

# **NDEWS** *National Drug Early Warning System*

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

## Philadelphia Sentinel Community Site (SCS) Drug Use Patterns and Trends, 2018

November 2018

NDEWS Coordinating Center

# NDEWS *National Drug Early Warning System*

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# National Drug Early Warning System (NDEWS) Philadelphia Sentinel Community Site (SCS) Drug Use Patterns and Trends, 2018

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## Highlights

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- A total of 1,217 people **died of drug overdoses** in 2017, which was an increase of 34% over 2016; opioids were present in more than 88% of cases, up from 83% in the previous year.
- **Fentanyl** was detected in 846 overdose deaths in 2017, which was a 104% increase from 2016 ( $n = 413$ ); fentanyl surpassed heroin as the leading drug of any drug intoxication deaths; and it was present in 84% of opioid-related deaths, compared with 57% in 2016.
- **Heroin** was detected in 37.6% of all drug intoxication deaths and in 46% in opioid-positive cases, which was a decrease from 57% in 2016; 46.1% of 2017 treatment admissions reported heroin as primary drug of choice.
- **Opioid** overdoses are rising among people of color:
  - Among Hispanics, opioid-related overdoses jumped 60%.
  - Among Blacks, by 34%.
  - Whites still comprise the largest share of deaths, increased by 47%.
- **Cocaine** remains a popular drug; 45% of drug overdose deaths were positive for cocaine; acute hepatitis C cases report increasing use; treatment admissions are 9% compared with 11% in 2016.
- Treatment data indicate **marijuana** as primary drug of choice is down from 18.0% to 13.6%; acute hepatitis C cases report decreasing use.

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## NDEWS Priority Substances

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Drug intoxication killed 702 individuals in Philadelphia in 2015, 907 in 2016, and 1,217 in 2017. Of the counties associated with the 10 largest cities in the United States, Philadelphia had more than double the rate of drug intoxication deaths in 2016. The top three drugs detected, excluding ethanol, among the 1,217 drug intoxication deaths are fentanyl, cocaine, and heroin. Figure 1 provides a table with the most frequently detected substances among drug intoxication deaths.

**Figure 1. Most Frequently Detected Substances Amongst Drug Intoxication Deaths, Philadelphia, 2017 (N = 1,217)**

Substance	Number of cases with positive detections
Fentanyl	846
Ethanol	578
Cocaine	545
Heroin	458
Alprazolam	276
Diazepam	140
Aminoclonazepam	131
Diphenhydramine	131
Gabapentin	117
Oxazepam	114

SOURCE: Philadelphia Department of Public Health, Medical Examiner's Office.

Almost three quarters (73.4%) of the drug intoxication deaths were male, more than half (58.3%) were non-Hispanic Whites, and almost half (49.3%) were 26 to 44 years of age. The demographic distribution of 2017 drug intoxication deaths was consistent with 2016. Figure 2 provides a table with the demographic distribution of the 1,217 drug intoxication deaths in 2017.

As is the case in many jurisdictions, a large proportion of overdose fatalities involved opioids, with 88% involving an opioid in 2017.<sup>1</sup> In 2017, the age-adjusted death rate for opioid involved overdoses was 59.8 deaths per 100,000 residents, which was up from 19.9 deaths per 100,000 residents in 2013, representing a rate increase of 200% in 5 years. Figure 3 provides a table with the number and percentage of opioid-related drug intoxication deaths from 2013 to 2017.

<sup>1</sup> Philadelphia Department of Public Health. "Fatal Drug Overdoses in Philadelphia, 2017" Chart, Volume 3, Number 1, April 2018, <http://www.phila.gov/health/pdfs/CHART v3e1.pdf>.

**Figure 2. Demographic Profiles of Drug Intoxication Deaths, Philadelphia, 2017 (N = 1,217)**

	Number	Percentage
<b>Gender</b>		
Male	893	73.4%
Female	324	26.6%
<b>Race/Ethnicity</b>		
White, Non-Hispanic	710	58.3%
African American, Non-Hispanic	317	26.0%
Hispanic	174	14.3%
Asian	14	1.2%
Other	2	0.2%
<b>Age</b>		
Younger than 18	1	0.1%
18–25	97	8.0%
26–44	600	49.3%
45+	517	42.5%
Unknown	2	0.2%

SOURCE: Philadelphia Department of Public Health, Medical Examiner's Office.

**Figure 3. Number and Percent of Opioid Detections Amongst Drug Intoxication Deaths, Philadelphia, 2013–2017**

Year	Number of Drug Intoxication Deaths	Number with Opioid Detections	Percent of Drug Intoxication Deaths with Opioids
2013	460	356	77%
2014	628	495	79%
2015	702	561	80%
2016	907	752	83%
2017	1217	1074	88%

SOURCE: Philadelphia Department of Public Health, Medical Examiner's Office.

## COCAINE/CRACK

### Key Findings

Treatment admissions for cocaine are down from 2016, continuing a downward trend since 2015. In 2017, 8.8% of treatment admissions reported cocaine as primary drug of choice, which was down from 11.2% in 2016. As in the previous years, cocaine remained in a distant fourth ranked primary drug compared with heroin (46.1%), alcohol (18.6%), and marijuana (13.6%) for treatment admissions. Overall, 71.1% of primary cocaine treatment admissions were male. African Americans constituted almost three quarters of those admitted for treatment (71.6%), with fewer White non-Hispanic (12.2%) and Hispanics (8.1%) than in 2016 (27.5% and 13.2% respectively). Consistent with historical data, admissions are older with 53.3% aged 45 and older at admission. As is with alcohol (50.1% aged 45 and older), those presenting for treatment for cocaine are generally older than for other substances.

In 2017, there were 545 cocaine-involved drug intoxication deaths, which was an increase from 406 in 2016.<sup>2</sup> Cocaine is the second most detected drug, excluding alcohol, among the decedents; it is detected more often (44.8% of drug intoxication deaths) than heroin (37.6%).

Of 22,732 total analyzed drug reports from law enforcement seizures in Philadelphia in 2017, 21.3% were positive for cocaine. Cocaine was the second most commonly detected drug of the total analyzed drug reports in 2017, having dropped from first rank in 2016, where there were 6,177 detections representing 27.8% of the positive reports.

### **Polydrug Use**

Of the 545 cocaine-detected drug intoxication deaths, 387 were positive for fentanyl. Among drug intoxication deaths with cocaine detections, the following drugs are the top three detected: fentanyl (387, 71.0%), heroin (211, 38.7%), and alprazolam (109, 20.0%).

Deviating from the historical pattern, alcohol (24.4%) replaced heroin (9.6%) as the top secondary substance for primary cocaine treatment admissions.

### **Additional Findings**

On the morning of 6/18/18, the Philadelphia Department of Public Health (PDPH) was notified about a surge in drug-related overdoses at a medical center in the western part of the city that occurred during 6/16/18– 6/17/18. The majority were African American, with an average age of 53 years, and two thirds were male. Based on the historical pattern, the demographic profile suggests cocaine use; however, many of the patients presenting had near-fatal outcomes, including anoxic brain injury and cardiac arrest. Of the individuals interviewed, most reported that they thought they were using crack cocaine but had an opioid overdose profile, which raises the concern of possible adulteration with fentanyl. Emergency medical services personnel also reported needing to use higher doses of naloxone than usual (6–8 mg) before seeing a response. The following week when two individuals were found dead in the same neighborhood, a male and a female in their mid-40s, there were crack pipes nearby. At last count, at least 20 individuals were impacted with 18 nonfatal and 2 fatal. All patients tested positive for cocaine, and of those tested for fentanyl ( $n = 14$ ), all were positive.

The recent surge in fentanyl-related overdoses is indicative of crack-cocaine with fentanyl contamination. In April 2018, the Drug Enforcement Administration (DEA) Philadelphia Field Division shared its analysis on other drugs found in combination with exhibits with detections of cocaine from Philadelphia National Forensic Laboratory Information System (NFLIS) data up through third quarter

<sup>2</sup> Previous NDEWS reports for Philadelphia had only included mortality cases in which the Medical Examiner's Office had performed the toxicology testing, and had not included delayed cases, where the individual had died in the hospital with the toxicology testing performed by the hospital. These are typically cases in which the individual overdosed, was resuscitated, and survived in the hospital before dying. Historically, these have accounted for between 2% and 4% of Philadelphia drug deaths. However, in 2017, these cases increased to 7.5% of drug deaths (possibly the results of more overdose victims making it to the hospital due to the increased availability of naloxone), and results from hospital toxicology testing will now be included in the report. This inclusion will account for differences in drug detection counts between this and previous reports. Note that the hospital drug screens often do not differentiate between the various opioids or various benzodiazepines; hence, discussion of specific drugs will not include toxicology results from the hospitals.

2017. Although heroin positive reports showed increasingly more and more fentanyl detected in combination with heroin (see Additional Findings under the “Heroin” section), the percentage of cocaine-positive exhibits with fentanyl detections was consistently less than 1%.<sup>3</sup>

## METHAMPHETAMINE

### Key Findings

In 2017, the morbidity indicator for methamphetamine use in Philadelphia continued to be low. Out of 2,226 treatment admissions, only 10 (0.4%) reported methamphetamine as the primary drug of choice. Eight of these admissions were male, and seven were White, non-Hispanic.

The mortality indicator, however, showed doubling in detections within the same period. There were 72 detections of methamphetamine among drug intoxication deaths compared with 34 in 2016.<sup>4</sup> Compared with other substances detected, methamphetamine is a low ranked drug; it was detected in 5.9% of drug intoxication deaths and was not ranked in the top 10 substances detected.

NFLIS data for 2017 reported 227 methamphetamine-positive reports for items seized and tested, representing 1.0% of all positive reports for Philadelphia.

### Polydrug Use

The majority of methamphetamine treatment admissions reported no secondary substance. As methamphetamine treatment admissions were low, it can be difficult to understand polydrug use with methamphetamine. Medical Examiner Office (MEO) data, however, showed 86.1% of drug intoxication deaths with methamphetamine detected, which also tested positive for fentanyl and fentanyl analogs. This finding is concerning and raises the question of whether these were intentional drug combination among methamphetamine users. Among drug intoxication deaths with methamphetamine detections, the following drugs are the top three detected: fentanyl (62, 86.1%), amphetamine (40, 55.6%), and cocaine (32, 44.4%).

### Additional Findings

Compared with the law enforcement data for the nation ( $n = 351,080$ , 23.5%), where methamphetamine had the highest number of positive reports, Philadelphia pattern did not conform to the national pattern ( $n = 227$ , 1%). It was ranked eighth locally compared with rank first nationally in the NFLIS data.

<sup>3</sup> Analysis based on results shared by the DEA Philadelphia Field Division at April 2018 meeting.

<sup>4</sup> In the 2017 NDEWS report for Philadelphia, we reported methamphetamines were detected in 50 drug intoxication deaths that requires the following clarification—**methamphetamine or amphetamine were detected in 50 drug intoxication deaths**. In 2016, there were 34 detections of methamphetamine among the drug-intoxication deaths.

## HEROIN

### Key Findings

Almost half (46.1%) of treatment admissions reported heroin as their primary drug of choice. This represents a 26% increase from 2016, continuing a trend from 2013 (19.5%). In 2017, males constituted 73.3% of primary heroin admissions. Non-Hispanic Whites accounted for the majority (58.6%) of primary heroin treatment admissions, followed by African Americans (18.6%) and Asians and Others (15.9%). Hispanics constituted 6.9% of primary heroin treatment admissions, which was much lower than in 2016 (18.6%). Overall, 62.4% of those admitted to treatment reported injection as their preferred route of administration, with 22.0% reporting inhalation and 15.3% oral consumption. More than two thirds (68.2%) of heroin treatment admissions were in the middle age category, 26–44 years old. Except for fewer Hispanics, the demographic profile of primary heroin treatment admissions is consistent with 2016 patterns.

Heroin ( $n = 458$ ) was the third most detected drug, excluding alcohol, among intoxication deaths in 2017. Among opioid-positive cases, 43% were positive for heroin.<sup>5</sup> Fatal heroin overdoses predominantly occurred in Philadelphia among non-Hispanic White Males, although no demographic group has been unaffected.

Heroin was the third most commonly detected drug of the total analyzed positive reports from NFLIS in 2017. Of 22,732 total analyzed drug reports from law enforcement seizures in Philadelphia in 2017, 20.5% were positive for heroin.

### Polydrug Use

Cocaine is the most frequently (27.6%) reported secondary drug for primary heroin treatment admissions, followed by benzodiazepines (11.0%). Among drug intoxication deaths with heroin detections, the following drugs are the top three detected: fentanyl (368, 80.3%), cocaine (211, 46.1%), and alprazolam (128, 27.9%).

### Additional Findings

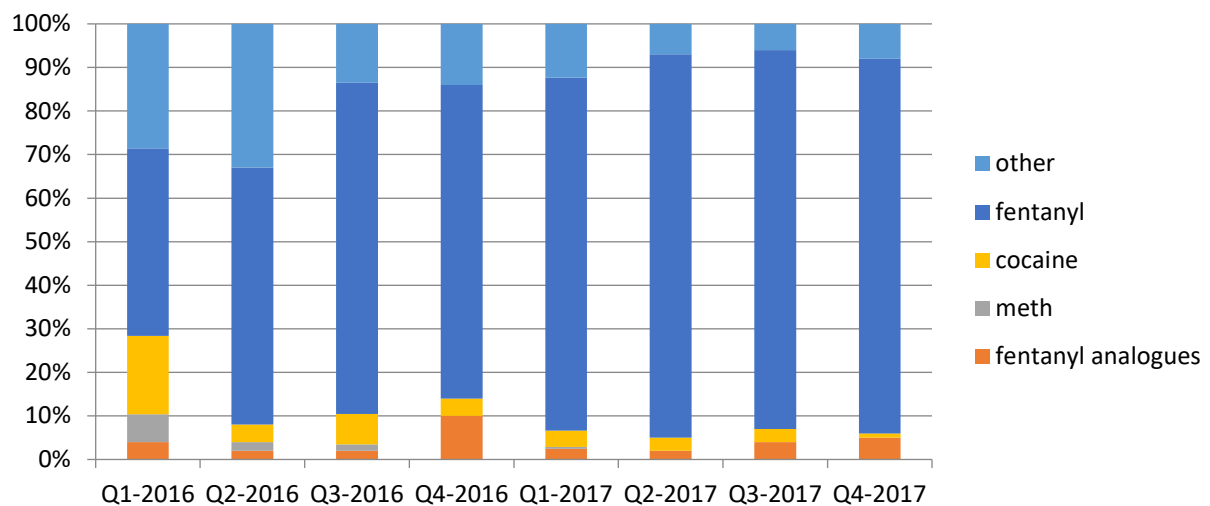
Analysis by the DEA Philadelphia Field Division of heroin positive reports showed increasingly that fentanyl was detected in combination with heroin. Figure 4 shows the percentage of drugs found in combination with heroin for Philadelphia law enforcement seizures, by quarter from 2016 to 2017. The presence of fentanyl among heroin exhibits doubled in percentage from 43% at the beginning of 2016 to 86% by the end of 2017.<sup>6</sup>

<sup>5</sup> Of those cases in which toxicology was conducted by the MEO, delayed cases with toxicology conducted by hospitals often do not differentiate between the various opioids.

<sup>6</sup> Data downloaded from PDPH Opioid Surveillance Program data website: <https://public.tableau.com/profile/pdph#1/>.



**Figure 4. Percentage of Drug Found in Combination with Heroin Based on DEA Analysis of Law Enforcement Seizures in Philadelphia, 2016Q1–2017Q4**



## PREScription OPIOIDS

### Key Findings

Prescription opioids were detected in 19.1% of all drug-related intoxication deaths in 2017.<sup>7</sup> Overall, 5.4% of treatment admissions reported prescription opioids as their primary drug of choice, which was an increase from 2016 (4.1%). Although oxycodone had the fifth most positive drug reports for items seized and analyzed by law enforcement in Philadelphia, the volume (684, 3.0%) is significantly lower than the top four substances (cannabis, 24.0%; cocaine, 21.3%; heroin, 20.5%; fentanyl, 12.9%).

### Polydrug Use

With the lowest rate of no secondary drug reported, primary prescription opioid users had high polydrug use. Of the various primary substances of abuse reported at treatment admission, prescription opioid users had the highest rate of benzodiazepines as secondary drug of choice (26.4%).

## FENTANYL AND OTHER NONPRESCRIPTION SYNTHETIC OPIOIDS

### Key Findings

Fentanyl is the most frequently detected drug among drug intoxication deaths in Philadelphia. The percentage of drug intoxication deaths with fentanyl<sup>8</sup> detected increased from 45.5% to 69.5%. The number and percentage of cases is under-represented, as delayed cases with toxicology conducted by

<sup>7</sup> Of those cases in which toxicology was conducted by the MEO, delayed cases with toxicology conducted by hospitals often do not differentiate between the various opioids.

<sup>8</sup> Fentanyl counts in MEO data include fentanyl and fentanyl analogs.

hospitals often do not differentiate between the various opioids.<sup>9</sup> Of the opioid-positive cases, 84% were positive for fentanyl.<sup>10</sup> Figure 5 shows the trend in drug intoxication deaths with fentanyl detections.

**Figure 5. Number and Percentage of Fentanyl Detections Among Drug Intoxication Deaths, Philadelphia, 2007–2017**

Year	Number of Fentanyl Detections	Total Drug Intoxication Deaths	Percent with Fentanyl
2007	31	421	7.36%
2008	32	460	6.96%
2009	29	419	6.92%
2010	33	387	8.53%
2011	17	489	3.48%
2012	9	513	1.75%
2013	25	460	5.43%
2014	100	628	15.92%
2015	184	702	26.21%
2016	413	907	45.53%
2017	846	1217	69.51%

SOURCE: Philadelphia Department of Public Health, Medical Examiner's Office.

A treatment indicator for fentanyl is not available, but 37% of current opioid users surveyed between December 2017 and March 2018 by the PDPH reported that they were more likely to take a drug if they knew it contained fentanyl (Figure 6).<sup>11</sup> Among the two younger age groups, 18–24 and 25–34 years, users responded with higher rates (47% and 49%, respectively) of more likely to take a drug if they knew it contained fentanyl. More females (47%) than males (32%) reported that they were more likely. Non-Hispanic Whites (41%) were more likely to respond “more likely” than were other race and ethnic groups.

Availability of fentanyl in the illicit drug market continue to increase in Philadelphia. Positive drug reports for fentanyl accounted for 12.9% of all positive drug reports. There was more than a five-fold increase in number of fentanyl positive reports from 2016 (n=586) to 2017 (n=2,938), out-pacing the three-fold increase from 2015 (n=163) to 2016. Compared to national data from NFLIS, the Philadelphia illicit drug market has a higher preponderance of fentanyl (3.9% and 12.9%, respectively).

<sup>9</sup> Fentanyl was specifically reported in only 1 out of the 90 hospital toxicology cases.

<sup>10</sup> Of those cases in which toxicology was conducted by the MEO, delayed cases with toxicology conducted by hospitals often do not differentiate between the various opioids.

<sup>11</sup> Current is defined by knowingly used heroin in the past 3 months. Survey question asked, “If you know that a drug contains fentanyl, are you more or less likely to take it?”

**Figure 6. Response to Likelihood to Use a Drug If They Know It Contains Fentanyl Among People Who Use Opioids Surveyed between December 2017 and May 2018 by Demographic Factors, Philadelphia**

		Less Likely (n = 174)	More Likely (n = 142)	No Difference (n = 53)	No Response (n = 13)
<b>Age Category</b>					
	<b>18–24</b>	27%	47%	20%	7%
	<b>25–34</b>	41%	49%	11%	0%
	<b>35–44</b>	45%	35%	17%	3%
	<b>45–54</b>	53%	30%	14%	3%
	<b>55+</b>	57%	14%	11%	17%
	<b>Unknown</b>	0%	100%	0%	0%
<b>Gender Category</b>					
	<b>Females</b>	35%	47%	15%	2%
	<b>Males</b>	51%	32%	13%	4%
	<b>Other</b>	0%	0%	100%	0%
	<b>Unknown</b>	60%	40%	0%	0%
<b>Race Category</b>					
	<b>White, Non-H</b>	39%	41%	19%	2%
	<b>Black, Non-H</b>	55%	28%	10%	7%
	<b>Hispanic</b>	40%	24%	33%	3%
	<b>Other</b>	46%	31%	23%	0%
	<b>Unknown</b>	0%	14%	71%	14%

SOURCE: Philadelphia Department of Public Health, Medical Examiner's Office.

Availability of fentanyl in the illicit drug market continues to increase in Philadelphia. There was more than a five-fold increase in the number of fentanyl positive reports from 2016 ( $n = 586$ ) to 2017 ( $n = 2,938$ ), out-pacing the three-fold increase from 2015 ( $n = 163$ ) to 2016. Compared to national data from NFLIS, the Philadelphia illicit drug market has a greater preponderance of fentanyl (3.9% and 12.9%, respectively).

### Polydrug Use

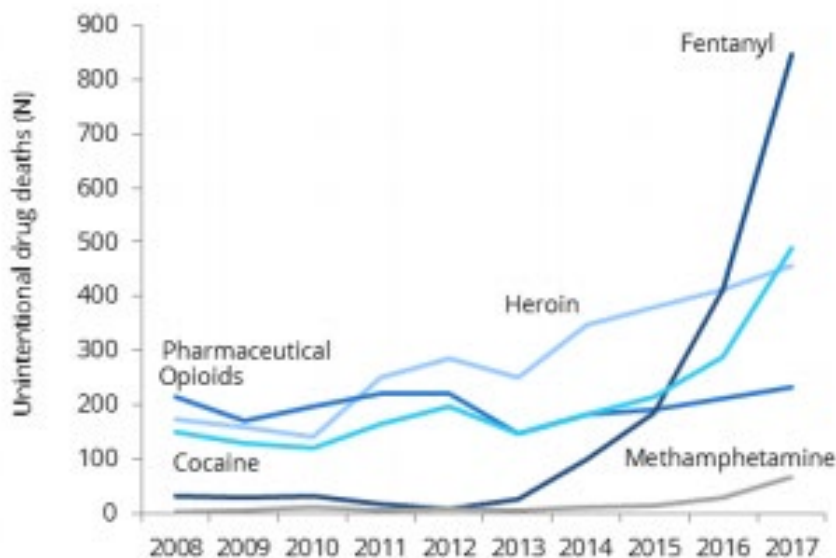
Cocaine is the drug most frequently found with fentanyl-positive drug intoxication cases. There were 387 cases with both fentanyl and cocaine detected, representing 31.8% of cases.

### Additional Findings

Fentanyl or fentanyl analogs were present in 84% of opioid-related deaths in 2017, compared with 57% in 2016. Fentanyl had surpassed heroin as the leading cause of opioid-related intoxication deaths (Figure 7).<sup>12</sup>

<sup>12</sup> Philadelphia Department of Public Health. "Fatal Drug Overdoses in Philadelphia, 2017" Chart, Volume 3, Number 1, April 2018, <http://www.phila.gov/health/pdfs/CHARTv3e1.pdf>.

**Figure 7. Opioid-Related Deaths by Drug Type, Philadelphia, 2008–2017**



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## Other Priority Substances in Philadelphia

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### BENZODIAZEPINES

#### Key Findings

Alprazolam ( $n = 276$ , 22.7%), clonazepam ( $n = 131$ , 10.8%), and diazepam ( $n = 140$ , 11.5%) continued to be the top detected benzodiazepines among drug intoxication deaths. NFLIS data reported alprazolam (2.6%) in the top 10 ranked substances of positive reports from law enforcement seizures in Philadelphia, which was consistent with years prior. Treatment admissions for benzodiazepines continued to be low and accounted for only 2.0% of admissions. Although treatment demand for benzodiazepines was low, data from the Medical Examiner's Office and NFLIS supported the pervasive misuse of benzodiazepines.

#### Polydrug Use

Examination of the MEO data for polydrug use showed alprazolam consistently being detected along with the top substances detected, including fentanyl, cocaine, and heroin. The combined detection of benzodiazepines with other substances despite a low morbidity indicator is consistent with previous focus group findings, where users reported use of benzodiazepines as a “booster.”

## PHENCYCLIDINE (PCP)

### Key Findings

Although morbidity indicators such as treatment admissions and reported poly-substance use were low, phencyclidine has had a continual presence in Philadelphia. NFLIS reports have consistently shown through the years PCP among the top 10 ranked substances of positive reports from law enforcement seizures in Philadelphia. MEO data reported that 6.7% ( $n = 75$ ) of drug intoxication deaths tested positive for PCP.

### Polydrug Use

As PCP treatment admissions were low, it can be difficult to understand polydrug use with PCP. MEO data, however, showed that 74.3% of drug intoxication deaths with PCP detected also tested positive for fentanyl and fentanyl analogs. This finding is concerning and raises the question of whether there were intentional drug combinations among PCP users. Other top substances found among the decedents with PCP detected were cocaine (50.0%) and alprazolam (24.3%).

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## Infectious Diseases Related to Substance Use

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### HEPATITIS C<sup>13</sup>

In 2017, PDPH reported 155 confirmed acute HCV, which was an increase from 133 for 2016.<sup>14</sup> The information in this section includes all acute HCV cases reported to the PDPH between 2012 and 2017. There are some limitations to this data. First, due to the lack of a specific laboratory test and the general asymptomatic presentation of acute HCV, disease incidence is often underestimated. Second, the demographic and risk factor profile of the individuals tested for HCV may not be representative of the population infected. Finally, although the Viral Hepatitis Program attempts to investigate all cases of acute HCV infection to assess risk factors, some individuals are lost to follow-up and risk factor information is not always obtained.

Individuals between the ages of 25 and 34 years are the predominant age group being diagnosed with acute HCV. The percentage of male cases of acute HCV is slightly higher than the percentage of females. More than 50% of individuals who had race/ethnicity information were White, non-Hispanic individuals (Figure 8).

More than 70% of individuals have ever used a street drug. Among this group, about 80% of individuals primarily use injection methods.

<sup>13</sup> Data and information for this section were provided by Danica Kuncio, Viral Hepatitis Program, Philadelphia Department of Public Health

<sup>14</sup> In the 2017 NDEWS report for Philadelphia, the number of acute Hepatitis C confirmed for 2016 was erroneously reported as 89.

**Figure 8. Acute HCV Cases by Age, Sex, and Race/Ethnicity, Philadelphia, 2012–2017**

Age	(n = 468)	Sex	(n = 468)	Race/Ethnicity	(n = 377)
15–18	1%	Female	46%	White, Non-Hispanic	56%
19–24	16%	Male	54%	Black, Non-Hispanic	20%
25–34	44%			Hispanic	22%
35–44	18%			Other, Non-Hispanic	2%
45–54	13%				
55–64	4%				
65+	3%				

The HEP Program started collecting enhanced drug behavior questions in 2016. Among the 90 individuals with acute HCV that were currently using street drugs, 89% were using heroin, 37% were using crack/cocaine, 8% were using Percocet/oxycodone, and 4% were using methamphetamine. These categories were not mutually exclusive.

## HIV

In 2016,<sup>15</sup> Philadelphia recorded 480 newly diagnosed HIV cases, which was a decrease from 540 in 2015.<sup>16</sup> Among the 480 cases, 27 or 5.6% reported having transmission risk of people who inject drugs (PWID), which was similar to the 2015 rate (5.5%). The transmission risk from injection drug use among the newly diagnosed HIV cases have been declining. In 2016, this transmission risk was still almost half the percentage reported for 2012 cases (11.2%). Co-infection rates for Hepatitis B and Hepatitis C were 1.3% and 8.3% (n = 6 and 40), respectively.

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## New Substance-Related Legislative and Policy Updates

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### MAYOR'S TASK FORCE TO COMBAT THE OPIOID EPIDEMIC IN PHILADELPHIA

Following the issuance of the taskforce report in May 2017, multiple agencies in the city of Philadelphia have been working to address recommendations set forth by the Mayor's Task Force to Combat the Opioid Epidemic in Philadelphia. Progress on implementation of the recommendations is monitored by the Mayor's Commission on Addiction and Recovery, which was an advisory committee to Philadelphia

<sup>15</sup> As of the issuance of this profile, reports on 2017 HIV diagnoses have not been released. All HIV statistics reported in this profile are from the annual HIV/AIDS surveillance report, *Philadelphia Department of Public Health, AIDS Activities Coordinating Office Surveillance Report, 2016. Philadelphia, PA: City of Philadelphia; September 2017.*

<sup>16</sup> 2015 newly diagnosed HIV cases have been revised from previously reported counts in the 2015 annual HIV/AIDS surveillance report, *Philadelphia Department of Public Health, AIDS Activities Coordinating Office Surveillance Report, 2015. Philadelphia, PA: City of Philadelphia; September 2016.*

Department of Behavioral Health and Intellectual disAbility Services (DBHIDS). Quarterly status reports on taskforce metrics are available at <https://dbhids.org/opioid>.

At the completion of the task force's work, PDPH established the Opioid Surveillance Program. The Opioid Surveillance Program coordinates data collection from city, state, and federal agencies to report on opioid-related statistics. Annual and quarterly data on acute hepatitis, addiction treatment, law enforcement activities, neonatal and maternal morbidity, overdoses (fatal and nonfatal), sales, and prescriptions are available at <https://www.phila.gov/programs/combating-the-opioid-epidemic/reports-and-data/>.

## **PHILADELPHIA MEDICAID PRESCRIBER DASHBOARD**

One recommendation from the task force is to improve health-care professional education by supporting evidence-based approaches to changing prescribing behavior that support safer opioid prescribing and appropriate treatment. In response, a collaborative of city and state agencies<sup>17</sup> developed the Philadelphia Medicaid Prescriber Dashboard Initiative to address prescriber behavior. The Initiative promotes appropriate prescribing practices among prescribers to Philadelphia Medicaid population through sharing data that illustrates their prescribing patterns in comparison with prescribers within their specialty.

The first biannual Philadelphia Medicaid Prescriber Dashboard reports were mailed to greater than 2,600 prescribers on December 29, 2017. The second distribution, focusing on opioid prescribing, was mailed to more than 1,400 prescribers on July 15, 2018. The use of dashboard reports is a promising practice that not only provides an opportunity for self-examination of a prescriber's practice as it pertains to their prescribing of controlled substances but also provides a more efficient method for reviewing patient prescription histories and associated risk.

## **PENNSYLVANIA PRESCRIPTION DRUG MONITORING PROGRAM**

The year 2017 marked significant changes to PA PDMP, which was established by Act 191 of 2014. Among the changes is the requirement for all licensed prescribers and dispensers to register with the program. Another significant change is the submission of prescriptions fill data by the close of the subsequent business day. With DEA oversight of registrants, these program requirements have resulted in more than 93,000 users registered by April 2018, averaging 53,000 searches on a weekday and 9,000 searches on a weekend. The PA Department of Health plans to issue prescriber reports similar to the Philadelphia Medicaid Prescriber Dashboard to all prescribers registered in PDMP.

<sup>17</sup> The collaborative includes Community Behavioral Health, Philadelphia Department of Behavioral Health and Intellectual disAbility Services; Philadelphia Department of Public Health; Office of Medical Assistance Program, Pennsylvania Department of Human Services; Center for Mental Health Policy and Services Research, University of Pennsylvania; Aetna; Health Partners Plans; Keystone First; and United Healthcare.

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## Treatment Tables

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**Table 1: Trends in Admissions\* to Programs Treating Substance Use Disorders, Philadelphia Residents, 2013-2017**

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

	Calendar Year									
	2013		2014		2015		2016		2017	
	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)
<b>Total Admissions (#)</b>	<b>8,802</b>	<b>100%</b>	<b>8,363</b>	<b>100%</b>	<b>4,810</b>	<b>100%</b>	<b>3,507</b>	<b>100%</b>	<b>2,226</b>	<b>100%</b>
<b>Primary Substance of Abuse (%)</b>										
Alcohol	3,087	35.1%	2,476	29.6%	1,359	28.3%	693	19.8%	415	18.6%
Cocaine/Crack	1,058	12.0%	1,081	12.9%	676	14.1%	394	11.2%	197	8.8%
Heroin	1,720	19.5%	1,764	21.1%	1,206	25.1%	1,287	36.7%	1,027	46.1%
Prescription Opioids	370	4.2%	311	3.7%	60	1.2%	145	4.1%	121	5.4%
Methamphetamine**	10	0.1%	15	0.2%	11	0.2%	15	0.4%	10	0.4%
Marijuana	1,903	21.6%	1,844	22.0%	1,086	22.6%	640	18.2%	303	13.6%
Benzodiazepines	67	0.8%	80	1.0%	34	0.7%	63	1.8%	44	2.0%
MDMA	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
Synthetic Stimulants***	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
Synthetic Cannabinoids***	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
Other Drugs/Unknown***	587	6.7%	792	9.5%	378	7.9%	269	7.7%	109	4.9%

**NOTES:**

**\*Admissions:** Includes admissions for uninsured and underinsured individuals admitted to any licensed treatment programs funded through the Philadelphia Department of Behavioral Health and Intellectual disAbility Services. Each admission does not necessarily represent a unique individual as some individuals are admitted to treatment more than once in a given period. Please note that Pennsylvania expanded Medicaid coverage under the Affordable Care Act and more than 100,000 additional individuals became eligible beginning 2015. As individuals who historically have been uninsured become insured, the number of individuals served through the BHSI (Behavioral Health Special Initiative) program declined; thus treatment admissions reported by BHSI have declined. Additionally, state law Act 76 of 2016, suspends MA benefits for up to a maximum of two years in the event of incarceration. This law, effective 2017, also contributed to fewer individuals served through BHSI and treatment admissions continue to decline in 2017.

**\*\*Methamphetamine:** Includes both amphetamines and methamphetamine.

**\*\*\*Other Drugs:** May include synthetics, barbiturates, and over-the-counter drugs. **Synthetic Stimulants** and **Synthetic Cannabinoids** are not distinguishable from "Other Drugs" in the reporting source.

**unavail:** Data not available.

**SOURCE:** Data provided to the Philadelphia NDEWS SCE by Philadelphia Department of Behavioral Health and Intellectual disAbility Services, Behavioral Health Special Initiative.

**Table 2: Demographic and Drug Use Characteristics of Treatment Admissions\* for Select Primary Substances, Philadelphia Residents, 2017**  
Number of Admissions, by Primary Substance and Percentage of Admissions with Selected Demographic and Drug Use Characteristics

	Primary Substance																	
	Alcohol		Cocaine/Crack		Heroin		Prescription Opioids		Methamphetamine**		Marijuana		Benzo-diazepines		Synthetic Stimulatns		Synthetic Cannabinoids	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Number of Admissions (#)	415	100%	197	100%	1,027	100%	121	100%	10	100%	303	100%	44	100%	unavail	unavail	unavail	unavail
Sex (%)																		
Male	330	79.5%	140	71.1%	753	73.3%	93	76.9%	8	80.0%	270	89.1%	32	72.7%	unavail	unavail	unavail	unavail
Female	85	20.5%	57	28.9%	273	26.6%	28	23.1%	2	20.0%	33	10.9%	12	27.3%	unavail	unavail	unavail	unavail
Race/Ethnicity (%)																		
White, Non-Hisp.	128	30.8%	24	12.2%	602	58.6%	45	37.2%	7	70.0%	26	8.6%	23	52.3%	unavail	unavail	unavail	unavail
African-Am/Black, Non-Hisp	242	58.3%	141	71.6%	191	18.6%	58	47.9%	1	10.0%	207	68.3%	11	25.0%	unavail	unavail	unavail	unavail
Hispanic/Latino	24	5.8%	16	8.1%	71	6.9%	7	5.8%	2	20.0%	51	16.8%	7	15.9%	unavail	unavail	unavail	unavail
Asian	4	1.0%	1	0.5%	7	0.7%	1	0.8%	0	0.0%	3	1.0%	1	2.3%	unavail	unavail	unavail	unavail
Other	17	4.1%	15	7.6%	156	15.2%	10	8.3%	0	0.0%	16	5.3%	2	4.5%	unavail	unavail	unavail	unavail
Age Group (%)																		
Under 18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	12	4.0%	0	0.0%	unavail	unavail	unavail	unavail
18-25	22	5.3%	6	3.0%	39	3.8%	21	17.4%	1	10.0%	81	26.7%	6	13.6%	unavail	unavail	unavail	unavail
26-44	196	47.2%	86	43.7%	700	68.2%	85	70.2%	8	80.0%	192	63.4%	28	63.6%	unavail	unavail	unavail	unavail
45+	197	47.5%	105	53.3%	288	28.0%	15	12.4%	1	10.0%	18	5.9%	10	22.7%	unavail	unavail	unavail	unavail
Route of Administration (%)																		
Smoked	0	0.0%	158	80.2%	3	0.3%	0	0.0%	2	20.0%	295	97.4%	0	0.0%	unavail	unavail	unavail	unavail
Inhaled	0	0.0%	28	14.2%	226	22.0%	11	9.1%	5	50.0%	1	0.3%	1	2.3%	unavail	unavail	unavail	unavail
Injected	0	0.0%	6	3.0%	641	62.4%	1	0.8%	1	10.0%	0	0.0%	0	0.0%	unavail	unavail	unavail	unavail
Oral/Other/Unknown	415	100.0%	5	2.5%	157	15.3%	109	90.1%	2	20.0%	7	2.3%	43	97.7%	unavail	unavail	unavail	unavail
Secondary Substance (%)																		
None	Unavail	Unavail	Unavail	Unavail	Unavail	Unavail	Unavail	Unavail	Unavail	Unavail	Unavail	Unavail	Unavail	Unavail	unavail	unavail	unavail	unavail
Alcohol	na	na	48	24.4%	37	3.6%	7	5.8%	1	10.0%	21	6.9%	2	4.5%	unavail	unavail	unavail	unavail
Cocaine/Crack	83	20.0%	na	na	283	27.6%	11	9.1%	0	0.0%	5	1.7%	0	0.0%	unavail	unavail	unavail	unavail
Heroin	10	2.4%	19	9.6%	na	na	2	1.7%	0	0.0%	7	2.3%	5	11.4%	unavail	unavail	unavail	unavail
Prescription Opioids	4	1.0%	3	1.5%	12	1.2%	na	na	0	0.0%	10	3.3%	4	9.1%	unavail	unavail	unavail	unavail
Methamphetamine**	3	0.7%	0	0.0%	9	0.9%	0	0.0%	na	na	1	0.3%	4	9.1%	unavail	unavail	unavail	unavail
Marijuana	94	22.7%	42	21.3%	47	4.6%	33	27.3%	0	0.0%	na	na	11	25.0%	unavail	unavail	unavail	unavail
Benzodiazepines	11	2.7%	5	2.5%	113	11.0%	32	26.4%	0	0.0%	6	2.0%	na	na	unavail	unavail	unavail	unavail
Synthetic Stimulants	Unavail	Unavail	Unavail	Unavail	Unavail	Unavail	Unavail	Unavail	Unavail	Unavail	Unavail	Unavail	Unavail	Unavail	unavail	unavail	unavail	unavail
Synthetic Cannabinoids	Unavail	Unavail	Unavail	Unavail	Unavail	Unavail	Unavail	Unavail	Unavail	Unavail	Unavail	Unavail	Unavail	Unavail	unavail	unavail	unavail	unavail

**NOTES:**  
**\*Admissions:** Includes admissions for uninsured and underinsured individuals admitted to any licensed treatment programs funded through the Philadelphia Department of Behavioral Health and Intellectual disAbility Services. Each admission does not necessarily represent a unique individual as some individuals are admitted to treatment more than once in a given period. Please note that Pennsylvania expanded Medicaid coverage under the Affordable Care Act and more than 100,000 additional individuals became eligible beginning 2015. As individuals who historically have been uninsured become insured, the number of individuals served through the BHSI (Behavioral Health Special Initiative) program declined; thus treatment admissions reported by BHSI have declined. Additionally, state law Act 76 of 2016, suspends MA benefits for up to a maximum of two years in the event of incarceration. This law, effective 2017, also contributed to fewer individuals served through BHSI and treatment admissions continue to decline in 2017.  
**\*\*Methamphetamine:** Includes both amphetamines and methamphetamine.

**unavail:** Data not available; **na:** Not Applicable; **Percentages** may not sum to 100 due to missing data, rounding, and/or because not all possible categories are presented in the table. Category frequencies may not sum to drug total due to missing data and/or not all possible categories are presented in the table.

**SOURCE:** Data provided to the Philadelphia NDEWS SCE by Philadelphia Department of Behavioral Health and Intellectual disAbility Services, Behavioral Health Special Initiative.

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## Sources

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This report has been focused on the city and county of Philadelphia and includes data from the sources shown as follows. Reporting year is the calendar year unless specified as the fiscal year (FY), which would begin on July 1 and end on June 30 of the specified FY.

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

**Treatment admissions** data for residents of Philadelphia County were provided by the Behavioral Health Special Initiative (BHSI), supported by the Office of Addiction Services (OAS), Philadelphia Department of Behavioral Health and Intellectual disAbility Services. The database covers the uninsured and underinsured population of Philadelphia. The data represent self-reported mentions of use of preferred drugs by individuals admitted to treatment in 2017. This report focuses on primary choice of drugs at treatment admission. Beginning in FY 2015, services funded by the Pennsylvania Department of Drug and Alcohol Programs and tracked by BHSI for OAS are required to report through an Internet portal. This new reporting system does not require drug of choice in the data collection. The impact of this change in reporting protocol resulted in an increase in the proportion of “unknown” drug of choice in subsequent years.

**Mortality** data were provided by the Medical Examiner’s Office (MEO), Philadelphia Department of Public Health (PDPH). These data cover mortality cases with toxicology reports indicating the detection of drugs in persons who died in Philadelphia from January 1, 2017 to December 31, 2017. The MEO does not test for the presence of marijuana/tetrahydrocannabinol (THC)/cannabis.

**Crime laboratory drug analysis** data came from the National Forensic Laboratory Information System (NFLIS). Data include analysis of drug samples tested by the Philadelphia Police Department Forensic Science Laboratory from 2017 law enforcement seizures. Recent changes in NFLIS methodology resulted in reports, not items, as units of analysis. NFLIS methodology allows for the accounting of up to three drugs positively identified per item submitted for analysis. The data presented are a combined count of primary, secondary, and tertiary positive reports for drug items analyzed. Therefore, the data in this report are on positive reports, not on items analyzed.

**Acquired immunodeficiency syndrome (AIDS) and human immunodeficiency virus (HIV)** data were obtained from the PDPH’s AIDS Activities Coordinating Office Surveillance Report for 2017. At the time of this report, the 2016 Surveillance Report is final for cases reported through September 2017. The final count of cases may differ from previously reported preliminary data.

**Hepatitis C (HVC)** data were obtained from the PDPH’s Viral Hepatitis Program (HEP). Data on acute HVC cases are on cases diagnosed through December 2017.

### **ADDITIONAL INFORMATION ON SUBSTANCE USE IN THIS SCS:**

Annual and quarterly data on acute hepatitis, addiction treatment, law enforcement activities, neonatal and maternal morbidity, overdoses (fatal and nonfatal), sales, and prescriptions are available at <https://www.phila.gov/programs/combating-the-opioid-epidemic/reports-and-data/>.

*For additional information about the substances and substance use patterns discussed in this report, please contact Suet Lim, Ph.D., Philadelphia Department of Behavioral Health and Intellectual disAbility Services, 801 Market Street, Philadelphia, PA 19107, Phone: 215-413-7165, E-mail: [suet.lim@phila.gov](mailto:suet.lim@phila.gov).*