NDEWS National Drug Early Warning System
Funded at the Center for Substance Abuse Research by the National Institute on Drug Abuse

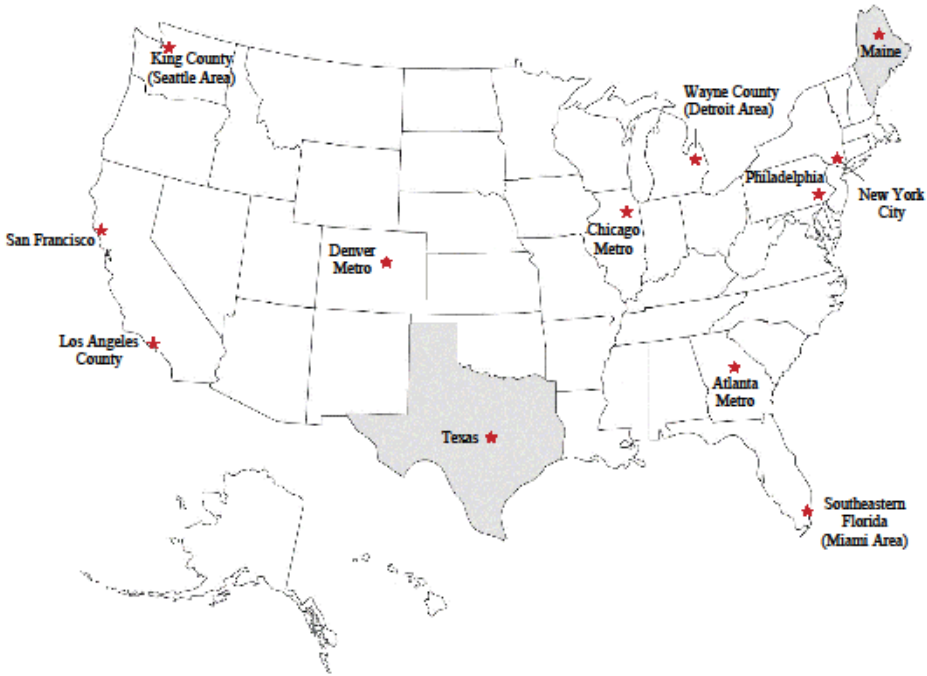
National Drug Early Warning System (NDEWS) Sentinel Community Site Profile 2015: Philadelphia

August 2015

NDEWS Coordinating Center

NDEWS is funded under NIDA Cooperative Agreement DA038360 awarded to the Center for Substance Abuse Research (CESAR) at the University of Maryland, College Park. Opinions expressed in this report may not represent those of NIH or NIDA.

Sentinel Community Site (SCS) Locations



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National Drug Early Warning System (NDEWS) Sentinel Community Site Profile Overview

The National Drug Early Warning System (NDEWS) was launched in 2014 with the support of the National Institute on Drug Abuse. The Center for Substance Abuse Research (CESAR) at the University of Maryland manages the NDEWS Coordinating Center and has recruited a team of nationally recognized experts to collaborate on building NDEWS. During 2015, 12 Sentinel Community Sites (SCS) were established, each with an expert Sentinel Community Epidemiologist (SCE). This inaugural Sentinel Community Site Profile contains three sections:

- The *Profile Snapshot* presents selected indicators of substance use, consequences, and availability;
- The *Drug Use Patterns and Trends* contains the SCE's review of important findings and trends; and
- The *Appendix Data Tables* contains a set of data tables prepared by Coordinating Center staff and disseminated to each SCE for review in preparing their profiles.

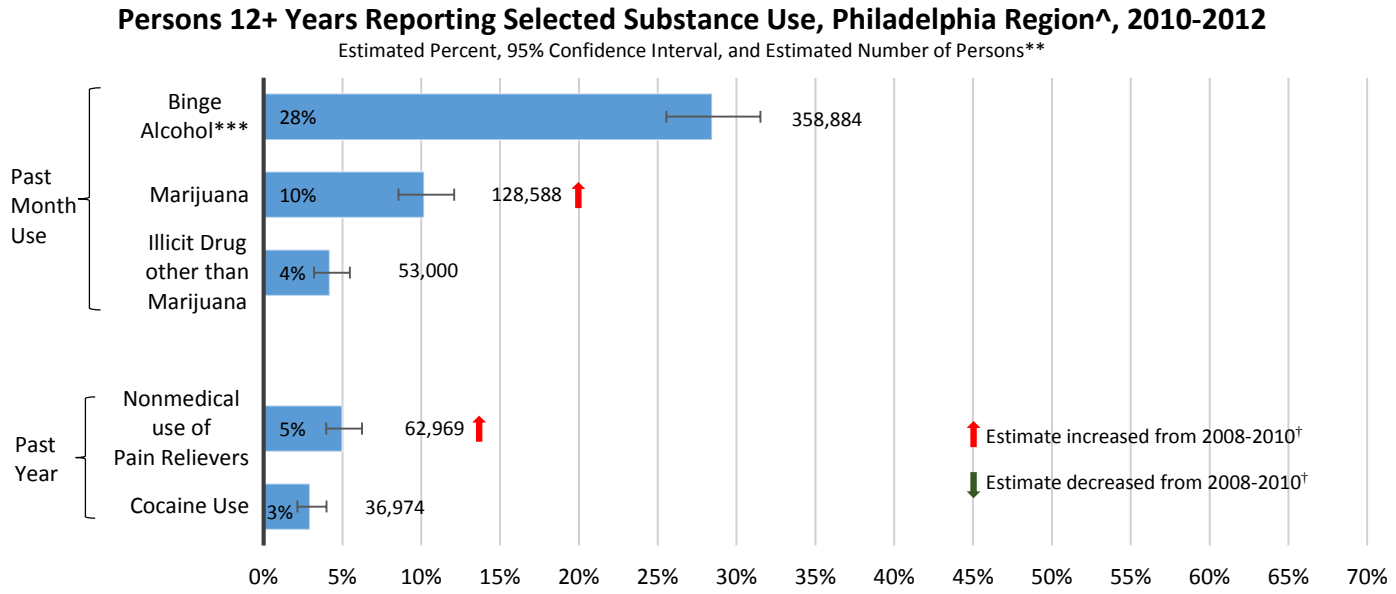
This entire Profile necessarily relies on using a variety of data sources produced by governmental and local agencies and these sources often measure geographic areas that differ from the intended catchment area of a Sentinel Site. For example, some surveys measure statewide patterns while others provide county level estimates. Wherever appropriate, a note is provided specifying the area covered by the findings presented.

The Annual Profiles for the 12 Sentinel Community Sites and detailed information about NDEWS can be found on the NDEWS website at www.ndews.org.

National Drug Early Warning System (NDEWS)
Philadelphia Sentinel Community Site
Profile Snapshot, 2015

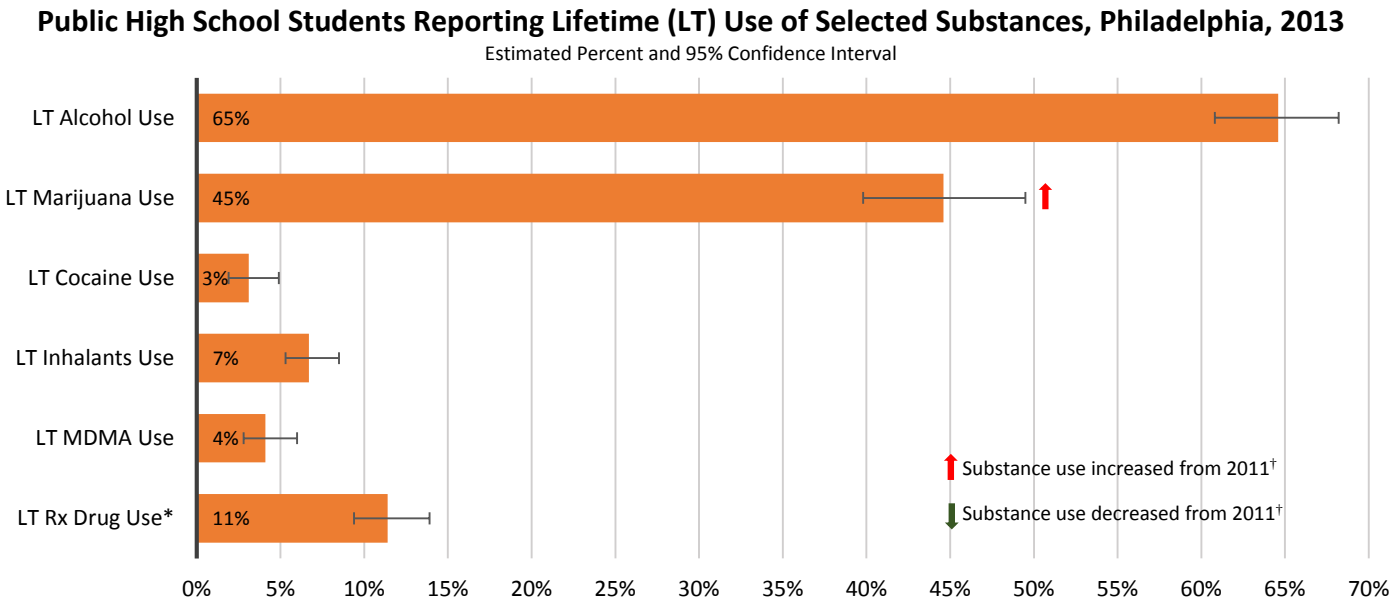
Substance Use

*National Survey on Drug Use and Health (NSDUH): Survey of U.S. Population**



*U.S. Population: U.S. civilian non-institutionalized population. ^Philadelphia Region: NSDUH Substate Region 36 which comprises Philadelphia County.**Estimated Number: Calculated by multiplying the prevalence rate and the population estimate of persons 12+ years (1,261,900) from Table C1 of the NSDUH Report. ***Binge Alcohol: Defined as drinking five or more drinks on the same occasion. †Statistically significant change: p<0.05.
Source: Adapted by the NDEWS Coordinating Center from data provided by SAMHSA, NSDUH. Annual averages based on 2010, 2011, and 2012 NSDUHs.

Youth Risk Behavior Survey (YRBS): Survey of Student Population



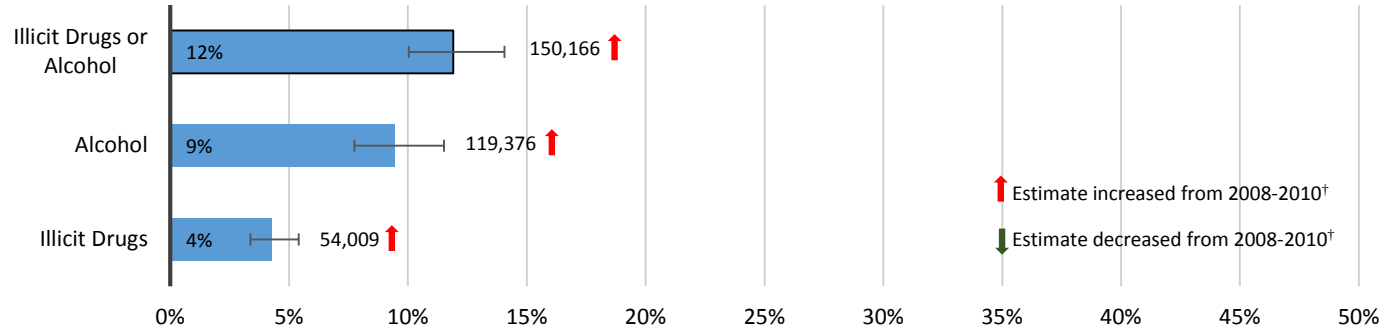
*LT Rx Drug Use: Defined as ever took prescription drugs without a doctor's prescription.
†Statistically significant change: p<0.05 by t-test.
Source: Adapted by the NDEWS Coordinating Center from data provided by CDC, 2001-2013 high school YRBS data.

Substance Use Disorders and Treatment

*National Survey on Drug Use and Health (NSDUH): Survey of U.S. Population**

Dependence or Abuse in Past Year Among Persons 12+ Years, Philadelphia Region, 2010-2012**

Estimated Percent, 95% Confidence Interval, and Estimated Number of Persons***



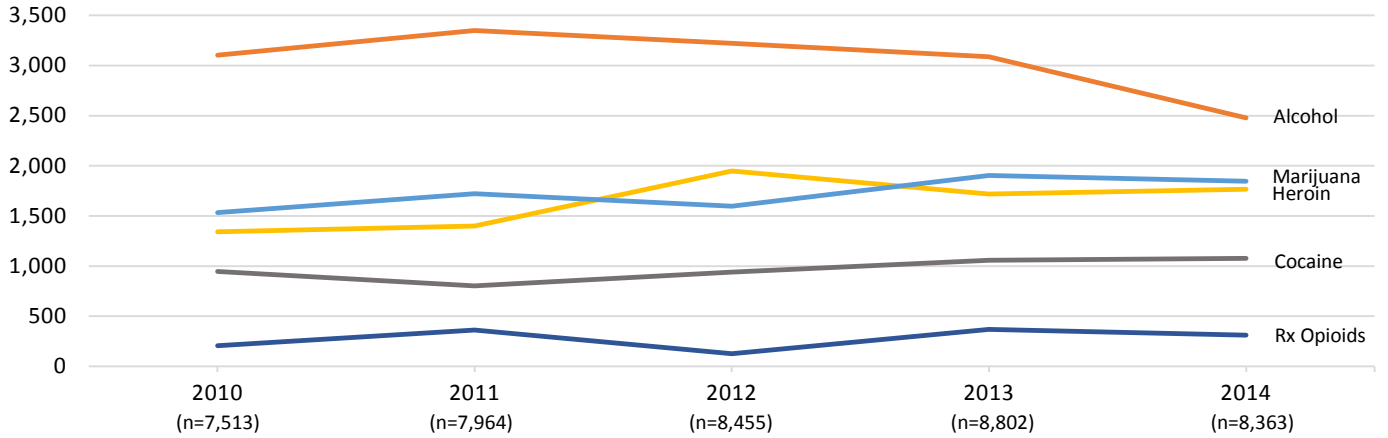
*U.S. Population: U.S. civilian non-institutionalized population. **Dependence or Abuse: Based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).* ***Estimated Number: Calculated by multiplying the prevalence rate and the population estimate of persons 12+ years (1,261,900) from Table C1 of the NSDUH Report. †Statistically significant change: $p<0.05$.

Source: Adapted by the NDEWS Coordinating Center from data provided by SAMHSA, NSDUH. Annual averages based on 2010, 2011, and 2012 NSDUHs.

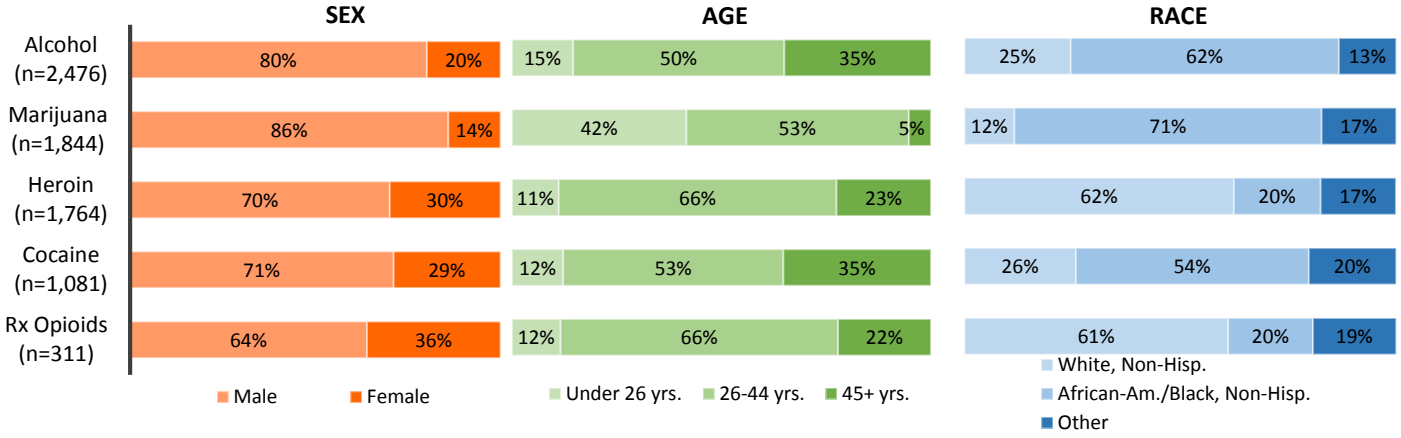
Treatment Admissions Data from Local Sources

Trends in Treatment Admissions*, by Primary Substance of Abuse, Philadelphia, 2010-2014

(n = Number of Treatment Admissions)



Demographic Characteristics of Treatment Admissions*, Philadelphia, 2014



*Treatment Admissions: Includes admissions for uninsured and underinsured individuals admitted to any licensed treatment programs funded through the Philadelphia Department of Behavioral Health. Percentages may not sum to 100 due to rounding.

Source: Data provided by the Philadelphia NDEWS SCE and the Philadelphia Department of Behavioral Health and Intellectual disAbility Services, Office of Addiction Services, Behavioral Health Special Initiative.

Law Enforcement Drug Seizures

National Forensic Laboratory Information System (NFLIS)

Drug Reports* for Items Seized by Law Enforcement in Philadelphia in 2014
National Forensic Laboratory Information System (NFLIS)

Top 10 Drug Reports and Selected Drug Categories

Drug Identified	Number (#)	Percent of Total Drug Reports (%)
TOTAL Drug Reports	**18,187**	**100%**
Top 10 Drug Reports		
Cannabis	5,283	29.0%
Cocaine	4,468	24.6%
Heroin	3,221	17.7%
Oxycodone	1,038	5.7%
Alprazolam	744	4.1%
Acetaminophen	673	3.7%
No Controlled Drug Identified	416	2.3%
Phencyclidine	382	2.1%
Non-Controlled Non-Narcotic Drug	258	1.4%
Clonazepam	210	1.2%
Top 10 Total	**16,693**	**91.8%**
Selected Drug Categories		
Synthetic Cannabinoids	352	1.9%
Synthetic Cathinones	26	0.1%
Fentanyl & Fentanyl Analogs	24	0.1%
Piperazines	5	<0.1%
2C Phenethylamines	0	0.0%
Tryptamines	0	0.0%

Top 5 Drugs, by Selected Drug Category
(% of Category)**

Synthetic Cannabinoids
(n=352)

XLR-11 (42%)
PB-22 (34%)
5F-PB-22 (7%)
AB-FUBINACA (5%)
AB-PINACA (3%)
AKB48-N-(5-Fluoropentyl) (3%)
Other (4%)

Synthetic Cathinones
(n=26)

Methylone (62%)
Alpha-PVP (19%)
Ethylone (15%)
4-MEC (4%)

Fentanyl & Fentanyl Analogs
(n=24)

Fentanyl (100%)

*Drug Reports: Drug that is identified in law enforcement items, submitted to and analyzed by federal, state, or local forensic labs, and included in the NFLIS database. The NFLIS database allows for the reporting of up to three drugs per item submitted for analysis. The data presented are a total count of first, second, and third listed reports for each selected drug item seized and analyzed.

**Percentages may not sum to 100 due to rounding.

Source: Adapted by the NDEWS Coordinating Center from data provided by the U.S. Drug Enforcement Administration (DEA), Office of Diversion Control, Drug and Chemical Evaluation Section, Data Analysis Unit, May 2015.

National Drug Early Warning System (NDEWS) Philadelphia Sentinel Community Site Drug Use Patterns and Trends, 2015

Suet Lim, Ph.D.

SCS Highlights

- Philadelphia experienced an outbreak of fentanyl-related intoxication deaths in 2014, with a major spike in March through mid-May; we observed a four-fold increase in fentanyl-related intoxication deaths from 2013.
- Numerous indicators suggest that heroin is a principal drug of abuse in Philadelphia. It is the drug most frequently detected amongst intoxication deaths in which a toxicology test was performed; treatment admissions for heroin as a primary drug of abuse have increased; and data from the National Forensic Laboratory Information System (NFLIS) show a higher percentage of drug items testing positive for heroin in 2014 than in 2013.
- Mortality indicator data shows that cocaine continued to be the 2nd most frequently detected drug amongst intoxication deaths; it was also the 2nd most identified drug in NFLIS items. In addition, there was a slight increase in primary treatment admissions for cocaine from 2013 to 2014.
- For prescription opioids, the mortality indicator and NFLIS reports identified oxycodone as the top ranked drug; treatment indicator showed little change in primary admissions for prescription opioids.
- Treatment admissions for benzodiazepines slightly increase from 2013 to 2014; mortality indicator data shows three benzodiazepines in the top ten drugs detected amongst intoxication deaths: alprazolam, clonazepam, and diazepam.
- Alcohol continues to be a top substance in primary treatment admissions and is the fourth most frequently detected drug among drug intoxication deaths with toxicology results.
- Marijuana continues to be in the top three primary treatment admissions; it is the most commonly identified substance in NFLIS.

Area Description

Philadelphia is the largest city in the Commonwealth of Pennsylvania. The US Census Bureau estimates that the City's population was 1,560,297 in 2014, with approximately 22% younger than 18 years old, and 12.4% 65 years and older. Over half of Philadelphia's population is women (52.7%). The population is diverse: 44.2% of the population is African American, 45.5% are White, 6.9% are Asian, and 3.3% are other races. Among these, 13.3% are of Hispanic origin. Among major cities in the United States, Philadelphia's poverty rate of 26.3% in 2013 is among the highest in the nation. According to the Philadelphia Inquirer (9/25/14) Philadelphia is the poorest big city in America and has the highest rate of deep poverty (people with incomes below half of the poverty line) of any of the nation's 10 most populous cities. There are approximately 60,000 children in the city who live in deep poverty. The percent of children living in poverty in Philadelphia rose every year from 2006 and 2011 to 40%, compared to a national rate of 21%. The average number of Philadelphians who were enrolled in Medicaid is over 450,000, which is almost one-third of the city's population. At the same time, more than 75% of Philadelphia's population under the age of 18 is enrolled in Medicaid, which is an extraordinarily high percentage. Education levels are also a barrier to improved incomes for city residents. Overall, only 24% of adult residents have graduated from college, which is substantially below national averages, and 19% of residents have not finished high school. In addition, 21% of Philadelphians speak a language other than English at home. Based on national population estimates, there are approximately 26,000 individuals in Philadelphia who identify as lesbian, gay, bisexual or transgender.

Changes in Legislation

In Pennsylvania, a controlled substance is any substance listed in the schedules designated by the Pennsylvania Secretary of Health. Each controlled substance is assigned to a schedule based on its severity for abuse. Based on these, Pennsylvania has its own set of drug laws governing how many days, months or years in prison and how much in fines defendants can receive for specific types of drug offenses. These drug offenses include, but are not limited to: possession of a controlled substance; manufacturing, delivering, or possessing with intent to deliver controlled substance; possession of a small amount of marijuana; drug paraphernalia; criminal use of communication facility; obtaining a controlled substance by fraud or misrepresentation: and prescription drug crimes.

Drug charges tend to be harsher when judges believe defendants distributed or manufactured drugs. In addition a number of other factors can play a part in judges' determination. These factors include, but are not limited to, the weight of the substance, proximity to a school zone, or possession of a weapon. Under Pennsylvania law, the severity of a drug charge depends largely on the type of drug involved. For example, defendants would tend to get lesser charges of around $500 fines and 30-days in jail for possession of less than 30 grams of marijuana. In 2014, the Mayor of Philadelphia signed legislation that decriminalized the possession and public consumption of marijuana, making it one of the largest American cities to turn back punitive drug laws. The bill levies fines of $25 on people caught possessing small amounts of the drug (up to 30 grams), and $100 for smoking it in public. In neither case would an

offender face a criminal charge or arrest. For other narcotics charges, defendants can receive up to 15 years in prison and fines of up to $250,000. In cases involving drug charges, defendants may be able to obtain lesser charges for unlawful search and seizure, entrapment by police, medical marijuana, or planted drugs. Charges related to drugs, such as money laundering and drug trafficking, hold their own penalties and sentences.

In October 2014, the Pennsylvania Governor signed Good Samaritan legislation (Act 139) which established immunity for certain drug crimes and provided law enforcement new tools to reduce fatality rates during drug overdoses. The new act provides for first responders (including law enforcement, fire fighters, EMS or other organizations) as well as individuals the ability to administer naloxone, a life-saving opioid-overdose antidote. Act 139 had strong local support from local legislators and law enforcement officials as a deadly heroin epidemic continues to claim lives in Pennsylvania. Act 139 provides immunity from prosecution for certain drug crimes for individuals who seek emergency medical help when a friend or companion overdoses on drugs. Act 139 will encourage people to quickly report overdoses to emergency personnel without fearing legal repercussions.

Drug Use Patterns and Trends

OVERVIEW

Data for 2014 indicates that substance use continues to represent a public health problem in Philadelphia with severe consequences for its population. Data on treatment admissions for 2014 are shown in Exhibits 1 and 2 and Appendix Tables 4a and 4b. Alcohol, marijuana, cocaine, and heroin constituted 85.6% of the primary drugs of choice reported at treatment admissions in 2014. Compared to 2013, treatment admissions in 2014 showed a slight increase in marijuana (0.4 percentage points [pp]). Cocaine admissions also increased slightly (0.9 pp) and there were somewhat larger increases in heroin (1.6 pp) admissions. Primary treatment admissions for prescription opioids decreased 0.5 pp compared to 2013. The largest decrease was registered for alcohol treatment admissions, which decreased by 5.5 pp, from 35.1% in 2013 to 29.6% in 2014.

In 2014, there were 652 drug intoxication deaths certified by the Medical Examiner's Office (MEO) (627 accident, 1 homicide, 21 suicide, and 3 undetermined). Of those 652 deaths, toxicology testing was performed by the MEO on 635 cases. The ten drugs most frequently detected amongst the intoxication deaths are shown in Exhibit 3. Morphine/heroin was detected in 350 cases, followed by cocaine with 273. Fentanyl was detected in 100 cases of intoxication deaths, while oxycodone was detected in 93 intoxication deaths. Consistent with previous years, mortality cases with the presence of drugs are suggestive of high poly-drug use among the drug using population in Philadelphia.

The total number of drug reports among drug items analyzed by law enforcement in Philadelphia and reported by the National Forensic Laboratory Information System (NFLIS) was 18,187, lower than in 2013 (n=22,896). The number of reports has been declining each year since 2009 (n=35,802).The leading drug identified among NFLIS reports was cannabis (29.0%, n=5,283), followed by cocaine (24.6%, n=4,468), heroin (17.7%, n=3,221) and oxycodone (5.7%, n=1,038) (Exhibit 4).

Heroin overdose deaths are increasing in many cities and counties across the United States, particularly in the Northeast area. Pennsylvania's overdose death rate for 2013 (19.4 per 100,000 population) is above the national rate (13.8 per 100,000 population). To gauge the amount of drug overdose amongst the drug abusing population in Philadelphia, this report is also utilizing data from Philadelphia Fire Department's Emergency Medical Services. EMS responds to calls for overdoses and accidental poisonings. The manner in which the data is collected and reported precluded further refinement of overdose and poisoning. EMS reported 11,745 (>800 per month, Figure 1) runs in response to overdoses or accidental poisonings in 2014, which represents an increase of 6 pp compared to 2013.

ALCOHOL

Alcohol continued to be the substance most likely to be reported as a primary substance of abuse at treatment admission in 2014 in the Philadelphia catchment area (Exhibit 1). However, we observed a substantial decline from the previous years (5.5 pp and 11.7 pp decreases in the number of admissions in 2013 and 2010, respectively). In 2014, males constituted 80.1% of primary alcohol treatment admissions. African Americans accounted for 62.2% of primary alcohol treatment admissions in 2014, followed by Whites (24.6%), Hispanics (9.0%), and Asians and others (4.2%). The majority of those seeking treatment for alcohol abuse were aged 26-44 (50.4%), followed by those older than 45 (35.0%). Youth and adolescents (18 and younger) represented 0.4% of primary treatment admissions for alcohol. The number of intoxication deaths with the presence of alcohol (in combination with other drugs) was 125 in 2014 (19% of the 635 cases with toxicology results available), a decline from 169 cases in 2013.

BENZODIAZEPINES

Treatment admissions for benzodiazepines represented 1.0% of all treatment admissions in the Philadelphia catchment area (Exhibit 1). We observed an increase of 0.2 pp from 2013 but a decrease of 1.5 pp from admission rates in 2010. In 2014, males constituted 75.0% of primary benzodiazepine treatment admissions. African Americans accounted for 55.0% of primary benzodiazepine treatment admissions in 2013, followed by Whites (28.8%), Hispanics (13.8%), and Asians and others (2.5%). The majority of those seeking treatment for benzodiazepine abuse were aged 26-44 (61.3%). The number of intoxication deaths with the presence of different benzodiazepines (in combination with other drugs) was substantial. For example, the number of MEO cases that included alprazolam was 172 in 2014 (27.0% of 635 overdose cases with toxicology results available), clonazepam 100 (15.0%), and diazepam 83 (13.0%). According to NFLIS data for 2014, there were744 alprazolam, 210 clonazepam, and 33 diazepam reports in items. Taken together, this represents 5.0% of all positive reports among drug items seized and analyzed by NFLIS laboratories. Finally, 305 (15.0%) of those who were on probation or parole in 2014 and who were tested for the presence of drugs were positive for benzodiazepines.

COCAINE

While it remained in a distant fourth rank relative to alcohol, marijuana, and heroin, primary treatment admissions for cocaine continued to increase from 2011 to 2013. In 2014, cocaine constituted 12.9% of all primary treatment admissions (Exhibit 1), which represents an increase of 0.9 pp compared to 2013, and 0.3 pp compared to 2010. Almost three quarters (71.1%) of primary cocaine treatment admissions were male. African Americans constituted the majority of those admitted for primary treatment (53.9

%), while 25.8% were White. Hispanics represented 17.9% of total primary cocaine admissions in 2014 while Asians and other races constituted 2.4%. Over half of those admitted were between aged 26-44 (52.5%), while 35.2% were 45 and older. As in 2013, marijuana was the most commonly cited secondary drug for primary cocaine admissions (27.8%), followed by heroin (24.2%).

Cocaine continued to be among the top 10 drugs detected amongst Philadelphia MEO intoxication cases in 2014. The number of intoxication deaths with the presence of cocaine in 2014 was 273 (42% of all cases) (Exhibit 3). NFLIS data in 2014 revealed that cocaine continued to be second to cannabis in the number of reports for items seized and analyzed in NFLIS laboratories with total of 4,468 positive reports, which represents 24.6% of all positive drug reports (Exhibit 4). APPD urinalysis data of adults entering probation or parole in 2014 revealed the presence of cocaine in 376 (19.0%) of all drug-positive tests (Exhibit 5).

HEROIN

Data from Behavioral Health Special Initiative, Philadelphia Department of Behavioral Health and Intellectual disAbility Services shows that heroin use was responsible for 21.1% of primary treatment admissions in Philadelphia (Exhibit 1). This represents 1.6 pp increase from 2013, and 3.2 pp increase from 2010. In 2014, males constituted 70.1% of primary heroin admissions. Whites accounted for 62.4% of primary heroin treatment admissions, followed by African Americans (20.1%) and Asians and others (3.2%). Hispanics constituted 14.3% of primary heroin treatment admissions. Those admitted to treatment reported oral ingestion as their preferred route of administration (69.7%), followed by injecting (30.2%). Finally, those aged 26-44 were the most likely to be admitted for the primary heroin treatment (66.3% of all admitted cases). The MEO 2014 data shows that heroin/morphine was the most frequently detected drug among intoxication deaths where a toxicology test was performed (n=635), present in 55.1% of these deaths. There were more heroin reports among seized items analyzed by the NFLIS than in the previous years. While heroin remained third in the number of positive drug reports (n=3,221) compared to marijuana and cocaine, there has been a continuous increase in the proportion of NFLIS positive reports that were identified as heroin since 2010. The Philadelphia Adult Probation and Parole Department (APPD) analyzed urine specimens from those individuals who were placed on probation, or on parole status (n=4,500) (Exhibit 5). Opiates were found in 22% (n=428) of those who tested positive for any substance (n=1942).

Heroin availability in Philadelphia in the first half of 2014 is listed as high, and substantially higher than in the second half 2013, according to Drug Enforcement Administration (DEA) Philadelphia Division. The overwhelming majority of the heroin available in Philadelphia is of South American origin. At the wholesale level, Philadelphia operates as a source for the mid-Atlantic region, supplying the cities of Baltimore, Allentown, Harrisburg, Scranton, Washington, DC, and the state of Delaware. The majority of heroin available in the Philadelphia region was transported in commercial, rental, or personal vehicles, many of which were equipped with concealed compartments. Kilogram quantities of heroin are packaged in brick form; retail quantities were typically packaged in small glassine bags, colored bags, or wax packets, which were sold individually, in bundles containing 10-13 bags, or in “racks” of ten or more bundles. Philadelphia has historically offered the cheapest and purest heroin on the East coast. Heroin seized by the DEA Philadelphia Division is significantly higher in purity and lower in cost than most other heroin markets. The cost of a bag of heroin in 2014 was $10, a gram of heroin $55-80, and $55,000-

80,000 per kilogram, according to the DEA. An increasing number of shipments of Mexican black tar heroin have also been seized in Northeastern markets, including Philadelphia, where black tar is rarely seen.

MARIJUANA

In 2014, marijuana was again ranked second in the number of primary treatment admissions. There was a slight increase from 2013 (0.4%) in the percent of treatment admissions that are primary for marijuana (22.0%) (Exhibit 1). Males represented 86.0% of primary marijuana treatment admissions in 2014. African Americans accounted for 71.2% of primary treatment admissions, followed by Hispanics (13.8%), Whites (11.6%) and Asians and others (3.5%). Age categories 26-44 combined constituted one half of primary marijuana treatment admissions (53.1%). Historically, for youths age 18 and younger, marijuana was overwhelmingly the primary drug of choice for treatment. This remains true in 2014, with over 78% of adolescent admissions with known drug of choice reporting marijuana as their primary drug.

NFLIS data for 2014 showed marijuana accounted for 29% of positive reports (Exhibit 4). APPD urinalysis data, the first tests of adults placed on probation or parole, continued to detect the presence of marijuana in more samples than any other drug, with marijuana representing two-thirds (66%) of the tests that were positive for any drug in 2014 (Exhibit 5). Marijuana continued to be the most frequently detected drug among first timers to probation or parole.

METHAMPHETAMINE

Methamphetamine and amphetamines remained a relatively minor problem in Philadelphia, and use of these drugs appeared to be confined to a small portion of the population, based on various indicators. As the primary drug of choice, methamphetamine and amphetamine only represented 0.2 % of treatment admissions with a known drug of abuse (Exhibit 1). Historically, these drugs are not frequently detected drugs in MEO cases. In 2014, methamphetamines were not among top 10 drugs detected in intoxication deaths. NFLIS data for 2014 reports 136 methamphetamine-positive reports for items seized, and 73 amphetamine-positive reports. Taken together this represents 1% of all positive reports among drug items seized and analyzed by NFLIS laboratories. In addition, NFLIS reported 27 positive reports for MDMA. APPD urinalysis data of adults on probation or parole in 2014 revealed the presence of amphetamines in 1% of all individuals tested.

PRESCRIPTION OPIOIDS

The nonmedical use of prescription opioids was increasingly reported by individuals entering treatment. As primary drug of choice, “Other Opiates” represented 3.7% of primary treatment admissions in 2014 (Exhibit 1). This represents continuation of trend from 2013, when we saw an almost threefold increase from 2012 in the proportion of primary treatment admissions for other opioids. Of the 311 primary treatment admissions, 64.0% were male, 61.1% were White, 19.6% were African American, 3.2% were Asians and other races, and 16.1% were of Hispanic ethnicity. The largest age category for primary other opiates/opioids admissions was age 26-44 (66.2%). In 2014, oxycodone was detected in 94 (14%) decedents who died from drug intoxication where a toxicology test was performed by the MEO (n=635). Oxycodone continued to be the fourth most frequently identified drug among all drug reports for items

seized and analyzed in NFLIS laboratories in Philadelphia in 2014 (n=1,038) (Exhibit 4). When methadone was detected among MEO cases, it was uncertain whether methadone was used as directed by a physician for the management of pain, as a prescribed adjunctive measure in treatment/recovery programs, and/ or in an abusive or recreational manner. MEO detected methadone in 62 (9%) decedents who died from drug intoxication death and where toxicology test was performed in 2014 (Exhibit 3).

Reports from the law enforcement, public health, and regulatory communities indicate that prescription drugs within Schedules II, III, and IV are readily available and sought throughout Philadelphia. Reports indicate the most commonly diverted and abused prescription opioids include the pain relievers oxycodone and hydrocodone, as well as buprenorphine. Buprenorphine (Subutex® and Suboxone®) reduces or eliminates opioid withdrawal symptoms, including drug cravings, without producing the "high" or dangerous side effects of heroin and other opioids. Sources indicate that as heroin and opioid abuse increases, abusers increasingly seek buprenorphine to ease withdrawal symptoms until the abuser has the funds or means to acquire their primary drug of choice. The cost of prescription opioids by unit in Philadelphia are as follows: Methadone 10 mg $5-$15; Morphine 15 mg $3-$5; Oxycodone 30 mg $20-$30; Oxycodone 10 mg $10; OxyContin® 80 mg $20-$45; Percocet® 10 mg $10; Percocet® 5 mg $2.50-$5; Percocet® 30 mg $15-$20; Suboxone 8 mg $5-$15; Vicodin® 7.5 mg $7-$10 (11).

NEW AND NOTABLE

In the past several years, fentanyl, a powerful synthetic opioid, has re-emerged as a drug threat in Pennsylvania and in Philadelphia. Fentanyl is a Schedule II synthetic opioid that is approximately 80 to 100 times stronger than morphine and 25 to 40 times more potent than heroin. The effects are similar to morphine and heroin; however, fentanyl produces a stronger respiratory depressive effect. Traffickers and dealers mix fentanyl with diluents and sell it as "synthetic heroin," or use fentanyl to increase the potency of low-quality heroin. Many users who purchase fentanyl-laced heroin have no knowledge that fentanyl is mixed into the heroin. Acetyl-fentanyl is an analog of fentanyl and is not meant for human consumption. Because acetyl-fentanyl is somewhat less potent than fentanyl, users may believe it is safe to ingest. Two primary types of fentanyl have been observed in Philadelphia: illicitly-produced fentanyl, most commonly available in powder form, and traditionally used with other illicit drugs such as heroin and cocaine, and pharmaceutical fentanyl in the form of tablets, patches, and lozenges prescribed by a physician. Fentanyl abuse is intrinsically tied to the use of illicit drugs such as heroin and cocaine, as well as to the misuse of other prescription opioids. Philadelphia's MEO reported 24 fentanyl-related overdose deaths in 2013, while the MEO reported 100 fentanyl-related overdose deaths in 2014 (Exhibit 3). Of the 100 decedents, 12 showed the presence of fentanyl with no additional illicit drugs, opioids, or benzodiazepines identified in the toxicology test results. Eighty decedents showed the presence of a heroin metabolite or cocaine, with 15 decedents showing the presence of both. The largest spike in fentanyl-related overdose deaths occurred between March 3rd and May 17th 2014, with 44 deaths certified by Philadelphia MEO during that time period.

Following the outbreak of fentanyl related overdose deaths that peaked in May 2014, our surveillance efforts collected qualitative data using focus groups. Former heroin users revealed that users seeking a potent heroin, often obtain heroin adulterated with fentanyl. It was implied that drug sellers adulterated heroin with fentanyl without the knowledge of the buyer. This strategy is used as a

marketing tool by making the heroin seem stronger, thereby increasing buyer's demand and boosting heroin sales. The origins of the illicit fentanyl supply, as well as the point at which it is introduced into the supply chain in Pennsylvania, remain under investigation and serve as significant intelligence gaps. While NFLIS data reports a small number of positive reports in Philadelphia (n=24) compared to other drugs in 2014, the number of positive reports for fentanyl in 2014 is higher than the preceding four years (average n=7 between 2010 and 2013).

Additional Information on Drug Use Trends

INFECTIOUS DISEASES RELATED TO SUBSTANCE USE

In 2013, Philadelphia recorded 649 newly diagnosed HIV cases. Among these, 40 were related to injection drug use (6%). The 2013 rate per 100,000 population was 2.4, which is substantially higher than the rest of the Commonwealth of Pennsylvania (0.5 per 100,000). In addition, there were 13 new cases of acute Hepatitis C, at a rate of 0.8 new cases per 100,000 population. This rate is higher than the one in the rest of Pennsylvania (0.6 cases per 100,000 population).

Exhibits

Exhibit 1. Number and Percentage of Primary Drugs of Abuse at Treatment Admission by Uninsured and Underinsured Individuals in Philadelphia: 2013

Primary Drug of Abuse	Number of Treatment Admissions	Percentage of Total Admissions
Alcohol	2,476	29.6%
Heroin	1,844	22.0%
Marijuana	1,764	21.1%
Cocaine: Crack/Powder	1,081	12.9%
Other Opiates/Synthetics	311	3.7%
Benzodiazepine	80	1.0%
Methamphetamine & Amphetamine	15	0.2%
Other Drugs /Unknown	792	9.5%

SOURCE: Behavioral Health Special Initiative

Exhibit 2. Demographic Profiles of Individuals Who Entered Substance Abuse Treatment in Philadelphia: 2013

	Number of Treatment Admissions	Percentage of Total Admissions
Gender		
Male	6,339	75.8%
Female	2,024	24.2%
Race/Ethnicity		
White	2,607	31.2%
African American	4,254	50.9%
Hispanic	1,127	13.5%
Asian	46	0.6%
Others	329	3.9%
Age		
Under 18	186	2.2%
18-25	1,593	19.0%
26-44	4,643	55.5%
45+	1,941	23.2%

SOURCE: Behavioral Health Special Initiative

Exhibit 3. Most Frequently Detected Drugs amongst Alcohol and/or Drug Intoxication Deaths, Philadelphia 2014.

Drug	Number of cases with identified drug
Morphine	350
Cocaine	273
Alprazolam	172
Ethanol	125
Clonazepam	100
Fentanyl	100
Oxycodone	93
Diazepam	83
Methadone	62
Citalopram	62

SOURCE: Philadelphia Medical Examiner's Office

Exhibit 4. Top 10 Drugs Identified by NFLIS Measured by Positive Reports, Philadelphia, 2014 (n=18,187)

Drug	Number of cases with identified drug	Percentage of Total (n=18,187)
Cannabis	5,283	29.0%
Cocaine	4,468	24.6%
Heroin	3,221	17.7%
Oxycodone	1,038	5.7%
Alprazolam	744	4.1%
Acetaminophen	673	3.7%
Phencyclidine	382	2.1%
Clonazepam	210	1.2%
XLR-11 , synthetic cannabis	149	0.8%
Buprenorphine	136	0.7%
Methamphetamine	135	0.7%
Others	1,748	9.6%

SOURCE: NFLIS

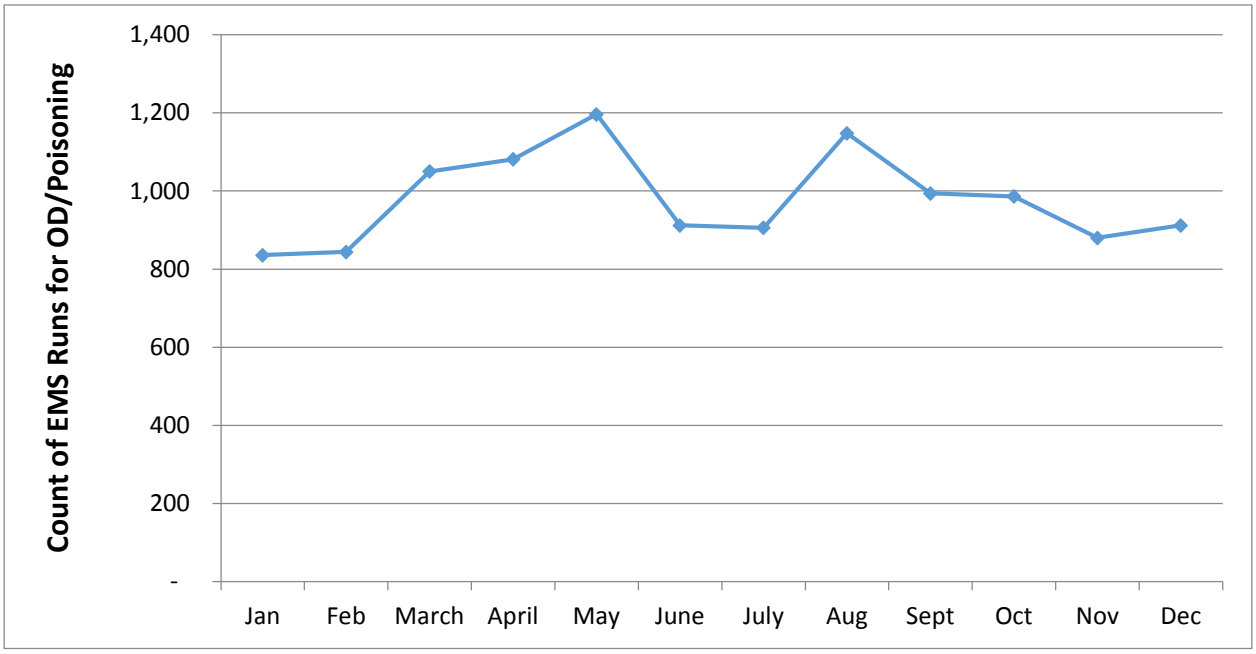
Exhibit 5. Number of Drug-Positive Urinalysis Results of Adults in Probation or Parole Status who were Tested for the First Time and Percent Positive for Any Drug, in Philadelphia (Total tested=4,500)

Tested	Number	Percent
Negative	2558	56.8%
Positive*	1942	43.2%
Marijuana	1285	28.6%
Opiates	428	9.5%
Cocaine	376	8.0%
Benzodiazepines	305	6.8%
PCP	170	3.8%
Alcohol	54	1.2%
Amphetamines	34	0.8%

* - Some individuals tested positive for multiple substances

SOURCE: Adult Probation/Parole Department, First Judicial District, Philadelphia

Figure 1: Count of EMS Runs for OD/Poisoning per month in 2014



SOURCE: Philadelphia Fire Department

Data Sources

This report focuses primarily on the city and county of Philadelphia and includes data from the sources shown below. Reporting year is the calendar year unless specified as 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 Appendix tables and 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 2014. This report focuses on primary choice of drugs at treatment admission. Beginning in FY 2014, 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. These data cover mortality cases with toxicology reports indicating the detection of drugs in persons who died in Philadelphia from January 1, 2014, to December 31, 2014. 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 2011 to 2014. 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 items analyzed. Data for this report were retrieved in May 2015, and are considered preliminary and subject to change.

Criminal justice urinalysis data for adults who are in probation or parole status were derived from reports from the First Judicial District of Pennsylvania, Adult Probation and Parole Department (APPD), from January 1, 2014, to December 31, 2014. Data represent the first-time test for individuals when placed on probation or parole status.

Acquired immunodeficiency syndrome (AIDS) and human immunodeficiency virus (HIV) data were obtained from the Philadelphia Department of Public Health's AIDS Activities Coordinating Office Surveillance Report for 2013. At the time of this report, the 2013 Surveillance Report is final for cases reported through June 2014. Final count of cases may differ from previously reported preliminary data.

Contact Information: For additional information about the drugs and drug use patterns discussed in this report, please contact Suet T. Lim, Ph.D., City of Philadelphia, Department of Behavioral Health and Intellectual disAbility Services, Community Behavioral Health, 801 Market Street, 7th Floor, Philadelphia, PA, 19107-2908, Phone: 215-413-7165, Fax: 215-413-7121, E-mail: suet.lim@phila.gov.

National Drug Early Warning System (NDEWS) Philadelphia Sentinel Community Site Appendix Data Tables, 2015

NDEWS Coordinating Center

Table 1: Demographic and Socio-Economic Characteristics
Philadelphia County, Pennsylvania
2009-2013 ACS Five-Year Estimates

	Estimate	Margin of Error
Total Population (#)	**1,536,704**	**
Age (%)		
18 years and over	77.6%	**
21 years and over	72.1%	+/-0.1
65 years and over	12.2%	**
Median Age	33.6	
Race (%)		
White, Not Hisp.	36.6%	+/-0.1
Black/African American, Not Hisp.	42.0%	+/-0.1
Hispanic/Latino	12.7%	
American Indian/Alaska Native	<1%	+/-0.1
Asian	6.5%	+/-0.1
Native Hawaiian/Pacific Islander	0.0%	+/-0.1
Some Other Race	<1%	+/-0.1
Two or More Races	1.8%	+/-0.1
Sex (%)		
Male	47.2%	+/-0.1
Female	52.8%	+/-0.1
Educational Attainment (*Among Population Aged 25+ Years*) (%)		
High School Graduate or Higher	81.2%	+/-0.3
Bachelor's Degree or Higher	23.9%	+/-0.3
Unemployment (*Among Civilian Labor Force Pop Aged 16+ Years*) (%)		
Percent Unemployed	8.9%	+/- 0.2
Income		
Median Household Income (in 2013 inflation-adjusted dollars)	$37,192	+/- $424
Poverty (%)		
People Whose Income in Past Year is Below Poverty Level	26.5%	+/-0.5

NOTES:
Margin of Error: can be interpreted roughly as providing a 90% probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value.
**The estimate is controlled; a statistical test for sampling variability is not appropriate.

SOURCES: Adapted by the NDEWS Coordinating Center from data provided by the U.S. Census Bureau, 2009-2013 5-Year American Community Survey (ACS).

Table 2a: Self-Reported Substance Use Behaviors Among Persons 12+ Years in *Philadelphia* ^, 2010-2012

Estimated Percent, 95% Confidence Interval, and Estimated Number
Annual Averages Based on 2010, 2011, 2012 NSDUHs

Substance Use Behaviors	Substate Region: Philadelphia		
	Estimated % (95% CI)		Estimated #*
Used in Past Month			
Alcohol	52.31	(48.83 - 55.77)	660,100
Binge Alcohol**	28.44	(25.54 - 31.52)	358,884
Marijuana	10.19	(8.56 - 12.09)	128,588
Use of Illicit Drug Other Than Marijuana	4.20	(3.20 - 5.48)	53,000
Used in Past Year			
Cocaine	2.93	(2.14 - 3.99)	36,974
Nonmedical Use of Pain Relievers	4.99	(3.97 - 6.24)	62,969
Dependence or Abuse in Past Year* **			
Illicit Drugs or Alcohol	**11.90**	**(10.04 - 14.06)**	**150,166**
Alcohol	9.46	(7.75 - 11.51)	119,376
Illicit Drugs	4.28	(3.37 - 5.41)	54,009

NOTES:

95% Confidence Interval (CI): provides a measure of the accuracy of the estimate. It defines the range within which the true value can be expected to fall 95 percent of the time.

^Philadelphia: NSDUH Substate Region 36 which comprises Philadelphia County.

***Estimated #**: the estimated number of persons aged 12 or older who used the specified drug or are dependent/abuse a substance was calculated by multiplying the prevalence rate and the population estimate from Table C1 of the NSDUH report. The population estimate is the simple average of the 2010, 2011, and 2012 population counts for persons aged 12 or older

****Binge Alcohol:** defined as drinking 5 or more drinks on the same occasion on at least 1 day in the past 30 days.

*****Dependence or Abuse in Past Year:** based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* .

SOURCE: Adapted by the NDEWS Coordinating Center from data provided by the Substance Abuse and Mental Health Services Administration (SAMHSA), Substate Estimates of Substance Use and Mental Disorders from the 2010-2012 National Surveys on Drug Use and Health: Results and Detailed Tables. Rockville, MD. 2014. Available at: http://www.samhsa.gov/data/NSDUH/substate2k12/toc.aspx.

Table 2b: Self-Reported Substance Use Behaviors Among Persons in *Philadelphia* ^, by Age Group, 2010-2012
Estimated Percent and 95% Confidence Interval (CI)
Annual Averages Based on 2010, 2011, 2012 NSDUHs

Substance Use Behaviors	Substate Region: Philadelphia^		
	12-17	18-25	26+
	Estimated Percent (95% CI)	Estimated Percent (95% CI)	Estimated Percent (95% CI)
Used in Past Month			
Binge Alcohol*	6.9 (5.4 - 8.9)	42.4 (38.4 - 46.5)	27.6 (24.0 - 31.4)
Marijuana	7.8 (6.0 - 10.10)	23.6 (20.1 - 27.5)	7.3 (5.6 - 9.5)
Use of Illicit Drug Other Than Marijuana	3.7 (2.6 - 5.2)	6.3 (4.7 - 8.3)	3.8 (2.6 - 5.4)
Used in Past Year			
Marijuana	14.2 (11.6 - 17.4)	37.1 (33.1 - 41.4)	12.2 (9.8 - 15.0)
Cocaine	0.5 (0.3 - 0.9)	4.1 (2 .8 - 5.9)	2.9 (2.01 - 4.28)
Nonmedical Use of Pain Relievers	5.4 (4.0 - 7.2)	9.0 (7.1 - 11.3)	4.0 (2.9 - 5.5)
Dependence or Abuse in Past Year**			
Illicit Drugs or Alcohol	7.8 (5.9 - 10.3)	20.6 (17.5 - 24.2)	10.3 (8.1 - 13.0)
Alcohol	4.0 (2.8 - 5.6)	14.8 (12.3 - 17.7)	8.8 (6.8 - 11.3)
Illicit Drugs	3.4 (2.4 - 4.9)	7.9 (6.0 - 10.2)	3.5 (2.5 - 5.0)

NOTES:
95% Confidence Interval (CI): provides a measure of the accuracy of the estimate. It defines the range within which the true value can be expected to fall 95 percent of the time.
^Philadelphia: NSDUH Substate Region 36 which comprises Philadelphia County.
***Binge Alcohol:** defined as drinking 5 or more drinks on the same occasion on at least 1 day in the past 30 days.
****Dependence or Abuse in Past Year:** based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

SOURCE: Adapted by the NDEWS Coordinating Center from data provided by the Substance Abuse and Mental Health Services Administration (SAMHSA), Substate Estimates of Substance Use and Mental Disorders from the 2010-2012 National Surveys on Drug Use and Health: Results and Detailed Tables. Rockville, MD. 2014. Available at: http://www.samhsa.gov/data/NSDUH/substate2k12/toc.aspx.

Table 3: Self-Reported Substance Use Behaviors Among *Philadelphia* ^ Public High School Students, 2013
Estimated Percent and 95% Confidence Interval (CI)
2011 and 2013 YRBS*

Substance Use Behaviors	2013 vs 2011			2013 by Sex			2013 by Race			
	2013	2011	p-value	Male	Female	p-value	White	Black	Hispanic	Asian
	Percent			Percent			Percent			
	Estimate (95% CI)	Estimate (95% CI)		Estimate (95% CI)	Estimate (95% CI)		Estimate (95% CI)	Estimate (95% CI)	Estimate (95% CI)	Estimate (95% CI)
Used in Past Month										
Alcohol	33.1 (29.7 - 36.7)	31.6 (27.9 - 35.5)	0.55	27.8 (23.6 - 32.3)	37.9 (34.2 - 41.7)	**0.00**	47.2 (39.0 - 55.6)	29.8 (25.6 - 34.4)	33.7 (26.5 - 41.8)	18.0 (10.4 - 29.3)
Binge Alcohol**	13.9 (11.2 - 17.1)	15.2 (12.7 - 18.0)	0.52	13.2 (9.9 - 17.3)	14.6 (11.5 - 18.4)	0.45	24.0 (16.2 - 34.1)	10.7 (7.6 - 14.7)	16.1 (11.5 - 22.1)	7.1 (2.6 - 17.9)
Marijuana	25.1 (21.6 - 28.9)	21.3 (18.6 - 24.3)	0.10	25.3 (20.1 - 31.4)	24.8 (21.2 - 28.8)	0.86	21.7 (13.4 - 33.1)	28.0 (23.7 - 32.9)	24.6 (19.5 - 30.6)	8.7 (4.1 - 17.6)
Ever Used in Lifetime										
Alcohol	64.6 (60.8 - 68.2)	64.3 (60.4 - 68.1)	0.93	60.1 (55.1 - 64.8)	69.2 (64.9 - 73.1)	**0.00**	75.5 (68.4 - 81.5)	62.2 (58.1 - 66.2)	70.7 (63.6 - 76.9)	42.0 (30.5 - 54.4)
Marijuana	44.6 (39.8 - 49.5)	38.2 (34.6 - 42.1)	**0.04**	44.7 (39.1 - 50.4)	44.5 (38.5 - 50.7)	0.95	43.4 (33.8 - 53.6)	46.4 (39.8 - 53.1)	48.0 (41.0 - 55.1)	18.3 (10.4 - 30.3)
Cocaine	3.1 (1.9 - 4.9)	3.2 (2.3 - 4.5)	0.86	2.9 (1.6 - 5.2)	2.9 (1.6 - 5.2)	0.95	3.9 (1.9 - 8.0)	1.9 (0.7 - 4.7)	4.3 (2.1 - 8.7)	1.9 (0.5 - 6.6)
Hallucinogenic Drugs	—	—	~	—	—	~	—	—	—	—
Inhalants	6.7 (5.3 - 8.5)	8.5 (7.0 - 10.2)	0.12	5.7 (3.8 - 8.5)	7.4 (5.4 - 10.0)	0.26	8.0 (4.5 - 14.1)	5.6 (3.7 - 8.5)	5.8 (3.4 - 9.7)	3.5 (1.5 - 7.9)
Ecstasy also called "MDMA"	4.1 (2.8 - 6.0)	4.0 (2.6 - 6.1)	0.91	4.9 (2.9 - 8.2)	3.0 (2.0 - 4.3)	0.10	7.3 (4.3 - 12.1)	3.0 (1.6 - 5.5)	3.7 (1.5 - 8.6)	1.9 (0.5 - 6.6)
Heroin	1.8 (1.1 - 2.9)	2.8 (1.8 - 4.2)	0.17	2.9 (1.7 - 4.7)	0.7 (0.2 - 2.1)	**0.00**	1.7 (0.5 - 5.4)	1.6 (0.7 - 3.6)	2.0 (0.7 - 6.0)	1.4 (0.3 - 6.3)
Methamphetamine	2.8 (1.5 - 5.1)	2.8 (1.8 - 4.4)	0.98	3.0 (1.5 - 6.2)	2.2 (1.0 - 4.5)	0.35	2.0 (0.6 - 6.1)	2.2 (0.9 - 5.4)	3.9 (1.7 - 8.7)	1.9 (0.5 - 6.6)
Rx Drugs without a Doctors Prescription	11.4 (9.4 - 13.9)	8.6 (7.1 - 10.5)	0.05	12.2 (9.4 - 15.5)	10.4 (8.2 - 13.1)	0.26	11.4 (6.6 - 19.0)	9.5 (7.4 - 12.2)	15.3 (9.9 - 22.8)	8.7 (5.1 - 14.7)
Injected Any Illegal Drug	2.6 (1.7 - 3.9)	2.7 (1.8 - 4.0)	0.91	2.3 (1.4 - 3.7)	2.6 (1.3 - 5.2)	0.74	1.9 (0.6 - 5.8)	2.3 (1.2 - 4.6)	3.1 (1.2 - 7.6)	1.5 (0.3 - 6.7)

NOTES:
'—' = Data not available; **~ =** P-value not available; **N/A =** < 100 respondents for the subgroup.
^Philadelphia: weighted data were available for Philadelphia in 2011 and 2013; weighted results mean that the overall response rate was at least 60%. The overall response rate is calculated by multiplying the school response rate times the student response rate. Weighted results are representative of all students in grades 9–12 attending public schools in each jurisdiction.
***Sample Frame for the 2011 and 2013 YRBS:** sampling frame consisted of public schools with students in at least one of grades 9-12. The sample size for 2011 was 1,539 with an overall response rate of 73%; the 2013 sample size was 1,280 with a 71% overall response rate.
****Binge Alcohol:** defined as had five or more drinks of alcohol in a row within a couple of hours on at least 1 day during the 30 days before the survey.

Source: Adapted by the NDEWS Coordinating Center from data provided by the Centers for Disease Control and Prevention (CDC), 1991-2013 High School Youth Risk Behavior Survey Data. Available at http://nccd.cdc.gov/youthonline/. Accessed on [3/12/2015].

Table 4a: Trends in Admissions* to Substance Abuse Treatment Programs, *Philadelphia* Residents, 2010-2014

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

	Calendar Year									
	2010		2011		2012		2013		2014	
	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)
Total Admissions (#)	**7,513**	n/a	**7,964**	n/a	**8,455**	n/a	**8,802**	n/a	**8,363**	n/a
Primary Substance of Abuse (%)										
Alcohol	3,103	41.3%	3,349	42.1%	3,222	38.1%	3,087	35.1%	2,476	29.6%
Cocaine/Crack	946	12.6%	803	10.1%	939	11.1%	1,058	12.0%	1,081	12.9%
Heroin	1,342	17.9%	1,398	17.6%	1,947	23.0%	1,720	19.5%	1,764	21.1%
Prescription Opioids	207	2.8%	363	4.6%	125	1.5%	370	4.2%	311	3.7%
Methamphetamine	8	<1%	4	<1%	7	<1%	10	<1%	15	<1%
Marijuana	1,532	20.4%	1,721	21.6%	1,598	18.9%	1,903	21.6%	1,844	22.0%
Benzodiazepines	188	2.5%	140	1.8%	92	1.1%	67	<1%	80	1.0%
MDMA	0	0.0%	0	0.0%	0	0.0%	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	187	2.5%	186	2.3%	525	6.2%	587	6.7%	792	9.5%

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, since some individuals are admitted to treatment more than once in a given period.

****Methamphetamine:** includes both amphetamines and methamphetamine.

unavail: unavailable; **n/a:** not applicable.

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

Table 4b: Demographic and Drug Use Characteristics of Primary Treament Admissions*
for Select Substances of Abuse, *Philadelphia* Residents, 2014
Number of Admissions, by Primary Substance of Abuse and
Percent of Admissions with Selected Demographic and Drug Use Characteristics

	Primary Substance of Abuse								
	Alcohol	Cocaine/ Crack	Heroin	Prescription Opioids	Meth-amphetamine	Marijuana	Benzo-diazepines	Synthetic Stimulants	Synthetic Cannabinoids
Number of Admissions (#)	2,476	1,081	1,764	311	15	1,844	80	1	1
Sex (%)									
Male	80.1%	71.1%	70.1%	64.0%	60.0%	86.0%	75.0%	unavail	unavail
Female	19.9%	28.9%	29.9%	36.0%	40.0%	14.0%	25.0%	unavail	unavail
Race/Ethnicity (%)									
White, Non-Hisp.	24.6%	25.8%	62.4%	61.1%	60.0%	11.6%	28.8%	unavail	unavail
African-Am/Black, Non-Hisp	62.2%	53.9%	20.1%	19.6%	20.0%	71.2%	55.0%	unavail	unavail
Hispanic/Latino	9.0%	17.9%	14.3%	16.1%	20.0%	13.8%	13.8%	unavail	unavail
Asian	0.8%	<1%	<1%	0.0%	0.0%	0.8%	0.0%	unavail	unavail
Other	3.4%	2.2%	2.9%	3.2%	0.0%	2.7%	2.5%	unavail	unavail
Age Group (%)									
Under 18	<1%	<1%	0.0%	0.0%	0.0%	2.3%	1.3%	unavail	unavail
18-25	14.2%	12.0%	11.2%	11.6%	13.3%	39.3%	30.0%	unavail	unavail
26-44	50.4%	52.5%	66.3%	66.2%	80.0%	53.1%	61.3%	unavail	unavail
45+	35.0%	35.2%	22.6%	22.2%	6.7%	5.3%	7.5%	unavail	unavail
Route of Administration (%)									
Smoked	0.0%	39.1%	<1%	0.0%	0.0%	99.0%	0.0%	unavail	unavail
Inhaled	0.0%	0.0%	<1%	0.0%	0.0%	0.0%	0.0%	unavail	unavail
Injected	0.0%	<1%	30.2%	0.0%	0.0%	0.0%	0.0%	unavail	unavail
Oral/Other/Unknown	100.0%	59.9%	69.7%	100.0%	100.0%	1.0%	100.0%	unavail	unavail
Secondary Substance (%)									
None**	26.4%	40.1%	75.2%	unavail	unavail	66.5%	unavail	unavail	unavail
Alcohol	0.0%	3.4%	1.1%	unavail	unavail	1.4%	unavail	unavail	unavail
Cocaine/Crack	35.1%	0.0%	9.2%	unavail	unavail	1.9%	unavail	unavail	unavail
Heroin	4.4%	24.2%	0.0%	unavail	unavail	16.3%	unavail	unavail	unavail
Prescription Opioids	<1%	<1%	<1%	unavail	unavail	2.2%	unavail	unavail	unavail
Methamphetamine***	<1%	<1%	<1%	unavail	unavail	0.3%	unavail	unavail	unavail
Marijuana	29.6%	27.8%	2.6%	unavail	unavail	0.0%	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, since some individuals are admitted to treatment more than once in a given period.
****None:** None or Unknown
*****Methamphetamine:** includes both amphetamines and methamphetamines.
unavail: data not available; **percentages** may not sum to 100 due to either rounding and/or because not all possible categories are presented in the table.

SOURCE: Data provided by the Philadelphia NDEWS SCE and Philadelphia Department of Behavioral Health and Intellectual disAbility Services, Office of

Table 5: Drug Poisoning Deaths*, by Demographic Characteristics,
***Philadelphia County*, 2009-2012**
Rate per 100,000 of deaths with underlying causes of drug related poisonings
and 95% Confidence Interval (CI), 2009-2011 and 2010-2012

	2009-2011 Rate (95% CI)	2010-2012 Rate (95% CI)
Total (Age-Adjusted**)	25.1 (23.6 - 26.6)	27.3 (25.7 - 28.8)
Sex (Age-Adjusted**)		
Male	37.2 (34.5 - 39.8)	39.7 (37 - 42.4)
Female	14.2 (12.7 - 15.8)	16.1 (14.5 - 17.8)
Race / Ethnicity (Age-Adjusted**)		
White, Non-Hisp.	37.2 (34.3 - 40.2)	40.3 (37.2 - 43.4)
African-American/Black, Non-Hisp.	19.6 (17.6 - 21.6)	20.8 (18.8 - 22.9)
Hispanic	18.7 (15.1 - 22.8)	22.0 (17.9 - 26.0)
Asian	DSU	DSU
American Indian/Alaska Native	DSU	DSU
Age Group		
<18	DSU	DSU
18-44	29.1 (26.6 - 31.5)	32.2 (29.7 - 34.8)
45-64	49.7 (45.5 - 53.9)	52.6 (48.3 - 57.0)
65+	6.1 (4.2 - 8.5)	7.0 (4.9 - 9.5)

NOTES:
***Deaths due to drug poisoning,** ICD-10 codes X40-44, X60-64, X85, Y10-14. Please see the *Overview & Limitations* section (pgs.8-9) for the ICD-10 definitions.
****Age Adjusted Rate:** the rate is adjusted based on the age distribution of a standard population allowing for comparison of rates across different sites.
Unless noted otherwise, any age-adjusted data are adjusted using the year 2000 standard population.
unavail: data not available for geographic area; **DSU:** data statistically unreliable.

SOURCE: Adapted by the NDEWS Coordinating Center from National Vital Statistics System-Mortality (NVSS-M) data provided by the Centers for Disease Control and Prevention, National Center for Health Statistics. Accessed from Health Indicators Warehouse.

Table 6: HIV/AIDS and Viral Hepatitis Cases,
Philadelphia County* and *State of Pennsylvania
Number of Cases and Rate per 100,000 Population, Various Years

Type of Disease	Philadelphia		Pennsylvania	
	#	Rate per 100,000	#	Rate per 100,000
HIV				
Diagnosis of HIV Infection, 2012[a]	748	57.9	1,481	13.7
Persons Living with Diagnosed HIV Infection (Prevalence), Year-End 2011[a]	16,714	1,298.7	31,110	288.0
Hepatitis B, 2012[b]				
Acute Cases (reported new cases)	unavail	unavail	63	0.5
Chronic Cases (estimated #)	unavail	unavail	unavail	unavail
Hepatitis C, 2012[b]				
Acute Cases (reported new cases)	unavail	unavail	66	0.5
Chronic Cases (estimated #)	unavail	unavail	unavail	unavail

NOTES:
unavail: data not available.

Sources: Adapted by the NDEWS Coordinating Center from data provided by:
[a]Centers for Disease Control and Prevention (CDC). NCHHSTP Atlas. Accessed on [3/20/15]. Available at: http://www.cdc.gov/nchhstp/atlas/.
[b]Centers for Disease Control and Prevention (CDC), National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Division of Viral Hepatitis, *Surveillance for Viral Hepatitis — United States, 2012.*

Table 7a: Drug Reports for Items Seized by Law Enforcement in *Philadelphia* in 2014
National Forensic Laboratory Information System (NFLIS)
Top 10 Drug Reports* and Select Drugs/Drug Categories of Interest,
Number of Drug-Specific Reports and Percent of Total Analyzed Drug Reports

Drug Identified	Number (#)	Percent of Total Drug Reports (%)
TOTAL Drug Reports*	**18,187**	**100%**
Top 10 Drug Reports		
Cannabis	5,283	29.0%
Cocaine	4,468	24.6%
Heroin	3,221	17.7%
Oxycodone	1,038	5.7%
Alprazolam	744	4.1%
Acetaminophen	673	3.7%
No Controlled Drug Identified	416	2.3%
Phencyclidine	382	2.1%
Non-Controlled Non-Narcotic Drug	258	1.4%
Clonazepam	210	1.2%
Top 10 Total	**16,693**	**91.8%**
Selected Drugs/Drug Categories**		
Fentanyl & Fentanyl Analogs	24	0.1%
Synthetic Cannabinoids	352	1.9%
Synthetic Cathinones	26	0.1%
2C Phenethylamines	0	0.0%
Piperazines	5	<0.1%
Tryptamines	0	0.0%

NOTES:
***Drug Report:** drug that is identified in law enforcement items, submitted to and analyzed by federal, state, or local forensic labs, and included in the NFLIS database.
****Selected Drugs/Drug Categories:** Fentanyl & Fentanyl Analogs and Synthetic Cannabinoids, Synthetic Cathinones, 2C Phenethylamines, Piperazines, and Tryptamines are drug categories of current interest to the NDEWS Project because of the recent increase in their numbers, types, and availability. Please see the Overview & Limitations section (pgs. 12-17) for a complete list of drugs included in each category that were reported to NFLIS during the January to December 2014 timeframe.

The NFLIS database allows for the reporting of up to three drugs per item submitted for analysis. The data presented are a total count of first, second, and third listed reports for each selected drug item seized and analyzed.

Source: Adapted by the NDEWS Coordinating Center from data provided by the U.S. Drug Enforcement Administration (DEA), Office of Diversion Control, Drug and Chemical Evaluation Section, Data Analysis Unit. Data were retrieved from the NFLIS Data Query System (DQS) on May 5, 2015.

Table 7b: Drug Reports* for Selected Categories of New Psychoactive Substances (NPS) among Items Seized by Law Enforcement in *Philadelphia in 2014,* National Forensic Laboratory Information System (NFLIS),
Number of NPS Drug-Specific Reports and Percent of NPS Category

NPS Category Drug Identified	Number (#)	Percent of NPS Category (%)
Top 5 *Synthetic Cannabinoid* Drug Reports**		
XLR-11 (1-(5-FLUOROPENTYL-1H-3-YL)(2,2,3,3-TETRAMETHYLCYCLOPROPYL)METHANONE)	149	42.3%
PB-22 (1-PENTYL-1H-INDOLE-3-CARBOXYLIC ACID 8-QUINOLINYL ESTER)	121	34.4%
5F-PB-22 (1-(5-FLUOROPENTYL)-1H-INDOLE-3-CARBOXYLIC ACID 8-QUINOLINYL ESTER)	24	6.8%
AB-FUBINACA	19	5.4%
AB-PINACA	12	3.4%
AKB48 N-(5-FLUOROPENTYL)	12	3.4%
Other Synthetic Cannabinoids	15	4.3%
Total *Synthetic Cannabinoid* Reports	**352**	**100.0%**
Top 5 *Synthetic Cathinone* Drug Reports**		
N-METHYL-3,4-METHYLENEDIOXYCATHINONE (METHYLONE)	16	61.5%
ALPHA-PYRROLIDINOPENTIOPHENONE (ALPHA-PVP)	5	19.2%
3,4-METHYLENEDIOXYETHYLCATHINONE (ETHYLONE)	4	15.4%
4-METHYL-N-ETHYLCATHINONE (4-MEC)	1	3.8%
Total *Synthetic Cathinone* Reports	**26**	**100.0%**
Top 5 *2C Phenethylamine* Drug Reports**		
Total *2C Phenethylamine* Reports	**0**	**0.0%**
Top 5 *Piperazine* Drug Reports**		
N-BENZYLPIPERAZINE (BZP)	3	60.0%
1-(3-TRIFLUOROMETHYL)PHENYL-PIPERAZINE (TFMPP)	2	40.0%
Total *Piperazine* Reports	**5**	**100.0%**
Top 5 *Tryptamine* Drug Reports**		
Total *Tryptamine* Reports	**0**	**0.0%**

NOTES:
***Drug Report:** drug that is identified in law enforcement items, submitted to and analyzed by federal, state, or local forensic labs, and included in the NFLIS database.
****Top 5 NPS Category Drug Reports**: fewer than 5 drug types for a specific NPS category may have been seized in the catchment area during the reporting period. Please see the Overview & Limitations section (pgs. 12-17) for a complete list of drugs included in each NPS category that were reported to NFLIS during the January to December 2014 timeframe.

NFLIS database allows for the reporting of up to three drugs per item submitted for analysis. The data presented are a total count of first, second, and third listed reports for each selected drug item seized and analyzed.

Source: Adapted by the NDEWS Coordinating Center from data provided by the U.S. Drug Enforcement Administration (DEA), Office of Diversion Control, Drug and Chemical Evaluation Section, Data Analysis Unit. Data were retrieved from the NFLIS Data Query System (DQS) on May 5, 2015.