

# **NYS BRFSS** Brief

The Behavioral Risk Factor Surveillance System (BRFSS) is an annual telephone survey of adults developed by the Centers for Disease Control and Prevention and conducted in all 50 states, the District of Columbia, and several US Territories. The New York BRFSS is administered by the New York State Department of Health to provide statewide and regional information on behaviors, risk factors, and use of preventive health services related to the leading causes of chronic and infectious diseases, disability, injury, and death.

### **Binge and Heavy Drinking**

New York State Adults, 2020

#### **Introduction and Key Findings**

Excessive alcohol use is associated with short-term health outcomes such as unintentional injuries and violence, long-term health outcomes including chronic diseases, and learning and mental health concerns like anxiety, depression, and memory problems. Binge drinking and heavy drinking are two patterns of excessive alcohol use. Excessive alcohol use also includes any kind of drinking by pregnant people or people under age 21.¹ Binge drinking is defined as consuming 4 or more drinks for women and 5 or more drinks for men on a single occasion. Heavy drinking is defined as consuming 8 or more drinks per week for women and 15 or more drinks per week for men.¹

Excessive alcohol use is one of the leading causes of preventable and premature death in the United States (US), responsible for 140,000 preventable deaths attributable to excessive alcohol use each year.<sup>2,3,4</sup> In New York State (NYS), excessive alcohol use causes nearly 6,700 deaths annually, resulting in an average of 24 years of potential life lost per death.<sup>3</sup> Excessive alcohol use also results in economic costs and, in 2010, cost NYS an estimated \$16.3 billion, or approximately \$2.28 per drink.<sup>5</sup> Economic costs due to excessive drinking include losses in workplace productivity, health care expenses, criminal justice expenses, and motor vehicle crash costs.

Excessive alcohol use, both in the form of heavy drinking or binge drinking, is associated with an increased risk for several chronic diseases and conditions. Excessive alcohol use has been linked to an increased risk for various types of cancer including those of the oral cavity and pharynx, larynx, esophagus, liver, colon, rectum, and female breast.<sup>6</sup> Research indicates the more alcohol a person drinks regularly over time, the higher their risk of developing an alcohol-associated cancer. Excessive alcohol use over time also increases the risk for hypertension, cardiovascular disease, stroke, liver disease, and other digestive diseases.<sup>1</sup> An estimated 3.2% of all cancer deaths in NYS are attributable to alcohol consumption.<sup>7</sup>



#### **Key Findings**

One in 6 adults in NYS (16.7%) reported excessive alcohol use in the form of either binge or heavy drinking. Binge drinking was the most common pattern of excessive alcohol use among adults in NYS and nationally. An estimated 14.7% of adults in NYS reported binge drinking, which was significantly less than the previous year, and 6.5% reported heavy drinking, which was higher, although not significantly, than the previous year. Adults who binge drink reported an average of 4.7 binge drinking occasions per month (median = 1.9 drinks) and an average of 7.1 drinks per binge drinking episode (median = 5.3 drinks) (data not shown).

Binge drinking was reported higher in men, and adults with an annual household income of \$75,000 or more. White, non-Hispanic adults reported higher rates of binge (17.3%) and heavy drinking (9%) when compared to adults representing other racial and ethnic groups. Binge drinking and heavy drinking were significantly higher in adults who were less than 35 years of age and who reported being employed/self-employed. The prevalence of binge drinking and heavy drinking was significantly higher in adults who reported frequent mental distress (20.1% and 10.5%, respectively). The prevalence of binge drinking among adults who were current smokers (25.3%) was nearly double the prevalence reported among non-smokers (13.2%) while the prevalence of heavy drinking was almost three times greater among people who smoked (14.5%) as compared to people who did not smoke (5.4%).



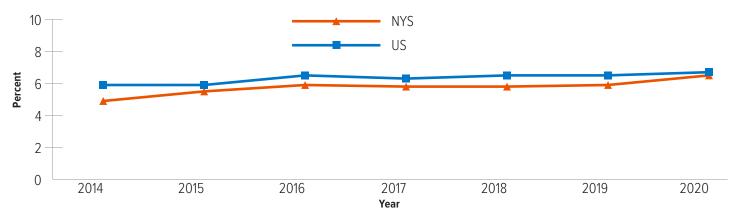


Figure 1. Prevalence of binge drinking among US and NYS adults by survey year, BRFSS 2014-2020



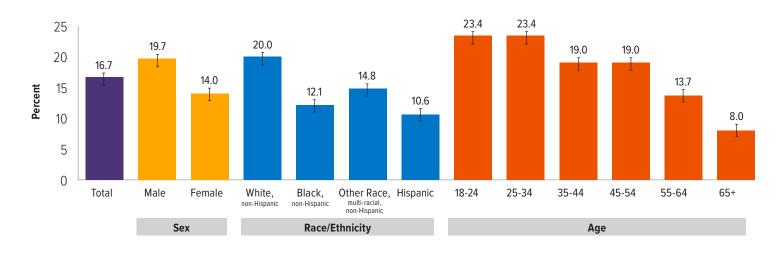
<sup>\*</sup>Median percent; includes data from all 50 states and the District of Columbia.

Figure 2. Prevalence of heavy drinking among US and NYS adults by survey year, BRFSS 2014-2020



<sup>\*</sup>Median percent; includes data from all 50 states and the District of Columbia.

Figure 3. Prevalence of binge or heavy drinking among NYS adults by sex, race/ethnicity, and age, BRFSS 2020



	Binge or Heavy Drinking <sup>a</sup>		Binge Drinking		Heavy Drinking	
	%ь	95% CI⁵	% <sup>b</sup>	95% CI <sup>b</sup>	% <sup>b</sup>	95% CI <sup>b</sup>
otal NYS [N=14,232]	16.7	15.8-17.6	14.7	13.8-15.5	6.5	6.0-7.1
egion						
est of State (NYS excluding NYC)	17.3	16.1-18.5	15.0	13.8-16.1	7.8	6.9-8.6
New York City	15.8	14.4-17.1	14.2	12.9-15.5	4.9	4.2-5.6
ex <sup>c</sup>						
1ale	19.7	18.3-21.0	18.4	17.2-19.8	6.2	5.5-7.0
emale	14.0	12.9-15.1	11.2	10.2-12.3	6.8	6.0-7.6
ace, Ethnicity						
/hite, non-Hispanic	20.0	18.8-21.2	17.3	16.2-18.4	9.0	8.2-9.8
llack, non-Hispanic	12.1	9.7-14.5	10.8	8.5-13.2	3.5	2.4-4.7
Other race or multiracial, non-Hispanic	14.8	12.6-17.0	13.4	11.4-15.5	4.2	3-5.4.0
lispanic	10.6	8.2-13.1	9.7	7.3-12.1	2.4	1.5-3.2
lge						
8-24	23.4	19.9-26.9	22.5	19.0-26.0	7.0	4.8-9.1
5-34	23.4	20.8-26.0	21.9	19.4-24.4	7.2	5.8-8.7
5-44	19.0	16.7-21.3	17.4	15.2-19.6	7.3	5.9-8.8
5-54	19.0	16.6-21.3	16.7	14.4-19.0	7.0	5.7-8.4
5-64	13.7	12.1-15.4	11.3	9.8-12.8	6.7	5.5-7.9
5+	8.0	6.8-9.2	4.9	3.9-5.9	5.0	4.1-6.0
ducational Attainment						
ess than high school	11.9	9.0-14.7	11.1	8.3-13.9	3.7	2.3-5.1
ligh school or GED	15.6	13.9-17.4	14.1	12.4-15.8	5.6	4.6-6.6
iome post-high school	18.7	16.8-20.6	16.2	14.4-18.0	7.9	6.7-9.2
College graduate	18.1	16.8-19.3	15.5	14.3-16.7	7.3	6.5-8.1
Annual Household Income						
ess than \$25,000	14.0	12.0-16.0	12.9	10.9-14.9	4.9	3.8-6.0
25,000-\$34,999	14.8	11.5-18.2	13.6	10.3-16.8	4.1	2.5-5.7
35,000-\$49,999	19.7	16.6-22.8	17.2	14.2-20.1	7.2	5.4-8.9
50,000-\$74,999	19.9	17-22.8	16.4	13.7-19.1	10.6	8.4-12.9
75,000 or more	20.7	19.2-22.3	18.3	16.8-19.8	8.3	7.3-9.2
Missing <sup>d</sup>	10.7	9.1-12.3	9.2	7.7-10.8	3.8	2.8-4.8
imployment Status						
Employed/self-employed	20.9	19.6-22.2	18.9	17.6-20.1	7.8	6.9-8.6
Inemployed	17.7	14.8-20.6	15.3	12.6-18.2	7.6	5.7-9.6
Not in labor force	10.5	9.3-11.6	8.5	7.4-9.6	4.5	3.8-5.2
lealth Coverage						
Private insurance	19.6	18.2-20.9	17.3	16-18.5	7.7	6.9-8.6
Medicare	7.9	6.6-9.3	5.2	4.1-6.2	5.1	4.0-6.1
Medicaid	13.0	10.7-15.3	11.6	9.4-13.8	4.7	3.5-6.0
Other insurance <sup>e</sup>	14.9	10.8-19.0	13.7	9.7-17.7	6.1	3.8-8.3
lo insurance	18.9	15.6-22.3	18.2	14.9-21.6	5.4	3.4-7.4
visability Status'						
es	12.3	10.6-14.0	10.8	9.2-12.4	5.2	4.3-6.2
lo	18.0	17.0-19.1	15.9	14.9-16.8	6.9	6.3-7.6
requent Mental Distress <sup>g</sup>			.5.5		3.3	0.0 7.0
es	22.6	19.8-25.5	20.1	17.4-22.9	10.5	8.6-12.3
lo	16.0	15.1-16.9	14.0	13.1-14.9	6.0	5.5-6.6
Current Smoker <sup>h</sup>	10.0	13.1-10.3	14.0	15.1-17.3	0.0	5.5-0.0
	28.4	25.2-31.6	25.3	22.3-28.4	14.5	12.3-16.8
/es	20.4	23.2-31.0	25.3	ZZ.J=Z0.4	14.5	12.3-10.8

<sup>a</sup>Respondents who reported either binge or heavy drinking. <sup>b</sup>%= Weighted percentage; 95% CI= 95% confidence interval. <sup>c</sup>Based on respondent's sex at birth or current gender identity at time of interview if sex at birth is missing. <sup>d</sup>Missing category included because more than 10% of the sample did not report income. <sup>e</sup>Includes TRICARE, VA/Military, and Indian Health Services. <sup>f</sup>Respondents who reported at least one type of disability (cognitive, self-care, independent living, vision, mobility, or hearing). <sup>g</sup>Frequent mental distress is defined as yes if respondents reported problems with stress, depression, or emotions on at least 14 of the previous 30 days. <sup>h</sup>Current smoker is an adult over age 18 who has smoked at least 100 cigarettes in their lifetime and currently smokes on at least some days.

12.3-14.0

14.2-15.9

#### **Impact of COVID-19**

The Coronavirus disease - 2019 (COVID-19) pandemic is an evolving public health crisis impacting population health nationally and in NYS. On March 22, 2020, NYS issued a directive that all non-essential businesses statewide must close in-office personnel functions. Off-premises alcohol and liquor retail outlets were deemed essential and remained open and restaurants were allowed to serve to-go alcohol. These restrictions and changes could have impacted patterns of alcohol consumption, as bars, restaurants and pubs were not open for on-premises alcohol consumption. In addition, studies identified increases in alcohol consumption across gender and race, alcohol-related emergency room visits, deaths, and sales of off-premises alcoholic beverages in comparison to the pre-pandemic year. The findings from this report should be viewed in the context of the ongoing pandemic and policies that restricted in-person gatherings and simultaneously increased the availability of alcohol sales



- 1. Centers for Disease Control and Prevention (CDC). Alcohol and Public Health. Retrieved on July 26, 2022. https://www.cdc.gov/alcohol/fact-sheets/alcohol-use.htm
- 2. Esser MB, Leung G, Sherk A, et al. Estimated deaths attributable to excessive alcohol use among US adults aged 20 to 64 years, 2015 to 2019. JAMA Netw Open. 2022;5(11):e2239485. Published 2022 Nov 1. doi:10.1001/jamanetworkopen.2022.39485–4.
- 3. Centers for Disease Control and Prevention. Alcohol Related Disease Impact (ARDI) application, 2022. Available at https://nccd.cdc.gov/DPH\_ARDI/Default/Default.aspx
- 4. Woolf SH, Schoomaker H. Life expectancy and mortality rates in the United States, 1959-2017. JAMA. 2019;322(20):1996-2016. doi:10.1001/jama.2019.16932
- 5. Sacks JJ, Gonzales KR, Bouchery EE, Tomedi LE, Brewer RD. 2010 National and state costs of excessive alcohol consumption. Am J Prev Med. 2015;49(5):e73-e79. doi:10.1016/j.amepre.2015.05.031 6. National Cancer Institute. Alcohol and Cancer Risk. Retrieved on July 26, 2022. https://www.cancer.gov/about-cancer/causes-prevention/risk/alcohol/alcohol-fact-sheet#r1.
- 7. Goding Sauer A, Fedewa SA, Bandi P, et al. Proportion of cancer cases and deaths attributable to alcohol consumption by US state, 2013-2016. Cancer Epidemiol. 2021;71(Pt A):101893. doi:10.1016/j. canep.2021.101893.
- 8. Governor Cumo signs the NYS on pause executive order. Retrieved on July 26, 2022 https://www.governor.ny.gov/news/governor-cuomo-signs-new-york-state-pause-executive-order
- 9. Guidance for determining whether a business enterprise is subject to a workforce reduction under a recent executive order Retrieved on October 5, 2022 <a href="https://esd.ny.gov/guidance-executive-order-2026">https://esd.ny.gov/guidance-executive-order-2026</a>
- 10. Barbosa C, Cowell AJ, Dowd WN. Alcohol consumption in response to the COVID-19 pandemic in the United States. J Addict Med. 2021;15(4):341-344.
- 11. Pollard MS, Tucker JS, Green HD Jr. Changes in adult alcohol use and consequences during the COVID-19 pandemic in the US. JAMA Netw Open. 2020;3(9):e2022942. Published 2020 Sep 1.
- 12. Esser MB, Idaikkadar N, Kite-Powell A, Thomas C, Greenlund KJ. Trends in emergency department visits related to acute alcohol consumption before and during the COVID-19 pandemic in the United States, 2018-2020. Drug Alcohol Depend Rep. 2022;3:100049. doi:10.1016/j.dadr.2022.100049
- 13. White AM, Castle IP, Powell PA, Hingson RW, Koob GF. Alcohol-related deaths during the COVID-19 pandemic. JAMA. 2022;327(17):1704-1706. doi:10.1001/jama.2022.4308
- Alcohol sales during the COVID-19 pandemic (Surveillance Report COVID-19). Bethesda, Md, National Institute on Alcohol Abuse and Alcoholism, 2020. https://pubs.niaaa.nih.gov/publications/surveillance-covid-19/COVSALES.htm



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#### **BRFSS Questions**

- 1. During the past 30 days, how many days per week or per month did you have at least one drink of any alcoholic beverage such as beer, wine, a malt beverage or liquor?
- 2. One drink is equivalent to a 12-ounce beer, a 5-ounce glass of wine, or a drink with one shot of liquor. During the past 30 days, on the days when you drank, about how many drinks did you drink on the average?
- 3. 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?
- 4. During the past 30 days, what is the largest number of drinks you had on any occasion?

## Program Contributions



New York State Department of Health

Bureau of Chronic Disease Evaluation and Research

Bureau of Cancer Prevention and Control

#### **Order Information**

#### Copies may be obtained by contacting:

**BRFSS** Coordinator

New York State Department of Health

Bureau of Chronic Disease Evaluation and Research

Empire State Plaza, Rm. 1070

Corning Tower Albany, NY 12237-0679

#### Or by phone or electronic mail:

(518) 473-0673

or

BRFSS@health.ny.gov

or

www.health.ny.gov





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