



Epi Data Tables

New York City Department of Health and Mental Hygiene

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Benzodiazepines in New York City: Misuse, Morbidity and Mortality Update

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Data Sources

NSDUH: The National Survey on Drug Use and Health (NSDUH) conducted annually by Substance Abuse and Mental Health Services Administration [SAMHSA] includes a representative sample of NYC residents aged 12 years and older. Two-year averages are presented.

YDS: The Youth Development Survey (YDS) conducted by the NYS Office of Alcohol Substance Abuse Services assesses risk (including substance use) and protective factors for academic success among public and private school students in grades seven through 12. 2008 data are presented.

DAWN: The Drug Abuse Warning Network (DAWN), managed by SAMHSA, is a database of drug-related visits to hospital emergency departments (EDs), including 61 NYC EDs. Data were weighted to produce citywide estimates of drug-related ED visits for 2004-2010.

OVS/OCME: Mortality data were collected through an in-depth review of data and charts from the Health Department's Bureau of Vital Statistics and the Office of the Chief Medical Examiner for 2005-2009. Rates are age adjusted to the year 2000 standard population, except those for specific age groups.

To access the related Epi Data Brief, go to www.nyc.gov/html/doh/downloads/pdf/epi/databrief18.pdf

Table 1. Any self-reported drug use in the past year, NYC and US, 2008-2009

Source: NSDUH; analysis by SAMHSA

NYC Data presented as two-year average of 2008-2009

National (US) data presented for the year 2009

	NYC 2008-2009		US 2009	
	N	%	N	%
Any Drug	1,034,000	16.4	37,954,000	15.1
Marijuana	849,000	13.5	28,521,000	11.3
Cocaine	180,000	2.9	4,797,000	1.9
Heroin	6,000	0.1	605,000	0.2
Opioid Analgesics	263,000	4.2	12,405,000	4.9
Benzodiazepines	90,000	1.4	5,460,000	2.2
Any Drug Except Marijuana	472,000	7.5	21,000,000	8.3

Table 1a. Any self-reported drug use in the past year by age group, NYC, 2002-2009

Source: NSDUH; analysis by SAMHSA

NYC Data presented as two-year averages of 2002-2003, 2004-2005, 2006-2007, 2008-2009

	2002-2003		2004-2005		2006-2007		2008-2009	
	N	%	N	%	N	%	N	%
Benzodiazepines	100,000	1.6	80,000	1.3	143,000	2.3	90,000	1.4
12-17	8,000	1.3	3,000	0.6	3,000	0.6	2,000	0.3
18-25	26,000	2.9	11,000	1.4	37,000	4.1	45,000	4.8
26-35	26,000	2.2	45,000	4.4	23,000	2.2	24,000	1.9
>35	40,000	1.2	21,000	0.5	80,000	2.3	20,000	0.5

Table 2. Self-reported lifetime and past-30-day benzodiazepine use among public and private students, grades seven to 12, NYC and New York State, 2008

Source: YDS; analysis by OASAS

	NYC		NYS	
	Lifetime Use	Past 30 Day Use	Lifetime Use	Past 30 Day Use
Any Drug*	26.8%	14.1%	33.1%	18.0%
Benzodiazepines	1.6%	0.6%	2.3%	0.8%

*Not including tobacco or alcohol.

Table 3. Rates of benzodiazepine-related emergency room visits, overall and by age, NYC, 2004-2009

Source: DAWN; analysis by SAMHSA

Rates per 100,000 New Yorkers presented.

	2004		2005		2006		2007		2008		2009		2010	
	NYC	US	NYC	US	NYC	US	NYC	US	NYC	US	NYC	US	NYC	US
Total	38.1	58.2	51.6	74.9	53.2	78.1	58.7	86.1	64.0	108.5	58.9	121.6	78.1	131.9
Age (years)														
18-20	*	90.6	*	108.1	40.6	113.1	43.8	125.5	41.9	156.8	43.5	189.7	51.1	159.2
21-24	51.0	84.1	45.9	130.1	49.0	129.2	57.8	168.7	66.5	227.2	71.1	223.4	104.9	253.1
25-29	46.2	96.7	66.0	126.9	67.7	133.8	75.3	144.2	97.7	225.7	80.3	243.3	115.5	287.0
30-34	53.1	97.1	73.4	107.4	78.6	124.4	86.0	144.6	85.2	185.9	74.1	218.6	125.1	257.2
35-44	81.8	108.9	111.9	135.4	113.1	139.1	113.8	142.6	123.5	161.2	117.9	187.3	141.3	208.5
45-54	63.3	85.0	97.8	106.8	98.9	112.8	117.4	125.8	114.1	153.8	103.9	167.6	130.2	183.2
55-64	35.3	28.7	37.5	58.1	41.8	51.8	41.7	54.3	61.9	66.9	56.9	88.5	74.5	93.5
≥65	*	18.1	12.5	24.7	11.2	27.1	18.4	24.1	15.0	34.1	16.7	39.0	20.2	39.4

* No estimate available.

Table 4. Number and rate of unintentional benzodiazepine-involved poisoning (overdose) deaths, NYC, 2005 and 2010

Source: OVS/OCME; analysis by BADUPCT

Rates per 100,000 New Yorkers are age adjusted, except those for specific age groups.

	2005			2010			2005-2010	
	Number	Percent	Rate	Number	Percent	Rate	Percent Change in Rate*	
Total Unintentional Poisoning Deaths	801	100%	12.3	516	100%	7.9	-36%	*
Total Unintentional Benzodiazepine-Involved Poisoning Deaths	192	24%	3.0	226	44%	3.5	18%	*
Gender								
Female	59	31%	1.8	65	29%	1.9	6%	
Male	133	69%	4.3	161	71%	5.2	21%	
Race/Ethnicity								
Black	28	15%	1.8	19	9%	1.3	-28%	*
Hispanic	44	24%	2.5	62	28%	3.5	40%	
White	114	61%	5.1	138	63%	6.6	29%	
Age (years)								
15-24	18	9%	1.7	19	8%	1.6	-6%	
25-34	31	16%	2.4	47	21%	3.4	42%	
35-44	46	24%	3.5	61	27%	5.3	51%	
45-54	80	42%	7.3	70	31%	6.3	-14%	*
55-64	15	8%	1.9	26	12%	2.9	53%	
65-84	**	**	**	**	**	**		
Borough of Residence								
Bronx	25	15%	2.6	36	18%	3.5	35%	
Brooklyn	38	23%	2.0	69	35%	3.6	80%	*
Manhattan	42	26%	3.1	31	16%	2.4	-23%	*
Queens	39	24%	2.3	38	19%	2.1	-9%	
Staten Island	20	12%	5.6	24	12%	6.6	18%	
Borough of Death								
Bronx	34	18%	3.4	42	19%	4.1	21%	
Brooklyn	41	21%	2.2	78	35%	4	82%	*
Manhattan	55	29%	4.0	44	19%	3.4	-15%	*
Queens	40	21%	2.3	38	17%	2.1	-9%	
Staten Island	22	11%	6.1	24	11%	6.8	11%	
Neighborhood Income Level								
Low	59	36%	3.1	63	32%	3.1	0%	
Medium	53	32%	2.1	82	42%	3.2	110%	
High	52	32%	2.9	52	26%	2.9	0%	
Top 5 NYC Neighborhoods***								
Stapleton-St. George	...	...	...	...	...	8.2		
Port Richmond	...	...	...	...	...	7.5		
Willowbrook	...	...	...	...	...	7.3		
Lower Manhattan	...	...	...	...	...	6.5		
Canarsie-Flatlands	...	...	...	...	...	5.8		

*Percent change based on age-adjusted rate and significant at P<0.05.

** Low Precision - No estimate available.

***The 42 United Hospital Fund neighborhoods cover all five boroughs and are aggregations of adjacent zip codes.

... Data reported for 2010 only

Table 5. Distribution of unintentional benzodiazepine poisoning (overdose) deaths by type of benzodiazepine, NYC, 2010

Source: OVS/OCME; analysis by BADUPCT

	2010
Benzodiazepine Type*	
Alprazolam (Xanax®)	26%
Oxazepam (Serax®)	13%
Diazepam (Valium®)	13%
Clonazepam (Klonopin®)	10%
Temazepam (Restoril®)	8%

*Not mutually exclusive

Map 1. Top 5 NYC Neighborhoods: Rates of Unintentional Benzodiazepine Poisoning (Overdose) by NYC neighborhood of residence, 2010

Source: OVS/OCME; analysis by BADUPCT

Unintentional Benzodiazepine Poisoning Deaths by NYC Neighborhood of Residence , 2010

Rate Range (Rate per 100,000 population)

0.4 - 2.4

2.5 - 4.9

5.0 - 8.2

UHF's with Top 5 Benzodiazepine Poisoning Rates

No Unintentional Poisoning Deaths

