Chicago Metro
Sentinel Community Site (SCS)
Drug Use Patterns and Trends, 2016

October 2016

NDEWS Coordinating Center

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National Drug Early Warning System (NDEWS) Sentinel Community Site (SCS) Drug Use Patterns and Trends, 2016

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.
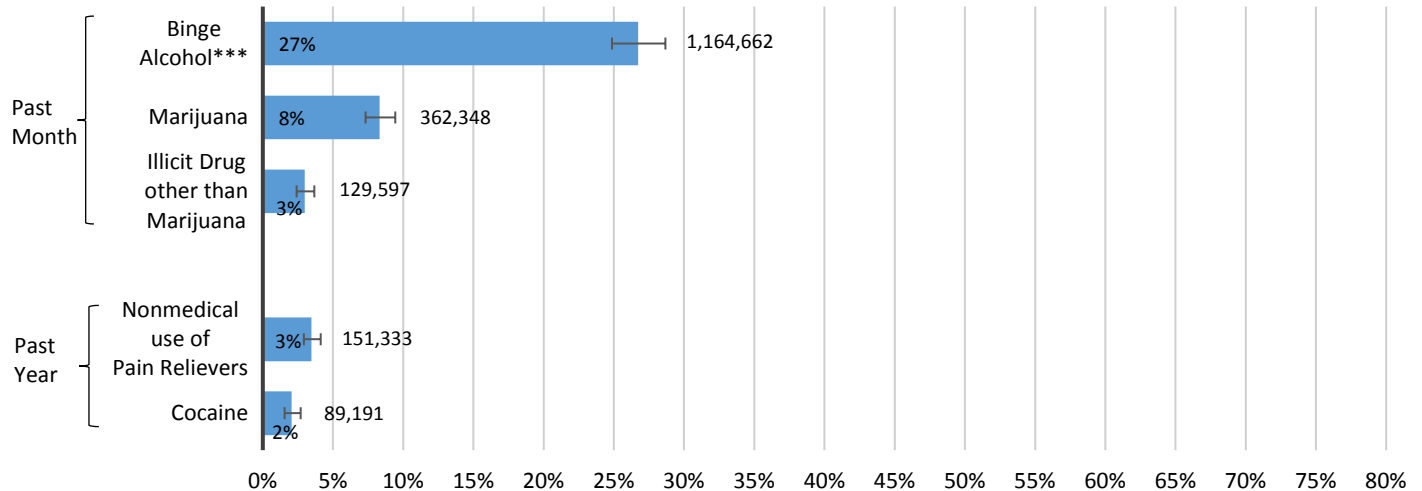
Chicago Metro SCS Snapshot, 2016

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**

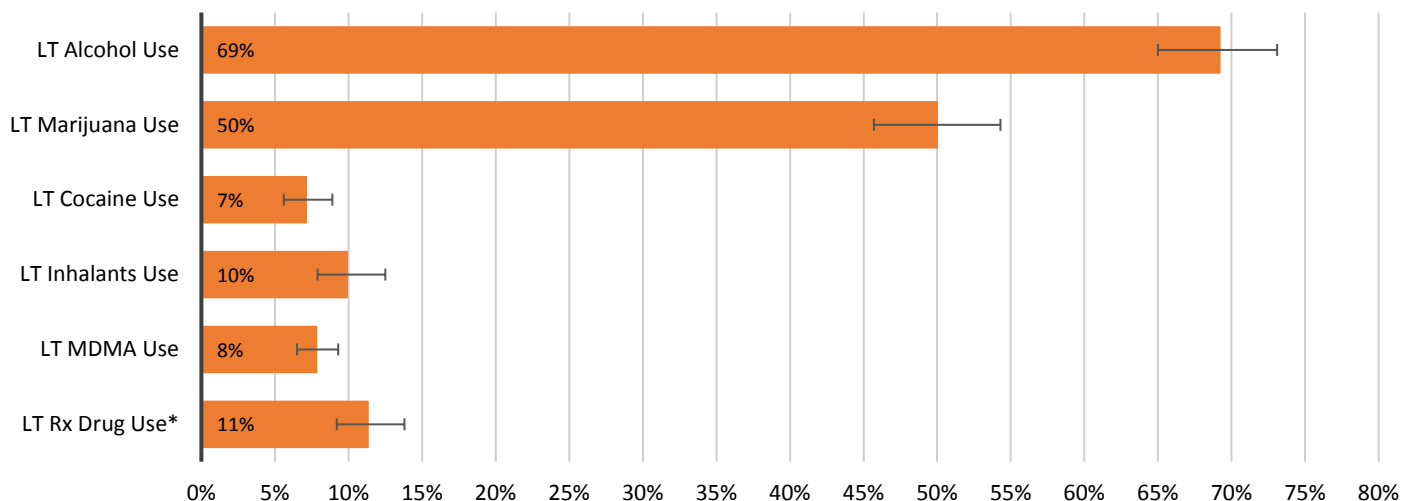| Category		Substance	Percent	Estimated Number
Past Month		Binge Alcohol***	27%	1,164,662
		Marijuana	8%	362,348
		Illicit Drug other than Marijuana	3%	129,597
Past Year		Nonmedical use of Pain Relievers	3%	151,333
		Cocaine	2%	89,191

*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

Substance	Percent
LT Alcohol Use	69%
LT Marijuana Use	50%
LT Cocaine Use	7%
LT Inhalants Use	10%
LT MDMA Use	8%
LT Rx Drug Use*	11%

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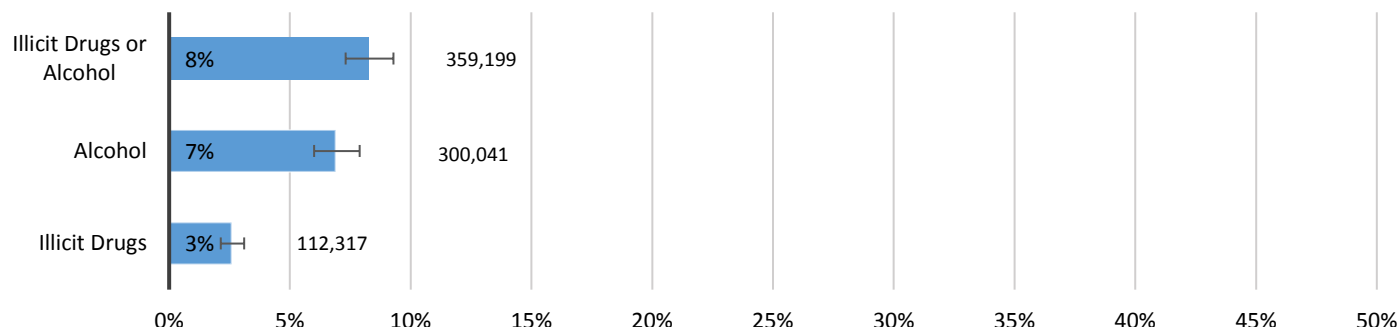
Source: Adapted by the NDEWS Coordinating Center from data provided by CDC, 2001-2013 high school YRBS data.

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***

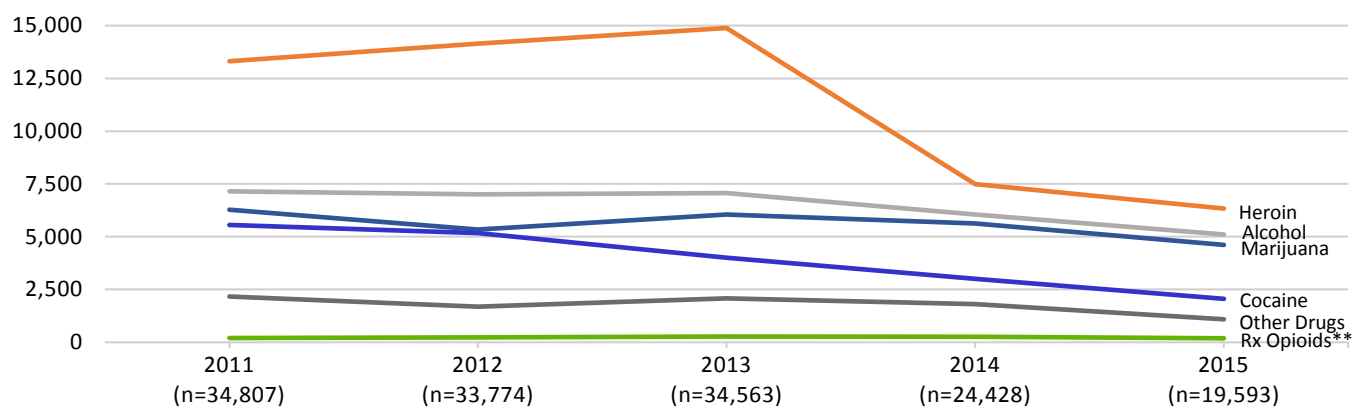| Category	Percent	Estimated Number
Illicit Drugs or Alcohol	8%	359,199
Alcohol	7%	300,041
Illicit Drugs	3%	112,317

*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.
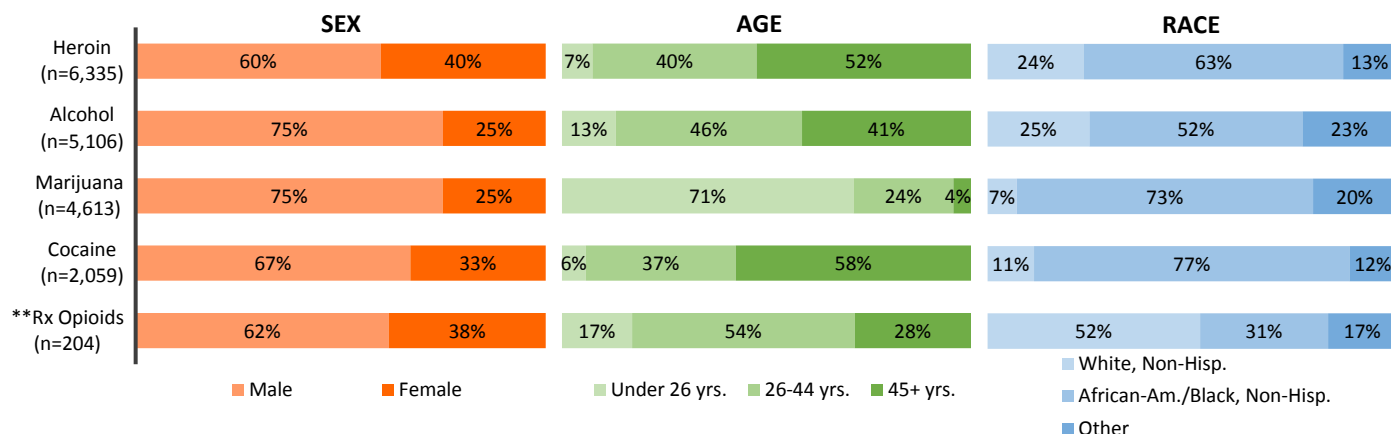
Treatment Admissions Data from Local Sources

Trends in Treatment Admissions*, by Primary Substance of Abuse, Chicago^, Fiscal Years 2011-2015^Δ
(n = Number of Treatment Admissions)

Lines: Heroin, Alcohol, Marijuana, Cocaine, Other Drugs, Rx Opioids**

2011 (n=34,807) · 2012 (n=33,774) · 2013 (n=34,563) · 2014 (n=24,428) · 2015 (n=19,593)

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

Substance	SEX Male	SEX Female	AGE Under 26 yrs.	AGE 26-44 yrs.	AGE 45+ yrs.	RACE White, Non-Hisp.	RACE African-Am./Black, Non-Hisp.	RACE Other
Heroin (n=6,335)	60%	40%	7%	40%	52%	24%	63%	13%
Alcohol (n=5,106)	75%	25%	13%	46%	41%	25%	52%	23%
Marijuana (n=4,613)	75%	25%	71%	24%	4%	7%	73%	20%
Cocaine (n=2,059)	67%	33%	6%	37%	58%	11%	77%	12%
**Rx Opioids (n=204)	62%	38%	17%	54%	28%	52%	31%	17%

Legend: ■ Male ■ Female ■ Under 26 yrs. ■ 26-44 yrs. ■ 45+ yrs. ■ White, Non-Hisp. ■ African-Am./Black, Non-Hisp. ■ Other

*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. ^Δ2011-2015: Note that all treatment admissions data is based on fiscal year data because calendar year data was not available. **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 Alcohol and Substance Use (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), 2010–2014
(Number of Deaths and Percent of Drug Overdose (Poisoning) Deaths with Drug(s) Specified[v])
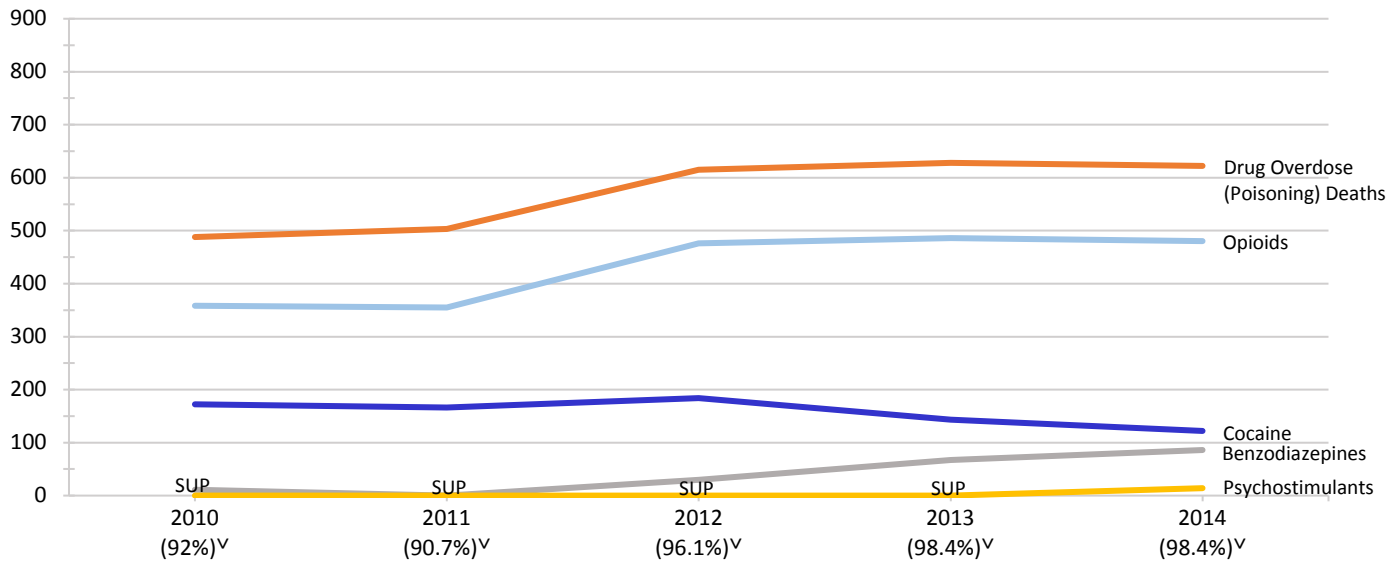
Trends in Opioid Overdose (Poisoning) Deaths*, by Opioid, Cook County (Chicago Area), 2010–2014
(Number of Deaths, by Drug** and Percent of Drug Overdose (Poisoning) Deaths with Drug(s) Specified[v])
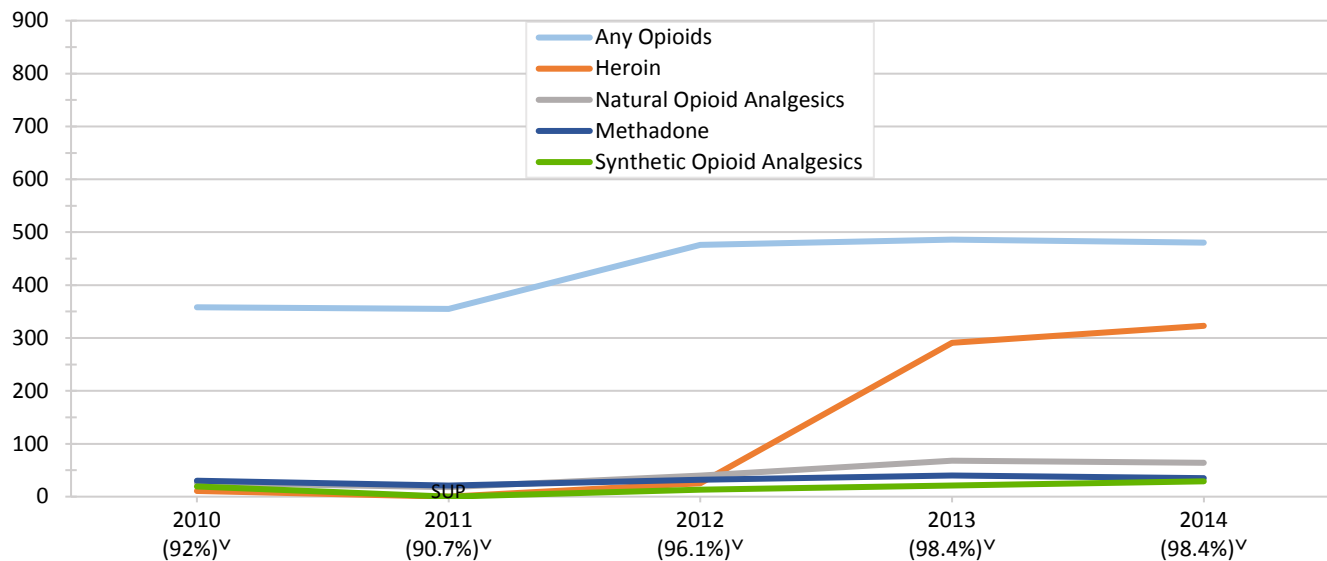
*Drug Overdose (Poisoning) Deaths: Defined as deaths with ICD-10 underlying cause-of-death (UCOD) codes: X40-X44, X60-X64, X85, and Y10-Y14. **Drug Overdose (Poisoning) Deaths, by Drug: Drug overdose (poisoning) deaths with ICD-10 multiple cause-of-death (MCOD) T-codes: Benzodiazepines (T42.4); Cocaine (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). [v]Percent 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 1999-2014, available on the CDC WONDER Online Database, released 2015. Data compiled in the Multiple cause of death 1999-2014 were provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Retrieved between December 2015 - May 2016, 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 2015
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	**59,990**	**100%**
Top 10 Drug Reports		
Cannabis	30,090	50.2%
Heroin	11,667	19.4%
Cocaine	9,957	16.6%
Alprazolam	1,454	2.4%
Hydrocodone	650	1.1%
Methamphetamine	620	1.0%
3,4-methylenedioxymethamphetamine (MDMA)	601	1.0%
Phencyclidine	585	1.0%
Amphetamine	281	0.5%
Clonidine	277	0.5%
Top 10 Total	**56,182**	**93.7%**
Selected Drugs/Drug Categories		
Opioids	13,245	22.1%
Fentanyl	37	0.1%
Other Fentanyls***	7	<0.1%
Synthetic Cathinones	349	0.6%
Synthetic Cannabinoids	336	0.6%
Piperazines	297	0.5%
Tryptamines	63	0.1%
2C Phenethylamines	57	<0.1%

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

Synthetic Cathinones
(n=349)

Ethylone (55%)
alpha-PVP (29%)
MDPV (5%)
Methylone (3%)
alpha-PBP (3%)
Pentylone (3%)
Other (3%)

Synthetic Cannabinoids
(n=336)

XLR-11 (38%)
AB-CHIMINACA (17%)
AB-FUBINACA (15%)
AB-PINACA (7%)
FUB-PB-22 (3%)
ADB-CHIMINACA (3%)
Other (16%)

Piperazines
(n=297)

TFMPP (68%)
BZP (32%)

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

^Chicago MSA: Includes Cook, DeKalb, DuPage, Grundy, Kane, Kendall, Lake, McHenry, Will, Jasper, Newton, & Porter Counties in IL; Lake County, IN; and Kenosha County, WI.

**Percentages may not sum to 100 due to rounding. ***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 full list of Other Fentanyls that were reported to NFLIS during the January to December 2015 timeframe. See *Sentinel Community Site (SCS) Data Tables* and *Overview & Limitations* for more information regarding the data.

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 18, 2016.

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:

◊ SCS Highlights
◊ Changes in Legislation
◊ Substance Use Patterns and Trends
◊ Local Research Highlights (if available)
◊ Infectious Diseases Related to Substance Use (if available)

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, 2016: SCE Narrative

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University of Illinois at Chicago

Highlights

- **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.

- **Hydrocodone** was the most commonly used prescription opioid in the Chicago MSA.

- Among new and notable drugs, **synthetic cannabinoids** remained common in NFLIS reports with 17 varieties documented. Both piperazine and tryptamine reports in NFLIS experienced substantial declines.

- **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 the decline continued in 2014 and leveled in the first half of 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. Among detainees at the Cook County Jail who participated in the Arrestee Drug Abuse Monitoring Program (ADAM) II in 2012, urinalyses and self-reports indicated declines in cocaine use.

- **Marijuana** remained the drug most often found in NFLIS reports and was plentiful across the Chicago MSA. Cannabis in a soft waxy form was increasingly available, according to the Chicago Police Department.

- **PCP** reports continued to increase among NFLIS reports for the Chicago MSA. Between 2007 and 2014, PCP reports increased from 115 to 563. The number of reports in the first half of 2015 (n = 325) suggested a continued increase in the presence of PCP in the Chicago MSA.

- **Methamphetamine** remained uncommon in Chicago among groups other than men who have sex with men.

Changes in Legislation

Illinois pharmacists with a standing order from a physician will now be able to 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 May 4, 2016, the Illinois Department of Public Health (IDPH) has approved 6,200 applications from qualifying patients who have been approved by the Illinois Department of Public Health (IDPH) (http://www.illinois.gov/gov/mcpp/Pages/update05042016.aspx). Approximately 8,100 individuals have submitted a complete application to IDPH.

Substance Use Patterns and Trends

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 MSA, now ranking fourth among all drug reports. In 2014, there were 1,057 reports of alprazolam compared with 605 in 2013, 488 in 2012, and 419 in 2011. The increase in alprazolam reports between 2011 and 2014 was 152.3%. The number of reports in 2015 (n = 1454 suggests that this trend continues its upswing. Ethnographic reports indicated alprazolam was the benzodiazepine most often used by persons who

used heroin or cocaine. Alprazolam typically sold for $2–$3 for 1-milligram tablets and for $3–$5 for 2-milligram bars.

COCAINE

- 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 the decline continued in 2014 and leveled in the first half of 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. Among detainees at the Cook County Jail who participated in the Arrestee Drug Abuse Monitoring Program (ADAM) II in 2012, urinalyses and self-reports indicated declines in cocaine use.

Although cocaine continues to constitute a serious drug problem for Chicago, most quantitative and qualitative cocaine indicators suggest that its use continues to decline. In 2000, cocaine was second only to marijuana/cannabis among 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 in 2015, it constituted only 17% and, of all such drug reports, about the same proportion as in 2014 (16%).

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 alcohol and 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.

Among the 430 male arrestees sampled in 2012 by ADAM II at the Cook County Jail, 395 (94%) consented to interviews and 374 of them (95%) provided a urine sample for drug testing. Most arrestees (86%) tested positive for at least one illicit drug. More than one fifth (22%) were positive for multiple drugs, a significantly lower level ($p \leq .01$) than found in the 6 years in which ADAM was conducted (between 2000 and 2008). Nineteen percent were urinalysis positive for cocaine. This proportion marked the fourth consecutive year of decline and was significantly smaller ($p < .01$) than in 2007 (41%), 2008 (44%), and 2009 (33%, $p \leq .05$). Self-reported crack use in the 30 days before arrest declined for the fourth consecutive year and was significantly lower ($p \leq .01$) in 2012 (9%) compared with 2007 and 2008 (23% in both years). Two percent of Chicago arrestees reported using powdered cocaine in the 30 days before arrest. Chicago arrestees were the least likely (2%) among the five ADAM-II sites to report using powdered cocaine in the 30 days before arrest.

The amount of cocaine seized by the Drug Enforcement Administration's (DEA) Chicago Field Division 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 1651 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. The increase in 2013 compared with 2004 was statistically significant (p = 0.04). 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%).

MARIJUANA

- Marijuana remained the drug most often found in NFLIS reports and was plentiful across the Chicago MSA. Cannabis in a soft waxy form was increasingly available, according to the Chicago Police Department.

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.

Among arrestees in the 2012 ADAM II study, 58% tested urinalysis-positive for marijuana; this was the second largest proportion among the five sites. Males age 25 and younger were more likely to test positive for marijuana than were older male arrestees. When participants in the 2011 ADAM II survey were asked about their most recent purchase of marijuana, 62% said they used an outdoor drug market; this was a smaller proportion than in 2010 survey reports (81%) but close to the 2008, 2009, and 2011 proportions (66%, 63%, and 69%, respectively).

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 report that "buds" constituted approximately 60% of the marijuana they seized in 2014. In early 2016, the police reported seeing more "moon rocks," which was 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. Ethnographic reports in Chicago for late 2012 found prices for high-quality marijuana of around $3,000 per pound and $350–$450 per ounce, and low-quality marijuana prices of $800 per pound and $90–$100 per ounce. 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* = 30,090) than for any other drug in the Chicago metropolitan statistical area (MSA) in 2015, but this number has declined 27% since 2011 (*n* = 41,165). Whereas marijuana constituted 57.0% of all NFLIS drug reports in 2011, that proportion fell to 50.2% in 2014.

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 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.

METHAMPHETAMINE

- Methamphetamine remained uncommon in Chicago among groups other than men who have sex with men.

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 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%).

ADAM II data indicated that in 2012, only 0.8% of male arrestees at the Cook County Jail tested urinalysis positive for methamphetamine.

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. 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.

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, more recently, 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 $10,500–$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 17 varieties documented. Both piperazine and tryptamine reports in NFLIS experienced substantial declines.

Synthetic Cathinones

Substituted cathinones ("bath salts") continued to decline in NFLIS reports. Ethylone first appeared in NFLIS in 2013 and is now the most common substituted cathinones.

In the first half of 2015, there were 201 repots in NFLIS of psychoactive drugs in substances that once were commonly marketed as "bath salts" (substituted or synthetic cathinones) among analyzed drug items. If extrapolated to 12 months, this figure would represent a decline from the 575 reports in 2014, 487 reports in 2013, and 525 reports in 2012. Of the synthetic cathinones, the most common in 2015 were ethylone (3,4- methylenedioxyethylcathinone) (193 reports) and alpha-PVP (alphapyrrolidinopentiophenone) (100 reports). Ethylone first appeared in NFLIS reports in 2013 when it ranked third among this class of drugs. MDPV (3,4-methylenedioxypyrovalerone) prevalence in NFLIS (19 reports) seems to have leveled after a steep decline from 343 reports in 2012, 95 in 2013, and 26 in 2014. Methylone (nmethyl- 3,4-methylenedioxycathinone), which was the most common substituted cathinone in 2013 (*n* = 203), also continued its decline, with only 10 reports in 2015. The only other synthetic cathinone reported (*n* = 2) was dibutylone (beta-keto-n,n-dimethyl-1,3-benzodioxolylbutanamine; bk-dmbdb).

Synthetic Cannabinoids

Synthetic cannabinoids reports in NFLIS remained common with 23 varieties documented.

There were 336 NFLIS reports of compounds designed to mimic marijuana (cannabinoids) in 2015. In comparison, there were 227 reports in 2014, 281 in 2013 and 361 in 2012, which suggests a rebound in synthetic cannabinoids after recent declines. A total of 23 synthetic cannabinoids were identified in 2015, compared to 20 in 2014. The most common synthetic cannabinoids reported in NFLIS 2015 were XLR-11 (38%), AB-CHMINACA (17%), and AB-FUBINACA (15%). 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 and toward TFMPP.

Tryptamines

In 2015, there were 63 reports of tryptamines in NFLIS for the Chicago MSA, a level close to the 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). The 63 reports in 2015 were well below the 403 reports in 2011, 307 in 2012, and 168 in 2013.

There were three other tryptamines reported in 2015:5-MEO-DALT (n,n-diallyl-5-methoxytryptamine) (*n* = 2), 4-HO-MET (4-hydroxy-n-methyl-n-ethyltryptamine) and 5-MEO-MIPT (5-methoxy-n-methyl-n-isopropyltryptamine).

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 (34 reports), 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).

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.

- 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.

Heroin abuse indicators in this reporting period continued to suggest high levels of use in the Chicago area. Most heroin in Chicago comes from Colombia and Mexico, and its distribution locally is controlled by Mexican cartels. 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.

According to NFLIS, heroin was the second most often identified drug in reports among items seized and analyzed in the Chicago MSA in 2015. Heroin accounted for 19.4% of all reports during this period, which was nearly the same as the proportion in 2014 (19.6%) but higher than in 2011 (15.5%). Between 2011 and 2015, the total number of heroin reports increased 4%, despite a decline of 17% in the overall number of drug seizures.

The DEA's Chicago Field Division seized 187 kilograms of heroin in FY2015. In comparison, the DEA seized only 36 kilograms of heroin in 2005, 26 kilograms in FY2006, and 46 kilograms in FY2007. Since then at least 125 kilograms have been seized each year, including 180 kilograms in FY2013 and 366 kilograms in FY2014.

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 14% in 2015.

ADAM II data indicated that 15.1% of male arrestees at the Cook County Jail tested urinalysis-positive for opiates in 2012; this represented a decrease from 2011 (18.6%) and 2009 (17.6%) and was significantly lower ($p < .05$) than in 2008 (28.6%). This was the highest level among the five ADAM II sites nationally.

The average age of males testing positive for opiates in 2010–2012 was 38.7, which was higher than the average age for 2000–2003 (37.4 years). Whites were more likely to test positive for opiates than were African Americans and Hispanics. Among Chicago arrestees who used heroin, 37% said they injected the drug (fewer than in the other four cities in the ADAM II study), which was up from 21% in 2010 and a significant increase ($p < .05$) compared with four of the five years ADAM was conducted between 2000 and 2007.

Heroin purity peaked in 1997, at about 31%, 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 13.6% pure in 2011, 13.2% pure in 2012, 16.4% in 2013, 10.1% in 2014, and 11.3% in 2015. In 2012, the price per milligram pure was $0.58, which then rose to $0.72 in 2013 (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 more common than in years past, 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 (5.1%) than among female (2.2%) 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%).

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 while 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). Overdose deaths in DuPage County, which encompasses relatively affluent suburbs West of Chicago, increased from 29 in 2010 to 38 in 2012, to 46 in 2013, to 33 in 2014, and to 43 in 2015 (http://www.heroindupage.org). Persons 20–29 years old constitute the age group most likely to die from a heroin overdose. These figures may be increasing: Between January 1 and April 11, 2016, DuPage County reported 13 deaths attributed to heroin overdose and 24 cases of naloxone administration that may have prevented an overdose death. 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.

In Will County, which includes suburbs South and Southwest of Chicago, heroin 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. Persons younger than 30 years old constituted 49% of the decedents in 2014, but only 40% in 2015, and none were younger than 20 years old. Approximately half (51%) of these heroin-related overdose deaths involved alcohol or other drugs. The Cook County Medical Examiner's Office's reported 424 deaths involving heroin in 2015

(http://www.chicagotribune.com/suburbs/daily-southtown/news/ct-sta-southland-heroin-problem-st-0701-20160629-story.html).

Fentanyl

There were 44 reports of fentanyl by NFLIS reports for 2015, well above the 21 reports in 2014. Five of the 44 current reports were acetylfentanyl and two were butyryl fentanyl, neither of which are medically approved in the United States. Currently the local lab that reports NFLIS data estimated that approximately 10% of samples thought to be heroin contain at least a trace of some form of fentanyl.

Ethnographic data from mid-September 2015 indicated that in at least two areas of Chicago, persons bought heroin that was marketed as containing fentanyl. In the past, heroin that included fentanyl was sold and described to others simply as good heroin. Users who inject drugs report seeking heroin mixed with fentanyl to achieve a better "rush."

Between late September and early October 2015, Chicago officials estimated that 118 people were successfully treated for what was believed to be heroin/fentanyl overdoses, most on Chicago's West side. The Cook County Medical Examiner's Office, which in June 2015 began checking for fentanyl as a matter of routine, reported 102 overdose deaths involving fentanyl that year and 87 such deaths in the first five months of 2016 (http://www.chicagotribune.com/suburbs/daily-southtown/news/ct-sta-southland-heroin-problem-st-0701-20160629-story.html).

As of June 15, 2016, DuPage County Coroner's Office reported 22 overdose deaths related to fentanyl, either mixed with heroin or by itself, compared to 14 deaths attributed to heroin alone (http://www.chicagotribune.com/suburbs/naperville-sun/news/ct-nvs-dupage-drug-update-st-0619-20160615-story.html). In 2015, the Coroner's office reported 43 heroin-related death, 7 of which also involved fentanyl. As of June 2016 there have been 12 deaths related to heroin/fentanyl mixes, and 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, which amounted to 11% of all overdose deaths. Of these, two involved fentanyl alone and seven were in combination with heroin. Acetylfentanyl was found in 1 of the 10 cases. (http://www.willcountyillinois.com/County-Offices/Judicial-Services/Coroner/2015-Overdose-Statistics)

Two other collar counties suspect that recent fatal overdoses may be fentanyl related. Heroin users in the collar counties often buy the drug in Chicago neighborhoods with known drug markets. Buyers appear most often to be told that the product is heroin, but some sellers are now indicating that the product contains fentanyl, either mixed with heroin or alone. Based on ethnographic reports, the locations of overdoses, and locations where police have seized heroin/fentanyl, it appears that heroin combined with fentanyl is being used across the City (North side, South side, Southeast side, West side). That fact does not mean that heroin/fentanyl is being sold in all these areas, though given that many people in the City tend to stay in their own neighborhoods, this is a possibility.

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 1.1% 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 drugs identified in NFLIS reports among drug items seized and analyzed by laboratories in the first half of 2015 (excluding acetaminophen and diphenhydramine), six were prescription opioids: hydrocodone (n = 325), codeine (n = 110), oxycodone (n = 87), methadone (n = 51), and morphine (n = 27). The number of codeine reports for this half-year period is on pace to exceed the 2014 total of 166, and it far exceeds the 2011 total of 47 reports. Ethnographic reports so far indicate the continuing popularity in some areas of Chicago of codeine syrup mixed with a soft drink, typically referred to locally as "lean."

The YRBS added a question in 2011 regarding the nonprescribed use of prescription drugs. 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%).

PCP

- PCP reports continued to increase among NFLIS reports for the Chicago MSA. Between 2007 and 2014, PCP reports increased from 115 to 563. The number of reports in the first half of 2015 (n = 325) suggested a continued increase in the presence of PCP in the Chicago MSA.

The number of PCP (phencyclidine) reports among NFLIS drug items for the Chicago MSA have increased each year since 2007, despite declines in the number of all drug items tested. There were 563 PCP reports in 2014 compared with 115 reports in 2007. This trend seems to be continuing, with 585 reports in 2015. As a proportion of all drug reports, PCP has increased from 0.16% in 2007 to 1.0% in 2015, and it ranks as the eighth 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 0.7% 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.

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 (e.g., the expansion of Medicaid under the ACA to cover some forms of drug treatment). For this reason, trends usually are reported in terms of a drug's proportion in relation to all admissions.

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) 2009–2014. Data for 2014 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.

Arrestee drug use data were derived from the Arrestee Drug Abuse Monitoring (ADAM) II program, sponsored by the Office of National Drug Control Policy. ADAM II collected data regarding drug use and related issues from adult male booked arrestees in five counties across the country. ADAM II data come from two sources—a 20–25-minute, face-to-face interview and urinalysis of a test sample for the presence of 10 different drugs. Participation in both the interview and the urine test is voluntary and confidential. Data were collected between April 1 and July 15 and then statistically annualized to represent the entire year. During that period, 1,938 interviews were conducted and 1,736 urine specimens were collected from a probability-based sample of adult male booked arrestees within 48 hours of their arrest. When weighted, the samples represented 14,155 persons arrested and booked in the 5 ADAM counties during the data collection period. Since 2007, in these 5 sites alone, almost 15,000 interviews have been conducted and almost 13,000 urine specimens have been tested, representing more than 100,000 arrests.

Drug-related mortality data on deaths were obtained from the DuPage County Coroner's Office, the Will County Coroner's Office, the AIDS Foundation of Chicago, the American Civil Liberties Union, the Chicago Sun Times, the Lake County Coroner's Office, and the DuPage Coalition Against Heroin.

Price and purity data for heroin were provided by the DEA's Heroin Domestic Monitor Program (HDMP) for 2001–2013 and from the DEA Chicago Field Division for 2014 and 2015. Drug price data are also reported from the February 2010 report of National Illicit Drug Prices by the National Drug Intelligence Center (NDIC) and from 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 2013 Youth Risk Behavior Survey (YRBS), prepared by the Centers for Disease Control and Prevention (CDC). These data provided drug use data representative of students in Chicago public high schools.

Infectious Disease data are from:

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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*
2010–2014 ACS 5-Year Estimates

	Chicago City		Chicago MSA	
	Estimate	Margin of Error	Estimate	Margin of Error
Total Population (#)	**2,712,608**	**+/-46**	**9,516,448**	******
Age				
18 years and over (%)	77.5%	+/-0.1	75.6%	+/-0.1
21 years and over (%)	73.3%	+/-0.1	71.5%	+/-0.1
65 years and over (%)	10.7%	+/-0.1	12.1%	+/-0.1
Median Age	33.4		36.3	
Race (%)				
White, Not Hisp.	32.2%	+/-0.2	54.3%	+/-0.1
Black/African Am, Not Hisp.	31.5%	+/-0.1	16.8%	+/-0.1
Hispanic/Latino (of any race)	28.9%	+/-0.2	21.2%	**
American Indian/Alaska Native	0.1%	+/-0.1	0.1%	+/-0.1
Asian	5.7%	+/-0.1	5.9%	+/-0.1
Native Hawaiian/Pacific Islander	0.0%	+/-0.1	0.0%	+/-0.1
Some Other Race	0.2%	+/-0.1	0.1%	+/-0.1
Two or More Races	1.4%	+/-0.1	1.5%	+/-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	81.6%	+/-0.3	86.9%	+/-0.1
Bachelor's Degree or Higher	34.9%	+/-0.3	35.1%	+/-0.2
Unemployment (*Among Civilian Labor Force Population Aged 16+ Years*) (%)				
Percent Unemployed	13.2%	+/-0.2	10.5%	+/-0.1
Income ($)				
Median Household Income (in 2014 inflation-adjusted dollars)	$47,831	+/-446	$61,497	+/-248
Health Insurance Coverage (*Among Civilian Noninstitutionalized Population*) (%)				
No Health Insurance Coverage	18.7%	+/-0.2	13.5%	+/-0.2
Poverty (%)				
All People Whose Income in Past Year Is Below Poverty Level	22.7%	+/-0.3	14.1%	+/-0.1

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, 2010–2014 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		Male	Female		White	Black	Hispanic
	Percent		p-value	Percent		p-value	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^* Residents, Fiscal Year 2011-2015**

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

	Fiscal Year									
	2011		2012		2013		2014		2015	
	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)
Total Admissions (#)	**34,807**	**100%**	**33,774**	**100%**	**34,563**	**100%**	**24,428**	**100%**	**19,593**	**100%**
Primary Substance of Abuse (%)										
Alcohol	7,150	20.5%	7,014	20.8%	7,064	20.4%	6,056	24.8%	5,106	26.1%
Cocaine/Crack	5,558	16.0%	5,171	15.3%	4,013	11.6%	3,009	12.3%	2,059	10.5%
Heroin	13,312	38.2%	14,147	41.9%	14,886	43.1%	7,490	30.7%	6,335	32.3%
Prescription Opioids**	206	0.6%	238	0.7%	274	0.8%	270	1.1%	190	1.0%
Methamphetamine	60	0.2%	110	0.3%	100	0.3%	70	0.3%	103	0.5%
Marijuana	6,279	18.0%	5,343	15.8%	6,059	17.5%	5,631	23.1%	4,613	23.5%
Benzodiazepines	30	0.1%	37	0.1%	50	0.1%	44	0.2%	63	0.3%
MDMA	44	0.1%	29	0.1%	40	0.1%	51	0.2%	34	0.2%
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	2,168	6.2%	1,685	5.0%	2,077	6.0%	1,807	7.4%	1,090	5.6%

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).

**Fiscal Year Data: Calendar Year data is not available for Chicago at this time; FY 2011–2015 data are presented.

^Chicago: Includes data for Chicago not the entire Chicago MSA.****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 Alcohol and Substance Use (DASA).

Table 4b: Demographic and Drug Use Characteristics of Primary Treament Admissions* for Select Substances of Abuse, *Chicago*^ Residents, 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.
**Fiscal Year 2015: Calendar Year data is not available for Chicago at this time; FY 2015 data are presented.
^Chicago: Includes data for Chicago not the entire Chicago MSA.
***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 Alcohol and Substance Use (DASA).

Table 5: Drug Overdose (Poisoning) Deaths*, by Drug** and Year, *Cook County (Chicago Area)* , 2010–2014
Number, Crude Rate, and Age-Adjusted Rate*** (per 100,000 population)

	2010			2011			2012			2013			2014		
	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 Overdose (Poisoning) Deaths	**488**	**9.4**	**9.2**	**503**	**9.6**	**9.6**	**615**	**11.8**	**11.5**	**628**	**12.0**	**11.6**	**622**	**11.9**	**11.5**
Opioids‡	**358**	**6.9**	**6.8**	**355**	**6.8**	**6.7**	**476**	**9.1**	**8.9**	**486**	**9.3**	**9.0**	**480**	**9.1**	**8.9**
Heroin	11	UNR	UNR	SUP	SUP	SUP	25	0.5	0.5	291	5.6	5.4	323	6.2	6.0
Natural Opioid Analgesics	26	0.5	0.5	18	UNR	UNR	40	0.8	0.8	68	1.3	1.2	64	1.2	1.2
Methadone	30	0.6	0.6	21	0.4	0.4	32	0.6	0.6	40	0.8	0.8	35	0.7	0.7
Synthetic Opioid Analgesics	19	UNR	UNR	SUP	SUP	SUP	13	UNR	UNR	21	0.4	0.3	29	0.6	0.5
Benzodiazepines	**11**	**UNR**	**UNR**	**SUP**	**SUP**	**SUP**	**30**	**0.6**	**0.6**	**67**	**1.3**	**1.2**	**86**	**1.6**	**1.6**
Benzodiazepines **AND** Any Opioids	SUP	SUP	SUP	SUP	SUP	SUP	17	UNR	UNR	47	0.9	0.9	57	1.1	1.0
Benzodiazepines **AND** Heroin	SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP	11	UNR	UNR	17	UNR	UNR
Psychostimulants															
Cocaine	172	3.3	3.3	166	3.2	3.2	184	3.5	3.4	143	2.7	2.6	122	2.3	2.3
Psychostimulants with Abuse Potential	SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP	14	UNR	UNR
Cannabis (derivatives)	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**
Percent with Drugs Specified‡	92.0%			90.7%			96.1%			98.4%			98.4%		

NOTES:

*Drug Overdose (Poisoning) Deaths: 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 Overdose (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. This is not a complete list of all drugs that may have been involved with these drug poisoning deaths.

***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
   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; *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 [excluding cocaine] (T43.6) (e.g., amphetamines, caffeine, MDMA, methamphetamine, and methylphenidate)
Cannabis (derivatives): (T40.7)

‡Percent of Drug Overdose (Poisoning) Deaths with Drug(s) Specified: Among drug overdose (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 1999-2014, available on the CDC WONDER Online Database, released 2015. Data compiled in the Multiple cause of death 1999-2014 were provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Retrieved between December 2015 - May 2016, from http://wonder.cdc.gov/mcd-icd10.html

Table 6a: Drug Reports* for Items Seized by Law Enforcement in *Chicago MSA^* in 2015
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*	**59,990**	**100.0%**
CANNABIS	30,090	50.2%
HEROIN	11,667	19.4%
COCAINE	9,957	16.6%
ALPRAZOLAM	1,454	2.4%
HYDROCODONE	650	1.1%
METHAMPHETAMINE	620	1.0%
3,4-METHYLENEDIOXYMETHAMPHETAMINE (MDMA)	601	1.0%
PHENCYCLIDINE	585	1.0%
AMPHETAMINE	281	0.5%
CLONIDINE	277	0.5%
ACETAMINOPHEN	228	0.4%
CODEINE	210	0.4%
1-(3-TRIFLUOROMETHYL)PHENYL-PIPERAZINE (TFMPP)	203	0.3%
3,4-METHYLENEDIOXYETHYLCATHINONE (ETHYLONE)	193	0.3%
LYSERGIC ACID DIETHYLAMIDE (LYSERGIDE)	177	0.3%
CLONAZEPAM	176	0.3%
OXYCODONE	167	0.3%
PHENYLIMIDOTHIAZOLE ISOMER UNDETERMINED	134	0.2%
XLR-11 (1-(5-FLUOROPENTYL-1H-3-YL)(2,2,3,3-TETRAMETHYLCYCLOPROPYL)METHANONE)	128	0.2%
TRAMADOL	117	0.2%
METHADONE	103	0.2%
ALPHA-PYRROLIDINOPENTIOPHENONE (ALPHA-PVP)	100	0.2%
PSILOCIN	98	0.2%
DIPHENHYDRAMINE	95	0.2%
N-BENZYLPIPERAZINE (BZP)	94	0.2%
DIAZEPAM	84	0.1%
MORPHINE	81	0.1%
BUPRENORPHINE	74	0.1%
VARDENAFIL	71	0.1%
AB-CHMINACA (N-[(1S)-1-(AMINOCARBONYL)-2-METHYLPROPYL]-1-(CYCLOHEXYLMETHYL)-1H-INDAZOLE-3-CARBOXAMIDE)	58	< 0.1%
METHORPHAN	57	< 0.1%
CAFFEINE	56	< 0.1%
LORAZEPAM	56	< 0.1%
METHYLPHENIDATE	53	< 0.1%
AB-FUBINACA	51	< 0.1%
KETAMINE	49	< 0.1%
LISDEXAMFETAMINE	48	< 0.1%
3,4-METHYLENEDIOXYAMPHETAMINE (MDA)	47	< 0.1%
PROCHLORPERAZINE	43	< 0.1%
FENTANYL	37	< 0.1%
2-(4-IODO-2,5-DIMETHOXYPHENYL)-N-(2-METHOXYBENZYL)ETHANAMINE (25-I-NBOME)	34	< 0.1%
DIMETHYLTRYPTAMINE (DMT)	33	< 0.1%

Drug Identified	Number (#)	Percent of Total Drug Reports* (#)
TESTOSTERONE	32	< 0.1%
6-MONOACETYLMORPHINE	30	< 0.1%
5-METHOXY-N,N-DIISOPROPYLTRYPTAMINE (5-MEO-DIPT)	26	< 0.1%
AB-PINACA	25	< 0.1%
NO CONTROLLED DRUG IDENTIFIED	23	< 0.1%
QUININE	21	< 0.1%
ZOLPIDEM	20	< 0.1%
HYDROMORPHONE	19	< 0.1%
METHYLENEDIOXYPYROVALERONE (MDPV)	19	< 0.1%
2-(4-CHLORO-2,5-DIMETHOXYPHENYL)-N-(2-METHOXYBENZYL)ETHANAMINE (25-C-NBOME)	15	< 0.1%
CARISOPRODOL	15	< 0.1%
LIDOCAINE	15	< 0.1%
GAMMA HYDROXY BUTYL LACTONE	14	< 0.1%
LACTOSE	14	< 0.1%
PHENTERMINE	13	< 0.1%
FUB-PB-22 (QUINOLIN-8-YL-1-(4-FLUOROBENZYL)-1H-INDOLE-3-CARBOXYLATE)	10	< 0.1%
MAB-CHMINACA (ADB-CHMINACA)	10	< 0.1%
N-METHYL-3,4-METHYLENEDIOXYCATHINONE (METHYLONE)	10	< 0.1%
5-FLUORO AMB	9	< 0.1%
ALPHA-PYRROLIDINOBUTIOPHENONE (ALPHA-PBP)	9	< 0.1%
DEXTROMETHORPHAN	9	< 0.1%
PENTYLONE (ß-KETO-METHYLBENZODIOXOLYLPENTANAMINE)	9	< 0.1%
1,4-BUTANEDIOL	8	< 0.1%
AM-2201 (1-(5-FLUOROPENTYL)-3-(1-NAPHTHOYL)INDOLE)	8	< 0.1%
PSILOCYBINE	8	< 0.1%
METHANDROSTENOLONE (METHANDIENONE)	7	< 0.1%
NANDROLONE	7	< 0.1%
NM2201 (NAPHTHALEN-1-YL 1-(5-FLUOROPENTYL)-1H-INDOLE-3-CARBOXYLATE)	7	< 0.1%
4-CHLORO-2,5-DIMETHOXYAMPHETAMINE (DOC)	6	< 0.1%
5F-AB-PINACA	6	< 0.1%
BUTALBITAL	6	< 0.1%
DEXTROPROPOXYPHENE	6	< 0.1%
OXANDROLONE	6	< 0.1%
OXYMORPHONE	6	< 0.1%
TADALAFIL	6	< 0.1%
ACETYLFENTANYL	5	< 0.1%
BENZOCAINE	5	< 0.1%
METHOXETAMINE (MXE; 2-(3-METHOXYPHENYL)-2-(ETHYLAMINO)CYCLOHEXANONE)	5	< 0.1%
QUETIAPINE	5	< 0.1%
SILDENAFIL CITRATE (VIAGRA)	5	< 0.1%
TRENBOLONE	5	< 0.1%
2-(4-BROMO-2,5-DIMETHOXYPHENYL)-N-(2-METHOXYBENZYL)ETHANAMINE (25-B-NBOMe)	4	< 0.1%
4-BROMO-2,5-DIMETHOXYPHENETHYLAMINE (2C-B)	4	< 0.1%
AM2201 BENZIMIDAZOLE ANALOG	4	< 0.1%
BUTYLONE (ß-KETO-N-METHYLBENZO-DIOXYLPROPYLAMINE)	4	< 0.1%
FLUNITRAZEPAM	4	< 0.1%
GUAIFENESIN	4	< 0.1%
IBUPROFEN	4	< 0.1%

Drug Identified	Number (#)	Percent of Total Drug Reports* (#)
MITRAGYNINE	4	< 0.1%
PHENACETIN	4	< 0.1%
TEMAZEPAM	4	< 0.1%
3,4-METHYLENEDIOXYMETHAMPHETAMINE METHYLENE HOMOLOG	3	< 0.1%
5-MAPB (1-(BENZOFURAN-5-YL)-N-METHYLPROPAN-2-AMINE)	3	< 0.1%
AMITRIPTYLINE	3	< 0.1%
ASPIRIN	3	< 0.1%
CATHINONE	3	< 0.1%
CYCLOBENZAPRINE	3	< 0.1%
DIHYDROCODEINE	3	< 0.1%
FUB-AMB	3	< 0.1%
MODAFINIL	3	< 0.1%
NALOXONE	3	< 0.1%
NIACINAMIDE	3	< 0.1%
OXYMETHOLONE	3	< 0.1%
PHENOBARBITAL	3	< 0.1%
UR-144 ((1-PENTYLINDOL-3-YL)-(2,2,3,3-TETRAMETHYLCYCLOPROPYL)METHANONE)	3	< 0.1%
4-FLUOROAMPHETAMINE (4-FA)	2	< 0.1%
5-FLUORO SDB-005	2	< 0.1%
BOLDENONE	2	< 0.1%
BUTYRYL FENTANYL	2	< 0.1%
CITALOPRAM	2	< 0.1%
DIBUTYLONE (BETA-KETO-N,N-DIMETHYL-1,3-BENZODIOXOLYLBUTANAMINE; BK-DMBDB)	2	< 0.1%
DIMETHYLSULFONE	2	< 0.1%
DRONABINOL	2	< 0.1%
GAMMA HYDROXY BUTYRATE	2	< 0.1%
HU-210 (((6AR,10AR)-9-(HYDROXYMETHYL)-6,6-DIMETHYL-3-(2-METHYLOCTAN-2-YL)-6A,7,10,10A-TETRAHYDROBENZO[C]CHROMEN-1-OL)	2	< 0.1%
MAM-2201 (1-(5-FLUOROPENTYL)-3-(4-METHYL-1-NAPHTHOYL)INDOLE)	2	< 0.1%
METHIOPROPAMINE	2	< 0.1%
N,N-DIALLYL-5-METHOXYTRYPTAMINE (5-MEO-DALT)	2	< 0.1%
NICOTINAMIDE	2	< 0.1%
NICOTINE	2	< 0.1%
NOSCAPINE	2	< 0.1%
PENTEDRONE (2-(METHYLAMINO)-1-PHENYLPENTAN-1-ONE)	2	< 0.1%
PHENAZEPAM	2	< 0.1%
PROMETHAZINE	2	< 0.1%
PSEUDOEPHEDRINE	2	< 0.1%
SUCROSE	2	< 0.1%
THIOPROPAZATE	2	< 0.1%
THJ 2201(1-(5-FLUOROPENTYL)-1H-INDAZOL-3-YL)(NAPHTHALEN-1-YL)METHANONE	2	< 0.1%
2,5-DIMETHOXY-4-METHYLAMPHETAMINE (DOM)	1	< 0.1%
3,4-METHYLENEDIOXY-N-ETHYLAMPHETAMINE (MDEA)	1	< 0.1%
3-METHOXYPHENCYCLIDINE (3-MEO-PCP)	1	< 0.1%
4-HYDROXY-N-METHYL-N-ETHYLTRYPTAMINE (4-HO-MET)	1	< 0.1%
4-METHYLMETHCATHINONE (4-MMC) (MEPHEDRONE)	1	< 0.1%
5-APDB (5-(2-AMINOPROPYL)-2,3-DIHYDROBENZOFURAN)	1	< 0.1%
5-METHOXY-N-METHYL-N-ISOPROPYLTRYPTAMINE (5-MEO-MIPT)	1	< 0.1%

Drug Identified	Number (#)	Percent of Total Drug Reports* (#)
ACID	1	< 0.1%
BENOCYCLIDINE (1-[1-(1-BENZOTHIOPHEN-2-YL)CYCLOHEXYL]PIPERIDINE)	1	< 0.1%
BUSPIRONE	1	< 0.1%
BUTABARBITAL	1	< 0.1%
CANNABINOL	1	< 0.1%
CHLORPHENIRAMINE	1	< 0.1%
DICLAZEPAM	1	< 0.1%
DIPHENOXYLATE	1	< 0.1%
DROSTANOLONE	1	< 0.1%
EAM-2201 (1-(5-FLUOROPENTYL)-3-(4-ETHYL-1-NAPHTHOYL)INDOLE)	1	< 0.1%
EPHEDRINE	1	< 0.1%
ESCITALOPRAM	1	< 0.1%
FDU-PB-22 (NAPHTHALEN-1-YL 1-(4-FLUOROBENZYL)-1H-INDOLE-3-CARBOXYLATE)	1	< 0.1%
FENPROPOREX	1	< 0.1%
FLUOXETINE	1	< 0.1%
GABAPENTIN	1	< 0.1%
HYDROXYZINE	1	< 0.1%
INOSITOL	1	< 0.1%
JWH-210 (1-PENTYL-3-(4-ETHYL-1-NAPHTHOYL)INDOLE)	1	< 0.1%
MANNITOL	1	< 0.1%
MDMB-CHMICA (MMB-CHMINACA)	1	< 0.1%
MESTEROLONE	1	< 0.1%
METAXALONE	1	< 0.1%
MONOACETYLMORPHINE	1	< 0.1%
OXAZEPAM	1	< 0.1%
PB-22 (1-PENTYL-1H-INDOLE-3-CARBOXYLIC ACID 8-QUINOLINYL ESTER)	1	< 0.1%
PROPYLHEXEDRINE	1	< 0.1%
PSILOCYBIN/PSILOCYN	1	< 0.1%
SALVINORIN-A	1	< 0.1%
SODIUM BICARBONATE	1	< 0.1%
STANOZOLOL	1	< 0.1%
STARCH	1	< 0.1%
THIAMINE	1	< 0.1%
THJ-018 (1-NAPHTHALENYL(1-PENTYL-1H-INDAZOL-3-YL)-METHANONE)	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 to December 2015.

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 18, 2016.

Table 6b: Drug Reports* for Items Seized by Law Enforcement in *Chicago MSA^* in 2015
DEA National Forensic Laboratory Information System (NFLIS)
Drug Reports* by Select Drug Categories of Interest
Number of Drug-Specific Reports, Percent of Analyzed Drug Category Reports**, & Percent of Total Analyzed Drug Reports

NPS Category Drug Identified	Number (#)	Percent of Drug Category** (%)	Percent of Total Reports (%)
Total Drug Reports*	**59,990**	**100.0%**	**100.0%**
Opioids Category	**13,245**	**100.0%**	**22.1%**
Heroin	**11,667**	**88.1%**	**19.4%**
Narcotic Analgesics	**1,484**	**11.2%**	**2.5%**
HYDROCODONE	650	4.9%	1.1%
CODEINE	210	1.6%	0.4%
OXYCODONE	167	1.3%	0.3%
TRAMADOL	117	0.9%	0.2%
METHADONE	103	0.8%	0.2%
MORPHINE	81	0.6%	0.1%
BUPRENORPHINE	74	0.6%	0.1%
FENTANYL	37	0.3%	< 0.1%
HYDROMORPHONE	19	0.1%	< 0.1%
DEXTROPROPOXYPHENE	6	< 0.1%	< 0.1%
OXYMORPHONE	6	< 0.1%	< 0.1%
ACETYLFENTANYL	5	< 0.1%	< 0.1%
MITRAGYNINE	4	< 0.1%	< 0.1%
DIHYDROCODEINE	3	< 0.1%	< 0.1%
BUTYRYL FENTANYL	2	< 0.1%	< 0.1%
Narcotics	**94**	**0.7%**	**0.2%**
METHORPHAN	57	0.4%	< 0.1%
6-MONOACETYLMORPHINE	30	0.2%	< 0.1%
NALOXONE	3	< 0.1%	< 0.1%
NOSCAPINE	2	< 0.1%	< 0.1%
DIPHENOXYLATE	1	< 0.1%	< 0.1%
MONOACETYLMORPHINE	1	< 0.1%	< 0.1%
Synthetic Cathinones Category	**349**	**100.0%**	**0.6%**
Synthetic Cathinones	**319**	**91.4%**	**0.5%**
3,4-METHYLENEDIOXYETHYLCATHINONE (ETHYLONE)	193	55.3%	0.3%
ALPHA-PYRROLIDINOPENTIOPHENONE (ALPHA-PVP)	100	28.7%	0.2%
ALPHA-PYRROLIDINOBUTIOPHENONE (ALPHA-PBP)	9	2.6%	< 0.1%
PENTYLONE (ß-KETO-METHYLBENZODIOXOLYLPENTANAMINE)	9	2.6%	< 0.1%
BUTYLONE (ß-KETO-N-METHYLBENZO-DIOXYLPROPYLAMINE)	4	1.1%	< 0.1%
DIBUTYLONE (BETA-KETO-N,N-DIMETHYL-1,3-BENZODIOXOLYLBUTANAMINE; BK-DMBDB)	2	0.6%	< 0.1%
PENTEDRONE (2-(METHYLAMINO)-1-PHENYLPENTAN-1-ONE)	2	0.6%	< 0.1%
Synthetic Cathinones (Hallucinogen)	**30**	**8.6%**	**< 0.1%**
METHYLENEDIOXYPYROVALERONE (MDPV)	19	5.4%	< 0.1%
N-METHYL-3,4-METHYLENEDIOXYCATHINONE (METHYLONE)	10	2.9%	< 0.1%
4-METHYLMETHCATHINONE (4-MMC) (MEPHEDRONE)	1	0.3%	< 0.1%

NPS Category Drug Identified	Number (#)	Percent of Drug Category** (%)	Percent of Total Reports (%)
Synthetic Cannabinoids Category	**336**	**100.0%**	**0.6%**
XLR-11 (1-(5-FLUOROPENTYL-1H-3-YL)(2,2,3,3-TETRAMETHYLCYCLOPROPYL)METHANONE)	128	38.1%	0.2%
AB-CHMINACA (N-[(1S)-1-(AMINOCARBONYL)-2-METHYLPROPYL]-1-(CYCLOHEXYLMETHYL)-1H-INDAZOLE-3-CARBOXAMIDE)	58	17.3%	< 0.1%
AB-FUBINACA	51	15.2%	< 0.1%
AB-PINACA	25	7.4%	< 0.1%
FUB-PB-22 (QUINOLIN-8-YL-1-(4-FLUOROBENZYL)-1H-INDOLE-3-CARBOXYLATE)	10	3.0%	< 0.1%
MAB-CHMINACA (ADB-CHMINACA)	10	3.0%	< 0.1%
5-FLUORO AMB	9	2.7%	< 0.1%
AM-2201 (1-(5-FLUOROPENTYL)-3-(1-NAPHTHOYL)INDOLE)	8	2.4%	< 0.1%
NM2201 (NAPHTHALEN-1-YL 1-(5-FLUOROPENTYL)-1H-INDOLE-3-CARBOXYLATE)	7	2.1%	< 0.1%
5F-AB-PINACA	6	1.8%	< 0.1%
AM2201 BENZIMIDAZOLE ANALOG	4	1.2%	< 0.1%
FUB-AMB	3	0.9%	< 0.1%
UR-144 ((1-PENTYLINDOL-3-YL)-(2,2,3,3-TETRAMETHYLCYCLOPROPYL)METHANONE)	3	0.9%	< 0.1%
5-FLUORO SDB-005	2	0.6%	< 0.1%
HU-210 ((((6AR,10AR)-9-(HYDROXYMETHYL)-6,6-DIMETHYL-3-(2-METHYLOCTAN-2-YL)-6A,7,10,10A-TETRAHYDROBENZO[C]CHROMEN-1-OL)	2	0.6%	< 0.1%
MAM-2201 (1-(5-FLUOROPENTYL)-3-(4-METHYL-1-NAPHTHOYL)INDOLE)	2	0.6%	< 0.1%
THJ 2201(1-(5-FLUOROPENTYL)-1H-INDAZOL-3-YL)(NAPHTHALEN-1-YL)METHANONE	2	0.6%	< 0.1%
EAM-2201 (1-(5-FLUOROPENTYL)-3-(4-ETHYL-1-NAPHTHOYL)INDOLE)	1	0.3%	< 0.1%
FDU-PB-22 (NAPHTHALEN-1-YL 1-(4-FLUOROBENZYL)-1H-INDOLE-3-CARBOXYLATE)	1	0.3%	< 0.1%
JWH-210 (1-PENTYL-3-(4-ETHYL-1-NAPHTHOYL)INDOLE)	1	0.3%	< 0.1%
MDMB-CHMICA (MMB-CHMINACA)	1	0.3%	< 0.1%
PB-22 (1-PENTYL-1H-INDOLE-3-CARBOXYLIC ACID 8-QUINOLINYL ESTER)	1	0.3%	< 0.1%
THJ-018 (1-NAPHTHALENYL(1-PENTYL-1H-INDAZOL-3-YL)-METHANONE)	1	0.3%	< 0.1%
Piperazines Category	**297**	**100.0%**	**0.5%**
Piperazines (Hallucinogen)	**203**	**68.4%**	**0.3%**
1-(3-TRIFLUOROMETHYL)PHENYL-PIPERAZINE (TFMPP)	203	68.4%	0.3%
Piperazines (Stimulant)	**94**	**31.6%**	**0.2%**
N-BENZYLPIPERAZINE (BZP)	94	31.6%	0.2%
Tryptamines Category	**63**	**100.0%**	**0.1%**
DIMETHYLTRYPTAMINE (DMT)	33	52.4%	< 0.1%
5-METHOXY-N,N-DIISOPROPYLTRYPTAMINE (5-MEO-DIPT)	26	41.3%	< 0.1%
N,N-DIALLYL-5-METHOXYTRYPTAMINE (5-MEO-DALT)	2	3.2%	< 0.1%
4-HYDROXY-N-METHYL-N-ETHYLTRYPTAMINE (4-HO-MET)	1	1.6%	< 0.1%
5-METHOXY-N-METHYL-N-ISOPROPYLTRYPTAMINE (5-MEO-MIPT)	1	1.6%	< 0.1%

NPS Category Drug Identified	Number (#)	Percent of Drug Category** (%)	Percent of Total Reports (%)
Phenethylamines (2C Series) (H) Category	**57**	**100.0%**	**< 0.1%**
2-(4-IODO-2,5-DIMETHOXYPHENYL)-N-(2-METHOXYBENZYL)ETHANAMINE (25-I-NBOME)	34	59.6%	< 0.1%
2-(4-CHLORO-2,5-DIMETHOXYPHENYL)-N-(2-METHOXYBENZYL)ETHANAMINE (25-C-NBOME)	15	26.3%	< 0.1%
2-(4-BROMO-2,5-DIMETHOXYPHENYL)-N-(2-METHOXYBENZYL)ETHANAMINE (25-B-NBOMe)	4	7.0%	< 0.1%
4-BROMO-2,5-DIMETHOXYPHENETHYLAMINE (2C-B)	4	7.0%	< 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, 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 to December 2015.

**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 18, 2016.

National Drug Early Warning System (NDEWS) Sentinel Community Site (SCS) Drug Use Patterns and Trends, 2016: 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.

Area Description Indicators

American Community Survey (ACS): Population Estimates, by Demographic and Socioeconomic Characteristics

Overview and Limitations

Data on demographic, social, and economic characteristics are based on 2010–2014 American Community Survey (ACS) 5-Year Estimates. 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; *2010–2014 American Community Survey 5-Year Estimates;* Tables DP02, DP03, and DP05; using American FactFinder; http://factfinder2.census.gov; Accessed on [5/24/2016]; 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

Substance Use Indicators

National Survey on Drug Use and Health (NSDUH): Substance Use Among Population 12 Years or Older

Overview and Limitations

NSDUH is an ongoing 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 derived from a hierarchical Bayes model-based small area estimation 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 to provide more precise estimates of substance use and mental health outcomes. [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 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 but 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 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 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 [8/5/2016].

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 on [8/5/2016].

Youth Risk Behavioral Survey (YRBS): Substance Use Among Student Populations

Overview and Limitations

The Youth Risk Behavior Surveillance System (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. YRBSS also was developed to provide comparable national, State, territorial, and large urban school district data as well as comparable data among subpopulations of youths (e.g., racial/ethnic subgroups) and to monitor progress toward achieving national health objectives. The YRBSS monitors six categories of priority health risk behaviors among youth and young adults: 1) behaviors that contribute to unintentional injuries and violence; 2) tobacco use; 3) alcohol and other drug use; 4) sexual behaviors that contribute to unintended pregnancy and sexually transmitted infections; 5) unhealthy dietary behaviors; and 6) physical inactivity.[a] We have included selected drug and alcohol survey questions from the YRBSS.

One component of the Surveillance System is the school-based Youth Risk Behavior Survey (YRBS) which includes representative samples of high school students in the nation, States, tribes, and select large urban school district across the country. The ongoing surveys are conducted biennially; each cycle begins in July of the preceding even-numbered year (e.g., in 2010 for the 2011 cycle) when the questionnaire for the upcoming year is released and continues until the data are published in June of the following even-numbered year (e.g., in 2012 for the 2011 cycle).[a]

For States and large urban school districts, the YRBSs are administered by State and local education or health agencies. Each State, territorial, tribal, and large urban school district YRBS employs a two-stage, cluster sample design to produce a representative sample of students in grades 9–12 in its jurisdiction. All the data presented in these tables area based on weighted data. Weighted results are representative of all students in grades 9–12 attending public schools in each jurisdiction. According to CDC, "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."[a]

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 2009, approximately 4% of persons aged 16–17 years were not enrolled in a high-school program and had not completed high school.[b] 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.[c]

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.[d]

Notes about Data Terms

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), 1991–2013 High School Youth Risk Behavior Survey Data. Available at http://nccd.cdc.gov/youthonline/. Accessed on [3/12/2015].

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

[a]*Methodology of the Youth Risk Behavior Surveillance System— 2013* Report in the Centers for Disease Control and Prevention (CDC) *March 1, 2013 Morbidity and Mortality Weekly Report* (MMWR); 62(1). Available at http://www.cdc.gov/mmwr/pdf/rr/rr6201.pdf. Accessed on [4/10/2015].

[b]Chapman C, Laird J, Ifill N, KewalRamani A. Trends in high school dropout and completion rates in the United States: 1972–2009 (NCES 2012–006). Available at http://nces.ed.gov/pubs2012/2012006.pdf. Accessed on [2/11/2013].

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

[d]Eaton DK, Lowry R, Brener ND, Grunbaum JA, Kann L. 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.

Treatment for Substance Use Disorders

Treatment Admissions Data from Local Data Sources

Overview and Limitations

Drug treatment admissions data provide indicators of the health consequences of substance misuse and their impact on the treatment system.[a] Treatment admissions 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 also 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 made available to the NDEWS Coordinating Center by the NDEWS Sentinel Community Epidemiologist for each SCS. Calendar year 2015 treatment admissions data were available for 10 of 12 SCSs. Calendar Year 2015 data were not available for the Chicago Metro SCS; Fiscal Year 2015 for Chicago (not entire Chicago metro area) is provided. No treatment data for the Atlanta Metro SCS was available for 2015. See below for site-specific information about the data.

Site-Specific Notes about 2015 Treatment Data and Sources of the Data

❖ **Atlanta Metro**

Data Availability: Calendar year 2015 treatment data are not available for the Atlanta Metro SCS.

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, Pickents, 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: Only fiscal year data are available at this time.

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 Substance Use.

❖ **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 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.
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:
Admissions: Includes admissions to all 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 oxycodone/hydrocodone, nonprescription methadone, and other opiates.

Source: Data provided to the King County (Seattle Area) NDEWS SCE by the Washington State Department of Social and Health Services (DSHS), Division Behavioral Health and Recovery, Treatment Report and Generation Tool (TARGET).

❖ **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 and 2014 data) and the California Department of Drug and Alcohol Programs (2011 and 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 2016 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 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 4,810 in 2015. However, similar patterns of substance use were observed among those seeking treatment in 2014 and in 2015.

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: 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, 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 all admissions to programs receiving any public funds. Each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period.

2011–2013: Data for Palm Beach County is not available for 2011-2013, therefore, 2011–2013 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 and the Broward Behavioral Health Coalition.

❖ **Texas**

Notes & Definitions:
Admissions: Includes all admissions reported to the Clinical Management for Behavioral Health Services (CMBHS) of the Department of State Health Services (DSHS). 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.
Synthetic Cannabinoids: DSHS collects data on "other Cannabinoids," which may not include all the synthetic cannabinoids.
Females: Calculated using formula "1 minus Male %."

Source: Data provided to the Texas NDEWS SCE by the Texas Department of State Health Services (DSHS).

❖ **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

Consequences of Drug Use Indicators

Drug Overdose (Poisoning) Deaths

Overview and Limitations

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 2016 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:

[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.

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-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%. 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., state, and county resident populations. The year 2010 populations are April 1 modified census counts. The year 2011–2014 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)

5-Year Percent Change: Change in age-adjusted rate between 2010 and 2014.

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 1999–2014*, available on the CDC WONDER Online Database, released 2015. Data compiled in the *Multiple cause of death 1999–2014*

were provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Retrieved between December 16, 2015 and February 9, 2016, 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*.

Availability Indicators

Drug Reports from the National Forensic Laboratory Information System (NFLIS)

Overview and Limitations

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 DEA describes NFLIS as:

> "a comprehensive information system that includes data from forensic laboratories that handle the Nation's drug analysis cases. The NFLIS participation rate, defined as the percentage of the national drug caseload represented by laboratories that have joined NFLIS, is currently over 97%. Currently, 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 2015 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 were included in the counts.
- ❖ **Texas:** The Austin Police Department laboratory closed, and no data were provided for 2015. The Houston Forensic Science Government Corporation (formerly Houston Police Department Crime Lab) lab was added in April 2014 and has been reporting data since then.

Notes about Data Terms

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. The data presented are a total count of first, second, and third listed reports for each selected drug item seized and analyzed.

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–December 2015. Data were queried from the DEA's NFLIS Data Query System (DQS) on May 18, 2016 using drug item submission date.

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 butyrl fentanyl).

A complete list of drugs included in the Other Fentanyls category that were reported to NFLIS during the January to December 2015 timeframe includes:

3-METHYLFENTANYL

ACETYL-ALPHA-METHYLFENTANYL

ACETYLFENTANYL

Beta-HYDROXYTHIOFENTANYL

BUTYRYL FENTANYL

P-FLUOROBUTYRYL FENTANYL (P-FBF)

P-FLUOROFENTANYL

Sources

*Data Sources***:** Adapted by the NDEWS Coordinating Center from data provided by the U.S. Drug Enforcement Administration (DEA), Office of Diversion Control, Drug and Chemical Evaluation Section, Data Analysis Unit. Data were retrieved from NFLIS Data Query System (DQS) May 18, 2016.

*Overview/Methods/Limitations Sources***:** [a]Adapted by the NDEWS Coordinating Center from U.S. Drug Enforcement Administration (DEA), Office of Diversion Control. (2016) *National Forensic Laboratory Information System: Midyear Report 2015.* Springfield, VA: U.S. Drug Enforcement Administration. Available at: https://www.nflis.deadiversion.usdoj.gov/DesktopModules/ReportDownloads/Reports/NFLIS_MidYear2015.pdf