

# **Epi Data Brief**

November 2019, No. 120

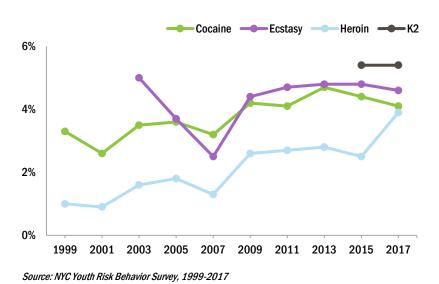
# Illicit Drug Use and Prescription Drug Misuse among Youth in New York City Public High Schools, 2017

This data brief highlights self-reported illicit drug use, including cannabis, ecstasy, K2, cocaine, heroin, and prescription drug misuse among youth in New York City (NYC) public high schools. While youth did not report an increase in cannabis use in 2017, compared with 2015 (the previous survey year), they reported a 33% increase in heroin use (3% in 2015 vs. 4% in 2017).

# One in 10 New York City youth in public high schools reported any illicit drug use In 2017:

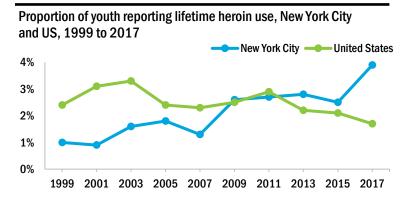
- Nine percent of NYC youth reported any illicit drug use in their lifetime, including cocaine, heroin, ecstasy, and synthetic cannabinoids (K2).
- Four percent of youth reported cocaine use during their lifetime.
  - From 1999 to 2017, the proportion of NYC youth that used cocaine in their lifetime increased from 3% to 4%.
- Five percent of youth reported ecstasy use during their lifetime.
  - From 2003 to 2007, ecstasy use decreased (from 5% to 3%) but increased again from 2007 to 2013 (from 3% to 5%); from 2013 to 2017, ecstasy use remained steady at 5%.

### Proportion of New York City youth reporting lifetime illicit drug use, by drug type, 1999 to 2017



- Five percent of youth reported K2 use during their lifetime.
  - o From 2015 to 2017, the proportion of K2 use remained the same at 5%.
- Four percent of youth reported heroin use during their lifetime.

### Lifetime heroin use increased among New York City youth from 2015 to 2017



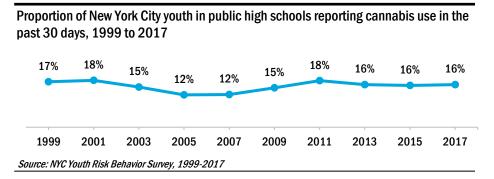
Source: NYC Youth Risk Behavior Survey, 1999-2017; National Youth Risk Behavior Surveillance System, 1999-2017

- In 2017, 4% of NYC youth in public high schools reported ever using heroin; 2% of high school students nationally reported using heroin.
- The proportion of NYC youth reporting heroin use at least once in their life increased from 1999 to 2017 (from 1% to 4%).
  - $_{\odot}$  From 2015 to 2017, use increased from 3% to 4%.
- In 2017, the prevalence of any heroin use was greater among NYC adolescent boys (5%) than adolescent girls (2%).

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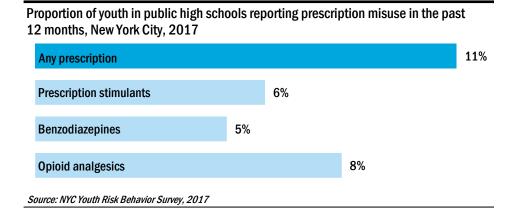
### Sixteen percent of New York City youth used cannabis in 2017

From 1999 to 2005, there was a decrease in the proportion of NYC youth that used cannabis in the past 30 days (from 17% to 12%). Use increased from 2005 to 2011 (from 12% to 18%); the proportion did not change from 2011 to 2017 (16%).



### Prescription drug misuse among New York City youth, 2017

 In 2017, 11% of NYC youth reported any prescription drug misuse in the past 12 months. Six percent reported prescription stimulant misuse, 5% reported prescription benzodiazepine misuse, and 8% reported opioid analgesic misuse in the past 12 months.



#### **Definitions:**

Youth: NYC public high school students in grades 9 through 12.

Cannabis: Refers to marijuana.

Illicit drugs: Ecstasy, cocaine (any form), heroin, and K2. Lifetime use: Use of a drug ever during one's lifetime.

K2: Synthetic cannabinoids, also referred to as Spice, synthetic marijuana, or "legal" marijuana. Any prescription drugs: Includes opioid analgesics, benzodiazepines, and prescription stimulants.

Prescription misuse: Use of prescription drugs without a prescription or differently than how a doctor instructed.

Opioid analgesics: A prescription pain medicine such as codeine, Vicodin®, OxyContin®, Hydrocodone, or Percocet®.

Benzodiazepines: A prescription medication such as Xanax®, Valium®, Klonopin®, or Ativan®.

Prescription stimulants: A medication such as Adderall®, Ritalin®, Concerta®, or Vyvanse®.

Authors: Charles Ko, Ellenie Tuazon, and Denise Paone

Acknowledgements: Hillary Kunins, Elizabeth Mello, Wen Qin Deng, Tamar Marder, Nneka Lundy De La Cruz, Asmara Tesfaye Rogoza Data Sources: The NYC Youth Risk Behavior Survey (YRBS), 1999-2017: The NYC YRBS is a biennial self-administered, anonymous survey conducted in NYC public high schools (including public charter schools) by the NYC Health Department and the NYC Department of Education.

National Youth Risk Behavior Surveillance System (YRBSS): Conducted by the Centers for Disease Control and Prevention, the YRBSS monitors health-risk behaviors which contribute to leading causes of death and disability. The YRBSS includes a national school-based survey of public and private school students in grades 9 to 12 in the 50 states and the District of Columbia.

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# **Epi Data Tables**

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# Illicit Drug Use and Prescription Drug Misuse among Youth in New York City Public High Schools, 2017

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#### **Data Sources**

#### The NYC Youth Risk Behavior Survey (YRBS), 1999-2017:

The NYC YRBS is a biennial self-administered, anonymous survey conducted in NYC public high schools (including public charter schools) by the NYC Health Department and the NYC Department of Education.

#### National Youth Risk Behavior Surveillance System (YRBSS), 1999-2017:

Conducted by the Centers for Disease Control and Prevention, the YRBSS monitors health-risk behaviors which contribute to leading causes of death and disability. The YRBSS includes a national school-based survey of public and private school students in grades 9 to 12 in the 50 states and the District of Columbia.



## Table 1a. Proportion of youth reporting any lifetime cocaine use in the United States, New York City and New York State, 1999-2017

Source: National Youth Risk Behavior Surveillance System, 1999-2017; NYC Youth Risk Behavior Survey, 1999-2017; NYS Youth Risk Behavior Survey, 1999-2017

	United	d States*	New Yo	ork City**	New York State***		
Year	%	95% C.I.	%	95% C.I.	%	95% C.I.	
1999	9.5U	(8.2-11.1)	3.3	(2.0-5.4)	6.8	(5.7-8.0)	
2001	9.4	(8.2-10.7)	2.6	(1.7-3.9)	~	~	
2003	8.7	(7.6-9.9)	3.5D	(2.9-4.2)	6.1	(5.4-6.9)	
2005	7.6	(6.7-8.7)	3.6	(3.0-4.3)	5.1	(4.2-6.2)	
2007	7.2	(6.2-8.2)	3.2	(2.5-4.1)	7.0	(5.8-8.5)	
2009	6.4	(5.7-7.1)	4.2	(3.7-4.9)	7.2	(5.4-9.5)	
2011	6.8	(6.2-7.5)	4.1	(3.5-4.8)	6.2	(5.4-7.2)	
2013	5.5U	(4.7-6.6)	4.7	(3.8-5.6)	5.3	(4.2-6.7)	
2015	5.2	(4.3-6.2)	4.4	(3.6-5.3)	7.6	(6.0-9.6)	
2017	4.8	(4.2-5.6)	4.1	(3.4-4.9)	4.9	(3.7-6.5)	

## Table 1b. Proportion of youth reporting any lifetime heroin use in the United States, New York City and New York State, 1999-2017

Source: National Youth Risk Behavior Surveillance System, 1999-2017; NYC Youth Risk Behavior Survey, 1999-2017; NYS Youth Risk Behavior Survey, 1999-2017

	United	United States*		ork City**	New York State***		
Year	%	95% C.I.	%	95% C.I.	%	95% C.I.	
1999	2.4	(1.9-3.0)	1.0	(0.6-1.8)	2.6	(2.0-3.4)	
2001	3.1	(2.7-3.6)	0.9	(0.5-1.7)	~	~	
2003	3.3	(2.6-4.1)	1.6	(1.3-2.0)	1.8	(1.4-2.3)	
2005	2.4	(2.0-2.8)	1.8	(1.3-2.4)	1.8	(1.3-2.4)	
2007	2.3	(1.8-2.8)	1.3	(0.9-1.9)	3.4	(2.6-4.6)	
2009	2.5D	(2.2-2.9)	2.6	(2.1-3.2)	3.9	(2.8-5.4)	
2011	2.9	(2.5-3.3)	2.7	(2.3-3.2)	4.0	(3.2-5.1)	
2013	2.2	(1.7-2.8)	2.8	(2.1-3.6)	3.7	(2.7-4.8)	
2015	2.1	(1.5-2.8)	2.5	(1.9-3.3)	4.8	(3.8-6.1)	
2017	1.7	(1.3-2.2)	3.9	(3.2-4.8)	3.9	(2.7-5.7)	

# Table 1c. Proportion of youth reporting any lifetime ecstasy use in the United States, New York City and New York State, 2003-2017

Source: National Youth Risk Behavior Surveillance System, 2003-2017; NYC Youth Risk Behavior Survey, 2003-2017; NYS Youth Risk Behavior Survey, 2003-2017

	United	United States*		ork City**	New York State***		
Year	%	95% C.I.	%	95% C.I.	%	95% C.I.	
2003	11.1	(7.8-15.5)	5.0	(4.3-5.8)	6.1	(5.3-7.1)	
2005	6.3	(5.4-7.3)	3.7	(3.0-4.5)	4.1	(3.3-5.1)	
2007	5.8	(5.0-6.6)	2.5U	(2.0-3.3)	6.1	(5.1-7.4)	
2009	6.7	(5.8-7.6)	4.4	(3.7-5.1)	5.8	(4.4-7.7)	
2011	8.2	(7.2-9.4)	4.7	(4.1-5.4)	7.0	(6.0-8.2)	
2013	6.6	(5.6-7.7)	4.8	(4.1-5.5)	7.0	(5.7-8.7)	
2015	5.0	(4.3-5.8)	4.8	(4.0-5.7)	~	~	
2017	4.0	(3.4-4.7)	4.6	(3.9-5.5)	~	~	

## Table 1d. Proportion of youth reporting any lifetime synthetic cannabinoids use in the United States, New York City and New York State, 2015-2017

Source: National Youth Risk Behavior Surveillance System, 2015-2017; NYC Youth Risk Behavior Survey, 2015-2017; NYS Youth Risk Behavior Survey, 2015-2017

United States*			New Y	ork City**	New York State***		
Year	%	95% C.I.	%	95% C.I.	%	95% C.I.	
2015	9.2	(7.9-10.8)	5.4	(4.0-5.7)	10.0	(8.0-12.3)	
2017	6.9	(5.9-7.9)	5.4	(4.5-6.5)	6.2	(5.3-7.3)	

 $<sup>{}^*\</sup>mathsf{US}$  YRBS is administered to both public and private school students.

<sup>\*\*</sup> NYC YRBS is administered to public school students only.

 $<sup>\</sup>ensuremath{^{***}}$  NYS YRBS is administered to public school students only.

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

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

<sup>95%</sup> confidence intervals (CIs) are a measure of estimate precision; the wider the CI, the more imprecise the estimate.

A p-value is a measure of statistical significance. A **bold** p-value less than .05 means there is a significant difference between that group and the referent (comparison) group.

### Table 2a. Trend analyses for lifetime substance use for three time periods among youth in New York City public high schools, 1999-2017

Source: NYC Youth Risk Behavior Survey, 1999-2017

Time period	Substance	Linear Trend <sup>1</sup>	Quadratic Trend <sup>1,2</sup>	Cubic Trend <sup>1,2</sup>
1999 to 2017	Cocaine	Increase, 1999-2017	No change	No change
1555 to 2017	Heroin	Increase, 1999-2017	No change	No change Decrease, 2003-2007 Increase, 2007-2013
2003 to 2017	Ecstasy	No change	No change	No change, 2013-2017
2015 to 2017	K2	No change	Not applicable	Not applicable

<sup>&</sup>lt;sup>1</sup> Based on a trend analysis using logistic regression and controlling for grade, race/ethnicity, and sex. p < 0.05

### Table 2b. Trend analysis of reported cannabis use in the past 30 days among youth in New York City public high schools, 1999-2017

Source: NYC Youth Risk Behavior Survey, 1999-2017

Time period	Substance	Linear Trend <sup>1</sup>	Quadratic Trend <sup>1,2</sup>	Cubic Trend <sup>1,2</sup>
				Decrease, 1999-2005
			Decrease, 1999-2005	Increase, 2005-2011
1999 to 2017	Cannabis	No change	Increase, 2005-2017	No change, 2011-2017

<sup>&</sup>lt;sup>1</sup> Based on a trend analysis using logistic regression and controlling for grade, race/ethnicity, and sex. p < 0.05

## Table 2c. Between years analysis of reported lifetime heroin use among youth in New York City public high schools, 2015-2017

Source: NYC Youth Risk Behavior Survey, 2015-2017

Time period	Substance	% change between years p-value <sup>1</sup>	
2015 to 2017	Heroin	54.7%	0.008

<sup>&</sup>lt;sup>1</sup> Based on between years comparison using T-test

<sup>&</sup>lt;sup>2</sup> When quadratic or cubic trends are significant at p < 0.05, joinpoints are identified using NCI's Joinpoint software.

<sup>&</sup>lt;sup>2</sup> When quadratic or cubic trends are significant at p < 0.05, joinpoints are identified using NCI's Joinpoint software.

### Table 3. Proportion of youth reporting prescription drug misuse in the past 12 months, New York City 2017

Source: NYC Youth Risk Behavior Survey, 2017

New York City**									
Drug Type	%	95% C.I.							
Any prescription <sup>2</sup> drug misuse	11.1	(10.0-12.4)							
Opioid analgesic	7.8	(7.0-8.7)							
Benzodiazepine	5.1	(4.3-6.0)							
Prescription stimulant	5.8	(5.1-6.6)							

<sup>\*\*</sup> NYC YRBS is administered to public school students only.

<sup>&</sup>lt;sup>1</sup> Misuse: use without a prescription or differently than how a doctor instructed.

<sup>&</sup>lt;sup>2</sup> Any prescription includes opioid analgesics, benzodiazepines, and/or prescription stimulants.

<sup>95%</sup> confidence intervals (CIs) are a measure of estimate precision; the wider the CI, the more imprecise the estimate.

#### Table 4. Illicit drug use among youth by demographics, New York City 2017

Source: NYC Youth Risk Behavior Survey, 2017

Data are weighted to the NYC public high school student population.

		Any illicit dr	_	     	Cocaine (lifetime us	e)	     	Heroin (lifetime us	e)	     	Ecstasy (lifetime us	se)	Syn	thetic Cannabi (lifetime us	•
	%	95% C.I.	P-value	%	95% C.I.	P-value	%	95% C.I.	P-value	%	95% C.I.	P-value	%	95% C.I.	P-value
Total	8.9	(7.8-10.1)	~	4.1	(3.4-4.9)	~	3.9	(3.2-4.8)	~	4.6	(3.9-5.5)	~	5.4	(4.5-6.5)	
Sex				:			į			:			:		
Female	5.9	(5.0-7.0)	Referent	2.0	(1.5-2.6)	Referent	1.6	(1.2-2.2)	Referent	2.6	(2.0-3.4)	Referent	4.0	(3.1-5.1)	Referent
Male	10.8	(9.4-12.5)	<0.0001	5.6	(4.6-6.8)	<0.0001	5.3	(4.3-6.6)	<0.0001	5.8	(4.8-7.1)	<0.0001	6.4	(5.3-7.7)	<0.0001
Grade				!			<u> </u>			!			:		
9th grade	6.4	(5.2-7.8)	<0.0001	2.8	(2.0-3.9)	0.001	2.8	(1.9-3.9)	0.095	3.2	(2.5-4.2)	0.012	3.9	(3.1-4.8)	0.100
10th grade	7.7	(5.9-10.1)	0.082	3.0	(2.4-3.9)	0.010	3.6	(2.3-5.4)	0.744	4.0	(2.9-5.6)	0.409	5.4	(3.8-7.7)	0.761
11th grade	10.1	(7.9-12.8)	0.934	4.3	(2.8-6.3)	0.404	4.3	(2.9-6.4)	0.630	5.0	(3.5-7.2)	0.848	6.5U	(4.9-8.6)	0.228
12th grade	9.9	(8.6-11.5)	Referent	5.1	(4.0-6.4)	Referent	3.9	(3.0-5.0)	Referent	4.8	(3.8-6.0)	Referent	5.1	(4.1-6.4)	Referent
Race/Ethnicity <sup>2</sup>				) 			İ			ı İ			Î		
White	9.2	(7.3-11.7)	Referent	4.3	(3.1-6.0)	Referent	3.4	(2.0-5.8)	Referent	4.3	(3.1-6.0)	Referent	5.8	(4.1-8.3)	Referent
Black	7.0	(5.5-8.8)	0.061	2.7	(1.9-3.9)	0.039	3.4	(2.2-5.1)	0.942	3.5D	(2.4-4.9)	0.246	4.4	(3.4-5.7)	0.195
Latino/a	10.3	(8.8-11.9)	0.424	4.7	(3.9-5.7)	0.539	4.2	(3.4-5.2)	0.417	5.3	(4.3-6.5)	0.228	6.4	(5.2-7.8)	0.625
Asian	4.6	(3.3-6.5)	0.001	2.4	(1.5-3.9)	0.027	2.1	(1.3-3.2)	0.166	2.3	(1.5-3.7)	0.043	2.3	(1.4-3.9)	0.005
Other <sup>3</sup>	13.7	(10.1-18.4)	0.034	7.0	(4.7-10.4)	0.049	5.3	(3.1-8.9)	0.233	8.2	(5.4-12.1)	0.018	8.2	(6.0-11.2)	0.040
Borough of resider	nce			  -			ļ			  -			j		
Bronx	8.8	(7.6-10.2)	0.475	4.5U	(3.6-5.7)	0.498	4.2	(3.2-5.6)	0.513	4.3	(3.3-5.5)	0.885	4.9	(4.1-5.8)	0.338
Brooklyn	7.8	(6.5-9.5)	0.088	3.0	(2.1-4.4)	0.012	3.1	(1.9-5.1)	0.027	4.6	(3.5-6.0)	0.635	4.6	(3.3-6.4)	0.187
Manhattan	9.8	(7.6-12.7)	Referent	5.2	(3.6-7.4)	Referent	5.0	(3.6-7.0)	Referent	4.1	(2.4-6.9)	Referent	5.8	(4.4-7.6)	Referent
Queens	8.3	(6.6-10.5)	0.221	3.8	(2.8-5.1)	0.121	3.1	(2.2-4.3)	0.030	4.1	(3.0-5.5)	0.981	5.1	(3.8-6.9)	0.528
Staten Island	10.8	(8.2-14.0)	0.623	5.0	(3.5-7.1)	0.858	5.2	(3.4-7.7)	0.899	5.5D	(3.9-7.5)	0.288	7.8	(5.6-10.7)	0.142
Borough of school				; 						; 			İ		
Bronx	9.0	(7.5-10.8)	0.186	4.7	(3.9-5.6)	0.176	4.4	(3.3-5.9)	0.011	4.9	(3.8-6.2)	0.029	5.1	(4.2-6.3)	0.208
Brooklyn	9.2	(6.4-13.1)	0.362	4.0	(2.4-6.7)	0.709	4.0*	(2.1-7.5)	0.274	5.3	(3.3-8.3)	0.080	5.8	(3.5-9.5)	0.305
Manhattan	7.6	(6.1-9.3)	Referent	3.6	(2.4-5.4)	Referent	2.6	(2.0-3.5)	Referent	2.9	(1.8-4.6)	Referent	4.3	(3.4-5.3)	Referent
Queens	9.7	(7.8-12.1)	0.097	4.0	(2.8-5.7)	0.623	4.3	(3.4-5.5)	0.007	5.1	(3.9-6.5)	0.019	5.9	(4.3-8.1)	0.114
Staten Island	8.3	(5.6-12.0)	0.683	4.1	(2.5-6.7)	0.647	4.3	(2.5-7.2)	0.154	4.3	(2.7-6.7)	0.243	6.4	(4.3-9.4)	0.120

<sup>&</sup>lt;sup>1</sup> Any illicit drug use: cocaine, heroin, ecstasy, or synthetic cannabinoid/K2 use.

<sup>&</sup>lt;sup>2</sup> For the purpose of this publication, Latino/a includes persons of Hispanic or Latino origin, as identified by the survey question "Are you Hispanic or Latino?," regardless of race. Black, White, and Asian race categories exclude those who self-identified as Latino/a.

<sup>&</sup>lt;sup>3</sup> Other category includes non-Latino students who selected American Indian/Alaska Native, Native Hawaiian/other Pacific Islander, or multiple race categories.

<sup>\*</sup> Estimate should be interpreted with caution. Estimate's Relative Standard Error (a measure of estimate precision) is greater than 30%, the 95% Confidence Interval half-width is greater than 10, or the sample size is less than 50, making the estimate potentially unreliable.

 $<sup>\</sup>ensuremath{\mathsf{D}}$  Data rounded down to the nearest whole number for the purposes of reporting in the text.

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

<sup>95%</sup> confidence intervals (CIs) are a measure of estimate precision; the wider the CI, the more imprecise the estimate.

A p-value is a measure of statistical significance. A **bold** p-value less than .05 means there is a significant difference between that group and the referent (comparison) group.

### Table 5. Prescription drug misuse among youth by demographics, New York City 2017

Source: NYC Youth Risk Behavior Survey, 2017

Data are weighted to the NYC public high school student population.

		ny Prescription (past 12 month	_	(	Opioid Analge past 12 month		(	Benzodiazepi past 12 month		Prescription Stimulants (past 12 month use)		
	%	95% C.I.	P-value	%	95% C.I.	P-value	%	95% C.I.	P-value	%	95% C.I.	P-value
Total	11.1	(10.0-12.4)	~	7.8	(7.0-8.7)	~	5.1	(4.3-6.0)	~	5.8	(5.1-6.6)	~
Sex				!			 					
Female	9.4	(8.0-10.9)	Referent	6.4	(5.4-7.5)	Referent	3.5D	(2.7-4.4)	Referent	3.3	(2.8-4.0)	Referent
Male	11.9	(10.3-13.6)	0.009	8.4	(7.4-9.7)	0.003	5.9	(4.7-7.3)	<0.0001	7.4	(6.3-8.6)	<0.0001
Grade							! !					
9th grade	8.7	(6.8-11.2)	0.012	6.4	(4.9-8.4)	0.033	3.6	(2.5-5.2)	0.060	4.2	(3.0-5.9)	0.033
10th grade	11.7	(9.8-13.8)	0.767	7.6	(6.3-9.2)	0.385	4.5U	(3.3-6.2)	0.264	6.2	(4.8-7.9)	0.852
11th grade	10.9	(8.6-13.7)	0.487	7.8	(6.1-9.8)	0.566	5.2	(6.3-7.4)	0.668	5.3	(3.8-7.4)	0.346
12th grade	12.0	(10.4-13.9)	Referent	8.5D	(7.3-9.9)	Referent	5.6	(4.4-7.2)	Referent	6.4	(5.1-8.0)	Referent
Race/Ethnicity <sup>3</sup>							:   					
White	11.3	(9.3-13.6)	Referent	7.3	(5.6-9.3)	Referent	6.3	(4.8-8.2)	Referent	5.8	(4.2-7.8)	Referent
Black	9.6	(7.8-11.6)	0.183	7.0	(5.4-9.1)	0.842	4.0	(3.0-5.4)	0.015	4.6	(3.4-6.1)	0.214
Latino	12.0	(10.2-14.2)	0.533	8.6	(7.3-10.1)	0.175	5.3	(4.1-6.8)	0.164	6.0	(4.9-7.3)	0.799
Asian	7.9	(6.4-9.8)	0.028	4.8	(3.5-6.5)	0.099	2.8	(1.9-3.9)	<0.0001	4.3	(3.0-6.1)	0.261
Other <sup>4</sup>	13.3	(9.9-17.8)	0.390	8.6	(5.9-12.2)	0.515	7.9	(5.3-11.4)	0.346	7.2	(4.6-11.0)	0.458
Borough of residen	ice						; 					
Bronx	11.1	(9.1-13.6)	0.682	8.2	(6.5-10.2)	0.696	5.2	(3.9-7.0)	0.440	5.9	(4.4-7.8)	0.669
Brooklyn	10.8	(9.1-12.7)	0.476	7.7	(6.2-9.4)	0.953	4.7	(3.5-6.3)	0.679	5.4	(4.5-6.4)	0.382
Manhattan	12.0	(9.3-15.2)	Referent	7.6	(5.8-9.9)	Referent	4.3	(2.7-6.7)	Referent	6.7	(4.2-10.6)	Referent
Queens	10.4	(8.5-12.7)	0.291	6.8	(5.3-8.6)	0.485	4.9	(3.4-7.0)	0.623	5.1	(4.0-6.4)	0.339
Staten Island	11.4	(9.3-13.9)	0.742	8.9	(7.1-11.2)	0.368	5.7	(4.0-7.9)	0.280	5.9	(4.2-8.2)	0.651
Borough of school				i I			i I					
Bronx	11.9	(9.4-14.9)	0.539	8.5D	(6.6-10.9)	0.428	5.5D	(3.9-7.6)	0.317	6.4	(4.7-8.7)	0.212
Brooklyn	11.9	(9.6-14.6)	0.513	8.7	(6.9-10.9)	0.329	5.1	(3.4-7.5)	0.516	6.3	(4.8-8.4)	0.214
Manhattan	10.6	(7.9-14.1)	Referent	7.4	(5.9-9.3)	Referent	4.2	(2.7-6.4)	Referent	4.7	(3.1-7.1)	Referent
Queens	11.0	(8.7-13.8)	0.864	7.0	(5.6-8.7)	0.693	5.5D	(3.9-7.7)	0.307	5.9	(4.9-7.1)	0.275
Staten Island	8.4	(6.5-10.8)	0.232	6.6	(4.9-8.8)	0.506	4.9	(3.3-7.1)	0.605	4.7	(3.0-7.3)	0.997

 $<sup>^{1}\,\</sup>mathrm{Misuse};$  use without a prescription or differently than how a doctor instructed.

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

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

95% confidence intervals (CIs) are a measure of estimate precision; the wider the CI, the more imprecise the estimate.

A p-value is a measure of statistical significance. A **bold** p-value less than .05 means there is a significant difference between that group and the referent (comparison) group.

<sup>&</sup>lt;sup>2</sup> Any prescription includes opioid analgesics, benzodiazepines, and/or prescription stimulants.

<sup>&</sup>lt;sup>3</sup> For the purpose of this publication, Latino/a includes persons of Hispanic or Latino/a origin, as identified by the survey question "Are you Hispanic or Latino/a?," regardless of race. Black, White, and Asian race categories exclude those who self-identified as Latino/a.

<sup>&</sup>lt;sup>4</sup> Other category includes non-Latino/a students who selected American Indian/Alaska Native, Native Hawaiian/other Pacific Islander, or multiple race categories.

<sup>\*</sup> Estimate should be interpreted with caution. Estimate's Relative Standard Error (a measure of estimate precision) is greater than 30%, the 95% Confidence Interval half-width is greater than 10, or the sample size is less than 50, making the estimate potentially unreliable.

### Table 6. Cannabis use among youth by demographics, New York City 2017

Source: NYC Youth Risk Behavior Survey, 2017

Data are weighted to the NYC public high school student population.

		Cannabis	
		(past 30 day use	e)
	%	95% C.I.	P-value
Total	16.2	(14.7-17.8)	~
Sex			
Female	16.4	(14.7-18.2)	Referent
Male	15.3	(13.5-17.3)	0.219
Grade			
9th grade	10.4	(9.1-11.7)	<0.0001
10th grade	15.3	(12.6-18.6)	0.039
11th grade	19.2	(16.4-22.3)	0.802
12th grade	19.7	(16.8-23.0)	Referent
Race/Ethnicity <sup>2</sup>			
White	19.0	(15.6-22.9)	Referent
Black	15.4	(13.4-17.7)	0.057
Latino	19.3	(17.6-21.1)	0.843
Asian	5.6	(4.1-7.6)	<0.0001
Other <sup>3</sup>	21.8	(17.7-26.5)	0.265
Borough of residence			
Bronx	17.1	(15.1-19.4)	0.354
Brooklyn	15.5U	(13.9-17.3)	0.054
Manhattan	19.7	(15.3-24.9)	Referent
Queens	14.6	(11.3-18.7)	0.063
Staten Island	16.3	(13.3-19.7)	0.254
Borough of school			
Bronx	17.3	(15.1-19.8)	0.963
Brooklyn	15.7	(14.3-17.3)	0.519
Manhattan	17.4	(12.9-23.2)	Referent
Queens	15.6	(11.8-20.3)	0.564
Staten Island	14.1	(11.1-17.9)	0.280

<sup>&</sup>lt;sup>1</sup> Refers to the questions on past 30 day marijuana use.

<sup>&</sup>lt;sup>2</sup> For the purpose of this publication, Latino/a includes persons of Hispanic or Latino/a origin, as identified by the survey question "Are you Hispanic or Latino/a?," regardless of race. Black, White, and Asian race categories exclude those who self-identified as Latino/a.

<sup>&</sup>lt;sup>3</sup> Other category includes non-Latino/a students who selected American Indian/Alaska Native, Native Hawaiian/other Pacific Islander, or multiple race categories.

<sup>\*</sup> Estimate should be interpreted with caution. Estimate's Relative Standard Error (a measure of estimate precision) is greater than 30%, the 95% Confidence Interval half-width is greater than 10, or the sample size is less than 50, making the estimate potentially unreliable.

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 $<sup>\</sup>ensuremath{\mathsf{U}}$  Data rounded up to the nearest whole number for the purposes of reporting in the text.

<sup>95%</sup> confidence intervals (CIs) are a measure of estimate precision; the wider the CI, the more imprecise the estimate.

A p-value is a measure of statistical significance. A **bold** p-value less than .05 means there is a significant difference between that group and the referent (comparison) group.

## Table 7. Proportion of youth reporting cannabis use in the past 30 days in the United States, New York City and New York State, 1999-2017

Source: National Youth Risk Behavior Surveillance System, 2017; NYC Youth Risk Behavior Survey, 2017; NYS Youth Risk Behavior Survey, 2017

	Unite	United States*		York City**	New York State***		
Year	%	95% C.I.	%	95% C.I.	%	95% C.I.	
1999	26.7	(24.2-29.4)	17.3	(14.0-21.2)	23.4	(21.0-26.0)	
2001	23.9	(22.3-25.5)	17.8	(14.4-22.0)	~	~	
2003	22.4	(20.2-24.6)	15.3	(13.9-16.9)	20.7	(18.7-22.8)	
2005	20.2	(18.6-22.0)	12.3	(10.9-13.8)	18.3	(16.2-20.7)	
2007	19.7	(17.8-21.8)	12.4	(11.0-13.9)	18.6	(17.1-20.2)	
2009	20.8	(19.4-22.3)	15.0	(13.4-16.8)	20.9	(18.4-23.6)	
2011	23.1	(21.5-24.7)	17.7	(16.6-19.0)	20.5U	(18.5-22.7)	
2013	23.4	(21.3-25.7)	16.2	(14.5-18.0)	21.4	(19.4-23.5)	
2015	21.7	(19.3-24.2)	15.9	(13.9-18.0)	19.3	(16.9-21.8)	
2017	19.8	(18.1-21.6)	16.2	(14.7-17.8)	18.4	(16.6-20.3)	

<sup>&</sup>lt;sup>1</sup> Refers to the questions on past 30 day marijuana use.

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

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

95% confidence intervals (CIs) are a measure of estimate precision; the wider the CI, the more imprecise the estimate.

A p-value is a measure of statistical significance. A **bold** p-value less than .05 means there is a significant difference between that group and the referent (comparison) group.

<sup>\*</sup>US YRBS is administered to both public and private school students.

<sup>\*\*</sup> NYC YRBS is administered to public school students only.

<sup>\*\*\*</sup> NYS YRBS is administered to public school students only.