Number 2024-05



New York State Behavioral Risk Factor Surveillance System Brief

The Behavioral Risk Factor Surveillance System (BRFSS) is an annual statewide telephone survey of adults developed by the Centers for Disease Control and Prevention conducted in all 50 States, the District of Columbia, and several United States Territories. The New York Behavioral Risk Factor Surveillance System 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.

Cannabis Use

New York State Adults, 2021



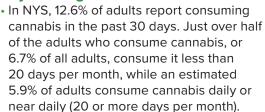
Introduction

Cannabis sativa, also know as weed, pot, marijuana, or hash, is a plant that can have psychoactive characteristics and is consumed recreationally and for medical purposes. The cannabis plant has hundreds of chemical compounds, including tetrahydrocannabinol (THC), which is psychoactive (causes a high), as well as cannabidiol (CBD) which is not psychoactive. Cannabis is commonly consumed in the United States with an estimated 55 million people consuming it in 2020.² The New York State (NYS) Department of Health (DOH) established a regulated medical cannabis program in November 2016, and on March 31, 2021, cannabis consumption became legal for individuals aged 21 years and older.³ Methods or modes of cannabis use include smoking (joints, blunts, or using bongs), vaping (using electronic vaporizing devices), and mixed or infused into foods or drinks (called edibles). There is scientific evidence that cannabis consumption can be associated with short- and long-term dangers, including hallucinations, delusions, poor memory, depression, and poor birth outcomes.⁴⁻¹⁰ The New York State Department of Health is committed to monitoring trends, reporting on the public health risks, and understanding the overall impact of cannabis use on the health of New Yorkers.

Health Equity

Cannabis-related arrests, convictions, and other law enforcement practices have disproportionately targeted people of color, affecting not only individuals, but families and communities. The New York State legislation established a robust social and economic equity program to incentivize participation in the cannabis industry for individuals disproportionately impacted by cannabis prohibition. New York State Department of Health remains committed to monitoring and reducing the burden of cannabis consumption and addressing cannabis-related health disparities to promote safer consumption, prevent underage consumption, and promote and facilitate safe storage practices.





- The most common mode of cannabis consumption by NYS adults aged 18 years and older is smoking (73.3%), followed by eating (14.2%), and vaporizing (8.3%).
- Among cannabis consumers, nearly half (49%) do so for non-medical reasons only, 38% for medical and non-medical reasons, and the remaining 13% consume for medical reasons only.
- The prevalence of cannabis consumption varies by county with estimated percentages ranging from 1.7% to 25.1%.
- Both non-daily cannabis consumption and daily or near daily cannabis consumption are significantly higher among individuals who report recent problems with stress, depression, or emotions (i.e., frequent mental distress); have at least one type of disability; are in the lesbian, gay, bisexual, transgender, queer/questioning and intersex communities; currently smoke tobacco; currently use e-cigarettes; and report binge or heavy drinking.





Figure 1. Prevalence of cannabis consumption among adults (18+ years) in New York, Behavioral Risk Factor Surveillance System, 2018-2021

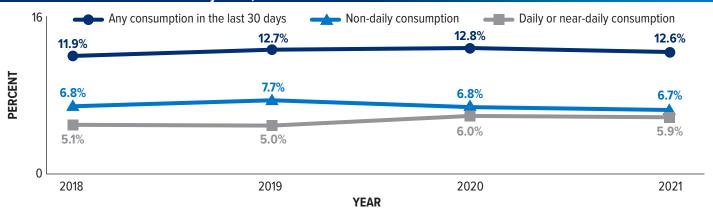
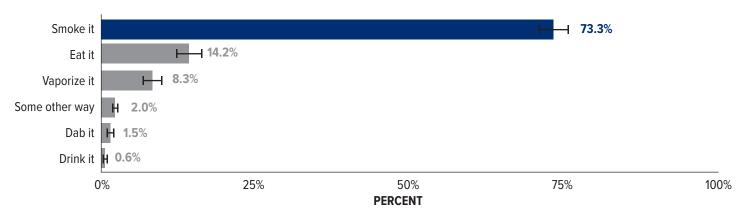


Figure 2. Mode of cannabis consumption among adults (18+ years) in New York, Behavioral Risk Factor Surveillance System, 2021



Note: Error bars represent 95% confidence intervals

Figure 3. Reasons for cannabis consumption among adults (18+ years) in New York, Behavioral Risk Factor Surveillance System, 2021

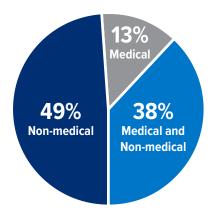
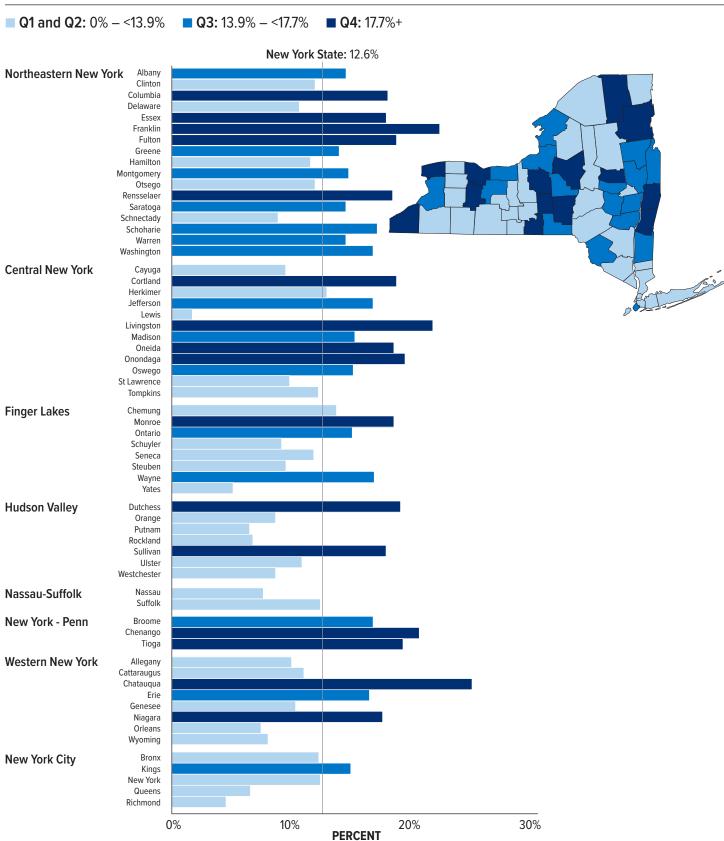


Figure 4. Prevalence of any cannabis consumption in the past 30 days among adults (18+ years) in New York by county, Behavioral Risk Factor Surveillance System, 2021

Counties are shaded based on quartile distribution



The three levels of shading in the map above are based on the rank order of the estimated percentage of adults who report consuming cannabis in each county and do not represent statistical differences between counties.

Table 1. Cannabis consumption among adults^a in New York, Behavioral Risk Factor Surveillance System, 2021

	Any Consumption in past 30 days		Non-Daily Consumption (1-19 days past month)		Daily or Near-Daily Consumption (20+ days past month)	
	%ь	95% CI ^b	%	95% CI	%	95% CI
New York State [n=39,095]	12.6	11.4-13.7	6.7	5.8-7.6	5.9	5.1-6.6
Sex						
Male ^c	15.0	13.5-17.2	8.1	6.7-9.5	7.3	6.0-8.6
Female	10.0	8.6-11.4	5.4	4.3-6.6	4.5	3.6-5.4
Sexual Orientation and Gender Identity						
Lesbian, gay, bisexual, transgender, queer/questioning and intersex	31.1	25.1-37.0	17.5	12.7-22.3	13.6	9.2-18.0
Heterosexual/straight and cisgender ^d	11.4	10.2-12.5	6.0	5.1-6.9	5.4	4.6-6.2
Age (Years)						
18-24	24.6	19.0-30.3	16.0	11.0-21.0	8.7	5.2-12.1
25-34	22.0	18.2-25.8	10.5	7.8-13.3	11.5	8.6-14.3
35-44	14.1	11.5-16.7	7.2	5.3-9.1	6.9	5.1-8.8
45-54	8.6	6.7-10.5	4.2	2.9-5.6	4.4	3.0-5.8
55-64	9.2	7.4-11.0	4.8	3.5-6.0	4.5	3.1-5.8
65+	3.7	2.8-4.6	2.1	1.5-2.6	1.6	1.0-2.3
Race/Ethnicity						
Black, non-Hispanic	17.7	13.8-21.6	9.2	6.1-12.2	8.5	5.7-11.3
Hispanic	10.0	7.5-12.5	4.8	3.0-6.6	5.2	3.4-7.0
Multiracial, non-Hispanic	20.9	12.0-29.9	12.6	4.8-20.4	8.4	2.9-13.9
White, non-Hispanic	13.2	11.6-14.7	7.4	6.2-8.6	5.8	4.7-6.8
All other race groups combined ^e	5.7	3.6-7.8	2.9	1.4-4.3	2.8	1.4-4.3
Annual Household Income						
Less than \$25,000	16.2	12.6-19.7	8.3	5.3-11.2	7.9	5.6-10.2
\$25,000-\$49,999	13.7	11.3-16.0	6.5	4.8-8.1	7.2	5.5-9.0
\$50,000 and greater	11.7	10.1-13.4	6.9	5.6-8.2	4.8	3.8-5.9
Missing ^f	11.0	8.5-13.6	5.7	3.8-7.6	5.3	3.5-7.1
Educational Attainment						
Less than high school	11.0	7.7-14.3	4.7	2.3-7.2	6.3	3.9-8.6
High school or GED	14.9	12.3-17.5	7.4	5.5-9.3	7.5	5.6-9.5
Some post-high school	13.6	11.4-15.8	7.1	5.4-8.8	6.5	5.0-8.0
College graduate	10.6	8.9-12.2	6.6	5.1-8.0	4.0	3.1-4.9
Disability ⁹	45.0	40.0.47.1	7.5	F.O.O.O.	7.0	C4.0.0
Yes	15.2	13.0-17.4	7.5	5.8-9.3	7.6	6.1-9.2
No Posion	11.5	10.2-12.8	6.2	5.2-7.3	5.3	4.3-6.2
Region New York City	40.0	10.744.0	7.5	F 0 0 2	FO	20.00
New York City	12.8	10.7-14.9	7.5	5.8-9.2	5.3	3.9-6.8
New York State exclusive of New York City	12.4	11.1-13.8	6.3	5.3-7.3	6.1	5.2-7.1
Employed	40.0	12 2 45 6	7.5	6200	<i>C</i> 4	E 4 7 F
Employed	13.9	12.3-15-6	7.5	6.2-8.8	6.4	5.4-7.5
Unemployed Not in labor force	19.2	14.1-24.2	8.8	5.4-12.3	10.3	6.2-14.5
Not in labor force	9.1	7.6-10.6	5.0	3.9-6.1	4.1	3.1-5.2
Health care coverage type	12.0	11 1 11 5	77	6201	E 1	1161
Private	12.8	11.1-14.5	7.7	6.3-9.1	5.1	4.1-6.1
Medicare Medicard	6.6	5.1-8.0	4.1	2.9-5.3	2.5	1.7-3.2
Medicaid Other insurance ^h	17.9	14.3-21.5	7.3	4.8-9.8	10.6	7.8-13.3
Other insurance ^h	14.7	10.8-18.6	7.4	4.6-10.3	7.3	4.4-10.2
No coverage	17.9	10.2-25.6	5.5	0.1-10.84	12.5	6.1-18.8

Table 1. Cannabis consumption among adults^a in New York, Behavioral Risk Factor Surveillance System, 2021

		Any Consumption in past 30 days		Non Daily Consumption (1-19 days past month)		Daily or Near Daily Consumption (20+ days past month)	
	% ^b	95% CI⁵	%	95% CI	%	95% CI	
New York State [n=39,095]	12.6	11.4-13.7	6.7	5.8-7.6	5.9	5.1-6.6	
Frequent mental distress ⁱ							
Yes	29.0	24.5-33.5	13.9	10.1-17.8	15.1	11.9-18.3	
No	10.1	9.0-11.2	5.6	4.7-6.4	4.5	3.7-5.3	
Current smoking ^j							
Yes	29.3	25.0-33.6	10.3	7.8-12.9	19.0	15.1-22.8	
No	10.2	9.1-11.4	6.2	5.2-7.2	4.0	3.3-4.7	
Current E-cigarette use							
Every day or some days	48.2	40.5-55.9	25.0	17.9-32.2	23.1	16.5-29.8	
Not at all or never	10.8	9.7-11.8	5.8	4.9-6.6	4.9	4.2-5.7	
Binge or heavy drinking ^k							
Yes	31.9	27.6-36.1	17.6	14.0-21.2	14.3	11.0-17.5	
No	9.0	7.9-10.0	4.8	4.0-5.6	4.2	3.5-4.9	

Notes: "Rows are suppressed when there are less than 50 observations, a confidence interval with a half-width of greater than 10, or when the standard relative error is greater than 0.30. "% = weighted percentage; CI = confidence interval; When comparing estimates, the 95% confidence interval (95% CI) provides the statistical range containing the true population percentage with a 95% probability. The width of the confidence interval is influenced by the number of residents surveyed. Although a 95% confidence interval is not a test of statistical significance, estimates whose 95% confidence intervals do not overlap can be considered significantly different. 'Based on respondent's sex at birth, or current gender identity at time of interview if sex at birth is missing. "Heterosexual or straight are people who are sexually oriented toward people of the opposite, usually binary, gender; Cisgender is a person whose current gender corresponds to the sex they were assigned at birth. "Alaska Native, Native Hawaiian or other Pacific Islander, Asian or Other. The response sizes for each individual category did not meet stability standards. "Missing" category included because more than 10% of the sample did not report income. "All respondents who report having at least one type of disability (cognitive, mobility, vision, self-care, independent living, or hearing). "Includes TRICARE, VA/Military, and Indian Health Services. 'All respondents who report problems with stress, depression, or emotions on at least 14 of the previous 30 days. 'All respondents who have smoked at least 100 cigarettes in their lifetime and currently smoke on at least some days. 'Binge drinking is defined as consuming four or more drinks for women and five or more drinks for men on a single occasion in the past month; heavy drinking is defined as eight or more drinks per week for women and fifteen or more drinks per week for men.



References

- Schilling S, Melzer R, McCabe PF. Cannabis sativa. Current Biology. 2020 Jan 6;30(1): R8-R9. doi: 10.1016/j.cub.2019.10.039. PMID: 31910378.
- National Center for Drug Abuse Statistics. Marijuana Addiction: Rates & Usage Statistics. Substance Abuse and Mental Health Services Administration. Retrieved from https://drugabusestatistics.org/marijuana-addiction/ on December 6, 2023.
- New York State Office of Cannabis Management. https://cannabis.ny.gov/system/files/documents/2022/02/adult-use-cannabis-legalization_0_1.
 pdf. Accessed on November 16, 2023.
- NIDA. 2019, December 24. Cannabis (Marijuana) DrugFacts. Retrieved from https://nida.nih.gov/publications/drugfacts/cannabis-marijuana
 on 2024, May 24.
- Kroon E, Kuhns, Cousijn J. The short-term and long-term effects of cannabis on cognition: recent advances in the field. *Current Opinion in Psychology*, 2021,38:49-55.
- 6. National Academies of Sciences, Engineering, and Medicine. 2017. The health effects of cannabis and cannabinoids: The current state of evidence and recommendations for research. Washington, DC: The National Academies Press. doi: 10.17226/24625.
- Hasin DS, Saha TD, Kerridge BT, et al. Prevalence of Marijuana Use Disorders in the United States Between 2001-2002 and 2012-2013. JAMA Psychiatry. 2015;72(12):1235–1242. doi:10.1001/jamapsychiatry.2015.1858
- Meier MH, et al. Persistent cannabis users show neuropsychological decline from childhood to midlife. PNAS. August 27, 2012; 109 (40): E2657-E2664. doi.org/10.1073/pnas.1206820109
- Auer R, et al. Association Between Lifetime Marijuana Use and Cognitive Function in Middle Age: The Coronary Artery Risk Development in Young Adults (CARDIA) Study. *JAMA Intern Med*. 2016 Mar;176(3):352-61. doi: 1001/jamainternmed.2015.7841.
- Hayatbakhsh MR, Flenady VJ, Gibbons KS, Kingsbury AM, Hurrion E, Mamun AA, Najman JM. Birth outcomes associated with cannabis use before and during pregnancy. *Pediatr Res.* 2012 Feb;71(2):215-9. doi: 10.1038/pr.2011.25. Epub 2011 Dec 21. PMID: 22258135.
- 11. Montgomery BW, Allen J. Cannabis Policy in the 21st Century: Mandating an Equitable Future and Shedding the Racist Past. *Clin Ther*. 2023 Jun;45(6):541-550. doi: 10.1016/j.clinthera.2023.05.001. PMID: 37414505.

Behavioral Risk Factor Surveillance System Questions

Cannabis

- **1.** During the past 30 days, on how many days did you use marijuana or cannabis?
- **2.** During the past 30 days, which one of the following ways did you use marijuana the most often? Did you usually...
 - a. Smoke it (for example, in a joint, bong, pipe, or blunt).
 - b. Eat it (for example, in brownies, cakes, cookies, or candy)
 - c. Drink it (for example, in tea, cola, or alcohol)
 - d. Vaporize it (for example, in an e-cigarette-like vaporizer or another vaporizing device)
 - e. Dab it (for example, using a dabbing rig, knife, or dab pen), or
 - f. Use it some other way.
 - g. Don't know/Not sure
- **3.** When you used marijuana or cannabis during the past 30 days, was it usually:
 - a. For medical reasons
 - b. For non-medical reasons
 - c. For both medical and non-medical reasons

Limitations



- BRFSS data are cross-sectional, and causality cannot be inferred.
- BRFSS cannabis-related data is based on self-report which is subject to social desirability and recall bias.

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Program Contributions



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