

## Unintentional Drug Poisoning (Overdose) Deaths in New York City in 2020

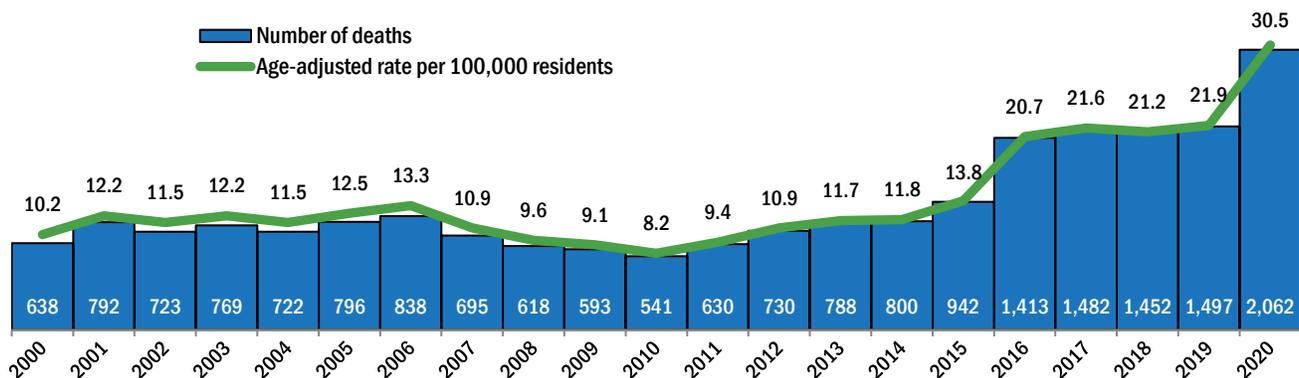
Nationally, the number of drug overdose deaths more than quadrupled from 2000 to 2019, and opioid overdose was declared a Nationwide Public Health Emergency in 2017. This Epi Data Brief presents provisional 2020 unintentional drug poisoning death data for New York City (NYC). Unintentional drug poisoning deaths are hereafter referred to as overdose deaths or overdose mortality. The NYC Department of Health and Mental Hygiene reports overdose deaths annually, reflecting deaths during the prior calendar year. To support efforts to prevent overdose deaths and ensure equitable distribution of resources, overdose deaths are reported for a range of factors, particularly by neighborhood and race/ethnicity.

### Key findings

- In 2020 there were 2,062 overdose deaths in NYC, compared with 1,497 in 2019, an increase of 565 deaths.
- The rate of overdose death increased to 30.5 per 100,000 NYC residents, compared with 21.9 in 2019.
- Black New Yorkers had the highest rate of overdose death (38.2 per 100,000 residents), and the largest absolute increase in rate from 2019 to 2020 (+14.2 per 100,000).
- In 2020, opioids were involved in 85% of overdose deaths.
- For the fourth year in a row, fentanyl was the most common substance involved in overdose deaths, present in 77% of overdose deaths in 2020.
- Approximately half (48%) of all overdose deaths in 2020 involved more than one central nervous system depressant, such as alcohol, benzodiazepines, or opioids.

### In New York City, rates of overdose death are the highest since reporting began in 2000

Number and age-adjusted rate per 100,000 residents of unintentional drug poisoning (overdose) deaths, New York City, 2000 to 2020



Sources: NYC Office of the Chief Medical Examiner and NYC DOHMH Bureau of Vital Statistics, 2000–2020; 2020 data are provisional and subject to change.

### Definitions:

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

**Opioids** include substances derived from “natural” opium, such as morphine or heroin, and 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 and tramadol.

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

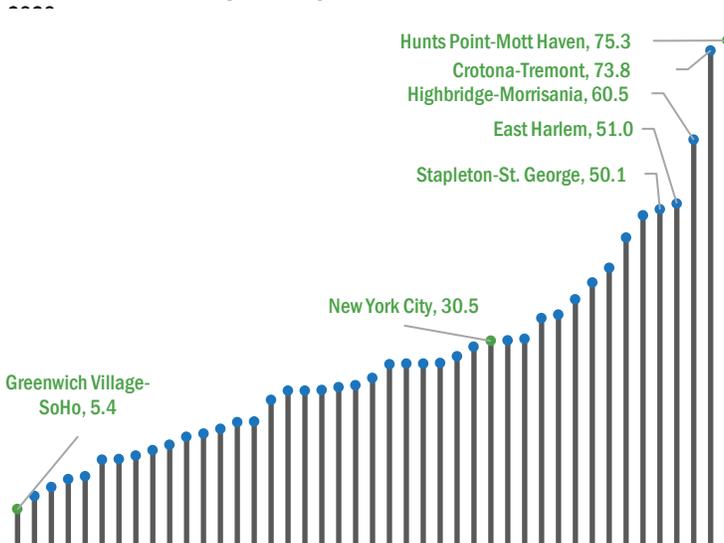
Drugs involved in overdose deaths are not mutually exclusive; percent will not equal 100%. Drug-involvement reported based on the detection of substances in post-mortem toxicology.

## Overdose death rates are higher and growing faster for some groups and places

- In 2020, the rate of overdose death among male New Yorkers (49.8 per 100,000 males) was nearly four times as high as the rate among female New Yorkers (13.1 per 100,000 females).
- Black New Yorkers had the highest rate of overdose death (38.2 per 100,000 residents), and the largest absolute increase in rate from 2019 to 2020 (+14.2 per 100,000).
- From 2019 to 2020, rates of overdose death increased among White New Yorkers (24.3 to 32.7 per 100,000 residents) and Latino/a New Yorkers (27.1 to 33.6 per 100,000 residents). The rate of overdose remained the same among Asian/Pacific Islander New Yorkers (3.3 per 100,000 residents).
- In 2020, New Yorkers ages 55 to 64 years had the highest rate of overdose death (52.4 per 100,000 residents, up from 39.7 per 100,000 in 2019). Rates of overdose death also increased among New Yorkers ages 15 to 24 years (+5.8 per 100,000 residents), 25 to 34 years (+7.0), 35 to 44 years (+11.3), and 45 to 54 years (+14.7).
- Residents of the Bronx had the highest rate of overdose death in 2020 (48.0 per 100,000 residents) followed by residents of Staten Island (37.0 per 100,000 residents), Manhattan (25.2 per 100,000 residents), Brooklyn (21.1 per 100,000 residents), and Queens (19.9 per 100,000 residents).
- From 2019 to 2020, rates of overdose death increased the most among residents of the Bronx (+11.5 per 100,000 residents) followed by residents of Staten Island (+8.5 per 100,000 residents) and Queens (+7.4 per 100,000 residents).

### Substantial disparities in rates of overdose death exist by neighborhood of residence

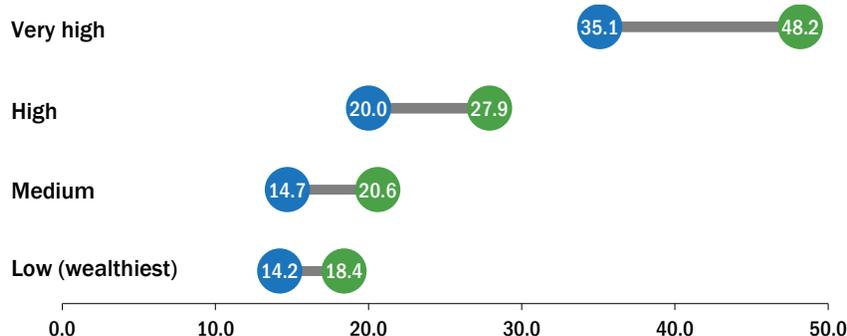
Rate of unintentional drug poisoning (overdose) death, per 100,000 residents



The United Hospital Fund (UHF) 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>. Sources: NYC Office of the Chief Medical Examiner and NYC DOHMH Bureau of Vital Statistics, 2020; 2020 data are provisional and subject to change.

### Residents of very high poverty neighborhoods had the highest and fastest growth in rate of overdose death

Rate of unintentional drug poisoning (overdose) death per 100,000 residents, by neighborhood poverty level, 2019 and 2020



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 2008-2012, in four groups: low (<10% FPL), medium (10% - <20% FPL), high (20% - <30% FPL), and very high (>=30% FPL). Sources: NYC Office of the Chief Medical Examiner and NYC DOHMH Bureau of Vital Statistics, 2019-2020; 2020 data are provisional and subject to change.

- Rates of overdose death among South Bronx^ residents increased from 2019 to 2020 (from 50.1 to 68.7 per 100,000 residents).
- Residents of very high poverty neighborhoods had a higher rate of overdose death in 2020 (48.2 per 100,000 residents) than residents of high, medium, and low poverty neighborhoods (27.9, 20.6, and 18.4 per 100,000 residents respectively).

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

## Fentanyl continues to drive overdose deaths in 2020

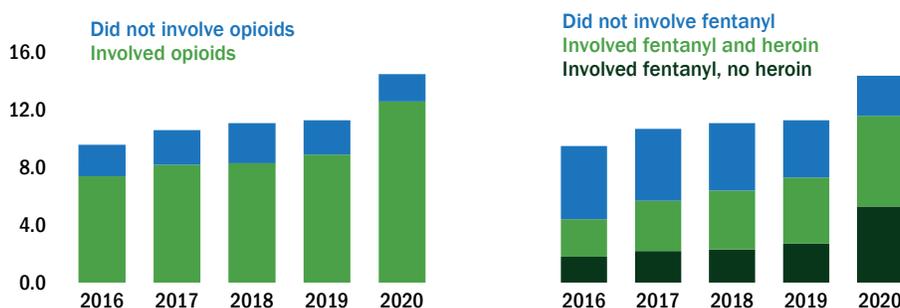
- In 2020, fentanyl was the most common opioid involved in overdose deaths (77%), followed by heroin (47%), opioid analgesics (16%), and methadone (14%).
- The rate of opioid-involved overdose death was highest among Black New Yorkers (30.8 per 100,000 residents), followed by Latino/a (29.1 per 100,000 residents), White (28.7 per 100,000 residents), and Asian/Pacific Islander New Yorkers (2.6 per 100,000 residents).
- Approximately half (49%) of all opioid-involved overdoses also involved cocaine; alcohol was involved in 42% of opioid-involved deaths.
- Fentanyl was involved in 93% of heroin-involved overdoses, 81% of cocaine-involved overdoses, 80% of alcohol-involved overdoses, 77% of opioid analgesic-involved overdoses, and 66% of amphetamine-involved overdoses.
- Opioid analgesics, excluding fentanyl and tramadol, were involved in 16% of overdose deaths in 2020, compared with 12% of overdose deaths in 2019.

## Cocaine overdose deaths most impact Black New Yorkers in 2020

- Cocaine was involved in 48% of overdose deaths in 2020.
- From 2019 to 2020, the rate of cocaine-involved overdose death increased from 11.3 to 14.5 per 100,000 residents.
- In 2020, Black New Yorkers had the highest rate of cocaine-involved overdose death (22.1 per 100,000), followed by Latino/a (16.2 per 100,000), White (12.6 per 100,000), and Asian/Pacific Islander New Yorkers (1.2 per 100,000).
- Opioids were involved in 87% of cocaine-involved overdoses.
- Cocaine-involved overdose deaths were less likely to involve an opioid among Black New Yorkers (81%) compared with Latino/a (91%) and White New Yorkers (90%).
- Fentanyl was the most common opioid in cocaine-involved overdose deaths.
- 359 overdose deaths involved cocaine and fentanyl without heroin, an increase from 184 deaths in 2019.
- 309 overdose deaths involved cocaine and fentanyl without any other opioid, an increase from 166 deaths in 2019.

### Sharp increase in cocaine-involved deaths with greater share involving fentanyl

Rate of cocaine-involved unintentional drug poisoning (overdose) death, per 100,000 residents, by substances involved, 2016-2020



Other substances may be present unless otherwise specified.

Sources: NYC Office of the Chief Medical Examiner and NYC DOHMH Bureau of Vital Statistics, 2016-2020; 2020 data are provisional and subject to change.

### Change in post-mortem toxicology testing

During 2020, in response to the increased number of heroin and fentanyl seizures containing tramadol, the Office of the Chief Medical Examiner introduced a new, more sensitive test for tramadol.

During 2020, when a more sensitive test was implemented, tramadol was detected in 274 overdose deaths (13%), compared with 14 overdose deaths (1%) in 2019.

### Definitions:

**Neighborhood:** The United Hospital Fund (UHF) 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](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 2008–2012, 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

In 2020, overdose deaths in NYC were at their highest rate since reporting began in 2000. Data demonstrate an increase in racial, economic, age, and place-based disparities in overdose deaths, with the largest increases occurring among men, Black New Yorkers, residents of high-poverty neighborhoods, and neighborhoods with prior high rates of overdose death. This increase in disparities in overdose deaths occurred during the COVID-19 pandemic, which widened existing inequities in health, income, and wealth.

The most prominent disparity for overdose mortality rates in New York City is by geography, reflecting a highly segregated city. As in prior years, these geographic patterns reflect inequities in income, wealth, employment, education, criminal legal system involvement, and housing. All of these factors have been linked to an increased risk of overdose death and are the result of structural racism and disinvestment in communities.

On October 18th 2021, the New York City Board of Health passed a resolution declaring racism a public health crisis.<sup>1</sup> As part of this resolution, the Board of Health noted the Health Department had documented persistent racial disparities across a wide range of health conditions. The Board of Health also noted that longstanding structural racism impacts both the health and wellbeing of New Yorkers as well as the services and care they receive.

The Health Department has committed more resources in response to these historically high overdose mortality rates. This includes raising awareness of fentanyl and overdose through a citywide direct mailing campaign, media targeted in the most impacted neighborhoods, and distribution of fentanyl test strips to identify the presence of fentanyl in unregulated drugs. The Health Department is also working to reduce harm by expanding the hours of syringe service program (SSP) drop-in centers, outreach, and syringe litter clean-up. In New York City, drug overdose continues to be a leading cause of death among individuals experiencing homelessness; to continue addressing this challenge, the City is expanding access to treatment through provision of same-day buprenorphine prescriptions in multiple settings for people who are unstably housed.

Overdose prevention centers are an evidence-based approach to preventing overdose deaths adopted by countries around the world, yet remain unsanctioned in the United States. Overdose prevention centers offer supervised, hygienic spaces for people who use drugs to do so safely, as well as connections to harm reduction, health, mental health, substance use disorder, and social services. Overdose prevention centers improve individual and community health, increase public safety, and reduce the social consequences of drug use.

**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.

**Data Sources:** NYC Office of the Chief Medical Examiner and NYC DOHMH Bureau of Vital Statistics: Mortality data for 2000–2020 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 2020 are provisional and subject to change.

**Rate calculation:** DOHMH population estimates, modified from US Census Bureau intercensal population estimates 2000–2019, updated October 2020. 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.

**Reference:** 1. New York City Board of Health. Resolution of the NYC Board of Health Declaring Racism a Public Health Crisis, 2021. Accessed Oct 27, 2021. Available online: [www1.nyc.gov/assets/doh/downloads/pdf/boh/racism-public-health-crisis-resolution.pdf](http://www1.nyc.gov/assets/doh/downloads/pdf/boh/racism-public-health-crisis-resolution.pdf)

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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 2020

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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 2000-2020. Data for 2020 are provisional and subject to change.

**Rate Calculation:** NYC DOHMH population estimates, modified from US Census Bureau intercensal population estimates 2000-2019, updated October 2020. 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, 2017-2020\***

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 2000-2019 updated October 2020. 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.

|  | 2017        |             |             | 2018        |             |             | 2019        |             |             | 2020*       |             |             |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|  | Number      | Percent     | Rate        |
| <b>Total Unintentional Drug Poisoning Deaths</b> | <b>1482</b> | <b>100%</b> | <b>21.6</b> | <b>1452</b> | <b>100%</b> | <b>21.2</b> | <b>1497</b> | <b>100%</b> | <b>21.9</b> | <b>2062</b> | <b>100%</b> | <b>30.5</b> |
| <b>Sex</b>                                       |             |             |             |             |             |             |             |             |             |             |             |             |
| Male   | 1168        | 79%         | 35.8        | 1108        | 76%         | 34.1        | 1152        | 77%         | 35.5        | 1608        | 78%         | 49.8        |
| Female   | 314         | 21%         | 8.7         | 344         | 24%         | 9.5         | 345         | 23%         | 9.5         | 454         | 22%         | 13.1        |
| <b>Race/ethnicity†</b>                           |             |             |             |             |             |             |             |             |             |             |             |             |
| Asian and Pacific Islander                       | 27          | 2%          | 2.7         | 32          | 2%          | 3.2         | 34          | 2%          | 3.3         | 30          | 1%          | 3.3         |
| Black  | 417         | 28%         | 25.7        | 375         | 26%         | 22.5        | 392         | 26%         | 24.0        | 613         | 30%         | 38.2        |
| Latino/a   | 456         | 31%         | 24.2        | 485         | 33%         | 25.6        | 510         | 34%         | 27.1        | 635         | 31%         | 33.6        |
| White  | 555         | 37%         | 25.4        | 522         | 36%         | 24.5        | 527         | 35%         | 24.3        | 691         | 34%         | 32.7        |
| Other/Missing                                    | 27          | 2%          | -           | 38          | 3%          | -           | 34          | 2%          | -           | 93          | 5%          | -           |
| <b>Age group (years)</b>                         |             |             |             |             |             |             |             |             |             |             |             |             |
| 15-24  | 73          | 5%          | 7.3         | 65          | 4%          | 6.7         | 52          | 3%          | 5.4         | 107         | 5%          | 11.2        |
| 25-34  | 313         | 21%         | 20.8        | 267         | 18%         | 17.9        | 268         | 18%         | 18.1        | 372         | 18%         | 25.1        |
| 35-44  | 282         | 19%         | 24.5        | 250         | 17%         | 21.9        | 298         | 20%         | 26.2        | 426         | 21%         | 37.5        |
| 45-54  | 398         | 27%         | 36.9        | 407         | 28%         | 38.6        | 348         | 23%         | 33.8        | 499         | 24%         | 48.5        |
| 55-64  | 334         | 23%         | 33.6        | 353         | 24%         | 35.3        | 397         | 27%         | 39.7        | 523         | 25%         | 52.4        |
| 65-84  | 82          | 6%          | 7.8         | 110         | 8%          | 10.2        | 134         | 9%          | 12.2        | 135         | 7%          | 12.3        |
| <b>Age group (years)</b>                         |             |             |             |             |             |             |             |             |             |             |             |             |
| 15-34  | 386         | 26%         | 15.4        | 332         | 23%         | 13.4        | 320         | 21%         | 13.1        | 479         | 23%         | 19.6        |
| 35-54  | 680         | 46%         | 30.5        | 657         | 45%         | 29.9        | 646         | 43%         | 29.8        | 925         | 45%         | 42.7        |
| 55-84  | 416         | 28%         | 20.4        | 463         | 32%         | 22.3        | 531         | 35%         | 25.3        | 658         | 32%         | 31.3        |
| <b>Borough of residence</b>                      |             |             |             |             |             |             |             |             |             |             |             |             |
| Bronx  | 362         | 24%         | 32.1        | 396         | 27%         | 35.3        | 405         | 27%         | 36.5        | 537         | 26%         | 48.0        |
| Brooklyn   | 355         | 24%         | 17.1        | 275         | 19%         | 13.6        | 298         | 20%         | 14.3        | 424         | 21%         | 21.1        |
| Manhattan  | 225         | 15%         | 17.0        | 268         | 18%         | 19.4        | 287         | 19%         | 20.4        | 352         | 17%         | 25.2        |
| Queens   | 270         | 18%         | 14.3        | 215         | 15%         | 11.4        | 227         | 15%         | 12.5        | 359         | 17%         | 19.9        |
| Staten Island                                    | 100         | 7%          | 27.1        | 114         | 8%          | 32.0        | 106         | 7%          | 28.5        | 132         | 6%          | 37.0        |
| Non-New York City                                | 137         | 9%          | -           | 153         | 11%         | -           | 140         | 9%          | -           | 245         | 12%         | -           |
| Missing  | 33          | 2%          | -           | 31          | 2%          | -           | 34          | 2%          | -           | 13          | 1%          | -           |
| <b>Borough of death</b>                          |             |             |             |             |             |             |             |             |             |             |             |             |
| Bronx  | 399         | 27%         | 35.6        | 447         | 31%         | 40.2        | 438         | 29%         | 39.3        | 582         | 28%         | 52.6        |
| Brooklyn   | 395         | 27%         | 19.1        | 310         | 21%         | 15.3        | 336         | 22%         | 16.2        | 478         | 23%         | 23.8        |
| Manhattan  | 316         | 21%         | 23.7        | 368         | 25%         | 26.5        | 389         | 26%         | 28.1        | 495         | 24%         | 35.9        |
| Queens   | 271         | 18%         | 14.3        | 216         | 15%         | 11.5        | 240         | 16%         | 13.2        | 375         | 18%         | 20.8        |
| Staten Island                                    | 101         | 7%          | 27.3        | 111         | 8%          | 31.0        | 94          | 6%          | 25.4        | 132         | 6%          | 37.0        |
| <b>Neighborhood poverty<sup>^</sup></b>          |             |             |             |             |             |             |             |             |             |             |             |             |
| Low (wealthiest)                                 | 202         | 14%         | 15.0        | 182         | 13%         | 13.2        | 197         | 13%         | 14.2        | 242         | 12%         | 18.4        |
| Medium   | 374         | 25%         | 14.8        | 337         | 23%         | 13.5        | 364         | 24%         | 14.7        | 503         | 24%         | 20.6        |
| High   | 316         | 21%         | 18.7        | 348         | 24%         | 20.7        | 337         | 23%         | 20.0        | 469         | 23%         | 27.9        |
| Very high  | 418         | 28%         | 34.7        | 395         | 27%         | 33.0        | 422         | 28%         | 35.1        | 581         | 28%         | 48.2        |
| Non-New York City/Missing                        | 172         | 12%         | -           | 190         | 13%         | -           | 177         | 12%         | -           | 267         | 13%         | -           |
| <b>Drug type**</b>                               |             |             |             |             |             |             |             |             |             |             |             |             |
| Alcohol  | 604         | 41%         | 8.9         | 577         | 40%         | 8.4         | 593         | 40%         | 8.7         | 823         | 40%         | 12.2        |
| Amphetamines                                     | 64          | 4%          | 0.9         | 66          | 5%          | 1.0         | 75          | 5%          | 1.2         | 112         | 5%          | 1.6         |
| Benzodiazepines                                  | 433         | 29%         | 6.4         | 423         | 29%         | 6.2         | 413         | 28%         | 6.0         | 398         | 19%         | 6.1         |
| Cocaine  | 728         | 49%         | 10.7        | 758         | 52%         | 11.1        | 768         | 51%         | 11.3        | 980         | 48%         | 14.5        |
| Fentanyl   | 832         | 56%         | 12.1        | 873         | 60%         | 12.9        | 1016        | 68%         | 14.9        | 1580        | 77%         | 23.4        |
| Heroin   | 767         | 52%         | 11.1        | 738         | 51%         | 10.8        | 789         | 53%         | 11.4        | 972         | 47%         | 14.3        |
| Methadone  | 197         | 13%         | 2.9         | 200         | 14%         | 2.9         | 196         | 13%         | 2.7         | 285         | 14%         | 4.1         |
| Opioid Analgesics <sup>††</sup>                  | 210         | 14%         | 3.1         | 151         | 10%         | 2.2         | 178         | 12%         | 2.5         | 325         | 16%         | 4.8         |
| <b>Top 5 NYC neighborhoods<sup>^^</sup></b>      |             |             |             |             |             |             |             |             |             |             |             |             |
|  |             |             |             | 2019 rate   |             |             |             |             |             | 2020* rate  |             |             |
|  |             |             |             |             |             | 53.7        |             |             |             |             |             | 75.3        |
|  |             |             |             |             |             | 50.9        |             |             |             |             |             | 73.8        |
|  |             |             |             |             |             | 47.1        |             |             |             |             |             | 60.5        |
|  |             |             |             |             |             | 40.5        |             |             |             |             |             | 51.0        |
|  |             |             |             |             |             | 36.1        |             |             |             |             |             | 50.1        |

\*Data for 2020 are provisional and 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.

<sup>^</sup>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 2008-2012, in four groups: low (<10%), medium (10% - < 20%), high (20% - < 30%), and very high poverty (>=30%).

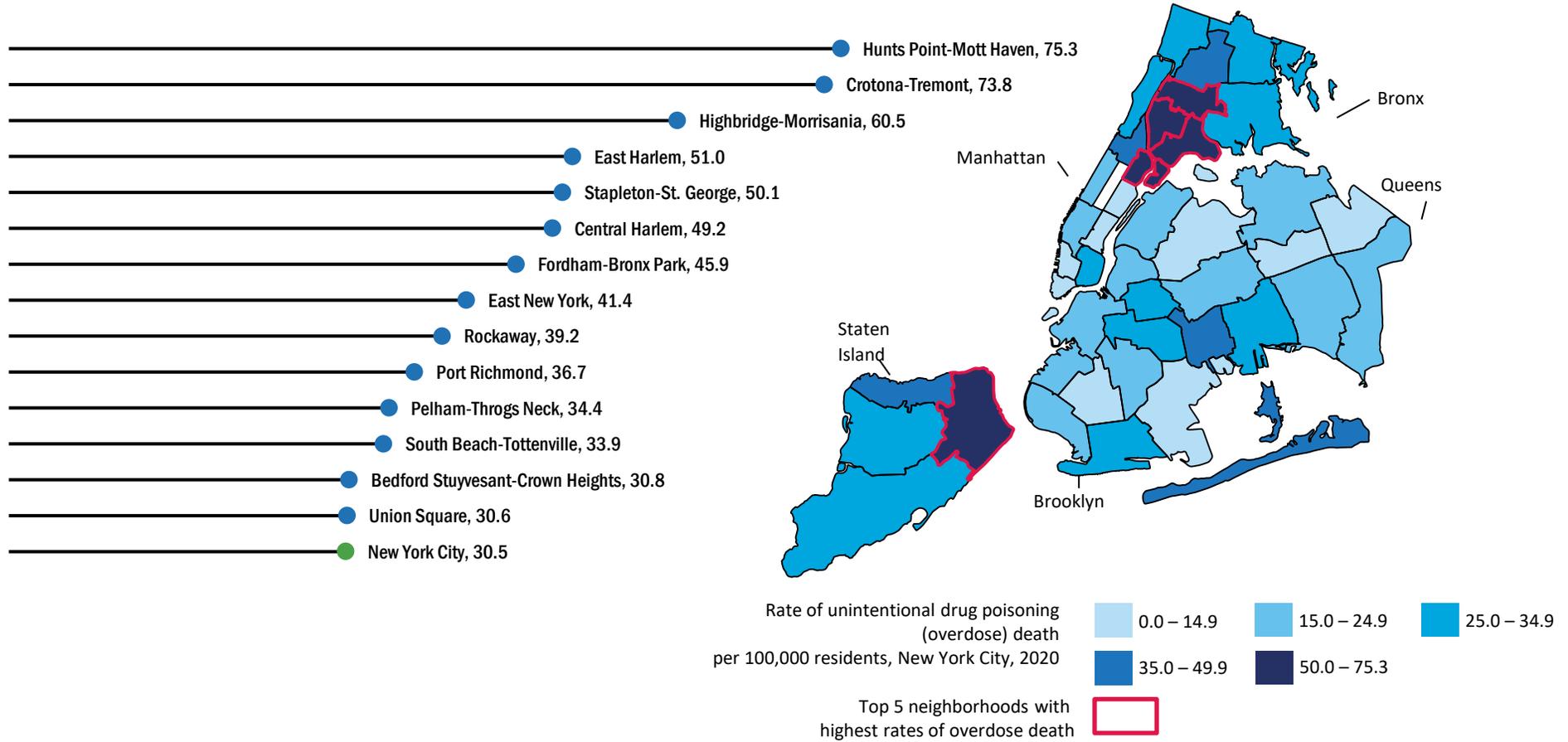
\*\*Drug type, not mutually exclusive; percent will not equal 100%. ††For this analysis, opioid analgesics exclude fentanyl and tramadol.

<sup>^^</sup>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<sup>^</sup>, New York City, 2020\***

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 2000-2019 updated October 2020. 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 rate, 2020**  
Rate per 100,000 residents



\*Data for 2020 are provisional and subject to change.

<sup>^</sup>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, 2017-2020\***

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 2000-2019 updated October 2020. 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.

|  | 2017        |             |             | 2018             |             |             | 2019              |             |                        | 2020*       |             |             |
|--|-------------|-------------|-------------|------------------|-------------|-------------|-------------------|-------------|------------------------|-------------|-------------|-------------|
|  | Number      | Percent     | Rate        | Number           | Percent     | Rate        | Number            | Percent     | Rate                   | Number      | Percent     | Rate        |
| <b>Total Unintentional Drug Poisoning Deaths</b>                   | <b>1482</b> | <b>100%</b> | <b>21.6</b> | <b>1452</b>      | <b>100%</b> | <b>21.2</b> | <b>1497</b>       | <b>100%</b> | <b>21.9</b>            | <b>2062</b> | <b>100%</b> | <b>30.5</b> |
| <b>Total Unintentional Drug Poisoning Deaths Involving Opioids</b> | <b>1209</b> | <b>82%</b>  | <b>17.6</b> | <b>1157</b>      | <b>80%</b>  | <b>17.0</b> | <b>1238</b>       | <b>83%</b>  | <b>18.1</b>            | <b>1745</b> | <b>85%</b>  | <b>25.9</b> |
| <b>Sex</b>   |             |             |             |                  |             |             |                   |             |                        |             |             |             |
| Male   | 968         | 80%         | 29.7        | 894              | 77%         | 27.6        | 947               | 76%         | 29.1                   | 1368        | 78%         | 42.3        |
| Female   | 241         | 20%         | 6.7         | 263              | 23%         | 7.3         | 291               | 24%         | 8.1                    | 377         | 22%         | 10.9        |
| <b>Race/ethnicity†</b>   |             |             |             |                  |             |             |                   |             |                        |             |             |             |
| Asian and Pacific Islander   | 20          | 2%          | 2.0         | 18               | 2%          | 1.8         | 20                | 2%          | 2.0                    | 24          | 1%          | 2.6         |
| Black  | 299         | 25%         | 18.5        | 242              | 21%         | 14.5        | 294               | 24%         | 18.0                   | 494         | 28%         | 30.8        |
| Latino/a   | 383         | 32%         | 20.3        | 417              | 36%         | 22.1        | 446               | 36%         | 23.7                   | 550         | 32%         | 29.1        |
| White  | 487         | 40%         | 22.3        | 452              | 39%         | 21.3        | 452               | 37%         | 20.8                   | 604         | 35%         | 28.7        |
| Other/Missing  | 20          | 2%          | -           | 28               | 2%          | -           | 26                | 2%          | -                      | 73          | 4%          | -           |
| <b>Age group (years)</b>   |             |             |             |                  |             |             |                   |             |                        |             |             |             |
| 15-24  | 64          | 5%          | 6.4         | 50               | 4%          | 5.1         | 48                | 4%          | 5.0                    | 94          | 5%          | 9.8         |
| 25-34  | 274         | 23%         | 18.2        | 235              | 20%         | 15.7        | 239               | 19%         | 16.1                   | 328         | 19%         | 22.1        |
| 35-44  | 241         | 20%         | 21.0        | 211              | 18%         | 18.5        | 246               | 20%         | 21.6                   | 362         | 21%         | 31.8        |
| 45-54  | 315         | 26%         | 29.2        | 330              | 29%         | 31.3        | 286               | 23%         | 27.8                   | 418         | 24%         | 40.7        |
| 55-64  | 257         | 21%         | 25.8        | 250              | 22%         | 25.0        | 317               | 26%         | 31.7                   | 433         | 25%         | 43.3        |
| 65-84  | 58          | 5%          | 5.5         | 81               | 7%          | 7.5         | 102               | 8%          | 9.3                    | 110         | 6%          | 10.0        |
| <b>Age group (years)</b>   |             |             |             |                  |             |             |                   |             |                        |             |             |             |
| 15-34  | 338         | 28%         | 13.5        | 285              | 25%         | 11.5        | 287               | 23%         | 11.8                   | 422         | 24%         | 17.3        |
| 35-54  | 556         | 46%         | 25.0        | 541              | 47%         | 24.6        | 532               | 43%         | 24.6                   | 780         | 45%         | 36.0        |
| 55-84  | 315         | 26%         | 15.4        | 331              | 29%         | 16.0        | 419               | 34%         | 19.9                   | 543         | 31%         | 25.9        |
| <b>Borough of residence</b>  |             |             |             |                  |             |             |                   |             |                        |             |             |             |
| Bronx  | 291         | 24%         | 25.9        | 317              | 27%         | 28.7        | 336               | 27%         | 30.4                   | 463         | 27%         | 41.4        |
| Brooklyn   | 285         | 24%         | 13.8        | 206              | 18%         | 10.3        | 255               | 21%         | 12.3                   | 371         | 21%         | 18.5        |
| Manhattan  | 183         | 15%         | 13.9        | 208              | 18%         | 15.0        | 235               | 19%         | 16.7                   | 290         | 17%         | 20.6        |
| Queens   | 217         | 18%         | 11.5        | 169              | 15%         | 9.1         | 174               | 14%         | 9.5                    | 292         | 17%         | 16.3        |
| Staten Island  | 90          | 7%          | 24.6        | 103              | 9%          | 29.1        | 93                | 8%          | 25.1                   | 112         | 6%          | 31.0        |
| Non-New York City  | 115         | 10%         | -           | 132              | 11%         | -           | 116               | 9%          | -                      | 207         | 12%         | -           |
| Missing  | 28          | 2%          | -           | 22               | 2%          | -           | 29                | 2%          | -                      | 10          | 1%          | -           |
| <b>Borough of death</b>  |             |             |             |                  |             |             |                   |             |                        |             |             |             |
| Bronx  | 326         | 27%         | 29.2        | 359              | 31%         | 32.7        | 367               | 30%         | 33.1                   | 500         | 29%         | 45.3        |
| Brooklyn   | 314         | 26%         | 15.3        | 247              | 21%         | 12.3        | 285               | 23%         | 13.7                   | 419         | 24%         | 20.9        |
| Manhattan  | 257         | 21%         | 19.3        | 283              | 24%         | 20.1        | 317               | 26%         | 22.9                   | 404         | 23%         | 29.2        |
| Queens   | 222         | 18%         | 11.7        | 166              | 14%         | 9.0         | 185               | 15%         | 10.1                   | 308         | 18%         | 17.1        |
| Staten Island  | 90          | 7%          | 24.6        | 102              | 9%          | 28.7        | 84                | 7%          | 22.8                   | 114         | 7%          | 31.7        |
| <b>Neighborhood poverty^</b>                                       |             |             |             |                  |             |             |                   |             |                        |             |             |             |
| Low (wealthiest)   | 168         | 14%         | 12.6        | 151              | 13%         | 11.1        | 169               | 14%         | 12.3                   | 206         | 12%         | 15.5        |
| Medium   | 317         | 26%         | 12.5        | 269              | 23%         | 10.8        | 290               | 23%         | 11.7                   | 426         | 24%         | 17.5        |
| High   | 256         | 21%         | 15.2        | 269              | 23%         | 16.1        | 273               | 22%         | 16.1                   | 388         | 22%         | 22.9        |
| Very High  | 325         | 27%         | 27.0        | 309              | 27%         | 26.2        | 358               | 29%         | 29.9                   | 500         | 29%         | 41.4        |
| Non-New York City/Missing  | 143         | 12%         | -           | 159              | 14%         | -           | 148               | 12%         | -                      | 225         | 13%         | -           |
| <b>Top 5 NYC neighborhoods^^</b>                                   |             |             |             | <b>2019 rate</b> |             |             | <b>2020* rate</b> |             |                        |             |             |             |
|  |             |             |             |                  |             | 45.8        |                   |             | Hunts Point-Mott Haven |             | 67.7        |             |
|  |             |             |             |                  |             | 41.9        |                   |             | Crotona-Tremont        |             | 63.8        |             |
|  |             |             |             |                  |             | 38.6        |                   |             | Highbridge-Morrisania  |             | 48.4        |             |
|  |             |             |             |                  |             | 34.1        |                   |             | Central Harlem         |             | 41.5        |             |
|  |             |             |             |                  |             | 32.5        |                   |             | East Harlem            |             | 39.7        |             |

\*Data for 2020 are provisional and subject to change.

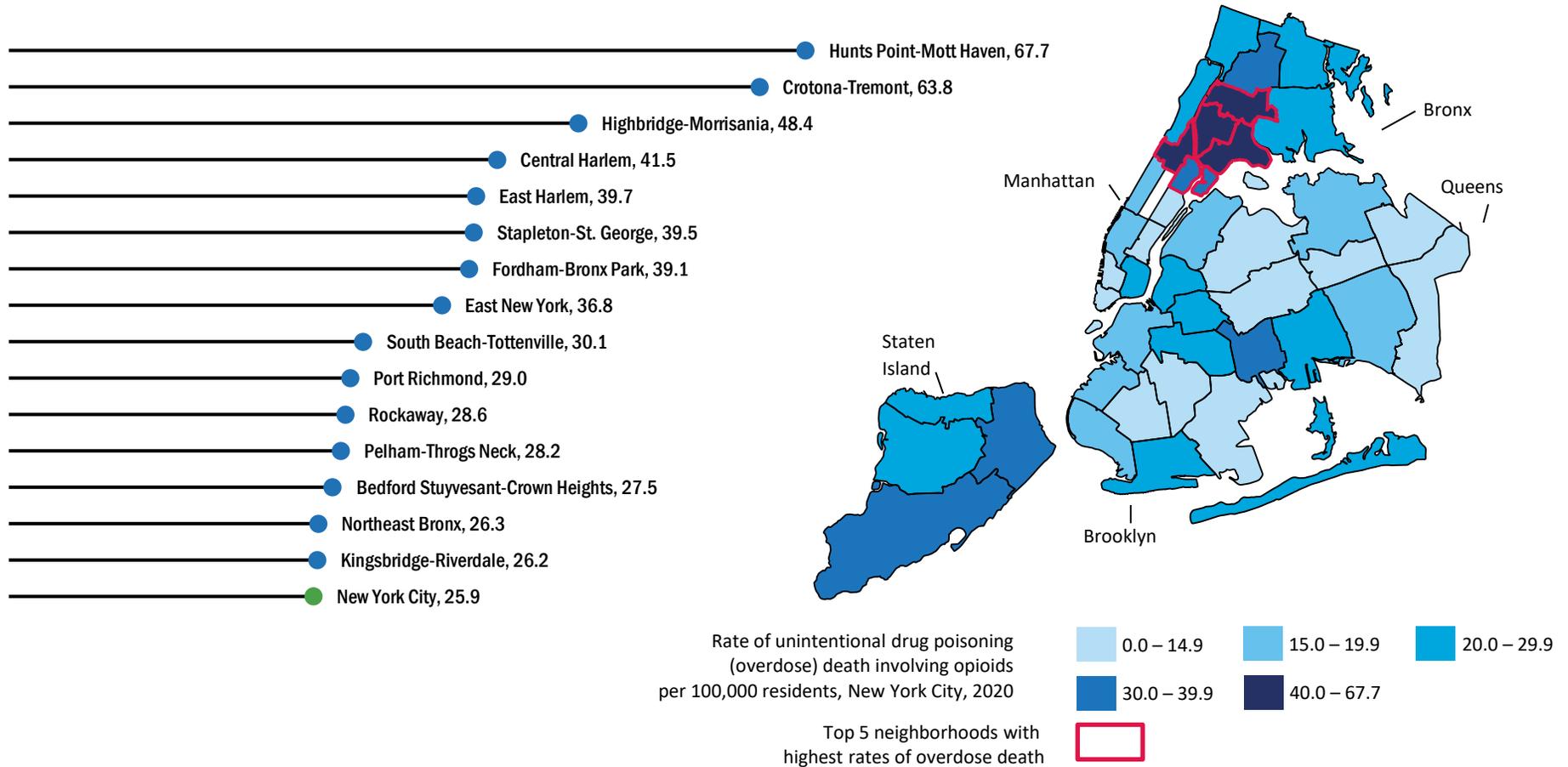
†For the purpose of this publication, Latino/a includes people of Hispanic origin based on ancestry reported on the death certificate, regardless of reported race; Latino/a excludes reported ancestry from non-Spanish speaking Central/South American countries, and non-Spanish speaking Caribbean islands.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

^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 2008-2012, 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<sup>^</sup>, New York City, 2020\***

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 2000-2019 updated October 2020. 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 rate, 2020**  
Rate per 100,000 residents



\*Data for 2020 are provisional and subject to change.

<sup>^</sup>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, 2017-2020\***

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 2000-2019 updated October 2020. 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.

|   | 2017        |             |             | 2018             |             |             | 2019        |                   |             | 2020*       |             |             |
|---|-------------|-------------|-------------|------------------|-------------|-------------|-------------|-------------------|-------------|-------------|-------------|-------------|
|   | Number      | Percent     | Rate        | Number           | Percent     | Rate        | Number      | Percent           | Rate        | Number      | Percent     | Rate        |
| <b>Total Unintentional Drug Poisoning Deaths</b>                  | <b>1482</b> | <b>100%</b> | <b>21.6</b> | <b>1452</b>      | <b>100%</b> | <b>21.2</b> | <b>1497</b> | <b>100%</b>       | <b>21.9</b> | <b>2062</b> | <b>100%</b> | <b>30.5</b> |
| <b>Total Unintentional Drug Poisoning Deaths Involving Heroin</b> | <b>767</b>  | <b>52%</b>  | <b>11.1</b> | <b>738</b>       | <b>51%</b>  | <b>10.8</b> | <b>789</b>  | <b>53%</b>        | <b>11.4</b> | <b>972</b>  | <b>47%</b>  | <b>14.3</b> |
| <b>Sex</b>  |             |             |             |                  |             |             |             |                   |             |             |             |             |
| Male  | 628         | 82%         | 19.2        | 581              | 79%         | 17.9        | 608         | 77%               | 18.6        | 758         | 78%         | 23.3        |
| Female  | 139         | 18%         | 3.8         | 157              | 21%         | 4.4         | 181         | 23%               | 5.0         | 214         | 22%         | 6.2         |
| <b>Race/ethnicity†</b>  |             |             |             |                  |             |             |             |                   |             |             |             |             |
| Asian and Pacific Islander  | 12          | 2%          | 1.1         | 11               | 1%          | 1.1         | 9           | 1%                | 0.9         | 9           | 1%          | 1.0         |
| Black   | 174         | 23%         | 10.6        | 151              | 20%         | 9.0         | 176         | 22%               | 10.4        | 255         | 26%         | 15.6        |
| Latino/a  | 249         | 32%         | 13.2        | 261              | 35%         | 13.9        | 289         | 37%               | 15.3        | 309         | 32%         | 16.3        |
| White   | 321         | 42%         | 14.6        | 293              | 40%         | 13.6        | 299         | 38%               | 13.8        | 354         | 36%         | 16.7        |
| Other/Missing   | 11          | 1%          | -           | 22               | 3%          | -           | 16          | 2%                | -           | 45          | 5%          | -           |
| <b>Age group (years)</b>  |             |             |             |                  |             |             |             |                   |             |             |             |             |
| 15-24   | 34          | 4%          | 3.4         | 34               | 5%          | 3.5         | 21          | 3%                | 2.2         | 43          | 4%          | 4.5         |
| 25-34   | 179         | 23%         | 11.9        | 147              | 20%         | 9.8         | 152         | 19%               | 10.2        | 165         | 17%         | 11.1        |
| 35-44   | 158         | 21%         | 13.8        | 125              | 17%         | 10.9        | 151         | 19%               | 13.3        | 196         | 20%         | 17.2        |
| 45-54   | 186         | 24%         | 17.3        | 215              | 29%         | 20.4        | 179         | 23%               | 17.4        | 235         | 24%         | 22.9        |
| 55-64   | 173         | 23%         | 17.4        | 165              | 22%         | 16.5        | 211         | 27%               | 21.1        | 258         | 27%         | 25.8        |
| 65-84   | 37          | 5%          | 3.5         | 52               | 7%          | 4.8         | 75          | 10%               | 6.8         | 75          | 8%          | 6.8         |
| <b>Age group (years)</b>  |             |             |             |                  |             |             |             |                   |             |             |             |             |
| 15-34   | 213         | 28%         | 8.5         | 181              | 25%         | 7.3         | 173         | 22%               | 7.1         | 208         | 21%         | 8.5         |
| 35-54   | 344         | 45%         | 15.5        | 340              | 46%         | 15.5        | 330         | 42%               | 15.2        | 431         | 44%         | 19.9        |
| 55-84   | 210         | 27%         | 10.3        | 217              | 29%         | 10.5        | 286         | 36%               | 13.6        | 333         | 34%         | 15.9        |
| <b>Borough of residence</b>                                       |             |             |             |                  |             |             |             |                   |             |             |             |             |
| Bronx   | 199         | 26%         | 17.7        | 201              | 27%         | 18.1        | 199         | 25%               | 17.6        | 245         | 25%         | 22.1        |
| Brooklyn  | 180         | 23%         | 8.7         | 137              | 19%         | 6.9         | 191         | 24%               | 9.2         | 229         | 24%         | 11.3        |
| Manhattan   | 113         | 15%         | 8.3         | 128              | 17%         | 9.2         | 141         | 18%               | 9.8         | 150         | 15%         | 10.6        |
| Queens  | 128         | 17%         | 6.8         | 113              | 15%         | 6.1         | 100         | 13%               | 5.4         | 161         | 17%         | 8.8         |
| Staten Island   | 57          | 7%          | 15.8        | 66               | 9%          | 19.2        | 62          | 8%                | 17.2        | 66          | 7%          | 18.4        |
| Non-New York City   | 71          | 9%          | -           | 78               | 11%         | -           | 76          | 10%               | -           | 117         | 12%         | -           |
| Missing   | 19          | 2%          | -           | 15               | 2%          | -           | 20          | 3%                | -           | 4           | 0%          | -           |
| <b>Borough of death</b>   |             |             |             |                  |             |             |             |                   |             |             |             |             |
| Bronx   | 220         | 29%         | 19.6        | 230              | 31%         | 20.7        | 223         | 28%               | 19.9        | 258         | 27%         | 23.5        |
| Brooklyn  | 201         | 26%         | 9.7         | 165              | 22%         | 8.2         | 212         | 27%               | 10.2        | 267         | 27%         | 13.2        |
| Manhattan   | 159         | 21%         | 11.6        | 173              | 23%         | 12.4        | 194         | 25%               | 13.8        | 218         | 22%         | 15.7        |
| Queens  | 132         | 17%         | 7.0         | 106              | 14%         | 5.7         | 107         | 14%               | 5.7         | 163         | 17%         | 8.8         |
| Staten Island   | 55          | 7%          | 15.4        | 64               | 9%          | 18.3        | 53          | 7%                | 14.8        | 66          | 7%          | 18.4        |
| <b>Neighborhood poverty^</b>                                      |             |             |             |                  |             |             |             |                   |             |             |             |             |
| Low (wealthiest)  | 104         | 14%         | 7.6         | 93               | 13%         | 6.9         | 105         | 13%               | 7.6         | 106         | 11%         | 8.1         |
| Medium  | 200         | 26%         | 7.8         | 176              | 24%         | 7.1         | 188         | 24%               | 7.5         | 240         | 25%         | 9.8         |
| High  | 155         | 20%         | 9.2         | 175              | 24%         | 10.5        | 178         | 23%               | 10.5        | 221         | 23%         | 13.1        |
| Very High   | 218         | 28%         | 18.1        | 197              | 27%         | 16.7        | 220         | 28%               | 18.1        | 281         | 29%         | 23.3        |
| Non-New York City/Missing   | 90          | 12%         | -           | 97               | 13%         | -           | 98          | 12%               | -           | 124         | 13%         | -           |
| <b>Top 5 NYC neighborhoods^^</b>                                  |             |             |             | <b>2019 rate</b> |             |             |             | <b>2020* rate</b> |             |             |             |             |
|   |             |             |             |                  |             | 27.5        |             |                   |             |             |             | 38.9        |
|   |             |             |             |                  |             | 22.1        |             |                   |             |             |             | 38.6        |
|   |             |             |             |                  |             | 21.9        |             |                   |             |             |             | 25.2        |
|   |             |             |             |                  |             | 21.6        |             |                   |             |             |             | 23.3        |
|   |             |             |             |                  |             | 21.3        |             |                   |             |             |             | 22.6        |

\*Data for 2020 are provisional and 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.

^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 2008-2012, 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, 2017-2020\***

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 2000-2019 updated October 2020. 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.

|  | 2017        |             |             | 2018             |             |             | 2019              |             |                        | 2020*       |             |             |
|--|-------------|-------------|-------------|------------------|-------------|-------------|-------------------|-------------|------------------------|-------------|-------------|-------------|
|  | Number      | Percent     | Rate        | Number           | Percent     | Rate        | Number            | Percent     | Rate                   | Number      | Percent     | Rate        |
| <b>Total Unintentional Drug Poisoning Deaths</b>                   | <b>1482</b> | <b>100%</b> | <b>21.6</b> | <b>1452</b>      | <b>100%</b> | <b>21.2</b> | <b>1497</b>       | <b>100%</b> | <b>21.9</b>            | <b>2062</b> | <b>100%</b> | <b>30.5</b> |
| <b>Total Unintentional Drug Poisoning Deaths Involving Cocaine</b> | <b>728</b>  | <b>49%</b>  | <b>10.7</b> | <b>758</b>       | <b>52%</b>  | <b>11.1</b> | <b>768</b>        | <b>51%</b>  | <b>11.3</b>            | <b>980</b>  | <b>48%</b>  | <b>14.5</b> |
| <b>Sex</b>   |             |             |             |                  |             |             |                   |             |                        |             |             |             |
| Male   | 570         | 78%         | 17.6        | 578              | 76%         | 17.8        | 573               | 75%         | 17.7                   | 744         | 76%         | 23.0        |
| Female   | 158         | 22%         | 4.4         | 180              | 24%         | 5.0         | 195               | 25%         | 5.4                    | 236         | 24%         | 6.7         |
| <b>Race/ethnicity†</b>   |             |             |             |                  |             |             |                   |             |                        |             |             |             |
| Asian and Pacific Islander   | 10          | 1%          | 1.0         | 9                | 1%          | 0.9         | 16                | 2%          | 1.6                    | 11          | 1%          | 1.2         |
| Black  | 255         | 35%         | 15.7        | 247              | 33%         | 14.8        | 259               | 34%         | 15.9                   | 353         | 36%         | 22.1        |
| Latino/a   | 230         | 32%         | 12.2        | 245              | 32%         | 13.0        | 262               | 34%         | 13.9                   | 306         | 31%         | 16.2        |
| White  | 221         | 30%         | 10.3        | 232              | 31%         | 11.2        | 213               | 28%         | 10.0                   | 267         | 27%         | 12.6        |
| Other/Missing  | 12          | 2%          | -           | 25               | 3%          | -           | 18                | 2%          | -                      | 43          | 4%          | -           |
| <b>Age group (years)</b>   |             |             |             |                  |             |             |                   |             |                        |             |             |             |
| 15-24  | 30          | 4%          | 3.0         | 32               | 4%          | 3.3         | 20                | 3%          | 2.1                    | 30          | 3%          | 3.1         |
| 25-34  | 132         | 18%         | 8.8         | 130              | 17%         | 8.7         | 124               | 16%         | 8.4                    | 170         | 17%         | 11.5        |
| 35-44  | 141         | 19%         | 12.3        | 129              | 17%         | 11.3        | 145               | 19%         | 12.8                   | 208         | 21%         | 18.3        |
| 45-54  | 213         | 29%         | 19.8        | 222              | 29%         | 21.1        | 211               | 27%         | 20.5                   | 256         | 26%         | 24.9        |
| 55-64  | 168         | 23%         | 16.9        | 188              | 25%         | 18.8        | 210               | 27%         | 21.0                   | 260         | 27%         | 26.0        |
| 65-84  | 44          | 6%          | 4.2         | 57               | 8%          | 5.3         | 58                | 8%          | 5.3                    | 56          | 6%          | 5.1         |
| <b>Age group (years)</b>   |             |             |             |                  |             |             |                   |             |                        |             |             |             |
| 15-34  | 162         | 22%         | 6.5         | 162              | 21%         | 6.6         | 144               | 19%         | 5.9                    | 200         | 20%         | 8.2         |
| 35-54  | 354         | 49%         | 15.9        | 351              | 46%         | 16.0        | 356               | 46%         | 16.4                   | 464         | 47%         | 21.4        |
| 55-84  | 212         | 29%         | 10.4        | 245              | 32%         | 11.8        | 268               | 35%         | 12.8                   | 316         | 32%         | 15.0        |
| <b>Borough of residence</b>  |             |             |             |                  |             |             |                   |             |                        |             |             |             |
| Bronx  | 182         | 25%         | 16.1        | 223              | 29%         | 19.8        | 236               | 31%         | 21.4                   | 286         | 29%         | 25.4        |
| Brooklyn   | 171         | 23%         | 8.4         | 145              | 19%         | 7.2         | 147               | 19%         | 7.1                    | 201         | 21%         | 10.0        |
| Manhattan  | 121         | 17%         | 9.2         | 152              | 20%         | 10.9        | 148               | 19%         | 10.5                   | 156         | 16%         | 11.1        |
| Queens   | 140         | 19%         | 7.5         | 111              | 15%         | 5.9         | 102               | 13%         | 5.5                    | 161         | 16%         | 9.0         |
| Staten Island  | 39          | 5%          | 10.5        | 44               | 6%          | 12.5        | 50                | 7%          | 13.9                   | 59          | 6%          | 16.5        |
| Non-New York City  | 61          | 8%          | -           | 67               | 9%          | -           | 64                | 8%          | -                      | 111         | 11%         | -           |
| Missing  | 14          | 2%          | -           | 16               | 2%          | -           | 21                | 3%          | -                      | 6           | 1%          | -           |
| <b>Borough of death</b>  |             |             |             |                  |             |             |                   |             |                        |             |             |             |
| Bronx  | 202         | 28%         | 18.1        | 248              | 33%         | 22.2        | 255               | 33%         | 23.0                   | 308         | 31%         | 27.8        |
| Brooklyn   | 188         | 26%         | 9.2         | 162              | 21%         | 8.0         | 157               | 20%         | 7.6                    | 226         | 23%         | 11.2        |
| Manhattan  | 159         | 22%         | 11.9        | 202              | 27%         | 14.4        | 192               | 25%         | 14.0                   | 219         | 22%         | 16.0        |
| Queens   | 139         | 19%         | 7.4         | 105              | 14%         | 5.6         | 119               | 15%         | 6.4                    | 167         | 17%         | 9.3         |
| Staten Island  | 40          | 5%          | 10.7        | 41               | 5%          | 11.7        | 45                | 6%          | 12.6                   | 60          | 6%          | 16.8        |
| <b>Neighborhood poverty^</b>                                       |             |             |             |                  |             |             |                   |             |                        |             |             |             |
| Low (wealthiest)   | 99          | 14%         | 7.5         | 73               | 10%         | 5.5         | 82                | 11%         | 6.0                    | 102         | 10%         | 7.8         |
| Medium   | 170         | 23%         | 6.7         | 172              | 23%         | 6.8         | 161               | 21%         | 6.3                    | 218         | 22%         | 8.8         |
| High   | 180         | 25%         | 10.9        | 205              | 27%         | 12.3        | 183               | 24%         | 11.0                   | 229         | 23%         | 13.6        |
| Very High  | 204         | 28%         | 17.0        | 221              | 29%         | 18.4        | 255               | 33%         | 21.5                   | 311         | 32%         | 25.7        |
| Non-New York City/Missing  | 75          | 10%         | -           | 87               | 11%         | -           | 87                | 11%         | -                      | 120         | 12%         | -           |
| <b>Top 5 NYC neighborhoods^^</b>                                   |             |             |             | <b>2019 rate</b> |             |             | <b>2020* rate</b> |             |                        |             |             |             |
|  |             |             |             |                  |             | 38.2        |                   |             | Crotona-Tremont        |             | 43.3        |             |
|  |             |             |             |                  |             | 31.0        |                   |             | Highbridge-Morrisania  |             | 36.0        |             |
|  |             |             |             |                  |             | 30.7        |                   |             | Hunts Point-Mott Haven |             | 30.2        |             |
|  |             |             |             |                  |             | 25.5        |                   |             | Fordham-Bronx Park     |             | 26.7        |             |
|  |             |             |             |                  |             | 22.1        |                   |             | East Harlem            |             | 25.6        |             |

\*Data for 2020 are provisional and 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.

^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 2008-2012, 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, 2017-2020\***

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 2000-2019 updated October 2020. 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.

|  | 2017        |             |             | 2018        |             |             | 2019        |             |             | 2020*       |             |             |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|  | Number      | Percent     | Rate        |
| <b>Total Unintentional Drug Poisoning Deaths</b>                             | <b>1482</b> | <b>100%</b> | <b>21.6</b> | <b>1452</b> | <b>100%</b> | <b>21.2</b> | <b>1497</b> | <b>100%</b> | <b>21.9</b> | <b>2062</b> | <b>100%</b> | <b>30.5</b> |
| <b>Total Unintentional Drug Poisoning Deaths Involving Opioid Analgesics</b> | <b>210</b>  | <b>14%</b>  | <b>3.1</b>  | <b>151</b>  | <b>10%</b>  | <b>2.2</b>  | <b>178</b>  | <b>12%</b>  | <b>2.5</b>  | <b>325</b>  | <b>16%</b>  | <b>4.8</b>  |
| <b>Sex</b>   |             |             |             |             |             |             |             |             |             |             |             |             |
| Male   | 152         | 72%         | 4.7         | 110         | 73%         | 3.4         | 108         | 61%         | 3.2         | 234         | 72%         | 7.2         |
| Female   | 58          | 28%         | 1.7         | 41          | 27%         | 1.1         | 70          | 39%         | 1.8         | 91          | 28%         | 2.6         |
| <b>Race/ethnicity†</b>   |             |             |             |             |             |             |             |             |             |             |             |             |
| Asian and Pacific Islander   | 5           | 2%          | 0.5         | 3           | 2%          | 0.3         | 1           | 1%          | 0.1         | 3           | 1%          | 0.3         |
| Black  | 41          | 20%         | 2.7         | 24          | 16%         | 1.3         | 32          | 18%         | 2.0         | 68          | 21%         | 4.2         |
| Latino/a   | 50          | 24%         | 2.6         | 46          | 30%         | 2.4         | 51          | 29%         | 2.6         | 85          | 26%         | 4.5         |
| White  | 113         | 54%         | 5.3         | 77          | 51%         | 3.5         | 93          | 52%         | 4.2         | 158         | 49%         | 7.5         |
| Other/Missing  | 1           | 0%          | -           | 1           | 1%          | -           | 1           | 1%          | -           | 11          | 3%          | -           |
| <b>Age group (years)</b>   |             |             |             |             |             |             |             |             |             |             |             |             |
| 15-24  | 15          | 7%          | 1.5         | 4           | 3%          | 0.4         | 5           | 3%          | 0.5         | 13          | 4%          | 1.4         |
| 25-34  | 43          | 20%         | 2.9         | 34          | 23%         | 2.3         | 48          | 27%         | 3.2         | 59          | 18%         | 4.0         |
| 35-44  | 43          | 20%         | 3.7         | 31          | 21%         | 2.7         | 31          | 17%         | 2.7         | 71          | 22%         | 6.2         |
| 45-54  | 55          | 26%         | 5.1         | 35          | 23%         | 3.3         | 35          | 20%         | 3.4         | 81          | 25%         | 7.9         |
| 55-64  | 42          | 20%         | 4.2         | 32          | 21%         | 3.2         | 47          | 26%         | 4.7         | 74          | 23%         | 7.4         |
| 65-84  | 12          | 6%          | 1.1         | 15          | 10%         | 1.4         | 12          | 7%          | 1.1         | 27          | 8%          | 2.5         |
| <b>Age group (years)</b>   |             |             |             |             |             |             |             |             |             |             |             |             |
| 15-34  | 58          | 28%         | 2.3         | 38          | 25%         | 1.5         | 53          | 30%         | 2.2         | 72          | 22%         | 3.0         |
| 35-54  | 98          | 47%         | 4.4         | 66          | 44%         | 3.0         | 66          | 37%         | 3.0         | 152         | 47%         | 7.0         |
| 55-84  | 54          | 26%         | 2.6         | 47          | 31%         | 2.3         | 59          | 33%         | 2.8         | 101         | 31%         | 4.8         |
| <b>Borough of residence</b>  |             |             |             |             |             |             |             |             |             |             |             |             |
| Bronx  | 43          | 20%         | 3.8         | 28          | 19%         | 2.4         | 43          | 24%         | 3.8         | 72          | 22%         | 6.5         |
| Brooklyn   | 51          | 24%         | 2.6         | 35          | 23%         | 1.9         | 39          | 22%         | 1.8         | 74          | 23%         | 3.7         |
| Manhattan  | 30          | 14%         | 2.3         | 30          | 20%         | 2.1         | 27          | 15%         | 1.9         | 45          | 14%         | 3.1         |
| Queens   | 38          | 18%         | 2.0         | 25          | 17%         | 1.4         | 28          | 16%         | 1.5         | 59          | 18%         | 3.3         |
| Staten Island  | 30          | 14%         | 8.1         | 21          | 14%         | 5.8         | 22          | 12%         | 5.9         | 40          | 12%         | 10.8        |
| Non-New York City  | 17          | 8%          | -           | 12          | 8%          | -           | 16          | 9%          | -           | 32          | 10%         | -           |
| Missing  | 1           | 0%          | -           | 0           | 0%          | 0.0         | 3           | 2%          | -           | 3           | 1%          | -           |
| <b>Borough of death</b>  |             |             |             |             |             |             |             |             |             |             |             |             |
| Bronx  | 52          | 25%         | 4.6         | 30          | 20%         | 2.7         | 45          | 25%         | 3.9         | 79          | 24%         | 7.2         |
| Brooklyn   | 51          | 24%         | 2.6         | 40          | 26%         | 2.1         | 43          | 24%         | 2.0         | 81          | 25%         | 4.0         |
| Manhattan  | 36          | 17%         | 2.8         | 34          | 23%         | 2.3         | 35          | 20%         | 2.5         | 62          | 19%         | 4.4         |
| Queens   | 41          | 20%         | 2.2         | 27          | 18%         | 1.5         | 32          | 18%         | 1.7         | 61          | 19%         | 3.4         |
| Staten Island  | 30          | 14%         | 8.2         | 20          | 13%         | 5.5         | 23          | 13%         | 6.1         | 42          | 13%         | 11.5        |
| <b>Neighborhood poverty^</b>   |             |             |             |             |             |             |             |             |             |             |             |             |
| Low (wealthiest)   | 39          | 19%         | 3.0         | 27          | 18%         | 1.8         | 41          | 23%         | 3.0         | 67          | 21%         | 4.9         |
| Medium   | 64          | 30%         | 2.6         | 48          | 32%         | 1.9         | 49          | 28%         | 1.9         | 85          | 26%         | 3.7         |
| High   | 47          | 22%         | 2.8         | 34          | 23%         | 2.2         | 26          | 15%         | 1.4         | 62          | 19%         | 3.7         |
| Very High  | 42          | 20%         | 3.6         | 30          | 20%         | 2.3         | 43          | 24%         | 3.4         | 76          | 23%         | 6.2         |
| Non-New York City/Missing  | 18          | 9%          | -           | 12          | 8%          | -           | 19          | 11%         | -           | 35          | 11%         | -           |

\*Data for 2020 are provisional and 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.

^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 2008-2012, 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, 2020\***

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 2000-2019 updated October 2020. 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 other opioid** |             |             | Unintentional drug poisoning (overdose) deaths involving fentanyl, cocaine, no heroin** |             |             | Unintentional drug poisoning (overdose) deaths involving fentanyl, cocaine, no other opioid** |             |             |
|---|---|-------------|-------------|--|-------------|-------------|---|-------------|-------------|---|-------------|-------------|
|   | Number  | Percent     | Rate        | Number   | Percent     | Rate        | Number  | Percent     | Rate        | Number  | Percent     | Rate        |
| <b>Total Unintentional Drug Poisoning Deaths</b>              | <b>2062</b>   | <b>100%</b> | <b>30.5</b> | <b>2062</b>  | <b>100%</b> | <b>30.5</b> | <b>2062</b>   | <b>100%</b> | <b>30.5</b> | <b>2062</b>   | <b>100%</b> | <b>30.5</b> |
| <b>Total Unintentional Drug Poisoning Deaths by Drug Type</b> | <b>1580</b>   | <b>77%</b>  | <b>23.4</b> | <b>553</b>   | <b>27%</b>  | <b>8.2</b>  | <b>359</b>  | <b>17%</b>  | <b>5.3</b>  | <b>309</b>  | <b>15%</b>  | <b>4.6</b>  |
| <b>Sex</b>  |   |             |             |  |             |             |   |             |             |   |             |             |
| Male  | 1252  | 79%         | 38.7        | 453  | 82%         | 14.1        | 279   | 78%         | 8.7         | 244   | 79%         | 7.6         |
| Female  | 328   | 21%         | 9.4         | 100  | 18%         | 2.9         | 80  | 22%         | 2.2         | 65  | 21%         | 1.8         |
| <b>Race/ethnicity†</b>  |   |             |             |  |             |             |   |             |             |   |             |             |
| Asian and Pacific Islander                                    | 20  | 1%          | 2.2         | 11   | 2%          | 1.2         | 7   | 2%          | 0.8         | 5   | 2%          | 0.5         |
| Black   | 461   | 29%         | 28.7        | 189  | 34%         | 11.9        | 133   | 37%         | 8.3         | 121   | 39%         | 7.5         |
| Latino/a  | 508   | 32%         | 26.8        | 177  | 32%         | 9.4         | 125   | 35%         | 6.6         | 104   | 34%         | 5.5         |
| White   | 526   | 33%         | 24.9        | 154  | 28%         | 7.4         | 80  | 22%         | 4.0         | 65  | 21%         | 3.3         |
| Other/Missing   | 65  | 4%          | -           | 22   | 4%          | -           | 14  | 4%          | -           | 14  | 5%          | -           |
| <b>Age group (years)</b>                                      |   |             |             |  |             |             |   |             |             |   |             |             |
| 15-24   | 87  | 6%          | 9.1         | 38   | 7%          | 4.0         | 15  | 4%          | 1.6         | 11  | 4%          | 1.1         |
| 25-34   | 307   | 19%         | 20.7        | 123  | 22%         | 8.3         | 70  | 19%         | 4.7         | 56  | 18%         | 3.8         |
| 35-44   | 324   | 21%         | 28.5        | 121  | 22%         | 10.6        | 81  | 23%         | 7.1         | 68  | 22%         | 6.0         |
| 45-54   | 373   | 24%         | 36.3        | 123  | 22%         | 12.0        | 90  | 25%         | 8.8         | 80  | 26%         | 7.8         |
| 55-64   | 392   | 25%         | 39.2        | 127  | 23%         | 12.7        | 91  | 25%         | 9.1         | 84  | 27%         | 8.4         |
| 65-84   | 97  | 6%          | 8.8         | 21   | 4%          | 1.9         | 12  | 3%          | 1.1         | 10  | 3%          | 0.9         |
| <b>Borough of residence</b>                                   |   |             |             |  |             |             |   |             |             |   |             |             |
| Bronx   | 430   | 27%         | 38.4        | 164  | 30%         | 14.5        | 120   | 33%         | 10.7        | 110   | 36%         | 9.8         |
| Brooklyn  | 336   | 21%         | 16.6        | 105  | 19%         | 5.2         | 68  | 19%         | 3.4         | 59  | 19%         | 2.9         |
| Manhattan   | 256   | 16%         | 18.3        | 93   | 17%         | 6.7         | 61  | 17%         | 4.3         | 51  | 17%         | 3.6         |
| Queens  | 256   | 16%         | 14.2        | 92   | 17%         | 5.2         | 50  | 14%         | 2.9         | 41  | 13%         | 2.3         |
| Staten Island   | 94  | 6%          | 26.3        | 22   | 4%          | 6.3         | 15  | 4%          | 4.3         | 10  | 3%          | 2.9         |
| Non-New York City   | 198   | 13%         | -           | 72   | 13%         | -           | 41  | 11%         | -           | 35  | 11%         | -           |
| Missing   | 10  | 1%          | -           | 5  | 1%          | -           | 4   | 1%          | -           | 3   | 1%          | -           |
| <b>Borough of death</b>                                       |   |             |             |  |             |             |   |             |             |   |             |             |
| Bronx   | 464   | 29%         | 41.9        | 179  | 32%         | 16.0        | 132   | 37%         | 11.8        | 119   | 39%         | 10.6        |
| Brooklyn  | 382   | 24%         | 18.9        | 113  | 20%         | 5.6         | 72  | 20%         | 3.6         | 59  | 19%         | 3.0         |
| Manhattan   | 367   | 23%         | 26.6        | 135  | 24%         | 9.9         | 86  | 24%         | 6.4         | 74  | 24%         | 5.5         |
| Queens  | 272   | 17%         | 15.1        | 103  | 19%         | 5.9         | 55  | 15%         | 3.1         | 48  | 16%         | 2.7         |
| Staten Island   | 95  | 6%          | 26.7        | 23   | 4%          | 6.6         | 14  | 4%          | 4.1         | 9   | 3%          | 2.6         |
| <b>Neighborhood poverty^</b>                                  |   |             |             |  |             |             |   |             |             |   |             |             |
| Low (wealthiest)  | 171   | 11%         | 12.9        | 54   | 10%         | 4.0         | 34  | 9%          | 2.6         | 24  | 8%          | 1.8         |
| Medium  | 383   | 24%         | 15.7        | 122  | 22%         | 5.1         | 75  | 21%         | 3.0         | 59  | 19%         | 2.4         |
| High  | 343   | 22%         | 20.1        | 126  | 23%         | 7.3         | 75  | 21%         | 4.4         | 68  | 22%         | 4.0         |
| Very High   | 467   | 30%         | 38.7        | 170  | 31%         | 14.1        | 128   | 36%         | 10.7        | 118   | 38%         | 9.8         |
| Non-New York City/Missing                                     | 216   | 14%         | -           | 81   | 15%         | -           | 47  | 13%         | -           | 40  | 13%         | -           |

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†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.

^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 2008-2012, in four groups: low (<10%), medium (10% - < 20%), high (20% - < 30%), and very high poverty (>=30%).

\*\*Other substances may be present unless otherwise specified