

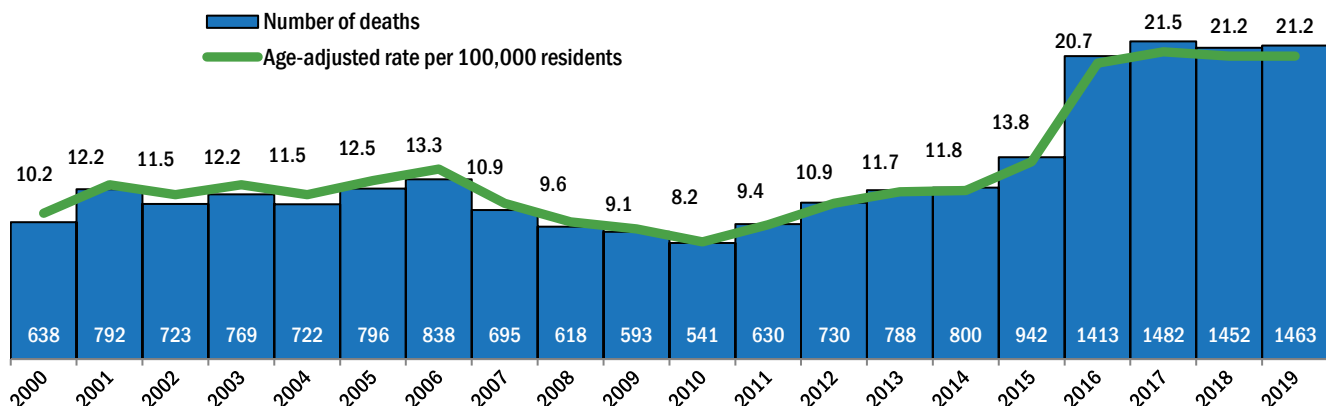
Unintentional Drug Poisoning (Overdose) Deaths in New York City in 2019

To support efforts to prevent overdose deaths and target resources, the New York City (NYC) Department of Health and Mental Hygiene annually reports overdose deaths that occurred in the prior year. This brief presents provisional 2019 mortality data and describes trends and the demographic and geographic characteristics of drug overdose deaths.

- In 2019 there were 1,463 unintentional drug overdose deaths in NYC, compared with 1,452 in 2018, an increase of 11 deaths.
- The rate of overdose death remained the same in 2019 as 2018 (21.2 per 100,000 NYC residents).
- In 2019, opioids were involved in 83% of overdose deaths.
- For the third year in a row, fentanyl was the most common substance involved in drug overdose deaths, present in 68% of overdose deaths in 2019.
- Half (51%) of all overdose deaths in 2019 involved multiple central nervous system depressants, such as alcohol, benzodiazepines, and opioids.

In New York City, rates of drug overdose death remain high

Number and age-adjusted rate per 100,000 residents of unintentional overdose deaths, New York City, 2000 to 2019



Sources: NYC Office of the Chief Medical Examiner and NYC DOHMH Bureau of Vital Statistics, 2000–2019; 2019 data are provisional and subject to change.

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 2000–2019 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 2019 are provisional and subject to change.

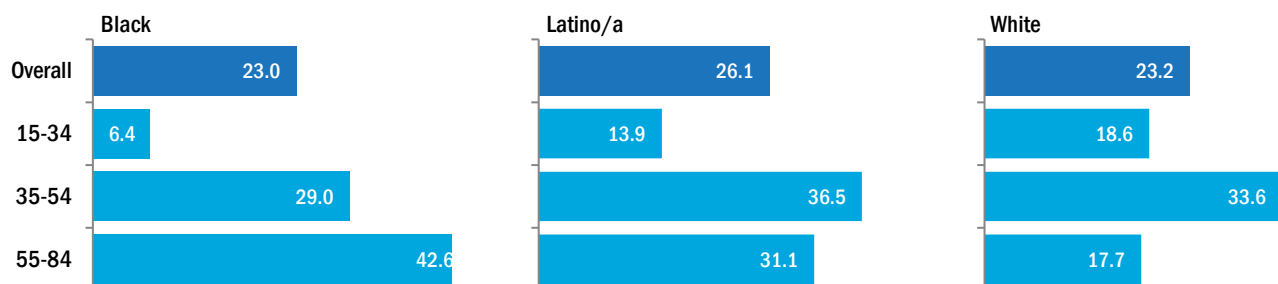
Rate calculation: DOHMH population estimates, modified from US Census Bureau intercensal population estimates 2000–2018, updated September 2019. These rates will differ from previously reported rates based on Census counts or previous versions of population estimates. Rates are age-adjusted to Census 2000 US standard population, except those for specific age groups.

Characteristics of overdose deaths

- In 2019, the rate of overdose death was nearly four times as high among male New Yorkers (34.5 per 100,000 males) compared with female New Yorkers (9.2 per 100,000 females).
- For the second consecutive year, Latino/a New Yorkers had the highest rate of drug overdose death.
- From 2018 to 2019, rates of overdose death increased among Latino/a New Yorkers (25.5 to 26.1 per 100,000 residents) and Black New Yorkers (22.5 to 23.0 per 100,000 residents).
- During the same period, rates of overdose decreased among White New Yorkers (24.5 to 23.2 per 100,000 residents), and Asian/Pacific Islander New Yorkers (3.2 to 3.0 per 100,000 residents).
- During 2019, New Yorkers ages 55 to 64 had the highest rate of overdose death (38.9 per 100,000 residents, up from 35.3 per 100,000 in 2018). While from 2018 to 2019 rates of overdose death also increased among New Yorkers ages 35 to 44 and 65 to 84, rates decreased among New Yorkers ages 15 to 24 (from 6.6 to 5.3 per 100,000 residents) and New Yorkers ages 45 to 54 (from 38.5 to 32.0 per 100,000 residents).
- Among Black New Yorkers, the rate of overdose death was the highest among those ages 55 to 84. Among Latino/a and White New Yorkers, the rate of overdose death was highest among those ages 35 to 54.

Age-specific rates of drug overdose death vary by race/ethnicity

Rate of unintentional overdose deaths, by race/ethnicity and age group, New York City, 2019



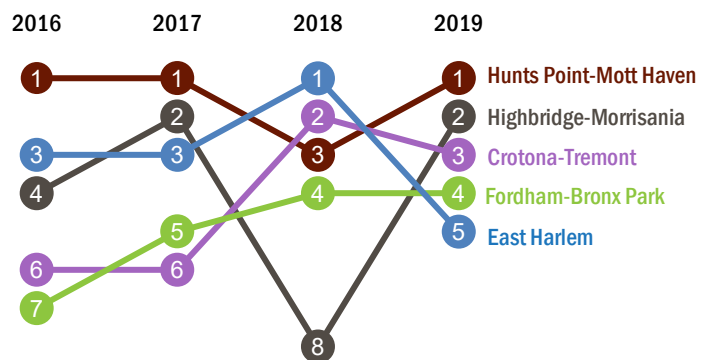
Race/ethnicity: White and Black race categories exclude Latino/a ethnicity. Latino/a includes Hispanic or Latino/a of any race.

Sources: NYC Office of the Chief Medical Examiner and NYC DOHMH Bureau of Vital Statistics, 2019; 2019 data are provisional and subject to change.

- Residents of the Bronx had the highest rate of overdose death in 2019 (35.2 per 100,000 residents) followed by residents of Staten Island (28.1 per 100,000 residents), Manhattan (19.9 per 100,000 residents), Brooklyn (13.9 per 100,000 residents), and Queens (12.2 per 100,000 residents).
- The top five NYC neighborhoods with the highest overdose rates in 2019 have consistently ranked among the highest neighborhoods in prior years.
- Rates of overdose death among South Bronx[^] residents increased from 2018 to 2019 (from 44.2 to 47.8 per 100,000 residents).
- Residents of very high poverty neighborhoods had a higher rate of overdose death in 2019 (34.2 per 100,000 residents) than residents of high, medium, and low poverty neighborhoods (20.5, 13.9, and 13.8 per 100,000 respectively).

New York City neighborhoods with the highest rates of overdose deaths in 2019 consistently ranked among the highest in prior years

Five highest neighborhoods ranked by overdose rates in 2019 and rank in prior years, 2016-2019



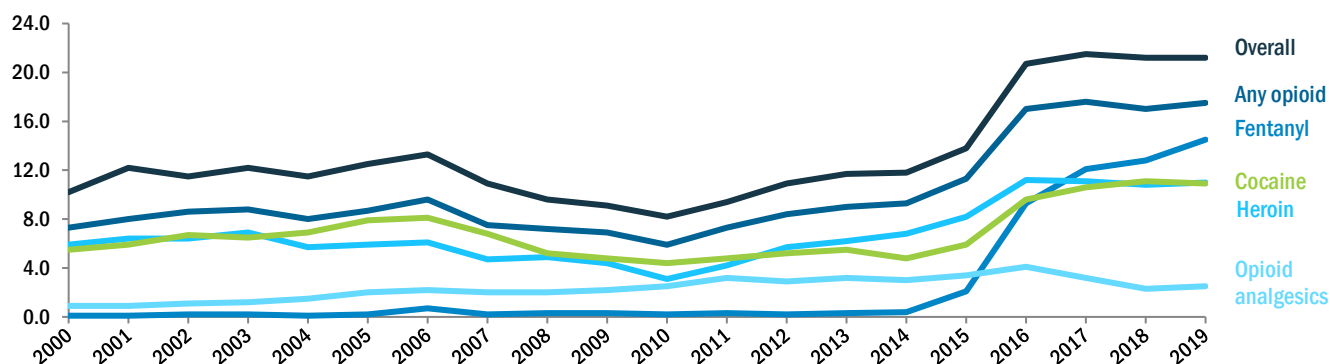
Neighborhood: The United Hospital Fund classifies New York City into 42 neighborhoods, comprised of contiguous ZIP codes.

Sources: NYC Office of the Chief Medical Examiner and NYC DOHMH Bureau of Vital Statistics, 2016-2019; 2019 data are provisional and subject to change.

[^]The South Bronx includes the UHF-42 neighborhoods of Crotona-Tremont, Highbridge-Morrisania, and Hunts Point-Mott Haven.

Rates of overdose deaths involving opioids, fentanyl, heroin, and opioid analgesics increased from 2018 to 2019

Age-adjusted unintentional overdose deaths per 100,000 residents by select substances involved, New York City, 2000–2019



Sources: NYC Office of the Chief Medical Examiner and NYC DOHMH Bureau of Vital Statistics, 2000–2019; 2019 data are provisional and subject to change.

Unintentional overdose deaths involving opioids, 2019

- In 2019, fentanyl was the most common opioid involved in overdose deaths (68%), followed by heroin (52%), methadone (13%), and opioid analgesics (12%).
- The rate of opioid-involved overdose deaths was highest among Latino/a New Yorkers (22.9 per 100,000), followed by White New Yorkers (19.9 per 100,000), Black New Yorkers (17.2 per 100,000), and Asian/Pacific Islander New Yorkers (1.9 per 100,000).
- Cocaine was involved in approximately half (49%) of all opioid-involved deaths; benzodiazepines were involved in approximately one third (30%) of opioid-involved deaths.

Unintentional overdose deaths involving fentanyl, 2019

- Fentanyl was involved in 68% of overdose deaths in 2019, compared with 60% of overdose deaths in 2018.
 - 183 overdose deaths involved cocaine and fentanyl without heroin, an increase from 157 deaths in 2018.

Unintentional overdose deaths involving cocaine, 2019

- Cocaine was involved in 51% of overdose deaths in 2019.
- From 2018 to 2019, the rate of cocaine-involved overdose decreased from 11.1 per 100,000 to 10.9 per 100,000.
- In 2019, Black New Yorkers had the highest rate of cocaine-involved overdose death (15.1 per 100,000), followed by Latino/a (13.5 per 100,000), White (9.4 per 100,000), and Asian/Pacific Islander New Yorkers (1.5 per 100,000).
- In 2019, 78% 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 (67%) compared with Latino/a (86%) and White (85%) New Yorkers.

Definitions:

Neighborhood: The United Hospital Fund classifies New York City into 42 neighborhoods, comprised of contiguous ZIP codes. For more information visit: 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).

Race/ethnicity: For the purpose of this publication, Latino/a includes people 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, White, and Asian/Pacific Islander race categories do not include people of Latino/a origin.

Implications

These data highlight disparities in drug overdose deaths in NYC among residents of different neighborhoods and neighborhood poverty levels. Additionally, the data show diverging trends in overdose mortality by race/ethnicity. During the previous three years, overdose rates among White New Yorkers decreased; however, rates increased among Black New Yorkers during the past year and rates among Latino/a New Yorkers have increased for five consecutive years. Latino/a New Yorkers have the highest drug overdose death rate in New York City.

Neighborhoods with sustained high overdose death rates also have a disproportionate disease burden, including high rates of premature mortality (death before age 65), of which overdose is the third leading cause in NYC. These patterns reflect structural inequities in the social determinants of health, such as wealth, employment, education, housing, and criminal justice system involvement.

The Health Department pursues a focused and dynamic response to reduce inequities and prevent overdose deaths with interventions—such as increasing access to naloxone and medication for opioid use disorder—in neighborhoods with disproportionately high rates of drug overdose death. Recently, the Health Department launched a pilot program to distribute naloxone at no cost at 15 chain pharmacies throughout the five boroughs of NYC, with most located in neighborhoods with the highest overdose rates. The Health Department has also trained additional buprenorphine providers and launched a mailing campaign describing how to access buprenorphine and methadone during the COVID-19 pandemic, which was sent to providers to share with patients, including via NYC Health + Hospital's virtual buprenorphine clinic. Lastly, in partnership with the New York State Office of Addiction Services and Supports (OASAS), the Health Department implemented a methadone delivery system to ensure that opioid use disorder treatment is not interrupted during the pandemic. The Health Department is committed to addressing the overdose crisis and confronting associated racial/ethnic disparities by providing disproportionately impacted neighborhoods with harm reduction messages and public health services.

Health equity is attainment of the highest level of health and well-being for all people. Not all New Yorkers have the same opportunities to live a healthy life. Achieving health equity requires focused and ongoing efforts to address historical and contemporary injustices such as discrimination based on social position (e.g., class, immigration status) or social identities (e.g., race, gender, sexual orientation). For more information, visit the Centers for Disease Control and Prevention's [Health Equity](#) page.

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New York City Department of Health and Mental Hygiene





Epi Data Tables

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Unintentional Drug Poisoning (Overdose) Deaths in New York City in 2019

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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 2000-2019. Data for 2019 are provisional and subject to change.

Rate Calculation: NYC DOHMH population estimates, modified from US Census Bureau intercensal population estimates 2000-2018, updated September 2019. 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, 2016-2019*

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 2000-2018 updated September 2019. 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.

	2016			2017			2018			2019*		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Total Unintentional Drug Poisoning Deaths	1413	100%	20.7	1482	100%	21.5	1452	100%	21.2	1463	100%	21.2
Sex												
Male	1084	77%	33.3	1168	79%	35.7	1108	76%	34.0	1128	77%	34.5
Female	329	23%	9.3	314	21%	8.6	344	24%	9.5	335	23%	9.2
Race/ethnicity[^]												
Asian and Pacific Islander	28	2%	3.0	27	2%	2.7	32	2%	3.2	31	2%	3.0
Black	333	24%	20.2	417	28%	25.6	375	26%	22.5	381	26%	23.0
Latino/a	435	31%	23.0	456	31%	24.2	485	33%	25.5	495	34%	26.1
White	594	42%	27.4	555	37%	25.4	522	36%	24.5	508	35%	23.2
Other/Missing	23	2%	-	27	2%	-	38	3%	-	48	3%	-
Age group (years)												
15-24	100	7%	9.8	73	5%	7.3	65	4%	6.6	52	4%	5.3
25-34	278	20%	18.3	313	21%	20.8	267	18%	17.8	263	18%	17.5
35-44	281	20%	24.3	282	19%	24.5	250	17%	21.8	294	20%	25.6
45-54	394	28%	36.0	398	27%	36.9	407	28%	38.5	338	23%	32.0
55-64	297	21%	30.0	334	23%	33.6	353	24%	35.3	389	27%	38.9
65-84	63	4%	6.2	82	6%	7.8	110	8%	10.3	127	9%	11.9
Age group (years)												
15-34	378	27%	14.9	386	26%	15.4	332	23%	13.4	315	22%	12.7
35-54	675	48%	30.0	680	46%	30.5	657	45%	29.8	632	43%	28.7
55-84	360	25%	17.9	416	28%	20.4	463	32%	22.4	516	35%	24.9
Borough of residence[†]												
Bronx	322	23%	29.4	362	24%	32.1	396	27%	35.3	394	27%	35.2
Brooklyn	310	22%	14.9	355	24%	17.1	275	19%	13.6	292	20%	13.9
Manhattan	247	17%	18.2	225	15%	17.0	268	18%	19.4	280	19%	19.9
Queens	241	17%	12.8	270	18%	14.3	215	15%	11.3	224	15%	12.2
Staten Island	119	8%	32.7	100	7%	27.1	114	8%	31.9	105	7%	28.1
Non-New York City	151	11%	-	137	9%	-	153	11%	-	164	11%	-
Missing	23	2%	-	33	2%	-	31	2%	-	4	0%	-
Borough of death												
Bronx	355	25%	32.4	399	27%	35.6	447	31%	40.1	423	29%	37.6
Brooklyn	363	26%	17.4	395	27%	19.1	310	21%	15.3	331	23%	15.8
Manhattan	339	24%	25.2	316	21%	23.7	368	25%	26.5	383	26%	27.7
Queens	244	17%	12.9	271	18%	14.3	216	15%	11.5	234	16%	12.6
Staten Island	112	8%	31.0	101	7%	27.3	111	8%	31.0	92	6%	24.8
Neighborhood poverty^{†o}												
Low (wealthiest)	216	15%	15.6	207	14%	15.0	188	13%	13.3	195	13%	13.8
Medium	370	26%	14.3	401	27%	15.3	364	25%	14.2	362	25%	13.9
High	329	23%	20.5	301	20%	19.0	327	23%	20.2	333	23%	20.5
Very high	315	22%	26.9	401	27%	33.8	383	26%	32.7	403	28%	34.2
Non-New York City/Missir	183	13%	-	172	12%	-	190	13%	-	170	12%	-
Drug type^{**}												
Alcohol	548	39%	8.0	604	41%	8.8	577	40%	8.4	581	40%	8.4
Benzodiazepines	468	33%	6.9	433	29%	6.4	423	29%	6.2	404	28%	5.8
Cocaine	650	46%	9.6	728	49%	10.6	758	52%	11.1	751	51%	10.9
Fentanyl	624	44%	9.3	832	56%	12.1	873	60%	12.8	994	68%	14.5
Heroin	768	54%	11.2	767	52%	11.1	738	51%	10.8	765	52%	11.0
Methadone	204	14%	2.9	197	13%	2.9	200	14%	2.9	189	13%	2.6
Opioid Analgesics ^{††}	278	20%	4.1	214	14%	3.2	157	11%	2.3	179	12%	2.5
Top 5 NYC neighborhoods^{^^}	2018 rate			2019* rate								
	East Harlem			57.2			Hunts Point-Mott Haven			52.3		
	Crotona-Tremont			50.9			Highbridge-Morrisania			49.2		
	Hunts Point-Mott Haven			50.6			Crotona-Tremont			43.8		
	Fordham-Bronx Park			41.2			Fordham-Bronx Park			39.4		
	South Beach-Tottenville			37.8			East Harlem			35.5		

*Data for 2019 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 people 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, White and Asian/Pacific Islander race categories do not include people 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%).

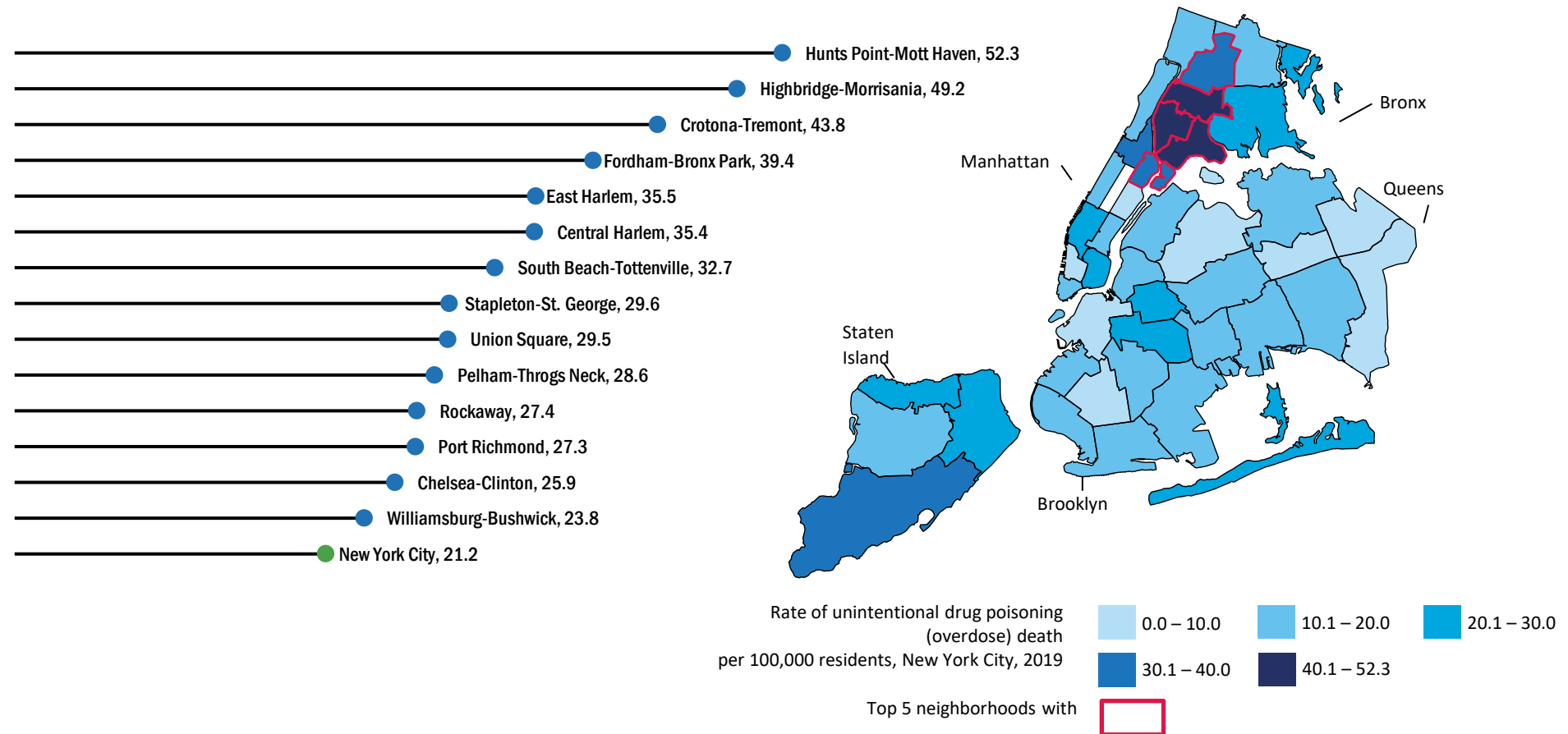
^{**}Drug Type, not mutually exclusive.; percent will not equal 100%. ^{††}For this analysis, opioid analgesics exclude fentanyl.

^{^^}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, 2019*

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 2000-2018 updated September 2019. 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, 2019 Rate per 100,000 residents



*Data for 2019 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, 2016-2019*

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 2000-2018 updated September 2019. 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.

	2016			2017			2018			2019*		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Total Unintentional Drug Poisoning Deaths	1413	100%	20.7	1482	100%	21.5	1452	100%	21.2	1463	100%	21.2
Total Unintentional Drug Poisoning Deaths Involving Opioids	1159	82%	17.0	1209	82%	17.6	1157	80%	17.0	1210	83%	17.5
Sex												
Male	898	77%	27.6	968	80%	29.6	894	77%	27.6	929	77%	28.3
Female	261	23%	7.4	241	20%	6.7	263	23%	7.3	281	23%	7.8
Race/ethnicity[^]												
Asian and Pacific Islander	16	1%	1.7	20	2%	2.0	18	2%	1.7	19	2%	1.9
Black	236	20%	14.3	299	25%	18.5	242	21%	14.5	285	24%	17.2
Latino/a	369	32%	19.5	383	32%	20.3	417	36%	22.1	434	36%	22.9
White	517	45%	24.1	487	40%	22.2	452	39%	21.3	436	36%	19.9
Other/Missing	21	2%	-	20	2%	-	28	2%	-	36	3%	-
Age group (years)												
15-24	89	8%	8.7	64	5%	6.4	50	4%	5.1	47	4%	4.8
25-34	237	20%	15.6	274	23%	18.2	235	20%	15.7	235	19%	15.7
35-44	238	21%	20.6	241	20%	20.9	211	18%	18.4	243	20%	21.2
45-54	314	27%	28.7	315	26%	29.2	330	29%	31.2	277	23%	26.2
55-64	235	20%	23.7	257	21%	25.8	250	22%	25.0	310	26%	31.0
65-84	46	4%	4.5	58	5%	5.5	81	7%	7.6	98	8%	9.2
Age group (years)												
15-34	326	28%	12.8	338	28%	13.5	285	25%	11.5	282	23%	11.4
35-54	552	48%	24.5	556	46%	24.9	541	47%	24.6	520	43%	23.6
55-84	281	24%	14.0	315	26%	15.4	331	29%	16.0	408	34%	19.7
Borough of residence[†]												
Bronx	271	23%	24.8	291	24%	25.9	317	27%	28.7	328	27%	29.4
Brooklyn	264	23%	12.6	285	24%	13.8	206	18%	10.3	250	21%	11.9
Manhattan	184	16%	13.6	183	15%	13.9	208	18%	15.0	229	19%	16.2
Queens	183	16%	9.7	217	18%	11.5	169	15%	9.1	171	14%	9.2
Staten Island	103	9%	28.4	90	7%	24.6	103	9%	29.1	92	8%	24.7
Non-New York City	132	11%	-	115	10%	-	132	11%	-	136	11%	-
Missing	22	2%	-	28	2%	-	22	2%	-	4	0%	-
Borough of death												
Bronx	297	26%	27.2	326	27%	29.2	359	31%	32.7	356	29%	31.8
Brooklyn	315	27%	15.0	314	26%	15.3	247	21%	12.3	281	23%	13.4
Manhattan	258	22%	19.3	257	21%	19.3	283	24%	20.1	312	26%	22.5
Queens	192	17%	10.2	222	18%	11.6	166	14%	8.9	179	15%	9.6
Staten Island	97	8%	26.9	90	7%	24.6	102	9%	28.7	82	7%	22.1
Neighborhood poverty^{†0}												
Low (wealthiest)	180	16%	13.1	174	14%	12.7	155	13%	11.2	165	14%	11.8
Medium	294	25%	11.4	338	28%	12.9	287	25%	11.2	287	24%	11.0
High	265	23%	16.5	244	20%	15.4	259	22%	16.1	275	23%	16.9
Very High	260	22%	22.3	310	26%	26.2	297	26%	25.8	341	28%	28.9
Non-New York City/Missing	160	14%	-	143	12%	-	159	14%	-	142	12%	-
Top 5 NYC neighborhoods^{^^}	2018 rate						2019* rate					
	East Harlem			51.5			Hunts Point-Mott Haven			45.4		
	Hunts Point-Mott Haven			42.6			Highbridge-Morrisania			40.3		
	Crotona-Tremont			38.4			Crotona-Tremont			36.2		
	Fordham-Bronx Park			36.3			Fordham-Bronx Park			33.0		
	South Beach-Tottenville			35.8			South Beach-Tottenville			31.4		

*Data for 2019 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 people 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, White and Asian/Pacific Islander race categories do not include people of Latino/a origin.

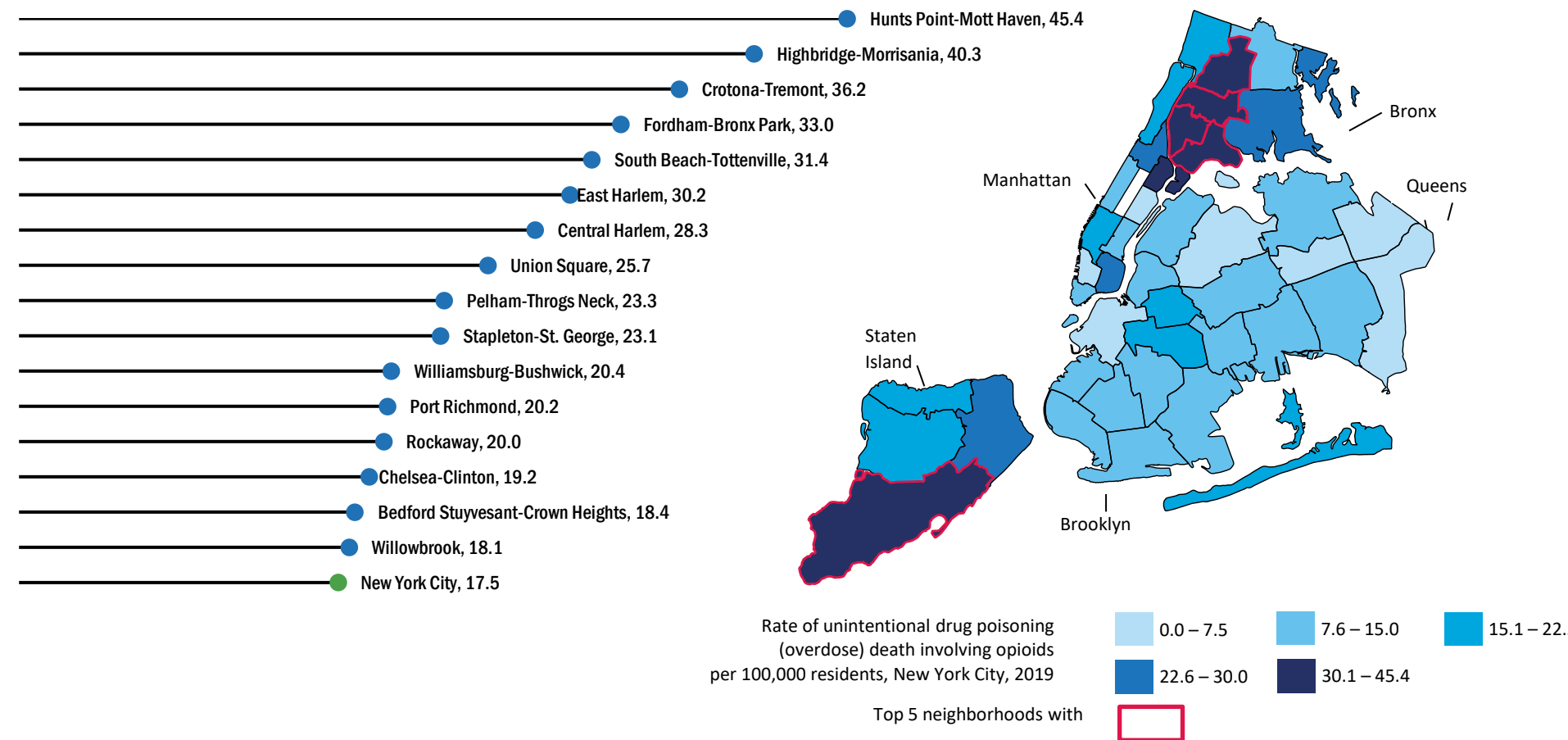
⁰Neighborhood poverty (based on ZIP code) was defined as percent of residents with incomes below 100% of the federal poverty level (FPL) per American Community Survey 2007-2011, in four groups: low (<10%), medium (10 %-< 20%), high (20 %-< 30%), and very high poverty (>=30%).

Map 2. Highest rates of unintentional drug poisoning (overdose) deaths involving opioids by neighborhood of residence, New York City, 2019*

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 2000-2018 updated September 2019. 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, 2019

Rate per 100,000 residents



*Data for 2019 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, 2016-2019*

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 2000-2018 updated September 2019. 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.

	2016			2017			2018			2019*		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Total Unintentional Drug Poisoning Deaths	1413	100%	20.7	1482	100%	21.5	1452	100%	21.2	1463	100%	21.2
Total Unintentional Drug Poisoning Deaths Involving Heroin	768	54%	11.2	767	52%	11.1	738	51%	10.8	765	52%	11.0
Sex												
Male	616	80%	18.8	628	82%	19.2	581	79%	17.9	591	77%	17.9
Female	152	20%	4.3	139	18%	3.8	157	21%	4.4	174	23%	4.7
Race/ethnicity[^]												
Asian and Pacific Islander	12	2%	1.3	12	2%	1.1	11	1%	1.1	10	1%	0.9
Black	148	19%	8.7	174	23%	10.6	151	20%	9.0	171	22%	10.0
Latino/a	265	35%	14.1	249	32%	13.2	261	35%	13.9	278	36%	14.6
White	330	43%	15.3	321	42%	14.5	293	40%	13.6	286	37%	13.0
Other/Missing	13	2%	-	11	1%	-	22	3%	-	20	3%	-
Age group (years)												
15-24	52	7%	5.1	34	4%	3.4	34	5%	3.5	20	3%	2.0
25-34	163	21%	10.7	179	23%	11.9	147	20%	9.8	148	19%	9.9
35-44	151	20%	13.1	158	21%	13.7	125	17%	10.9	149	19%	13.0
45-54	217	28%	19.8	186	24%	17.2	215	29%	20.4	172	22%	16.3
55-64	159	21%	16.0	173	23%	17.4	165	22%	16.5	205	27%	20.5
65-84	26	3%	2.5	37	5%	3.5	52	7%	4.9	71	9%	6.6
Age group (years)												
15-34	215	28%	8.5	213	28%	8.5	181	25%	7.3	168	22%	6.8
35-54	368	48%	16.4	344	45%	15.4	340	46%	15.4	321	42%	14.6
55-84	185	24%	9.2	210	27%	10.3	217	29%	10.5	276	36%	13.3
Borough of residence[†]												
Bronx	179	23%	16.4	199	26%	17.7	201	27%	18.1	193	25%	16.9
Brooklyn	173	23%	8.3	180	23%	8.7	137	19%	6.9	187	24%	8.9
Manhattan	117	15%	8.6	113	15%	8.3	128	17%	9.2	135	18%	9.4
Queens	121	16%	6.4	128	17%	6.7	113	15%	6.1	97	13%	5.1
Staten Island	68	9%	19.2	57	7%	15.8	66	9%	19.2	61	8%	16.8
Non-New York City	96	13%	-	71	9%	-	78	11%	-	90	12%	-
Missing	14	2%	-	19	2%	-	15	2%	-	2	0%	-
Borough of death												
Bronx	201	26%	18.4	220	29%	19.6	230	31%	20.7	214	28%	18.9
Brooklyn	204	27%	9.7	201	26%	9.7	165	22%	8.2	209	27%	10.0
Manhattan	171	22%	12.7	159	21%	11.6	173	23%	12.4	189	25%	13.4
Queens	127	17%	6.7	132	17%	7.0	106	14%	5.7	102	13%	5.3
Staten Island	65	8%	18.4	55	7%	15.4	64	9%	18.3	51	7%	14.2
Neighborhood poverty^{†0}												
Low (wealthiest)	112	15%	8.0	106	14%	7.6	96	13%	7.1	102	13%	7.2
Medium	186	24%	7.3	215	28%	8.2	181	25%	7.1	177	23%	6.8
High	179	23%	11.1	146	19%	9.2	174	24%	10.9	181	24%	11.1
Very High	175	23%	15.1	210	27%	17.7	190	26%	16.4	212	28%	17.8
Non-New York City/Missing	116	15%	-	90	12%	-	97	13%	-	93	12%	-
Top 5 NYC neighborhoods^{^^}	2018 rate						2019* rate					
	East Harlem						Hunts Point-Mott Haven					
	30.1						27.2					
	Hunts Point-Mott Haven						Fordham-Bronx Park					
	27.9						20.8					
	South Beach-Tottenville						East Harlem					
	25.2						20.8					
	Crotona-Tremont						Highbridge-Morrisania					
	24.5						20.6					
	Fordham-Bronx Park						Crotona-Tremont					
	22.1						20.4					

*Data for 2019 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 people 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, White and Asian/Pacific Islander race categories do not include people 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, 2016-2019*

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 2000-2018 updated September 2019. 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.

	2016			2017			2018			2019*		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Total Unintentional Drug Poisoning Deaths	1413	100%	20.7	1482	100%	21.5	1452	100%	21.2	1463	100%	21.2
Total Unintentional Drug Poisoning Deaths Involving Cocaine	650	46%	9.6	728	49%	10.6	758	52%	11.1	751	51%	10.9
Sex												
Male	493	76%	15.2	570	78%	17.6	578	76%	17.8	561	75%	17.2
Female	157	24%	4.4	158	22%	4.4	180	24%	5.0	190	25%	5.2
Race/ethnicity[^]												
Asian and Pacific Islander	13	2%	1.3	10	1%	1.0	9	1%	0.9	15	2%	1.5
Black	201	31%	12.2	255	35%	15.7	247	33%	14.7	251	33%	15.1
Latino/a	193	30%	10.3	230	32%	12.2	245	32%	13.0	256	34%	13.5
White	230	35%	10.7	221	30%	10.3	232	31%	11.2	202	27%	9.4
Other/Missing	13	2%	-	12	2%	-	25	3%	-	27	4%	-
Age group (years)												
15-24	41	6%	4.0	30	4%	3.0	32	4%	3.3	20	3%	2.0
25-34	112	17%	7.4	132	18%	8.8	130	17%	8.7	122	16%	8.1
35-44	135	21%	11.7	141	19%	12.3	129	17%	11.2	141	19%	12.3
45-54	189	29%	17.3	213	29%	19.7	222	29%	21.0	206	27%	19.5
55-64	147	23%	14.8	168	23%	16.9	188	25%	18.8	206	27%	20.6
65-84	26	4%	2.5	44	6%	4.2	57	8%	5.3	56	7%	5.2
Age group (years)												
15-34	153	24%	6.0	162	22%	6.5	162	21%	6.5	142	19%	5.7
35-54	324	50%	14.4	354	49%	15.9	351	46%	15.9	347	46%	15.8
55-84	173	27%	8.6	212	29%	10.4	245	32%	11.8	262	35%	12.7
Borough of residence[†]												
Bronx	169	26%	15.4	182	25%	16.1	223	29%	19.8	228	30%	20.5
Brooklyn	133	20%	6.3	171	23%	8.4	145	19%	7.2	144	19%	6.9
Manhattan	132	20%	9.8	121	17%	9.2	152	20%	10.9	146	19%	10.3
Queens	101	16%	5.3	140	19%	7.4	111	15%	5.9	99	13%	5.2
Staten Island	41	6%	11.2	39	5%	10.5	44	6%	12.5	50	7%	13.8
Non-New York City	61	9%	-	61	8%	-	67	9%	-	81	11%	-
Missing	13	2%	-	14	2%	-	16	2%	-	3	0%	-
Borough of death												
Bronx	181	28%	16.6	202	28%	18.1	248	33%	22.2	246	33%	22.0
Brooklyn	154	24%	7.5	188	26%	9.2	162	21%	8.0	155	21%	7.4
Manhattan	173	27%	12.9	159	22%	11.9	202	27%	14.4	191	25%	13.8
Queens	104	16%	5.4	139	19%	7.4	105	14%	5.6	114	15%	6.0
Staten Island	38	6%	10.3	40	5%	10.7	41	5%	11.7	45	6%	12.5
Neighborhood poverty^{†0}												
Low (wealthiest)	75	12%	5.6	103	14%	7.6	77	10%	5.7	79	11%	5.8
Medium	178	27%	6.9	181	25%	6.9	190	25%	7.3	162	22%	6.1
High	166	26%	10.4	173	24%	11.1	184	24%	11.6	182	24%	11.3
Very High	153	24%	13.0	196	27%	16.6	220	29%	18.7	242	32%	20.8
Non-New York City/Missing	78	12%	-	75	10%	-	87	11%	-	86	11%	-
Top 5 NYC neighborhoods^{^^}	2018 rate						2019* rate					
	East Harlem					37.2	Highbridge-Morrisania					37.2
	Crotona-Tremont					31.6	Hunts Point-Mott Haven					30.7
	Hunts Point-Mott Haven					25.8	Crotona-Tremont					26.9
	Washington Heights-Inwood					20.8	Central Harlem					25.7
	Fordham-Bronx Park					20.6	Fordham-Bronx Park					21.8

*Data for 2019 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 people 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, White and Asian/Pacific Islander race categories do not include people 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 5. Number and rate of unintentional drug poisoning (overdose) deaths involving opioid analgesics††, New York City, 2016-2019*

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 2000-2018 updated September 2019. 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.

	2016			2017			2018			2019*		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Total Unintentional Drug Poisoning Deaths	1413	100%	20.7	1482	100%	21.5	1452	100%	21.2	1463	100%	21.2
Total Unintentional Drug Poisoning Deaths Involving Opioid Analgesics	278	20%	4.1	214	14%	3.2	157	11%	2.3	179	12%	2.5
Sex												
Male	212	76%	6.5	155	72%	4.8	115	73%	3.5	109	61%	3.3
Female	66	24%	1.8	59	28%	1.7	42	27%	1.2	70	39%	1.8
Race/ethnicity[^]												
Asian and Pacific Islander	2	1%	0.3	5	2%	0.5	3	2%	0.3	2	1%	0.3
Black	34	12%	2.1	42	20%	2.7	24	15%	1.3	32	18%	1.9
Latino/a	80	29%	4.2	52	24%	2.7	47	30%	2.5	49	27%	2.5
White	161	58%	7.4	114	53%	5.4	82	52%	3.7	95	53%	4.2
Other/Missing	1	0%	-	1	0%	-	1	1%	-	1	1%	-
Age group (years)												
15-24	20	7%	2.0	15	7%	1.5	5	3%	0.5	5	3%	0.5
25-34	54	19%	3.6	45	21%	3.0	35	22%	2.3	47	26%	3.1
35-44	60	22%	5.2	45	21%	3.9	32	20%	2.8	31	17%	2.7
45-54	65	23%	5.9	55	26%	5.1	36	23%	3.4	39	22%	3.7
55-64	64	23%	6.5	42	20%	4.2	34	22%	3.4	46	26%	4.6
65-84	15	5%	1.5	12	6%	1.1	15	10%	1.4	11	6%	1.0
Age group (years)												
15-34	74	27%	2.9	60	28%	2.4	40	25%	1.6	52	29%	2.1
35-54	125	45%	5.6	100	47%	4.5	68	43%	3.1	70	39%	3.2
55-84	79	28%	3.9	54	25%	2.6	49	31%	2.4	57	32%	2.8
Borough of residence[†]												
Bronx	62	22%	5.5	43	20%	3.8	28	18%	2.4	42	23%	3.6
Brooklyn	54	19%	2.6	52	24%	2.6	36	23%	1.9	40	22%	1.9
Manhattan	42	15%	3.0	32	15%	2.5	32	20%	2.2	28	16%	2.0
Queens	55	20%	2.9	39	18%	2.1	27	17%	1.5	28	16%	1.4
Staten Island	32	12%	8.7	30	14%	8.1	21	13%	5.8	22	12%	5.9
Non-New York City	28	10%	-	17	8%	-	13	8%	-	19	11%	-
Missing	5	2%	-	1	0%	-	0	0%	0.0	0	0%	0.0
Borough of death												
Bronx	67	24%	6.0	53	25%	4.7	30	19%	2.7	43	24%	3.6
Brooklyn	65	23%	3.1	52	24%	2.6	41	26%	2.1	42	23%	1.9
Manhattan	54	19%	4.0	37	17%	2.9	37	24%	2.5	39	22%	2.8
Queens	60	22%	3.2	42	20%	2.3	29	18%	1.6	32	18%	1.7
Staten Island	32	12%	8.8	30	14%	8.2	20	13%	5.5	23	13%	6.0
Neighborhood poverty^{†0}												
Low (wealthiest)	60	22%	4.3	42	20%	3.1	30	19%	2.0	40	22%	2.9
Medium	77	28%	2.9	71	33%	2.8	54	34%	2.1	48	27%	1.8
High	56	20%	3.6	41	19%	2.6	36	23%	2.4	32	18%	1.9
Very High	52	19%	4.3	42	20%	3.7	24	15%	1.9	40	22%	3.2
Non-New York City/Missing	33	12%	-	18	8%	-	13	8%	-	19	11%	-
Top 5 NYC neighborhoods^{^^}	2018 rate						2019* rate					
	Stapleton-St. George					9.1	South Beach-Tottenville					9.7
	South Beach-Tottenville					6.9	Kingsbridge-Riverdale					6.4
	East Harlem					5.7	East Harlem					6.0
	Central Harlem					4.6	Chelsea-Clinton					5.8
	Sunset Park					4.5	Willowbrook					5.4

*Data for 2019 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 people 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, White and Asian/Pacific Islander race categories do not include people 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 6. Number and rate of unintentional drug poisoning (overdose) deaths involving fentanyl, New York City, 2019*

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 2000-2018 updated September 2019. 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	1463	100%	21.2	1463	100%	21.2	1463	100%	21.2	1463	100%	21.2
Total Unintentional Drug Poisoning Deaths by Drug Type	994	68%	14.5	362	25%	5.4	1127	77%	16.4	183	13%	2.7
Sex												
Male	788	79%	24.1	291	80%	9.0	882	78%	26.9	141	77%	4.3
Female	206	21%	5.7	71	20%	2.0	245	22%	6.8	42	23%	1.2
Race/ethnicity[^]												
Asian and Pacific Islander	17	2%	1.7	8	2%	0.9	18	2%	1.8	5	3%	0.6
Black	233	23%	14.2	92	25%	6.0	263	23%	15.9	57	31%	3.6
Latino/a	371	37%	19.7	136	38%	7.2	414	37%	21.9	74	40%	3.9
White	342	34%	15.8	112	31%	5.3	398	35%	18.3	40	22%	1.9
Other/Missing	31	3%	-	14	4%	-	34	3%	-	7	4%	-
Age group (years)												
15-34	235	24%	9.5	94	26%	3.8	262	23%	10.6	38	21%	1.5
35-54	434	44%	19.7	168	46%	7.6	489	43%	22.2	90	49%	4.1
55-84	325	33%	15.7	100	28%	4.8	376	33%	18.2	55	30%	2.7
Borough of residence[†]												
Bronx	263	26%	23.7	111	31%	10.4	304	27%	27.3	72	39%	6.7
Brooklyn	206	21%	9.8	51	14%	2.4	238	21%	11.4	20	11%	1.0
Manhattan	191	19%	13.6	75	21%	5.5	210	19%	14.9	35	19%	2.5
Queens	139	14%	7.6	59	16%	3.3	156	14%	8.4	31	17%	1.6
Staten Island	73	7%	19.5	23	6%	5.9	84	7%	22.8	7	4%	1.9
Non-New York City	118	12%	-	41	11%	-	131	12%	-	16	9%	-
Missing	4	0%	-	2	1%	-	4	0%	-	2	1%	-
Borough of death												
Bronx	289	29%	26.0	118	33%	10.8	332	29%	29.7	76	42%	7.0
Brooklyn	233	23%	11.1	60	17%	2.9	269	24%	12.9	25	14%	1.2
Manhattan	264	27%	19.1	100	28%	7.5	289	26%	20.8	45	25%	3.3
Queens	146	15%	7.9	62	17%	3.4	164	15%	8.8	31	17%	1.6
Staten Island	62	6%	16.6	22	6%	5.7	73	6%	19.9	6	3%	1.6
Neighborhood poverty^{*0}												
Low (wealthiest)	130	13%	9.2	44	12%	3.3	146	13%	10.4	16	9%	1.2
Medium	227	23%	8.8	86	24%	3.3	263	23%	10.1	38	21%	1.4
High	233	23%	14.4	78	22%	4.9	259	23%	16.0	40	22%	2.5
Very High	280	28%	23.9	110	30%	9.6	322	29%	27.4	70	38%	6.1
Non-New York City/Missing	124	12%	-	44	12%	-	137	12%	-	19	10%	-

*Data for 2019 are provisional and are subject to change.

[^]For the purpose of this publication, Latino/a includes people 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, White and Asian/Pacific Islander race categories do not include people 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%).