New York City Department of Health and Mental Hygiene

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Alcohol Use and Health Risk Behaviors among NYC Youth

Data Tables

Table 1.	Youth drinking in NYC and the United States, 1997-2011
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- Table 2. Current and binge drinking among youth by demographic characteristics, NYC, 2011
- Table 3a. Current drinking among youth by demographic characteristics, NYC, 2007-2011
- **Table 3b.** Binge drinking among youth who currently drink by demographic characteristics, NYC, 2007-2011
- Table 4. Type of alcohol consumed in the past 30 days among youth who reported current drinking, NYC, 2011
- **Table 5.** Youth alcohol use, violence and bullying, NYC, 2011
- **Table 6.** Youth alcohol and drug use by drinking status, NYC, 2011
- **Table 7.** Youth alcohol use and sexual activity, NYC, 2011

Data Sources

NYC YRBS: The Youth Risk Behavior Survey (YRBS), conducted in collaboration by the Health Department and the NYC Department of Education, is an anonymous, biennial study of NYC public high school students.

National YRBSS: The Youth Risk Behavior Surveillance System (YRBSS) is a self-administered survey of approximately 17,000 public and private school students in grades nine through 12, conducted in odd years by the CDC.

To access the related Epi Data Brief, go to www.nyc.gov/html/doh/downloads/pdf/epi/databrief21.pdf





Table 1. Youth drinking in NYC and the United States, 1997-2011

Source: NYC Youth Risk Behavior Survey 1997-2011; National Youth Risk Behavior Surveillance System 1997-2011

					Binge Dr	inkers ²		
		Curre	Current Drinkers ¹		ng all youth	Among youth who currently drink		
	Year	Percent	95% Confidence Interval	Percent	95% Confidence Interval	Percent	95% Confidence Interval	
NYC	1997	39.7	(35.0 – 44.6)	18.4	(15.0 – 22.4)	46.4	(39.0 - 53.9)	
	1999	37.8	(33.4 – 42.4)	16.6	(14.2 - 19.3)	44.9	(40.4 - 49.5)	
	2001	41.8	(38.1 – 45.6)	17.9	(15.6 – 20.4)	43.2	(39.1 - 47.5)	
	2003	35.5D	(33.5 – 37.5)	15.7	(14.6 - 17.0)	43.9	(41.6 - 46.3)	
	2005	35.5D	(32.8 – 38.2)	13.6	(12.2 – 15.1)	38.5D	(35.6 - 41.5)	
	2007	33.5U	(31.2 – 35.9)	14.8	(13.1 - 16.6)	46.2	(42.9 - 49.4)	
	2009	32.0	(30.0 – 34.2)	14.0	(12.6 – 15.5)	46.1	(43.4 - 48.9)	
	2011	30.6	(28.8 - 32.5)	12.7	(11.7 - 13.9)	44.1	(41.5 - 46.8)	
United States	1997	50.8	(47.9 – 53.6)	33.4	(31.2-35.6)	66.6	(64.0 - 69.1)	
	1999	50.0	(47.4 - 52.7)	31.5U	(29.6-33.5)	63.4	(61.0 - 65.7)	
	2001	47.1	(44.8 – 49.3)	21.9	(21.0-22.8)	64.4	(61.7 - 67.0)	
	2003	44.9	(42.5 - 47.4)	28.3	(26.3-30.4)	64.2	(61.8 - 66.7)	
	2005	43.3	(40.5 - 46.1)	25.5U	(23.3 - 27.9)	59.4	(56.7 - 62.1)	
	2007	44.7	(42.4 - 47.0)	26.0	(24.0-28.0)	60.6	(58.2 - 63.0)	
	2009	41.8	(40.2 - 43.4)	24.2	(22.6-25.9)	60.9	(58.3 - 63.5)	
	2011	38.7	(37.2 - 40.3)	21.9	(21.0-22.8)	58.7	(56.9 - 60.6)	

 $^{^{1}}$ Current Drinking: Consuming at least 1 alcoholic drink during the past 30 days.

² Binge Drinking: Consuming 5 or more alcoholic drinks in a row (within a couple of hours) at least once during the past 30 days.

D Data rounded down to nearest whole number for purposes of reporting in the text.

U Data rounded up to nearest whole number for purposes of reporting in the text.

^{95%} confidence intervals are a measure of estimate precision. The wider the interval, the more imprecise the estimate.



Table 2. Current and binge drinking among youth by demographic characteristics, NYC, 2011

Source: NYC Youth Risk Behavior Survey 2011

		Current Drinkers ¹			Binge Drinkers ² among those who currently drink				
	Percent	95% Confidence Interval	P-value	Percent	95% Confidence Interval	P-value			
Overall	30.6	(28.8 - 32.5)	N/A	44.1	(41.5 - 46.8)	N/A			
Sex				I I I					
Female	32.6	(29.8 - 35.5)	Referent	41.2	(37.4 - 45.1)	Referent			
Male	28.3	(26.2 - 30.5)	<0.001	46.9	(43.6 - 50.1)	0.022			
Grade				I					
9th grade	22.9	(20.7-25.1)	<0.001	41.5U	(35.4 - 47.9)	0.039			
10th grade	29.0	(24.9-33.4)	<0.001	41.2	(36.1 - 46.5)	0.004			
11th grade	32.9	(30.3-35.6)	< 0.001	41.7	(37.0 - 46.5)	0.016			
12th grade	41.2	(37.3-45.2)	Referent	49.8	(46.0 - 53.6)	Referent			
Race/Ethnicity				I I I					
Hispanic	36.0	(34.3 - 37.7)	0.033	50.0	(45.8 - 54.1)	0.801			
White Non-Hispanic	40.2	(35.3 - 45.3)	Referent	49.0	(42.8 - 55.3)	Referent			
Black Non-Hispanic	29.1	(26.1 - 32.2)	<0.001	33.2	(29.2 - 37.5)	< 0.001			
Asian	13.6	(11.4 - 16.3)	<0.001	37.7	(30.9 - 45.1)	0.017			
Other ³	37.1	(31.9 - 42.6)	0.351	59.3	(49.6 - 68.3)	0.057			
Borough of Residence				!					
Bronx	32.2	(29.6 - 35)	0.025	47.0	(42.2 - 51.8)	0.545			
Brooklyn	31.0	(27.3 - 34.9)	0.007	39.6	(34.9 - 44.5)	0.331			
Manhattan	37.2	(33.9 - 40.5)	Referent	44.6	(37.0 - 52.4)	Referent			
Queens	26.3	(23.6 - 29.2)	<0.001	45.1	(40.6 - 49.6)	0.908			
Staten Island	31.3	(27.7 - 35.1)	0.016	51.1	(45.7 - 56.5)	0.181			

¹ Current Drinking: Consuming at least 1 alcoholic drink during the past 30 days.

² Binge Drinking: Consuming 5 or more alcoholic drinks in a row (within a couple of hours) at least once during the past 30 days.

³ Other: American Indian, Native Hawaiian/other Pacific Islander, or non-Hispanic multiple race/ethnicity.

U Data rounded up to nearest whole number for purposes of reporting in the text.



Table 3a. Current drinking among youth by demographic characteristics, NYC, 2007-2011

Source: NYC Youth Risk Behavior Survey 2007-2011

		2007		2009		2011	P	ercent chang	ge
	Percent	95% Confidence Interval	Percent	95% Confidence Interval	Percent	95% Confidence Interval	2007 vs 2009	2009 vs 2011	2007 vs 2011
Current Drinkers ¹									
Overall	33.5U	(31.2 - 35.9)	32.0	(30.0 - 34.2)	30.6	(28.8 - 32.5)	-4.5%	-4.4%	-8.7%
Gender									
Female	34.5D	(31.8 - 37.3)	33.4	(31.2 - 35.6)	32.6	(29.8 - 35.5)	-3.2%	-2.4%	-5.5%
Male	32.5D	(29.2 - 35.9)	30.5D	(28.0 - 33.2)	28.3	(26.2 - 30.5)	-6.2%	-7.2%	-12.9%
Grade									
9th grade	26.9	(23.0 - 31.1)	26.4	(23.1 - 30.1)	22.9	(20.7-25.1)	-1.9%	-13.3%	-14.9%
10th grade	33.0	(29.5 - 36.7)	29.3	(26.1 - 32.6)	29.0	(24.9-33.4)	-11.2%	-1.0%	-12.1%
11th grade	38.5D	(35.4 - 41.7)	32.8	(30.2 - 35.6)	32.9	(30.3-35.6)	-14.8%	0.3%	-14.5%
12th grade	40.6	(36.0 - 45.4)	42.6	(39.4 - 45.8)	41.2	(37.3-45.2)	4.9%	-3.3%	1.5%
Race/Ethnicity									
Hispanic	41.6	(39.6 - 43.5)	39.9	(37.4 - 42.4)	36.0	(34.3 - 37.7)	-4.1%	-9.8%	-13.5%
White Non-Hispanic	49.8	(44.3 - 55.4)	42.1	(36.7 - 47.8)	40.2	(35.3 - 45.3)	-15.5%	-4.5%	-19.3%
Black Non-Hispanic	26.1	(22.4 - 30.2)	28.6	(26.2 - 31.2)	29.1	(26.1 - 32.2)	9.6%	1.7%	11.5%
Asian	15.4	(12.4 - 19.0)	14.3	(10.6 - 19.0)	13.6	(11.4 - 16.3)	-7.1%	-4.9%	-11.7%
Other ²	36.3	(30.6 - 42.5)	29.8	(24.8 - 35.3)	37.1	(31.9 - 42.6)	-17.9%	24.5%	2.2%
Borough of Residence									
Bronx	33.3	(28.8 - 38.2)	33.3	(29.9 - 36.9)	32.2	(29.6 - 35.0)	0.0%	-3.3%	-3.3%
Brooklyn	31.0	(27.5 - 34.6)	31.7	(26.7 - 37.2)	31.0	(27.3 - 34.9)	2.3%	-2.2%	0.0%
Manhattan	38.0	(32.0 - 44.4)	38.0	(32.7 - 43.6)	37.2	(33.9 - 40.5)	0.0%	-2.1%	-2.1%
Queens	32.5U	(28.0 - 37.4)	28.1	(25.2 - 31.2)	26.3	(23.6 - 29.2)	-13.5%	-6.4%	-19.1%
Staten Island	41.3	(37.4 - 45.3)	39.1	(35.0 - 43.2)	31.3	(27.7 - 35.1)	-5.3%	-19.9%	-24.2%

Bold percentages indicate a statistically significant percent change.

¹ Current Drinking: Consuming at least 1 alcoholic drink during the past 30 days.

 $^{^{2}}$ Other: American Indian, Native Hawaiian/other Pacific Islander, or more than one race

D Data rounded down to nearest whole number for purposes of reporting in the text.

U Data rounded up to nearest whole number for purposes of reporting in the text.

^{95%} confidence intervals are a measure of estimate precision. The wider the interval, the more imprecise the estimate.



Table 3b. Binge drinking among youth who currently drink by demographic characteristics, NYC, 2007-2011

Source: NYC Youth Risk Behavior Survey 2007-2011

		2007		2009		2011	Po	ercent chan	ge
	Percent	95% Confidence Interval	Percent	95% Confidence Interval	Percent	95% Confidence Interval	2007 vs 2009	2009 vs 2011	2007 vs 2011
Overall	46.2	(42.9 - 49.4)	46.1	(43.4 - 48.9)	44.1	(41.5 - 46.8)	-0.2%	-4.3%	-4.5%
Gender									
Female	44.6	(39.7 - 49.6)	42.5U	(39.1 - 46.1)	41.2	(37.4 - 45.1)	-4.7%	-3.1%	-7.6%
Male	48.3	(44.4 - 52.1)	50.6	(46.7 - 54.6)	46.9	(43.6 - 50.1)	4.8%	-7.3%	-2.9%
Grade									
9th grade	45.9	(38.5 - 53.5)	40.3	(36.6 - 44.2)	41.5U	(35.4 - 47.9)	-12.2%	3.0%	-9.6%
10th grade	40.3	(34.8 - 46.1)	44.9	(38.3 - 51.7)	41.2	(36.1 - 46.5)	11.4%	-8.2%	2.2%
11th grade	50.0	(44.0 - 56.1)	43.5D	(38.3 - 48.7)	41.7	(37.0 - 46.5)	-13.0%	-4.1%	-16.6%
12th grade	50.0	(44.7 - 55.3)	53.6	(48.6 - 58.5)	49.8	(46.0 - 53.6)	7.2%	-7.1%	-0.4%
Race/Ethnicity									
Hispanic	50.9	(47.0 - 54.8)	50.3	(47.4 - 53.1)	50.0	(45.8 - 54.1)	-1.2%	-0.6%	-1.8%
White Non-Hispanic	55.0	(50.9 - 59.0)	51.0	(40.9 - 60.1)	49.0	(42.8 - 55.3)	-7.3%	-3.9%	-10.9%
Black Non-Hispanic	34.4	(28.9 - 40.3)	36.2	(32.5 - 40.2)	33.2	(29.2 - 37.5)	5.2%	-8.3%	-3.5%
Asian	38.8	(29.8 - 48.6)	48.0	(37.9 - 58.3)	37.7	(30.9 - 45.1)	23.7%	-21.5%	-2.8%
Other ¹	39.2	(28.0 - 51.7)	46.7	(36.0 - 57.8)	59.3	(49.6 - 68.3)	19.1%	27.0%	51.3%
Borough of Residence									
Bronx	49.1	(42.9 - 55.4)	46.0	(41.4 - 50.7)	47.0	(42.2 - 51.8)	-6.3%	2.2%	-4.3%
Brooklyn	41.8	(36.4 - 47.3)	40.8	(35.9 - 45.8)	39.6	(34.9 - 44.5)	-2.4%	-2.9%	-5.3%
Manhattan	44.1	(38.8 - 49.6)	47.3	(41.0 - 53.6)	44.6	(37.0 - 52.4)	7.3%	-5.7%	1.1%
Queens	46.3	(39.9 - 52.8)	47.3	(42.1 - 52.6)	45.1	(40.6 - 49.6)	2.2%	-4.7%	-2.6%
Staten Island	55.0	(49.1 - 60.7)	60.7	(53.1 - 67.8)	51.1	(45.7 - 56.5)	10.4%	-15.8%	-7.1%

Bold percentages indicate a statistically significant percent change.

Binge Drinking: Consuming 5 or more alcoholic drinks in a row (within a couple of hours) at least once during the past 30 days.

95% confidence intervals are a measure of estimate precision. The wider the interval, the more imprecise the estimate.

 $^{^{\}rm 1}$ Other: American Indian, Native Hawaiian/other Pacific Islander, or more than one race

D Data rounded down to nearest whole number for purposes of reporting in the text.

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Table 4. Type of alcohol consumed in the past 30 days among youth who reported current drinking, NYC, 2011

Source: NYC Youth Risk Behavior Survey 2011

	Non-bin	ige drinker ¹	Binge	Binge drinkers ²		
	Percent	95% Confidence Interval	Percent	95% Confidence Interval	P-value	
Type of alcohol						
I did not have usual type	11.1	(8.9-13.7)	10.6	(8.8-12.6)	0.744	
Beer	10.7	(8.6-13.2)	9.6	(7.7-11.8)	0.398	
Alcopops ³	17.4	(15.2-19.8)	17.4	(14.9-20.1)	0.990	
Wine	7.1	(5.8-8.7)	1.9	(1.0-3.5)	<0.001	
Liquor	41.2	(37.6-44.8)	53.1	(49.8-56.3)	< 0.001	
Some other type	10.6	(9.0-12.4)	5.4	(4.0-7.4)	<0.001	

¹ Non-binge drinker: Consumed at least 1 alcoholic drink during the past 30 days but not binge drinking.

95% confidence intervals are a measure of estimate precision. The wider the interval, the more imprecise the estimate.

² Binge Drinking: Consumed 5 or more alcoholic drinks in a row (within a couple of hours) at least once during the past 30 days.

³ Alcopops: Flavored malt beverages such as Smirnoff® ice or wine coolers.



Table 5. Youth alcohol use, violence and bullying, NYC, 2011

Source: NYC Youth Risk Behavior Survey 2011

	Non-drinkers		Non-bin	Non-binge ² drinkers		e ³ drinkers	Non-Drinkers vs. Non-Binge	Non-Binge vs. Binge	Non-Drinkers vs. Binge
	Percent	95% Confidence Interval	Percent	95% Confidence Interval	Percent	95% Confidence Interval	P-value	P-value	P-value
During the past 30 days:							· !		
Carried a weapon at school	1.1	(0.8 - 1.5)	3.7	(2.7 - 5.1)	13.2	(10.6 - 16.3)	<0.001	<0.001	< 0.001
Missed school due to feeling unsafe During the past 12 months:	5.7	(4.8 - 6.7)	9.9 	(8.1 - 12.1)	14.7	(11.7 - 18.3)	 <0.001 	0.002	<0.001
Was threatened or injured with a weapon on school property	3.4	(2.9 - 3.9)	6.7	(5.3 - 8.3)	16.7	(13.4 - 20.7)	 <0.001	<0.001	<0.001
Was in a physical fight	20.1	(18.2 - 22.1)	35.5U	(32.6 - 38.6)	53.8	(49.5 - 58.1)	< 0.001	< 0.001	< 0.001
Was hit, slapped, or physically hurt by boyfriend /girlfriend	6.9	(6.2 - 7.7)	11.0	(9.4 - 12.8)	21.7	(19.0 - 24.7)	 <0.001	<0.001	<0.001
Was bullied ⁴ on school property	10.6	(9.3 - 12.0)	13.0	(11.0 - 15.2)	15.3	(13.0 - 17.8)	0.042	0.065	<0.001
Was bullied electronically ⁵	8.3	(7.5 - 9.2)	12.8	(10.5 - 15.5)	17.7	(14.5 - 21.4)	<0.001	0.023	<0.001

¹Non-Drinkers: Consumed no alcohol during the past 30 days.

95% confidence intervals are a measure of estimate precision. The wider the interval, the more imprecise the estimate.

² Non-Binge Drinkers: Consumed at least 1 alcoholic drink during the past 30 days, but did not binge drinking.

³ Binge Drinker: Consuming 5 or more alcoholic drinks in a row (within a couple of hours) at least once during the past 30 days.

⁴ Bullying: One or more students teasing, threatening, spreading rumors about, hitting, shoving, or hurting another student over and over again.

⁵ Electronic bullying: Bullying through e-mail, chat-rooms, instant messaging, Web sites, or texting.

 $^{^{\}rm U}$ Data rounded up to nearest whole number for purposes of reporting in the text.



Table 6. Youth alcohol and drug use by drinking status, NYC, 2011

Source: NYC Youth Risk Behavior Survey 2011

	Non-drinkers ¹		Non-bin	ge ² drinkers	 Bing	ge ³ drinkers	Non-Drinkers vs. Non-Binge	Non-Binge vs. Binge	Non-Drinkers vs. Binge
	Percent	95% Confidence Interval	Percent	95% Confidence Interval	Percent	95% Confidence Interval	P-value	P-value	P-value
Used alcohol before age 13	12.8	(11.3 - 14.4)	37.0	(33.4 - 40.8)	47.1	(43.0 - 51.2)	<0.001	<0.001	<0.001
Any illicit drug (Marijuana, cocaine, heroin, ecstasy, or methamphetamines)	16.6	(14.8 - 18.5)	 49.7	(46.4 - 53.0)	 - 77.7	(74.8 - 80.3)	<0.001	<0.001	<0.001
Marijuana Used marijuana at least once before age 13	2.4	(1.9 - 3.0)	8.4	(6.8 - 10.2)	22.6	(19.1 - 26.6)	<0.001	<0.001	<0.001
Used marijuana 1 or more times during the past 30 days	5.8	(5.0 - 6.7)	2 9.9	(27.1 - 32.8)	56.5D	(52.8 - 60.0)	<0.001	<0.001	<0.001
Prescription Drugs ⁴ Used prescription medication without a prescription Used prescription pain medication (such as Oxycontin, Percocet, etc.) without a prescription	2.8	(0.9 - 1.3) (2.2 - 3.5)	 4.7 8.1	(3.3 - 6.6)	18.6 1 23.7	(16.3 - 21.2) (20.9 - 26.8)	<0.001 <0.001	<0.001 <0.001	<0.001
Other drugs ⁵		(2.2 0.0)	 	(6.1 20.2)		(2013 2010)	10.002	101002	10.002
Cocaine Heroin Methamphetamines Ecstasy	1.0 0.4* 0.7 0.8	(0.7 - 1.4) (0.2 - 0.9) (0.5 - 0.9) (0.6 - 1.2)	2.7 1.2 1.3 3.7	(2.0 - 3.7) (0.7 - 2.0) (0.8 - 2.2) (2.8 - 4.9)	17.2 11.1 11.1 20.2	(14.4 - 20.3) (8.7 - 14.1) (8.7 - 14.1) (17.4 - 23.3)	<0.001 0.017 0.079 <0.001	<0.001 <0.001 <0.001 <0.001	<0.001 <0.001 <0.001 <0.001

¹ Non-Drinkers: Consumed no alcohol during the past 30 days.

95% confidence intervals are a measure of estimate precision. The wider the interval, the more imprecise the estimate.

² Non-Binge Drinkers: Consumed at least 1 alcoholic drink during the past 30 days, *but did not* binge drinking.

³ Binge Drinker: Consuming 5 or more alcoholic drinks in a row (within a couple of hours) at least once during the past 30 days.

⁴ Used during the past 12 months

⁵ Used one or more times during lifetime

^D Data rounded down to nearest whole number for purposes of reporting in the text.

^{*}Estimate should be interpreted with caution. Estimate's Relative Standard Error (a measure of estimate precision) is greater than 30% or the sample size is less than 50, making the estimate potentially unreliable.



Table 7. Sexual activity by drinking status, NYC 2011

Source: NYC Youth Risk Behavior Survey 2011

	Non-drinkers ¹		Non-bin	Non-binge ² drinkers Binge ³ drinkers		³ drinkers	Non-Drinkers vs. Non-Binge	Non-Binge vs. Binge	Non-Drinkers vs. Binge
	ъ.	95% Confidence		95% Confidence		95% Confidence		n 1	
Had sex ever	Percent 25.6	Interval (22.8-28.7)	Percent 53.5D	Interval (48.3-58.6)	Percent 73.3	Interval (68.9-77.2)	P-value <0.001	P-value <0.001	P-value <0.001
Had sexual intercourse before age 13*	4.2	(3.4-5.0)	8.6	(6.5-11.3)	17.2	(14.7-20.1)	<0.001	<0.001	<0.001
Had sexual intercourse with 4 or more people in lifetime*	7.2	(5.8-8.8)	17.6	(14.8-20.8)	29.5D	(25.6-33.7)	<0.001	<0.001	<0.001
Had sexual intercourse with 1 or more people during the past 3 months*	15.2	(13.2-17.5)	36.5D	(32.2-41.0)	54.5U	(50.7-58.3)	<0.001	<0.001	<0.001
Used a condom during last sexual intercourse*	70.3	(65.9-74.4)	65.2	(59.9-70.2)	56.0	(48.6-63.1)	0.077	0.011	<0.001
Been/gotten someone pregnant 1 or more times*	4.5D	(3.7-5.5)	5.2	(3.6-7.3)	9.9	(7.7-12.7)	0.461	0.002	<0.001
Used alcohol or drugs before last sexual intercourse*	6.4	(4.4-9.0)	16.9	(13.9-20.3)	39.6	(35.1-44.2)	<0.001	<0.001	<0.001

¹Non-Drinkers: Consumed no alcohol during the past 30 days.

95% confidence intervals are a measure of estimate precision. The wider the interval, the more imprecise the estimate.

² Non-Binge Drinkers: Consuming at least 1 alcoholic drink during the past 30 days, *but not* binge drinking.

³ Binge Drinker: Consuming 5 or more alcoholic drinks in a row (within a couple of hours) at least once during the past 30 days.

^{*}Among those who have ever had sexual intercourse.

^D Data rounded down to nearest whole number for purposes of reporting in the text.

 $^{^{\}rm U}$ Data rounded up to nearest whole number for purposes of reporting in the text.