2020

ANNUAL REPORT

DIVISION OF SUBSTANCE USE PREVENTION AND HARM REDUCTION

Department of
Public Health
CITY OF PHILADELPHIA

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INTRODUCTION

Philadelphia has been working to address substance use for decades, but in 2020 the COVID-19 global pandemic disrupted normal day-to-day life and exacerbated many risk factors that put individuals at risk for substance use disorder (SUD). The COVID-19 pandemic contributed to record job losses, increased mental distress, food insecurity, and potential housing instability. While the effects of COVID-19 were felt across the city, the pandemic also exposed the systemic racial inequities that exist in particular groups and communities. However, despite the challenges of an unpredictable year, the Philadelphia Department of Public Health's (PDPH) Division of Substance Use Prevention and Harm Reduction (SUPHR) continued to focus on its mission to reduce the number of people initiating use of illicit opioids and other drugs while ensuring that people who use drugs received the harm reduction and treatment resources they needed.

This report describes how substance use continues to impact Philadelphia residents in the context of an unprecedented pandemic, including trends in the prescribing of controlled substances, and the morbidity and mortality associated with SUD. The many efforts within the city to address the impact of substance use, including policies enacted in 2020 and PDPH's community response, are also described in this report.

REPORT HIGHLIGHTS

IN 2020 *compared to 2019*

634,674
opioid prescriptions *excluding buprenorphine*
15.5% DECREASE

488,830
benzodiazepine prescriptions
11.2% DECREASE

284,356
stimulant prescriptions
8.4% DECREASE

143,605
buprenorphine prescriptions
3.8% INCREASE

Emergency Department Visits:

6,139 visits for drug overdoses
13.5% DECREASE

5,299 visits for withdrawal or detoxification
3.7% DECREASE

5.8% INCREASE

275 cases of neonatal abstinence syndrome were reported to PDPH.

57,742 doses of naloxone distributed by PDPH
21.0% DECREASE

3,259 individuals were trained to use naloxone in 79 training sessions.

(44 virtual/26 in person/9 pop-up)

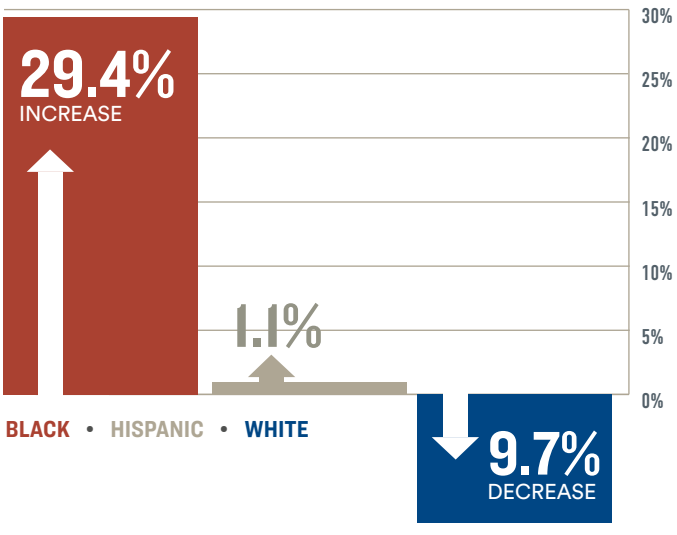
1,214 unintentional overdose deaths occurred.

5.5% increase from 2019

698 opioid overdose-related non-fatal hospitalizations occurred.

3.4% increase from 2019

Unintentional overdose deaths
compared to 2019



SURVEILLANCE

PRESCRIBING TRENDS

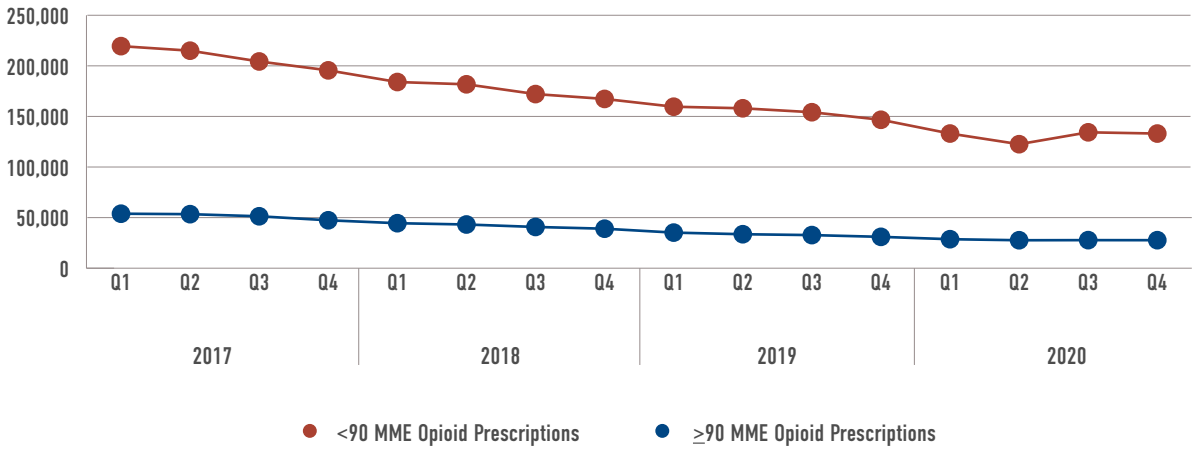
Despite approved medical uses, prescription opioids, stimulants, and benzodiazepines are addictive and prone to misuse. To reduce prescription drug misuse, the Pennsylvania Prescription Drug Monitoring Program (PDMP) was implemented in 2016 to collect information on prescribers and prescriptions filled by Pennsylvania residents for controlled substances. The PDMP collects information on all prescription opioids, including buprenorphine, as well as benzodiazepines (such as Xanax) and prescription stimulants (such as Adderall). Prescription counts reported in previous reports were limited to prescriptions filled at Philadelphia pharmacies. In 2020, the PDMP datasets were expanded to prescriptions filled at all pharmacies regardless of location.

OPIOID PRESCRIBING 2020

- The number of opioid prescriptions less than or equal to 89 morphine milligram equivalents (MME) prescribed to Philadelphia residents decreased from 219,480 prescriptions in the first quarter of 2017 to 133,071 total prescriptions in the last quarter of 2020 (Figure 1).

During the same time period, high dose opioid prescriptions, which consist of prescriptions that are 90 MME or higher, decreased from 53,848 prescriptions in the first quarter of 2017 to 27,672 in the last quarter of 2020 (Figure 1).

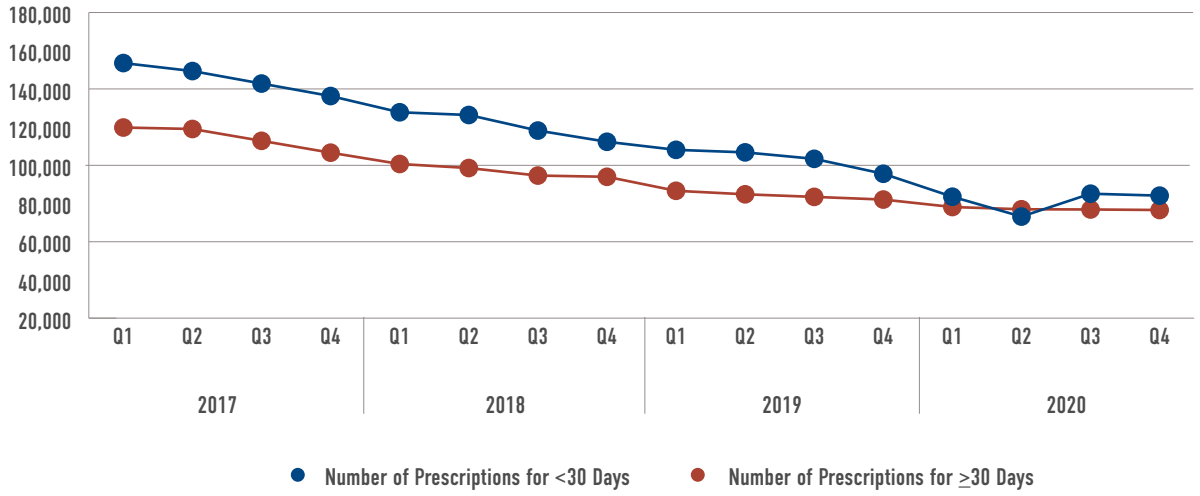
FIGURE 1
NUMBER OF OPIOID PRESCRIPTIONS (EXCLUDING BUPRENORPHINE) PRESCRIBED TO RESIDENTS PER QUARTER



Data Source: Pennsylvania Prescription Drug Monitoring Program

- The number of opioid prescriptions for less than 30 days' supply and 30 days or more supply decreased from 153,537 and 119,791 in the first quarter of 2017 to 84,129 and 76,614 prescriptions in the last quarter of 2020, respectively (Figure 2).
- The number of opioid prescriptions for less than 30 days' supply decreased to 73,167 during the second quarter of 2020, likely due to elective surgeries and procedures being cancelled to reduce the transmission of COVID-19 (Figure 2).

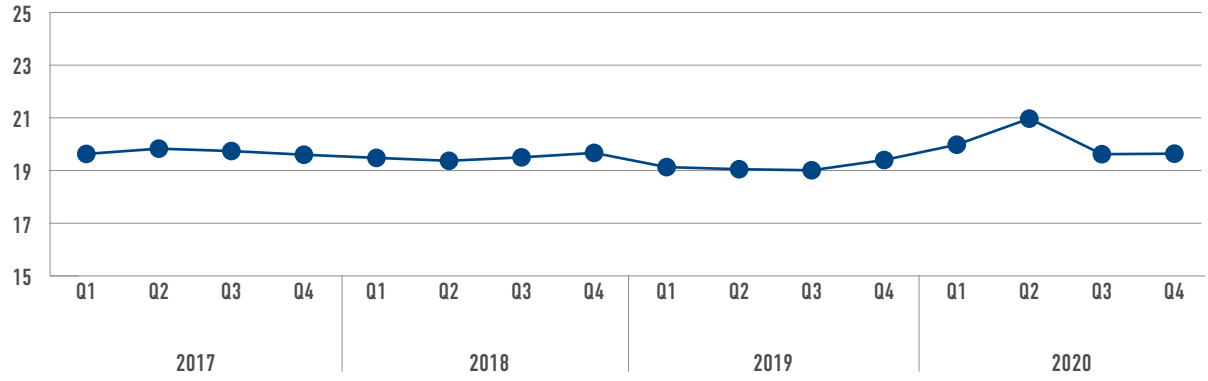
FIGURE 2
NUMBER OF OPIOID PRESCRIPTIONS (EXCLUDING BUPRENORPHINE) PER QUARTER BY DAYS SUPPPLY



Data Source: Pennsylvania Prescription Drug Monitoring Program

- The average day supply per opioid prescription, excluding buprenorphine prescriptions, has remained consistent over time, with 19.6 days reported in the first quarter of 2017 and the last quarter of 2020 (Figure 3).
- The average day supply increased to 21.0 days during the second quarter of 2020. This is likely due to the cancellation of elective surgeries and procedures that would have resulted in opioid prescriptions of only a few days and lower the average day supply (Figure 3).

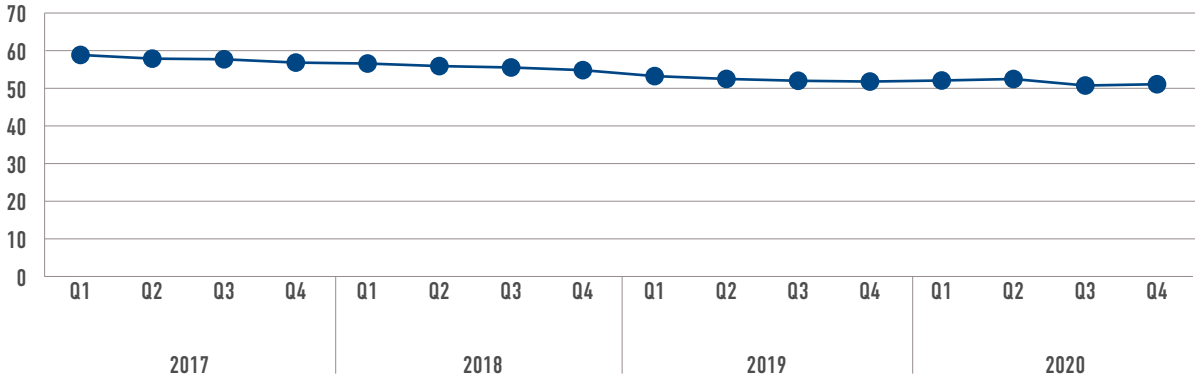
FIGURE 3
AVERAGE DAY SUPPLY PER OPIOID (EXCLUDING BUPRENORPHINE) PRESCRIPTION PER QUARTER



Data Source: Pennsylvania Prescription Drug Monitoring Program

• The average daily MME per opioid prescription, excluding buprenorphine prescriptions, decreased 13.2% from 58.9 MME in the first quarter of 2017 to approximately 51.1 MME in the last quarter of 2020 (Figure 4).

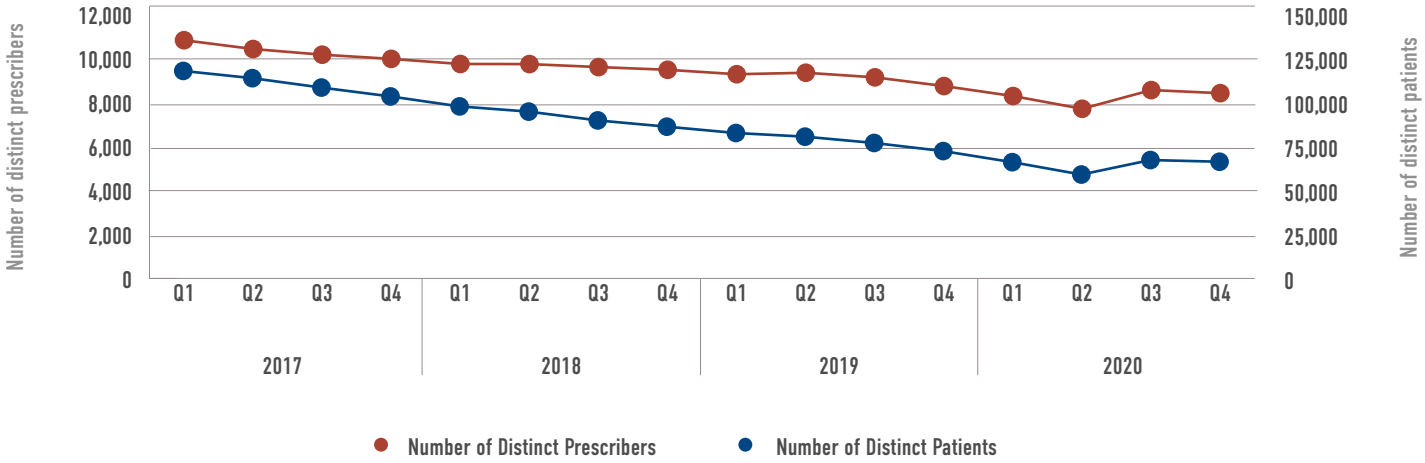
FIGURE 4
AVERAGE DAILY MME PER OPIOID PRESCRIPTION (EXCLUDING BUPRENORPHINE) PER QUARTER



Data Source: Pennsylvania Prescription Drug Monitoring Program

• The number of distinct prescribers who wrote an opioid prescription to Philadelphia residents has decreased over time, from 10,848 in the first quarter of 2017 to 8,438 in the last quarter of 2020. During the same time, the number of distinct patients receiving an opioid prescription also decreased (Figure 5).

FIGURE 5
NUMBER OF DISTINCT OPIOID (EXCLUDING BUPRENORPHINE) PRESCRIBERS AND PATIENTS PER QUARTER

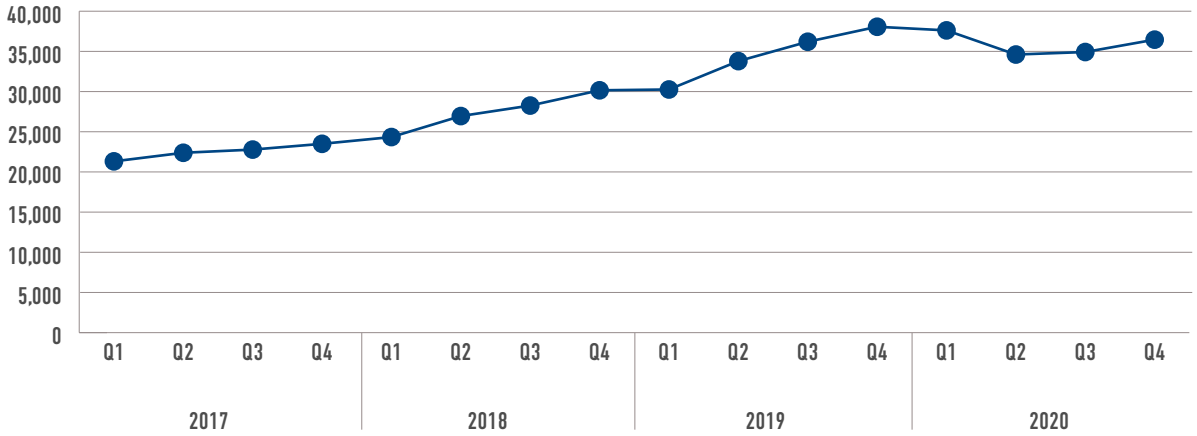


Data Source: Pennsylvania Prescription Drug Monitoring Program

Buprenorphine Prescribing – Buprenorphine is a medication approved by the Food and Drug Administration (FDA) to treat opioid use disorder (OUD). Unlike methadone, which is limited to specialty clinics when treating OUD, buprenorphine can be prescribed in outpatient settings by licensed physicians and advanced practice providers (nurse practitioners and physician assistants).

- Since the first quarter of 2017, the number of buprenoprhine prescriptions has increased, however the number of buprenorphine prescriptions slightly decreased from 38,065 in the last quarter of 2019 to 36,461 in the last quarter of 2020 (Figure 6).

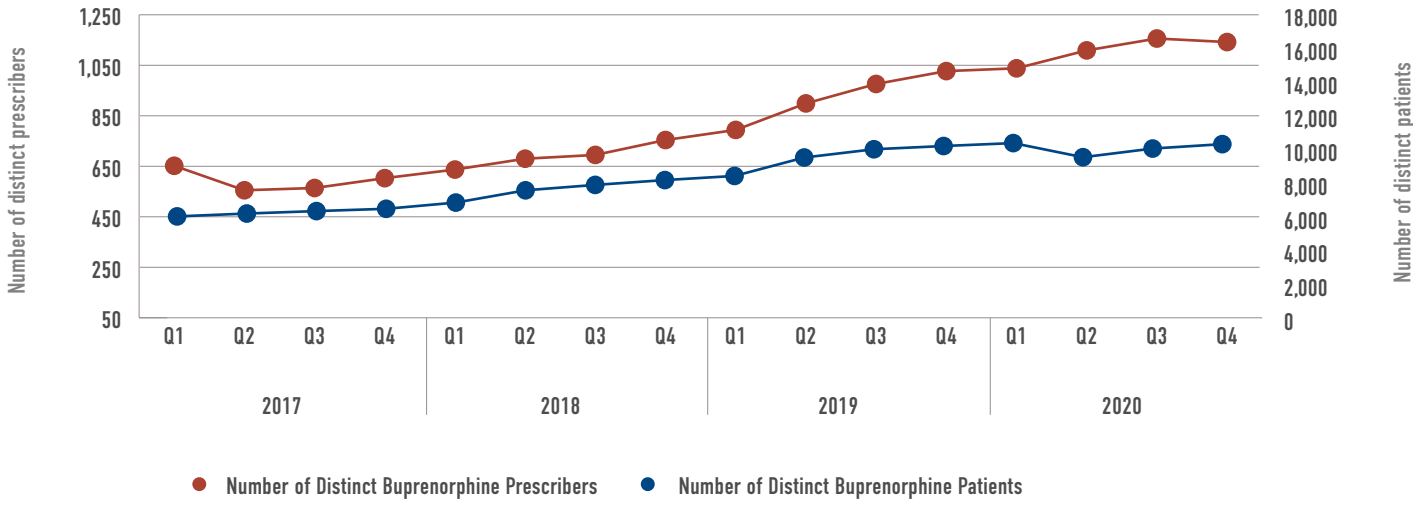
FIGURE 6
BUPRENORPHINE PRESCRIPTIONS TO RESIDENTS PER QUARTER



Data Source: Pennsylvania Prescription Drug Monitoring Program

- The number of distinct buprenorphine prescribers writing buprenorphine prescriptions continued to increase throughout the pandemic but the number of distinct patients receiving buprenorphine plateaued throughout 2020 (Figure 7).

FIGURE 7
NUMBER OF DISTINCT BUPRENORPHINE PRESCRIBERS AND PATIENTS PER QUARTER



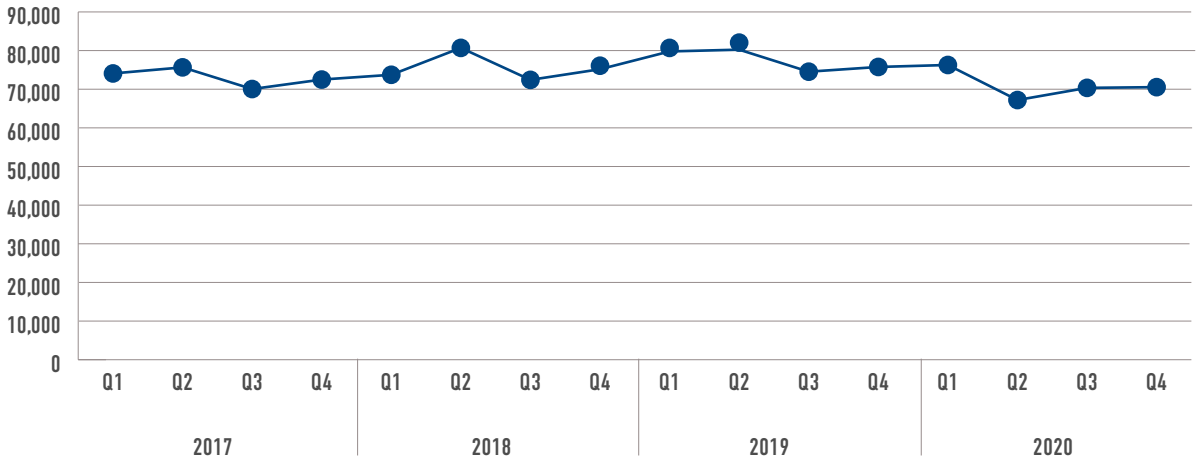
Data Source: Pennsylvania Prescription Drug Monitoring Program

Stimulant Prescribing – Prescription stimulants are medications used to treat attention-deficit hyperactivity disorder (ADHD). These medications include amphetamine (Adderall), lisdexamfetamine (Vyvanse), and methylphenidate (Ritalin).

- Stimulant prescriptions have slightly decreased from 74,080 prescriptions in the first quarter of 2017 to 70,535 prescriptions in the last quarter of 2020 (Figure 8).

In addition to opioids and stimulants, benzodiazepines (prescription medications used for sedation and to treat anxiety) are also being prescribed to Philadelphians in large quantities.In the last quarter of 2020, 119,571 benzodiazepine prescriptions were dispensed to Philadelphia residents (see Supplemental Table 5).

FIGURE 8
NUMBER OF STIMULANT PRESCRIPTIONS RECEIVED BY RESIDENTS



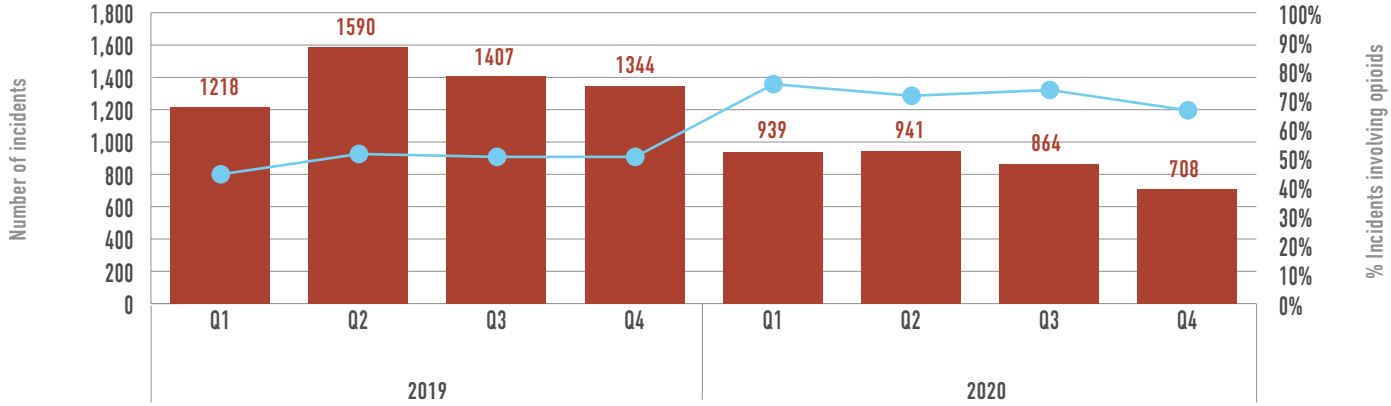
Data Source: Pennsylvania Prescription Drug Monitoring Program

MORBIDITY

Emergency Medical Services

In 2020, there were 3,452 substance-related Emergency Medical Services (EMS) incidents, a 37.9% decrease from 5,559 substance-related EMS incidents in 2019. Of the 3,452 substance-related EMS incidents, 72.5% (n=2,504) were related to opioid use. The quarterly average number of substance-related EMS incidents was 863, compared to 1,390 incidents in 2019.

FIGURE 9
NUMBER OF SUBSTANCE-RELATED* EMS INCIDENTS



Data Source: Philadelphia Fire Department

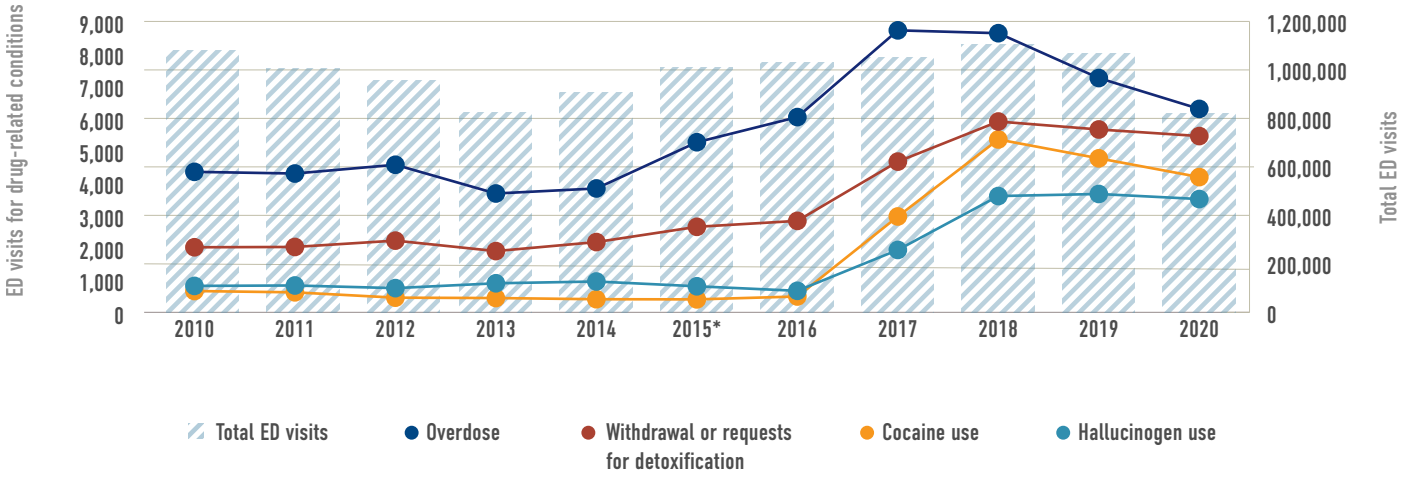
*Specific to EMS Incidents with Primary Impression of "Cocaine Use", "Hallucinogen Use", "Inhaled Substance Use", "Opioid Use", and "Substance Use".

Emergency Department Visits

In 2020 there were:

- 6,139 emergency department visits for overdoses from opioids or unspecified substances, a 13.5% decrease from 2019 to 2020 (Figure 10).
- 5,299 emergency department visits for withdrawal or requests for detoxification, a 3.7% decrease from 2019 to 2020 (Figure 10).
- 4,030 emergency department visits for cocaine use, a 12.6% decrease from 2019 to 2020 (Figure 10).
- 3,350 emergency department visits for hallucinogen use, a 4.5% decrease from 2019 to 2020 (Figure 10).
- Emergency departments visits for all conditions decreased 23.1% from 2019 to 2020 due to the COVID-19 pandemic. This decrease may partially explain the decrease in substance use-related visits in 2020 (Figure 10).

FIGURE 10
NUMBER OF EMERGENCY DEPARTMENT VISITS FOR DRUG-RELATED CONDITIONS



*The U.S. transitioned to International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) from International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) in the last quarter of 2015.

Data Source: Philadelphia Department of Public Health Syndromic Surveillance System

Neonatal Abstinence Syndrome:

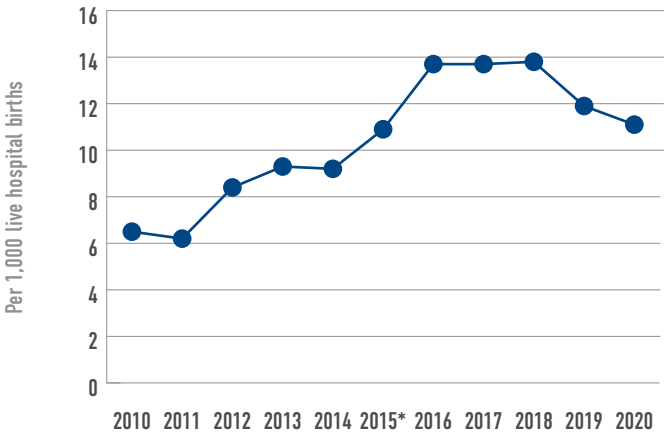
Substance use among women of childbearing age has led to an increased risk of giving birth to an infant with neonatal abstinence syndrome (NAS). NAS is a clinical diagnosis used to describe a collection of signs and symptoms that occur when a newborn infant withdraws from certain drugs, which he or she was exposed to in the womb. Treating NAS involves medications for opioid use disorder (MOUD) and non-pharmacological treatments.

- The rate of NAS was 11.1 cases per 1,000 live hospital births in 2020 compared to 11.9 cases per 1,000 live hospital births in 2019 (Figure 11).

*The U.S. transitioned to International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) from International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) in the last quarter of 2015.

Data Source: Pennsylvania Health Care Cost Containment Council

FIGURE 11
RATE OF NEONATAL ABSTINENCE SYNDROME PER 1,000 LIVE HOSPITAL BIRTHS



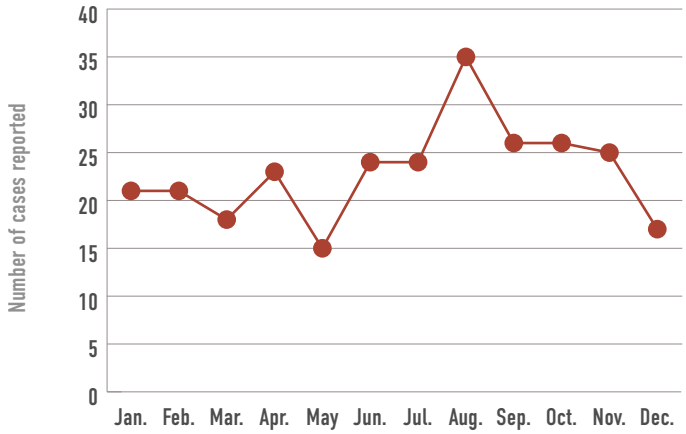
In 2018, the Philadelphia Board of Health added NAS to the list of conditions that must be reported to PDPH by hospitals and birthing facilities. Receipt of this information allows PDPH to link infants and parenting persons to home visiting programs, early intervention services, and harm reduction services such as naloxone trainings and drug treatment.

In 2020:

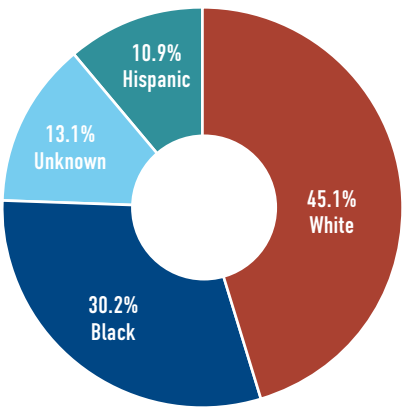
- There were 275 cases of NAS reported to PDPH (Figure 12).

Data Source: Philadelphia Department of Public Health, Neonatal Abstinence Syndrome Program

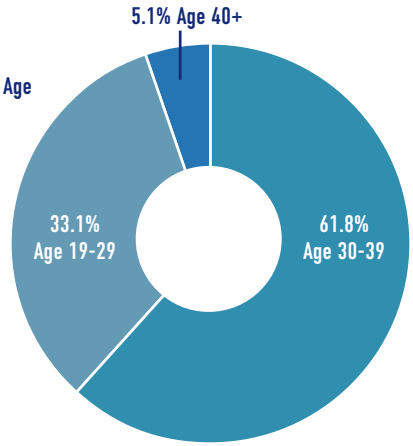
FIGURE 12
NEONATAL ABSTINENCE SYNDROME CASES REPORTED TO PDPH BY MONTH, 2020



Percentage of Mothers of Infants with NAS by Race/Ethnicity



Percentage of Mothers of Infants with NAS by Age



- Similar to 2019, most mothers of infants diagnosed with NAS were non-Hispanic White and between 30-39 years old in 2020 (Table 1).
- Compared to 2019, there was a larger proportion of mothers aged 30-39 who gave birth to infants diagnosed with NAS in 2020 (Table 1).
- The number of mothers where their race/ethnicity was classified as unknown was six-times higher in 2020 than in 2019 (Table 1).

TABLE 1

DEMOGRAPHICS OF MOTHERS WHO GAVE BIRTH TO INFANTS WITH NAS, 2019, 2020 COMPARED WITH ALL MOTHERS WHO GAVE BIRTH, 2020

	Mothers of Infants with NAS Reported to PDPH, 2019		Mothers of Infants with NAS Reported to PDPH, 2020		All Mothers who Gave Birth, 2020	
Age Category	**N**	**%**	**N**	**%**	**N**	**%**
19-29	111	42.7	91	33.1	9,031	48.0
30-39	141	54.2	170	61.8	9,046	48.1
40+	8	3.1	14	5.1	722	3.8
Race/Ethnicity						
White	147	56.5	124	45.1	5,032	25.9
Black	73	28.1	83	30.2	7,360	37.9
Asian	*	*	*	*	4,003	20.6
Hispanic	28	10.8	30	10.9	1,390	17.2
Other	*	*	*	*	357	1.8
Unknown	6	2.3	36	13.1	1,273	6.6

* Counts less than 6 have been suppressed.
Data Source: Philadelphia Department of Public Health, Neonatal Abstinence Syndrome Program

Infants diagnosed with NAS display a number of signs and symptoms including, but not limited to, hyperirritability, restlessness, hyperactive reflexes, seizures, tremors, poor feeding, sweating, nasal flaring, and inconsolability. These symptoms are used to calculate a Finnegan's score, which quantifies the severity of the syndrome.

- In 2020, infants had an average Finnegan score of 10.6 with a range of 3 – 20 signs and symptoms (data not shown).
- The largest percentage of substances detected by hospital toxicology screening were medications for opioid use disorder (21.9%) (Table 2).

TABLE 2

SUBSTANCES DETECTED BY HOSPITAL TOXICOLOGY SCREENING*

Substance Exposure	N	%
MOUD† only	60	21.9
Opioids only	45	16.4
Non-opioid drugs only	37	13.4
MOUD + opioids	23	8.5
MOUD + opioids + non-opioid drugs	23	8.5
Opioid + non-opioid drugs	53	19.4
MOUD + non-opioid drugs	33	11.9

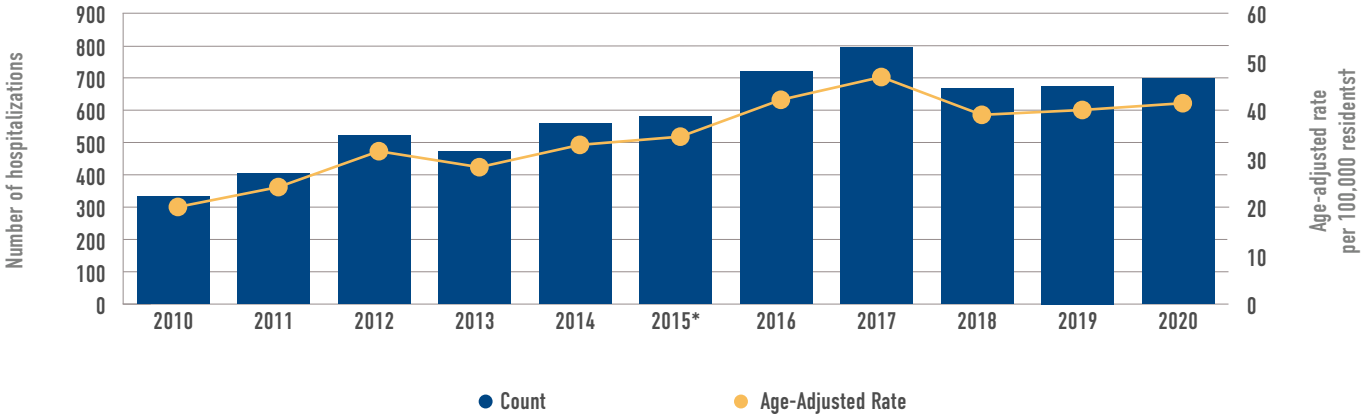
*Includes results of mothers of infants with NAS and infants with NAS.
† MOUD indicates medications used for opioid use disorder (methadone, naltrexone, and buprenorphine).
Data source: Philadelphia Department of Public Health Neonatal Abstinence Syndrome Program

HOSPITALIZATION

Non-fatal Opioid Overdose Hospitalizations

- Since 2010, non-fatal opioid overdose hospitalizations have increased steadily in Philadelphia, from 332 in 2010 to 698 in 2020 (Figure 13).
- The age-adjusted rate rose 100.9% from 21.2 non-fatal opioid hospitalizations per 100,000 residents in 2010 to 42.6 non-fatal opioid hospitalizations per 100,000 residents in 2020 (Figure 13).

FIGURE 13
NON-FATAL OPIOID OVERDOSE HOSPITALIZATIONS



*The U.S. transitioned to International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) from International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) in the last quarter of 2015.

†Rates are age adjusted to the Census 2000 US standard population.

‡Limited to unintentional or undetermined non-fatal opioid overdose events

Data Source: Pennsylvania Health Care Cost Containment Council

- Compared to 2019, a larger proportion of all non-fatal opioid overdose hospitalizations occurred among males (Table 3).
- The highest proportion of individuals who were hospitalized for a non-fatal opioid overdose in 2020 for both males and females were those between 30-39 years old (23.5%) and non-Hispanic White (41.0%) (Table 3).
- The age-adjusted hospitalization rate in 2020 was 63.2 hospitalizations and 25.1 hospitalizations per 100,000 residents for males and females, respectively (data not shown).

TABLE 3

DEMOGRAPHICS OF NON-FATAL OPIOID OVERDOSE HOSPITALIZATIONS

	2019		2020	
	Males	Females	Males	Females
	N (%)	N (%)	N (%)	N (%)
Total	**412 (61.0)**	**263 (39.0)**	**480 (68.8)**	**218 (31.2)**
Age				
0-9 years old	*	*	*	*
10-19 years old	*	*	*	*
20-29 years old	57(13.8)	32 (12.2)	59 (12.3)	21 (9.6)
30-39 years old	88 (21.4)	58 (22.1)	113 (23.5)	51 (23.4)
40-49 years old	84 (20.4)	43 (16.4)	96 (20.0)	34 (15.6)
50-59 years old	96 (23.3)	59 (22.4)	109 (27.7)	48 (22.2)
60-69 years old	61 (14.8)	45 (17.1)	79 (16.5)	43 (19.7)
70-79 years old	21 (5.1)	11 (4.2)	15 (3.1)	15 (6.9)
80+ years old	*	14 (5.3)	8 (1.7)	*
Race/Ethnicity				
Non-Hispanic White	188 (45.6)	147 (55.9)	184 (38.3)	102 (48.6)
Non-Hispanic Black	137 (33.3)	88 (33.5)	163 (34.0)	90 (41.3)
Hispanic	46 (11.2)	17 (6.5)	63 (13.1)	129 (5.5)
Other	39 (9.5)	10 (3.8)	67 (14.0)	14 (6.4)

* Counts less than 6 are suppressed

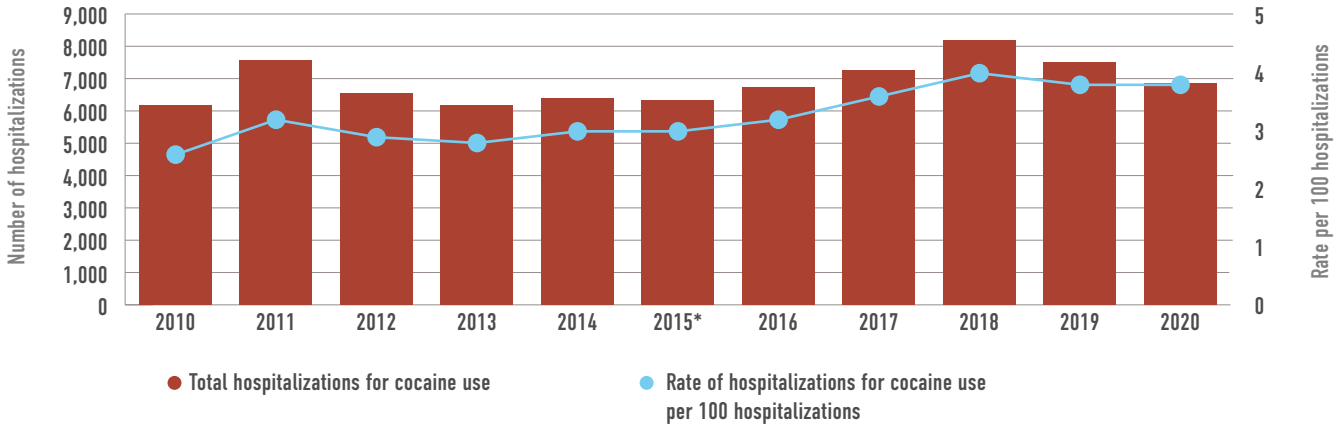
‡Limited to unintentional or undetermined non-fatal opioid overdose events

Data Source: Pennsylvania Healthcare Cost Containment Council

Hospitalizations for Cocaine Use or Dependence

- Since 2010, hospitalizations for cocaine use or dependence have remained consistent, though peaking in 2018 with 8,170 hospitalizations (Figure 14).

FIGURE 14
HOSPITALIZATIONS FOR COCAINE USE OR DEPENDENCE



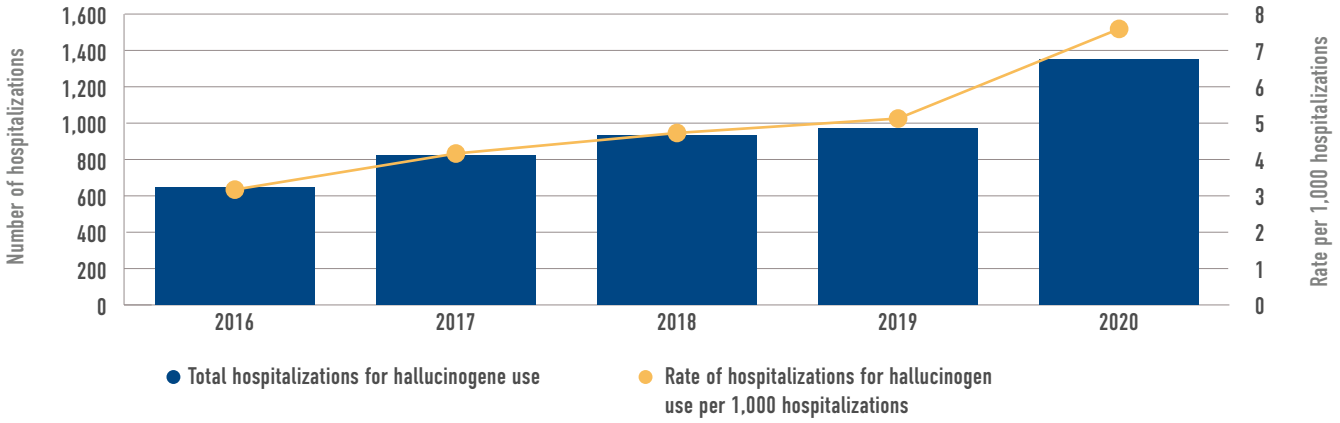
* The U.S. transitioned to International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) from International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) in the last quarter of 2015.

Data Source: Pennsylvania Health Care Cost Containment Council

Hospitalizations for Hallucinogen Use

- Hospitalizations for hallucinogen use have been steadily rising over the past five years, with a 109.6% increase in hospitalizations since 2016 (Figure 15).

FIGURE 15
HOSPITALIZATIONS FOR HALLUCINOGEN USE



Data Source: Pennsylvania Health Care Cost Containment Council

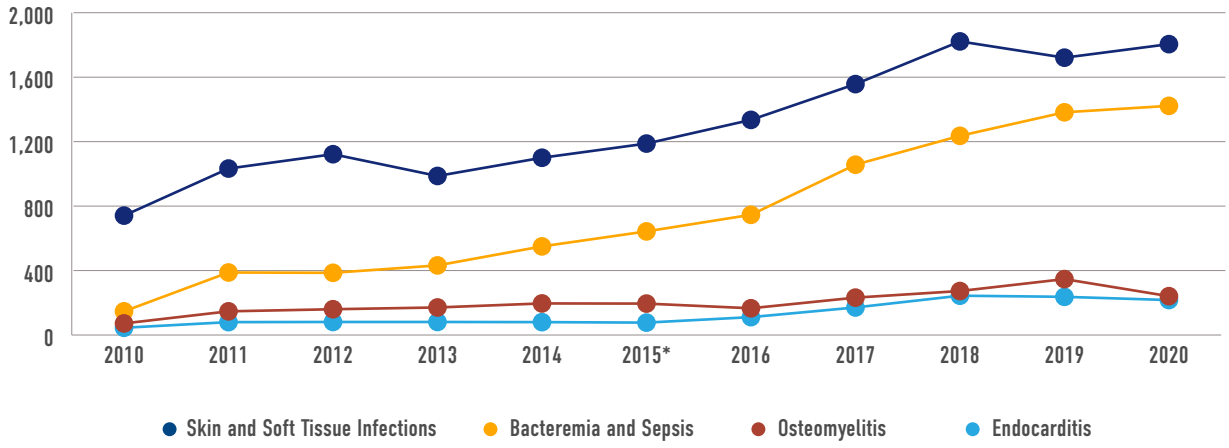
Infections Related to Injection Drug Use-Bacterial Infections

Infections can be caused by the spread of microbial pathogens (primarily bacterial) that result from re-using contaminated injecting equipment or not cleaning the injection area prior to use. They include skin and soft tissue infections (SSTI) such as cellulitis, abscesses, and necrotizing fasciitis. If the bacteria spreads through the blood, it can lead to additional infections such as osteomyelitis (infection of the bone), infective endocarditis (infection of the lining of the heart and/or heart valves), bacteremia (infection of the blood), and sepsis (life-threatening condition resulting from a major infection).

In 2020:

- There were 1,805 hospitalizations for SSTI associated with injection drug use, a 4.9% increase from 2019 (Figure 16).
- There were 1,422 hospitalizations for bacteremia and sepsis, a 2.9% increase from 2019 (Figure 16).
- There were 347 hospitalizations for osteomyelitis, a 20.9% increase from 2019 (Figure 16).
- There were 217 hospitalizations for endocarditis, an 8.4% decrease from 2019 (Figure 16).

FIGURE 16
HOSPITALIZATIONS FOR INFECTIONS ASSOCIATED WITH SUBSTANCE USE



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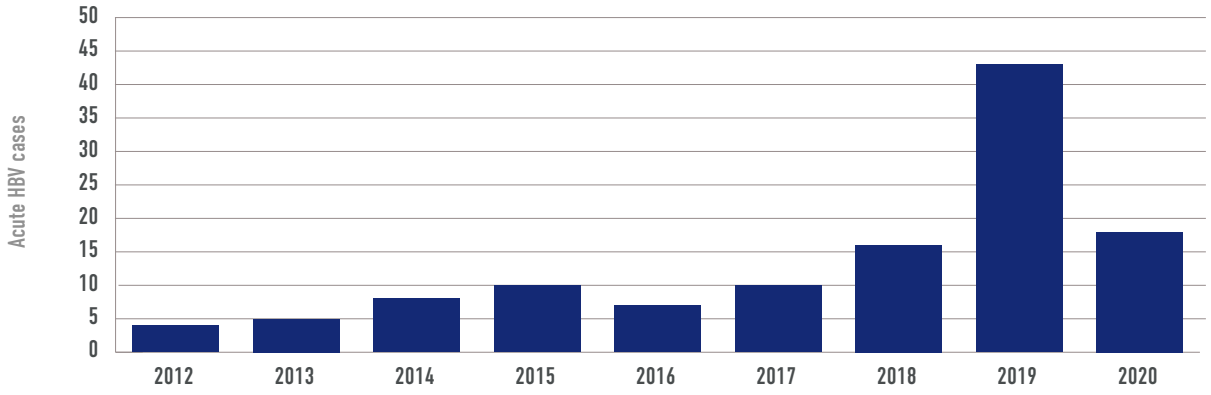
Data Source: Pennsylvania Health Care Cost Containment Council

Infections Related to Injection Drug Use - Viral Hepatitis

Hepatitis C virus (HCV) infection occurs at very high rates among people who use injection drugs, especially among those who share injecting equipment and other drug paraphernalia. The acute phase of HCV refers to the 6-month period after the virus first enters the body. Although acute HCV infection can clear on its own, for most people, acute infection leads to chronic infection. In Philadelphia, 68.0% of individuals with acute HCV reported ever having injected drugs. Recently the increase in acute Hepatitis B virus (HBV) infection has also been driven by injection drug use. Like acute HCV, the acute phase of HBV refers to the 6-month period after the virus first enters the body. However, most people infected with acute HBV clear their infection. Since injection drug use is a primary risk factor for acute HCV and HBV, it is important to emphasize safe injection strategies that can reduce the transmission of HCV, HBV, and other blood born infectious diseases, such as HIV. Unlike HIV and HBV, there is a cure for HCV infection. Data presented here include all acute HCV and HBV cases reported to the Philadelphia Department of Public Health between 2012 to 2020.

- From 2018 to 2020, there was a 12.5% increase in confirmed acute HBV cases, though the increase through 2019 was 169% (Figure 17).
- During the early months of COVID-19 pandemic (March - October 2020), PDPH observed a citywide decrease in HBV testing. This may have contributed to the reduction in identified acute HBV cases in 2020 (Figure 17).
- Among 2020 acute HBV cases, 70.5% reported any drug use, 64.7% reported injection drug use, and 29.4% reported experiencing homelessness (data not shown).
- Along with reported opioid use, other reported drug use among acute HBV cases in 2020 included cocaine and crack use (data not shown).

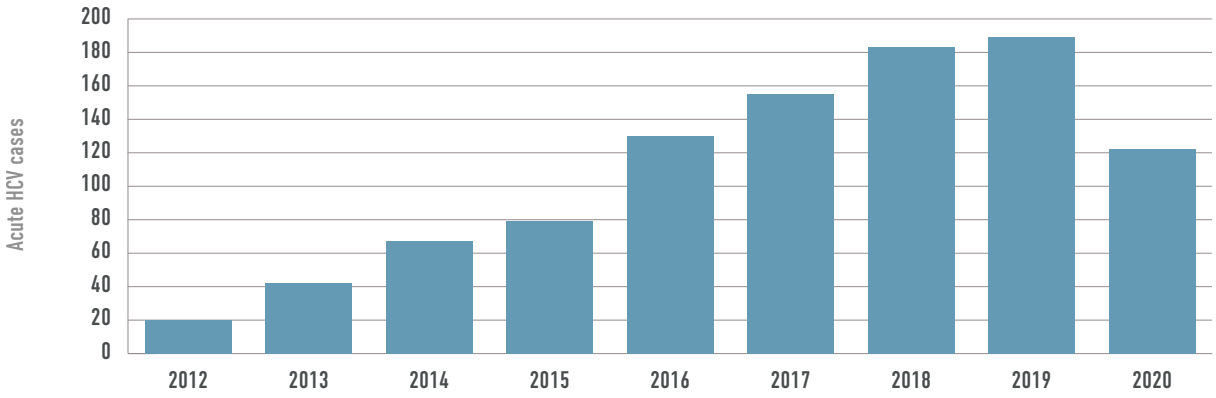
FIGURE 17
ACUTE CASES OF HEPATITIS B VIRUS (HBV) BY YEAR



Data Source: Philadelphia Department of Public Health, Viral Hepatitis Program

- From 2015 to 2020, there was a 54.4% increase in confirmed acute HCV cases, though the increase was 139.2% through 2019 (Figure 18).
- During the early months COVID-19 pandemic (March - October 2020), PDPH observed a citywide decrease in HCV testing. This may have contributed to the reduction in identified acute HCV cases in 2020 (Figure 18).
- Among acute HCV cases in 2020, 92.8% reported any drug use, 87.1% reported injection drug use and 42.7% reported experiencing homelessness (data not shown).
- Along with reported opioid use, other reported drug use for acute HCV cases in 2020 included cocaine, methamphetamine, hallucinogen, and tranquilizers (data not shown).
- All acute HCV counts are considered underestimates since the majority of acute HCV patients experience no symptoms and may never seek care or testing during their acute disease.

FIGURE 18
ACUTE CASES OF HEPATITIS C VIRUS (HCV) BY YEAR



Data Source: Philadelphia Department of Public Health, Viral Hepatitis Program

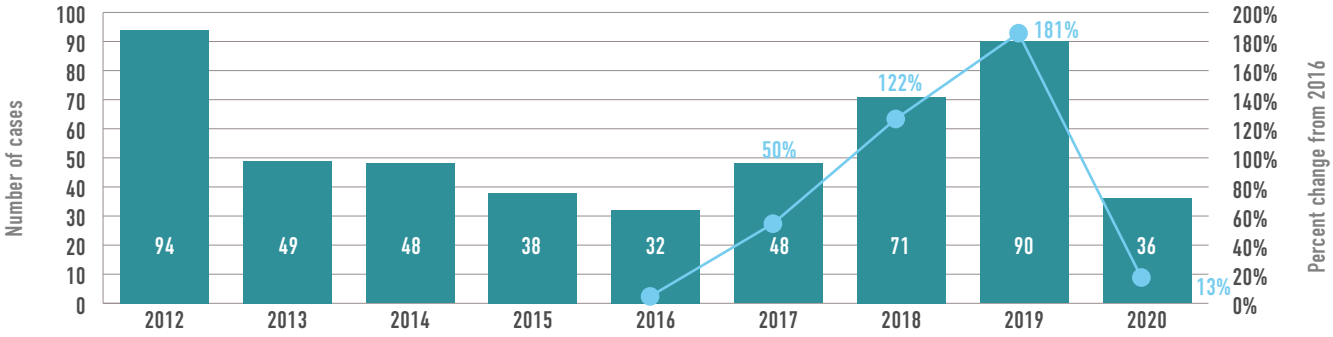
Infections Related to Injection Drug Use - HIV

The number of newly diagnosed cases of HIV among people who inject drugs (PWID) had been declining in Philadelphia since the implementation of the local syringe exchange program in 1992. However, in September 2018, PDPH identified an increase in the number of new HIV infections among this population. The number of new HIV diagnoses among PWID, including persons who inject and men who have sex with men (MSM/PWID), continued to rise until 2020 when COVID-19 presented as a major barrier to accessing HIV testing and care. Despite the drastic decreases in identified cases among this population in the current year, this outbreak highlights the continued risk for HIV acquisition among PWID and their sexual and injection equipment sharing partners. This is especially true given the disparities observed in HIV viral suppression among this group when compared to other populations at increased risk for acquiring HIV. Since identifying this outbreak, PDPH's AIDS Activities Coordinating Office (AACO) has responded with data-driven approaches, including targeted testing, linkage to care activities, and innovative and collaborative prevention strategies.

In 2020:

- There were 36 newly diagnosed cases of HIV among PWID. Despite the impact of COVID-19, this is a 12.5% increase from 32 cases reported in 2016, or the last year where a decrease was observed (Figure 19).
- Twenty-seven (75.0%) of newly diagnosed cases occurred among PWID and 9 (25.0%) occurred among MSM/PWID (data not shown).
- The majority of newly diagnosed cases among PWID, including MSM/PWID, occurred in males (86.1%, n=31), individuals aged 30-39 (36.1%, n=13) and non-Hispanic White individuals (47.2%, n=17) (data not shown).

FIGURE 19
NUMBER OF NEWLY DIAGNOSED CASES OF HIV (regardless of AIDS status) IN PWID BY YEAR



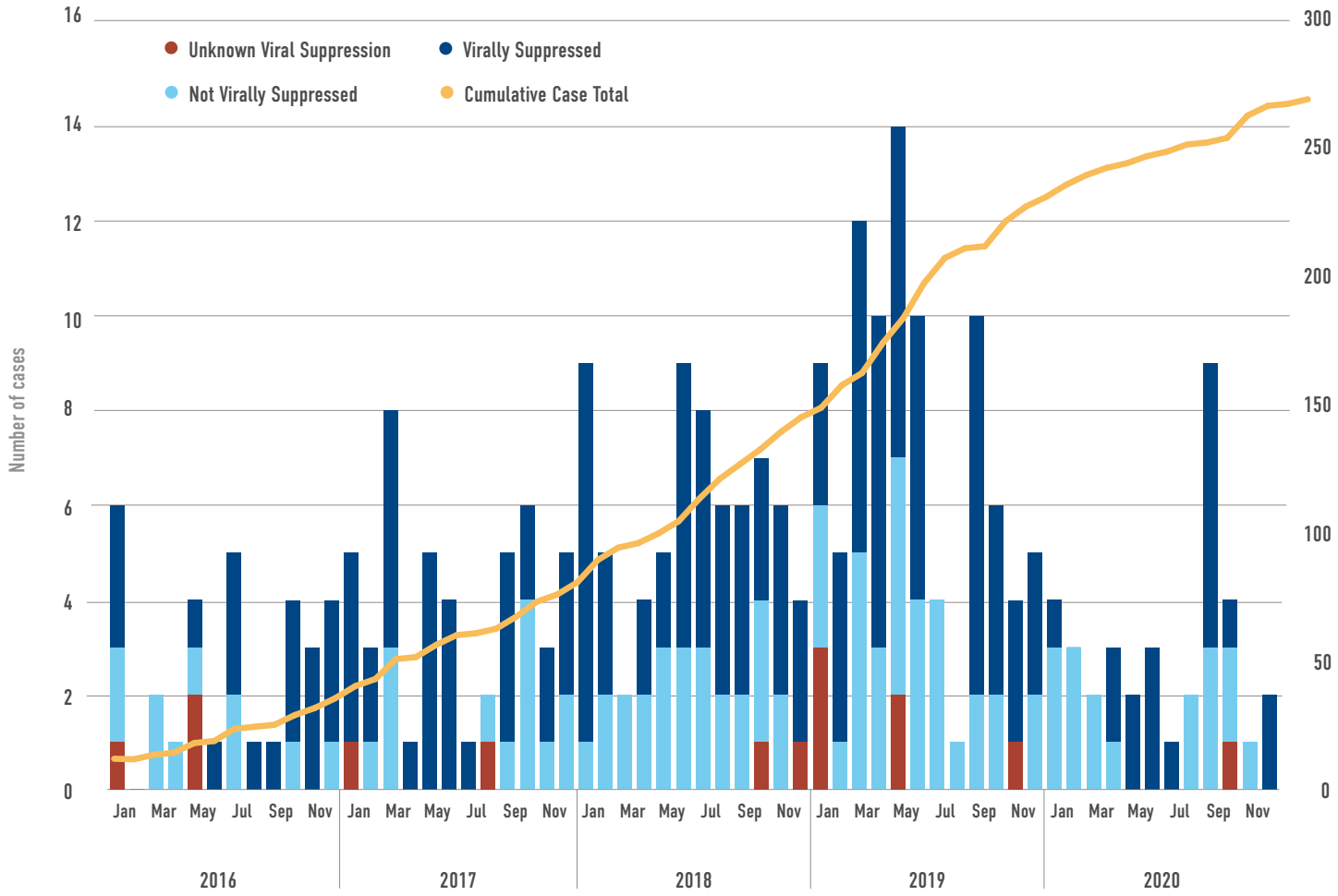
Data Source: Philadelphia Department of Public Health, AIDS Activities Coordinating Office

In 2020:

- Among all PWID living with diagnosed HIV in Philadelphia, 48.1% were virally suppressed at last viral load (data not shown).
- Disparities in HIV viral suppression are observed across sex at birth, race/ethnicity, and age at HIV diagnosis (data not shown).

FIGURE 20

MONTH OF DIAGNOSIS AMONG ALL PWID STRATIFIED BY HIV VIRAL SUPPRESSION STATUS AS OF DECEMBER 31, 2020



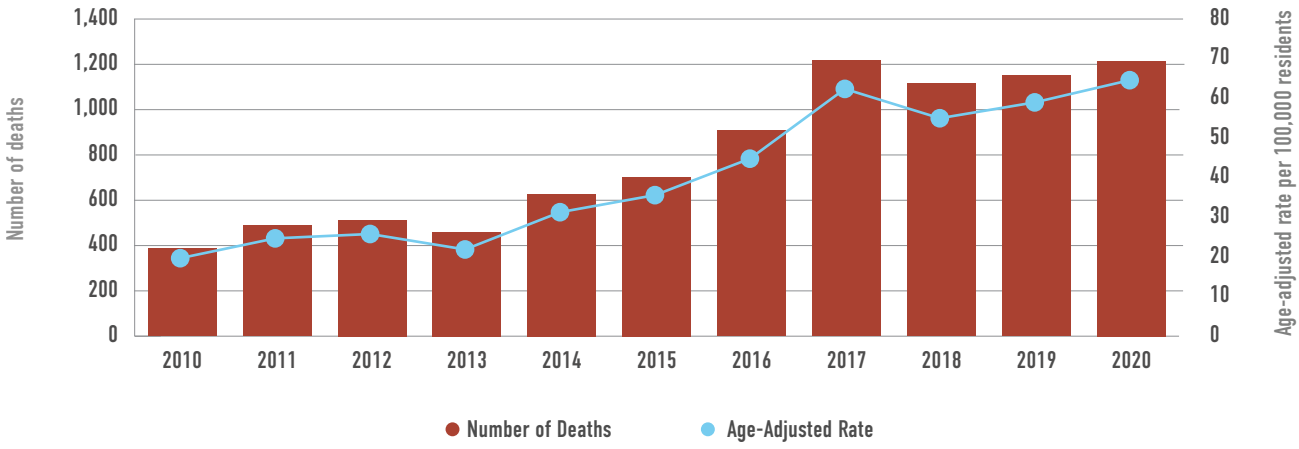
Data Source: Philadelphia Department of Public Health, AIDS Activities Coordinating Office

MORTALITY

In 2020:

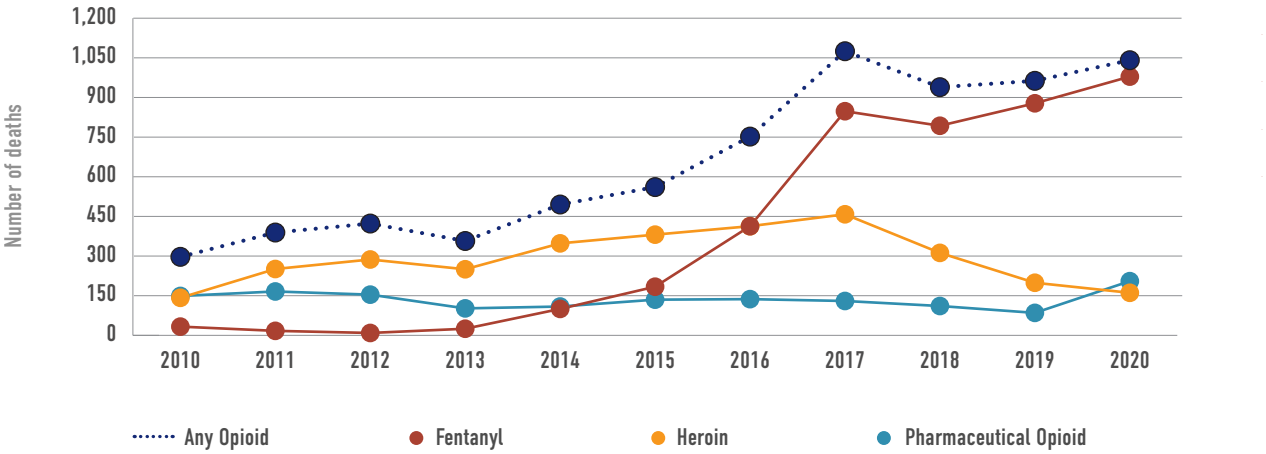
- There were 1,214 unintentional overdose deaths, a 5.6% increase from 2019 (Figure 21).
- 85.7% of all unintentional overdose deaths involved an opioid.
- The age-adjusted mortality rate increased to 68.3 deaths per 100,000 residents in 2020 from 62.7 deaths per 100,000 residents in 2019 (Figure 21).
- Fentanyl continues to drive the increase in opioid-involved overdose deaths in Philadelphia.

FIGURE 21
NUMBER AND AGE-ADJUSTED RATE* OF UNINTENTIONAL OVERDOSE DEATHS



*Rates are age adjusted using the Census 2000 US standard population.
Data Source: Philadelphia Department of Public Health, Medical Examiner's Office

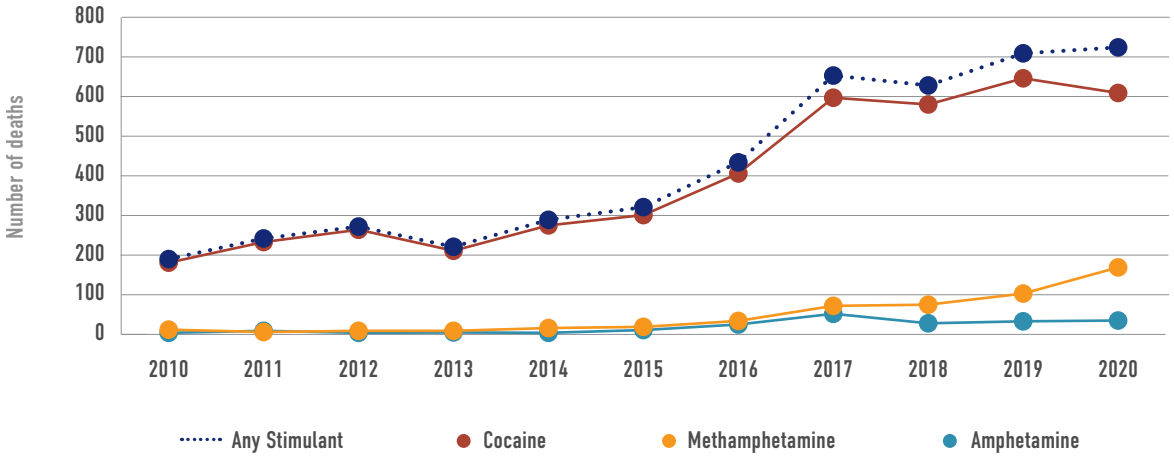
FIGURE 22
NUMBER OF UNINTENTIONAL OPIOID-INVOLVED OVERDOSE DEATHS BY OPIOID TYPE*



*Types of opioids detected are not mutually exclusive
Data Source: Philadelphia Department of Public Health, Medical Examiner's Office

- The number of deaths involving any stimulant is increasing, however, overdose deaths involving cocaine decreased 5.7% from 2019 to 2020 (Figure 23).
- There were 979 unintentional overdose deaths involving fentanyl in 2020, an 11.5% increase from 2019 (Figure 23).
- The number of deaths involving methamphetamine increased 64.1% from 2019 (Figure 23).
- Toxicological tests show an increase in deaths where stimulants and fentanyl are both detected, with 76.6% of stimulant deaths also involving fentanyl in 2020, a 9% increase from 2019 (data not shown).

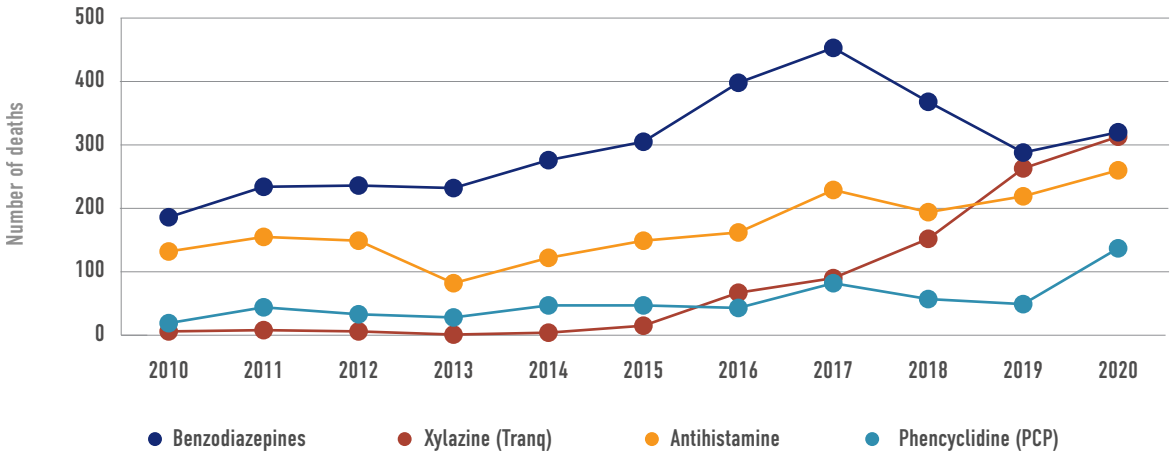
FIGURE 23
NUMBER OF UNINTENTIONAL STIMULANT-INVOLVED OVERDOSE DEATHS BY STIMULANT TYPE*



*Types of stimulants detected are not mutually exclusive

Data Source: Philadelphia Department of Public Health, Medical Examiner's Office

FIGURE 24
NUMBER OF UNINTENTIONAL OVERDOSE DEATHS BY OTHER DRUGS

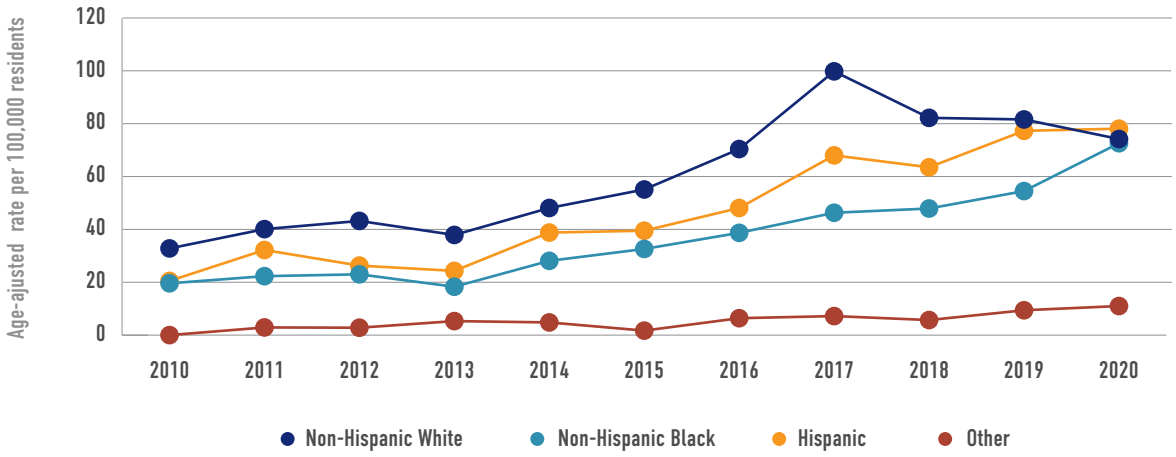


Other drugs involved are not mutually exclusive from opioids and stimulants

Data Source: Philadelphia Department of Public Health, Medical Examiner's Office

- In 2020, 25.8% (n=313) of all unintentional overdose deaths involved xylazine, a 19.0% increase from 2019 (Figure 24).
- In addition to xylazine, antihistamines are often used to potentiate the effects of opioids. In 2020, 21.4% (n=260) of deaths had antihistamines detected in toxicology tests (Figure 24).
- PCP was involved in 137 unintentional overdose deaths in 2020, a 179.6% increase from 2019. (Figure 24).
- While benzodiazepine prescriptions have decreased over time (see Supplemental Table 5), "designer" benzodiazepines, which are benzodiazepines not approved for medical use, have been increasing in the illicit drug supply and may be contributing to the increase of fatalities involving benzodiazepines.
- In recent years, the majority of unintentional overdoses occurred among non-Hispanic White individuals. (Figure 25).
- In 2020, there was a demographic shift among those that died of an unintentional overdose. The age-adjusted mortality rate increased 33.5% among non-Hispanic Black individuals while the age-adjusted mortality rate decreased 9.2% among non-Hispanic White individuals (Figure 25).

FIGURE 25
AGE-ADJUSTED OVERDOSE DEATH RATE, BY RACE/ETHNICITY



*Rates are Age-adjusted using the Census 2000 US standard population.
Data Source: Philadelphia Department of Public Health, Medical Examiner's Office

While this demographic shift is notable and necessitates new outreach strategies and engagement, the overdose epidemiccontinues to affect every demographic group in Philadelphia. Among those who died of an unintentional overdose in 2020, the largest proportion of decedents were:

- Non-Hispanic White (42.1%).
- Male (age-adjusted mortality rate was 108.5 deaths per 100,000 residents compared to 33.5 deaths per 100,000 residents for females, respectively (Table 4).
- Between the ages of 30-39 years old (27.4 %) (Table 4).

TABLE 4
DEMOGRAPHICS OF UNINTENTIONAL OVERDOSE DECEDENTS IN PHILADELPHIA, 2019-2020

	2019			2020		
	Age-adjusted Rates Per 100,000 Residents	N	Percent	Age-adjusted Rates Per 100,000 Residents	N	Percent
Total	**62.7**	**1,150**	**100.0**	**68.3**	**1,214**	**100.0**
Sex						
Males	98.4	849	73.8	108.5	912	75.1
Females	32.0	301	26.2	33.5	302	24.9
Age†						
0-9 years old	*	*	*	*	*	*
10-19 years old	*	*	*	-	7	0.6
20-29 years old	46.2	162	14.1	33.2	118	9.7
30-39 years old	103.3	318	27.7	106.9	333	27.4
40-49 years old	124.8	246	21.4	140.8	268	22.1
50-59 years old	130.6	259	22.5	158.6	304	25.0
60-69 years old	84.5	144	12.5	95.7	164	13.5
70-79 years old	-	17	1.5	-	19	1.6
80+ years old	*	*	*	*	*	*
Race/Ethnicity						
White, Non-Hispanic	80.7	566	49.2	74.4	511	42.1
Black, Non-Hispanic	55.0	384	33.4	72.8	497	40.9
Hispanic	79.8	183	15.9	79.4	185	15.2
Other	-	17	1.5	12.1	21	1.7

* Counts less than 6 are suppressed

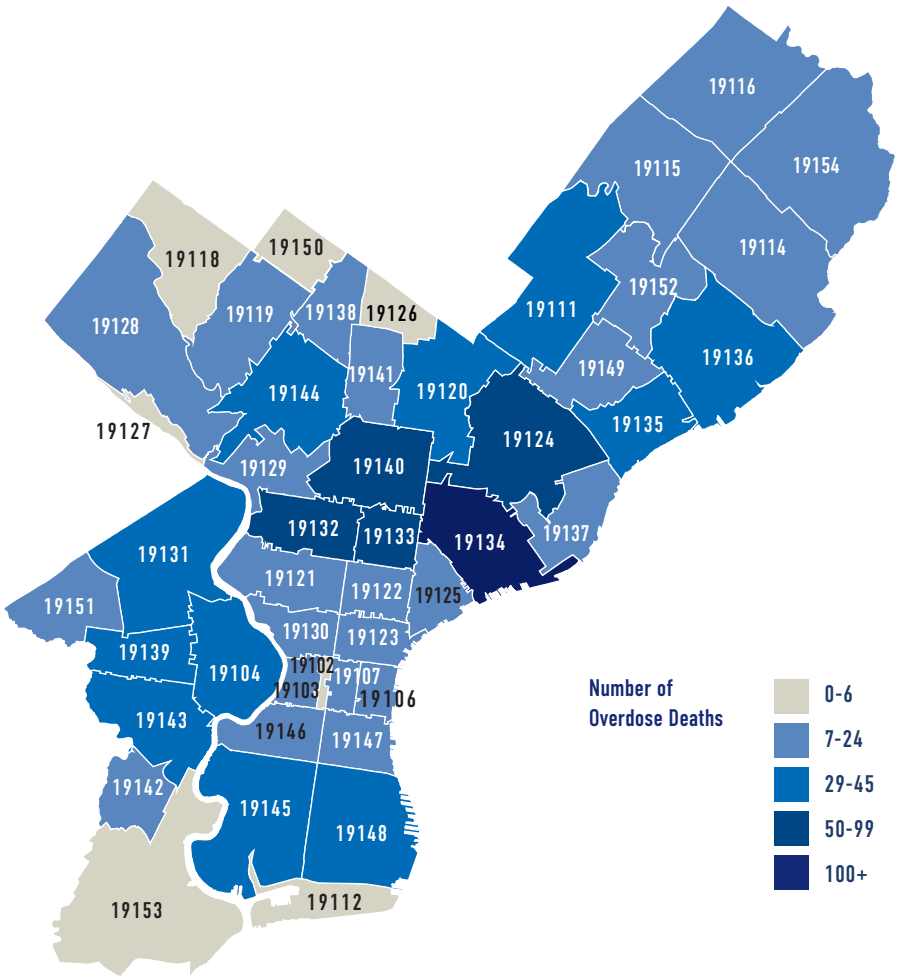
- Death rates based on counts less than 20 deaths were too few to calculate a reliable rate.

† Calculation of age specific rates includes Philadelphia Residents only

Data Source: Philadelphia Department of Public Health, Medical Examiner's Office

- In 2020, the largest number of overdose fatalities (139 deaths) occurred in the 19134 zip code followed by 19124 (83 deaths), 19140 (69 deaths), 19133 (59 deaths), and 19132 (55 deaths) (Figure 26).

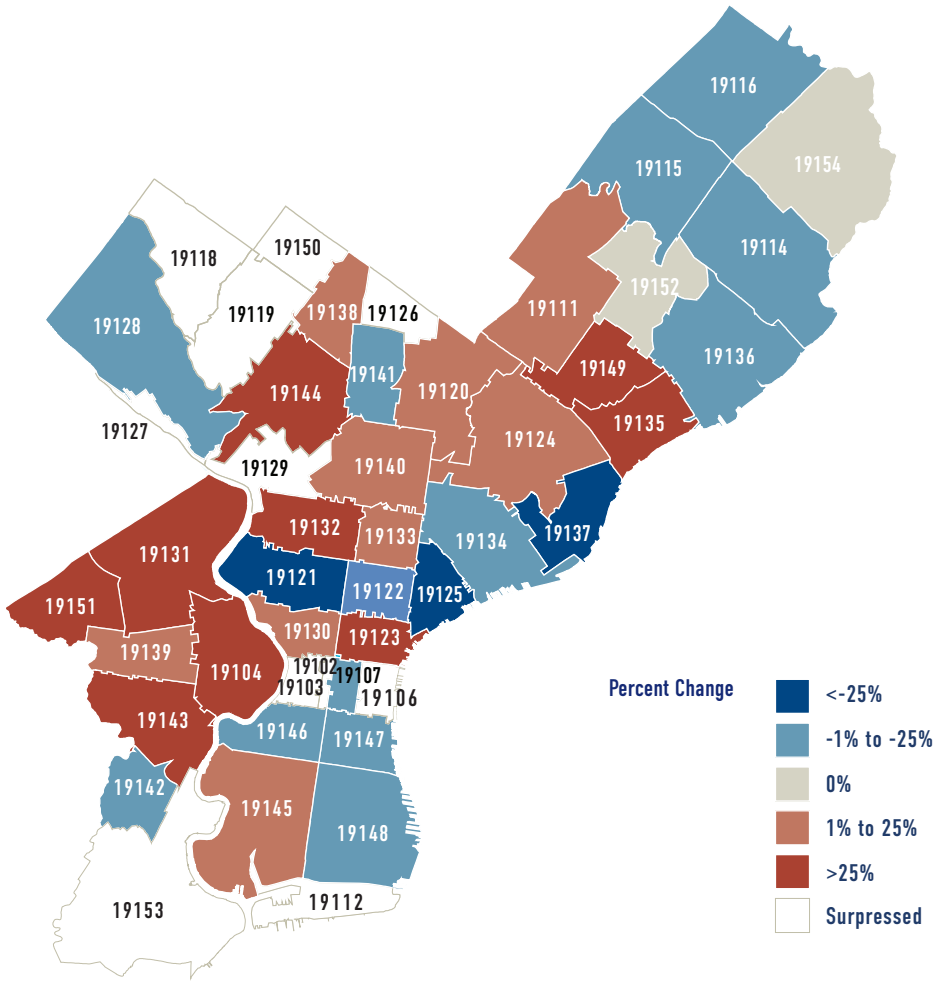
FIGURE 26
NUMBER OF OVERDOSES BY INCIDENT LOCATION, 2020



Data Source: Philadelphia Department of Public Health, Medical Examiner's Office

- Although the total number of overdose deaths increased across Philadelphia from 2019 to 2020, increases were not uniform across the city. The largest percent increase occurred in the West Philadelphia and Northeast Philadelphia zip codes (Figure 27).

FIGURE 27
PERCENT CHANGE IN FATAL OVERDOSES, 2019-2020



Data Source: Philadelphia Department of Public Health, Medical Examiner's Office

RESPONDING TO THE SUBSTANCE USE EPIDEMIC

POLICIES

Achieving Better Care by Monitoring All Prescriptions Program (ABC-MAP) Act

In 2014, the Pennsylvania General Assembly passed the Achieving Better Care by Monitoring All Prescriptions Program (ABC-MAP) Act, which established the Pennsylvania Prescription Drug Monitoring Program (PDMP). Pennsylvania's PDMP was designed to limit and prevent prescription drug misuse by informing prescribers on patients who may be seeking prescription drugs. In the 2019-2020 regular session, Senator Kristin Phillips-Hill re-introduced House Bill 1532 which would amend the ABC-MAP Act and provide local health departments access to identified PDMP data. On February 4, 2020, the bill was passed by both the State Senate and House of Representatives, and on February 12, 2020, the bill was signed into law by Governor Wolf.

Mandated Emergency Department Reporting

To improve the city's efforts to address drug overdoses, Philadelphia City Council passed Bill No. 190864 on April 13, 2020, requiring acute care hospitals in Philadelphia to report aggregate counts of individuals who were seen in the emergency department (ED) for substance use-related reasons and the disposition of those individuals. Specific metrics to be reported to PDPH included the number of patients seen in the ED for an overdose or seeking treatment for withdrawal symptoms, and the number of patients who were seen in the ED who were referred to substance use treatment, treated with buprenorphine, or provided naloxone on discharge. Hospitals began reporting data quarterly starting in October 2020.

In the third and fourth quarter of 2020:

- 15 hospitals reported data for both quarters.
- 1,312 patients received treatment for drug overdose.
- 2,214 patients received treatment for withdrawal symptoms.
- 3,046 patients received a referral to substance use treatment.
- 1,025 patients were treated with buprenorphine.
- 827 patients were provided naloxone at discharge.

COMMUNITY RESPONSE

OD Stat

Philadelphia's Overdose Fatality Review (OFR) Program, also known as OD Stat, was established in 2019 to conduct in-depth reviews of overdose decedents to gain insight on the decedent's drug use and identify missed opportunities for intervention. In 2020, a total of 22 decedents were reviewed, 6 decedents in the first and third quarter, and 5 decedents in the second and fourth quarter. Starting in the second quarter of 2020, the in-person meeting was moved to a virtual platform to comply with COVID-19 restrictions. The virtual platform provided increased accessibility that allowed PDPH to invite experts from out-of-state to share their valuable insight at the OD Stat meetings. Additionally, the virtual platform allowed for peer OFR coordinators to observe and learn from OD Stat. Attendees quickly adapted to the virtual meeting platform and the meeting continued to have high attendance throughout 2020.

As a result of the OD Stat meetings, several recommendations have been made to address the overdose crisis in the city. Some recommendations include the following:

- PDPH should coordinate the creation of a citywide overdose prevention plan to address the rise in drug-related overdoses among non-Hispanic Black and Hispanic Philadelphians.
- The Managing Director's Office (MDO) and Philadelphia Police Department (PPD) should coordinate a peer-based program that provides follow-up after a non-fatal overdose through a harm reduction lens.
- The Department of Behavioral Health and Intellectual disAbility Services (DBHIDS) should increase access to substance use treatment assessments by expanding to new low-barrier partnerships.

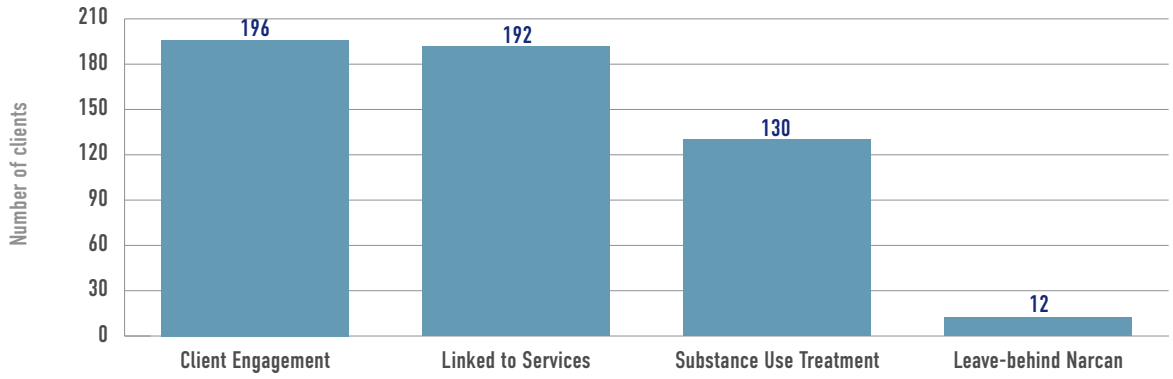
Linkage to Care Programs

AR-2

In 2019, Philadelphia's Alternative Response Unit-2 (AR-2) was launched as a collaboration between PDPH, the Philadelphia Fire Department (PFD) EMS, and the Department of Behavioral Health and Intellectual disAbility Services (DBHIDS). AR-2 is a PFD vehicle that is staffed by a paramedic lieutenant and case manager and responds to non-fatal overdose incidents where the individual declines EMS transportation to an emergency department. AR-2 offers several services to clients, including leave-behind naloxone, information on linkage to care, and a direct connection to drug treatment. In addition to overdose-related 911 calls, AR-2 engages individuals through community outreach and distributes naloxone. After the City's Stay-At-Home order was issued, AR-2 was out of service from March 17, 2020, through June 23, 2020. Partial service resumed June 24, 2020 with case workers working remotely and conducting assessments via telephone.

- In 2020, 315 individuals were identified by AR-2 upon responding to the scene of an overdose.
- Of the identified individuals, 62.2% (n=192) of clients agreed to speak with an AR-2 case manager (Figure 29).
- Of the identified individuals, 41.3% (n=130) were linked to substance use treatment (Figure 28).

FIGURE 28
SERVICES ACCEPTED BY AR-2 CLIENTS



Data Source: Philadelphia Fire Department

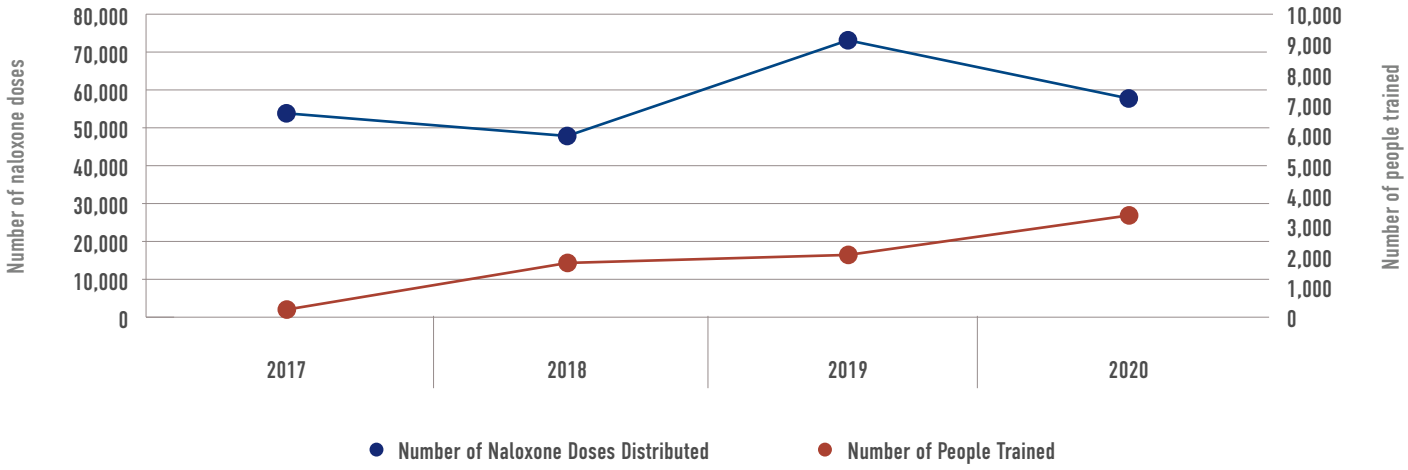
LEAP

In 2020, PDPH provided funding to Action Wellness to launch the Linkage and Engagement After Prison (LEAP) Program. This program is designed to assist formerly incarcerated individuals living with opioid use disorder (OUD) by providing medical case management to link clients to services such as inpatient/ outpatient drug and alcohol treatment, vocational support and job training, and court advocacy. In 2020, 251 individuals were referred to the program and 143 were accepted. Among those that participated, most were Hispanic (37%) or non-Hispanic Black (38%), between the ages 26-35 (39%), and male (90%).

Overdose Reversal Trainings and Naloxone Distribution

In 2020, PDPH distributed 57,742 doses of naloxone (48,858 doses of Narcan and 8,884 doses of generic naloxone), to community organizations, law enforcement agencies, and criminal justice organizations. This was a 21% decrease from 2019 (n=73,112). In 2020, there were 3,259 people trained on overdose reversal, a 67% increase from the number of people trained in 2019 (Figure 29). Of the 79 trainings, 44 were virtual due to social distancing guidelines, 26 were in-person and 9 were pop-up trainings.

FIGURE 29
NUMBER OF NALOXONE DOSES DISTRIBUTED
AND INDIVIDUALS TRAINED ON OVERDOSE REVERSAL



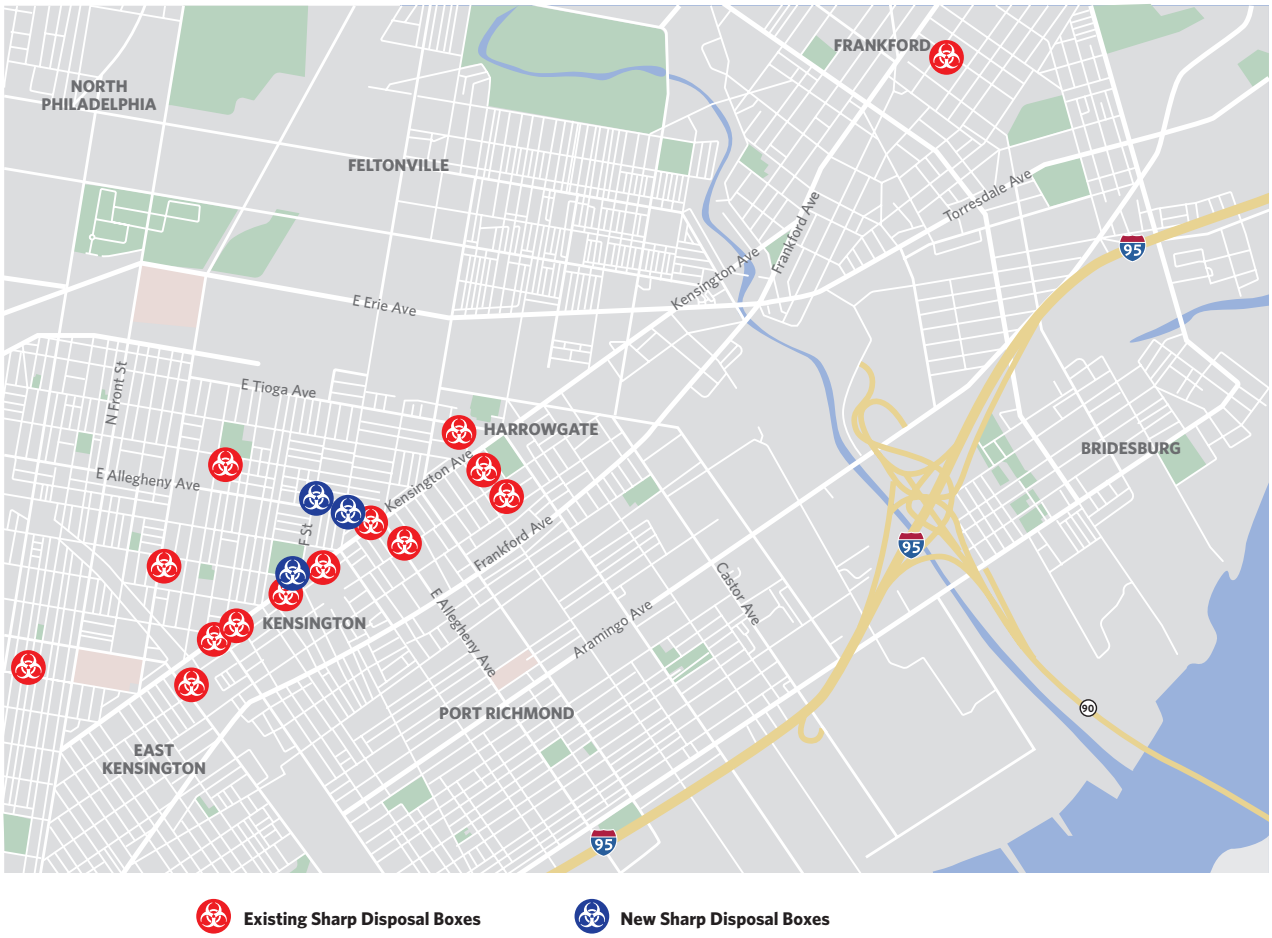
Data Source: Philadelphia Department of Public Health, Division of Substance Use Prevention and Harm Reduction

Syringe Disposal and Environmental Impact

Syringe Disposal

Used sharps (such as needles and syringes) and other drug paraphernalia continue to pose a serious health threat to pets and people across Philadelphia. Safely disposing sharps can prevent the spread of infectious diseases such as Hepatitis B virus (HBV), Hepatitis C virus (HCV), and Human Immunodeficiency virus (HIV). PDPH added three new syringe disposal boxes in 2020 and collected approximately 67,711 sharps from the 23 disposal boxes across the city. The map below shows the three sharp disposal boxes that were added in 2020.

SYRINGE DISPOSAL LOCATIONS



KIND

At the end of 2018, PDPH funded the Kensington Initiative for Needle Disposal (KIND), in collaboration with Prevention Point Philadelphia and Impact Services, to collect and dispose of used sharps and other drug paraphernalia from the streets of Kensington. KIND was also established to create a source of income for community members by employing individuals who have lived experience with drug use or homelessness. In 2020, KIND collected 62,076 used sharps and other drug litter.

Project Reach

In 2020, PDPH launched Project Reach to supplement environmental cleanups in Kensington given the increased amount of drug paraphernalia and trash in Kensington due to COVID-19. Unlike other sanitation programs in Kensington, Project Reach is a harm reduction-focused sanitation program. Its objectives are to improve the quality of life for residents in communities that have been heavily impacted by drug use and ensure that naloxone is provided to businesses, residents, and high-risk populations. In 2020, 592 doses of Narcan and 480 doses of naloxone were given out to the community and 1,908 syringes were collected.

ADDRESSING RACIAL DISPARITIES IN SUBSTANCE USE

Historically, those who died of an unintentional overdose in Philadelphia were non-Hispanic White males between the ages of 25-44 years old. However, from 2018 to 2019, the number of fatal overdoses increased 24% and 11% among Hispanic and non-Hispanic Black individuals in Philadelphia, respectively. In 2020, the COVID-19 global pandemic magnified the existing systemic inequities and exacerbated the consequences of substance use among communities of color in Philadelphia. While unintentional fatal overdoses decreased 9% among non-Hispanic White individuals, there was a 1% and 33% increase in fatal overdoses among Hispanic and non-Hispanic Black individuals in Philadelphia from 2019 to 2020, respectively.

Despite the recent increase of fatal overdoses in communities of color, substance use has been a long-standing issue within these communities for decades. Beginning in the 1970's, the federal government first declared a "War on Drugs", which led to an aggressive over-policing framework rooted in systemic racism that disproportionately targeted communities of color in the 1980's. Many of the negative effects of the early years of the War on Drugs are still seen in Philadelphia today. PDPH is working to reverse these lasting consequences by supporting community based organizations that serve Black and Latinx communities, as well as prioritizing the development of culturally competent harm reduction educational materials.

SUPPLEMENTAL TABLES

TABLE 5

Distinct Counts of Benzodiazepine Prescriptions, Prescribers, and Patients, Philadelphia, 2017-2020			
Quarter	**Total Prescriptions**	**Number of Distinct Prescribers**	**Number of Distinct Patients**
2017 Q1	175,540	7,674	75,314
2017 Q2	172,590	7,443	73,694
2017 Q3	164,452	7,445	70,990
2017 Q4	160,868	7,327	69,334
2018 Q1	157,018	7,309	67,570
2018 Q2	156,696	7,283	65,894
2018 Q3	151,629	7,156	63,645
2018 Q4	148,906	7,204	62,140
2019 Q1	140,357	7,037	60,124
2019 Q2	139,898	7,188	58,976
2019 Q3	137,805	6,972	57,024
2019 Q4	132,245	6,852	55,766
2020 Q1	126,818	6,667	54,726
2020 Q2	121,711	6,247	52,334
2020 Q3	120,730	6,641	52,055
2020 Q4	119,571	6,617	51,451

Data Source: Pennsylvania Prescription Drug Monitoring Program

TABLE 6

Distinct Counts of Stimulant Prescriptions, Prescribers, and Patients, Philadelphia, 2017-2020			
Quarter	Total Prescriptions	Number of Distinct Prescribers	Number of Distinct Patients
2017 Q1	74,080	4,023	29,097
2017 Q2	75,657	3,991	29,220
2017 Q3	70,048	4,062	27,508
2017 Q4	72,497	4,064	28,063
2018 Q1	73,734	4,046	28,411
2018 Q2	80,694	4,179	29,666
2018 Q3	72,420	4,239	27,768
2018 Q4	75,172	4,234	28,130
2019 Q1	79,778	4,222	30,317
2019 Q2	80,235	4,203	30,175
2019 Q3	74,536	4,245	28,561
2019 Q4	75,760	4,235	28,574
2020 Q1	76,271	4,162	29,031
2020 Q2	67,199	4,055	26,069
2020 Q3	70,351	4,244	27,024
2020 Q4	70,535	4,306	26,787

Data Source: Pennsylvania Prescription Drug Monitoring Program

TABLE 7

Overdose Mortality Rate*, Count, Percent by Opioid Detection, Philadelphia, 2010-2020						
	Opioid Overdose Death			Non-Opioid Overdose Death		
Year	Age-adjusted Rate per 100,000 residents	N	Percent	Age-adjusted Rate per 100,000 residents	N	Percent
2010	18.0	297	76.7%	5.5	90	23.3%
2011	22.7	389	79.6%	5.6	100	20.4%
2012	24.8	423	82.5%	5.1	90	17.5%
2013	20.2	357	77.6%	5.7	103	22.4%
2014	28.2	495	78.8%	7.5	133	21.2%
2015	32.2	561	79.9%	8.1	141	20.1%
2016	40.7	752	82.9%	8.8	155	17.1%
2017	59.2	1,075	88.3%	7.9	142	11.7%
2018	49.9	939	84.1%	10.1	177	15.9%
2019	53.6	963	83.7%	10.5	187	16.3%
2020	58.7	1,041	85.7%	10.4	173	14.3%

* Calculation of age-adjusted rates includes Philadelphia Residents only. Rates are age-adjusted to Census 2000 US Standing Population

Data Source: Philadelphia Department of Public Health, Medical Examiner's Office

TABLE 8

Rates†, Count, and Column Percentages of Opioid Overdose-Related Deaths by Age Category, Philadelphia, PA, 2010-2020												
	Ages 15-29 years old			Ages 30-44 years old			Ages 45-59 years old			Ages 60 years old and older		
Year	Age Specific Rate per 100,000 residents	N	Percent	Age Specific Rate per 100,000 residents	N	Percent	Age Specific Rate per 100,000 residents	N	Percent	Age Specific Rate per 100,000 residents	N	Percent
2010	13.5	61	20.5%	28.8	97	32.7%	41.7	122	41.1%	-	17	5.7%
2011	16.1	89	22.9%	41.4	141	36.2%	47.8	142	36.5%	-	17	4.4%
2012	19.9	95	22.5%	48.1	166	39.2%	45.9	143	33.8%	-	19	4.5%
2013	16.8	84	23.5%	36.3	134	37.5%	38.6	117	32.8%	7.7	22	6.2%
2014	22.9	113	22.8%	50.5	178	36.0%	54.4	172	34.7%	11.1	32	6.5%
2015	26.1	120	21.4%	54.6	206	36.7%	62.9	188	33.5%	16	47	8.4%
2016	29.7	159	21.2%	71.7	282	37.5%	81.9	259	34.5%	17	51	6.8%
2017	37.9	187	17.4%	116.6	466	43.3%	108.3	337	31.3%	27.3	85	7.9%
2018	31.7	163	17.4%	84.8	363	38.7%	100.4	306	32.6%	32.2	107	11.4%
2019	31.4	149	15.5%	98.0	407	42.3%	102.5	297	30.9%	33.9	109	11.3%
2020	24.4	121	11.6%	104.0	431	41.4%	123.9	349	33.6%	41.6	139	13.4%

* Counts less than 6 are suppressed

-Death rates based on counts less than 20 deaths were too few to calculate a reliable rate.

† Calculation of age specific rates includes Philadelphia Residents only

Data Source: Philadelphia Department of Public Health, Medical Examiner's Office

TABLE 9

Rates†, Count, and Column Percentages of Non-opioid Overdose-Related Deaths by Age Category, Philadelphia, PA 2010-2019												
	Ages 15-29 years old			Ages 30-44 years old			Ages 45-59 years old			Ages 60 years old and older		
Year	Age Specific Rate per 100,000 residents	N	Percent	Age Specific Rate per 100,000 residents	N	Percent	Age Specific Rate per 100,000 residents	N	Percent	Age Specific Rate per 100,000 residents	N	Percent
2010	-	10	11.1%	-	19	21.1%	15.8	47	52.2%	-	14	15.6%
2011	-	11	11.0%	8.2	31	31.0%	14.6	44	44.0%	-	14	14.0%
2012	-	11	12.2%	-	11	12.2%	17.7	54	60.0%	-	14	15.6%
2013	-	12	11.8%	6.1	24	23.5%	17.1	51	50.0%	-	15	14.7%
2014	-	8	6.0%	10.1	38	28.6%	21.3	66	49.6%	7.1	21	15.8%
2015	-	14	9.9%	9.7	38	27.0%	21.7	65	46.1%	8.0	24	17.0%
2016	-	11	7.1%	8.3	30	19.4%	26	79	51.0%	10.9	35	22.6%
2017	-	13	9.2%	7.9	34	23.9%	22.8	67	47.2%	9.3	28	19.7%
2018	-	11	6.2%	10.3	41	23.2%	30.4	88	49.7%	11.4	37	20.9%
2019	-	16	8.6%	9.2	37	19.8%	28.1	82	43.9%	15.7	52	27.8%
2020	*	*	*	10.9	43	24.9%	29.9	82	47.4%	13.9	45	26.0%

* Counts less than 6 are suppressed

-Death rates based on counts less than 20 deaths were too few to calculate a reliable rate.

† Calculation of age specific rates includes Philadelphia Residents only

Data Source: Philadelphia Department of Public Health, Medical Examiner's Office

TABLE 10

Opioid-Related Overdose Mortality Rate*, Count, Percent by Sex, Philadelphia, 2010-2020						
	Females			Males		
Year	Age-adjusted Rate per 100,000 residents	N	Percent	Age-adjusted Rate per 100,000 residents	N	Percent
2010	10.4	88	29.6%	26.6	209	70.4%
2011	11.6	99	25.4%	35.2	290	74.6%
2012	15.4	135	31.9%	35.1	288	68.1%
2013	11.9	113	31.7%	29.0	244	68.3%
2014	17.5	162	32.7%	38.7	333	67.3%
2015	15.7	147	26.2%	49.0	414	73.8%
2016	24.9	234	31.1%	57.6	518	68.9%
2017	28.5	273	25.4%	92.1	802	74.6%
2018	25.6	252	26.8%	75.1	687	73.2%
2019	25.4	243	25.2%	83.4	720	74.8%
2020	28.4	259	24.9%	91.4	782	75.1%

* Calculation of age-adjustedrates includes Philadelphia Residents only. Rates are age-adjusted to Census 2000 US Standard Population.
Data Source: Philadelphia Medical Examiner's Office

TABLE 11

Non-Opioid-Related Overdose Mortality Rate*, Count, Percent by Sex, Philadelphia, 2010-2020						
	Females			Males		
Year	Age-adjusted Rate per 100,000 residents	N	Percent	Age-adjusted Rate per 100,000 residents	N	Percent
2010	3.5	29	32.2%	7.7	61	67.8%
2011	3.2	30	30.0%	8.4	70	70.0%
2012	2.5	25	27.8%	7.6	65	72.2%
2013	3.7	34	33.0%	7.8	69	67.0%
2014	4.4	38	28.6%	11.1	95	71.4%
2015	5.6	50	35.5%	10.5	91	64.5%
2016	4.7	46	29.7%	12.3	109	70.3%
2017	5.1	51	35.9%	10.5	91	64.1%
2018	5.9	51	28.8%	14.2	126	71.2%
2019	6.0	58	31.0%	14.5	129	69.0%
2020	4.9	43	24.9%	16.1	130	75.1%

* Calculation of age-adjusted rates includes Philadelphia Residents only. Rates are age-adjusted to Census 2000 US Standard Population.
Data Source: Philadelphia Department of Public Health, Medical Examiner's Office

TABLE 12

Age-adjusted Opioid Mortality Rates†, Counts, and Percentages, by Race, Philadelphia, 2010-2020												
	Non-Hispanic White			Non-Hispanic Black			Hispanic (any race)			Other		
Year	Age-adjusted Rate per 100,000 residents	N	Percent	Age-adjusted Rate per 100,000 residents	N	Percent	Age-adjusted Rate per 100,000 residents	N	Percent	Age-adjusted Rate per 100,000 residents	N	Percent
2010	30.2	198	66.7%	11.6	76	25.6%	13.6	23	7.7%	0	0	0
2011	36.1	246	63.2%	12.9	83	21.3%	29.4	56	14.4%	*	*	*
2012	41.4	280	66.2%	15.2	99	23.4%	21.8	41	9.7%	*	*	*
2013	34.4	238	66.7%	10.7	68	19.0%	22.3	47	13.2%	*	*	*
2014	45.2	312	63.0%	16.6	112	22.6%	32.3	67	13.5%	*	*	*
2015	50.4	343	61.1%	22.1	145	25.8%	34.3	71	12.7%	*	*	*
2016	65	468	62.2%	25.2	169	22.5%	42.9	101	13.4%	-	14	1.9%
2017	96.5	679	63.2%	34.5	228	21.2%	64.9	153	14.2%	-	15	1.4%
2018	76.9	562	59.9%	33.8	239	25.5%	56.7	130	13.8%	-	8	0.9%
2019	74.9	519	53.9%	40.4	267	27.7%	70.8	165	17.1%	-	12	1.2%
2020	68.5	475	45.6%	57.2	378	36.3%	74.8	171	16.4%	-	17	1.6%

† Calculation of age-adjusted includes Philadelphia Residents only. Rates are age-adjusted to Census 2000 US Standard Population.

* Counts less than 6 are suppressed

-Death rates based on counts less than 20 deaths were too few to calculate a reliable rate.

Data Source: Philadelphia Department of Public Health, Medical Examiner's Office

TABLE 13

Age-adjusted Non-Opioid Mortality Rates†, Counts, and Percentages, by Race, Philadelphia, PA 2010-2020												
	Non-Hispanic White			Non-Hispanic Black			Hispanic (any race)			Other		
Year	Age-adjusted Rate per 100,000 residents	N	Percent	Age-adjusted Rate per 100,000 residents	N	Percent	Age-adjusted Rate per 100,000 residents	N	Percent	Age-adjusted Rate per 100,000 residents	N	Percent
2010	2.9	24	26.7%	8.3	54	60.0%	-	12	13.3%	0	0	0.0%
2011	3.1	32	32.0%	9.5	62	62.0%	*	*	*	0	0	0.0%
2012	2.2	20	22.2%	8.7	60	66.7%	-	9	10.0%	*	*	*
2013	4.3	35	34.0%	7.9	58	56.3%	*	*	*	*	*	*
2014	3.4	33	24.8%	12.1	83	62.4%	-	14	10.5%	*	*	*
2015	6.2	47	33.3%	11.7	82	58.2%	-	11	7.8%	*	*	*
2016	5.7	41	26.5%	14.1	100	64.5%	-	13	8.4%	*	*	*
2017	5.5	41	28.9%	13.2	93	65.5%	-	7	4.9%	*	*	*
2018	6.6	50	28.2%	15.8	108	61.0%	-	17	9.6%	*	*	*
2019	6.9	47	25.1%	16.0	117	62.6%	-	18	9.6%	*	*	*
2020	5.3	36	20.8%	18.0	119	68.8%	-	14	8.1%	*	*	*

† Calculation of age-adjusted includes Philadelphia Residents only. Rates are age-adjusted to Census 2000 US Standard Population.

* Counts less than 6 are suppressed

-Death rates based on counts less than 20 deaths were too few to calculate a reliable rate.

Data Source: Philadelphia Department of Public Health, Medical Examiner's Office

TABLE 14

Number of Unintentional Overdose Deaths by Zip Code, Philadelphia, PA 2019-2020				
	2019		2020	
Zip Code	Number of Deaths	Percent	Number of Deaths	Percent
19102	7	0.6%	*	*
19103	*	*	8	0.7%
19104	24	2.1%	37	3.0%
19106	*	*	9	0.7%
19107	17	1.5%	16	1.3%
19111	22	1.9%	27	2.2%
19112	0	0.0%	*	*
19114	16	1.4%	13	1.1%
19115	10	0.9%	9	0.7%
19116	19	1.7%	16	1.3%
19118	*	*	0	0.0%
19119	*	*	9	0.7%
19120	30	2.6%	37	3.0%
19121	34	3.0%	19	1.6%
19122	14	1.2%	14	1.2%
19123	8	0.7%	14	1.2%
19124	72	6.3%	83	6.8%
19125	29	2.5%	21	1.7%
19126	6	0.5%	*	*
19127	*	*	*	*
19128	13	1.1%	12	1.0%
19129	*	*	12	1.0%
19130	9	0.8%	11	0.9%
19131	17	1.5%	27	2.2%
19132	38	3.3%	55	4.5%
19133	57	5.0%	59	4.9%
19134	179	15.6%	139	11.4%
19135	35	3.0%	45	3.7%
19136	29	2.5%	25	2.1%
19137	11	1.0%	8	0.7%
19138	9	0.8%	11	0.9%
19139	27	2.3%	33	2.7%

TABLE 14 (continued)

Number of Unintentional Overdose Deaths by Zip Code, Philadelphia, PA 2019-2020				
	2019		2020	
Zip Code	Number of Deaths	Percent	Number of Deaths	Percent
19140	62	5.4%	69	5.7%
19141	18	1.6%	14	1.2%
19142	15	1.3%	13	1.1%
19143	26	2.3%	36	3.0%
19144	16	1.4%	33	2.7%
19145	29	2.5%	31	2.6%
19146	26	2.3%	22	1.8%
19147	15	1.3%	13	1.1%
19148	48	4.2%	41	3.4%
19149	15	1.3%	19	1.6%
19150	*	*	6	0.5%
19151	6	0.5%	13	1.1%
19152	19	1.7%	19	1.6%
19153	7	0.6%	*	*
19154	13	1.1%	13	1.1%
Unknown/Out of Jurisdiction	72	6.3%	89	7.3%

* Counts less than 6 are suppressed

Data Source: Philadelphia Department of Public Health, Medical Examiner's Office

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