New York City Department of Health and Mental Hygiene

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Opioid Analgesics in New York City: Misuse, Morbidity and Mortality Update

Data Tables & Map

- **Table 1.** Any self-reported non-medical use of Prescription Opioids in the past year, 2002-2009, NSDUH analysis by SAMHSA
- **Table 2.** Self-reported lifetime prevalence of Opioid Analgesics among NYC Public and Private School Students, grades 7-12, 2008, *YDS analysis by OASAS*
- **Table 3.** Emergency Department Visits for Opioid Analgesic Misuse/Abuse, 2004-2009, DAWN *analysis* by SAMSHA
- **Table 4.** Unintentional Opioid Analgesic Poisoning (Overdose) Deaths, 2005-2009, *OVS/OCME analysis by BADUPCT*
- **Table 4a.** Unintentional Opioid Analgesic Poisoning (Overdose) Deaths by NYC Neighborhood, 2008-2009, OVS/OCME analysis by BADUPCT
- **Table 5.** Hydrocodone, Oxycodone, and Hydrocodone and/or Oxycodone Prescriptions filled, 2008-2009, *PMDP analysis by BADUPCT*
- Maps 1 & 2. Top 5 NYC Neighborhoods: Rates of Hydrocodone, Oxycodone, and Hydrocodone and/or Oxycodone Prescriptions Filled by Neighborhood Income, 2008-2009, *PMDP analysis by BADUPCT*

Top 5 NYC Neighborhoods: Rates of Unintentional Opioid Analgesic Poisoning (Overdose) Deaths by Neighborhood Income, 2008-2009, OVS/OCME – analysis by BADUPCT

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' ages 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 and protective factors for academic success among public and private school students in grades seven to 12. 2008 data are presented by grade and borough of residence.

OVS/OCME: Mortality data result from an in-depth review by the Health Department's Bureau of Alcohol and Drug Use Prevention, Care and Treatment (BADUPCT), Bureau of Vital Statistics and the Office of the Chief Medical Examiner records for 2005-2009. Rates are age adjusted to the year 2000 standard population, except those for specific age groups. Given the large number of methadone maintenance treatment clients in NYC, methadone mortality is reported separately and is excluded from unintentional opioid analgesic poisoning (overdose) death analyses presented here.

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 are weighted to produce citywide estimates of drug-related ED visits for 2004-2009.

NYS PDMP: The Prescription Drug Monitoring Program (PDMP) managed by New York State DOH, collects data from drug dispensers on schedule II-V controlled substances.

To access the related Epi Data Brief, go to www.nyc.gov/html/doh/downloads/pdf/epi/databrief3.pdf



Table 1. Any Self-Reported Non-Medical Use of Prescription Opioids in the past year 2002-2009 data presented in two-year averages

David Tyme	2002-03		2004-05		2006-07		2008-09	
Drug Type	N	%	N	%	N	%	N	%
Prescription opioids	181,000	3.0	145,000	2.3	263,000	4.3	263,000	4.2

Source: NSDUH; analysis by SAMSA

Table 2. Any Self-Reported Lifetime Prevalence of Opioid Analgesics among NYC Public and Private School Students

2008 data presented for percent of students who responded to the survey in grades seven through 12

Grade	Bronx	Brooklyn	Manhattan	Queens	S.I.
7-8	9.0%	7.9%	7.6%	8.7%	9.1%
9-10	12.3%	10.9%	12.9%	10.9%	11.5%
11-12	10.6%	12.9%	9.4%	12.8%	13.3%
Total	10.6%	10.3%	10.5%	10.6%	11.2%

Source: YDS; analysis by OASAS

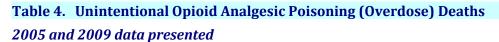
Table 3. Emergency Department Visits for Opioid Analgesic Misuse/Abuse 2004 and 2009 rates per 100,000 New Yorkers presented.

Rates are age-adjusted to year 2000 standard population and reported per 100,000 New Yorkers. Chi-square was used and an alpha level of 0.05 indicated statistical significance.

Age Group	2004 rate	2009 rate
Total NYC*	55	110
18-20	•••	39
21-24*	49	80
25-29*	52	104
30-34*	72	122
35-44*	119	222
45-54*	121	251
55-64*	48	130
<u>≥</u> 65*	11	29

^{*} *P*<0.05

Source: DAWN; analysis by SAMHSA



Neighborhoods are defined using United Hospital Fund definitions, which create 42 neighborhoods comprised of contiguous zip codes. Income is defined by the percent of households below 200% of the federal poverty level (Census 2000) and separated into three groups: low-income (43%-70%), medium-income (30%-43%) and high-income (13%-30%). Rates are age-adjusted to the 2000 standard population. Chi-square was used and an alpha level of 0.05 indicated statistical significance.

	2005			2009			Percent Change in Rate	
	N	%	Rate	N	%	Rate		
Total	131	16	2.0	158	25	2.4	20%*	
Race/Ethnicity								
Black	26	21	1.7	28	18	1.8	6%	
Hispanic	20	16	1.2	35	22	2.1	75%	
White	80	63	3.6	93	60	3.9	8%	
Borough								
Bronx	22	19	2.3	29	20	2.8	22%	
Brooklyn	23	20	1.2	38	26	2.0	67%	
Manhattan	34	29	2.5	21	15	1.5	-40%*	
Queens	26	22	1.5	28	19	1.5	0%	
Staten Island	11	9	3.0	28	19	7.4	147%*	
Neighborhood Incom	me Level							
Low	50	43	2.6	45	31	2.3	-12%	
Medium	33	28	1.3	60	42	2.2	69%*	
High	33	28	1.8	39	27	2.0	11%	

^{*} P<0.05

Source: OVS/OCME; analysis by BADUPCT

Table 4a. Unintentional Opioid Analgesic Poisoning (Overdose) Deaths by NYC Neighborhood 2008-09 data presented in two-year average

Rates are age-adjusted to the 2000 standard population. Chi-square was used and an alpha level of 0.05 indicated statistical significance.

	2008-09 Rate
Top 5 NYC Neighborhoods	
Port Richmond	10.7
South Beach-Tottenville	6.1
Rockaway	5.4
Stapleton-St. George	5.3
Willowbrook	4.8

Source: OVS/OCME; analysis by BADUPCT

Table 5. Hydrocodone (eg: Vicodin), Oxycodone (eg: Percocet, Oxycontin), and Hydrocodone and/or Oxycodone Prescriptions filled

2008, 2009 and 2008-2009 rates per 100,000 New Yorkers presented.

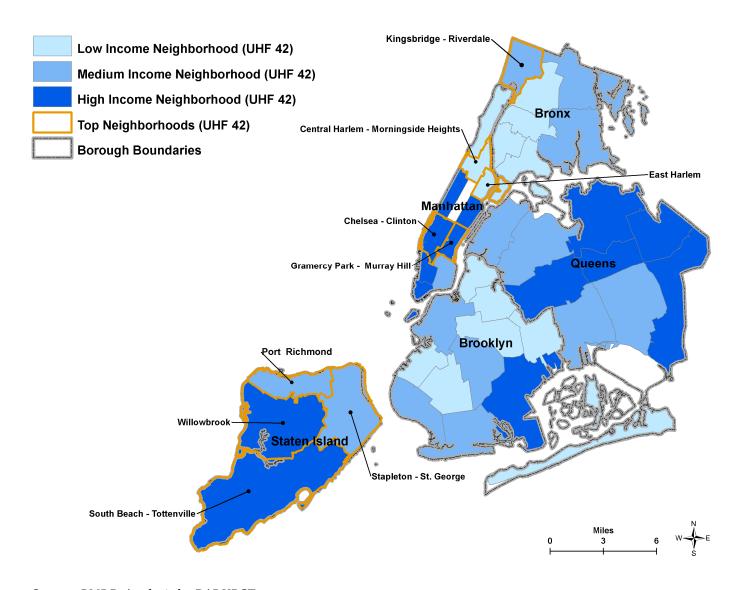
Neighborhoods are defined using United Hospital Fund definitions, which create 42 neighborhoods comprised of contiguous zip codes. Income is defined by the percent of households below 200% of the federal poverty level (Census 2000) and separated into three groups: low-income (43%-70%), medium-income (30%-43%) and high-income (13%-30%).

	Hydrocodone Rate		Oxycodone Rate		Hydrocodone and/or Oxycodone Rate	
	2008	2009	2008	2009	2008-09	
Total	9,716	9,884	8,728	10,700	19,502	
Borough						
Bronx	7,786	8,102	10,791	13,814	20,250	
Brooklyn	7,790	8,142	6,235	7,910	15,041	
Manhattan	11,645	11,584	10,366	12,118	22,855	
Queens	9,467	9,682	6,757	8,304	17,108	
Staten Island	20,035	19,354	19,688	22,962	41,025	
Top 5 NYC Neighborhoods						
South Beach-Tottenville	23,908	22,708	23,283	27,352	48,630	
Willowbrook	20,498	19,838	19,924	22,214	41,239	
Stapleton-St. George	16,752	16,545	18,235	21,102	36,324	
Chelsea-Clinton	16,236	15,348			29,406	
Port Richmond	15,236				29,430	
Gramercy Park-Murray Hill		15,248		• • •		
East Harlem			15,889	20,196		
Kingsbridge-Riverdale			14,529	• • •		
Central Harlem-Morningside Heights			• • •	17,171		
Neighborhood Income Level						
Low	7,067	7,439	8,048	10,404	16,477	
Medium	9,473	9,687	7,935	9,849	18,475	
High	13,231	13,057	10,686	12,269	24,624	

Source: PMDP; analysis by BADUPCT

Map 1. Top 5 NYC neighborhoods for rates of hydrocodone prescriptions filled, for rates of oxycodone prescriptions filled, (2008, 2009) and for rates of hydrocodone and/or oxycodone (2008-09) by neighborhood income

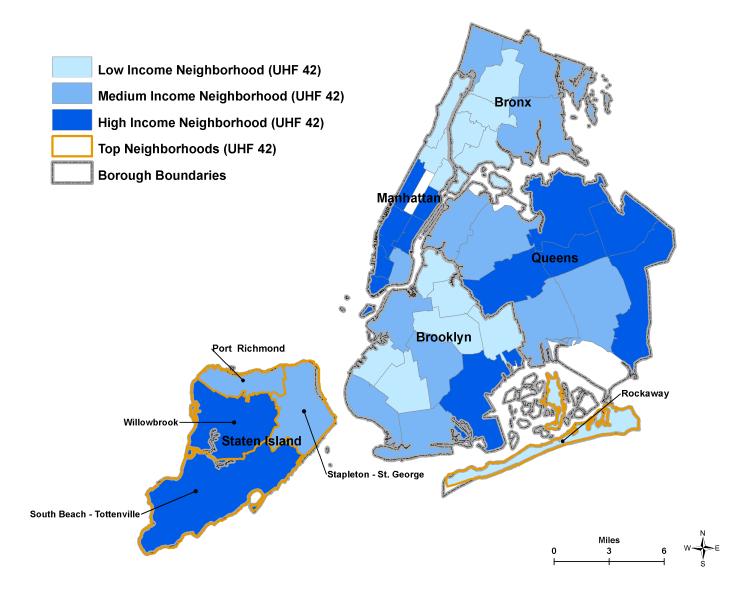
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Source: PMDP, Analysis by BADUPCT

Map 2. Top 5 NYC neighborhoods for rates of unintentional opioid analysesic poisoning (overdose) deaths (2008-09) by neighborhood income

Neighborhoods are defined using United Hospital Fund definitions, which create 42 neighborhoods comprised of contiguous zip codes. Income is defined by the percent of households below 200% of the federal poverty level (Census 2000) and separated into three groups: low-income (43%-70%), medium-income (30%-43%) and high-income (13%-30%). Rates are age-adjusted to the 2000 standard population.



Source: OVS/OCME Analysis by BADUPCT