NDEWS National Drug Early Warning System

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

Chicago Metro
Sentinel Community Site (SCS)
Drug Use Patterns and Trends, 2017

November 2017

NDEWS Coordinating Center

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National Drug Early Warning System (NDEWS)
Sentinel Community Site (SCS)
Drug Use Patterns and Trends, 2017

The National Drug Early Warning System (NDEWS) was launched in 2014 with the support of the National Institute on Drug Abuse (NIDA) to collect and disseminate timely information about drug trends in the United States. 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, including 12 Sentinel Community Epidemiologists (SCEs). The SCEs serve as the point of contact for their individual Sentinel Community Site (SCS), and correspond regularly with NDEWS Coordinating Center staff throughout the year to respond to queries, share information and reports, collect data and information on specific drug topics, and write an annual *SCE Narrative* describing trends and patterns in their local SCS.

This *Sentinel Community Site Drug Use Patterns and Trends* report contains three sections:

- The *SCS Snapshot*, prepared by Coordinating Center staff, contains graphics that display information on drug use, substance use disorders and treatment, drug poisoning deaths, and drug seizures. The *SCS Snapshots* attempt to harmonize data available for each of the 12 sites by presenting standardized graphics from local treatment admissions and four national data sources.

- The *SCE Narrative*, written by the SCE, provides their interpretation of important findings and trends based on available national data as well as sources specific to their area, such as data from local medical examiners or poison control centers. As a local expert, the SCE is able to provide context to the national and local data presented.

- The *SCS Data Tables*, prepared by Coordinating Center staff, include information on demographic and socioeconomic characteristics of the population, drug use, substance use disorders and treatment, drug poisoning deaths, and drug seizures for the Sentinel Community Site. The *SCS Data Tables* attempt to harmonize data available for each of the 12 sites by presenting standardized information from local treatment admissions and five national data sources.

The *Sentinel Community Site Drug Use Patterns and Trends* reports for each of 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)
Sentinel Community Site (SCS)
Drug Use Patterns and Trends: SCS Snapshot

The *SCS Snapshot* is prepared by NDEWS Coordinating Center staff and contains graphics that display information on drug use, substance use disorders and treatment, drug poisoning deaths, and drug seizures. The *SCS Snapshots* attempt to harmonize data available for each of the 12 sites by presenting standardized graphics from local treatment admissions and four national data sources:

- National Survey on Drug Use and Health;
- Youth Risk Behavior Survey;
- SCE-provided local treatment admissions data;
- National Vital Statistics System mortality data queried from CDC WONDER; and
- National Forensic Laboratory Information System.

The *SCS Snapshots* for each of the 12 Sentinel Community Sites and detailed information about NDEWS can be found on the NDEWS website at www.ndews.org.

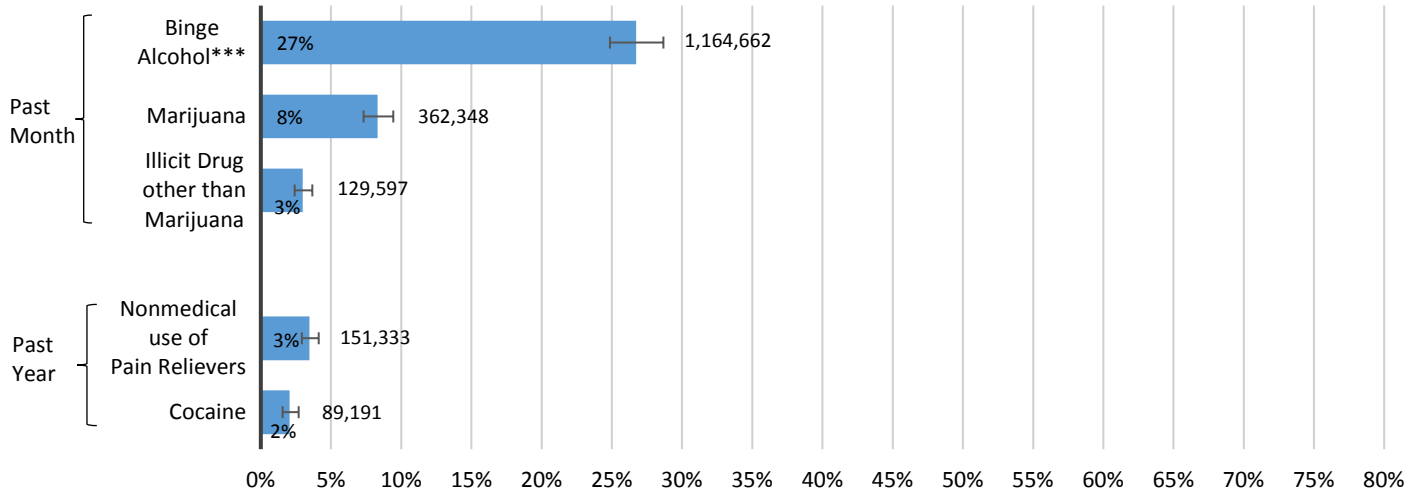
Chicago Metro SCS Snapshot, 2017

Substance Use

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

Persons 12+ Years Reporting Selected Substance Use, Cook County (Chicago Area)^, 2012-2014

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



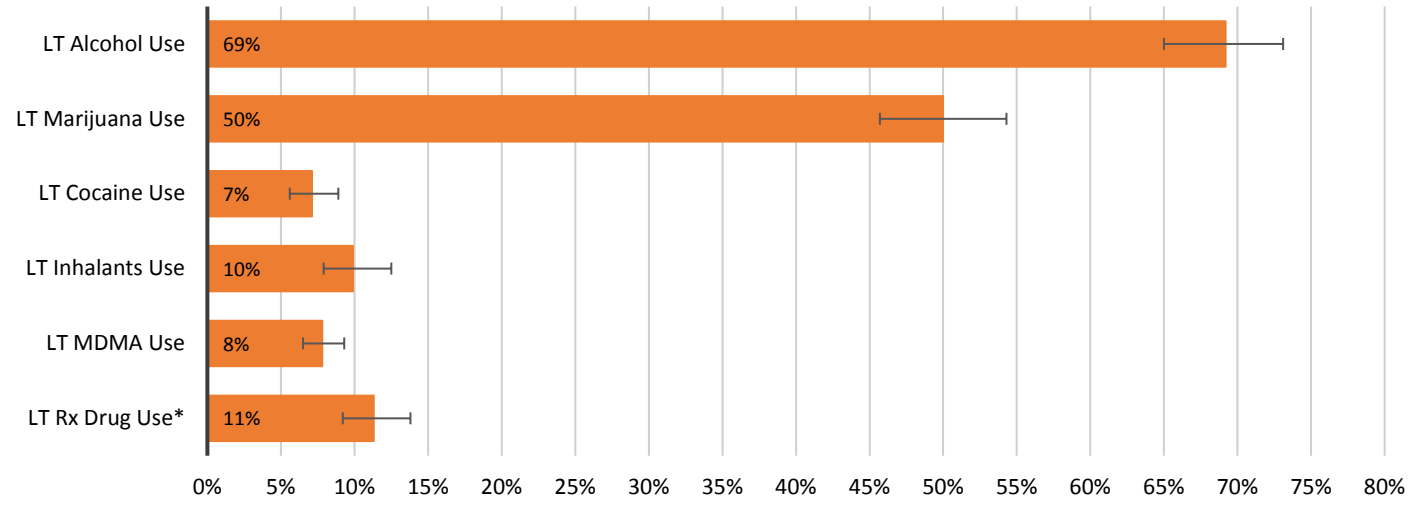
*U.S. Population: U.S. civilian non-institutionalized population. ^Chicago Area: NSDUH Region I (Cook County). **Estimated Number: Calculated by multiplying the prevalence rate and the population estimate of persons 12+ years (4,357,973) from Table C1 of the NSDUH Report. ***Binge Alcohol: Defined as drinking five or more drinks on the same occasion.

Source: Adapted by the NDEWS Coordinating Center from data provided by SAMHSA, NSDUH. Annual averages based on combined 2012 to 2014 NSDUH data.

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

Public High School Students Reporting Lifetime (LT) Use of Selected Substances, Chicago, 2013[1]

Estimated Percent and 95% Confidence Interval



[1]2013: 2015 YRBS data not available for Chicago so 2013 data are presented.

*LT Rx Drug Use: Defined as ever took prescription drugs without a doctor's prescription.

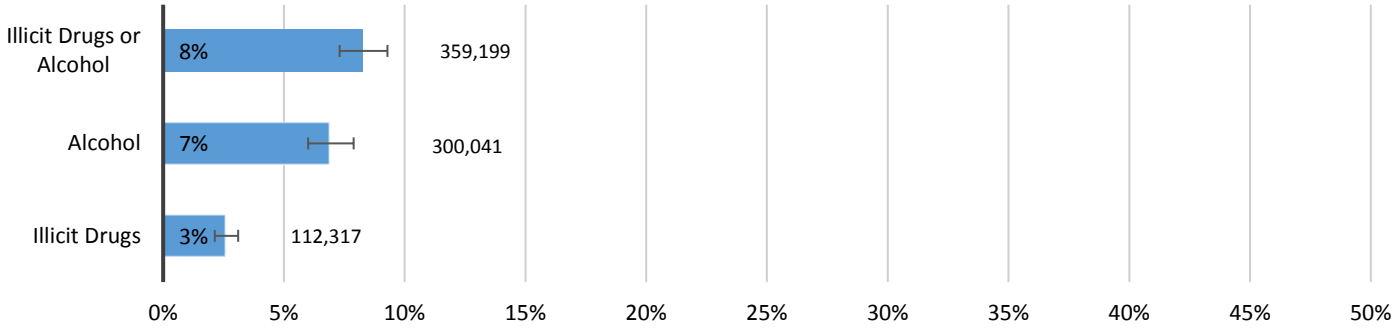
Source: Adapted by the NDEWS Coordinating Center from data provided by CDC, 2001-2013 high school YRBS data.

Substance Use Disorders and Treatment

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

Substance Use Disorders in Past Year Among Persons 12+ Years, Cook County (Chicago Area)^, 2012-2014**

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



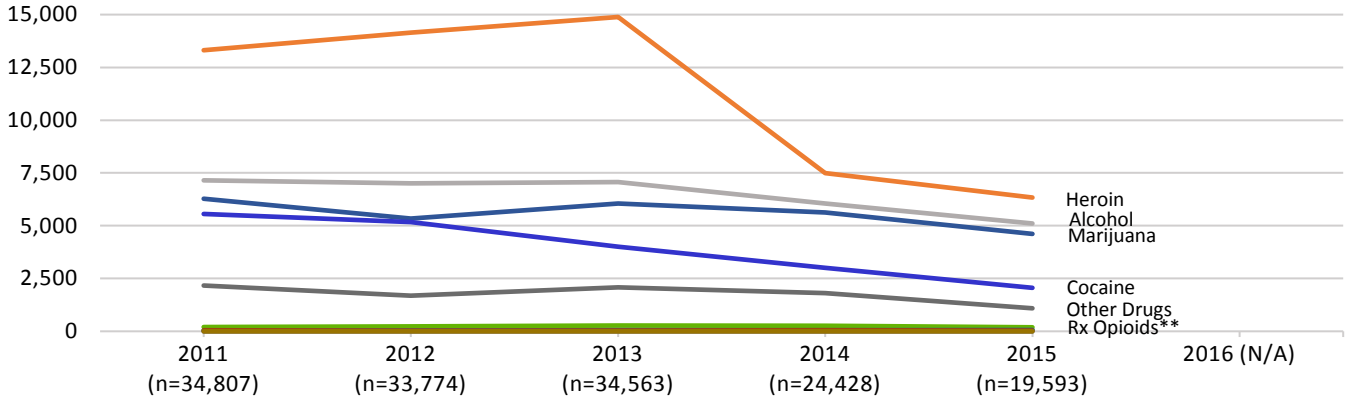
*U.S. Population: U.S. civilian non-institutionalized population. **Substance Use Disorders in Past Year: Persons are classified as having a substance use disorder in the past 12 months based on responses to questions that meet the criteria specified in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*. ^Chicago Area: NSDUH Region I (Cook County). ***Estimated Number: Calculated by multiplying the prevalence rate and the population estimate of persons 12+ years (4,357,973) from Table C1 of the NSDUH Report.

Source: Adapted by the NDEWS Coordinating Center from data provided by SAMHSA, NSDUH. Annual averages based on combined 2012 to 2014 NSDUH data.

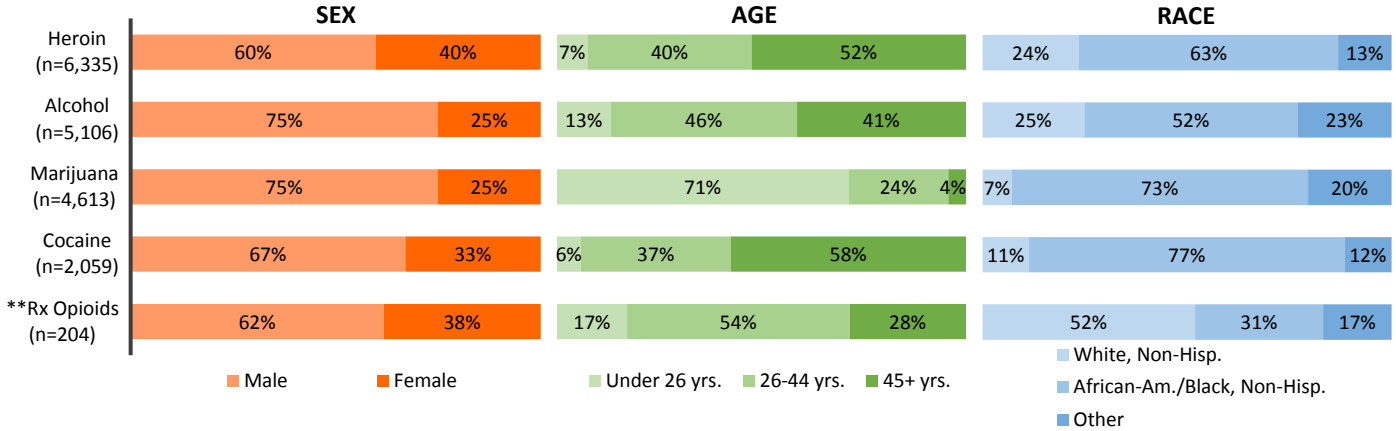
Treatment Admissions Data from Local Sources

Trends in Treatment Admissions*, by Primary Substance of Abuse, Chicago^, Fiscal Years 2012-2016Δ

(n = Number of Treatment Admissions)



Demographic Characteristics of Treatment Admissions*, Chicago^, Fiscal Year 2015Δ



*Treatment Admissions: Includes admissions to publicly-funded programs. Declines in overall admissions are due to several factors, including budget cuts and changes in providers and payers that affect the reporting of these data. ^Chicago: Includes data for Chicago not the entire Chicago MSA. ΔFiscal Year 2015: Neither calendar (CY) nor 2016 data are available at this time so FY2015 data are presented. **Rx Opioids: Includes oxycodone/hydrocodone, non-prescription methadone, and other opiates. Percentages may not sum to 100 due to rounding. See *Sentinel Community Site (SCS) Data Tables* and *Overview & Limitations* section for more information regarding the data.

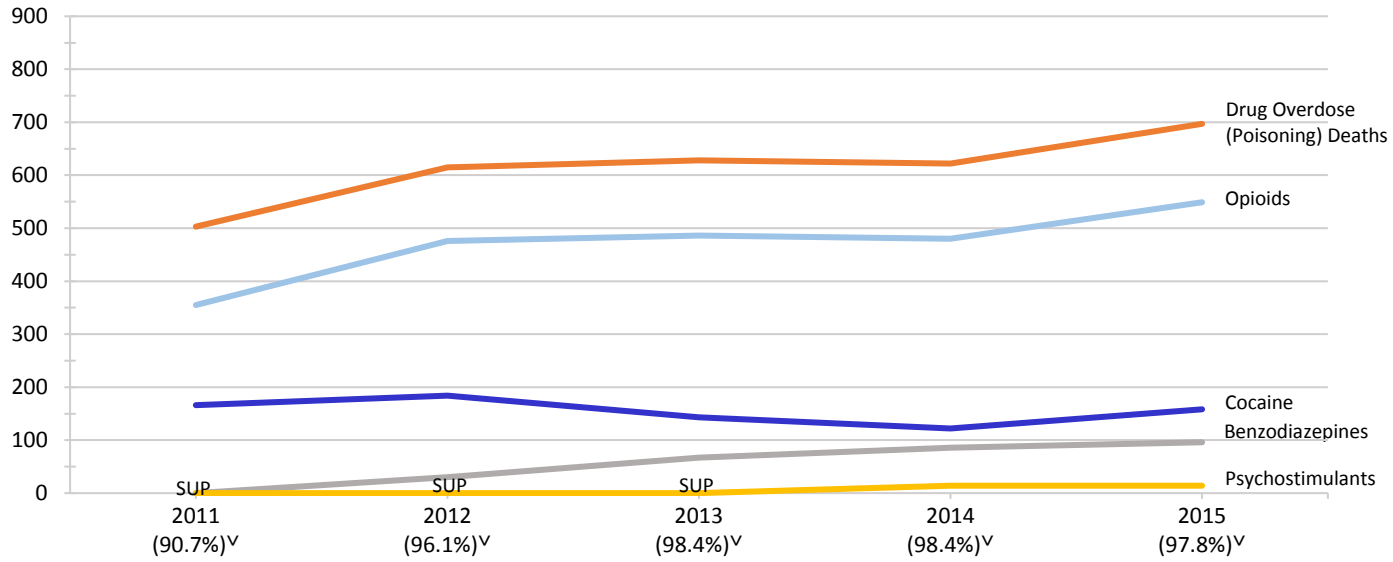
Source: Data provided to the Chicago Metro NDEWS SCE by the Illinois Department of Human Services, Division of Alcoholism and Substance Abuse (DASA).

Drug Overdose (Poisoning) Deaths

National Vital Statistics System (NVSS) via CDC WONDER

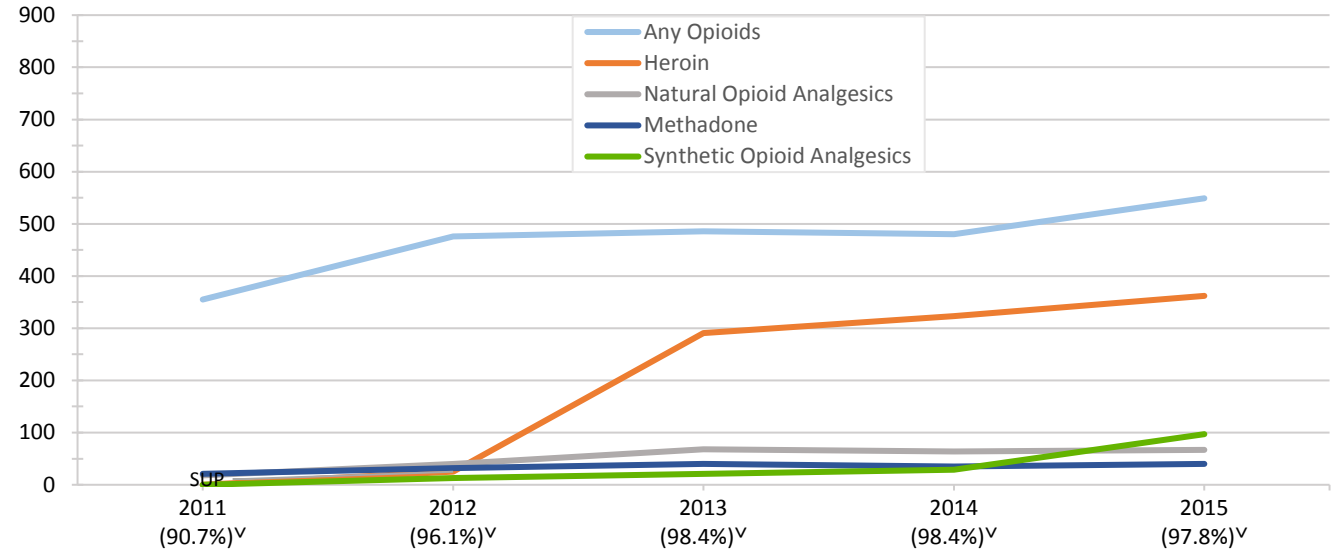
Trends in Drug Overdose (Poisoning) Deaths*, by Drug, Cook County (Chicago Area), 2011–2015**

(Number of Deaths and Percent of Drug Overdose (Poisoning) Deaths with Drug(s) Specified[v])



Trends in Opioid Overdose (Poisoning) Deaths*, by Opioid, Cook County (Chicago Area), 2011–2015

(Number of Deaths, by Drug** and Percent of Drug Overdose (Poisoning) Deaths with Drug(s) Specified[v])



*Drug Overdose (Poisoning) Deaths: Defined as deaths with ICD-10 underlying cause-of-death (UCOD) codes: X40-X44, X60-X64, X85, and Y10-Y14. **Drug Overdose (Poisoning) Deaths, by Drug: Drug overdose (poisoning) deaths with ICD-10 multiple cause-of-death (MCOD) T-codes: Benzodiazepines (T42.4); Cocaine (T40.5); Psychostimulants with Abuse Potential [excluding cocaine] (T43.6)—may include amphetamines, caffeine, MDMA, methamphetamine, and/or methylphenidate; Any Opioids (T40.0-T40.4, OR T40.6). Specific opioids are defined: Opium (T40.0); Heroin (T40.1); Natural Opioid Analgesics (T40.2)—may include morphine, codeine, and semi-synthetic opioid analgesics, such as oxycodone, hydrocodone, hydromorphone, and oxymorphone; Methadone (T40.3); Synthetic Opioid Analgesics [excluding methadone] (T40.4)—may include drugs such as tramadol and fentanyl; and Other and Unspecified Narcotics (T40.6). vPercent of Drug Overdose (Poisoning) Deaths with Drug(s) Specified: The percentage of drug overdose (poisoning) deaths with specific drugs mentioned varies considerably by state/catchment area. This statistic describes the annual percentage of drug overdose (poisoning) deaths that include at least one ICD-10 MCOD code in the range T36-T50.8. SUP=Suppressed: Counts are suppressed for subnational data representing 0–9 deaths. See *Sentinel Community Site (SCS) Data Tables* and/or *Overview & Limitations* for additional information on mortality data.

Source: Adapted by the NDEWS Coordinating Center from data provided by the Centers for Disease Control and Prevention (CDC), National Center for Health Statistics, Multiple cause of death 1999-2015, available on the CDC WONDER Online Database, released 2016. Data compiled in the Multiple cause of death 1999-2015 were provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Retrieved between February-June 2017, from http://wonder.cdc.gov/mcd-icd10.html

Law Enforcement Drug Seizures

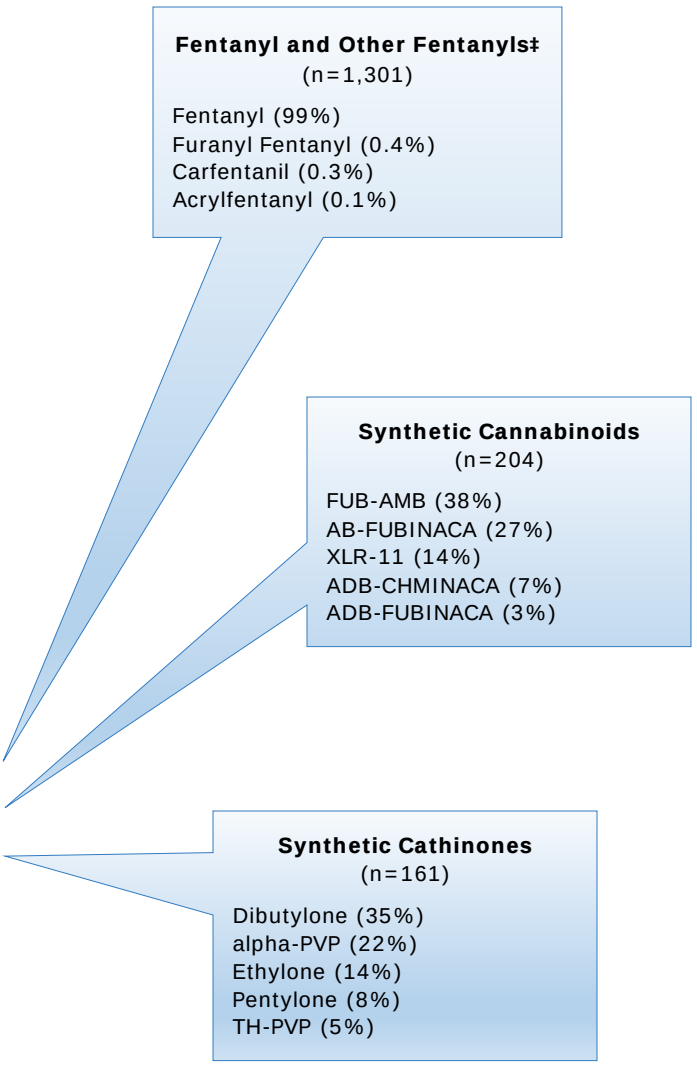
National Forensic Laboratory Information System (NFLIS)

Drug Reports* for Items Seized by Law Enforcement in the Chicago MSA^ in 2016
DEA 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	**44,438**	**100%**
Top 10 Drug Reports		
Cannabis	18,127	40.8%
Heroin	9,359	21.1%
Cocaine	8,441	19.0%
Alprazolam	1,453	3.3%
Fentanyl	1,291	2.9%
Methamphetamine	761	1.7%
Hydrocodone	560	1.3%
Phencyclidine	421	0.9%
3,4-Methylenedioxymethamphetamine (MDMA)	411	0.9%
Amphetamine	307	0.7%
Top 10 Total	**41,131**	**92.6%**
New Psychoactive Substances (NPS) Drug Categories†		
Fentanyl and Other Fentanyls‡	1,301	2.9%
Synthetic Cannabinoids	204	0.5%
Synthetic Cathinones	161	0.4%
Piperazines	68	0.2%
2C Phenethylamines	26	<0.1%
Tryptamines	24	<0.1%
Any Opioid†	**11,993**	**27.0%**

Top Drug Reports Among Select NPS Drug Categories†**
(% of Category)



*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. 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. The timeframe is January-December 2016.

^Chicago MSA: Includes the following 14 counties: Cook, DeKalb, DuPage, Grundy, Kane, Kendall, Lake, McHenry, Will, Jasper, Newton, & Porter Counties in IL; Lake County, IN; and Kenosha County, WI. **Select NPS Drug Categories: The 3 most prevalent NPS drug categories.

Percentages may not sum to 100 due to either rounding, missing data and/or because not all possible categories are presented in the table.

†Drug Categories/Any Opioid: See *Sentinel Community Site (SCS) Data Table 6b* for a full list of the drug reports for each NPS and Opioid category.

‡Other Fentanyls are substances that are structurally related to fentanyl (e.g., acetylfentanyl and butyrl fentanyl). See *Notes About Data Terms* in *Overview and Limitations* section for a list of Other Fentanyls that were reported to NFLIS from the 12 NDEWS sites.

Source: Adapted by the NDEWS Coordinating Center from data provided by the U.S. Drug Enforcement Administration (DEA), Diversion Control Division, Drug and Chemical Evaluation Section, Data Analysis Unit. Data were retrieved from the NFLIS Data Query System (DQS) on May 28, 2017.

National Drug Early Warning System (NDEWS)
Sentinel Community Site (SCS)
Drug Use Patterns and Trends: SCE Narrative

The *SCE Narrative* is written by the Sentinel Community Epidemiologist (SCE) and provides their interpretation of important findings and trends based on available national data as well as sources specific to their area, such as data from local medical examiners or poison control centers. As a local expert, the SCE is able to provide context to the national and local data presented.

This *SCE Narrative* contains the following sections:

- ◊ Highlights
- ◊ Primary and Emerging Substance Use Problems
- ◊ Local Research Highlights (if available)
- ◊ Infectious Diseases Related to Substance Use (if available)
- ◊ Legislative and Policy Updates

The *SCE Narratives* for each of 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) Chicago Metro Sentinel Community Site (SCS) Drug Use Patterns and Trends, 2017: SCE Narrative

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Highlights

- **Alprazolam** was the most frequent **benzodiazepine** found in drug items seized by law enforcement. The number of items positive for alprazolam increased 152% from 2011 to 2014.
- **Cocaine** indicators suggested a continuing decline in availability and usage. In 2012, cocaine fell to third in the number of NFLIS drug reports among items seized and analyzed, behind marijuana and heroin, and it has remained in that position through 2016. The number of cocaine items declined 12.8% in 2016 compared with 2015. Cocaine also fell to third among reasons for entering publicly funded treatment programs in FY2009 and then fell to fourth from FY2012 to FY2015.
- **Marijuana** remained the drug most often found in NFLIS reports and was plentiful across the Chicago metropolitan statistical area (MSA).
- **Methamphetamine** remained uncommon in Chicago among groups other than men who have sex with men, although it often is consumed by persons thinking they are acquiring MDMA (ecstasy).
- Among new and notable drugs, **synthetic cannabinoids** remained common in NFLIS reports with 15 varieties documented. Both **piperazine** and **tryptamine** in the NFLIS reports experienced substantial declines.
- **Heroin** continued to be the primary opioid abused in the Chicago region, and heroin use indicators maintained levels that had been elevated since the mid-1990s.
- Reports of **fentanyl** greatly increased in the NFLS database.
- **Hydrocodone** was the most commonly used prescription opioid in the Chicago MSA.
- **PCP** declined among the number of NFLIS reports for the Chicago MSA after steadily increasing between 2007 and 2015, from 115 to 585.

Primary and Emerging Substance Use Problems

BENZODIAZEPINES

- **Alprazolam** was the most frequent **benzodiazepine** found in drug items seized by law enforcement. The number of items positive for alprazolam increased 152% from 2011 to 2014.

In Chicago, depressants such as benzodiazepines and barbiturates are commonly taken with opioids, frequently heroin, to enhance the effects or to help alleviate symptoms of drug withdrawal. Depressants are also sometimes taken with stimulants to moderate the undesirable side effects of chronic stimulant abuse, or when concluding "runs," to help induce sleep and to reduce the craving for more stimulants. Treatment episodes for primary benzodiazepine use as a proportion of all treatment admissions in Chicago have been rising from almost nonexistent (14 cases in more than 67,000 treatment episodes) in FY2007 to 0.3% of all treatment episodes in FY2015, according to the Illinois Division of Alcoholism and Substance Abuse (DASA). Males (67%) and Whites (60%) constituted the majority of treatment episodes for benzodiazepines. In 2014, the National Forensic Laboratory Information System (NFLIS) reported a substantial increase in alprazolam (Xanax®) in drug items seized and analyzed in the Chicago metropolitan statistical area (MSA), now ranking fourth among all drug reports. In 2016, there were 1,453 reports of alprazolam compared with 1,454 in 2015, 1,057 in 2014, 605 in 2013, 488 in 2012, and 419 in 2011. The increase in alprazolam reports between 2011 and 2015 was 247.0%. As a proportion of all NFLIS drug items other than cannabis, which has been in a steep decline due to changes in policy and enforcement, alprazolam rose to 5.5% in CY 2016, up from 1.1% in 2010. The number of alprazolam reports in 2016 (*N* = 1,453) suggests, however, that this trend may be leveling. Ethnographic reports indicated alprazolam was the benzodiazepine most often used by persons who used heroin or cocaine.

COCAINE/CRACK

- **Cocaine** indicators suggested a continuing decline in availability and usage. In 2012, cocaine fell to third in the number of NFLIS drug reports among items seized and analyzed, behind marijuana and heroin, and it has remained in that position through 2016. The number of cocaine items declined 12.8% in 2016 compared with 2015. Cocaine also fell to third among reasons for entering publicly funded treatment programs in FY2009 and then fell to fourth from FY2012 to FY2015.

Although cocaine continues to constitute a serious drug problem for Chicago, most quantitative and qualitative cocaine indicators have suggested that its use continues to decline. In 2000, cocaine was second only to marijuana/cannabis among the number of NFLIS drug reports for the Chicago MSA, and it constituted more than 30% of all drug reports. By 2012, cocaine had declined to third place among seized and analyzed drug reports, and despite a large reduction in seizures of marijuana, cocaine constituted only 19% of all drug reports in 2016.

Treatment episodes for primary cocaine use in Chicago continued to decline from 25% of all treatment admissions in FY2007 to 11% in FY2015. The majority of cocaine clients (86%) reported smoking crack

cocaine as the primary route of administration. Alcohol was the secondary drug (33%) most often mentioned by cocaine clients. Cocaine was the most commonly mentioned secondary drug among clients treated for primary heroin problems. In FY2015, African Americans remained the largest group treated for cocaine abuse (at 77%); more males sought services for cocaine addiction (67%) than did females.

Arrests by the Drug Enforcement Administration's (DEA) Chicago Field Division for cocaine declined from about 1,100 in 2000 to less than 500 in 2016. Likewise, case initiations declined during that period from more than 700 to fewer than 200. The amount of cocaine seized in FY2012 declined for the eighth consecutive year to the lowest level in more than 20 years. The 255 kilograms of cocaine seized in FY2012 represented a 94% reduction compared with FY2007—the peak year since FY2000—and an 86% reduction since 2007, the first year that cocaine shortages were reported. Cocaine seizures increased in 2013 to 1,651 kilograms but then declined again in 2014 and 2015 to 654 kilograms and 471 kilograms, respectively.

The DEA reported an increase in the wholesale price of a kilogram of powder cocaine in Chicago, from $17,000–$25,000 in 2007, to $21,000–$34,500 in the first half of 2011, to $24,000–$45,000 in FY2012, to $28,000 to $39,000 in the second half of 2014. Prices for an ounce of powdered cocaine reported by the DEA in the second half of 2014 ranged from $650 to $1,500. Prices for 1 ounce of crack cocaine during the same periods ranged from $750 to $1,700, according to the DEA and ethnographic sources. Crack typically sold for $5−$20 per bag; this price has been stable for many years. Ethnographic reports indicated that although crack cocaine remained readily available in street markets, there continued to be reports of areas with only moderate availability. The availability of powdered cocaine was moderate to low.

The Youth Risk Behavior Survey (YRBS) assesses lifetime cocaine use among public high-school students in the city of Chicago. Any use of cocaine was reported by 4.2% (confidence interval [CI] = 2.4−7.3) of students in 2005, 5.9% (CI = 3.9–8.8) in 2007, 6.7% (CI = 4.3–10.1) in 2009, 5.9% (CI = 4.7–7.4) in 2011, and 7.1% (CI = 5.6–8.9) in 2013. Any use of cocaine by Chicago high-school students was more often reported in 2013 by males than by females (10.1% vs. 3.8%) and by Hispanics (8.2%) and Blacks (6.8%) than by Whites (2.2%). For Illinois students, 5.4% (CI = 4.4–6.7) reported lifetime use of cocaine in 2015, the lowest level since 1993.

MARIJUANA

- **Marijuana** remained the drug most often found in NFLIS reports and was plentiful across the Chicago MSA.

Marijuana continued to be the most widely available and used illicit drug in Chicago and in Illinois. Marijuana users represented 24% of all treatment episodes in Chicago in FY2015 and 23% in FY2014. These figures suggest a rising trend compared with FY2011–FY2013 (range, 16–18%) and FY2007 (14%). Alcohol remained the most commonly reported secondary drug among clients receiving treatment for marijuana (25%), while 63% reported no secondary drugs. There were larger proportions of primary marijuana treatment episodes for males (75%) than for females and for African Americans (73%) than for other ethnicities.

According to the DEA, the bulk of marijuana shipments were transported by Mexico-based polydrug trafficking organizations. The primary wholesalers of marijuana were the same Mexico-based organizations that supplied most of the cocaine, methamphetamine, and heroin in the Midwest. In addition, high-quality marijuana was brought from the West Coast to Chicago by Whites involved in trafficking and from Canada by Chinese, Vietnamese, and Albanian traffickers. In 2015, the DEA and the Chicago Police Department also reported increases in the number of local grow houses and the availability of marijuana produced locally (both indoor and outdoor). The DEA's Chicago Field Division seized 4,611 kilograms of marijuana in FY2015, up from 1,216 kilograms in 2014 but down from 9,668 kilograms in 2013.

The abundance and popularity of marijuana across the city has led to an array of types, quality, and prices. Chicago police reported that "buds" constituted approximately 60% of the marijuana they seized in 2014. In early 2016, they reported seeing more "moon rocks," which were described as soft and waxy and may have been butane hash oil. Marijuana prices may have increased since 2003. According to the DEA's Chicago Field Division, the price for 1 pound of marijuana in FY2012 generally ranged from $1,800 to $4,800 for high-quality grades such as sinsemilla and "BC Bud" and was $400–$700 for lower quality domestic and Mexican grades. Ounce prices for marijuana were $250–$500 for high-grade varieties and $30–$225 for low-grade varieties, according to the DEA. On the street, marijuana was most often sold in bags for $5–$35 or as blunts (cigars).

There were more NFLIS reports for marijuana (*N* = 18,127) than for any other drug in the Chicago MSA in 2015, but this number has declined 56% since 2011 (*N* = 41,165). Whereas marijuana constituted 57.0% of all NFLIS drug reports in 2011, that proportion fell to 40.8% in 2016.

According to the 2013 YRBS, 50.0% (CI = 45.7–54.3) of public high-school students in Chicago reported lifetime use of marijuana, similar to the earlier peak of 49.3% in 2001. After 2001, reports of lifetime marijuana use declined in each survey year through 2009 (41.0%) and then increased to 42.6% in 2011. Likewise, reports of marijuana use in the past 30 days (28.5%, CI = 25.8–31.4) are higher than all survey years after 2001. In 2013, male students were somewhat more likely to report lifetime use than were female students (53.9% and 45.9%, respectively). For Illinois as a whole, 46.6% (CI = 43.9–54.5) of African American students, 49.4% (CI = 44.8–54.0) of Hispanic students, and 35.9% (CI = 29.0–43.5) of White students reported lifetime marijuana use. YRBS data for 2015, which is available for Illinois students collectively but not for Chicago students as a subset, reveals that the proportion of students who used marijuana in the past 30 days (18.7%) and the proportion that ever tried marijuana (36.3) are at the lowest levels since 1992. The extent to which synthetic cannabinoids may have influenced this trend is not discernable from the YRBS data.

METHAMPHETAMINE

- **Methamphetamine** remained uncommon in Chicago among groups other than men who have sex with men, although it often is consumed by persons thinking they are acquiring MDMA (ecstasy).

Methamphetamine treatment episodes constituted 0.5% of all treatment admissions in Chicago in FY2015. The number of episodes (103) remained within the range found in the past decade despite large

reductions in overall treatment admissions in recent years. After a substantial increase in the proportion of episodes involving African Americans seeking treatment for methamphetamine abuse (from 15% in FY2005 to 47% in FY2006), there was a decline to 30% in FY2007 and to 10% in FY2011. In FY2015, the proportion of African Americans seeking treatment in Chicago for methamphetamine abuse was 26%. Males (representing 77%) continued to be more likely to seek treatment than females probably because the use of methamphetamine in Chicago has been concentrated among the population of men who have sex with men (MSM). The proportion who reported that smoking was the primary route of administration decreased from 65% in FY2011 to 40% in FY2012 and to 50% in FY2015. Injection increased from 20% to 30% between FY2011 and FY2012, and it rose to 38% in FY2015. Alcohol was the predominant secondary drug used with methamphetamine in Chicago (20%) followed by marijuana (16%).

NFLIS reported a notable increase in the number of methamphetamine drug reports among items seized and analyzed in the Chicago MSA in 2014 (*N* = 367) compared with 2013 (*N* = 278), 2012 (*N* = 229), and 2011 (*N* = 287). This trend seems to be continuing with 620 reports of methamphetamine in 2015 and 761 reports in 2016. As a proportion of all seized drug items other than marijuana, methamphetamine has increased from 0.9% in 2013 to 2.9% in 2016. When methamphetamine is identified by the lab, however, it often is in drug items sold as ecstasy. Most methamphetamine seized by the DEA's Chicago Field Division is produced in large laboratories based in Mexico.

According to the YRBS, lifetime use of methamphetamine among Chicago public high-school students increased significantly from 1.5% (CI = 0.7–3.3) in 2005 to 3.4% (CI = 2.7–4.3) in 2011 and 3.7% (CI = 2.4–5.5) in 2013. Use was greater among male students (4.8%) than among female students (2.5%), and among Blacks (4.6%) and Hispanics (3.4%) than among Whites (0.0%). Methamphetamine use among high-school students was more prevalent in the state of Illinois as a whole in 2013 (4.5%) than in the city of Chicago, although this difference could be due to chance. YRBS data for 2015, which is available for Illinois students collectively but not for Chicago students as a subset, recorded a decline in lifetime use from 4.5% in 2013 to 3.5% in 2015, a level within the range of earlier years.

Within Chicago, a low but stable prevalence of methamphetamine use has been reported for several years in the North Side gay community and occasionally among some Asian ethnic groups. In the 2010 reporting period, the Community Outreach Intervention Projects (COIP) staff heard for the first time of modest availability of methamphetamine in some South Side African American neighborhoods. In the January 2014 reporting period, staff for the first time learned of a methamphetamine laboratory in an African American neighborhood and, in 2016, of use among some young gay men of color.

Seizures of methamphetamine by the DEA's Chicago Field Division since 2005 have ranged from a high of 139 kilograms in 2005 to a low of 44 kilograms in 2007. Seizures of methamphetamine in recent years have been toward the low end of this range with 63 kilograms in FY2015, 48 kilograms in FY2014, and 45 kilograms in FY2013. Nevertheless, methamphetamine seized in Chicago by the DEA often was destined for other areas of the Midwest. The DEA's Chicago Field Division reported methamphetamine prices in the second half of 2014 ranging from $10,000 to $18,000 for a pound of "ice," which typically is smoked, and from $10,500 to $14,000 for a pound of powder, which typically is snorted. Ounce prices for ice methamphetamine were $900–$1,200.

NEW PSYCHOACTIVE SUBSTANCES (OTHER THAN OPIOIDS)

- Among new and notable drugs, synthetic cannabinoids remained common in NFLIS reports with 15 varieties documented. Both piperazine and tryptamine in the NFLIS reports experienced substantial declines.

Synthetic Cathinones

Substituted cathinones ("bath salts") continued to decline in NFLIS reports, although the variety of types appears to have increased. The most common substituted cathinone in 2016 was dibutylone.

In 2016, there were 161 reports in NFLIS of psychoactive drugs in substances that once were commonly marketed as "bath salts" (substituted or synthetic cathinones) among analyzed drug items, which is a large decline from the 317 reports in 2015, 575 reports in 2014, 487 reports in 2013, and 525 reports in 2012.

NFLIS identified 16 different substituted cathinones in 2016, compared with 5 in 2015 and 10 in 2014. The most common substituted cathinones in 2016 were dibutylone (beta-keto-n,n-dimethyl-1,3-benzodioxolylbutanamine; bk-dmbdb) (56 reports), alpha-PVP (alpha-pyrrolidinopentiophenone) (35 reports), and ethylone (3,4- methylenedioxyethylcathinone) (23 reports). There were no mentions in NFLIS of dibutylone in 2014 and only 2 mentions in 2015.

Synthetic Cannabinoids

Synthetic cannabinoid reports in NFLIS remained common although declining, with 15 varieties documented.

There were 204 NFLIS reports of compounds designed to mimic marijuana (cannabinoids) in 2016. In comparison, there were 336 reports in 2015, 227 reports in 2014, 281 in 2013, and 361 in 2012, which suggests an overall decline in synthetic cannabinoids. A total of 15 synthetic cannabinoids were identified in 2016, compared with 23 in 2015 and 20 in 2014. The most common synthetic cannabinoids reported in NFLIS 2016 were FUB-AMB (38%), AB-FUBINACA (27%), and XLR-11 (14%). The sale of these drugs was banned in Chicago beginning January 1, 2012, and it can result in a $1,000 fine and the loss of a business license. In July 2012, Illinois designated some of these cannabinoid-mimicking drugs as Schedule I controlled substances.

Piperazines

In 2013 and 2014 each, there were 601 NFLIS reports for the Chicago MSA of piperazines involving two drugs: BZP (n-benzylpiperazine) and TFMPP (1-(3-trifluoromethyl)phenyl-piperazine)). BZP was the most common piperazine in both years (*n* = 584 and 574, respectively). In 2015, these drugs again were the only piperazines reported, but the total of 94 reports for BZP and 203 reports for TFMPP suggest both an overall decline in use of these substances and a substantial move away from BZP toward TFMPP. This decline continued in 2016 with only 68 reports, of which 53 were for TFMPP, 10 for BZP, and 5 for pFPP (4-fluorophenylpiperazine).

Tryptamines

In 2016, there were 24 reports of tryptamines in NFLIS for the Chicago MSA, a level well below the 63 reports in 2015 and 57 reports for 2014.

In 2015, DMT (dimethyltryptamine) replaced 5-MEO-DIPT (5-methoxy-n,n-diisopropyltryptamine), sometimes called "foxy methoxy," as the most common tryptamine (52% and 41% of all tryptamines, respectively). In 2016, DMT comprised 83% of all tryptamines identified by NFLIS, with only three reports of 5-MEO-DIPT and one report of 5-meo-dalt (n,n-diallyl-5-methoxytryptamine).

Phenethylamines (2C Series) (H)

In 2014, there were 73 reports of phenethylamines (2C Series) (H), a substituted phenethylamine with hallucinogenic effects. In 2015, there were 57 of these reports involving four drugs: 25-I-NBOME (2-(4-iodo-2,5-dimethoxyphenyl)-n-(2-methoxybenzyl)ethanamine (*n* = 34), 2C-C-NBOME (2-(4-chloro-2,5-dimethoxyphenyl)-n-(2-methoxybenzyl)ethanamine)) (*n* = 15), 25-B-NBOMe 2-(4-bromo-2,5-dimethoxyphenyl)-n-(2-methoxybenzyl)ethanamine (*n* = 4), and 2C-B (4-bromo-2,5-dimethoxyphenethylamine) (*n* = 4). In 2016, there were only 26 of these reports involving three drugs: 25-I-NBOME (*n* = 16), 25-C-NBOME (2-(4-chloro-2,5-dimethoxyphenyl)-n-(2-methoxybenzyl)ethanamine) (*n* = 5) and 2C-B (*n* = 5).

OPIOIDS

- Heroin continued to be the primary opioid abused in the Chicago region, and heroin use indicators maintained levels that had been elevated since the mid-1990s.
- Reports of fentanyl greatly increased in the NFLS database.
- Hydrocodone was the most commonly used prescription opioid in the Chicago MSA.

Heroin

Heroin continued to be the primary opioid abused in the Chicago region, and heroin use indicators maintained levels that had been elevated since the mid-1990s. Whereas Chicago's heroin market was remarkably diverse in the 1990s to early 2000s, with heroin coming from Mexico, South America, and Southeast and Southwest Asia, today's market is dominated by heroin that originates in Mexico. In the multistate region served by the Chicago Field Division of the DEA, 98% of seized heroin by weight that was analyzed by their Heroin Signature Program (HSP) appears to have originated in Mexico. Heroin abuse indicators in this reporting period continued to suggest high levels of use in the Chicago area.

Heroin in Chicago is most often sold in a powdered form and is readily available in both outdoor markets and through meetings arranged by phone. Heroin's availability for purchase seems to have increased in the suburbs. Tar heroin is available, although mostly in neighborhoods where residents are predominately of Mexican descent. Nearly all retail-level exhibits of heroin obtained in 2016 by the DEA's Domestic Monitoring Program in Chicago appeared to be from Mexico and had a signature

indicative of the high-quality processing techniques that previously were associated with heroin from South America.

According to NFLIS, heroin was the second most often identified drug in reports among items seized and analyzed in the Chicago MSA in 2016. Heroin accounted for 21.1% of all reports during this period and for 35.6% of all reports excepting marijuana. For comparison, reports of heroin in 2011 as a proportion of all drugs other than marijuana was 36.0%, which suggests a steady trend.

The DEA's Chicago Field Division seized a record-high 517 kilograms of heroin in FY2016. In comparison, the DEA seized only 37 kilograms of heroin in 2005, 27 kilograms in FY2006, 40 kilograms in FY2007, and 79 kilograms in 2008. Since 2011, then, at least 194 kilograms have been seized each year, including 199 kilograms in FY2013 and 437 kilograms in FY2014 and 286 kilograms in 2015. The DEA reports that although seizures of 20 kilograms or more are rising, this level of interruption no longer appears to have a noticeable effect on heroin prices and quality at the retail level in Chicago.

During FY2015, heroin use was the most frequently reported reason for seeking addiction treatment in Chicago. Between 2011 and 2013, heroin clients constituted 38% to 43% of all admissions before declining to 31% in FY2014 and then rising slightly to 32% in FY2015. Among these treatment episodes, the most common secondary substances reported were cocaine (25%, down from 43% in 2010) and alcohol (13%). The proportion of primary heroin treatment episodes in Chicago involving African Americans declined notably between FY2007 (82%) and FY2015 (63%), whereas the proportion of Whites increased from 9% to 24% during that period. The proportion reporting inhalation ("snorting") as the primary route of administration declined from 81% in FY2009 to 72% in FY2012 and to 67% in FY2015. The proportion reporting injection as the primary route of administration has increased steadily from 14% in FY2007, to 17% in FY2009, to 19% in FY2010, to 21% in FY2012, and to 28% in FY2015. Research during this period indicated that injection was declining among African Americans and was perhaps increasing among Whites (Armstrong, 2007; Broz and Ouellet, 2008; Cooper et al., 2008; Tempalski et al., 2013), a trend that may account for some of this rise in injection prevalence among treatment episodes. Women constituted 40% of primary heroin treatment episodes, the highest for any drug/drug class covered in this report other than PCP and consistent with trends over at least the past decade. Cocaine was the secondary drug (25%) most often mentioned by heroin clients. Whereas in FY2007 marijuana was mentioned as a secondary drug by only 4% of heroin clients, that figure rose to 7% in 2015.

Heroin purity in Chicago at the retail level in 2016 was 11.5% according to the DEA's DMP. Heroin purity peaked in 1997, at about 31.0%, and then began a steady decline to 12.6% pure in 2006. Nevertheless, the average price per milligram pure was $0.49 in 2006, which was among the lowest prices in CEWG cities nationally. Purity rebounded to 22.4% pure in 2007, 23.8% pure in 2008, and 26.6% pure in 2009. This change was accompanied by a decline in the average price to $0.37 per milligram pure in 2008 and 2009. Purity then declined to 13.8% pure in 2011, 13.6% pure in 2012, 16.7% in 2013, 16.9% in 2014, and 10.5% in 2015. In 2012, the price per milligram pure was $0.58 (the most recent date for which data are available).

Heroin prices varied depending on type and origin. Heroin was commonly sold on the street in $10 and $20 units (bags), although bags for as little as $5 were available. The DEA reported kilogram price ranges

for the second half of 2014 of $40,000–$65,000 for South American heroin, $46,000–$53,000 for Mexican brown, $55,000–$65,000 for Mexican black tar heroin, and $65,000-$80,000 for Southwest Asian heroin. Ethnographic reports in 2012 regarding kilogram prices for these three types of heroin were approximately $100,000, $80,000, and $60,000, respectively. For heroin whose source was unknown, kilogram prices were estimated at $73,000, according to the DEA. Prices for an ounce of heroin in the second half of 2014 ranged from $1,000 to $2,200 for South American and from $1,000 to $1,200 for Southwest Asian heroin. Ethnographic sources reported a range of $600–$1,000 for 1 ounce of heroin (type not cited) in early 2013. Gram prices for heroin reported by the DEA ranged from $80 to $200 in the second half of 2014. Ethnographic reports in 2016 found a typical range of $100-$125. "Jabs" of heroin in 2016 continue to feature 12–13 "dime" bags for $100. Ethnographic reports indicated that heroin was readily available in street markets. Reports of purchases arranged through telephone contacts were common, and in a few cases reported, these purchases include delivery to the buyer's home. DEA reports in 2014 indicated gram prices for brown and tar heroin typically ranged from $70 to $110.

The YRBS reported lifetime use of heroin among Chicago public high-school students at 2.0% (CI = 0.9–4.4) in 2005, compared with 4.7% (CI = 3.0–7.2) in 2009, 3.9% (CI = 2.9–5.2) in 2011, and 4.1% (CI = 2.6–6.5) in 2013. The increase from 2005 to 2013 was not statistically significant. More use was reported among male (6.1%) than among female (1.7%) students. Any use of heroin by Chicago high-school students was more often reported in 2013 by males than by females (6.1 vs. 1.7%) and by Blacks (5.7%) and Hispanics (3.4%) than by Whites (0.7%). For Illinois students as a whole in 2015, 3.4% reported ever using heroin, down from 4.5% in 2013 but within the range reported since 2007.

A substantial problem with heroin use began in the 1990s across many of Chicago's suburbs. In local studies conducted of people 30 years of age and younger who injected drugs, almost all of whom primarily injected heroin, the proportion residing in the suburbs has risen. These proportions increased from negligible levels in the early 1990s to 30%–50% in the late 1990s-to-mid-2000s (Boodram, Golub, & Ouellet, 2010; Thorpe, Bailey, Huo, Monterroso, & Ouellet, 2001) and to 75% in the late 2000s (Mackesy-Amiti, Donenberg, & Ouellet, 2012). A recent study that more closely examined geography and social networks related to heroin injection among young persons recruited at a Chicago-based syringe access program reported that although 64% of participants lived in the suburbs in the 12 months preceding the initial interview, 41% of these suburban residents had also resided in Chicago at some point during that time period (Boodram, Mackesy-Amiti, & Latkin, 2015).

As another indicator of increasing heroin use in Chicago's suburbs, the number of heroin purchases by the DuPage Metropolitan Enforcement Group in 2011 was more than 3 times greater than in 2008 (59 in 2011 compared with 16 in 2008), and the amount of heroin seized was more than 16 times greater in 2011 (1,835 grams).

Heroin-related overdose deaths in DuPage County, which encompasses relatively affluent suburbs West of Chicago, increased from 29 in 2010 to 38 in 2012, 46 in 2013, 33 in 2014, 51 in 2015, and 78 in 2016. Even though many of the deceased may have believed they were using only heroin, in more than half these cases, fentanyl was present either in combination with heroin (*n* = 26) or without heroin (*n* = 16). DuPage County now has a public information website titled "Heroin DuPage" (http://www.heroindupage.org/), and in September 2013, officials established the DuPage Narcan

Program to equip and train law enforcement officers in the administration of Narcan® (naloxone), a safe, nonaddictive, and effective in reversing opioid overdoses. Cases of naloxone administration that likely saved the recipient's life have risen from 32 in 2014 to 62 in 2015 and 145 in 2016.

In Will County, which includes suburbs South and Southwest of Chicago, heroin-related overdose deaths reported by the Coroner's Office increased from 6 in 1999, to 30 in 2011, and to 53 in 2012. Deaths then decreased to 38 in 2013 and to 35 in 2014 before rebounding to 53 in 2015 and 78 in 2016. As in DuPage County, decedents in Will County often may have believed they were injecting only heroin, but in 33 (42%) of these cases, fentanyl was present either in combination with heroin (*n* = 18) or without heroin present (*n* = 15). Given that 63% of deaths involving fentanyl occurred in the second half of 2016, this trend appears to be increasing. More than one third (35%) of these heroin-related overdose deaths also involved alcohol, cocaine, or other non-opioid drugs. Persons younger than 30 years old constituted 49% of the decedents in 2014, 40% in 2015, and 37% in 2016. Decedents ranged in age from 18 to 70 years old. Most decedents were male (81%) and non-Hispanic White (78%).

Fentanyl

There were 1,301 reports of fentanyls in the NFLIS database for 2016, far above the 44 reports for 2015 and 21 reports in 2014. Of the reports in 2016, five were furanyl fentanyl, one was acrylfentanyl, and four were carfentanil.

Current ethnographic data indicated that many heroin users are aware of the overdose risks associated with fentanyl and employ tactics they believe will reduce the likelihood that the heroin they purchase will include fentanyl. It appears that only a minority of heroin sellers promote sales by informing purchasers that the product contains fentanyl. Users who inject drugs report seeking heroin mixed with fentanyl to achieve a better "rush."

The Medical Examiner (ME) for Cook County, in which Chicago is located, began routine testing for fentanyl in June 2015. For 2016, the ME reported 1,091 deaths due to drug overdoses that were at least partly related to the use of an opioid. Of these, 562 deaths (53%) involved some form of fentanyl. In comparison, the office found 102 fentanyl-related deaths in 2015 and 20 in 2014. (https://www.cookcountyil.gov/news/medical-examiner-reports-deaths-caused-powerful-opioid)

In 2016, the DuPage County Coroner's Office reported 42 of 78 (54%) heroin-related overdose involved fentanyl, either mixed with heroin or by itself, up from seven such cases in 2015. In more than half of these cases, fentanyl was present either in combination with heroin (*n* = 26) or without heroin (*n* = 16). (https://www.heroindupage.org). In 2015, the Coroner's office reported 51 heroin-related death, 15 of which involved fentanyl with heroin (*n* = 7) or without heroin (*n* = 8). In 2016, the Coroner's office has released a public health warning about the danger of intentionally or inadvertently using fentanyl (http://www.dailyherald.com/article/20160615/news/160619356/)

The Will County Coroner's Office reported 10 cases of fentanyl-related overdose deaths in 2015. Of these cases, two involved fentanyl alone and seven involved a combination of fentanyl and heroin. In 2016, 42% (*n* = 33) of heroin-related overdose deaths, which includes cases in which the decedent may have wrongly believed the drug being used was heroin, involved fentanyl either in combination with

heroin (*n* = 18) or without heroin present (*n*= 15). (http://www.willcountyillinois.com/County-Offices/Judicial-Services/Coroner)

Prescription Opioids (Other Than Fentanyl)

Hydrocodone is the most commonly used prescription opioid in the Chicago MSA.

Drug treatment episodes for other opiates/opioids as the primary drug of abuse rose from 0.001% of all treatment episodes in FY2007 to 0.6% in FY2011 and rising each year to 1.0% in FY2015. Whereas treatment episodes for other opiates/opioids had nearly as many females (49%) as males in FY2012, females constituted 38% in FY2015. The proportion of clients who were White remained level during this period (52%). Clients 26–44 years old constituted the largest age group (54%) in FY2015, whereas 15% were 18–25 years old. Oral ingestion was reported as the most frequent route of administration (with 69% reporting that route of administration); 18% reported snorting and 9% injecting these drugs. The most common secondary substances were alcohol (18%), cocaine/crack (13%), and marijuana (11%).

Of the top 25 psychoactive drugs identified in NFLIS reports among drug items seized and analyzed by laboratories in 2016, six were prescription opioids: hydrocodone (*N* = 560), oxycodone (*N* = 165), codeine (*N* = 122), methadone (*N* = 82), tramadol (*N* = 111), and morphine (*N* = 85). There were more reports in 2015 of hydrocodone (*N* = 650), codeine (*N* = 210), and methadone (*N* = 103) but little change in the number of reports for these other drugs.

The YRBS added a question in 2011 regarding the nonprescribed use of prescription drugs (a category that here includes opioids, stimulants, and benzodiazepines). In 2013, 11.3% (CI = 9.2–13.8) of students reported any such use, which was a nonstatistically significant increase from 9.8% (CI = 7.9–12.0) in 2011. Any misuse of prescribed drugs by Chicago high-school students was more often reported in 2013 by males than by females (14.2% vs. 8.0%) and by Whites (13.1%) and Blacks (12.2%) than by Hispanics (10.0%). For Illinois students as a whole in 2015, 14.4% (CI = 12.3–16.8) reported ever using such drugs, down from 18.4% (CI = 14.8–22.5) in 2013 and 14.9% (12.8–17.4) in 2011.

PCP

- **PCP** declined among the number of NFLIS reports for the Chicago MSA after steadily increasing between 2007 and 2015, from 115 to 585.

The number of PCP (phencyclidine) reports among NFLIS drug items for the Chicago MSA increased each year between 2007 and 2015, despite declines in the number of all drug items tested. There were 585 PCP reports in 2015 compared with 115 reports in 2007. In 2016, there were 421 reports. As a proportion of all drug reports, PCP has increased from 0.16% in 2007 to 1.0% in 2015 and 2016, and it ranks as the ninth most common drug among those analyzed.

Although the number of treatment episodes overall have declined sharply in Chicago, the number of episodes for PCP in FY2015 (*N* = 136) was higher than a decade ago and has risen as a proportion of all treatment episodes from 0.001% in 2007 to 0.700% in FY2015. Most treatment episodes for PCP occurred among African Americans (80%) and were more common among females (58%).

Local Research Highlights

Recent attention has been given to the impact of cannabinoid use on adherence to HIV antiretroviral therapy (ART). A recent study, not yet published, examined associations between ART adherence and the use of marijuana and other substances in a sample of people living with HIV (PLWHIV) who were incarcerated (Mackesy-Amiti et al., 2016). Methods: Persons who self-identified or tested positive for HIV were interviewed in Cook County Jail, Chicago, Illinois, between 2013 and 2015. Interviews included questions about substance use and its severity (TCU screen) and ART adherence during the 3 months before arrest. Logistic regression analyses were conducted to examine the relationship between marijuana and other substance use and not having engaged in any ART for at least the seven days before arrest. The effects of demographic and socioeconomic characteristics on these relationships were also examined. Results: Of 410 persons interviewed, 371 (90%) had engaged in ART; of those, 32% reported no ART in the seven days before being arrested. Recent use of illicit substances was common, with 42% reporting marijuana, 37% cocaine/stimulants, and 33% heroin/opioids. In an unadjusted analysis, frequent cocaine/stimulant use and any heroin/opioid use predicted lapsed adherence at time of arrest, whereas marijuana use had no effect. After adjusting for substance use disorder severity, use of cocaine/stimulants and heroin/opioids was no longer associated with lapsed adherence, whereas marijuana use seemed to be protective (odds ratio [OR] = 0.55, 95% CI = 0.30–0.99, $p < .05$). We concluded that the severity of substance use disorder better predicted ART lapsed adherence than did the use or even frequent use of illicit stimulants or heroin/opioids. The effect likely is exacerbated by conditions such as unstable housing and lack of health insurance. Marijuana use seems to moderate the effect of substance use disorder severity on lapses in ART, but the study's cross-sectional design limits the ability to infer a direct causal relationship.

Infectious Diseases Related to Substance Use

New HIV diagnoses in Chicago declined for the 13th consecutive year in 2014 (Chicago Department of Public Health, 2015). The 973 new HIV diagnoses in 2014 represented a 6% reduction since 2010 and a 48% reduction since 2001 (Chicago Department of Public Health, 2014. Injection drug use was the primary risk factor in only 3% of new HIV diagnoses in 2014, down from 9% in 2010 and 19% in 2001. Another 2.5% of cases reported both injection drug use and male-to-male sexual contact, and the number of these cases has remained steady since 2010. Male-to-male sexual contact was the primary risk factor for 81% of all new HIV diagnoses overall and for 94% of cases among men. Among women, injection drug use was the primary risk factor in 9% of cases, with heterosexual transmission accounting for 88% of diagnoses. Persons 20–29 years old constituted the age group most likely to be newly diagnosed with HIV in 2014.

Of the people living with HIV in Chicago, approximately 55% received HIV medical care in 2012, which was well above the national average of 39%, and 45% achieved viral suppression, which was again well above the national average of 30% (Chicago Department of Public Health, 2015).

Robust data on new diagnoses of viral hepatitis in Chicago were not available.

Legislative and Policy Updates

Illinois pharmacists with a standing order from a physician can now dispense naloxone, a drug used to reverse opioid overdoses, without requiring individualized prescriptions to the following persons: (a) those in a position to assist a person at risk of overdose, (b) trained first-responders, (c) individuals at risk of overdose, and (d) trained school nurses. The state legislature enacted this bill, Illinois PA99-0480, in September 2015 with the expressed intent of reducing death by opioid overdose. Pharmacists who wish to dispense naloxone first need to complete the online Illinois State Opioid Antagonist Training Program. Illinois legalized the medical use of marijuana in late 2013 through a pilot program that was among the strictest in the country. In September 2014, the Illinois Department of Public Health began accepting applications from potential patients. Illinois currently recognizes 39 qualifying medical conditions. The sale of medical marijuana to qualifying patients and caregivers began on November 9, 2015. As of July 11, 2017, the Illinois Department of Public Health (IDPH) has approved 21,800 applications from qualifying patients. (https://www.illinois.gov/gov/mcpp/Pages/update07112017.aspx). Approximately 25,300 individuals have submitted a complete application to IDPH.

An Illinois state bill enacted on July 29, 2016 that decriminalized possession of small amounts of marijuana also set standards to define driving under the influence of marijuana, which is now defined as five or more nanograms of THC in blood or 10 or more nanograms of THC in saliva.

Data Sources

Data for this report were drawn from the following sources:

Treatment admission episode data for Chicago for fiscal year (FY) 2015 (July 1–June 30) were provided by the Illinois Department of Human Services, Division of Alcoholism and Substance Abuse (DASA). Declines in drug treatment episodes should be understood within the context of reductions in the availability of treatment, and changes in providers and payers that affect the reporting of these data. For this reason, trends usually are reported in terms of a drug's proportion in relation to all admissions. Data for 2016 were not available at the time of this report due to changes reflecting the large increase in treatment provided through managed care organizations.

Data on drug reports among items seized and analyzed in forensic laboratories are from the Drug Enforcement Administration (DEA)'s National Forensic Laboratory Information System (NFLIS). Data are for the Chicago-Naperville-Michigan City, IL-IN-WI MSA. NFLIS methodology allows for the accounting of up to three drugs per item submitted for analysis. The data presented are a combined count including primary, secondary, and tertiary reports for each drug for calendar years (CYs) 2009–2016. Data for 2016 are preliminary and are subject to change. In 2014, the definition of the MSA changed slightly. The city of Joliet was dropped. All other jurisdictions remained the same.

Drug seizure data also came from the DEA's Chicago Field Division, which comprises the states of Indiana, Minnesota, North Dakota, Wisconsin, and the Northern and Central Federal Judicial Districts of Illinois. (See https://www.dea.gov/docs/DEA-CHI-DIR-023-17%20The%20Opioid%20Threat%20in%20the%20Chicago%20FD.pdf)

Drug-related mortality data on deaths were obtained from the DuPage County Coroner's Office via the DuPage Coalition Against Heroin (http://www.heroindupage.org), the Will County Coroner's Office (http://www.willcountyillinois.com/County-Offices/Judicial-Services/Coroner/2016-Overdose-Statistics), the Cook County Medical Examiner's Office, the AIDS Foundation of Chicago, and the American Civil Liberties Union.

Price and purity data for heroin were provided by the DEA's Heroin Domestic Monitor Program (HDMP) for 2001–2016. Report updates sometimes result in outcome changes for past years. Drug price data are reported from the February 2010 report of National Illicit Drug Prices by the National Drug Intelligence Center (NDIC) and from HDMP and the local Trends in Trafficking report from the DEA. Ethnographic data on drug availability, prices, and purity are from observations conducted by the Community Outreach Intervention Projects (COIP), School of Public Health, University of Illinois at Chicago (UIC).

Student drug use prevalence data were derived from the Youth Risk Behavior Survey (YRBS), prepared by the Centers for Disease Control and Prevention (CDC). The YRBS provided drug use data representative of students in Chicago public high schools for 2013 and of Illinois public high-school students for 2015.

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National Drug Early Warning System (NDEWS)
Sentinel Community Site (SCS)
Drug Use Patterns and Trends: SCS Data Tables

The *SCS Data Tables* are prepared by NDEWS Coordinating Center staff and include information on demographic and socioeconomic characteristics of the population, drug use, substance use disorders and treatment, drug poisoning deaths, and drug seizures for the Sentinel Community Site. The *SCS Data Tables* attempt to harmonize data available for each of the 12 sites by presenting standardized information from local treatment admissions and five national data sources:

- ◊ American Community Survey;
- ◊ National Survey on Drug Use and Health;
- ◊ Youth Risk Behavior Survey;
- ◊ SCE-provided local treatment admissions data;
- ◊ National Vital Statistics System mortality data queried from CDC WONDER; and
- ◊ National Forensic Laboratory Information System.

The *SCS Data Tables* for each of the 12 Sentinel Community Sites and detailed information about NDEWS can be found on the NDEWS website at www.ndews.org.

Table 1: Demographic and Socioeconomic Characteristics

Chicago and Chicago Metropolitan Statistical Area (MSA)^, Illinois

2011–2015 ACS 5-Year Estimates

	Chicago City		Chicago MSA	
	Estimate	Margin of Error	Estimate	Margin of Error
Total Population (#)	**2,717,534**	**+/-53**	**9,534,008**	**
Age				
18 years and over (%)	77.8%	+/-0.1	75.9%	+/-0.1
21 years and over (%)	73.7%	+/-0.1	71.9%	+/-0.1
65 years and over (%)	10.9%	+/-0.1	12.4%	+/-0.1
Median Age (years)	33.7	+/-0.1	36.5	+/-0.1
Race (%)				
White, Not Hisp.	32.2%	+/-0.2	54.0%	+/-0.1
Black/African Am, Not Hisp.	30.9%	+/-0.2	16.7%	+/-0.1
Hispanic/Latino (of any race)	29.1%	+/-0.2	21.4%	**
American Indian/Alaska Native, Not Hisp.	0.1%	+/-0.1	0.1%	+/-0.1
Asian, Not Hisp.	5.9%	+/-0.1	6.1%	+/-0.1
Native Hawaiian/Pacific Islander, Not Hisp.	0.0%	+/-0.1	0.0%	+/-0.1
Some Other Race	0.2%	+/-0.1	0.1%	+/-0.1
Two or More Races	1.6%	+/-0.1	1.6%	+/-0.1
Sex (%)				
Male	48.5%	+/-0.1	48.9%	+/-0.1
Female	51.5%	+/-0.1	51.1%	+/-0.1
Educational Attainment (*Among Population Aged 25+ Years***) (%)**				
High School Graduate or Higher	82.3%	+/-0.2	87.2%	+/-0.1
Bachelor's Degree or Higher	35.6%	+/-0.3	35.5%	+/-0.2
Unemployment (*Among Civilian Labor Force Population Aged 16+ Years***) (%)**				
Unemployment Rate	12.1%	+/-0.2	9.5%	+/-0.1
Income ($)				
Median Household Income (in 2015 inflation-adjusted dollars)	$48,522	+/-405	$61,828	+/-221
Health Insurance Coverage *(Among Civilian Noninstitutionalized Population)* **(%)**				
No Health Insurance Coverage	16.8%	+/-0.2	12.2%	+/-0.1
Poverty (%)				
All People Whose Income in Past 12 Months Is Below Poverty Level	22.3%	+/-0.3	14.0%	+/-0.2

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.

^Chicago MSA: In 2013, the U.S. Office of Management and Budget (OMB) revised MSA delineations across the country; the new Chicago-Naperville-Elgin, IL-IN-WI MSA comprises 14 counties (previously, 13 counties). The 14 counties are Cook, DuPage, Grundy, Kendall, McHenry, Will, DeKalb, Kane, Jasper, Lake, Newton, and Porter counties in Illinois; Lake County, Indiana; and Kenosha County, Wisconsin. The principal cities of the Chicago MSA include Chicago, Naperville, Elgin, Arlington Heights, Evanston, Schaumburg, Skokie, Des Plaines, and Hoffman Estates, Illinois and Gary, Indiana.

****The estimate is controlled; a statistical test for sampling variability is not appropriate.

SOURCE: Adapted by the NDEWS Coordinating Center from data provided by the U.S. Census Bureau, 2011–2015 American Community Survey (ACS) 5-Year Estimates.

Table 2a: Self-Reported Substance Use Behaviors
Among Persons 12+ Years in *Chicago Region*^, 2012–2014
Estimated Percent, 95% Confidence Interval, and Estimated Number*
Annual Averages Based on Combined 2012 to 2014 NSDUH Data

Substance Use Behaviors	Substate Region: Region I^		Substate Region: Region II^	
	Estimated % (95% CI)*	Estimated #*	Estimated % (95% CI)*	Estimated #*
Used in Past Month				
Alcohol	55.29 (53.06 – 57.49)	2,409,387	57.18 (54.96 – 59.38)	1,932,202
Binge Alcohol**	26.72 (24.86 – 28.67)	1,164,662	25.46 (23.52 – 27.50)	860,377
Marijuana	8.31 (7.32 – 9.43)	362,348	6.08 (5.25 – 7.02)	205,376
Use of Illicit Drug Other Than Marijuana	2.97 (2.41 – 3.67)	129,597	2.80 (2.27 – 3.44)	94,515
Used in Past Year				
Cocaine	2.05 (1.55 – 2.70)	89,191	1.56 (1.18 – 2.08)	52,877
Nonmedical Use of Pain Relievers	3.47 (2.92 – 4.12)	151,333	3.57 (2.98 – 4.26)	120,489
Substance Use Disorders in Past Year***				
Illicit Drugs or Alcohol	**8.24 (7.31 – 9.29)**	**359,199**	**7.00 (6.18 – 7.93)**	**236,640**
Alcohol	6.88 (6.00 – 7.89)	300,041	5.80 (5.02 – 6.70)	196,009
Illicit Drugs	2.58 (2.14 – 3.11)	112,317	2.08 (1.73 – 2.51)	70,414

NOTES:
^Chicago Region: Includes NSDUH Substate Region I and Region II; Region I comprises Cook County; and Region II comprises Boone, Carroll, DeKalb, DuPage, Grundy, Jo Daviess, Kane, Kankakee, Kendall, Lake, Lee, McHenry, Ogle, Stephenson, Whiteside, Will, and Winnebago counties.
***Estimated %:** Substate estimates are based on a small area estimation methodology in which 2012–2014 substate level NSDUH data are combined with county and census block group/tract-level data from the state; **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; **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 of persons 12+ years (Region I = 4,357,973 and Region II = 3,378,920) from Table C1 of the NSDUH report. The population estimate is the simple average of the 2012, 2013, and 2014 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.
*****Substance Use Disorders in Past Year:** Persons are classified as having a substance use disorder in the past 12 months based on reponses to questions that meet the criteria specified 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 Illness from the 2012–2014 National Surveys on Drug Use and Health. Available at: http://www.samhsa.gov/data/population-data-nsduh/reports?tab=38

Table 2b: Self-Reported Substance Use Behaviors Among Persons in *Chicago Regions*^ , by Age Group and Region, 2012–2014

Estimated Percent and 95% Confidence Interval (CI)*, Annual Averages Based on Combined 2012 to 2014 NSDUH Data

	Region: Region I^						Region: Region II^					
	12–17		18–25		26+		12–17		18–25		26+	
Substance Use Behaviors	Estimated Percent (95% CI)*		Estimated Percent (95% CI)*		Estimated Percent (95% CI)*		Estimated Percent (95% CI)*		Estimated Percent (95% CI)*		Estimated Percent (95% CI)*	
Used in Past Month												
Binge Alcohol**	5.75	(4.62 – 7.12)	41.12	(38.11 – 44.19)	26.80	(24.53 – 29.20)	5.39	(4.34 – 6.68)	41.77	(38.37 – 45.24)	25.73	(23.35 – 28.26)
Marijuana	6.90	(5.66 – 8.39)	21.42	(19.03 – 24.02)	6.31	(5.18 – 7.65)	6.00	(4.88 – 7.35)	19.10	(16.55 – 21.94)	3.96	(3.09 – 5.06)
Use of Illicit Drug Other Than Marijuana	2.91	(2.17 – 3.89)	5.88	(4.68 – 7.37)	2.50	(1.88 – 3.32)	2.58	(1.92 – 3.46)	7.26	(5.83 – 9.00)	2.10	(1.55 – 2.84)
Used in Past Year												
Cocaine	0.48	(0.28 – 0.84)	4.23	(3.17 – 5.61)	1.87	(1.31 – 2.67)	0.51	(0.30 – 0.87)	4.33	(3.20 – 5.84)	1.27	(0.85 – 1.88)
Nonmedical Use of Pain Relievers	3.84	(2.96 – 4.96)	7.16	(5.89 – 8.67)	2.82	(2.20 – 3.60)	3.34	(2.56 – 4.35)	8.91	(7.37 – 10.73)	2.73	(2.09 – 3.55)
Substance Use Disorder in Past Year***												
Illicit Drugs or Alcohol	4.76	(3.76 – 6.00)	17.79	(15.59 – 20.24)	7.07	(5.99 – 8.32)	4.54	(3.60 – 5.71)	17.48	(15.08 – 20.18)	5.65	(4.73 – 6.74)
Alcohol	2.32	(1.74 – 3.08)	13.24	(11.30 – 15.45)	6.37	(5.34 – 7.58)	2.30	(1.71 – 3.10)	13.27	(11.25 – 15.59)	5.09	(4.20 – 6.16)
Illicit Drugs	3.37	(2.58 – 4.40)	7.41	(6.06 – 9.04)	1.68	(1.23 – 2.31)	3.39	(2.58 – 4.43)	6.58	(5.28 – 8.18)	1.16	(0.83 – 1.61)

NOTES:

^Chicago Region: Includes NSDUH Substate Region I and Region II; Region I comprises Cook County; and Region II comprises Boone, Carroll, DeKalb, DuPage, Grundy, Jo Daviess, Kane, Kankakee, Kendall, Lake, Lee, McHenry, Ogle, Stephenson, Whiteside, Will, and Winnebago counties.

***Estimated %:** Substate estimates are based on a small area estimation methodology in which 2012–2014 substate level NSDUH data are combined with county and census block group/tract-level data from the state; **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.

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

*****Substance Use Disorders in Past Year:** Persons are classified as having a substance use disorder in the past 12 months based on responses to questions that meet the criteria specified 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 Illness from the 2012–2014 National Surveys on Drug Use and Health. Available at: http://www.samhsa.gov/data/population-data-nsduh/reports?tab=38

Table 3: Self-Reported Substance Use-Related Behaviors Among *Chicago* ^ Public High School Students, 2013[1]

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
	Percent			Percent			Percent		
	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	37.3 (34.1 - 40.6)	37.7 (34.3 - 41.3)	0.86	37.7 (33.8 - 41.8)	36.7 (32.5 - 41.1)	0.68	47.2 (33.3 - 61.6)	33.1 (28.2 - 38.3)	38.2 (33.2 - 43.5)
Binge Alcohol**	17.6 (15.3 - 20.3)	19.7 (16.5 - 23.4)	0.33	19.1 (15.8 - 23.0)	16.1 (13.7 - 18.8)	0.08	24.3 (16.9 - 33.5)	10.9 (8.3 - 14.2)	21.0 (17.0 - 25.7)
Marijuana	28.5 (25.8 - 31.4)	25.0 (21.4 - 28.9)	0.13	31.7 (28.4 - 35.3)	25.3 (21.7 - 29.2)	0.01	24.5 (17.1 - 33.8)	31.4 (27.9 - 35.2)	27.8 (23.7 - 32.3)
Ever Used in Lifetime									
Alcohol	69.2 (65.0 - 73.1)	68.9 (64.9 - 72.7)	0.92	64.5 (58.2 - 70.3)	73.6 (68.9 - 77.9)	0.01	68.2 (56.8 - 77.7)	67.0 (61.0 - 72.5)	71.9 (66.1 - 77.1)
Marijuana	50.0 (45.7 - 54.3)	42.6 (38.4 - 46.9)	0.02	53.9 (48.9 - 58.9)	45.9 (40.7 - 51.1)	0.01	41.6 (29.9 - 54.3)	52.9 (47.1 - 58.7)	50.6 (44.3 - 57.0)
Cocaine	7.1 (5.6 - 8.9)	5.9 (4.7 - 7.4)	0.26	10.1 (8.1 - 12.5)	3.8 (2.5 - 5.7)	0.00	2.2 (0.6 - 7.6)	6.8 (4.5 - 10.2)	8.2 (6.5 - 10.3)
Hallucinogenic Drugs	—	—	~	—	—	~	—	—	—
Inhalants	9.9 (7.9 - 12.5)	10.7 (9.1 - 12.5)	0.61	10.2 (7.6 - 13.5)	9.0 (6.8 - 11.9)	0.49	8.3 (4.5 - 14.8)	10.4 (7.8 - 13.7)	9.6 (7.3 - 12.5)
Ecstasy also called "MDMA"	7.8 (6.5 - 9.3)	6.9 (5.6 - 8.4)	0.35	10.8 (8.8 - 13.2)	4.4 (3.0 - 6.4)	0.00	9.5 (6.7 - 13.5)	8.1 (6.0 - 10.7)	6.7 (5.2 - 8.5)
Heroin	4.1 (2.6 - 6.5)	3.9 (2.9 - 5.2)	0.82	6.1 (3.8 - 9.6)	1.7 (0.8 - 3.6)	0.00	0.7 (0.1 - 5.4)	5.7 (3.4 - 9.3)	3.4 (1.7 - 6.6)
Methamphetamine	3.7 (2.4 - 5.5)	3.4 (2.7 - 4.3)	0.76	4.8 (2.9 - 7.9)	2.5 (1.3 - 4.7)	0.11	0.0 (0.0 - 0.0)	4.6 (2.9 - 7.2)	3.4 (1.9 - 6.1)
Rx Drugs without a Doctors Prescription	11.3 (9.2 - 13.8)	9.8 (7.9 - 12.0)	0.31	14.2 (10.6 - 18.6)	8.0 (6.4 - 10.0)	0.01	13.1 (7.7 - 21.2)	12.2 (8.6 - 17.0)	10.0 (7.7 - 12.9)
Injected Any Illegal Drug	2.6 (1.6 - 4.1)	3.4 (2.7 - 4.2)	0.26	3.4 (2.2 - 5.2)	1.5 (0.7 - 3.1)	0.01	0.0 (0.0 - 0.0)	2.8 (1.6 - 5.0)	2.5 (1.4 - 4.3)

NOTES:

[1]**2013:** 2015 YRBS data not available for Chicago so 2013 data is presented.

'—' = Data not available; **~ =** P-value not available; **N/A =** < 100 respondents for the subgroup.

^Chicago: weighted data were available for Chicago 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 1,907 with an overall response rate of 69%; the 2013 sample size was 1,581 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 Programs Treating Substance Use Disorders, *Chicago*^, Fiscal Year† 2012-2016

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

	Fiscal Year									
	2012		2013		2014		2015		2016††	
	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)
Total Admissions (#)	**33,774**	**100%**	**34,563**	**100%**	**24,428**	**100%**	**19,593**	**100%**	unavail	unavail
Primary Substance of Abuse (%)										
Alcohol	7,014	20.8%	7,064	20.4%	6,056	24.8%	5,106	26.1%	unavail	unavail
Cocaine/Crack	5,171	15.3%	4,013	11.6%	3,009	12.3%	2,059	10.5%	unavail	unavail
Heroin	14,147	41.9%	14,886	43.1%	7,490	30.7%	6,335	32.3%	unavail	unavail
Prescription Opioids**	238	0.7%	274	0.8%	270	1.1%	190	1.0%	unavail	unavail
Methamphetamine	110	0.3%	100	0.3%	70	0.3%	103	0.5%	unavail	unavail
Marijuana	5,343	15.8%	6,059	17.5%	5,631	23.1%	4,613	23.5%	unavail	unavail
Benzodiazepines	37	0.1%	50	0.1%	44	0.2%	63	0.3%	unavail	unavail
MDMA	29	0.1%	40	0.1%	51	0.2%	34	0.2%	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	1,685	5.0%	2,077	6.0%	1,807	7.4%	1,090	5.6%	unavail	unavail

NOTES:

***Admissions:** Includes admissions to publicly funded programs. Each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period. Declines in overall treatment admissions are due to several factors, including budget cuts and changes in providers and payers that affect the reporting of these data (e.g., the expansion of Medicaid under the ACA to cover some forms of drug treatment).

^Chicago: Includes data for Chicago not the entire Chicago MSA.

†**Fiscal Year (FY):** Calendar Year (CY) data are not available for this site so fiscal year data are presented. Please note that treatment data presented for other NDEWS SCSs represent calendar year data. ††**FY2016:** Data for 2016 were not available at this time so FY2012–2015 data are presented.

****Prescription Opioids:** Includes oxycodone/hydrocodone, non-prescription methadone, and other opiates.

unavail: Data not available; **Percentages** may not sum to 100 due to either rounding, missing data and/or because not all possible categories are presented in the table.

SOURCE: Data provided to the Chicago Metro NDEWS SCE by Illinois Department of Human Services, Division of Alcoholism and Substance Abuse (DASA).

Table 4b: Demographic and Drug Use Characteristics of Primary Treament Admissions* for Select Substances of Abuse, *Chicago*^ , Fiscal Year 2015†

Number of Admissions, by Primary Substance of Abuse and Percentage of Admissions with Selected Demographic and Drug Use Characteristics

	Primary Substance of Abuse													
	Alcohol		Cocaine/Crack		Heroin		Prescription Opioids**		Methamphetamine		Marijuana		Benzo-diazepines	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Number of Admissions (#)	**5,106**	**100%**	**2,059**	**100%**	**6,335**	**100%**	**204**	**100%**	**103**	**100%**	**4,613**	**100%**	**63**	**100%**
Sex (%)														
Male	3,832	75.0%	1379	67.0%	3786	59.8%	126	61.8%	79	76.7%	3454	74.9%	42	66.7%
Female	1,274	25.0%	680	33.0%	2549	40.2%	78	38.2%	24	23.3%	1159	25.1%	21	33.3%
Race/Ethnicity (%)														
White, Non-Hisp.	1,271	24.9%	234	11.4%	1494	23.6%	106	52.0%	41	39.8%	326	7.1%	38	60.3%
African-Am/Black, Non-Hisp	2,663	52.2%	1590	77.2%	4016	63.4%	64	31.4%	27	26.2%	3345	72.5%	8	12.7%
Hispanic/Latino	1,015	19.9%	205	10.0%	721	11.4%	25	12.3%	22	21.4%	875	19.0%	11	17.5%
Asian/Pacific Islander	26	0.5%	2	0.1%	8	0.1%	0	0.0%	7	6.8%	10	0.2%	2	3.2%
Other	131	2.6%	28	1.4%	96	1.5%	9	4.4%	6	5.8%	57	1.2%	4	6.3%
Age Group (%)														
Under 18	89	1.7%	4	0.2%	5	0.1%	4	2.0%	0	0.0%	1692	36.7%	5	7.9%
18-25	582	11.4%	116	5.6%	469	7.4%	31	15.2%	11	10.7%	1594	34.6%	28	44.4%
26-44	2,325	45.5%	756	36.7%	2542	40.1%	111	54.4%	80	77.7%	1127	24.4%	23	36.5%
45+	2,110	41.3%	1183	57.5%	3319	52.4%	58	28.4%	12	11.7%	200	4.3%	7	11.1%
Route of Administration (%)														
Smoked	26	0.5%	1762	85.6%	159	2.5%	9	4.4%	51	49.5%	4440	96.2%	2	3.2%
Inhaled	37	0.7%	225	10.9%	4268	67.4%	36	17.6%	10	9.7%	29	0.6%	0	0.0%
Injected	5	0.1%	15	0.7%	1754	27.7%	19	9.3%	39	37.9%	7	0.2%	1	1.6%
Oral/Other/Unknown	5,038	98.7%	57	2.8%	154	2.4%	140	68.6%	3	2.9%	137	3.0%	60	95.2%
Secondary Substance (%)														
None	2,453	48.0%	757	36.8%	2898	45.7%	71	34.8%	32	31.1%	2885	62.5%	16	25.4%
Alcohol	0	0.0%	670	32.5%	805	12.7%	36	17.6%	21	20.4%	1164	25.2%	10	15.9%
Benzodiazepines	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
Cocaine/Crack	898	17.6%	5	0.2%	1,605	25.3%	27	13.2%	9	8.7%	157	3.4%	4	6.3%
Heroin	267	5.2%	193	9.4%	1	0.0%	4	2.0%	5	4.9%	47	1.0%	8	12.7%
Prescription Opioids**	41	0.8%	10	0.5%	48	0.8%	0	0.0%	0	0.0%	44	1.0%	4	6.3%
Methamphetamine	9	0.2%	4	0.2%	21	0.3%	0	0.0%	0	0.0%	8	0.2%	0	0.0%
Marijuana	1,089	21.3%	285	13.8%	410	6.5%	23	11.3%	16	15.5%	0	0.0%	14	22.2%

NOTES:

***Admissions:** Includes admissions to publicly funded programs. Each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period.

^Chicago: Includes data for Chicago not the entire Chicago MSA.

†Fiscal Year (FY) 2015: Neither calendar(CY) nor 2016 data are available at this time so FY2015 data are presented. Please note that treatment data presented for other NDEWS SCSs represent calendar year data.

****Prescription Opioids:** Includes oxycodone/hydrocodone, non-prescription methadone, and other opiates.

unavail: Data not available; **Percentages** may not sum to 100 due to either rounding, missing data and/or because not all possible categories are presented in the table.

SOURCE: Data provided to the Chicago Metro NDEWS SCE by Illinois Department of Human Services, Division of Alcoholism and Substance Abuse (DASA).

Table 5: Drug Poisoning Deaths*, by Drug and Year, *Cook County (Chicago Area)*, 2011–2015**
Number, Crude Rate, and Age-Adjusted Rate* (per 100,000 population)**

	2011			2012			2013			2014			2015		
	Number (#)	Crude Rate	Age-Adjusted Rate	Number (#)	Crude Rate	Age-Adjusted Rate	Number (#)	Crude Rate	Age-Adjusted Rate	Number (#)	Crude Rate	Age-Adjusted Rate	Number (#)	Crude Rate	Age-Adjusted Rate
Drug Poisoning Deaths	**503**	**9.6**	**9.6**	**615**	**11.8**	**11.5**	**628**	**12.0**	**11.6**	**622**	**11.9**	**11.5**	**697**	**13.3**	**12.6**
Opioids‡	**355**	**6.8**	**6.7**	**476**	**9.1**	**8.9**	**486**	**9.3**	**9.0**	**480**	**9.1**	**8.9**	**549**	**10.5**	**10.0**
Heroin	SUP	SUP	SUP	25	0.5	0.5	291	5.6	5.4	323	6.2	6.0	362	6.9	6.6
Natural Opioid Analgesics	18	UNR	UNR	40	0.8	0.8	68	1.3	1.2	64	1.2	1.2	67	1.3	1.2
Methadone	21	0.4	0.4	32	0.6	0.6	40	0.8	0.8	35	0.7	0.7	40	0.8	0.7
Synthetic Opioid Analgesics	SUP	SUP	SUP	13	UNR	UNR	21	0.4	0.3	29	0.6	0.5	97	1.9	1.8
Benzodiazepines	**SUP**	**SUP**	**SUP**	**30**	**0.6**	**0.6**	**67**	**1.3**	**1.2**	**86**	**1.6**	**1.6**	**96**	**1.8**	**1.7**
Benzodiazepines **AND** Any Opioids	SUP	SUP	SUP	17	UNR	UNR	47	0.9	0.9	57	1.1	1.0	72	1.4	1.3
Benzodiazepines **AND** Heroin	SUP	SUP	SUP	SUP	SUP	SUP	11	UNR	UNR	17	UNR	UNR	23	0.4	0.4
Psychostimulants															
Cocaine	166	3.2	3.2	184	3.5	3.4	143	2.7	2.6	122	2.3	2.3	158	3.0	2.9
Psychostimulants with Abuse Potential	SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP	14	UNR	UNR	14	UNR	UNR
Cannabis (derivatives)	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**
Percent with Drugs Specified‡	**90.7%**			**96.1%**			**98.4%**			**98.4%**			**97.8%**		

NOTES:

***Drug Poisoning Deaths:** Drug poisoning deaths are defined as deaths with **underlying cause-of-death** codes from the World Health Organization's (WHO's) *International Classification of Diseases, Tenth Revision* (ICD-10) of X40-X44, X60-X64, X85, and Y10-Y14. See *Overview & Limitations* section for additional information on mortality data and definitions of the specific ICD-10 codes listed.

****Drug Poisoning Deaths, by Drug:** Among the deaths with drug poisoning identified as the underlying cause, the specific drugs are identified by ICD-10 **multiple cause-of-death (MCOD)** T-codes (see below). Each death certificate may contain up to 20 causes of death indicated in the MCOD field. Thus, the total count across drugs may exceed the actual number of dead persons in the selected population. Some deaths involve more than one drug; these deaths are included in the rates for each drug category.

*****Age-Adjusted Rate:** Age-adjusted rates are weighted averages of the age-specific death rates, where the weights represent a fixed population by age (2000 U.S. Population). Age adjustment is a technique for removing the effects of age from crude rates, so as to allow meaningful comparisons across populations with different underlying age structures. Age-adjusted rates should be viewed as relative indexes rather than as direct or actual measures of mortality risk. See http://wonder.cdc.gov/wonder/help/mcd.html for more information.

‡**Opioids:** Includes any of these MCOD codes T40.0-T40.4, or T40.6

Heroin (T40.1); *Natural Opioid Analgesics* (T40.2) - Including morphine and codeine, and semi-synthetic opioid analgesics, including drugs such as oxycodone, hydrocodone, hydromorphone, and oxymorphone; *Methadone* (T40.3); *Synthetic Opioid Analgesics* (T40.4) - Other than methadone, including drugs such as tramadol and fentanyl; *Other and Unspecified Narcotics* (T40.6)

Benzodiazepines: (T42.4)

Benzodiazepines AND *Any Opioids* (T42.4 AND T40.0-T40.4, or T40.6)

Benzodiazepines AND *Heroin* (T42.4 AND T40.1)

Psychostimulants:

Cocaine (T40.5); Psychostimulants with Abuse Potential [excludes cocaine] (T43.6)

Cannabis (derivatives): (T40.7)

‡**Percent of Drug Poisoning Deaths with Drug(s) Specified:** Among drug poisoning deaths, deaths that mention the type of drug(s) involved are defined as those including at least one ICD-10 MCOD in the range T36-T50.8. See *Overview & Limitations* section for more information about this statistic.

SUP=Suppressed: Counts and Rates are suppressed for subnational data representing 0–9 deaths. **UNR=Unreliable:** Rates are Unreliable when the death count <20.

SOURCE: Adapted by the NDEWS Coordinating Center from data taken from the Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple cause of death 1999-2015, available on the CDC WONDER Online Database, released December 2016. Data compiled in the Multiple cause of death 1999-2015 were provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Retrieved between February 2017 - June 2017, from http://wonder.cdc.gov/mcd-icd10.html

Table 6a: Drug Reports* for Items Seized by Law Enforcement in Chicago MSA^ in 2016
DEA National Forensic Laboratory Information System (NFLIS)
Number of Drug-Specific Reports and Percent of Total Analyzed Drug Reports

Drug Identified	Number (#)	Percent of Total Drug Reports* (#)
Total Drug Reports	**44,438**	**100.0%**
CANNABIS	18,127	40.8%
HEROIN	9,359	21.1%
COCAINE	8,441	19.0%
ALPRAZOLAM	1,453	3.3%
FENTANYL	1,291	2.9%
METHAMPHETAMINE	761	1.7%
HYDROCODONE	560	1.3%
PHENCYCLIDINE	421	0.9%
3,4-METHYLENEDIOXYMETHAMPHETAMINE (MDMA)	411	0.9%
AMPHETAMINE	307	0.7%
PHENYLIMIDOTHIAZOLE ISOMER UNDETERMINED	197	0.4%
LYSERGIC ACID DIETHYLAMIDE (LYSERGIDE)	195	0.4%
CLONAZEPAM	165	0.4%
OXYCODONE	165	0.4%
ACETAMINOPHEN	160	0.4%
TESTOSTERONE	132	0.3%
CODEINE	122	0.3%
DIPHENHYDRAMINE	116	0.3%
TRAMADOL	111	0.2%
MORPHINE	85	0.2%
PSILOCIN	83	0.2%
METHADONE	82	0.2%
FUB-AMB	78	0.2%
BUPRENORPHINE	76	0.2%
DIAZEPAM	70	0.2%
CAFFEINE	67	0.2%
KETAMINE	66	0.1%
DIBUTYLONE (BETA-KETO-N,N-DIMETHYL-1,3-BENZODIOXOLYLBUTANAMINE; BK-DMBDB)	56	0.1%
AB-FUBINACA	55	0.1%
1-(3-TRIFLUOROMETHYL)PHENYL-PIPERAZINE (TFMPP)	53	0.1%
TRENBOLONE	53	0.1%
METHORPHAN	51	0.1%
LISDEXAMFETAMINE	47	0.1%
LORAZEPAM	46	0.1%
METHYLPHENIDATE	46	0.1%
3,4-METHYLENEDIOXYAMPHETAMINE (MDA)	40	< 0.1%
ALPHA-PYRROLIDINOPENTIOPHENONE (ALPHA-PVP)	35	< 0.1%
QUININE	31	< 0.1%
XLR-11 (1-(5-FLUOROPENTYL-1H-3-YL)(2,2,3,3-TETRAMETHYLCYCLOPROPYL)METHANONE)	29	< 0.1%
NO CONTROLLED DRUG IDENTIFIED	26	< 0.1%
STANOZOLOL	25	< 0.1%
VARDENAFIL	25	< 0.1%
NANDROLONE	24	< 0.1%
3,4-METHYLENEDIOXYETHYLCATHINONE (ETHYLONE)	23	< 0.1%
6-MONOACETYLMORPHINE	22	< 0.1%
METHANDROSTENOLONE (METHANDIENONE)	21	< 0.1%
OXANDROLONE	21	< 0.1%
ZOLPIDEM	21	< 0.1%
BOLDENONE	20	< 0.1%
DIMETHYLTRYPTAMINE (DMT)	20	< 0.1%
HYDROMORPHONE	20	< 0.1%
TADALAFIL	17	< 0.1%
2-(4-IODO-2,5-DIMETHOXYPHENYL)-N-(2-METHOXYBENZYL)ETHANAMINE (25-I-NBOME)	16	< 0.1%
CARISOPRODOL	16	< 0.1%
GAMMA HYDROXY BUTYL LACTONE	16	< 0.1%
PROCHLORPERAZINE	16	< 0.1%
BENZOCAINE	15	< 0.1%

Table 6a (cont'd): Drug Reports* for Items Seized by Law Enforcement in Chicago MSA^ in 2016
DEA National Forensic Laboratory Information System (NFLIS)

Drug Identified	Number (#)	Percent of Total Drug Reports* (#)
DROSTANOLONE	15	< 0.1%
LIDOCAINE	15	< 0.1%
MAB-CHMINACA (ADB-CHMINACA)	14	< 0.1%
OXYMETHOLONE	14	< 0.1%
NALOXONE	13	< 0.1%
PENTYLONE (ß-KETO-METHYLBENZODIOXOLYLPENTANAMINE)	13	< 0.1%
PSEUDOEPHEDRINE	12	< 0.1%
LACTOSE	11	< 0.1%
DIMETHYLSULFONE	10	< 0.1%
N-BENZYLPIPERAZINE (BZP)	10	< 0.1%
NOSCAPINE	10	< 0.1%
TEMAZEPAM	10	< 0.1%
BUTALBITAL	9	< 0.1%
3',4'-TETRAMETHYLENE-ALPHA-PYRROLIDINOVALEROPHENONE (TH-PVP)	8	< 0.1%
METHOXETAMINE (MXE; 2-(3-METHOXYPHENYL)-2-(ETHYLAMINO)CYCLOHEXANONE)	8	< 0.1%
PHENTERMINE	8	< 0.1%
TAMOXIFEN	8	< 0.1%
ADB-FUBINACA (N-(1-AMINO-3,3-DIMETHYL-1-OXOBUTAN-2-YL)-1-(4-FLUOROBENZYL)-1H-INDAZOLE-3-CARBOXAMIDE)	7	< 0.1%
N-ETHYLPENTYLONE	7	< 0.1%
OXYMORPHONE	7	< 0.1%
4-HYDROXY-19-NORTESTOSTERONE (4,17ß-DIHYDROXY-ESTR-4-EN-3-ONE)	6	< 0.1%
AB-CHMINACA (N-[(1S)-1-(AMINOCARBONYL)-2-METHYLPROPYL]-1-(CYCLOHEXYLMETHYL)-1H-INDAZOLE-3-CARBOXAMIDE)	6	< 0.1%
INOSITOL	6	< 0.1%
MESTEROLONE	6	< 0.1%
SILDENAFIL CITRATE (VIAGRA)	6	< 0.1%
1,4-BUTANEDIOL	5	< 0.1%
2-(4-CHLORO-2,5-DIMETHOXYPHENYL)-N-(2-METHOXYBENZYL)ETHANAMINE (25-C-NBOME)	5	< 0.1%
4-BROMO-2,5-DIMETHOXYPHENETHYLAMINE (2C-B)	5	< 0.1%
4-FLUOROPHENYLPIPERAZINE (pFPP)	5	< 0.1%
DEXTROMETHORPHAN	5	< 0.1%
FURANYL FENTANYL	5	< 0.1%
PHENACETIN	5	< 0.1%
PSILOCYBIN/PSILOCYN	5	< 0.1%
SUCROSE	5	< 0.1%
AB-PINACA	4	< 0.1%
CARFENTANIL	4	< 0.1%
DIPYRONE	4	< 0.1%
METHCATHINONE	4	< 0.1%
PSILOCYBINE	4	< 0.1%
U-47700	4	< 0.1%
4-METHYL-ALPHA-ETHYLAMINOPENTIOPHENONE	3	< 0.1%
5-FLUORO-ADB	3	< 0.1%
5-METHOXY-N,N-DIISOPROPYLTRYPTAMINE (5-MEO-DIPT)	3	< 0.1%
BARBITAL	3	< 0.1%
CANNABINOL	3	< 0.1%
FLURAZEPAM	3	< 0.1%
METHENOLONE	3	< 0.1%
METHYLENEDIOXYPYROVALERONE (MDPV)	3	< 0.1%
NICOTINAMIDE	3	< 0.1%
NICOTINE	3	< 0.1%
PREGABALIN	3	< 0.1%
SECOBARBITAL	3	< 0.1%
TRAZODONE	3	< 0.1%
1-PHENYL-2-PROPANONE	2	< 0.1%
ALPHA-PYRROLIDINOHEXANOPHENONE (ALPHA-PHP)	2	< 0.1%
CLOMIPHENE	2	< 0.1%
CLONAZOLAM	2	< 0.1%

Table 6a (cont'd): Drug Reports* for Items Seized by Law Enforcement in Chicago MSA^ in 2016
DEA National Forensic Laboratory Information System (NFLIS)

Drug Identified	Number (#)	Percent of Total Drug Reports* (#)
CLORAZEPATE	2	< 0.1%
CREATINE	2	< 0.1%
DEXTROPROPOXYPHENE	2	< 0.1%
ETIZOLAM	2	< 0.1%
EXEMESTANE	2	< 0.1%
GAMMA HYDROXY BUTYRATE	2	< 0.1%
GLUTAMINE	2	< 0.1%
IBUPROFEN	2	< 0.1%
MELATONIN	2	< 0.1%
METHASTERONE	2	< 0.1%
MONOACETYLMORPHINE	2	< 0.1%
NM2201 (NAPHTHALEN-1-YL 1-(5-FLUOROPENTYL)-1H-INDOLE-3-CARBOXYLATE)	2	< 0.1%
N-METHYL-3,4-METHYLENEDIOXYCATHINONE (METHYLONE)	2	< 0.1%
PHENOBARBITAL	2	< 0.1%
THIOPROPAZATE	2	< 0.1%
3-FLUOROPHENMETRAZINE (3-FPM)	1	< 0.1%
3-METHOXYPHENCYCLIDINE (3-MEO-PCP)	1	< 0.1%
4-ANILINO-1-PHENETHYLPIPERIDINE	1	< 0.1%
4-CHLORODEHYDROMETHYLTESTOSTERONE	1	< 0.1%
4-CHLOROMETHCATHINONE (4-CMC; CLEPHEDRONE)	1	< 0.1%
4-FLUORO PENTEDRONE (1-(4-FLUOROPHENYL)-2-(METHYLAMINO)PENTAN-1-ONE)	1	< 0.1%
4-FLUOROAMPHETAMINE (4-FA)	1	< 0.1%
5-FLUORO ABICA	1	< 0.1%
5-FLUORO AMB	1	< 0.1%
ACRYLFENTANYL	1	< 0.1%
ADD'L SUBSTAN.BELVD.PRESNT-NOT IDEN	1	< 0.1%
AKB48 N-(5-FLUOROPENTYL)	1	< 0.1%
ALPHA-PYRROLIDINOBUTIOPHENONE (ALPHA-PBP)	1	< 0.1%
ALPHA-PYRROLIDINOHEPTAPHENONE (PV8)	1	< 0.1%
AMOXICILLIN	1	< 0.1%
ANASTROZOLE	1	< 0.1%
ASPIRIN	1	< 0.1%
CANNABIDIOL	1	< 0.1%
CATHINONE	1	< 0.1%
CLOMIPHENE CITRATE	1	< 0.1%
CLOTRIMAZOLE	1	< 0.1%
CYCLOBENZAPRINE	1	< 0.1%
DIHYDROCODEINE	1	< 0.1%
ETHYLPHENIDATE	1	< 0.1%
FLUOROMETHCATHINONE	1	< 0.1%
FUB-144 ((1-(4-FLUOROBENZYL)-1H-INDOL-3-YL)(2,2,3,3-TETRAMETHYLCYCLOPROPYL)METHANONE)	1	< 0.1%
GUAIFENESIN	1	< 0.1%
HU-308 (4-[4-(1,1-DIMETHYLHEPTYL)-2,6-DIMETHOXYPHENYL]-6,6-DIMETHYL-BICYCLO[3.1.1]HEPT-2-ENE-2-METHANOL)	1	< 0.1%
JWH-200 ([1-[2-(4-MORPHOLINYL)ETHYL]-3-(1-NAPTHOYL)INDOLE])	1	< 0.1%
LETROZOLE	1	< 0.1%
LORATADINE	1	< 0.1%
LUFENURON	1	< 0.1%
METHYLHEXANAMINE	1	< 0.1%
METHYLTESTOSTERONE	1	< 0.1%
MINOXIDIL	1	< 0.1%
MODAFINIL	1	< 0.1%
N,N-DIALLYL-5-METHOXYTRYPTAMINE (5-MEO-DALT)	1	< 0.1%
NAPROXEN	1	< 0.1%
NIACINAMIDE	1	< 0.1%
NICOTINIC ACID	1	< 0.1%
PENTOBARBITAL	1	< 0.1%
PROCAINE	1	< 0.1%
PROPYLENE GLYCOL (1,2-PROPANEDIOL)	1	< 0.1%
SODIUM BICARBONATE	1	< 0.1%

Table 6a (cont'd): Drug Reports* for Items Seized by Law Enforcement in Chicago MSA^ in 2016
DEA National Forensic Laboratory Information System (NFLIS)

Drug Identified	Number (#)	Percent of Total Drug Reports* (#)
SPIRONOLACTONE	1	< 0.1%
ZOPICLONE	1	< 0.1%

NOTES:
^Chicago MSA: Includes the following 14 counties: Cook, DeKalb, DuPage, Grundy, Kane, Kendall, Lake, McHenry, Will, Jasper, Newton, and Porter in Illinois; Lake County, Indiana; and Kenosha County, Wisconsin.
***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. The time frame is January - December 2016.

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), Diversion Control Division, Drug and Chemical Evaluation Section, Data Analysis Unit. Data were retrieved from the NFLIS Data Query System (DQS) on May 28, 2017.

Table 6b: Drug Reports* for Items Seized by Law Enforcement in Chicago MSA^ in 2016
DEA National Forensic Laboratory Information System (NFLIS)

Drug Reports* by Selected Drug Categories** of Interest, Number of Drug-Specific Reports,
Percent of Analyzed Drug Category Reports, & Percent of Total Analyzed Drug Reports

Drug Identified, by Selected Drug Category**	Number (#)	Percent of Drug Category (%)	Percent of Total Reports (%)
Total Drug Reports*	**44,438**	**100.0%**	**100.0%**
Opioids Category	**11,993**	**100.0%**	**27.0%**
Heroin	**9,359**	**78.0%**	**21.1%**
Narcotic Analgesics	**2,532**	**21.1%**	**5.7%**
FENTANYL	1,291	10.8%	2.9%
HYDROCODONE	560	4.7%	1.3%
OXYCODONE	165	1.4%	0.4%
CODEINE	122	1.0%	0.3%
TRAMADOL	111	0.9%	0.2%
MORPHINE	85	0.7%	0.2%
METHADONE	82	0.7%	0.2%
BUPRENORPHINE	76	0.6%	0.2%
HYDROMORPHONE	20	0.2%	< 0.1%
OXYMORPHONE	7	< 0.1%	< 0.1%
FURANYL FENTANYL	5	< 0.1%	< 0.1%
U-47700	4	< 0.1%	< 0.1%
DEXTROPROPOXYPHENE	2	< 0.1%	< 0.1%
ACRYLFENTANYL	1	< 0.1%	< 0.1%
DIHYDROCODEINE	1	< 0.1%	< 0.1%
Narcotics	**102**	**0.9%**	**0.2%**
METHORPHAN	51	0.4%	0.1%
6-MONOACETYLMORPHINE	22	0.2%	< 0.1%
NALOXONE	13	0.1%	< 0.1%
NOSCAPINE	10	< 0.1%	< 0.1%
CARFENTANIL	4	< 0.1%	< 0.1%
MONOACETYLMORPHINE	2	< 0.1%	< 0.1%
Synthetic Cannabinoids Category	**204**	**100.0%**	**0.5%**
FUB-AMB	78	38.2%	0.2%
AB-FUBINACA	55	27.0%	0.1%
XLR-11 (1-(5-FLUOROPENTYL-1H-3-YL)(2,2,3,3-TETRAMETHYLCYCLOPROPYL)METHANONE)	29	14.2%	< 0.1%
MAB-CHMINACA (ADB-CHMINACA)	14	6.9%	< 0.1%
ADB-FUBINACA (N-(1-AMINO-3,3-DIMETHYL-1-OXOBUTAN-2-YL)-1-(4-FLUOROBENZYL)-1H-INDAZOLE-3-CARBOXAMIDE)	7	3.4%	< 0.1%
AB-CHMINACA (N-[(1S)-1-(AMINOCARBONYL)-2-METHYLPROPYL]-1-(CYCLOHEXYLMETHYL)-1H-INDAZOLE-3-CARBOXAMIDE)	6	2.9%	< 0.1%
AB-PINACA	4	2.0%	< 0.1%
5-FLUORO-ADB	3	1.5%	< 0.1%
NM2201 (NAPHTHALEN-1-YL 1-(5-FLUOROPENTYL)-1H-INDOLE-3-CARBOXYLATE)	2	1.0%	< 0.1%
5-FLUORO ABICA	1	0.5%	< 0.1%
5-FLUORO AMB	1	0.5%	< 0.1%
AKB48 N-(5-FLUOROPENTYL)	1	0.5%	< 0.1%
FUB-144 ((1-(4-FLUOROBENZYL)-1H-INDOL-3-YL)(2,2,3,3-TETRAMETHYLCYCLOPROPYL)METHANONE)	1	0.5%	< 0.1%
HU-308 (4-[4-(1,1-DIMETHYLHEPTYL)-2,6-DIMETHOXYPHENYL]-6,6-DIMETHYL-BICYCLO[3.1.1]HEPT-2-ENE-2-METHANOL)	1	0.5%	< 0.1%
JWH-200 ([1-[2-(4-MORPHOLINYL)ETHYL]-3-(1-NAPTHOYL)INDOLE])	1	0.5%	< 0.1%
Synthetic Cathinones Category	**161**	**100.0%**	**0.4%**
Synthetic Cathinones	**156**	**96.9%**	**0.4%**
DIBUTYLONE (BETA-KETO-N,N-DIMETHYL-1,3-BENZODIOXOLYLBUTANAMINE; BK-DMBDB)	56	34.8%	0.1%
ALPHA-PYRROLIDINOPENTIOPHENONE (ALPHA-PVP)	35	21.7%	< 0.1%
3,4-METHYLENEDIOXYETHYLCATHINONE (ETHYLONE)	23	14.3%	< 0.1%
PENTYLONE (ß-KETO-METHYLBENZODIOXOLYLPENTANAMINE)	13	8.1%	< 0.1%
3',4'-TETRAMETHYLENE-ALPHA-PYRROLIDINOVALEROPHENONE (TH-PVP)	8	5.0%	< 0.1%
N-ETHYLPENTYLONE	7	4.3%	< 0.1%
METHCATHINONE	4	2.5%	< 0.1%
4-METHYL-ALPHA-ETHYLAMINOPENTIOPHENONE	3	1.9%	< 0.1%
ALPHA-PYRROLIDINOHEXANOPHENONE (ALPHA-PHP)	2	1.2%	< 0.1%
4-CHLOROMETHCATHINONE (4-CMC; CLEPHEDRONE)	1	0.6%	< 0.1%

Table 6b (cont'd): Drug Reports* for Items Seized by Law Enforcement in Chicago MSA^ in 2016
DEA National Forensic Laboratory Information System (NFLIS)

Drug Identified, by Selected Drug Category**	Number (#)	Percent of Drug Category (%)	Percent of Total Reports (%)
4-FLUORO PENTEDRONE (1-(4-FLUOROPHENYL)-2-(METHYLAMINO)PENTAN-1-ONE)	1	0.6%	< 0.1%
ALPHA-PYRROLIDINOBUTIOPHENONE (ALPHA-PBP)	1	0.6%	< 0.1%
ALPHA-PYRROLIDINOHEPTAPHENONE (PV8)	1	0.6%	< 0.1%
FLUOROMETHCATHINONE	1	0.6%	< 0.1%
Synthetic Cathinones (Hallucinogen)	**5**	**3.1%**	**< 0.1%**
METHYLENEDIOXYPYROVALERONE (MDPV)	3	1.9%	< 0.1%
N-METHYL-3,4-METHYLENEDIOXYCATHINONE (METHYLONE)	2	1.2%	< 0.1%
Piperazines Category	**68**	**100.0%**	**0.2%**
Piperazines (Hallucinogen)	**58**	**85.3%**	**0.1%**
1-(3-TRIFLUOROMETHYL)PHENYL-PIPERAZINE (TFMPP)	53	77.9%	0.1%
4-FLUOROPHENYLPIPERAZINE (pFPP)	5	7.4%	< 0.1%
Piperazines (Stimulant)	**10**	**14.7%**	**< 0.1%**
N-BENZYLPIPERAZINE (BZP)	10	14.7%	< 0.1%
Phenethylamines (2C Series) (H) Category	**26**	**100.0%**	**< 0.1%**
2-(4-IODO-2,5-DIMETHOXYPHENYL)-N-(2-METHOXYBENZYL)ETHANAMINE (25-I-NBOME)	16	61.5%	< 0.1%
2-(4-CHLORO-2,5-DIMETHOXYPHENYL)-N-(2-METHOXYBENZYL)ETHANAMINE (25-C-NBOME)	5	19.2%	< 0.1%
4-BROMO-2,5-DIMETHOXYPHENETHYLAMINE (2C-B)	5	19.2%	< 0.1%
Tryptamines Category	**24**	**100.0%**	**< 0.1%**
DIMETHYLTRYPTAMINE (DMT)	20	83.3%	< 0.1%
5-METHOXY-N,N-DIISOPROPYLTRYPTAMINE (5-MEO-DIPT)	3	12.5%	< 0.1%
N,N-DIALLYL-5-METHOXYTRYPTAMINE (5-MEO-DALT)	1	4.2%	< 0.1%

NOTES:

^Chicago MSA: Includes the following 14 counties: Cook, DeKalb, DuPage, Grundy, Kane, Kendall, Lake, McHenry, Will, Jasper, Newton, and Porter in Illinois; Lake County, Indiana; and Kenosha County, Wisconsin.

***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. The time frame is January - December 2016.

****Selected Drug Categories:** Opioids, 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.

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), Diversion Control Division, Drug and Chemical Evaluation Section, Data Analysis Unit. Data were retrieved from the NFLIS Data Query System (DQS) on May 28, 2017.

National Drug Early Warning System (NDEWS) Sentinel Community Site (SCS) Drug Use Patterns and Trends, 2017: Overview and Limitations About Data Sources

The *Overview and Limitations About Data Sources,* written by Coordinating Center staff, provides a summary and a detailed description of the limitations of some of the national data sources used this report, including indicators of substance use, treatment, consequences, and availability.

Overview and Limitations of American Community Survey (ACS) Data

Data on demographic, social, and economic characteristics are based on 2011–2015 American Community Survey (ACS) 5-Year Estimates, collected between January 1, 2011 and December 31, 2015. The U.S. Census Bureau's ACS is a nationwide survey designed to provide communities with reliable and timely demographic, social, economic, and housing data on an annual basis. Although the main function of the decennial census is to provide counts of people for the purpose of congressional apportionment and legislative redistricting, the primary purpose of the ACS is to measure the changing social and economic characteristics of the U.S. population. As a result, the ACS does not provide official counts of the population in between censuses. Instead, the Census Bureau's Population Estimates Program will continue to be the official source for annual population totals, by age, race, Hispanic origin, and sex.[a]

The ACS selects approximately 3.5 million housing unit addresses from every county across the nation to survey. Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error (MOE). The values shown in the table are the margin of errors. The MOE can be interpreted roughly as providing a 90% probability that the interval defined by the estimate minus the MOE and the estimate plus the MOE (the lower and upper confidence bounds) contains the true value.[a]

Sources

***Data Sources*:** Adapted by the NDEWS Coordinating Center from data from the American Community Survey; *2011–2015 American Community Survey 5-Year Estimates;* Tables DP02, DP03, and DP05; using American FactFinder; http://factfinder.census.gov; Accessed April 2017; U.S. Census Bureau.

***Overview/Methods/Limitations Sources*:** [a]Adapted by the NDEWS Coordinating Center from U.S. Census Bureau, *A Compass for Understanding and Using American Community Survey Data: What General Data Users Need to Know.* U.S. Government Printing Office, Washington, DC, 2008. Available at: https://www.census.gov/library/publications/2008/acs/general.html

Overview and Limitations of National Survey of Drug Use and Health (NSDUH) Data

NSDUH is an annual survey of the civilian, noninstutionalized population of the United States aged 12 years or older that is planned and managed by the Substance Abuse and Mental Health Administration's (SAMHSA) Center for Behavioral Health Statistics and Quality (CBHSQ). Data is collected from individuals residing in households, noninstitutionalized group quarters (e.g., shelters, rooming houses, dormitories) and civilians living on military bases. In 2012–2014, NSDUH collected data from 204,048 respondents aged 12 years or older; this sample was designed to obtain representative samples from the 50 states and the District of Columbia.[a]

The **substate estimates** are produced from a hierarchical Bayes model-based small area estimation (SAE) procedure in which 2012–2014 NSDUH data at the substate level are combined with local area county and census block group/tract-level data from the area. The goal of this method is to enhance statistical power and analytic capability, and to provide more precise estimates of substance use and mental health outcomes within and across states. [See 2012–2014 NSDUH Methods Report for more information about the methodolgy used to generate substate estimates]. Comparable estimates derived from the small area estimation procedure were also produced for the 50 states and the District of Columbia. We present these estimates for Maine and Texas. Because these data are based on 3 consecutive years of data, they are not directly comparable with the annually published state estimates that are based on only 2 consecutive years of NSDUH data.[a]

Substate regions, also referred to as planning regions or substate areas, were defined by officials from each of the 50 states and the District of Columbia and were typically based on the treatment planning regions specified by the states in their applications for the Substance Abuse Prevention and Treatment Block Grant (SABG) administered by SAMHSA. There has been extensive variation in the size and use of substate regions across states. In some states, the substate regions have been used more for administrative purposes than for planning purposes. The goal of the project was to provide substate-level estimates showing the geographic distribution of substance use prevalence for regions that states would find useful for planning and reporting purposes. The final substate region boundaries were based on the state's recommendations, assuming that the NSDUH sample sizes were large enough to provide estimates with adequate precision. Most states defined regions in terms of counties or groups of counties, while some defined them in terms of census tracts. Estimates for 384 substate regions were generated using the 2012–2014 NSDUH data. Substate regions used for each Sentinel Community Site (SCS) are defined in the Notes sections of Tables 2a and 2b.[a]

Notes about Data Terms

Estimated percentages are based on a survey-weighted hierarchical Bayes estimation approach, and the 95% prediction (credible) intervals are generated by Markov Carlo techniques.

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% of the time.

Estimated # is the estimated number of persons aged 12 years or older in the civilian, noninstitutionalized population who used the specified drug or are dependent on/abuse a substance; the estimated number of persons using/dependent on a particular drug 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 2012, 2013, and 2014 population counts for persons aged 12 years or older.

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

Use of Illicit Drug Other Than Marijuana is defined as any illicit drug other than marijuana and includes cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

Substance Use Disorder in Past Year: Persons are classified as having a substance use disorder in the past 12 months based on responses to questions that meet the criteria specified in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

Sources

***Data Sources*:** 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 *2012–2014 National Surveys on Drug Use and Health: Results and Detailed Tables.* Rockville, MD. 2014. Available at: http://www.samhsa.gov/data/population-data-nsduh/reports?tab=38; Accessed on August 2016.

***Overview/Methods/Limitations Sources*:** [a]Adapted by the NDEWS Coordinating Center from Substance Abuse and Mental Health Services Administration (SAMHSA), *2012–2014 National Surveys on Drug Use and Health: Guide to Substate Tables and Summary of Small Area Estimation Methodology.* Rockville, MD 2016. Available at: http://www.samhsa.gov/data/sites/default/files/NSDUHsubstateMethodology2014/NSDUHsubstateMethodology2014.html; Accessed August 2016.

Overview and Limitations of Youth Risk Behavioral Survey (YRBS) Data

The Youth Risk Behavior Surveillance System (YRBSS) was established in 1991 by the Centers for Disease Control and Prevention (CDC) to monitor six priority health-risk behaviors that contribute to the leading causes of morbidity and mortality among youth and young adults in the United States.[a] The YRBSS was designed to enable public health professionals, educators, policy makers, and researchers to 1) describe the prevalence of health-risk behaviors among youths, 2) assess trends in health-risk behaviors over time, and 3) evaluate and improve health-related policies and programs.[a] One component of the surveillance system is the biennial school-based Youth Risk Behavior Survey (YRBS). Survey results are based on representative samples of high school students in the nation, States, tribes, and select large urban school district across the country.[a] Weighted survey estimates of alcohol and drug use are presented for the nation and the YRBS state and large urban school district catchment areas that most closely represent each NDEWS SCS.

The national YRBS estimates are representative of all students in grades 9–12 attending **public and private** schools in the 50 states and the District of Columbia. Public schools in the national sample might include charter schools and public alternative, special education, or vocational schools. Private schools in the national sample might include religious and other private schools, but they do not include private alternative, special education, or vocational schools.[a]

The estimates for the NDEWS Sentinel Community Sites (SCS) catchment areas are represented by state and large urban school districts. Only jurisdictions with an overall response rate ≥60% are presented. See Table A for sample size and overall response rate for each SCS. The weighted estimates for state and large urban school districts are representative of all students in grades 9–12 attending **public** schools in each of their respective jurisdictions.[b] State and substate public schools might include charter schools; public alternative, special education, or vocational schools; and schools overseen by the Bureau of Indian Education.[b] In 2015, data were not available for 5 NDEWS sites and YRBS regions did not correspond exactly to the catchment areas of each NDEWS SCS:

- 2015 YRBS survey results were unavailable for the following 5 SCSs: Chicago Metro, Atlanta Metro, Texas, Denver Metro, and King County.
- The Detroit YRBS is used to represent the Wayne County SCS; Detroit does not represent the entire Wayne County catchment area.
- The Southeastern Florida (Miami Area) SCS reporting area includes separate results for each of the 3 counties making up the SCS reporting area.

Thus, results for 9 YRBS reporting areas representing 7 of the 12 NDEWS SCSs are presented in the YRBS Cross-Site Data Presentation. See Figures and Tables for description of the YRBS catchment areas, where available, used to represent each NDEWS SCS. For more information about the YRBSS and 2015 YRBS survey methodology, see *Youth Risk Behavior Surveillance—United States, 2015*.

Table A: Sample Sizes and Overall Response Rates, United States and Selected YRBS Sites, YRBS, 2015

NDEWS SCS	YRBS Site	Student Sample Size (#)	Overall Response Rate (%)
United States	**National Sample**	**15,624**	**60%**
Maine	Maine	9,605	66%
Los Angeles County	Los Angeles	2,336	81%
New York City	New York City	8,522	70%
Philadelphia	Philadelphia	1,717	68%
San Francisco	San Francisco	2,181	82%
Southeastern Florida (Miami Area)	Broward County Miami-Dade County Palm Beach County	1,413 2,728 2,490	72% 78% 71%
Wayne County (Detroit Area)	Detroit	1,699	67%

Limitations. All YRBS data are self-reported, and the extent of underreporting or overreporting of behaviors cannot be determined, although there have been studies that demonstrate that the data are of acceptable quality.

The data apply only to youths who attend school and, therefore, are not representative of all persons in this age group. Nationwide, in 2012, approximately 3% of persons aged 16–17 years were not enrolled in a high-school program and had not completed high school.[c] The NHIS and Youth Risk Behavior Supplement conducted in 1992 demonstrated that out-of-school youths are more likely than youths attending school to engage in the majority of health-risk behaviors.[d]

Local parental permission procedures are not consistent across school-based survey sites. However, in a 2004 study, the CDC demonstrated that the type of parental permission typically does not affect prevalence estimates as long as student response rates remain high.[e]

Notes about Data Terms

Lifetime Prescription Drug Misuse is defined as "*taken prescription drugs (e.g., Oxycontin, Percocet, Vicodin, codeine, Adderall, Ritalin, or Xanax) without a doctor's prescription one or more times during their life"*.

Lifetime Inhalant Use is defined as "*sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high one or more times during their life"*.

Lifetime Synthetic Cannabinoid Use is defined as "*used "synthetic marijuana" (also called "K2," "Spice," "fake weed," "King Kong," "Yucatan Fire," "Skunk," or "Moon Rocks") one or more times during their life"*.

Past Month Binge Alcohol Use is defined as "*having 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"*.

Sources

Data Sources: Adapted by the NDEWS Coordinating Center from data provided by Centers for Disease Control and Prevention (CDC), 1991–2015 High School Youth Risk Behavior Survey Data. Available at http://nccd.cdc.gov/youthonline/. Accessed on [10/11/2016].

***Overview/Methods/Limitations Sources*:** Adapted by the NDEWS Coordinating Center from:

[a]Brener N, Kann L, Shanklin S, et al. Methodology of the Youth Risk Behavior Surveillance System—*2013.* MMWR Recomm Rep; 2013, 62(No. RR-1);1–20. Available at http://www.cdc.gov/mmwr/pdf/rr/rr6201.pdf. Accessed on [4/10/2015].

[b]Kann L, McManus T, Harris WA, et al. Youth Risk Behavior Surveillance—United States, 2015. MMWR Surveill Summ 2016; 65(No. SS-6);1–174. Available at https://www.cdc.gov/mmwr/volumes/65/ss/ss6506a1.htm Accessed on [10/11/2016].

[c]Stark P, Noel AM. Trends in high school dropout and completion rates in the United States: 1972–2012 (NCES 2015-015). US Department of Education. Washington, DC: National Center for Education Statistics; 2015. Available at http://nces.ed.gov/pubs2015/2015015.pdf

[d]CDC. Health risk behaviors among adolescents who do and do not attend school—United States, 1992. MMWR 1994;43(08):129–32.

[e]Eaton DK, Lowry R, Brener ND, et al. Passive versus active parental permission in school-based survey research: does type of permission affect prevalence estimates of self-reported risk behaviors? Evaluation Review 2004;28:564–77.

Overview and Limitations of Treatment Admissions Data from Local Sources

Treatment admissions data provide indicators of the health consequences of drug use and their impact on the treatment system.[a] The data can provide some indication of the types of drugs being used in geographic areas and can show patterns of use over time. However, it is important to note that treatment data only represent use patterns of individuals entering treatment programs and the availability of particular types of treatment in a geographic area will influence the types of drugs being reported. Also, most sites report only on admissions to publicly funded treatment programs; thus, information on individuals entering private treatment programs may not be represented by the data. It should also be noted that each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period.[b]

Treatment admissions data are reported to the NDEWS Coordinating Center by the NDEWS Sentinel Community Epidemiologist for each SCS, when available. Calendar year 2016 data were available for 10 of 12 NDEWS SCSs; data were not available for the Atlanta Metro and Chicago SCSs. See below for site-specific information about the data.

Site-Specific Notes about 2016 Treatment Data and Sources of the Data

- **Atlanta Metro**

  Data Availability: Calendar year 2015 and 2016 data are not available; therefore data for 2012–2014 are presented in the Atlanta Metro SCS Data Tables and Snapshot.

  Catchment Area: Includes residents of: Barrow, Bartow, Butts, Carroll, Cherokee, Clayton, Cobb, Coweta, Dawson, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Haralson, Heard, Henry, Jasper, Lamar, Meriwether, Morgan, Newton, Paulding, Pickens, Pike, Rockdale, Spalding, and Walton counties.

  Notes & Definitions:

  Admissions: includes admissions to publicly-funded programs.

  Marijuana/Synthetic Cannabinoids: the data do not differentiate between marijuana and synthetic cannabinoids.

  Source: Data provided to the Atlanta Metro NDEWS SCE by the Georgia Department of Human Resources.

- **Chicago Metro**

  Data Availability: Calendar Year (CY) data are not available for the Chicago SCS so fiscal year data are presented. Data for 2016 were also not available at this time so FY2012-2015 are presented.

  Catchment Area: Data were only available for residents of Chicago, not for the entire Chicago MSA.

  Notes & Definitions:

  Admissions: Includes admissions to publicly funded programs. Each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period.

  Declines in overall treatment admissions are due to several factors, including budget cuts and changes in providers and payers that affect the reporting of these data (e.g., the expansion of Medicaid under the ACA to cover some forms of drug treatment).

  Prescription Opioids: Includes oxycodone/hydrocodone, nonprescription methadone, and other opiates.

  Source: Data provided to the NDEWS Chicago SCE by the Illinois Department of Human Services, Division of Alcoholism and Substance Abuse (DASA).

❖ **Denver Metro**

Catchment Area: Includes admissions data for residents of Adams, Arapahoe, Boulder, Broomfield, Clear Creek, Denver, Douglas, Gilpin, and Jefferson counties.

Notes & Definitions:
Admissions: Includes admissions (excluding detox and DUI) to all Colorado alcohol and drug treatment agencies licensed by the Colorado Department of Human Services, Office of Behavioral Health (OBH). Each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period. Treatment data presented in this year's report differ from data presented in previous SCS reports due to a change in access to treatment data and/or a change in query search terms.
Prescription Opioids: Includes nonprescription methadone and other opiates and synthetic opiates.
MDMA: Coded as "club drugs," which are mostly MDMA.
Other Drugs/Unknown: Includes inhalants, over-the-counter, and other drugs not specified.

Source: Data provided to the Denver Metro NDEWS SCE by the Colorado Department of Human Services, Office of Behavioral Health (OBH), Drug/Alcohol Coordinated Data System (DACODS).

❖ **King County (Seattle Area)**

Notes & Definitions:

Data Availability: 2016 figures are estimates based on doubling preliminary numbers reported for July-December 2016.
Treatment authorizations: Includes admissions to outpatient, opioid treatment programs and residential modalities of care in publicly funded programs. Each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period.
Prescription Opioids: Includes hydromorphine, other opiates and synthetics, and oxycodone.

Source: Data provided to the King County (Seattle Area) NDEWS SCE by the Washington State Department of Social and Health Services (DSHS) and King County Behavioral Health and Recovery Division for July-Dec 2016.

❖ **Los Angeles County**

Notes & Definitions:
Admissions: Includes all admissions to programs receiving any public funds or to programs providing narcotic replacement therapy, as reported to the California Outcomes Monitoring System (CalOMS). An admission is counted only after all screening, intake, and assessment processes have been completed, and all of the following have occurred: 1) the provider has determined that the client meets the program admission criteria; 2) if applicable, the client has given consent for treatment/recovery services; 3) an individual recovery or treatment plan has been started; 4) a client file has been opened; 5) the client has received his/her first direct recovery service in the facility and is expected to continue participating in program activities; and 6) in methadone programs, the client has received his/her first dose. Each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period.
Prescription Opioids: Includes drug categories labeled "oxycodone/OxyContin" and "other opiates or synthetics."

Source: Data provided to the Los Angeles NDEWS SCE by the California Department of Health Care Services, Mental Health Services Division, Office of Applied Research and Analysis, CalOMS (2013–2016 data) and the California Department of Drug and Alcohol Programs (2012 data).

❖ **Maine**

Notes & Definitions:
Admissions*:* includes all admissions to programs receiving state funding.

Source: Data provided to the Maine NDEWS SCE by the Maine Office of Substance Abuse.

❖ **New York City**

Notes & Definitions:

Non-Crisis Admissions: Includes non-crisis admissions to outpatient, inpatient, residential, and methadone maintenance treatment programs licensed in the state.

Crisis Admissions: Includes detox admissions to all licensed treatment programs in the state

Each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period.

Prescription Opioids: Includes nonprescription methadone, buprenorphine, other synthetic opiates, and OxyContin.

Benzodiazepines: Includes benzodiazepines, alprazolam, and rohypnol.

Synthetic Stimulants: Includes other stimulants and a newly created category, synthetic stimulants (created in 2014).

Source: Data provided to the New York City NDEWS SCE by the New York State Office of Alcoholism and Substance Abuse Services (OASAS), Client Data System accessed May 24, 2017 from Local Governmental Unit (LGU) Inquiry Reports.

❖ **Philadelphia**

Notes & Definitions:

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 (DBHIDS). Each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period.

2015 and 2016 Data: Pennsylvania expanded Medicaid coverage under the Affordable Care Act and more than 100,000 additional individuals became eligible in 2015. As individuals who historically have been uninsured become insured, the number of individuals served through the BHSI (Behavioral Health Special Initiative) program has declined; thus treatment admissions reported by BHSI declined from 8,363 in 2014 to 3,507 in 2016. However, similar patterns of substance use were observed among those seeking treatment in 2014 and in 2015.

Beginning in FY2015, 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.

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.

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

❖ **San Francisco County**

Notes & Definitions

Admissions: Treatment episodes include clients admitted in prior years who are still receiving services in a particular year (e.g., methadone maintenance clients). Each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period.

Source: Data provided to the San Francisco NDEWS SCE by the San Francisco Department of Public Health (SFDPH), Community Behavioral Health Services Division.

❖ **Southeastern Florida (Miami Area)**

Catchment Area: Includes the three counties of the Miami MSA—Broward, Miami-Dade, and Palm Beach counties.

Notes & Definitions:

Admissions: Includes admissions of all clients in programs receiving any public funding located in Miami-Dade, Broward and Palm Beach counties as provided by the Florida Department of Children and Families Office of Substance Abuse and Mental Health. Each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period.

2012–2013: Data for Palm Beach County is not available for 2012–2013, therefore, data for 2012–2013 only includes data for Broward and Miami-Dade counties.

Source: Data provided to the Southeastern Florida NDEWS SCE by the Florida Department of Children and Families, Office of Substance Abuse and Mental Health.

❖ **Texas**

Notes & Definitions:

Admissions: Includes all admissions reported to the Clinical Management for Behavioral Health Services (CMBHS) of the Texas Health and Human Services Commission, Behavioral Health Services (HHSC BHS). Each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period.

Methamphetamine: Includes amphetamines and methamphetamine.

Please Note: Treatment data presented in this year's report differ from data presented in previous NDEWS reports because the treatment data for Texas have been revised.

Source: Data provided to the Texas NDEWS SCE by the Texas Health and Human Services Commission, Behavioral Health Services (HHSC BHS).

❖ **Wayne County (Detroit Area)**

Notes & Definitions:

Admissions: Admissions whose treatment was covered by Medicaid or Block Grant funds; excludes admissions covered by private insurance, treatment paid for in cash, and admissions funded by the Michigan Department of Corrections. Each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period.

Synthetic Stimulants: Includes amphetamines and synthetic stimulants; data suppressed to protect confidentiality.

Source: Data provided to the Wayne County (Detroit Area) NDEWS SCE by the Michigan Department of Health and Human Services, Bureau of Behavioral Health and Developmental Disabilities, Division of Quality Management and Planning, Performance Measurement and Evaluation Section.

Sources

Data Sources: Adapted by the NDEWS Coordinating Center from data provided by NDEWS SCEs listed above.

***Overview/Methods/Limitations Sources*:** Adapted by the NDEWS Coordinating Center from:

[a]National Institute on Drug Abuse; National Institutes of Health; U.S. Department of Health and Human Services, *Assessing Drug Abuse Within and Across Communities, 2nd Edition*. 2006. Available at: https://www.drugabuse.gov/publications/assessing-drug-abuse-within-across-communities

[b]National Institute on Drug Abuse; National Institutes of Health; U.S. Department of Health and Human Services, *Epidemiologic Trends in Drug Abuse, Proceedings of the Community Epidemiology Work Group, Highlights and Executive Summary, June 2014*. Available at: https://www.drugabuse.gov/sites/default/files/cewgjune2014.pdf

Overview and Limitations of CDC WONDER Multiple Cause of Death Data

The multiple cause-of-death mortality files from the National Vital Statistics System (NVSS) (queried from the CDC WONDER Online Database) were used to identify drug overdose (poisoning) deaths. Mortality data are based on information from all death certificates for U.S. residents filed in the 50 states and the District of Columbia. Deaths of nonresidents and fetal deaths are excluded. The death certificates are either 1) coded by the states or provided to the CDC's National Center for Health Statistics (NCHS) through the Vital Statistics Cooperative Program; or 2) coded by NCHS from copies of the original death certificates provided to NCHS by the respective state registration office. Each death certificate contains a single underlying cause of death, up to 20 additional multiple causes, and demographic data.[1] (Click here for more information about CDC WONDER Multiple Cause of Death data)

The drug-specific poisoning deaths presented in the National Drug Early Warning System (NDEWS) reports are deaths that have been certified "as due to acute exposure to a drug, either alone or in combination with other drugs or other substances" (Goldberger, Maxwell, Campbell, & Wilford, p. 234)[2] and are identified by using the World Health Organization's (WHO's) *International classification of diseases, 10th Revision* (ICD-10)[3] **underlying cause-of-death** codes X40–X44, X60–X64, X85, and Y10–Y14. Drug-specific poisoning deaths are the subset of drug overdose (poisoning) deaths with drug-specific **multiple cause-of-death** codes (i.e., T-codes). For the definitions of specific ICD-10 codes, see the section titled ***Notes About Data Terms***. Each death certificate may contain up to 20 causes of death indicated in the multiple cause-of-death (MCOD) field. Thus, the total count across drugs may exceed the actual number of dead persons in the selected population. Some deaths involve more than one drug; these deaths are included in the rates for each drug category.

As stated in its report, *Consensus Recommendations for National and State Poisoning Surveillance,* the Safe States Injury Surveillance Workgroup on Poisoning (ISW7)[a] identified the limitations of using mortality data from NVSS to measure drug poisoning deaths:

> Several factors related to death investigation and reporting may affect measurement of death rates involving specific drugs. At autopsy, toxicological lab tests may be performed to determine the type of legal and illegal drugs present. The substances tested for and circumstance in which tests are performed vary by jurisdiction. Increased attention to fatal poisonings associated with prescription pain medication may have led to changes in reporting practices over time such as increasing the level of substance specific detail included on the death certificates. Substance-

[a] The Safe States Alliance, a nongovernmental membership association, convened the Injury Surveillance Workgroup on Poisoning (ISW7) to improve the surveillance of fatal and nonfatal poisonings. Representation on the ISW7 included individuals from the National Center for Injury Prevention and Control (NCIPC), the National Center for Health Statistics (NCHS) at the Centers for Disease Control and Prevention (CDC), the Substance Abuse and Mental Health Services Administration (SAMHSA), the Council of State and Territorial Epidemiologists (CSTE), the American Association of Poison Control Centers (AAPCC), the Association of State and Territorial Health Officials (ASTHO), the Society for the Advancement of Injury Research (SAVIR), state health departments, academic centers, the occupational health research community, and private research organizations.

specific death rates are more susceptible to measurement error related to these factors than the overall poisoning death rate. (The Safe States Alliance, p. 63)[4]

Warner et al.[5] found that there was considerable variation in certifying the manner of death and the percentage of drug intoxication deaths with specific drugs identified on death certificates and that these variations across states can lead to misleading cross-state comparisons. Based on 2008–2010 data, Warner et al.[5] found that the percentage of deaths with an "undetermined" manner of death ranged from 1% to 85%. Thus, comparing state-specific rates of *unintentional* or *suicidal* drug intoxication deaths would be problematic because the "magnitude of the problem will be underestimated in States with high percentages of death in which the manner is *undetermined*."[5] The drug overdose (poisoning) deaths presented in the NDEWS tables include the various manner of death categories: unintentional (X40–X44); suicide (X60–X64); homicide (X85); or undetermined (Y10–Y14).

Based on 2008–2010 data, Warner et al.[5] found that the percentage of drug overdose (poisoning) deaths with specific drugs mentioned varied considerably by state and type of death investigation system. The authors found that in some cases, deaths without a specific drug mentioned on the death certificate may indicate a death involving multiple drug toxicity. The **Percent of Drug Overdose (Poisoning) Deaths with Drug(s) Specified** statistic is calculated for each NDEWS SCS catchment area so the reader can assess the thoroughness of the data for the catchment area. This statistic is defined as drug poisoning deaths with at least one ICD-10 multiple cause of death in the range T36–T50.8.

Notes About Data Terms

Underlying Cause of Death (UCOD): The CDC follows the WHO's definition of *underlying cause of death*: "[T]he disease or injury which initiated the train of events leading directly to death, or the circumstances of the accident or violence which produced the fatal injury." Underlying cause of death is selected from the conditions entered by the physician on the cause-of-death section of the death certificate. When more than one cause or condition is entered by the physician, the underlying cause is determined by the sequence of condition on the certificate, provisions of the ICD, and associated selection rules and modifications. (Click here for more information about CDC WONDER Multiple Cause of Death data)

Specific ICD-10 codes for *underlying cause of death*[3] (Click here to see full list of WHO ICD-10 codes)

X40: Accidental poisoning by and exposure to nonopioid analgesics, antipyretics, and antirheumatics.

X41: Accidental poisoning by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism, and psychotropic drugs, not elsewhere classified.

X42: Accidental poisoning by and exposure to narcotics and psychodysleptics [hallucinogens], not elsewhere classified.

X43: Accidental poisoning by and exposure to other drugs acting on the autonomic nervous system.

X44: Accidental poisoning by and exposure to other and unspecified drugs, medicaments, and biological substances.

X60: Intentional self-poisoning (suicide) by and exposure to nonopioid analgesics, antipyretics, and antirheumatics.

X61: Intentional self-poisoning (suicide) by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism, and psychotropic drugs, not elsewhere classified.

X62: Intentional self-poisoning (suicide) by, and exposure to, narcotics and psychodysleptics [hallucinogens], not elsewhere classified.

X63: Intentional self-poisoning (suicide) by and exposure to other drugs acting on the autonomic nervous system.

X64: Intentional self-poisoning (suicide) by and exposure to other and unspecified drugs, medicaments, and biological substances.

X85: Assault (homicide) by drugs, medicaments, and biological substances.

Y10: Poisoning by and exposure to nonopioid analgesics, antipyretics, and antirheumatics, undetermined intent.

Y11: Poisoning by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism, and psychotropic drugs, not elsewhere classified, undetermined intent.

Y12: Poisoning by and exposure to narcotics and psychodysleptics [hallucinogens], not elsewhere classified, undetermined intent.

Y13: Poisoning by and exposure to other drugs acting on the autonomic nervous system, undetermined intent.

Y14: Poisoning by and exposure to other and unspecified drugs, medicaments, and biological substances, undetermined intent.

Multiple Cause of Death: Each death certificate may contain up to 20 *multiple causes of death*. Thus, the total count by "any mention" of cause in the *multiple cause of death* field may exceed the actual number of dead persons in the selected population. Some deaths involve more than one drug; these deaths are included in the rates for each drug category. (Click here for more information about CDC WONDER Multiple Cause of Death data)

Drug-specific ICD-10 T-codes for *multiple cause of death*[3]
(Click here to see full list of WHO ICD-10 codes)

Any Opioids (T40.0–T40.4 or T40.6) [T40.0 (Opium) and T40.6 (Other and Unspecified Narcotics)]

Heroin (T40.1)

Methadone (T40.3)

Natural Opioid Analgesics (T40.2)

Please note the ICD-10 refers to T40.2 as *Other Opioids*; CDC has revised the wording for clarity: http://www.cdc.gov/drugoverdose/data/analysis.html

Synthetic Opioid Analgesics (T40.4)

Please note the ICD-10 refers to T40.4 as *Other Synthetic Narcotics*; CDC has revised the wording for clarity: http://www.cdc.gov/drugoverdose/data/analysis.html

Cocaine (T40.5)

Psychostimulants with Abuse Potential [excludes cocaine] (T43.6)

Cannabis (derivatives) (T40.7)

Benzodiazepines (T42.4)

Percentage of Drug Overdose (Poisoning) Deaths with Drug(s) Specified: Percentage of drug overdose (poisoning) deaths that mention the type of drug(s) involved, by catchment area. This statistic is defined as drug poisoning deaths with at least one ICD-10 multiple cause of death in the range T36–T50.8.

Population (used to calculate rates): The population estimates used to calculate the crude rates are bridged-race estimates based on Bureau of the Census estimates of total U.S. national, state, and county resident populations. The year 2010 populations are April 1 modified census counts. The year 2011–2015 population estimates are bridged-race postcensal estimates of the July 1 resident population. Click here for more information about CDC WONDER Multiple Cause of Death data)

Age-Adjusted Rate: Age-adjusted death rates are weighted averages of the age-specific death rates, where the weights represent a fixed population by age. They are used to compare relative mortality risk among groups and over time. An age-adjusted rate represents the rate that would have existed had the age-specific rates of the particular year prevailed in a population whose age distribution was the same as that of the fixed population. Age-adjusted rates should be viewed as relative indexes rather than as direct or actual measures of mortality risk. The rate is adjusted based on the age distribution of a standard population allowing for comparison of rates across different sites. The year "2000 U.S. standard" is the default population selection for the calculation of age-adjusted rates. (Click here for more information about CDC WONDER Multiple Cause of Death data)

Suppressed Data: As of May 23, 2011, all subnational data representing 0–9 deaths are suppressed (privacy policy). Corresponding subnational denominator population figures are also suppressed when the population represents fewer than 10 persons. (Click here for more information about CDC WONDER Multiple Cause of Death data)

Unreliable Data: Estimates based on fewer than 20 deaths are considered unreliable and are not displayed. (Click here for more information about CDC WONDER Multiple Cause of Death data

Sources

Data Sources: Adapted by the NDEWS Coordinating Center from data taken from the Centers for Disease Control and Prevention, National Center for Health Statistics, *Multiple cause of death 1999–2015*, available on the CDC WONDER Online Database, released December 2016. Data compiled in the *Multiple cause of death 1999–2015* were provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Retrieved between February 2017 - June 2017, from http://wonder.cdc.gov/mcd-icd10.html

***Overview/Methods/Limitations Sources*:** Adapted by the NDEWS Coordinating Center from:

[1]Center from Centers for Disease Control and Prevention, National Center for Health Statistics. (2015). *Multiple cause of death 1999–2014*. Retrieved December 16, 2015, from http://wonder.cdc.gov/wonder/help/mcd.html

[2]Goldberger, B. A., Maxwell, J. C., Campbell, A., & Wilford, B. B. (2013). Uniform standards and case definitions for classifying opioid-related deaths: Recommendations by a SAMHSA consensus panel. *Journal of Addictive Diseases*, *32*, 231–243.

[3]World Health Organization (WHO). (2016). *International statistical classification of diseases and related health problems 10th Revision*. Retrieved March 14, 2016, from http://apps.who.int/classifications/icd10/browse/2016/en

[4]The Safe States Alliance. (2012). *Consensus recommendations for national and state poisoning surveillance*. Atlanta, GA: Injury Surveillance Workgroup 7.

[5]Warner, M., Paulozzi, L. J., Nolte, K. B., Davis, G. G., & Nelson, L.S. (2013). State variation in certifying manner of death and drugs involved in drug intoxication deaths. *Acad Forensic Pathol,* 3(2),231–237.

Overview and Limitations of National Forensic Laboratory Information System (NFLIS) Data

The Drug Enforcement Administration's (DEA) National Forensic Laboratory Information System (NFLIS) systematically collects results from drug analyses conducted by State and local forensic laboratories. These laboratories analyze controlled and noncontrolled substances secured in law enforcement operations across the United States. The NFLIS participation rate, defined as the percentage of the national drug caseload represented by laboratories that have joined NFLIS, is currently over 98%. NFLIS includes 50 State systems and 101 local or municipal laboratories/laboratory systems, representing a total of 277 individual laboratories. The NFLIS database also includes Federal data from DEA and U.S. Customs and Border Protection (CBP) laboratories.[a]

Limitations. NFLIS includes results from completed analyses only. Drug evidence secured by law enforcement but not analyzed by laboratories is not included in the NFLIS database.

State and local policies related to the enforcement and prosecution of specific drugs may affect drug evidence submissions to laboratories for analysis.

Laboratory policies and procedures for handling drug evidence vary. Some laboratories analyze all evidence submitted to them, whereas others analyze only selected case items. Many laboratories do not analyze drug evidence if the criminal case was dismissed from court or if no defendant could be linked to the case.[a]

Notes about Reporting Labs

Reporting anomalies were identified in several NDEWS SCSs in 2016 and are described below:

- **Denver Metro Area:** The Aurora Police Department laboratory's last reported data are from July 2014, following the migration to a new laboratory information management system (LIMS).
- **San Francisco County:** The San Francisco Police Department (SFPD) laboratory has been closed since 2010; however, beginning in January 2012, the Alameda Sheriff Department laboratory began reporting their SFPD cases to NFLIS. All available data from the SFPD are included in the counts. Please note that previously published 2014 and 2015 San Francisco County NDEWS reports did not include SFPD cases analyzed by the Alameda Sheriff Department laboratory. The dramatic increases in this year's 2016 data, compared to 2014 and 2015, are a result of the inclusion of SFPD data analyzed by the Alameda laboratory.
- **Texas:** The Austin Police Department laboratory resumed reporting for 2016. Dallas Institute of Forensic Science is a new lab reporting all 2016 data to date.
- **Wayne County (Detroit Area):** The Michigan State Police began reporting data from a lab in Detroit starting in March 2016.

Notes about Data Terms

SCS 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. This database allows for the reporting of up to three drug reports per item submitted for analysis.

For each site, the NFLIS drug reports are based on submissions of items seized in the site's catchment area. The catchment area for each site is described in the Notes section below each table. The time frame is January through December 2016. Data were retrieved from the NFLIS Data Query System (DQS) on May 28, 2017. Please note that

the data are subject to change; data queried on different dates may reflect differences in the time of data analyses and reporting.

National Estimates in Table 5a of the Cross-Site Data Presentation of NFLIS data: The top 10 most frequently identified drugs in the United States are included in Table 5a; this list comes from the DEA's *National Forensic Laboratory Information System (NFLIS) Annual 2016 Report* and is based on national estimates of drug reports using the NEAR (National Estimates Based on All Reports) approach. The NEAR estimates are based on cases and items submitted to laboratories from January through December 2016 that were analyzed by March 31, 2017. A national sampling frame of all State and local forensic laboratories that routinely perform drug chemistry analyses has been developed based on laboratory-specific information, such as annual caseloads, ascertained from a 1998 survey (updated in 2002, 2004, 2008, and 2013).[a] A probability proportional to size (PPS) sample was drawn on the basis of annual cases analyzed per laboratory resulting in a NFLIS national sample of 29 State laboratory systems and 31 local or municipal laboratories, and a total of 168 individual laboratories.[a] Over the years, the number of non-sampled laboratories reporting to NFLIS has increased, so the DEA sought ways to use the data submitted by these "volunteer" laboratories. Since 2011, data from the "volunteer" laboratories have been included and assigned a weight of one. Estimates are more precise, especially for recent years, due to this inclusion of a large number of volunteer laboratories. This precision allows for more power to detect trends and fewer suppressed estimates."[a]

Since 2011, for each drug item (exhibit) analyzed by a laboratory in the NFLIS program, up to three drugs were reported to NFLIS and counted in the estimation process. A further enhancement to account for multiple drugs per item was introduced in 2017 for the 2016 Annual Report. All drugs reported in an item are now counted in the estimation process. This change ensures that the estimates will take into consideration all reported substances including emerging drugs of interest that may typically be reported as the fourth or fifth drug within an item. This change was implemented in the 2016 data processing cycle and for future years.[a] (See *National Forensic Laboratory Information System (NFLIS): Statistical Methodology* report for more information about how the national estimates are derived).

NPS Categories: Five new psychoactive substance (NPS) drug categories and Fentanyls are of current interest to the NDEWS Project because of the recent increase in their numbers, types, and availability. The five NPS categories are: synthetic cannabinoids, synthetic cathinones, piperazines, tryptamines, and 2C Phenethylamines.

Other Fentanyls are substances that are structurally related to fentanyl (e.g., acetylfentanyl and butyryl fentanyl).

A complete list of drugs included in the Other Fentanyls category that were reported to NFLIS during the January to December 2016 timeframe includes:

3-METHYLFENTANYL
3-METHYLTHIOFENTANYL
4-METHOXY-BUTYRYL FENTANYL
ACETYL-ALPHA-METHYLFENTANYL
ACETYLFENTANYL
ACRYL-ALPHA-METHYLFENTANYL
ACRYLFENTANYL
ALFENTANIL
ALPHA-METHYLFENTANYL
ALPHA-METHYLTHIOFENTANYL
BENZYLFENTANYL
BETA-HYDROXY-3-METHYLFENTANYL

BETA-HYDROXYFENTANYL
Beta-HYDROXYTHIOFENTANYL
BUTYRYL FENTANYL
CARFENTANIL
CIS-3-METHYLFENTANYL
DESPROPIONYL FENTANYL
FLUOROFENTANYL
FLUOROISOBUTYRYLFENTANYL
FURANYL FENTANYL
LOFENTANIL
ORTHO-FLUOROFENTANYL
P-FLUOROBUTYRYL FENTANYL (P-FBF)
P-FLUOROFENTANYL
P-FLUOROISOBUTYRYL FENTANYL
REMIFENTANIL
SUFENTANIL
THENYLFENTANYL
THIOFENTANYL
TRANS-3-METHYLFENTANYL
VALERYL FENTANYL

Sources

***Data Sources*:** SCS Drug Report data adapted by the NDEWS Coordinating Center from data provided by the U.S. Drug Enforcement Administration (DEA), Diversion Control Division, Drug and Chemical Evaluation Section, Data Analysis Unit. Data were retrieved from NFLIS Data Query System (DQS) May 28, 2017.

National estimates adapted by the NDEWS Coordinating Center from data provided by the U.S. Drug Enforcement Administration (DEA), Diversion Control Division. (2017) *National Forensic Laboratory Information System: 2016 Annual Report.* Springfield, VA: U.S. Drug Enforcement Administration. Available at: https://www.nflis.deadiversion.usdoj.gov/DesktopModules/ReportDownloads/Reports/NFLIS2016AR.pdf

***Overview/Methods/Limitations Sources*:** [a]Adapted by the NDEWS Coordinating Center from U.S. Drug Enforcement Administration (DEA), Diversion Control Division. (2017) *National Forensic Laboratory Information System: 2016 Annual Report.* Springfield, VA: U.S. Drug Enforcement Administration. Available at: https://www.nflis.deadiversion.usdoj.gov/DesktopModules/ReportDownloads/Reports/NFLIS2016AR.pdf

U.S. Drug Enforcement Administration (DEA), Diversion Control Division. (2017) *National Forensic Laboratory Information System: Statistical Methodology Revised September 2017.* Springfield, VA: U.S. Drug Enforcement Administration. Available at: https://www.nflis.deadiversion.usdoj.gov/DesktopModules/ReportDownloads/Reports/NFLIS-2017-StatMethodology.pdf