

Alcohol Use and Alcohol-Related Cancers among New York City Adults

H [ealthyNYC](#), the City's campaign for increasing the life expectancy of New Yorkers, includes a key aim of reducing deaths from screenable cancers (breast, colorectal, lung, prostate, and cervical) by 20% before 2030. To achieve this goal, the City and its partners will make robust efforts to address key risk factors for cancer, link New Yorkers to effective screenings, and support access to high quality medical care.

Alcohol is a commonly used drug among U.S. adults¹ and is strongly linked to at least seven types of cancer: mouth, throat, larynx, esophagus, liver, colorectal, and female breast.² In the U.S., only about half of adults recognize that alcohol use increases cancer risk.³ Working to create greater public awareness of the health

risks of alcohol and the benefits of drinking less alcohol, in conjunction with implementing evidence-based policies, could decrease alcohol-related premature deaths and lead to cost savings for society.^{4, 5}

Alcohol use is shaped by a variety of factors including social and cultural norms, stress, advertising, and alcohol availability and price. Addressing these social and commercial determinants is vital to prevent the health impacts, including cancer, of alcohol use. This report presents data describing alcohol use patterns, disparities and inequities in cancers commonly linked to alcohol use, and variation in the retail environment across the city. The report concludes with strategies to reduce alcohol use.

Alcohol-related cancer cases differed by sex assigned at birth, and race and ethnicity

- In New York City (NYC) from 2017 to 2021, there were an average of about 3,400 new colorectal cancer cases, 1,000 new liver cancer cases, and more than 6,600 new female breast cancer cases each year.
- In 2017-2021, the rate of colorectal cancer cases was higher among males than females (40 vs. 29 per 100,000). Black and white males had higher rates than Latino and Asian and Pacific Islander (API) males. Rates were also higher among Black and white females compared with Latina and API females.
- The rate of liver cancer cases was three times higher among males (13 per 100,000) than females (4 per 100,000).
- The rate of female breast cancer cases was higher among white females (147 per 100,000) than Black, Latina, or API females. However, the rate of death due to breast cancer was highest among Black females (22 per 100,000) compared with other racial and ethnic groups (9 to 17 per 100,000).⁶

Annual new cancer cases per 100,000 New York City residents by sex at birth and race and ethnicity, 2017-2021

	Colorectal		Liver		Female breast
	Males	Females	Males	Females	
White	42	32	10	4	147
Black	43	32	15	5	125
Latino	35	24	18	7	94
Asian/PI	38	26	21	7	111

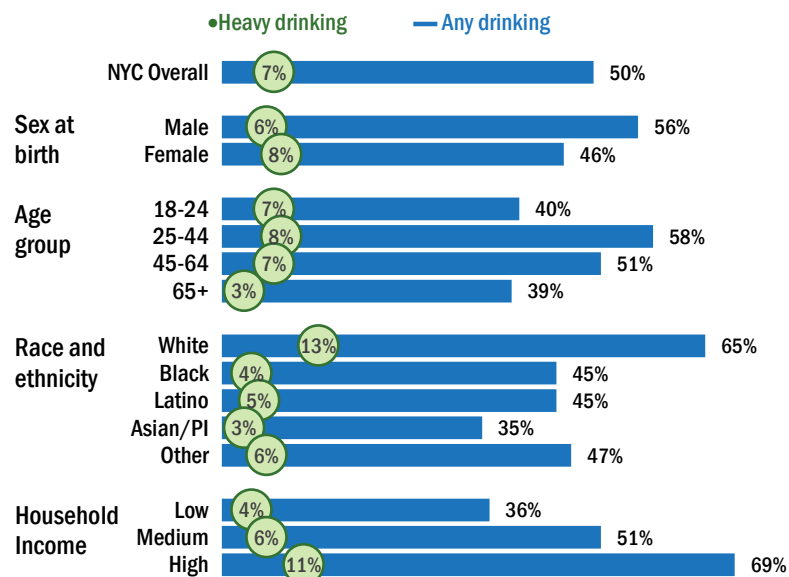
White, Black, and Asian/Pacific Islander (PI) categories exclude those of Latino ethnicity. Latino includes Hispanic or Latino of any race.

Source: NYS Cancer Registry, 2017-2021

Data sources: Community Health Survey (CHS) 2022,2023: CHS is conducted annually by the Health Department with approximately 9,000 -10,000 noninstitutionalized adults ages 18 and older. Estimates are age-adjusted to the U.S. 2000 standard population, except where noted. Since 2021, CHS has used a random sample of NYC mailing addresses to obtain participants. For more survey details, visit nyc.gov/health/survey. **Current Liquor Authority Active Licenses 2023:** Database of alcohol retailer counts maintained by the NY State Liquor Authority Division of Alcoholic Beverage Control. Neighborhood Poverty Level data are from the **American Community Survey**, conducted by the United States Census Bureau. Cancer cases are from the **NYS Cancer Registry**, 2017-2021 and represent newly identified cases. Cancer reporting is required in New York State.

Males and New Yorkers living in households with higher income were more likely to drink alcohol

Prevalence of drinking alcohol heavily among New York City adults, 2023



Heavy drinking: Males having more than two alcoholic drinks or females having more than one alcoholic drink per day, on average, in the past 30 days. A drink of alcohol is one can or bottle of beer/wine cooler, one glass of wine, one cocktail, or one shot of liquor. **Household income** defined as percent of federal poverty level (FPL); low=<200% FPL, medium=200-399% FPL, high=>=400% FPL. White, Black, Asian/Pacific Islander (PI) and Other race categories exclude those of Latino ethnicity. Latino includes Hispanic or Latino of any race.

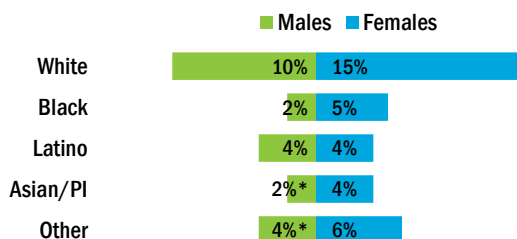
Source: NYC Community Health Survey, 2023.

- The more individuals drink, the greater their risk of developing cancer.²
- In 2023, half of NYC adults drank any alcohol in the past 30 days, including 7% who drank heavily (more than two drinks per day, on average, for males and more than one drink per day, on average, for females).
- Males were more likely to drink any alcohol than females (56% vs. 46%), but heavy drinking was similar among males and females (6% vs. 8%).
- Adults ages 25 to 44 and 45 to 64 were more likely to drink alcohol (58% and 51%) than adults ages 18 to 24 (40%) and 65 or older (39%).
- White adults were more likely to drink any alcohol than adults of any other racial and ethnic group (65% vs. 35% to 47%).
- Adults in households with high income were almost twice as likely to drink alcohol as those living in households with low income (69% vs. 36%) and about three times as likely to drink alcohol heavily (11% vs. 4%).

Heavy alcohol drinking was more common among white adults, regardless of sex assigned at birth

- Overall, in 2022-2023 heavy drinking was more than twice as common among white adults than Black, Latino, or API adults (13% vs. 3% to 4%).
- White males had a higher prevalence of heavy drinking than Black, Latino, or API males (10% vs. 2-4%).
- White females had a higher prevalence of heavy drinking than Black, Latina, or API females (15% vs. 4-5%).
- White and Black females had higher rates of heavy drinking than their male counterparts (15% vs. 10% and 5% vs. 2%, respectively).

Prevalence of heavy drinking by sex assigned at birth and race/ethnicity, New York City adults, 2022-2023



Heavy drinking: Males having more than two alcoholic drinks or females having more than one alcoholic drink per day, on average, in the past 30 days. A drink of alcohol is one can or bottle of beer/wine cooler, one glass of wine, one cocktail, or one shot of liquor.

White, Black, Asian/Pacific Islander (PI), and Other race categories exclude those of Latino ethnicity. Latino includes Hispanic or Latino of any race.

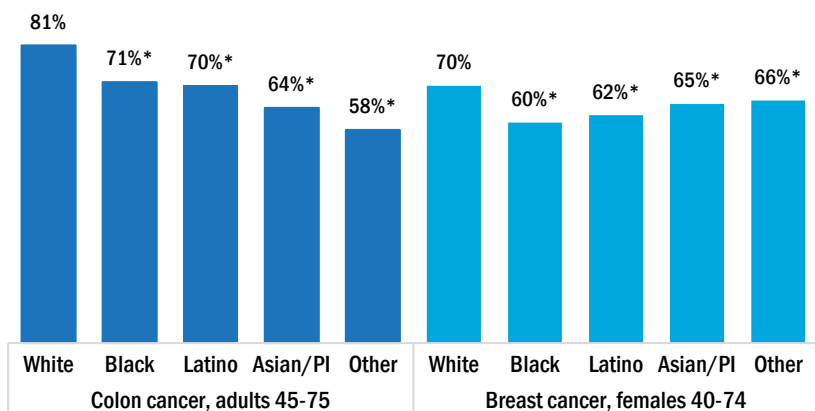
*Estimate should be interpreted with caution due to large Relative Standard Error.

Source: NYC Community Health Survey, 2022-23

Definitions: A drink of alcohol is one can or bottle of beer or wine cooler, one glass of wine, one cocktail, or one shot of liquor. **Heavy drinking:** Males having more than two alcoholic drinks per day or females having more than one alcoholic drink per day, on average, in the past 30 days. **Any drinking:** One or more alcoholic drinks in the past 30 days. **Neighborhood poverty** (based on ZIP code) is the percentage of residents with incomes below the federal poverty level (FPL) per the American Community Survey, 2018-2022, for CHS data: low poverty = <10%, medium = 10 - <20%, high = 20 - <30%, very high = ≥30% of the population living below FPL. **Household income** defined as percentage of FPL: low income = <200% of FPL, medium = 200 - <399400% of FPL, high = ≥ 400% of FPL. **Current colon cancer screening:** Colonoscopy in the past 10 years or stool-based test in the past year. **Race/ and ethnicity:** Collection of race and /ethnicity information may differ across data sources. Case data (p. 1): Based on provider reports. Latino includes individuals of Hispanic//Latino descent and regardless of reported race. Prevalence and screening data (p. 2 and p. 3, respectively): Latino includes people of Hispanic or Latino origin, as identified by the survey question "Are you Hispanic or Latino?" and regardless of reported race. Black, white, Asian/Pacific Islander, and Other race categories exclude those who identified as Latino.

Only two thirds of females who drank heavily were recently screened for breast cancer

Current cancer screening among New York City adults who drank alcohol heavily, 2022-2023



Heavy drinking: Males having more than two alcoholic drinks or females having more than one alcoholic drink per day, on average, in the past 30 days. A drink of alcohol is one can or bottle of beer/wine cooler, one glass of wine, one cocktail, or one shot of liquor.

Current colorectal cancer screening: colonoscopy in the past 10 years or stool-based test in the past year.

Current breast cancer screening: mammogram in the past 2 years.

Race/ethnicity: White, Black, Asian/Pacific Islander (PI) and Other race categories exclude Latino ethnicity. Latino includes Hispanic or Latino of any race.

*Estimate should be interpreted with caution due to small sample size or wide 95% Confidence Interval.

Source: NYC Community Health Survey, 2022-23

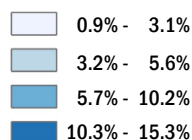
- Early detection of cancer by screening can make treatment easier and improve outcomes, including mortality. Among the seven cancers for which alcohol is a clear risk factor, universal age-based screening is recommended for colon and breast cancer. Current guidelines from the U.S. Preventive Services Task Force advise screening for breast cancer starting at age 40⁷ and for colon cancer at age 45,⁸ with people at high risk often needing to start earlier.
- In 2022-2023, among NYC adults ages 45 to 75 who drank heavily, about three quarters (76%) were up to date with colon cancer screening. Screening rates were lower for API adults than white adults. Rates were similar across other racial/ethnic groups.
- Among females ages 40 to 74 who drank heavily, about two thirds (66%) were up to date with breast cancer screening. Screening rates were similar across racial/ethnic groups (60%* to 70%).

Note: Respondents' drinking patterns may have been different at the time of screening (for example, in the past 10 years for colonoscopy) than at the time of the survey.

Liquor store density is associated with heavy alcohol drinking

Count of liquor stores per 100k residents and prevalence of heavy drinking by United Hospital Fund area, New York City, 2022-2023

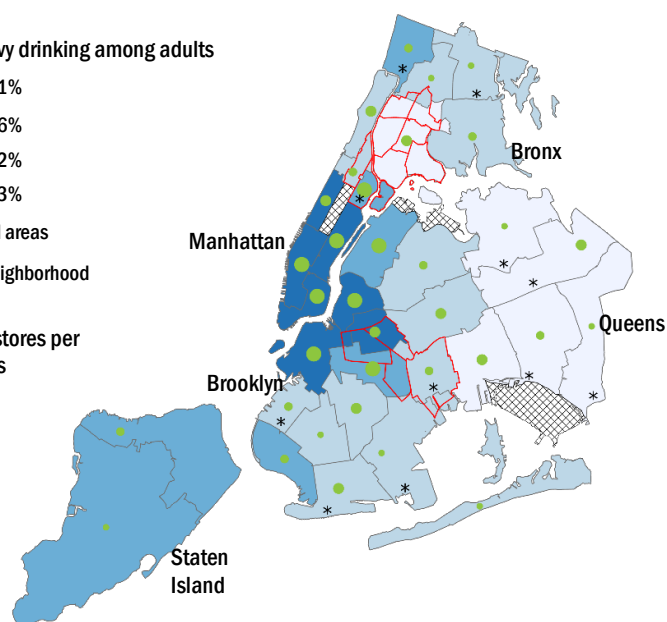
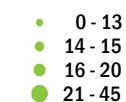
Prevalence of heavy drinking among adults



Unpopulated areas

Bureau of Neighborhood Health areas

Number of liquor stores per 100,000 residents



- As of 2023, there were a total of 24,870 businesses licensed to sell liquor in NYC, with 1,497 categorized as liquor stores.
- Increased alcohol retailer density (the number of licensed alcohol retailers per population within a geographic area) is associated with excessive alcohol consumption.⁹
- Neighborhoods with the highest density of liquor stores also had the highest prevalence of heavy drinking (12%), about three times higher than in neighborhoods with the lowest liquor store density (4%).

* Estimate should be interpreted with caution due to small sample size or wide 95% Confidence Interval. The United Hospital Fund classifies New York City into 34 neighborhoods, comprised of contiguous ZIP codes. [Bureau of Neighborhood Health areas](#): The Health Department, in partnership with community organizations, offers neighborhood-specific services to reduce health inequities and improve health outcomes in North and Central Brooklyn, East Harlem, and the South Bronx.

Sources: NYC Community Health Survey, 2022-23; NY State Liquor Authority Division of Alcoholic Beverage Control, Active Liquor Licenses 2023.

Recommendations



Community-based organizations, public health practitioners, and social service providers:

- Communicate effectively and respectfully about alcohol use, cancer, and health inequities. Use person-first language (“people who drink alcohol” instead of “drinkers”).
- Implement projects that address excess alcohol promotion, availability, or use. Refer to the Race to Justice Action Kit (visit nyc.gov/health and search “Race to Justice”) for best practices on meaningfully engaging communities.
- Create opportunities to increase awareness of alcohol’s health risks including through multisectoral coalitions and partnerships.
- Limit the presence of alcohol, including advertising, at organization events.



Health care providers:

- Assess alcohol use at every visit with a substance use screening tool such as [TAPS](#). When asking patients about alcohol use, use neutral, person-centered language. Share information about the health risks of alcohol use.
- Collaborate with patients to explore their personal relationship with alcohol, including their motivations for use and what kinds of harms they perceive.
- Offer patients harm reduction strategies, including learning how to set goals and drink more safely. See [Mindful Drinking: How To Reduce Your Risk of Alcohol-Related Harms](#) for patient-level tips.
- Recommend cancer screenings tailored to patients’ age and other risks.



Public health researchers, funders, and policymakers:

- Bolster youth prevention programming in schools and other venues to increase awareness of alcohol risks.
- Convene and fund communities most impacted by alcohol use and its negative health and social outcomes in planning research and developing communication materials.
- Fund education campaigns to raise awareness of alcohol-related cancer risks and where to get screenings.
- Consider policy options including warning labels, alcohol retailer reduction, alcohol advertising restrictions, and price levers such as taxes or minimum unit pricing to reduce the likelihood of alcohol-related harms.
- Require alcohol server training, including cancer risk information.

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Health equity is attainment of the highest level of health and well-being for all people. Not all New Yorkers have the same opportunities to live a healthy life. Achieving health equity requires focused and ongoing societal efforts to address historical and contemporary injustices such as discrimination based on race and ethnicity, and other identities. For more information, visit the World Health Organization’s [Health Equity](#) webpage.

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Acknowledgements: Kinjia Hinterland, Kim Kessler, Kacie Seil, Sung Woo Lim, Shadi Chamany, Michelle Morse, Simone Hawkins, Shivani Mantha, Tina Saha, Ellenie Tuazon, Charles Asumeng, Adrienne Gelpi, Beth Seltzer.

Suggested citation: Coleman JT, Grasso A, Conigliaro T, Jasek J. Alcohol Use and Cancer Risk among New York City Adults. *NYC Vital Signs* 2025, 22(4); 1-4.



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