

# **New York State**

# **Opioid Annual Data Report**

2021

**New York State Department of Health** 

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#### Introduction

Public Health Law Section 3309(5)<sup>1</sup> requires the New York State (NYS) Commissioner of Health to publish findings on statewide opioid overdose data annually. In this report, the New York State Department of Health (NYSDOH) provides an overview of opioid-related mortality and morbidity across NYS, including:

- Opioid overdose deaths
- Naloxone administration encounters
- Opioid overdose hospitalizations and emergency department (ED) visits
- Treatment admissions for opioid dependency
- Opioid prescribing
- Prevalence of opioid use behaviors and opioid dependency

Opioids include both prescription opioid pain relievers such as hydrocodone, oxycodone, fentanyl and morphine, as well as illegal opioids such as heroin, illicitly manufactured fentanyl and fentanyl analogues, and opium.

Most of the data in this report are presented at the state level. County-level data are available in the New York State County Opioid Quarterly Reports on the NYSDOH Opioid-related Data website.<sup>2</sup>

This report provides information to assist agencies and programs across the state in planning and tailoring interventions to address the ongoing opioid crisis.

Please direct questions or requests for additional information to opioidprevention@health.ny.gov.

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<sup>&</sup>lt;sup>1</sup> https://www.nvsenate.gov/legislation/laws/PBH/3309 [Accessed July 2021].

<sup>&</sup>lt;sup>2</sup> Opioid-related Data in New York State. New York State Department of Health website. <a href="https://health.ny.gov/statistics/opioid/">https://health.ny.gov/statistics/opioid/</a>

# Glossary

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Acronym/Abbreviation	Definition
AI	AIDS Institute
BLS	Basic Life Support
BNE	Bureau of Narcotic Enforcement
CDC	Centers for Disease Control and Prevention
CDS	Client Data System (OASAS)
CFR	Certified First Responders
CNS	Clinical Nurse Specialist
COOP	Community Opioid Overdose Prevention
DEA	Drug Enforcement Administration
ED	Emergency Department
EMS	Emergency Medical Services
EMT	Emergency Medical Technician
e-PCR	Electronic Pre-hospital Care Reports
ICD-9	International Classification of Disease, Ninth Revision
ICD-10	International Classification of Disease, Tenth Revision
I-STOP	Internet System for Tracking Over Prescribing
LA	Long-acting
LE	Law Enforcement
LM	Licensed Midwife
MME	Morphine Milligram Equivalents
NAS	Neonatal Abstinence Syndrome
NEMSIS	National EMS Information Systems
NYCDOHMH	New York City Department of Health and Mental Hygiene
NH	Non-Hispanic
NP	Nurse Practitioner
NSDUH	National Survey on Drug Use and Health
NYC	New York City
NYS	New York State
NYSDOH	New York State Department of Health
NYS excluding NYC	New York State excluding New York City
OASAS	Office of Addiction Services and Supports
OUD	Opioid Use Disorder
PA	Physician's Assistant
PCR	Pre-hospital Care Report
PEP	Population Estimates Program
PMP	Prescription Monitoring Program
SA	Short-acting
SAMHSA	Substance Abuse and Mental Health Services Administration
SOOTM	Synthetic Opioids Other Than Methadone
SPARCS	Statewide Planning and Research Cooperative System
LIC	United States

**United States** 

### **Executive Summary**

This report aims to provide a comprehensive overview of opioid-related data for NYS residents. It presents the most recent and complete information available on opioid-related overdose deaths and death rates by age, gender, ethnicity – for the whole state and by geographic location. Overall data on emergency department and hospital utilization for the treatment of opioid overdoses, abuse, and dependency are provided, as well as data on the volume of naloxone (opioid antagonist) administrations by pre-hospital services (emergency medical services, law enforcement, and community programs). Statewide information is also presented, from the NYS Office of Addiction Services and Supports (OASAS), on admissions to substance use disorder treatment programs for heroin and for any opioid reported as the primary, secondary, or tertiary substance of abuse at admission. Prescription monitoring program data on dispensed opioid analgesic and benzodiazepine prescriptions are provided, as are data on prescription opioids for outpatient treatment, for the state total and by age, gender, and region. Finally, population-based survey data on illicit drug use, heroin use, and pain reliever misuse are presented.

Depending on the data source, several types of estimates are presented in this report. Rates per 100,000 population are used for mortality and morbidity, while rates per 1,000 population are used for opioid prescriptions. Percentages are used for survey-related data, and for several other opioid prescription-related indicators.

Rates and percentages using the NYS population in this report are based on annual population estimates from the United States (US) Census Bureau's Population Estimates Program (PEP). The PEP estimates for the NYS total population for 2010 to 2020 are based on the 2010 Census and display a downward trend in recent years. However, preliminary 2020 Census results indicate an increase in the 2020 NYS population estimates. In 2022, the Census Bureau is scheduled to release the revised Intercensal Estimates for 2010 to 2020, which will incorporate the results of the 2020 Census and become the official estimates of the decade.<sup>3</sup> The official population estimates in the upcoming 2010-2020 Intercensal Estimates may be different from the numbers currently used in the Opioid Annual Report 2021. Future reports using the official 2010-2020 Intercensal Estimates for the NYS population may depict lower rates and percentages for certain years.

County maps are provided throughout the report. The county colors are based on the ranks of county rates, from the lowest to the highest, as follows:

- The YELLOW category includes 50 percent of counties with the lowest estimates; those in quartile 1 and quartile 2;
- The BLUE category includes 25 percent of counties with the highest estimates; those in quartile 4; and
- The GREEN category includes counties between the lowest 50 percent and the highest 25 percent (i.e., 25 percent of counties or those in quartile 3).

For detailed methodology, data sources, indicator descriptions, suppression criteria, and limitations please see the Methods section at the end of this report.

<sup>&</sup>lt;sup>3</sup> United States Census Bureau. 2021. Schedule. [online] Available at < <a href="https://www.census.gov/programs-surveys/popest/about/schedule.html">https://www.census.gov/programs-surveys/popest/about/schedule.html</a> [Accessed November 2021].

#### **Opioid Mortality**

Among NYS residents, the number of overdose deaths involving any opioid increased each year between 2010 and 2017, with an overall increase of 200.2 percent from 1,074 in 2010 to 3,224 in 2017. In 2019, 2,939 overdose deaths involving any opioid occurred among NYS residents. The 2019 age-adjusted rate of 14.9 deaths involving any opioid per 100,000 population in NYS is nearly triple that of 5.4 in 2010. The crude rate was highest among the 25-44 year-old age group (27.1 per 100,000), and the age-adjusted rates were highest among males (22.1 per 100,000), White non-Hispanic individuals (17.3 per 100,000), and residents of NYS excluding NYC (17.0 per 100,000). The number of overdose deaths involving commonly prescribed opioids, including medications such as Vicodin or Oxycodone, increased by 41.7 percent, from 737 deaths in 2010 to 1,044 in 2017. This was followed by a 10.1 percent decrease in 2019 to 939 deaths involving commonly prescribed opioids. Most of the opioid-related mortality trends have been driven by deaths involving synthetic opioids other than methadone (SOOTM, predominantly illicitly manufactured fentanyl), which had an overall increase of 1,251.4 percent from 2010 to 2019. Furthermore, preliminary data (Opioid Quarterly reports) indicated that opioid overdoses increased significantly in 2020.

The number of overdose deaths involving cocaine in NYS increased from 388 overdose deaths in 2010 to 1,320 deaths in 2019 – a 240.2 percent increase. Between 2018 (1,276 deaths) and 2019 (1,320 deaths), the number of overdose deaths involving cocaine increased by 3.4 percent. Deaths involving both cocaine and SOOTM increased from 18 in 2010 to 858 in 2019, a 4,666.7 percent increase, while the number of deaths involving cocaine without SOOTM increased by 24.9 percent for the same time period (from 370 to 462). This indicates the increase in overdose deaths involving cocaine has been driven by the presence of opioids, specifically fentanyl. Similar trends are being observed in NYC<sup>5</sup> and across the country. <sup>6</sup>

It is important to note that although there have been increases in the number of overdose deaths involving any opioid through 2017, as well as increases in overdose deaths involving cocaine and SOOTM through 2019, some of these observed increases have likely been due to raised awareness of opioid overdoses, improvements in technology and resources for toxicology testing, and improved cause-of-death reporting.

#### Naloxone Administration

There were 16,011 unique naloxone administrations reported electronically by Emergency Medical Services (EMS) agencies during 2020, representing a 27.6 percent increase from 12,552 administrations in 2019. There was a 30.5 percent increase in NYC, and a 24.4 percent increase in NYS excluding NYC. Administrations were higher on Thursdays, Fridays, and Saturdays,

<sup>&</sup>lt;sup>4</sup> Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2019 on CDC WONDER Online Database [Accessed June 2021].

<sup>&</sup>lt;sup>5</sup> Nolan ML, Tuazon E, Paone D. Unintentional Drug Poisoning (Overdose) Deaths in New York City in 2019. New York City Department of Health and Mental Hygiene: Epi Data Brief (122); December 2020. https://www1.nyc.gov/assets/doh/downloads/pdf/epi/databrief122.pdf.

<sup>&</sup>lt;sup>6</sup> Increase in Fatal Drug Overdoses Across the United States Driven by Synthetic Opioids Before and During the COVID-19 Pandemic". December 2020. Centers for Disease Control and Prevention. Health Advisory. <a href="https://emergency.cdc.gov/han/2020/han00438.asp">https://emergency.cdc.gov/han/2020/han00438.asp</a>.

highlighting a need for individuals using substances such as opioids to obtain naloxone in their communities and have it available over weekends. The distribution of unique administrations was roughly even across months of the year, with counts slightly higher during the summer months (data not shown). For information about EMS naloxone administrations prior to 2019, please see the Opioid Annual Report, 2020.

NYS is a leader in the implementation of public health programming to prevent death from opioid overdoses. Through the Department of Health's Office of Drug User Health, it uses a harm reduction approach with programmatic roots in the State's network of 25 syringe exchange programs. It also has an emphasis on expanding access to Medication for Opioid Use Disorder, including buprenorphine and methadone. These medications prevent death from overdose. The State's multi-pronged approach also includes a focus on building overdose response capacity within communities throughout the state. The core of this program is for community laypersons to be trained by organizations registered with the NYSDOH to administer naloxone (an opioid antagonist also known by the brand name Narcan) in the event of a suspected opioid overdose. There are currently more than 850 registered Community Opioid Overdose Prevention (COOP) programs, with over 700,000 individuals trained by them since the initiative's inception in 2006. Of these, 100,000 were public safety personnel and the rest were community responders. In 2020, there were 1,768 naloxone administration reports by law enforcement (LE) to the NYSDOH and 2,027 reports by COOP programs. In total, including unique administrations by EMS agencies, there were 19,806 reported naloxone administrations in NYS in 2020. For additional information about the State's Harm Reduction programs, please see the Opioid Annual Report, 2020.

#### Opioid Burden

The NYSDOH combines multiple data sources to collectively measure opioid events that represent the overall health burden of opioids within NYS. These data sources for opioid burden include opioid overdose deaths, and non-fatal outpatient ED visits and hospital discharges involving opioid overdose, abuse, dependence and unspecified use. Among NYS residents, opioid burden decreased 11.8 percent from 55,223 events in 2018 to 48,729 in 2019, with a decrease in the crude rate from 282.8 per 100,000 population to 250.5 per 100,000 population. The rate in 2019 was highest among those 25-44 years of age (513.1 per 100,000), and among Black non-Hispanic individuals (252.5 per 100,000); rates among Hispanic and White non-Hispanic individuals were nearly as high. The rate was more than two and a half times higher among males (367.1 per 100,000) than among females (140.3 per 100,000). NYC had a higher rate (276.0 per 100,000) than NYS excluding NYC (231.4 per 100,000). The counties with the highest rates for opioid burden, listed in descending order by 2019 rate, included Chautauqua, Bronx, Ulster, Sullivan, Greene, Dutchess, Chemung, Broome, Richmond, New York, Niagara, Onondaga, Albany, Rensselaer, Suffolk, and Monroe.

#### **Opioid Morbidity**

Among NYS residents, the number of newborns with Neonatal Abstinence Syndrome (NAS) and/or affected by maternal use of drugs of addiction decreased 23.4 percent from 1,885 in 2018 to 1,444 in 2019, and the crude rate per 1,000 newborn discharges decreased from 9.4 to 7.2.

Among NYS residents, the number of hospital discharges for opioid use (including overdose, abuse, dependence and unspecified use) decreased by 13.2 percent from 23,814 in 2018 to

20,674 in 2019, and the crude rate per 100,000 population decreased from 121.9 to 106.3 respectively. The rate in 2019 was highest among the 25-44 year-old age group (214.6 per 100,000) and among Hispanic individuals (115.0 per 100,000). The rate was two and a half times higher among males (154.3 per 100,000) than among females (60.9 per 100,000). NYC had a higher rate (114.0 per 100,000) than NYS excluding NYC (100.5 per 100,000).

In 2019, there were 10,619 visits to EDs due to an opioid overdose among NYS residents, a 5.0 percent decrease from 2018 (11,178 visits). The crude rate per 100,000 decreased from 57.2 in 2018 to 54.6 in 2019. The rate in 2019 was highest among the 25-44 year-old age group (102.5 per 100,000) and among White non-Hispanic individuals (56.9 per 100,000). The rate was more than two times higher among males (76.1 per 100,000) than among females (34.2 per 100,000). NYC had a lower rate (44.4 per 100,000) than NYS excluding NYC (62.2 per 100,000).

#### Office of Addiction Services and Supports Client Data

The NYS Office of Addiction Services and Supports (OASAS) provided data on admissions for any opioid between 2010-2020. The source of this information is the Client Data System (CDS) which collects data on people treated in all OASAS-certified chemical dependence treatment programs. Data are collected at admission and discharge from a level of care within a provider in NYS. The CDS does not have data for individuals who get treated by the US Department of Veterans Affairs, go outside NYS for treatment, are admitted to hospitals but not to an OASAS-certified treatment program, or receive medication addiction treatment from a physician outside the OASAS system of care.

Because a significant amount of time often elapses from an individual's initial use of an opioid and their admission to treatment, OASAS considers the number of admissions to treatment for opioids to be a trailing indicator of the prevalence of opioid abuse. Additionally, admissions data for 2020 were impacted by COVID-19 and do not represent a typical year for admissions.

During 2020, there were more than 84,000 admission for any opioid by state residents to the OASAS-certified chemical dependence treatment programs. Statewide, the crude rate of admissions for any opioid was 505.2 per 100,000 population. In 2020, admission rates were over two times higher among males (754.8 per 100,000) than females (273.4 per 100,000). Rates of admission were also higher among New Yorkers aged 25-34 years (1,081.9 per 100,000) and among Hispanic individuals (650.0 per 100,000). During 2020, the counties with the highest crude rates of admissions for treatment for opioids were mostly rural counties. It is important to recognize that admissions rates are affected by the availability of treatment at the local level.

#### Prescription Monitoring Program

In 2020, more than six million opioid analgesic prescriptions were dispensed to NYS residents. The crude rate of opioid analgesics declined from 457.9 prescriptions per 1,000 population in 2016<sup>7</sup> to 319.1 per 1,000 in 2020. The rate for opioid analgesic prescriptions was higher in NYS excluding NYC (412.9 per 1,000) than in NYC (192.9 per 1,000) for 2020.

<sup>&</sup>lt;sup>7</sup> New York State Opioid Data Dashboard <a href="https://webbi1.health.ny.gov/SASStoredProcess/guest?">https://webbi1.health.ny.gov/SASStoredProcess/guest?</a> program=/EBI/PHIG/apps/opioid dashboard/op dashboard &p=tbl&ind\_id=op61 [Accessed August 2021].

Observed differences in filled prescription patterns and trends during 2020 are noted throughout this report. Some of these anomalies in the trends can be attributed to the impacts of the COVID-19 pandemic, with many being most notable during the second quarter of 2020. At that time there were statewide declines in ED visits due to patients heeding directives from public health authorities to stay home, as well as a moratorium on elective surgeries that would likely have impacted opioid prescribing.

Initiating treatment for chronic pain with long-acting or extended-release opioids is associated with higher risk of overdose than the initiation of treatment with immediate-release opioids. The number of incidents in which patients were both opioid-naïve and received long-acting opioid prescriptions declined between 2018 (38,165) and 2020 (18,378) in NYS. During 2018-2020, the percentage of patients, who were opioid-naïve, and receiving long-acting opioid prescriptions for the initiation of treatment, was consistently higher in NYS excluding NYC than in NYC.

Opioid use for acute pain is associated with long-term opioid use, and physical dependence on opioids is an expected physiologic response in patients exposed to opioids for more than a few days. In July 2016, NYS limited the initial prescribing of opioids for acute pain to no more than a seven-day supply. In NYS, opioid prescriptions for more than a seven-day supply decreased among opioid-naïve patients from 26.5 percent in the first quarter of 2018 to 14.8 percent in the fourth quarter of 2020.

In NYS, a substantial reduction occurred in the crude rate of patients who received opioid prescriptions from five or more prescribers at five or more pharmacies in a six-month period ("doctor shoppers") between 2017 (1.5 per 100,000 population) and 2020 (0.8 per 100,000).

Opioid analgesics prescribed in higher dosages ( $\geq$  90 morphine milligram equivalents (MME)) are associated with higher risks of overdose and death.<sup>8</sup> In NYS, the percentage of patients receiving one or more opioid analgesic prescriptions with a total daily dose of 90 or greater MME for at least one day, declined between 2017 (12.5 percent) and 2020 (10.8 percent). Statewide, patients aged 55-64 years had the highest percentage for both males (15.5 percent) and females (13.5 percent).

The risk of opioid overdose increases when taken in combination with other drugs, including benzodiazepines (e.g., Xanax® [alprazolam], Valium® [diazepam]).8 Among patients receiving at least one prescription for opioid analgesics or at least one for benzodiazepines, the percentage with two or more calendar days of overlapping opioid analgesic and benzodiazepine prescriptions declined between 2017 (9.3 percent) and 2020 (8.4 percent) in NYS. From 2017-2020, NYS excluding NYC had consistently higher percentages of overlapping prescriptions compared to NYC. Statewide, the percentage was higher among those aged 65 and older for both male (10.3 percent) and female (12.2 percent) patients in 2020.

<sup>&</sup>lt;sup>8</sup> Dowell D, Haegerich TM, Chou R. CDC Guideline for Prescribing Opioids for Chronic Pain — United States, 2016. MMWR Recomm Rep 2016;65(No. RR-1): 1–49. https://www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm.

<sup>&</sup>lt;sup>9</sup> New Legislation Enacted to Limit Initial Opioid Prescribing to a 7 Day Supply for Acute Pain. <a href="https://www.health.ny.gov/professionals/narcotic/laws">https://www.health.ny.gov/professionals/narcotic/laws</a> and regulations/[Accessed August 2021].

Among patients in NYS receiving one or more opioid analgesic prescriptions, the percentage with two or more calendar days of overlapping opioid analgesic prescriptions declined between 2017 (16.9 percent) and 2019 (15.9 percent), but slightly increased to 16.3 percent in 2020. From 2017-2020, NYS excluding NYC had consistently higher percentages compared to NYC. In 2020, the percentage was higher among males than females, in all age groups, except among those aged 65 years and older.

In NYS, more than 79,800 patients were prescribed at least one buprenorphine prescription for outpatient treatment of OUD in 2020. The crude rate of buprenorphine prescribing for OUD increased by 21.9 percent from 338.9 per 100,000 population in 2017 to 413.0 per 100,000 in 2020. The rate was more than two times higher in NYS excluding NYC than for NYC during 2017-2020.

#### Use of Opioids and Other Substances

The Substance Abuse and Mental Health Services Administration (SAMHSA) supports the National Survey on Drug Use and Health (NSDUH), an annual nationwide survey involving interviews with approximately 70,000 randomly selected individuals aged 12 years and older. These data are used to provide state and national estimates, track trends in the use of substances, assess the consequences of substance use and abuse, and identify those groups at high risk for OUD. <sup>10</sup> During 2018-2019, 3.1 percent of the population aged 12 years and older in NYS and 3.3 percent in the US reported using illicit drugs other than marijuana in the past month. The percentage reporting use of illicit drugs other than marijuana declined slightly in NYS from 3.3 percent in 2015-2016 to 3.1 percent in 2018-2019.

During 2018-2019, 2.7 percent of the population aged 12 years and older in NYS reported having misused pain relievers in the past year, compared to 3.6 percent in the US. In NYS, between the 2015-2016 and 2018-2019 time periods, the percentage decreased from 3.7 percent to 2.7 percent. In these same time periods, the percentage of respondents who reported heroin use in the past year decreased from 0.4 percent to 0.2 percent in NYS, whereas the US percentage remained steady at 0.3 percent. While reported misuse of pain relievers and heroin decreased, reported cocaine use in the past year increased slightly in NYS, from 2.5 percent in 2015-2016 to 2.6 percent in 2018-2019. For the US overall, the percentage of respondents reporting cocaine use in the past year also increased slightly, from 1.8 percent in 2015-2016 to 2.0 percent in 2018-2019. In 2018-2019, 68.2 percent of respondents in NYS and 70.6 percent in the US, when asked about their risk perceptions, reported the use of cocaine once a month as being a "great risk."

The Youth Risk Behavior Surveillance System (YRBSS) provides data on self-reported lifetime use (reported as "ever used") of cocaine, heroin, methamphetamine, and synthetic marijuana, as well as lifetime injection of an illegal drug, in high school students (9th grade to 12th grade). In 2019, the prevalence of lifetime use for each of these substances among high school students was higher in NYS than in the US (cocaine: 6.3 percent in NYS, 3.9 percent in the US; heroin: 5.8 percent in NYS, 1.8 percent in the US; methamphetamine: 4.9 percent in NYS, 2.1 percent in the US; 1.6 percent in the US; synthetic marijuana: 10.3 percent in NYS, 7.3 percent in the US; injection of an illegal drug: 3.8 percent in NYS). Among high school students in NYS, the prevalence was generally higher among male, Hispanic, and 12th grade students.

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<sup>&</sup>lt;sup>10</sup> National Survey on Drug Use and Health. <a href="https://nsduhweb.rti.org/respweb/homepage.cfm">https://nsduhweb.rti.org/respweb/homepage.cfm</a>. [Accessed June 2020].

Among NYS adult residents, public perception of prescription opioid misuse and abuse and of heroin use remains higher compared to other public health problems, such as alcohol consumption and access to health food and beverages. <sup>11</sup> The percentages of those responding "very serious" to the question of the severity of these public health problems have declined over recent years, possibly indicating a need for more public awareness of the ongoing overdose crisis.

11

https://www.health.ny.gov/statistics/prevention/injury prevention/information for action/docs/2019 pop survey s ummary report.pdf

### 1 - Opioid Overdose Mortality Data

The confirmation and recording of opioid-related deaths are impacted by several factors, including toxicology testing, coroner/medical examiner systems and capacity, resource and funding availability, and county of death. These may result in lack of identification of deaths caused by an opioid overdose, as well as variation in the information available with respect to specific substances involved. However, raised awareness of specific substances involved in overdoses, improvements in technology and resources for toxicology testing, and improved cause-of-death reporting have occurred in recent years. As a result, it is important to note that while there have been increases in the number of overdose deaths, some of the observed early increases are likely due to these improvements.

According to death certificate data reported to the NYSDOH, opioid-related overdose deaths have increasingly involved fentanyl. <sup>12,13</sup> Fentanyl is a potent synthetic opioid with medical uses; as such, it is classified in the International Classification of Disease, Tenth Revision (ICD-10) category "synthetic opioids (other than methadone)" (SOOTM) under ICD-10 code T40.4, along with other synthetic opioid analgesics, such as tramadol. Fentanyl is 50-100 times more potent than morphine. <sup>14</sup> Prescription fentanyl is primarily prescribed to manage acute and chronic pain associated with advanced cancer. Non-pharmaceutical grade fentanyl is illicitly manufactured. Illegal fentanyl is often mixed with heroin or cocaine, and has also been identified in counterfeit pills, formed to look like oxycodone and other prescription medications. <sup>15</sup> Because it is not possible to distinguish illicit fentanyl from medically administered fentanyl in postmortem toxicology testing, all fentanyl-related deaths are classified in the same way – as "synthetic opioids (other than methadone)" (SOOTM) – and are assigned ICD-10 code T40.4. Due to the potency of these substances, multiple doses of naloxone, a drug that can reverse the effects of an opioid overdose, are often required to revive individuals who have overdosed on fentanyl or fentanyl analogs.

<sup>&</sup>lt;sup>12</sup> New York State Department of Health. Data to Action: Fentanyl-related deaths in New York State outside of New York City, 2015-2017. <a href="https://www.health.ny.gov/statistics/opioid/data/pdf/nysdoh\_dta1\_fentanyl.pdf">https://www.health.ny.gov/statistics/opioid/data/pdf/nysdoh\_dta1\_fentanyl.pdf</a> [Accessed July 2019].

<sup>&</sup>lt;sup>13</sup> Nolan ML, Mantha S, Tuazon E, Paone D. Unintentional Drug Poisoning (Overdose) Deaths in New York City in 2018. New York City Department of Health and Mental Hygiene: Epi Data Brief (116); August 2019. https://www1.nyc.gov/assets/doh/downloads/pdf/epi/databrief116.pdf [Accessed September 2019].

<sup>&</sup>lt;sup>14</sup> Fentanyl. Centers for Disease Control and Prevention website. https://www.cdc.gov/drugoverdose/opioids/fentanyl.html [Accessed September 2019].

<sup>&</sup>lt;sup>15</sup> Seth P, Rudd RA, Noonan RK, Haegerich TM. "Quantifying the Epidemic of Prescription Opioid Overdose Deaths." American Journal of Public Health 2018;108(4):500-502.

Among NYS residents, there were 2,939 overdose deaths involving any opioid in 2019, a 1.7 percent decline from 2,991 deaths in 2018. The age-adjusted rate of overdose deaths involving any opioid declined 1.3 percent from 15.1 per 100,000 population in 2018 to 14.9 per 100,000 population in 2019. However, the 2019 age-adjusted rate was nearly triple that of 5.4 per 100,000 population in 2010. Furthermore, preliminary data (Opioid Quarterly Reports) indicated that opioid overdoses increased significantly in 2020. It should be noted that categories of opioids and other substances involved in overdose deaths are not mutually exclusive, as a death can involve multiple substances, and that these deaths largely involved SOOTM. In light of this, SOOTM is shown separately from any opioid and from other commonly prescribed opioids (ICD-10 codes T40.2 and T40.3), such as hydrocodone and oxycodone. While the rate of overdose deaths involving any opioid declined in 2019, the rate of overdose deaths involving SOOTM rose by 7.1 percent from 2018 to 2019 (11.2 per 100,000 and 12.0 per 100,000, respectively) (Figure 1.1). Compared to 2018, the age-adjusted rate of overdose deaths per 100,000 population decreased in 2019 for both heroin (9.5 percent) and commonly prescribed opioids (4.1 percent). Between 2018 and 2019, the age-adjusted rate of overdose deaths involving heroin with SOOTM decreased by 4.1 percent, from a rate of 4.9 per 100,000 population to 4.7 per 100,000. Conversely, an opposite pattern was observed for deaths involving cocaine with SOOTM, with the rate increasing by 7.3 percent from 4.1 per 100,000 in 2018 to 4.4 per 100,000 in 2019.

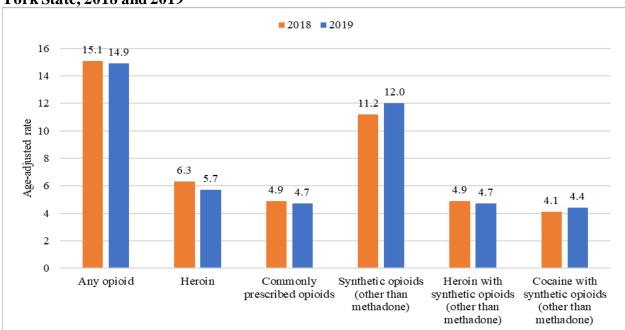


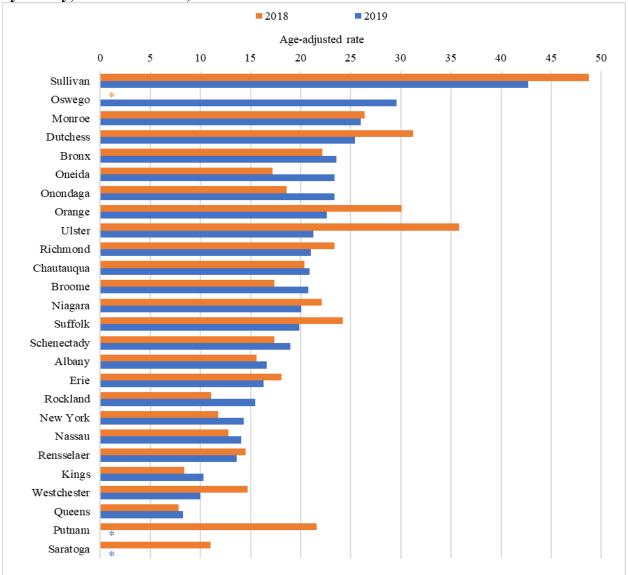
Figure 1.1 Overdose deaths, age-adjusted rate per 100,000 population, by substance, New York State, 2018 and 2019

Multiple cause of death ICD-10 definitions: <u>Any opioid</u> – T40.0 (Opium), T40.1 (Heroin), T40.2 (Other opioids), T40.3 (Methadone), T40.4 (Synthetic opioids (other than methadone)), T40.6 (Other and unspecified narcotics); <u>Heroin</u> – T40.1; <u>Commonly prescribed opioids</u> – T40.2, T40.3 (e.g., hydrocodone, oxycodone); <u>Synthetic opioids (other than methadone)</u> – T40.4; <u>Heroin with synthetic opioids (other than methadone)</u> – T40.1 AND T40.4; <u>Cocaine with synthetic opioids (other than methadone)</u> – T40.5 (cocaine) AND T40.4.

Data source: CDC WONDER; Accessed June 2021 For complete data, see <u>Appendix: Data Table 1.1</u>.

In NYS during 2019, the age-adjusted rate per 100,000 population for overdose deaths involving any opioid was highest in Sullivan County (42.7 per 100,000) (Figure 1.2). Among counties with 20 or more overdose deaths involving any opioid in 2019, the ten counties with the highest age-adjusted rates were located in the Mid-Hudson (Sullivan, Dutchess, Orange, Ulster), Central NY (Oswego, Onondaga), Finger Lakes (Monroe), NYC (Bronx, Richmond), and Mohawk Valley (Oneida) regions.

Figure 1.2 Overdose deaths involving any opioid, age-adjusted rate per 100,000 population, by county, New York State, 2018 and 2019



<sup>\*:</sup> Rates are unreliable for years with fewer than 20 deaths, therefore not shown.

Data source: CDC WONDER; Accessed June 2021

For county data on overdose deaths involving any opioid, see Appendix: Data Table 1.2.

In NYS during 2019, the age-adjusted rate per 100,000 population for overdose deaths involving SOOTM was highest in Sullivan County (35.2 per 100,000) (Figure 1.3). Among counties with 20 or more overdose deaths involving SOOTM in 2019, the ten counties with the highest age-adjusted rates were located in the Mid-Hudson (Sullivan, Dutchess, Orange, Ulster), Central NY (Oswego, Onondaga), Finger Lakes (Monroe), Mohawk Valley (Oneida), NYC (Bronx), and Western NY (Niagara) regions.

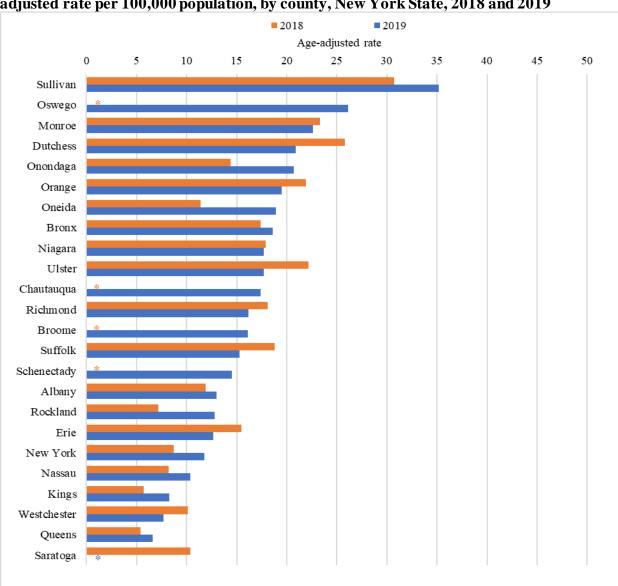


Figure 1.3 Overdose deaths involving synthetic opioids (other than methadone), ageadjusted rate per 100,000 population, by county, New York State, 2018 and 2019

st: Rates are unreliable for years with fewer than 20 deaths, therefore not shown.

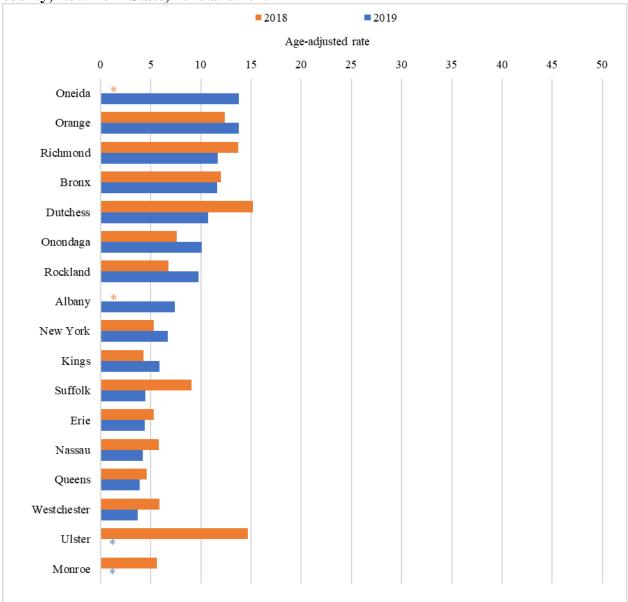
Data source: CDC WONDER; Accessed June 2021

For county data on overdose deaths involving synthetic opioids other than methadone, see <u>Appendix</u>: Data Table 1.3.

<sup>^</sup>Synthetic opioids other than methadone (SOOTM) are identified by ICD-10 code T40.4 and serve as a proxy for fentanyl, which is a highly potent opioid now commonly found in the illicit drug market.

In NYS during 2019, the age-adjusted rate per 100,000 population for overdose deaths involving heroin was highest in Oneida and Orange Counties (both 13.8 per 100,000) (Figure 1.4). Among counties with 20 or more overdose deaths involving heroin in 2019, the ten counties with the highest age-adjusted rates were located in the Mohawk Valley (Oneida), Mid-Hudson (Orange, Dutchess, Rockland), NYC (Richmond, Bronx, New York, Kings), Central NY (Onondaga), and Capital Region (Albany) regions.

Figure 1.4 Overdose deaths involving heroin, age-adjusted rate per 100,000 population, by county, New York State, 2018 and 2019



<sup>\*:</sup> Rates are unreliable for years with fewer than 20 deaths, therefore not shown.

Data source: CDC WONDER; Accessed June 2021

For county data on overdose deaths involving heroin, see Appendix: Data Table 1.4.

In NYS during 2019, most overdose deaths involving any opioid occurred at the decedent's home (61.6 percent) (Figure 1.5). For overdose deaths, knowing the most common place of death can inform programmatic and policy responses.

Inpatient Other. (Medical Facility),  $n = 352^{-}$ n = 243Outpatient or ER (Medical Facility), n = 454 Dead on Arrival (Medical Facility), n = 74Decedent's home, n = 1,811The numbers of deaths occurring in "Hospice facility," "Nursing home/long term care," and "Place of death unknown" are suppressed. The number of deaths occuring in "Medical Facility (Status unknown)" is missing.

Figure 1.5 Overdose deaths involving any opioid, by place of death, New York State, 2019

Data source: CDC WONDER; Accessed June 2021 For complete data, see Appendix: Data Table 1.5.

Because substance and use trends have changed over time, the following figures present long-term trends for overdoses involving selected substances, as well as demographic descriptions of decedents by substance type. These data reflect variation, over time and among different populations, and can inform public health responses.

The age-adjusted rates of overdose death involving SOOTM increased sharply in both NYS and the US, from 1.4 per 100,000 population in NYS and 1.8 per 100,000 in the US in 2014, to 12.0 per 100,000 in NYS and 11.4 per 100,000 in the US in 2019 (Figure 1.6). Compared to 2018, the number of overdoes deaths in 2019 increased in both NYS (6.5 percent) and the US (16.0 percent). <sup>16</sup>

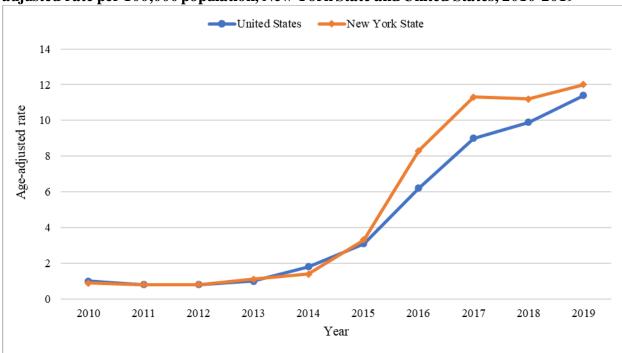


Figure 1.6 Overdose deaths involving synthetic opioids (other than methadone)\*, age-adjusted rate per 100,000 population, New York State and United States, 2010-2019

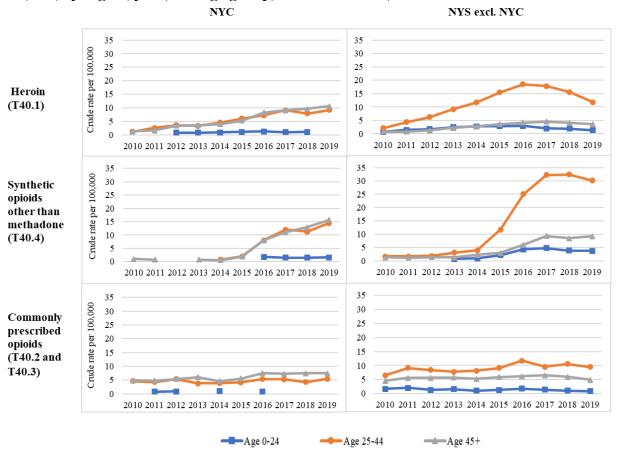
Among New Yorkers aged 25-44 years, the crude rate of overdose deaths involving heroin was lower in NYC than in NYS excluding NYC for every year during 2010-2019 (Figure 1.7). In 2018, the crude rate of overdose deaths involving heroin among those aged 25-44 years was almost two times higher in NYS excluding NYC (15.6 per 100,000 population) than it was in NYC (7.9 per 100,000). In 2019, a 24.4 percent decrease occurred in the rate in NYS excluding NYC (15.6 to 11.8 per 100,000), while NYC experienced an increase of 16.5 percent (7.9 to 9.2 per 100,000 population). Similarly, among New Yorkers aged 25-44 years, the crude rate of overdose deaths involving SOOTM (primarily fentanyl) was lower in NYC than it was in NYS excluding NYC for every year during 2010-2019. The 2019 crude rate of overdose deaths involving fentanyl among those aged 25-44 years was two times higher in NYS excluding NYC (30.1 per 100,000) than it was in NYC (14.5 per 100,000). Compared to 2018, the rate for NYS

<sup>\*</sup>Synthetic opioids other than methadone (SOOTM) are identified by ICD-10 code T40.4 and serve as a proxy for fentanyl, which is a highly potent opioid now commonly found in the illicit drug market. Data source: CDC WONDER; Accessed June 2021 For complete data, see Appendix: Data Table 1.6.

<sup>&</sup>lt;sup>16</sup> Hedegaard H, Miniño AM, Warner M. Drug Overdose Deaths in the United States, 1999–2018. Centers for Disease Control and Prevention. <a href="https://www.cdc.gov/nchs/products/databriefs/db356.htm">https://www.cdc.gov/nchs/products/databriefs/db356.htm</a>. Published January 30, 2020. [Accessed August 2020].

excluding NYC among this age group decreased by 7.1 percent (32.4 to 30.1 per 100,000), while the rate for NYC increased by 28.3 percent (11.3 to 14.5 per 100,000). The crude rate of overdose deaths involving commonly prescribed opioids remained fairly steady among all age groups and across regions during 2010-2019, with the highest rates among those aged 25-44 years residing in NYS excluding NYC.

Figure 1.7 Overdose deaths involving heroin (T40.1), synthetic opioids (other than methadone) (T40.4)\*, and commonly prescribed opioids (T40.2 and T40.3), crude rates per 100,000, by region, year, and age group, New York State, 2010-2019

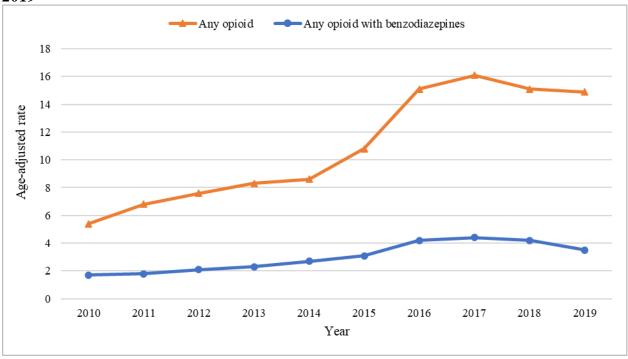


<sup>\*</sup>Synthetic opioids other than methadone (SOOTM) are identified by ICD-10 code T40.4 and serve as a proxy for fentanyl, which is a highly potent opioid now commonly found in the illicit drug market. Note: For years and age groups with fewer than 20 deaths, rates are not shown.

Data source: CDC WONDER; Accessed June 2021 For complete data, see Appendix: Data Table 1.7.

The risk of an opioid overdose increases when opioids are taken in combination with benzodiazepines (e.g., Xanax® [alprazolam], Valium® [diazepam]). In NYS, the age-adjusted rate of overdose deaths involving the concurrent use of any opioids with benzodiazepines increased from 1.7 per 100,000 population in 2010 to 3.5 per 100,000 in 2019 – a smaller increase than was seen over the same period in the age-adjusted rate of overdose death involving any opioid (Figure 1.8). While the rate of overdose death involving any opioid with benzodiazepines increased more slowly than the rate of overdose death involving any opioid, it is important to monitor the involvement of other substances and to provide information to the public about the increased risk of overdose.

Figure 1.8 Overdose deaths involving any opioid and overdose deaths involving any opioid with benzodiazepines, age-adjusted rate per 100,000 population, New York State, 2010-2019



Data source: CDC WONDER; Accessed June 2021 For complete data, see Appendix: Data Table 1.8.

<sup>&</sup>lt;sup>17</sup> Dowell D, Haegerich TM, Chou R. CDC Guideline for Prescribing Opioids for Chronic Pain — United States, 2016. MMWR Recomm Rep 2016;65(No. RR-1):1–49. <a href="https://www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm">https://www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm</a>.

The number of overdose deaths involving cocaine in NYS increased from 388 overdose deaths in 2010 to 1,320 deaths in 2019 – a 240.2 percent increase (Figure 1.9). Between 2018 (1,276 deaths) and 2019 (1,320 deaths), the number of overdose deaths involving cocaine increased by 3.4 percent. The sharp rise since 2012 was largely driven by the involvement of SOOTM (ICD-10 code T40.4), predominantly illicit fentanyl. The number of overdose deaths involving cocaine without SOOTM increased by 52.4 percent, from 370 deaths in 2010 to 564 deaths in 2017, and decreased to 462 deaths in 2019. However, the number of overdose deaths involving cocaine with SOOTM increased by 840 deaths over the ten-year period, marking a 4,666.7 percent increase since 2010. This indicates the increase in overdose deaths involving cocaine has been driven by the presence of opioids, specifically fentanyl. Similar trends are being observed in NYC<sup>18</sup> and across the country.<sup>19</sup>

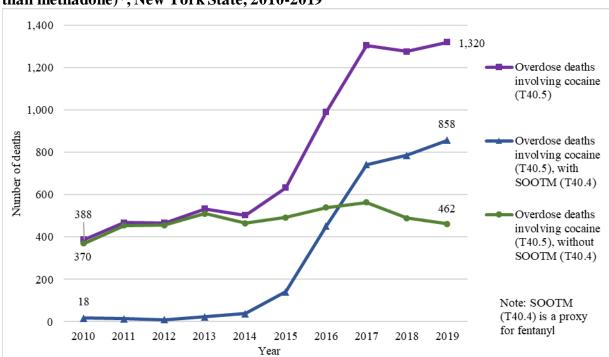


Figure 1.9 Overdose deaths involving cocaine with and without synthetic opioids (other than methadone)\*, New York State, 2010-2019

Data source: CDC WONDER; Accessed June 2021 For complete data, see <u>Appendix</u>: <u>Data Table 1.9</u>.

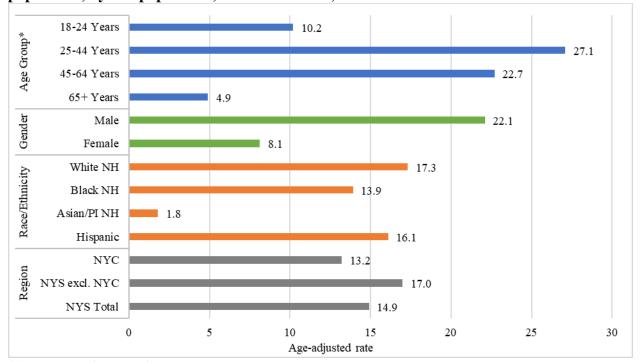
<sup>\*</sup>Synthetic opioids other than methadone (SOOTM) are identified by ICD-10 code T40.4 and serve as a proxy for fentanyl, which is a highly potent opioid now commonly found in the illicit drug market. Note: Cocaine overdose is identified by ICD-10 code T40.5.

<sup>&</sup>lt;sup>18</sup> Nolan ML, Tuazon E, Paone D. Unintentional Drug Poisoning (Overdose) Deaths in New York City in 2019. New York City Department of Health and Mental Hygiene: Epi Data Brief (122); December 2020. <a href="https://www1.nyc.gov/assets/doh/downloads/pdf/epi/databrief122.pdf">https://www1.nyc.gov/assets/doh/downloads/pdf/epi/databrief122.pdf</a>.

<sup>&</sup>lt;sup>19</sup> Increase in Fatal Drug Overdoses Across the United States Driven by Synthetic Opioids Before and During the COVID-19 Pandemic". December 2020. Centers for Disease Control and Prevention. Health Advisory. <a href="https://emergency.cdc.gov/han/2020/han00438.asp">https://emergency.cdc.gov/han/2020/han00438.asp</a>.

In NYS during 2019, the crude rates of overdose death involving any opioid were highest among those aged 25-44 years (27.1 per 100,000 population) and 45-64 years (22.7 per 100,000) (Figure 1.10). The age-adjusted rates of overdose death involving any opioid were highest among males (22.1 per 100,000), White non-Hispanic individuals (17.3 per 100,000), Hispanic individuals (16.1 per 100,000), and residents of NYS excluding NYC (17.0 per 100,000).

Figure 1.10 Overdose deaths involving any opioid, age-adjusted\* rates per 100,000 population, by sub-population, New York State, 2019



\*Age groups show crude rates.

Data source: CDC WONDER; Accessed June 2021 For complete data, see Appendix: Data Table 1.10.

In NYS during 2019, the crude rates of overdose death involving SOOTM were highest among those aged 25-44 years (22.4 per 100,000 population) and 45-64 years (17.3 per 100,000) (Figure 1.11). The age-adjusted rates of overdose death involving SOOTM were highest among males (18.3 per 100,000), White non-Hispanic and Hispanic individuals (both at 13.6 per 100,000), and residents of NYS excluding NYC (13.7 per 100,000).

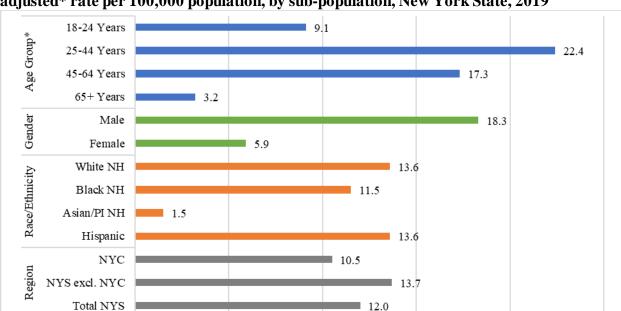


Figure 1.11 Overdose deaths involving synthetic opioids (other than methadone)\*\*, age-adjusted\* rate per 100,000 population, by sub-population, New York State, 2019

10

Age-adjusted rate

15

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For complete data, see Appendix: Data Table 1.11.

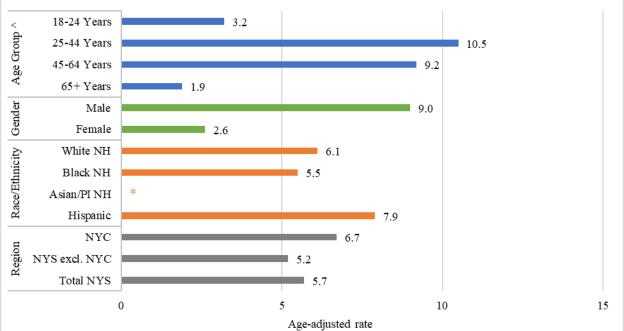
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<sup>\*</sup>Age groups show crude rates.

<sup>\*\*</sup>Synthetic opioids other than methadone (SOOTM) are identified by ICD-10 code T40.4 and serve as a proxy for fentanyl, which is a highly potent opioid now commonly found in the illicit drug market. Data source: CDC WONDER; Accessed June 2021

In NYS during 2019, the crude rates of overdose death involving heroin were highest among those aged 25-44 years (10.5 per 100,000 population) and 45-64 years (9.2 per 100,000) (Figure 1.12). The age-adjusted rates of overdose death involving heroin were highest among males (9.0 per 100,000), Hispanic individuals (7.9 per 100,000), White non-Hispanic individuals (6.1 per 100,000), and residents of NYC (6.7 per 100,000).

Figure 1.12 Overdose deaths involving heroin, age-adjusted^ rate per 100,000 population, by sub-population, New York State, 2019



<sup>^</sup>Age groups show crude rates.

Data source: CDC WONDER; Accessed June 2021 For complete data, see <u>Appendix: Data Table 1.12</u>.

<sup>\*:</sup> Rates are unreliable for years with fewer than 20 deaths, therefore not shown.

#### 2 - Naloxone Administrations

Naloxone (Narcan® and other name brands) is an opioid antagonist used in the event of a suspected opioid overdose. Administrations of naloxone are given for patients presenting with signs and symptoms of a potential opioid overdose.

#### Naloxone Administrations by Emergency Medical Services

Although naloxone has been used for decades by Advanced Life Support (ALS) EMS agencies, naloxone use by Basic Life Support (BLS) EMS agencies is more recent. Many areas of NYS rely on BLS agencies to provide emergency medical response through Emergency Medical Technicians (EMTs) and Certified First Responders (CFRs). Equipping BLS agencies with intranasal naloxone has significantly expanded the reach of this life-saving medicine into communities where it is needed. EMS agencies provide the most naloxone administrations to suspected overdose events in NYS. Counts of unique administrations of naloxone by EMS agencies in NYS are based on information submitted to the NYSDOH Bureau of Emergency Medical Services through electronic Patient Care Reports (e-PCRs).

In 2020, nearly 99 percent of total EMS response provided throughout NYS was reported electronically, an increase from 84.6 percent in 2015 (Figure 2.1). This improvement in electronic documentation by EMS agencies provides more complete and accurate data for naloxone administrations. Regional trends for NYC and NYS excluding NYC during 2015-2020 followed similar patterns to the NYS total. Electronic coverage increased from 87.8 percent in 2015 to 99.7 percent in 2020 in NYC and increased from 81.7 percent to 98.0 percent in NYS excluding NYC.

New York City NYS excl. NYC 100% 90% 80% 70% 60% Percentage 50% 40% 30% 20% 10% 0% 2015 2016 2017 2018 2019 2020 Year

Figure 2.1 Percentage of EMS response reported electronically, by region, New York State, 2015-2020

Data source: NYSDOH, Bureau of Emergency Medical Services; Data as of June 2021 For complete data, see Appendix: Data Table 2.1.

The number of electronically reported unique naloxone administrations by EMS in NYS increased by 27.6 percent, from 12,552 in 2019 to 16,011 in 2020 (Figure 2.2). There was a 6.6 percent increase from 3,777 in Quarter 1 of 2017 to 4,027 in Quarter 4 of 2020. During that time, Quarter 3 of 2020 had the highest number of reported administrations (4,649). (For data from years prior to 2019, please see the <a href="NYS Opioid Annual Report">NYS Opioid Annual Report</a>, 2020.)

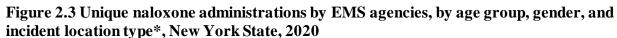
-New York State New York City NYS excl. NYC 5,000 4,500 Unique Naloxone Administrations 4,000 3,500 3,000 2,500 2,000 1,500 1,000 500 0 Q3 Q1 O2 O4 O1 O2 Q3 Q4 O1 O2 Q3 O4 O1 O2 O4 2017 2018 2019 2020

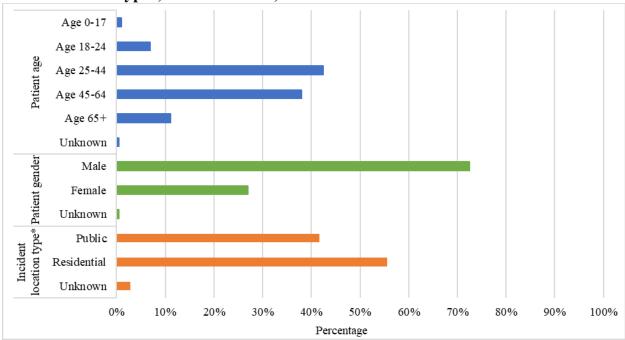
Figure 2.2 Unique naloxone administrations by EMS agencies, by region, New York State, 2017-2020

Note: Counts may have been affected by changes in documentation systems used by EMS agencies. Additional data validation steps have been taken to de-duplicate multiple naloxone administrations for the same patient encounter. As a result, counts may differ from previous reports.

Data source: NYSDOH, Bureau of Emergency Medical Services; Data as of June 2021 For complete data, see <u>Appendix: Data Table 2.2</u>.

In 2020, unique naloxone administrations were highest among patients in the 25-44 year-old age group (6,802 administrations, or 42.5 percent) (Figure 2.3). Most unique naloxone administrations by EMS personnel involved male patients (11,608 administrations, or 72.5 percent). Akin to the overdose deaths shown in Figure 1.5, the majority of EMS unique naloxone administrations occurred in residential settings (8,755 administrations, or 55.5 percent).





<sup>\*</sup>Incident location type excludes Suffolk County, as data were not available. As such, the total count for this category will differ from other categories shown.

Data source: NYSDOH, Bureau of Emergency Medical Services; Data as of June 2021. For complete data, see <u>Appendix</u>: <u>Data Table 2.3</u>.

In 2020, Friday was the day of the week during which the highest number of unique naloxone administrations by EMS occurred (2,535 administrations, or 15.8 percent), followed by Thursday and Saturday both with 15.2 percent (Figure 2.4). This highlights the need for individuals using substances such as opioids, as well as cocaine and other drugs, to obtain naloxone in their communities and have it available over weekends. The fewest administrations occurred on Sunday (2,074, or 13.0 percent) and Mondays (2,076 administrations, or 13.0 percent). The distribution of unique administrations was roughly even across months of the year, with counts slightly higher during the summer months and slightly lower during the winter (data not shown). The month with the highest number of naloxone administrations in 2020 was July (1,738 administrations, or 10.9 percent), while the month with the lowest number was January (1,047 administrations, or 6.5 percent).

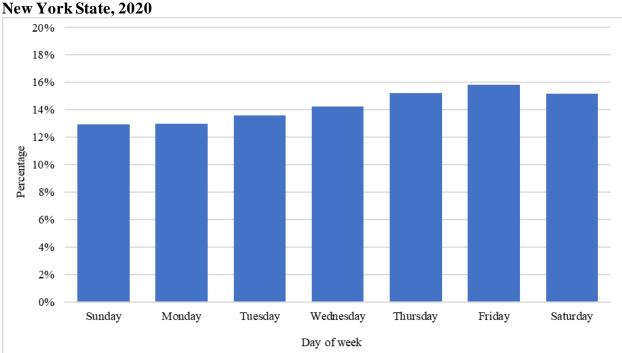
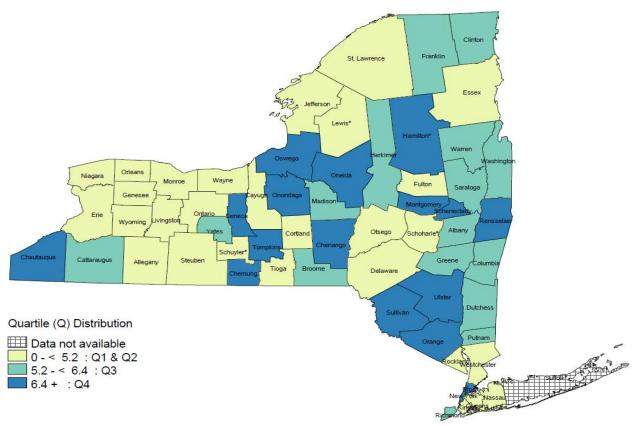


Figure 2.4 Unique naloxone administrations by EMS agencies, by incident day of week, New York State, 2020

Data source: NYSDOH, Bureau of Emergency Medical Services; Data as of June 2021 For complete data, see Appendix: Data Table 2.4.

Figure 2.5 shows variation in the county rate of unique naloxone administrations per 1,000 unique 911 EMS dispatches in 2020. The counties shown in blue had the highest crude rates (rates greater than or equal to 6.4 per 1,000) of naloxone administration per 1,000 unique 911 EMS dispatches. The ten counties with the highest stable rates of unique naloxone administrations in 2020 were Chemung, Sullivan, Chenango, Rensselaer, Orange, Tompkins, New York, Oswego, Chautauqua, and Schenectady. Counties shown in yellow had the lowest rates of naloxone administration per 1,000 unique dispatches. Please note that a rate could not be calculated for Suffolk County, as dispatch data were unavailable.

Figure 2.5 Unique naloxone administrations by EMS agencies, crude rate per 1,000 unique 911 EMS dispatches, by county, New York State\*, 2020



<sup>\*</sup> Rates may be unstable for counties with fewer than 10 naloxone administrations.

Dispatch data for Suffolk County were not available and, as a result, no rate could be calculated. Both the NYS excluding NYC and NYS totals exclude the number of unique naloxone administrations reported and the number of unique dispatches for Suffolk County.

Dispatch data for additional Nassau County Police Department (NCPD) were not available for 2020 and not included in the number of unique dispatch volume for Nassau County.

Data source: NYSDOH, Bureau of Emergency Medical Services; Data as of June 2021 For complete data, see Appendix: Data Table 2.5.

#### **Naloxone Administrations by Community Programs**

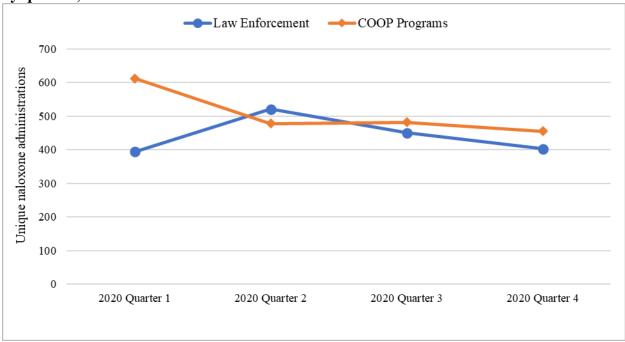
NYS is a leader in the implementation of public health programming to prevent death from opioid overdoses. Through the Department of Health's Office of Drug User Health, it uses a harm reduction approach whose programmatic roots are in the State's network of 25 syringe exchange programs. It also has an emphasis on expanding access to Medication for Opioid Use Disorder, including buprenorphine and methadone. These medications prevent death from overdose. The State's multi-pronged approach complements the longstanding efforts by EMS agencies throughout NYS and focuses on building overdose response capacity within communities throughout the state. This community capacity comprises trained responders, including opioid-dependent individuals, their families and friends, staff of agencies who work with people who use drugs, law enforcement personnel, firefighters, drug treatment providers, correctional facility guards, incarcerated persons about to be released and their family members, and others. The core of this program is for community "laypersons" to be trained by organizations registered with NYSDOH to recognize and respond to opioid overdoses. These individuals are known as trained overdose responders. Under regulation, these entities or providers may maintain regulated opioid overdose prevention programs and include:

- a healthcare facility licensed under the Public Health Law;
- a physician, physician assistant, or nurse practitioner who is authorized to prescribe the use of an opioid antagonist;
- a drug treatment program licensed under the mental hygiene law;
- a not-for-profit community-based organization incorporated under the not-for-profit corporation law and having the services of a Clinical Director; and
- a local health department.

LE personnel are frequently the first on the scene of an overdose. This report presents data on administrations of naloxone, including the number of naloxone administration reports received by NYSDOH for 2020 from EMS (n = 16,011), LE (n = 1,768), and COOP programs (n = 2,027) (Appendix: Data Table 2.9). For additional information about the State's Harm Reduction programs, please see the Opioid Annual Report, 2020. All naloxone administration data are based on self-report. There are instances in which not all data fields are completed by the responder. There is often a lag in data reporting. Increases seen over time may represent expansion of program and may or may not indicate an increase in overdose events, thus all data should be interpreted with caution. Naloxone data reflect the county in which the overdose occurred and in which the naloxone was administered – not necessarily the county of the overdosed person's residence.

In NYS during 2020, the quarters during which law enforcement agencies and community opioid overdose prevention programs reported the highest number of naloxone administrations were April through June (Quarter 2), and January through March (Quarter 1), respectively (Figure 2.6).

Figure 2.6 Naloxone administration reports by law enforcement and community programs, by quarter, New York State 2020

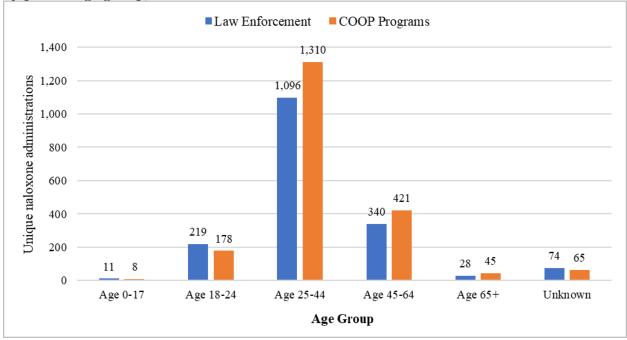


Note: The law enforcement category does not capture administrations reported in New York City, and does not comprehensively capture administrations reported in Nassau County.

Data source: New York State Department of Health AIDS Institute; Data as of June 2021 For complete data, see <u>Appendix: Data Table 2.6</u>.

In NYS during 2020, most naloxone administration reports from law enforcement agencies and community opioid overdose prevention programs were for patients aged 25-44 (Figure 2.7).

Figure 2.7 Naloxone administration reports by law enforcement and community programs, by patient age group, New York State 2020

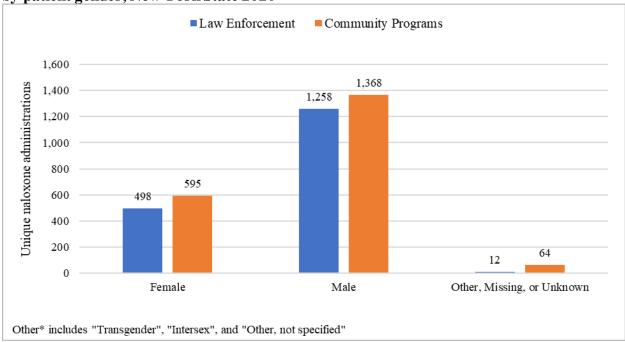


Note: The law enforcement category does not capture administrations reported in New York City, and does not comprehensively capture administrations reported in Nassau County.

Data source: New York State Department of Health AIDS Institute; Data as of June 2021 For complete data, see <a href="Appendix: Data Table 2.7">Appendix: Data Table 2.7</a>.

In NYS during 2020, most naloxone administrations were for males, according to reports from law enforcement agencies and community opioid overdose prevention programs (Figure 2.8) This was similar to the pattern among EMS administrations, as shown in Figure 2.3.

Figure 2.8 Naloxone administration reports by law enforcement and community programs, by patient gender, New York State 2020



Note: The law enforcement category does not capture administrations reported in New York City, and does not comprehensively capture administrations reported in Nassau County.

Data source: New York State Department of Health AIDS Institute; Data as of June 2021 For complete data, see <u>Appendix: Data Table 2.8</u>.

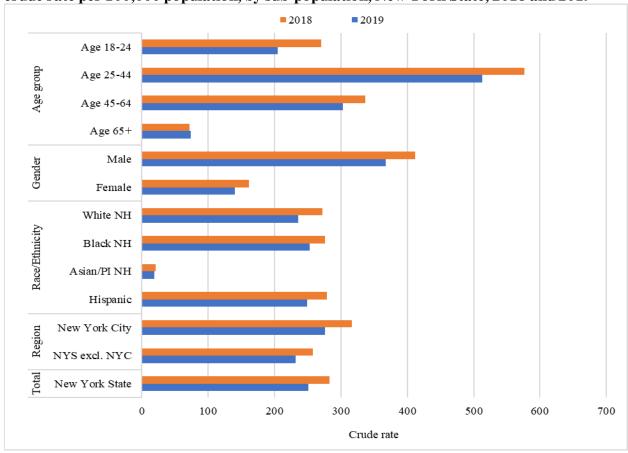
## 3 - Hospitalization and Emergency Visits Data

Hospitals, through both ED visits and inpatient admissions, play an important role in the treatment of drug poisoning, and they also see many individuals who are at risk for opioid overdoses. Data for both ED visits and hospitalizations are obtained from the Statewide Planning and Research Cooperative System (SPARCS) database.

ED and hospitalization indicators are based on diagnosis codes (ICD-10-CM) reported in records by the EDs and hospital facilities, and are limited by the quality of reporting and coding by the facilities. The indicators are defined based on the principal diagnosis code or first-listed, valid, external cause of injury code only.

Among NYS residents, the number of opioid burden events (including opioid overdose deaths, non-fatal outpatient ED visits and hospital discharges involving opioid overdose, abuse, dependence and unspecified use) decreased 11.8 percent from 55,223 in 2018 to 48,729 in 2019 and the crude rate per 100,000 population decreased from 282.8 to 250.5 (Figure 3.1). In 2019, the rate was highest among the 25-44 year-old age group (513.1 per 100,000), followed by the rates among the 45-64 year-old age group (302.9 per 100,000) and the 18-24 year-old age group (205.0 per 100,000). The rate was more than two and a half times higher among males (367.1 per 100,000) than that among females (140.3 per 100,000). The rate in 2019 was highest among Black non-Hispanic individuals (252.5 per 100,000), followed by the rates among Hispanic individuals (248.5 per 100,000) and White non-Hispanic individuals (278.4 per 100,000), followed by the rates among Black non-Hispanic individuals (278.4 per 100,000), followed by the rates among Black non-Hispanic individuals (276.0 per 100,000) and White non-Hispanic individuals (272.0 per 100,000). In 2019, NYC had a higher rate (276.0 per 100,000) than NYS excluding NYC (231.4 per 100,000).

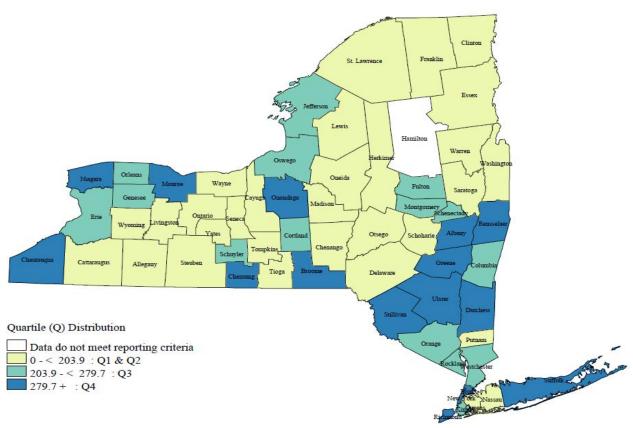
Figure 3.1 Opioid burden (including opioid overdose deaths, non-fatal outpatient ED visits and hospital discharges involving opioid overdose, abuse, dependence and unspecified use), crude rate per 100,000 population, by sub-population, New York State, 2018 and 2019



Data source: CDC WONDER, Data accessed June 2021; New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS); Data as of June 2021 For complete data, see Appendix: Data Table 3.1.

In 2019, the 16 counties with opioid burden (including opioid overdose deaths, non-fatal outpatient ED visits and hospital discharges involving opioid overdose, abuse, dependence and unspecified use) in the highest quartile (crude rates greater than or equal to 279.7 per 100,000 population) were: Chautauqua, Bronx, Ulster, Sullivan, Greene, Dutchess, Chemung, Broome, Richmond, New York, Niagara, Onondaga, Albany, Rensselaer, Suffolk, and Monroe (Figure 3.2).

Figure 3.2 Opioid burden (including opioid overdose deaths, non-fatal outpatient ED visits and hospital discharges involving opioid overdose, abuse, dependence and unspecified use), crude rate per 100,000 population, by county, New York State, 2019

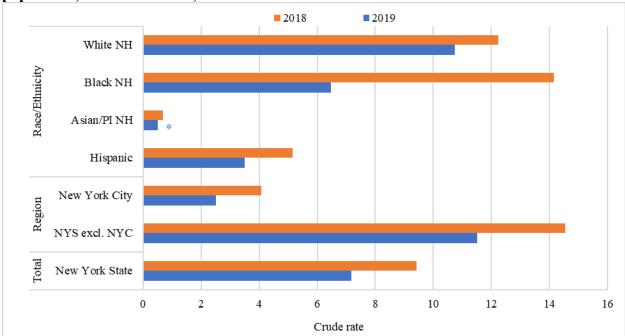


Data sources: NYS Excl NYC death data from New York State Department of Health, Bureau of Vital Statistics, as of May 2021; NYC death data from CDC WONDER, as of June 2021; ED Visits and Hospital Discharges from New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS), as of June 2021. For complete data, see Appendix: Data Table 3.2.

#### **Neonatal Abstinence Syndrome**

Among NYS residents, the number of newborns with NAS and/or affected by maternal use of drugs of addiction decreased 23.4 percent from 1,885 in 2018 to 1,444 in 2019, and the crude rate per 1,000 newborn discharges decreased from 9.4 to 7.2 (Figure 3.3). In 2019, the rate was highest among White non-Hispanic newborns (10.7 per 1,000), followed by the rates among Black non-Hispanic (6.5 per 1,000) and Hispanic newborns (3.5 per 1,000). In 2018, however, the rate was highest among Black non-Hispanic newborns (14.2 per 100,000), which decreased by more than half in 2019. In 2019, the rate for NYS excluding NYC (11.5 per 1,000) was over four and a half times higher than NYC (2.5 per 1,000). It is important to note that research on the long-term effects of neonatal withdrawal syndrome on developmental outcomes are limited. <sup>13</sup>

Figure 3.3 Newborns with neonatal abstinence syndrome and/or affected by maternal use of drugs of addiction, crude rate per 1,000 newborn discharges (any diagnosis), by subpopulation, New York State, 2018 and 2019



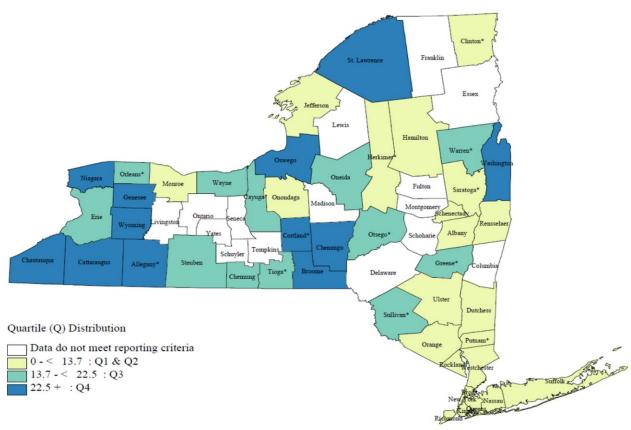
<sup>\*:</sup> Fewer than 10 events in the numerator, therefore the rate is unstable.

Data source: New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS); Data as of June 2021.

For complete data, see Appendix: Data Table 3.3.

In 2019, the 10 counties with the highest stable rates (crude rates greater than or equal to 22.5 per 1,000 newborn discharges) for documenting of newborns with NAS and/or affected by maternal use of drugs of addiction were Oswego, Niagara, Genesee, Chenango, St. Lawrence, Chautauqua, Wyoming, Broome, Washington, and Cattaraugus (Figure 3.4).

Figure 3.4 Newborns with neonatal abstinence syndrome and/or affected by maternal use of drugs of addiction, crude rate per 1,000 newborn discharges (any diagnosis), by county, New York State, 2019



<sup>\*:</sup> Fewer than 10 events in the numerator, therefore the rate is unstable.

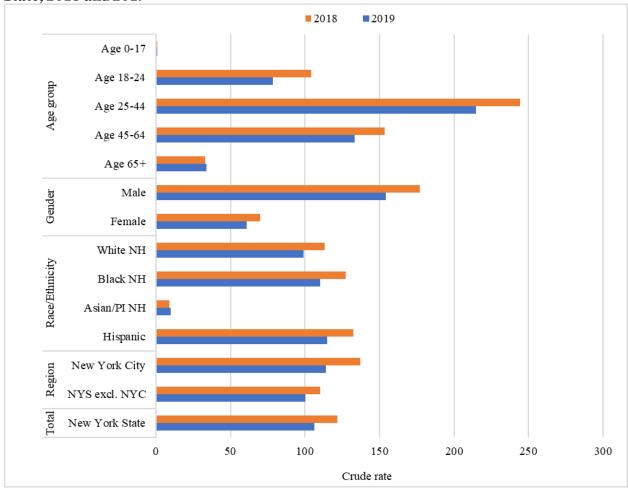
Data source: New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS); Data as of June 2021

For complete data, see Appendix: Data Table 3.4.

#### **Hospital Discharges**

Among NYS residents, the number of hospital discharges for opioid use (including overdose, abuse, dependence and unspecified use) decreased 13.2 percent from 23,814 in 2018 to 20,674 in 2019, and the crude rate per 100,000 population decreased from 121.9 to 106.3 (Figure 3.5). In 2019, the rate was highest among the 25-44 year-old age group (214.6 per 100,000), followed by the rates among the 45-64 year-old age group (133.5 per 100,000) and the 18-24 year-old age group (78.3 per 100,000). The rate among males (154.3 per 100,000) was two and a half times higher than that among females (60.9 per 100,000). The rate was highest among Hispanic individuals (115.0 per 100,000), followed by the rates among Black non-Hispanic individuals (110.2 per 100,000) and White non-Hispanic individuals (99.2 per 100,000). NYC (114.0 per 100,000) had a higher rate than NYS excluding NYC (100.5 per 100,000).

Figure 3.5 Hospital discharges involving opioid use (including overdose, abuse, dependence and unspecified use), crude rate per 100,000 population, by sub-population, New York State, 2018 and 2019

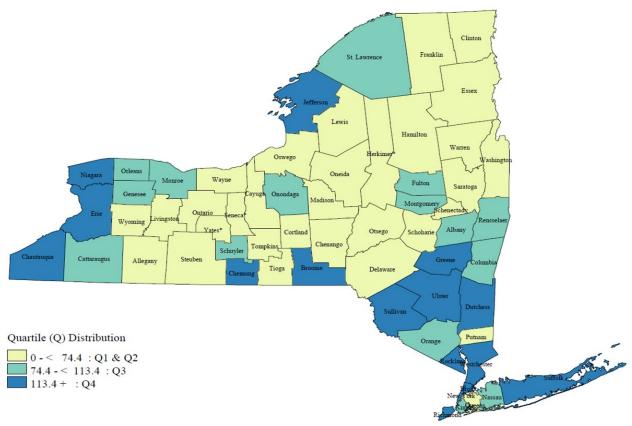


Data source: New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS); Data as of June 2021

For complete data, see Appendix: Data Table 3.5.

The 16 counties in the highest quartile (crude rates greater than or equal to 113.4 per 100,000 population) for hospital discharges due to opioid use (including overdose, abuse, dependence and unspecified use) in 2019 were Chautauqua, Ulster, Bronx, Sullivan, Greene, Dutchess, Niagara, Richmond, Westchester, Broome, Rockland, Suffolk, New York, Jefferson, Chemung, and Erie (Figure 3.6).

Figure 3.6 Hospital discharges involving opioid use (including overdose, abuse, dependence and unspecified use), crude rate per 100,000 population, by county, New York State, 2019



<sup>\*:</sup> Fewer than 10 events in the numerator, therefore the rate is unstable.

Data source: New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS); Data as of June 2021

For complete data, see Appendix: Data Table 3.6.

Among NYS residents, the number of hospital discharges involving heroin overdose decreased 12.9 percent from 1,210 in 2018 to 1,054 in 2019, and the crude rate per 100,000 population decreased from 6.2 to 5.4 (Figure 3.7). Where data met reporting criteria, decreases in 2019 were observed for all subgroup populations. In 2019, the rate was highest among the 25-44 year-old age group (9.4 per 100,000), followed by the rates among the 45-64 year-old age group (7.9 per 100,000), and the 18-24 year-old age group (4.0 per 100,000). The 2019 rate was about three times higher among males (8.2 per 100,000) than that among females (2.7 per 100,000). The rate in 2019 was highest among Hispanic individuals (5.8 per 100,000), followed by the rates among Black non-Hispanic individuals (5.2 per 100,000) and White non-Hispanic individuals (4.7 per 100,000). In 2019, NYC had a higher rate (5.8 per 100,000) than NYS excluding NYC (5.1 per 100,000).

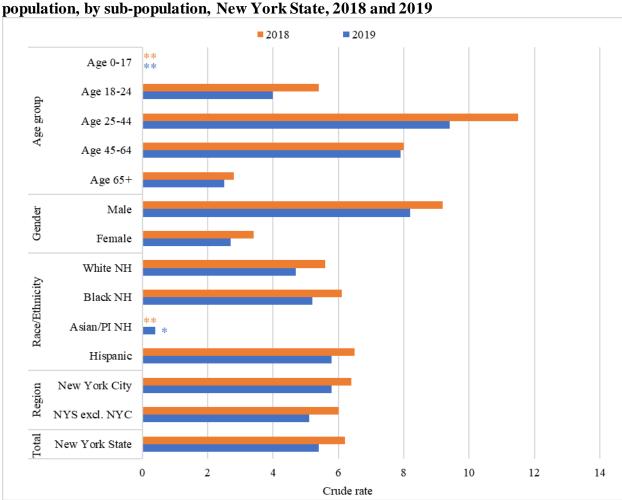


Figure 3.7 Hospital discharges involving heroin overdose, crude rate per 100,000 population, by sub-population, New York State, 2018 and 2019

Data source: New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS); Data as of June 2021

For complete data, see Appendix: Data Table 3.7.

<sup>\*:</sup> Fewer than 10 events in the numerator, therefore the rate is unstable.

<sup>\*\*:</sup> Data do not meet reporting criteria.

In 2019, among counties with ten or more hospital discharges involving heroin overdose, the ten counties with the highest crude rates were Bronx, Dutchess, Ulster, Monroe, Schenectady, Albany, Onondaga, Rensselaer, Niagara, and Suffolk (Figure 3.8). There were several counties that experienced large decreases in crude rates, including Bronx, Monroe, Onondaga, Albany, Suffolk, Orange, and Richmond.

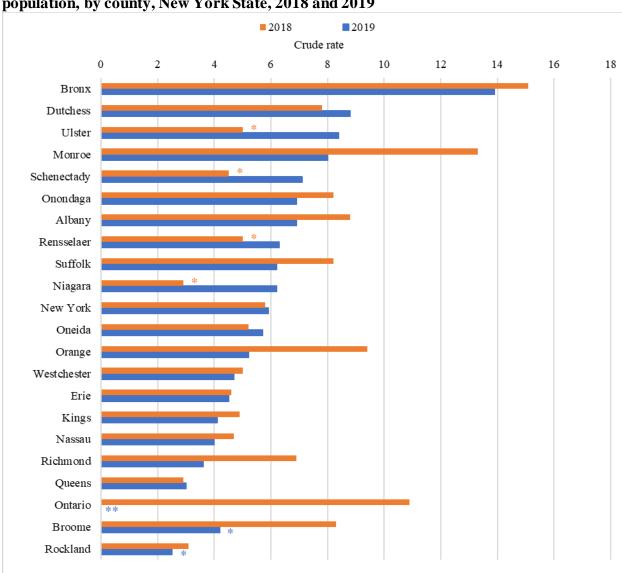


Figure 3.8 Hospital discharges involving heroin overdose, crude rate per 100,000 population, by county, New York State, 2018 and 2019

Data source: New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS); Data as of June 2021

For complete data, see Appendix: Data Table 3.8.

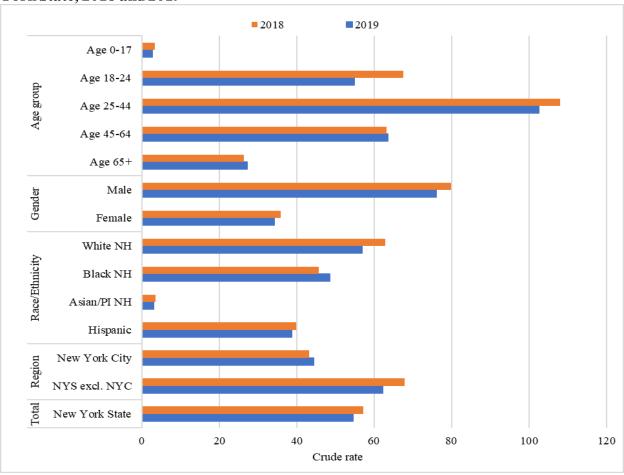
<sup>\*:</sup> Fewer than 10 events in the numerator, therefore the rate is unstable.

<sup>\*\*:</sup> Data do not meet reporting criteria.

#### **Emergency Department Visits**

Among NYS residents, the number of all ED visits (including outpatients and patients later admitted) involving any opioid overdose decreased 5.0 percent from 11,178 in 2018 to 10,619 in 2019, and the crude rate per 100,000 decreased from 57.2 to 54.6 (Figure 3.9). In 2019, the rate was highest among the 25-44 year-old age group (102.5 per 100,000) followed by the rates among the 45-64 year-old age group (63.5 per 100,000), and the 18-24 year-old age group (54.9 per 100,000) followed by the rates among the 25-44 year-old age group (108.1 per 100,000) followed by the rates among the 18-24 year-old age group (67.6 per 100,000), and the 45-64 year-old age group (63.2 per 100,000). The rate, in 2019, was more than two times higher among males (76.1 per 100,000) than among females (34.2 per 100,000). White non-Hispanic individuals had the highest rate (56.9 per 100,000), followed by Black non-Hispanic individuals (48.6 per 100,000) and Hispanic individuals (38.7 per 100,000). NYS excluding NYC (62.2 per 100,000) had a rate that was 1.4 times higher than NYC (44.4 per 100,000).

Figure 3.9 All emergency department visits (including outpatients and admitted patients) involving any opioid overdose, crude rate per 100,000 population, by sub-population, New York State, 2018 and 2019

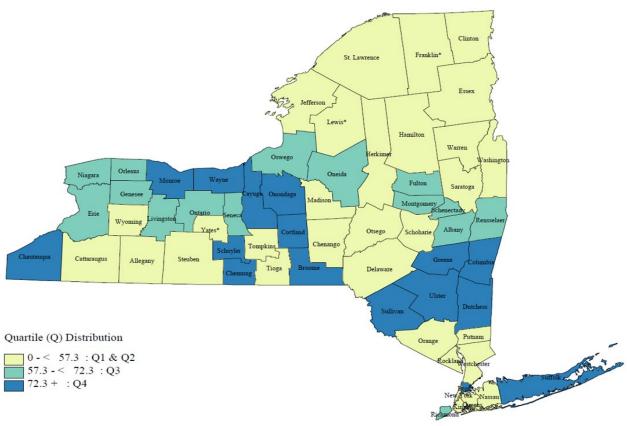


Data source: New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS); Data as of June 2021

For complete data, see Appendix: Data Table 3.9.

The 16 counties in the highest quartile (crude rates greater than or equal to 72.3 per 100,000 population) for ED visits due to any opioid overdose were Monroe, Ulster, Cortland, Dutchess, Greene, Onondaga, Chemung, Chautauqua, Wayne, Bronx, Sullivan, Suffolk, Broome, Cayuga, Schuyler, and Columbia (Figure 3.10).

Figure 3.10 All emergency department visits (including outpatients and admitted patients) involving any opioid overdose, crude rate per 100,000 population, by county, New York State, 2019



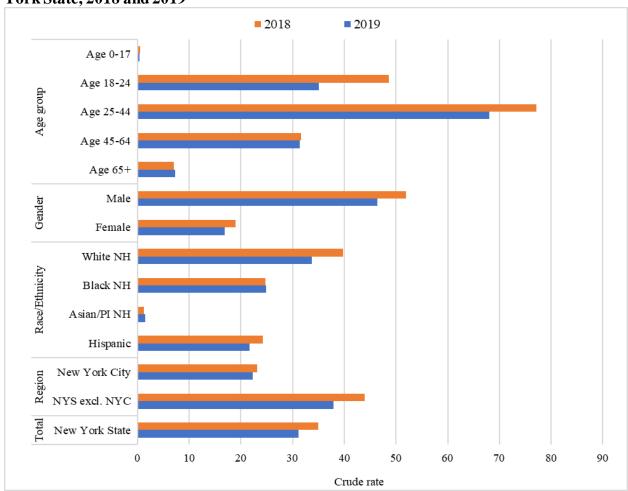
<sup>\*:</sup> Fewer than 10 events in the numerator, therefore the rate is unstable.

Data source: New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS); Data as of June 2021

For complete data, see Appendix: Data Table 3.10.

Among NYS residents, the number of ED visits (including outpatients and admitted patients) involving any heroin overdose decreased 11.1 percent from 6,835 in 2018 to 6,075 in 2019 (Figure 3.11). The crude rate per 100,000 population decreased from 35.0 to 31.2. In 2019, the rate was highest among the 25-44 year-old age group (68.1 per 100,000), followed by the rates among the 18-24 year-old age group (35.1 per 100,000) and the 45-64 year-old age group (31.4 per 100,000). The rate was more than two and a half times higher for males (46.4 per 100,000) than that for females (16.9 per 100,000). The rate was highest among White non-Hispanic individuals (33.7 per 100,000), followed by the rates for Black non-Hispanic individuals (24.9 per 100,000) and Hispanic individuals (21.7 per 100,000). NYS excluding NYC (37.9 per 100,000) had a rate that was about 1.7 times higher than that of NYC (22.3 per 100,000).

Figure 3.11 All emergency department visits (including outpatients and admitted patients) involving heroin overdose, crude rate per 100,000 population, by sub-population, New York State, 2018 and 2019

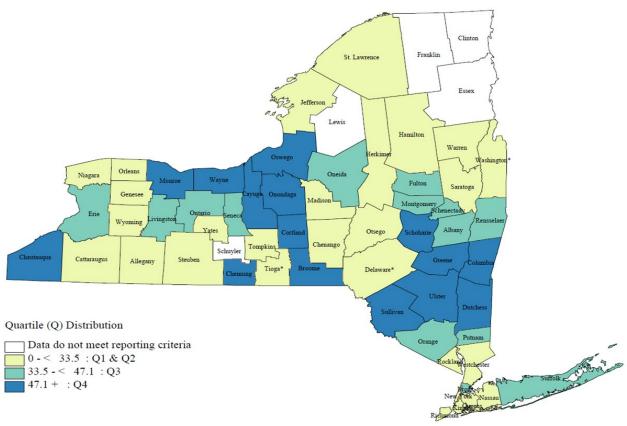


Data source: New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS); Data as of June 2021

For complete data, see Appendix: Data Table 3.11.

The 15 counties in the highest quartile (crude rates greater than or equal to 47.1 per 100,000 population) for ED visits due to heroin overdose were Monroe, Greene, Onondaga, Chemung, Broome, Dutchess, Cortland, Chautauqua, Ulster, Sullivan, Cayuga, Oswego, Wayne, Schoharie, and Columbia (Figure 3.12).

Figure 3.12 All emergency department visits (including outpatients and admitted patients) involving heroin overdose, crude rate per 100,000 population, by county, New York State, 2019



<sup>\*:</sup> Fewer than 10 events in the numerator, therefore the rate is unstable.

Data source: New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS); Data as of June 2021

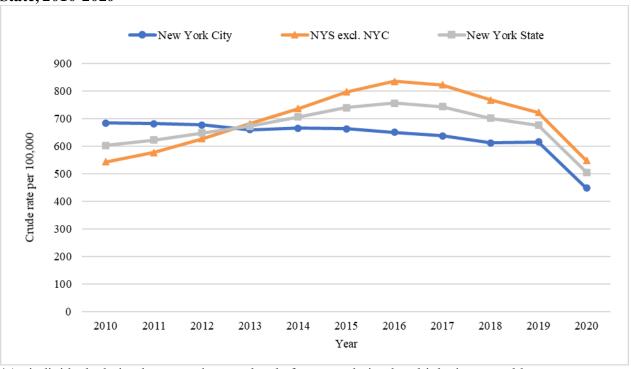
For complete data, see Appendix: Data Table 3.12.

# 4 - New York State Office of Addiction Services and Supports (OASAS) Client Data

NYS's treatment system for OUD through OASAS consists of crisis services and non-crisis treatment services. Crisis services include hospital-based detoxification and medically monitored or supervised services in free-standing or hospital settings. Non-crisis treatment services include opioid (methadone, long-acting injectable naltrexone, and buprenorphine) treatment programs, other outpatient treatment, inpatient rehabilitation, and residential programs. Lengths of stay in these settings vary.

Among NYS residents in 2020, there were 84,283 admissions to OASAS-certified chemical dependence treatment programs for any opioid, including heroin (Figure 4.1). This represented a crude rate of 505.2 per 100,000 population. Rates across all regions have been decreasing since 2016.

Figure 4.1 Admissions\* to OASAS-certified chemical dependence treatment programs for any opioid (including heroin), crude rate per 100,000 population, by region, New York State, 2010-2020\*\*



<sup>\*</sup>An individual admitted to more than one level of care or admitted multiple times would count as multiple admissions.

Data source: New York State Office of Addiction Services and Supports (OASAS) Client Data System (CDS); Data as of July 2021

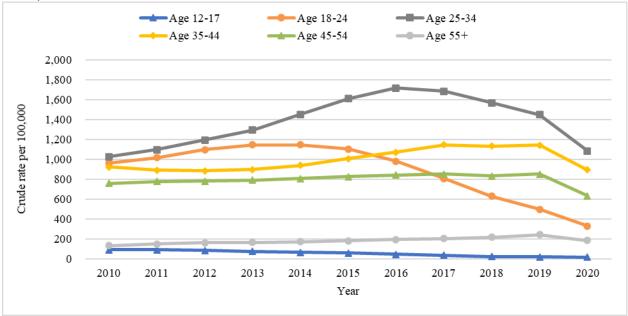
For complete data on OASAS client admissions by region, see Appendix: Data Table 4.1.

<sup>\*\*</sup> Admissions data for 2020 were impacted by COVID-19 and do not represent a typical year for admissions.

Since 2010, New Yorkers aged 25-34 years had the highest crude rate per 100,000 population for admissions to OASAS-certified chemical dependence treatment programs for any opioid (including heroin), while those aged 12-17 years had the lowest rate per 100,000 among all age groups (Figure 4.2). From 2013 to 2017, the rates increased for those aged 35-44 years and 55+ years. The rates for those aged 18-24 years declined since 2013.

In 2020, New Yorkers aged 25-34 years had the highest rate (1,081.9 per 100,000), followed by those aged 35-44 years (891.3 per 100,000) and 45-54 years (631.7 per 100,000).

Figure 4.2 Admissions\* to OASAS-certified chemical dependence treatment programs for any opioid (including heroin), crude rate per 100,000 population, by age group, New York State, 2010-2020\*\*



<sup>\*</sup>An individual admitted to more than one level of care or admitted multiple times would count as multiple admissions.

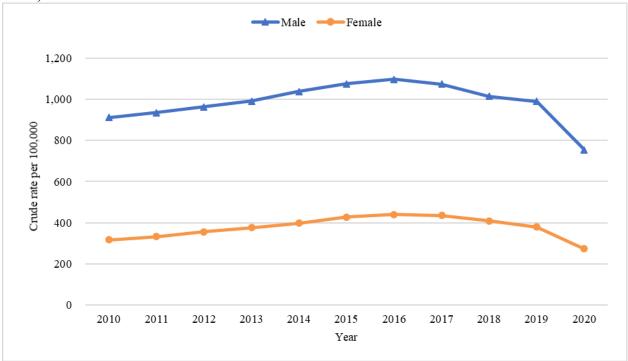
Data source: New York State Office of Addiction Services and Supports (OASAS) Client Data System (CDS); Data as of July 2021

For complete data on OASAS client admissions by age group, see Appendix: Data Table 4.2.

<sup>\*\*</sup> Admissions data for 2020 were impacted by COVID-19 and do not represent a typical year for admissions.

From 2010 to 2016, the crude rates per 100,000 population for admissions to OASAS-certified chemical dependence treatment programs for any opioid (including heroin), were consistently higher for males than they were for females in NYS, although the rate steadily increased for each gender (Figure 4.3). There was a decrease for both genders between 2016 and 2020. In 2020, the rate for males (754.8 per 100,000) was over two times higher than the rate for females (273.4 per 100,000).

Figure 4.3 Admissions\* to OASAS-certified chemical dependence treatment programs for any opioid (including heroin), crude rate per 100,000 population, by sex at birth, New York State, 2010-2020\*\*



<sup>\*</sup> An individual admitted to more than one level of care or admitted multiple times would count as multiple admissions.

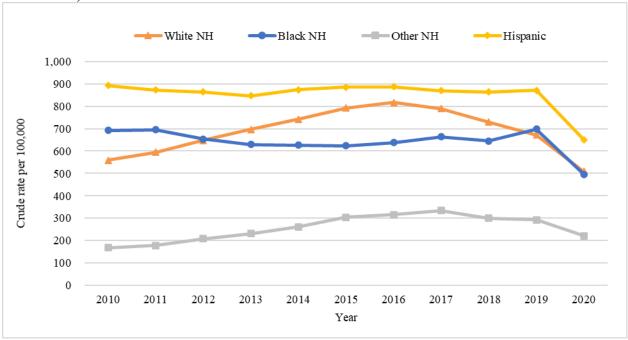
Data source: New York State Office of Addiction Services and Supports (OASAS) Client Data System (CDS); Data as of July 2021

For complete data on OASAS client admissions by sex at birth, see Appendix: Data Table 4.3.

<sup>\*\*</sup> Admissions data for 2020 were impacted by COVID-19 and do not represent a typical year for admissions.

Hispanic individuals had consistently higher crude rates per 100,000 population for admissions to OASAS-certified chemical dependence treatment programs for any opioid (including heroin), than any other racial/ethnic group between 2010 to 2020 (Figure 4.4). In 2020, Hispanic individuals had the highest rate (650.0 per 100,000), as compared to White non-Hispanic individuals (509.1 per 100,000) and Black non-Hispanic individuals (495.9 per 100,000).

Figure 4.4 Admissions\* to OASAS-certified chemical dependence treatment programs for any opioid (including heroin), crude rate per 100,000 population, by race/ethnicity, New York State, 2010-2020\*\*



<sup>\*</sup> An individual admitted to more than one level of care or admitted multiple times would count as multiple admissions.

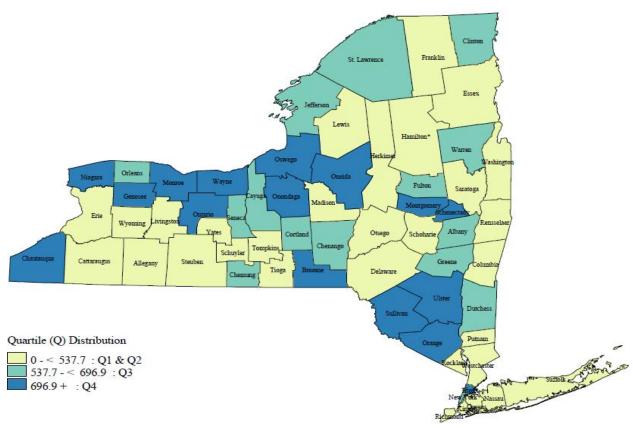
Data source: New York State Office of Addiction Services and Supports (OASAS) Client Data System (CDS); Data as of July 2021

For complete data on OASAS client admissions by race/ethnicity, see Appendix: Data Table 4.4.

<sup>\*\*</sup> Admissions data for 2020 were impacted by COVID-19 and do not represent a typical year for admissions.

Counties that had the highest crude rates per 100,000 population for admissions to OASAS-certified chemical dependence treatment programs for any opioid (including heroin), in 2020 are shaded in blue (Figure 4.5). In 2020, the 16 counties in the highest quartile (crude rates greater than or equal to 696.9 per 100,000 population were Sullivan, Broome, Onondaga, Niagara, Ontario, Montgomery, Monroe, Oswego, Bronx, Chautauqua, Wayne, Oneida, Genesee, Orange, Schenectady, and Ulster.

Figure 4.5 Admissions\* to OASAS-certified chemical dependence treatment programs for any opioid (including heroin), crude rate per 100,000 population, by county, New York State, 2020\*\*



- + Fewer than 10 events in the numerator, therefore the rate is unstable.
- \* An individual admitted to more than one level of care or admitted multiple times would count as multiple admissions. In addition, there is a variation in the levels of care (inpatient, outpatient, or both) provided by local facilities. County rates could be impacted, in part, by the levels of care available.
- \*\* Admissions data for 2020 were impacted by COVID-19 and do not represent a typical year for admissions.

Data source: New York State Office of Addiction Services and Supports (OASAS) Client Data System (CDS); Data as of July 2021

For complete data on OASAS client admissions by county, see Appendix: Data Table 4.5.

## 5 - Prescription Monitoring Program Data

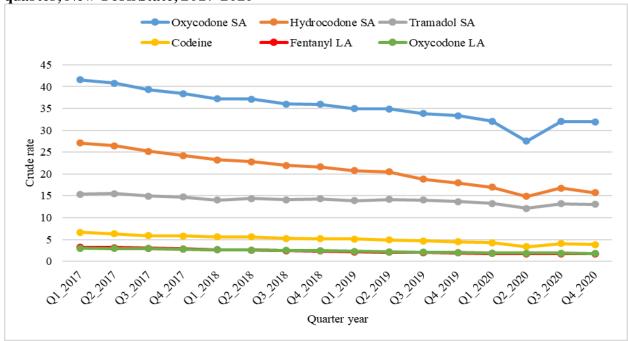
The Bureau of Narcotic Enforcement's (BNE) Prescription Monitoring Program (PMP) Registry collects and analyzes dispensed controlled substance prescription data from pharmacies and dispensers. In February 2010, BNE implemented a PMP that provided secure online access for practitioners to their patients' recent controlled substance prescription histories. The data, consisting of patient, prescriber, pharmacy, and controlled substance prescription information, are the basis for the information available to practitioners and pharmacists through the online PMP. It provides a patient's current controlled substance prescription information and up to a one-year history to practitioners and pharmacists to better evaluate drug therapy and to inform a practitioner of other controlled substance use. These data also identify potential sources of prescription drug diversion or abuse, including prescription fraud, "doctor-shopping" or multiple-provider episodes, and improper prescribing and dispensing.

For the purposes of this report, many statistics were calculated using the CDC national standard set of indicators. Therefore, the data in this report may not always be exactly comparable to other similar data the NYSDOH has reported in earlier publications. Specifically, for this section, CDC's standards exclude from the analysis drugs that are not typically used in outpatient settings or are otherwise not critical for MME purposes.

Since 2017, the rate of prescribing has remained low for long-acting (LA) oxycodone, tramadol, codeine, and LA fentanyl (Figure 5.1). Note, the trend in LA fentanyl (in red below) is obscured by the similar trend in LA oxycodone (in green). In NYS, the crude prescription rate of shortacting (SA) oxycodone declined from 41.5 per 1,000 to 31.9 per 1,000 and SA hydrocodone declined from 27.1 per 1,000 to 15.7 per 1,000 between first quarter of 2017 to fourth quarter of 2020.

The temporary drop in crude rates in opioid prescriptions during the second quarter of 2020 can be attributable to the COVID-19 pandemic. A decrease in prescribing corresponds with patients delaying medical and dental visits and a moratorium on elective surgeries during this time. This is especially true for prescribing of SA opioids that are generally used for acute pain.

Figure 5.1 Commonly prescribed opioid analgesics, crude rate per 1,000 population, by quarter, New York State, 2017-2020



SA=Short-acting; LA=Long-acting

The data exclude buprenorphine prescriptions for the treatment of OUD.

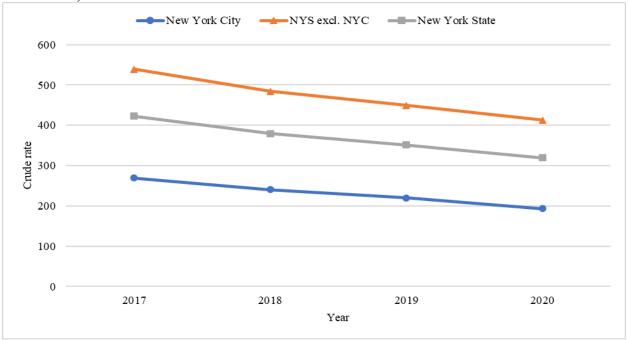
New York State total contains number with county unknown.

Data Source: NYS Prescription Monitoring Program; Data as of June 2021

For complete data, see Appendix: Data Table 5.1.

In NYS, the crude rate of opioid analgesic prescriptions declined consistently between 2017 (422.9 per 1,000 population) and 2020 (319.1 per 1,000), representing a 25.0 percent reduction (Figure 5.2). During 2017-2020, NYS excluding NYC consistently had the higher rate of opioid analgesic prescriptions, compared to NYC. In 2020, more than six million opioid prescriptions were filled for NYS residents, and the rate was more than two times higher for NYS excluding NYC (412.9 per 1,000) than NYC (192.9 per 1,000).

Figure 5.2 Opioid analgesic prescriptions, crude rate per 1,000 population, by region, New York State, 2017-2020



The data exclude buprenorphine prescriptions for the treatment of OUD.

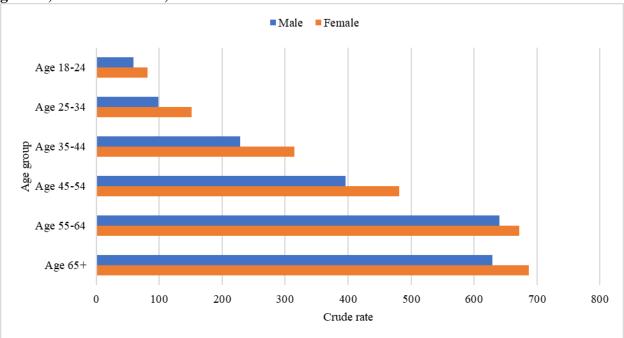
New York State total contains number with county unknown.

Data Source: NYS Prescription Monitoring Program; Data as of June 2021

For complete data, see Appendix: Data Table 5.2.

In 2020, the crude rate of opioid analgesic prescriptions per 1,000 population was higher for females than it was for males across all age groups (Figure 5.3). The gap between genders was highest among the 35-44 year-old age group, with crude rates of 228.6 per 1,000 for males and 315.2 per 1,000 for females.

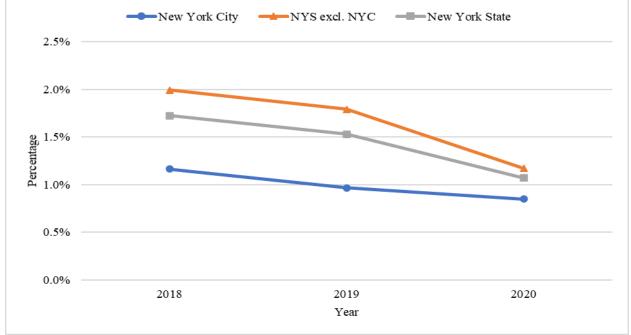
Figure 5.3 Opioid analgesic prescriptions, crude rate per 1,000 population, by age and gender, New York State, 2020



The data exclude buprenorphine prescriptions for the treatment of OUD. Data Source: NYS Prescription Monitoring Program; Data as of June 2021 For complete data, see Appendix: Data Table 5.3.

Initiating treatment for chronic pain with LA or extended release opioids is associated with higher risk of overdose than the initiation of treatment with immediate-release opioids.<sup>20</sup> The percentage of incidents in which patients were both opioid-naïve and received LA opioid prescriptions declined between 2018 (1.7 percent) and 2020 (1.1 percent) in NYS (Figure 5.4). During 2018-2020, the percentage was consistently higher in NYS excluding NYC than in NYC.

Figure 5.4 Percentage of incidents when patients were opioid-naïve and received longacting opioid prescription\*, by region, New York State, 2018-2020 New York City →NYS excl. NYC -New York State



The data exclude buprenorphine prescriptions for the treatment of OUD.

Opioid-naïve was defined as patients with no opioid prescription for pain in last 45 days.

New York State total contains number with county unknown.

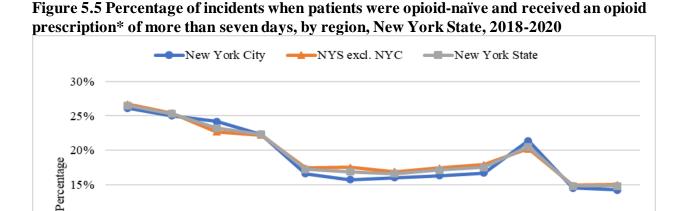
\*Patient received index prescription of long-acting opioid and was opioid-naïve.

Data Source: NYS Prescription Monitoring Program; Data as of June 2021

For complete data, see Appendix: Data Table 5.4.

<sup>&</sup>lt;sup>20</sup> Dowell D, Haegerich TM, Chou R. CDC Guideline for Prescribing Opioids for Chronic Pain — United States, 2016. MMWR Recomm Rep 2016;65(No. RR-1): 1-49. https://www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm.

Opioid use for acute pain is associated with long-term opioid use, and physical dependence on opioids is an expected physiologic response in patients exposed to opioids for more than a few days. <sup>21</sup> In July 2016, NYS limited the initial prescribing of opioids for acute pain to no more than a seven-day supply. <sup>22</sup> In NYS, opioid prescriptions for more than a seven-day supply decreased among opioid-naïve patients, from 26.5 percent in the first quarter of 2018 to 14.8 percent in the fourth quarter of 2020 (Figure 5.5). No significant regional differences were observed. The temporary increase in percent of incidents of opioid-naïve patients receiving a more than seven-day supply during the second quarter of 2020 could be attributable to the COVID-19 pandemic. Data show a higher percentage of incidents of opioid-naïve patients receiving a more than seven-day supply during the second quarter of 2020. Conversely, there was a decrease in incidents of opioid-naïve patients receiving a seven-day supply or less during that same quarter. This trend is evidenced by a reduction in prescribing for acute pain primarily due to the decreases in visits to practitioners and an elimination of elective medical and dental procedures during this time.



The data exclude buprenorphine prescriptions for the treatment of OUD.

Opioid-naïve was defined as patients with no opioid prescription for pain in last 45 days.

New York State total contains number with county unknown.

Data Source: NYS Prescription Monitoring Program; Data as of June 2021

For complete data, see Appendix: Data Table 5.5.

10%

5%

Quarter Year

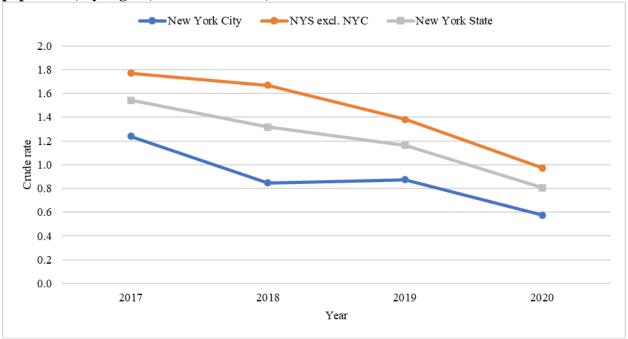
<sup>\*</sup>Patient received opioid index prescription of more than seven days and was opioid-naïve.

<sup>&</sup>lt;sup>21</sup> Dowell D, Haegerich TM, Chou R. CDC Guideline for Prescribing Opioids for Chronic Pain — United States, 2016. MMWR Recomm Rep 2016;65(No. RR-1): 1–49. https://www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm.

<sup>&</sup>lt;sup>22</sup> New Legislation Enacted to Limit Initial Opioid Prescribing to a 7 Day Supply for Acute Pain. <a href="https://www.health.ny.gov/professionals/narcotic/laws">https://www.health.ny.gov/professionals/narcotic/laws</a> and regulations/[Accessed August 2021].

The number of patients who received opioid prescriptions from five or more prescribers, at five or more pharmacies in a six-month period ("doctor shoppers") dropped substantially across NYS between 2017 to 2020. In NYS, the crude rate per 100,000 population declined from 1.5 per 100,000 in 2017 to 0.8 per 100,000 in 2020 (Figure 5.6). In NYS, the crude rate per 100,000 population in 2012, prior to the implementation of the Internet System for Tracking Over Prescribing (I-STOP), was 27.0.<sup>23</sup>

Figure 5.6 Patients with prescribed opioid analgesics from five or more prescribers and dispensed at five or more pharmacies in a six-month period, crude rate per 100,000 population, by region, New York State, 2017-2020



The data exclude buprenorphine prescriptions for the treatment of OUD.

A patient will be counted twice if they were included in each 6-month time period for the year.

New York State total contains number with county unknown.

Data Source: NYS Prescription Monitoring Program; Data as of June 2021

For complete data, see Appendix: Data Table 5.6.

<sup>&</sup>lt;sup>23</sup> New York State Opioid Data Dashboard <a href="https://webbi1.health.ny.gov/SASStoredProcess/guest?">https://webbi1.health.ny.gov/SASStoredProcess/guest?</a> program=/EBI/PHIG/apps/opioid dashboard/op dashboard <a href="mailto:&p=tbl&ind\_id=op61">&p=tbl&ind\_id=op61</a> [Accessed August 2021]

Opioid analgesics prescribed in higher dosages ( $\geq$  90 MME) are associated with higher risk of overdose and death.<sup>24</sup> The percentage of patients receiving one or more opioid analgesic prescriptions with a total daily dose of  $\geq$  90 MME for at least one day declined between 2017 (12.5 percent) and 2020 (10.8 percent) in NYS (Figure 5.7). During 2017-2020, the percentage was consistently higher in NYS excluding NYC than in NYC. In NYC, the percentage slightly increased from 2019 (10.2 percent) to 2020 (10.4 percent).

New York City NYS excl. NYC New York State

14%

12%

10%

8%

4%

2%

Year

2019

2020

Figure 5.7 Percentage of patients with a total daily dose of  $\geq$  90 MME on at least one day, by region, New York State, 2017-2020

The data exclude buprenorphine prescriptions for pain and treatment of OUD.

2018

New York State total contains number with county unknown.

MME: morphine milligram equivalents

2017

0%

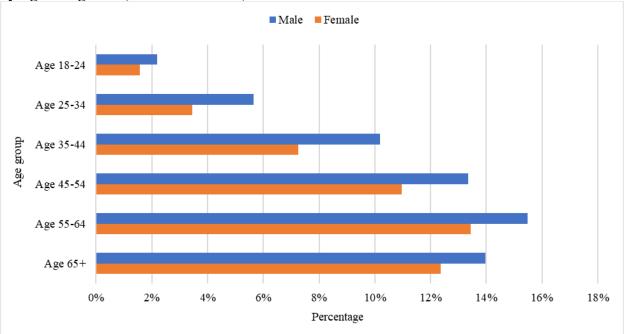
Data Source: NYS Prescription Monitoring Program; Data as of June 2021

For complete data, see Appendix: Data Table 5.7.

<sup>&</sup>lt;sup>24</sup> Dowell D, Haegerich TM, Chou R. CDC Guideline for Prescribing Opioids for Chronic Pain — United States, 2016. MMWR Recomm Rep 2016;65(No. RR-1):1–49. <a href="https://www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm">https://www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm</a>.

In 2020, the percentage of patients receiving one or more opioid analgesic prescriptions with a total daily dose of  $\geq 90$  MME for at least one day was highest among the 55-64 year-old age group, for both males (15.5 percent) and females (13.5 percent), followed by the 65 and older age group for males (14.0 percent) and females (12.4 percent). The percent of males receiving a daily dose of  $\geq 90$  MME was consistently higher than females for all age groups (Figure 5.8).

Figure 5.8 Percentage of patients with a total daily dose of ≥ 90 MME on at least one day, by age and gender, New York State, 2020



The data exclude buprenorphine prescriptions for pain and treatment of OUD.

MME: morphine milligram equivalents

Data Source: NYS Prescription Monitoring Program; Data as of June 2021

For complete data, see Appendix: Data Table 5.8.

The risk of opioid overdose increases when taken in combination with other drugs, including benzodiazepines (e.g., Xanax® [alprazolam], Valium® [diazepam]).<sup>25</sup> As such, it is important to monitor the co-prescribing and co-dispensing of these medications, as well as the potential for their prescriptions to overlap, and to provide information to practitioners and the public about the increased risk of overdose when combining opioids and benzodiazepines, as well as other substances.

Among patients receiving at least one prescription for opioid analgesics or benzodiazepines, the percentage with two or more calendar days of overlapping opioid analgesic and benzodiazepine prescriptions declined between 2017 (9.3 percent) and 2020 (8.4 percent) in NYS (Figure 5.9). In 2020, the percentage was higher for NYS excluding NYC (9.2 percent) than for NYC (6.8 percent). During 2017-2020, compared to NYC, NYS excluding NYC had consistently higher percentages of patients with two or more calendar days of overlapping opioid analgesic and benzodiazepine prescriptions.

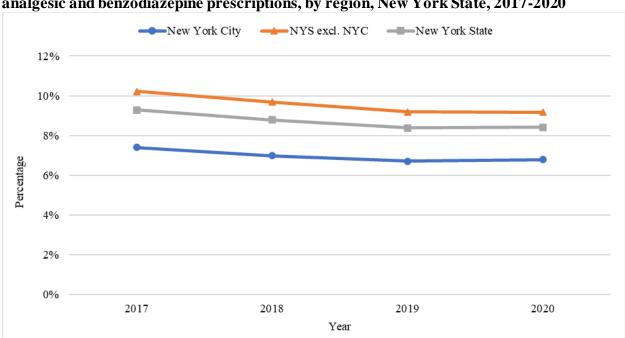


Figure 5.9 Percentage of patients\* with two or more calendar days of overlapping opioid analysesic and benzodiazepine prescriptions, by region, New York State, 2017-2020

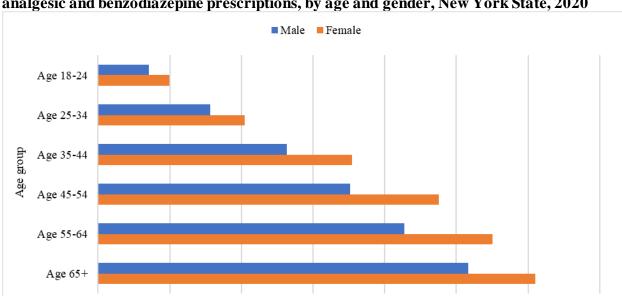
The data exclude buprenorphine prescriptions for treatment of OUD.

New York State total contains number with county unknown.

\*Patients with at least one prescription for opioid analgesics or benzodiazepines during a given year Data Source: NYS Prescription Monitoring Program; Data as of June 2021 For complete data, see Appendix: Data Table 5.9.

<sup>&</sup>lt;sup>25</sup> Dowell D, Haegerich TM, Chou R. CDC Guideline for Prescribing Opioids for Chronic Pain — United States, 2016. MMWR Recomm Rep 2016;65(No. RR-1):1–49. <a href="https://www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm">https://www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm</a>.

In 2020, among patients with at least one prescription for opioid analgesics or benzodiazepines, the percentage who received two or more calendar days of overlapping opioid analgesic and benzodiazepine prescriptions was higher among females than among males (Figure 5.10). The largest gap in percentage between genders was seen among the 45-54 year-old age group (7.0 percent for males, 9.5 percent for females) and the 55-64 year-old age group (8.5 percent for males, 11.0 percent for females).



6%

Percentage

8%

10%

12%

14%

Figure 5.10 Percentage of patients\* with two or more calendar days of overlapping opioid analysesic and benzodiazepine prescriptions, by age and gender, New York State, 2020

The data exclude buprenorphine prescriptions for treatment of OUD.

4%

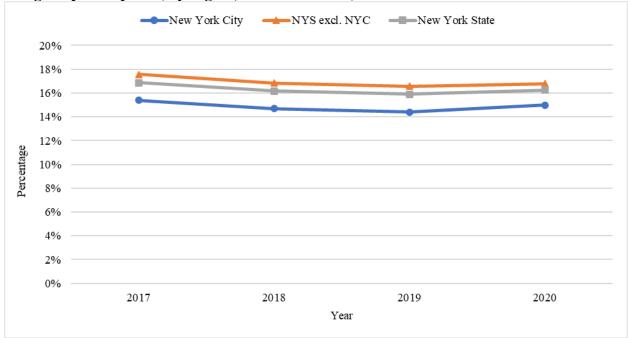
2%

0%

<sup>\*</sup>Patients with at least one prescription for opioid analgesics or benzodiazepines during a given year Data Source: NYS Prescription Monitoring Program; Data as of June 2021 For complete data, see <u>Appendix: Data Table 5.10</u>.

Among NYS patients receiving one or more opioid analgesic prescriptions, the percentage with two or more calendar days of overlapping opioid analgesic prescriptions declined between 2017 (16.9 percent) and 2019 (15.9 percent), but slightly increased in 2020 to 16.3 percent (Figure 5.11). During 2017-2020, NYS excluding NYC had consistently higher percentages compared to NYC. In 2020, the percentage was higher for NYS excluding NYC (16.8 percent) than for NYC (15.0 percent).

Figure 5.11 Percentage of patients\* with two or more calendar days of overlapping opioid analgesic prescriptions, by region, New York State, 2017-2020



The data exclude buprenorphine prescriptions for treatment of OUD.

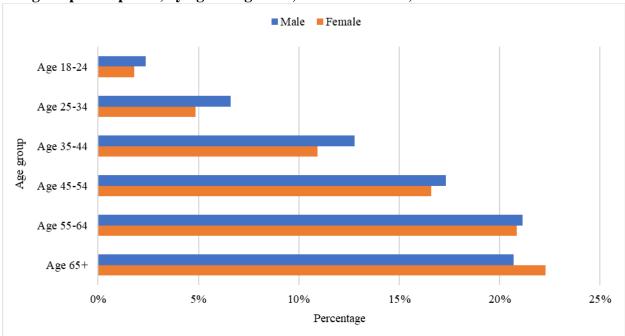
New York State total contains number with county unknown.

\*Patients with at least one prescription for opioid analgesics during a given year Data Source: NYS Prescription Monitoring Program; Data as of June 2021

For complete data, see Appendix: Data Table 5.11.

In 2020, among patients with at least one prescription for opioid analysics, the percentage who had two or more calendar days of overlapping opioid analysic prescriptions was higher among males than among females, except among those aged 65 years and older (Figure 5.12). The largest gap in the percentage between genders was seen among the 35-44 year-old age group (12.8 percent for males, 10.9 percent for females).

Figure 5.12 Percentage of patients\* with two or more calendar days of overlapping opioid analysesic prescriptions, by age and gender, New York State, 2020



The data exclude buprenorphine prescriptions for treatment of OUD.

\*Patients with at least one prescription for opioid analgesics during a given year Data Source: NYS Prescription Monitoring Program; Data as of June 2021

For complete data, see Appendix: Data Table 5.12.

In NYS, the crude rate of patients who received at least one buprenorphine prescription for OUD increased between 2017 (338.9 per 100,000 population) and 2020 (413.0 per 100,000), representing a 21.9 percent increase (Figure 5.13). The rate was more than two times higher in NYS excluding NYC than in NYC during 2017-2020. It is encouraging that more qualified practitioners have completed the required training and have received their SAMHSA DATA 2000 waiver<sup>26</sup> and the Drug Enforcement Administration (DEA) x-designation so that they have the capacity to prescribe buprenorphine for the treatment of OUD. These qualified practitioners include physicians, Nurse Practitioners (NPs), Physician Assistants (PAs), Clinical Nurse Specialists (CNSs), and Licensed Midwifes (LMs) and are in various settings increasing access for this life-saving medication.

Figure 5.13 Patients who received at least one buprenorphine prescription for opioid use disorder, crude rate per 100,000 population, by region, New York State, 2017-2020

New York State total contains number with county unknown.

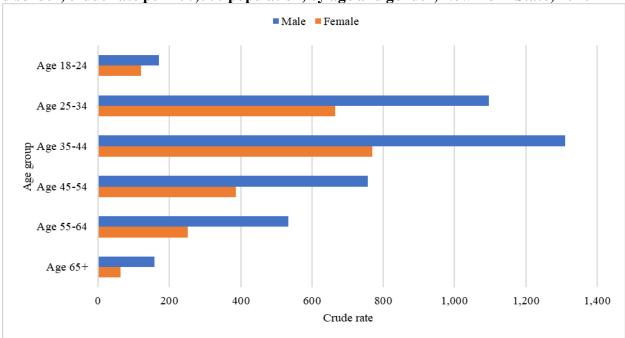
Data Source: NYS Prescription Monitoring Program; Data as of June 2021

For complete data, see Appendix: Data Table 5.13.

<sup>&</sup>lt;sup>26</sup> DEA Requirements for DATA Waived Physicians <a href="https://www.samhsa.gov/medication-assisted-treatment/become-buprenorphine-waivered-practitioner">https://www.samhsa.gov/medication-assisted-treatment/become-buprenorphine-waivered-practitioner</a> [Accessed August 2021].

In 2020, the crude rate of patients who received at least one buprenorphine prescription for OUD per 100,000 population was highest among the 35-44 year-old age group in both males (1,309.3 per 100,000) and females (768.4 per 100,000), followed by the 25-34 year-old age group, with a rate of 1,096.1 per 100,000 for males and 664.4 per 100,000 for females. The crude rate of patients who received at least one buprenorphine prescription for OUD was consistently higher in males than females for all age groups (Figure 5.14).

Figure 5.14 Patients who received at least one buprenorphine prescription for opioid use disorder, crude rate per 100,000 population, by age and gender, New York State, 2020



Data Source: NYS Prescription Monitoring Program; Data as of June 2021 For complete data, see Appendix: Data Table 5.14.

## 6 - Population surveys on substance use

#### National Survey on Drug Use and Health (NSDUH)

SAMHSA funds the NSDUH, an annual nationwide survey involving interviews with approximately 70,000 randomly selected individuals, aged 12 years and older. This survey provides estimates on the use of tobacco products, alcohol, illicit drugs, and mental health in the United States (US). These data provide state and national estimates to track trends in the use of substances, assess the consequences of substance use and abuse, and identify those groups at high risk for OUD.<sup>27</sup>

Among population aged 12 years and older, the percentage of people who reported using illicit drugs other than marijuana in the past month, during 2018-2019, was 3.1 percent for NYS, and 3.3 percent for the US (Figure 6.1). For both NYS and the US, the percentage was highest in the 18-25 year-old age group (6.6 percent in NYS, 6.1 percent in the US), followed by the 26-34 year-old age group (5.9 percent in NYS, 5.7 percent in the US).

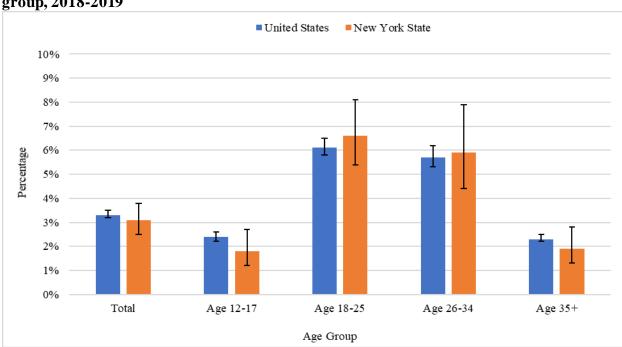


Figure 6.1 Prevalence of illicit drug use other than marijuana in the past month, by age group, 2018-2019

Data source: National Survey on Drug Use and Health (NSDUH); Data as of June 2021 For complete data, see <u>Appendix: Data Table 6.1</u>.

<sup>&</sup>lt;sup>27</sup> National Survey on Drug Use and Health. <a href="https://nsduhweb.rti.org/respweb/homepage.cfm">https://nsduhweb.rti.org/respweb/homepage.cfm</a>. [Accessed June 2020].

During 2018-2019, 2.7 percent of the population aged 12 years and older in NYS reported having misused pain relievers in the past year. This was significantly lower than 3.6 percent of the population aged 12 years and older in the US (Figure 6.2). Among both NYS and US populations aged 12 years and older, the percentage was highest among the 26-34 year-old age group (4.9 percent in NYS, 5.5 percent in the US), followed by the 18-25 year-old age group (4.5 percent in NYS, 5.4 percent in the US), and those aged 35 years and older (1.9 percent in NYS, 3.0 percent in the US). Those aged 12-17 years had the lowest percentage of pain reliever misuse reported (1.5 percent in NYS, 2.5 percent in the US).

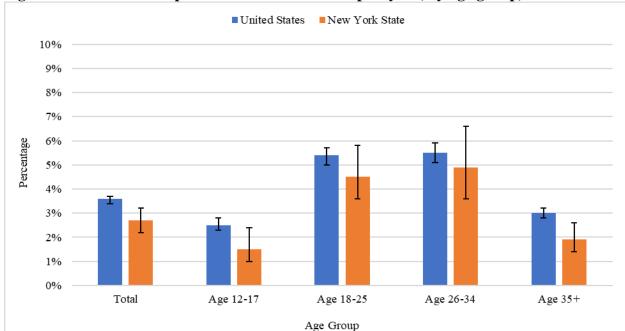


Figure 6.2 Prevalence of pain reliever misuse in the past year, by age group, 2018-2019

Data source: National Survey on Drug Use and Health (NSDUH); Data as of June 2021 For complete data, see Appendix: Data Table 6.2.

Among NYS population aged 12 years and older, the percentage of reported heroin use in the past year decreased from 0.4 percent during 2015-2016, to 0.2 percent during 2018-2019 (Figure 6.3). However, this decrease was not statistically significant. During the same periods, reported use of heroin in the past year in the US remained steady at 0.3 percent.

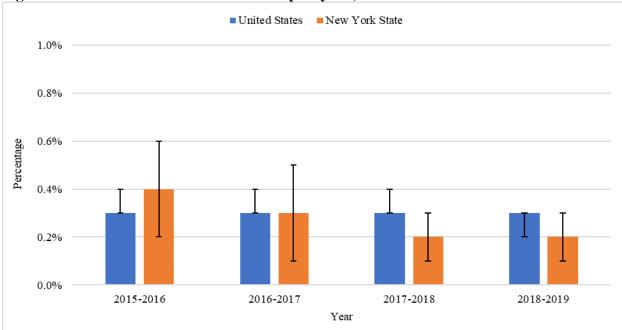


Figure 6.3 Prevalence of heroin use in the past year, 2015-2016 to 2018-2019

Note: Confidence intervals for NSDUH percentages are constructed on the logit scale, resulting in asymmetric intervals. Point estimates and confidence intervals are then rounded to one decimal place. This could lead to overlapping between the small estimates and the confidence limits. Data source: National Survey on Drug Use and Health (NSDUH); Data as of June 2021 For complete data, see <a href="Appendix: Data Table 6.3">Appendix: Data Table 6.3</a>.

In 2018-2019, the prevalence of reported cocaine use in the past year among the population aged 12 years and older was 2.6 percent in NYS and 2.0 percent in the US (Figure 6.4). Between 2015-2016 and 2018-2019 in both NYS and the US, the prevalence of reported cocaine use in the past year experienced little to no significant changes.

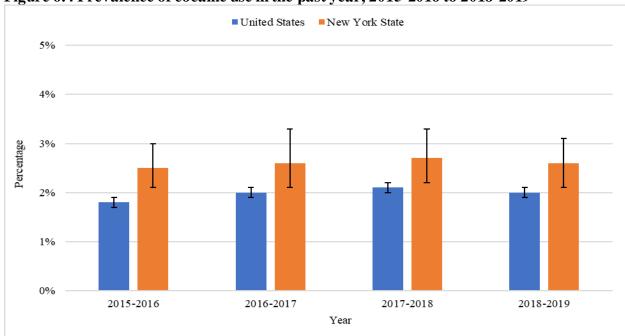


Figure 6.4 Prevalence of cocaine use in the past year, 2015-2016 to 2018-2019

Data source: National Survey on Drug Use and Health (NSDUH); Data as of June 2021 For complete data, see <u>Appendix</u>: <u>Data Table 6.4</u>.

Between 2015-2016 and 2018-2019 in NYS, the percentage of reported illicit drug use other than marijuana in the past month among those 12 years and older remained relatively steady (Figure 6.5). Reported cocaine use in the past year also remained stable with 2.6 percent in 2018-2019. During the same period, reported pain reliever misuse in the past year decreased among New Yorkers 12 years and older from 3.7 percent in 2015-2016 to 2.7 percent in 2018-2019. Reports of heroin use in the past year also decreased from 0.4 percent in 2015-2016, to 0.2 percent in 2018-2019.

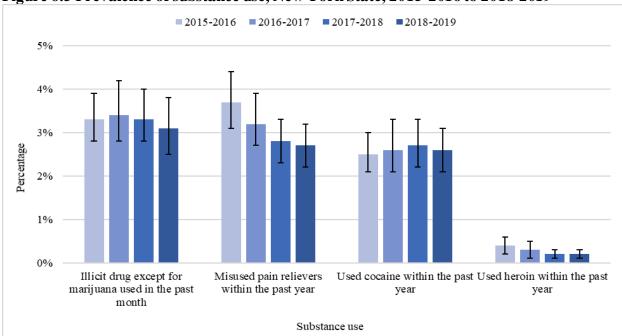
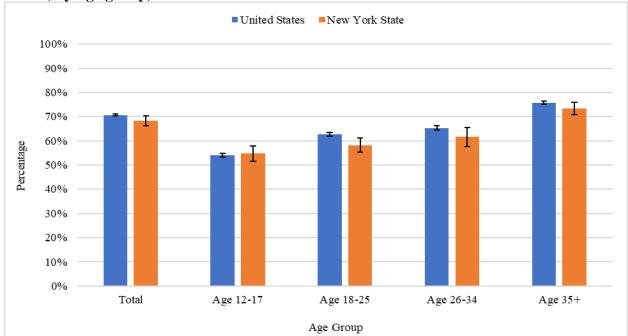


Figure 6.5 Prevalence of substance use, New York State, 2015-2016 to 2018-2019

Data source: National Survey on Drug Use and Health (NSDUH); Data as of June 2021 For complete data, see Appendix: Data Table 6.5.

During 2018-2019, 68.2 percent of the population aged 12 years and older in NYS, and 70.6 percent of the population aged 12 years and older in the US, reported perceiving great risk from using cocaine once a month (Figure 6.6). The percentage was highest among those aged 35 years and older (73.4 percent in NYS, 75.7 percent in the US), followed by the 26-34 year-old age group (61.6 percent in NYS, 65.3 percent in the US), and the 18-25 year-old age group (58.2 percent in NYS, 62.6 percent in the US). Those aged 12-17 years had the lowest prevalence of perceiving great risk from using cocaine once a month (54.9 percent in NYS, 54.1 percent in the US).





Data source: National Survey on Drug Use and Health (NSDUH); Data as of June 2021 For complete data, see Appendix: Data Table 6.6.

### Youth Risk Behavior Surveillance System (YRBSS)

The YRBSS provides data on self-reported lifetime use (reported as "ever used") of cocaine, heroin, methamphetamine, and synthetic marijuana, as well as lifetime injection of an illegal drug, in high school students (9th grade to 12th grade).

In 2019, the percentages of high school students in NYS who reported ever using cocaine (6.3 percent), heroin (5.8 percent), methamphetamine (4.9 percent), synthetic marijuana (10.3 percent), and who reported injection of an illegal drug (3.8 percent) were higher than the percentages in the US overall, respectively (Figure 6.7).

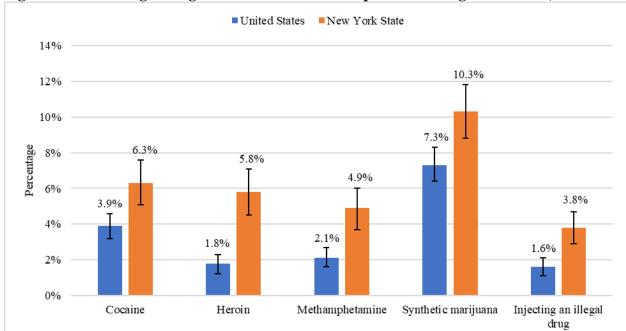
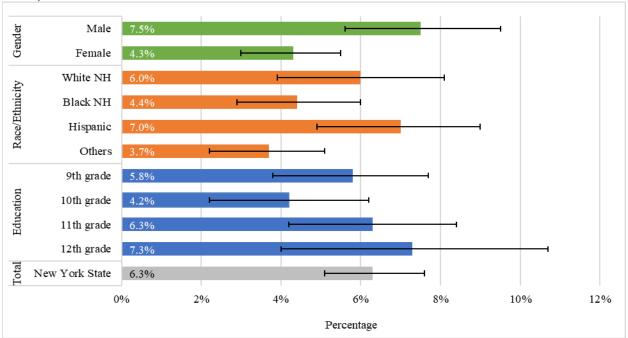


Figure 6.7 Percentage of high school students who report ever using a substance, 2019

Data source: Youth Risk Behavior Surveillance System (YRBSS); Data as of October 2020 For complete data, see Appendix: Data Table 6.7.

During 2019, 6.3 percent of all high school students in NYS reported ever using cocaine (Figure 6.8). This was highest among male (7.5 percent), Hispanic (7.0 percent), and 12th grade (7.3 percent) students.

Figure 6.8 Percentage of of high school students who report ever using cocaine, New York State, 2019

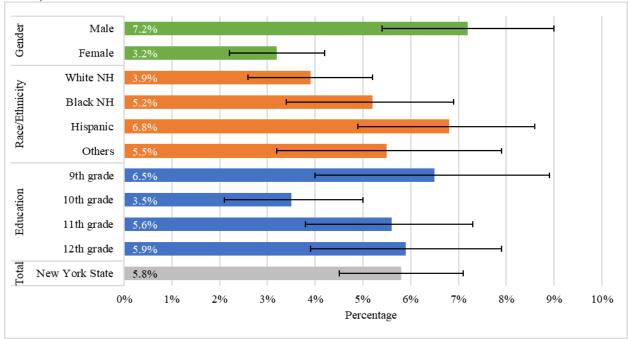


Survey question: During your life, how many times have you used any form of cocaine, including powder, crack, or freebase?

Data source: Youth Risk Behavior Surveillance System (YRBSS); Data as of October 2020 For complete data, see <u>Appendix</u>: <u>Data Table 6.8</u>.

During 2019, 5.8 percent of all high school students in NYS reported ever using heroin (Figure 6.9). This was highest among male (7.2 percent), Hispanic (6.8 percent), 9th grade (6.5 percent), and 12th grade (5.9 percent) students.

Figure 6.9 Percentage of high school students who report ever using heroin, New York State, 2019

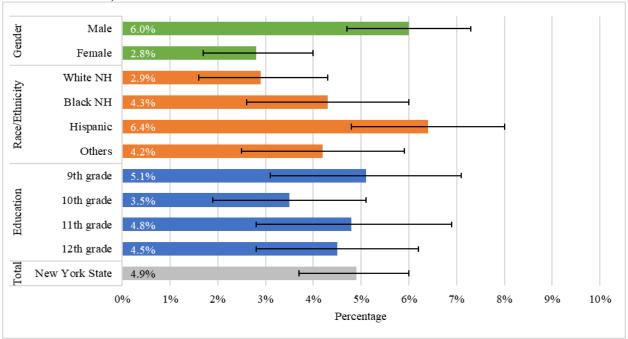


Survey question: During your life, how many times have you used heroin (also called smack, junk, or China White)?

Data source: Youth Risk Behavior Surveillance System (YRBSS); Data as of October 2020 For complete data, see <u>Appendix</u>: <u>Data Table 6.9</u>.

During 2019, 4.9 percent of high school students in NYS reported ever using methamphetamines (Figure 6.10). This was highest among male (6.0 percent), Hispanic (6.4 percent), and 9th grade (5.1 percent) students.

Figure 6.10 Percentage of high school students who report ever using methamphetamines, New York State, 2019

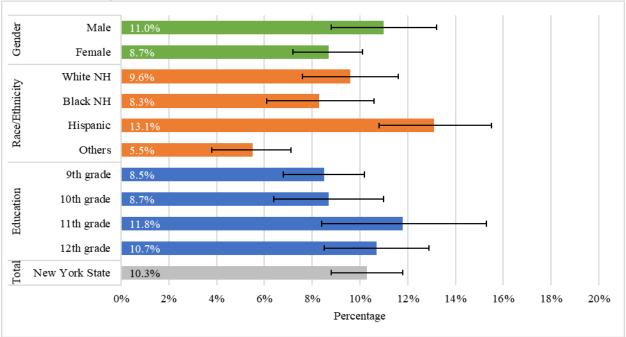


Survey question: During your life, how many times have you used methamphetamines (also called speed crystal meth, crank, ice, or meth)?

Data source: Youth Risk Behavior Surveillance System (YRBSS); Data as of October 2020 For complete data, see <u>Appendix</u>: <u>Data Table 6.10</u>.

During 2019, 10.3 percent of high school students in NYS reported ever using synthetic marijuana (Figure 6.11). This was highest among male (11.0 percent), Hispanic (13.1 percent), 11th grade (11.8 percent), and 12th grade (10.7 percent) students.

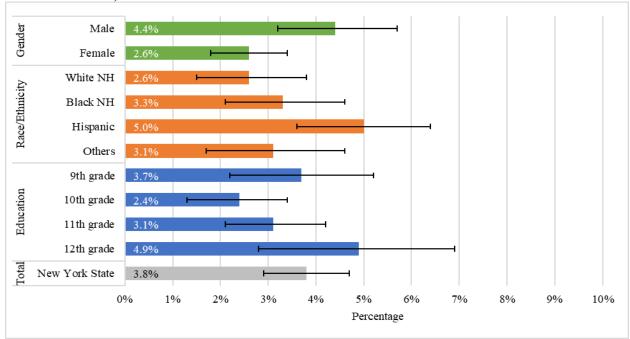
Figure 6.11 Percentage of high school students who report ever using synthetic marijuana, New York State, 2019



Survey question: During your life, how many times have you used synthetic marijuana? (Synthetic marijuana also is called Spice, fake weed, K2, King Kong, Yucatan Fire, or Skunk.) Data source: Youth Risk Behavior Surveillance System (YRBSS); Data as of October 2020 For complete data, see <a href="Appendix: Data Table 6.11">Appendix: Data Table 6.11</a>.

During 2019, 3.8 percent of high school students in NYS reported ever injecting an illegal drug (Figure 6.12). This is was highest among male (4.4 percent), Hispanic (5.0 percent), and 12th grade (4.9 percent) students.

Figure 6.12 Percentage of high school students who report ever injecting an illegal drug, New York State, 2019



Survey question: During your life, how many times have you used a needle to inject any illegal drug into your body?

Data source: Youth Risk Behavior Surveillance System (YRBSS); Data as of October 2020 For complete data, see <u>Appendix</u>: <u>Data Table 6.12</u>.

#### **Public Opinion Poll of Public Health Issues**

The Siena College Research Institute administers an annual survey of adult NYS residents on behalf of the NYSDOH. This survey aims to examine the general public's beliefs about public health issues and to assess public support for priority policies in chronic disease prevention and control. In NYS, reported attitudes about heroin use and prescription opioid misuse and abuse indicate an awareness of the risk of overdose involving opioids. In the most recent survey, approximately 66 percent of New Yorkers reported that they consider prescription opioid misuse and abuse to be a "very serious" public health problem, representing a concerning decrease from a high of 75 percent in the November 2017 and January 2019 surveys. Similarly, about 70 percent of New Yorkers consider heroin use to be a "very serious" public health problem, also decreased from 76 percent in November 2017 (Figure 6.13). Even with the decreases over time, these public health problems were rated as serious public health problems at higher percentages as compared to respondents' perceptions of "very serious" problems regarding other areas of public health concern, such as "access to healthy food and beverages" and "alcohol consumption". Perception of opioids as a serious public health problem is not restricted to a single geographic region of NYS. Across the state, most New Yorkers surveyed have consistently reported that they consider heroin use and prescription opioid misuse and abuse to be a "very serious public health problem" across survey years (data not shown).

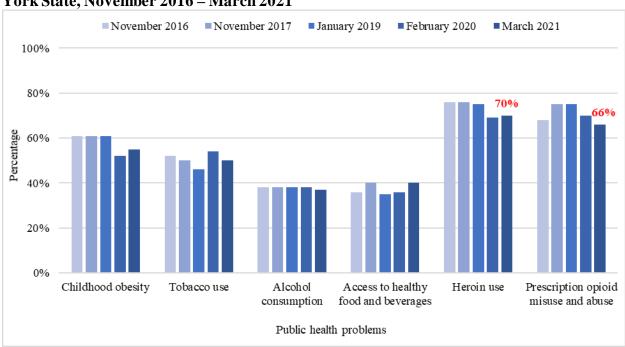


Figure 6.13 Perceptions of public health problems as "Very Serious" by adults in New York State, November 2016 – March 2021

Data source: New York State Department of Health/Siena College Research Institute, New York State Chronic Disease Public Opinion Poll; Accessed July 2021 For complete data, see Appendix: Data Table 6.13.

# Acknowledgements

This report was prepared with the invaluable assistance from the following programs:

- New York State Department of Health:
  - o Office of Public Health Practice
  - o AIDS Institute
  - o Bureau of Emergency Medical Services and Trauma Systems
  - o Bureau of Narcotic Enforcement
  - o Bureau of Vital Records
  - o Office of Quality and Patient Safety
  - o Bureau of Chronic Disease Evaluation and Research
- New York State Office of Addiction Supports and Services
- New York/New Jersey High Intensity Drug Trafficking Area

# Methods

## **Indicators**

Indicator	Definition	ICD Codes/Detailed Explanation	Data Source
Overdose deaths involving any opioid	All poisoning deaths involving opioids, all manners, using all causes of death	Underlying cause of death, determined from the field designated as such, or, where missing or unknown, from the first-listed multiple cause of death field: X40-X44, X60-X64, X85, Y10-Y14 AND Any opioid in all other causes of death: T40.0, T40.1, T40.2, T40.3, T40.4, T40.6	CDC WONDER
Overdose deaths involving heroin	Poisoning deaths involving heroin, all manners, using all causes of death	Underlying cause of death, determined from the field designated as such, or, where missing or unknown, from the first-listed multiple cause of death field: X40-X44, X60-X64, X85, Y10-Y14 AND Heroin in all other causes of death: T40.1	
Overdose deaths involving commonly prescribed opioids	Poisoning deaths involving commonly prescribed opioids, all manners, using all causes of death	Underlying cause of death, determined from the field designated as such, or, where missing or unknown, from the first-listed multiple cause of death field: X40-X44, X60-X64, X85, Y10-Y14 AND any commonly prescribed opioid in all other causes of death: T40.2, T40.3 (e.g., hydrocodone, oxycodone)	CDC WONDER
Overdose deaths involving any synthetic opioid other than methadone	Poisoning deaths involving any synthetic opioid other than methadone, all manners, using all causes of death	Underlying cause of death, determined from the field designated as such, or, where missing or unknown, from the first-listed multiple cause of death field: X40-X44, X60-X64, X85, Y10-Y14 AND any other synthetic narcotics in all other causes of death: T40.4	
Overdose deaths involving cocaine	Poisoning deaths involving cocaine, all manners, using all causes of death	nanners, using all designated as such, or, where missing or unknown, from the WON	
Opioid burden (including outpatient ED visits and hospital discharges for non- fatal opioid	Opioid burden includes opioid overdose deaths, non-fatal outpatient ED visits and hospital discharges involving opioid abuse, poisoning, dependence and	Underlying cause of death, determined from the field designated as such, or, where missing or unknown, from the first listed multiple cause of death field: X40-X44, X60-X64, X85, Y10-Y14 AND any opioid in all other causes of death: T40.0, T40.1, T40.2, T40.3, T40.4, T40.6	Vital Statistics and CDC WONDER
overdose, abuse, dependence, and unspecified use; and opioid overdose deaths)	unspecified use.	ICD-10-CM: Opioid abuse (Principal Diagnosis: F1110, F11120, F11121, F11122, F11129, F1114, F11150, F11151, F11159, F11181, F11182, F11188, F1119); Opioid dependence and unspecified use (Principal Diagnosis: F1120, F11220, F11221, F11222, F11229, F1123, F1124, F11250, F11251, F11259, F11281, F11282, F11288, F1129, F1190, F11920, F11921, F11922, F11929, F1193, F1194, F11950, F11951, F11959, F11981, F11982, F11988, F1199); Opioid poisoning (Principal Diagnosis: T40.0, T40.1, T40.2, T40.3, T40.4, T40.6 (Excludes 'adverse effect' or 'underdosing' as indicated by the values of 5 and 6 in the 6th character; and 'sequela' as indicated by the value of 'S' in the 7th character; e.g. T400X5S, T400X6S)	SPARCS

Indicator	Definition	ICD Codes/Detailed Explanation	Data Source
Newborns with neonatal withdrawal syndrome and/or affected by maternal use of drugs of addiction	Neonatal withdrawal symptoms from maternal use of drugs of addiction, and/or newborns affected by maternal use of drugs of addiction (other than cocaine)	ICD-10-CM: Principal Diagnosis: Z38 (liveborn infants) AND P96.1 (neonatal withdrawal symptoms from maternal use of drugs of addiction) or P04.49 (newborns affected by maternal use of drugs of addiction (other than cocaine)) in any other diagnoses	SPARCS
Hospital discharges involving opioid use (including abuse, poisoning, dependence and unspecified use)	Opioid use includes abuse, poisoning, dependence and unspecified use.	ICD-10-CM: Opioid abuse (Principal Diagnosis: F1110, F11120, F11121, F11122, F11129, F1114, F11150, F11151, F11159, F11181, F11182, F11188, F1119); Opioid dependence and unspecified use (Principal Diagnosis: F1120, F11220, F11221, F11222, F11229, F1123, F1124, F11250, F11251, F11259, F11281, F11282, F11288, F1129, F1190, F11920, F11921, F11922, F11929, F1193, F1194, F11950, F11951, F11959, F11981, F11982, F11988, F1199); Opioid poisoning (Principal Diagnosis: T40.0, T40.1, T40.2, T40.3, T40.4, T40.6 (Excludes 'adverse effect' or 'underdosing' as indicated by the values of 5 and 6 in the 6th character; and 'sequela' as indicated by the value of 'S' in the 7th character; e.g. T400X5S, T400X6S)	SPARCS
Hospital discharges involving heroin overdose	Hospitalizations involving heroin poisonings	ICD-10-CM: Principal Diagnosis: T40.1 (Excludes 'adverse effect' or 'underdosing' as indicated by the values of 5 and 6 in the 6th character; and 'sequela' as indicated by the value of 'S' in the 7th character; e.g. T401X5S, T401X6S)	SPARCS
All emergency department visits involving opioid overdose	All emergency department visits (including outpatient and admitted patients) involving opioid poisonings	ICD-10-CM: Principal Diagnosis: T40.0, T40.1, T40.2, T40.3, T40.4, T40.6 (Excludes 'adverse effect' or 'underdosing' as indicated by the values of 5 and 6 in the 6th character; and 'sequela' as indicated by the value of 'S' in the 7th character; e.g. T400X5S, T400X6S)	SPARCS
All emergency department visits involving heroin overdose	All emergency department visits (including outpatient and admitted patients) involving heroin poisoning	ICD-10-CM: Principal Diagnosis: T40.1 (Excludes 'adverse effect' or 'underdosing' as indicated by the values of 5 and 6 in the 6th character; and 'sequela' as indicated by the value of 'S' in the 7th character; e.g. T401X5S, T401X6S)	SPARCS
Admissions for any opioids	Admissions to OASAS-certified chemical dependence treatment programs with heroin or any other synthetic opioid reported as the primary, secondary or tertiary substance of abuse at admission.	Other opioid includes synthetic and semi-synthetic opioids. The OASAS Client Data System (CDS) collects specific data on methadone, buprenorphine, oxycodone, as well as "other synthetic opioids." Other synthetic opioids also include drugs such as hydrocodone, pharmaceutical and/or non-pharmaceutical fentanyl. Clients may also have heroin or any other substance as the primary, secondary or tertiary substance of abuse at admission.  An admission is the enrollment of a person into a certified chemical dependence program to receive treatment for a substance use disorder. A person may be admitted to one or more programs during the year depending on the type of services required.	OASAS Client Data System (CDS)

Indicator	Definition	ICD Codes/Detailed Explanation	Data Source
Naloxone administration report by Emergency Medical Services (EMS)	Each naloxone administration report represents an EMS encounter when the administration of naloxone was given during the course of patient care. Multiple doses may be dispensed within a single administration report. Often, administrations of naloxone were given for patients presenting with similar signs and symptoms of a potential opioid overdose; final diagnosis of an opioid overdose is completed during definitive care or final evaluation.	Medication administered is equal to naloxone.	NYS e-PCR data, and other regional EMS Program data collection methods
Naloxone administration report by law enforcement	Each naloxone administration report represents a naloxone administration instance in which a trained law enforcement officer administered one or more doses of naloxone to a person suspected of an opioid overdose.	Not applicable	NYS Law Enforcement Naloxone Administration Database
Naloxone administration report by registered COOP program	Each naloxone administration report represents a naloxone administration instance in which a trained responder administered one or more doses of naloxone to a person suspected of an opioid overdose. Naloxone administration instances that are not reported to the AIDS Institute by the registered COOP programs are excluded from the county report.	Not applicable	NYS Community Opioid Overdose Prevention (COOP) Naloxone Administration Database
Prevalence of illicit drug use other than marijuana in the past month	Prevalence of respondents reporting use of illicit drugs other than marijuana in the past month.	Illicit drug use other than marijuana use includes the misuse of prescription psychotherapeutics or the use of cocaine (including crack), heroin, hallucinogens, inhalants, or methamphetamine. Misuse of prescription psychotherapeutics is defined as use in any way not directed by a doctor, including use without a prescription of one's own; use in greater amounts, more often, or longer than told; or use in any other way not directed by a doctor. Prescription psychotherapeutics do not include over-the-counter drugs.  Estimates are weighted to represent the civilian, noninstitutionalized population aged 12 or older for the nation as a whole and for each state. The standard errors and 95 percent confidence intervals also reflect the survey's stratified, clustered design and are computed using the Taylor series linearization method, assuming a with-replacement design. The confidence intervals for percentages are constructed on the logit scale, producing asymmetric intervals that are more accurate near 0% or 100% than symmetric intervals would be. Point estimates and confidence intervals are then rounded to one decimal place. This could lead to overlapping between the small estimates and the confidence limits.	National Survey on Drug Use and Health (NSDUH)

Indicator	Definition	ICD Codes/Detailed Explanation	Data Source
Prevalence of pain reliever misuse in the past year	Prevalence of respondents reporting misuse of pain relievers in the past year.	Misuse of prescription psychotherapeutics is defined as use in any way not directed by a doctor, including use without a prescription of one's own; use in greater amounts, more often, or longer than told; or use in any other way not directed by a doctor. Prescription psychotherapeutics do not include over-the-counter drugs.  Estimates are weighted to represent the civilian, noninstitutionalized population aged 12 or older for the nation as a whole and for each state. The standard errors and 95 percent confidence intervals also reflect the survey's stratified, clustered design and are computed using the Taylor series linearization method, assuming a with-replacement design. The confidence intervals for percentages are constructed on the logit scale, producing asymmetric intervals that are more accurate near 0% or 100% than symmetric intervals would be. Point estimates and confidence intervals are then rounded to one decimal place. This could lead to overlapping between the small estimates and the confidence limits.	NSDUH
Prevalence of heroin use in the past year	Prevalence of respondents reporting use of heroin in the past year.	Measures of use of heroin in the respondent's lifetime, the past year, and the past month were derived from responses to the questions about lifetime and recency of use (e.g., "How long has it been since you last used heroin?"). The question about recency of use was asked if respondents previously reported any use of heroin in their lifetime.  Estimates are weighted to represent the civilian, noninstitutionalized population aged 12 or older for the nation as a whole and for each state. The standard errors and 95 percent confidence intervals also reflect the survey's stratified, clustered design and are computed using the Taylor series linearization method, assuming a with-replacement design. The confidence intervals for percentages are constructed on the logit scale, producing asymmetric intervals that are more accurate near 0% or 100% than symmetric intervals would be. Point estimates and confidence intervals are then rounded to one decimal place. This could lead to overlapping between the small estimates and the confidence limits.	NSDUH

Indicator	Definition	ICD Codes/Detailed Explanation	Data Source
Prevalence of cocaine use in the past year	Prevalence of respondents reporting use of cocaine in the past year.	Measures of use of cocaine, including powder, crack, free base, and coca paste, in the respondent's lifetime, the past year, and the past month were derived from responses to the questions about lifetime and recency of use (e.g., "How long has it been since you last used any form of cocaine?"). The question about recency of use was asked if respondents previously reported any use of cocaine in their lifetime.	NSDUH
		Estimates are weighted to represent the civilian, noninstitutionalized population aged 12 or older for the nation as a whole and for each state. The standard errors and 95 percent confidence intervals also reflect the survey's stratified, clustered design and are computed using the Taylor series linearization method, assuming a with-replacement design. The confidence intervals for percentages are constructed on the logit scale, producing asymmetric intervals that are more accurate near 0% or 100% than symmetric intervals would be. Point estimates and confidence intervals are then rounded to one decimal place. This could lead to overlapping between the small estimates and the confidence limits.	
Percentage of population who perceived great risk from using cocaine once a month	Prevalence of respondents reporting perceiving great risk from using cocaine once a month.	Respondents were asked to assess the extent to which people risk harming themselves physically and in other ways when they use various illicit drugs, alcohol, and cigarettes, with various levels of frequency. Response options were (1) no risk, (2) slight risk, (3) moderate risk, and (4) great risk. Although these questions on the perceived risk of harm from using various substances did not change for 2015, other changes to the 2015 questionnaire appeared to affect the comparability of several of these measures between 2015 and prior years.	NSDUH
		Estimates are weighted to represent the civilian, noninstitutionalized population aged 12 or older for the nation as a whole and for each state. The standard errors and 95 percent confidence intervals also reflect the survey's stratified, clustered design and are computed using the Taylor series linearization method, assuming a with-replacement design. The confidence intervals for percentages are constructed on the logit scale, producing asymmetric intervals that are more accurate near 0% or 100% than symmetric intervals would be. Point estimates and confidence intervals are then rounded to one decimal place. This could lead to overlapping between the small estimates and the confidence limits.	
Percentage of high school students who report ever using cocaine	Percentage of respondents indicating that they had used cocaine in their lifetime	Survey question: During your life, how many times have you used any form of cocaine, including powder, crack, or freebase?  Responses: "A. 0 times B. 1 or 2 times C. 3 to 9 times D. 10	Youth Risk Behavior Surveillance System (YRBSS)
Percentage of high school students who report ever using heroin	Percentage of respondents indicating that they had used heroin in their lifetime	Survey question: "During your life, how many times have you used heroin (also called smack, junk, or China White)?"	YRBSS
		Responses: "A. 0 times B. 1 or 2 times C. 3 to 9 times D. 10 to 19 times E. 20 to 39 times F. 40 or more times"	

Indicator	Definition	ICD Codes/Detailed Explanation	Data Source
Percentage of high school students who report ever using methamphetamines	Percentage of respondents indicating that they had used methamphetamines in their lifetime	Survey question: During your life, how many times have you used methamphetamines (also called speed crystal meth, crank, ice, or meth)?	YRBSS
		Responses: "A. 0 times B. 1 or 2 times C. 3 to 9 times D. 10 to 19 times E. 20 to 39 times F. 40 or more times"	
Percentage of high school students who report ever using synthetic marijuana	Percentage of respondents indicating that they had used synthetic marijuana in their lifetime	Survey question: During your life, how many times have you used synthetic marijuana? (Synthetic marijuana also is called Spice, fake weed, K2, King Kong, Yucatan Fire, or Skunk.)	YRBSS
		Responses: "A. 0 times B. 1 or 2 times C. 3 to 9 times D. 10 to 19 times E. 20 to 39 times F. 40 or more times"	
Percentage of high school students who report ever injecting an illegal drug	Percentage of respondents indicating that they had injected an illegal drug in their lifetime	Survey question: During your life, how many times have you used a needle to inject any illegal drug into your body?	YRBSS
		Responses: "A. 0 times B. 1 time C. 2 or more times"	

Indicator	Numerator	Denominator
Opioid <sup>e</sup> analgesic prescription rate <sup>a</sup> per 1,000 population	Schedule II, III and IV opioid analgesic prescriptions <sup>c</sup> dispensed to state residents.	Midyear population for the calendar year under surveillance from US census
Commonly prescribed opioid analgesic prescription rate <sup>a</sup> per 1,000 population	Six commonly prescribed schedule II, III and IV opioid analgesic prescriptions <sup>c</sup> dispensed to state residents	Midyear population for the calendar year under surveillance from US census
Percentage of incidents when patients were opioid naïve and received long-acting opioid prescription <sup>e,f</sup>	Number of incidents when patients were opioid naïve and received long-acting opioid prescription <sup>e,f</sup>	Number of opioid naïve incidents <sup>c</sup>
Percentage of incidents when patients were opioid naïve and received an opioid prescription <sup>e,g</sup> of more than seven days	Number of incidents when patients were opioid naïve and received an opioid prescription <sup>e,g</sup> of more than seven days	Number of opioid naïve incidents <sup>c</sup>
Patients prescribed opioide analgesics from five or more prescribers and dispensed at five or more pharmacies in a six-month period, rate per 100,000 population	Number of patients receiving prescriptions <sup>c</sup> for opioid analgesics from five or more prescribers and that are dispensed at five or more pharmacies in a six-month period	Midyear population for the calendar year under surveillance from US census
Patients who received at least one buprenorphine prescription for opioid use disorder, rate <sup>a</sup> per 1,000 population	Patients who received at least one buprenorphine prescription for opioid use disorder within the state	Midyear population for the calendar year under surveillance from US census
Patients prescribed one or more opioid analgesics with a total daily dose of $\geq 90$ MME on at least one day	Patients prescribed one or more opioid analgesics prescription <sup>d</sup> with a total daily dose of $\geq 90$ MME on at least one day	Patients who received one or more opioid analgesic prescriptions <sup>d</sup> during a given year
Patients with two or more calendar days of overlapping opioid <sup>e</sup> analgesic and benzodiazepine prescriptions	Patients with two or more calendar days of overlapping opioid analgesic and benzodiazepine prescriptions <sup>c</sup>	Patients with at least one prescription <sup>c</sup> for opioid analgesics or benzodiazepines during a given year
Patients with two or more calendar days of overlapping opioid analgesic prescriptions	Patients with two or more calendar days of overlapping opioid analgesic prescriptions <sup>c</sup>	Patients with at least one prescription <sup>c</sup> for opioid analgesics during a given year

<sup>&</sup>lt;sup>a</sup>: The rates presented are controlled substance prescription rates per population. These numbers are federally-standardized indicators used to measure types of progress toward combating the controlled substance epidemic in certain states. They are not rates of the number of different people who are receiving a controlled substance prescription in a certain population. Rather, they are rates of the number of specific controlled substance prescriptions written and dispensed within the period. For example, if a county has a rate of 25, that means there were 25 prescriptions per 1,000 people in the population. However, it does not necessarily mean that 25 out of 1,000 individuals received a prescription; all 25 controlled substance prescriptions could have been for one individual.

<sup>&</sup>lt;sup>b</sup>: Morphine milligram equivalent

<sup>&</sup>lt;sup>c</sup>: Buprenorphine prescriptions for the treatment of substance use disorder were excluded.

d: Buprenorphine prescriptions for the pain and the treatment of substance use disorder were excluded.

e: A comprehensive controlled substance list including drugs from CDC and NYS PMP was used for data analysis

f: Patient received index prescription of long-acting opioid and opioid naïve.

g: Patient received index prescription of more than seven days and opioid naïve.

#### **Data Sources**

#### **CDC WONDER:**

State level opioid overdose mortality data were obtained from the Centers for Disease Control and Prevention Multiple Cause of Death Data query (CDC WONDER).

For information about CDC WONDER race/ethnicity groups, including which groups are included in the "other" category, please see:

https://wonder.cdc.gov/wonder/help/mcd.html#Race% 20and% 20Ethnicity% 20Questions

#### **Vital Records (Vital Statistics) Vital Event Registration:**

New York State consists of two registration areas, New York City (NYC) and New York State Exclusive of New York City (also referred to as Rest of State). NYC includes the five counties of Bronx, Kings (Brooklyn), New York (Manhattan), Queens, and Richmond (Staten Island); the remaining 57 counties comprise New York State Exclusive of NYC. The NYSDOH Bureau of Vital Records processes data from live birth, death, fetal death, and marriage certificates recorded in New York State Exclusive of NYC. Through a cooperative agreement, the NYSDOH receives data on live births, deaths, and fetal deaths recorded in NYC from the New York City Department of Health and Mental Hygiene (NYCDOHMH), and on live births and deaths recorded outside of New York State of residents of New York State from other states and Canada.

In general, vital event indicators for NYC geographical areas reported by the NYSDOH and the NYCDOHMH may be different because the former possibly includes all NYC residents' events, regardless of where they took place, and the latter reports events to NYC residents that took place in NYC.

Vital statistics mortality data include up to 20 causes of death. Frequencies are based on decedents' county of residence, not the county where death occurred. This report's mortality indicators reflect all manners and all causes of death. Data are frequently updated as additional confirmations on the causes of death and new records for all NYS resident deaths are received. Therefore, the frequencies published in subsequent reports may also differ due to timing and/or completeness of data.

#### **Statewide Planning and Research Cooperative System (SPARCS):**

SPARCS collects information about hospitalizations and ED visits through the patient discharge data system. Outpatient ED visits are events that did not result in admission to the hospital. Each hospitalization and outpatient ED visit receives an ICD-10-CM code at discharge that indicates the primary reason for the occurrence. There is also a first-listed cause, external cause of injury, and up to 24 other diagnosis codes recorded to further describe the hospitalization or ED visits.

Statistics in these tables are based on the primary diagnosis and first-listed cause of injury unless otherwise noted. An individual can have more than one hospitalization or ED visit. Numbers and rates are based on the number of discharges and not on the number of individuals seen. The frequencies are based on patients' county of residence, not the county where the incident occurred. County of residence was assigned based on ZIP Code for cases in which the patient county of residence was listed as unknown or missing, but a valid NYS ZIP Code was present.

For indicators related to the ED data, the numbers represent ED visits for opioid overdose patients who were not subsequently admitted into the hospital.

For information about SPARCS race/ethnicity groups, including which groups are included in the "other" category, please see:

- SPARCS Inpatient Data Dictionary (pages 54 and 55) https://www.health.ny.gov/statistics/sparcs/sysdoc/inpatientoutputdd.pdf
- SPARCS Outpatient Data Dictionary (pages 70 and 71) https://www.health.ny.gov/statistics/sparcs/sysdoc/outpatientoutputdd.pdf

#### New York State Emergency Medical Services (EMS) Data:

New York State maintains an EMS patient care data repository, in which all electronic Patient Care Report (e-PCR) data are captured from across the State. As of June 2018, additional EMS electronic patient care data are being submitted in compliance with the National EMS Information Systems (NEMSIS) 3.4.0 standard. The number of reported naloxone administrations for Erie, Niagara, Monroe, Onondaga, Schoharie, Montgomery and Herkimer counties may have increased compared to previous reports, as an EMS agency covering those counties and responding to a large volume of 911 calls has had data submitted back starting in August 2016 until current quarters. Additional historical data from 2017 forward is expected to be received for the five counties of New York City and other regions across New York State. Updates will be made to reported totals as additional data become available.

Most data for Suffolk County are obtained through the Suffolk County Regional EMS Medical Control, to which all medication administrations by EMS—including naloxone—are required to be reported. The Suffolk County results in this report are a de-duplicated compilation of data received from Suffolk County Medical Control and data provided from e-PCRs submitted. Data for Nassau County are primarily provided by the Nassau County Police Department, based on reports submitted by Nassau County first response agencies and most ambulance transport agencies. The EMS data from Nassau County Police Department are combined with e-PCR data submitted by other agencies not included in the Nassau County Police Department reporting. Finally, part of the data for Richmond County is obtained directly from the EMS agency, due to a difference in reporting mechanisms.

#### New York State Law Enforcement Naloxone Administration Dataset:

The NYS Law Enforcement Naloxone Administration dataset provides information on naloxone administrations by law enforcement officers in the case of a suspected opioid overdose. The information comes from a form that is submitted by officers following a naloxone administration. The form collects the age and gender of the individual receiving naloxone, the county and ZIP Code where the suspected opioid overdose occurred, aided status before and after naloxone administration, the suspected drug used, the number of naloxone vials administered by the officer, and whether the person lived. Initial trainings of law enforcement began in 2014 and are ongoing. The data do not yet comprehensively include the New York City Police Department and the Nassau County Police Department, which use a distinct reporting mechanism.

#### New York State Community Opioid Overdose Prevention (COOP) Program Dataset:

The NYS COOP program dataset provides information on naloxone administrations by lay persons who have been trained by registered NYS COOP programs in the case of a suspected opioid overdose. Naloxone administration reports are submitted by registered COOP programs, not individual lay persons. The form collects information including age and gender of the individual receiving naloxone, the county and ZIP Code where the suspected opioid overdose occurred, aided status before naloxone administration, the number of naloxone doses administered by the responder, and whether the person lived.

Naloxone usage reports are submitted to the AIDS Institute (AI) by registered community programs after a naloxone kit has been used by a trained community responder. Beginning in May 2018, the AI Community Opioid Overdose Prevention program began the transition from a paper-based reporting system to an online system for naloxone usage reporting purposes. Data that had previously been collected using paper reports and manually entered into a database were migrated to an online platform where data are now stored and managed. This migration included all paper reports from program inception in 2006 through July 2018. Registered programs have been introduced to the online reporting system on a rolling basis. While most registered program are utilizing the online platform for reporting purposes, paper reports will continue to be accepted and naloxone administration data on these forms will be entered into the new online system. As of April 2019, a new ZIP Code file was introduced to improve reporting accuracy. This has resulted in shifts in the number of administrations in certain counties, depending upon the ZIP Code reassignment.

# New York State Office of Addiction Services and Supports (OASAS) Client Data System (CDS):

The NYS Office of Addiction Services and Supports (OASAS) collects data on people treated in all OASAS-certified chemical dependence treatment programs. Data are collected through the OASAS Client Data System (CDS). Data are collected at admission and discharge from a level of care within a provider. Levels of care include crisis, residential, inpatient, outpatient, and opioid treatment. An individual admitted to more than one level of care during a year would be counted more than one admission. The primary, secondary and tertiary substance of abuse is collected for all clients admitted. Not all clients have a secondary or tertiary substance of abuse.

Data are based on the number of admissions during the year, and not on the number of individuals treated. A person admitted in a previous year could still be receiving treatment in subsequent years but would not be shown as an admission for the new year unless they were admitted in that year.

## **Prescription Monitoring Program (PMP) Data:**

The New York State Prescription Monitoring Program Registry (PMP) is an online registry that is administered by the New York State Department of Health's Bureau of Narcotic Enforcement (BNE). The registry collects dispensed prescription data for controlled substances in schedules II, III, IV and V that are reported by more than 5,000 separate dispensing pharmacies and practitioners registered with New York State. The data must be submitted to BNE within 24 hours after the prescription is dispensed. BNE closely monitors all submitted prescriptions and

their associated information. The integrity of the data is achieved through a variety of system edits, and it is the responsibility of the pharmacies to provide timely and accurate data.

Effective August 27, 2013, NYS prescribers are required to consult the Prescription Monitoring Program Registry prior to writing a prescription for Schedule II, III, and IV controlled substances. The PMP provides practitioners with direct, secure access to view dispensed controlled substance prescription histories for their patients. The PMP is available 24 hours a day/seven days a week via an application on the Health Commerce System (HCS). Patient reports include all controlled substances that were dispensed in New York State and reported by the pharmacy/dispenser for the past year. This information empowers practitioners to better evaluate their patients' treatment with controlled substances and determine whether there may be abuse or non-medical use. In addition, pharmacists can also access the registry to assist in the exercise of their professional judgment before dispensing the prescriptions for controlled substances.

#### The National Survey on Drug Use and Health (NSDUH):

The National Survey on Drug Use and Health (NSDUH) is sponsored by the Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration (SAMHSA). SAMHSA is a division within the U.S. Department of Health and Human Services (HHS). It is an on-going data collection plan designed to provide national and state-level statistical information on the use of alcohol, tobacco, and illicit drugs, including the non-medical use of prescription drugs, in the U.S. The survey tracks trends in substance use and identifies at-risk groups. It also collects data on mental health, co-occurring substance use and mental disorders, and treatment.

#### What is its use?

Organizations and agencies use the data for a variety of purposes. The data are used to provide information on prevalence of substance use and abuse, identify patterns and trends in substance use, identify demographic variations in health-related behaviors, identify risk factors, and assess potential need for services.

#### Who is covered in the NSDUH?

The health characteristics estimated from the NSDUH pertain only to the civilian, noninstitutionalized population age 12 years and older. Approximately 70,000 individuals are interviewed. US households are randomly selected and an interviewer visits each selected household. One or two residents from each selected household may be interviewed and the interview is administered on a laptop computer. The questions are answered in private directly on to the laptop computer; for some items, the interviewer reads the question. Each survey participant is compensated with \$30.

#### The Youth Risk Behavior Surveillance System (YRBSS):

#### What is the YRBSS?

The YRBSS is a national survey of youth and young adults in the US. It was developed to monitor priority health risk behaviors that are often established in childhood and adolescence. The YRBSS had been conducted every two years since 1991 and surveys high school students on substance use, physical activity, dietary behaviors, sexual behaviors, and behaviors related to injuries and violence. The national survey is conducted by CDC and the state, territorial, tribal government, and local surveys are administered by departments of health and education.

#### What is its use?

Health departments use the data for a variety of purposes. Among those are to provide information on prevalence and trends in health behaviors, identify demographic variations in health-related behaviors, provide comparable data, and measure progress toward achieving state and national health objectives.

#### Who is covered in the YRBSS?

The health characteristics estimated from the YRBSS pertain only to 9th through 12th grade students in public and private schools in the US. A cluster sample design is employed to identify a nationally representative sample of 9th through 12th grade students. Primary sample units are used, schools are samples from the primary sample units, and intact classes of required subjects are identified and samples. All students enrolled in the sample classes can participate in the survey.

# **Data Suppression Rules for Confidentiality**

In many instances, results are not shown (i.e., suppressed) to protect individuals' confidentiality. Suppression rules vary, depending on the data source. A double asterisk ('\*\*') notation within tables indicates that the data did not meet reporting criteria.

Data Source	Suppression Criteria
Vital Statistics - Death Records	Denominator population <50
CDC WONDER	Numerator <10 deaths
Statewide Planning and Research Cooperative System (SPARCS) - ED and hospital records	Numerator 1-5 cases
OASAS Client Data System (CDS) - Admissions	Numerator between 1-6 clients
Prehospital Care Reports	None
NYS Law Enforcement Naloxone Administration Dataset	None
NYS Community Opioid Overdose Prevention Program (COOP) Dataset	None
NYS Prescription Monitoring Program (PMP)  Numerator between 1-5 ca	

## **Data Limitations**

Data Source	Limitations
Vital Records	The accuracy of indicators based on codes found in vital statistics data is limited by the completeness and quality of reporting and coding. Death investigations may require weeks or months to complete; while investigations are being conducted, deaths may be assigned a pending status on the death certificate (ICD-10-CM underlying cause code of R99, "other ill-defined and unspecified causes of mortality"). Analysis of the percentage of death certificates with an underlying cause of death of R99 by age, over time, and by jurisdiction should be conducted to determine potential impact of incomplete underlying causes of death on drug overdose death indicators.
	The percentage of death certificates with information on the specific drug(s) involved in drug overdose deaths varies substantially by state and local jurisdiction and may vary over time. The substances tested for, the circumstances under which the tests are performed, and how information is reported on death certificates may also vary. Drug overdose deaths that lack information about the specific drugs may have involved opioids.
	Even after a death is ruled as caused by a drug overdose, information on the specific drug might not be subsequently added to the certificate. Therefore, estimates of fatal drug overdoses involving opioids may be underestimated from lack of drug specificity. Additionally, deaths involving heroin might be misclassified as involving morphine (a natural opioid), because morphine is a metabolite of heroin.
	The indicator "Overdose deaths involving opioid pain relievers" includes overdose deaths due to pharmaceutically and illicitly produced opioids such as fentanyl.
	Data for NYC on opioid overdose deaths are not included in this report.
CDC WONDER	For additional information about CDC WONDER, including limitations of Multiple Cause of Death data, please see: <a href="https://wonder.cdc.gov/wonder/help/mcd.html">https://wonder.cdc.gov/wonder/help/mcd.html</a>

Data Source	Limitations
SPARCS	The recent data may be incomplete and should be interpreted with caution. Health Care Facilities licensed in New York State, under Article 28 of the Public Health Law, are required to submit their inpatient and/or outpatient data to SPARCS. SPARCS is a comprehensive all-payer data reporting system established in 1979 as a result of cooperation between the healthcare industry and government. Created to collect information on discharges from hospitals, SPARCS now collects patient level detail on patient characteristics, diagnoses and treatments, services, and charges for hospitals, ambulatory surgical centers, and clinics, both hospital extension and diagnosis and treatment centers.
	Per NYS Rules and Regulations, Section 400.18 of Title 10, data are required to be submitted: (1) monthly, (2) 95% within 60 days following the end of the month of patient's discharge/visit, and (3) 100% are due 180 days following the end of the month of the patient discharge/visit. Failure to comply may result in the issuance of Statement of Deficiencies (SODs) and facilities may be subject to a reimbursement rate penalty.
	The accuracy of indicators, which are based on diagnosis codes (ICD-9-CM codes before Oct. 1, 2015 and ICD-10-CM on or after Oct. 1, 2015) reported by the facilities, is limited by the completeness and quality of reporting and coding by the facilities. The indicators are defined based on the principal diagnosis code or first-listed valid external cause code only. The sensitivity and specificity of these indicators may vary by year, hospital location, and drug type. Changes should be interpreted with caution due to the change in codes used for the definition.
	The SPARCS data do not include discharges by people who sought care from hospitals outside of NYS which may lower numbers and rates for some counties, especially those which border other states.
OASAS Client Data System (CDS)	The recent data may be incomplete and should be interpreted with caution. The CDS includes data for individuals served in the OASAS-certified treatment system. It is important to keep in mind that these data do not include individuals who do not enter treatment, get treated by the U.S. Department of Veterans Affairs (VA), go outside of New York State for treatment, are admitted to hospitals but not to Substance Use Disorder (SUD) treatment, get diverted to other systems, or receive an addictions medication from a physician outside of the OASAS system of care. OASAS-certified chemical dependence treatment programs are required to submit their admissions data to the CDS not later than the fifth of the month following the clinical admission transaction. Data are considered to be substantially complete three months after the due date, but are able to be updated indefinitely. The accuracy of measures, which are based on data reported by the programs, is limited by the completeness, consistency and quality of reporting and coding by the programs. The sensitivity and specificity of these indicators may vary by provider, program, and possible substances reported. Opioid admissions data are not direct measures of the prevalence of opioid use. The availability of chemical dependence treatment services within a county may affect the number of admissions of county residents to programs offering those services. Admissions are not unique counts of people. A person can be admitted into treatment more than once in a given time period.
EMS Patient Care Reports	Documentation data entry errors can occur, and may result in 'naloxone administered' being recorded when a different medication had actually been administered.
	Patients who present as unresponsive or with an altered mental status with unknown etiology may be administered naloxone, as part of the treatment protocol, while attempts are being made to determine the cause of the patient's current unresponsive state or altered mental status.
	Electronic PCR data currently capture approximately 90% of all EMS data statewide, from 45%-50% of all certified EMS agencies. The remaining data are reported via paper PCR, from which extracting opioid/heroin overdoses and naloxone administrations is impractical.
	The Suffolk County Medical Control data do not include patients recorded as 'unresponsive/unknown' who received a treatment protocol that includes naloxone.
	The National Emergency Medical Services Information System (NEMSIS) is a universal standard for how EMS patient care data are collected. Prior to 2019, most EMS agencies in New York State adhered to the NEMSIS version 2.2.1 standard that was released in 2005. As of January 1, 2020, most have transitioned to the updated NEMSIS version 3.4.0 standard, which has improved the quality of EMS data. Electronic PCR data are now captured from both NEMSIS version 2 and NEMSIS version 3 agencies. Now that NEMSIS version 3 data are being captured by New York State, the receipt of historical data has increased the number of naloxone administration reports counted for several counties. Additional increases may occur as more EMS agencies begin to submit NEMSIS version 3 data, which will be reflected in future quarterly reports as the data become available.

Data Source	Limitations
NYS Law Enforcement	All data are self-reported by the responding officer at the scene. Not all data fields are completed by the responding officer. There is often a lag in data reporting. All data should be interpreted with caution.
Naloxone Administration Dataset	It is possible that not all naloxone administrations reported are for an opioid overdose. There are not toxicology reports to confirm suspected substances used.
Dataset	Increase may represent expansion of program and may or may not indicate an increase in overdose events.
	Data for New York City on naloxone administration reports by law enforcement are not included in this report. Data displayed for Nassau County on naloxone administration reports by law enforcement are not complete due to the use of an alternate reporting system.
NYS Community	All data are self-reported by the responder on the scene. Not all data fields are completed by the responder. There is often a lag in data reporting. All data should be interpreted with caution.
Opioid Overdose	Increase may represent expansion of program and may or may not indicate an increase in overdose events.
Prevention (COOP) Program Dataset	Reporting administrations of naloxone to the NYSDOH is one of the mandated responsibilities of registered COOP program directors. The actual number of incidents of naloxone administrations in the community may be higher than the number reported to the NYSDOH due to the delay in reporting.
	The actual number of naloxone administrations is likely to substantially exceed the number reported to the NYSDOH.
NYS Prescription Monitoring Program (PMP)	For all PMP indicators, NYSDOH applied several exclusions. Prescriptions for out-of-state patients or without a valid patient's NY ZIP code were removed from the analysis. Data from veterinarians and prescription drugs administered to animals were not included in the analysis of PMP data. Prescriptions filled for opioids that have supply days greater than 90 were eliminated from the analysis. Also, opioids not typically used in outpatient settings and cold formulations including elixirs, antitussives, decongestants, antihistamines and expectorants were not included in the analysis. The Bureau of Narcotic Enforcement (BNE) conducts an annual update of the National Drug Code (NDC) file used to identify select opioids, benzodiazepines, and stimulants in the prescription monitoring program (PMP) data. The historic prescription data is updated using the most recent NDC file each year. The application of the updated NDC file to the historic data may result in modifications to previous years data.
The National Survey on Drug Use and Health (NSDUH)	NSDUH estimates of substance use among adolescents have generally been lower than corresponding estimates from two school-based surveys: Monitoring the Future (MTF) and the Youth Risk Behavior Surveillance System (YRBSS) In December 2012, SAMHSA released a report, "Comparing and Evaluating Youth Substance Use Estimates from the National Survey on Drug Use and Health and Other Surveys," which explored some of the reasons for this. It is important to note that, although NSDUH has consistently shown lower prevalence rates than MTF and YRBSS, the trends have usually been parallel. Unlike, MTF and YRBSS, NSDUH conducts interviews in the adolescent's home. The SAMHSA report stated, "It is possible that conducting an interview in an adolescent's home environment has an inhibitory effect on adolescent substance users' willingness to report use, even if parents or other household members are not in the same room as the adolescent and are not able to see how adolescents are answering the substance use questions."  The SAMHSA report noted that factors besides interview privacy also could contribute to lower estimates of adolescent substance use in NSDUH than in MTF or YRBSS. These other factors include the focus of the survey (e.g., primary focus on substance use or on broader health topics), how prominently substance use is mentioned when a survey is presented to parents and adolescents, procedures for obtaining parental permission for their children to be interviewed, assurances of anonymity or confidentiality, the placement and context of substance use questions in the interview, the survey mode (e.g., computer-assisted interviewing with skip patterns or paper-and-pencil questionnaires), and the question structure and wording.  For example, NSDUH asks filter questions about lifetime use before asking about the most recent use of a substance or the frequency of use. Research has shown that filter questions can depress the reporting of certain behaviors. Some NSDUH respondents also may realize early during their intervie
	patterns minimally. In addition, students taking a survey in a classroom administration setting may not be motivated to finish sooner if they otherwise have to stay until the end of the class period.

Data Source	Limitations
Youth Behavior Risk Surveillance System (YBRSS)	YRBSS has multiple limitations. First, all data are self-reported, and the extent of underreporting or overreporting of behaviors cannot be determined. Second, the national, state, and local school-based survey data apply only to youth who attend school and, therefore, are not representative of all persons in this age group due to a small portion of youth not enrolled in a high school program o had not completed high school. Third, whereas YRBSS is designed to produce information to help assess the effect of broad national, state, and local policies and programs, it was not designed to evaluate the effectiveness of specific interventions (e.g., a professional development program, school curriculum, or media campaign). <sup>28</sup>

<sup>28</sup> https://www.cdc.gov/mmwr/pdf/rr/rr6201.pdf

# **Appendix**

Data Table 1.1 Overdose deaths, age-adjusted rate per  $100,\!000$  population, by substance, New York State, 2018 and 2019

		2018	2019		
Substance	Deaths	Age-adjusted rate per 100,000 population	Deaths	Age-adjusted rate per 100,000 population	
Any opioid	2,991	15.1	2,939	14.9	
Heroin	1,243	6.3	1,145	5.7	
Commonly prescribed opioids	998	4.9	939	4.7	
Synthetic opioids (other than methadone)*	2,195	11.2	2,338	12.0	
Heroin with other synthetic opioids (other than methadone)	960	4.9	949	4.7	
Cocaine with other synthetic opioids (other than methadone)	786	4.1	858	4.4	

<sup>\*</sup>Synthetic opioids (other than methadone) (SOOTM) are identified by ICD-10 code T40.4 and serve as a proxy for fentanyl, which is a highly potent opioid now commonly found in the illicit drug market.

Note: Categories of substances are not mutually exclusive.

Data source: CDC WONDER; Accessed June 2021.

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Data Table 1.2 Overdose deaths involving any opioid, age-adjusted rate per 100,000 population, by county, New York State, 2018 and 2019

		2018	8	2019			
County	Deaths	Population	Age-adjusted rate per 100,000 population	Deaths	Population	Age-adjusted rate per 100,000 population	
Albany	45	307,117	15.6	47	305,506	16.6	
Allegany	**	46,430	**	**	46,091	**	
Bronx	321	1,432,132	22.2	339	1,418,207	23.6	
Broome	28	191,659	17.4	34	190,488	20.8	
Cattaraugus	**	76,840	**	10	76,117	*	
Cayuga	12	77,145	*	**	76,576	**	
Chautauqua	21	127,939	20.4	24	126,903	20.9	
Chemung	**	84,254	**	14	83,456	*	
Chenango	**	47,536	**	**	47,207	**	
Clinton	**	80,695	**	**	80,485	**	
Columbia	**	59,916	**	**	59,461	**	
Cortland	**	47,823	**	**	47,581	**	
Delaware	13	44,527	*	**	44,135	**	
Dutchess	84	293,718	31.2	68	294,218	25.4	
Erie	168	919,719	18.1	142	918,702	16.3	
Essex	**	37,300	**	**	36,885	**	
Franklin	**	50,293	**	**	50,022	**	
Fulton	**	53,591	**	**	53,383	**	
Genesee	17	57,511	*	12	57,280	*	
Greene	12	47,491	*	**	47,188	**	
Hamilton	**	4,434	**	**	4,416	**	
Herkimer	**	61,833	**	**	61,319	**	
Jefferson	10	111,755	*	15	109,834	*	
Kings	220	2,582,830	8.4	277	2,559,903	10.3	
Lewis	**	26,447	**	**	26,296	**	
Livingston	15	63,227	*	**	62,914	**	
Madison	11	70,795	*	**	70,941	**	
Monroe	188	742,474	26.4	187	741,770	26.0	
Montgomery	**	49,455	**	**	49,221	**	
Nassau	159	1,358,343	12.8	183	1,356,924	14.1	
New York	214	1,628,701	11.8	263	1,628,706	14.3	
Niagara	41	210,433	22.1	37	209,281	20.1	
Oneida	37	229,577	17.2	47	228,671	23.4	
Onondaga	80	461,809	18.6	101	460,528	23.4	
Ontario	14	109,864	*	16	109,777	*	
Orange	109	381,951	30.1	80	384,940	22.6	
Orleans	**	40,612	**	**	40,352	**	

		2018	8	2019			
County	Deaths	Population	Age-adjusted rate per 100,000 population	Deaths	Population	Age-adjusted rate per 100,000 population	
Oswego	15	117,898	*	31	117,124	29.6	
Otsego	**	59,749	**	**	59,493	**	
Putnam	20	98,892	21.6	13	98,320	*	
Queens	189	2,278,906	7.8	197	2,253,858	8.3	
Rensselaer	21	159,442	14.5	22	158,714	13.6	
Richmond	110	476,179	23.4	101	476,143	21.0	
Rockland	33	325,695	11.1	46	325,789	15.5	
Saratoga	24	230,163	11.0	16	229,863	*	
Schenectady	25	155,350	17.4	28	155,299	19.0	
Schoharie	**	31,097	**	**	30,999	**	
Schuyler	**	17,912	**	**	17,807	**	
Seneca	**	34,300	**	**	34,016	**	
St. Lawrence	**	108,047	**	**	107,740	**	
Steuben	**	95,796	**	**	95,379	**	
Suffolk	345	1,481,093	24.2	275	1,476,601	19.9	
Sullivan	34	75,498	48.8	31	75,432	42.7	
Tioga	**	48,560	**	**	48,203	**	
Tompkins	11	102,793	*	11	102,180	*	
Ulster	60	178,599	35.8	34	177,573	21.3	
Warren	**	64,265	**	**	63,944	**	
Washington	**	61,197	**	**	61,204	**	
Wayne	17	90,064	*	**	89,918	**	
Westchester	137	967,612	14.7	92	967,506	10.0	
Wyoming	**	40,085	**	**	39,859	**	
Yates	**	24,841	**	**	24,913	**	

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<sup>\*:</sup> Age-adjusted rates are unreliable when there are fewer than 20 deaths, therefore not shown.

\*\*: Counts and age-adjusted rates are suppressed when there are fewer than 10 deaths.

Data source: CDC WONDER; Accessed June 2021.

Data Table 1.3 Overdose deaths involving synthetic opioids (other than methadone) $^{\wedge}$ , ageadjusted rate per 100,000 population, by county, New York State, 2018 and 2019

		2018			2019	
County	Deaths	Population	Age-adjusted rate per 100,000 population	Deaths	Population	Age-adjusted rate per 100,000 population
Albany	35	307,117	11.9	37	305,506	13.0
Allegany	**	46,430	**	**	46,091	**
Bronx	250	1,432,132	17.4	266	1,418,207	18.6
Broome	16	191,659	*	26	190,488	16.1
Cattaraugus	**	76,840	**	**	76,117	**
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Chautauqua	19	127,939	*	20	126,903	17.4
Chemung	**	84,254	**	11	83,456	*
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Columbia	**	59,916	**	**	59,461	**
Cortland	**	47,823	**	**	47,581	**
Delaware	**	44,527	**	**	44,135	**
Dutchess	67	293,718	25.8	53	294,218	20.9
Erie	140	919,719	15.5	109	918,702	12.7
Essex	**	37,300	**	**	36,885	**
Franklin	**	50,293	**	**	50,022	**
Fulton	**	53,591	**	**	53,383	**
Genesee	15	57,511	*	**	57,280	**
Greene	**	47,491	**	**	47,188	**
Hamilton	**	4,434	**	**	4,416	**
Herkimer	**	61,833	**	**	61,319	**
Jefferson	**	111,755	**	14	109,834	*
Kings	148	2,582,830	5.7	222	2,559,903	8.3
Lewis	**	26,447	**	**	26,296	**
Livingston	13	63,227	*	**	62,914	**
Madison	**	70,795	**	**	70,941	**
Monroe	166	742,474	23.3	161	741,770	22.6
Montgomery	**	49,455	**	**	49,221	**
Nassau	98	1,358,343	8.2	133	1,356,924	10.4
New York	156	1,628,701	8.7	216	1,628,706	11.8
Niagara	33	210,433	17.9	32	209,281	17.7
Oneida	24	229,577	11.4	39	228,671	18.9
Onondaga	61	461,809	14.4	89	460,528	20.7
Ontario	11	109,864	*	10	109,777	*
Orange	78	381,951	21.9	68	384,940	19.5
Orleans	**	40,612	**	**	40,352	**

		2018		2019			
County	Deaths	Population	Age-adjusted rate per 100,000 population	Deaths	Population	Age-adjusted rate per 100,000 population	
Oswego	10	117,898	*	27	117,124	26.1	
Otsego	**	59,749	**	**	59,493	**	
Putnam	15	98,892	*	10	98,320	*	
Queens	130	2,278,906	5.4	155	2,253,858	6.6	
Rensselaer	18	159,442	*	16	158,714	*	
Richmond	83	476,179	18.1	79	476,143	16.2	
Rockland	22	325,695	7.2	36	325,789	12.8	
Saratoga	22	230,163	10.4	15	229,863	*	
Schenectady	15	155,350	*	22	155,299	14.5	
Schoharie	**	31,097	**	**	30,999	**	
Schuyler	**	17,912	**	**	17,807	**	
Seneca	**	34,300	**	**	34,016	**	
St. Lawrence	**	108,047	**	**	107,740	**	
Steuben	**	95,796	**	**	95,379	**	
Suffolk	258	1,481,093	18.8	209	1,476,601	15.3	
Sullivan	22	75,498	30.7	25	75,432	35.2	
Tioga	**	48,560	**	**	48,203	**	
Tompkins	**	102,793	**	**	102,180	**	
Ulster	35	178,599	22.2	28	177,573	17.7	
Warren	**	64,265	**	**	63,944	**	
Washington	**	61,197	**	**	61,204	**	
Wayne	16	90,064	*	**	89,918	**	
Westchester	93	967,612	10.1	70	967,506	7.7	
Wyoming	**	40,085	**	**	39,859	**	
Yates	**	24,841	**	**	24,913	**	

<sup>^</sup>Synthetic opioids other than methadone (SOOTM) are identified by ICD-10 code T40.4 and serve as a proxy for fentanyl, which is a highly potent opioid now commonly found in the illicit drug market.

\*: Age-adjusted rates are unreliable when there are fewer than 20 deaths, therefore not shown.

Data source: CDC WONDER; Accessed June 2021.

<sup>\*\*:</sup> Counts and age-adjusted rates are suppressed when there are fewer than 10 deaths.

Data Table 1.4 Overdose deaths involving heroin, age-adjusted rate per  $100,\!000$  population, by county, New York State, 2018 and 2019

		2018	3	2019			
County	Deaths	Population	Age-adjusted rate per 100,000 population	Deaths	Population	Age-adjusted rate per 100,000 population	
Albany	15	307,117	*	21	305,506	7.4	
Allegany	**	46,430	**	**	46,091	**	
Bronx	173	1,432,132	12.0	171	1,418,207	11.6	
Broome	13	191,659	*	**	190,488	**	
Cattaraugus	**	76,840	**	**	76,117	**	
Cayuga	**	77,145	**	**	76,576	**	
Chautauqua	**	127,939	**	**	126,903	**	
Chemung	**	84,254	**	**	83,456	**	
Chenango	**	47,536	**	**	47,207	**	
Clinton	**	80,695	**	**	80,485	**	
Columbia	**	59,916	**	**	59,461	**	
Cortland	**	47,823	**	**	47,581	**	
Delaware	**	44,527	**	**	44,135	**	
Dutchess	38	293,718	15.2	29	294,218	10.7	
Erie	49	919,719	5.3	40	918,702	4.4	
Essex	**	37,300	**	**	36,885	**	
Franklin	**	50,293	**	**	50,022	**	
Fulton	**	53,591	**	**	53,383	**	
Genesee	**	57,511	**	**	57,280	**	
Greene	**	47,491	**	**	47,188	**	
Hamilton	**	4,434	**	**	4,416	**	
Herkimer	**	61,833	**	**	61,319	**	
Jefferson	**	111,755	**	**	109,834	**	
Kings	110	2,582,830	4.3	158	2,559,903	5.9	
Lewis	**	26,447	**	**	26,296	**	
Livingston	**	63,227	**	**	62,914	**	
Madison	**	70,795	**	**	70,941	**	
Monroe	39	742,474	5.6	18	741,770	*	
Montgomery	**	49,455	**	**	49,221	**	
Nassau	68	1,358,343	5.8	55	1,356,924	4.2	
New York	99	1,628,701	5.3	127	1,628,706	6.7	
Niagara	18	210,433	*	**	209,281	**	
Oneida	18	229,577	*	28	228,671	13.8	
Onondaga	33	461,809	7.6	43	460,528	10.1	
Ontario	**	109,864	**	**	109,777	**	
Orange	45	381,951	12.4	48	384,940	13.8	
Orleans	**	40,612	**	**	40,352	**	

		2018		2019			
County	Deaths	Population	Age-adjusted rate per 100,000 population	Deaths	Population	Age-adjusted rate per 100,000 population	
Oswego	**	117,898	**	15	117,124	*	
Otsego	**	59,749	**	**	59,493	**	
Putnam	**	98,892	**	**	98,320	**	
Queens	110	2,278,906	4.6	93	2,253,858	3.9	
Rensselaer	10	159,442	*	**	158,714	**	
Richmond	62	476,179	13.7	55	476,143	11.7	
Rockland	20	325,695	6.8	27	325,789	9.8	
Saratoga	11	230,163	*	**	229,863	**	
Schenectady	13	155,350	*	12	155,299	*	
Schoharie	**	31,097	**	**	30,999	**	
Schuyler	**	17,912	**	**	17,807	**	
Seneca	**	34,300	**	**	34,016	**	
St. Lawrence	**	108,047	**	**	107,740	**	
Steuben	**	95,796	**	**	95,379	**	
Suffolk	124	1,481,093	9.1	62	1,476,601	4.5	
Sullivan	15	75,498	*	14	75,432	*	
Tioga	**	48,560	**	**	48,203	**	
Tompkins	**	102,793	**	**	102,180	**	
Ulster	23	178,599	14.7	12	177,573	*	
Warren	**	64,265	**	**	63,944	**	
Washington	**	61,197	**	**	61,204	**	
Wayne	**	90,064	**	**	89,918	**	
Westchester	53	967,612	5.9	34	967,506	3.7	
Wyoming	**	40,085	**	**	39,859	**	
Yates	**	24,841	**	**	24,913	**	

Data Table 1.5 Overdose deaths involving any opioid, by place of death, New York State, 2019

Place of death	Deaths (%)
Inpatient (medical facility)	243 (8.3%)
Outpatient or ER (medical facility)	454 (15.4%)
Dead on arrival (medical facility)	74 (2.5%)
Decedent's home	1,811 (61.6%)
Other	352 (12.0%)

The numbers of deaths occurring in "Hospice facility", "Nursing home/long term care", and "Place of death unknown" are suppressed.

Data source: CDC WONDER; Accessed June 2021.

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Data Table 1.6 Overdose deaths involving synthetic opioids (other than methadone)\*, ageadjusted rate per 100,000 population, New York State and United States, 2010-2019

	NYS			USA
Year	Deaths	Age-adjusted rate per 100,000 population	Deaths	Age-adjusted rate per 100,000 population
2019	2,338	12.0	36,359	11.4
2018	2,195	11.2	31,335	9.9
2017	2,238	11.3	28,466	9.0
2016	1,641	8.3	19,413	6.2
2015	668	3.3	9,580	3.1
2014	294	1.4	5,544	1.8
2013	210	1.1	3,105	1.0
2012	164	0.8	2,628	0.8
2011	155	0.8	2,666	0.8
2010	173	0.9	3,007	1.0

<sup>\*</sup>Synthetic opioids other than methadone (SOOTM) are identified by ICD-10 code T40.4 and serve as a proxy for fentanyl, which is a highly potent opioid now commonly found in the illicit drug market.

Data source: CDC WONDER; Accessed June 2021.

Data Table 1.7 Overdose deaths involving heroin (T40.1), synthetic opioids (other than methadone) (T40.4)^, and commonly prescribed opioids (T40.2 and T40.3), crude rates per 100,000, by region, year, and age group, New York State, 2010-2019

	<u>Heroin</u>				tic opioids n methado		Comm	nonly preso	cribed	
	Year	4	Age group		Age group			Age group		
		0-24	25-44	45+	0-24	25-44	45+	0-24	25-44	45+
	2019	*	9.2	10.6	1.6	14.5	15.7	*	5.5	7.5
	2018	1.1	7.9	9.6	1.5	11.3	13.0	*	4.3	7.5
	2017	1.0	9.1	9.1	1.5	12.0	11.1	*	5.3	7.3
	2016	1.3	7.2	8.2	1.8	8.0	8.0	0.9	5.4	7.6
NITIG	2015	1.1	6.0	5.3	*	2.0	1.9	*	4.2	5.6
NYC	2014	0.9	4.5	4.0	**	0.8	0.6	1.1	3.9	4.6
	2013	0.8	3.3	3.6	**	**	0.8	*	3.8	6.1
	2012	0.8	3.6	3.4	**	*	*	0.9	5.4	5.4
	2011	**	2.6	1.6	**	*	0.8	0.8	4.3	4.8
	2010	**	1.2	1.3	**	*	1.0	*	4.6	4.9
	2019	1.4	11.8	3.6	3.7	30.1	9.2	0.9	9.5	4.9
	2018	1.9	15.6	4.1	3.8	32.4	8.5	1.0	10.6	6.0
	2017	2.0	17.8	4.6	4.8	32.2	9.3	1.4	9.6	6.5
<b></b>	2016	3.0	18.5	4.2	4.3	25.0	6.0	1.8	11.7	6.2
NYS	2015	2.9	15.5	3.6	2.1	11.7	3.0	1.3	9.1	5.9
excl. NYC	2014	2.8	11.7	2.8	0.9	3.9	2.2	1.0	8.1	5.3
	2013	2.5	9.2	2.2	0.7	3.1	1.3	1.6	7.8	5.7
	2012	1.7	6.3	1.3	**	1.9	1.4	1.3	8.4	5.6
	2011	1.5	4.4	0.8	*	1.7	1.2	2.0	9.1	5.6
AG 11 11	2010	0.7	2.1	0.8	*	1.7	1.3	1.7	6.5	4.5

<sup>^</sup>Synthetic opioids other than methadone (SOOTM) are identified by ICD-10 code T40.4 and serve as a proxy for fentanyl, which is a highly potent opioid now commonly found in the illicit drug market.

Data source: CDC WONDER; Accessed June 2021.

<sup>\*:</sup> Rates are unreliable when there are fewer than 20 deaths, therefore not shown.

<sup>\*\*:</sup> Rates are suppressed for death counts fewer than 10.

Data Table 1.8 Overdose deaths involving any opioid and overdose deaths involving any opioid with benzodiazepines, age-adjusted rate per 100,000 population, New York State, 2010-2019

	Any (	pioid	Any opioid with benzodiazepines		
Year	Deaths	Age-adjusted rate per 100,000 population	Deaths	Age-adjusted rate per 100,000 population	
2019	2,939	14.9	687	3.5	
2018	2,991	15.1	821	4.2	
2017	3,224	16.1	874	4.4	
2016	3,009	15.1	843	4.2	
2015	2,166	10.8	636	3.1	
2014	1,739	8.6	538	2.7	
2013	1,681	8.3	473	2.3	
2012	1,530	7.6	427	2.1	
2011	1,356	6.8	358	1.8	
2010	1,074	5.4	328	1.7	

Data source: CDC WONDER; Accessed June 2021.

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Data Table 1.9 Overdose deaths involving cocaine with and without synthetic opioids (other than methadone)\*, New York State, 2010-2019

Year	Overdose deaths involving cocaine (T40.5)		Overdose deaths involving cocaine (T40.5), with T40.4		Overdose deaths involving cocaine (T40.5), without T40.4	
7647	Count	Crude rate per 100,000 population	Count	Crude rate per 100,000 population	Count	Crude rate per 100,000 population
2019	1,320	6.8	858	4.4	462	2.4
2018	1,276	6.5	786	4.0	490	2.5
2017	1,306	6.6	742	3.7	564	2.8
2016	991	5.0	451	2.3	540	2.7
2015	634	3.2	142	0.7	492	2.5
2014	503	2.5	38	0.2	465	2.4
2013	533	2.7	23	0.1	510	2.6
2012	467	2.4	10	0.1**	457	2.3
2011	469	2.4	15	0.1**	454	2.3
2010	388	2.0	18	0.1**	370	1.9

<sup>\*</sup>Synthetic opioids other than methadone (SOOTM) are identified by ICD-10 code T40.4 and serve as a proxy for fentanyl, which is a highly potent opioid now commonly found in the illicit drug market.

Note: Cocaine overdose is identified by ICD-10 code T40.5.

Data source: CDC WONDER; Accessed June 2021.

<sup>\*\*:</sup> Rates are unreliable for death counts fewer than 20, therefore not shown.

Data Table 1.10 Overdose deaths involving any opioid, age-adjusted\* rates per 100,000 population, by sub-population, New York State, 2019

Group	Characteristic	Deaths	Age-adjusted rate per 100,000 population
	Age 18-24	179	10.2
A ~~ ~~~*	Age 25-44	1,436	27.1
Age group*	Age 45-64	1,153	22.7
	Age 65+	162	4.9
Camilan	Male	2,130	22.1
Gender	Female	809	8.1
	White NH	1,791	17.3
Race/Ethnicity	Black NH	441	13.9
Race/Etillicity	Asian/PI NH	34	1.8
	Hispanic	601	16.1
Dogion	New York City	1,177	13.2
Region	NYS excl. NYC	1,762	17.0
Total	New York State	2,939	14.9

<sup>\*</sup>Age groups show crude rates.

Data source: CDC WONDER; Accessed June 2021.

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Data Table 1.11 Overdose deaths involving synthetic opioids (other than methadone)\*, age-adjusted\*\* rate per 100,000 population, by sub-population, New York State, 2019

Group	Characteristic	Deaths	Age-adjusted rate per 100,000 population
	Age 18-24	161	9.1
A go group*	Age 25-44	1,187	22.4
Age group*	Age 45-64	879	17.3
	Age 65+	107	3.2
Gender	Male	1,758	18.3
Gender	Female	580	5.9
	White NH	1,381	13.6
Daga/Ethnicity	Black NH	366	11.5
Race/Ethnicity	Asian/PI NH	27	1.5
	Hispanic	510	13.6
Dagion	New York City	938	10.5
Region	NYS excl. NYC	1,400	13.7
Total	New York State	2,338	12.0

<sup>\*</sup>Synthetic opioids other than methadone (SOOTM) are identified by ICD-10 code T40.4 and serve as a proxy for fentanyl, which is a highly potent opioid now commonly found in the illicit drug market.

\*\*Age groups show crude rates.

Data source: CDC WONDER; Accessed June 2021

Data Table 1.12 Overdose deaths involving heroin, age-adjusted^ rate per 100,000 population, by sub-population, New York State, 2019

Group	Characteristic	Deaths	Age-adjusted rate per 100,000 population
	Age 18-24	57	3.2
Λ σο σπουπΛ	Age 25-44	556	10.5
Age group^	Age 45-64	466	9.2
	Age 65+	64	1.9
Gender	Male	878	9.0
Gender	Female	267	2.6
	White NH	628	6.1
D /E41 : - :4	Black NH	181	5.5
Race/Ethnicity	Asian/PI NH	12	*
	Hispanic	292	7.9
Dagion	New York City	604	6.7
Region	NYS excl. NYC	541	5.2
Total	New York State	1,145	5.7

<sup>^</sup>Age groups show crude rates.

Data source: CDC WONDER; Accessed June 2021

<sup>\*:</sup> Age-adjusted rates are unreliable when there are fewer than 20 deaths, therefore not shown.

Data Table 2.1 Percentage of EMS response reported electronically, by region, New York State, 2015-2020

Year	Region	EMS response reported electronically	Percentage
	New York City	1,645,543	99.7%
2020	NYS excl. NYC	1,768,292	98.0%
	New York State	3,413,835	98.8%
	New York City	1,884,275	98.9%
2019	NYS excl. NYC	1,703,605	94.4%
	New York State	3,587,880	96.7%
	New York City	1,764,242	95.1%
2018	NYS excl. NYC	1,627,601	92.3%
	New York State	3,391,843	93.7%
	New York City	1,663,609	92.8%
2017	NYS excl. NYC	1,548,622	87.7%
	New York State	3,212,231	90.3%
	New York City	1,711,277	92.8%
2016	NYS excl. NYC	1,476,020	87.4%
	New York State	3,187,297	90.2%
	New York City	1,335,506	87.8%
2015	NYS excl. NYC	1,435,753	81.7%
	New York State	2,771,259	84.6%

Data source: NYSDOH, Bureau of Emergency Medical Services; Data as of June 2021.

Data Table 2.2 Unique naloxone administrations by EMS agencies, by region, New York State, 2017-2020

<b>X</b> 10 1		Region	
Year/Quarter	New York City	NYS excluding NYC	New York State
2020	8,485	7,526	16,011
Q1	1,794	1,548	3,342
Q2	1,991	2,002	3,993
Q3	2,511	2,138	4,649
Q4	2,189	1,838	4,027
2019	6,504	6,048	12,552
Q1	1,475	1,496	2,971
Q2	1,678	1,494	3,172
Q3	1,818	1,658	3,476
Q4	1,533	1,400	2,933
2018	6,936	6,788	13,724
Q1	1,449	1,575	3,024
Q2	1,855	1,863	3,718
Q3	2,053	1,849	3,902
Q4	1,579	1,501	3,080
2017	7,742	8,207	15,949
Q1	1,745	2,032	3,777
Q2	2,058	2,291	4,349
Q3	2,197	2,168	4,365
Q4	1,742	1,716	3,458

Note: Counts may have been affected by changes in documentation systems used by EMS a gencies. Additional data validation steps have been taken to de-duplicate multiple naloxone administrations for the same patient encounter. As a result, counts may differ from previous reports.

Data source: NYSDOH, Bureau of Emergency Medical Services; Data as of June 2021. Back to <u>Table of Contents</u>.

Data Table 2.3 Unique naloxone administrations by EMS agencies, by age group, gender, and incident location type\*, New York State, 2020

Subpopulation	Number	Percentage
Patient age		
Age 0-17	153	1.0%
Age 18-24	1,113	7.0%
Age 25-44	6,802	42.5%
Age 45-64	6,082	38.0%
Age 65+	1,783	11.1%
Unknown	78	0.5%
Patient gender		
Male	11,608	72.5%
Female	4,327	27.0%
Unknown	76	0.5%
Incident location type*		
Public	6,571	41.7%
Residential	8,755	55.5%
Unknown	437	2.8%

<sup>\*</sup>Incident location type excludes Suffolk County, as data were not available. As such, the total count for this category will differ from other categories shown.

Data source: NYSDOH, Bureau of Emergency Medical Services; Data as of June 2021.

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Data Table 2.4 Unique naloxone administrations by EMS agencies, by incident day of week, New York State, 2020

Day of unique naloxone administration incident	Number	Percentage
Sunday	2,074	13.0%
Monday	2,076	13.0%
Tuesday	2,173	13.6%
Wednesday	2,283	14.3%
Thursday	2,438	15.2%
Friday	2,535	15.8%
Saturday	2,432	15.2%
Total	16,011	100.0%

Data source: NYSDOH, Bureau of Emergency Medical Services; Data as of June 2021.

Data Table 2.5 Unique naloxone administrations by EMS agencies, crude rate per 1,000 unique 911 EMS dispatches, by county, New York State\*, 2020

County	Total 2020 (numerator)	Unique EMS dispatch volume (denominator)	Crude rate per 1,000	
Albany	427	68,057	6.3	
Allegany	33	8,129	4.1	
Broome	202	32,403	6.2	
Cattaraugus	60	11,311	5.3	
Cayuga	59	12,625	4.7	
Chautauqua	142	19,688	7.2	
Chemung	146	13,086	11.2	
Chenango	38	3,899	9.8	
Clinton	55	9,200	6.0	
Columbia	71	12,773	5.6	
Cortland	40	7,726	5.2	
Delaware	22	9,839	2.2	
Dutchess^	293	49,219	6.0	
Erie	596	117,926	5.1	
Essex	15	4,047	3.7	
Franklin	17	3,254	5.2	
Fulton	62	12,281	5.1	
Genesee	34	9,958	3.4	
Greene	48	8,151	5.9	
Hamilton	4	500	8.0*	
Herkimer	56	8,788	6.4	
Jefferson	70	14,230	4.9	
Lewis	5	3,144	1.6*	
Livingston	21	6,388	3.3	
Madison	46	8,561	5.4	
Monroe	679	139,711	4.9	
Montgomery	106	15,629	6.8	
Nassau^ +	681	135,785	5.0	
Niagara	112	23,858	4.7	
Oneida	272	42,053	6.5	
Onondaga	522	79,070	6.6	
Ontario	76	20,312	3.7	
Orange^	346	41,909	8.3	
Orleans	16	3,944	4.1	
Oswego	142	19,294	7.4	
Otsego	18	5,603	3.2	
Putnam	55	10,553	5.2	
Rensselaer	182	18,861	9.7	

County	Total 2020 (numerator)	Unique EMS dispatch volume (denominator)	Crude rate per 1,000
Rockland <sup>^</sup>	96	38,860	2.5
Saratoga	141	24,363	5.8
Schenectady	244	35,015	7.0
Schoharie	8	2,602	3.1*
Schuyler	1	351	2.9*
Seneca	24	3,562	6.7
St. Lawrence	28	11,824	2.4
Steuben	47	14,867	3.2
Suffolk**		n/a	n/a
Sullivan^	99	9,826	10.1
Tioga	12	4,872	2.5
Tompkins	86	11,200	7.7
Ulster^	171	26,219	6.5
Warren	66	10,812	6.1
Washington	51	8,210	6.2
Wayne	63	16,706	3.8
Westchester^	339	100,962	3.4
Wyoming	11	3,569	3.1
Yates	22	3,715	5.9
NYS excl. NYC	7,278	1,339,300	5.4
Bronx^	2,310	341,117	6.8
Kings^	1,958	432,983	4.5
New York^	2,530	336,028	7.5
Queens^	1,222	297,815	4.1
Richmond <sup>^</sup>	465	85,887	5.4
New York City	8,485	1,493,830	5.7
New York State	15,763	2,833,130	5.6

<sup>\*</sup> Rates may be unstable for counties with fewer than 10 naloxone administrations.

Data source: NYSDOH, Bureau of Emergency Medical Services; Data as of June 2021.

<sup>\*\*</sup> Dispatch data for Suffolk County were not available and, as a result, no rate could be calculated. Both the NYS excluding NYC and NYS totals exclude the number of unique naloxone administrations reported and the number of unique dispatches for Suffolk County.

<sup>+</sup> Dispatch data for additional Nassau County Police Department (NCPD) were not a vailable for 2020 and not included in the number of unique dispatch volume for Nassau County.

<sup>^</sup> Data for this county may be incomplete because of a known reporting issue under review. Please interpret with caution.

Data Table 2.6 Naloxone administration reports by law enforcement and community programs, by quarter, New York State, 2020

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
2020	January - March	April - June	July - September	October - December
Law Enforcement	394	521	450	403
Community Programs	612	478	482	455

Note: The law enforcement category does not capture a dministrations reported in New York City, and does not comprehensively capture a dministrations reported in Na ssau County.

Data source: New York State Department of Health AIDS Institute. Data as of June 2021.

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Data Table 2.7 Naloxone administration reports by law enforcement and community programs, by patient age group, New York State 2020

Age group	Law enforcement	Community programs
< 18	11	8
18-24 years old	219	178
25-44 years old	1,096	1,310
45-64 years old	340	421
65+	28	45
Unknown	74	65

Note: The law enforcement category does not capture a dministrations reported in New York City, and does not comprehensively capture administrations reported in Na ssau County.

Data source: New York State Department of Health AIDS Institute. Data as of June 2021.

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Data Table 2.8 Naloxone administration reports by law enforcement and community programs, by patient gender, New York State 2020

Gender	Law enforcement	Community programs
Female	498	595
Male	1,258	1,368
Other*, Missing or Unknown	12	64

Note: The law enforcement category does not capture administrations reported in New York City, and does not comprehensively capture administrations reported in Nassau County.

Data source: New York State Department of Health AIDS Institute. Data as of June 2021.

Data Table 2.9 Naloxone administration reports by administrator type, New York State 2020

Туре	Naloxone administration reports
EMS	16,011
Law Enforcement	1,768
Community Opioid Overdose Prevention (COOP) Programs	2,027

Note: The EMS category does not capture administrations reported with missing incident county. The law enforcement category does not capture administrations reported in New York City, and does not comprehensively capture administrations reported in Nassau County.

Data sources: New York State Department of Health Bureaus of Emergency Medical Services and Trauma Systems, data as of June 2021; New York State Department of Health AIDS Institute, data as of June 2021 Back to Table of Contents.

Data Table 3.1 Opioid burden (including outpatient emergency department visits and hospital discharges for non-fatal opioid overdose, abuse, dependence, and unspecified use; and opioid overdose death), crude rate per 100,000 population, by sub-population, New York State, 2018 and 2019

		2018		2019	
Group	Characteristics	Numerator	Crude rate per 100,000 population	Numerator	Crude rate per 100,000 population
	Age 0-17	**	**	**	**
	Age 18-24	4,857	270.6	3,613	205.0
Age group	Age 25-44	30,537	576.2	27,181	513.1
	Age 45-64	17,311	336.6	15,353	302.9
	Age 65+	2,309	71.7	2,422	73.5
Candan	Male	39,023	411.5	34,685	367.1
Gender	Female	16,198	161.2	14,038	140.3
	White NH	29,922	272.0	25,655	235.1
D /E/1 : :/	Black NH	8,132	276.0	7,417	252.5
Race/Ethnicity	Asian/PI NH	360	20.4	337	18.9
	Hispanic	10,422	278.4	9,322	248.5
ъ :	New York City	26,512	316.0	23,009	276.0
Region	NYS excl. NYC	28,711	257.7	25,720	231.4
Total	New York State	55,223	282.8	48,729	250.5

<sup>\*\*:</sup> Data do not meet reporting criteria.

Data sources: Death data from CDC WONDER, accessed June 2021; ED visits and hospital discharges from New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS), as of June 2021

Data Table 3.2 Opioid burden (including outpatient emergency department visits and hospital discharges for non-fatal opioid overdose, abuse, dependence, and unspecified use; and opioid overdose death), crude rate per 100,000 population, by county, New York State, 2019

County	Numerator	Population	Crude rate per 100,000 population
Albany	914	305,506	299.2
Allegany	51	46,091	110.7
Bronx	6,944	1,418,207	489.6
Broome	622	190,488	326.5
Cattaraugus	135	76,117	177.4
Cayuga	143	76,576	186.7
Chautauqua	666	126,903	524.8
Chemung	278	83,456	333.1
Chenango	90	47,207	190.6
Clinton	86	80,485	106.9
Columbia	151	59,461	253.9
Cortland	97	47,581	203.9
Delaware	47	44,135	106.5
Dutchess	1,097	294,218	372.9
Erie	2,191	918,702	238.5
Essex	32	36,885	86.8
Franklin	49	50,022	98.0
Fulton	125	53,383	234.2
Genesee	139	57,280	242.7
Greene	195	47,188	413.2
Hamilton	**	4,416	**
Herkimer	56	61,319	91.3
Jefferson	249	109,834	226.7
Kings	6,301	2,559,903	246.1
Lewis	26	26,296	98.9
Livingston	90	62,914	143.1
Madison	72	70,941	101.5
Monroe	2,075	741,770	279.7
Montgomery	115	49,221	233.6
Nassau	2,175	1,356,924	160.3
New York	5,241	1,628,706	321.8
Niagara	651	209,281	311.1
Oneida	328	228,671	143.4

County	Numerator	Population	Crude rate per 100,000 population
Onondaga	1,394	460,528	302.7
Ontario	195	109,777	177.6
Orange	966	384,940	250.9
Orleans	86	40,352	213.1
Oswego	270	117,124	230.5
Otsego	66	59,493	110.9
Putnam	148	98,320	150.5
Queens	2,982	2,253,858	132.3
Rensselaer	469	158,714	295.5
Richmond	1,541	476,143	323.6
Rockland	667	325,789	204.7
Saratoga	268	229,863	116.6
Schenectady	414	155,299	266.6
Schoharie	61	30,999	196.8
Schuyler	37	17,807	207.8
Seneca	37	34,016	108.8
St. Lawrence	166	107,740	154.1
Steuben	151	95,379	158.3
Suffolk	4,174	1,476,601	282.7
Sullivan	330	75,432	437.5
Tioga	39	48,203	80.9
Tompkins	110	102,180	107.7
Ulster	817	177,573	460.1
Warren	84	63,944	131.4
Washington	76	61,204	124.2
Wayne	166	89,918	184.6
Westchester	2,071	967,506	214.1
Wyoming	54	39,859	135.5
Yates	32	24,913	128.4

<sup>\*\*:</sup> Data do not meet reporting criteria.

Data sources: NYS excl. NYC death data from New York State Department of Health, Bureau of Vital Statistics, as of May 2021; NYC death data from CDC WONDER, as of June 2021; ED visits and hospital discharges from New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS), as of June 2021.

Data Table 3.3 Newborns with neonatal abstinence syndrome and/or affected by maternal use of drugs of addiction (any diagnosis), crude rate per 1,000 newborn discharges, by subpopulation, New York State, 2018 and 2019

		20	018	2019		
Group	Characteristics	Discharges	Crude rate per 1,000 newborn discharges	Discharges	Crude rate per 1,000 newborn discharges	
	White NH	951	12.2	833	10.7	
Race/Ethnicity	Black NH	284	14.2	141	6.5	
Race/Etimicity	Asian/PI NH	12	0.7	8	0.5*	
	Hispanic	149	5.1	106	3.5	
Darian	New York City	399	4.1	245	2.5	
Region	NYS excl. NYC	1,486	14.5	1,199	11.5	
Total	New York State	1,885	9.4	1,444	7.2	

<sup>\*</sup> Fewer than 10 events in the numerator, therefore the rate is unstable.

Data source: New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS); Data as of June 2021.

Data Table 3.4 Newborns with neonatal abstinence syndrome and/or affected by maternal use of drugs of addiction (any diagnosis), crude rate per 1,000 newborn discharges, by county, New York State, 2019

County	Discharges	Population	Crude rate per 100,000 population
Albany	17	2337	7.3
Allegany	9	360	25.0*
Bronx	85	16878	5.0
Broome	52	1938	26.8
Cattaraugus	18	757	23.8
Cayuga	9	538	16.7*
Chautauqua	37	1154	32.1
Chemung	13	817	15.9
Chenango	16	458	34.9
Clinton	8	637	12.6*
Columbia	**	389	**
Cortland	9	400	22.5*
Delaware	**	290	**
Dutchess	25	2456	10.2
Erie	191	9480	20.1
Essex	**	176	**
Franklin	**	367	**
Fulton	**	451	**
Genesee	20	542	36.9
Greene	6	329	18.2*
Hamilton	0	25	0.0*
Herkimer	6	484	12.4*
Jefferson	15	1761	8.5
Kings	51	34219	1.5
Lewis	**	257	**
Livingston	**	475	**
Madison	**	557	**
Monroe	37	7260	5.1
Montgomery	**	552	**
Nassau	35	12902	2.7
New York	34	16012	2.1
Niagara	75	1875	40.0
Oneida	27	1965	13.7
Onondaga	62	5023	12.3

County	Discharges	Population	Crude rate per 100,000 population
Ontario	**	872	**
Orange	40	4624	8.7
Orleans	6	372	16.1*
Oswego	53	1231	43.1
Otsego	7	402	17.4*
Putnam	8	678	11.8*
Queens	44	24959	1.8
Rensselaer	14	1230	11.4
Richmond	31	5076	6.1
Rockland	9	4477	2.0*
Saratoga	9	1808	5.0*
Schenectady	20	1608	12.4
Schoharie	**	216	**
Schuyler	**	136	**
Seneca	**	232	**
St. Lawrence	30	862	34.8
Steuben	14	898	15.6
Suffolk	147	14436	10.2
Sullivan	8	572	14.0*
Tioga	7	316	22.1*
Tompkins	**	500	**
Ulster	19	1421	13.4
Warren	8	530	15.1*
Washington	12	486	24.7
Wayne	13	821	15.8
Westchester	24	7918	3.0
Wyoming	10	326	30.7
Yates * Fewer than 10 events in th	**	182	**

<sup>\*</sup> Fewer than 10 events in the numerator, therefore the rate is unstable.

Data source: New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS); Data as of June 2021.

<sup>\*\*:</sup> Data do not meet reporting criteria.

Data Table 3.5 Hospital discharges involving opioid use (including overdose, abuse, dependence and unspecified use), crude rate per 100,000 population, by sub-population, New York State, 2018 and 2019

		20	18	2019	
Group	Characteristics	Hospital discharges	Crude rate per 100,000 population	Hospital discharges	Crude rate per 100,000 population
	Age 0-17	41	1.0	38	0.9
	Age 18-24	1,869	104.1	1,380	78.3
Age group	Age 25-44	12,942	244.2	11,371	214.6
	Age 45-64	7,900	153.6	6,767	133.5
	Age 65+	1,062	33.0	1,118	33.9
C 1	Male	16,782	176.9	14,582	154.3
Gender	Female	7,032	70.0	6,090	60.9
	White NH	12,432	113.0	10,828	99.2
D /E41 : :4	Black NH	3,750	127.3	3,236	110.2
Race/Ethnicity	Asian/PI NH	162	9.2	173	9.7
	Hispanic	4,964	132.6	4,312	115.0
Region	New York City	11,522	137.3	9,506	114.0
	NYS excl. NYC	12,292	110.3	11,168	100.5
Total	New York State	23,814	121.9	20,674	106.3

Data source: New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS); Data as of June 2021.

Data Table 3.6 Hospital discharges involving opioid use (including overdose, abuse, dependence and unspecified use), crude rate per 100,000 population, by county, New York State, 2019

County	Hospital discharges	Population	Crude rate per 100,000 population
Albany	263	305,506	86.1
Allegany	16	46,091	34.7
Bronx	3,253	1,418,207	229.4
Broome	242	190,488	127.0
Cattaraugus	68	76,117	89.3
Cayuga	33	76,576	43.1
Chautauqua	365	126,903	287.6
Chemung	97	83,456	116.2
Chenango	25	47,207	53.0
Clinton	28	80,485	34.8
Columbia	53	59,461	89.1
Cortland	24	47,581	50.4
Delaware	23	44,135	52.1
Dutchess	542	294,218	184.2
Erie	1,042	918,702	113.4
Essex	10	36,885	27.1
Franklin	21	50,022	42.0
Fulton	50	53,383	93.7
Genesee	57	57,280	99.5
Greene	89	47,188	188.6
Hamilton	0	4,416	0.0*
Herkimer	8	61,319	13*
Jefferson	133	109,834	121.1
Kings	2,245	2,559,903	87.7
Lewis	12	26,296	45.6
Livingston	18	62,914	28.6
Madison	20	70,941	28.2
Monroe	703	741,770	94.8
Montgomery	41	49,221	83.3
Nassau	1,067	1,356,924	78.6
New York	1,980	1,628,706	121.6
Niagara	327	209,281	156.2
Oneida	58	228,671	25.4
Onondaga	374	460,528	81.2

County	Hospital discharges	Population	Crude rate per 100,000 population
Ontario	53	109,777	48.3
Orange	413	384,940	107.3
Orleans	37	40,352	91.7
Oswego	57	117,124	48.7
Otsego	18	59,493	30.3
Putnam	58	98,320	59.0
Queens	1,349	2,253,858	59.9
Rensselaer	143	158,714	90.1
Richmond	679	476,143	142.6
Rockland	409	325,789	125.5
Saratoga	68	229,863	29.6
Schenectady	109	155,299	70.2
Schoharie	12	30,999	38.7
Schuyler	15	17,807	84.2
Seneca	9	34,016	26.5*
St. Lawrence	109	107,740	101.2
Steuben	42	95,379	44.0
Suffolk	1,820	1,476,601	123.3
Sullivan	144	75,432	190.9
Tioga	12	48,203	24.9
Tompkins	26	102,180	25.4
Ulster	444	177,573	250.0
Warren	17	63,944	26.6
Washington	17	61,204	27.8
Wayne	45	89,918	50.0
Westchester	1,257	967,506	129.9
Wyoming	17	39,859	42.7
Yates	8	24,913	32.1*

<sup>\*</sup> Fewer than 10 events in the numerator, therefore the rate is unstable.

Data source: New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS); Data as of June 2021. Back to <u>Table of Contents</u>.

Data Table 3.7 Hospital discharges involving heroin overdose, crude rate per 100,000 population, by sub-population, New York State, 2018 and 2019

		201	18	2019	
Group	Characteristics	Hospital discharges	Crude rate per 100,000 population	Hospital discharges	Crude rate per 100,000 population
	Age 0-17	**	**	**	**
	Age 18-24	97	5.4	71	4.0
Age group	Age 25-44	607	11.5	499	9.4
	Age 45-64	414	8.0	398	7.9
	Age 65+	89	2.8	83	2.5
G 1	Male	870	9.2	779	8.2
Gender	Female	340	3.4	275	2.7
	White NH	615	5.6	518	4.7
D /E41 : - : 4	Black NH	180	6.1	152	5.2
Race/Ethnicity	Asian/PI NH	**	**	7	0.4*
	Hispanic	242	6.5	219	5.8
ъ .	New York City	537	6.4	483	5.8
Region	NYS excl. NYC	673	6.0	571	5.1
Total	New York State	1,210	6.2	1,054	5.4

<sup>\*</sup> Fewer than 10 events in the numerator, therefore the rate is unstable.

Data source: New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS); Data as of June 2021.

<sup>\*\*:</sup> Data do not meet reporting criteria.

Data Table 3.8 Hospital discharges involving heroin overdose, crude rate per 100,000 population, by county, New York State, 2018 and 2019

		2018			2019	
County	Hospital discharges	Population	Crude rate per 100,000 population	Hospital discharges	Population	Crude rate per 100,000 population
Albany	27	306,585	8.8	21	305,506	6.9
Allegany	0	46,332	0.0*	**	46,091	**
Bronx	216	1,432,087	15.1	197	1,418,207	13.9
Broome	16	191,925	8.3	8	190,488	4.2*
Cattaraugus	**	76,726	**	**	76,117	**
Cayuga	**	77,121	**	**	76,576	**
Chautauqua	**	127,472	**	7	126,903	5.5*
Chemung	6	83,935	7.1*	7	83,456	8.4*
Chenango	**	47,445	**	**	47,207	**
Clinton	**	80,679	**	0	80,485	0.0*
Columbia	**	59,785	**	**	59,461	**
Cortland	**	47,722	**	**	47,581	**
Delaware	**	44,526	**	0	44,135	0.0*
Dutchess	23	293,939	7.8	26	294,218	8.8
Erie	42	919,717	4.6	41	918,702	4.5
Essex	**	37,288	**	0	36,885	0.0*
Franklin	0	50,279	0.0*	0	50,022	0.0*
Fulton	**	53,633	**	**	53,383	**
Genesee	**	57,487	**	**	57,280	**
Greene	**	47,381	**	**	47,188	**
Hamilton	0	4,432	0.0*	0	4,416	0.0*
Herkimer	**	61,713	**	0	61,319	0.0*
Jefferson	**	111,866	**	7	109,834	6.4*
Kings	126	2,578,074	4.9	106	2,559,903	4.1
Lewis	0	26,486	0.0*	**	26,296	**
Livingston	**	63,213	**	**	62,914	**
Madison	**	71,117	**	**	70,941	**
Monroe	99	742,864	13.3	59	741,770	8.0
Montgomery	**	49,394	**	**	49,221	**
Nassau	64	1,357,534	4.7	54	1,356,924	4.0
New York	95	1,629,055	5.8	96	1,628,706	5.9
Niagara	6	210,060	2.9*	13	209,281	6.2
Oneida	12	229,474	5.2	13	228,671	5.7
Onondaga	38	461,649	8.2	32	460,528	6.9

		2018		2019		
County	Hospital discharges	Population	Crude rate per 100,000 population	Hospital discharges	Population	Crude rate per 100,000 population
Ontario	12	109,738	10.9	**	109,777	**
Orange	36	382,126	9.4	20	384,940	5.2
Orleans	**	40,655	**	**	40,352	**
Oswego	8	117,515	6.8*	**	117,124	**
Otsego	**	59,810	**	0	59,493	0.0*
Putnam	**	98,814	**	**	98,320	**
Queens	67	2,274,605	2.9	67	2,253,858	3.0
Rensselaer	8	159,283	5.0*	10	158,714	6.3
Richmond	33	476,260	6.9	17	476,143	3.6
Rockland	10	325,522	3.1	8	325,789	2.5*
Saratoga	**	230,170	**	9	229,863	3.9*
Schenectady	7	155,079	4.5*	11	155,299	7.1
Schoharie	0	31,146	0.0*	0	30,999	0.0*
Schuyler	0	17,884	0.0*	**	17,807	**
Seneca	**	34,179	**	0	34,016	0.0*
St. Lawrence	**	108,327	**	**	107,740	**
Steuben	**	95,860	**	**	95,379	**
Suffolk	121	1,480,830	8.2	91	1,476,601	6.2
Sullivan	8	75,399	10.6*	**	75,432	**
Tioga	0	48,441	0.0*	**	48,203	**
Tompkins	**	102,419	**	**	102,180	**
Ulster	9	178,418	5.0*	15	177,573	8.4
Warren	**	64,215	**	**	63,944	**
Washington	**	61,274	**	**	61,204	**
Wayne	7	90,200	7.8*	**	89,918	**
Westchester	48	968,213	5.0	45	967,506	4.7
Wyoming	0	40,023	0.0*	**	39,859	**
Yates	**	24,951	**	**	24,913	**

<sup>\*</sup> Fewer than 10 events in the numerator, therefore the rate is unstable.

\*\*: Data do not meet reporting criteria.

Data source: New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS); Data as of June 2021. Back to <u>Table of Contents</u>.

Data Table 3.9 All emergency department visits (including outpatients and admitted patients) involving any opioid overdose, crude rate per 100,000 population, by subpopulation, New York State, 2018 and 2019

		2	2018	2019	
Groups	Characteristics	ED visits	Crude rate per 100,000 population	ED visits	Crude rate per 100,000 population
	Age 0-17	137	3.4	108	2.7
	Age 18-24	1,214	67.6	968	54.9
Age group	Age 25-44	5,730	108.1	5,428	102.5
	Age 45-64	3,250	63.2	3,220	63.5
	Age 65+	847	26.3	895	27.2
C - 1 - 1	Male	7,568	79.8	7,194	76.1
Gender	Female	3,610	35.9	3,420	34.2
	White NH	6,904	62.8	6,208	56.9
D /E41 : - : 4	Black NH	1,346	45.7	1,428	48.6
Race/Ethnicity	Asian/PI NH	61	3.5	54	3.0
	Hispanic	1,494	39.9	1,451	38.7
ъ.	New York City	3,619	43.1	3,702	44.4
Region	NYS excl. NYC	7,559	67.9	6,917	62.2
Total	New York State	11,178	57.2	10,619	54.6

Data source: New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS); Data as of June 2021.

Data Table 3.10 All emergency department visits (including outpatient and admitted patients) involving any opioid overdose, crude rate per 100,000 population, by county, New York State, 2019

County	ED visits	Population	Crude rate per 100,000 population
Albany	181	305,506	59.2
Allegany	16	46,091	34.7
Bronx	1,140	1,418,207	80.4
Broome	149	190,488	78.2
Cattaraugus	24	76,117	31.5
Cayuga	56	76,576	73.1
Chautauqua	104	126,903	82.0
Chemung	73	83,456	87.5
Chenango	18	47,207	38.1
Clinton	18	80,485	22.4
Columbia	43	59,461	72.3
Cortland	43	47,581	90.4
Delaware	14	44,135	31.7
Dutchess	265	294,218	90.1
Erie	625	918,702	68.0
Essex	14	36,885	38.0
Franklin	6	50,022	12.0*
Fulton	31	53,383	58.1
Genesee	38	57,280	66.3
Greene	42	47,188	89.0
Hamilton	0	4,416	0.0*
Herkimer	20	61,319	32.6
Jefferson	41	109,834	37.3
Kings	979	2,559,903	38.2
Lewis	8	26,296	30.4*
Livingston	42	62,914	66.8
Madison	28	70,941	39.5
Monroe	913	741,770	123.1
Montgomery	34	49,221	69.1
Nassau	510	1,356,924	37.6
New York	744	1,628,706	45.7
Niagara	137	209,281	65.5
Oneida	136	228,671	59.5
Onondaga	404	460,528	87.7

County	ED visits	Population	Crude rate per 100,000 population
Ontario	73	109,777	66.5
Orange	217	384,940	56.4
Orleans	28	40,352	69.4
Oswego	81	117,124	69.2
Otsego	27	59,493	45.4
Putnam	48	98,320	48.8
Queens	556	2,253,858	24.7
Rensselaer	97	158,714	61.1
Richmond	283	476,143	59.4
Rockland	85	325,789	26.1
Saratoga	74	229,863	32.2
Schenectady	98	155,299	63.1
Schoharie	17	30,999	54.8
Schuyler	13	17,807	73.0
Seneca	24	34,016	70.6
St. Lawrence	23	107,740	21.3
Steuben	50	95,379	52.4
Suffolk	1,168	1,476,601	79.1
Sullivan	60	75,432	79.5
Tioga	14	48,203	29.0
Tompkins	42	102,180	41.1
Ulster	162	177,573	91.2
Warren	20	63,944	31.3
Washington	22	61,204	35.9
Wayne	73	89,918	81.2
Westchester	339	967,506	35.0
Wyoming	20	39,859	50.2
Yates	9	24,913	36.1*

<sup>\*</sup>Fewer than 10 events in the numerator, therefore the rate is unstable.

Data source: New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS); Data as of June 2021. Back to <u>Table of Contents</u>.

Data Table 3.11 All emergency department visits (including outpatient and admitted patients) involving heroin overdose, crude rate per 100,000 population, by sub-population, New York State, 2018 and 2019

	Characteristics	2018		2019	
Groups		ED visits	Crude rate per 100,000 population	ED visits	Crude rate per 100,000 population
	Age 0-17	19	0.5	17	0.4
	Age 18-24	873	48.6	619	35.1
Age group	Age 25-44	4,088	77.1	3,609	68.1
	Age 45-64	1,629	31.7	1,590	31.4
	Age 65+	226	7.0	240	7.3
Candan	Male	4,928	52.0	4,384	46.4
Gender	Female	1,907	19.0	1,688	16.9
Race/Ethnicity	White NH	4,378	39.8	3,679	33.7
	Black NH	729	24.7	732	24.9
	Asian/PI NH	22	1.2	27	1.5
	Hispanic	909	24.3	814	21.7
Region	New York City	1,936	23.1	1,863	22.3
	NYS excl. NYC	4,899	44.0	4,212	37.9
Total	New York State	6,835	35.0	6,075	31.2

Data source: New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS); Data as of June 2021.

Data Table 3.12 All emergency department visits (including outpatient and admitted patients) involving heroin overdose, crude rate per  $100,\!000$  population, by county, New York State, 2019

County	County ED visits		Crude rate per 100,000 population	
Albany	125	305,506	40.9	
Allegany	11	46,091	23.9	
Bronx	615	1,418,207	43.4	
Broome	116	190,488	60.9	
Cattaraugus	14	76,117	18.4	
Cayuga	41	76,576	53.5	
Chautauqua	71	126,903	55.9	
Chemung	51	83,456	61.1	
Chenango	13	47,207	27.5	
Clinton	**	80,485	**	
Columbia	28	59,461	47.1	
Cortland	27	47,581	56.7	
Delaware	6	44,135	13.6*	
Dutchess	178	294,218	60.5	
Erie	355	918,702	38.6	
Essex	**	36,885	**	
Franklin	**	50,022	**	
Fulton	20	53,383	37.5	
Genesee	19	57,280	33.2	
Greene	30	47,188	63.6	
Hamilton	0	4,416	0.0*	
Herkimer	10	61,319	16.3	
Jefferson	28	109,834	25.5	
Kings	467	2,559,903	18.2	
Lewis	**	26,296	**	
Livingston	25	62,914	39.7	
Madison	13	70,941	18.3	
Monroe	552	741,770	74.4	
Montgomery	23	49,221	46.7	
Nassau	268	1,356,924	19.8	
New York	355	1,628,706	21.8	
Niagara	64	209,281	30.6	
Oneida	91	228,671	39.8	
Onondaga	291	460,528	63.2	

County	ED visits	Population	Crude rate per 100,000 population
Ontario	41	109,777	37.3
Orange	129	384,940	33.5
Orleans	12	40,352	29.7
Oswego	62	117,124	52.9
Otsego	14	59,493	23.5
Putnam	34	98,320	34.6
Queens	274	2,253,858	12.2
Rensselaer	63	158,714	39.7
Richmond	152	476,143	31.9
Rockland	52	325,789	16.0
Saratoga	53	229,863	23.1
Schenectady	65	155,299	41.9
Schoharie	15	30,999	48.4
Schuyler	**	17,807	**
Seneca	14	34,016	41.2
St. Lawrence	12	107,740	11.1
Steuben	27	95,379	28.3
Suffolk	693	1,476,601	46.9
Sullivan	41	75,432	54.4
Tioga	9	48,203	18.7*
Tompkins	27	102,180	26.4
Ulster	98	177,573	55.2
Warren	11	63,944	17.2
Washington	6	61,204	9.8*
Wayne	47	89,918	52.3
Westchester	192	967,506	19.8
Wyoming	11	39,859	27.6
Yates	0	24,913	0.0*

<sup>\*</sup>Fewer than 10 events in the numerator, therefore the rate is unstable.

Data source: New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS); Data as of June 2021.

<sup>\*\*:</sup> Data do not meet reporting criteria.

Data Table 4.1 Admissions\* to OASAS-certified chemical dependence treatment programs for any opioid (including heroin), crude rate per 100,000 population, by region, New York State, 2010-2020\*\*

New York City		NYS excl. NYC		New York State		
Year	OASAS admissions	Crude rate per 100,000 population	OASAS admissions	Crude rate per 100,000 population	OASAS admissions	Crude rate per 100,000 population
2020	31,714	447.7	52,569	547.7	84,283	505.2
2019	43,953	614.7	69,439	721.6	113,392	676.0
2018	43,960	611.6	73,923	767.2	117,883	700.7
2017	46,028	637.4	79,176	821.3	125,204	742.6
2016	47,102	650.5	80,516	835.0	127,618	755.8
2015	47,946	663.0	76,883	796.2	124,829	739.2
2014	47,927	665.0	71,171	736.2	119,098	705.8
2013	47,299	659.3	65,863	681.5	113,162	672.1
2012	48,313	677.2	60,434	626.5	108,747	648.1
2011	48,207	681.7	55,580	577.5	103,787	621.6
2010	47,920	683.7	52,086	543.1	100,006	602.4

<sup>\*</sup> An individual admitted to more than one level of care or admitted multiple times would count as multiple admissions.

<sup>\*\*</sup> Admissions data for 2020 were impacted by COVID-19 and do not represent a typical year for admissions. Data source: New York State Office of Addiction Services and Supports (OASAS) Client Data System (CDS); Data as of July 2021

Data Table 4.2 Admissions\* to OASAS-certified chemical dependence treatment programs for any opioid (including heroin), crude rate per 100,000 population, by age group, New York State, 2010-2020\*\*

Year	Age group	OASAS admissions	Crude rate per 100,000 population
	Age 12-17	181	13.6
	Age 18-24	5,640	327.5
2020	Age 25-34	30,700	1,081.9
2020	Age 35-44	21,670	891.3
	Age 45-54	15,184	631.7
	Age 55+	10,908	183.2
	Age 12-17	252	18.7
	Age 18-24	8,742	496.0
2010	Age 25-34	41,504	1,447.3
2019	Age 35-44	27,757	1,142.3
	Age 45-54	21,037	851.1
	Age 55+	14,100	239.3
	Age 12-17	299	21.9
	Age 18-24	11,287	628.8
2010	Age 25-34	45,038	1,567.7
2018	Age 35-44	27,470	1,131.9
	Age 45-54	21,224	832.0
	Age 55+	12,565	216.1
	Age 12-17	471	34.0
	Age 18-24	14,722	806.2
2017	Age 25-34	48,338	1,682.2
2017	Age 35-44	27,718	1,143.8
	Age 45-54	22,308	849.6
	Age 55+	11,647	203.4
	Age 12-17	603	43.0
	Age 18-24	18,263	981.2
2016	Age 25-34	49,315	1,717.1
2016	Age 35-44	26,042	1,071.5
	Age 45-54	22,574	840.6
	Age 55+	10,821	192.1
	Age 12-17	797	56.3
	Age 18-24	20,988	1,102.7
2015	Age 25-34	45,935	1,610.6
2015	Age 35-44	24,725	1,006.6
	Age 45-54	22,526	825.1
	Age 55+	9,858	178.2

Year	Age Group	OASAS admissions	Crude rate per 100,000 population
	Age 12-17	893	62.4
	Age 18-24	22,303	1,144.2
2014	Age 25-34	41,091	1,451.9
2014	Age 35-44	23,284	938.5
	Age 45-54	22,300	805.6
	Age 55+	9,227	170.4
	Age 12-17	1,042	71.8
	Age 18-24	22,623	1,145.6
2013	Age 25-34	36,171	1,291.7
2015	Age 35-44	22,477	896.5
	Age 45-54	22,139	789.0
	Age 55+	8,710	164.3
	Age 12-17	1,213	82.4
	Age 18-24	21,823	1,096.8
2012	Age 25-34	32,966	1,194.1
2012	Age 35-44	22,337	881.8
	Age 45-54	22,125	778.9
	Age 55+	8,283	159.8
	Age 12-17	1,326	88.8
	Age 18-24	20,208	1,014.8
2011	Age 25-34	29,785	1,094.9
2011	Age 35-44	22,780	889.9
	Age 45-54	22,290	776.8
	Age 55+	7,398	146.1
	Age 12-17	1,358	89.3
	Age 18-24	19,061	961.0
2010	Age 25-34	27,344	1,024.1
2010	Age 35-44	23,925	920.4
	Age 45-54	21,824	758.1
* A in dividual a durite at a	Age 55+	6,494	131.2

<sup>\*</sup> An individual admitted to more than one level of care or admitted multiple times would count as multiple

Data source: New York State Office of Addiction Services and Supports (OASAS) Client Data System (CDS); Data as of July 2021 Back to <u>Table of Contents</u>.

<sup>\*\*</sup> Admissions data for 2020 were impacted by COVID-19 and do not represent a typical year for admissions.

Data Table 4.3 Admissions\* to OASAS-certified chemical dependence treatment programs for any opioid (including heroin), crude rate per 100,000 population, by sex at birth, New York State, 2010-2020\*\*

	Fe	male	M	ale
Year	OASAS admissions	Crude rate per 100,000 population	OASAS admissions	Crude rate per 100,000 population
2020	23,650	273.4	60,633	754.8
2019	33,021	379.7	79,938	989.7
2018	35,683	409.0	82,187	1,014.7
2017	38,058	435.2	87,133	1,073.6
2016	38,494	439.4	89,142	1,097.2
2015	37,501	427.7	87,349	1,075.6
2014	34,901	398.2	84,215	1,038.4
2013	32,923	376.3	80,247	991.9
2012	31,090	356.4	77,662	963.9
2011	28,877	332.4	74,911	935.2
2010	27,411	317.2	72,594	912.2

<sup>\*</sup> An individual admitted to more than one level of care or admitted multiple times would count as multiple admissions

<sup>\*\*</sup> Admissions data for 2020 were impacted by COVID-19 and do not represent a typical year for admissions. Data source: New York State Office of Addiction Services and Supports (OASAS) Client Data System (CDS); Data as of July 2021

Data Table 4.4 Admissions\* to OASAS-certified chemical dependence treatment programs for any opioid (including heroin), crude rate per 100,000 population, by race/ethnicity, New York State, 2010-2020\*\*

Year	Race/ethnicity	OASAS aadmissions	Crude rate per 100,000 population
	White NH	48,419	509.1
2020	Black NH	12,337	495.9
2020	Other NH	3,586	222.0
	Hispanic	19,941	650.0
	White NH	64,535	672.1
2010	Black NH	17,452	697.8
2019	Other NH	4,725	293.5
	Hispanic	26,680	871.6
	White NH	70,567	729.5
2010	Black NH	16,167	644.5
2018	Other NH	4,791	300.7
	Hispanic	26,358	864.5
	White NH	76,907	789.6
2017	Black NH	16,684	663.5
2017	Other NH	5,278	334.3
	Hispanic	26,335	869.6
	White NH	79,975	816.0
2016	Black NH	16,046	637.2
2016	Other NH	4,921	316.4
	Hispanic	26,676	886.3
	White NH	78,078	791.6
-04-	Black NH	15,680	622.8
2015	Other NH	4,654	305.2
	Hispanic	26,417	885.7
	White NH	73,663	742.7
2014	Black NH	15,736	626.2
2014	Other NH	3,912	262.2
	Hispanic	25,787	873.5
	White NH	69,326	696.2
2012	Black NH	15,766	629.7
2013	Other NH	3,371	231.1
	Hispanic	24,699	846.4
	White NH	64,681	647.8
2012	Black NH	16,252	653.1
2012	Other NH	2,979	208.4
	Hispanic	24,835	863.3
2011	White NH	59,436	594.4
2011	Black NH	17,190	695.2

Year	Race/ethnicity	OASAS aadmissions	Crude rate per 100,000 population
	Other NH	2,492	178.6
	Hispanic	24,669	871.9
2010	White NH	55,937	558.9
	Black NH	16,972	691.5
	Other NH	2,295	168.8
	Hispanic	24,802	892.8

<sup>\*</sup> An individual admitted to more than one level of care or admitted multiple times would count as multiple admissions.

\*\* Admissions data for 2020 were impacted by COVID-19 and do not represent a typical year for admissions. Data source: New York State Office of Addiction Services and Supports (OASAS) Client Data System (CDS); Data as of July 2021

Data Table 4.5 Admissions\* to OASAS-certified chemical dependence treatment programs for any opioid (including heroin), crude rate per  $100,\!000$  population, by county, New York State, 2020\*\*

Region / County	OASAS admissions	Population	Crude rate per 100,000 population
Albany	1,534	267,093	574.3
Allegany	173	39,645	436.4
Bronx	9,104	1,167,270	779.9
Broome	1,960	165,612	1,183.5
Cattaraugus	309	65,090	474.7
Cayuga	389	66,672	583.5
Chautauqua	850	109,499	776.3
Chemung	494	71,317	692.7
Chenango	230	40,526	567.5
Clinton	439	70,350	624.0
Columbia	278	53,471	519.9
Cortland	254	41,443	612.9
Delaware	162	39,490	410.2
Dutchess	1,673	259,524	644.6
Erie	4,273	795,790	537.0
Essex	106	33,294	318.4
Franklin	217	43,809	495.3
Fulton	266	46,067	577.4
Genesee	353	49,551	712.4
Greene	228	42,190	540.4
Hamilton	8	4,013	199.4+
Herkimer	217	53,084	408.8
Jefferson	544	89,802	605.8
Kings	7,311	2,137,676	342.0
Lewis	76	22,224	342.0
Livingston	272	55,575	489.4
Madison	270	62,030	435.3
Monroe	5,144	641,812	801.5
Montgomery	341	41,764	816.5
Nassau	3,014	1,164,942	258.7
New York	8,674	1,449,595	598.4
Niagara	1,597	181,533	879.7
Oneida	1,413	195,649	722.2
Onondaga	3,479	395,276	880.1
Ontario	787	96,329	817.0
Orange	2,274	321,574	707.1
Orleans	228	35,194	647.8
Oswego	790	100,696	784.5
Otsego	192	52,761	363.9
Putnam	242	86,889	278.5

Region / County	OASAS admissions	Population	Crude rate per 100,000 population
Queens	4,526	1,920,476	235.7
Rensselaer	735	138,202	531.8
Richmond	2,099	408,526	513.8
Rockland	893	263,420	339.0
St. Lawrence	503	93,446	538.3
Saratoga	675	201,542	334.9
Schenectady	930	133,175	698.3
Schoharie	129	27,647	466.6
Schuyler	80	15,506	515.9
Seneca	168	29,587	567.8
Steuben	408	81,582	500.1
Suffolk	6,716	1,279,866	524.7
Sullivan	845	65,144	1,297.1
Tioga	137	41,784	327.9
Tompkins	257	91,568	280.7
Ulster	1,103	158,277	696.9
Warren	324	56,480	573.7
Washington	270	53,475	504.9
Wayne	585	77,125	758.5
Westchester	2,555	833,234	306.6
Wyoming	71	34,751	204.3
Yates	109	21,060	517.6

<sup>+</sup>Fewer than 10 events in the numerator, therefore the rate is unstable

<sup>\*</sup> An individual admitted to more than one level of care or admitted multiple times would count as multiple admissions. In addition, there is a variation in the levels of care (inpatient, outpatient, or both) provided by local facilities. County rates could be impacted, in part, by the levels of care available.

<sup>\*\*</sup> Admissions data for 2020 were impacted by COVID-19 and do not represent a typical year for admissions.

Data source: New York State Office of Addiction Services and Supports (OASAS) Client Data System (CDS); Data as of July 2021

Data Table 5.1 Commonly prescribed opioid analgesics, crude rate per 1,000 population, by quarter, New York State, 2017-2020

		Crude rate per 1,000 population					
Year	Quarter	Oxycodone SA	Hydrocodone SA	Tramadol SA	Codeine	Fentanyl LA	Oxycodone LA
	Jan - Mar	32.1	17.0	13.2	4.3	1.8	1.9
2020	Apr - Jun	27.5	14.9	12.1	3.3	1.7	1.8
2020	Jul - Sep	32.0	16.8	13.2	4.0	1.7	1.9
	Oct - Dec	31.9	15.7	13.1	3.9	1.7	1.8
	Jan - Mar	34.9	20.8	13.9	5.1	2.2	2.3
2010	Apr - Jun	34.9	20.5	14.2	4.9	2.1	2.2
2019	Jul - Sep	33.8	18.8	14.0	4.7	2.0	2.1
	Oct - Dec	33.3	18.0	13.7	4.5	1.9	2.0
	Jan - Mar	37.2	23.2	14.1	5.6	2.6	2.6
2010	Apr - Jun	37.1	22.8	14.4	5.6	2.6	2.6
2018	Jul - Sep	36.0	22.0	14.1	5.2	2.4	2.5
	Oct - Dec	35.9	21.6	14.3	5.2	2.3	2.4
	Jan - Mar	41.5	27.1	15.4	6.7	3.2	3.0
2017	Apr - Jun	40.8	26.4	15.5	6.3	3.2	2.9
2017	Jul - Sep	39.3	25.2	14.9	5.9	3.0	2.9
GA GI	Oct - Dec	38.4	24.2	14.7	5.8	2.9	2.8

SA=Short-acting; LA=Long-acting.

The data exclude buprenorphine prescriptions for the treatment of opioid use disorder.

New York State total contains number with county unknown.

Data Source: NYS Prescription Monitoring Program; Data as of June 2021.

Data Table 5.2 Opioid analgesic prescriptions, crude rate per 1,000 population, by region, New York State, 2017-2020

	New York City		NYS excl. NYC		New York State	
Year	Number of opioid analgesics prescriptions	Crude rate per 1,000 population	Number of opioid analgesics prescriptions	Crude rate per 1,000 population	Number of opioid analgesics prescriptions	Crude rate per 1,000 population
2020	1,592,258	192.9	4,576,688	412.9	6,170,305	319.1
2019	1,834,735	220.1	4,997,119	449.5	6,833,693	351.3
2018	2,019,439	240.7	5,393,988	484.2	7,415,544	379.7
2017	2,273,353	269.4	6,008,737	538.8	8,284,879	422.9

The data exclude buprenorphine prescriptions for the treatment of opioid use disorder.

New York State total contains number with county unknown.

Data Source: NYS Prescription Monitoring Program; Data as of June 2021.

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Data Table 5.3 Opioid analgesic prescriptions, crude rate per 1,000 population, by age and gender, New York State, 2020

Age group	Gender	Number of opioid analgesics prescriptions	Crude rate per 1,000 population
A == 10.24	Male	50,569	58.7
Age 18-24	Female	70,427	81.9
A == 25, 24	Male	139,731	98.3
Age 25-34	Female	214,514	151.5
A 25 44	Male	274,614	228.6
Age 35-44	Female	387,614	315.2
A 45.54	Male	462,778	396.0
Age 45-54	Female	594,050	481.1
A 55 CA	Male	793,413	640.6
Age 55-64	Female	904,899	672.2
Age 65+	Male	918,335	629.4
	Female	1,313,248	687.4

The data exclude buprenorphine prescriptions for the treatment of opioid use disorder.

Data Source: NYS Prescription Monitoring Program; Data as of June 2021.

Data Table 5.4 Percentage of incidents when patients were opioid-naïve and received long-acting opioid prescription\*, by region, New York State, 2018-2020

Year	Region	Number of incidents when patients were opioid-naïve and received long-acting opioid prescription*	Number of opioid-naïve incidents	Percentage
	New York City	4,481	528,249	0.8%
2020	NYS excl. NYC	13,894	1,187,777	1.2%
	New York State	18,378	1,716,196	1.1%
	New York City	6,247	645,807	1.0%
2019	NYS excl. NYC	24,631	1,373,611	1.8%
	New York State	30,881	2,019,693	1.5%
	New York City	8,350	718,111	1.2%
2018	NYS excl. NYC	29,812	1,495,476	2.0%
	New York State	38,165	2,213,924	1.7%

The data exclude buprenorphine prescriptions for the treatment of opioid use disorder.

Data Source: NYS Prescription Monitoring Program; Data as of June 2021.

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Data Table 5.5 Percentage of incidents when patients were opioid-naïve and received an opioid prescription\* of more than seven days, by region, New York State, 2018-2020

Year	Region			n patients were op tion* of more tha	
		Jan - Mar	Apr -Jun	Jul - Sep	Oct - Dec
	New York City	16.7%	21.4%	14.5%	14.2%
2020	NYS excl. NYC	17.9%	20.2%	14.9%	15.0%
	New York State	17.5%	20.5%	14.8%	14.8%
	New York City	16.6%	15.7%	16.0%	16.3%
2019	NYS excl. NYC	17.4%	17.5%	16.9%	17.4%
	New York State	17.2%	16.9%	16.6%	17.1%
2018	New York City	26.1%	25.0%	24.2%	22.3%
	NYS excl. NYC	26.7%	25.4%	22.7%	22.2%
	New York State	26.5%	25.3%	23.2%	22.3%

The data exclude buprenorphine prescriptions for the treatment of opioid use disorder.

Data Source: NYS Prescription Monitoring Program; Data as of June 2021.

Opioid-naïve was defined as patient with no opioid for pain prescription in last 45 days.

New York State total includes records where county is unknown.

<sup>\*</sup>Patient received index prescription of long-acting opioid and was opioid-naïve.

Opioid-naïve was defined as patient with no opioid for pain prescription in last 45 days.

New York State total includes records where county is unknown.

<sup>\*</sup>Patient received index prescription of an opioid of more than seven days and was opioid-naïve.

Data Table 5.6 Patients with prescribed opioid analgesics from five or more prescribers and dispensed at five or more pharmacies in a six-month period, crude rate per 100,000 population, by region, New York State, 2017-2020

	New York City		NYS excl. NYC		New York State	
Year	Number of patients	Crude rate per 100,000 population	Number of patients	Crude rate per 100,000 population	Number of patients	Crude rate per 100,000 population
2020	95	0.6	216	1.0	312	0.8
2019	146	0.9	307	1.4	453	1.2
2018	142	0.8	372	1.7	515	1.3
2017	209	1.2	395	1.8	605	1.5

The data exclude buprenorphine prescriptions for the treatment of opioid use disorder.

A patient will be counted twice if they were included in each 6-month time period for the year.

New York State total includes records where county is unknown.

Data Source: NYS Prescription Monitoring Program; Data as of June 2021.

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Data Table 5.7 Percentage of patients with a total daily dose of ≥ 90 MME on at least one day, by region, New York State, 2017-2020

Year	Region	Number of patients received opioid analgesics ≥ 90 MME	Number of patients received opioid analgesic prescriptions	Percentage
2020	New York City	54,016	519,169	10.4%
	NYS exc. NYC	130,867	1,198,866	10.9%
	New York State	184,959	1,718,300	10.8%
2019	New York City	63,781	626,256	10.2%
	NYS exc. NYC	150,168	1,364,907	11.0%
	New York State	214,040	1,991,512	10.7%
2018	New York City	74,917	694,123	10.8%
	NYS exc. NYC	174,309	1,479,099	11.8%
	New York State	249,350	2,173,652	11.5%
2017	New York City	92,103	778,331	11.8%
	NYS exc. NYC	211,189	1,642,514	12.9%
	New York State	303,463	2,421,393	12.5%

The data exclude buprenorphine prescriptions for pain and treatment of opioid use disorder.

MME: morphine milligram equivalents.

New York State total contains number with county unknown.

Data Source: NYS Prescription Monitoring Program; Data as of June 2021.

Data Table 5.8 Percentage of patients with a total daily dose of  $\geq$  90 MME on at least one day, by age and gender, New York State, 2020

Age group	Gender	Number of patients received opioid analgesics ≥ 90 MME	Number of patients received opioid analgesic prescriptions	Percentage
Age 18-24	Male	833	37,970	2.2%
Age 16-24	Female	860	55,262	1.6%
A == 25, 24	Male	3,920	69,526	5.6%
Age 25-34	Female	4,063	117,490	3.5%
A 25 44	Male	8,903	87,356	10.2%
Age 35-44	Female	9,544	131,524	7.3%
A 45 54	Male	15,629	116,950	13.4%
Age 45-54	Female	16,544	150,967	11.0%
A 55 CA	Male	26,862	173,695	15.5%
Age 55-64	Female	26,442	196,591	13.5%
A 65.	Male	32,283	231,150	14.0%
Age 65+	Female	38,696	313,184	12.4%

The data exclude buprenorphine prescriptions for pain and treatment of opioid use disorder.

MME: morphine milligram equivalents.

Data Source: NYS Prescription Monitoring Program; Data as of June 2021.

Data Table 5.9 Percentage of patients\* with two or more calendar days of overlapping opioid analysesic and benzodiazepine prescriptions, by region, New York State, 2017-2020

Year	Region	Number of patients with two or more overlapping days	Number of patients received opioid or benzo prescriptions	Percentage
2020	New York City	55,586	819,391	6.8%
	NYS exc. NYC	160,287	1,748,664	9.2%
	New York State	215,923	2,568,497	8.4%
2019	New York City	62,379	930,335	6.7%
	NYS exc. NYC	175,600	1,910,966	9.2%
	New York State	238,030	2,841,837	8.4%
2018	New York City	69,776	999,670	7.0%
	NYS exc. NYC	195,843	2,020,832	9.7%
	New York State	265,684	3,021,180	8.8%
2017	New York City	80,005	1,082,672	7.4%
	NYS exc. NYC	222,447	2,176,613	10.2%
	New York State	302,554	3,260,117	9.3%

The data exclude buprenorphine prescriptions for treatment of opioid use disorder.

Data Source: NYS Prescription Monitoring Program; Data as of June 2021.

New York State total contains number with county unknown.

<sup>\*</sup>Patients with at least one prescription for opioid analgesics or benzodiazepines during a given year.

Data Table 5.10 Percentage of patients\* with two or more calendar days of overlapping opioid analysesic and benzodiazepine prescriptions, by age and gender, New York State, 2020

Age group Gender		Number of patients with two or more overlapping days	Number of patients received opioid or benzodiazepine prescriptions	Percentage
Age 18-24	Male	712	50,173	1.4%
Age 16-24	Female	1,503	75,356	2.0%
A 25 24	Male	3,455	110,330	3.1%
Age 25-34	Female	7,687	187,813	4.1%
A 25 44	Male	7,145	135,559	5.3%
Age 35-44	Female	15,159	213,963	7.1%
A 45 54	Male	11,698	166,259	7.0%
Age 45-54	Female	23,212	244,197	9.5%
A 55 64	Male	19,891	232,966	8.5%
Age 55-64	Female	33,750	306,826	11.0%
A = - C5 :	Male	32,259	312,371	10.3%
Age 65+	Female	58,561	479,764	12.2%

The data exclude buprenorphine prescriptions for treatment of opioid use disorder.

Data Source: NYS Prescription Monitoring Program; Data as of June 2021.

<sup>\*</sup>Patients with at least one prescription for opioid analgesics or benzodiazepines during a given year.

Data Table 5.11 Percentage of patients\* with two or more calendar days of overlapping opioid analysis prescriptions, by region, New York State, 2017-2020

Year	Region	Number of patients with two or more overlapping days	Number of patients received opioid prescriptions	Percentage
	New York City	77,867	519,310	15.0%
2020	NYS exc. NYC	201,564	1,199,873	16.8%
	New York State	279,527	1,719,449	16.3%
	New York City	90,224	626,390	14.4%
2019	NYS exc. NYC	226,186	1,365,857	16.6%
	New York State	316,526	1,992,596	15.9%
	New York City	101,940	694,253	14.7%
2018	NYS exc. NYC	249,411	1,479,885	16.9%
	New York State	351,496	2,174,568	16.2%
	New York City	119,709	778,484	15.4%
2017	NYS exc. NYC	288,650	1,643,269	17.6%
	New York State	408,563	2,422,302	16.9%

The data exclude buprenorphine prescriptions for treatment of opioid use disorder.

Data Source: NYS Prescription Monitoring Program; Data as of June 2021.

New York State total contains number with county unknown.

<sup>\*</sup>Patients with at least one prescription for opioid analgesics during a given year.

Data Table 5.12 Percentage of patients\* with two or more calendar days of overlapping opioid analysis prescriptions, by age and gender, New York State, 2020

Age group	Gender	Number of patients with two or more overlapping days	Number of patients received opioid prescriptions	Percentage
Age 18-24	Male	895	37,972	2.4%
Age 16-24	Female	993	55,265	1.8%
A 25 24	Male	4,580	69,539	6.6%
Age 25-34	Female	5,686	117,525	4.8%
A 25 44	Male	11,168	87,400	12.8%
Age 35-44	Female	14,402	131,591	10.9%
A 45 54	Male	20,298	117,033	17.3%
Age 45-54	Female	25,072	151,086	16.6%
A 55 CA	Male	36,763	173,799	21.2%
Age 55-64	Female	41,071	196,761	20.9%
A 65	Male	47,942	231,339	20.7%
Age 65+	Female	69,904	313,502	22.3%

The data exclude buprenorphine prescriptions for treatment of opioid use disorder.

Data Source: NYS Prescription Monitoring Program; Data as of June 2021.

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Data Table 5.13 Patients who received at least one buprenorphine prescription for opioid use disorder, crude rate per 100,000 population, by region, New York State, 2017-2020

	New York City		NYS exclu	ding NYC	New York State		
Year	Number of patients	Crude rate per 100,000 population	Number of patients	Crude rate per 100,000 population	Number of patients	Crude rate per 100,000 population	
2020	16,206	196.4	63,622	574.0	79,864	413.0	
2019	16,710	200.4	61,931	557.1	78,698	404.5	
2018	15,478	184.5	56,884	510.6	72,419	370.8	
2017	14,428	171.0	51,904	465.4	66,389	338.9	

New York State total contains number with county unknown.

Data Source: NYS Prescription Monitoring Program; Data as of June 2021.

<sup>\*</sup>Patients with at least one prescription for opioid analgesics during a given year.

Data Table 5.14 Patients who received at least one buprenorphine prescription for opioid use disorder, crude rate per 100,000 population, by age and gender, New York State, 2020

Age group	Gender	Number of patients	Crude rate per 100,000 population
A co 19 24	Male	1,470	170.5
Age 18-24	Female	1,031	119.9
A co 25 24	Male	15,583	1,096.1
Age 25-34	Female	9,407	664.4
A ~~ 25 44	Male	15,729	1,309.3
Age 35-44	Female	9,450	768.4
A ~~ 45 54	Male	8,843	756.7
Age 45-54	Female	4,765	385.9
A co 55 64	Male	6,605	533.3
Age 55-64	Female	3,377	250.8
A 90 65 L	Male	2,297	157.4
Age 65+	Female	1,213	63.5

Data Source: NYS Prescription Monitoring Program; Data as of June 2021.

Data Table 6.1 Prevalence of illicit drug use other than marijuana in the past month, by age group, 2018-2019

	Uni	ted States		New York State			
Age group	Dorgantago	95% C.I.		Dorgantaga	95% C.I.		
	Percentage	Low	High	Percentage	Low	High	
Total (age 12 or older)	3.3%	3.2%	3.5%	3.1%	2.5%	3.8%	
Age 12-17	2.4%	2.2%	2.6%	1.8%	1.2%	2.7%	
Age 18-25	6.1%	5.8%	6.5%	6.6%	5.4%	8.1%	
Age 26-34	5.7%	5.3%	6.2%	5.9%	4.4%	7.9%	
Age 35+	2.3%	2.2%	2.5%	1.9%	1.3%	2.8%	

Data source: National Survey on Drug Use and Health (NSDUH); Data as of June 2021 Back to <u>Table of Contents</u>.

Data Table 6.2 Prevalence of pain reliever misuse in the past year, by age group, 2018-2019

	United	States		New York State			
Age group	Domontono	95% C.I.		Domontono	95% C.I.		
	Percentage	Low	High	Percentage	Low	High	
Total (age 12 or older)	3.6%	3.4%	3.7%	2.7%	2.2%	3.2%	
Age 12-17	2.5%	2.3%	2.8%	1.5%	1.0%	2.4%	
Age 18-25	5.4%	5.0%	5.7%	4.5%	3.6%	5.8%	
Age 26-34	5.5%	5.1%	5.9%	4.9%	3.6%	6.6%	
Age 35+	3.0%	2.8%	3.2%	1.9%	1.4%	2.6%	

Data source: National Survey on Drug Use and Health (NSDUH); Data as of June 2021 Back to <u>Table of Contents</u>.

Data Table 6.3 Prevalence of heroin use in the past year, 2015-2016 to 2018-2019

	Unit	ed States		New York State		
Year	Domoontogo	95% C.I.		Domoontogo	95% C.I.	
	Percentage	Low	High	Percentage	Low	High
2015-2016	0.3%	0.3%	0.4%	0.4%	0.2%	0.6%
2016-2017	0.3%	0.3%	0.4%	0.3%	0.1%	0.5%
2017-2018	0.3%	0.3%	0.4%	0.2%	0.1%	0.3%
2018-2019	0.3%	0.2%	0.3%	0.2%	0.1%	0.3%

Data source: National Survey on Drug Use and Health (NSDUH); Data as of June 2021 Back to <u>Table of Contents</u>.

Data Table 6.4 Prevalence of cocaine use in the past year, 2015-2016 to 2018-2019

	United	States		New York State		
Year	Domontogo	95% C.I.		Domontogo	95% C.I.	
	Percentage	Low	High	Percentage	Low	High
2015-2016	1.8%	1.7%	1.9%	2.5%	2.1%	3.0%
2016-2017	2.0%	1.9%	2.1%	2.6%	2.1%	3.3%
2017-2018	2.1%	2.0%	2.2%	2.7%	2.2%	3.3%
2018-2019	2.0%	1.9%	2.1%	2.6%	2.1%	3.1%

Data source: National Survey on Drug Use and Health (NSDUH); Data as of June 2021 Back to <u>Table of Contents</u>.

Data Table 6.5 Prevalence of substance use, New York State, 2015-2016 to 2018-2019

(FD*	G 1.4	D. C. I	D	95%	C.I.
Time	Substance use	Period	Percentage	Low	High
		2015-2016	3.7%	3.1%	4.4%
	Pain reliever	2016-2017	3.2%	2.7%	3.9%
	misuse in the past year	2017-2018	2.8%	2.3%	3.3%
	<i>y</i>	2018-2019	2.7%	2.2%	3.2%
		2015-2016	0.4%	0.2%	0.6%
Dogt wasn	Heroin use in the past year	2016-2017	0.3%	0.1%	0.5%
Past year		2017-2018	0.2%	0.1%	0.3%
		2018-2019	0.2%	0.1%	0.3%
		2015-2016	2.5%	2.1%	3.0%
	Cocaine use in the	2016-2017	2.6%	2.1%	3.3%
	past year	2017-2018	2.7%	2.2%	3.3%
		2018-2019	2.6%	2.1%	3.1%
	Illicit drug use	2015-2016	3.3%	2.8%	3.9%
Past month	other than	2016-2017	3.4%	2.8%	4.2%
1 ast month	marijuana in the	2017-2018	3.3%	2.8%	4.0%
	past month	2018-2019	3.1%	2.5%	3.8%

Data source: National Survey on Drug Use and Health (NSDUH); Data as of June 2021 Back to Table of Contents.

Data Table 6.6 Percentage of population who perceived great risk from using cocaine once a month, by age group, 2018-2019

	United States			New York State			
Age group	Paraentage 95% C.I.		Domoontogo	95% C.I.			
	Percentage	Low	High	Percentage	Low	High	
Total (age 12 or older)	70.6%	70.2%	71.0%	68.2%	66.2%	70.2%	
Age 12-17	54.1%	53.4%	54.8%	54.9%	51.6%	58.0%	
Age 18-25	62.6%	61.9%	63.4%	58.2%	55.3%	61.1%	
Age 26-34	65.3%	64.4%	66.2%	61.6%	57.7%	65.4%	
Age 35+	75.7%	75.1%	76.3%	73.4%	0.7%	75.8%	

Data source: National Survey on Drug Use and Health (NSDUH); Data as of June 2021

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Data Table 6.7 Percentage of high school students who report ever using a substance, 2019

	United States			New York State			
Substance, ever use	Domoontogo	95% C.I.		Damaantaga	95% C.I.		
	Percentage	Low	High	Percentage	Low	High	
Cocaine	3.9%	3.2%	4.6%	6.3%	5.1%	7.6%	
Heroin	1.8%	1.2%	2.3%	5.8%	4.5%	7.1%	
Methamphetamine	2.1%	1.6%	2.7%	4.9%	3.7%	6.0%	
Injecting an illegal drug	1.6%	1.1%	2.1%	3.8%	2.9%	4.7%	
Synthetic marijuana	7.3%	7.3%	8.3%	10.3%	8.8%	11.8%	

Data source: Youth Risk Behavior Surveillance System (YRBSS); Data as of October 2020

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Data Table 6.8 Percentage of high school students who report ever using cocaine, New York State, 2019

Croun	Characteristic	Domoontogo	95% C.I.		
Group	Characteristic	Percentage	Low	High	
Gender	Male	7.5%	5.6%	9.5%	
Gender	Female	4.3%	3.0%	5.5%	
	White NH	6.0%	3.9%	8.1%	
Daga/Ethnigity	Black NH	4.4%	2.9%	6.0%	
Race/Ethnicity	Hispanic	7.0%	4.9%	9.0%	
	Others	7.0% 4.9% 3.7% 2.2%	5.1%		
	9th grade	5.8%	3.8%	7.7%	
Education	10th grade	4.2%	2.2%	6.2%	
Education	11th grade	6.3%	4.2%	8.4%	
	12th grade	7.3%	4.0%	10.7%	
Total	Total	6.3%	5.1%	7.6%	

Survey question: During your life, how many times have you used any form of cocaine, including powder, crack, or freebase?

Data source: Youth Risk Behavior Surveillance System (YRBSS); Data as of October 2020

Data Table 6.9 Percentage of high school students who report ever using heroin, New York State, 2019

Cwarm	Characteristic	Domontoro	95% C.I.	
Group	Characteristic	Percentage	Low	High
Gender	Male	7.2%	5.4%	9.0%
Gender	Female	3.2%	2.2%	4.2%
	White NH	3.9%	2.6%	5.2%
Dogo/Ethaicita	Black NH	5.2%	3.4%	6.9%
Race/Ethnicity	Hispanic	6.8%	4.9%	8.6%
	Others	5.5%	3.2%	7.9%
	9th grade	6.5%	4.0%	8.9%
Education	10th grade	3.5%	2.1%	5.0%
Education	11th grade	5.6%	3.8%	7.3%
	12th grade	5.9%	3.9%	7.9%
Total	Total	5.8%	4.5%	7.1%

Survey question: During your life, how many times have you used heroin (also called smack, junk, or China White)? Data source: Youth Risk Behavior Surveillance System (YRBSS); Data as of October 2020 Back to Table of Contents.

Data Table 6.10 Percentage of high school students who report ever using methamphetamines, New York State, 2019

C	Cl44: -	D4	95%	95% C.I.	
Group	Characteristic	Percentage	Low	High	
Gender	Male	6.0%	4.7%	7.3%	
Gender	Female	2.8%	1.7%	4.0%	
	White NH	2.9%	1.6%	4.3%	
Dago/Ethnigity	Black NH	4.3%	2.6%	6.0%	
Race/Ethnicity	Hispanic	6.4%	4.8%	8.0%	
	Others	4.2%	4.3%       2.6%         6.4%       4.8%	5.9%	
	9th grade	5.1%	3.1%	7.1%	
Education	10th grade	3.5%	1.9%	5.1%	
Education	11th grade	4.8%	2.8%	6.9%	
	12th grade	4.5%	2.8%	6.2%	
Total	Total	4.9%	3.7%	6.0%	

Survey question: During your life, how many times have you used methamphetamines (also called speed crystal meth, crank, ice, or meth)?

Data source: Youth Risk Behavior Surveillance System (YRBSS); Data as of October 2020 Back to Table of Contents.

Data Table 6.11 Percentage of high school students who report ever using synthetic marijuana, New York State, 2019

Cwayn	Characteristic	Domoontogo	95% C.I.	
Group	Characteristic	Percentage	Low	High
Gender	Male	11.0%	8.8%	13.2%
Gender	Female	8.7%	7.2%	10.1%
	White NH	9.6%	7.6%	11.6%
Dago/Ethnigity	Black NH	8.3%	6.1%	10.6%
Race/Ethnicity	Hispanic	13.1%	10.8%	15.5%
	Others	5.5%	3.8%	7.1%
	9th grade	8.5%	6.8%	10.2%
Education	10th grade	8.7%	6.4%	11.0%
Education	11th grade	11.8%	8.4%	15.3%
	12th grade 10.7%		8.5%	12.9%
Total	Total	10.3%	8.8%	11.8%

Survey question: During your life, how many times have you used synthetic marijuana? (Synthetic marijuana also is called Spice, fake weed, K2, King Kong, Yucatan Fire, or Skunk.)

 $Data\ source:\ Youth\ Risk\ Behavior\ Surveillance\ System\ (YRBSS); Data\ as\ of\ October\ 2020$ 

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Data Table 6.12 Percentage of high school students who report ever injecting an illegal drug, New York State, 2019

Cwoun	Characteristic	Domoontogo	95% C.I.	
Group	Characteristic	Percentage	Low	High
Gender	Male	4.4%	3.2%	5.7%
Gender	Female	2.6%	1.8%	3.4%
	White NH	2.6%	1.5%	3.8%
Daga/Ethnigity	Black NH	3.3%	2.1%	4.6%
Race/Ethnicity	Hispanic	5.0%	3.6%	6.4%
	Others	3.1%	2.1% 9% 3.6% % 1.7%	4.6%
	9th grade	3.7%	2.2%	5.2%
T du cation	10th grade	2.4%	1.3%	3.4%
Education	11th grade	3.1%	2.1%	4.2%
	12th grade	4.9%	2.8%	6.9%
Total	Total	3.8%	2.9%	4.7%

Survey question: During your life, how many times have you used a needle to inject any illegal drug into your body? Data source: Youth Risk Behavior Surveillance System (YRBSS); Data as of October 2020 Back to Table of Contents.

Data Table 6.13 Perceptions of public health problems as "very serious" among New York State residents, November 2016 - March 2021

Public health problem	Percentage of adults in New York State with perceptions of public health problems as "very serious"					
Tubic nearth problem	November 2016	November 2017	January 2019	February 2020	March 2021	
Childhood obesity	61%	61%	61%	52%	55%	
Tobacco use	52%	50%	46%	54%	50%	
Alcohol consumption	38%	38%	38%	38%	37%	
Access to healthy food and beverages	36%	40%	35%	36%	40%	
Heroin use	76%	76%	75%	69%	70%	
Prescription opioid misuse and abuse	68%	75%	75%	70%	66%	

Data source: New York State Department of Health / Siena College Research Institute, New York State Chronic Disease Public Opinion Poll, Data as of July 2021