# **NDEWS** National Drug Early Warning System

Funded at the Center for Substance Abuse Research by the National Institute on Drug Abuse

# New York City Sentinel Community Site (SCS) Drug Use Patterns and Trends, 2020

August 2020

## NDEWS Coordinating Center

National Drug Early Warning System (NDEWS) & www.ndews.org & ndews@umd.edu & @ndewsnews & network.ndews.org

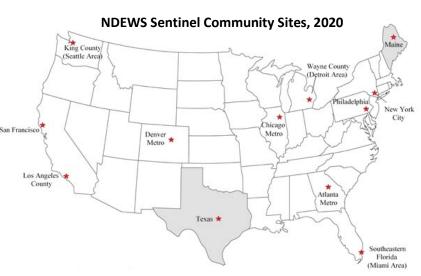
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# **NDEWS** National Drug Early Warning System

Funded at the Center for Substance Abuse Research by the National Institute on Drug Abuse

A unique feature of NDEWS is its capability to describe and compare drug use patterns and trends in selected communities across the United States. The NDEWS Coordinating Center works closely with Sentinel Community Epidemiologists (SCEs) in

12 Sentinel Community Sites (SCSs) across the U.S. Emerging drugs and changing drug trends are monitored by each local SCE utilizing indicators such as drug overdose deaths, treatment admissions, hospital cases, poison center exposure calls, and law enforcement seizures. In May 2020, each SCE was asked to review available indicators and identify up to five drugs they considered most important to summarize for their site and include in their 2020 annual Drug Use Patterns and Trends Report.



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## National Drug Early Warning System (NDEWS) New York City Sentinel Community Site (SCS) Drug Use Patterns and Trends, 2020

## Elodie C. Warren, M.P.H, Shivani Mantha, M.P.H, Ellenie Tuazon, M.P.H, and Denise Paone, Ed.D. New York City Department of Health and Mental Hygiene

## Highlights

## **Prescription Monitoring Program**

• **Opioid analgesic** prescriptions filled by NYC residents continue to decrease. In 2019, there were 1,272,797 opioid analgesic prescriptions filled in NYC, down from 1,405,133 opioid analgesic prescriptions in 2018.

## Substance use disorder treatment

• After alcohol (36.0%), heroin continues to be the most common primary drug involved in non-crisis substance use treatment admissions in 2019 (28.4%), followed by marijuana (16.2%), cocaine/crack (11.5%), and prescription opioids (2.3%).

## Unintentional drug overdose mortality

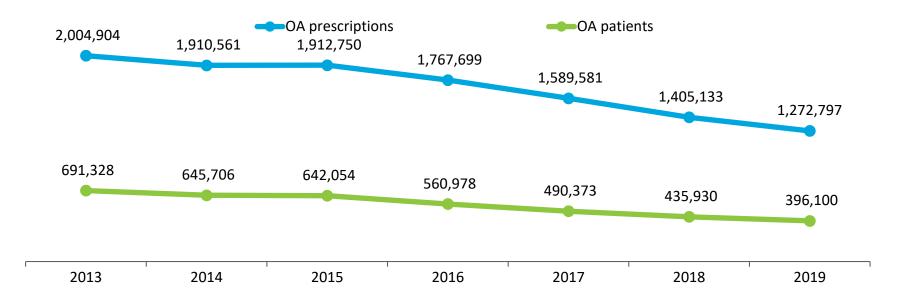
- After seven consecutive years of increases, the number of unintentional drug overdose deaths decreased in NYC from 1,482 in 2017 to 1,444 in 2018. The number of overdose deaths in the first two quarters of 2019 (n=659) was lower than the number in the first two quarters of 2018 (n=748), but overdose deaths in NYC remain at epidemic levels.
- In 2018, **opioids** were involved in 80% of overdose deaths. **Fentanyl** was the most common substance involved in overdose deaths, present in 60% of overdose deaths in 2018.
- **Cocaine** was involved in more than half of overdose deaths in NYC in 2018 (756 deaths). Since 2014, the rate of cocaine-involved overdose death more than doubled from 4.7 to 10.7 per 100,000 residents in 2018.
- The slight decrease in overdose deaths in NYC from 2017 to 2018 was not equally distributed citywide. Significant disparities remain in the rate of overdose death by race/ethnicity, age, and neighborhood poverty level.
- Black New Yorkers between the ages of 55 and 84 had the highest rate of unintentional drug overdose deaths in 2018, at 40.9 per 100,000 residents. This is almost double the citywide rate of 20.5 per 100,000 residents.

## **Special projects**

- A NYC Health Opinion Poll in 2019 showed that 43% of participants had heard of **naloxone**, while only 14% knew that it reversed only an opioid overdose. Approximately two-thirds (67%) knew that opioid use disorder could be treated with medication.
- Among New York City residents who died of an unintentional drug overdose death from 2008 to 2015, 79% had at least one arrest and 69% had at least one conviction.

## 2019 Data Updates: Opioid Analgesic Prescriptions Filled by NYC Residents Continue to Decrease

Number of Schedule II opioid analgesic prescriptions and patients, NYC, 2013-2019



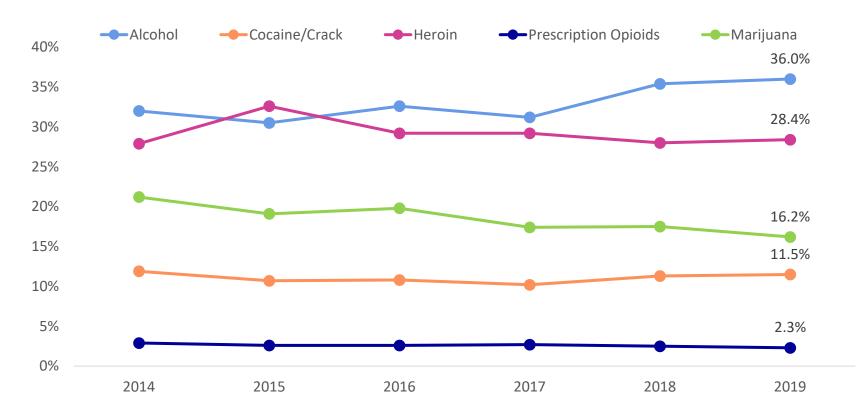
• Opioid analgesic prescriptions filled by NYC residents continue to decrease.

Source: New York State Department of Health Bureau of Narcotics Enforcement, 2013 – 2019. Analysis by NYC Department of Health and Mental Hygiene, Bureau of Alcohol and Drug Use Prevention, Care, and Treatment.



## 2019 Data Updates: After Alcohol, Heroin Continues to Be the Most Common Primary Drug Involved in Non-Crisis Substance Treatment Admissions

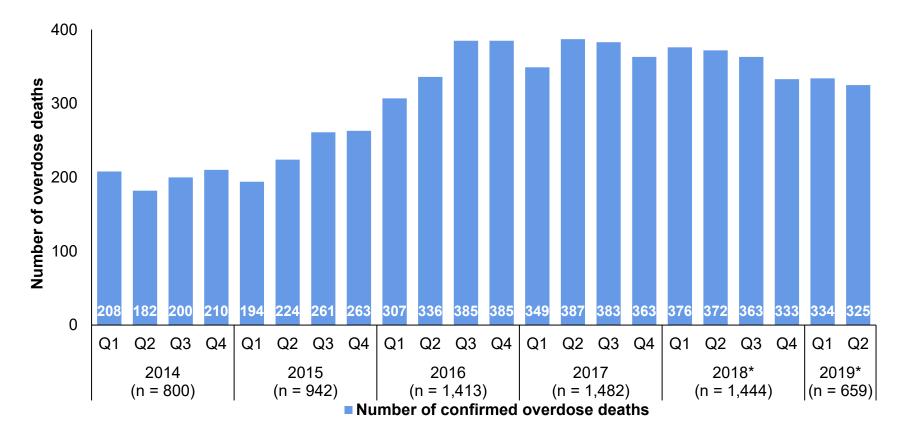
Number of non-crisis substance use treatment admissions among NYC residents by primary substance, 2014 - 2019



Source: Data provided to the New York City NDEWS SCE by the New York State Office of Alcoholism and Substance Abuse Services (OASAS), Client Data System accessed from Local Governmental Unit (LGU) Inquiry Reports.



2019 Data Updates: Unintentional Drug Poisoning Deaths, NYC, 2014-2019 (Quarters 1-2)\*



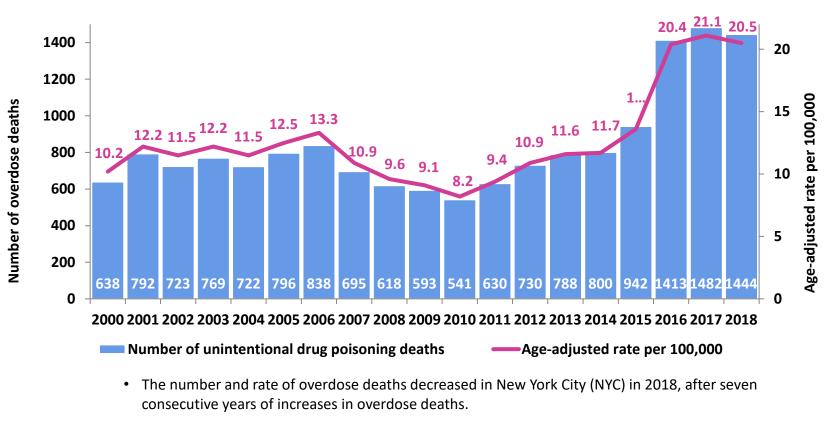
• The number of overdose deaths in the first two quarters of 2019 were lower than 2018, but overdose deaths in New York City remain at epidemic levels.

\*Data for 2018 and 2019 are provisional and subject to change; more recent quarters subject to larger increases

Source: New York City Office of the Chief Medical Examiner & New York City Department of Health and Mental Hygiene 2000-2019



## 2019 Data Updates: Unintentional Drug Poisoning Deaths, NYC, 2000-2018\*



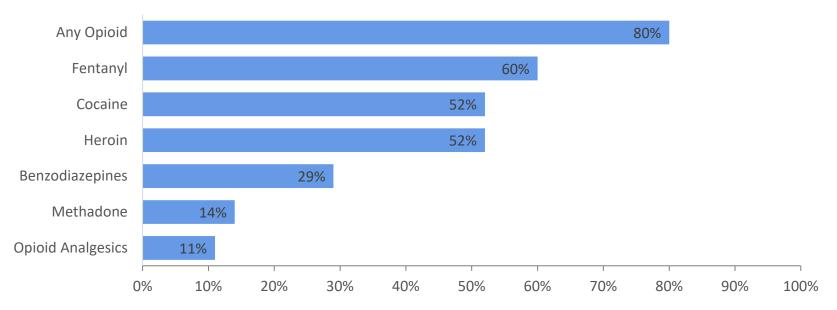
- In 2018 there were 1,444 unintentional drug overdose deaths in NYC, compared with 1,482 in 2017, a decrease of 38 deaths.
- The rate of overdose death decreased 3% from 21.1 per 100,000 residents in 2017 to 20.5 per 100,000 residents in 2018.

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

Source: New York City Office of the Chief Medical Examiner & New York City Department of Health and Mental Hygiene 2000-2018. NDEWS New York City SCS Drug Use Patterns & Trends, 2020



## 2019 Data Updates: Fentanyl Was Involved in 60% of Overdose Deaths in 2018\*



Proportion of unintentional drug overdose deaths involving select drugs, New York City, 2018\*.

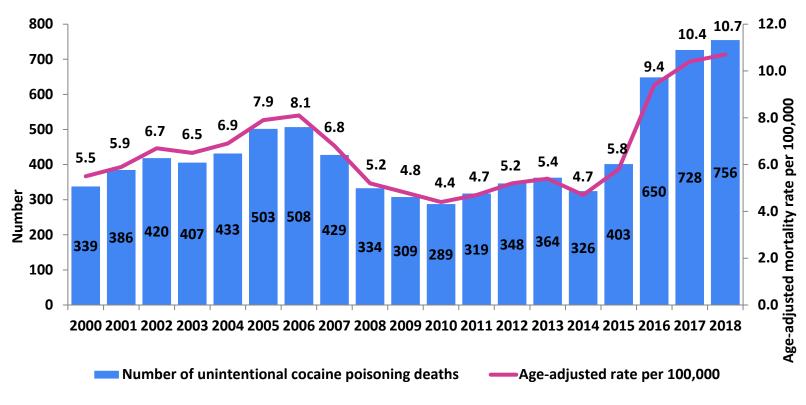
- In 2018, opioids were involved in 80% of overdose deaths.
- For the second year in a row, fentanyl was the most common substance involved in drug overdose deaths, present in 60% of overdose deaths in 2018.
- In 2018, opioid analgesics, excluding fentanyl, were involved in the fewest number of overdose deaths since 2009 (156 vs. 145).
- Half (50%) of all overdose deaths involved multiple central nervous system depressants, such as alcohol (40%), benzodiazepines (29%), and opioids (80%)

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

Source: New York City Office of the Chief Medical Examiner & New York City Department of Health and Mental Hygiene NDEWS New York City SCS Drug Use Patterns & Trends, 2020



2019 Data Updates: Cocaine-Involved Overdose Deaths Continued to Increase in 2018\*



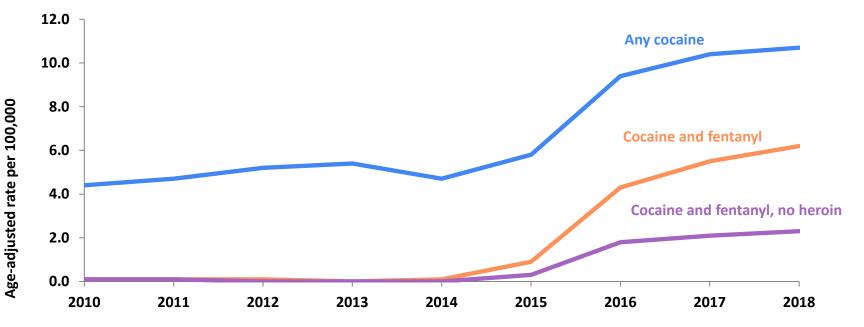
- In 2018, there were 756 cocaine overdose deaths in New York City, for a rate of 10.7 per 100,000 residents.
- In New York City, the number and rate of cocaine overdose death has increased sharply in recent years. Since 2014, the rate of cocaine-involved overdose death has more than doubled from 4.7 per 100,000 residents to 10.7 per 100,000 residents in 2018.

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

Source: New York City Office of the Chief Medical Examiner & New York City Department of Health and Mental Hygiene 2000-2018.



## 2019 Data Updates: Fentanyl Driving the Increase in Cocaine-Involved Overdose Deaths



Age-adjusted rate of cocaine overdose death by fentanyl and heroin involvement, New York City, 2010 – 2018\*

- Our data suggest that the increase in cocaine-involved overdose deaths from 2015 to 2018 was driven by opioids.
- The increase in cocaine overdose deaths from 2015 to 2018 was mirrored by a corresponding increase in the rate of overdose deaths involving both cocaine and fentanyl.
- During this time period, we also saw a substantial increase in the rate of overdose deaths involving cocaine and fentanyl, without heroin. Cocaine overdose deaths involving fentanyl but no heroin, are a proxy for deaths where fentanyl might have been present in the cocaine product.

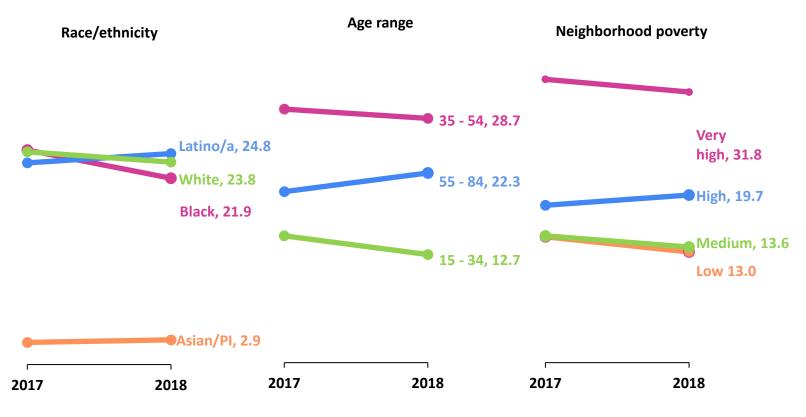
\*Data for 2018 are preliminary and subject to change.

Source: New York City Office of the Chief Medical Examiner & New York City Department of Health and Mental Hygiene 2000-2018.



## 2019 Data Updates: Change in Rates of Drug Overdose Death, 2017 To 2018\* (Per 100,000 Residents)

Large increase in rates of overdose among Latino/a New Yorkers and New Yorkers aged 55-84 from 2017 to 2018\*



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

Source: New York City Office of the Chief Medical Examiner & New York City Department of Health and Mental Hygiene, 2017-2018.



**2019 Data Updates:** 

## Change in Rates of Drug Overdose Death, 2017 To 2018\* (Per 100,000 Residents)

Large increase in rates of overdose among Latino/a New Yorkers and New Yorkers aged 55-84 from 2017 to 2018\*

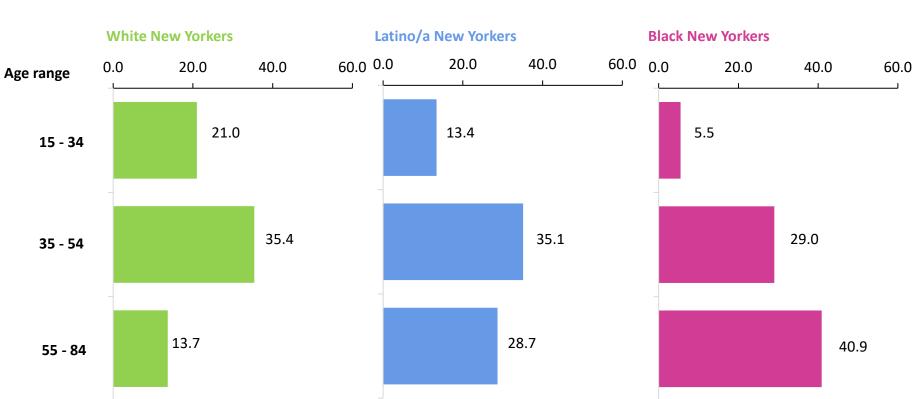
- Although there was a slight decrease in overdose deaths in New York City from 2017 to 2018, this decrease was not equally distributed citywide, with some groups experiencing increases in the rate of overdose deaths during this time period.
- In 2018, Latino/a New Yorkers had the highest rate of overdose deaths (24.8 per 100,000 residents); the rate increased 5% from 23.7 per 100,000 residents in 2017. The rate among White New Yorkers decreased for the second consecutive year. The rate decreased by 5%, from 25.0 per 100,000 in 2017 to 23.8 per 100,000 in 2018. The rate among Black New Yorkers decreased by 13% from 2017 to 2018, from 25.2 to 21.9 per 100,000.
- Significant disparities also remain in the rate of overdose deaths by age group. Overdose rates remained highest
  among New Yorkers ages 35 to 54, (28.7 per 100,000) but decreased 4% from 2017 to 2018. The rate also decreased
  among New Yorkers ages 15 to 24 by 15%. Among New Yorkers ages 55 to 84, the rate increased by 11%, from 20.1
  per 100,000 in 2017 to 22.3 per 100,000 in 2018.
- Finally, there are also wide disparities in the rate of overdose deaths by neighborhood poverty level. Residents of very high poverty neighborhoods had a higher rate (31.8 per 100,000) than residents of high, medium, and low poverty neighborhoods (19.7, 13.6, and 13.0 per 100,000 respectively).

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

Source: New York City Office of the Chief Medical Examiner & New York City Department of Health and Mental Hygiene, 2017-2018.



## 2019 Data Updates: Drug Overdose Rates Highest Among Older, Black New Yorkers



Rates of unintentional drug overdose death, by age range & race/ethnicity, 2018\* (per 100,000 residents)

• Black New Yorkers between the ages of 55-84 had the highest rate of unintentional drug overdose deaths among all New Yorkers in 2018, at 40.9 per 100,000 residents.

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

Source: New York City Office of the Chief Medical Examiner & New York City Department of Health and Mental Hygiene, 2018\*



## **Special Topics**

## **Health Opinion Polls**

- Naloxone awareness
  - 43% of participants had heard of naloxone
  - 14% knew naloxone reversed only an opioid overdose
- Awareness of Medication for Opioid Use Disorder (MOUD)
  - 67% of participants knew OUD can be treated with medication
  - Knowledge of MOUD highest for methadone, then naltrexone, and lowest for buprenorphine
- Cannabis
  - 27.3% reported use of cannabis in the past 12 months
  - If cannabis was legalized, a majority support being able to use it in private homes or spaces designated for cannabis use

## **Criminal Justice Involvement Among Drug Overdose Decedents**

- Matched criminal justice history data from NY Division of Criminal Justice Services with drug overdose mortality data
- Among NYC residents who died of a drug overdose from 2008 2015:
  - 79% of overdose decedents had at least one arrest
  - 69% of decedents had at least one conviction



## NYC Department of Health and Mental Hygiene Initiatives

## Initiative Highlights, 2019

- Continued Rapid Assessment and Response (RAR) and Enhanced Community Engagement (ECE)
  - Neighborhood assessment post-closure of syringe service program (SSP) storefront
  - Day of action in the Bronx
- Expanded NYC DOHMH nonfatal overdose response system (Relay) into 13 hospitals
- Distributed over 160,000 naloxone kits citywide
- Collaborated with NYC Parks Department and Syringe Service Programs to coordinate syringe disposal in parks
- Conducted Cocaine and Bars public awareness campaign to highlight presence of fentanyl in cocaine supply

## **Overdose Data to Action Initiatives, 2020**

- Survey of people who use drugs during COVID-19
- Provider case-based webinar series on opioid prescribing challenges
- Buprenorphine navigator model in two EDs
- Toolkit for providers on stigma and substance use

## **COVID-19 Responses And Initiatives**

<u>Data</u>

- Survey of people who use drugs during COVID-19 (surveillance strategy for CDC Overdose Data to Action grant) Guidance
- Mindful drinking
- COVID-19 prevention among people who use drugs
- Overdose prevention

## Initiatives:

- Supporting Syringe Service Programs through distribution of protective and cleaning supplies
- Methadone Delivery System

## **Treatment Tables**

 Table 1a: Trends in Non-Crisis Admissions\* to Programs Treating Substance Use Disorders, New York City Residents, 2015-2019

 Number of Admissions and Percentage of Admissions with Selected Substances Cited as Primary Substance at Admission, by Year and Substance

	Calendar Year									
	2015		2016		2017		2018		2019	
	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)
Total Admissions (#)	80,334	100%	71,242	100%	78,125	100%	71,530	100%	70,343	100%
Primary Substance of Abuse (%)										
Alcohol	24,503	30.5%	23,213	32.6%	24,397	31.2%	25,309	35.4%	25,346	36.0%
Cocaine/Crack	8,596	10.7%	7,698	10.8%	7,937	10.2%	8,116	11.3%	8,097	11.5%
Heroin	26,217	32.6%	20,768	29.2%	26,315	33.7%	20,011	28.0%	19,988	28.4%
Prescription Opioids**	2,115	2.6%	1,871	2.6%	2,115	2.7%	1,802	2.5%	1,600	2.3%
Methamphetamine	471	0.6%	630	0.9%	733	0.9%	805	1.1%	1,037	1.5%
Marijuana	15,347	19.1%	14,085	19.8%	13,628	17.4%	12,545	17.5%	11,378	16.2%
Benzodiazepines**	793	1.0%	1,033	1.4%	965	1.2%	858	1.2%	832	1.2%
MDMA	52	0.1%	70	0.1%	53	0.1%	79	0.1%	66	0.1%
Synthetic Stimulants**	35	0.0%	43	0.1%	92	0.1%	67	0.1%	68	0.1%
Synthetic Cannabinoids	312	0.4%	142	0.2%	108	0.1%	114	0.2%	163	0.2%
Other Drugs/Unknown	1,893	2.4%	1,689	2.4%	1,782	2.3%	1,824	2.5%	1,768	2.5%

#### NOTES:

\*Non-Crisis Admissions: Includes non-crisis admissions to outpatient, inpatient, residential, and methadone maintenance treatment programs licensed in the State. Each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period.

**\*\*Substance Categories: Prescription opioids** includes non-prescription methadone, buprenorphine, other synthetic opiates, and OxyContin; **Benzodiazepines** includes benzodiazepines, alprazolam, and rohypnol. **Synthetic Stimulants** includes other stimulants and a newly created category, synthetic stimulants (created in 2014). **unavail:** Data not available.

2019 data are as of 5/15/2020. 2018 date are as of 4/24/2019. 2017 data are as of 5/29/2018. 2016 data are as of 5/24/2017. 2015 data are as of May 2016.

**SOURCE:** Data provided to the New York City NDEWS SCE by the New York State Office of Alcoholism and Substance Abuse Services (OASAS), Client Data System accessed from Local Governmental Unit (LGU) Inquiry Reports.

 Table 1b: Trends in Crisis (Detox) Admissions\* to Programs Treating Substance Use Disorders, New York City Residents, 2015-2019

 Number of Admissions and Percentage of Admissions with Selected Substances Cited as Primary Substance at Admission, by Year and

 Substance

Substance											
	Calendar Year										
	2015		2016		2017		2018		2019		
	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)	
Total Admissions (#)	45,018	100%	42,109	100%	40,907	100%	41,651	100%	38,910	100%	
Primary Substance of Abuse (%)											
Alcohol	25,205	56.0%	22,689	53.9%	22,767	55.7%	25,582	61.4%	23,803	61.2%	
Cocaine/Crack	2,038	4.5%	2,024	4.8%	1,478	3.6%	1,033	2.5%	885	2.3%	
Heroin	14,439	32.1%	14,425	34.3%	13,921	34.0%	12,573	30.2%	12,032	30.9%	
Prescription Opioids**	939	2.1%	846	2.0%	764	1.9%	723	1.7%	596	1.5%	
Methamphetamine	23	0.1%	28	0.1%	20	0.0%	24	0.1%	25	0.1%	
Marijuana	538	1.2%	452	1.1%	348	0.9%	254	0.6%	128	0.3%	
Benzodiazepines**	1,234	2.7%	1,137	2.7%	1,134	2.8%	1,049	2.5%	1,053	2.7%	
MDMA	nr	nr	nr	nr	nr	nr	nr	nr	nr	nr	
Synthetic Stimulants**	nr	nr	nr	nr	nr	nr	nr	nr	nr	nr	
Synthetic Cannabinoids	114	0.3%	50	0.1%	42	0.1%	20	0.0%	13	0.0%	
Other Drugs/Unknown	477	1.1%	452	1.1%	430	1.1%	385	0.9%	370	1.0%	

#### NOTES:

\*Crisis Admissions: Includes detox admissions to all licensed treatment programs in the State. Each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period.

**\*\*Substance Categories: Prescription opioids** includes non-prescription methadone, buprenorphine, other synthetic opiates, and OxyContin; **Benzodiazepines** includes benzodiazepines, alprazolam, and rohypnol. **Synthetic Stimulants** includes other stimulants and a newly created category, synthetic stimulants (created in 2014). **nr:** Data not reported.

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## **Sources**

## DATA FOR THIS REPORT WERE DRAWN FROM THE FOLLOWING SOURCES:

#### Prevalence

 New York State Department of Health Bureau of Narcotics Enforcement, 2013 – 2019. Analysis by NYC Department of Health and Mental Hygiene, Bureau of Alcohol and Drug Use Prevention, Care, and Treatment.

#### Treatment

• Data provided to the New York City NDEWS SCE by the New York State Office of Alcoholism and Substance Abuse Services (OASAS), Client Data System accessed from Local Governmental Unit (LGU) Inquiry Reports.

#### Mortality

• New York City Office of the Chief Medical Examiner & New York City Department of Health and Mental Hygiene, 2000-2019.

## **Other Sources**

- New York City Department of Health and Mental Hygiene (2019). New York City Health Opinion Poll (NYC HOP) Topline Reports: Findings from HOP1. Retrieved from https://www1.nyc.gov/site/doh/data/data-sets/health-opinion-poll.page.
- Criminal justice history data provided by the New York State Division of Criminal Justice.

For additional information about the substances and substance use patterns discussed in this report, please contact Denise Paone, Ed.D., Senior Director of Research & Surveillance, Bureau of Alcohol and Drug Use Prevention, Care and Treatment, NYC Department of Health and Mental Hygiene, 42-09 28<sup>th</sup> St, Long Island City, NY; Phone: 646-941-3355; E-mail: dpaone@health.nyc.gov.