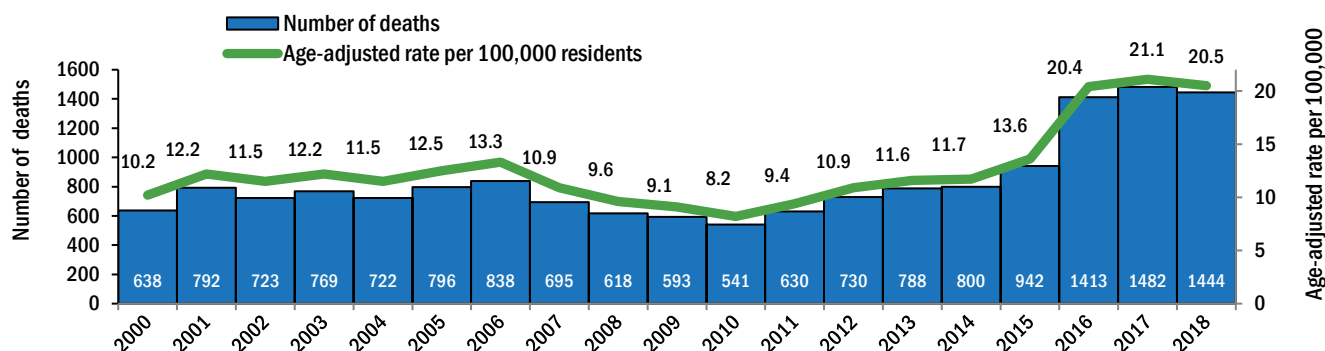


Unintentional Drug Poisoning (Overdose) Deaths in New York City in 2018

- The number and rate of overdose deaths decreased in New York City (NYC) in 2018, after seven consecutive years of increases in overdose deaths.
- In 2018 there were 1,444 unintentional drug overdose deaths in NYC, compared with 1,482 in 2017, a decrease of 38 deaths.
- The rate of overdose death decreased 3% from 21.1 per 100,000 residents in 2017 to 20.5 per 100,000 residents in 2018.
- In 2018, opioids were involved in 80% of overdose deaths.
- For the second year in a row, fentanyl was the most common substance involved in drug overdose deaths, present in 60% of overdose deaths in 2018.

Number and rate of unintentional overdose deaths, New York City, 2000 to 2018



Sources: NYC Office of the Chief Medical Examiner and NYC DOHMH Bureau of Vital Statistics, 2000–2018; 2018 data are provisional and subject to change.

- In 2018, opioid analgesics, excluding fentanyl, were involved in the fewest number of overdose deaths since 2009 (156 vs. 145).
- Half (50%) of all overdose deaths involved multiple central nervous system depressants, such as alcohol (40%), benzodiazepines (29%), and opioids (80%).

Definitions:

Unintentional drug poisoning deaths (overdose) exclude poisonings where the manner of death was classified as intentional (suicide), undetermined, or a homicide.

Opioids cover the entire family of opiates and opioids. Opiates are derived from “natural” opium, such as morphine or heroin. **Opioids** are synthetic drugs, such as methadone or fentanyl. **Opioid analgesics** are commonly known as prescription pain relievers, such as oxycodone (Percocet®) and hydrocodone (Vicodin®). †For this analysis, opioid analgesics exclude fentanyl.

Fentanyl includes fentanyl and fentanyl analogues. Fentanyl analogues, such as acetylfentanyl and furanylfentanyl, are similar in chemical structure to fentanyl. Fentanyl can be one of two types: synthetic opioid analgesics manufactured pharmaceutically to manage severe pain, or non-pharmaceutically manufactured and sold illicitly.

Drugs involved in overdose deaths are not mutually exclusive; percent will not equal 100%.

Data Sources:

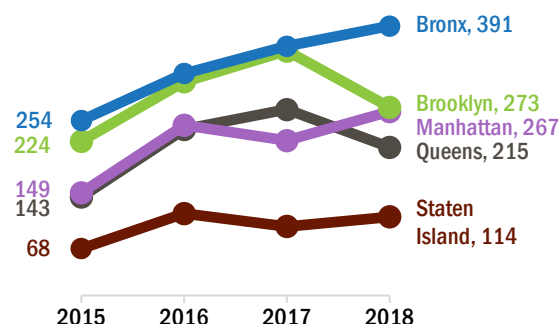
NYC Office of the Chief Medical Examiner and NYC DOHMH Bureau of Vital Statistics: Mortality data for 2000–2018 were collected through an in-depth review of data from DOHMH Bureau of Vital Statistics and NYC Office of the Chief Medical Examiner. Data were limited to individuals ages 15 to 84. Data for 2018 are provisional and subject to change.

Rate calculation: DOHMH population estimates, modified from US Census Bureau intercensal population estimates 2000–2017, updated September 2018. 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.

The rate of overdose deaths increased among residents of the Bronx, Manhattan, and Staten Island

- Although there were 38 fewer overdose deaths in 2018 compared with 2017, decreases were not evenly distributed by borough of residence.
- In 2018, Bronx residents had the highest rate of overdose death compared with all other boroughs. The rate increased by 9% from 31.4 per 100,000 residents in 2017 to 34.1 per 100,000 residents in 2018. Bronx residents also had the largest number of overdose deaths (391) in 2018.
- By borough of residence, Staten Island residents had the second highest rate of overdose death. The rate per 100,000 residents increased 18%, from 26.8 in 2017 to 31.5 in 2018.
- From 2017 to 2018, the number of overdose deaths increased among residents of the Bronx (+29 deaths), Manhattan (+42 deaths), and Staten Island (+14 deaths).
- From 2017 to 2018, the number of overdose deaths decreased among residents of Brooklyn (-82 deaths) and Queens (-55 deaths).
- Residents of East Harlem had the highest rate of overdose death (56.1 per 100,000) followed by Crotona-Tremont (49.5 per 100,000) and Hunts Point-Mott Haven residents (49.2 per 100,000).

Number of unintentional overdose deaths, by borough of residence, New York City, 2015–2018

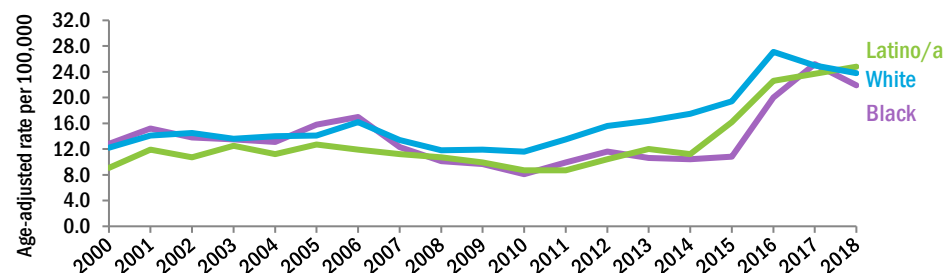


Sources: NYC Office of the Chief Medical Examiner and NYC DOHMH Bureau of Vital Statistics, 2000–2018; 2018 data are provisional and subject to change.

Shifting demographics of unintentional overdose deaths: the rate increased among Latino/a New Yorkers, those ages 55 to 84, and females

- In 2018, Latino/a New Yorkers had the highest rate of overdose death (24.8 per 100,000 residents); the rate increased 5% from 23.7 per 100,000 residents in 2017.
- The rate among White New Yorkers decreased for the second consecutive year. The rate decreased by 5%, from 25.0 per 100,000 in 2017 to 23.8 per 100,000 in 2018.

Unintentional overdose deaths by race and ethnicity, New York City, 2000–2018



Latino/a includes persons of Hispanic origin, regardless of reported race. Black and White race categories do not include people of Latino/a origin.

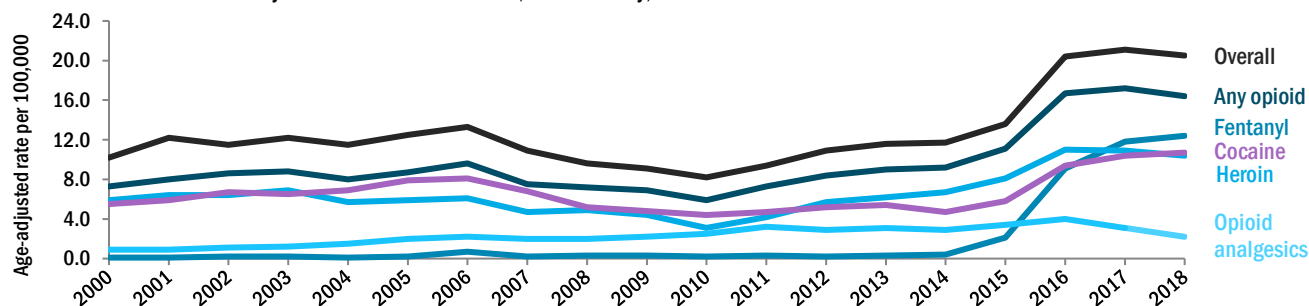
Sources: NYC Office of the Chief Medical Examiner and NYC DOHMH Bureau of Vital Statistics, 2000–2018; 2018 data are provisional and subject to change.

- The rate among Black New Yorkers decreased by 13% from 2017 to 2018, from 25.2 to 21.9 per 100,000.
- Overdose rates remained highest among New Yorkers ages 35 to 54, (28.7 per 100,000) but decreased 4% from 2017 to 2018. The rate also decreased among New Yorkers ages 15 to 24 by 15%.
- Among New Yorkers ages 55 to 84, the rate increased by 11%, from 20.1 per 100,000 in 2017 to 22.3 per 100,000 in 2018.
- The rate among females increased by 7%, from 2017 to 2018, from 8.5 to 9.1 per 100,000 female residents, compared with a 6% decrease among males from 2017 to 2018, from 35.0 per 100,000 to 33.0 per 100,000 male residents.
- Residents of very high poverty neighborhoods had a higher rate (31.8 per 100,000) than residents of high, medium, and low poverty neighborhoods (19.7, 13.6, and 13.0 per 100,000 respectively).

Definition: Race/ethnicity: For the purpose of this publication, Latino/a includes persons of Hispanic origin based on ancestry reported on the death certificate, regardless of reported race; Latino/a excludes reported ancestry from non-Spanish speaking Central/South American countries, and non-Spanish speaking Caribbean islands. Black and White race categories do not include persons of Latino/a origin.

Rates of overdose deaths involving opioids, heroin, and opioid analgesics decreased from 2017-2018

Unintentional overdose deaths by select substances involved, New York City, 2000–2018



Sources: NYC Office of the Chief Medical Examiner and NYC DOHMH Bureau of Vital Statistics, 2000–2018; 2018 data are provisional and subject to change.

Unintentional overdose deaths involving opioids, 2018

- Fentanyl was the most common opioid involved in overdose deaths (60%), followed by heroin (51%), methadone (14%), and opioid analgesics (11%).
- The rate of opioid-involved overdose deaths was highest among Latino/a New Yorkers (21.4 per 100,000), followed by White New Yorkers (20.6 per 100,000) and Black New Yorkers (14.1 per 100,000).
- Cocaine was involved in approximately half (49%) of all opioid-involved deaths; benzodiazepines were involved in approximately one third (33%) of opioid-involved deaths.

Unintentional overdose deaths involving fentanyl, 2018

- Fentanyl was involved in 60% of overdose deaths compared with 56% of overdose deaths in 2017.
- The rate of fentanyl-involved overdose deaths increased by 5%, from 11.8 per 100,000 residents in 2017 to 12.4 per 100,000 residents in 2018.
 - 157 overdose deaths involved cocaine and fentanyl without heroin, an increase from 146 deaths in 2017.
 - 544 overdose deaths involved two or more types of fentanyl, an increase from 198 deaths in 2017.

Unintentional overdose deaths involving cocaine, 2018

- Cocaine was involved in 52% of overdose deaths in 2018.
- Since 2014, the rate of cocaine-involved overdose death has more than doubled from 4.7 per 100,000 residents to 10.7 per 100,000 residents in 2018.
- In 2018, Black New Yorkers had the highest rate of cocaine-involved overdose death (14.3 per 100,000), followed by Latino/a (12.6 per 100,000) and White New Yorkers (10.9 per 100,000).
- In 2018, 74% of cocaine-involved overdoses also involved an opioid and 45% also involved alcohol.
 - Cocaine-involved overdoses among Black New Yorkers were less likely to involve an opioid (57%) compared with White (84%) and Latino/a (83%) New Yorkers.

Definitions: **Neighborhood:** The United Hospital Fund classifies New York City into 42 neighborhoods, comprised of contiguous ZIP codes. For more information visit: <http://www1.nyc.gov/assets/doh/downloads/pdf/ah/zipcodetable.pdf>.

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

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Acknowledgements: Kendall Lasane and Jonathan McAteer

Suggested citation: Nolan ML, Mantha S, Tuazon E, Paone D. Unintentional Drug Poisoning (Overdose) Deaths in New York City in 2018. New York City Department of Health and Mental Hygiene: Epi Data Brief (116); August 2019.

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New York City Department of Health and Mental Hygiene





Epi Data Tables

August 2019, No. 116

Unintentional Drug Poisoning (Overdose) Deaths in New York City, 2015 to 2018

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Data Sources

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 2000-2018. Data for 2018 are provisional and subject to change.

Rate Calculation: NYC DOHMH population estimates, modified from US Census Bureau intercensal population estimates 2000-2017, updated September 2017. 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.

Table 1. Number and rate of unintentional drug poisoning (overdose) deaths, New York City, 2015-2018*

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 2000-2017 updated September 2018. 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.

	2015			2016			2017			2018*		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Total Unintentional Drug Poisoning Deaths	942	100%	13.6	1413	100%	20.4	1482	100%	21.1	1444	100%	20.5
Gender												
Male	710	75%	21.5	1084	77%	32.7	1168	79%	35.0	1104	76%	33.0
Female	232	25%	6.5	329	23%	9.1	314	21%	8.5	340	24%	9.1
Race/ethnicity^{†^}												
Black	178	20%	10.8	333	24%	20.0	417	29%	25.2	374	27%	21.9
Latino/a	311	34%	16.2	435	32%	22.6	456	32%	23.7	481	35%	24.8
White	418	46%	19.4	594	44%	27.1	555	39%	25.0	520	38%	23.8
Age group (years)												
15-24	71	8%	6.6	100	7%	9.5	73	5%	7.0	63	4%	6.1
25-34	196	21%	12.8	278	20%	17.9	313	21%	20.2	265	18%	17.1
35-44	182	19%	15.4	281	20%	23.9	282	19%	23.9	250	17%	21.2
45-54	278	30%	25.0	394	28%	35.5	398	27%	36.2	405	28%	36.8
55-64	179	19%	18.1	297	21%	29.6	334	23%	33.1	351	24%	34.8
65-84	36	4%	3.6	63	4%	6.1	82	6%	7.7	110	8%	10.4
Age group (years)												
15-34	267	28%	10.2	378	27%	14.5	386	26%	14.9	328	23%	12.7
35-54	460	49%	20.1	675	48%	29.5	680	46%	29.8	655	45%	28.7
55-84	215	23%	10.8	360	25%	17.7	416	28%	20.1	461	32%	22.3
Borough of residence[†]												
Bronx	254	30%	22.4	322	26%	28.9	362	28%	31.4	391	31%	34.1
Brooklyn	224	27%	10.8	310	25%	14.6	355	27%	16.7	273	22%	13.2
Manhattan	149	18%	11.0	247	20%	18.0	225	17%	16.7	267	21%	18.9
Queens	143	17%	7.4	241	19%	12.5	270	21%	13.8	215	17%	10.9
Staten Island	68	8%	18.9	119	10%	32.4	100	8%	26.8	114	9%	31.5
Borough of death												
Bronx	274	29%	24.2	355	25%	31.9	399	27%	34.9	442	31%	38.8
Brooklyn	259	27%	12.5	363	26%	17.1	395	27%	18.7	309	21%	14.8
Manhattan	189	20%	14.0	339	24%	24.8	316	21%	23.2	366	25%	25.7
Queens	151	16%	7.8	244	17%	12.7	271	18%	13.9	216	15%	11.0
Staten Island	69	7%	19.3	112	8%	30.7	101	7%	27.0	111	8%	30.6
Neighborhood poverty^{†o}												
Low (wealthiest)	135	16%	9.8	216	18%	15.4	207	16%	14.8	188	15%	13.0
Medium	247	30%	9.5	370	30%	14.0	401	31%	14.9	361	29%	13.6
High	211	25%	13.2	329	27%	20.2	301	23%	18.5	326	26%	19.7
Very high	236	28%	19.5	315	26%	26.5	401	31%	33.3	379	30%	31.8
Drug type^{**}												
Alcohol	373	40%	5.4	548	39%	7.9	604	41%	8.7	574	40%	8.1
Benzodiazepines	374	40%	5.4	468	33%	6.8	433	29%	6.2	420	29%	6.0
Cocaine	403	43%	5.8	650	46%	9.4	728	49%	10.4	756	52%	10.7
Fentanyl	147	16%	2.1	624	44%	9.1	832	56%	11.8	868	60%	12.4
Heroin	561	60%	8.1	768	54%	11.0	767	52%	10.9	733	51%	10.4
Methadone	154	16%	2.3	204	14%	2.9	197	13%	2.8	199	14%	2.8
Opioid Analgesics ^{††}	232	25%	3.4	278	20%	4.0	214	14%	3.1	156	11%	2.2
Top 5 NYC neighborhoods^{^^}	2017 rate						2018* rate					
	Hunts Point-Mott Haven			45.8			East Harlem			56.1		
	Highbridge-Morrisania			42.9			Crotona-Tremont			49.5		
	East Harlem			38.4			Hunts Point-Mott Haven			49.2		
	Stapleton-St. George			37.2			Fordham-Bronx Park			40.5		
	Fordham-Bronx Park			36.4			South Beach-Tottenville			37.1		

*Data for 2018 are provisional and are subject to change.

†Percentage of deaths within subgroup are calculated among categories presented.

^For the purpose of this publication, Latino/a includes persons of Hispanic origin based on ancestry reported on the death certificate, regardless of reported race; Latino/a excludes reported ancestry from non-Spanish speaking Central/South American countries, and non-Spanish speaking Caribbean islands. Black and White race categories do not include persons of Latino/a origin.

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

**Drug Type, not mutually exclusive.; percent will not equal 100%. ††For this analysis, opioid analgesics exclude fentanyl.

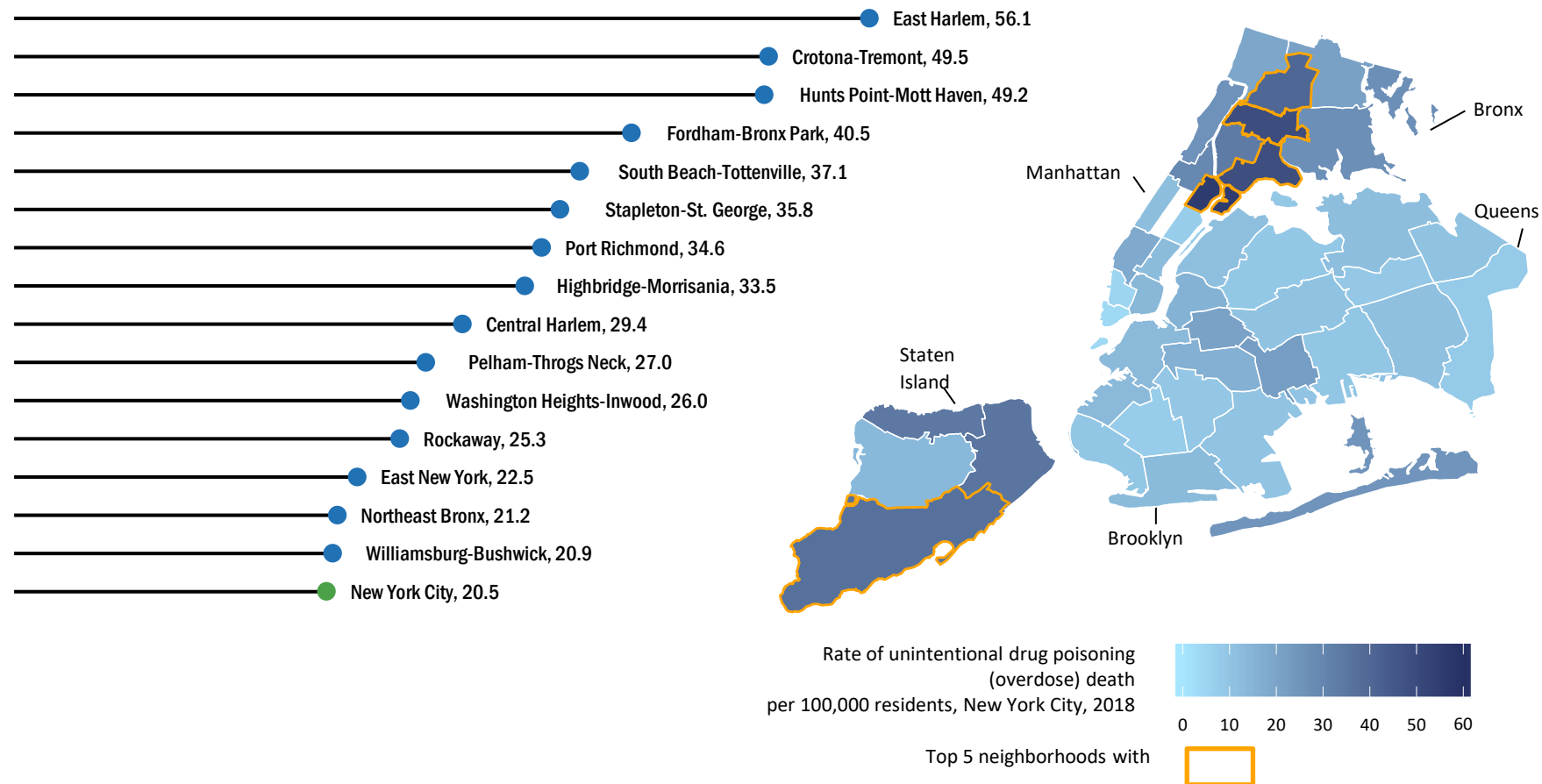
^^Top five of 42 NYC Neighborhoods. Neighborhood refers to residence of decedent.

Map 1. Highest rates of unintentional drug poisoning (overdose) deaths by neighborhood of residence, New York City, 2018*

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 2000-2016 updated September 2017. Analysis by Health Department's Bureau of Alcohol and Drug Use Prevention, Care and Treatment.

Neighborhoods with rates of overdose death among residents exceeding the New York City average, 2018

Rate per 100,000 residents



*Data for 2018 are provisional and are subject to change.

^The United Hospital Fund (UHF) classifies New York City into 42 neighborhoods, comprised of contiguous ZIP codes. Neighborhood refers to residence of decedent.

Table 2. Number and rate of unintentional drug poisoning (overdose) deaths involving opioids, New York City, 2015-2018*

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 2000-2017 updated September 2018. 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.

	2015			2016			2017			2018*		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Total Unintentional Drug Poisoning Deaths	942	100%	13.6	1413	100%	20.4	1482	100%	21.1	1444	100%	20.5
Total Unintentional Drug Poisoning Deaths Involving Opioids	766	81%	11.1	1159	82%	16.7	1209	82%	17.2	1151	80%	16.4
Gender												
Male	579	76%	17.5	898	77%	27.1	968	80%	29.0	891	77%	26.7
Female	187	24%	5.2	261	23%	7.3	241	20%	6.5	260	23%	7.0
Race/ethnicity[†]												
Black	121	16%	7.4	236	21%	14.1	299	26%	18.2	241	22%	14.1
Latino/a	255	34%	13.3	369	33%	19.2	383	33%	19.9	414	37%	21.4
White	364	49%	16.8	517	46%	23.8	487	42%	21.9	450	41%	20.6
Age group (years)												
15-24	65	8%	6.1	89	8%	8.5	64	5%	6.2	49	4%	4.7
25-34	176	23%	11.5	237	20%	15.3	274	23%	17.6	233	20%	15.0
35-44	153	20%	13.0	238	21%	20.2	241	20%	20.4	211	18%	17.9
45-54	211	28%	18.9	314	27%	28.3	315	26%	28.6	328	28%	29.8
55-64	133	17%	13.4	235	20%	23.5	257	21%	25.5	249	22%	24.7
65-84	28	4%	2.8	46	4%	4.5	58	5%	5.5	81	7%	7.7
Age group (years)												
15-34	241	31%	9.2	326	28%	12.5	338	28%	13.1	282	25%	10.9
35-54	364	48%	15.9	552	48%	24.1	556	46%	24.4	539	47%	23.7
55-84	161	21%	8.1	281	24%	13.8	315	26%	15.2	330	29%	16.0
Borough of residence[†]												
Bronx	203	30%	17.9	271	27%	24.4	291	27%	25.4	312	31%	27.6
Brooklyn	189	28%	9.1	264	26%	12.4	285	27%	13.5	206	21%	10.0
Manhattan	116	17%	8.6	184	18%	13.4	183	17%	13.6	207	21%	14.5
Queens	115	17%	6.0	183	18%	9.4	217	20%	11.1	169	17%	8.7
Staten Island	56	8%	15.5	103	10%	28.2	90	8%	24.4	103	10%	28.7
Borough of death												
Bronx	221	29%	19.5	297	26%	26.7	326	27%	28.6	354	31%	31.4
Brooklyn	225	29%	10.8	315	27%	14.8	314	26%	14.9	247	21%	11.9
Manhattan	143	19%	10.6	258	22%	19.1	257	21%	18.9	282	25%	19.5
Queens	121	16%	6.4	192	17%	10.0	222	18%	11.3	166	14%	8.6
Staten Island	56	7%	15.4	97	8%	26.7	90	7%	24.3	102	9%	28.3
Neighborhood poverty^{†0}												
Low (wealthiest)	113	17%	8.3	180	18%	12.9	174	16%	12.5	155	16%	10.9
Medium	200	30%	7.7	294	29%	11.1	338	32%	12.5	285	29%	10.7
High	164	24%	10.2	265	27%	16.3	244	23%	15.1	258	26%	15.6
Very High	195	29%	16.1	260	26%	22.0	310	29%	25.8	294	30%	25.0
Top 5 NYC neighborhoods^{^^}	2017 rate						2018* rate					
	Stapleton-St. George						East Harlem					
	34.1						50.4					
	Hunts Point-Mott Haven						Hunts Point-Mott Haven					
	33.9						41.6					
	East Harlem						Crotona-Tremont					
	32.1						37.0					
	Highbridge-Morrisania						Fordham-Bronx Park					
	31.5						35.6					
	Fordham-Bronx Park						South Beach-Tottenville					
	30.6						35.1					

*Data for 2018 are provisional and are subject to change.

†Percentage of deaths within subgroup are calculated among categories presented.

^For the purpose of this publication, Latino/a includes persons of Hispanic origin based on ancestry reported on the death certificate, regardless of reported race; Latino/a excludes reported ancestry from non-Spanish speaking Central/South American countries, and non-Spanish speaking Caribbean islands. Black and White race categories do not include persons of Latino/a origin.

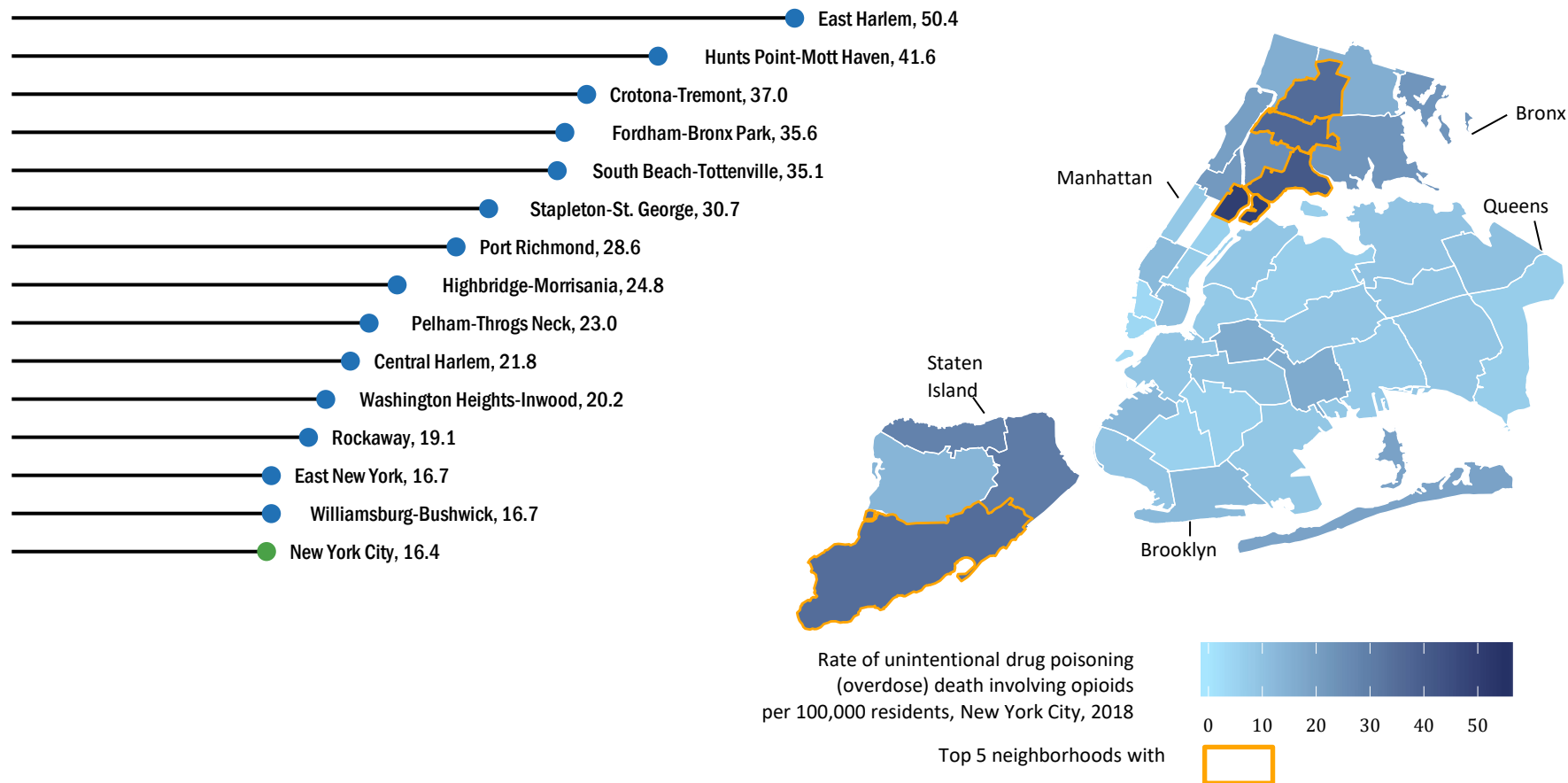
0Neighborhood poverty (based on ZIP code) was defined as percent of residents with incomes below 100% of the federal poverty level (FPL) per American Community Survey 2007-2011, in four groups: low (<10%), medium (10 %-< 20%), high (20 %-< 30%), and very high poverty (>=30%).

Map 2. Highest rates of unintentional drug poisoning (overdose) deaths involving opioids by neighborhood of residence, New York City, 2018*

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 2000-2016 updated September 2017. Analysis by Health Department's Bureau of Alcohol and Drug Use Prevention, Care and Treatment.

Neighborhoods with rates of opioid-involved overdose death among residents exceeding the New York City average, 2018

Rate per 100,000 residents



*Data for 2018 are provisional and are subject to change.

^The United Hospital Fund (UHF) classifies New York City into 42 neighborhoods, comprised of contiguous ZIP codes. Neighborhood refers to residence of decedent.

Table 3. Number and rate of unintentional drug poisoning (overdose) deaths involving heroin, New York City, 2015-2018*

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 2000-2017 updated September 2018. 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.

	2015			2016			2017			2018*		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Total Unintentional Drug Poisoning Deaths	942	100%	13.6	1413	100%	20.4	1482	100%	21.1	1444	100%	20.5
Total Unintentional Drug Poisoning Deaths Involving Heroin	561	60%	8.1	768	54%	11.0	767	52%	10.9	733	51%	10.4
Gender												
Male	438	78%	13.2	616	80%	18.5	628	82%	18.8	579	79%	17.3
Female	123	22%	3.4	152	20%	4.2	139	18%	3.7	154	21%	4.2
Race/ethnicity[†]												
Black	89	16%	5.4	148	20%	8.6	174	23%	10.4	150	21%	8.7
Latino/a	198	37%	10.2	265	36%	13.8	249	33%	12.9	259	37%	13.5
White	255	47%	11.8	330	44%	15.1	321	43%	14.3	291	42%	13.1
Age group (years)												
15-24	44	8%	4.1	52	7%	4.9	34	4%	3.3	33	5%	3.2
25-34	148	26%	9.7	163	21%	10.5	179	23%	11.5	146	20%	9.4
35-44	111	20%	9.4	151	20%	12.8	158	21%	13.4	125	17%	10.6
45-54	156	28%	14.0	217	28%	19.5	186	24%	16.9	213	29%	19.4
55-64	90	16%	9.1	159	21%	15.9	173	23%	17.1	164	22%	16.2
65-84	12	2%	1.2	26	3%	2.5	37	5%	3.5	52	7%	4.9
Age group (years)												
15-34	192	34%	7.4	215	28%	8.3	213	28%	8.2	179	24%	6.9
35-54	267	48%	11.6	368	48%	16.1	344	45%	15.1	338	46%	14.8
55-84	102	18%	5.1	185	24%	9.1	210	27%	10.2	216	29%	10.4
Borough of residence[†]												
Bronx	146	30%	12.8	179	27%	16.1	199	29%	17.4	197	31%	17.4
Brooklyn	137	28%	6.6	173	26%	8.1	180	27%	8.5	137	21%	6.7
Manhattan	80	16%	6.0	117	18%	8.5	113	17%	8.1	127	20%	8.9
Queens	84	17%	4.5	121	18%	6.2	128	19%	6.5	113	18%	5.8
Staten Island	39	8%	11.0	68	10%	19.1	57	8%	15.6	66	10%	18.9
Borough of death												
Bronx	165	29%	14.5	201	26%	18.1	220	29%	19.2	226	31%	19.9
Brooklyn	166	30%	8.0	204	27%	9.6	201	26%	9.5	165	23%	8.0
Manhattan	104	19%	7.7	171	22%	12.5	159	21%	11.4	172	23%	12.0
Queens	87	16%	4.6	127	17%	6.5	132	17%	6.8	106	14%	5.5
Staten Island	39	7%	10.9	65	8%	18.3	55	7%	15.2	64	9%	18.1
Neighborhood poverty^{†0}												
Low (wealthiest)	75	16%	5.5	112	17%	7.9	106	16%	7.5	96	15%	6.9
Medium	141	29%	5.4	186	29%	7.2	215	32%	7.9	179	28%	6.8
High	114	24%	7.1	179	27%	10.9	146	22%	9.0	173	27%	10.5
Very High	150	31%	12.2	175	27%	14.8	210	31%	17.5	188	30%	15.9
Top 5 NYC neighborhoods^{^^}	2017 rate						2018* rate					
	Hunts Point-Mott Haven						East Harlem					
	26.2						29.4					
	Crotona-Tremont						Hunts Point-Mott Haven					
	20.7						27.3					
	Stapleton-St. George						South Beach-Tottenville					
	20.0						24.8					
	East Harlem						Crotona-Tremont					
	19.8						23.2					
	Fordham-Bronx Park						Fordham-Bronx Park					
	19.4						21.9					

*Data for 2018 are provisional and are subject to change.

†Percentage of deaths within subgroup are calculated among categories presented.

^For the purpose of this publication, Latino/a includes persons of Hispanic origin based on ancestry reported on the death certificate, regardless of reported race; Latino/a excludes reported ancestry from non-Spanish speaking Central/South American countries, and non-Spanish speaking Caribbean islands. Black and White race categories do not include persons of Latino/a origin.

0Neighborhood poverty (based on ZIP code) was defined as percent of residents with incomes below 100% of the federal poverty level (FPL) per American Community Survey 2007-2011, in four groups: low (<10%), medium (10 %-< 20%), high (20 %-< 30%), and very high poverty (>=30%).

Table 4. Number and rate of unintentional drug poisoning (overdose) deaths involving cocaine, New York City, 2015-2018*

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 2000-2017 updated September 2018. 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.

	2015			2016			2017			2018*		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Total Unintentional Drug Poisoning Deaths	942	100%	13.6	1413	100%	20.4	1482	100%	21.1	1444	100%	20.5
Total Unintentional Drug Poisoning Deaths Involving Cocaine	403	43%	5.8	650	46%	9.4	728	49%	10.4	756	52%	10.7
Gender												
Male	306	76%	9.2	493	76%	15.0	570	78%	17.2	576	76%	17.2
Female	97	24%	2.7	157	24%	4.3	158	22%	4.3	180	24%	4.9
Race/ethnicity^{†^}												
Black	105	27%	6.4	201	32%	12.1	255	36%	15.4	246	34%	14.3
Latino/a	133	34%	6.8	193	31%	10.1	230	33%	11.9	244	34%	12.6
White	150	39%	7.0	230	37%	10.6	221	31%	10.1	232	32%	10.9
Age group (years)												
15-24	26	6%	2.4	41	6%	3.9	30	4%	2.9	32	4%	3.1
25-34	93	23%	6.1	112	17%	7.2	132	18%	8.5	130	17%	8.4
35-44	74	18%	6.3	135	21%	11.5	141	19%	12.0	129	17%	10.9
45-54	120	30%	10.8	189	29%	17.0	213	29%	19.4	221	29%	20.1
55-64	77	19%	7.8	147	23%	14.7	168	23%	16.6	187	25%	18.5
65-84	13	3%	1.3	26	4%	2.5	44	6%	4.2	57	8%	5.4
Age group (years)												
15-34	119	30%	4.6	153	24%	5.9	162	22%	6.3	162	21%	6.3
35-54	194	48%	8.5	324	50%	14.2	354	49%	15.5	350	46%	15.4
55-84	90	22%	4.5	173	27%	8.5	212	29%	10.3	244	32%	11.8
Borough of residence[†]												
Bronx	122	34%	10.6	169	29%	15.2	182	28%	15.7	221	33%	19.2
Brooklyn	95	27%	4.6	133	23%	6.2	171	26%	8.2	145	22%	7.0
Manhattan	67	19%	4.9	132	23%	9.7	121	19%	9.1	152	23%	10.7
Queens	59	16%	3.0	101	18%	5.2	140	21%	7.2	111	16%	5.7
Staten Island	15	4%	4.3	41	7%	11.1	39	6%	10.3	44	7%	12.3
Borough of death												
Bronx	140	35%	12.2	181	28%	16.3	202	28%	17.7	246	33%	21.5
Brooklyn	106	26%	5.1	154	24%	7.3	188	26%	9.0	162	21%	7.8
Manhattan	82	20%	6.0	173	27%	12.8	159	22%	11.7	202	27%	14.1
Queens	55	14%	2.8	104	16%	5.3	139	19%	7.2	105	14%	5.4
Staten Island	20	5%	5.7	38	6%	10.3	40	5%	10.6	41	5%	11.5
Neighborhood poverty^{†^}												
Low (wealthiest)	45	13%	3.2	75	13%	5.5	103	16%	7.5	77	12%	5.5
Medium	99	28%	3.7	178	31%	6.7	181	28%	6.7	190	28%	7.0
High	102	29%	6.4	166	29%	10.2	173	26%	10.9	184	28%	11.3
Very High	107	30%	8.7	153	27%	12.8	196	30%	16.3	218	33%	18.2
Top 5 NYC neighborhoods^{^^}	2017 rate						2018* rate					
	Fordham-Bronx Park						East Harlem					
	21.1						36.5					
	Highbridge-Morrisania						Crotona-Tremont					
	20.9						30.3					
	East New York						Hunts Point-Mott Haven					
	19.8						25.0					
	Central Harlem						Fordham-Bronx Park					
	19.6						20.4					
	Crotona-Tremont						Highbridge-Morrisania					
	19.4						20.4					

*Data for 2018 are provisional and are subject to change.

†Percentage of deaths within subgroup are calculated among categories presented.

^For the purpose of this publication, Latino/a includes persons of Hispanic origin based on ancestry reported on the death certificate, regardless of reported race; Latino/a excludes reported ancestry from non-Spanish speaking Central/South American countries, and non-Spanish speaking Caribbean islands. Black and White race categories do not include persons of Latino/a origin.

††For this analysis, opioid analgesics exclude fentanyl.

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

Table 5. Number and rate of unintentional drug poisoning (overdose) deaths involving opioid analgesics††, New York City, 2015-2018*

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 2000-2017 updated September 2018. 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.

	2015			2016			2017			2018*		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Total Unintentional Drug Poisoning Deaths	942	100%	13.6	1413	100%	20.4	1482	100%	21.1	1444	100%	20.5
Total Unintentional Drug Poisoning Deaths Involving Opioid Analgesics	232	25%	3.4	278	20%	4.0	214	14%	3.1	156	11%	2.2
Gender												
Male	166	72%	5.0	212	76%	6.4	155	72%	4.7	115	74%	3.4
Female	66	28%	1.9	66	24%	1.8	59	28%	1.7	41	26%	1.1
Race/ethnicity^{†^}												
Black	32	15%	2.0	34	12%	2.1	42	20%	2.7	24	16%	1.3
Latino/a	62	28%	3.2	80	29%	4.1	52	25%	2.7	46	30%	2.3
White	126	57%	5.7	161	59%	7.3	114	55%	5.3	82	54%	3.7
Age group (years)												
15-24	24	10%	2.2	20	7%	1.9	15	7%	1.4	5	3%	0.5
25-34	42	18%	2.7	54	19%	3.5	45	21%	2.9	34	22%	2.2
35-44	42	18%	3.6	60	22%	5.1	45	21%	3.8	32	21%	2.7
45-54	63	27%	5.7	65	23%	5.9	55	26%	5.0	36	23%	3.3
55-64	48	21%	4.8	64	23%	6.4	42	20%	4.2	34	22%	3.4
65-84	13	6%	1.3	15	5%	1.5	12	6%	1.1	15	10%	1.4
Age group (years)												
15-34	66	28%	2.5	74	27%	2.8	60	28%	2.3	39	25%	1.5
35-54	105	45%	4.6	125	45%	5.5	100	47%	4.4	68	44%	3.0
55-84	61	26%	3.1	79	28%	3.9	54	25%	2.6	49	31%	2.4
Borough of residence[†]												
Bronx	55	25%	5.0	62	25%	5.4	43	22%	3.8	27	19%	2.3
Brooklyn	54	25%	2.5	54	22%	2.5	52	27%	2.6	36	25%	1.9
Manhattan	38	18%	2.8	42	17%	3.0	32	16%	2.4	32	22%	2.2
Queens	45	21%	2.3	55	22%	2.9	39	20%	2.0	27	19%	1.4
Staten Island	24	11%	6.7	32	13%	8.6	30	15%	8.0	21	15%	5.7
Borough of death												
Bronx	56	24%	5.1	67	24%	5.9	53	25%	4.6	29	0%	0.0
Brooklyn	65	28%	3.1	65	23%	3.0	52	24%	2.5	41	0%	0.0
Manhattan	43	19%	3.2	54	19%	3.9	37	17%	2.8	37	0%	0.0
Queens	43	19%	2.2	60	22%	3.1	42	20%	2.2	29	0%	0.0
Staten Island	25	11%	7.0	32	12%	8.7	30	14%	8.1	20	0%	0.0
Neighborhood poverty^{†^}												
Low (wealthiest)	49	23%	3.5	60	24%	4.2	42	21%	3.1	30	21%	1.9
Medium	73	34%	2.7	77	31%	2.9	71	36%	2.7	53	37%	2.0
High	51	24%	3.2	56	23%	3.6	41	21%	2.6	36	25%	2.3
Very High	41	19%	3.4	52	21%	4.3	42	21%	3.6	24	17%	1.9
Top 5 NYC neighborhoods^{^^}	2017 rate						2018* rate					
	Stapleton-St. George						Stapleton-St. George					
	12.6						9.0					
	Port Richmond						South Beach-Tottenville					
	9.6						6.8					
	East Harlem						East Harlem					
	8.4						5.6					
	Highbridge-Morrisania						Central Harlem					
	6.6						4.6					
	South Beach-Tottenville						Sunset Park					
	6.0						4.2					

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†Percentage of deaths within subgroup are calculated among categories presented.

^For the purpose of this publication, Latino/a includes persons of Hispanic origin based on ancestry reported on the death certificate, regardless of reported race; Latino/a excludes reported ancestry from non-Spanish speaking Central/South American countries, and non-Spanish speaking Caribbean islands. Black and White race categories do not include persons of Latino/a origin.

††For this analysis, opioid analgesics exclude fentanyl.

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

Table 6. Number and rate of unintentional drug poisoning (overdose) deaths involving fentanyl, New York City, 2018*

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 2000-2017 updated September 2018. 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.

	Unintentional drug poisoning (overdose) deaths involving fentanyl			Unintentional drug poisoning (overdose) deaths involving fentanyl, no heroin			Unintentional drug poisoning (overdose) deaths involving fentanyl and/or heroin			Unintentional drug poisoning (overdose) deaths involving fentanyl, cocaine, no heroin		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Total Unintentional Drug Poisoning Deaths	1444	100%	20.5	1444	100%	20.5	1444	100%	20.5	1444	100%	20.5
Total Unintentional Drug Poisoning Deaths by Drug Type	868	60%	12.4	293	20%	4.2	1026	71%	14.6	157	11%	2.3
Gender												
Male	692	80%	20.7	233	80%	7.0	812	79%	24.3	126	80%	3.8
Female	176	20%	4.8	60	20%	1.6	214	21%	5.8	31	20%	0.9
Race/ethnicity^{†^}												
Black	190	23%	11.0	73	26%	4.3	223	23%	13.0	49	32%	2.8
Latino/a	318	38%	16.6	116	41%	6.0	375	38%	19.5	63	41%	3.3
White	324	39%	14.9	95	33%	4.5	386	39%	17.7	43	28%	2.1
Age group (years)												
15-34	223	26%	8.6	79	27%	3.1	258	25%	10.0	40	25%	1.5
35-54	417	48%	18.3	144	49%	6.3	482	47%	21.1	79	50%	3.5
55-84	228	26%	11.0	70	24%	3.4	286	28%	13.8	38	24%	1.8
Borough of residence[†]												
Bronx	255	34%	22.7	94	38%	8.5	291	33%	25.8	54	39%	4.9
Brooklyn	145	19%	7.0	45	18%	2.1	182	20%	8.8	30	22%	1.4
Manhattan	150	20%	10.6	51	21%	3.6	178	20%	12.6	26	19%	1.8
Queens	119	16%	6.1	36	15%	1.8	149	17%	7.7	18	13%	0.9
Staten Island	79	11%	22.5	22	9%	6.0	88	10%	24.9	11	8%	3.0
Borough of death												
Bronx	290	33%	25.7	104	35%	9.4	330	32%	29.2	59	38%	5.3
Brooklyn	178	21%	8.6	56	19%	2.7	221	22%	10.6	33	21%	1.5
Manhattan	207	24%	14.5	73	25%	5.0	245	24%	17.1	38	24%	2.6
Queens	115	13%	5.9	37	13%	1.9	143	14%	7.4	17	11%	0.9
Staten Island	78	9%	22.0	23	8%	6.3	87	8%	24.4	10	6%	2.7
Neighborhood poverty^{*0}												
Low (wealthiest)	117	16%	8.2	39	16%	2.7	135	15%	9.6	17	12%	1.2
Medium	200	27%	7.5	65	26%	2.4	244	28%	9.2	42	30%	1.5
High	198	27%	12.1	60	24%	3.6	233	26%	14.1	34	25%	2.1
Very High	230	31%	19.6	83	34%	7.2	271	31%	23.1	45	33%	3.9

*Data for 2018 are provisional and are subject to change.

[^]For the purpose of this publication, Latino/a includes persons of Hispanic origin based on ancestry reported on the death certificate, regardless of reported race; Latino/a excludes reported ancestry from non-Spanish speaking Central/South American countries, and non-Spanish speaking Caribbean islands. Black and White race categories do not include persons of Latino/a origin.

[†]Percentage of deaths within subgroup are calculated among categories presented.

⁰Neighborhood poverty (based on ZIP code) was defined as percent of residents with incomes below 100% of the federal poverty level (FPL) per American Community Survey 2007-2011, in four groups: low (<10%), medium (10 %-< 20%), high (20 %-< 30%), and very high poverty (>=30%).