



Epi Data Brief

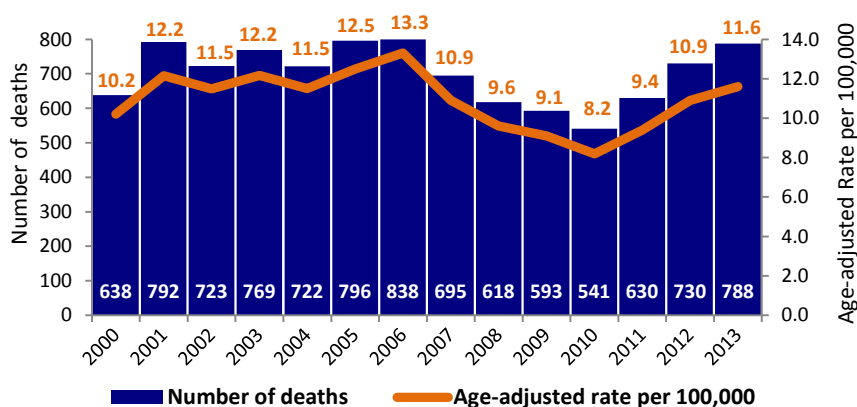
New York City Department of Health and Mental Hygiene

August, 2014 No. 50

Unintentional Drug Poisoning (Overdose) Deaths Involving Opioids in New York City, 2000–2013

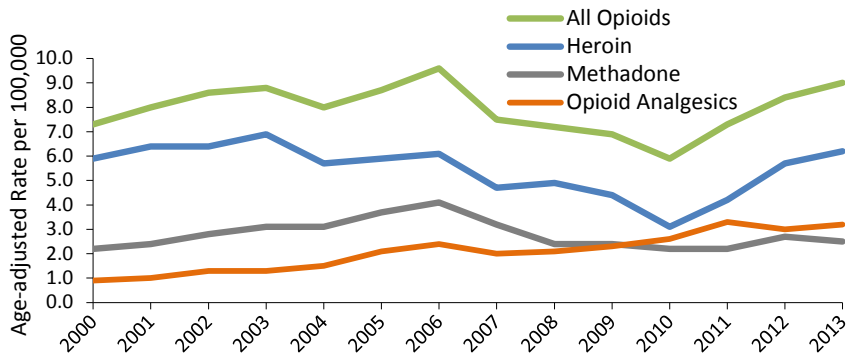
- In New York City (NYC) there were nearly 10,000 unintentional drug poisoning (overdose) deaths during the years 2000–2013, an average of 700 unintentional overdose deaths per year.
- From 2006–2010 the rate of overdose deaths decreased each consecutive year from 13.3 per 100,000 New Yorkers in 2006 to 8.2 per 100,000 New Yorkers in 2010, a 38% decrease.
- From 2010–2013, the rate of overdose deaths increased three years consecutively, from 8.2 per 100,000 in 2010 to 11.6 per 100,000 New Yorkers in 2013, a 41% increase.
- In 2013, more than three-quarters (77%) of overdose deaths involved an opioid.
- The rate of overdose deaths involving opioid analgesics increased by 256% from 2000 to 2013.
- The rate of overdose deaths involving heroin increased for three consecutive years from 3.1 per 100,000 New Yorkers (209 deaths) in 2010 to 6.2 per 100,000 New Yorkers (424 deaths) in 2013.
- Since 2008, the rate (2.4 per 100,000) of overdose deaths involving methadone has been stable.
- In 2013, methadone was involved in 21% (169 deaths) of overdose deaths, 2.5 per 100,000 New Yorkers.
- In 2013, nearly all (94%) of overdose deaths involved more than one substance.
- [Benzodiazepines](#) were found in 60% of overdose deaths involving [opioid analgesics](#), 36% of deaths involving heroin, and 58% of deaths involving methadone in 2013.

Unintentional overdose deaths, New York City, 2000–2013



Source: NYC Office of the Chief Medical Examiner and NYC DOHMH Bureau of Vital Statistics

Unintentional overdose deaths by opioid type involved (not mutually exclusive), New York City, 2000–2013



Source: NYC Office of the Chief Medical Examiner and NYC DOHMH Bureau of Vital Statistics

Definitions: Unintentional drug poisoning deaths referred to as overdose deaths: Derived from death certificates and includes deaths from both illicit drugs and licit drugs taken for non-medical reasons. Excludes drug poisonings where the manner of death was intentional (suicide), undetermined, or homicide. Toxicology findings were abstracted from medical examiner files. Drugs are not mutually exclusive.

Opioids: Includes the entire family of opiates and opioids. Opiates are narcotic analgesics derived from “natural” opium. Opioids are synthetic and semi-synthetic drugs, such as methadone or heroin.

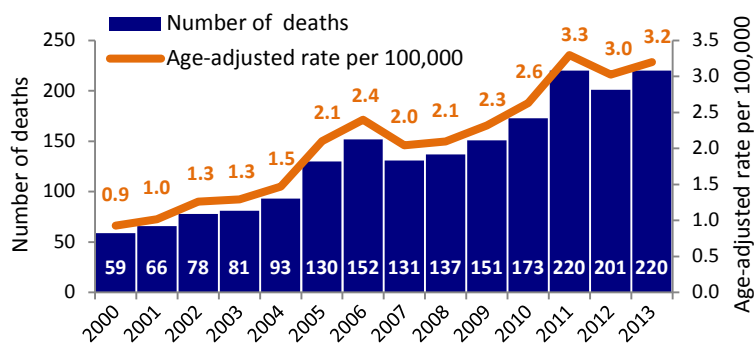
Opioid analgesics: Commonly known as prescription pain relievers, such as oxycodone (Percocet®) and hydrocodone (Vicodin®).

Methadone: A synthetic opioid used medically as an analgesic and to treat opioid dependence. Methadone is reported separately from opioid analgesics in New York City due to a large methadone maintenance population.

Unintentional overdose deaths involving opioid analgesics

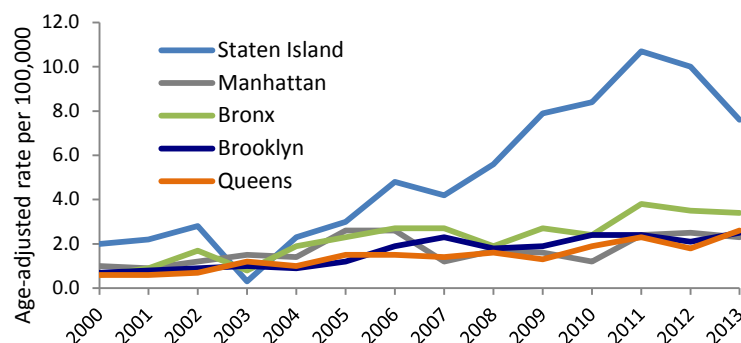
- Opioid analgesics were involved in 28% of overdose deaths in 2013.
- In 2013, the rate of overdose deaths involving opioid analgesics remained highest among Staten Island residents (7.6 per 100,000); however, the rate decreased for two consecutive years (by 29% from 10.7 per 100,000 in 2011).
- The rate increased from 2012 to 2013 in Queens from 1.8 to 2.6 per 100,000 residents and in Brooklyn from 2.1 to 2.5 per 100,000 residents.
- In 2013, residents of the lowest poverty (wealthiest) neighborhoods had the highest rate (4.1 per 100,000) of opioid analgesic-involved deaths compared with residents of all other neighborhoods.

Unintentional overdose deaths involving opioid analgesics, New York City, 2000–2013



Source: NYC Office of the Chief Medical Examiner and NYC DOHMH Bureau of Vital Statistics.

Unintentional overdose deaths involving opioid analgesics, by borough of residence New York City, 2000–2013

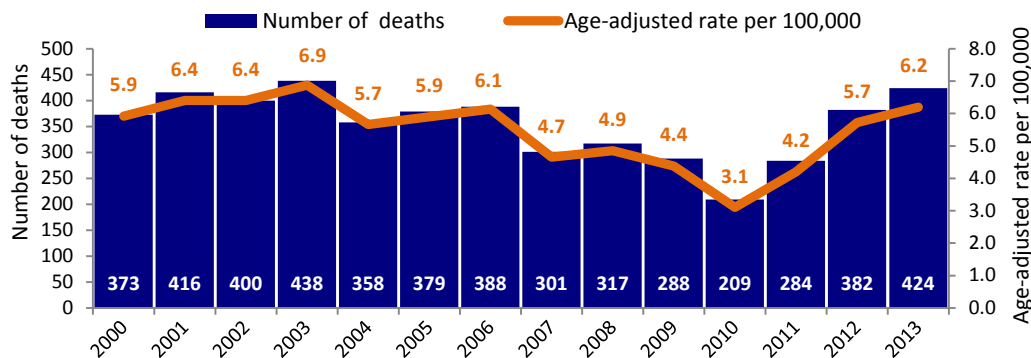


Source: NYC Office of the Chief Medical Examiner and NYC DOHMH Bureau of Vital Statistics.

Unintentional overdose deaths involving heroin

- In 2013, heroin was involved in 54% of all overdose deaths, making it the most common substance involved in overdose deaths.

Unintentional overdose deaths involving heroin, New York City, 2000–2013



Source: NYC Office of the Chief Medical Examiner and NYC DOHMH Bureau of Vital Statistics

Data Source: NYC Office of the Chief Medical Examiner and NYC DOHMH Bureau of Vital Statistics:

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 2000-2013.

Methadone is reported separately and not included in opioid analgesic analyses.

Definitions:

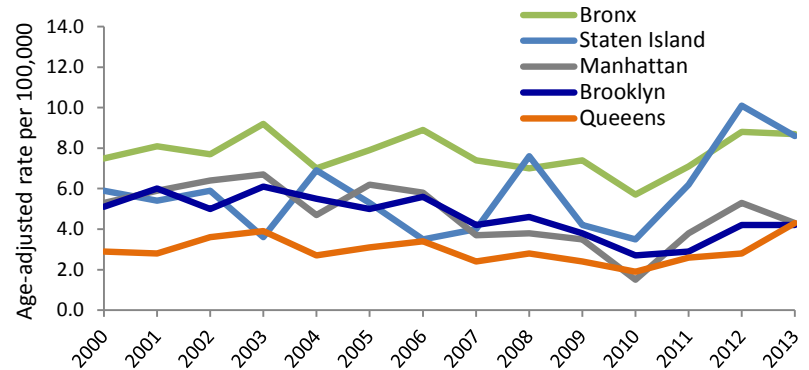
Rate Calculation: NYC DOHMH population estimates, modified from US Census Bureau intercensal population estimates 2000-2013, updated December 2014. These rates will differ from previously reported rates based on Census counts or previous versions of population estimates. Rates are age-adjusted to Census 2000 US standard population, except those for specific age groups.

Neighborhood poverty is based on ZIP code and is defined as the percentage of residents with incomes below 100% of the federal poverty level (per American Community Survey 2007-2011) in four groups: low (<10%), medium (10%–<20%), high (20%–<30%), and very high (≥30%).

Demographics of unintentional overdose deaths involving heroin

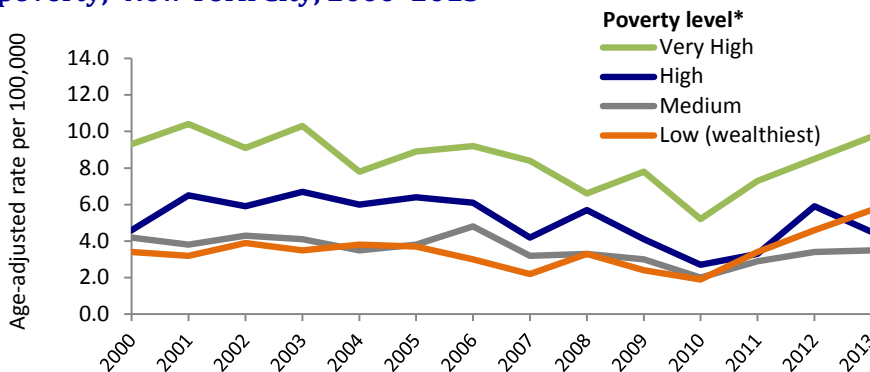
- In 2013, Bronx residents had the highest rate (8.7 per 100,000) of overdose deaths involving heroin, followed by Staten Island residents (8.6 per 100,000).
- The rate among Queens residents more than doubled from 1.9 in 2010 to 4.3 in 2013 per 100,000 residents.
- From 2010 through 2013, New Yorkers aged 35 to 54 had the highest rate of overdose deaths involving heroin.
- The largest increase (by age group) was among New Yorkers aged 15 to 34; the rate more than doubled from 2.1 per 100,000 in 2010 to 4.8 per 100,000 in 2013, a 129% increase.

Unintentional overdose deaths involving heroin by borough of residence, New York City, 2000–2013



Source: NYC Office of the Chief Medical Examiner and NYC DOHMH Bureau of Vital Statistics

Unintentional overdose deaths involving heroin by neighborhood poverty,* New York City, 2000–2013



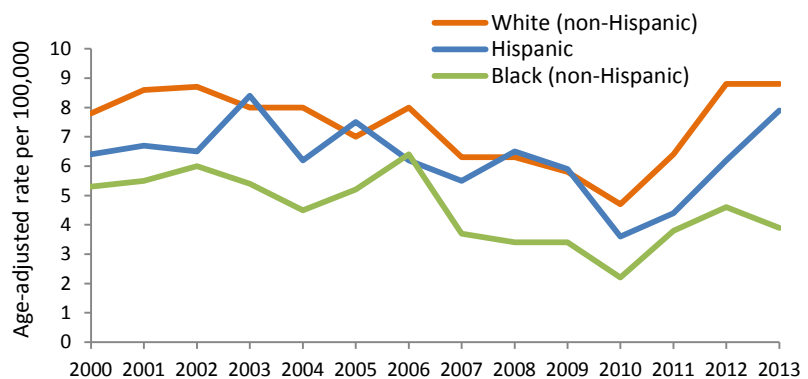
*Neighborhood poverty (based on ZIP code) defined as percent of residents with incomes below 100% of the Federal Poverty Level, per American Community Survey 2007–2011, in four groups: low (<10%), medium (10%–<20%), high (20%–<30%), and very high (>=30%).

Source: NYC Office of the Chief Medical Examiner and NYC DOHMH Bureau of Vital Statistics

- Residents of the highest poverty neighborhoods had a higher rate of overdose deaths involving heroin (9.7 per 100,000) than residents of all other neighborhoods in 2013.
- From 2010 to 2013, residents of the lowest-poverty (wealthiest) neighborhoods had the largest increase in rates (200%) from 1.9 per 100,000 in 2010 to 5.7 per 100,000 in 2013.

- The rate of overdose deaths involving heroin remained highest among white New Yorkers (8.8 per 100,000) in 2013.
- The largest increase was among Hispanic New Yorkers, from 3.6 per 100,000 residents in 2010 to 7.9 per 100,000 residents in 2013, a 119% increase.

Unintentional overdose deaths involving heroin by race/ethnicity, New York City, 2000–2013



Source: NYC Office of the Chief Medical Examiner and NYC DOHMH Bureau of Vital Statistics

Comment: For three consecutive years, the rate of heroin-involved overdose deaths increased in New York City, while the opioid analgesic mortality rate appears to have leveled off during the same time period. We cannot determine drug use patterns prior to the individual's death, thus, we cannot draw conclusions about the relationship between opioid analgesic use and heroin initiation. It is likely that some decedents did transition from opioid analgesics to heroin, while others may have increased their use of heroin and still others may have initiated heroin, without prior opioid analgesic use. In New York City, heroin mortality rates rose while prescribing rates of opioid analgesics remained stable.

New York City residents of low-income neighborhoods and white New Yorkers have the highest heroin-involved mortality rates; however, 2013 data show the highest increases are among residents of the wealthiest neighborhoods and younger New Yorkers.

DOHMH prevention and treatment activities

To prevent overdose and reduce adverse health consequences of heroin and prescription opioid use:

1. **Public awareness.** The Department of Health and Mental Hygiene (DOHMH) has conducted public awareness campaigns through television about overdose risk from prescription opioids.
2. **Overdose prevention.** DOHMH funds training of responders in overdose treatment and distributes naloxone, a medicine that reverses the effects of prescription opioids and heroin.
3. **Effective treatment for opioid dependence.** DOHMH funds and promotes quality improvement among substance use disorder treatment programs. DOHMH also conducts training, disseminates practice guidelines, and provides technical assistance to promote effective practice, particularly with buprenorphine, an effective medication for opioid dependence.
4. **Policy development and program initiatives.** DOHMH uses data to inform policy-makers and initiate new programs such as: advocating for relabeling of opioids to discourage their use for treatment of chronic non-cancer pain, making naloxone an over-the-counter medication, and urging hospital adoption of guidelines for judicious opioid prescribing in emergency departments.

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MORE New York City Health Data and Publications

- For complete tables of data presented in this Brief, visit nyc.gov/html/doh/downloads/pdf/epi/datatable50.pdf
 - For more information on drug use, check out the following Health Department resources:
 - [Unintentional Drug Poisoning \(Overdose\) Deaths in New York City, 2000-2012](#)
 - [Unintentional Opioid Analgesic Poisoning \(Overdose\) Deaths in New York City, 2011](#)
 - [Opioid Analgesics in New York City: Prescriber Practices](#)
 - [Drugs in New York City: Misuse, Morbidity and Mortality Update](#)
 - [Patterns of Opioid Analgesic Prescriptions for New York City Residents](#)
 - [Prescription Drug Misuse and Illicit Drug Use among New York City Youth](#)
 - [City Health Information: Preventing Misuse of Prescription Opioid Drugs](#) (includes prescribing guidelines)
 - [New York City Emergency Department Discharge Opioid Prescribing Guidelines](#)
 - [Vital Signs: Illicit Drug Use in New York City](#)
 - Visit EpiQuery – the Health Department's online, interactive health data system: nyc.gov/health/EpiQuery
- Data & Statistics at nyc.gov/health/data**



Epi Data Tables

New York City Department of Health and Mental Hygiene

Updated
March 2015

August 2014, No. 50

Unintentional Drug Poisoning (Overdose) Deaths Involving Opioids in New York City, 2010-2013

Data Tables

- Table 1.** Number and rate of unintentional drug poisoning (overdose) deaths, New York City, 2010-2013
- Map 1 & 2.** Top five New York City neighborhoods: Rates of unintentional drug poisoning (overdose) by neighborhood of residence, 2010-2011 and 2012-2013
- Table 2.** Number and rate of unintentional drug poisoning (overdose) deaths involving opioid analgesics New York City, 2010-2013
- Map 3 & 4.** Top five New York City neighborhoods: Rates of unintentional drug poisoning (overdose) deaths involving opioid analgesics by neighborhood of residence, 2010-2011 and 2012-2013
- Table 3.** Number and rate of unintentional drug poisoning (overdose) deaths involving heroin, New York City, 2010-2013
- Map 5 & 6.** Top five New York City neighborhoods: Rates of unintentional drug poisoning (overdose) deaths involving heroin by neighborhood of residence, 2010-2011 and 2012-2013

Data Sources

Bureau of Vital Stastics/Office of the Chief Medical Examiner: 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 2000-2013. Methadone is reported separately and not included in opioid analgesic analyses.

Rate Calculation: NYC DOHMH population estimates, modified from US Census Bureau intercensal population estimates 2000-2013, updated December 2014. These rates will differ from previously reported rates based on Census counts or previous versions of population estimates. Rates are age-adjusted to Census 2000, except those for specific age groups.

Neighborhood poverty is based on ZIP code and is defined as the percentage of residents with incomes below 100% of the Federal Poverty Level, per American Community Survey 2007-2011, in four groups: low (<10%), medium (10 %-< 20%), high (20 %-< 30%), and very high (>=30%).

To access the related Epi Data Brief, go to www.nyc.gov/html/doh/downloads/pdf/epi/databrief50.pdf



Table 1. Number and rate of unintentional drug poisoning (overdose) deaths, New York City, 2010-2013

Source: Bureau of Vital Statistics/Office of the Chief Medical Examiner, New York City; Rates calculated using NYC DOHMH population estimates, modified from US Census Bureau intercensal population estimates, 2010-2013. Updated December 2014. Analysis by Health Department's Bureau of Alcohol and Drug Use Prevention, Care and Treatment.

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

	2010			2011			2012			2013			
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate	
Total Unintentional Drug Poisoning Deaths	541	100%	8.2	630	100%	9.4	730	100%	10.9	788	100%	11.6	
Gender													
Male	386	71%	12.4	455	72%	14.2	534	73%	16.6	570	72%	17.7	
Female	155	29%	4.4	175	28%	5.0	196	27%	5.7	218	28%	6.2	
Race/Ethnicity													
Black (non-Hispanic)	128	24%	8.1	158	26%	10.0	180	25%	11.7	172	23%	10.7	
Hispanic	150	28%	8.7	157	26%	8.8	192	27%	10.5	222	30%	12.1	
White (non-Hispanic)	250	47%	11.6	300	49%	13.5	336	47%	15.6	358	48%	16.3	
Age (years)													
15-24	30	6%	2.5	37	6%	3.2	48	7%	4.2	45	6%	4.0	
25-34	85	16%	6.0	125	20%	8.7	140	19%	9.6	137	17%	9.3	
35-44	121	22%	10.4	133	21%	11.5	158	22%	13.5	159	20%	13.6	
45-54	194	36%	17.4	206	33%	18.5	245	34%	22.0	251	32%	22.6	
55-64	93	17%	10.3	122	19%	13.2	122	17%	13.0	163	21%	17.1	
65-84	17	3%	2.0	7	1%	0.8	17	2%	1.9	33	4%	3.6	
Borough of Residence													
Bronx	128	27%	12.3	140	25%	13.3	171	26%	16.1	162	21%	15.0	
Brooklyn	145	30%	7.3	158	28%	7.8	179	27%	8.9	165	21%	8.2	
Manhattan	69	14%	5.3	103	18%	7.7	131	20%	9.8	136	17%	9.8	
Queens	91	19%	5.0	97	17%	5.2	105	16%	5.5	145	18%	7.6	
Staten Island	46	10%	12.2	69	12%	18.4	74	11%	19.9	64	8%	17.6	
Borough of Death													
Bronx	132	24%	12.8	147	23%	13.8	175	24%	16.5	184	23%	17.2	
Brooklyn	166	31%	8.4	172	27%	8.5	188	26%	9.4	197	25%	9.9	
Manhattan	102	19%	7.6	134	21%	9.9	172	24%	12.9	191	24%	13.8	
Queens	96	18%	5.3	100	16%	5.4	120	16%	6.4	152	19%	8.0	
Staten Island	45	8%	12.0	77	12%	20.6	75	10%	20.1	64	8%	17.5	
Neighborhood Poverty*													
Low (wealthiest)	80	17%	6.0	124	22%	8.8	119	18%	8.6	147	22%	10.6	
Medium	150	32%	6.0	158	28%	6.2	194	29%	7.5	183	27%	7.1	
High	112	24%	7.2	130	23%	8.4	164	25%	10.6	160	24%	10.0	
Very High	130	28%	11.8	155	27%	13.9	182	28%	16.2	181	27%	15.9	
Drug Type**													
Alcohol	243	45%	3.7	273	43%	4.1	316	43%	4.7	340	43%	5.0	
Benzodiazepines	227	42%	3.5	210	33%	3.1	278	38%	4.2	298	38%	4.4	
Cocaine	289	53%	4.4	319	51%	4.8	348	48%	5.2	364	46%	5.5	
Heroin	209	39%	3.1	284	45%	4.3	382	52%	5.7	424	54%	6.2	
Methadone	142	26%	2.2	146	23%	2.2	184	25%	2.8	169	21%	2.5	
Opioid Analgesics	173	32%	2.6	220	35%	3.3	201	28%	3.0	220	27%	3.2	
Top 5 NYC Neighborhoods[^]				2010-2011 Rate			2012-2013 Rate						
				Stapleton-St George			Hunts Point-Mott Haven			28.2			
				Hunts Point-Mott Haven			18.2			South Beach-Tottenville			
				Highbridge-Morrisania			15.9			Willowbrook			
				Crotona-Tremont			15.8			Highbridge-Morrisania			
				Willowbrook			14.8			Central Harlem			

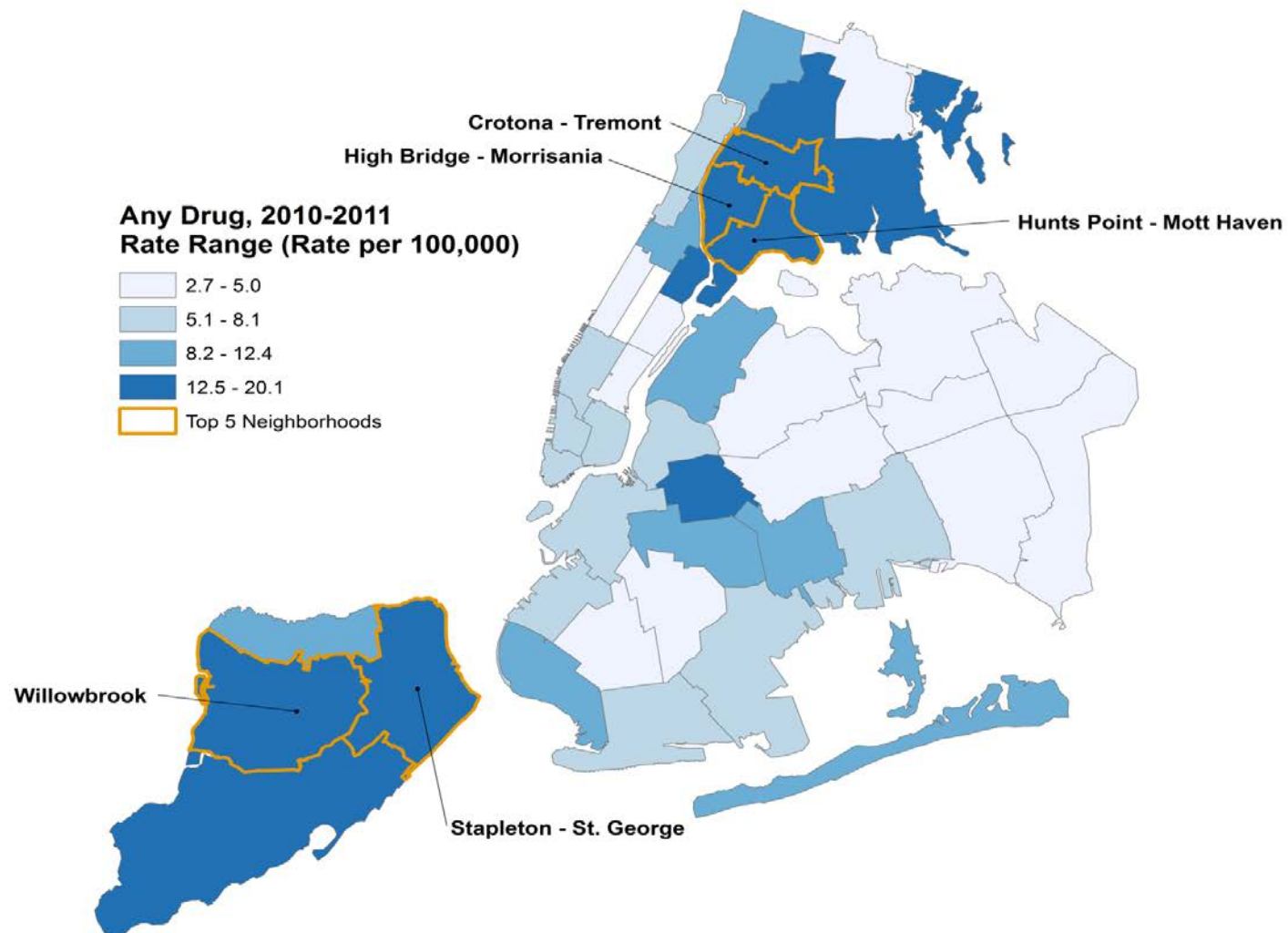
*Neighborhood poverty (based on ZIP code) was defined as percent of residents with incomes below 100% of the federal poverty level (Census 2000), separated into four groups: low (<10%), medium (10%-<20%), high (20%-<30%) and very high (>=30%).

**Drug Type, not mutually exclusive.; percent will not equal 100%.

[^Top five of 42 NYC Neighborhoods](#)

Map 1. Top five New York City neighborhoods: Rates of unintentional drug poisoning (overdose) by neighborhood* of residence, 2010-2011

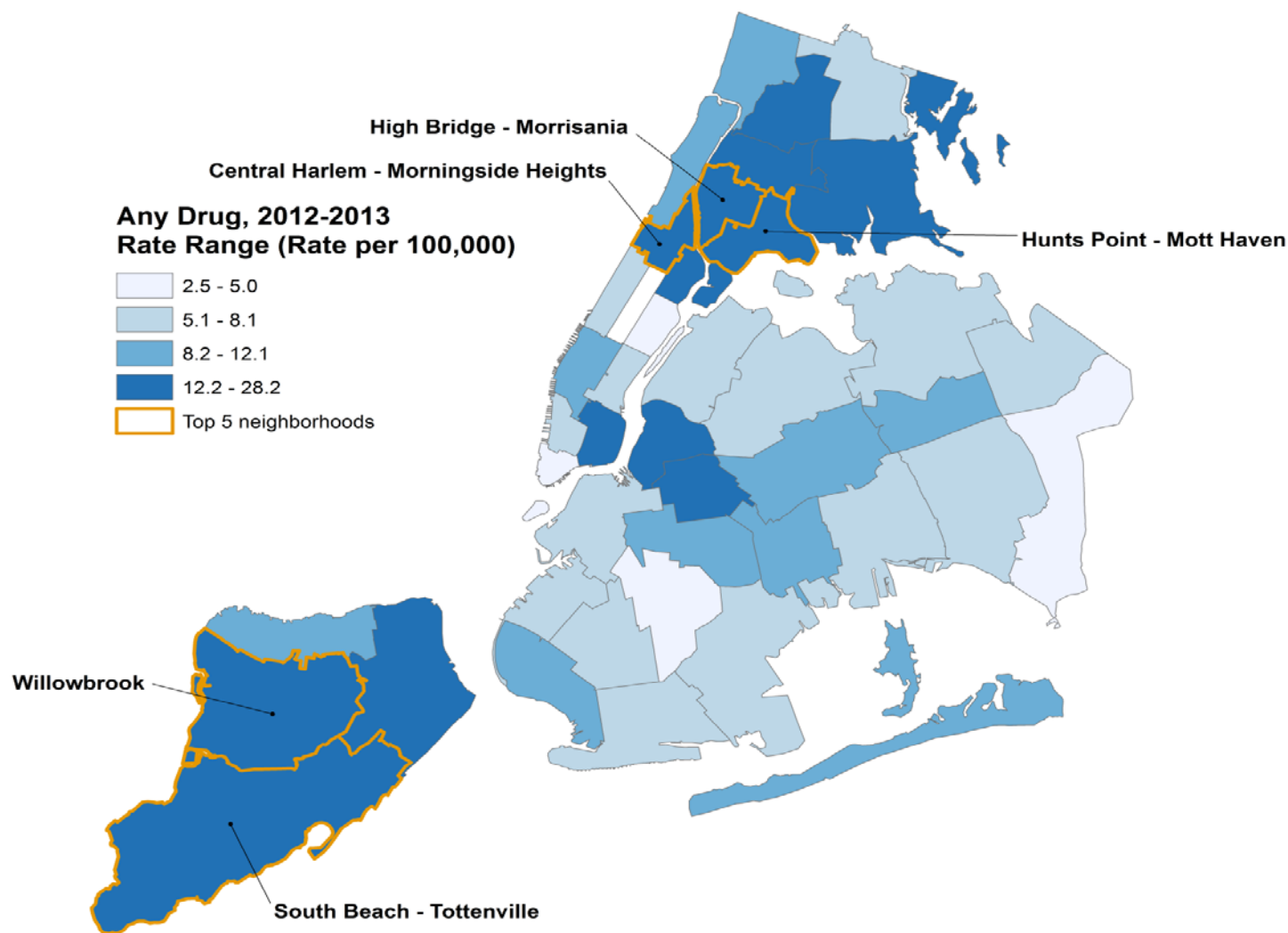
Source: Bureau of Vital Statistics/Office of the Chief Medical Examiner, New York City; Rates calculated using NYC DOHMH population estimates, modified from US Census Bureau intercensal population estimates, 2010-2011. Updated December 2014. Analysis by Health Department's Bureau of Alcohol and Drug Use Prevention, Care and Treatment.



*The United Hospital Fund (UHF) classifies New York City into 42 neighborhoods, comprised of contiguous zip codes.

Map 2. Top five New York City neighborhoods: Rates of unintentional drug poisoning (overdose) by neighborhood* of residence, 2012-2013

Source: Bureau of Vital Statistics/Office of the Chief Medical Examiner, New York City; Rates calculated using NYC DOHMH population estimates, modified from US Census Bureau intercensal population estimates, 2012-2013. Updated December 2014. Analysis by Health Department's Bureau of Alcohol and Drug Use Prevention, Care and Treatment.



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Table 2. Number and rate of unintentional drug poisoning (overdose) deaths involving opioid analgesics, New York City, 2010-2013

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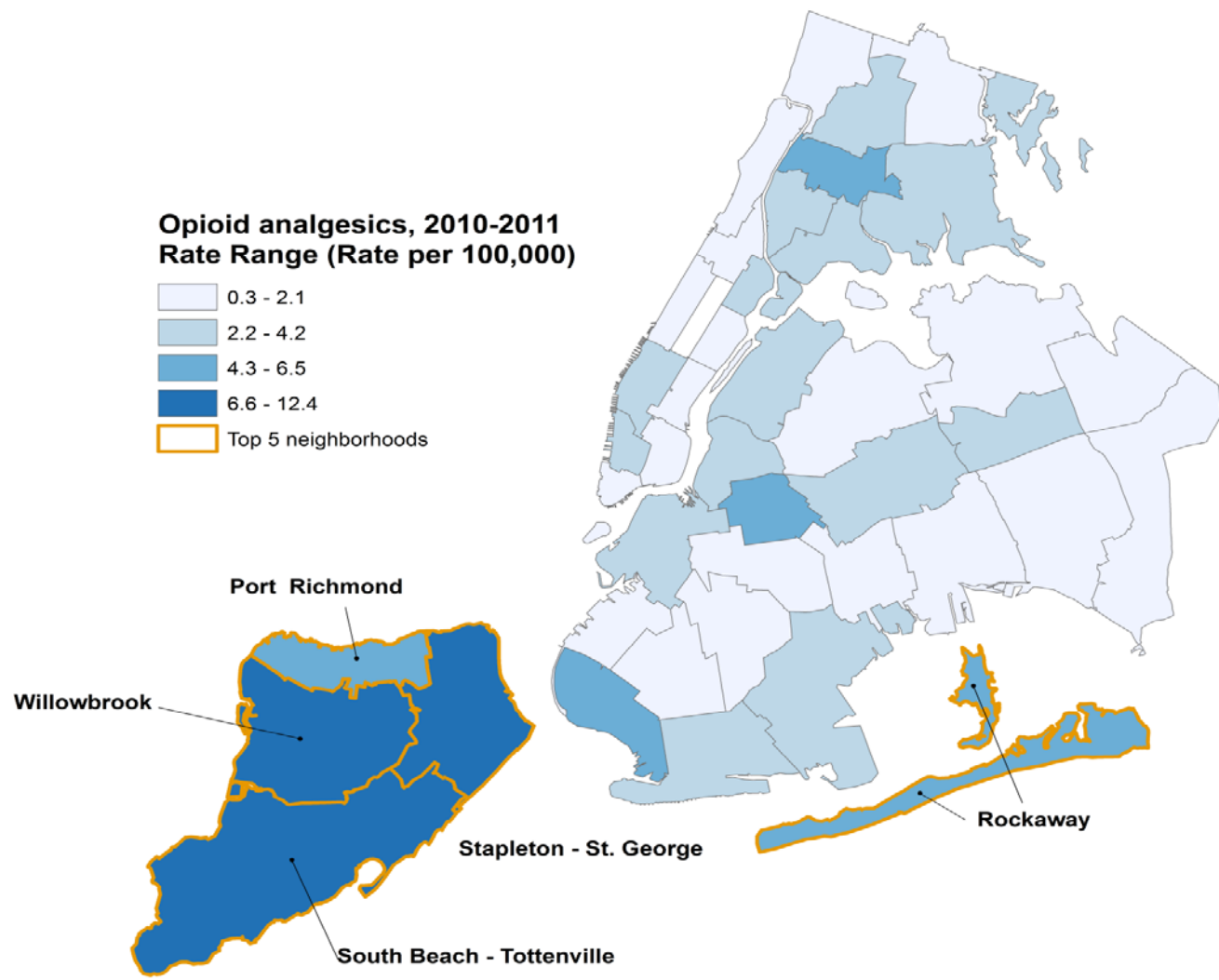
	2010			2011			2012			2013		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Total Unintentional Drug Poisoning Deaths	541	100%	8.2	630	100%	9.4	730	100%	10.9	788	100%	11.6
Total Unintentional Drug Poisoning Deaths Involving Opioid Analgesics	173	32%	2.6	220	35%	3.3	201	28%	3.0	220	28%	3.2
Gender												
Male	109	63%	3.5	160	73%	5.0	141	70%	4.4	147	67%	4.5
Female	64	37%	1.8	60	27%	1.7	60	30%	1.8	73	33%	2.0
Race/Ethnicity												
Black (non-Hispanic)	21	13%	1.3	24	11%	1.6	40	20%	2.7	30	14%	1.9
Hispanic	32	19%	1.8	40	19%	2.2	42	21%	2.3	52	24%	2.8
White (non-Hispanic)	115	68%	5.5	152	70%	7.0	115	58%	5.4	131	62%	5.8
Age (years)												
15-24	13	8%	1.1	24	11%	2.1	23	11%	2.0	11	5%	1.0
25-34	33	19%	2.3	50	23%	3.5	39	19%	2.7	43	20%	2.9
35-44	47	27%	4.0	49	22%	4.2	49	24%	4.2	44	20%	3.8
45-54	52	30%	4.7	59	27%	5.3	56	28%	5.0	73	33%	6.6
55-64	27	16%	3.0	35	16%	3.8	32	16%	3.4	43	20%	4.5
65-84	1	1%	0.1	3	1%	0.3	2	1%	0.2	6	3%	0.7
Age (years-collapsed)												
15-34	46	27%	1.8	74	34%	2.9	62	31%	2.4	54	25%	2.1
35-54	99	57%	4.3	108	49%	4.8	105	52%	4.6	117	53%	5.1
55-84	28	16%	1.6	38	17%	2.1	34	17%	1.9	49	22%	2.6
Borough of Residence												
Bronx	25	17%	2.4	40	20%	3.8	38	21%	3.5	36	18%	3.4
Brooklyn	46	30%	2.4	48	24%	2.4	40	22%	2.1	51	26%	2.5
Manhattan	15	10%	1.2	31	15%	2.4	33	18%	2.5	31	16%	2.3
Queens	34	23%	1.9	42	21%	2.3	33	18%	1.8	51	26%	2.6
Staten Island	31	21%	8.4	40	20%	10.7	37	20%	10.0	28	14%	7.6
Borough of Death												
Bronx	27	16%	2.6	41	19%	3.8	39	19%	3.6	42	19%	3.9
Brooklyn	50	29%	2.6	52	24%	2.6	41	20%	2.2	60	27%	3.0
Manhattan	25	14%	1.9	38	17%	2.9	45	22%	3.4	38	17%	2.7
Queens	40	23%	2.2	45	20%	2.4	38	19%	2.0	54	25%	2.8
Staten Island	31	18%	8.5	44	20%	12.0	38	19%	10.1	26	12%	6.9
Neighborhood Poverty*												
Low (wealthiest)	42	28%	3.2	59	29%	4.2	54	30%	4.0	59	30%	4.1
Medium	54	36%	2.2	67	33%	2.6	57	31%	2.2	55	28%	2.1
High	25	17%	1.6	33	16%	2.1	36	20%	2.3	44	22%	2.8
Very High	30	20%	2.6	42	21%	3.7	34	19%	3.0	38	19%	3.3
Top 5 NYC Neighborhoods[^]	2010-2011 Rate						2012-2013 Rate					
	Stapleton-St George			12.5			Willowbrook			11.7		
	South Beach-Tottenville			10.1			South Beach-Tottenville			10.9		
	Willowbrook			8.5			Stapleton-St George			6.3		
	Rockaway			6.6			Hunts Point-Mott Haven			5.7		
	Port Richmond			6.1			Kingsbridge-Riverdale			5.5		

*Neighborhood poverty (based on ZIP code) was defined as percent of residents with incomes below 100% of the federal poverty level (Census 2000), separated into four groups: low (<10%), medium (10%-<20%), high (20%-<30%) and very high (>=30%).

[^Top five of 42 NYC Neighborhoods](#)

Map 3. Top five New York City neighborhoods: Rates of unintentional drug poisoning (overdose) deaths involving opioid analgesics by neighborhood* of residence, 2010-2011

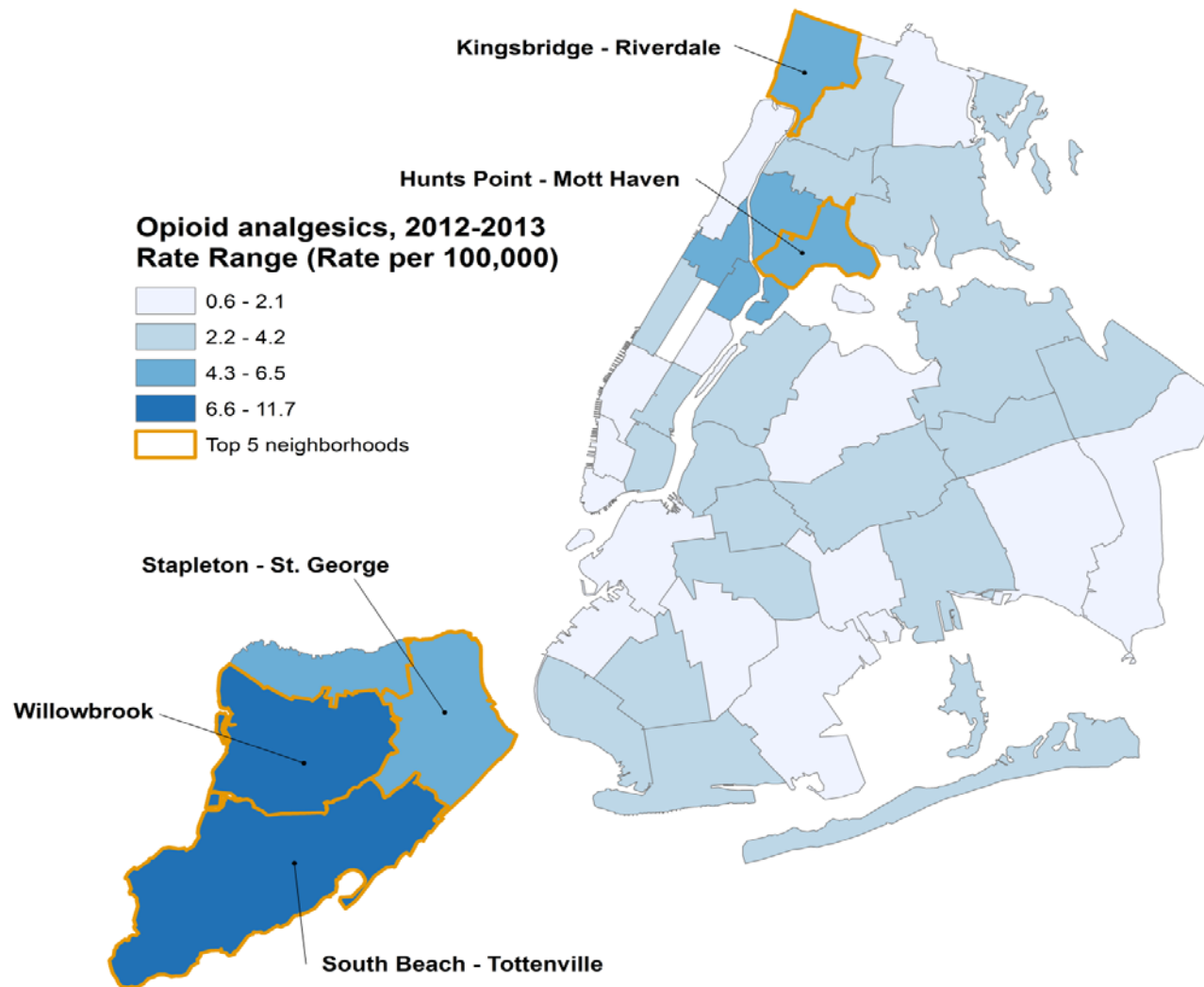
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Map 4. Top five NYC Neighborhoods: Rates of unintentional drug poisoning (overdose) deaths involving opioid analgesics by NYC neighborhood* of residence, 2012-2013

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*The United Hospital Fund (UHF) classifies New York City into 42 neighborhoods, comprised of contiguous zip codes.

Table 3. Number and rate of unintentional drug poisoning (overdose) deaths involving heroin, New York City, 2010-2013

Source: Bureau of Vital Statistics/Office of the Chief Medical Examiner, New York City; Rates calculated using NYC DOHMH population estimates, modified from US Census Bureau intercensal population estimates, 2010-2013. Updated December 2014. Analysis by Health Department's Bureau of Alcohol and Drug Use Prevention, Care and Treatment.

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

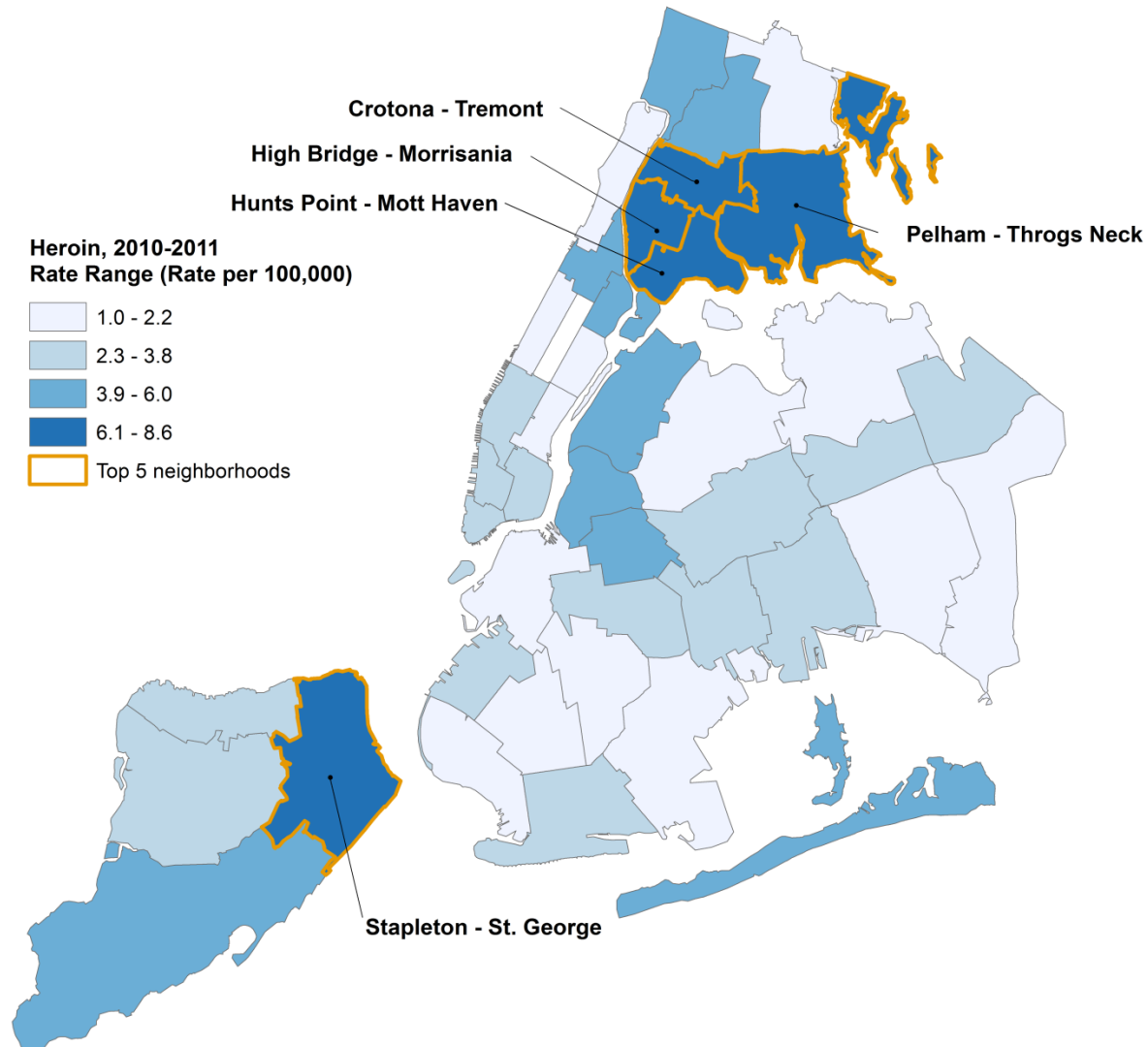
	2010			2011			2012			2013		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Total Unintentional Drug Poisoning Deaths	541	100%	8.2	630	100%	9.4	730	100%	10.9	788	100%	11.6
Total Unintentional Drug Poisoning Deaths Involving Heroin	209	39%	3.1	284	45%	4.2	382	52%	5.7	424	54%	6.2
Gender												
Male	168	80%	5.3	222	78%	6.9	297	78%	9.2	326	77%	10.1
Female	41	20%	1.1	62	22%	1.8	85	22%	2.5	98	23%	2.7
Race/Ethnicity												
Black (non-Hispanic)	36	18%	2.2	61	22%	3.8	70	19%	4.6	64	16%	3.9
Hispanic	64	31%	3.6	79	28%	4.4	114	30%	6.2	146	36%	7.9
White (non-Hispanic)	105	51%	4.7	140	50%	6.4	191	51%	8.8	195	48%	8.8
Age (years)												
15-24	12	6%	1.0	17	6%	1.5	27	7%	2.4	32	8%	2.9
25-34	43	21%	3.1	63	22%	4.4	88	23%	6.0	92	22%	6.2
35-44	36	17%	3.1	64	23%	5.5	80	21%	6.9	84	20%	7.2
45-54	76	36%	6.8	88	31%	7.9	130	34%	11.7	125	30%	11.2
55-64	39	19%	4.3	49	17%	5.3	50	13%	5.3	78	18%	8.2
65-84	3	1%	0.3	3	1%	0.3	7	2%	0.8	13	3%	1.4
Age (years-collapsed)												
15-34	55	26%	2.1	80	28%	3.1	115	30%	4.4	124	29%	4.8
35-54	112	54%	4.9	152	54%	6.7	210	55%	9.3	209	49%	9.2
55-84	42	20%	2.4	52	18%	2.9	57	15%	3.1	91	22%	4.9
Borough of Residence												
Bronx	60	33%	5.7	75	30%	7.1	93	27%	8.8	94	27%	8.7
Brooklyn	55	30%	2.7	58	23%	2.9	84	25%	4.2	84	24%	4.2
Manhattan	20	11%	1.5	51	20%	3.8	73	22%	5.3	61	17%	4.3
Queens	35	19%	1.9	47	19%	2.6	53	16%	2.8	81	23%	4.3
Staten Island	14	8%	3.5	22	9%	6.2	36	11%	10.1	32	9%	8.6
Borough of Death												
Bronx	58	28%	5.6	80	28%	7.6	98	26%	9.3	109	26%	10.2
Brooklyn	69	33%	3.4	66	23%	3.3	96	25%	4.8	102	24%	5.1
Manhattan	37	18%	2.7	68	24%	5.0	96	25%	7.2	89	21%	6.3
Queens	33	16%	1.7	47	17%	2.6	59	15%	3.2	91	22%	4.8
Staten Island	12	6%	3.0	23	8%	6.5	33	9%	9.2	33	8%	9.1
Neighborhood Poverty*												
Low (wealthiest)	26	15%	1.9	46	18%	3.4	64	19%	4.6	78	22%	5.7
Medium	51	28%	2.0	73	29%	2.9	86	25%	3.4	90	26%	3.5
High	43	24%	2.7	52	21%	3.3	92	27%	5.9	73	21%	4.5
Very High	59	33%	5.2	82	32%	7.3	96	28%	8.5	110	31%	9.7
Top 5 NYC Neighborhoods[^]	2010-2011 Rate					2012-2013 Rate						
	Hunts Point-Mott Haven					Hunts Point-Mott Haven						
	8.6					16.5						
	Crotona-Tremont					South Beach-Tottenville						
	8.1					12.8						
	Pelham-Throgs Neck					Willowbrook						
	8.0					10.7						
	Highbridge-Morrisania					Fordham - Bronx Park						
	7.0					10.6						
	Stapleton-St George					Crotona-Tremont						
	6.9					10.3						

*Neighborhood poverty (based on ZIP code) was defined as percent of residents with incomes below 100% of the federal poverty level per American Community Survey 2007-2011, separated into four groups: low (<10%), medium (10%-<20%), high (20%-<30%) and very high (>=30%).

[^Top five of 42 NYC Neighborhoods](#)

Map 5. Top five New York City neighborhoods: Rates of unintentional drug poisoning (overdose) deaths involving heroin by neighborhood* of residence, 2010-2011

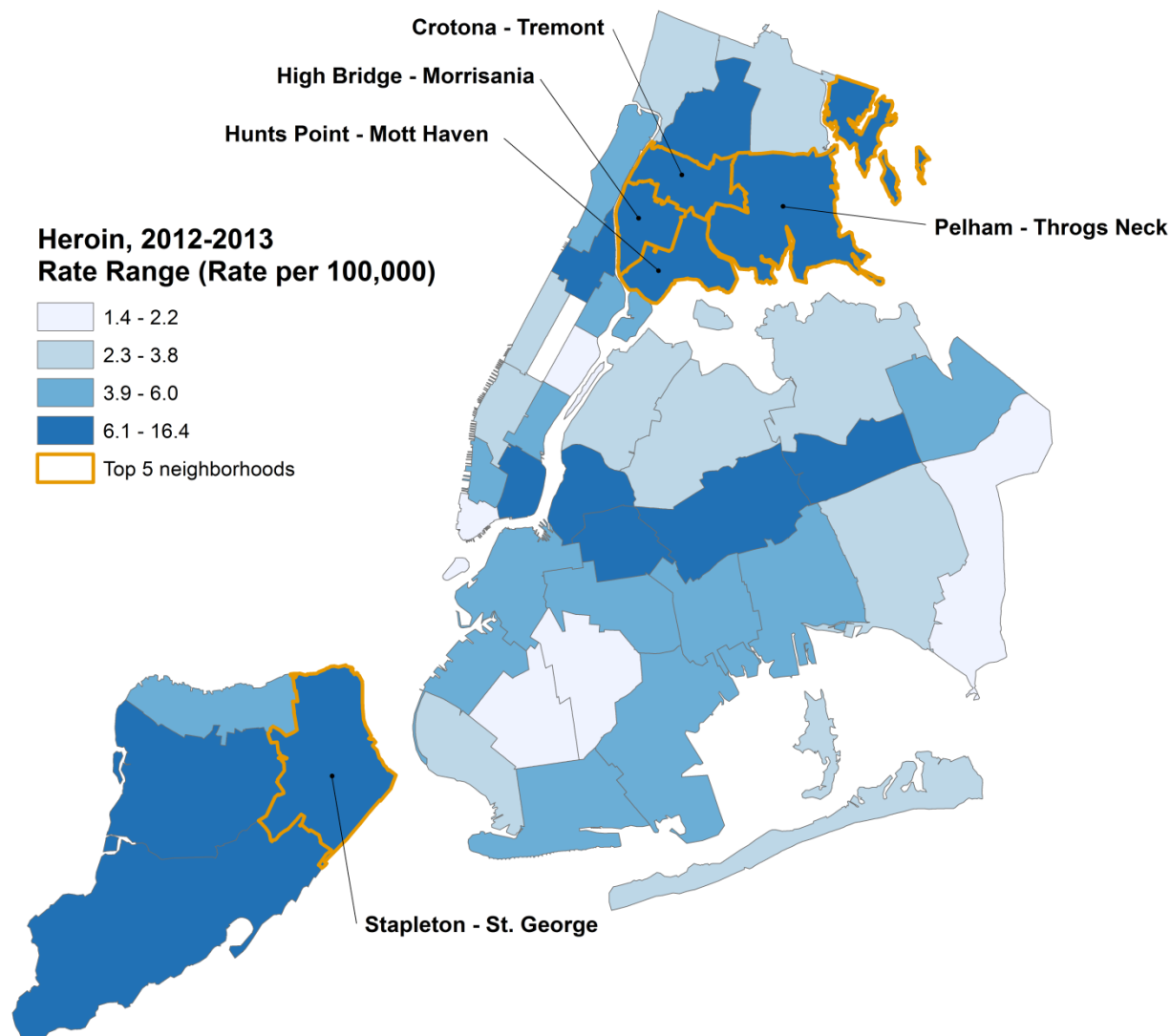
Source: Bureau of Vital Statistics/Office of the Chief Medical Examiner, New York City; Rates calculated using NYC DOHMH population estimates, modified from US Census Bureau intercensal population estimates, 2010-2011. Updated December 2014. Analysis by Health Department's Bureau of Alcohol and Drug Use Prevention, Care and Treatment.



*The United Hospital Fund (UHF) classifies New York City into 42 neighborhoods, comprised of contiguous zip codes.

Map 6. Top five New York City neighborhoods: Rates of unintentional drug poisoning (overdose) deaths involving heroin by neighborhood* of residence, 2012-2013

Source: Bureau of Vital Statistics/Office of the Chief Medical Examiner, New York City; Rates calculated using NYC DOHMH population estimates, modified from US Census Bureau intercensal population estimates, 2012-2013. Updated December 2014. Analysis by Health Department's Bureau of Alcohol and Drug Use Prevention, Care and Treatment.



*The United Hospital Fund (UHF) classifies New York City into 42 neighborhoods, comprised of contiguous zip codes.