New York State

Opioid Annual Data Report

2024

New York State Department of Health

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Introduction

Public Health Law Section 3309(5)[1] 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 morbidity and mortality 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 Opioid Data Dashboard and County Opioid Quarterly Reports on the NYSDOH Opioid-related Data website.[2]

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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[1] Opioid overdose prevention, N.Y. Public Health Law, Section (§) 3309. Accessed July 2023. https://www.nysenate.gov/legislation/laws/PBH/3309

[2] Opioid-related Data in New York State. New York State Department of Health. Accessed June 2023. https://health.ny.gov/statistics/opioid/

Glossary

Acronym/Abbreviation	Definition
BNE	Bureau of Narcotic Enforcement
BRFSS	Behavioral Risk Factor Surveillance System
CDC	Centers for Disease Control and Prevention
CDS	Client Data System (OASAS)
DEA	Drug Enforcement Administration
ED	Emergency Department
EMS	Emergency Medical Services
e-PCR	Electronic Pre-hospital Care Reports
ICD-9	International Classification of Disease, Ninth Revision
ICD-9-CM	International Classification of Diseases, Ninth Revision, Clinical Modification
ICD-10	International Classification of Disease, Tenth Revision
ICD-10-CM	International Classification of Diseases, Tenth Revision, Clinical Modification
I-STOP	Internet System for Tracking Over Prescribing
LA	Long-acting
MAT Act	Mainstreaming Addiction Treatment Act
MME	Morphine Milligram Equivalents
NEMSIS	National EMS Information Systems
NH	Non-Hispanic
NSDUH	National Survey of Drug Use and Health
NYC	New York City
NYCDOHMH	New York City Department of Health and Mental Hygiene
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
ODUH	Office of Drug User Health
OUD	Opioid Use Disorder
PCR	Pre-hospital Care Report
PMP	Prescription Monitoring Program
SA	Short-acting
SAMHSA	Substance Abuse and Mental Health Services Administration
SEP	Syringe Exchange Program
SOOTM	Synthetic Opioids Other Than Methadone
SPARCS	Statewide Planning and Research Cooperative System
STSEP	Second-tier Syringe Exchange Program
US	United States

Background

In NYS, both fatal and nonfatal overdoses involving opioids have increased since 2010. While efforts had initially slowed increases in fatal overdose, the COVID-19 pandemic impacts resulted in another sharp increase with opioid-related overdose deaths reaching historic levels of over 5,300 in 2022.[3] Using established methods, the estimated cost of opioid-related overdose death in 2022 was nearly 62 billion dollars.[4] This rise in overdose deaths also disproportionately affects racial and ethnic minority populations.[5,6]

In recent State of the State addresses, Governor Hochul has highlighted the need to continue expanding and enhancing the public health approach to fight the opioid crisis. In line with this call, the NYSDOH and the Office of Addiction Services and Supports (OASAS) coordinate to enhance existing public health programs, interventions, and healthcare system-based approaches, as well as develop novel strategies and programs. Deploying a public health strategy to address the crisis includes, but is not limited to, prevention programs, harm reduction services, ensuring linkage to treatment and clinical care, strengthening public health surveillance and epidemiology, and implementing evidence-based community interventions.

In its continuous commitment to implementing this wide-ranging public health approach, the NYSDOH takes advantage of resources, expertise, and capabilities across units to develop comprehensive public health programing driven by a sophisticated data and information infrastructure. The NYSDOH has a strong surveillance and epidemiology system in place that includes such information as mortality, ED visits, hospitalizations, and emergency medical services (EMS).The Division of Science's Opioid Surveillance Team in the Office of Public Health, together with subject matter experts across the Department (Bureau of Narcotic Enforcement (BNE), AIDS Institute, Office of Health Insurance Programs, Bureau of Community Chronic Disease Prevention, and Center for Environmental Health) as well as from other agencies like OASAS and the New York/New Jersey High Intensity Drug Trafficking Area, works to utilize and make these data available to partners in the form of dashboards, comprehensive reports, and special topic Data to Action reports. Additionally, data linkage efforts have been established to expand capabilities through more complete, timely, and accurate data linkages among relevant datasets within the Department. These data are used to inform

[3] Centers for Disease Control and Prevention. Multiple Cause of Death 1999-2020. CDC WONDER. Accessed July 2024. https://wonder.cdc.gov/mcd-icd10.html

[4] Luo F, Li M, Florence C. State-Level Economic Costs of Opioid Use Disorder and Fatal Opioid Overdose — United States, 2017. *MMWR Morb Mortal Wkly Rep*. 2021;70:541–546. doi: http://dx.doi.org/10.15585/mmwr.mm7015a1

[5] Friedman J, Akre S. COVID-19 and the Drug Overdose Crisis: Uncovering the Deadliest Months in the United States, January–July 2020. *Am J Public Health*. 2021;111(7):1284-1291. doi:10.2105/AJPH.2021.306256. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8493145/

[6] Kariisa M, Seth P, Jones CM. Increases in Disparities in US Drug Overdose Deaths by Race and Ethnicity: Opportunities for Clinicians and Health Systems. *JAMA.* 2022;328(5):421–422. doi:10.1001/jama.2022.12240. https://jamanetwork.com/journals/jama/article-abstract/2794593

policy decisions, guide program planning and implementation, and better respond to the opioid epidemic in NYS.

In addition, the NYSDOH regularly engages with external partners such as local health departments, treatment and mental healthcare providers, health systems and insurers, law enforcement and public safety agencies, researchers and information technology experts, community-based organizations, and persons who use drugs. Through these partnerships, the NYSDOH is leading, developing, and supporting a complex yet comprehensive set of programs and interventions designed to fight the opioid crisis. The role for the NYSDOH has grown since this initial work and continues to rapidly expand to include additional evidence-based strategies under primary, secondary, and tertiary prevention.

Consistent with the NYSDOH vision and mission, programs and interventions designed to fight the opioid crisis recognize historic and structural racism, rely on person-centered services and anti-racism and anti-stigma premises; and are grounded in health equity while addressing social determinants of health. Program and interventions are developed and implemented based on the following premises:

- Historically, communities of color bore the brunt of the war on people who use drugs. Racial equity and health equity should be at the forefront of strategies to respond to the opioid crisis.
- Addressing social determinants of health and each person's specific needs are critical components to successfully implementing *meaningful* person-centered public health interventions. A significant group of people who do have a substance use disorder (SUD) and/or for whom drug treatment has failed, do not see drug treatment as the solution.
- The risk of a fatal overdose is not only among those persons with a SUD. In the present illicit substance landscape, mainly driven by synthetic opioids such as fentanyl and other novel psychoactive substances, an overdose may happen with little or no prior problematic drug use.

Following these and core public health principals, the NYSDOH has led the response with evidence-based strategies and implemented and supported a wide range of programs focused on primary prevention (interventions designed to reduce the exposure to opioids and associated risks), secondary prevention (aimed at diagnosing and treating SUDs) and tertiary prevention designed to prevent life-threatening and adverse outcomes associated with drug use including infectious disease prevention. In practice and through programmatic implementation, prevention strategies overlap with many programs providing a myriad of interventions across the prevention continuum.

Primary prevention is aimed towards reducing exposure to opioids and associated risks, including prevention of SUD. Specific strategies include:

- Promotion and support of clinician education by developing a statewide program to enhance clinician education on pain management, palliative care, and SUD prevention including appropriate safe prescribing methods.[7]
- Monitor and identify improper and/or fraudulent prescribing through strengthening the Prescription Monitoring Program (PMP) by modernizing and improving ease of access.
- Improving infrastructure and applications including implementing the Internet System for Tracking Over-Prescribing (I-STOP).
- Collaborate with local, state, and federal law enforcement agencies in the investigation of improper and fraudulent prescribing and responding to disruptions in patient care.
- Implement programs for safe disposal of unused controlled substance medications and expanding the options available to collect controlled substances for purpose of disposal, including take-back events, mail-back programs, and collection receptacle locations.

Secondary prevention strategies focus on expanding access for screening, diagnoses, and treatment of opioid and other SUDs well as initiatives to reduce stigma. Specific strategies include:

- Provide clinician education on how to identify and treat SUD.
- Increase access and utilization of evidence-based medication for opioid use disorder (OUD) by increasing access to both low threshold medication access and comprehensive linkages to care and treatment.
- Reduce stigma and provide culturally appropriate prevention and harm reduction interventions by expanding education for consumers, families, and healthcare providers to reduce stigma against people who use drugs.

Secondary prevention, highlighted programs:

- Drug User Health Hubs, initiated in 2016, provide a welcoming, non-stigmatizing, and low threshold setting that improves the availability and accessibility of medications for OUD, harm reduction supplies, as well as primary care, mental health services including crisis and grief support, referrals, and linkage to an array of other healthcare and supportive services for persons who use drugs. In addition, programs conduct anti-stigma trainings and work with various partners such as law-enforcement agencies, jails, and hospitals to receive direct referrals. The low-threshold nature of the Drug User Health Hubs make them excellent resources for families to refer loved ones.

- The Buprenorphine Access Initiative, initiated in 2016, increases access to buprenorphine, an effective medication for the treatment of OUD. It prevents drug withdrawal, blocks or diminishes the effects of other opioids, and prevents the powerful cravings that accompany the reduction of opioid use. The risk of an opioid overdose is also reduced for persons taking buprenorphine. Expanded points of access to

[7] Overdose Prevention - Guideline Recommendations and Guiding Principles. Centers for Disease Control and Prevention. Accessed August 2024. https://www.cdc.gov/overdose-prevention/hcp/clinical-guidance/recommendations-and-principles.html?CDC_AAref_Val=https://www.cdc.gov/opioids/healthcare-professionals/prescribing/guideline/recommendations-principles.html

buprenorphine include Syringe Exchange Programs (SEPs), Drug User Health Hubs, primary care, emergency departments and urgent care, Federally Qualified Health Centers, community-based organizations, correction facilities, and re-entry programs. Recently passed legislation (Chapter 432 of the Laws of 2021) will significantly expand buprenorphine and methadone access in correctional settings.

- NY MATTERS, initiated in 2017, is a statewide referral network, including an electronic referral platform developed by the NYSDOH, to rapidly refer patients with OUD from emergency departments, OB/GYN offices, correction facilities, inpatient units, pre-hospital settings, etc., to community-based clinics and peer navigation services. Connections and appointments with outpatient treatment organizations can take place in as little as 24 hours from their initial referral. The NY MATTERS program has a presence in over 10 counties throughout the State, with large concentrations in the Western NY, Capital District, and Central/Hudson Regions.

For tertiary prevention, the NYSDOH deploys and coordinates interventions to expand capacity to prevent and respond to opioid overdoses, works to enhance data infrastructure to strengthen response capacity, and focuses on reducing the prevalence of HIV and HCV among persons who use drugs. Specific strategies include:

- Assist local public health partners and community coalitions in building capacity to address the opioid crisis by supporting the implementation of evidence-based interventions such as Post-overdose Outreach teams and Overdose Fatality Reviews.
- Provide timely public access to county-level data on major opioid-related measures available on a quarterly basis to assist communities in assessing their local burden; and near real-time data through the syndromic surveillance program data to prepare, identify, and respond to drug overdose spikes.
- Continue to adopt new, and adapt existing, testing technologies to monitor the illicit drug supply, and rapidly identify emergent risks while providing people who use drugs tools such as fentanyl and xylazine test strips and point of care drug checking services to increase their information and awareness of substance use risk.
- Expand support for and access to harm reduction interventions, including access to sterile syringes and naloxone.

Tertiary prevention, highlighted programs:

- Overdose Data to Action Grant in States. Since 2015, NYS has been among the federally funded jurisdictions charged with improving surveillance of fatal and nonfatal drug overdoses to inform the implementation of evidence-based and innovative prevention initiatives. The Office of Drug User Health (ODUH) leads a large cross departmental team that works to improve access to near real-time data such as syndromic surveillance and emergency medical services encounters to identify and respond to clusters and spikes as well as capturing detailed information on the circumstances surrounding overdose deaths through the State Unintentional Drug Overdose Reporting System. These data are used to inform prevention strategies such as improving partnerships between state and local health departments and organizations, establishing programs for linking people to

care and treatment, improving provider and health system support, and empowering people who use drugs to make safer choices.

- The Safe Sharps Collection Program established in 2001, expands settings for the disposal of used needles and other sharps. Through this program, pharmacies, health clinics, community-based organizations, public transportation facilities, housing projects, police stations, bus depots, and other venues have become sites for sharps collection. Sharps collection kiosks and wall-mounted units are provided free of charge to registered sites. The program also provides small personal sharps containers (Fitpacks) that may be disposed with regular garbage.

- Community Opioid Overdose Prevention Programs, first authorized in April 2006, train individuals to recognize opioid overdoses and to respond appropriately by calling 911 and administering naloxone to reverse overdoses. Currently, over 1,000 registered programs with 5,385 sites offer training and either provide naloxone at no cost to persons they have trained or refer these individuals to pharmacies to obtain naloxone. Through the Department's Naloxone Co-payment Assistance Program, individuals with prescription drug coverage as part of their health insurance have their co-payments of up to $40 covered, resulting in no or lower out-of-pocket expenses. Trained responders include individuals who are themselves at risk for an overdose, their family and friends, individuals working for agencies providing services to individuals at risk for an overdose, and others in the community who may be positioned to intervene in an overdose.

- "Safer Choices," a harm reduction anti-stigma campaign was developed and released in 2023. The multi-media campaign began with a focus on social media platforms and web-based resources, as a way to equip individuals with an understanding of how to reduce overdose. The campaign emphasizes the importance of naloxone as a life-saving tool in the event of an overdose as well as strategies such as testing drugs and aims to reduce the stigma associated with drug use.

- Post Overdose Follow-up, initiated in 2019, allows the ODUH to provide navigator services to individuals who have survived an overdose. The program also provides services to family, friends, and associates of people who have died of an overdose and whom are also at risk of experiencing a fatal overdose.

- Office of Drug User Health Drug Checking Programs established in collaboration with the BNE, provide on-site drug checking services in Drug User Health Hubs utilizing test strips and advance drug checking technology through a spectroscopy machine. This provides participants with essential information to make an informed decision regarding their potential use, serving as a key harm reduction intervention. ODUH provides program oversight including program operation licensure through BNE funding for the equipment, training and expert consultation, and confirmatory laboratory services.

- Syringe Exchange Programs (SEPs), which date from 1992, reduce transmission of HIV and hepatitis C virus among people who inject drugs by furnishing new, sterile syringes to enrolled participants, enabling them to use a new syringe for every injection. SEPs also

facilitate the collection and disposal of used syringes. There are currently over 30 approved SEPs in NYS, offering services through multiple sites and models including office based, street based, mobile van, community outreach, peer-delivered syringe exchange, remote access, vending machines, and by special arrangements. To complement the work of SEPs, community-based organizations, local health departments, and health clinics have the option to become Second-tier Syringe Exchange Programs (STSEPs). STSEPs are like SEPs and allow government agencies and not-for-profit organizations to provide syringes to their existing patients and clients.

- The Expanded Syringe Access Program, which began in 2001, enhances access to new, sterile syringes through pharmacies, health care facilities, and health care practitioners, which have registered with NYSDOH. Under recent legislation (Chapter 433 of the Laws of 2021), a 10-syringe cap and pharmacy registration requirement have been lifted.

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, race, and ethnicity for the whole state and by geographic location. Overall data on emergency department and hospital utilization for the treatment of opioid overdoses, and disorders 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 from the NYS OASAS is presented on individuals enrolled in substance use disorder treatment programs for heroin and for any opioid reported as the primary substance of use at admission. PMP 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. Lastly, survey data on opioid and other substances are presented.

Depending on the data source and the nature of the indicator, 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.

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.
- 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.

Opioid Mortality

Provisional data by the CDC have shown that overdose deaths involving drugs in NYS have declined considerably during 2023 to early 2024.[8] However, NYS remains cautiously optimistic and continues to focus on leveraging every tool available, from innovative prevention, treatment, harm reduction, to recovery services, to reach more New Yorkers who are impacted by the overdose epidemic.[9]

[8] Ahmad FB, Cisewski JA, Rossen LM, Sutton P. Provisional drug overdose death counts. National Center for Health Statistics. 2024. https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm

[9] Governor Hochul Announces Progress on Addressing the Opioid and Overdose Epidemic Across New York. https://www.governor.ny.gov/news/governor-hochul-announces-progress-addressing-opioid-and-overdose-epidemic-across-new-york

Please note: this report includes the final data for various data sources; therefore, the detailed provisional data are not included.

Historically, overdose deaths involving any opioid among NYS residents increased more than 400 percent from 1,074 deaths in 2010 to 5,361 deaths in 2022, with a sharp increase of 82.4 percent from 2,939 deaths in 2019.[10] The 2022 crude rate of 27.2 overdose deaths involving any opioid per 100,000 population in NYS was almost five times that of 5.5 in 2010. During 2022, the crude rate was highest among those aged 45-64 years (46.6 per 100,000), followed closely by those aged 25-44 years (44.9 per 100,000). The rates were over three times higher among males (41.7 per 100,000) as compared to females (13.4 per 100,000). Crude rates were higher among Black non-Hispanic (46.3 per 100,000) and American Indian or Alaska Native non-Hispanic (45.6 per 100,000) individuals, and slightly higher among NYC residents (28.9 per 100,000) as compared to residents in NYS excluding NYC (26.0 per 100,000). In 2022, synthetic opioids other than methadone (SOOTM), predominantly illicitly manufactured fentanyl, were present in 92.3 percent of all overdose deaths involving any opioid. Most of the upward opioid-related mortality trends have been driven by deaths involving SOOTM, which had an overall increase of 641.0 percent from 2015 (668 deaths) to 2022 (4,950 deaths). The number of overdose deaths involving commonly prescribed opioids, including medications such as Vicodin® or Oxycodone®, increased by 70.3 percent, from 737 deaths in 2010 to 1,255 in 2022.

In NYS, the number of overdose deaths involving cocaine increased 352.5 percent, from 634 overdose deaths in 2015 to 2,869 deaths in 2022. Between 2021 and 2022 the number of overdose deaths involving cocaine increased by 24.3 percent from 2,309 deaths in 2021 to 2,869 deaths in 2022. Deaths involving cocaine with SOOTM present increased from 142 in 2015 to 2,265 in 2022, representing a 1,495.1 percent increase. However, deaths involving cocaine without SOOTM present observed a much smaller increase (22.8 percent) from 492 deaths in 2015 to 604 deaths in 2022. This indicates that the increase in overdose deaths involving cocaine has been driven by the presence of opioids, specifically illicit fentanyl. Similar trends have been observed across the country.[11]

It is possible that raised awareness of opioid overdoses, improvements in technology and resources for toxicology testing, and improved cause-of-death reporting have contributed to a portion of these observed increases.

Naloxone Administration

Naloxone is a medication often used when an opioid overdose is suspected as it may reverse the effects when administered in time. In NYS, there were 21,473 unique naloxone administrations reported electronically by EMS agencies during 2023, representing a 1.0 percent decrease from 21,689 administrations in 2022. In NYC, 13,212 unique naloxone administrations were reported electronically by EMS agencies during 2023, representing a 2.2 percent increase from 12,924 administrations in 2022. In NYS excluding NYC, unique naloxone administrations decreased 5.8 percent from 8,765 administrations in 2022 to 8,261 administrations during 2023. Administrations were higher on Fridays and Saturdays, highlighting a need for individuals using

[10] Centers for Disease Control and Prevention. Multiple Cause of Death 1999-2020. CDC WONDER. Accessed July 2024. https://wonder.cdc.gov/mcd-icd10.html

[11] Increase in Fatal Drug Overdoses Across the United States Driven by Synthetic Opioids Before and During the COVID-19 Pandemic. Centers for Disease Control and Prevention, Health Alert Network. 2020 (CDCHAN-00438). Accessed May 21, 2024. https://stacks.cdc.gov/view/cdc/98848

substances such as opioids to obtain naloxone in their communities and always have it available, especially over the weekends. The distribution of unique administrations varied across months of the year, with counts being the highest in June and July. For information about EMS naloxone administrations prior to 2022, please see the Opioid Annual Report, 2023.

NYS is a leader in the implementation of public health programming to prevent death from opioid overdoses. The State's multi-pronged approach also includes a focus on building overdose response capacity within communities throughout the state via the Community Opioid Overdose Prevention programs. Through organizations registered with the NYSDOH, community laypersons are trained 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 1,000 registered Community Opioid Overdose Prevention programs, with over 1,271,000 individuals trained by them since the initiative's inception in 2006. Of these, over 157,000 were public safety personnel including law enforcement, fire fighters, and EMS responders, and the rest were community responders. Community responders are trained in identifying signs and symptoms of an opioid overdose and steps in how to respond to an overdose and how to administer naloxone.[12] In 2023, there were 1,875 naloxone administration reports by law enforcement to the NYSDOH and 2,591 reports by Community Opioid Overdose Prevention programs. For both law enforcement and community naloxone administrations, it is important to note they are known to be underreported and thus not representative of all law enforcement and community naloxone administrations occurring in NYS. Reporting can have significant time lags with the possibility of reports being made up to a year after administration. In an effort to increase reporting, the Opioid Overdose Prevention Program team has increased follow-up with community registered programs, which may impact counts in this and other reports. In total, including unique administrations by EMS agencies, there were 25,939 reported naloxone administrations in NYS in 2023. For additional information about the State's harm reduction programs, please see the Opioid Annual Report, 2020.

Suspected Opioid Overdose

Although naloxone administration has served as a useful marker for opioid overdoses, there are instances when naloxone is administered to individuals presenting with symptoms similar to an overdose but are not experiencing an actual overdose (such as loss of consciousness). Conversely, individuals with a suspected opioid overdose who present mild symptoms and do not meet clinical requirements, may not receive naloxone as a component of emergency care. As such, these encounters are not captured in the counts of naloxone administration. To improve surveillance and monitoring, an indicator for "suspected opioid overdose" was developed using EMS data. Suspected opioid overdoses include events where naloxone was administered (by EMS responders or by others before EMS responders' arrival) and the patient improved in response to naloxone, or evidence of a possible opioid overdose was observed based on recorded patient chief complaint, physical signs, or the EMS provider's impression.

[12] New York State's Opioid Overdose Prevention Program. New York State Department of Health. Accessed July 2024. https://www.health.ny.gov/diseases/aids/general/opioid_overdose_prevention/training_calendar.htm

In 2023, there were 25,728 suspected opioid overdose encounters, representing a 6.6 percent decrease from 27,548 suspected opioid overdose encounters in 2022. In 2023, approximately 68 percent of suspected opioid overdose encounters received naloxone administration.

Overdose Deaths Involving Opioids and Nonfatal Opioid-Related Hospital Events

The NYSDOH combines multiple data sources to measure opioid use and overdose, including opioid overdose deaths from mortality data sources and nonfatal outpatient ED visits and hospital discharges involving opioid overdose and use disorders. Collectively, these are opioid events that represent overall health impacts of opioids within NYS.

Among NYS residents in 2022, there were 45,348 opioid-related and overdose events, representing a crude rate of 230.5 per 100,000 population. Though there was a 1.4 percent decrease from 2021 (431.8 per 100,000) to 2022 (425.8 per 100,000) among those aged 25-44 years, the 2022 rate for this group remained highest of all age groups. Rates were highest among Black non-Hispanic individuals (306.1 per 100,000), followed by Hispanic (241.6 per 100,000) and White non-Hispanic (173.1 per 100,000) individuals. The rate was nearly three times higher among males (347.5 per 100,000) than among females (118.2 per 100,000). NYC had a higher rate (290.8 per 100,000) than NYS excluding NYC (186.1 per 100,000). Compared to 2021, the rates increased 11.2 percent for Black non-Hispanic residents (from 275.4 per 100,000 to 306.1 per 100,000), 13.5 percent for residents aged 45-64 (from 291.1 per 100,000 to 330.3 per 100,000), and 12.9 percent for residents aged 65 years and older (from 89.9 per 100,000 to 101.5 per 100,000). The counties with the highest rates for overdose deaths involving opioids and nonfatal opioid-related hospital events included Bronx, Chautauqua, New York, Sullivan, Broome, Dutchess, Cattaraugus, Niagara, Ulster, Schenectady, Kings, Greene, Richmond, Chemung, Suffolk, and Albany.

Among NYS residents, the number of newborns with neonatal withdrawal syndrome and/or affected by maternal use of opioids or other substances decreased 16.4 percent from 1,393 in 2021 to 1,164 in 2022, and the rate per 1,000 newborn discharges decreased from 7.1 to 6.0.

Nonfatal Opioid-Related Hospital Events

Among NYS residents in 2022, there were 12,826 hospital discharges for opioid use (including overdose and disorders). This represented a crude rate of 65.2 per 100,000 population. The rate in 2022 was highest among those aged 25-44 years (117.8 per 100,000) and among Black non-Hispanic individuals (87.0 per 100,000). The rate was two and a half times higher among males (95.3 per 100,000) than among females (36.3 per 100,000). NYC had a higher rate (73.8 per 100,000) than NYS excluding NYC (58.8 per 100,000).

In 2022, there were 13,767 outpatient visits to emergency departments due to an opioid overdose among NYS residents, a similar number compared to 2021 (13,816 visits). The crude rate per 100,000 increased slightly from 69.6 in 2021 to 70.0 in 2022. The increase was greatest among Black non-Hispanic residents (11.8 percent increase from 87.0 per 100,000 to 97.3 per 100,000), residents aged 65 years and older (8.9 percent increase from 42.5 per 100,000 to 46.3 per 100,000) and residents aged 45-64 years (9.4 percent increase from 95.8 per 100,000 to 104.8 per 100,000). The rate in 2022 was highest among those aged 25-44 years, and the rate for males was

more than two and a half times higher than for females. NYC had a higher rate (81.6 per 100,000) compared to NYS excluding NYC (61.4 per 100,000).

Office of Addiction Services and Supports Client Data

The NYS OASAS provided data on unique individuals enrolled in substance use disorder treatment programs who reported a primary substance use at admission with heroin or any other synthetic opioid between 2010 and 2023. The source of this information is the Client Data System (CDS) which collects data on people treated in all OASAS-certified substance use disorder 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 United States (US) Department of Veterans Affairs, go outside NYS for treatment, are admitted to hospitals but not to an OASAS-certified treatment program, or receive 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 individuals enrolled in treatment for opioids to be a trailing indicator of the prevalence of opioid misuse.

Statewide, the crude rate of unique individuals enrolled for any opioid increased 17.1 percent between 2010 (484.6 per 100,000) and 2016 (567.6 per 100,000). The rate of unique individuals enrolled has since declined each year from 2017 (570.4 per 100,000) to 2023 (463.1 per 100,000), a decline of 18.8 percent. Regionally, the rate of unique individuals enrolled for any opioid for NYS excluding NYC showed a 54.4 percent increase between 2010 (326.7 per 100,000) and 2016 (504.5 per 100,000), while there was a 7.3 percent decline in the rate of unique individuals for any opioid enrolled for NYC during this same period (from 694.5 per 100,000 to 643.7 per 100,000). Since 2017, the rate of unique individuals enrolled has continued to decline in both regions. During 2023, the counties with the highest crude rates of unique individuals enrolled for opioids were mostly rural counties. It is important to recognize that enrollment rates are affected by the availability of treatment at the local level.

Throughout this period, more than twice as many males as females were admitted for any opioid. However, between 2010 and 2016, there was a 24.3 percent increase in the crude rate of unique individuals enrolled for females admitted for any opioid, while the rate for males increased by 13.6 percent. Since 2017, there has been a decrease in the rates for both males and females. New Yorkers aged 25-34 consistently had the highest rate of unique individuals enrolled for any opioid between 2014 and 2020, while those aged 35-44 had the highest rate between 2021 and 2023.

Prescription Monitoring Program

In 2023, 5,372,908 opioid analgesic prescriptions were dispensed to NYS residents, a crude rate of 273.1 per 1,000 population, which is the lowest rate since 2014 (483.5 prescriptions per 1,000 population).[13] During the past ten years, NYS observed a consistent reduction in the number of opioid analgesic prescriptions and rates per 1,000 population. The rate for opioid analgesic

[13] New York State Opioid Data Dashboard. New York State Department of Health. Accessed May 2024. https://apps.health.ny.gov/public/tabvis/PHIG_Public/opioid/

prescriptions was more than two times higher in NYS excluding NYC (351.9 per 1,000) than in NYC (165.1 per 1,000) for 2023. Overall, short-acting (SA) oxycodone is the most often prescribed opioid analgesic, followed by hydrocodone and tramadol. The rate of prescribing long-acting (LA) oxycodone, SA codeine, and LA fentanyl has remained lower due to differences in therapeutic indications.

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.[14] The percentage of episodes in which patients were both opioid-naïve and received LA opioid prescriptions remained steady between 2021 (0.9 percent) and 2023 (0.9 percent) in NYS and declined slightly in NYC from 0.7 in 2021 percent to 0.6 percent in 2023. During 2021-2023, the percentage was consistently higher in NYS excluding NYC than in NYC. There was a slight temporary rise in NYS excluding NYC from 1.0 percent in 2021 to 1.2 percent in 2022.

Among opioid-naïve patients, a larger number of supply days for the first (initial) opioid prescription is strongly associated with developing long-term opioid use.[15] In July 2016, NYS limited the initial prescribing of opioids for acute pain to no more than a seven-day supply.[16] In NYS, opioid prescriptions with more than a seven-day supply among opioid-naïve patients increased during the last three quarters of 2023. This increase in episodes where patients were both opioid-naïve and received an opioid prescription with more than a seven-day supply warrants continued monitoring.

In NYS, an increase 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 (multiple provider episodes) between 2020 (1.7 per 100,000 population) and 2023 (2.3 per 100,000).

Opioid analgesics prescribed in higher dosages ($\geq$ 90 morphine milligram equivalents (MME)) are associated with higher risks of overdose and death.[14] 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 2020 (10.8 percent) and 2023 (9.0 percent). Statewide, patients aged 55-64 years had the highest percentage for both males (13.1 percent) and females (11.4 percent).

The risk of opioid overdose increases when taken in combination with other drugs, including benzodiazepines (e.g., alprazolam, diazepam, etc.).[14] 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 2020 (8.5 percent) and 2023 (7.6 percent) in NYS. From 2020-2023, NYS excluding

[14] 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

[15] Shah A, Hayes CJ, Martin BC. Factors Influencing Long-Term Opioid Use Among Opioid Naive Patients: An Examination of Initial Prescription Characteristics and Pain Etiologies. *J Pain*. 2017 Nov;18(11):1374-1383. https://doi.org/10.1016%2Fj.jpain.2017.06.010

[16] Laws and Regulations - Public Health Law §3331(5)(b)-(c) - New Legislation Enacted to Limit Initial Opioid Prescribing to a 7 Day Supply for Acute Pain. Bureau of Narcotic Enforcement. New York State Department of Health. Accessed July 2023. https://www.health.ny.gov/professionals/narcotic/laws_and_regulations/

NYC had consistently higher percentages of overlapping prescriptions compared to NYC. Statewide, in 2023, the percentage was higher among females than among males for all age groups. The percentage was higher among those aged 65 and older for both female (11.6 percent) and male (9.9 percent) patients in 2023.

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 2020 (16.3 percent) and 2023 (14.8 percent). From 2020-2023, NYS excluding NYC had consistently higher percentages compared to NYC. In 2023, the percentage was higher among males than females, in all age groups, except among those aged 65 years and older.

In NYS, more than 87,000 patients received at least one buprenorphine prescription for outpatient treatment of OUD in 2023. The crude rate of patients who received buprenorphine for OUD, increased by 9.4 percent from 408.3 per 100,000 population in 2020 to 446.6 per 100,000 in 2023. The rate was more than three times higher in NYS excluding NYC than for NYC during 2023. Note, on December 29, 2022, the X-waiver was eliminated as part of the omnibus spending bill, under the Mainstreaming Addiction Treatment Act (MAT Act). The removal of the X-waiver means that any Drug Enforcement Administration (DEA)-registered prescriber of controlled substances can now offer buprenorphine to patients with OUD provided that they comply with all other DEA and State requirements. NYSDOH will monitor the impact of the X-waiver elimination on buprenorphine prescribing.

The National Survey on Drug Use and Health (NSDUH)

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 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 misuse, and identify those groups at high risk for OUD.[17,18]

In 2021-2022, for the following indicators, estimates for NYS and the US were very similar for most age groups. During 2021-2022, 3.4 percent of the population aged 12 years and older in NYS reported using illicit drugs other than cannabis in the past month. The percentage was highest among those aged 18-25 years (5.9 percent), followed by those aged 26-34 years (3.6 percent), and those aged 35 years and older (3.2 percent). During the same period, 2.9 percent of the population aged 12 years and older in NYS reported having misused prescription pain relievers in the past year. The percentage was highest among those aged 26-34 years (3.4 percent), followed by those aged 35 years and older (2.9 percent), and those aged 18-25 years (2.6 percent). In 2021-2022, 15.8 percent of the population aged 12 years and older in NYS reported using cannabis in the past month. In NYS, the percentage was highest among those aged 26-34 years (26.8 percent), followed closely by those aged 18-25 years (23.8 percent). During 2021-2022, when asked about their risk perceptions, 63.4 percent of respondents in NYS

[17] National Survey on Drug Use and Health - Homepage. Accessed June 2024. https://nsduhweb.rti.org/respweb/homepage.cfm

[18] National Survey on Drug Use and Health (NSDUH) Population Data. Substance Abuse and Mental Health Services Administration. Accessed July 2024. www.datafiles.samhsa.gov/dataset/national-survey-drug-use-and-health-2022-nsduh-2022-ds0001

reported the use of cocaine once a month as being a "great risk." The percentage was highest among those aged 35 years and older (67.2 percent), followed by those aged 26-34 years (60.9 percent).

Behavioral Risk Factor Surveillance System (BRFSS)

The Behavioral Risk Factor Surveillance System (BRFSS) is an annual statewide random telephone and cellular surveillance survey designed by the CDC. The survey is conducted in all 50 states and US territories. BRFSS monitors modifiable risk behaviors and other factors contributing to the leading causes of morbidity and mortality in the population. Data from the BRFSS are useful for planning, initiating, and supporting health promotion and disease prevention programs at the state and federal level, and monitoring progress toward achieving health objectives for the state and nation. New York State's BRFSS sample is representative of the adult population living in private residences or college housing who have either a landline or cellular telephone, aged 18 years and older. Therefore, adults living in group homes or congregate settings are not included in the survey.[19]

In 2022, among NYS population aged 18 years and older, the age-adjusted percentage of people who self-reported prescription pain medication misuse in the past 12 months was 4.5 percent. The highest crude percentage was observed among those aged 18-24 years (5.6 percent) and those aged 25-34 years (5.6 percent). Among racial and ethnic groups, the age-adjusted percentage was highest among Hispanic individuals (9.8 percent) and lowest among White non-Hispanic individuals (2.6 percent). The prevalence was more than twice as high among NYC residents (7.0 percent) compared to that among residents living outside of NYC (3.0 percent). The age-adjusted percentage was relatively similar among male residents (4.7 percent) and female residents (4.3 percent). Compared to 2021, there was an increase in the prevalence of adults who self-reported prescription pain medication misuse in the past 12 months among those aged 18-24 and 35-44, among females, and among NYC residents.

Population Survey on Use of Opioids and Other Substances

The NYSDOH conducts an annual survey of NYS adult residents to understand public perceptions of key health issues, including opioid use.[20] The most recent public perception poll among NYS adult residents in March 2024 showed that 67 percent of New Yorkers considered prescription opioid misuse and heroin use as very serious public health problems. These remained the highest concerns compared to other public health problems, such as alcohol consumption and access to healthy food and beverages (unpublished data).

[19] Behavioral Risk Factor Surveillance System (BRFSS). New York State Department of Health. https://www.health.ny.gov/statistics/brfss/

[20] Division of Chronic Disease Prevention - Chronic Disease Public Opinion Poll. Division of Chronic Disease Prevention and Siena College Research Institute. New York State Department of Health. Accessed July 2024. health.ny.gov/statistics/prevention/injury_prevention/information_for_action/

1 - Opioid Overdose Mortality Data

According to death certificate data reported to the NYSDOH, opioid-related overdose deaths have increasingly involved fentanyl.[21,22] Fentanyl is a potent synthetic opioid with medical uses; as such, it is listed within the International Classification of Disease, Tenth Revision (ICD-10) category for poisoning by "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.[23] Prescription fentanyl is primarily prescribed to manage acute and chronic pain associated with advanced cancer. Non-pharmaceutical grade fentanyl is illicitly manufactured. Illicit fentanyl is often mixed with heroin and has also been identified in counterfeit pills, formed to look like oxycodone and other prescription medications.[24] 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 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, particularly when additional substances such as xylazine may also be present.[25]

[21] Data to Action: Fentanyl-related deaths in New York State outside of New York City, 2015-2017. New York State Department of Health. Accessed July 2019. https://www.health.ny.gov/statistics/opioid/data/pdf/nysdoh_dta1_fentanyl.pdf

[22] 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. Accessed September 2019. https://www1.nyc.gov/assets/doh/downloads/pdf/epi/databrief116.pdf

[23] Overdose Prevention - Fentanyl. Centers for Disease Control and Prevention. Accessed May 21, 2024. https://www.cdc.gov/overdose-prevention/about/fentanyl.html

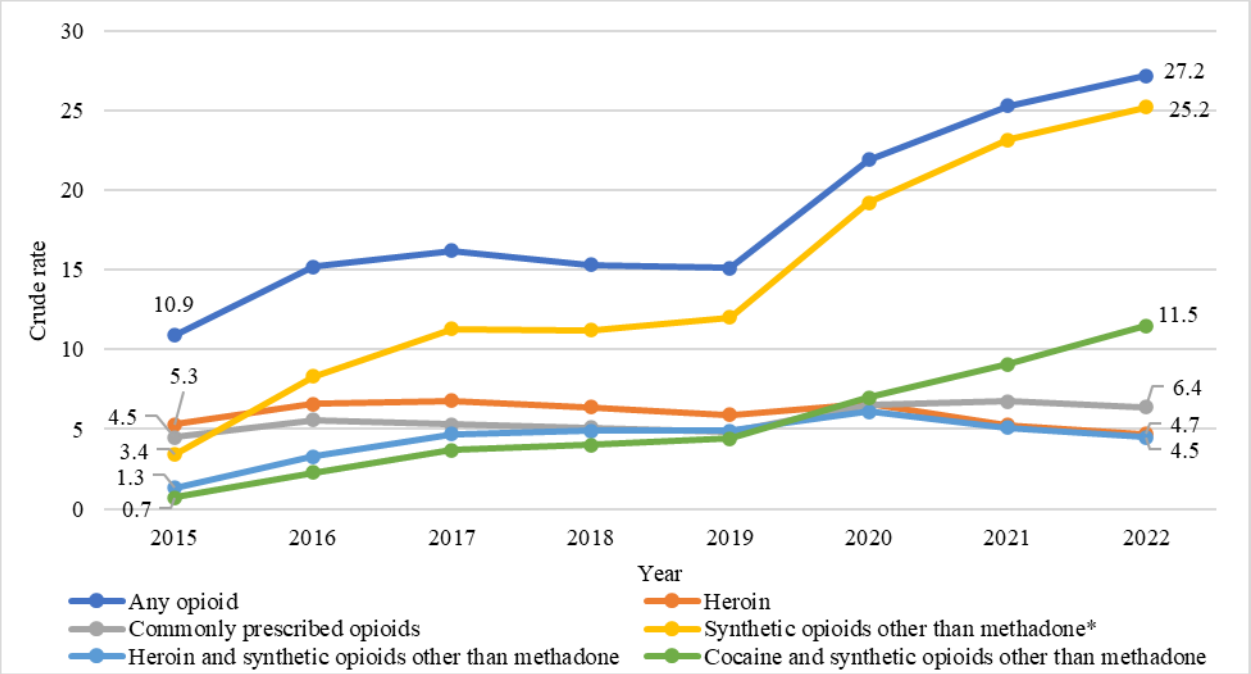
[24] Seth P, Rudd RA, Noonan RK, Haegerich TM. Quantifying the Epidemic of Prescription Opioid Overdose Deaths. *Am J Public Health*. 2018;108(4):500-502. https://doi.org/10.2105/AJPH.2017.304265

[25] Data to Action: Xylazine Awareness in New York State, 2021. New York State Department of Health. Accessed April 2023. http://www.health.ny.gov/statistics/opioid/data/pdf/nysdoh_op_dta8.pdf

Overdose deaths involving opioids and other substances

Among NYS residents, there were 5,361 overdose deaths involving any opioid in 2022, an increase of 6.9 percent from 5,017 deaths in 2021 (Figure 1.1). The crude rate of overdose deaths involving any opioid increased from 25.3 per 100,000 population in 2021 to 27.2 per 100,000 population in 2022. Moreover, the 2022 crude rate was two and a half times the 2015 rate of 10.9 per 100,000 population. It should be noted that categories of opioids and other substances involved in overdose deaths presented below are not mutually exclusive, as a death can involve multiple substances, and that these deaths largely involved SOOTM. Overdose deaths involving SOOTM is also displayed in addition to deaths involving any opioid and involving other commonly prescribed opioids (ICD-10 codes T40.2 and T40.3), such as hydrocodone and oxycodone. The crude rate of overdose deaths involving SOOTM rose by 8.8 percent from 23.2 per 100,000 in 2021 to 25.2 per 100,000 in 2022. From 2015 to 2022, the crude rates of overdose deaths involving SOOTM for NYS were consistently higher than that of US. Between 2021 and 2022, a 26.4 percent increase was observed for deaths involving cocaine and SOOTM, with the rate increasing from 9.1 to 11.5 per 100,000 population. Compared to 2021, the 2022 crude rate of overdose deaths decreased 11.3 percent for heroin and decreased by 4.5 percent for commonly prescribed opioids.

Figure 1.1 Overdose deaths involving opioids and other substances, crude rate per 100,000 population, New York State, 2015-2022



Multiple cause of death ICD-10 definitions: Any opioid – 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); Heroin – T40.1; Commonly prescribed opioids – T40.2 (e.g., hydrocodone, oxycodone), T40.3; Synthetic opioids other than methadone (SOOTM) – T40.4; Heroin and synthetic opioids other than methadone – T40.1 AND T40.4; Cocaine and synthetic opioids other than methadone – T40.5 (cocaine) AND T40.4.

* 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.

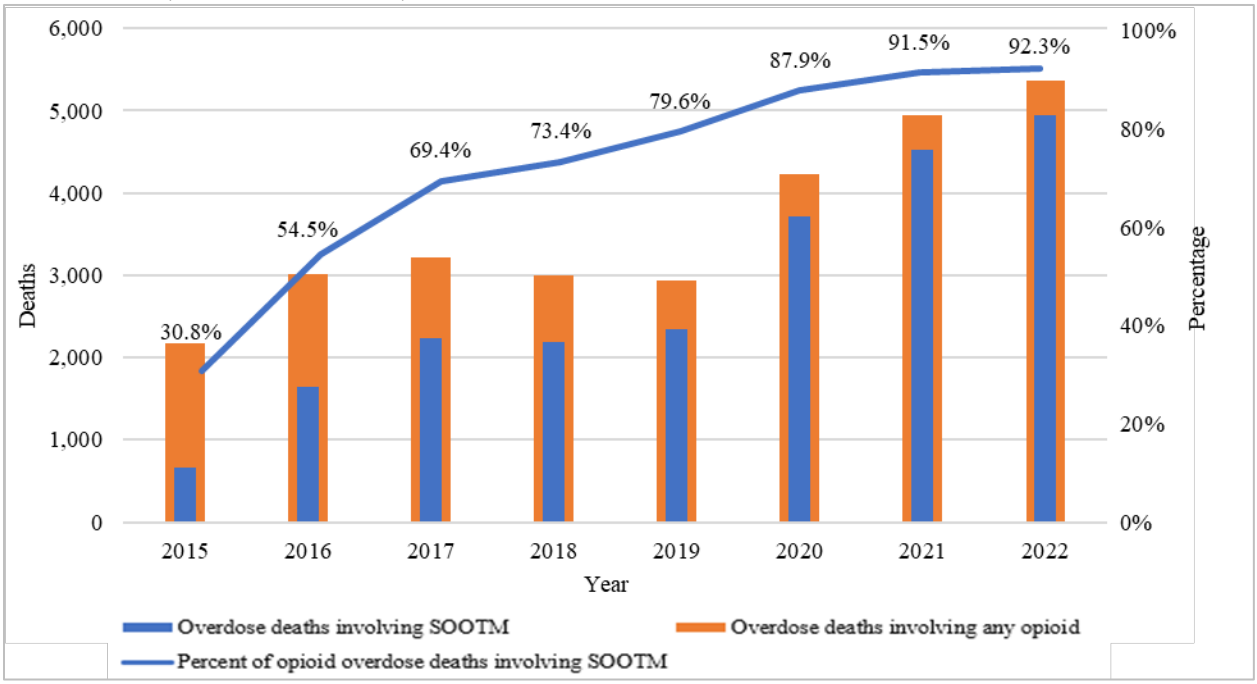
Data sources: Data for New York State excluding New York City in 2021 are provided by New York State Vital Statistics, as of April 2023; all other data are from CDC WONDER, accessed July 2024 .

For complete data, see Appendix: Data Table 1.1.

Opioid overdose deaths involving SOOTM

From 2015 to 2022, the percentage of any opioid overdose deaths that involved SOOTM increased from 30.8 to 92.3 percent, a total increase of 199.7 percent (Figure 1.2).

Figure 1.2 Percentage of opioid overdose deaths involving synthetic opioids other than methadone*, New York State, 2015-2022

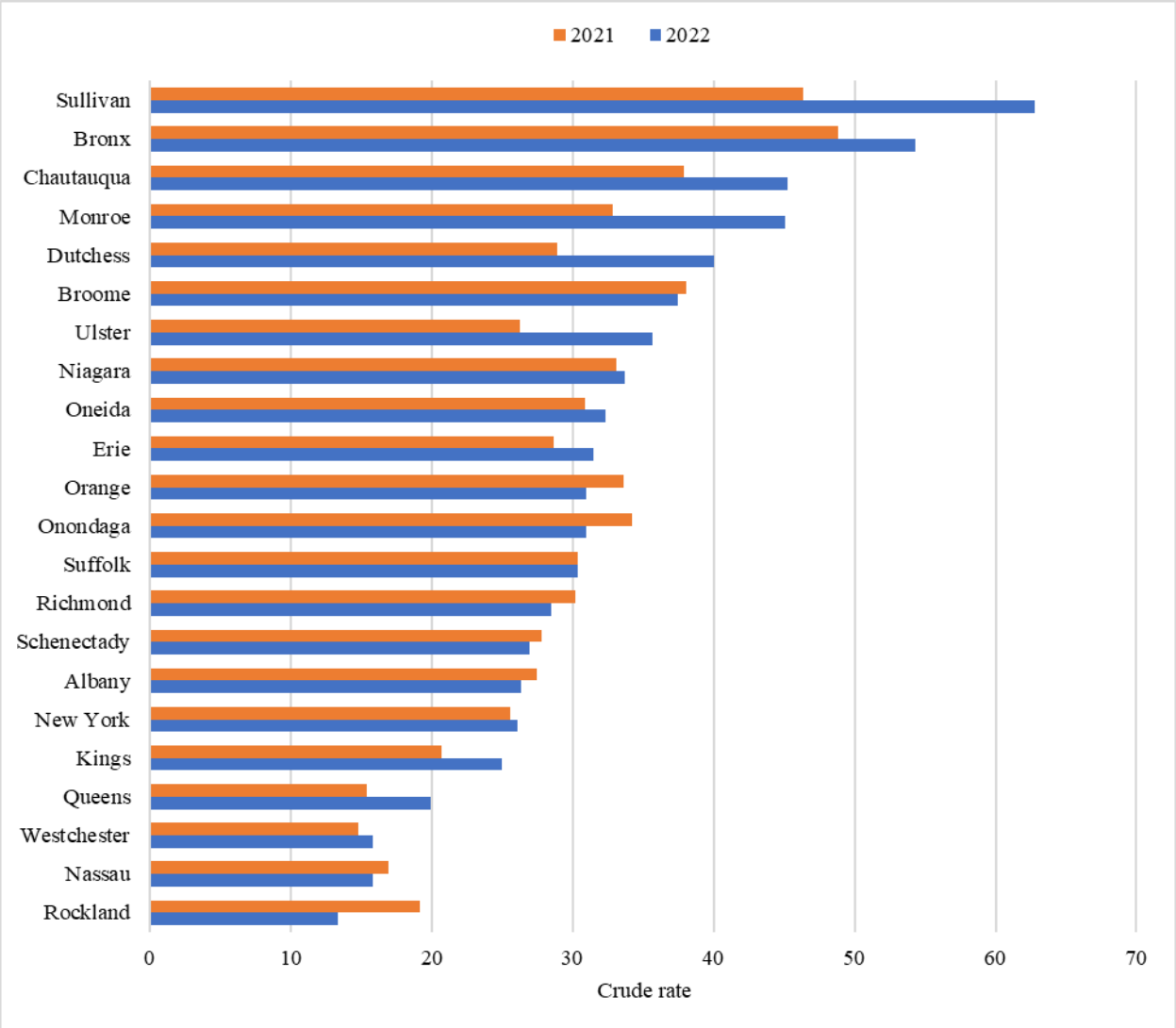


* Synthetic opioids other than methadone (SOOTM) are identified by ICD-10 code T40.4 and serve as a proxy for fentanyl, which is a highly potent opioid now commonly found in the illicit drug market.
Data sources: Data for New York State excluding New York City in 2021 are provided by New York State Vital Statistics, as of April 2023; all other data are from CDC WONDER, accessed July 2024.
For complete data, see Appendix: Data Table 1.2.

Overdose deaths involving any opioid by county

In NYS, among counties with 40 or more overdose deaths involving any opioid in 2022, the crude rate per 100,000 population for overdose deaths involving any opioid was highest in Sullivan County (62.8 per 100,000) (Figure 1.3). The ten counties with the highest crude rates were Sullivan, Bronx, Chautauqua, Monroe, Dutchess, Broome, Ulster, Niagara, Oneida, and Erie. Most of these ten counties, except for Broome, observed increases in the rates of overdose deaths involving any opioid in 2022 as compared to 2021. Sullivan County had the largest absolute increase (16.4 per 100,000) from 2021 (46.4 per 100,000) to 2022 (62.8 per 100,000). As noted above, in 2022, over 90 percent of opioid overdose deaths involved SOOTM.

Figure 1.3 Overdose deaths involving any opioid, crude rate per 100,000 population, by county^, New York State, 2021 and 2022

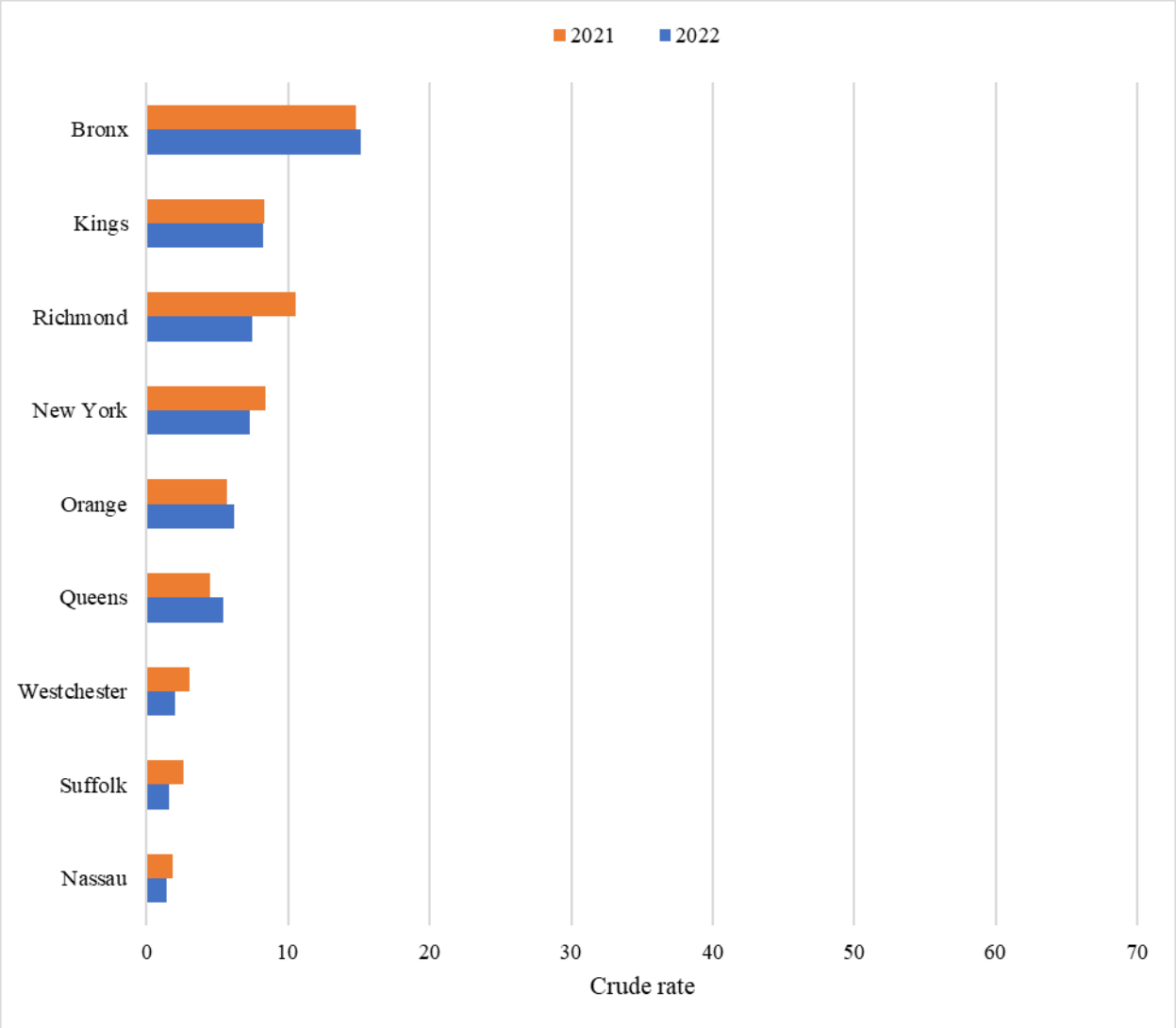


^ For the purpose of presenting comparison among counties with more complete data, statistics for 2022 for Monroe County are provided by New York State Vital Statistics, as of April 2024.
Data sources: Data for New York State excluding New York City in 2021 are provided by New York State Vital Statistics, as of April 2023; all other data are from CDC WONDER, accessed July 2024.
For county data on overdose deaths involving any opioid, see Appendix: Data Table 1.3.

Overdose deaths involving heroin by county

In NYS, among the nine counties with 20 or more overdose deaths involving heroin in 2022, the crude rate per 100,000 population for overdose deaths involving heroin was highest in Bronx County (15.1 per 100,000) (Figure 1.4). The nine counties with the highest crude rates were Bronx, Kings, Richmond, New York, Orange, Queens, Westchester, Suffolk, and Nassau .

Figure 1.4 Overdose deaths involving heroin, crude rate per 100,000 population, by county, New York State, 2021 and 2022

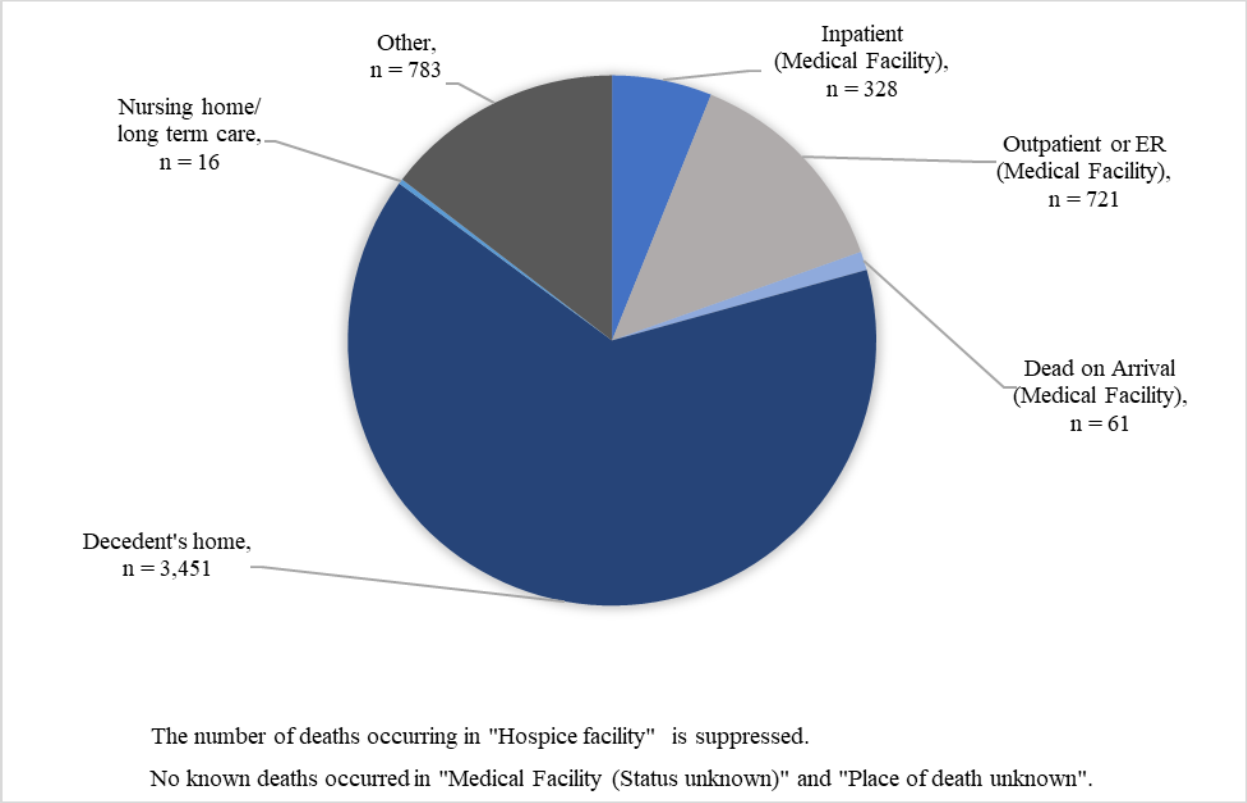


Data sources: Data for New York State excluding New York City in 2021 are provided by New York State Vital Statistics, as of April 2023; all other data are from CDC WONDER, accessed July 2024.
For county data on overdose deaths involving heroin, see Appendix: Data Table 1.4.

Overdose deaths involving any opioid by place of death

In NYS during 2022, the largest percentage of overdose deaths involving any opioid occurred at the decedent's home (64.4 percent), remaining stable from 2021 (66.3 percent, data not shown) (Figure 1.5). It is important to note this large percentage of overdose deaths that occurred in the home, as it may indicate those who used alone, or were not able to access naloxone or care in a timely manner. This can inform programmatic interventions and responses such as encouraging people who use drugs to avoid using alone, be trained to use naloxone and have it available, to create a safety plan, utilize drug checking services, and test all drugs with fentanyl test strips before using them.

Figure 1.5 Overdose deaths involving any opioid, by place of death, New York State, 2022

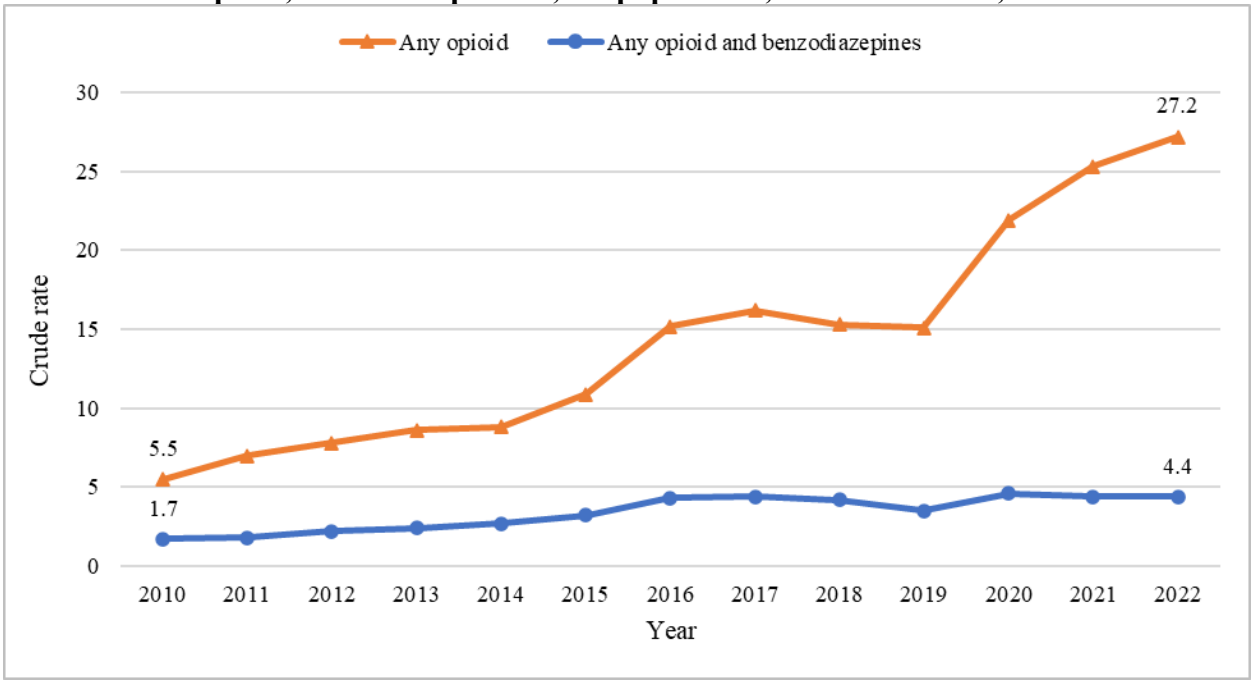


Data sources: CDC WONDER, accessed July 2024.
For complete data, see Appendix: Data Table 1.5.

Overdose deaths involving any opioid and benzodiazepines

The risk of an opioid overdose increases when opioids are taken in combination with benzodiazepines (e.g., Xanax® [alprazolam], Valium® [diazepam]).[26] It is important to monitor the involvement of multiple substances when assessing the risk of opioid overdose. In NYS, while the rate of overdose death involving any opioid and benzodiazepines gradually increased between 2010 and 2016, it has been relatively steady after that (Figure 1.6). Compared to 2021, in 2022, the crude rate of overdose death involving any opioid and benzodiazepines stayed unchanged at 4.4 per 100,000, while the rate of overdose death involving any opioid increased by 7.5 percent (from 25.3 to 27.2 per 100,000).

Figure 1.6 Overdose deaths involving any opioid and overdose deaths involving any opioid and benzodiazepines, crude rate per 100,000 population, New York State, 2010-2022



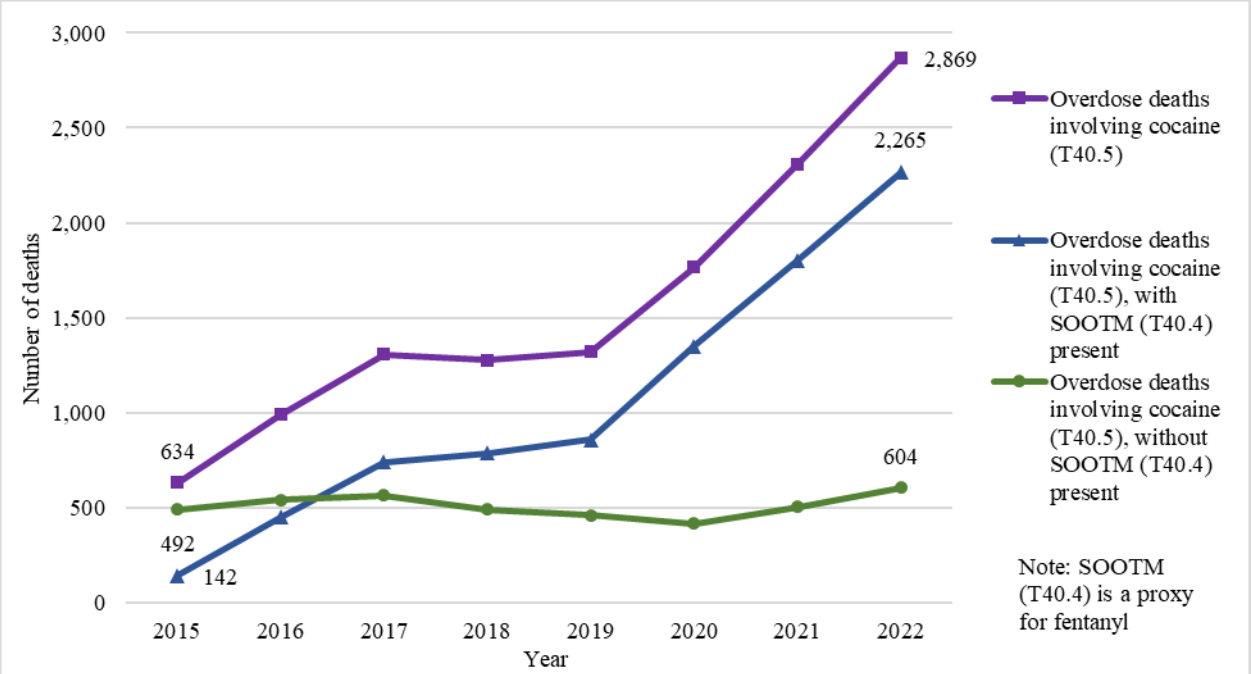
Multiple cause of death ICD-10 definitions: Any opioid – T40.0 (Opium), T40.1 (Heroin), T40.2 (Other opioids), T40.3 (Methadone), T40.4 (Synthetic opioids other than methadone), T40.6 (Other and unspecified narcotics); Any opioid and benzodiazepines – T40.0 (Opium), T40.1 (Heroin), T40.2 (Other opioids), T40.3 (Methadone), T40.4 (Synthetic opioids other than methadone), T40.6 (Other and unspecified narcotics) AND T42.4 (Benzodiazepines).
Data sources Data for New York State excluding New York City in 2021 are provided by New York State Vital Statistics, as of April 2023; all other data are from CDC WONDER, accessed July 2024.
For complete data, see Appendix: Data Table 1.6.

[26] 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. http://dx.doi.org/10.15585/mmwr.rr6501e1

Overdose deaths involving cocaine with and without SOOTM present

The number of overdose deaths involving cocaine in NYS increased from 634 overdose deaths in 2015 to 2,869 deaths in 2022 – a 352.5 percent increase (Figure 1.7). Between 2021 (2,309 deaths) and 2022 (2,869 deaths), the number of overdose deaths involving cocaine increased by 24.3 percent. The sharp rise since 2015 was largely driven by the involvement of SOOTM, predominantly illicit fentanyl. The number of overdose deaths involving cocaine *without* SOOTM present increased by 22.8 percent, from 492 deaths in 2015 to 604 deaths in 2022. However, the number of overdose deaths involving cocaine *with* SOOTM present increased by 2,123 deaths over the same period, from 142 in 2015 to 2,265 in 2022, marking a 1,495.1 percent increase. This indicates that the increase in overdose deaths involving cocaine has been driven by the presence of opioids, specifically fentanyl. Similar trends are being observed across the country.[27]

Figure 1.7 Overdose deaths involving cocaine with and without synthetic opioids other than methadone* present, New York State, 2015-2022



* 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 sources: Data for New York State excluding New York City in 2021 are provided by New York State Vital Statistics, as of April 2023; all other data are from CDC WONDER, accessed July 2024.
For complete data, see Appendix: Data Table 1.7.

[27] Increase in Fatal Drug Overdoses Across the United States Driven by Synthetic Opioids Before and During the COVID-19 Pandemic. Centers for Disease Control and Prevention, Health Alert Network. 2020 (CDCHAN-00438). Accessed June 2, 2022. https://emergency.cdc.gov/han/2020/han00438.asp

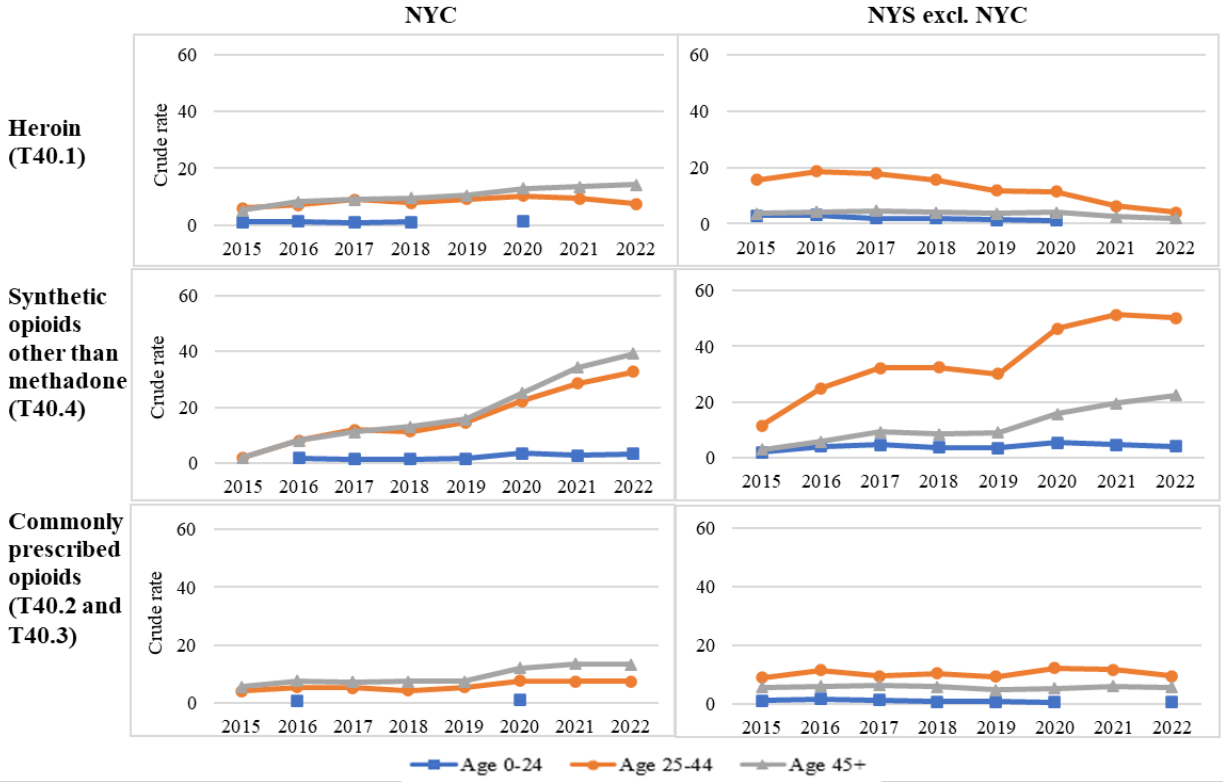
Overdose deaths involving heroin, SOOTM, and commonly prescribed opioids by region, year, and age group

Among New Yorkers aged 25-44 years, between 2015-2020 the crude rate of overdose deaths involving heroin was lower in NYC than in NYS excluding NYC. This changed in 2021 and 2022 when the rate in NYC became higher than in NYS (Figure 1.8). From 2018 to 2022, the crude rate among those aged 25-44 years in NYS excluding NYC decreased 73.7 percent (15.6 to 4.1 per 100,000). In the same period in NYC, the crude rate of overdose deaths involving heroin among those aged 25-44 years increased from 2018 to 2020 by 30.4 percent (7.9 to 10.3 per 100,000 population), but decreased in 2022 to 7.6 percent. In 2022 in NYC, the highest rate was among those aged 45 years and older (14.3 per 100,000).

Among New Yorkers aged 25-44 years, the crude rate of overdose deaths involving SOOTM was lower in NYC than it was in NYS excluding NYC for every year during 2015-2022. The 2022 crude rate of overdose deaths involving SOOTM among those aged 25-44 years was one and a half times higher in NYS excluding NYC (50.2 per 100,000) than it was in NYC (32.7 per 100,000). Compared to 2021, the rate among this age group increased by 15.1 percent in NYC (28.4 to 32.7 per 100,000). In 2022 in NYC, the highest rate was among those aged 45 years and older (39.2 per 100,000).

During 2015 to 2019, the crude rate of overdose deaths involving commonly prescribed opioids remained fairly steady among all age groups and across regions, with the highest rates among those aged 25-44 years residing in NYS excluding NYC. From 2019 to 2022, the crude rate among those aged 45 years and older residing in NYC increased by 77.3 percent from 7.5 per 100,000 in 2019 to 13.3 per 100,000 in 2022.

Figure 1.8 Overdose deaths involving heroin (T40.1), synthetic opioids other than methadone (T40.4)*, and commonly prescribed opioids (T40.2 and T40.3)^, crude rate per 100,000, by region, year, and age group, New York State, 2015-2022



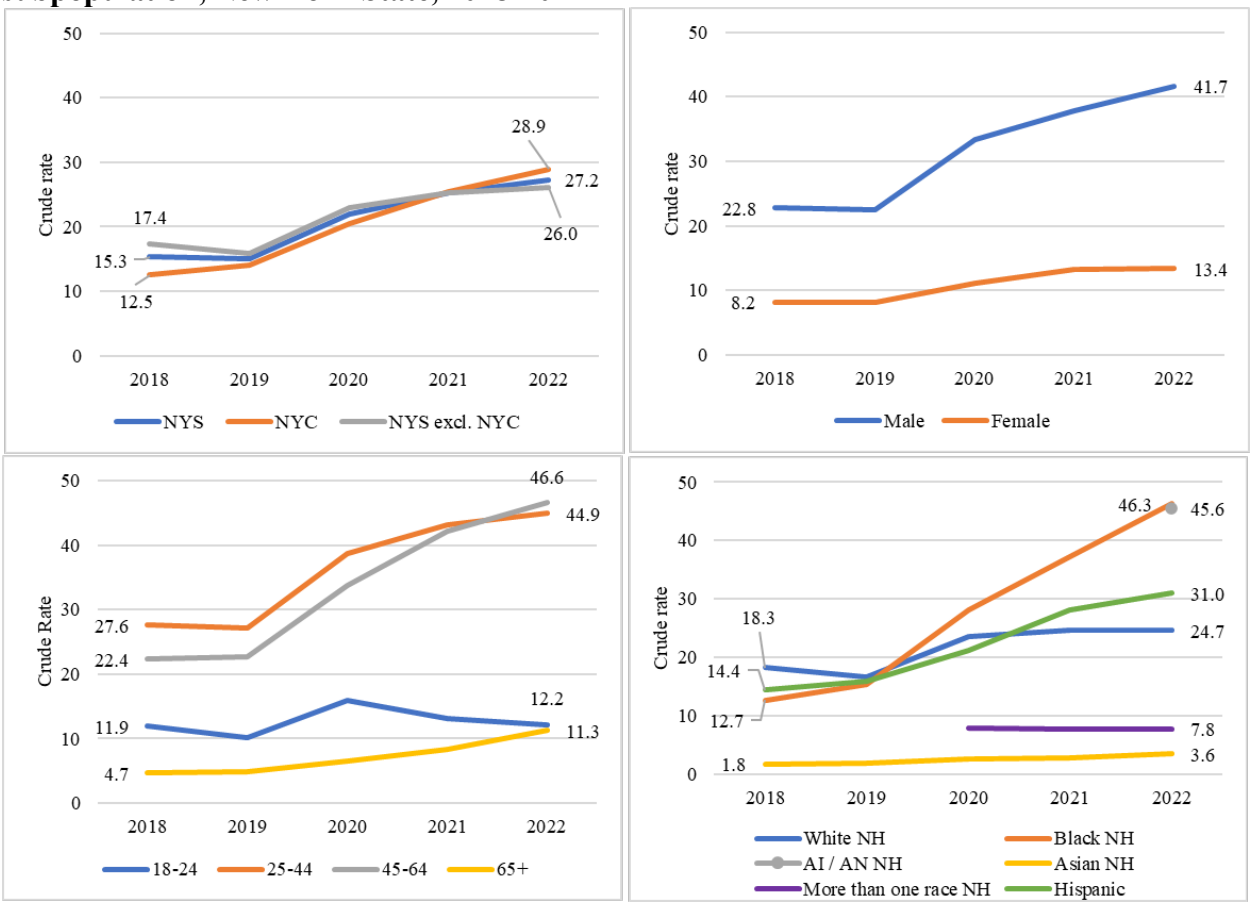
* Synthetic opioids other than methadone (SOOTM) are identified by ICD-10 code T40.4 and serve as a proxy for fentanyl, which is a highly potent opioid now commonly found in the illicit drug market.
^Commonly prescribed opioids are identified by ICD-10 codes T40.2 (Other opioids, e.g., hydrocodone, oxycodone), T40.3 (Methadone).
Note: For years and age groups with fewer than 20 deaths, rates are not shown.
Data sources: Data for New York State excluding New York City in 2021 are provided by New York State Vital Statistics, as of April 2023; all other data are from CDC WONDER, accessed July 2024.
For complete data, see Appendix: Data Table 1.8.

Overdose deaths involving any opioid by subpopulation

In 2022 the crude rate of overdose deaths involving any opioid was higher among residents in NYC (28.9 per 100,000 population) than in NYS excluding NYC (26.0 per 100,000) (Figure 1.9). From 2018 to 2022, the crude rates in NYC increased 131.2 percent from 12.5 to 28.9 per 100,000.

In NYS during 2022, the crude rate of overdose deaths involving any opioid was more than three times higher among males (41.7 per 100,000) as compared to females (13.4 per 100,000). The crude rates were highest among individuals aged 45-64 years (46.6 per 100,000) and those aged 25-44 years (44.9 per 100,000), Black non-Hispanic individuals (46.3 per 100,000), American Indian or Alaska Native individuals (45.6 per 100,000), and Hispanic individuals (31.0 per 100,000). From 2018 to 2022, the crude rates among Black non-Hispanic individuals increased 264.6 percent from 12.7 to 46.3 per 100,000.

Figure 1.9 Overdose deaths involving any opioid, crude rate per 100,000 population, by subpopulation, New York State, 2018-2022



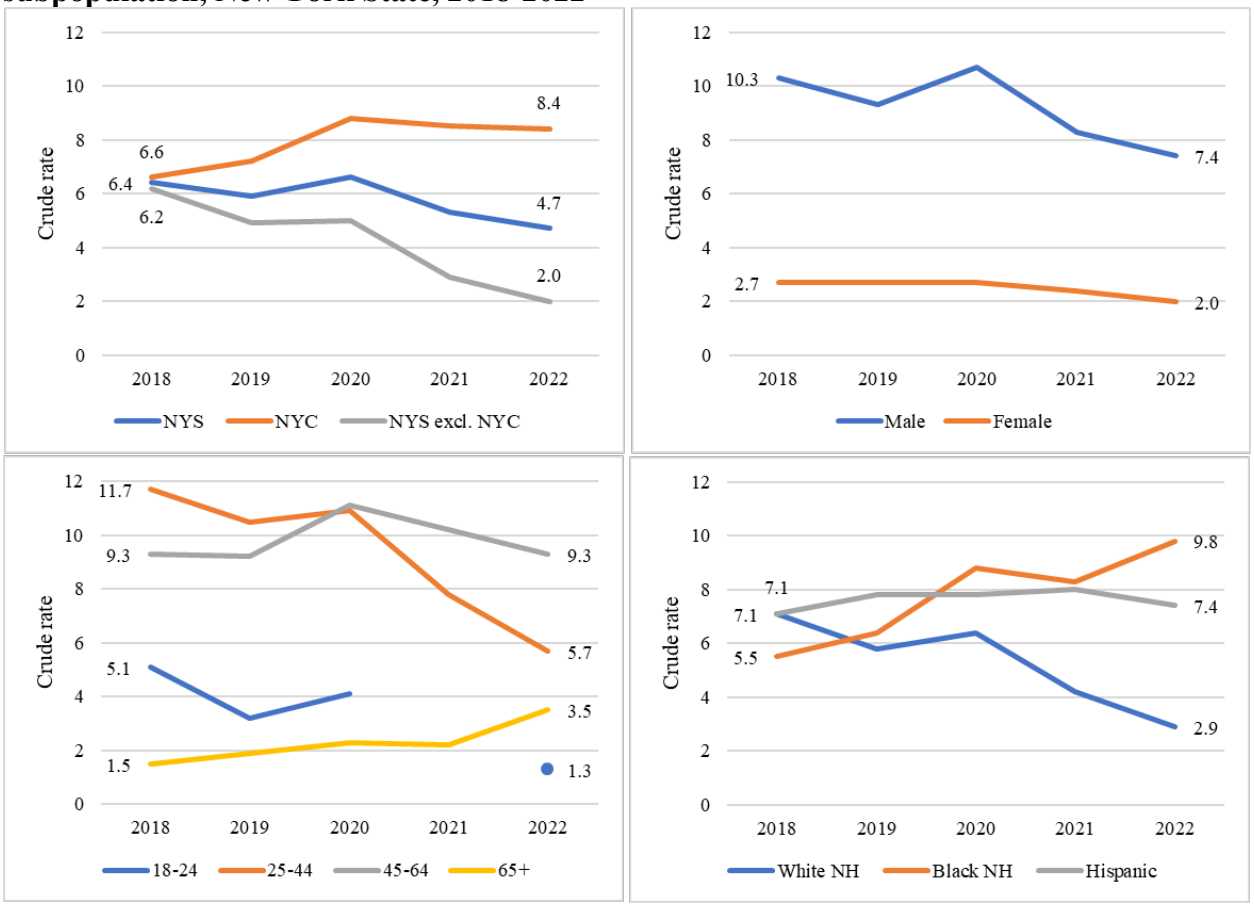
White NH = White non-Hispanic; Black NH = Black non-Hispanic; AI/AN NH = American Indian or Alaska Native non-Hispanic; Asian NH = Asian non-Hispanic; NYS excl. NYC = New York State excluding New York City
Data for Native Hawaiian/Other Pacific Islander NH do not meet reporting criteria and are therefore not shown.
Data sources: Data for New York State excluding New York City in 2021 are provided by New York State Vital Statistics, as of April 2023; all other data are from CDC WONDER, accessed July 2024.
For complete data, see Appendix: Data Table 1.9.

Overdose deaths involving heroin by subpopulation

In 2022, the crude rate of overdose deaths involving heroin was over four times higher in NYC (8.4 per 100,000) than in NYS excluding NYC (2.0 per 100,000) (Figure 1.10). From 2018 to 2022, the crude rate of overdose deaths involving heroin in NYC increased by 27.3 percent from 6.6 to 8.4 per 100,000, while the crude rate decreased by 67.7 percent from 6.2 to 2.0 per 100,000.

In NYS in 2022, the crude rate of overdose deaths involving heroin were highest among males (7.4 per 100,000), individuals aged 45-64 years (9.3 per 100,000) and Black non-Hispanic individuals (9.8 per 100,000). From 2018-2022, the crude rate increased 78.2 percent from 5.5 to 9.8 per 100,000 among Black non-Hispanic individuals.

Figure 1.10 Overdose deaths involving heroin, crude rate per 100,000 population, by subpopulation, New York State, 2018-2022



White NH = White non-Hispanic; Black NH = Black non-Hispanic; NYS excl. NYC = New York State excluding New York City
Data for American Indian /Alaska Native NH, Asian NH, Native Hawaiian / Other Pacific Islander NH and More than one race NH do not meet reporting criteria and are therefore not shown.
Data sources: Data for New York State excluding New York City in 2021 are provided by New York State Vital Statistics, as of April 2023; all other data are from CDC WONDER, accessed July 2024.
For complete data, see Appendix: Data Table 1.10.

2 - Naloxone Administrations

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

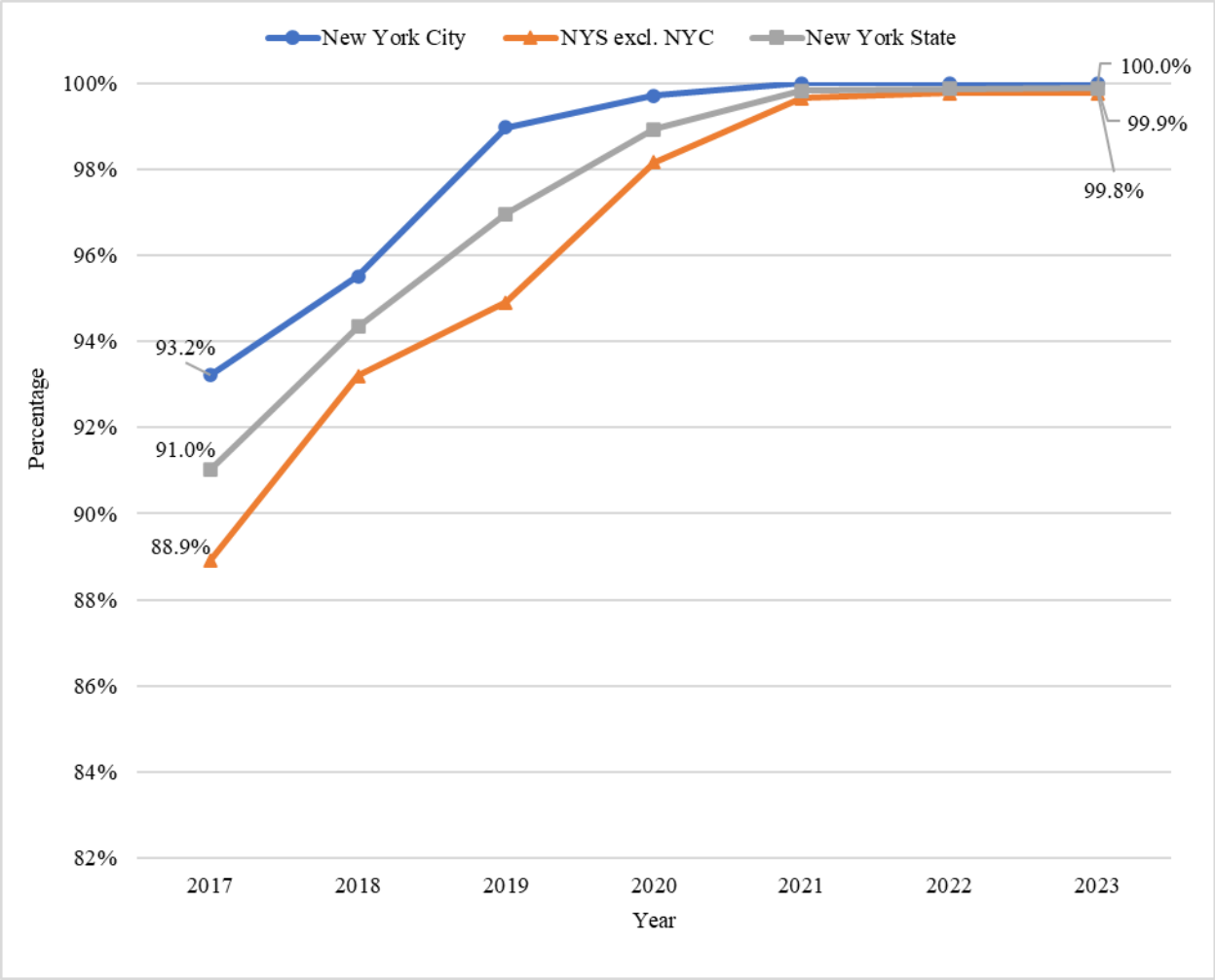
Naloxone Administrations by Emergency Medical Services

Naloxone has been actively administered by both Advanced Life Support and Basic Life Support providers in the treatment of potential opioid overdoses for many years. Many areas of NYS rely on Basic Life Support agencies to provide emergency medical response by Emergency Medical Technicians and Certified First Responders. EMS agencies administer the highest number of naloxone administrations 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).

911 EMS dispatches reported electronically

In 2023, 99.9 percent of all 911 EMS dispatches in NYS were reported electronically, an increase from 91.0 percent in 2017 (Figure 2.1). Improvements in data reporting for New York City (NYC) and NYS excluding NYC during 2017-2023 followed similar patterns to the NYS total. Electronic coverage increased from 93.2 percent in 2017 to 100 percent in 2023 in NYC. For NYS excluding NYC, coverage increased from 88.9 percent in 2017 to 99.8 percent in 2023.

Figure 2.1 Percentage of 911 EMS dispatches reported electronically, by region, New York State, 2017-2023

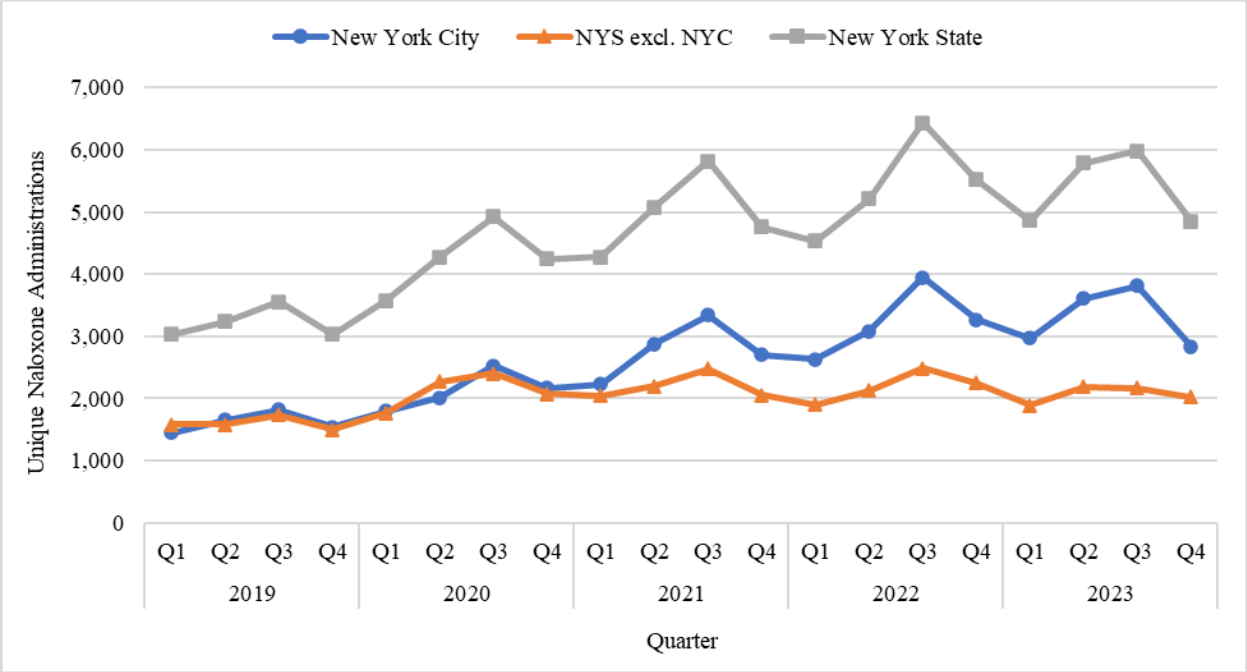


Data source: NYSDOH, Bureau of Emergency Medical Services; Data as of April 2024
For complete data, see Appendix: Data Table 2.1.

Unique naloxone administrations by EMS agencies

The number of electronically reported unique naloxone administrations by EMS in NYS decreased by 1.0 percent from 21,689 in 2022 to 21,473 in 2023 (Figure 2.2). Between 2022 and 2023, July through September (Quarter 3) of 2022 had the highest number of reported administrations (6,430).

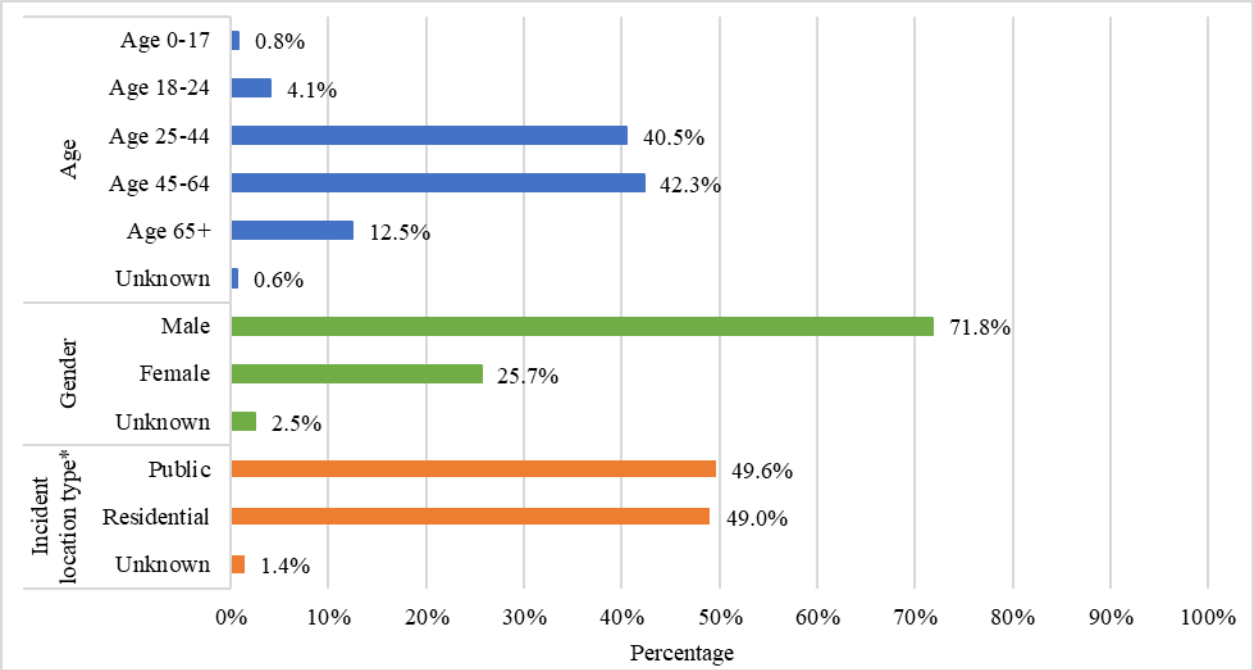
Figure 2.2 Number of unique* naloxone administrations by EMS agencies, by region, New York State, 2019-2023



* Unique naloxone administrations represent an EMS encounter in which naloxone was administered during the course of patient care. Often, multiple administrations of naloxone may be given to an individual during the same patient encounter. As such, additional data validation steps have been taken to de-duplicate multiple administrations and counts may differ from previous annual and quarterly reports.
Note: Counts may have been affected by changes in documentation systems used by EMS agencies.
Data source: NYSDOH, Bureau of Emergency Medical Services; Data as of April 2024
For complete data, see Appendix: Data Table 2.2.

In 2023, the highest number of unique naloxone administrations were administered to individuals aged 45-64 years, with 9,081 administrations (42.3 percent), followed closely by those aged 25-44 years, with 8,357 administrations (40.5 percent) (Figure 2.3). Most of these administrations by EMS personnel were administered to males, accounting for 15,424 administrations (71.8 percent).

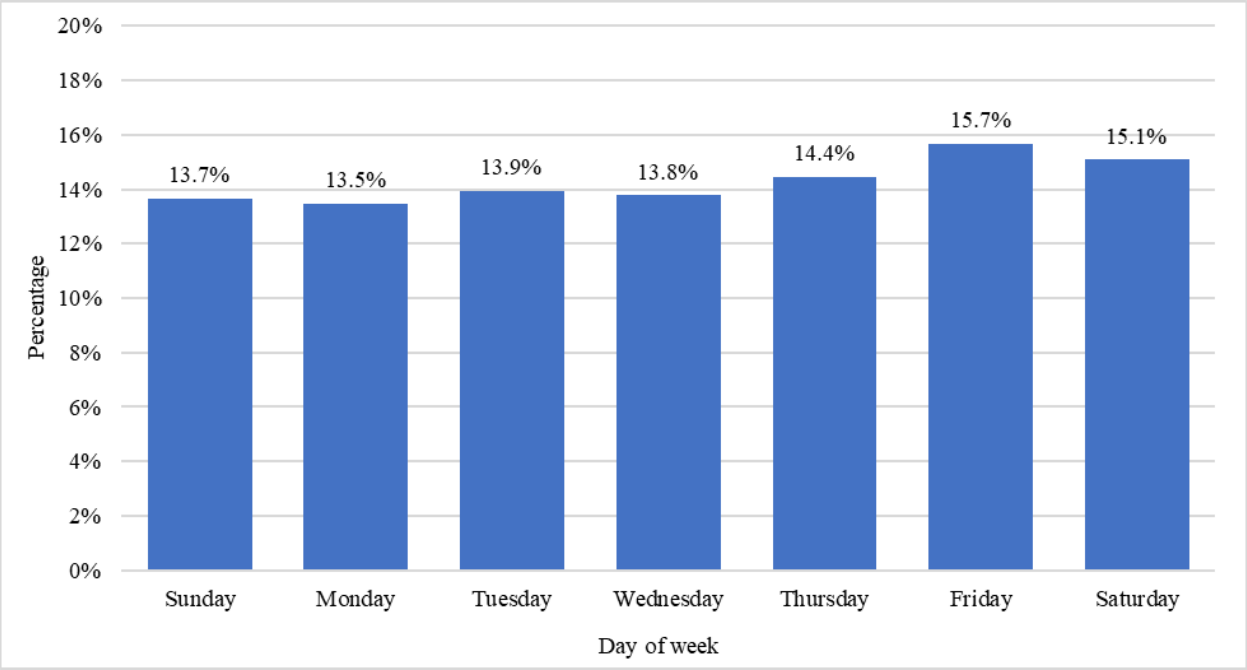
Figure 2.3 Percentage of unique naloxone administrations by EMS agencies, by age group, gender, and incident location type*, New York State, 2023



* Incident location type is incomplete for Richmond and Suffolk counties.
Data source: NYSDOH, Bureau of Emergency Medical Services; Data as of April 2024.
For complete data, see Appendix: Data Table 2.3.

In 2023, Friday was the day of the week during which the highest number of unique naloxone administrations by EMS occurred (3,366 administrations, or 15.7 percent), followed by Saturday (3,238 administrations, or 15.1 percent) (Figure 2.4). This highlights the need for individuals using opioids to obtain naloxone in their communities and always have it available, especially over the weekends. The fewest administrations occurred on Mondays (2,890 administrations or 13.5 percent) and Sundays (2,933 administrations, or 13.7 percent). The distribution of unique administrations varied across months of the year, with counts being the highest during the summer months especially since 2020 (data not shown). The month with the highest number of naloxone administrations in 2023 was July (2,115 administrations, or 9.8 percent), while the month with the lowest number was November (1,457 administrations, or 6.8 percent).

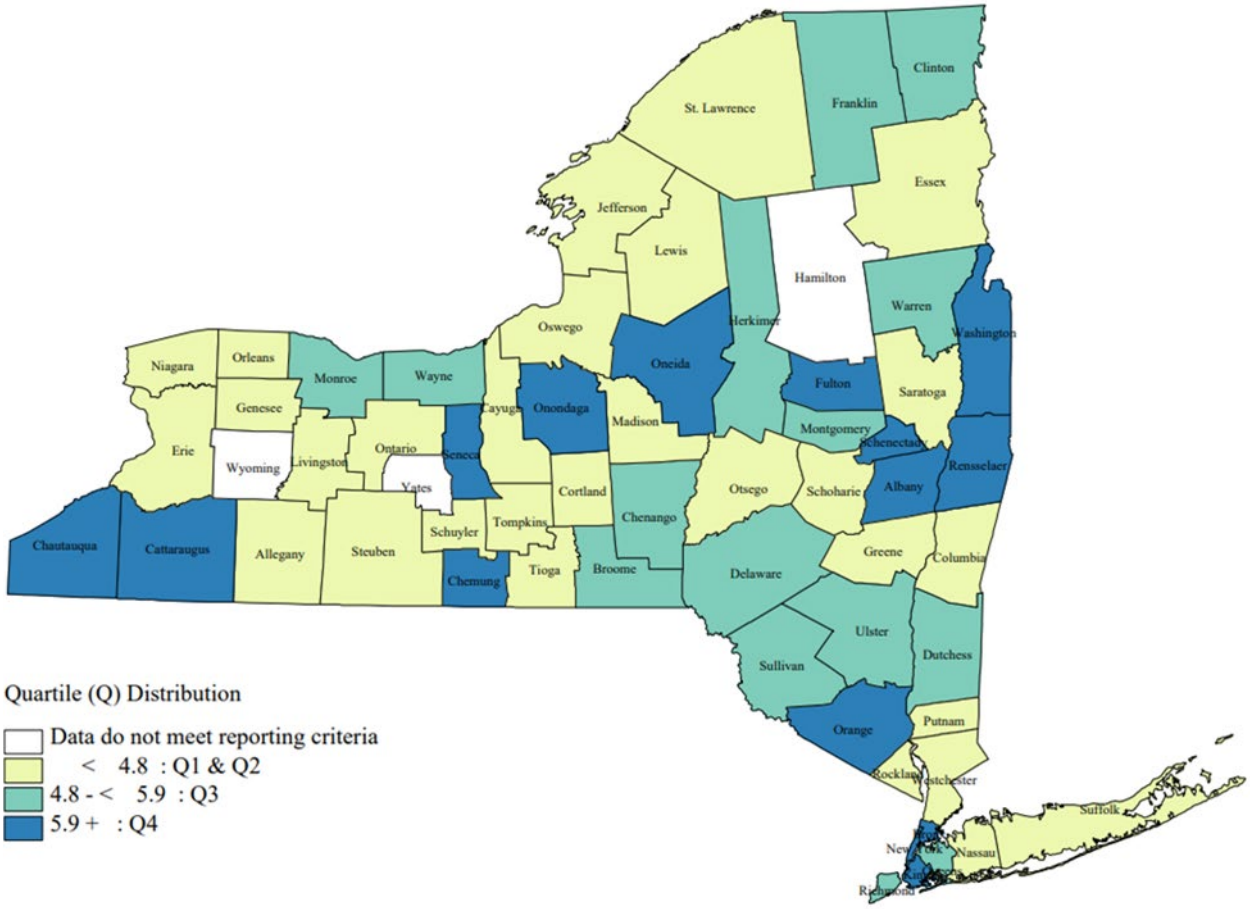
Figure 2.4 Percentage of unique naloxone administrations by EMS agencies, by day of the week, New York State, 2023



Data source: NYSDOH, Bureau of Emergency Medical Services; Data as of April 2024
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 2023. The counties shown in blue had the highest crude rates (rates greater than or equal to 5.9 per 1,000) of naloxone administration per 1,000 unique 911 EMS dispatches. The top counties with the highest rates of unique naloxone administrations in 2023 were Rensselaer, New York, Bronx, Chautauqua, Onondaga, Washington, Oneida, Schenectady, Cattaraugus, Albany, Orange, Chemung, Kings, Seneca, and Fulton. Counties shown in yellow had the lowest rates of naloxone administration per 1,000 unique dispatches.

Figure 2.5 Unique naloxone administrations by EMS providers documented on pre-hospital care reports, crude rate per 1,000 unique 911 EMS dispatches, by county, New York State, 2023



Data source: NYSDOH, Bureau of Emergency Medical Services; Data as of April 2024
For complete data, see Appendix: Data Table 2.5.

Naloxone Administrations by Community Programs

The Department of Health's ODUH uses a harm reduction approach with programmatic roots in the State's network of 37 syringe exchange programs. It also has an emphasis on expanding access to medication for OUD, including buprenorphine and methadone. These medications help 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, correction 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 to recognize and respond to opioid overdoses by organizations registered with NYSDOH. These individuals are known as trained overdose responders. Under regulation, these entities or providers may maintain regulated opioid overdose prevention programs and include:

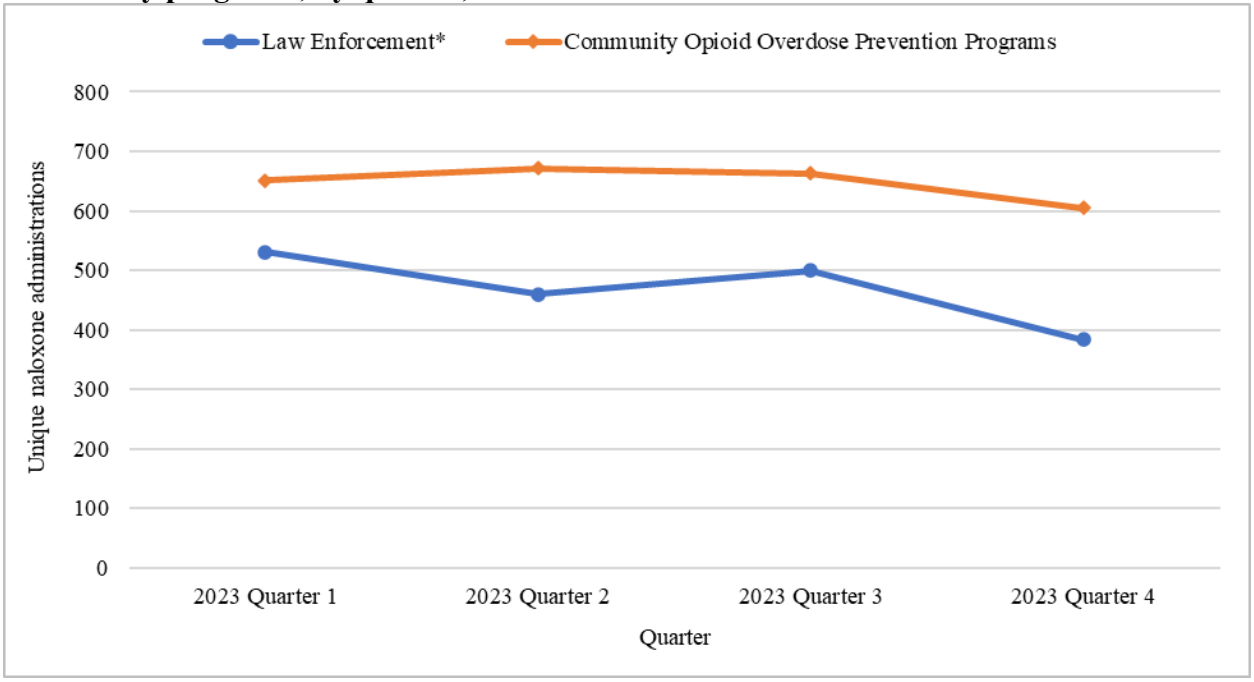
- a healthcare facility licensed under the Public Health Law;
- a physician, physician assistant, or nurse practitioner who is authorized to prescribe the use of an opioid antagonist;
- a drug treatment program licensed under the Mental Hygiene Law;
- a not-for-profit community-based organization incorporated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

In many municipalities, law enforcement 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 2023 from EMS (n = 21,473), law enforcement (n = 1,875), and Community Opioid Overdose Prevention programs (n = 2,591) (Appendix: Data Table 2.12). 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 increased follow-up with community registered programs 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.

Naloxone administration reports by law enforcement and community programs

In NYS during 2023, the highest numbers of naloxone administrations by law enforcement agencies were reported in January through March (531 administrations, Quarter 1), followed by July through September (500 administrations, Quarter 3). The highest numbers of naloxone administrations by Community Opioid Overdose Prevention programs were reported in April through June (672 administrations, Quarter 2), closely followed by July through September (663 administrations, Quarter 3) (Figure 2.6).

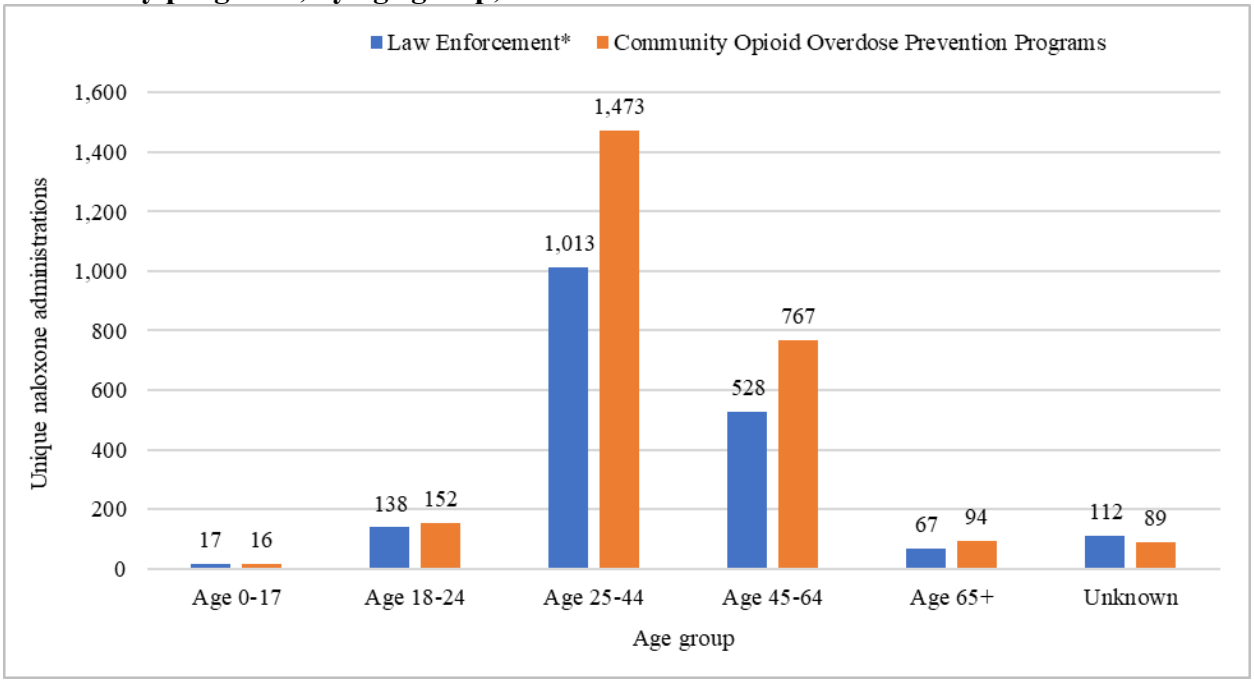
Figure 2.6 Number of naloxone administration reports by law enforcement* and community programs, by quarter, New York State 2023



* 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 April 2024
For complete data, see Appendix: Data Table 2.6.

In NYS in 2023 for both law enforcement agencies and Community Opioid Overdose Prevention programs most naloxone administrations were to individuals aged 25-44 years (Figure 2.7).

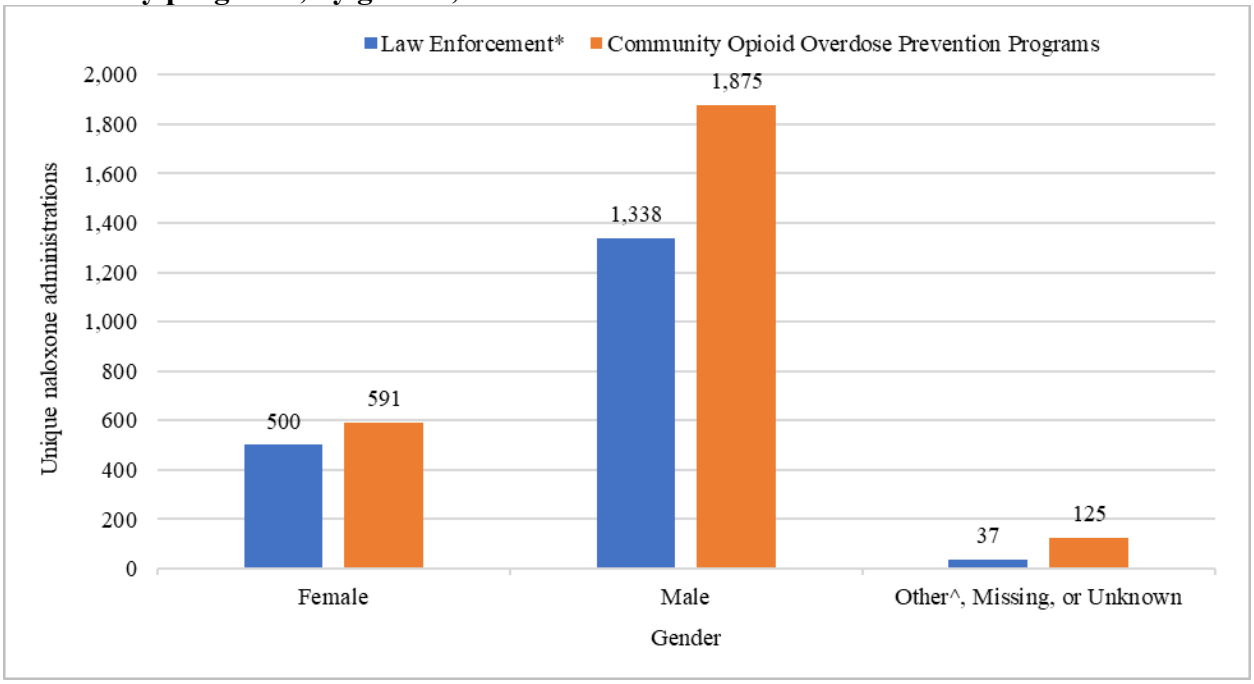
Figure 2.7 Number of naloxone administration reports by law enforcement* and community programs, by age group, New York State 2023



* 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 April 2024
For complete data, see Appendix: Data Table 2.7.

In NYS during 2023, most naloxone administrations were to males according to reports from both law enforcement agencies and Community Opioid Overdose Prevention programs (Figure 2.8). This was similar to the pattern among EMS administrations.

Figure 2.8 Number of naloxone administration reports by law enforcement* and community programs, by gender, New York State 2023



^ Other includes "Transgender", "Intersex", "Gender Non-conforming" and "Other, not specified"
* 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 April 2024
For complete data, see Appendix: Data Table 2.8.

Suspected Opioid Overdose

An opioid overdose occurs when opioids negatively affect the part of the brain that regulates breathing, resulting in slowed or ineffective breathing, which can be life threatening Since administrations of naloxone are given to patients presenting with signs and symptoms of a suspected opioid overdose, this is often used as a proxy indicator for opioid overdose. However, not all suspected opioid overdoses receive naloxone, and in some instances, naloxone may be administered in the prehospital setting in cases where opioid overdose is possible but not confirmed. Thus, naloxone administration alone may not represent the most accurate indicator of a suspected opioid overdose. To improve surveillance and monitoring, additional criteria for documented evidence of poisoning by opioids was used to develop an improved case definition for suspected opioid overdose based on patient clinical information captured by EMS data.

Starting in 2021, the quality of EMS data recorded on the e-PCRs significantly improved through the complete transition from National EMS Information Systems (NEMSIS) 2.2.1 standard platform to NEMSIS 3.4.0. As a result, more complete and better-quality data allowed for the development and standardization of this indicator.

Suspected Opioid Overdose Definition using EMS Data

The NYS definition for suspected opioid overdose includes EMS responses for which *ANY* of the following criteria is true.

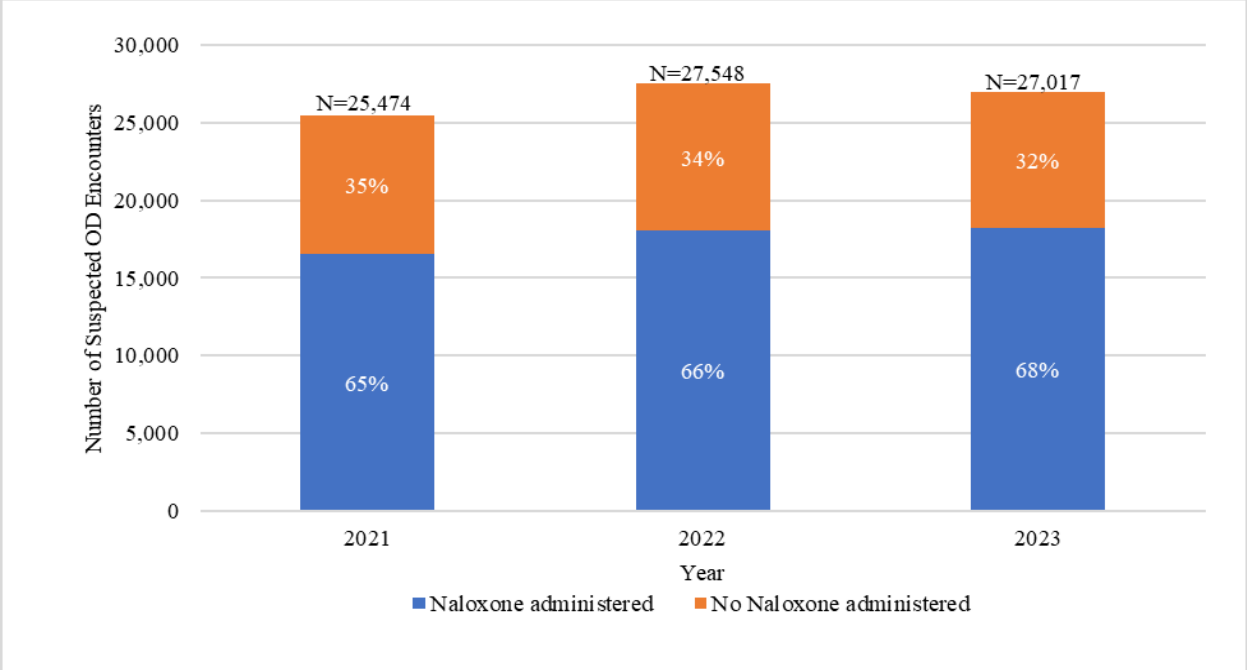
- Naloxone administered with positive response; or,
- Provider impressions indicate poisoning by opioids *and* naloxone is administered or at least two keywords indicating an opioid overdose mentioned in narrative; or,
- Provider impressions indicate opioid related disorder *and* naloxone is administered or at least three keywords indicating an opioid overdose mentioned in narrative; or,
- Provider impressions indicate unspecified drug overdose *and* opioid term is mentioned in narrative *and* response to naloxone is not worse *and* no narcotics are administered by EMS; or
- Provider impressions indicate unspecified drug overdose, cardiac arrest, apnea, or respiratory failure *and* opioid term is mentioned in narrative *and* no narcotics are administered by EMS *and* patient fatality is indicated; or,
- Opioid term *and* overdose term mentioned in narrative (with no exclusion term) *and* at least two keywords indicating an opioid overdose mentioned in narrative *and* no narcotics are administered by EMS.

For a more detailed methodology, see the section titled NYS Suspected Opioid Overdose Syndrome – NEMSIS v3.4.0 under Methods.

EMS suspected opioid overdose encounters with and without reported naloxone administration on scene

In 2023, there were 27,017 suspected opioid overdose encounters, representing a 1.9 percent decrease from 27,548 suspected opioid overdose encounters in 2022. During 2021 and 2022, naloxone was administered in approximately 65 percent and 66 percent of suspected opioid overdose encounters respectively. In 2023, approximately 68 percent of suspected opioid overdose encounters received naloxone administration (Figure 2.9). Instances of suspected opioid overdose in which naloxone may not have been administered include patients who were dead at scene, or those who presented with mild symptoms and did not meet clinical requirements. As such, these encounters are not captured in the counts of naloxone administration.

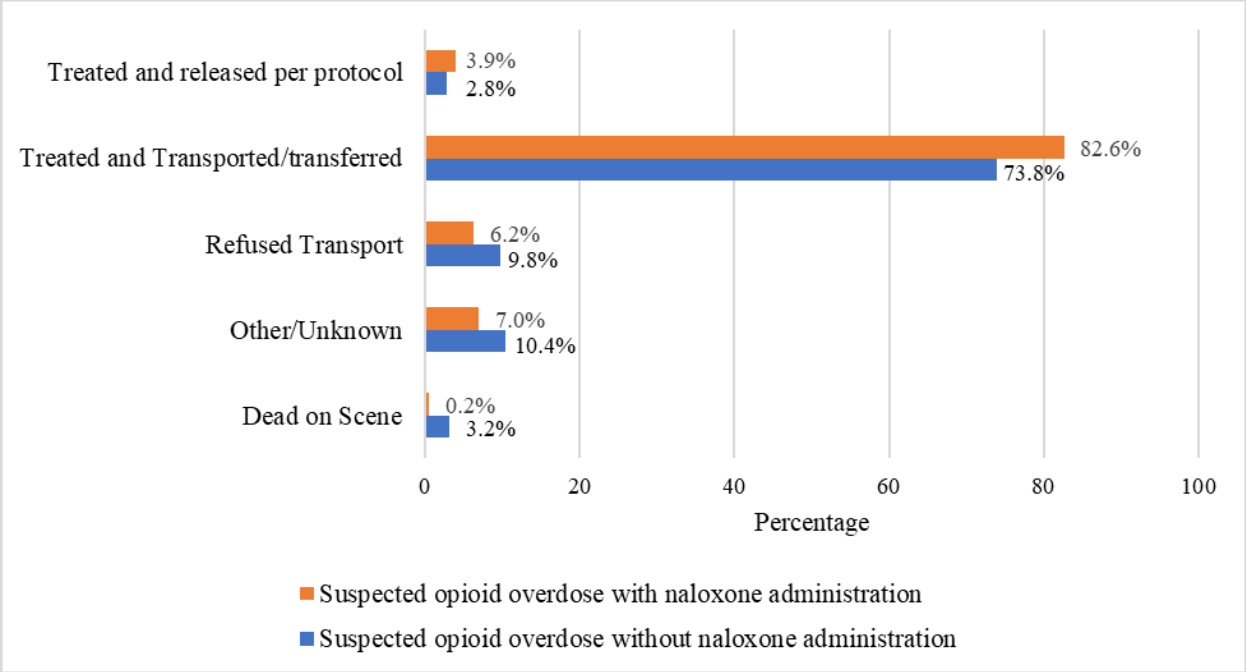
Figure 2.9 EMS suspected opioid overdose encounters with and without* reported naloxone administration on scene, New York State, 2021 to 2023



* These include unique naloxone administrations reported in the medication administered structured field and may include bystander and administrations prior to EMS arrival.
Data source: NYSDOH, Bureau of Emergency Medical Services; Data as of April 2024
For complete data, see Appendix: Data Table 2.9.

In 2023, 82.6 percent of suspected opioid overdose encounters with reported naloxone administration were treated and transported/transferred, compared to 73.8 percent of suspected opioid overdose encounters without reported naloxone administration (Figure 2.10). The proportion of suspected opioid overdose patients who refused transport to a medical facility was higher among those without naloxone administration, compared to those reported to have received naloxone (9.8 percent vs. 6.2 percent).

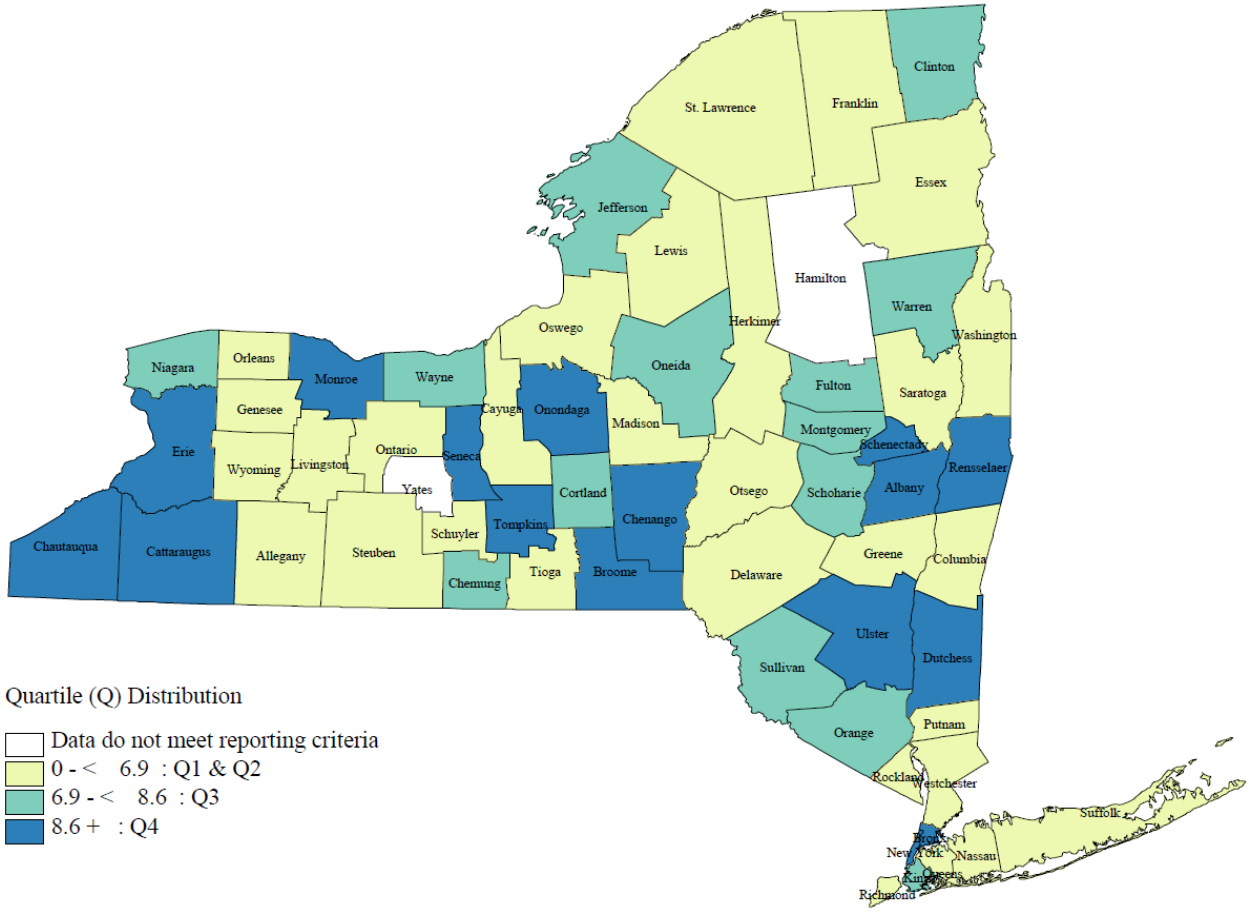
Figure 2.10 Percentage of suspected opioid overdose with and without* reported naloxone administration by patient disposition^, New York State, 2023



* These include unique naloxone administrations reported in the medication administered structured field and may include bystander and administrations prior to EMS arrival.
^ The patient disposition for an EMS event identifying whether a patient received care and/or services and transport.
Data source: NYSDOH, Bureau of Emergency Medical Services; Data as of April 2024
For complete data, see Appendix: Data Table 2.10.

Figure 2.11 shows variation in the county rate of suspected opioid overdoses per 1,000 unique 911 EMS dispatches in 2023. The counties shown in blue had the highest crude rates (rates greater than or equal to 8.6 per 1,000) of suspected opioid overdoses per 1,000 unique 911 EMS dispatches. The top counties with the highest rates of suspected opioid overdoses in 2023 were Tompkins, Onondaga, Broome, Chautauqua, Rensselaer, Monroe, New York, Cattaraugus, Schenectady, Seneca, Dutchess, Ulster, Albany, Chenango, Erie, and Bronx. Counties shown in yellow had the lowest rates of suspected opioid overdoses per 1,000 unique dispatches.

Figure 2.11 Suspected opioid overdoses by EMS providers documented on pre-hospital care reports, crude rate per 1,000 unique 911 EMS dispatches, by county, New York State, 2023



Data source: NYSDOH, Bureau of Emergency Medical Services; Data as of April 2024
For complete data, see Appendix: Data Table 2.11.

3 - Hospitalization and Emergency Department Visits Data

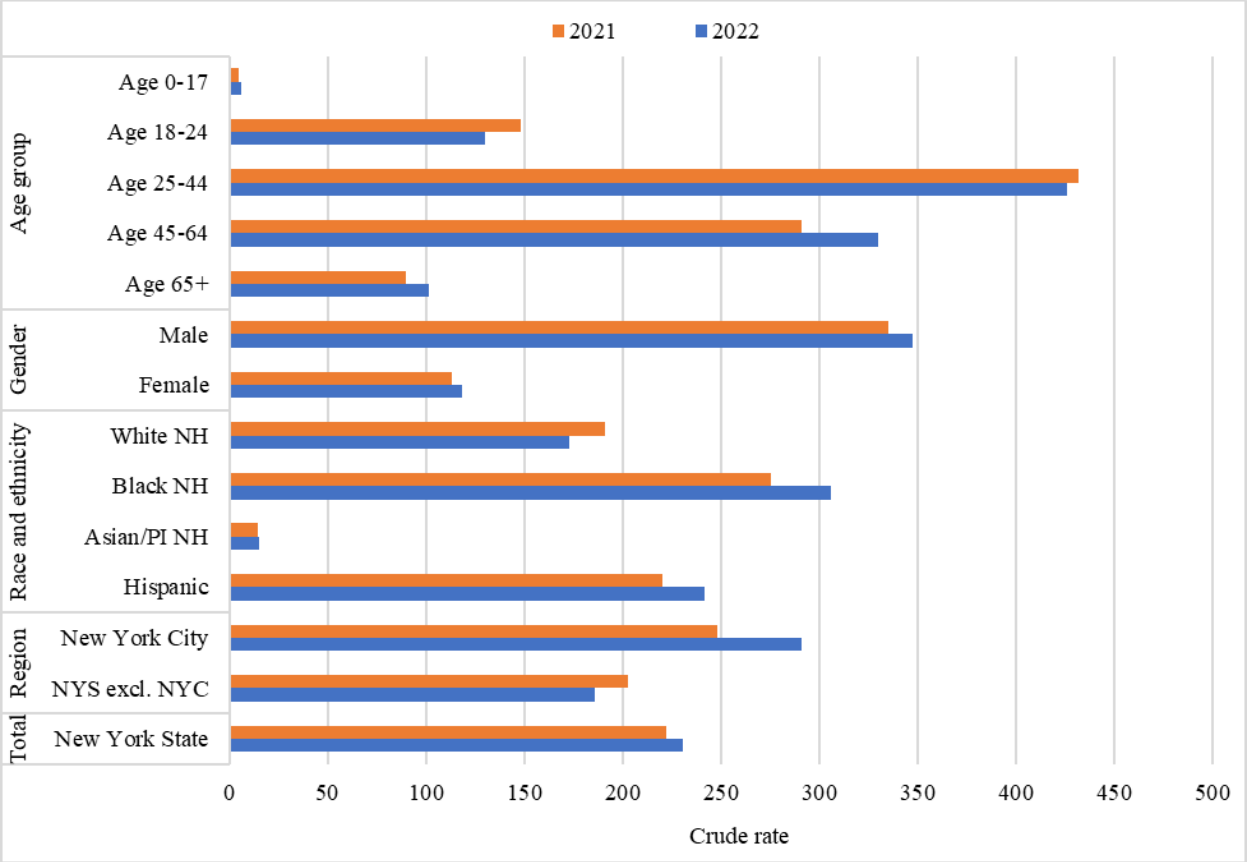
Severe drug overdoses are often treated in the emergency departments and hospitals. Data for both ED visits and hospitalization admissions are obtained from the Statewide Planning and Research Cooperative System (SPARCS) database. Therefore, these are important data sources to examine the burden by opioids on a part of the healthcare system.

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.

Overdose deaths involving opioids and nonfatal opioid-related hospital events

The NYSDOH combines multiple data sources to measure opioid use and overdose events, including opioid overdose deaths, nonfatal outpatient ED visits and hospital discharges involving opioid overdose and use disorders. Collectively, these are opioid events that represent overall health impacts of opioids within NYS. In 2022, among NYS residents, there were 45,348 opioid use related and overdose events, representing a crude rate of 230.5 per 100,000 population (Figure 3.1). While there was a slight decline from 2021 to 2022 among those aged 25-44 years, the rate was still highest for that age group (425.8 per 100,000) followed by the rate among those aged 45-64 years (330.3 per 100,000). The rate was almost three times higher among males (347.5 per 100,000) than among females (118.2 per 100,000). The 2022 rate was highest among Black non-Hispanic individuals (306.1 per 100,000), followed by the rates among Hispanic individuals (241.6 per 100,000), and White non-Hispanic individuals (173.1 per 100,000). In 2022, NYC had a higher rate (290.8 per 100,000) than NYS excluding NYC (186.1 per 100,000).

Figure 3.1 Overdose deaths involving opioids and nonfatal opioid-related hospital events, crude rate per 100,000 population, by subpopulation, New York State, 2021 and 2022



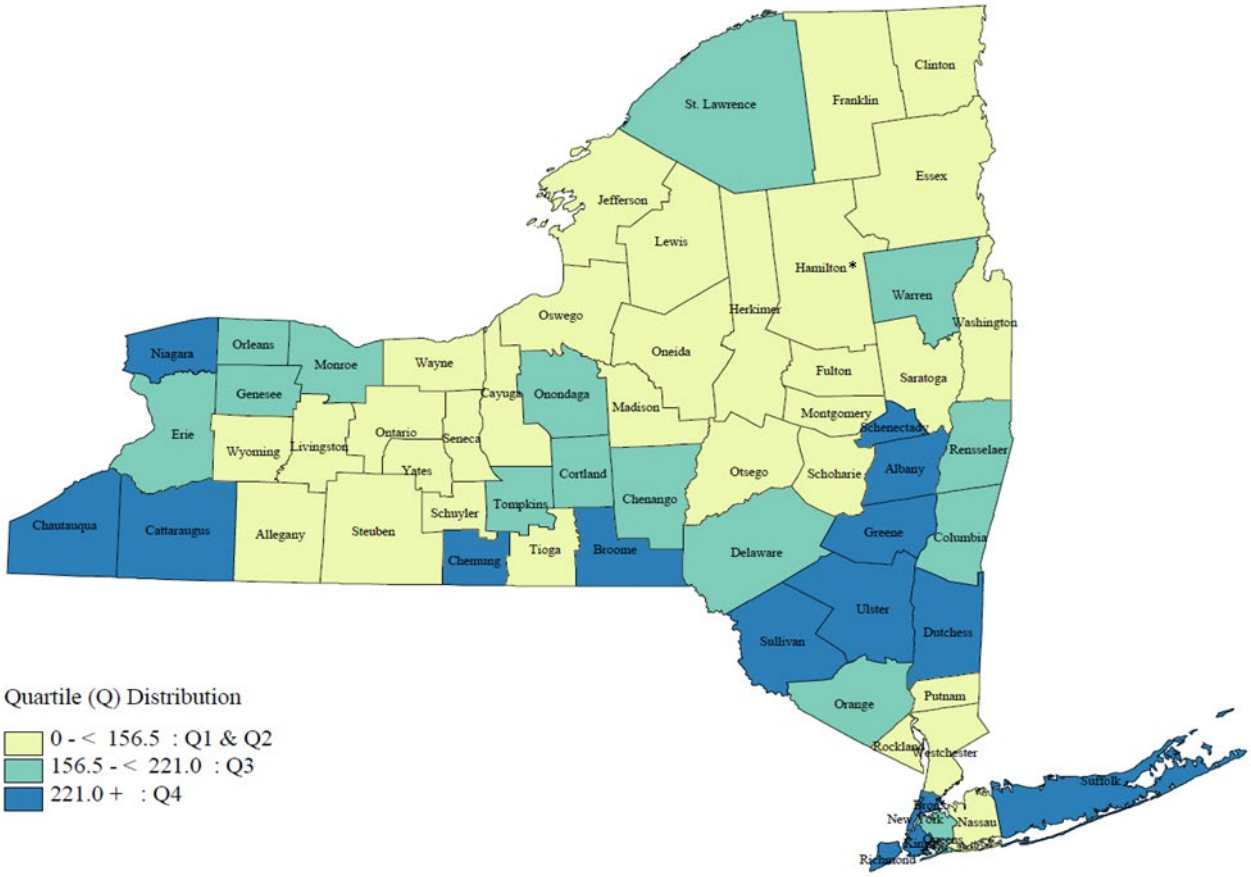
White NH = White non-Hispanic; Black NH = Black non-Hispanic; Asian/PI NH= Asian or Pacific Islander non-Hispanic; NYS excl. NYC = New York State excluding New York City

Data sources: Death data for New York State excluding New York City in 2021 are provided by New York State Vital Statistics, as of April 2023; all other death data are from CDC WONDER, accessed July 2024; ED Visits and Hospital Discharges from New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS), as of March 2024.

For complete data, see Appendix: Data Table 3.1.

In 2022, the 16 counties with overdose deaths involving opioids and nonfatal opioid related hospital events in the highest quartile (crude rates greater than or equal to 221.0 per 100,000 population) were: Bronx, Chautauqua, New York, Sullivan, Broome, Dutchess, Cattaraugus, Niagara, Ulster, Schenectady, Kings, Greene, Richmond, Chemung, Suffolk, and Albany (Figure 3.2).

Figure 3.2 Overdose deaths involving opioids and nonfatal opioid-related hospital events, crude rate per 100,000 population, by county, New York State, 2022

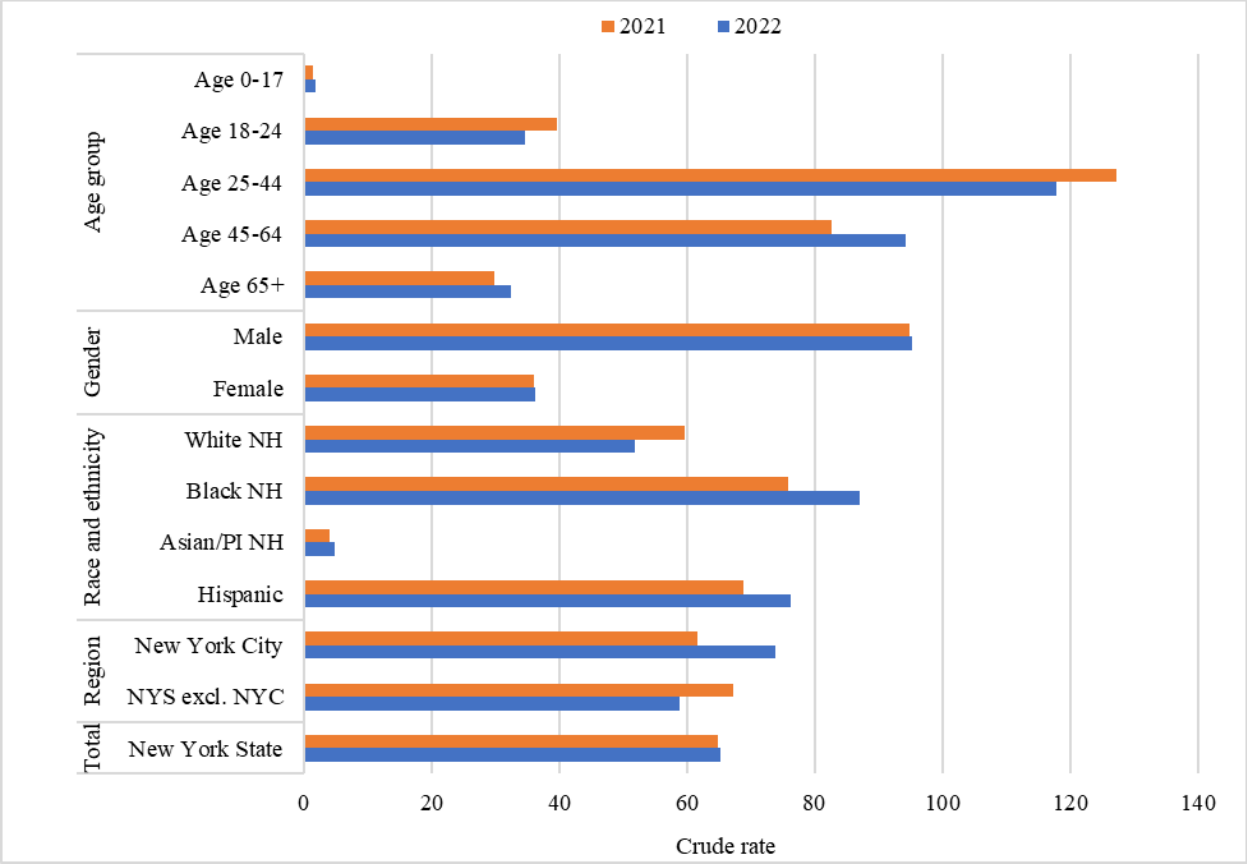


*: Fewer than 10 events in the numerator, therefore the rate is unstable.
Data sources: Death data are from CDC WONDER, accessed July 2024; ED Visits and Hospital Discharges from New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS), as of March 2024.
For complete data, see Appendix: Data Table 3.2.

Hospital discharges involving opioids

Among NYS residents in 2022, there were 12,826 hospital discharges for opioid use (including overdose and disorders), representing a crude rate of 65.2 per 100,000 population (Figure 3.3). In 2022, the rate was highest among those aged 25-44 years (117.8 per 100,000), followed by the rate among those aged 45-64 years (94.2 per 100,000). The rate among males (95.3 per 100,000) was two and a half times higher than that among females (36.3 per 100,000). The rate was highest among Black non-Hispanic individuals (87.0 per 100,000), followed by the rates among Hispanic individuals (76.3 per 100,000) and White non-Hispanic individuals (51.8 per 100,000). NYC (73.8 per 100,000) had a higher rate than NYS excluding NYC (58.8 per 100,000).

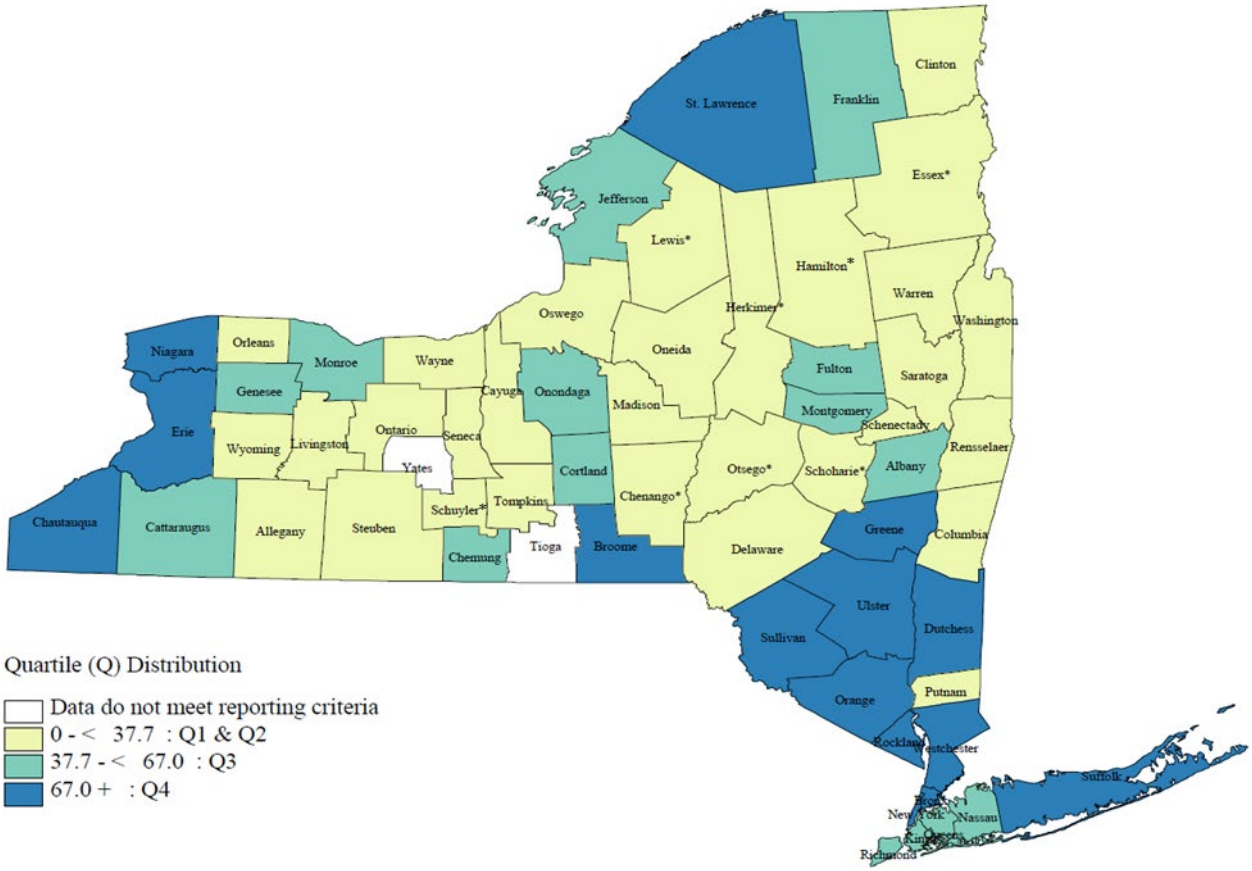
Figure 3.3 Hospital discharges involving opioid use (including overdose and disorders), crude rate per 100,000 population, by subpopulation, New York State, 2021 and 2022



White NH = White non-Hispanic; Black NH = Black non-Hispanic; Asian/PI NH= Asian or Pacific Islander non-Hispanic; NYS excl. NYC = New York State excluding New York City
Data source: New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS); Data as of March 2024.
For complete data, see Appendix: Data Table 3.3.

The 15 counties in the highest quartile (crude rates greater than or equal to 67.0 per 100,000 population) for hospital discharges due to opioid use (including overdose and disorders) in 2022 were Bronx, Dutchess, St. Lawrence, Sullivan, Niagara, Chautauqua, New York, Erie, Ulster, Broome, Suffolk, Orange, Rockland, Greene, and Westchester (Figure 3.4).

Figure 3.4 Hospital discharges involving opioid use (including overdose and disorders), crude rate per 100,000 population, by county, New York State, 2022

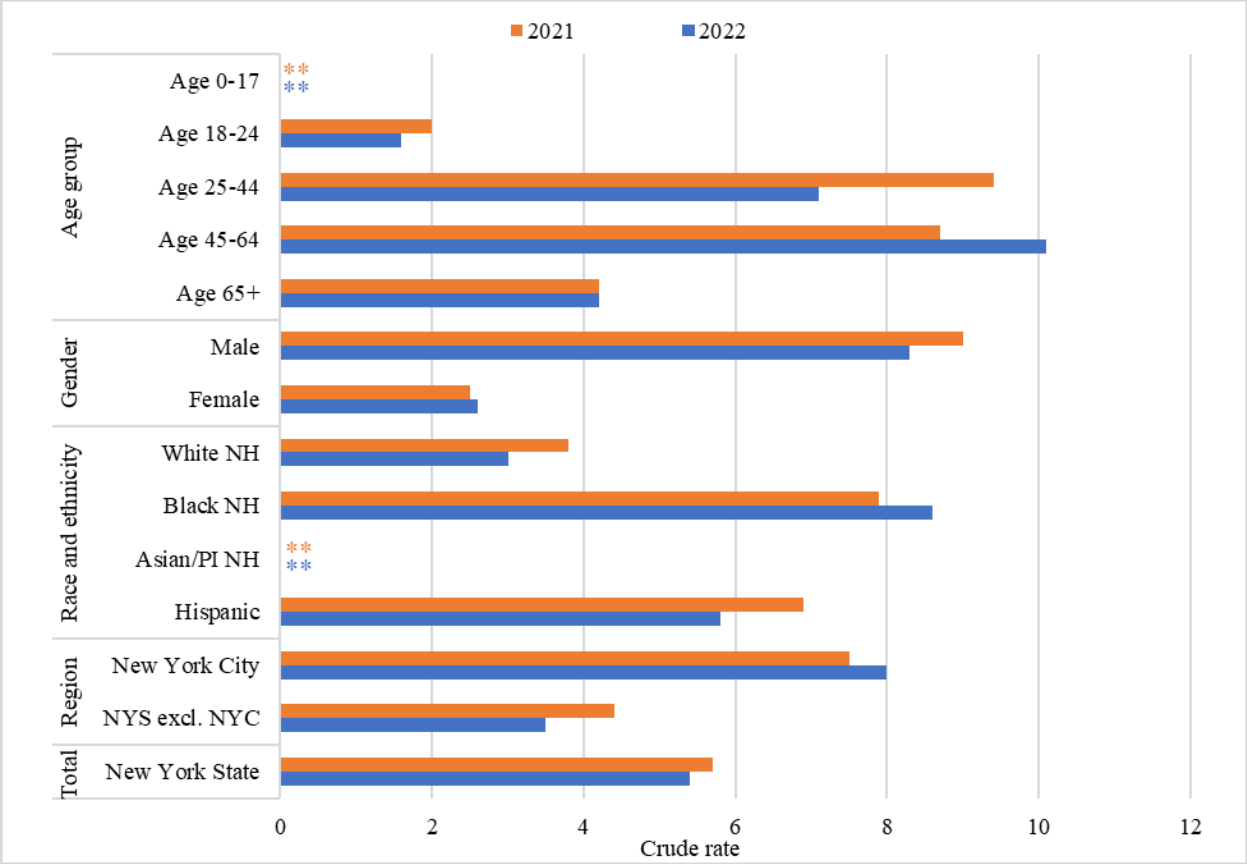


*: Fewer than 10 events in the numerator, therefore the rate is unstable.
Data source: New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS); Data as of March 2024.
For complete data, see Appendix: Data Table 3.4.

Hospital discharges involving heroin overdose

Among NYS residents, the number of hospital discharges involving heroin overdose decreased from 1,135 in 2021 (5.7 per 100,000) to 1,065 in 2022 (5.4 per 100,000), but increases were noticed among individuals aged 45-64 years (16.1 percent increase from 8.7 per 100,000 to 10.1 per 100,000), Black non-Hispanic individuals (8.9 percent increase from 7.9 per 100,000 to 8.6 per 100,000), and NYC (6.7 percent increase from 7.5 per 100,000 to 8.0 per 100,000) (Figure 3.5). In 2022, the rate was highest among those aged 45-64 years (10.1 per 100,000), followed by the rate among those aged 25-44 years (7.1 per 100,000). The 2022 rate was over three times higher among males (8.3 per 100,000) than that among females (2.6 per 100,000). The rate in 2022 was highest among Black non-Hispanic individuals (8.6 per 100,000), followed by the rates among Hispanic individuals (5.8 per 100,000) and White non-Hispanic individuals (3.0 per 100,000). In 2022, NYC had a rate (8.0 per 100,000), which was more than two times higher than the rate for NYS excluding NYC (3.5 per 100,000).

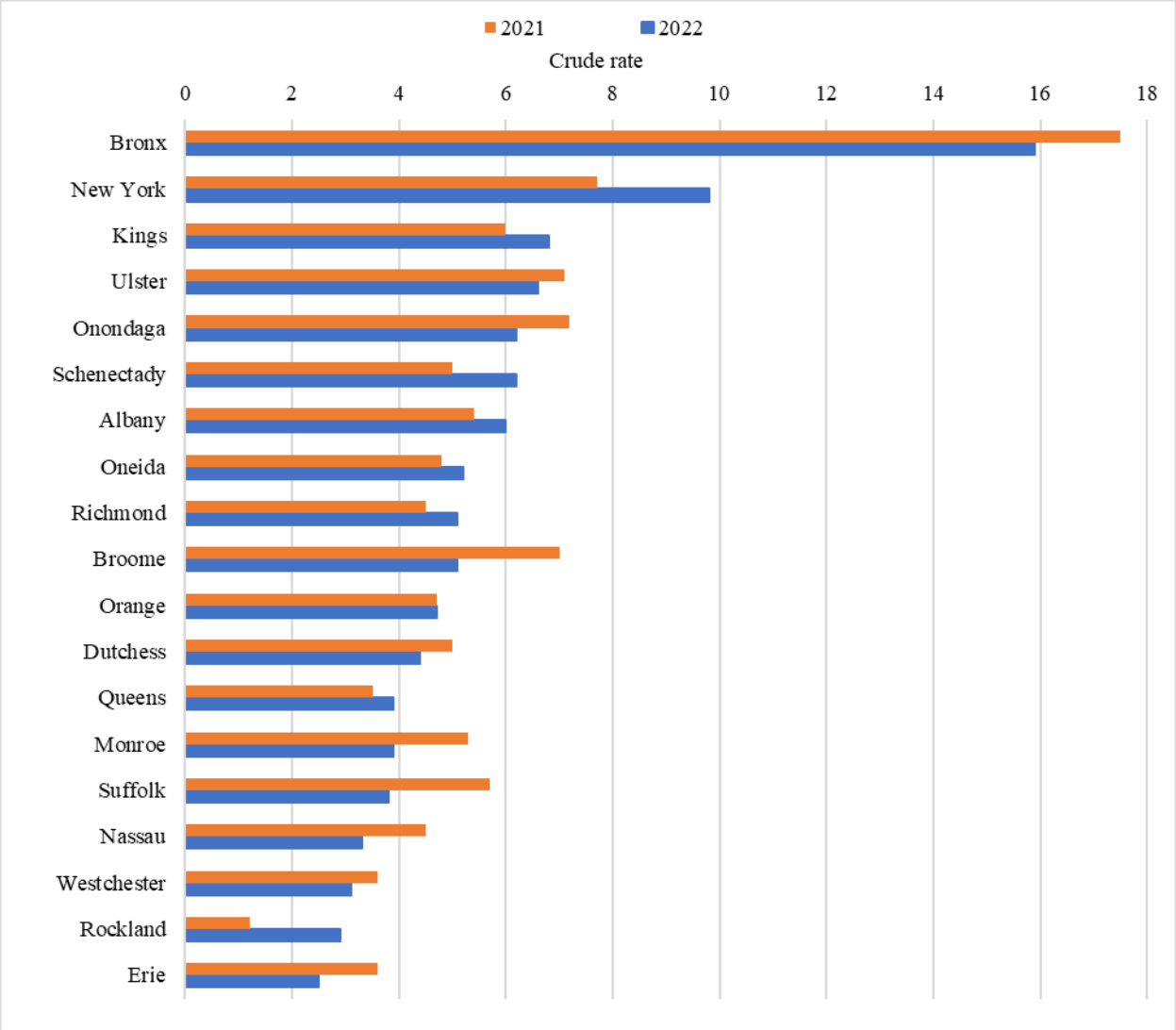
Figure 3.5 Hospital discharges involving heroin overdose, crude rate per 100,000 population, by subpopulation, New York State, 2021 and 2022



White NH = White non-Hispanic; Black NH = Black non-Hispanic; Asian/PI NH= Asian or Pacific Islander non-Hispanic; NYS excl. NYC = New York State excluding New York City
**: Data do not meet reporting criteria.
Data source: New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS); Data as of March 2024.
For complete data, see Appendix: Data Table 3.5.

In 2022, among counties with 10 or more hospital discharges involving heroin overdose, the nineteen counties with the highest crude rates were Bronx, New York, Kings, Ulster, Onondaga, Schenectady, Albany, Oneida, Richmond, Broome, Orange, Dutchess, Queens, Monroe, Suffolk, Nassau, Westchester, Rockland, and Erie (Figure 3.6). There were three counties that experienced large increases in the crude rates from 2021 to 2022: Rockland, New York, and Schenectady.

Figure 3.6 Hospital discharges involving heroin overdose, crude rate per 100,000 population, by county, New York State, 2021 and 2022

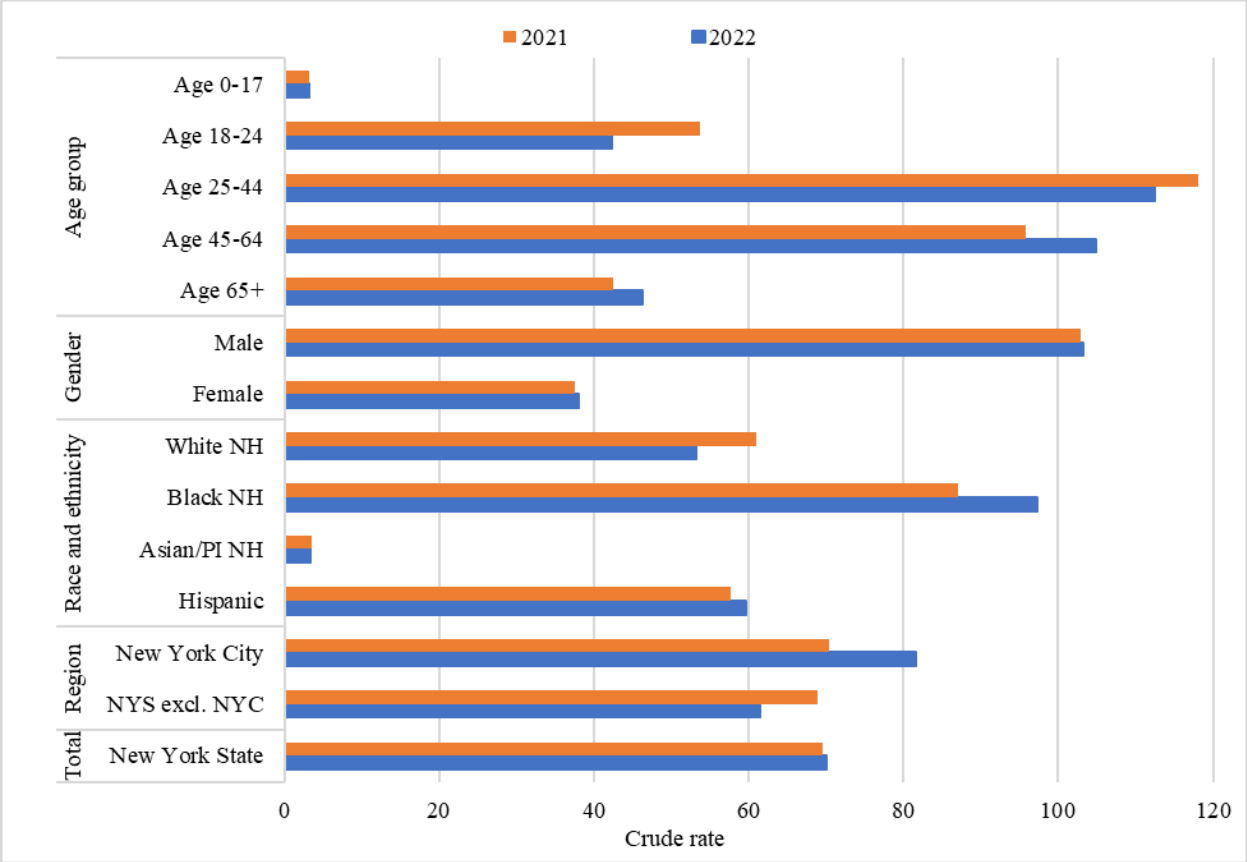


Data source: New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS); Data as of March 2024.
For complete data, see Appendix: Data Table 3.6.

Emergency department visits involving any opioid overdose

Among NYS residents, the number of all ED visits (including outpatients and patients subsequently admitted) involving any opioid overdose held fairly steady with 13,816 in 2021 (69.6 per 100,000) and 13,767 in 2022 (70.0 per 100,000) (Figure 3.7). In 2022, the rate was highest among those aged 25-44 years (112.5 per 100,000), followed by the rate among those aged 45-64 years (104.8 per 100,000). The 2022 rate was more than two and a half times higher among males (103.2 per 100,000) than that among females (38.1 per 100,000). The rate was highest among Black non-Hispanic individuals (97.3 per 100,000), followed by the rates among Hispanic individuals (59.6 per 100,000) and White non-Hispanic individuals (53.2 per 100,000). In 2022, the rate for NYS excluding NYC (61.4 per 100,000) was lower than NYC (81.6 per 100,000).

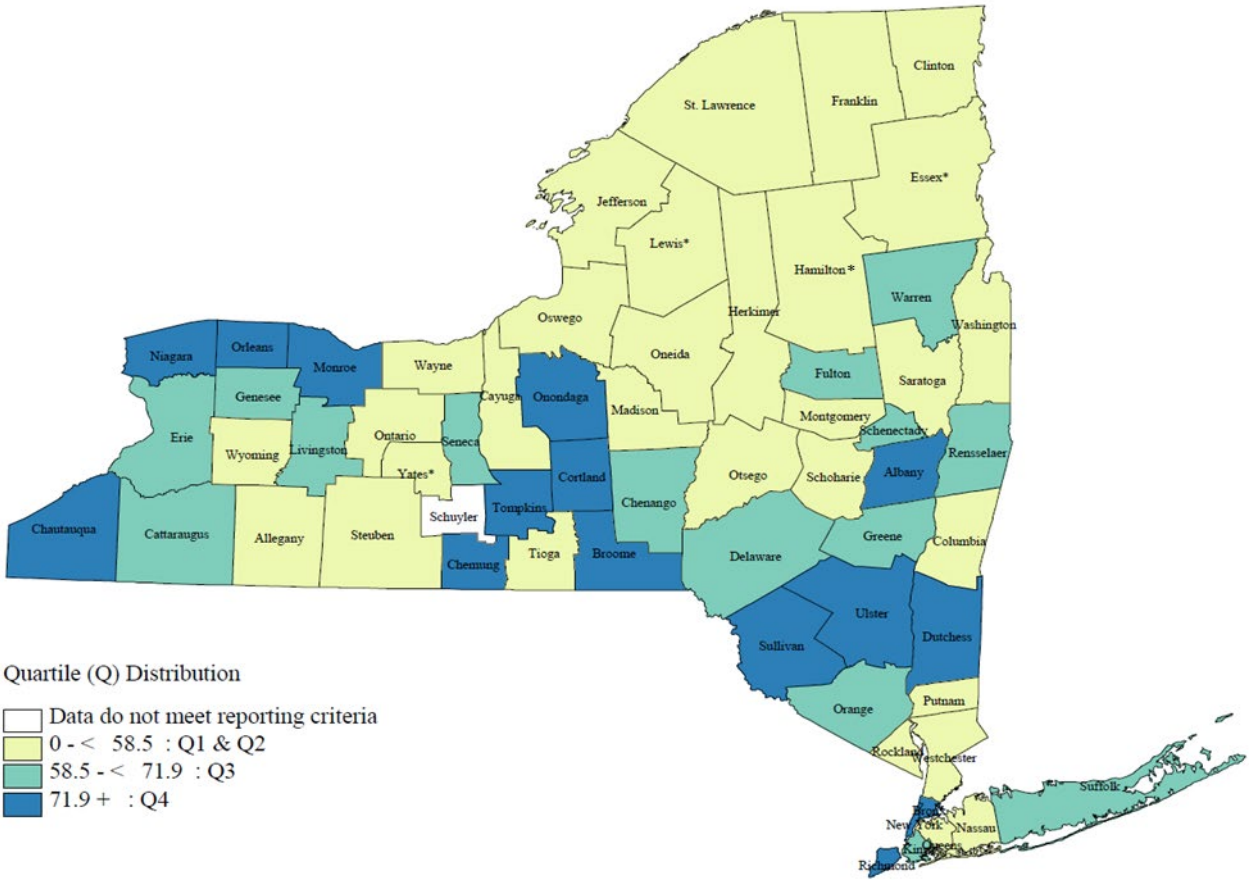
Figure 3.7 All emergency department visits (including outpatients and admitted patients) involving any opioid overdose, crude rate per 100,000 population, by subpopulation, New York State, 2021 and 2022



White NH = White non-Hispanic; Black NH = Black non-Hispanic; Asian/PI NH= Asian or Pacific Islander non-Hispanic; NYS excl. NYC = New York State excluding New York City
Data source: New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS); Data as of March 2024.
For complete data, see Appendix: Data Table 3.7.

In 2022, the 16 counties in the highest quartile (crude rates greater than or equal to 71.9 per 100,000 population) for ED visits due to any opioid overdose were Chautauqua, Bronx, Sullivan, Broome, New York, Monroe, Cortland, Niagara, Chemung, Ulster, Richmond, Tompkins, Dutchess, Orleans, Onondaga, and Albany (Figure 3.8).

Figure 3.8 All emergency department visits (including outpatients and admitted patients) involving any opioid overdose, crude rate per 100,000 population, by county, New York State, 2022

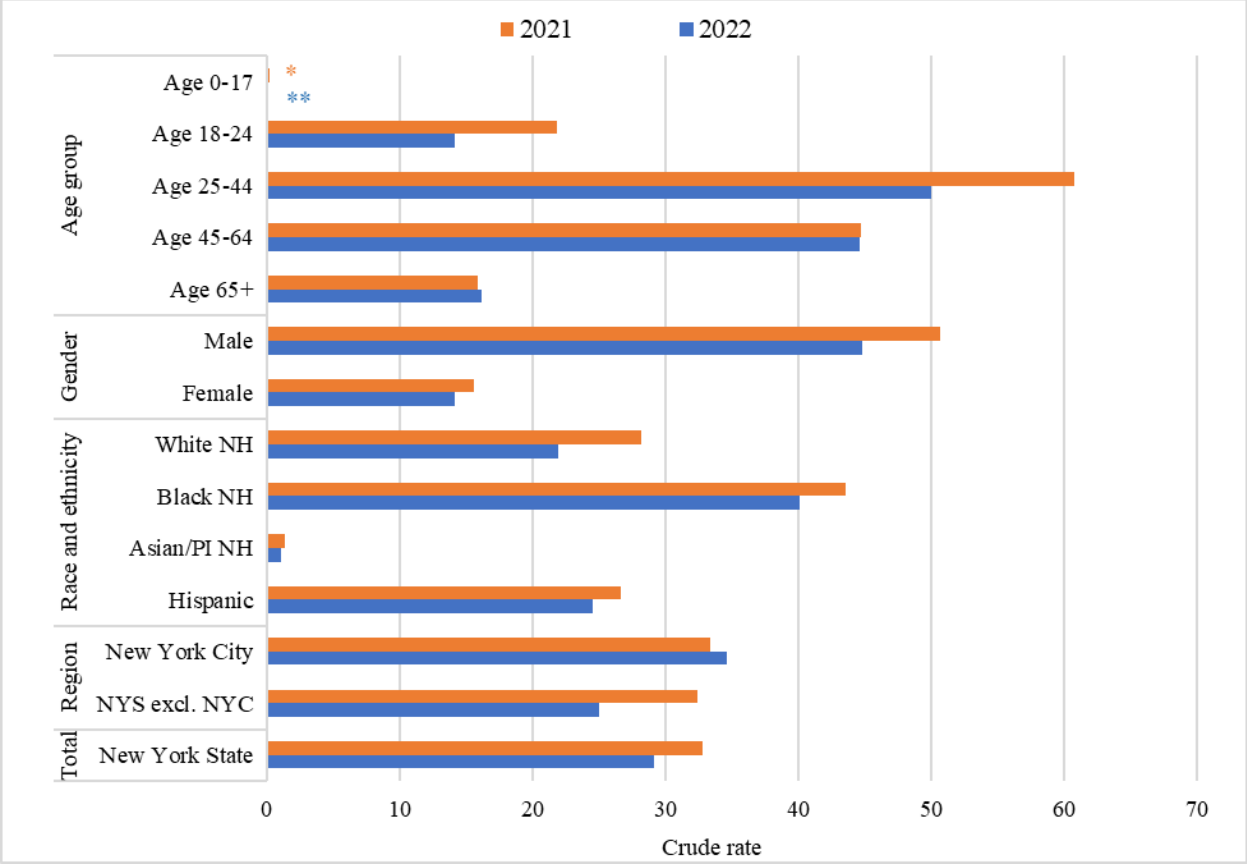


*: Fewer than 10 events in the numerator, therefore the rate is unstable.
Data source: New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS); Data as of March 2024.
For complete data, see Appendix: Data Table 3.8.

Emergency department visits involving heroin overdose

Among NYS residents, the number of ED visits (including outpatients and subsequently admitted patients) involving any heroin overdose decreased by 12.0 percent from 6,510 in 2021 (32.8 per 100,000) to 5,726 in 2022 (29.1 per 100,000) (Figure 3.9). In 2022, the rate was highest among those aged 25-44 years (50.0 per 100,000), followed by the rate among those aged 45-64 years (44.6 per 100,000). The rate was more than three times higher for males (44.8 per 100,000) than that for females (14.1 per 100,000). The rate was highest among Black non-Hispanic individuals (40.1 per 100,000), followed by the rates for Hispanic individuals (24.5 per 100,000) and White non-Hispanic individuals (21.9 per 100,000). In 2022, NYC (34.6 per 100,000) had a higher rate than that of NYS excluding NYC (25.0 per 100,000).

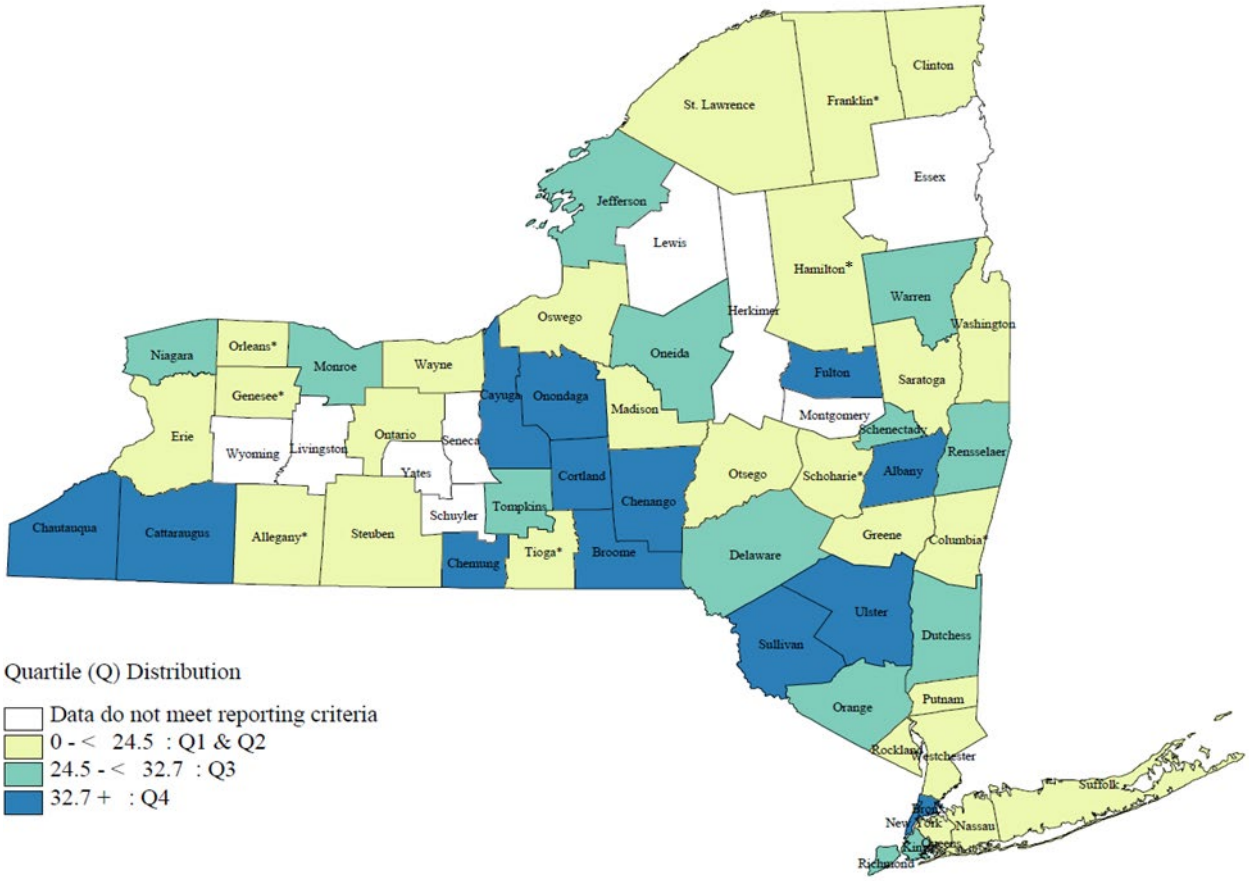
Figure 3.9 All emergency department visits (including outpatients and admitted patients) involving heroin overdose, crude rate per 100,000 population, by subpopulation, New York State, 2021 and 2022



White NH = White non-Hispanic; Black NH = Black non-Hispanic; Asian/PI NH= Asian or Pacific Islander non-Hispanic; NYS excl. NYC = New York State excluding New York City
*: 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 March 2024.
For complete data, see Appendix: Data Table 3.9.

In 2022, the 14 counties in the highest quartile (crude rates greater than or equal to 32.7 per 100,000 population) for ED visits due to heroin overdose were Chautauqua, Broome, Bronx, Sullivan, Chemung, Cortland, Chenango, New York, Onondaga, Ulster, Fulton, Albany, Cayuga, and Cattaraugus (Figure 3.10).

Figure 3.10 All emergency department visits (including outpatients and admitted patients) involving heroin overdose, crude rate per 100,000 population, by county, New York State, 2022

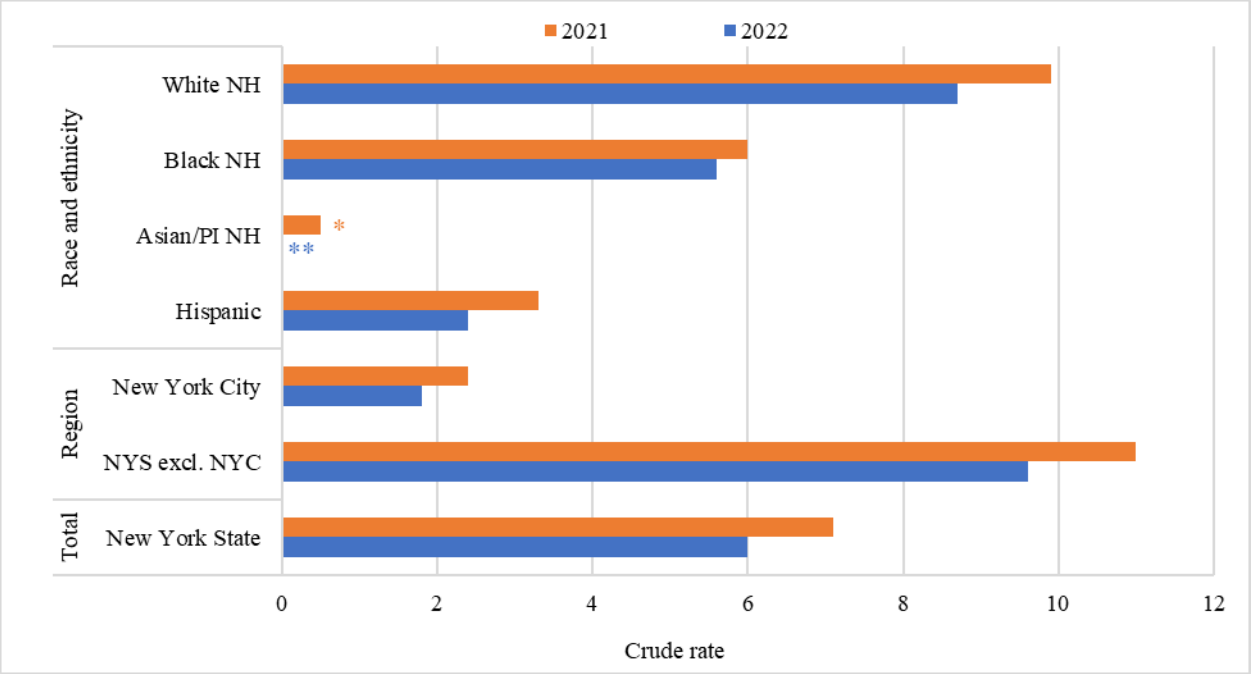


*: Fewer than 10 events in the numerator, therefore the rate is unstable.
Data source: New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS); Data as of March 2024.
For complete data, see Appendix: Data Table 3.10.

Neonatal withdrawal syndrome

Among NYS residents, the number of newborns with neonatal withdrawal syndrome and/or affected by maternal use of opioids or other substances decreased 16.4 percent from 1,393 in 2021 to 1,164 in 2022, and the rate per 1,000 newborn discharges decreased from 7.1 to 6.0 (Figure 3.11). In 2022, the rate was highest among White non-Hispanic newborns (8.7 per 1,000), followed by the rates among Black non-Hispanic (5.6 per 1,000) and Hispanic newborns (2.4 per 1,000). In 2022, the rate for NYS excluding NYC (9.6 per 1,000) was over five times higher than that of NYC (1.8 per 1,000).

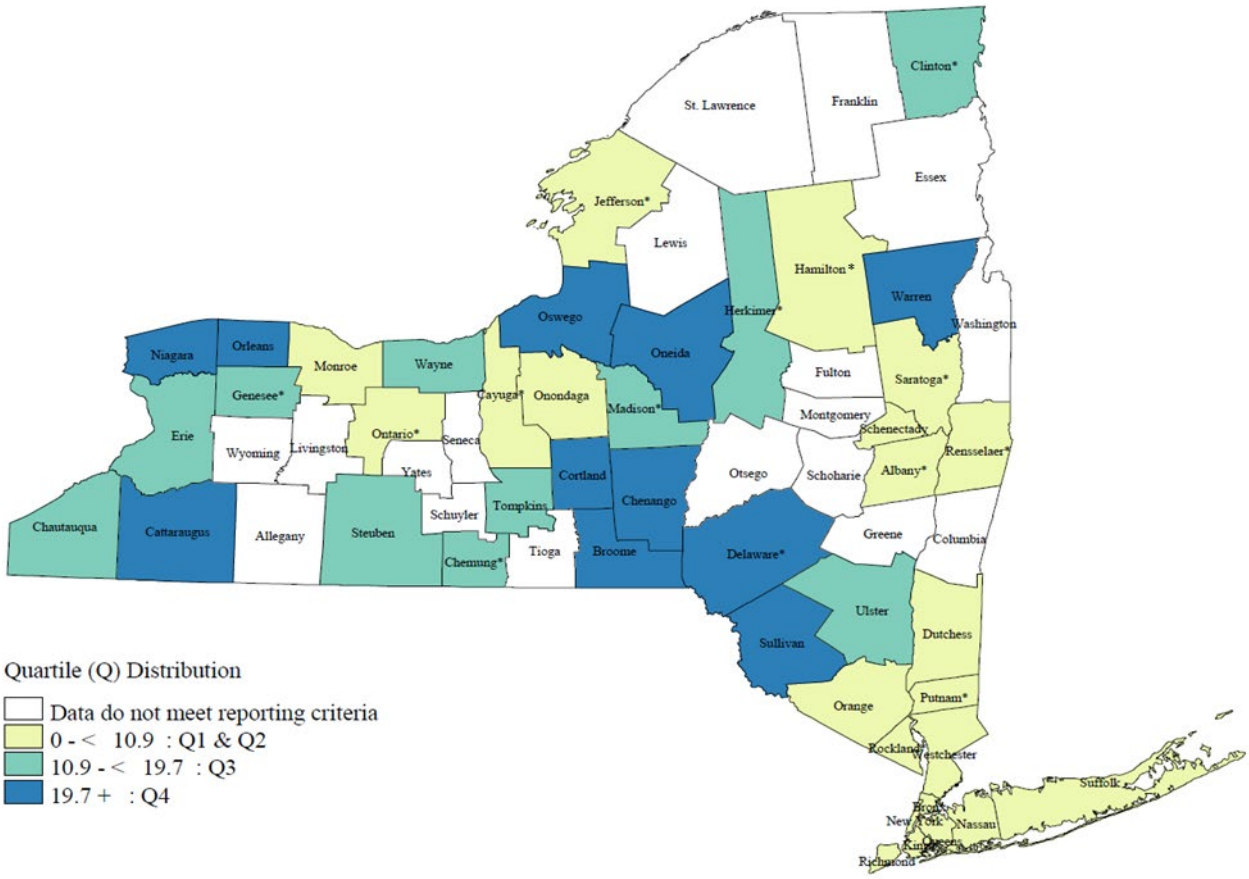
Figure 3.11 Newborns with neonatal withdrawal syndrome and/or affected by maternal use of opioids or other substances (any diagnosis), rate per 1,000 newborn discharges, by subpopulation, New York State, 2021 and 2022



White NH = White non-Hispanic; Black NH = Black non-Hispanic; Asian/PI NH= Asian or Pacific Islander non-Hispanic; NYS excl. NYC = New York State excluding New York City
*: 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 March 2024.
For complete data, see Appendix: Data Table 3.11.

In 2022, the 10 counties in the highest quartile (stable crude rates greater than or equal to 19.7 per 1,000 newborn discharges) for newborns with neonatal withdrawal syndrome and/or affected by maternal use of opioids or other substances were Niagara, Orleans, Chenango, Warren, Cortland, Cattaraugus, Oswego, Oneida, Broome, and Sullivan (Figure 3.12).

Figure 3.12 Newborns with neonatal withdrawal syndrome and/or affected by maternal use of opioids or other substances (any diagnosis), rate per 1,000 newborn discharges, by county, New York State, 2022



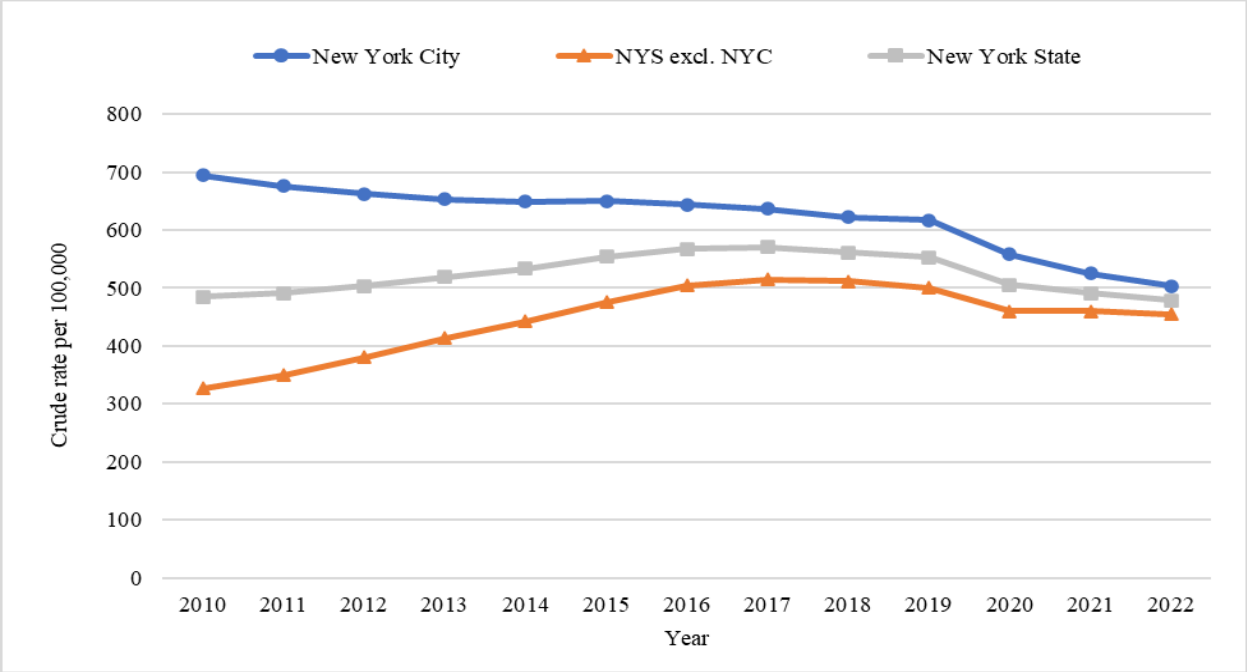
*: Fewer than 10 events in the numerator, therefore the rate is unstable.
Data source: New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS); Data as of March 2024.
For complete data, see Appendix: Data Table 3.12.

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, LA 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 2023, there were 79,039 unique individuals enrolled in OASAS-certified substance use disorder treatment programs for heroin or any other synthetic opioid (Figure 4.1). This represented a crude rate of 463.1 per 100,000 population. Compared to 2022, the 2023 rate for NYS decreased 3.3 percent from 479.0 to 463.1 per 100,000 population. Rates across all regions have generally been decreasing since 2017.

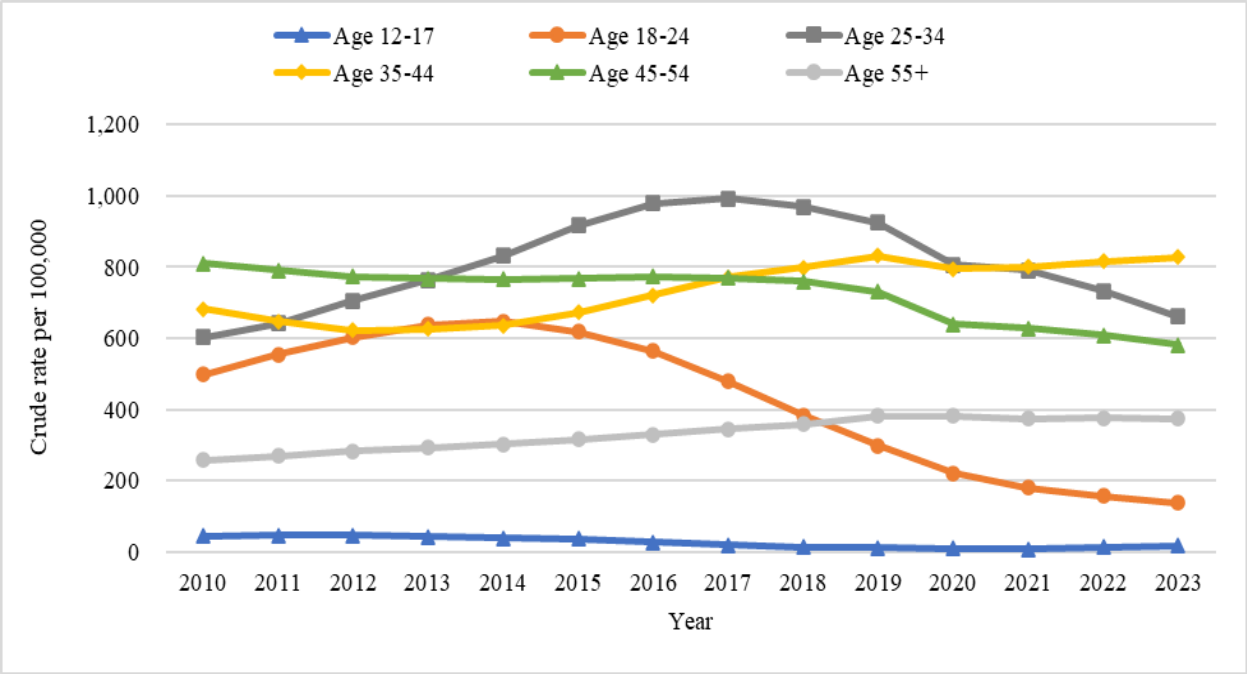
Figure 4.1 Number of unique individuals enrolled* in OASAS treatment programs who reported any opioids as a primary substance at admission, crude rate per 100,000 population, by region, New York State, 2010-2023



NYS excl. NYC = New York State excluding New York City
* A person is counted once if they were in treatment (received one or more services) during the year. A unique person may be counted once in one reported region and also be counted once in another reported region if both applied during the year (e.g., living in multiple areas or counties during the same year).
Data source: New York State Office of Addiction Services and Supports (OASAS) Client Data System (CDS); Data as of October 2024
For complete data, see Appendix: Data Table 4.1.

In 2023, New Yorkers aged 35-44 years had the highest rate (827.9 per 100,000 population) for unique individuals enrolled in OASAS-certified substance use disorder treatment programs for any opioid (including heroin), followed by those aged 25-34 years (661.1 per 100,000) and 45-54 years (582.0 per 100,000). Those aged 12-17 years had the lowest rate among all age groups (Figure 4.2). The rates declined for those aged 18-24 years since 2014, and since 2017 for those aged 25-34.

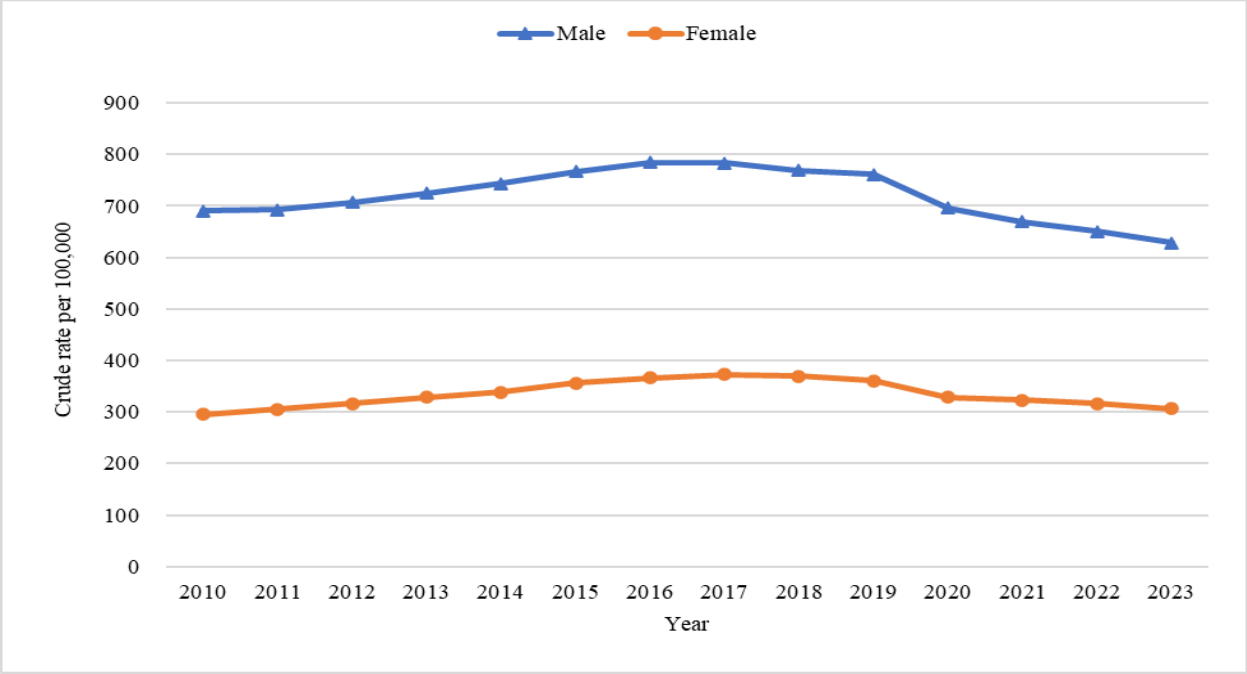
Figure 4.2 Number of unique individuals enrolled in OASAS treatment programs who reported any opioids as a primary substance at admission, crude rate per 100,000 population, by age group, New York State, 2010-2023



Data source: New York State Office of Addiction Services and Supports (OASAS) Client Data System (CDS); Data as of October 2024
For complete data, see Appendix: Data Table 4.2.

From 2010 to 2023, the crude rates per 100,000 population for unique individuals enrolled in OASAS-certified substance use disorder treatment programs for any opioid (including heroin) were over two times higher for males as compared to females in NYS (Figure 4.3). Between 2010 and 2016, the rates in both sexes increased steadily before starting to decline in 2017. In 2023, the crude rate per 100,000 population was 628.5 for males and 306.7 for females.

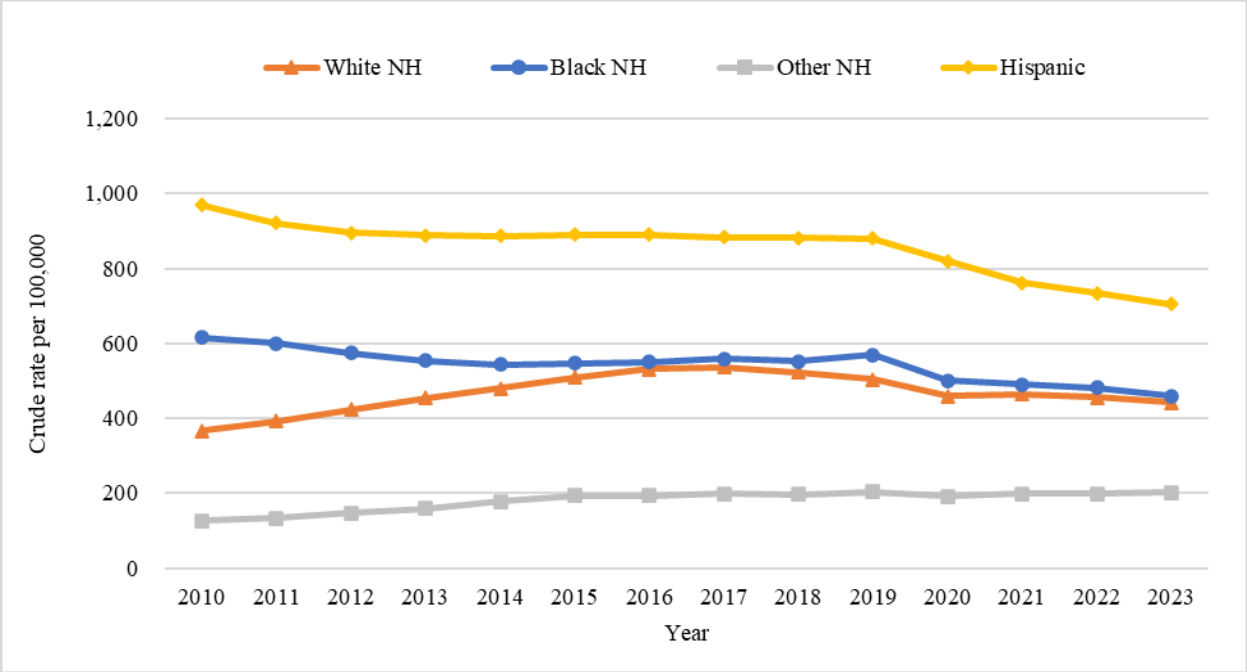
Figure 4.3 Number of unique individuals enrolled in OASAS treatment programs who reported any opioids as a primary substance at admission, crude rate per 100,000 population, by sex at birth, New York State, 2010-2023



Data source: New York State Office of Addiction Services and Supports (OASAS) Client Data System (CDS); Data as of October 2024
For complete data, see Appendix: Data Table 4.3.

Hispanic New Yorkers consistently had the highest crude rates for unique individuals enrolled in OASAS-certified substance use disorder treatment programs for any opioid (including heroin), as compared to other racial and ethnic groups during 2010 to 2023 (Figure 4.4). In 2023, Hispanic individuals had the highest rate (705.2 per 100,000), as compared to Black non-Hispanic (459.6 per 100,000) and White non-Hispanic individuals (441.7 per 100,000).

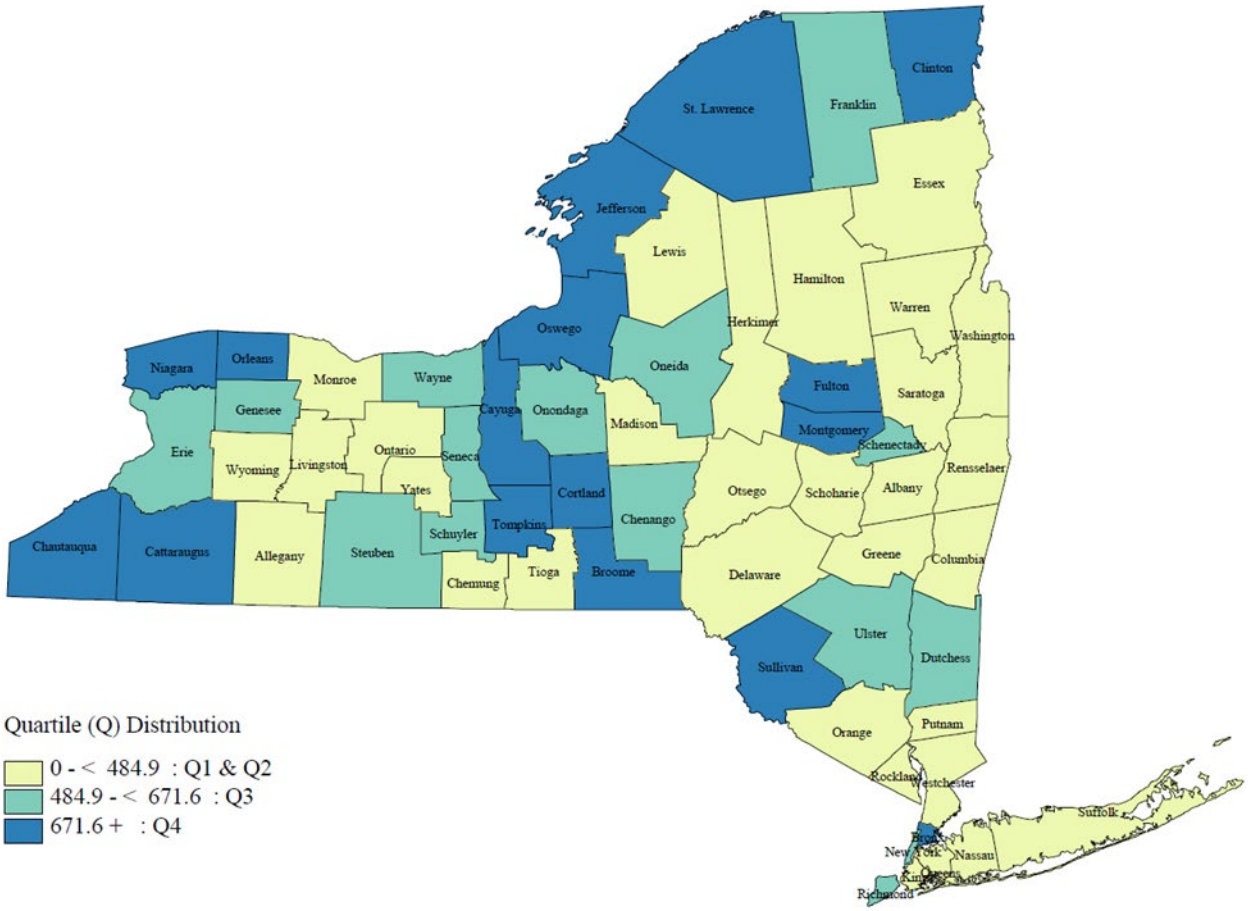
Figure 4.4 Number of unique individuals enrolled in OASAS treatment programs who reported any opioids as a primary substance at admission, crude rate per 100,000 population, by race and ethnicity, New York State, 2010-2023



White NH = White non-Hispanic; Black NH = Black non-Hispanic; Other NH= Other non-Hispanic
Data source: New York State Office of Addiction Services and Supports (OASAS) Client Data System (CDS); Data as of October 2024
For complete data, see Appendix: Data Table 4.4.

In 2023, the 16 counties in the highest quartile (crude rates greater than or equal to 671.6 per 100,000 population) were Bronx, Montgomery, Clinton, Broome, Sullivan, Cortland, Chautauqua, Cattaraugus, Niagara, Jefferson, Oswego, Orleans, Tompkins, St. Lawrence, Fulton, and Cayuga (Figure 4.5).

Figure 4.5 Number of unique individuals enrolled* in OASAS treatment programs who reported any opioids as a primary substance at admission by county of residence, New York State, 2023



* A person is counted once if they were in treatment (received one or more services) during the year. A unique person may be counted once in one reported county and also be counted once in another reported county if both applied during the year.
Data source: New York State Office of Addiction Services and Supports (OASAS) Client Data System (CDS); Data as of October 2024
For complete data, see Appendix: Data Table 4.5.

5 - Prescription Monitoring Program Data

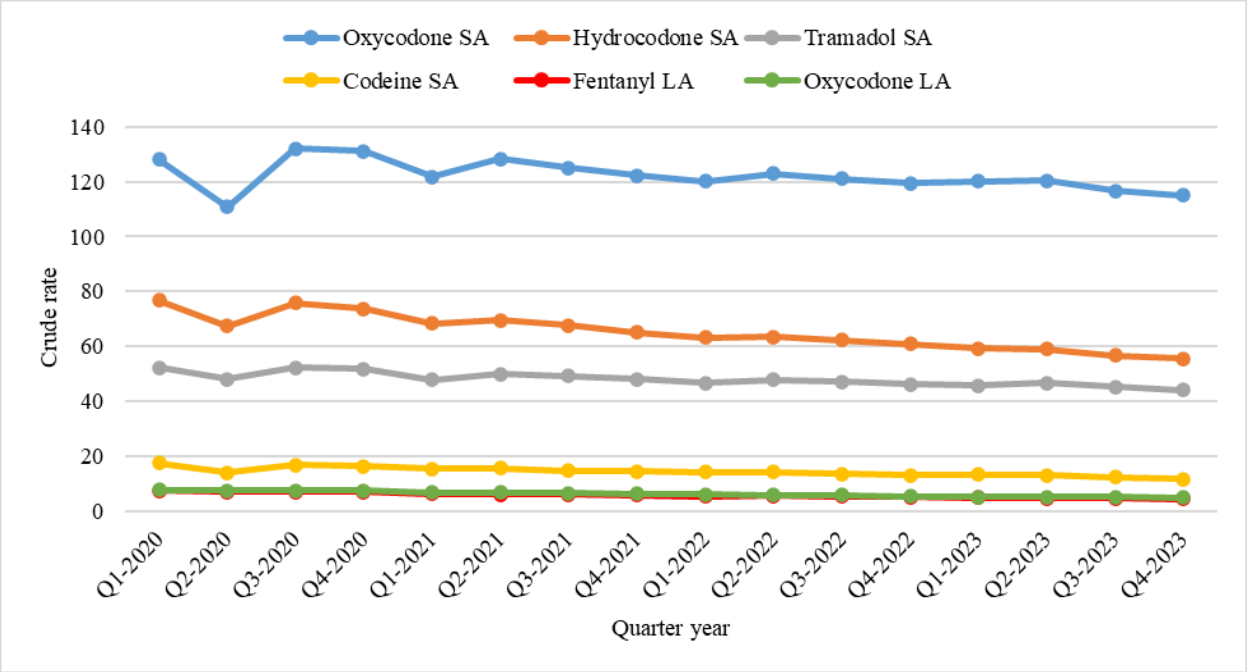
The BNE's PMP Registry collects and displays dispensed controlled substance prescription data from pharmacies and other dispensers. In February 2010, BNE implemented a prescription monitoring program that provided secure online access for practitioners to their patients' recent controlled substance prescription 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 Registry application. 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, 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.

Commonly prescribed opioid analgesics

Overall, SA oxycodone is the most often prescribed opioid analgesic, followed by hydrocodone and tramadol (Figure 5.1). A quarterly average crude prescription rate per person-years for each year was calculated based on the crude rate for each quarter of that year. Between 2020 and 2023, there was a 6.0 percent decline in the quarterly average crude prescription rate for SA oxycodone and a 21.5 percent decline in the quarterly average crude prescription rate for SA hydrocodone. The rate of prescribing LA oxycodone, SA codeine, and LA fentanyl has remained lower due to differences in therapeutic indications. Note, the trend in LA fentanyl is obscured by the similar trend in LA oxycodone. 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 decreases in ED visits and a moratorium in elective surgeries during this time period.

Figure 5.1 Commonly prescribed opioid analgesics, crude rate per 1,000 person years*, by quarter, New York State, 2020-2023

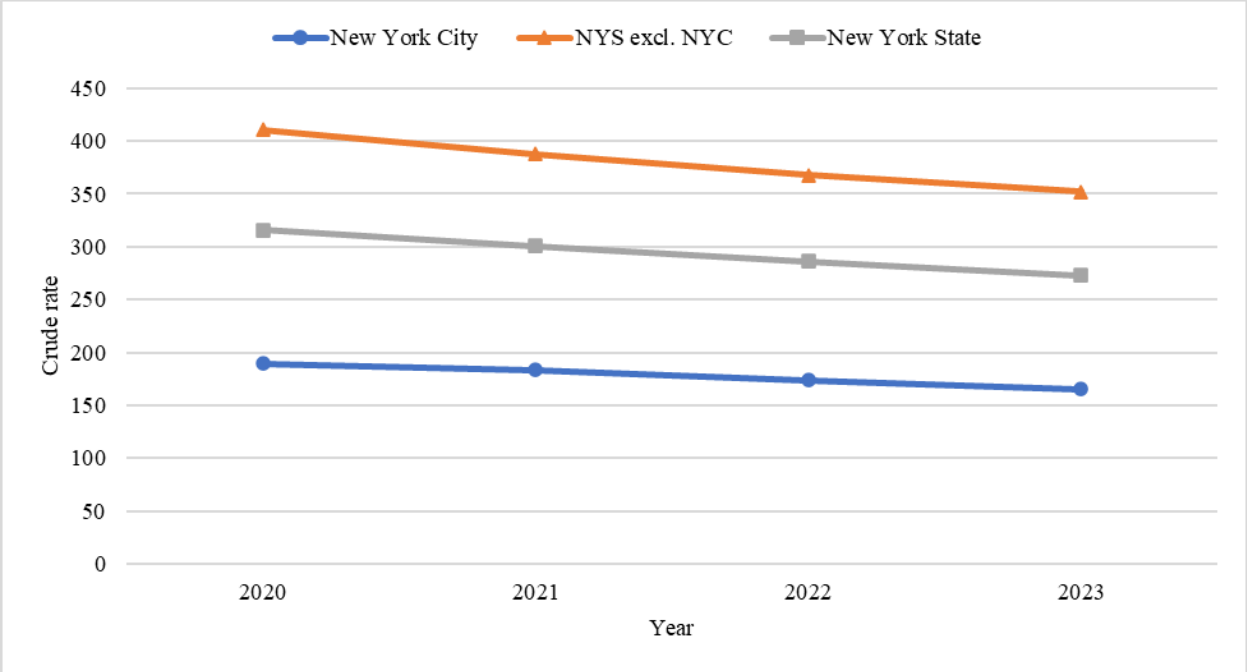


SA=Short-acting; LA=Long-acting
* The rates are calculated as follows: [# of events/(population*0.25 year)] * 1,000.
These data exclude buprenorphine prescriptions for the treatment of OUD.
New York State total contains number with county unknown.
Data Source: NYS Prescription Monitoring Program; Data as of April 2024
For complete data, see Appendix: Data Table 5.1.

Opioid analgesic prescriptions

In NYS, the crude rate of opioid analgesic prescriptions declined consistently between 2020 (315.9 per 1,000 population) and 2023 (273.1 per 1,000), representing about a 13.5 percent reduction (Figure 5.2). During 2020-2023, NYS excluding NYC consistently had a higher rate of opioid analgesic prescriptions, compared to NYC. In 2023, more than five million opioid prescriptions were filled for the state residents; the rate was over two times higher for NYS excluding NYC (351.9 per 1,000) than NYC (165.1 per 1,000).

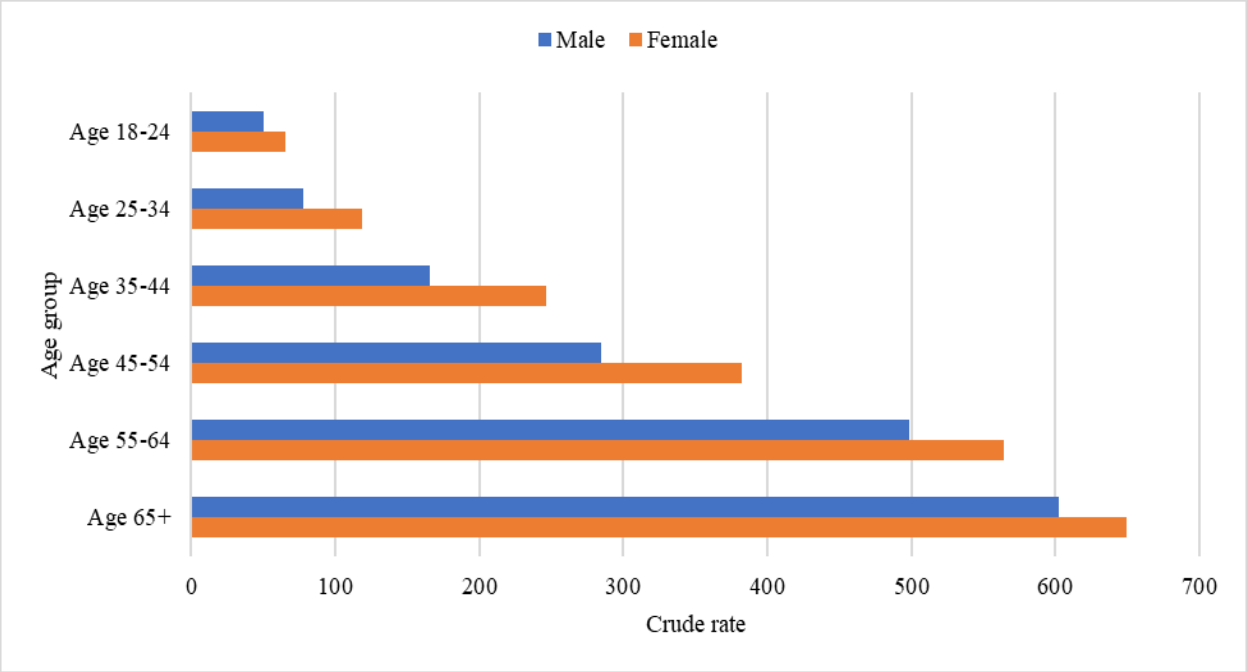
Figure 5.2 Opioid analgesic prescriptions, crude rate per 1,000 population, by region, New York State, 2020-2023



NYS excl. NYC = New York State excluding New York City
These 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 April 2024
For complete data, see Appendix: Data Table 5.2.

In 2023, 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 largest among those aged 45-54 years, with crude rates of 284.6 per 1,000 for males and 381.8 per 1,000 for females.

Figure 5.3 Opioid analgesic prescriptions, crude rate per 1,000 population, by age and gender, New York State, 2023

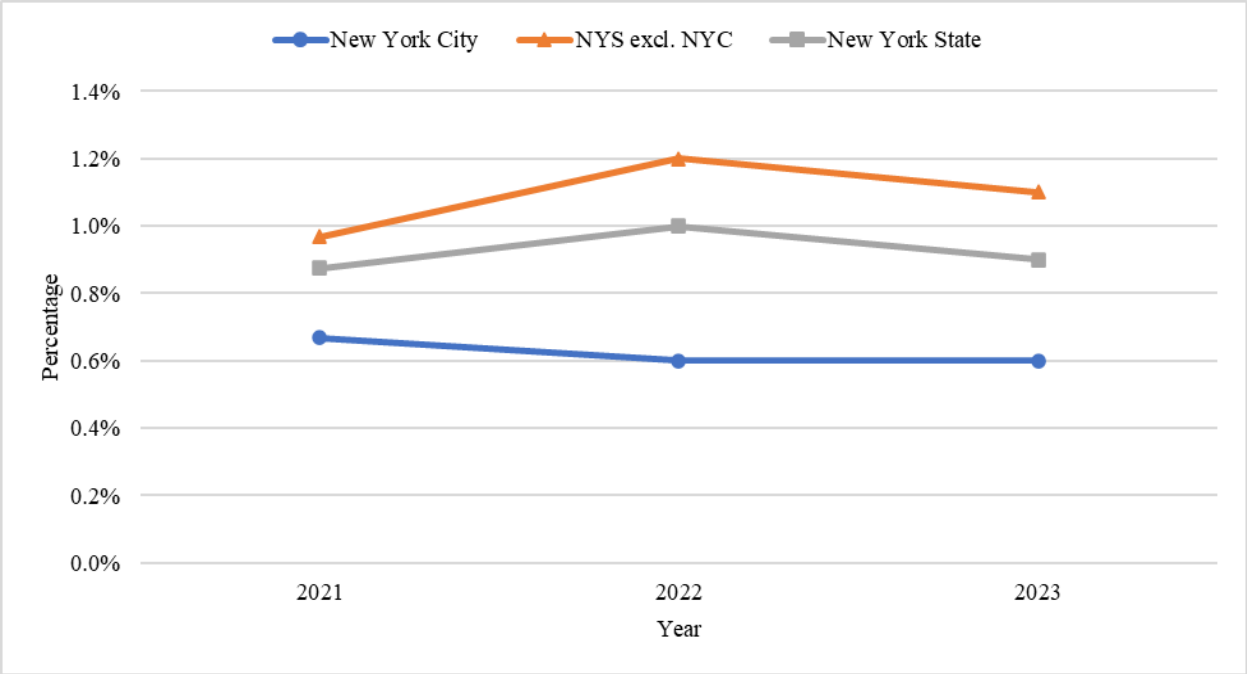


These data exclude buprenorphine prescriptions for the treatment of OUD.
Data Source: NYS Prescription Monitoring Program; Data as of April 2024
For complete data, see Appendix: Data Table 5.3.

Long-acting initial opioid prescriptions after being opioid-naïve

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.[28] The percentage of episodes in which patients were both opioid-naïve and received LA initial opioid prescriptions remained steady in NYS between 2021 (0.9 percent) and 2023 (0.9 percent) (Figure 5.4). In NYC, the percentage of episodes declined slightly between 2021 (0.7 percent) and 2023 (0.6 percent). During this same timeframe, the percentage was consistently higher in NYS excluding NYC than in NYC. Between 2021-2022 NYS excluding NYC observed a slight temporary rise from 1.0 percent in 2021 to 1.2 percent in 2022.

Figure 5.4 Percentage of episodes when an opioid-naïve patient received long-acting initial opioid prescription, by region, New York State, 2021-2023



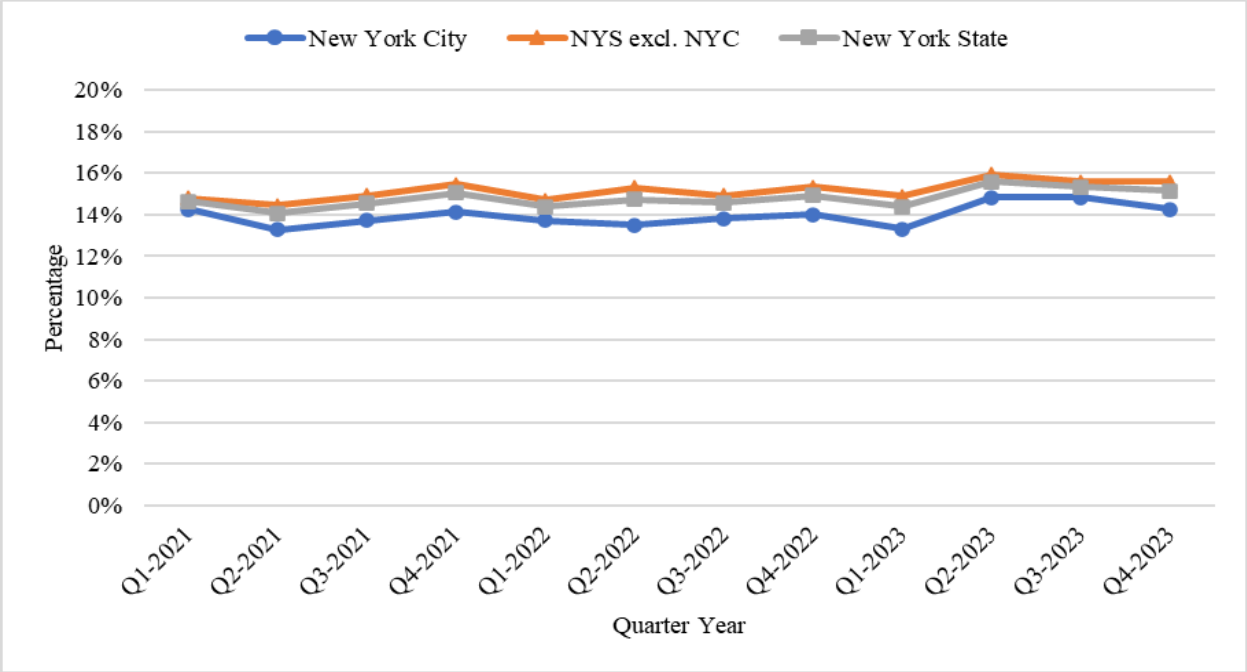
NYS excl. NYC = New York State excluding New York City
These data exclude buprenorphine prescriptions for the treatment of OUD.
Opioid-naïve was defined as patients with no opioid prescription for pain in last 45 days.
New York State total contains number with county unknown.
Data Source: NYS Prescription Monitoring Program; Data as of April 2024
For complete data, see Appendix: Data Table 5.4.

[28] 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 initial prescriptions for more than a seven-day supply

Among opioid-naïve patients, a larger number of supply days for the first (initial) opioid prescription is strongly associated with developing long-term opioid use.[29] In July 2016, NYS limited the initial prescription of opioids for acute pain to no more than a seven-day supply.[30] During 2021-2023, the percentage of initial prescriptions for more than a seven-day supply was consistently higher in NYS excluding NYC than it was in NYC (Figure 5.5). In NYS, these prescriptions increased during the last three quarters of 2023 as compared to the first quarter. In NYC in 2023, the percentage of episodes increased between Q1 (13.3 percent) and Q4 (14.3 percent). During the same period, the percentage in NYS excluding NYC increased from 14.9 to 15.6 percent. This increase in opioid initial prescriptions where patients were opioid-naïve warrants continued monitoring.

Figure 5.5 Percentage of episodes when an opioid-naïve patient received more than a seven-day supply from the initial opioid prescription, by region and quarter, New York State, 2021-2023



NYS excl. NYC = New York State excluding New York City
These 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 April 2024
For complete data, see Appendix: Data Table 5.5.

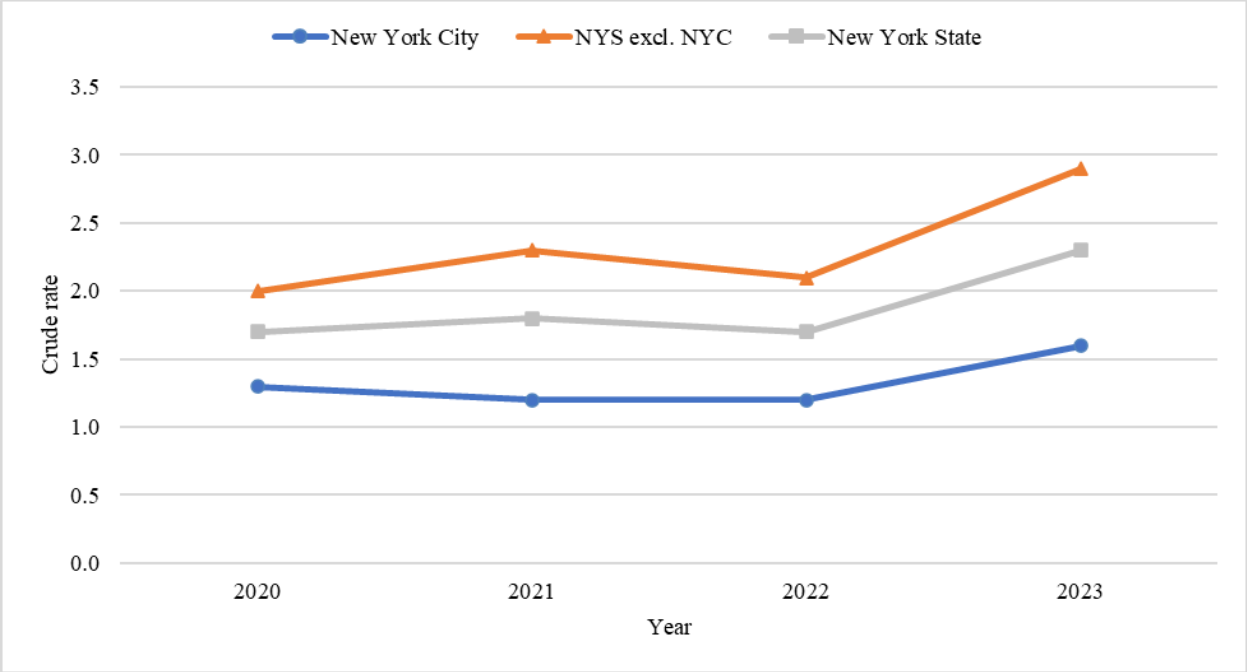
[29] Shah A, Hayes CJ, Martin BC. Factors Influencing Long-Term Opioid Use Among Opioid Naive Patients: An Examination of Initial Prescription Characteristics and Pain Etiologies. *J Pain*. 2017 Nov;18(11):1374-1383. https://doi.org/10.1016%2Fj.jpain.2017.06.010

[30] Laws and Regulations - Public Health Law §3331(5)(b)-(c) - New Legislation Enacted to Limit Initial Opioid Prescribing to a 7 Day Supply for Acute Pain. Bureau of Narcotic Enforcement. New York State Department of Health. Accessed July 2023. https://www.health.ny.gov/professionals/narcotic/laws_and_regulations/

Prescribed opioid analgesics from five or more prescribers and dispensed at five or more pharmacies

The number of patients who received opioid prescriptions from five or more prescribers, at five or more pharmacies in a six-month period (multiple-provider episodes) increased for NYS from a crude rate per 100,000 population of 1.7 in 2020 to 2.3 in 2023 (Figure 5.6). In NYS, the crude rate per 100,000 population in 2012, prior to the implementation of the updated NYS Prescription Monitoring Program (PMP) Registry I-STOP, was 27.0.[31] In NYS prescribers must consult the NYS PMP Registry when writing prescriptions for Schedule II, III, and IV controlled substances. This requirement aids practitioners in understanding their patient's controlled substance history and provide appropriate support and/or referrals, which continues to contribute to lower multiple provider episode rates.

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, 2020-2023



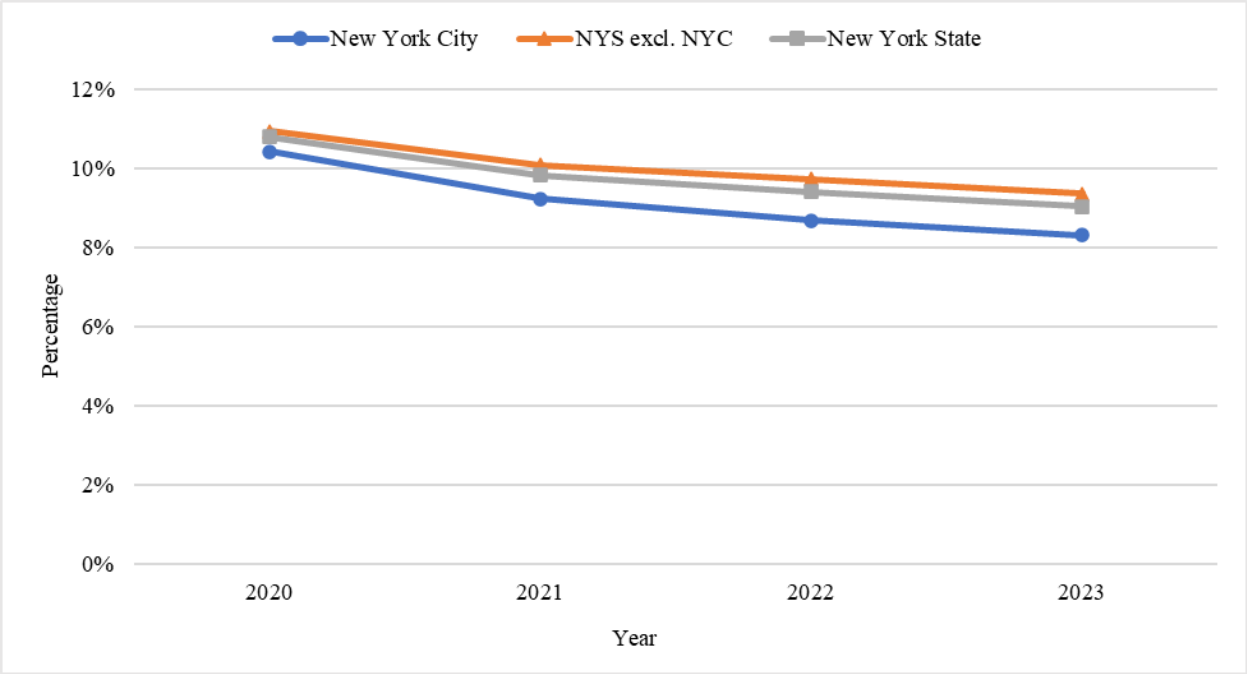
NYS excl. NYC = New York State excluding New York City
These data exclude buprenorphine prescriptions for the treatment of OUD.
A patient will be counted twice if they were included in each 6-month time period for the year.
New York State total contains number with county unknown.
Data Source: NYS Prescription Monitoring Program; Data as of April 2024
For complete data, see Appendix: Data Table 5.6.

[31] New York State Opioid Data Dashboard. New York State Department of Health. Accessed May 2024. https://apps.health.ny.gov/public/tabvis/PHIG_Public/opioid/

Prescribed opioid analgesics with total daily dose of ≥ 90 MME

Receiving opioid analgesics in higher dosages (≥ 90 MME) is associated with a higher risk of overdose and death.[32] The percentage of patients receiving one or more opioid analgesic prescriptions with a total daily dose of ≥ 90 MME for at least one day declined between 2020 (10.8 percent) and 2023 (9.0 percent) in NYS (Figure 5.7). During 2020-2023, the percentage was consistently higher in NYS excluding NYC than in NYC.

Figure 5.7 Percentage of patients who were prescribed one or more opioid analgesics with a total daily dose of ≥ 90 MME on at least one day, by region, New York State, 2020-2023

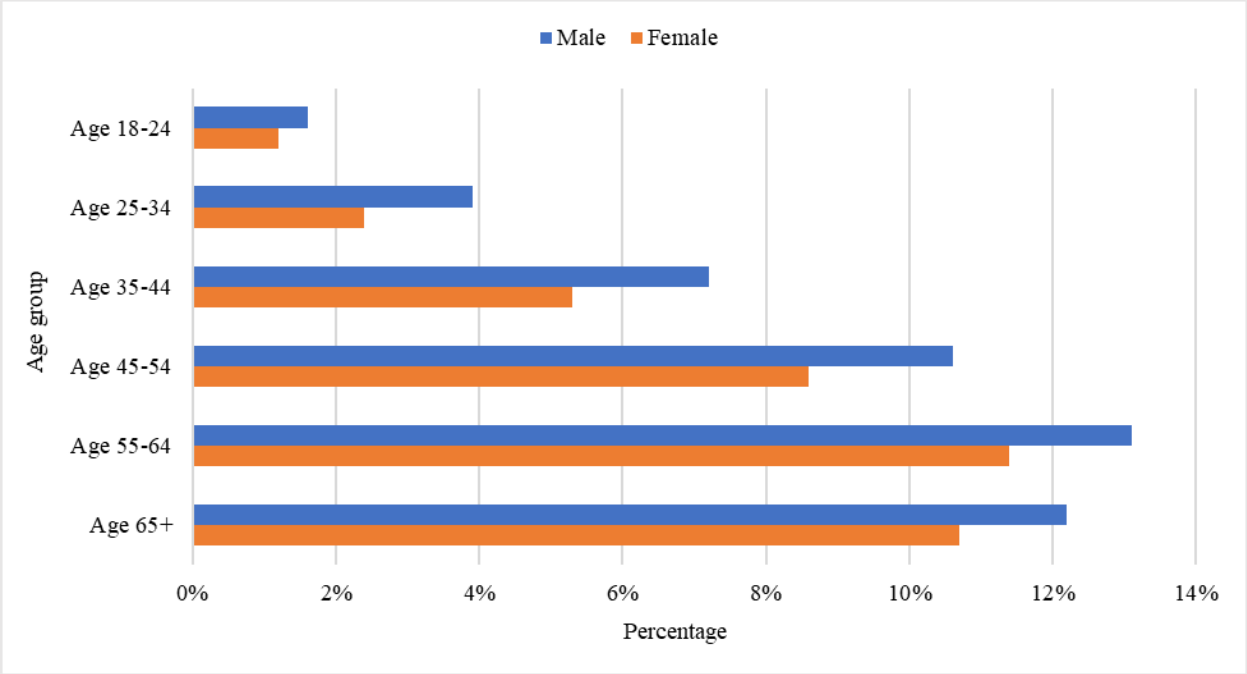


NYS excl. NYC = New York State excluding New York City
These data exclude buprenorphine prescriptions for pain and treatment of OUD.
New York State total contains number with county unknown.
MME: morphine milligram equivalents
Data Source: NYS Prescription Monitoring Program; Data as of April 2024
For complete data, see Appendix: Data Table 5.7.

[32] 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

In 2023, the percentage of patients receiving one or more opioid analgesic prescriptions with a total daily dose of ≥ 90 MME for at least one day was highest among those aged 55-64 years for both males (13.1 percent) and females (11.4 percent). This was followed by those aged 65 years and older for both males (12.2 percent) and females (10.7 percent). The percentage of males receiving a daily dose of ≥ 90 MME was consistently higher than females for all age groups (Figure 5.8).

Figure 5.8 Percentage of patients who were prescribed one or more opioid analgesics with a total daily dose of ≥ 90 MME on at least one day, by age and gender, New York State, 2023



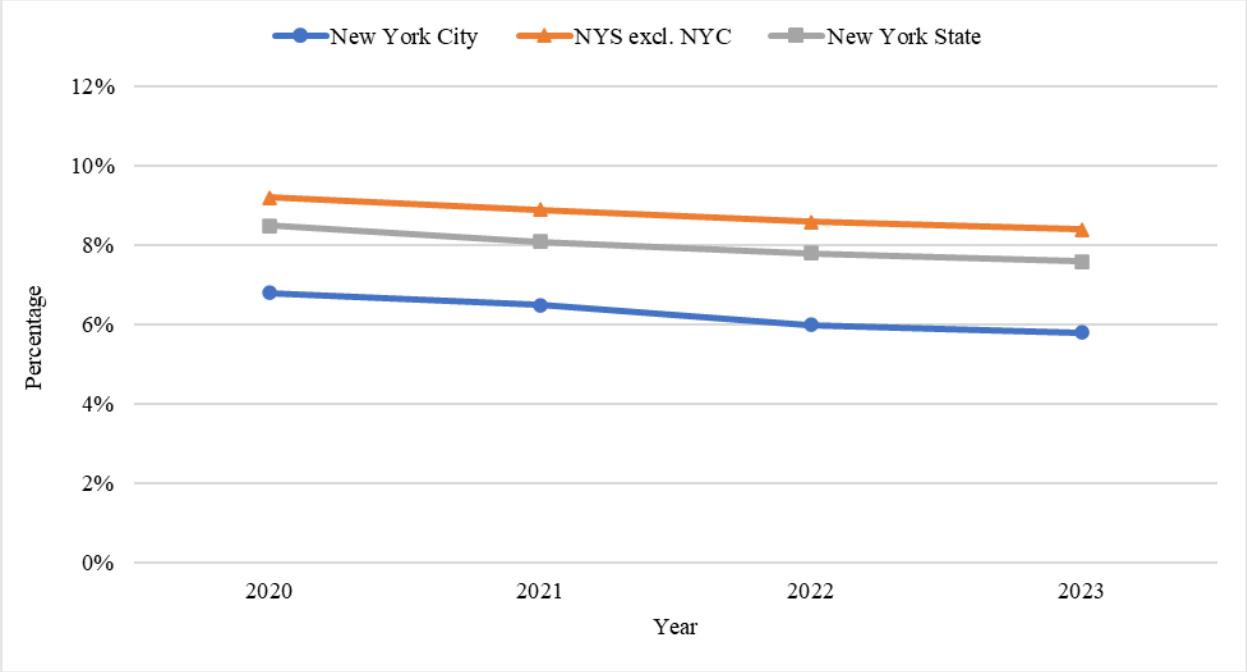
These data exclude buprenorphine prescriptions for pain and treatment of OUD.
MME: morphine milligram equivalents
Data Source: NYS Prescription Monitoring Program; Data as of April 2024
For complete data, see Appendix: Data Table 5.8.

Overlapping opioid analgesic and benzodiazepine prescriptions

The risk of opioid overdose increases when taken in combination with other drugs, including benzodiazepines (e.g., alprazolam, diazepam, etc.).[33] As such, it is important to monitor the co-prescribing and co-dispensing of these medications, as well as the potential for prescriptions to overlap, and to provide information 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 2020 (8.5 percent) and 2023 (7.6 percent) in NYS (Figure 5.9). In 2023, the percentage was higher for NYS excluding NYC (8.4 percent) than for NYC (5.8 percent). NYS excluding NYC had consistently higher percentages of patients with two or more calendar days of overlapping opioid analgesic and benzodiazepine prescriptions during 2020-2023.

Figure 5.9 Percentage of patients* with two or more calendar days of overlapping opioid analgesic and benzodiazepine prescriptions, by region, New York State, 2020-2023

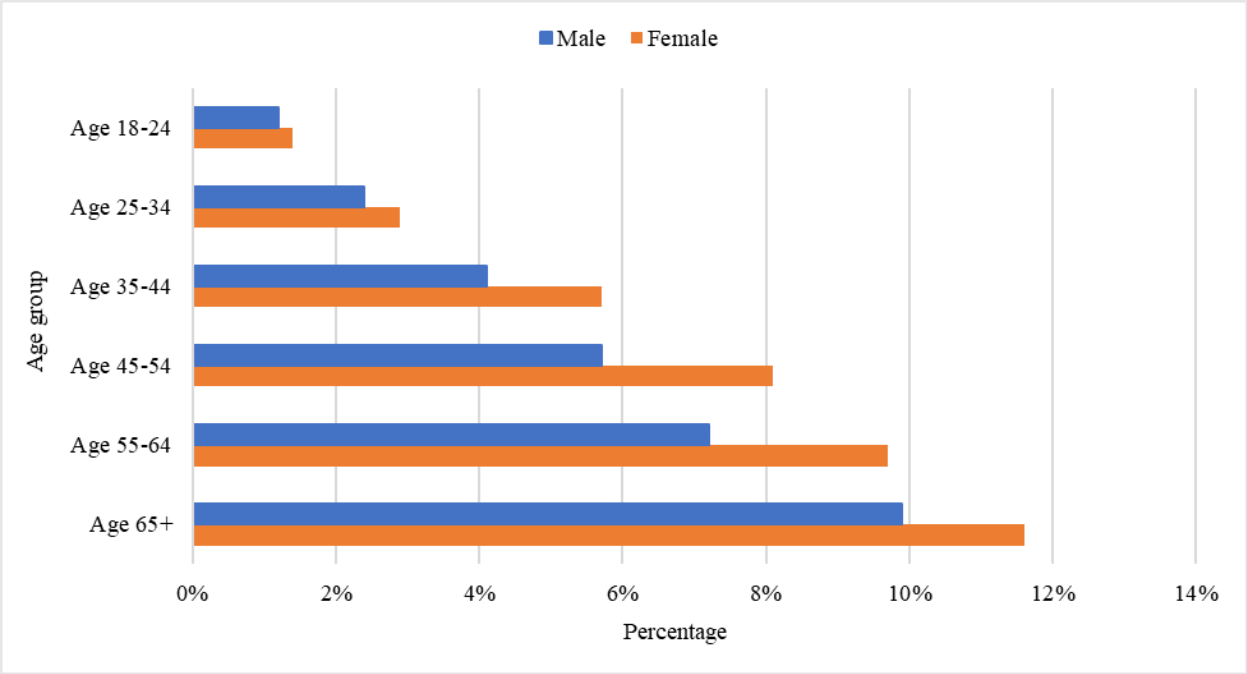


NYS excl. NYC = New York State excluding New York City
These data exclude buprenorphine prescriptions for treatment of OUD.
New York State total contains number with county unknown.
* Patients with at least one prescription for opioid analgesics or benzodiazepines during a given year
Data Source: NYS Prescription Monitoring Program; Data as of April 2024
For complete data, see Appendix: Data Table 5.9.

[33] 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

In 2023, 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 percentage increased with age and was highest among those aged 65 years and older, for both females (11.6 percent) and males (9.9 percent). The largest gap in percentage between genders was seen among those aged 55-64 years (7.2 percent for males, 9.7 percent for females).

Figure 5.10 Percentage of patients* with two or more calendar days of overlapping opioid analgesic and benzodiazepine prescriptions, by age and gender, New York State, 2023

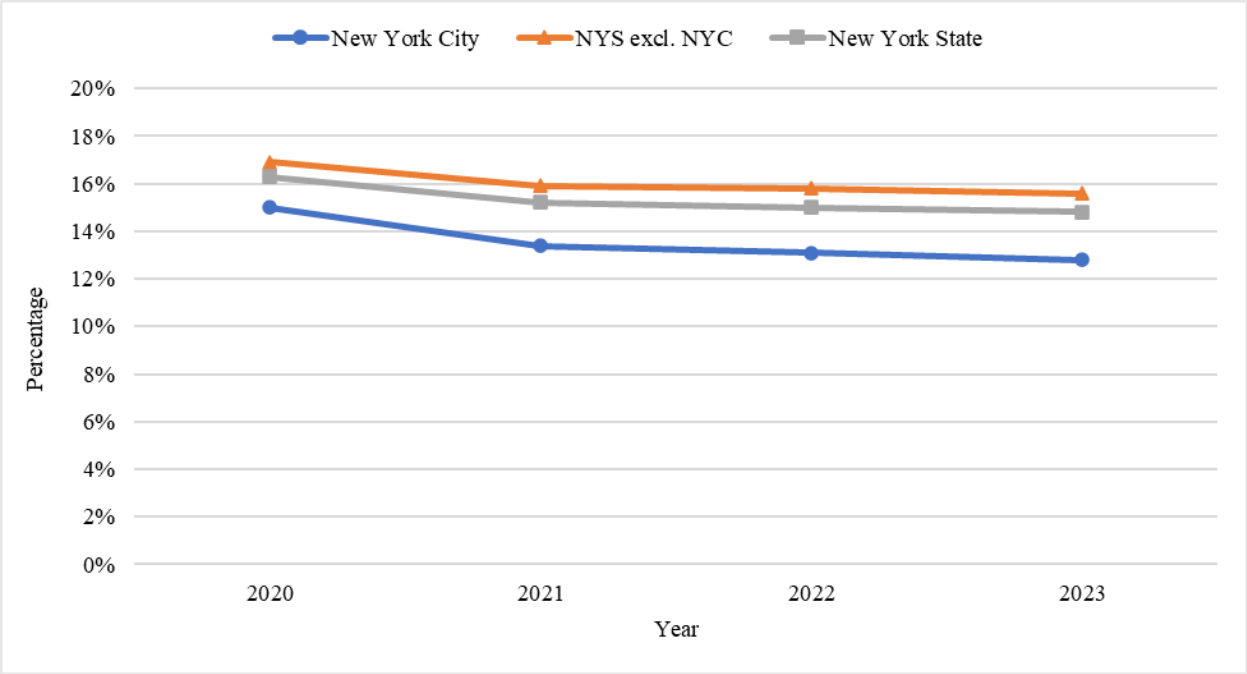


These data exclude buprenorphine prescriptions for treatment of OUD.
* Patients with at least one prescription for opioid analgesics or benzodiazepines during a given year
Data Source: NYS Prescription Monitoring Program; Data as of April 2024
For complete data, see Appendix: Data Table 5.10.

Overlapping opioid analgesic prescriptions

During 2020-2023, among patients receiving one or more opioid analgesic prescriptions in NYS, the percentage with two or more calendar days of overlapping opioid analgesic prescriptions steadily declined from 16.3 percent in 2020 to 14.8 percent in 2023 (Figure 5.11). In 2023, the percentage was higher for NYS excluding NYC (15.6 percent) than for NYC (12.8 percent). NYS excluding NYC had consistently higher percentages compared to NYC during 2020-2023.

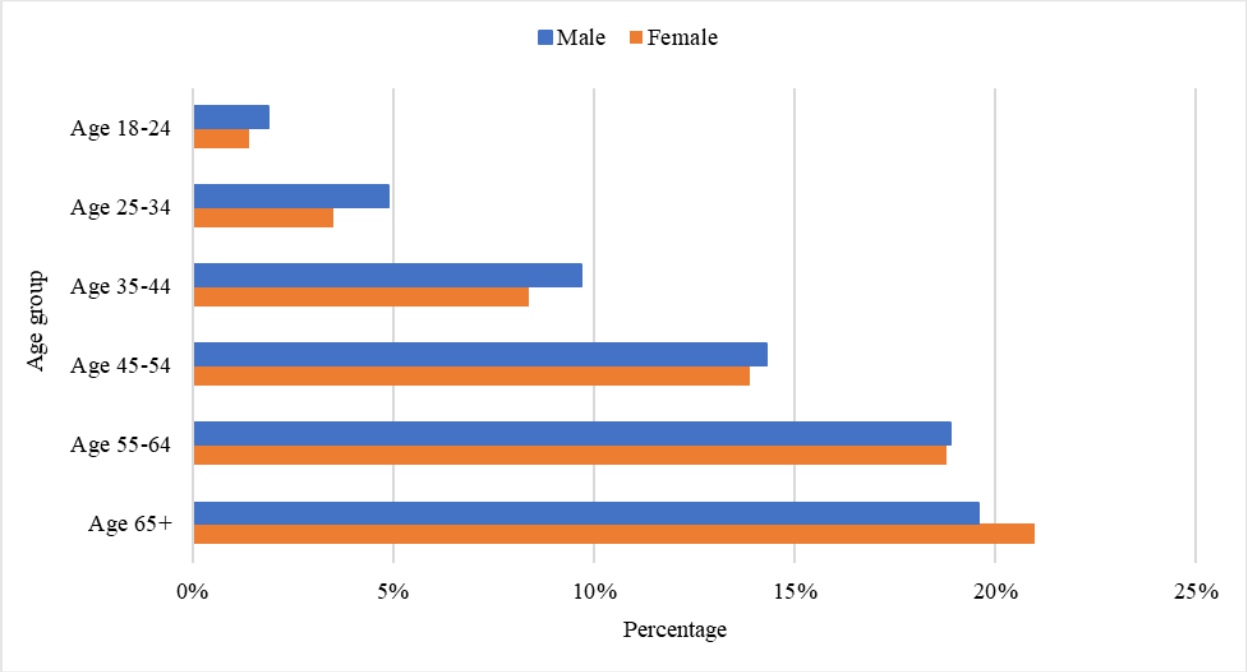
Figure 5.11 Percentage of patients* with two or more calendar days of overlapping opioid analgesic prescriptions, by region, New York State, 2020-2023



NYS excl. NYC = New York State excluding New York City
These 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 April 2024
For complete data, see Appendix: Data Table 5.11.

In 2023, among patients with at least one prescription for opioid analgesics, the percentage who had two or more calendar days of overlapping opioid analgesic prescriptions was higher among males than among females, except among those aged 65 years and older (Figure 5.12). The percentage was highest among those aged 65 years and older, for both females (21.0 percent) and males (19.6 percent). The largest gap in the percentage was seen among those aged 25-34 years (4.9 percent for males, 3.5 percent for females) and aged 65 years and older.

Figure 5.12 Percentage of patients* with two or more calendar days of overlapping opioid analgesic prescriptions, by age and gender, New York State, 2023

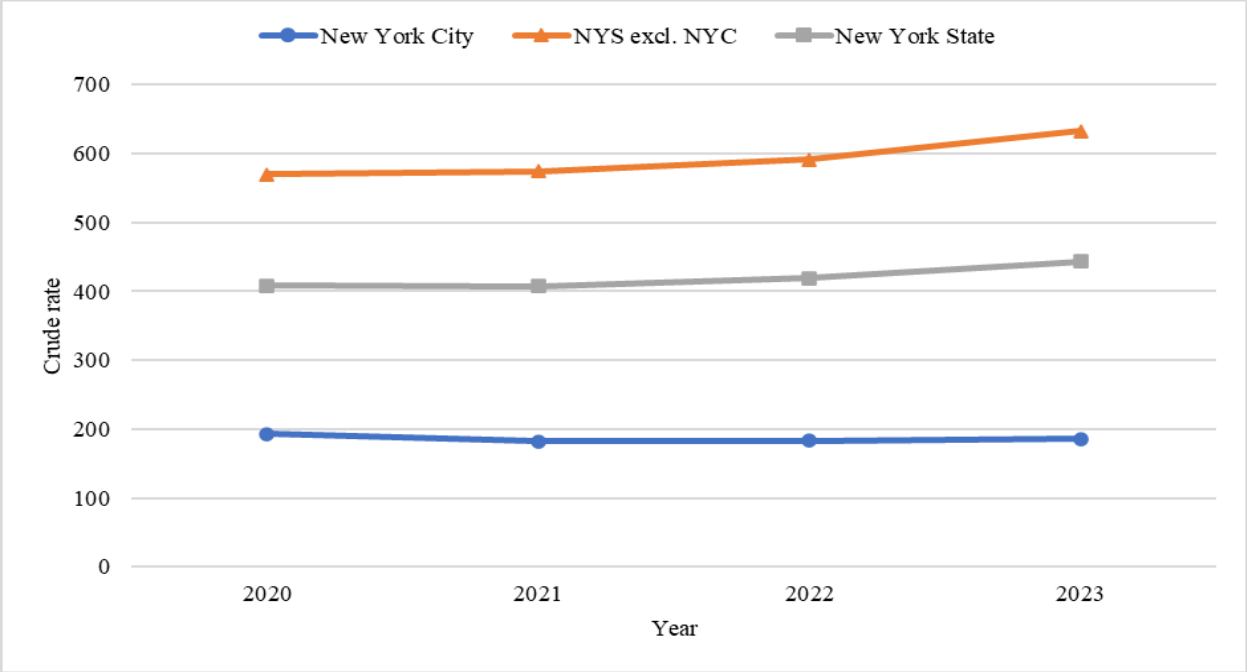


NYS excl. NYC = New York State excluding New York City
These data exclude buprenorphine prescriptions for treatment of OUD.
* Patients with at least one prescription for opioid analgesics during a given year
Data Source: NYS Prescription Monitoring Program; Data as of April 2024
For complete data, see Appendix: Data Table 5.12.

Buprenorphine prescription for opioid use disorder

In NYS, the crude rate of patients who received at least one buprenorphine prescription for OUD rose between 2020 (408.3 per 100,000 population) and 2023 (443.6 per 100,000), representing a 8.6 percent increase (Figure 5.13). This trend was driven by increases in NYS excluding NYC. The rate for NYC decreased from 2020 (193.2 per 100,000) to 2021 (182.4 per 100,000), then gradually increased during 2021-2023 to 185.7 per 100,000 in 2023. NYC rates were about three times lower than NYS excluding NYC during 2020-2023. On December 29, 2022, the X-waiver was eliminated as part of the Omnibus Spending Bill, under the MAT Act. The removal of the X-waiver means that any DEA-registered prescriber of controlled substances can now offer buprenorphine to patients with OUD provided that they comply with all other DEA and state requirements. The NYSDOH continues to monitor the impact of the X-waiver elimination on buprenorphine prescribing.

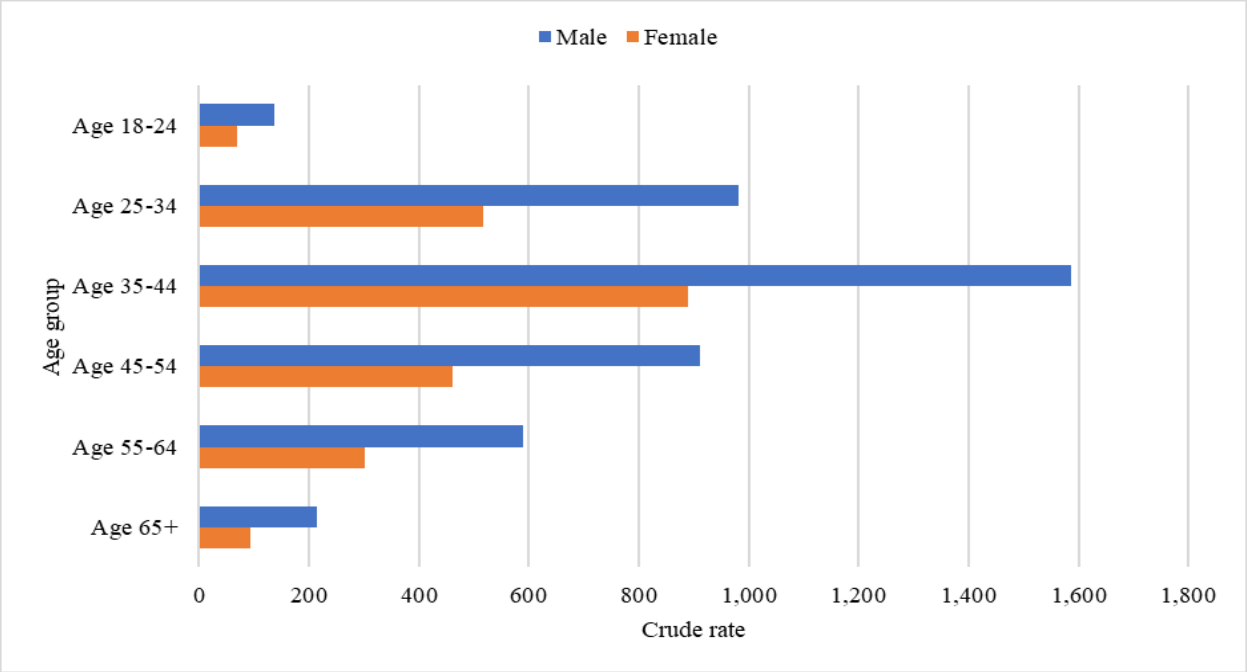
Figure 5.13 Patients who received at least one buprenorphine prescription for opioid use disorder, crude rate per 100,000 population, by region, New York State, 2020-2023



NYS excl. NYC = New York State excluding New York City
New York State total contains number with county unknown.
Data Source: NYS Prescription Monitoring Program; Data as of April 2024
For complete data, see Appendix: Data Table 5.13.

In 2023, the crude rate of patients who received at least one buprenorphine prescription for OUD per 100,000 population was highest among those aged 35-44 years for both males (1,585.4 per 100,000) and females (888.8 per 100,000), followed by those aged 25-34 years with a rate of 910.8 per 100,000 males and 462.2 per 100,000 females. The crude rate of patients who received at least one buprenorphine prescription for OUD was consistently higher for 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, 2023



Data Source: NYS Prescription Monitoring Program; Data as of April 2024
For complete data, see Appendix: Data Table 5.14.

6 - Population Surveys on Substance Use

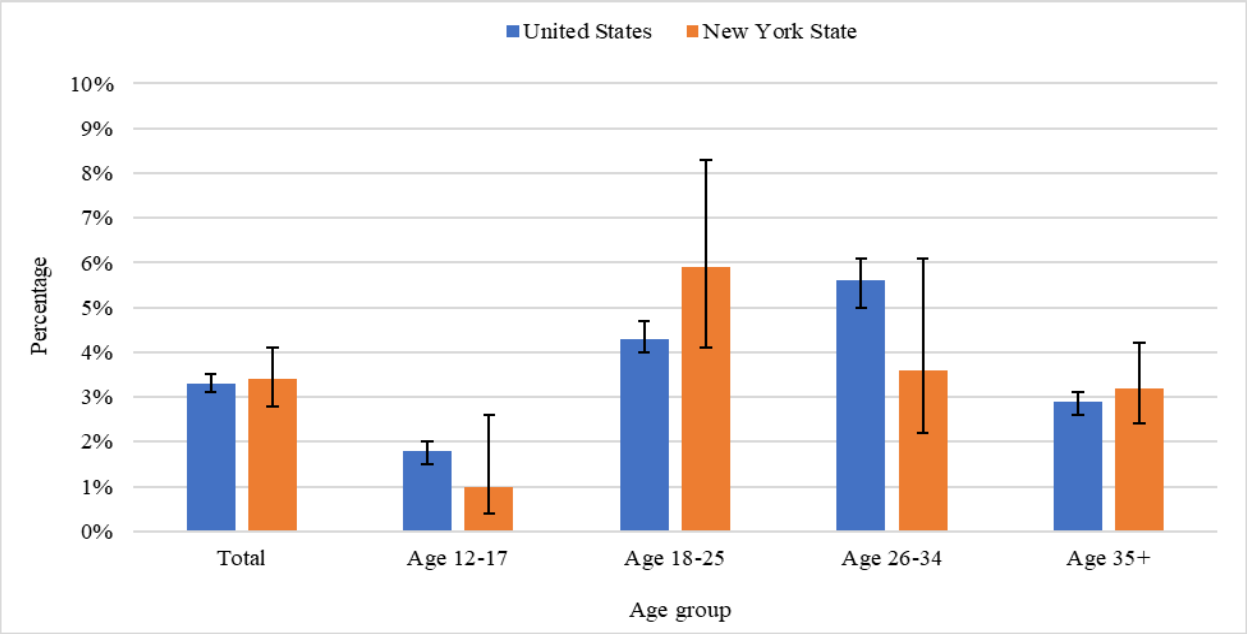
National Survey on Drug Use and Health (NSDUH)

SAMHSA funds the NSDUH, an annual nationwide survey involving interviews with approximately 70,000 individuals aged 12 years and older. This survey provides estimates on the use of tobacco products, alcohol, illicit drugs, and mental health in the US. These data provide state and national estimates to track trends in the use of substances, assess the consequences of substance use and misuse, and identify those groups at high risk for OUD.[34,35] In 2021-2022, for the indicators presented below, the NYS and US estimates were similar for most age groups.

Illicit drug use other than cannabis in the past month

In NYS, among the population aged 12 years and older during 2021-2022, the percent of people who reported using illicit drugs other than cannabis in the past month was 3.4 percent (Figure 6.1). The percentage was highest among those aged 18-25 years (5.9 percent), followed by those aged 26-34 years (3.6 percent), and those aged 35 years and older (3.2 percent). Those aged 12-17 years had the lowest prevalence of illicit drug use other than cannabis in the past month (1.0 percent).

Figure 6.1 Prevalence of illicit drug use other than cannabis in the past month, by age group, 2021-2022



Note: Adult-use cannabis was legalized in NYS in 2021 with the passage of the Marihuana Regulation and Taxation Act (MRTA).
Data source: National Survey on Drug Use and Health (NSDUH); Data as of May 2024
For complete data, see Appendix: Data Table 6.1.

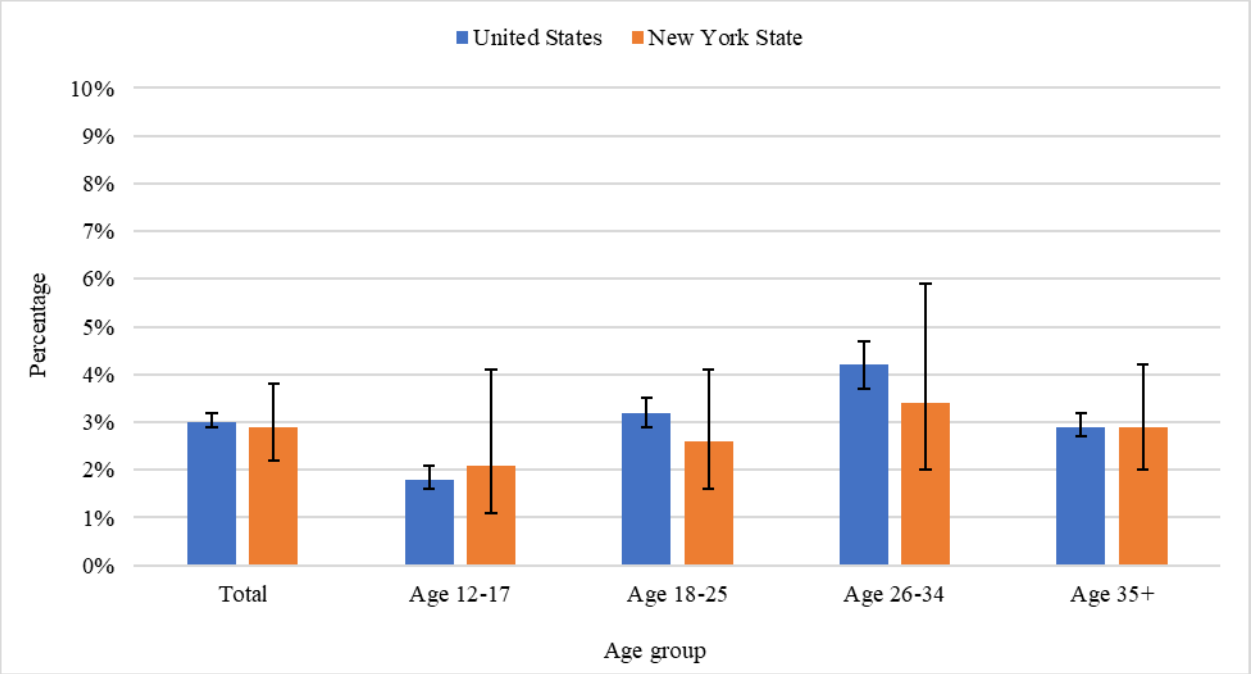
[34] National Survey on Drug Use and Health - Homepage. Accessed June 2024. https://nsduhweb.rti.org/respweb/homepage.cfm

[35] National Survey on Drug Use and Health (NSDUH) Population Data. Substance Abuse and Mental Health Services Administration. Accessed July 2024. www.datafiles.samhsa.gov/dataset/national-survey-drug-use-and-health-2022-nsduh-2022-ds0001

Prescription pain reliever misuse in the past year

During 2021-2022, among the population aged 12 years and older, the percentage of people who reported having misused prescription pain relievers in the past year was 2.9 percent in NYS (Figure 6.2). The percentage was highest among those aged 26-34 years (3.4 percent), followed by those aged 35 years and older (2.9 percent), and those aged 18-25 years (2.6 percent).

Figure 6.2 Prevalence of prescription pain reliever misuse in the past year, by age group, 2021-2022

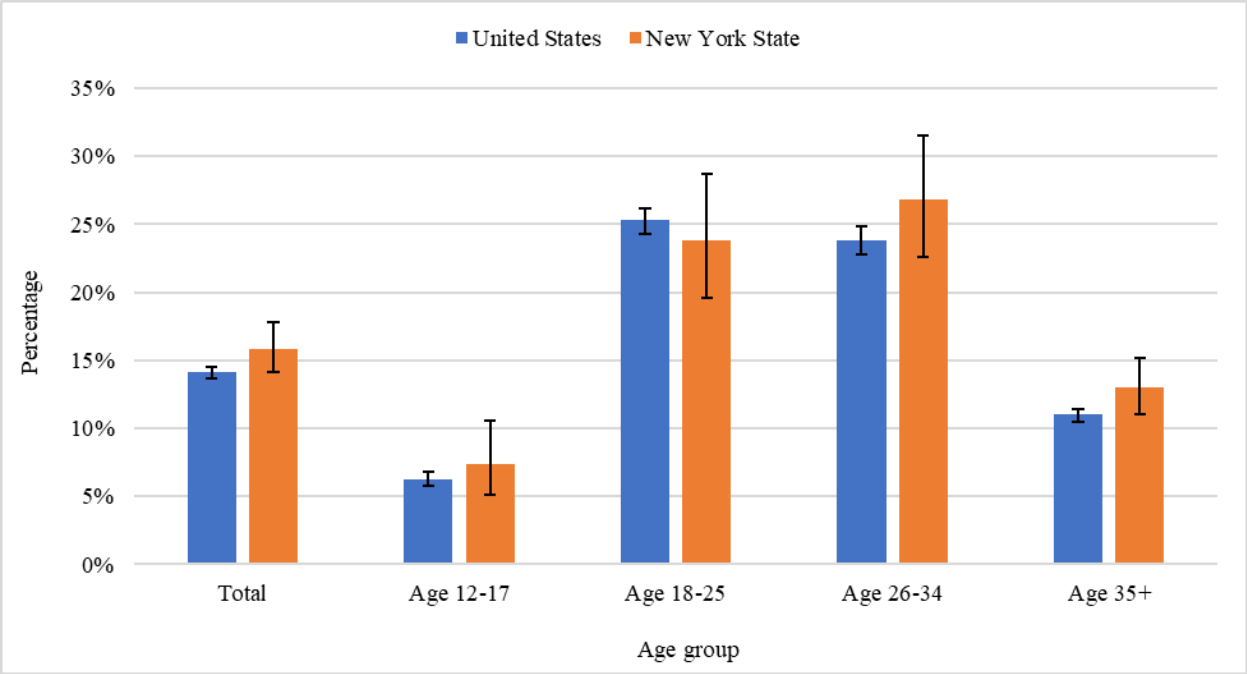


Data source: National Survey on Drug Use and Health (NSDUH); Data as of May 2024
For complete data, see Appendix: Data Table 6.2.

Cannabis use in the past month

During 2021-2022, 15.8 percent of the population aged 12 years and older in NYS reported using cannabis in the past month (Figure 6.3). In NYS, the percentage was highest among those aged 26-34 years (26.8 percent), followed by those aged 18-25 years (23.8 percent), and those aged 35 years and older (13.0 percent). Those aged 12-17 years had the lowest prevalence of cannabis use in the past month (7.4 percent).

Figure 6.3 Percentage of population who used cannabis in the past month, by age group, 2021-2022

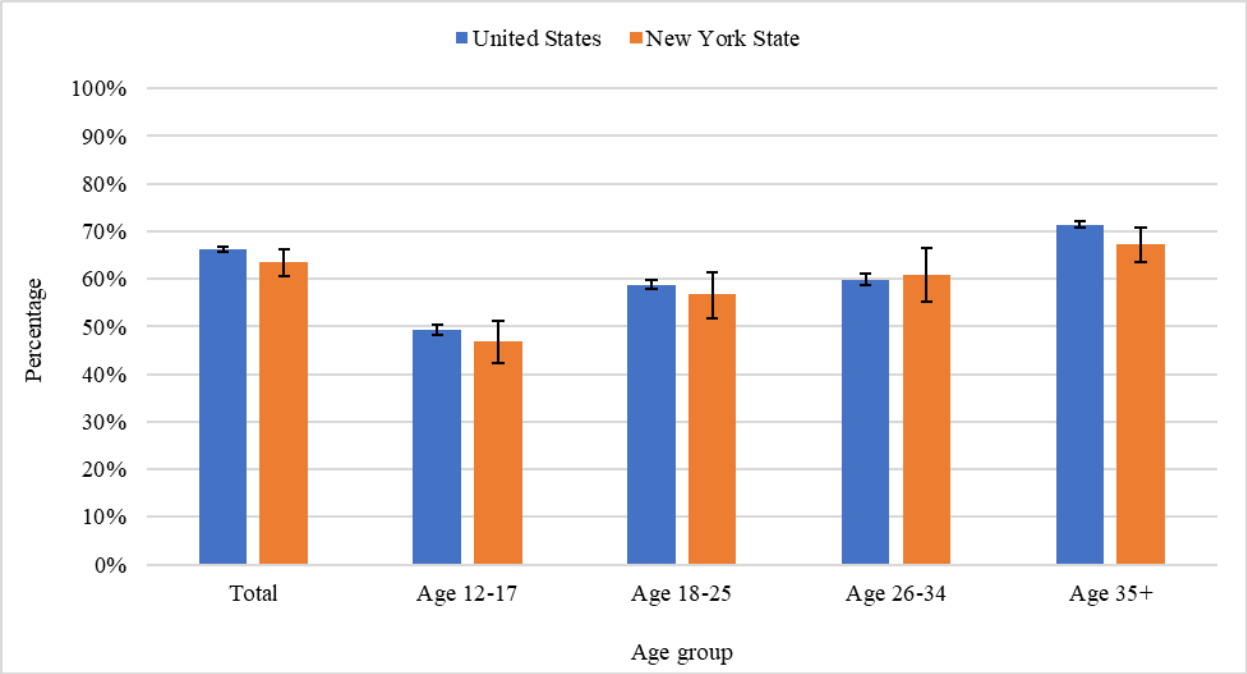


Note: Adult-use cannabis was legalized in NYS in 2021 with the passage of the Marihuana Regulation and Taxation Act (MRTA).
Data source: National Survey on Drug Use and Health (NSDUH); Data as of May 2024
For complete data, see Appendix: Data Table 6.3.

Perceptions of great risk from using cocaine once a month

During 2021-2022, 63.4 percent of the population aged 12 years and older in NYS reported perceiving that using cocaine once a month was a "great risk" (Figure 6.4). The percentage was highest among those aged 35 years and older (67.2 percent), followed by those aged 26-34 years (60.9 percent), and those aged 18-25 years (56.7 percent). Those aged 12-17 years were the least likely to report using cocaine once a month as a "great risk" (46.8 percent).

Figure 6.4 Percentage of population who perceived using cocaine once a month as a great risk, by age group, 2021-2022



Data source: National Survey on Drug Use and Health (NSDUH); Data as of May 2024
For complete data, see Appendix: Data Table 6.4.

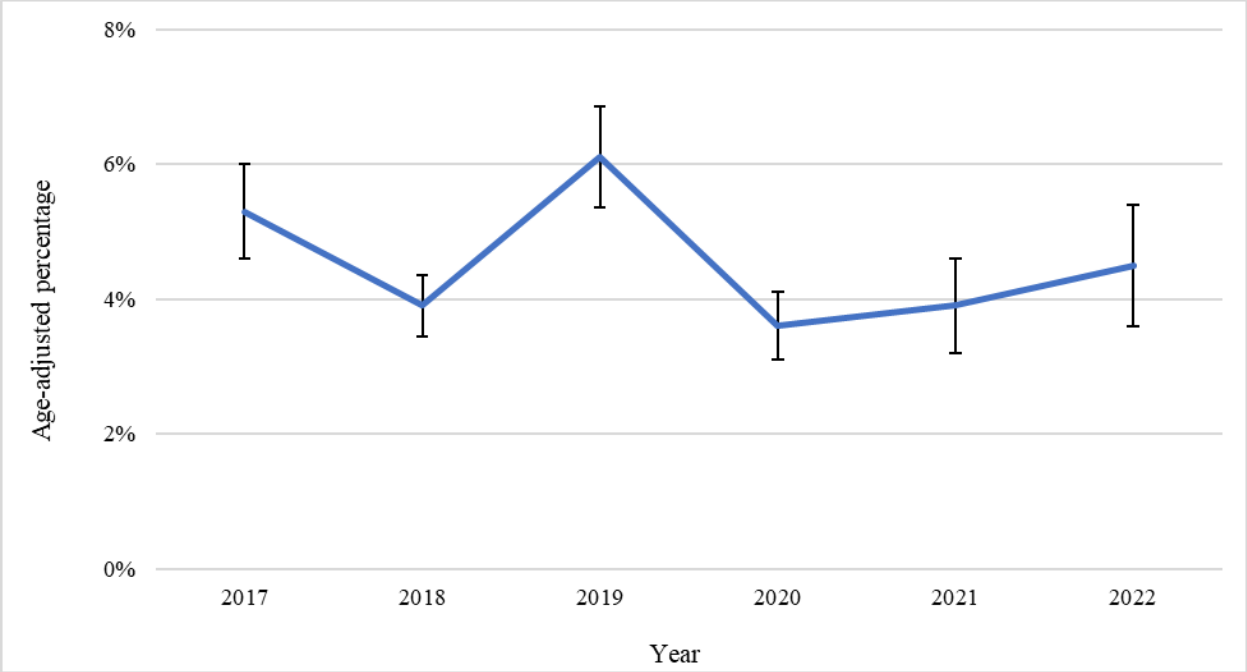
Behavioral Risk Factor Surveillance System (BRFSS)

The BRFSS is an annual statewide random telephone and cellular surveillance survey designed by the CDC. The survey is conducted in all 50 states and US territories. BRFSS monitors modifiable risk behaviors and other factors contributing to the leading causes of morbidity and mortality in the population. Data from the BRFSS are useful for planning, initiating, and supporting health promotion and disease prevention programs at the state and federal level, and monitoring progress toward achieving health objectives for the state and nation. New York State's BRFSS sample is representative of the adult population living in private residences or college housing who have either a landline or cellular telephone. Therefore, adults living in group homes or congregate settings are not included in the survey.[36]

Self-reported prescription pain medication misuse in the past year

Among the NYS population aged 18 years and older from 2017 to 2022, the age-adjusted percentage of people who self-reported prescription pain medication misuse in the past 12 months has fluctuated with the highest observed in 2019 at 6.1 percent and the lowest in 2020 at 3.6 percent (Figure 6.5). The percentage has been increasing since 2020 with an age-adjusted percentage of 4.5 percent in 2022.

Figure 6.5 Age-adjusted percentage of adults who self-reported prescription pain medication misuse in the past 12 months, New York State, 2017-2022

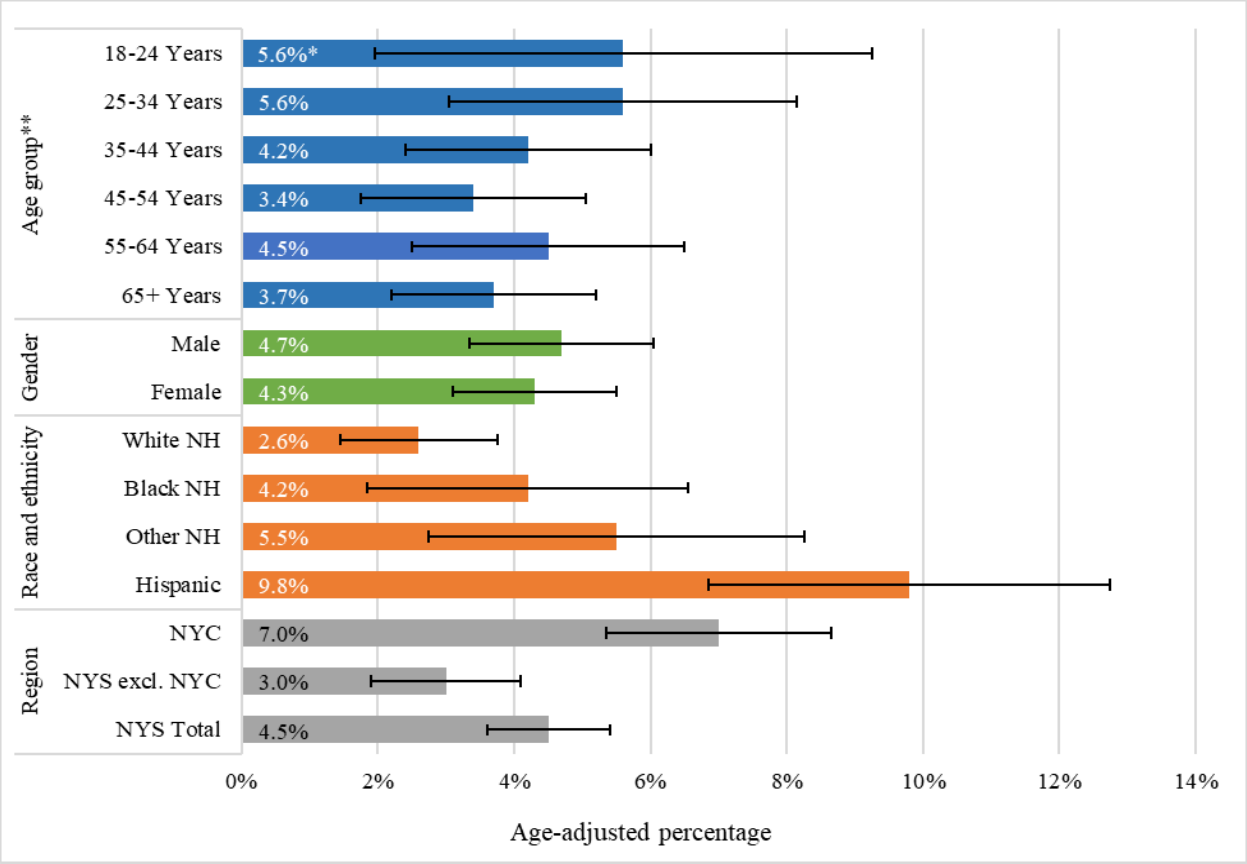


Survey question: In the past 12 months, have you used prescription pain medicine without a healthcare provider's prescription or differently than how the healthcare provider told you to use it?
Note: The population aged 18 and older.
Data source: Behavioral Risk Factor Surveillance System (BRFSS); Data as of September 2023.
For complete data, see Appendix: Data Table 6.5.

[36] Behavioral Risk Factor Surveillance System (BRFSS). New York State Department of Health. https://www.health.ny.gov/statistics/brfss/

In 2022, among NYS residents aged 18 and older, the highest percentages of self-reported prescription pain medication misuse in the past 12 months were among those aged 18-24 and 25-34, both at 5.6 percent (Figure 6.6). Among racial and ethnic groups, the age-adjusted percentage was highest among Hispanic individuals (9.8 percent) and lowest among White non-Hispanic individuals (2.6 percent). The prevalence was more than twice as high among NYC residents (7.0 percent) compared to that among residents living outside of NYC (3.0 percent). The age-adjusted percentage was relatively similar among male residents (4.7 percent) and female residents (4.3 percent). Between 2021 and 2022 in the percentage of prescription pain medication misuse among adults aged 18-24 years increased from 3.4 percent to 5.6 percent. Among those aged 35-44 years it increased from 2.9 percent to 4.2 percent), among females from 2.8 percent to 4.3 percent), and for it increased for NYC residents from 4.8 percent to 7.0 percent.

Figure 6.6 Age-adjusted percentage of adults who self-reported prescription pain medication misuse in the past 12 months, by subpopulation, New York State, 2022



Survey question: In the past 12 months, have you used prescription pain medicine without a healthcare provider's prescription or differently than how the healthcare provider told you to use it?
White NH = White non-Hispanic; Black NH = Black non-Hispanic; NYC = New York City; NYS excl. NYC = New York State excluding New York City
*: The rate is unstable.
** Age groups show crude percentages.
Note: The population aged 18 and older.
Data source: Behavioral Risk Factor Surveillance System (BRFSS); Data as of September 2023.
For complete data, see Appendix: Data Table 6.6.

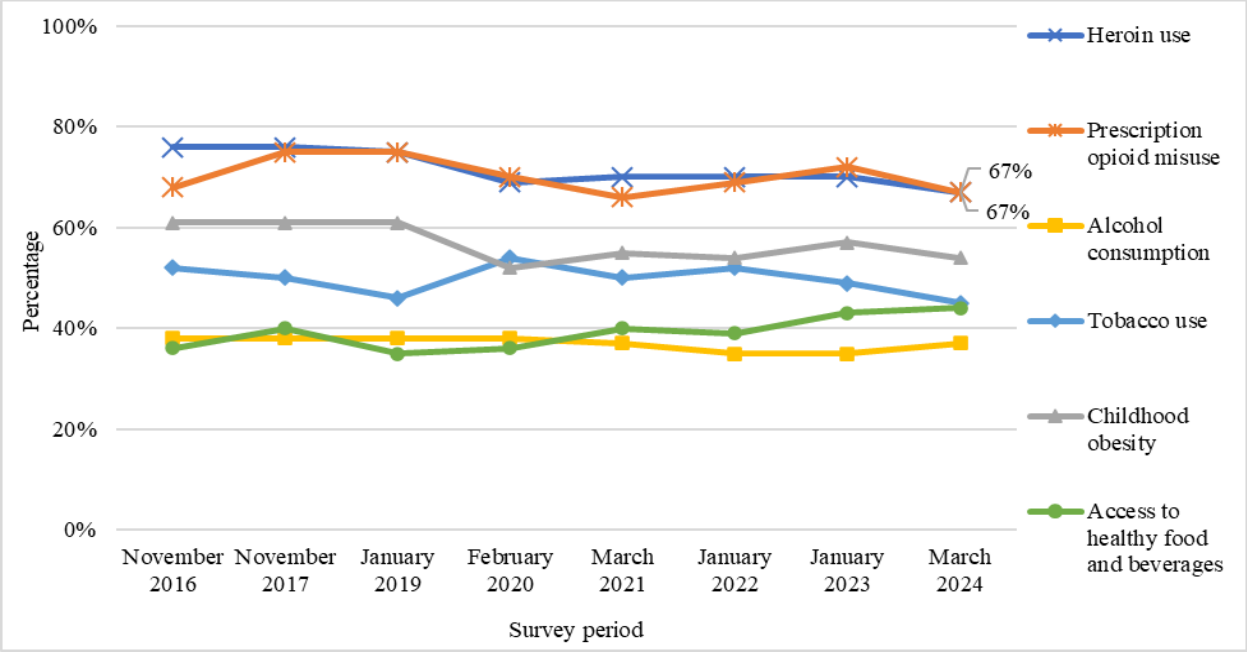
Public Opinion Survey of Public Health Issues

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 indicate an awareness of the risk of overdose involving opioids.[37]

Perceptions of public health problems as "very serious"

In the most recent survey in March 2024 (unpublished data), 67 percent of New Yorkers reported that they consider prescription opioid misuse to be a "very serious" public health problem, representing a decrease from 69 percent in the January 2022 survey and 72 percent in the January 2023 survey (Figure 6.7). Similarly, 67 percent of New Yorkers considered heroin use to be a "very serious" public health problem. This decreased from 70 percent that held stable in the past three surveys. With minor fluctuations over time, these issues have consistently been reported as serious public health problems at higher percentages, compared to 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 are similar across geographic regions of NYS. Across the state and across survey years, most New Yorkers have consistently reported that they consider heroin use and prescription opioid misuse to be a "very serious public health problem" (regional data not shown).

Figure 6.7 Perceptions of public health problems as "very serious" by adults in New York State, November 2016 – March 2024



Data source: New York State Department of Health/Siena College Research Institute, New York State Chronic Disease Public Opinion Poll; Accessed June 2024
For complete data, see Appendix: Data Table 6.7.

[37] Division of Chronic Disease Prevention - Chronic Disease Public Opinion Poll. Division of Chronic Disease Prevention and Siena College Research Institute. New York State Department of Health. Accessed July 2024. health.ny.gov/statistics/prevention/injury_prevention/information_for_action/

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  - Bureau of Emergency Medical Services and Trauma Systems
  - Bureau of Narcotic Enforcement
  - Bureau of Vital Records
  - Office of Health Services Quality and Analytics
  - 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	CDC WONDER
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	CDC WONDER
Overdose deaths involving cocaine	Poisoning deaths involving cocaine, 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 cocaine: T40.5	CDC WONDER
Overdose deaths involving opioids and nonfatal opioid related hospital events	Poisoning deaths involving any opioid, nonfatal outpatient ED visits and hospital discharges involving opioid abuse, poisoning, dependence, and unspecified use.	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 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)	Vital Statistics and CDC WONDER SPARCS

Indicator	Definition	ICD Codes/Detailed Explanation	Data Source
Newborns with neonatal withdrawal syndrome and/or affected by maternal use of opioids or other substances	Neonatal withdrawal symptoms from maternal use of opioids or other substances and/or newborns affected by maternal use of opioids or other substances (other than cocaine) including opiates, sedative-hypnotics, and anxiolytics	ICD-10-CM: Principal Diagnosis: Z38 (liveborn infants) AND P96.1 (neonatal withdrawal symptoms from maternal use of opioids or other substances) or P04.49 (newborns affected by maternal use of opioids or other substances or P04.14 (newborns affected by maternal use of opiates) or P04.17 (newborns affected by maternal use of sedative-hypnotics) or P04.1A (newborns affected by maternal use of anxiolytics) in any other diagnoses	SPARCS
Hospital discharges involving opioid use (including overdose and disorders)	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
Unique individuals enrolled in substance use disorder treatment programs who reported heroin or any other synthetic opioid as the primary substance use at admission	A person is counted once if they were in treatment (received one or more services) during a time period. A unique person may receive multiple services or be in treatment many years and therefore, may be counted uniquely across multiple time periods.	Persons entering treatment for Substance Use Disorders who reported a primary substance at admission with any opioid, including heroin. Example: Primary Substance=heroin, methadone, buprenorphine, or oxycodone	NYS OASAS Data Warehouse, Client Data System

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 Community Opioid Overdose Prevention 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 Community Opioid Overdose Prevention programs are excluded from the county report.	Not applicable	NYS Community Opioid Overdose Prevention Naloxone Administration Database

Indicator	Definition	ICD Codes/Detailed Explanation	Data Source
Suspected opioid overdose report by Emergency Medical Services (EMS)	If any one of the following conditions are met: 1) naloxone is administered with positive response, 2) provider impressions indicate poisoning by opioids, 3) provider impressions indicate opioid related disorder and naloxone is administered, 4) provider impressions indicate unspecified drug overdose and opioid term is mentioned in narrative and response to naloxone is not worse and no narcotics are administered by EMS, 5) provider impressions indicate unspecified drug overdose, cardiac arrest, apnea, or respiratory failure and opioid term is mentioned in narrative and naloxone is administered and patient fatality is indicated, 6) opioid term and overdose term mentioned in narrative (with no rule out term) and at least two additional terms indicating an opioid overdose mentioned in narrative and no narcotics are administered by EMS	Please see the section titled NYS Suspected Opioid Overdose Syndrome – NEMSIS v3.4.0 for detailed methodology	NYS e-PCR data, and other regional EMS Program data collection methods

Indicator	Definition	ICD Codes/Detailed Explanation	Data Source
Prevalence of illicit drug use other than cannabis in the past month	Prevalence of respondents reporting use of illicit drugs other than cannabis in the past month.	Illicit drug use other than cannabis use includes the misuse of prescription psychotherapeutics (prescription pain relievers, prescription tranquilizers, prescription stimulants, or prescription sedatives) 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. This measure excludes respondents who used only cannabis but includes those who used cannabis in addition to the other substances listed above. 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 prescription pain reliever misuse in the past year	Prevalence of respondents reporting misuse of prescription pain relievers in the past year.	Misuse of prescription psychotherapeutics (prescription pain relievers, prescription tranquilizers, prescription stimulants, or prescription sedatives) 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

Indicator	Definition	ICD Codes/Detailed Explanation	Data Source
Prevalence of cannabis use in the past month	Prevalence of respondents reporting use of cannabis in the past month.	Measures of use of cannabis in the respondent's lifetime, the past year, and the past month were derived from responses to the questions in the cannabis section of the questionnaire about lifetime and recency of use (i.e., "Have you ever, even once, used marijuana or any cannabis product?" and "How long has it been since you last used marijuana or any cannabis product?"). The question about recency of use was asked if respondents previously reported any use of marijuana or cannabis products in their lifetime. Responses to separate questions about use of cigars with marijuana in them (blunts) were not included in these measures. Creation of these measures did not take into account responses to questions included in the survey about use of cannabis in the past 12 months that was recommended by a doctor or other health care professional. The following definitional information preceded the question about lifetime use of cannabis: "The next questions are about marijuana and any cannabis products, sometimes called pot, weed, hashish, or concentrates. Some of the ways these products can be used are smoking (such as in joints, pipes, bongs, blunts, or hookahs), vaping (using vape pens, dab pens, tabletop vaporizers, or portable vaporizers), dabbing, eating or drinking, or applying as a lotion." 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
Percentage of population who perceived using cocaine once a month as a great risk	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. 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
Perception of heroin use as a “very serious” public health problem	Prevalence of NYS adults perceiving heroin use as a “very serious” public health problem	Residents aged 18 years or older are interviewed from within all regions in NYS to ensure a representative statewide sample. From 2013-2018 the survey conducted via a random-digit dial telephone survey. Survey methods were changed in 2019 to include the addition of an online survey and may affect the ability to trend data. The overall sample is weighted by age, gender, reported race and ethnicity, and region to ensure statistical representativeness. Survey Question: For each of the following, tell me if you think it is a very serious public health problem, a somewhat serious public health problem, a not very serious public health problem or that it is not at all a serious public health problem: Heroin use.	NYSDOH/Siena College Research Institute, Chronic Disease Prevention Public Opinion Survey

Indicator	Definition	ICD Codes/Detailed Explanation	Data Source
Perception of prescription opioid misuse and abuse as a "very serious" public health problem	Prevalence of NYS adults perceiving prescription opioid misuse and abuse to be a "very serious" public health problem	Residents aged 18 years or older are interviewed from within all regions in NYS to ensure a representative statewide sample. From 2013-2018 the survey conducted via a random-digit dial telephone survey. Survey methods were changed in 2019 to include the addition of an online survey and may affect the ability to trend data. The overall sample is weighted by age, gender, reported race and ethnicity, and region to ensure statistical representativeness. Survey Question: For each of the following, tell me if you think it is a very serious public health problem, a somewhat serious public health problem, a not very serious public health problem or that it is not at all a serious public health: Prescription opioid such as Percocet, OxyContin or Vicodin misuse and abuse problem.	NYSDOH/Siena College Research Institute, Chronic Disease Prevention Public Opinion Survey
Perception of alcohol consumption as a "very serious" public health problem	Prevalence of NYS adults perceiving alcohol consumption to be a "very serious" public health problem	Residents aged 18 years or older are interviewed from within all regions in NYS to ensure a representative statewide sample. From 2013-2018 the survey conducted via a random-digit dial telephone survey. Survey methods were changed in 2019 to include the addition of an online survey and may affect the ability to trend data. The overall sample is weighted by age, gender, reported race and ethnicity, and region to ensure statistical representativeness. Survey Question: For each of the following, tell me if you think it is a very serious public health problem, a somewhat serious public health problem, a not very serious public health problem or that it is not at all a serious public health problem: Alcohol consumption.	NYSDOH/Siena College Research Institute, Chronic Disease Prevention Public Opinion Survey
Perception of tobacco use as a "very serious" public health problem	Prevalence of NYS adults perceiving tobacco use to be a "very serious" public health problem	Residents aged 18 years or older are interviewed from within all regions in NYS to ensure a representative statewide sample. From 2013-2018 the survey conducted via a random-digit dial telephone survey. Survey methods were changed in 2019 to include the addition of an online survey and may affect the ability to trend data. The overall sample is weighted by age, gender, reported race and ethnicity, and region to ensure statistical representativeness. Survey Question: For each of the following, tell me if you think it is a very serious public health problem, a somewhat serious public health problem, a not very serious public health problem or that it is not at all a serious public health problem: Tobacco use.	NYSDOH/Siena College Research Institute, Chronic Disease Prevention Public Opinion Survey

Indicator	Definition	ICD Codes/Detailed Explanation	Data Source
Perception of childhood obesity as a “very serious” public health problem	Prevalence of NYS adults perceiving childhood obesity to be a “very serious” public health problem	Residents aged 18 years or older are interviewed from within all regions in NYS to ensure a representative statewide sample. From 2013-2018 the survey conducted via a random-digit dial telephone survey. Survey methods were changed in 2019 to include the addition of an online survey and may affect the ability to trend data. The overall sample is weighted by age, gender, reported race and ethnicity, and region to ensure statistical representativeness. Survey Question: For each of the following, tell me if you think it is a very serious public health problem, a somewhat serious public health problem, a not very serious public health problem or that it is not at all a serious public health problem: Childhood obesity.	NYSDOH/Siena College Research Institute, Chronic Disease Prevention Public Opinion Survey
Perception of access to health food and beverages as a “very serious” public health problem	Prevalence of NYS adults perceiving access to healthy food and beverages to be a “very serious” public health problem	Residents aged 18 years or older are interviewed from within all regions in NYS to ensure a representative statewide sample. From 2013-2018 the survey conducted via a random-digit dial telephone survey. Survey methods were changed in 2019 to include the addition of an online survey and may affect the ability to trend data. The overall sample is weighted by age, gender, reported race and ethnicity, and region to ensure statistical representativeness. Survey Question: For each of the following, tell me if you think it is a very serious public health problem, a somewhat serious public health problem, a not very serious public health problem or that it is not at all a serious public health problem: Access to healthy food and beverages.	NYSDOH/Siena College Research Institute, Chronic Disease Prevention Public Opinion Survey

Indicator	Numerator	Denominator
Opioid[e] analgesic prescription rate[a] per 1,000 population	Schedule II, III and IV opioid analgesic prescriptions[c] dispensed to state residents.	Midyear population for the calendar year under surveillance from US Census
Commonly prescribed opioid analgesic prescription rate per 1,000 person-years	Six commonly prescribed schedule II, III and IV opioid analgesic prescriptions[c] dispensed to state residents	Midyear population for the calendar year under surveillance from US Census * .25 year
Percentage of episodes when an opioid naïve patient received long-acting initial opioid prescription[e]	Number of episodes when an opioid naïve patient received long-acting initial opioid prescription[e]	Number of episodes when an opioid naïve patient received an opioid prescription[c]
Percentage of episodes when an opioid naïve patient received more than a seven-day supply from the initial opioid prescription[e]	Number of episodes when an opioid naïve patient received more than a seven-day supply from the initial opioid prescription[e]	Number of episodes when an opioid naïve patient received an opioid prescription[c]
Patients with prescribed opioid[e] analgesics from five or more prescribers and dispensed at five or more pharmacies in a six-month period, rate[a] per 100,000 population	Number of patients receiving prescriptions for opioid analgesics from five or more prescribers and that are dispensed at five or more pharmacies in a six-month period. The numerator is a count of unique patients who experienced at least one multiple provider episode (MPE)in any 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[a] per 1,000 population	Patients who received at least one buprenorphine prescription for opioid use disorder	Midyear population for the calendar year under surveillance from US Census
Percentage of patients prescribed one or more opioid[e] analgesics with a total daily dose of ≥ 90 MME[b] on at least one day	Number of patients prescribed one or more opioid analgesic prescriptions[d] with a total daily dose of ≥ 90 MME on at least one day	Number of patients who received one or more opioid analgesic prescriptions[d] during a given year
Percentage of patients with two or more calendar days of overlapping opioid [e] analgesic and benzodiazepine prescriptions	Patients with two or more calendar days of overlapping opioid analgesic and benzodiazepine prescriptions[c]	Patients with at least one prescription[c] for opioid analgesics or benzodiazepines during a given year
Percentage of patients with two or more calendar days of overlapping opioid [e] analgesic prescriptions	Patients with two or more calendar days of overlapping opioid analgesic prescriptions[c]	Patients with at least one prescription[c] for opioid analgesics during a given year

[a]: 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.
[b]: Morphine milligram equivalents
[c]: Buprenorphine prescriptions for the treatment of substance use disorder were excluded.
[d]: Buprenorphine prescriptions for 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

NYS Suspected Opioid Overdose Syndrome – NEMSIS v3.4.0

Records for inclusion are limited to 911 Response, Intercept and Mutual aid.

1. NEMSIS v3 - Naloxone administration is documented (eMedications.03) ***AND*** [response to medication (eMedications.07) indicates patient improvement OR narrative (eNarrative.01) contains “improved”, “improvement in loc", “more responsive", “now awake”, "began breathing", “became conscious”, “pt came to”, “pt woke up”, “became responsive”, "more alert", "positive response to Narcan"].

2. Primary or secondary impression(s) indicate an opioid overdose:
    - NEMSIS v3 - Primary/secondary impression (eSituation.11, eSituation.12) starts with any of the following:
        - T40.0: Poisoning by, adverse effect of and underdosing of opium
        - T40.1: Poisoning by and adverse effect of heroin
        - T40.2: Poisoning by, adverse effect of and underdosing of opioids
        - T40.3: Poisoning by, adverse effect of and underdosing of methadone
        - T40.4: Poisoning by, adverse effect of and underdosing of other synthetic narcotics- Fentanyl, Tramadol, etc.
        - T40.6: Poisoning by, adverse effect of and underdosing of other and unspecified narcotics

    AND

    - Any of the following is true:
        - No naloxone administration is documented in (eMedications.03)
        - Naloxone administration is documented in (eMedications.03) and response to medication (eMedications.07) indicates patient improvement or unchanged.
        - Naloxone administration is documented in (eMedications.03) and response to medication (eMedications.07) is not documented.

3. Primary or secondary impression(s) indicate an opioid related disorder
    - NEMSIS v3 - Primary/secondary impression (eSituation.11, eSituation.12) starts with F11: Opioid related disorders

    AND

    - Naloxone administration is documented in eMedications.03 or eNarrative.01

4. Primary or secondary impression(s) indicate an unspecified drug overdose:
    - NEMSIS v3 - Primary or secondary impression (eSituation.11, eSituation.12) starts with any of the following:
        - T50.9: Poisoning by, adverse effect of and underdosing of other and unspecified drugs, medicaments, and biological substances
        - T65.9: Toxic effect of unspecified substance

    AND

    - Opioid term is mentioned in narrative:
        - Narrative (eNarrative.01) or complaint (eSituation.04) contains "opioid", "opiate", "opium", “dope”, “smack”, "heroin", “hod”, "speedball", "methadone", "suboxone", “morphine”, “tramadol”,

buprenorphine", "codeine", "norco", "oxy", "vicodin", "Percocet", hydrocodone", "opana", "dilaudid", "hydromorphone", "fentanyl". Common misspellings and other variants of these terms are included.

AND

- Any of the following are true:
  - Naloxone administration is documented in eMedications.03 and response to medication (eMedications.07) indicates patient improvement or unchanged.
  - Naloxone administration is documented in eMedications.03 and response to medication (eMedications.07) is not documented.
  - Naloxone administration is documented in eNarrative.01.

AND

- Fentanyl (4337), Morphine (7052), Oxycodone (7804), Hydromorphone (3423), and Tramadol (10689) are not an administered medication in (eMedications.03).

5. Primary or secondary impression(s) indicate a non-specific drug or opioid overdose, cardiac arrest, apnea, or respiratory failure *AND* opioid term is mentioned in narrative *AND* naloxone is administered *AND* Patient fatality is indicated:
   - NEMSIS v3 (eSituation.11, eSituation.12):
     - Apnea: R06.81; Cardiac arrest: I46; Drug overdose codes: T40.0-T40.4, T40.6, T50.9, T65.9; Respiratory failure: J96.0, J96.9

   AND

   - Narrative (eNarrative.01) or complaint (eSituation.04) contains "opioid", "opiate", "opium", "dope", "smack", "heroin", "hod", "speedball", "methadone", "suboxone", "morphine", "tramadol", buprenorphine", "codeine", "norco", "oxy", "vicodin", "Percocet", hydrocodone", "opana", "dilaudid", "hydromorphone", "fentanyl". Common misspellings and other variants of these terms are included.

   AND

   - Naloxone administration is documented in eMedications.03 or eNarrative.01

   AND

   - Incident/Patient Disposition (eDisposition.12) indicates patient death.
   - Initial Patient Acuity (eSituation.13) or Final Patient Acuity (eDisposition.19) are Dead without Resuscitation Efforts (Black).
   - Reason CPR/Resuscitation Discontinued (eArrest.16) is 3016005 "Obvious Signs of Death".
   - End of EMS Cardiac Arrest Event (eArrest.18) is 3018001 Expired in ED 3018003 or Expired in the Field.

6. Opioid term mentioned in narrative (with no rule out term) AND overdose term mentioned in

narrative (with no rule out term) AND at least two additional terms (Narcan, method, LOC,
physiologic sign) mentioned in narrative AND there are no narcotic medications listed under
administered medications:

- NEMSIS v3 - Narrative or complaint contains opioid term AND overdose term (term is excluded if
  preceded by a rule out term: rule out", "r/o")
  - Opioid terms: "opioid", "opiate", "opium", "dope", "smack", "heroin", "hod", "speedball", "methadone", "suboxone", "morphine", "tramadol", buprenorphine", "codeine", "norco", "oxy", "vicodin", "Percocet", hydrocodone", "opana", "dilaudid", "hydromorphone", "fentanyl".

AND

  - Overdose terms: "overdose", "overdosed", "od", "od'd"

AND

- Narrative (eNarrative.01) or complaint (eSituation.04) contains a term from at least two of the following groups (common misspellings and other variants of these terms are included):
  - LOC: "nodding off", "unresponsive", "altered LOC", "AMS", "unconscious", "loss of consciousness"
  - Method: "inject", "snort", "tinfoil", "ingest", "smoke", "freebase", "syring" and "spoon", "needle" and "spoon"
  - Narcan: "Narcan", "naloxone"
  - Physiological sign: "pinpoint pupil", "injection mark", "track mark", "blue", "cyano", "stop breathing", "respiratory arrest", "inadequate breathing", "agonal breathing"

AND

- Fentanyl (4337), Morphine (7052), Oxycodone (7804), Hydromorphone (3423), and
  Tramadol (10689) are not an administered medication in eMedications.03

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).

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 the county in which death occurred. 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 reported number of overdose deaths, some of the observed early increases are likely due to the improvements in reporting.

For information about CDC WONDER race and 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 emergency department (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.

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 separate reporting mechanism.

New York State Community Opioid Overdose Prevention Program Dataset:

The NYS Community Opioid Overdose Prevention program dataset provides information on naloxone administrations by lay persons who have been trained by registered NYS Community Opioid Overdose Prevention programs in the case of a suspected opioid overdose. Naloxone administration reports are submitted by registered Community Opioid Overdose Prevention 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 in 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):

NYS OASAS collects data on people treated in all OASAS-certified substance use disorder treatment programs. Data are collected through the OASAS 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 in treatment in multiple levels of care during a year would be counted once.

A person admitted in a previous year could still be receiving treatment in subsequent years. They would be counted once for each year that are continuously enrolled in treatment. Data

excludes residents living outside of New York State and significant others. Individuals receiving SUD treatment may have had significant others who also received supportive services as part of social care for families and loved ones (such as counseling).

The 2018 population estimates are used to calculate rates for 2019 and 2020. The 2021 population estimates are used to calculate rates for 2021. The 2022 population estimates are used to calculate rates for 2022 and 2023.

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 PMP 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 2018 population estimates are used to calculate rates for 2020. The 2021 population estimates are used to calculate rates for 2021. The 2022 population estimates are used to calculate rates for 2022 and 2023.

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

What is the 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 aged 12 years and older. Approximately 70,000 individuals complete the interview online or in-person at their homes. US households are randomly selected and, one or two residents from each selected household may complete the interview. In in-person interviews, an interviewer visits the selected household and administers the interview using a laptop computer . The questions are answered in private directly on to the computer; for some items, the interviewer reads the question. Each survey participant who completes the interview is compensated with $30.

Behavioral Risk Factor Surveillance System (BRFSS):

The Behavioral Risk Factor Surveillance System (BRFSS) is an annual statewide telephone surveillance system designed and funded by the Centers for Disease Control and Prevention (CDC) and conducted by the NYSDOH Division of Chronic Disease and Prevention, Bureau of Chronic Disease Evaluation and Research. The BRFSS collects data on preventive health practices and risk behaviors that affect chronic diseases, injuries, and preventable infectious diseases. In addition to a set of core questions that CDC requires to be asked in all states either every year, or on a regular rotating basis, such as every other year, states may also include questions from a list of optional CDC questions or may add additional questions to serve their own specific state needs. Since 2018, questions on opioid use in the past 12 months have been included in the survey conducted in New York State.

New York State's BRFSS sample is designed to be representative of the adult population living in private residences or college housing who have either a landline or cellular telephone. Adults living in group homes or congregate settings are excluded from the survey. The BRFSS is designed to provide information for New York State, New York State excluding New York City and New York City (5 boroughs combined).

Public Opinion Survey

Survey data were provided by Siena College Research Institute, who administers an annual survey of adult residents of the state of New York on behalf of the New York State Department of Health Division of Chronic Disease Prevention 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.

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.

Data Source	Suppression Criteria
Vital Statistics - Death Records	Denominator population <50
CDC WONDER	Numerator 1-9 deaths
Statewide Planning and Research Cooperative System (SPARCS) - ED and hospital records	Numerator 1-5 cases
OASAS Client Data System (CDS) - enrollment	Numerator 1-9 individuals enrolled
Prehospital Care Reports	Numerator 1-10
NYS Law Enforcement Naloxone Administration Dataset	Numerator 1-10
NYS Community Opioid Overdose Prevention Program Dataset	Numerator 1-10
NYS Prescription Monitoring Program (PMP)	Numerator 1-5 cases
BRFSS	Unweighted denominator <50 or Unweighted numerator 1 - 5 cases

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 synthetic opioids other than methadone (SOOTM)" includes overdose deaths due to pharmaceutically and illicitly produced opioids such as fentanyl.
CDC WONDER	For additional information about CDC WONDER, including limitations of Multiple Cause of Death data, please see: https://wonder.cdc.gov/wonder/help/mcd.html

Data Source	Limitations
Statewide Planning and Research Cooperative System (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.
Office of Addiction Services and Supports Client Data System (OASAS CDS)	The CDS includes data for individuals enrolled in the OASAS-certified treatment system. 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. Data are considered to be substantially complete three months after the due date, but are able to be updated indefinitely. The accuracy of data depends on the completeness, consistency and quality of reporting and coding by the programs. The availability of substance use disorder treatment services within a county may affect the number of unique people enrolled who reside in that county.
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 99% of all EMS data statewide. 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 Naloxone Administration Dataset	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. It is possible that not all naloxone administrations reported are for an opioid overdose. There are not toxicology reports to confirm suspected substances used. 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 Opioid Overdose Prevention Program Dataset	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. Increase may represent expansion of program and may or may not indicate an increase in overdose events. Reporting administrations of naloxone to the NYSDOH is one of the mandated responsibilities of registered Community Opioid Overdose Prevention 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 and improves the accuracy and quality of the current year's data.
Behavioral Risk Factor Surveillance System (BRFSS)	https://www.cdc.gov/brfss/about/brfss_faq.htm https://www.cdc.gov/brfss/publications/data_qvr.htm
The National Survey on Drug Use and Health (NSDUH)	For limitations of NSDUH, please see the Study Notes section in the link here: https://www.datafiles.samhsa.gov/dataset/national-survey-drug-use-and-health-2022-nsduh-2022-ds0001 For more information about NSDUH and how it compares to other surveys, please see the documentation here: https://www.samhsa.gov/data/sites/default/files/reports/rpt42729/2022-nsduh-method-summary-defs/2022-nsduh-method-summary-defs-110123.pdf
NYSDOH/Siena College Research Institute, Chronic Disease Prevention Public Opinion Survey	Survey data were collected through random-digit dialing samples of both landline and cell phone numbers and are potentially limited by non-response bias.

Appendix

Data Table 1.1 Overdose deaths involving opioids and other substances, crude rate per 100,000 population, New York State, 2015-2022

Year	Any opioid		Heroin		Commonly prescribed opioids		Synthetic opioids other than methadone*		Heroin and synthetic opioids other than methadone		Cocaine and synthetic opioids other than methadone	
	Deaths	Crude rate	Deaths	Crude rate	Deaths	Crude rate	Deaths	Crude rate	Deaths	Crude rate	Deaths	Crude rate
2022	5,361	27.2	920	4.7	1,255	6.4	4,950	25.2	891	4.5	2,265	11.5
2021	5,017	25.3	1,047	5.3	1,336	6.7	4,594	23.2	1,013	5.1	1,804	9.1
2020	4,233	21.9	1,275	6.6	1,257	6.5	3,721	19.2	1,173	6.1	1,350	7.0
2019	2,939	15.1	1,145	5.9	939	4.8	2,338	12.0	949	4.9	858	4.4
2018	2,991	15.3	1,243	6.4	998	5.1	2,195	11.2	960	4.9	786	4.0
2017	3,224	16.2	1,356	6.8	1,044	5.3	2,238	11.3	923	4.7	742	3.7
2016	3,009	15.2	1,307	6.6	1,100	5.6	1,641	8.3	649	3.3	451	2.3
2015	2,166	10.9	1,058	5.3	895	4.5	668	3.4	263	1.3	142	0.7

* 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.
Multiple cause of death ICD-10 definitions: Any opioid – 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); Heroin – T40.1; Commonly prescribed opioids – T40.2 (e.g., hydrocodone, oxycodone), T40.3; Synthetic opioids other than methadone – T40.4; Heroin and synthetic opioids other than methadone – T40.1 AND T40.4; Cocaine and synthetic opioids other than methadone – T40.5 (cocaine) AND T40.4.
Note: Death counts by substances are not mutually exclusive.
Data source: Data for New York State excluding New York City in 2021 are provided by New York State Vital Statistics, as of April 2023; all other data are from CDC WONDER, accessed July 2024.
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Data Table 1.2 Percentage of opioid overdose deaths involving synthetic opioids other than methadone*, New York State, 2015-2022

Year	Overdose deaths involving synthetic opioids other than methadone	Overdose deaths involving any opioid	Percentage of overdose deaths involving synthetic opioids other than methadone
2022	4,950	5,361	92.3%
2021	4,594	5,017	91.6%
2020	3,721	4,233	87.9%
2019	2,338	2,939	79.6%
2018	2,195	2,991	73.4%
2017	2,238	3,224	69.4%
2016	1,641	3,009	54.5%
2015	668	2,166	30.8%

* 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: Data for New York State excluding New York City in 2021 are provided by New York State Vital Statistics, as of April 2023; all other data are from CDC WONDER, accessed July 2024.
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Data Table 1.3 Overdose deaths involving any opioid, crude rate per 100,000 population, by county, New York State, 2021 and 2022

County	2021			2022		
	Deaths	Population	Crude rate per 100,000 population	Deaths	Population	Crude rate per 100,000 population
Albany	86	313,743	27.4	83	315,811	26.3
Allegany	**	46,106	**	13	46,694	*
Bronx	695	1,424,948	48.8	749	1,379,946	54.3
Broome	75	197,240	38.0	74	197,117	37.5
Cattaraugus	15	76,426	*	28	76,439	36.6
Cayuga	20	75,880	26.4	16	74,998	*
Chautauqua	48	126,807	37.9	57	126,027	45.2
Chemung	28	83,045	33.7	31	81,426	38.1
Chenango	12	46,537	*	10	46,458	*
Clinton	13	79,596	*	18	78,753	*
Columbia	15	61,778	*	15	61,286	*
Cortland	16	46,311	*	10	46,126	*
Delaware	**	44,378	**	**	44,740	**
Dutchess	86	297,112	28.9	119	297,545	40.0
Erie	272	950,683	28.6	299	950,312	31.5
Essex	10	37,268	*	**	36,910	**
Franklin	**	47,456	**	**	46,373	**
Fulton	12	53,116	*	15	52,669	*
Genesee	**	57,853	**	15	57,535	*
Greene	22	48,499	45.4	11	48,061	*
Hamilton	**	5,119	**	0	5,118	*
Herkimer	**	59,937	**	12	59,822	*
Jefferson	26	116,295	22.4	20	116,637	17.1
Kings	548	2,641,052	20.7	648	2,590,516	25
Lewis	**	26,573	**	**	26,699	**
Livingston	**	61,578	**	12	61,516	*
Madison	14	67,658	*	14	67,097	*
Monroe ^	248	755,160	32.8	339	752,035	45.0
Montgomery	11	49,558	*	**	49,623	**
Nassau	236	1,390,907	17.0	218	1,383,726	15.8
New York	403	1,576,876	25.6	417	1,596,273	26.1
Niagara	70	211,653	33.1	71	210,880	33.7
Oneida	71	230,274	30.8	74	228,846	32.3
Onondaga	162	473,236	34.2	145	468,249	31.0
Ontario	16	112,508	*	12	112,707	*
Orange	136	404,525	33.6	126	405,941	31.0
Orleans	**	40,191	**	**	39,318	**

County	2021			2022		
	Deaths	Population	Crude rate per 100,000 population	Deaths	Population	Crude rate per 100,000 population
Oswego	36	117,387	30.7	32	118,287	27.1
Otsego	14	58,123	*	13	60,636	*
Putnam	21	97,936	21.4	21	98,045	21.4
Queens	358	2,331,143	15.4	454	2,278,029	20.0
Rensselaer	38	160,232	23.7	38	159,853	23.8
Richmond	149	493,494	30.2	140	491,133	28.5
Rockland	65	339,227	19.2	45	339,022	13.3
Saratoga	40	237,359	16.9	28	238,797	11.7
Schenectady	44	158,089	27.8	43	160,093	26.9
Schoharie	**	29,863	**	**	30,063	**
Schuyler	**	17,752	**	**	17,650	**
Seneca	**	33,688	**	**	32,882	**
St. Lawrence	17	108,051	*	24	107,733	22.3
Steuben	19	92,948	*	25	92,599	27.0
Suffolk	463	1,526,344	30.3	464	1,525,465	30.4
Sullivan	37	79,806	46.4	50	79,658	62.8
Tioga	**	47,980	**	**	47,772	**
Tompkins	16	105,162	*	25	104,777	23.9
Ulster	48	182,951	26.2	65	182,319	35.7
Warren	17	65,618	*	10	65,599	*
Washington	13	60,956	*	24	60,841	39.4
Wayne	20	90,923	22.0	23	91,125	25.0
Westchester	148	997,895	14.8	156	990,427	15.8
Wyoming	**	40,491	**	**	39,666	**
Yates	**	24,613	**	0	24,451	*

*: Crude rates are unreliable when there are fewer than 20 deaths and are therefore not shown.
**: Counts and crude rates are suppressed when there are fewer than 10 deaths.
^ For the purpose of presenting comparison among counties with more complete data, statistics for 2022 for Monroe County are provided by New York State Vital Statistics, as of July 2024.
Data for New York State excluding New York City in 2021 are provided by New York State Vital Statistics, as of April 2023; all other data are from CDC WONDER, accessed July 2024.
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Data Table 1.4 Overdose deaths involving heroin, crude rate per 100,000 population, by county, New York State, 2021 and 2022

County	2021			2022		
	Deaths	Population	Crude rate per 100,000 population	Deaths	Population	Crude rate per 100,000 population
Albany	16	313,743	*	**	315,811	**
Allegany	0	46,106	*	0	46,694	*
Bronx	211	1,424,948	14.8	208	1,379,946	15.1
Broome	11	197,240	*	**	197,117	**
Cattaraugus	0	76,426	*	**	76,439	**
Cayuga	**	75,880	**	**	74,998	**
Chautauqua	11	126,807	*	**	126,027	**
Chemung	**	83,045	**	**	81,426	**
Chenango	**	46,537	**	**	46,458	**
Clinton	0	79,596	*	0	78,753	*
Columbia	**	61,778	**	0	61,286	*
Cortland	0	46,311	*	**	46,126	**
Delaware	**	44,378	**	0	44,740	*
Dutchess	**	297,112	**	11	297,545	*
Erie	12	950,683	*	18	950,312	*
Essex	0	37,268	*	0	36,910	*
Franklin	**	47,456	**	0	46,373	*
Fulton	0	53,116	*	**	52,669	**
Genesee	**	57,853	**	**	57,535	**
Greene	**	48,499	**	**	48,061	**
Hamilton	0	5,119	*	0	5,118	*
Herkimer	0	59,937	*	0	59,822	*
Jefferson	0	116,295	*	0	116,637	*
Kings	220	2,641,052	8.3	212	2,590,516	8.2
Lewis	0	26,573	*	0	26,699	*
Livingston	0	61,578	*	**	61,516	**
Madison	**	67,658	**	**	67,097	**
Monroe ^	14	755,160	*	12	752,035	*
Montgomery	**	49,558	**	0	49,623	*
Nassau	25	1,390,907	1.8	20	1,383,726	1.4
New York	132	1,576,876	8.4	117	1,596,273	7.3
Niagara	**	211,653	**	**	210,880	**
Oneida	12	230,274	*	**	228,846	**
Onondaga	39	473,236	8.2	12	468,249	*
Ontario	**	112,508	**	0	112,707	*
Orange	23	404,525	5.7	25	405,941	6.2
Orleans	0	40,191	*	**	39,318	**

County	2021			2022		
	Deaths	Population	Crude rate per 100,000 population	Deaths	Population	Crude rate per 100,000 population
Oswego	**	117,387	**	**	118,287	**
Otsego	**	58,123	**	0	60,636	*
Putnam	**	97,936	**	**	98,045	**
Queens	104	2,331,143	4.5	123	2,278,029	5.4
Rensselaer	**	160,232	**	**	159,853	**
Richmond	52	493,494	10.5	37	491,133	7.5
Rockland	11	339,227	*	**	339,022	**
Saratoga	**	237,359	**	**	238,797	**
Schenectady	**	158,089	**	**	160,093	**
Schoharie	**	29,863	**	0	30,063	*
Schuyler	0	17,752	*	0	17,650	*
Seneca	0	33,688	*	0	32,882	*
St. Lawrence	**	108,051	**	0	107,733	*
Steuben	**	92,948	**	**	92,599	**
Suffolk	40	1,526,344	2.6	25	1,525,465	1.6
Sullivan	**	79,806	**	**	79,658	**
Tioga	0	47,980	*	0	47,772	*
Tompkins	0	105,162	*	**	104,777	**
Ulster	**	182,951	**	**	182,319	**
Warren	0	65,618	*	0	65,599	*
Washington	0	60,956	*	**	60,841	**
Wayne	0	90,923	*	0	91,125	*
Westchester	30	997,895	3.0	20	990,427	2.0
Wyoming	0	40,491	*	0	39,666	*
Yates	0	24,613	*	0	24,451	*

*: Crude rates are unreliable when there are fewer than 20 deaths and are therefore not shown.
**: Counts and crude rates are suppressed when there are fewer than 10 deaths.
^ For the purpose of presenting comparison among counties with more complete data, statistics for 2022 for Monroe County are provided by New York State Vital Statistics, as of July 2024.
Data source: Data for New York State excluding New York City in 2021 are provided by New York State Vital Statistics, as of April 2023; all other data are from CDC WONDER, accessed July 2024.
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Data Table 1.5 Overdose deaths involving any opioid, by place of death, New York State, 2022

Place of death	Deaths (%)
Inpatient (medical facility)	328 (6.1%)
Outpatient or ER (medical facility)	721 (13.5%)
Dead on arrival (medical facility)	61 (1.1%)
Decedent's home	3,451 (64.4%)
Nursing home/long term care	16 (0.3%)
Other	783 (14.6%)

The number of deaths occurring in "Hospice facility" is suppressed.
No known deaths occurred in "Medical Facility (Status unknown)" and "Place of death unknown".
Data source: CDC WONDER, accessed July 2024.
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Data Table 1.6 Overdose deaths involving any opioid and overdose deaths involving any opioid and benzodiazepines, crude rate per 100,000 population, New York State, 2010-2022

Year	Any opioid		Any opioid and benzodiazepines	
	Deaths	Crude rate per 100,000 population	Deaths	Crude rate per 100,000 population
2022	5,361	27.2	859	4.4
2021	5,017	25.3	882	4.4
2020	4,233	21.9	893	4.6
2019	2,939	15.1	687	3.5
2018	2,991	15.3	821	4.2
2017	3,224	16.2	874	4.4
2016	3,009	15.2	843	4.3
2015	2,166	10.9	636	3.2
2014	1,739	8.8	538	2.7
2013	1,681	8.6	473	2.4
2012	1,530	7.8	427	2.2
2011	1,356	7.0	358	1.8
2010	1,074	5.5	328	1.7

Multiple cause of death ICD-10 definitions: Any opioid – 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); Any opioid and benzodiazepines – 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) AND T42.4 (Benzodiazepines).
Data source: Data for New York State excluding New York City in 2021 are provided by New York State Vital Statistics, as of April 2023; all other data are from CDC WONDER, accessed July 2024.
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Data Table 1.7 Overdose deaths involving cocaine with and without synthetic opioids other than methadone* present, New York State, 2015-2022

Year	Overdose deaths involving cocaine (T40.5)		Overdose deaths involving cocaine (T40.5), *with* synthetic opioids other than methadone present		Overdose deaths involving cocaine (T40.5), *without* synthetic opioids other than methadone present	
	Count	Crude rate per 100,000 population	Count	Crude rate per 100,000 population	Count	Crude rate per 100,000 population
2022	2,869	14.6	2,265	11.5	604	3.1
2021	2,309	11.6	1,804	9.1	505	2.5
2020	1,765	9.1	1,350	7.0	415	2.1
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

* 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: Data for New York State excluding New York City in 2021 are provided by New York State Vital Statistics, as of April 2023; all other data are from CDC WONDER, accessed July 2024.
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Data Table 1.8 Overdose deaths involving heroin (T40.1), synthetic opioids other than methadone (T40.4)^, and commonly prescribed opioids (T40.2 and T40.3)[#], crude rate per 100,000, by region, year, and age group, New York State, 2015-2022

	Year	Heroin			Synthetic opioids other than methadone			Commonly prescribed opioids		
		Age group			Age group			Age group		
		0-24	*25-44*	*45+*	*0-24*	*25-44*	*45+*	*0-24*	*25-44*	*45+*
New York City	2022	*	7.6	14.3	3.4	32.7	39.2	*	7.4	13.3
	2021	**	9.4	13.5	2.7	28.4	34.3	*	7.5	13.6
	2020	1.3	10.3	13.0	3.6	22.3	25.1	1.1	7.6	12.1
	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
	2015	1.1	6.0	5.3	*	2.0	1.9	*	4.2	5.6
New York State excl. New York City	2022	**	4.1	2.0	4.2	50.2	22.6	0.7	9.7	5.9
	2021	*	6.4	2.6	4.9	51.4	19.6	*	11.8	6.1
	2020	1.2	11.4	4.0	5.5	46.4	15.8	0.8	12.3	5.4
	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
	2016	3.0	18.5	4.2	4.3	25.0	6.0	1.8	11.7	6.2
	2015	2.9	15.5	3.6	2.1	11.7	3.0	1.3	9.1	5.9

^ 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.
[#]Commonly prescribed opioids are identified by ICD-10 codes T40.2 (Other opioids, e.g., hydrocodone, oxycodone), T40.3 (Methadone).
*: Rates are unreliable when there are fewer than 20 deaths and are therefore not shown.
**: Rates are suppressed for death counts fewer than 10.
Data source: Data for New York State excluding New York City in 2021 are provided by New York State Vital Statistics, as of April 2023; all other data are from CDC WONDER, accessed July 2024.
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Data Table 1.9 Overdose deaths involving any opioid, crude rate per 100,000 population, by subpopulation, New York State, 2018-2022

Group	Characteristic		Year				
			2018	2019	2020	2021	2022
Total	New York State	Deaths	2,991	2,939	4,233	5,017	5,361
		Rate	15.3	15.1	21.9	25.3	27.2
Region	New York City	Deaths	1,054	1,177	1,693	2,153	2,408
		Rate	12.5	14.1	20.5	25.4	28.9
	NYS excl. NYC	Deaths	1,937	1,762	2,540	2,864	2,953
		Rate	17.4	15.8	22.9	25.2	26.0
Gender	Male	Deaths	2,165	2,130	3,133	3,665	4,010
		Rate	22.8	22.5	33.4	37.8	41.7
	Female	Deaths	826	809	1,100	1,352	1,351
		Rate	8.2	8.1	11.1	13.3	13.4
Age group	Age 18-24	Deaths	214	179	275	228	220
		Rate	11.9	10.2	16.0	13.1	12.2
	Age 25-44	Deaths	1,465	1,436	2,038	2,311	2,378
		Rate	27.6	27.1	38.7	43.2	44.9
	Age 45-64	Deaths	1,152	1,153	1,686	2,169	2,339
		Rate	22.4	22.7	33.8	42.1	46.6
	Age 65+	Deaths	150	162	221	293	404
		Rate	4.7	4.9	6.6	8.4	11.3
Race and ethnicity	White NH	Deaths	1,978	1,784	2,507	2,681	2,635
		Rate	18.3	16.6	23.6	24.7	24.7
	Black NH	Deaths	361	434	784	1,064	1,313
		Rate	12.7	15.4	28.1	37.2	46.3
	AI/AN NH	Deaths	14	17	11	18	66
		Rate	*	*	*	*	3.6
	Asian NH	Deaths	31	32	47	52	27
		Rate	1.8	1.9	2.7	2.9	45.6
	NH / Other PI NH	Deaths	0	**	**	0	0
		Rate	*	**	**	*	*
	More than one race NH	Deaths	**	15	29	29	30
		Rate	**	*	8.0	7.7	7.8
	Hispanic	Deaths	541	601	793	1,091	1,198
		Rate	14.4	16.0	21.2	28.2	31.0

White NH = White non-Hispanic; Black NH = Black non-Hispanic; AI/AN NH = American Indian or Alaska Native non-Hispanic; Asian NH = Asian non-Hispanic; NH/Other PI NH = Native Hawaiian or Other Pacific Islander non-Hispanic; NYS excl. NYC = New York State excluding New York City

*: Crude rates are unreliable when there are fewer than 20 deaths and are therefore not shown.

**: Counts and crude rates are suppressed when there are fewer than 10 deaths.

Data source: Data for New York State excluding New York City in 2021 are provided by New York State Vital Statistics, as of April 2023; all other data are from CDC WONDER, accessed July 2024.

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Data Table 1.10 Overdose deaths involving heroin, crude rate per 100,000 population, by subpopulation, New York State, 2018-2022

Group	Characteristic		Year				
			2018	2019	2020	2021	2022
Total	New York State	Deaths	1,243	1,145	1,275	1,047	920
		Rate	6.4	5.9	6.6	5.3	4.7
Region	New York City	Deaths	554	604	725	719	697
		Rate	6.6	7.2	8.8	8.5	8.4
	NYS excl. NYC	Deaths	689	541	550	328	223
		Rate	6.2	4.9	5.0	2.9	2.0
Gender	Male	Deaths	973	878	1,005	806	716
		Rate	10.3	9.3	10.7	8.3	7.4
	Female	Deaths	270	267	270	241	204
		Rate	2.7	2.7	2.7	2.4	2.0
Age group	Age 18-24	Deaths	91	57	70	**	23
		Rate	5.1	3.2	4.1	**	1.3
	Age 25-44	Deaths	623	556	572	419	304
		Rate	11.7	10.5	10.9	7.8	5.7
	Age 45-64	Deaths	477	466	555	523	467
		Rate	9.3	9.2	11.1	10.2	9.3
	Age 65+	Deaths	47	64	77	77	125
		Rate	1.5	1.9	2.3	2.2	3.5
Race and ethnicity	White NH	Deaths	765	626	678	458	313
		Rate	7.1	5.8	6.4	4.2	2.9
	Black NH	Deaths	157	179	246	237	279
		Rate	5.5	6.4	8.8	8.3	9.8
	AI/AN NH	Deaths	**	**	**	**	**
		Rate	**	**	**	**	**
	Asian NH	Deaths	13	11	14	14	**
		Rate	*	*	*	*	**
	NH / Other PI NH	Deaths	0	**	**	0	0
		Rate	*	**	**	*	*
	More than one race NH	Deaths	**	**	10	**	**
		Rate	**	**	*	**	**
	Hispanic	Deaths	268	292	293	310	288
		Rate	7.1	7.8	7.8	8.0	7.4

White NH = White non-Hispanic; Black NH = Black non-Hispanic; AI/AN NH = American Indian or Alaska Native non-Hispanic; Asian NH = Asian non-Hispanic; NH/Other PI NH = Native Hawaiian or Other Pacific Islander non-Hispanic; NYS excl. NYC = New York State excluding New York City

*: Crude rates are unreliable when there are fewer than 20 deaths and are therefore not shown.

**: Counts and crude rates are suppressed when there are fewer than 10 deaths.

Data source: Data for New York State excluding New York City in 2021 are provided by New York State Vital Statistics, as of April 2023; all other data are from CDC WONDER, accessed July 2024.

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Data Table 2.1 Percentage of 911 EMS dispatches reported electronically, by region, New York State, 2017-2023

Year	Region	EMS response reported electronically	Percentage
2023	New York City	2,009,339	100.0%
	NYS excl. NYC	2,200,855	99.8%
	New York State	4,210,194	99.9%
2022	New York City	2,011,034	100.0%
	NYS excl. NYC	2,230,157	99.8%
	New York State	4,241,191	99.9%
2021	New York City	1,938,245	100.0%
	NYS excl. NYC	1,917,529	99.7%
	New York State	3,855,774	99.8%
2020	New York City	1,800,785	99.7%
	NYS excl. NYC	1,810,273	98.2%
	New York State	3,611,058	98.9%
2019	New York City	1,929,152	99.0%
	NYS excl. NYC	1,809,925	94.9%
	New York State	3,739,077	97.0%
2018	New York City	1,820,448	95.5%
	NYS excl. NYC	1,813,064	93.2%
	New York State	3,633,512	94.3%
2017	New York City	1,733,487	93.2%
	NYS excl. NYC	1,696,237	88.9%
	New York State	3,429,724	91.0%

NYS excl. NYC = New York State excluding New York City
Data source: NYSDOH, Bureau of Emergency Medical Services; Data as of April 2024.
Data from previous annual reports might appear lower than the current annual report due to a lag in data reporting.
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Data Table 2.2 Unique naloxone administrations by EMS agencies, by region, New York State, 2019-2023

Year/Quarter	Region		
	New York City	NYS excluding NYC	New York State
2023	**13,212**	**8,261**	**21,473**
Q1	2,965	1,892	4,857
Q2	3,602	2,184	5,786
Q3	3,812	2,165	5,977
Q4	2,833	2,020	4,853
2022	**12,924**	**8,765**	**21,689**
Q1	2,630	1,899	4,529
Q2	3,081	2,128	5,209
Q3	3,942	2,488	6,430
Q4	3,271	2,250	5,521
2021	**11,143**	**8,777**	**19,920**
Q1	2,229	2,048	4,277
Q2	2,873	2,201	5,074
Q3	3,341	2,473	5,814
Q4	2,700	2,055	4,755
2020	**8,514**	**8,520**	**17,026**
Q1	1,802	1,770	3,572
Q2	2,009	2,271	4,280
Q3	2,523	2,403	4,926
Q4	2,180	2,076	4,248
2019	**6,454**	**6,406**	**12,860**
Q1	1,446	1,580	3,026
Q2	1,655	1,586	3,241
Q3	1,818	1,740	3,558
Q4	1,535	1,500	3,035

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 April 2024.
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Data Table 2.3 Unique naloxone administrations by EMS agencies, by age group, gender, and incident location type*, New York State, 2023

Subpopulation	Number	Percentage
Age		
Age 0-17	162	0.8%
Age 18-24	870	4.1%
Age 25-44	8,357	40.5%
Age 45-64	9,081	42.3%
Age 65+	2,865	12.5%
Unknown	138	0.6%
Gender		
Male	15,424	71.8%
Female	5,508	25.7%
Unknown	541	2.5%
Incident location type*		
Public	10,657	49.6%
Residential	10,524	49.0%
Unknown	292	1.4%

* Incident location type is incomplete for Suffolk and Richmond counties.
Data source: NYSDOH, Bureau of Emergency Medical Services; Data as of April 2024.
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Data Table 2.4 Unique naloxone administrations by EMS agencies, by incident day of week, New York State, 2023

Day of week	Number of unique naloxone administrations	Percentage
Sunday	2,933	13.7%
Monday	2,890	13.5%
Tuesday	2,990	13.9%
Wednesday	2,957	13.8%
Thursday	3,099	14.4%
Friday	3,366	15.7%
Saturday	3,238	15.1%
Total	21,473	100.0%

Data source: NYSDOH, Bureau of Emergency Medical Services; Data as of April 2024.
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Data Table 2.5 Unique naloxone administrations by EMS providers documented on pre-hospital care reports, crude rate per 1,000 unique 911 EMS dispatches, by county, New York State, 2023

County	Number of unique naloxone administrations (numerator)	Unique EMS dispatch volume (denominator)	Crude rate per 1,000
Albany	513	80,419	6.4
Allegany	24	7,884	3.0
Broome	187	37,860	4.9
Cattaraugus	97	14,343	6.8
Cayuga	50	16,116	3.1
Chautauqua	168	19,636	8.6
Chemung	111	17,587	6.3
Chenango	30	5,880	5.1
Clinton	57	10,182	5.6
Columbia	39	12,333	3.2
Cortland	37	9,333	4.0
Delaware	40	6,878	5.8
Dutchess^	255	48,749	5.2
Erie	614	143,072	4.3
Essex	16	5,239	3.1
Franklin	44	7,795	5.6
Fulton	72	12,174	5.9
Genesee	44	12,510	3.5
Greene	22	9,825	2.2
Hamilton	s	857	s
Herkimer	65	11,687	5.6
Jefferson	87	18,777	4.6
Lewis	11	3,373	3.3
Livingston	19	8,080	2.4
Madison	39	10,564	3.7
Monroe	807	141,317	5.7
Montgomery	69	12,632	5.5
Nassau	597	197,596	3.0
Niagara	159	36,383	4.4
Oneida	359	50,117	7.2
Onondaga	866	102,202	8.5
Ontario	64	19,524	3.3
Orange^	283	44,481	6.4
Orleans	16	4,562	3.5
Oswego	100	27,006	3.7

County	Number of unique naloxone administrations (numerator)	Unique EMS dispatch volume (denominator)	Crude rate per 1,000
Otsego	28	8,140	3.4
Putnam	28	10,333	2.7
Rensselaer	220	24,218	9.1
Rockland^	77	37,755	2.0
Saratoga	117	30,126	3.9
Schenectady	260	37,983	6.8
Schoharie	12	3,498	3.4
Schuyler	11	3,126	3.5
Seneca	24	3,940	6.1
St. Lawrence	62	16,813	3.7
Steuben	66	18,908	3.5
Suffolk*	368	124,331	3.0
Sullivan^	39	7,580	5.1
Tioga	15	5,148	2.9
Tompkins	79	16,979	4.7
Ulster^	133	25,770	5.2
Warren	62	11,942	5.2
Washington	73	8,972	8.1
Wayne	68	14,276	4.8
Westchester^	542	158,166	3.4
Wyoming	s	3,737	s
Yates	s	3,421	s
NYS excl. NYC	8,261	1,742,135	4.7
Bronx	3,618	413,288	8.8
Kings	3,388	540,676	6.3
New York	3,730	416,917	8.9
Queens	1,976	385,685	5.1
Richmond	500	98,585	5.1
New York City	13,212	1,855,151	7.1
New York State	21,473	3,597,286	6.0

s: Data do not meet reporting criteria.
* Dispatch data for Suffolk County were incomplete.
^ Data for this county may be incomplete because of a known reporting issue under review. Please interpret with caution.
Data source: NYSDOH, Bureau of Emergency Medical Services; Data as of April 2024.
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Data Table 2.6 Naloxone administration reports by law enforcement and community programs, by quarter, New York State, 2023

2023	Quarter 1	Quarter 2	Quarter 3	Quarter 4
	January - March	April - June	July - September	October - December
Law Enforcement	531	460	500	384
Community Programs	651	672	663	605

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 April 2024.
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Data Table 2.7 Naloxone administration reports by law enforcement and community programs, by age group, New York State, 2023

Age Group	Law Enforcement	Community Programs
< 18 years	17	16
18-24 years	138	152
25-44 years	1,013	1,473
45-64 years	528	767
65+ years	67	94
Unknown	112	89

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 April 2024.
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Data Table 2.8 Naloxone administration reports by law enforcement and community programs, by gender, New York State, 2023

Gender	Law Enforcement	Community Programs
Female	500	591
Male	1,338	1,875
Other*, Missing, or Unknown	37	125

* Other includes "Transgender", "Intersex", "Gender Non-conforming" and "Other, not specified"
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 April 2024.
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EMS Suspected Opioid Overdose

Data Table 2.9 Suspected opioid overdose encounters with and without* reported naloxone administration on scene, New York State, 2021 to 2023

Year	Naloxone	Number	Percentage
2023	Administration	18,254	67.6%
	No administration	8,763	32.4%
	Total	**27,017**	100.0%
2022	Administration	18,084	65.7%
	No administration	9,464	34.3%
	Total	**27,548**	100.0%
2021	Administration	16,537	64.9%
	No administration	8,937	35.1%
	Total	**25,474**	100.0%

*These include unique naloxone administrations reported in the medication administered structured field and may include bystander and administrations prior to EMS arrival.
Data source: NYSDOH, Bureau of Emergency Medical Services; Data as of April 2024.
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Data Table 2.10 Suspected opioid overdose encounters with and without* reported naloxone administration by patient disposition, New York State, 2023

Disposition	Suspected Opioid Overdose			
	***Without* Naloxone Administration**		***With* Naloxone Administration**	
	Number	Percent	Number	Percent
Treated and transported/transferred	6,554	73.8%	14,986	82.6%
Treated and released per protocol	251	2.8%	713	3.9%
Refused transport	866	9.8	1,132	6.2%
Other/unknown	920	10.4%	1,275	7.0%
Dead on scene	285	3.2%	35	0.2%

*These include unique naloxone administrations reported in the medication administered structured field and may include bystander and administrations prior to EMS arrival.
Data source: NYSDOH, Bureau of Emergency Medical Services; Data as of April 2024.
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Data Table 2.11 Suspected opioid overdoses by EMS providers documented on pre-hospital care reports, crude rate per 1,000 unique 911 EMS dispatches, by county, New York State, 2023

County	Number of suspected opioid overdose (numerator)	Unique EMS dispatch volume (denominator)	Crude rate per 1,000
Albany	700	80,419	8.7
Allegany	34	7,884	4.3
Broome	436	37,860	11.5
Cattaraugus	138	14,343	9.6
Cayuga	89	16,116	5.5
Chautauqua	217	19,636	11.1
Chemung	132	17,587	7.5
Chenango	51	5,880	8.7
Clinton	78	10,182	7.7
Columbia	57	12,333	4.6
Cortland	71	9,333	7.6
Delaware	43	6,878	6.3
Dutchess^	438	48,749	9.0
Erie	1,232	143,072	8.6
Essex	35	5,239	6.7
Franklin	40	7,795	5.1
Fulton	101	12,174	8.3
Genesee	77	12,510	6.2
Greene	54	9,825	5.5
Hamilton	s	857	s
Herkimer	63	11,687	5.4
Jefferson	147	18,777	7.8
Lewis	13	3,373	3.9
Livingston	38	8,080	4.7
Madison	62	10,564	5.9
Monroe	1,423	141,317	10.1
Montgomery	92	12,632	7.3
Nassau	863	197,596	4.4
Niagara	305	36,383	8.4
Oneida	365	50,117	7.3
Onondaga	1,280	102,202	12.5
Ontario	95	19,524	4.9
Orange^	373	44,481	8.4
Orleans	27	4,562	5.9
Oswego	181	27,006	6.7

County	Number of suspected opioid overdose (numerator)	Unique EMS dispatch volume (denominator)	Crude rate per 1,000
Otsego	54	8,140	6.6
Putnam	59	10,333	5.7
Rensselaer	246	24,218	10.2
Rockland^	106	37,755	2.8
Saratoga	201	30,126	6.7
Schenectady	357	37,983	9.4
Schoharie	26	3,498	7.4
Schuyler	18	3,126	5.8
Seneca	36	3,940	9.1
St. Lawrence	102	16,813	6.1
Steuben	88	18,908	4.7
Suffolk*	572	124,331	4.6
Sullivan^	62	7,580	8.2
Tioga	30	5,148	5.8
Tompkins	274	16,979	16.1
Ulster^	230	25,770	8.9
Warren	83	11,942	7.0
Washington	60	8,972	6.7
Wayne	101	14,276	7.1
Westchester^	848	158,166	5.4
Wyoming	16	3,737	4.3
Yates	s	3,421	s
NYS excl. NYC	12,928	1,742,135	7.4
Bronx	3,557	413,288	8.6
Kings	3,764	540,676	7.0
New York	4,129	416,917	9.9
Queens	2,152	385,685	5.6
Richmond	487	98,585	4.9
New York City	14,089	1,855,151	7.6
New York State	27,017	3,597,286	7.5

s: Data do not meet reporting criteria.
* Dispatch data for Suffolk County were incomplete.
^ Data for this county may be incomplete because of a known reporting issue under review. Please interpret with caution.
Data source: NYSDOH, Bureau of Emergency Medical Services; Data as of April 2024.
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Data Table 2.12 Naloxone administration reports by administrator type, New York State, 2023

Type	Naloxone Administration Reports
EMS	21,473
Law Enforcement	1,875
Community Opioid Overdose Prevention (COOP) Programs	2,591

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 April 2024; New York State Department of Health AIDS Institute; Data as of April 2024.
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Data Table 3.1 Overdose deaths involving opioids and nonfatal opioid-related hospital events, crude rate per 100,000 population, by subpopulation, New York State, 2021 and 2022

Group	Characteristic	2021		2022	
		Numerator	Crude rate per 100,000 population	Numerator	Crude rate per 100,000 population
Age group	Age 0-17	194	4.8	233	5.8
	Age 18-24	2,707	148.3	2,344	130.0
	Age 25-44	23,134	431.8	22,570	425.8
	Age 45-64	14,918	291.1	16,583	330.3
	Age 65+	3,128	89.9	3,618	101.5
Gender	Male	32,602	335.4	33,452	347.5
	Female	11,473	113.2	11,883	118.2
Race and ethnicity	White NH	20,665	191.4	18,471	173.1
	Black NH	7,948	275.4	8,686	306.1
	Asian/PI NH	271	14.7	288	15.5
	Hispanic	8,586	220.5	9,343	241.6
Region	New York City	20,971	247.9	24,239	290.8
	NYS Excl NYC	23,110	202.7	21,109	186.1
Total	New York State	44,081	222.0	45,348	230.5

White NH = White non-Hispanic; Black NH = Black non-Hispanic; Asian/PI NH= Asian or Pacific Islander non-Hispanic; NYS excl. NYC = New York State excluding New York City

Data source: Death data for New York State excluding New York City in 2021 are provided by New York State Vital Statistics, as of April 2023; all other death data are from CDC WONDER, accessed July 2024; ED Visits and Hospital Discharges from New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS), as of March 2024.

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Data Table 3.2 Overdose deaths involving opioids and nonfatal opioid-related hospital events, crude rate per 100,000 population, by county, New York State, 2022

County	Numerator	Population	Crude rate per 100,000 population
Albany	698	315,811	221.0
Allegany	68	46,694	145.6
Bronx	7,504	1,379,946	543.8
Broome	575	197,117	291.7
Cattaraugus	212	76,439	277.3
Cayuga	104	74,998	138.7
Chautauqua	492	126,027	390.4
Chemung	187	81,426	229.7
Chenango	74	46,458	159.3
Clinton	86	78,753	109.2
Columbia	99	61,286	161.5
Cortland	76	46,126	164.8
Delaware	74	44,740	165.4
Dutchess	849	297,545	285.3
Erie	1,923	950,312	202.4
Essex	47	36,910	127.3
Franklin	59	46,373	127.2
Fulton	77	52,669	146.2
Genesee	91	57,535	158.2
Greene	112	48,061	233.0
Hamilton	0	5,118	0.0*
Herkimer	48	59,822	80.2
Jefferson	162	116,637	138.9
Kings	6,038	2,590,516	233.1
Lewis	19	26,699	71.2
Livingston	74	61,516	120.3
Madison	70	67,097	104.3
Monroe	1,574	752,035	209.3
Montgomery	46	49,623	92.7
Nassau	1,959	1,383,726	141.6
New York	5,890	1,596,273	369.0
Niagara	584	210,880	276.9
Oneida	300	228,846	131.1
Onondaga	884	468,249	188.8
Ontario	131	112,707	116.2

County	Numerator	Population	Crude rate per 100,000 population
Orange	832	405,941	205.0
Orleans	63	39,318	160.2
Oswego	158	118,287	133.6
Otsego	79	60,636	130.3
Putnam	99	98,045	101.0
Queens	3,665	2,278,029	160.9
Rensselaer	292	159,853	182.7
Richmond	1,143	491,133	232.7
Rockland	481	339,022	141.9
Saratoga	251	238,797	105.1
Schenectady	414	160,093	258.6
Schoharie	38	30,063	126.4
Schuyler	11	17,650	62.3
Seneca	34	32,882	103.4
St. Lawrence	186	107,733	172.6
Steuben	128	92,599	138.2
Suffolk	3,421	1,525,465	224.3
Sullivan	281	79,658	352.8
Tioga	31	47,772	64.9
Tompkins	165	104,777	157.5
Ulster	484	182,319	265.5
Warren	115	65,599	175.3
Washington	82	60,841	134.8
Wayne	114	91,125	125.1
Westchester	1,540	990,427	155.5
Wyoming	40	39,666	100.8
Yates	18	24,451	73.6

*: Fewer than 10 events in the numerator, therefore the rate is unstable.
Data sources: Death data are from CDC WONDER, accessed July 2024; ED Visits and Hospital Discharges from New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS), as of March 2024.
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Data Table 3.3 Hospital discharges involving opioid use (including overdose and disorders), crude rate per 100,000 population, by subpopulation, New York State, 2021 and 2022

Group	Characteristic	2021		2022	
		Hospital discharges	Crude rate per 100,000 population	Hospital discharges	Crude rate per 100,000 population
Age group	Age 0-17	58	1.4	73	1.8
	Age 18-24	725	39.7	626	34.7
	Age 25-44	6,819	127.3	6,246	117.8
	Age 45-64	4,239	82.7	4,727	94.2
	Age 65+	1,037	29.8	1,154	32.4
Gender	Male	9,218	94.8	9,175	95.3
	Female	3,658	36.1	3,650	36.3
Race and ethnicity	White NH	6,439	59.7	5,527	51.8
	Black NH	2,191	75.9	2,468	87.0
	Asian/PI NH	73	4.0	91	4.9
	Hispanic	2,682	68.9	2,950	76.3
Region	New York City	5,214	61.6	6,155	73.8
	NYS Excl NYC	7,664	67.2	6,671	58.8
Total	New York State	12,878	64.9	12,826	65.2

White NH = White non-Hispanic; Black NH = Black non-Hispanic; Asian/PI NH= Asian or Pacific Islander non-Hispanic; NYS excl. NYC = New York State excluding New York City
Data source: New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS); Data as of March 2024.
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Data Table 3.4 Hospital discharges involving opioid use (including overdose and disorders), crude rate per 100,000 population, by county, New York State, 2022

County	Hospital Discharges	Population	Crude rate per 100,000 population
Albany	161	315,811	51.0
Allegany	16	46,694	34.3
Bronx	2,561	1,379,946	185.6
Broome	147	197,117	74.6
Cattaraugus	46	76,439	60.2
Cayuga	24	74,998	32.0
Chautauqua	109	126,027	86.5
Chemung	44	81,426	54.0
Chenango	7	46,458	15.1*
Clinton	24	78,753	30.5
Columbia	11	61,286	17.9
Cortland	18	46,126	39.0
Delaware	10	44,740	22.4
Dutchess	351	297,545	118.0
Erie	738	950,312	77.7
Essex	6	36,910	16.3*
Franklin	31	46,373	66.8
Fulton	23	52,669	43.7
Genesee	32	57,535	55.6
Greene	33	48,061	68.7
Hamilton	0	5,118	0.0
Herkimer	6	59,822	10.0*
Jefferson	76	116,637	65.2
Kings	1,051	2,590,516	40.6
Lewis	6	26,699	22.5*
Livingston	13	61,516	21.1
Madison	13	67,097	19.4
Monroe	385	752,035	51.2
Montgomery	22	49,623	44.3
Nassau	724	1,383,726	52.3
New York	1,336	1,596,273	83.7
Niagara	200	210,880	94.8
Oneida	41	228,846	17.9
Onondaga	276	468,249	58.9
Ontario	37	112,707	32.8

County	Hospital Discharges	Population	Crude rate per 100,000 population
Orange	300	405,941	73.9
Orleans	11	39,318	28.0
Oswego	42	118,287	35.5
Otsego	6	60,636	9.9*
Putnam	30	98,045	30.6
Queens	968	2,278,029	42.5
Rensselaer	58	159,853	36.3
Richmond	239	491,133	48.7
Rockland	250	339,022	73.7
Saratoga	46	238,797	19.3
Schenectady	42	160,093	26.2
Schoharie	6	30,063	20.0*
Schuyler	0	17,650	0.0*
Seneca	10	32,882	30.4*
St. Lawrence	114	107,733	105.8
Steuben	21	92,599	22.7
Suffolk	1,133	1,525,465	74.3
Sullivan	81	79,658	101.7
Tioga	**	47,772	**
Tompkins	17	104,777	16.2
Ulster	141	182,319	77.3
Warren	14	65,599	21.3
Washington	16	60,841	26.3
Wayne	20	91,125	21.9
Westchester	665	990,427	67.1
Wyoming	10	39,666	25.2
Yates	**	24,451	**

*: 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 March 2024.
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Data Table 3.5 Hospital discharges involving heroin overdose, crude rate per 100,000 population, by subpopulation, New York State, 2021 and 2022

Group	Characteristic	2021		2022	
		Hospital discharges	Crude rate per 100,000 population	Hospital discharges	Crude rate per 100,000 population
Age group	Age 0-17	**	**	**	**
	Age 18-24	36	2.0	29	1.6
	Age 25-44	501	9.4	378	7.1
	Age 45-64	448	8.7	508	10.1
	Age 65+	145	4.2	148	4.2
Gender	Male	878	9.0	801	8.3
	Female	257	2.5	264	2.6
Race and ethnicity	White NH	410	3.8	325	3.0
	Black NH	229	7.9	244	8.6
	Asian/PI NH	**	**	**	**
	Hispanic	268	6.9	223	5.8
Region	New York City	631	7.5	664	8.0
	NYS Excl NYC	504	4.4	401	3.5
Total	New York State	1,135	5.7	1,065	5.4

White NH = White non-Hispanic; Black NH = Black non-Hispanic; Asian/PI NH= Asian or Pacific Islander non-Hispanic; NYS excl. NYC = New York State excluding New York City
**: Data do not meet reporting criteria.
Data source: New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS); Data as of March 2024.
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Data Table 3.6 Hospital discharges involving heroin overdose, crude rate per 100,000 population, by county, New York State, 2021 and 2022

County	2021		2022	
	Hospital discharges	Crude rate per 100,000 population	Hospital discharges	Crude rate per 100,000 population
Albany	17	5.4	19	6.0
Allegany	0	0.0*	0	0.0*
Bronx	248	17.5	219	15.9
Broome	14	7.0	10	5.1
Cattaraugus	**	**	**	**
Cayuga	**	**	**	**
Chautauqua	**	**	0	0.0*
Chemung	**	**	6	7.4*
Chenango	0	0.0*	**	**
Clinton	**	**	**	**
Columbia	**	**	**	**
Cortland	**	**	**	**
Delaware	**	**	0	0.0*
Dutchess	15	5.0	13	4.4
Erie	34	3.6	24	2.5
Essex	**	**	**	**
Franklin	**	**	**	**
Fulton	**	**	**	**
Genesee	**	**	**	**
Greene	**	**	**	**
Hamilton	0	0.0*	0	*
Herkimer	0	0.0*	0	0.0*
Jefferson	6	5.1*	7	6.0*
Kings	157	6.0	175	6.8
Lewis	0	0.0*	0	0.0*
Livingston	**	**	0	0.0*
Madison	0	0.0*	**	**
Monroe	40	5.3	29	3.9
Montgomery	**	**	**	**
Nassau	63	4.5	46	3.3
New York	122	7.7	157	9.8
Niagara	**	**	7	3.3*
Oneida	11	4.8	12	5.2
Onondaga	34	7.2	29	6.2
Ontario	**	**	**	**

County	2021		2022	
	Hospital discharges	Crude rate per 100,000 population	Hospital discharges	Crude rate per 100,000 population
Orange	19	4.7	19	4.7
Orleans	**	**	0	0.0*
Oswego	6	5.1*	**	**
Otsego	**	**	0	0.0*
Putnam	**	**	6	6.1*
Queens	82	3.5	88	3.9
Rensselaer	8	5.0*	**	**
Richmond	22	4.5	25	5.1
Rockland	**	**	10	2.9
Saratoga	8	3.4*	7	2.9*
Schenectady	8	5.0*	10	6.2
Schoharie	**	**	0	0.0*
Schuyler	0	0.0*	0	0.0*
Seneca	**	**	**	**
St. Lawrence	**	**	**	**
Steuben	**	**	**	**
Suffolk	87	5.7	58	3.8
Sullivan	8	10.0*	**	**
Tioga	0	0.0*	**	**
Tompkins	**	**	**	**
Ulster	13	7.1	12	6.6
Warren	**	**	**	**
Washington	**	**	**	**
Wayne	**	**	**	**
Westchester	36	3.6	31	3.1
Wyoming	0	0.0*	0	0.0*
Yates	0	0.0*	0	0.0*

*: 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 March 2024.
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Data Table 3.7 All emergency department visits (including outpatients and admitted patients) involving any opioid overdose, crude rate per 100,000 population, by subpopulation, New York State, 2021 and 2022

Group	Characteristic	2021		2022	
		Emergency department visits	Crude rate per 100,000 population	Emergency department visits	Crude rate per 100,000 population
Age group	Age 0-17	129	3.2	128	3.2
	Age 18-24	980	53.7	763	42.3
	Age 25-44	6,321	118.0	5,964	112.5
	Age 45-64	4,907	95.8	5,261	104.8
	Age 65+	1,479	42.5	1,651	46.3
Gender	Male	9,998	102.9	9,931	103.2
	Female	3,815	37.6	3,828	38.1
Race and ethnicity	White NH	6,578	60.9	5,674	53.2
	Black NH	2,511	87.0	2,760	97.3
	Asian/PI NH	65	3.5	64	3.4
	Hispanic	2,247	57.7	2,303	59.6
Region	New York City	5,957	70.4	6,802	81.6
	NYS Excl NYC	7,859	68.9	6,965	61.4
Total	New York State	13,816	69.6	13,767	70.0

White NH = White non-Hispanic; Black NH = Black non-Hispanic; Asian/PI NH= Asian or Pacific Islander non-Hispanic; NYS excl. NYC = New York State excluding New York City
Data source: New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS); Data as of March 2024.
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Data Table 3.8 All emergency department visits (including outpatient and admitted patients) involving any opioid overdose, crude rate per 100,000 population, by county, New York State, 2022

County	Emergency department visits	Population	Crude rate per 100,000 population
Albany	227	315,811	71.9
Allegany	18	46,694	38.5
Bronx	2,053	1,379,946	148.8
Broome	217	197,117	110.1
Cattaraugus	54	76,439	70.6
Cayuga	43	74,998	57.3
Chautauqua	203	126,027	161.1
Chemung	73	81,426	89.7
Chenango	32	46,458	68.9
Clinton	29	78,753	36.8
Columbia	29	61,286	47.3
Cortland	45	46,126	97.6
Delaware	28	44,740	62.6
Dutchess	230	297,545	77.3
Erie	586	950,312	61.7
Essex	8	36,910	21.7*
Franklin	15	46,373	32.3
Fulton	35	52,669	66.5
Genesee	38	57,535	66.0
Greene	33	48,061	68.7
Hamilton	0	5,118	0.0*
Herkimer	18	59,822	30.1
Jefferson	53	116,637	45.4
Kings	1,649	2,590,516	63.7
Lewis	8	26,699	30.0*
Livingston	36	61,516	58.5
Madison	24	67,097	35.8
Monroe	771	752,035	102.5
Montgomery	10	49,623	20.2
Nassau	556	1,383,726	40.2
New York	1,692	1,596,273	106.0
Niagara	192	210,880	91.0
Oneida	132	228,846	57.7
Onondaga	338	468,249	72.2

County	Emergency department visits	Population	Crude rate per 100,000 population
Ontario	65	112,707	57.7
Orange	244	405,941	60.1
Orleans	30	39,318	76.3
Oswego	56	118,287	47.3
Otsego	24	60,636	39.6
Putnam	41	98,045	41.8
Queens	1,017	2,278,029	44.6
Rensselaer	98	159,853	61.3
Richmond	391	491,133	79.6
Rockland	83	339,022	24.5
Saratoga	85	238,797	35.6
Schenectady	105	160,093	65.6
Schoharie	15	30,063	49.9
Schuyler	**	17,650	**
Seneca	23	32,882	69.9
St. Lawrence	34	107,733	31.6
Steuben	50	92,599	54.0
Suffolk	1,091	1,525,465	71.5
Sullivan	91	79,658	114.2
Tioga	11	47,772	23.0
Tompkins	82	104,777	78.3
Ulster	146	182,319	80.1
Warren	39	65,599	59.5
Washington	28	60,841	46.0
Wayne	49	91,125	53.8
Westchester	367	990,427	37.1
Wyoming	15	39,666	37.8
Yates	8	24,451	32.7*

*: 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 March 2024.
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Data Table 3.9 All emergency department visits (including outpatient and admitted patients) involving heroin overdose, crude rate per 100,000 population, by subpopulation, New York State, 2021 and 2022

Group	Characteristic	2021		2022	
		Emergency department visits	Crude rate per 100,000 population	Emergency department visits	Crude rate per 100,000 population
Age group	Age 0-17	9	0.2*	**	**
	Age 18-24	398	21.8	255	14.1
	Age 25-44	3,256	60.8	2,650	50.0
	Age 45-64	2,292	44.7	2,238	44.6
	Age 65+	555	15.9	578	16.2
Gender	Male	4,931	50.7	4,311	44.8
	Female	1,579	15.6	1,413	14.1
Race/Ethnicity	White NH	3,047	28.2	2,337	21.9
	Black NH	1,259	43.6	1,139	40.1
	Asian/PI NH	25	1.4	21	1.1
	Hispanic	1,037	26.6	946	24.5
Region	New York City	2,822	33.4	2,886	34.6
	NYS Excl NYC	3,688	32.4	2,840	25.0
Total	New York State	6,510	32.8	5,726	29.1

White NH = White non-Hispanic; Black NH = Black non-Hispanic; Asian/PI NH= Asian or Pacific Islander non-Hispanic; NYS excl. NYC = New York State excluding New York City
*: 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 March 2024.
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Data Table 3.10 All emergency department visits (including outpatient and admitted patients) involving heroin overdose, crude rate per 100,000 population, by county, New York State, 2022

County	Emergency department visits	Population	Crude rate per 100,000 population
Albany	110	315,811	34.8
Allegany	8	46,694	17.1*
Bronx	866	1,379,946	62.8
Broome	134	197,117	68.0
Cattaraugus	25	76,439	32.7
Cayuga	26	74,998	34.7
Chautauqua	87	126,027	69.0
Chemung	41	81,426	50.4
Chenango	21	46,458	45.2
Clinton	14	78,753	17.8
Columbia	**	61,286	14.7*
Cortland	21	46,126	45.5
Delaware	12	44,740	26.8
Dutchess	95	297,545	31.9
Erie	211	950,312	22.2
Essex	**	36,910	**
Franklin	6	46,373	12.9*
Fulton	20	52,669	38.0
Genesee	9	57,535	15.6*
Greene	10	48,061	20.8
Hamilton	0	5,118	0.0*
Herkimer	**	59,822	**
Jefferson	29	116,637	24.9
Kings	742	2,590,516	28.6
Lewis	**	26,699	**
Livingston	**	61,516	**
Madison	16	67,097	23.8
Monroe	242	752,035	32.2
Montgomery	**	49,623	**
Nassau	253	1,383,726	18.3
New York	713	1,596,273	44.7
Niagara	53	210,880	25.1
Oneida	56	228,846	24.5
Onondaga	183	468,249	39.1

County	Emergency department visits	Population	Crude rate per 100,000 population
Ontario	26	112,707	23.1
Orange	107	405,941	26.4
Orleans	9	39,318	22.9*
Oswego	27	118,287	22.8
Otsego	10	60,636	16.5
Putnam	22	98,045	22.4
Queens	407	2,278,029	17.9
Rensselaer	40	159,853	25.0
Richmond	158	491,133	32.2
Rockland	27	339,022	8.0
Saratoga	37	238,797	15.5
Schenectady	47	160,093	29.4
Schoharie	7	30,063	23.3*
Schuyler	**	17,650	**
Seneca	**	32,882	**
St. Lawrence	12	107,733	11.1
Steuben	20	92,599	21.6
Suffolk	370	1,525,465	24.3
Sullivan	47	79,658	59.0
Tioga	7	47,772	14.7*
Tompkins	28	104,777	26.7
Ulster	70	182,319	38.4
Warren	20	65,599	30.5
Washington	12	60,841	19.7
Wayne	10	91,125	11.0
Westchester	159	990,427	16.1
Wyoming	**	39,666	**
Yates	**	24,451	**

*: 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 March 2024.
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Data Table 3.11 Newborns with neonatal withdrawal syndrome and/or affected by maternal use of opioids or other substances (any diagnosis), crude rate per 1,000 newborn discharges, by subpopulation, New York State, 2021 and 2022

Group	Characteristics	2021		2022	
		Neonatal withdrawal symptoms and/or affected by maternal use of opioids or other substances	Crude rate per 1,000 newborn discharges	Neonatal withdrawal symptoms and/or affected by maternal use of opioids or other substances	Crude rate per 1,000 newborn discharges
Race and ethnicity	White NH	725	9.9	620	8.7
	Black NH	114	6.0	93	5.6
	Asian/PI NH	7	0.5*	**	**
	Hispanic	106	3.3	79	2.4
Region	New York City	217	2.4	166	1.8
	NYS Excl NYC	1,176	11.0	998	9.6
Total	New York State	1,393	7.1	1,164	6.0

White NH = White non-Hispanic; Black NH = Black non-Hispanic; Asian/PI NH= Asian or Pacific Islander non-Hispanic; NYS excl. NYC = New York State excluding New York City
*: 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 March 2024.
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Data Table 3.12 Newborns with neonatal abstinence syndrome and/or affected by maternal use of opioids or other substances (any diagnosis), crude rate per 1,000 newborn discharges, by county, New York State, 2022

County	Newborns with neonatal withdrawal syndrome and/or affected by maternal use of opioids or other substances	Newborn discharges	Crude rate per 100,000 population
Albany	8	2,050	3.9*
Allegany	**	378	**
Bronx	59	16,442	3.6
Broome	37	1,715	21.6
Cattaraugus	17	674	25.2
Cayuga	7	660	10.6*
Chautauqua	15	944	15.9
Chemung	8	714	11.2*
Chenango	13	451	28.8
Clinton	9	508	17.7*
Columbia	**	358	**
Cortland	11	413	26.6
Delaware	9	321	28.0*
Dutchess	18	2,444	7.4
Erie	169	8,786	19.2
Essex	**	128	**
Franklin	**	344	**
Fulton	**	395	**
Genesee	6	551	10.9*
Greene	**	319	**
Hamilton	0	16	0.0*
Herkimer	8	539	14.8*
Jefferson	9	1,705	5.3*
Kings	39	31,837	1.2
Lewis	**	261	**
Livingston	**	499	**
Madison	8	504	15.9*
Monroe	47	7,328	6.4
Montgomery	**	376	**
Nassau	31	13,619	3.2
New York	43	13,612	3.2
Niagara	74	1,928	38.4

County	Newborns with neonatal withdrawal syndrome and/or affected by maternal use of opioids or other substances	Newborn discharges	Crude rate per 100,000 population
Oneida	47	2,076	22.6
Onondaga	29	4,465	6.5
Ontario	9	898	10.0*
Orange	33	4,912	6.7
Orleans	10	345	29.0
Oswego	25	1,063	23.5
Otsego	**	397	**
Putnam	6	761	7.9*
Queens	27	23,323	1.2
Rensselaer	6	1,019	5.9*
Richmond	11	4,796	2.3
Rockland	7	5,146	1.4*
Saratoga	8	1,813	4.4*
Schenectady	16	1,484	10.8
Schoharie	**	201	**
Schuyler	**	111	**
Seneca	**	208	**
St. Lawrence	**	669	**
Steuben	11	910	12.1
Suffolk	133	15,709	8.5
Sullivan	18	897	20.1
Tioga	**	318	**
Tompkins	10	576	17.4
Ulster	19	1,470	12.9
Warren	14	518	27.0
Washington	**	451	**
Wayne	11	808	13.6
Westchester	21	7,337	2.9
Wyoming	**	314	**
Yates	**	164	**

*: 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 March 2024.
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Data Table 4.1 Number of unique individuals enrolled* in OASAS treatment programs who reported any opioids as a primary substance at admission, crude rate per 100,000 population, by region, New York State, 2010-2023

Year	New York City		NYS excl. NYC		New York State	
	OASAS unique individuals enrolled	Crude rate per 100,000 population	OASAS unique individuals enrolled	Crude rate per 100,000 population	OASAS unique individuals enrolled	Crude rate per 100,000 population
2023	34,260	475.5	43,962	445.8	79,039	463.1
2022	36,248	503.1	44,818	454.5	81,752	479.0
2021	38,279	525.4	45,573	460.3	84,420	491.2
2020	40,178	558.6	44,402	460.5	85,087	505.5
2019	44,401	617.4	48,284	500.8	93,169	553.5
2018	44,771	622.5	49,305	511.4	94,551	561.7
2017	46,002	637.1	49,661	515.0	96,194	570.4
2016	46,611	643.7	48,659	504.5	95,842	567.6
2015	47,016	650.1	45,922	475.5	93,493	553.6
2014	46,750	648.7	42,745	442.1	90,050	533.6
2013	46,873	653.4	39,967	413.5	87,387	518.9
2012	47,257	662.4	36,711	380.5	84,507	503.6
2011	47,789	675.8	33,702	350.1	82,010	491.2
2010	48,679	694.5	31,331	326.7	80,442	484.6

NYS excl. NYC = New York State excluding New York City

* A person is counted once if they were in treatment (received one or more services) during the year. A unique person may be counted once in one reported region and also be counted once in another reported region if both applied during the year (e.g., living in multiple areas or counties during the same year).

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

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Data Table 4.2 Number of unique individuals enrolled in OASAS treatment programs who reported any opioids as a primary substance at admission, crude rate per 100,000 population, by age group, New York State, 2010-2023

Year	Age group	OASAS unique individuals enrolled	Crude rate per 100,000 population
2023	Age 12-17	221	16.0
	Age 18-24	2,463	136.6
	Age 25-34	18,295	661.1
	Age 35-44	20,974	827.9
	Age 45-54	13,971	582.0
	Age 55+	23,115	373.8
2022	Age 12-17	177	12.8
	Age 18-24	2,819	156.3
	Age 25-34	20,263	732.2
	Age 35-44	20,701	817.1
	Age 45-54	14,609	608.6
	Age 55+	23,183	374.9
2021	Age 12-17	114	8.1
	Age 18-24	3,293	180.4
	Age 25-34	22,248	791.2
	Age 35-44	20,401	801.5
	Age 45-54	15,429	627.6
	Age 55+	22,935	373.1
2020	Age 12-17	124	9.1
	Age 18-24	3,948	219.9
	Age 25-34	23,214	807.0
	Age 35-44	19,276	793.9
	Age 45-54	16,309	639.2
	Age 55+	22,216	381.9
2019	Age 12-17	142	10.4
	Age 18-24	5,351	298.0
	Age 25-34	26,593	924.5
	Age 35-44	20,181	831.1
	Age 45-54	18,650	730.9
	Age 55+	22,252	382.5
2018	Age 12-17	186	13.6
	Age 18-24	6,879	383.1
	Age 25-34	27,897	969.8
	Age 35-44	19,405	799.2
	Age 45-54	19,366	759.0
	Age 55+	20,818	357.8

Year	Age group	OASAS unique individuals enrolled	Crude rate per 100,000 population
2017	Age 12-17	252	18.2
	Age 18-24	8,756	479.3
	Age 25-34	28,540	992.2
	Age 35-44	18,683	770.9
	Age 45-54	20,186	768.9
	Age 55+	19,777	345.3
2016	Age 12-17	371	26.5
	Age 18-24	10,520	564.8
	Age 25-34	28,149	979.5
	Age 35-44	17,526	721.1
	Age 45-54	20,765	773.3
	Age 55+	18,511	328.6
2015	Age 12-17	502	35.5
	Age 18-24	11,790	619.2
	Age 25-34	26,196	918.0
	Age 35-44	16,535	673.2
	Age 45-54	20,957	767.7
	Age 55+	17,513	316.6
2014	Age 12-17	558	39.0
	Age 18-24	12,617	647.0
	Age 25-34	23,523	830.8
	Age 35-44	15,793	636.6
	Age 45-54	21,188	765.6
	Age 55+	16,371	302.3
2013	Age 12-17	612	42.2
	Age 18-24	12,616	638.6
	Age 25-34	21,380	763.3
	Age 35-44	15,714	626.8
	Age 45-54	21,557	768.3
	Age 55+	15,508	292.6
2012	Age 12-17	668	45.4
	Age 18-24	12,001	602.9
	Age 25-34	19,476	705.3
	Age 35-44	15,775	622.7
	Age 45-54	21,959	773.1
	Age 55+	14,628	282.2
2011	Age 12-17	684	45.8
	Age 18-24	11,054	555.0
	Age 25-34	17,433	640.8

Year	Age group	OASAS unique individuals enrolled	Crude rate per 100,000 population
	Age 35-44	16,552	646.6
	Age 45-54	22,683	790.5
	Age 55+	13,604	268.8
2010	Age 12-17	659	43.3
	Age 18-24	9,894	498.8
	Age 25-34	16,114	603.5
	Age 35-44	17,723	681.8
	Age 45-54	23,339	810.7
	Age 55+	12,713	256.9

Data source: New York State Office of Addiction Services and Supports (OASAS) Client Data System (CDS)
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Data Table 4.3 Number of unique individuals enrolled in OASAS treatment programs who reported any opioids as a primary substance at admission, crude rate per 100,000 population, by sex at birth, New York State, 2010-2023

Year	Female		Male	
	OASAS unique individuals enrolled	Crude rate per 100,000 population	OASAS unique individuals enrolled	Crude rate per 100,000 population
2023	26,920	306.7	52,102	628.5
2022	27,791	316.7	53,959	650.9
2021	28,502	322.6	55,917	669.4
2020	28,646	328.2	56,441	696.4
2019	31,445	360.2	61,724	761.6
2018	32,225	369.2	62,326	769.1
2017	32,581	372.5	63,613	783.7
2016	32,130	366.7	63,712	784.2
2015	31,235	356.2	62,258	766.6
2014	29,691	338.7	60,359	744.2
2013	28,718	328.2	58,669	725.1
2012	27,561	316.0	56,946	706.7
2011	26,493	305.0	55,517	693.1
2010	25,485	294.9	54,957	690.5

Data source: New York State Office of Addiction Services and Supports (OASAS) Client Data System (CDS)
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Data Table 4.4 Number of unique individuals enrolled in OASAS treatment programs who reported any opioids as a primary substance at admission, crude rate per 100,000 population, by race and ethnicity, New York State, 2010-2023

Year	Race/ethnicity	OASAS unique individuals enrolled	Crude rate per 100,000 population
2023	White NH	41,843	441.7
	Black NH	11,288	459.6
	Other NH	3,349	201.1
	Hispanic	22,559	705.2
2022	White NH	43,145	455.5
	Black NH	11,813	480.9
	Other NH	3,304	198.4
	Hispanic	23,490	734.3
2021	White NH	44,487	465.0
	Black NH	12,217	489.9
	Other NH	3,276	198.9
	Hispanic	24,440	760.7
2020	White NH	44,476	459.3
	Black NH	12,568	501.0
	Other NH	3,055	191.9
	Hispanic	24,988	819.3
2019	White NH	48,802	504.0
	Black NH	14,275	569.0
	Other NH	3,229	202.8
	Hispanic	26,863	880.7
2018	White NH	50,682	523.4
	Black NH	13,869	552.9
	Other NH	3,123	196.1
	Hispanic	26,877	881.2
2017	White NH	52,242	536.1
	Black NH	14,058	559.1
	Other NH	3,141	199.1
	Hispanic	26,753	883.6
2016	White NH	52,171	532.1
	Black NH	13,864	550.6
	Other NH	3,007	193.4
	Hispanic	26,800	890.9
2015	White NH	50,197	508.8
	Black NH	13,784	547.5
	Other NH	2,958	194.0
	Hispanic	26,554	890.7

2014	White NH	47,548	479.3
	Black NH	13,640	542.8
	Other NH	2,665	178.6
	Hispanic	26,197	887.7
2013	White NH	45,275	454.6
	Black NH	13,857	553.4
	Other NH	2,326	159.5
	Hispanic	25,929	888.8
2012	White NH	42,346	424.0
	Black NH	14,297	574.5
	Other NH	2,090	146.2
	Hispanic	25,774	896.1
2011	White NH	39,242	392.4
	Black NH	14,857	600.8
	Other NH	1,853	132.8
	Hispanic	26,058	921.1
2010	White NH	36,686	366.5
	Black NH	15,128	616.4
	Other NH	1,711	125.9
	Hispanic	26,917	969.0

White NH = White non-Hispanic; Black NH = Black non-Hispanic; Other NH= Other non-Hispanic
Data source: New York State Office of Addiction Services and Supports (OASAS) Client Data System (CDS)
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Data Table 4.5 Number of unique individuals enrolled* in OASAS treatment programs who reported any opioids as a primary substance at admission by county of residence, New York State, 2023

Region/County	OASAS unique individuals enrolled	Population	Crude rate per 100,000 population
Albany	1,055	279,354	409.2
Allegany	202	40,872	462.4
Bronx	12,306	1,157,898	1106.1
Broome	1,572	173,192	893.8
Cattaraugus	661	65,964	841.4
Cayuga	487	65,962	671.6
Chautauqua	898	109,828	868.6
Chemung	340	70,546	457.9
Chenango	245	40,486	511.3
Clinton	746	69,725	1002.5
Columbia	204	55,393	409.8
Cortland	463	40,681	877.6
Delaware	147	40,396	346.6
Dutchess	1,325	263,893	517.6
Erie	4,315	827,053	547.1
Essex	132	33,468	352.6
Franklin	229	40,480	536.1
Fulton	300	46,255	715.6
Genesee	278	50,230	603.2
Greene	209	43,110	438.4
Hamilton	12	4,724	169.3
Herkimer	180	52,222	398.3
Jefferson	853	97,568	803.5
Kings	8,359	2,199,130	410.4
Lewis	95	22,824	433.8
Livingston	190	54,748	376.3
Madison	302	59,301	428.3
Monroe	2,876	654,708	467.7
Montgomery	397	42,135	1034.8
Nassau	2,336	1,197,936	209.5
New York	7,103	1,444,100	532.8
Niagara	1,524	184,392	820.5
Oneida	1,309	197,563	651.4
Onondaga	2,623	405,106	654.6
Ontario	404	99,306	448.1
Orange	1,349	339,974	433
Orleans	243	34,579	731.7
Oswego	787	102,883	790.2

Region/County	OASAS unique individuals enrolled	Population	Crude rate per 100,000 population
Otsego	176	54,827	381.2
Putnam	223	86,503	283.2
Queens	4,486	1,980,424	231.9
Rensselaer	543	140,521	392.1
Richmond	2,006	424,088	502
Rockland	648	272,943	233.4
Saratoga	666	210,265	295.8
Schenectady	725	137,847	528.1
Schoharie	111	26,811	358.1
Schuyler	87	15,506	606.2
Seneca	159	28,545	602.6
St. Lawrence	817	94,433	726.4
Steuben	437	80,080	524.5
Suffolk	5,037	1,329,187	396.7
Sullivan	617	68,612	892
Tioga	210	41,845	451.7
Tompkins	731	95,650	730.8
Ulster	908	163,086	576.4
Warren	286	58,512	466.6
Washington	189	53,842	356.6
Wayne	439	79,067	552.7
Westchester	2,319	859,528	283.6
Wyoming	87	35,051	205.4
Yates	76	20,826	398.5

* A person is counted once if they were in treatment (received one or more services) during the year. A unique person may be counted once in one reported county and also be counted once in another reported county if both applied during the year.
Data source: New York State Office of Addiction Services and Supports (OASAS) Client Data System (CDS)
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Data Table 5.1 Commonly prescribed opioid analgesics, crude rate per 1,000 person-years*, by quarter, New York State, 2020-2023

		Crude rate per 1,000 population					
Year	Quarter	Oxycodone SA	Hydrocodone SA	Tramadol SA	Codeine SA	Fentanyl LA	Oxycodone LA
2023	Jan - Mar	120.0	59.2	45.6	13.2	4.7	5.1
	Apr - Jun	120.3	59.1	46.5	13.0	4.7	5.1
	Jul - Sep	116.6	56.7	45.2	12.2	4.5	5.0
	Oct - Dec	115.0	55.4	44.0	11.6	4.2	4.8
2022	Jan - Mar	120.2	63.2	46.7	14.2	5.4	5.9
	Apr - Jun	122.8	63.5	47.6	14.1	5.4	5.8
	Jul - Sep	121.2	62.2	47.2	13.4	5.4	5.6
	Oct - Dec	119.5	60.9	46.0	13.1	5.0	5.3
2021	Jan - Mar	121.7	68.3	47.8	15.4	6.2	6.7
	Apr - Jun	128.3	69.5	49.9	15.6	6.0	6.7
	Jul - Sep	125.0	67.6	49.1	14.6	6.0	6.5
	Oct - Dec	122.3	65.0	48.1	14.4	5.7	6.3
2020	Jan - Mar	128.0	76.7	52.3	17.4	7.4	7.6
	Apr - Jun	110.8	67.4	47.9	13.8	6.9	7.3
	Jul - Sep	132.0	75.7	52.3	16.7	6.9	7.4
	Oct - Dec	131.2	73.8	51.8	16.3	6.8	7.2

SA=Short-acting; LA=Long-acting.
* The rates are calculated as follows: [# of events/(population*0.25 year)] * 1,000.
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 April 2024.
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Data Table 5.2 Opioid analgesic prescriptions, crude rate per 1,000 population, by region, New York State, 2020-2023

Year	New York City		NYS excl. NYC		New York State	
	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
2023	1,376,470	165.1	3,990,451	351.9	5,372,902	273.1
2022	1,448,300	173.7	4,174,047	368.0	5,627,007	286.0
2021	1,553,160	183.6	4,421,981	387.9	5,977,254	301.0
2020	1,593,105	189.7	4,578,568	410.7	6,174,122	315.9

NYS excl. NYC = New York State excluding New York City
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 April 2024.
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Data Table 5.3 Opioid analgesic prescriptions, crude rate per 1,000 population, by age and gender, New York State, 2023

Age group	Gender	Number of opioid analgesics prescriptions	Crude rate per 1,000 population
Age 18-24	Male	45,157	49.9
	Female	58,726	65.4
Age 25-34	Male	107,398	77.4
	Female	163,043	118.2
Age 35-44	Male	210,799	166.0
	Female	311,789	246.8
Age 45-54	Male	337,778	284.6
	Female	463,362	381.8
Age 55-64	Male	636,255	498.8
	Female	757,968	563.8
Age 65+	Male	937,459	601.9
	Female	1,303,212	649.7

The data exclude buprenorphine prescriptions for the treatment of opioid use disorder.
Data Source: NYS Prescription Monitoring Program; Data as of April 2024.
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Data Table 5.4 Percentage of episodes when an opioid-naïve patient received long-acting initial opioid prescription, by region, New York State, 2021-2023

Year	Region	Number of episodes when patients were opioid naïve and received long-acting opioid prescription*	Number of opioid naïve incidents	Percentage
2023	New York City	2,958	526,633	0.6
	NYS excl. NYC	13,051	1,165,252	1.1
	New York State	16,009	1,691,982	0.9
2022	New York City	3,316	539,043	0.6
	NYS excl. NYC	14,424	1,186,860	1.2
	New York State	17,741	1,725,991	1.0
2021	New York City	3,737	564,680	0.7
	NYS excl. NYC	11,907	1,233,655	1.0
	New York State	15,644	1,798,441	0.9

NYS excl. NYC = New York State excluding New York City
The data exclude buprenorphine prescriptions for the treatment of opioid use disorder.
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.
Data Source: NYS Prescription Monitoring Program; Data as of April 2024.
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Data Table 5.5 Percentage of episodes when an opioid-naïve patient received more than a seven-day supply from the initial opioid prescription, by region, New York State, 2021-2023

Year	Region	Percentage of incidents when patients were opioid naïve and received an opioid prescription* of more than seven days			
		Jan - Mar	Apr -Jun	Jul - Sep	Oct - Dec
2023	New York City	13.3	14.8	14.8	14.3
	NYS excl. NYC	14.9	15.9	15.6	15.6
	New York State	14.4	15.6	15.4	15.2
2022	New York City	13.7	13.5	13.8	14.0
	NYS excl. NYC	14.7	15.3	14.9	15.3
	New York State	14.4	14.7	14.6	14.9
2021	New York City	14.3	13.3	13.7	14.1
	NYS excl. NYC	14.8	14.4	14.9	15.5
	New York State	14.6	14.1	14.5	15.0

These data exclude buprenorphine prescriptions for the treatment of opioid use disorder.
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.
Data Source: NYS Prescription Monitoring Program; Data as of April 2024.
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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, 2020-2023

Year	New York City		NYS excl. NYC		New York State	
	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
2023	135	1.6	326	2.9	461	2.3
2022	96	1.2	233	2.1	329	1.7
2021	104	1.2	258	2.3	362	1.8
2020	113	1.3	227	2.0	340	1.7

These 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 April 2024.
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Data Table 5.7 Percentage of patients who were prescribed one or more opioid analgesics with a total daily dose of ≥ 90 MME on at least one day, by region, New York State, 2020-2023

Year	Region	Number of patients received opioid analgesics ≥ 90 MME	Number of patients received opioid analgesic prescriptions	Percentage
2023	New York City	41,953	505,268	8.3
	NYS excl. NYC	107,131	1,146,536	9.3
	New York State	149,094	1,651,898	9.0
2022	New York City	44,956	518,558	8.7
	NYS excl. NYC	113,856	1,170,781	9.7
	New York State	158,829	1,689,433	9.4
2021	New York City	50,077	543,227	9.2
	NYS excl. NYC	122,940	1,219,855	10.1
	New York State	173,038	1,763,189	9.8
2020	New York City	54,014	518,478	10.4
	NYS excl. NYC	130,768	1,195,646	10.9
	New York State	184,797	1,714,218	10.8

NYS excl. NYC = New York State excluding New York City
These 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 April 2024.
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Data Table 5.8 Percentage of patients who were prescribed one or more opioid analgesics with a total daily dose of ≥ 90 MME on at least one day, by age and gender, New York State, 2023

Age group	Gender	Number of patients received opioid analgesics ≥ 90 MME	Number of patients received opioid analgesic prescriptions	Percentage
Age 18-24	Male	564	36,315	1.6
	Female	558	48,320	1.2
Age 25-34	Male	2,447	62,871	3.9
	Female	2,510	102,870	2.4
Age 35-44	Male	5,876	81,394	7.2
	Female	6,711	125,713	5.3
Age 45-54	Male	10,605	99,792	10.6
	Female	11,810	136,944	8.6
Age 55-64	Male	20,562	156,838	13.1
	Female	21,087	184,194	11.4
Age 65+	Male	30,608	250,138	12.2
	Female	35,477	332,758	10.7

These 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 April 2024.
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Data Table 5.9 Percentage of patients* with two or more calendar days of overlapping opioid analgesic and benzodiazepine prescriptions, by region, New York State, 2020-2023

Year	Region	Number of patients with two or more overlapping days	Number of patients received opioid or benzo prescriptions	Percentage
2023	New York City	45,529	787,615	5.8
	NYS excl. NYC	142,637	1,688,193	8.4
	New York State	188,172	2,475,976	7.6
2022	New York City	48,472	804,849	6.0
	NYS excl. NYC	147,679	1,715,616	8.6
	New York State	196,158	2,520,624	7.8
2021	New York City	53,734	831,983	6.5
	NYS excl. NYC	157,666	1,768,707	8.9
	New York State	211,408	2,600,853	8.1
2020	New York City	55,777	819,022	6.8
	NYS excl. NYC	161,277	1,745,900	9.2
	New York State	217,065	2,565,068	8.5

NYS excl. NYC = New York State excluding New York City
These data exclude buprenorphine prescriptions for treatment of opioid use disorder.
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 April 2024.
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Data Table 5.10 Percentage of patients* with two or more calendar days of overlapping opioid analgesic and benzodiazepine prescriptions, by age and gender, New York State, 2023

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	553	47,481	1.2
	Female	906	66,307	1.4
Age 25-34	Male	2,401	100,446	2.4
	Female	4,833	166,722	2.9
Age 35-44	Male	5,314	129,289	4.1
	Female	11,726	206,447	5.7
Age 45-54	Male	8,284	145,705	5.7
	Female	18,054	222,131	8.1
Age 55-64	Male	15,339	211,581	7.2
	Female	27,851	286,600	9.7
Age 65+	Male	33,170	335,289	9.9
	Female	58,786	505,398	11.6

These data exclude buprenorphine prescriptions for treatment of opioid use disorder.
* Patients with at least one prescription for opioid analgesics or benzodiazepines during a given year.
Data Source: NYS Prescription Monitoring Program; Data as of April 2024.
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Data Table 5.11 Percentage of patients* with two or more calendar days of overlapping opioid analgesic prescriptions, by region, New York State, 2020-2023

Year	Region	Number of patients with two or more overlapping days	Number of patients received opioid prescriptions	Percentage
2023	New York City	65,015	506,378	12.8
	NYS excl. NYC	179,474	1,150,527	15.6
	New York State	244,504	1,656,999	14.8
2022	New York City	67,762	519,033	13.1
	NYS excl. NYC	185,664	1,173,390	15.8
	New York State	253,440	1,692,517	15.0
2021	New York City	73,099	543,727	13.4
	NYS excl. NYC	194,544	1,222,550	15.9
	New York State	267,658	1,766,384	15.2
2020	New York City	78,040	519,003	15.0
	NYS excl. NYC	202,002	1,198,101	16.9
	New York State	280,055	1,717,198	16.3

NYS excl. NYC = New York State excluding New York City
These data exclude buprenorphine prescriptions for treatment of opioid use disorder.
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 April 2024.
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Data Table 5.12 Percentage of patients* with two or more calendar days of overlapping opioid analgesic prescriptions, by age and gender, New York State, 2023

Age group	Gender	Number of patients with two or more overlapping days	Number of patients received opioid prescriptions	Percentage
Age 18-24	Male	687	36,321	1.9
	Female	674	48,322	1.4
Age 25-34	Male	3,057	62,896	4.9
	Female	3,553	102,895	3.5
Age 35-44	Male	7,889	81,461	9.7
	Female	10,599	125,803	8.4
Age 45-54	Male	14,283	99,904	14.3
	Female	19,025	137,116	13.9
Age 55-64	Male	29,750	157,073	18.9
	Female	34,728	184,464	18.8
Age 65+	Male	49,398	251,685	19.6
	Female	70,375	335,274	21.0

These data exclude buprenorphine prescriptions for treatment of opioid use disorder.
* Patients with at least one prescription for opioid analgesics during a given year.
Data Source: NYS Prescription Monitoring Program; Data as of April 2024.
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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, 2020-2023

Year	New York City		NYS excluding NYC		New York State	
	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
2023	15,482	185.7	71,794	633.0	87,284	443.6
2022	15,283	183.3	67,113	591.8	82,400	418.8
2021	15,432	182.4	65,472	574.4	80,907	407.4
2020	16,222	193.2	63,563	570.2	79,789	408.3

New York State total contains number with county unknown.
Data Source: NYS Prescription Monitoring Program; Data as of April 2024.
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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, 2023

Age group	Gender	Number of patients	Crude rate per 100,000 population
Age 18-24	Male	1,238	136.8
	Female	615	68.5
Age 25-34	Male	13,615	980.6
	Female	7,138	517.6
Age 35-44	Male	20,136	1,585.4
	Female	11,228	888.8
Age 45-54	Male	10,809	910.8
	Female	5,610	462.2
Age 55-64	Male	7,513	589.0
	Female	4,058	301.8
Age 65+	Male	3,351	215.1
	Female	1,868	136.8

Data Source: NYS Prescription Monitoring Program; Data as of April 2024.
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Data Table 6.1 Prevalence of illicit drug use other than cannabis in the past month, by age group, 2021-2022

Age group	United States			New York State		
	Percentage	95% C.I.		Percentage	95% C.I.	
		Low	High		Low	High
Total (age 12 or older)	3.3%	3.1%	3.5%	3.4%	2.8%	4.1%
Age 12-17	1.8%	1.5%	2.0%	1.0%	0.4%	2.6%
Age 18-25	4.3%	4.0%	4.7%	5.9%	4.1%	8.3%
Age 26-34	5.6%	5.0%	6.1%	3.6%	2.2%	6.1%
Age 35+	2.9%	2.6%	3.1%	3.2%	2.4%	4.2%

Note: Adult-use cannabis was legalized in NYS in 2021 with the passage of the Marihuana Regulation and Taxation Act (MRTA).
Data source: National Survey on Drug Use and Health (NSDUH); Data as of May 2024.
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Data Table 6.2 Prevalence of prescription pain reliever misuse in the past year, by age group, 2021-2022

Age group	United States			New York State		
	Percentage	95% C.I.		Percentage	95% C.I.	
		Low	High		Low	High
Total (age 12 or older)	3.0%	2.9%	3.2%	2.9%	2.2%	3.8%
Age 12-17	1.8%	1.6%	2.1%	2.1%	1.1%	4.1%
Age 18-25	3.2%	2.9%	3.5%	2.6%	1.6%	4.1%
Age 26-34	4.2%	3.7%	4.7%	3.4%	2.0%	5.9%
Age 35+	2.9%	2.7%	3.2%	2.9%	2.0%	4.2%

Data source: National Survey on Drug Use and Health (NSDUH); Data as of May 2024.
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Data Table 6.3 Prevalence of cannabis use in the past month, by age group, 2021-2022

Age group	United States			New York State		
	Percentage	95% C.I.		Percentage	95% C.I.	
		Low	High		Low	High
Total (age 12 or older)	14.1%	13.7%	14.5%	15.8%	14.1%	17.8%
Age 12-17	6.2%	5.8%	6.8%	7.4%	5.1%	10.6%
Age 18-25	25.3%	24.3%	26.2%	23.8%	19.6%	28.7%
Age 26-34	23.8%	22.8%	24.9%	26.8%	22.6%	31.5%
Age 35+	11.0%	10.5%	11.4%	13.0%	11.0%	15.2%

Data source: National Survey on Drug Use and Health (NSDUH); Data as of May 2024.
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Data Table 6.4 Percentage of population who perceived using cocaine once a month as a great risk, by age group, 2021-2022

Age group	United States			New York State		
	Percentage	95% C.I.		Percentage	95% C.I.	
		Low	High		Low	High
Total (age 12 or older)	66.2%	65.6%	66.7%	63.4%	60.5%	66.1%
Age 12-17	49.3%	48.3%	50.3%	46.8%	42.3%	51.3%
Age 18-25	58.8%	57.8%	59.8%	56.7%	51.7%	61.5%
Age 26-34	59.9%	58.6%	61.1%	60.9%	55.1%	66.4%
Age 35+	71.4%	70.7%	72.1%	67.2%	63.5%	70.7%

Data source: National Survey on Drug Use and Health (NSDUH); Data as of May 2024.
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Data Table 6.5 Age-adjusted percentage of adults who self-reported prescription pain medication misuse in the past 12 months, New York State, 2017-2022

Year	Age-adjusted percentage (95% confidence interval)
2022	4.5 (3.6 - 5.4)
2021	3.9 (3.2 - 4.6)
2020	3.6 (3.1 - 4.1)
2019	6.1 (5.3 - 6.8)
2018	3.9 (3.5 - 4.4)
2017	5.3 (4.6 - 6.0)

Note: The population aged 18 and older.
Data source: Behavioral Risk Factor Surveillance System (BRFSS); Data as of September 2023.
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Data Table 6.6 Age-adjusted percentage of adults who self-reported prescription pain medication misuse in the past 12 months, by subpopulation, New York State, 2021 and 2022

Group	Characteristic	Age-adjusted percentage (95% confidence interval)	
		2021	2022
Age group**	Age 18-24	3.4 (0.9 - 5.9)	5.6* (1.9 - 9.2)
	Age 25-34	5.2 (3.0 - 7.3)	5.6 (3.0 - 8.1)
	Age 35-44	2.9 (1.6 - 4.2)	4.2 (2.4 - 6.0)
	Age 45-54	4.5 (2.9 - 6.2)	3.4 (1.8 - 5.1)
	Age 55-64	4.0 (2.5 - 5.6)	4.5 (2.5 - 6.5)
	Age 65+	3.6 (2.4 - 4.8)	3.7 (2.2 - 5.2)
Gender	Male	5.1 (3.9 - 6.3)	4.7 (3.3 - 6.0)
	Female	2.8 (2.1 - 3.6)	4.3 (3.1 - 5.5)
Race and ethnicity	White NH	2.4 (1.7 - 3.1)	2.6 (1.4 - 3.7)
	Black NH	3.4 (2.0 - 4.8)	4.2 (1.8 - 6.5)
	Other NH	4.2 (2.2 - 6.1)	5.5 (2.8 - 8.3)
	Hispanic	9.4 (6.5 - 12.2)	9.8 (6.9 - 12.8)
Region	New York City	4.8 (3.5 - 6.2)	7.0 (5.4 - 8.7)
	NYS excluding NYC	3.6 (2.7 - 4.4)	3.0 (1.9 - 4.1)
Total	New York State	3.9 (3.2 - 4.6)	4.5 (3.6 - 5.4)

White NH = White non-Hispanic; Black NH = Black non-Hispanic; NYS excl. NYC = New York State excluding New York City
*: The rate is unstable.
** Age groups show crude percentages.
Note: The population aged 18 and older.
Data source: Behavioral Risk Factor Surveillance System (BRFSS); Data as of September 2023.
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Data Table 6.7 Perceptions of public health problems as "very serious" among New York State residents, November 2016 – March 2024

Survey Period	Public health problem					
	Heroin use	Prescription opioid misuse and abuse	Childhood obesity	Tobacco use	Alcohol consumption	Access to healthy food and beverages
March 2024	67%	67%	54%	45%	37%	44%
January 2023	70%	72%	57%	49%	35%	43%
January 2022	70%	69%	54%	52%	35%	39%
March 2021	70%	66%	55%	50%	37%	40%
February 2020	69%	70%	52%	54%	38%	36%
January 2019	75%	75%	61%	46%	38%	35%
November 2017	76%	75%	61%	50%	38%	40%
November 2016	76%	68%	61%	52%	38%	36%

Data source: New York State Department of Health /Siena College Research Institute, New York State Chronic Disease Public Opinion Poll; Data as of June 2024.
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