COST**

- The percentage of not being able to see a doctor due to cost was **significantly higher** among **binge drinkers** (22.2%) compared to non-binge drinkers (13.3%).
- The odds of not being able to see a doctor due to cost among binge drinkers are 1.8 (95% CI 1.3-2.5) times the odds for non-binge drinkers. The odds of not being able to see a doctor due to cost are increased by 80% for binge drinkers. This finding is statistically significant.

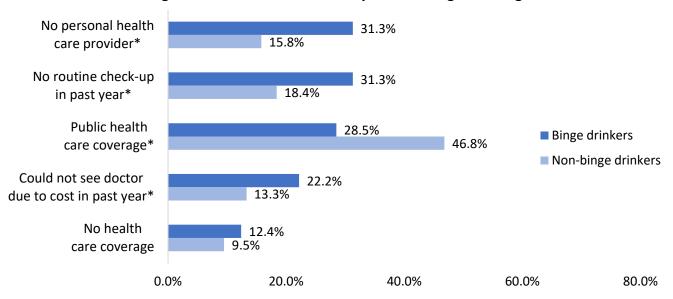
# No Personal Health Care Provider

- The percentage of not a having personal health care provider was **significantly higher** among **binge drinkers** (31.3%) compared to non-binge drinkers (15.8%).
- The odds of not having personal health care provider among binge drinkers are 1.7 (95% CI 1.2-2.2) times the odds for non-binge drinkers. The odds of not having personal health care provider are increased by 70% for binge drinkers. This finding is statistically significant.

# PUBLIC HEALTH CARE COVERAGE

- The percentage of having public health care coverage was **significantly lower** among **binge drinkers** (28.5%) compared to non-binge drinkers (46.8%).
- The odds of having public health care coverage among binge drinkers are 0.8 (95% CI 0.6-1.1) times the odds for non-binge drinkers. The odds of having public health care coverage are **decreased by 20%** for binge drinkers. This finding is **not statistically significant**.

Figure 3.1. Health Care Access by Current Binge Drinking



<sup>\*</sup>Denotes statistical significance

**Figure 3.2. Adjusted Odds Ratios for Health Care Access Factors**Binge drinkers compared to baseline for non-binge drinkers

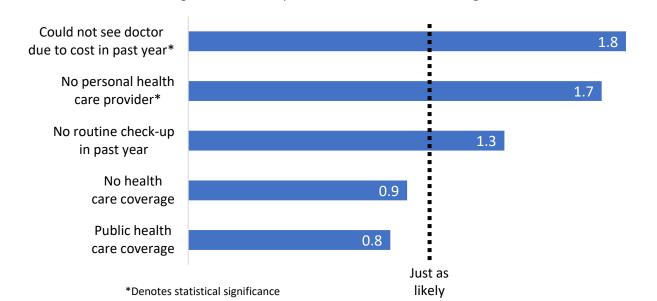


TABLE 3. Binge Drinking and Health Care Access									
	RESPO	ONDENTS		Binge drin	ker	Non-binge drinker			
	TOTAL	WEIGHTED	N <sup>(1)</sup>	% <sup>(2)</sup>	C.I. (95%)	N <sup>(1)</sup>	% <sup>(2)</sup>	C.I. (95%)	
No health care coverage	313	191,756	57	12.4	8.9-16.0	256	9.5	8.0-10.9	
Public health care coverage	1,647	860,888	127	28.5	23.5-33.6	1,520	46.8	44.5-49.0	
No personal health care provider	599	364,551	135	31.3	26.2-36.4	464	15.8	14.1-17.4	
No routine check-up in past year	698	403,336	134	31.3	26.1-36.5	564	18.4	16.6-20.1	
Could not see doctor due to cost in past year	499	296,335	89	22.2	17.1-27.3	410	13.3	11.7-14.8	

<sup>(1)</sup> Unweighted number

<sup>(2)</sup> Weighted percent

Note: Denominator excludes respondents with do not know/refused/missing responses

# **Binge Drinking and Self-Reported Health Status**

# **CONSIDERATIONS**

- When interpreting these results, it is important to keep in mind the existence of potential confounding factors, such as socioeconomic characteristics. For example, the percentage of current binge drinking is highest among younger age groups, which also have higher rates of self-reported poor mental health.
- To help clarify the relationship between current binge drinking and self-reported health status, we have included results of logistic regression analyses. The odds ratios presented below were adjusted by age, race, sex, education level, and annual household income.

# FAIR OR POOR HEALTH

- The percentage of fair or poor self-reported health was **lower** among **binge drinkers** (20.7%) compared to non-binge drinkers (25.4%). However, the difference was **not statistically significant**.
- The odds of having fair or poor self-reported health among binge drinkers are 1.1 (95% CI 0.8-1.5) times the odds for non-binge drinkers. In other words, the odds of having fair or poor health are increased by 10% for binge drinkers. This finding was not statistically significant.

# POOR PHYSICAL HEALTH

- The percentage of having 14+ poor physical health days in the past 30 days was **lower** among **binge drinkers** (11.6%) compared to non-binge drinkers (14.6%). However, the difference was **not statistically significant**.
- The odds of having 14 days or more of poor physical health in the past 30 days among binge drinkers are 1.0 (95% CI 0.7-1.5) times the odds for non-binge drinkers. The odds of having 14 days or more of poor physical health in the past 30 days are **the same** for binge drinkers and non-binge drinkers.

### POOR MENTAL HEALTH

- The percentage of having 14 days or more of poor mental health in the past 30 days was **significantly higher** among **binge drinkers** (25.6%) compared to non-binge drinkers (14.2%).
- The odds of having 14 days or more of poor mental health in the past 30 days among binge drinkers are 2.0 (95% CI 1.4-2.7) times the odds for non-binge drinkers. The odds of having 14 days or more of poor mental health in the past 30 days are **increased by 100%** for binge drinkers. This finding was **statistically significant**.

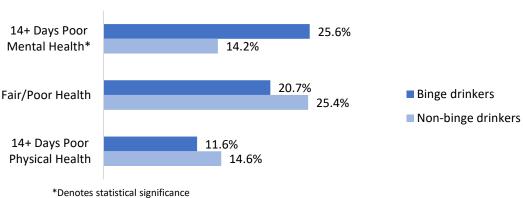


Figure 4.1. Health Status by Binge Drinking

Figure 4.2. Adjusted Odds Ratios for Health Status Factors Binge drinkers compared to baseline for non-binge drinkers

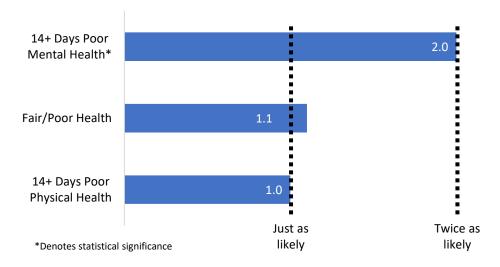


TABLE 4. Binge Drinking and Self-Reported Health Status									
	RESP	ONDENTS		Binge drinker			Non-binge drinker		
	TOTAL	WEIGHTED	<b>N</b> <sup>(1)</sup>	% <sup>(2)</sup>	C.I. (95%)	<b>N</b> <sup>(1)</sup>	% <sup>(2)</sup>	C.I. (95%)	
Fair or poor health	912	506,952	96	20.7	16.3-25.2	816	25.4	23.4-27.3	
14+ days poor physical health	519	282,829	50	11.6	8.1-15.1	469	14.6	12.9-16.2	
14+ days poor mental health	558	316,359	109	25.6	20.5-30.8	449	14.2	12.6-15.7	

<sup>(1)</sup> Unweighted number

(2) Weighted percent Note: Denominator excludes respondents with do not know/refused/missing responses

# **Binge Drinking and Health Conditions**

# **CONSIDERATIONS**

- When interpreting these results, it is important to keep in mind the existence of potential confounding
  factors, such as socioeconomic characteristics. For example, the percentage of current binge drinking is
  highest among younger age groups, which also have lower rates of many of the examined health
  conditions.
- To help clarify the relationship between current binge drinking and health conditions, we have included results of logistic regression analyses. The odds ratios presented below were adjusted by age, race, sex, education level, and annual household income.

### **ARTHRITIS**

- The percentage of ever having arthritis was **significantly lower** among **binge drinkers** (19.9%) compared to non-binge drinkers (36.9%).
- The odds of having arthritis among binge drinkers are 0.7 (95% CI 0.53-1.02) times the odds for non-binge drinkers. In other words, the odds of having arthritis are **decreased by 30%** for binge drinkers. This finding was **not statistically significant**.

# **CANCER**

- The percentage of ever having any type of cancer was **significantly lower** among **binge drinkers** (6.5%) compared to non-binge drinkers (12.3%).
- The odds of ever having any type of cancer among binge drinkers are 0.7 (95% CI 0.45-1.15) times the odds for non-binge drinkers. In other words, the odds of having cancer are **decreased by 30%** among binge drinkers. This finding was **not statistically significant**.

# CARDIOVASCULAR DISEASE (CVD)

- The percentage of having CVD was **lower** among **binge drinkers** (8.6%) compared to non-binge drinkers (13.2%). The difference was **not statistically significant**.
- The odds of having CVD among binge drinkers are 1.0 (95% CI 0.55-1.65) times the odds for non-binge drinkers. In other words, the odds of having CVD are **the same** for binge drinkers and non-binge drinkers.

# CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)

- The percentage of ever having COPD was **higher** among **binge drinkers** (10.8%) compared to non-binge drinkers (10.6%). The difference was **not statistically significant**.
- The odds of ever having COPD among binge drinkers are 1.6 (95% CI 1.01-2.66) times the odds for non-binge drinkers. The odds of ever having COPD are increased by 60% for binge drinkers. This finding was statistically significant.

# **DEPRESSION**

- The percentage of ever having depression was **higher** among **binge drinkers** (22.3%) compared to non-binge drinkers (20.7%). The difference was **not statistically significant**.
- The odds of ever having depression among binge drinkers are 1.2 (95% CI 0.88-1.63) times the odds for non-binge drinkers. In other words, the odds of ever having depression are **increased by 20%** for binge drinkers. This finding was **not statistically significant**.

## **DIABETES**

- The percentage of ever having diabetes was **significantly lower** among **binge drinkers** (7.7%) compared to non-binge drinkers (16.7%).
- The odds of ever having diabetes among binge drinkers are 0.6 (95% CI 0.40-0.97) times the odds for non-binge drinkers. The odds of ever having diabetes are **decreased by 40%** for binge drinkers. This finding was **statistically significant**.

# **DISABILITY**

- The percentage of disability was **lower** among **binge drinkers** (37.8%) compared to non-binge drinkers (38.0%). The difference was **not statistically significant**.
- The odds of disability among binge drinkers are 1.4 (95% CI 1.04-1.82) times the odds for non-binge drinkers. The odds of disability are **increased by 40%** for binge drinkers. This finding was **statistically significant**.

## **OBESITY**

- The percentage of obesity was **lower** among **binge drinkers** (36.5%) compared to non-binge drinkers (40.3%). The difference was **not statistically significant**.
- The odds of obesity among binge drinkers are 0.9 (95% CI 0.70-1.23) times the odds for non-binge drinkers. In other words, the odds of obesity are **decreased by 10%** for binge drinkers. This finding was **not statistically significant**.

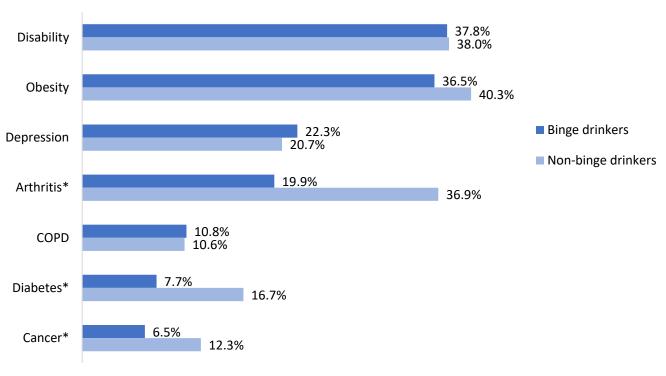


Figure 5.1. Health Conditions by Current Binge Drinking

<sup>\*</sup>Denotes statistical significance

**Figure 5.2. Adjusted Odds Ratios for Health Conditions**Binge drinkers compared to baseline for non-binge drinkers

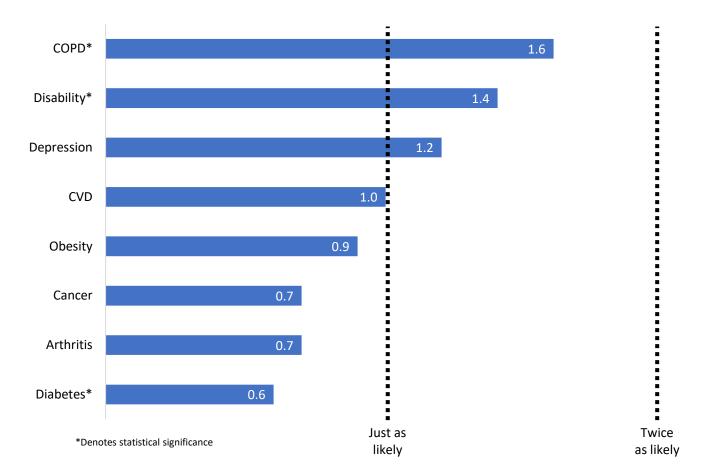


TABLE 5. Binge Drinking and Health Conditions										
	RESPO	NDENTS		Binge drinke	er	No	on-binge drin	ker		
	TOTAL	WEIGHTED	<b>N</b> <sup>(1)</sup>	% <sup>(2)</sup>	C.I. (95%)	<b>N</b> <sup>(1)</sup>	% <sup>(2)</sup>	C.I. (95%)		
Arthritis	1,379	706,412	110	19.9	15.7-24.1	1,269	36.9	34.8-39.0		
Cancer	481	234,694	35	6.5	3.7-8.5	446	12.3	10.9-13.8		
CVD	493	254,878	40	8.6	4.8-12.3	453	13.2	11.7-14.7		
COPD	360	215,998	36	10.8	6.5-15.1	324	10.6	9.1-12.0		
Diabetes	647	316,504	41	7.7	4.8-10.5	606	16.7	15.0-18.4		
Depression	774	426,323	111	22.3	17.7-26.9	663	20.7	18.9-22.5		
Obesity	1,529	774,882	168	36.5	30.9-42.1	1,361	40.3	38.1-42.5		
Disability	1,452	775,108	177	37.8	32.3-43.2	1,275	38.0	35.8-40.2		

<sup>(1)</sup> Unweighted number

Note: Denominator excludes respondents with do not know/refused/missing responses

<sup>(2)</sup> Weighted percent

# **Binge Drinking and Health Risk Behaviors**

# **CONSIDERATIONS**

- When interpreting these results, it is important to keep in mind the existence of potential confounding
  factors, such as socioeconomic characteristics. For example, the percentage of current binge drinking is
  highest among younger age groups, which may also have higher rates of some of the examined health
  risk behaviors.
- To help clarify the relationship between current binge drinking and health risk behaviors, we have included results of logistic regression analyses. The odds ratios presented below were adjusted by age, race, sex, education level, and annual household income.

### **CURRENT CIGARETTE SMOKING**

- The percentage of current cigarette smoking was **significantly higher** among **binge drinkers** (30.6%) compared to non-binge drinkers (15.1%).
- The odds of current cigarette smoking among binge drinkers are 2.6 (95% CI 1.9-3.5) times the odds for non-binge drinkers. In other words, the odds of current cigarette smoking are **increased by 160%** for binge drinkers. This finding was **statistically significant**.

# **CURRENT E-CIGARETTE USE**

- The percentage of current e-cigarette use was **significantly higher** among **binge drinkers** (21.7%) compared to non-binge drinkers (7.3%).
- The odds of current e-cigarette use among binge drinkers are 2.4 (95% CI 1.7-3.4) times the odds for non-binge drinkers. The odds of current e-cigarette use are **increased by 140%** for binge drinkers. This finding was **statistically significant**.

# **CURRENT ILLICIT MARIJUANA USE**

- The percentage of current illicit marijuana use was **significantly higher** among **binge drinkers** (29.1%) compared to non-binge drinkers (8.5%).
- The odds of current illicit marijuana use among binge drinkers are 3.2 (95% CI 2.2-4.5) times the odds for non-binge drinkers. The odds of current illicit marijuana use are **increased by 220%** for binge drinkers. This finding was **statistically significant**.

# **HIV RISK BEHAVIORS**

- The percentage of HIV risk behaviors was **significantly higher** among **binge drinkers** (20.3%) compared to non-binge drinkers (4.6%).
- The odds of HIV risk behaviors among binge drinkers are 3.7 (95% CI 2.6-5.5) times the odds for non-binge drinkers. The odds of HIV risk behaviors are **increased by 270%** for binge drinkers. This finding was **statistically significant**.

# **INADEQUATE SLEEP**

- The percentage of having inadequate sleep was **higher** among **binge drinkers** (43.9%) compared to non-binge drinkers (37.5%). The difference was **not statistically significant**.
- The odds of having inadequate sleep among binge drinkers are 1.3 (95% CI 1.0-1.7) times the odds for non-binge drinkers. The odds of having inadequate sleep are **increased by 30%** for binge drinkers. This finding was **not statistically significant**.

# **SEDENTARY LIFESTYLE**

- The percentage of having a sedentary lifestyle was **lower** among **binge drinkers** (26.0%) compared to non-binge drinkers (32.2%). The difference was **not statistically significant**.
- The odds of having a sedentary lifestyle among binge drinkers are 1.0 (95% CI 0.7-1.3) times the odds for non-binge drinkers. The odds of having a sedentary lifestyle are **the same** for binge drinkers and non-binge drinkers.

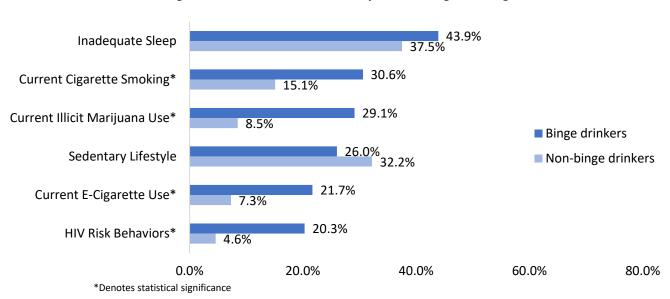
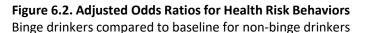


Figure 6.1. Health Risk Behaviors by Current Binge Drinking



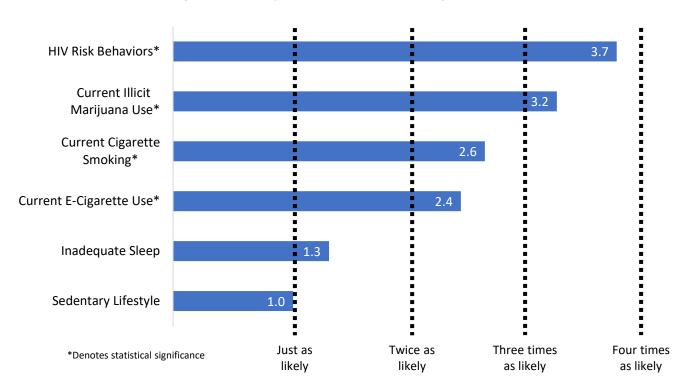


TABLE 6. Binge Drinking and Health Risk Behaviors										
	RESPONDENTS		1	Binge drinker			Non-binge drinker			
	TOTAL	WEIGHTED	<b>N</b> <sup>(1)</sup>	% <sup>(2)</sup>	C.I. (95%)	<b>N</b> <sup>(1)</sup>	% <sup>(2)</sup>	C.I. (95%)		
Current cigarette smoking	594	349,060	133	30.6	25.2-35.9	461	15.1	13.4-16.7		
Current e-cigarette use	297	189,481	93	21.7	16.9-26.6	204	7.3	6.1-8.5		
Current illicit marijuana use	309	208,084	101	29.1	23.0-35.1	208	8.5	7.1-9.9		
HIV risk behaviors	212	136,530	74	20.3	14.9-25.6	138	4.6	3.7-5.5		
Inadequate sleep	1,405	777,118	208	43.9	38.3-49.5	1,197	37.5	35.3-39.7		
Sedentary lifestyle	1,188	642,161	127	26.0	21.2-30.7	1,061	32.2	30.1-34.3		

(1) Unweighted number
(2) Weighted percent
Note: Denominator excludes respondents with do not know/refused/missing responses

# Binge Drinking and Social Determinants of Health

### **CONSIDERATIONS**

- When interpreting these results, it is important to keep in mind the existence of potential confounding factors, such as socioeconomic characteristics. For example, the percentage of current binge drinking is highest among younger age groups, which may also have higher rates of some of the examined social determinants.
- To help clarify the relationship between current binge drinking and social determinants of health, we have included results of logistic regression analyses. The odds ratios presented below were adjusted by age, race, sex, education level, and annual household income.

### **DISSATISFACTION WITH LIFE**

- The percentage of being dissatisfied with life was **significantly higher** among **binge drinkers** (11.6%) compared to non-binge drinkers (5.8%).
- The odds of being dissatisfied with life among binge drinkers are 1.8 (95% CI 1.11-2.82) times the odds for non-binge drinkers. In other words, the odds of being dissatisfied with life are **increased by 80%** for binge drinkers. This finding was **statistically significant**.

# LACK OF SOCIAL AND EMOTIONAL SUPPORT

- The percentage of sometimes, rarely, or never getting needed social and emotional support was **significantly higher** among **binge drinkers** (38.4%) compared to non-binge drinkers (30.0%).
- The odds of sometimes, rarely, or never getting needed social and emotional support among binge drinkers are 1.4 (95% CI 1.07-1.90) times the odds for non-binge drinkers. The odds of sometimes, rarely, or never getting needed social and emotional support are **increased by 40%** for binge drinkers. This finding was **statistically significant**.

# **SOCIAL ISOLATION**

- The percentage of always, usually, or sometimes feeling socially isolated from others was **significantly higher** among **binge drinkers** (44.0%) compared to non-binge drinkers (32.2%).
- The odds of always, usually, or sometimes feeling socially isolated from others among binge drinkers are 1.6 (95% CI 1.22-2.13) times the odds for non-binge drinkers. The odds of always, usually, or sometimes feeling socially isolated from others are **increased by 60%** for binge drinkers. This finding was **statistically significant**.

# LOST EMPLOYMENT/REDUCED HOURS

- The percentage of experiencing lost employment or reduced hours was **higher** among **binge drinkers** (15.1%) compared to non-binge drinkers (10.0%). The difference was **not statistically significant**.
- The odds of experiencing lost employment or reduced hours among binge drinkers are 1.3 (95% CI 0.91-1.99) times the odds for non-binge drinkers. The odds of experiencing lost employment or reduced hours are increased by 30% for binge drinkers. This finding was not statistically significant.

# RECEIVING FOOD STAMPS/SNAP

- The percentage of receiving food stamps/SNAP was **lower** among **binge drinkers** (10.1%) compared to non-binge drinkers (12.9%). The difference was **not statistically significant**.
- The odds of receiving food stamps/SNAP among binge drinkers are 0.9 (95% CI 0.55-1.40) times the odds for non-binge drinkers. The odds of receiving food stamps/SNAP are **decreased by 10%** for binge drinkers. This finding was **not statistically significant**.

# **FOOD INSECURITY**

- The percentage of experiencing food insecurity was **higher** among **binge drinkers** (23.9%) compared to non-binge drinkers (20.7%). The difference was **not statistically significant**.
- The odds of experiencing food insecurity among binge drinkers are 1.3 (95% CI 1.00-1.85) times the odds for non-binge drinkers. The odds of experiencing food insecurity are **increased by 30%** for binge drinkers. This finding was **not statistically significant**.

# **HOUSING INSECURITY**

- The percentage of experiencing housing insecurity was **higher** among **binge drinkers** (19.0%) compared to non-binge drinkers (14.1%). The difference was **not statistically significant**.
- The odds of experiencing food housing among binge drinkers are 1.4 (95% CI 0.95-1.98) times the odds for non-binge drinkers. The odds of experiencing housing insecurity are **increased by 40%** for binge drinkers. This finding was **not statistically significant**.

# THREATENED UTILITIES

- The percentage of experiencing threatened utilities was **higher** among **binge drinkers** (12.6%) compared to non-binge drinkers (9.3%). The difference was **not statistically significant**.
- The odds of experiencing threatened utilities among binge drinkers are 1.4 (95% CI 0.95-2.20) times the odds for non-binge drinkers. The odds of experiencing threatened utilities are **increased by 40%** for binge drinkers. This finding was **not statistically significant**.

# LACK OF RELIABLE TRANSPORTATION

- The percentage of experiencing a lack of reliable transportation was **higher** among **binge drinkers** (14.2%) compared to non-binge drinkers (9.5%). The difference was **not statistically significant**.
- The odds of having a lack of reliable transportation among binge drinkers are 1.7 (95% CI 1.15-2.59) times the odds for non-binge drinkers. The odds of having a lack of reliable transportation are increased by 70% for binge drinkers. This finding was statistically significant.

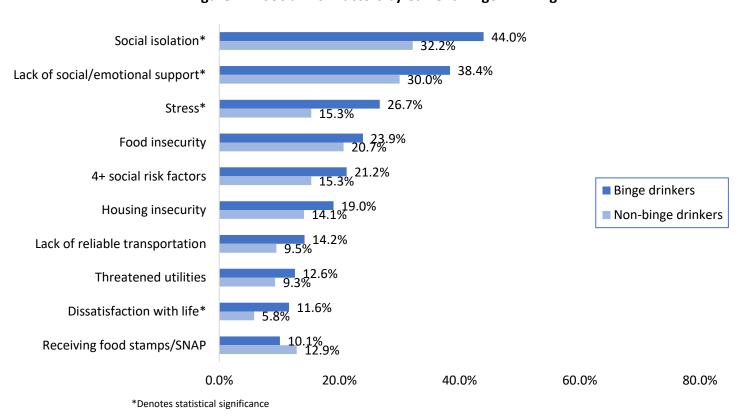
# **S**TRESS

- The percentage of always or usually feeling stress in the past 30 days was **significantly higher** among **binge drinkers** (26.7%) compared to non-binge drinkers (15.3%).
- The odds of always or usually feeling stress in the past 30 days among binge drinkers are 1.7 (95% CI 1.24-2.36) times the odds for non-binge drinkers. The odds of always or usually feeling stress in the past 30 days are **increased by 70%** for binge drinkers. This finding was **statistically significant**.

# **EXPERIENCING 4 OR MORE SOCIAL RISK FACTORS**

- The percentage of experiencing four or more social risk factors was **higher** among **binge drinkers** (21.2%) compared to non-binge drinkers (15.3%). The difference was **not statistically significant**.
- The odds of experiencing four or more social risk factors among binge drinkers are 1.5 (95% CI 1.02-2.10) times the odds for non-binge drinkers. The odds of experiencing four or more social risk factors are **increased by 50%** for binge drinkers. This finding was **statistically significant**.





**Figure 7.2. Adjusted Odds Ratios for Social Risk Factors**Binge drinkers compared to baseline for non-binge drinkers

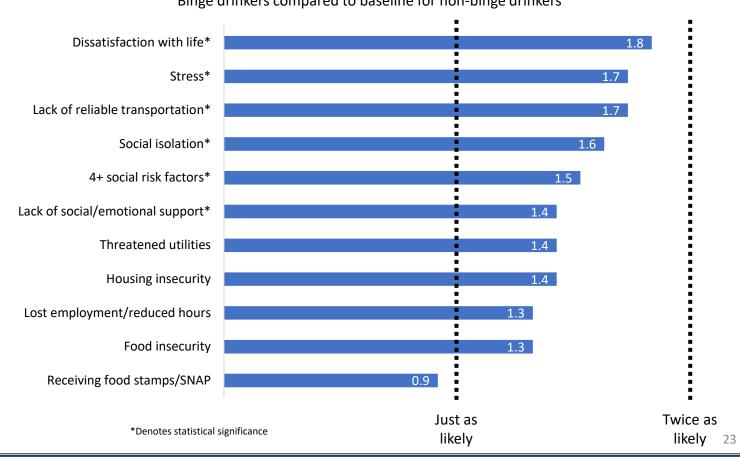


TABLE 7. Binge Drinking and Social Determinants of Health									
	RESP	ONDENTS		Binge drinker			Non-binge drinker		
	TOTAL	WEIGHTED	N <sup>(1)</sup>	% <sup>(2)</sup>	C.I. (95%)	N <sup>(1)</sup>	% <sup>(2)</sup>	C.I. (95%)	
Dissatisfaction with life	203	123,204	39	11.6	7.2-16.1	164	5.8	4.6-6.9	
Lack of social and emotional support	1,030	584,880	157	38.4	32.5-44.3	873	30.0	27.9-32.2	
Social isolation	1,158	634,614	170	44.0	38.0-50.1	988	32.2	30.1-34.4	
Lost employment or reduced hours	343	202,011	60	15.1	10.9-19.4	283	10.0	8.7-11.4	
Receiving food stamps/SNAP	446	237,300	48	10.1	6.9-13.3	398	12.9	11.3-14.5	
Food insecurity	700	396,981	94	23.9	18.5-29.2	606	20.7	18.8-22.6	
Housing insecurity	505	276,452	77	19.0	13.9-24.0	428	14.1	12.5-15.6	
Threatened utilities	319	182,282	48	12.6	8.5-16.7	271	9.3	7.9-10.6	
Lack of reliable transportation	337	190,501	57	14.2	10.1-18.2	280	9.5	8.2-10.8	
Stress	549	313,436	107	26.7	21.2-32.1	442	15.3	13.6-16.9	
Experiencing 4+ social risk factors	531	307,869	86	21.2	16.1-26.3	445	15.3	13.7-17.0	

<sup>(1)</sup> Unweighted number
(2) Weighted percent
Note: Denominator excludes respondents with do not know/refused/missing responses