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

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

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

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

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

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

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

The *Sentinel Community Site Drug Use Patterns and Trends* reports for each of the 12 Sentinel Community Sites and detailed information about NDEWS can be found on the NDEWS website at www.ndews.org.

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

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

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

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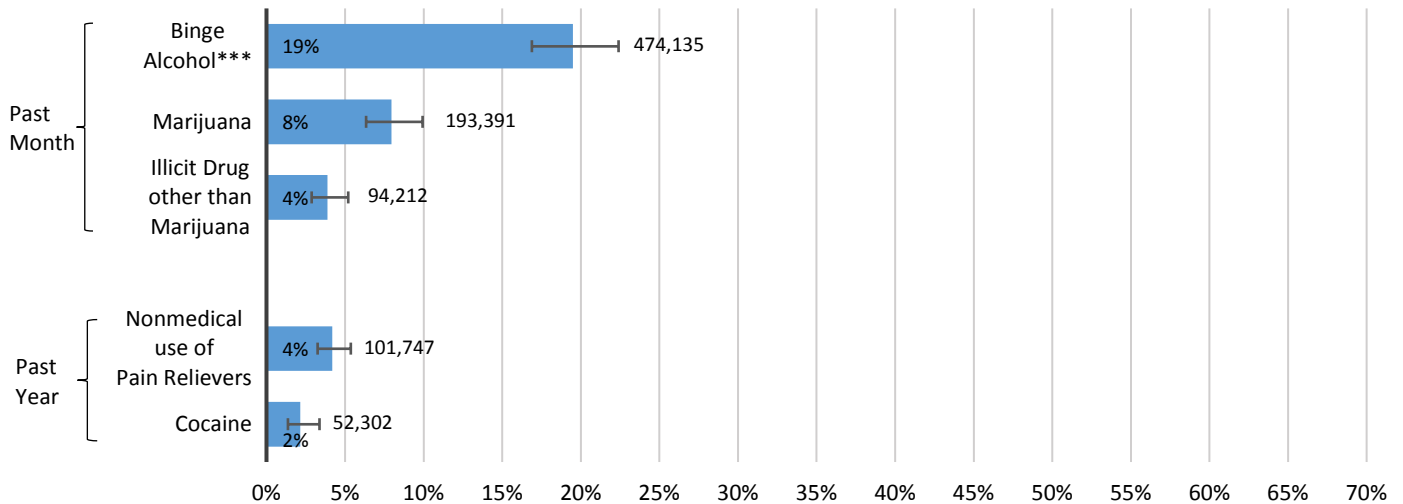
Substance Use

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

Persons 12+ Years Reporting Selected Substance Use, Atlanta Region^, 2012-2014

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

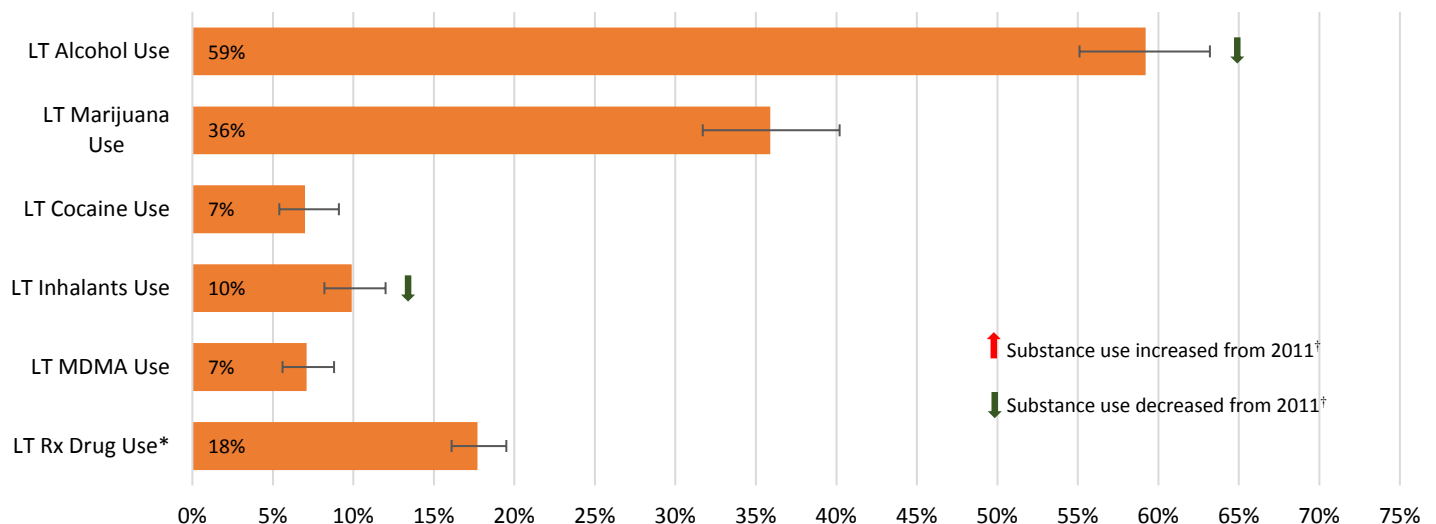| Period	Substance	Percent	Estimated Number
Past Month	Binge Alcohol***	19%	474,135
	Marijuana	8%	193,391
	Illicit Drug other than Marijuana	4%	94,212
Past Year	Nonmedical use of Pain Relievers	4%	101,747
	Cocaine	2%	52,302

*U.S. Population: U.S. civilian non-institutionalized population. ^Atlanta Region: NSDUH Region 3 (Clayton, DeKalb, Fulton, Gwinnett, Newton, and Rockdale counties). **Estimated Number: Calculated by multiplying the prevalence rate and the population estimate of persons 12+ years (2,431,810) 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, Georgia^, 2013[1]

Estimated Percent and 95% Confidence Interval

Substance	Percent
LT Alcohol Use	59% ↓
LT Marijuana Use	36%
LT Cocaine Use	7%
LT Inhalants Use	10% ↓
LT MDMA Use	7%
LT Rx Drug Use*	18%

↑ Substance use increased from 2011[†]

↓ Substance use decreased from 2011[†]

[1]2013: 2015 YRBS data not available for Atlanta or Georgia so 2013 Georgia data are presented.
^Georgia: Data not available for Atlanta so data for State of Georgia provided.
*LT Rx Drug Use: Defined as ever took prescription drugs without a doctor's prescription.
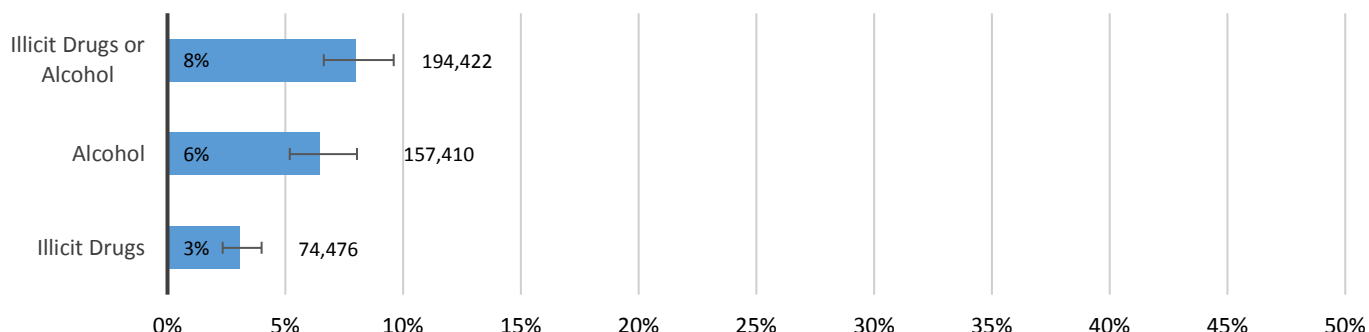[†]Statistically significant change: $p < 0.05$ by t-test.
Source: Adapted by the NDEWS Coordinating Center from data provided by CDC, 2001-2013 high school YRBS data.

Substance Use Disorders and Treatment

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

Substance Use Disorders** in Past Year Among Persons 12+ Years, Atlanta Region^, 2012-2014

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

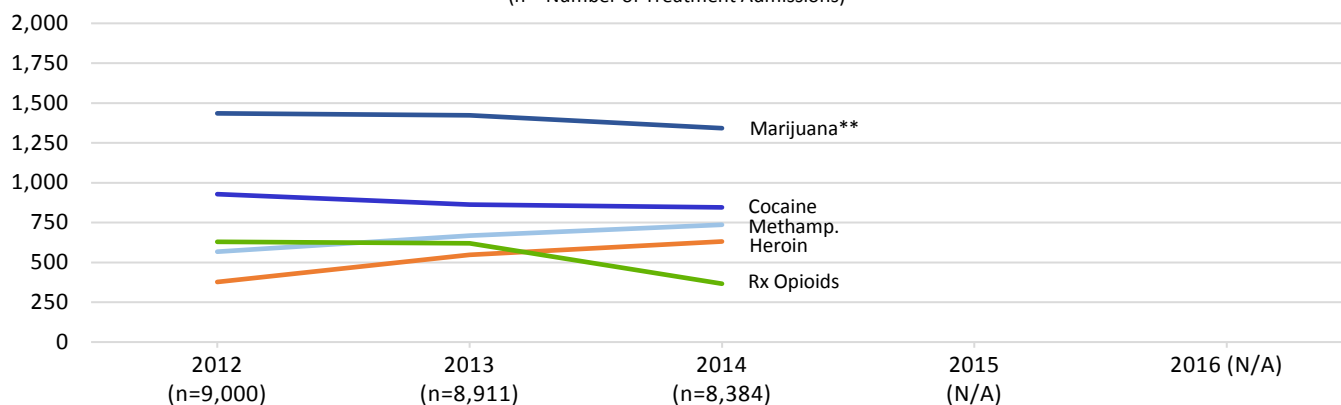| Category	Percent	Estimated Number
Illicit Drugs or Alcohol	8%	194,422
Alcohol	6%	157,410
Illicit Drugs	3%	74,476

*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)*. ^Atlanta Region: NSDUH Region 3 (Clayton, DeKalb, Fulton, Gwinnett, Newton, and Rockdale counties). ***Estimated Number: Calculated by multiplying the prevalence rate and the population estimate of persons 12+ years (2,431,810) 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.
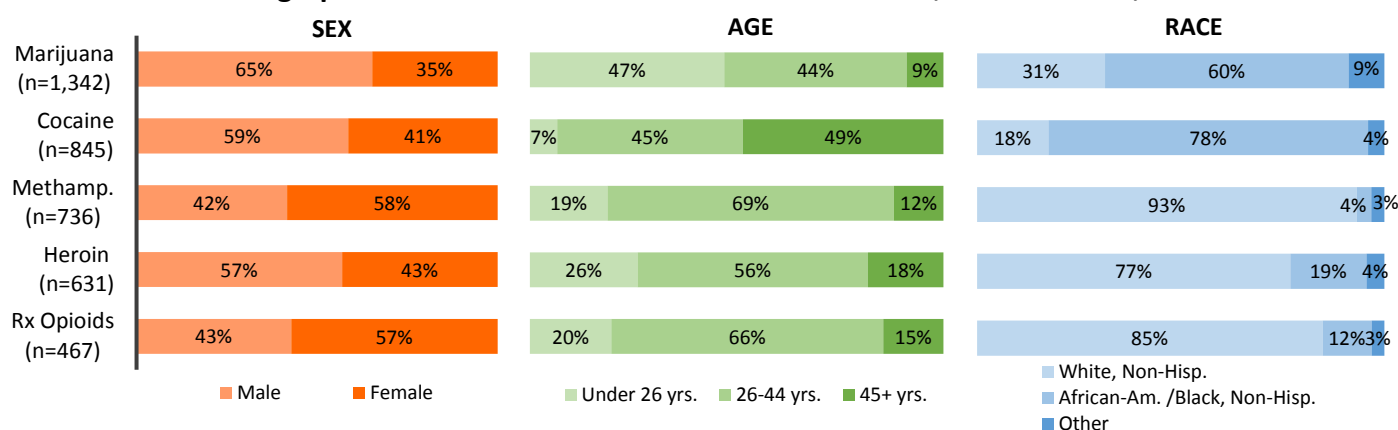
Treatment Admissions Data from Local Sources

Trends in Treatment Admissions*, by Primary Substance of Abuse, Atlanta MSA^, 2012-2016

(n = Number of Treatment Admissions)

Marijuana**
Cocaine
Methamp.
Heroin
Rx Opioids

2012 (n=9,000) — 2013 (n=8,911) — 2014 (n=8,384) — 2015 (N/A) — 2016 (N/A)

Demographic Characteristics of Treatment Admissions*, Atlanta MSA^, 2014

	SEX		AGE			RACE		
	Male	Female	Under 26 yrs.	26-44 yrs.	45+ yrs.	White, Non-Hisp.	African-Am./Black, Non-Hisp.	Other
Marijuana (n=1,342)	65%	35%	47%	44%	9%	31%	60%	9%
Cocaine (n=845)	59%	41%	7%	45%	49%	18%	78%	4%
Methamp. (n=736)	42%	58%	19%	69%	12%	93%	4%	3%
Heroin (n=631)	57%	43%	26%	56%	18%	77%	19%	4%
Rx Opioids (n=467)	43%	57%	20%	66%	15%	85%	12%	3%

Data for Calendar Years 2015 and 2016 are not available at this time; therefore, CY 2014 data, the most current data available, are presented.
*Treatment Admissions: Includes admissions to publicly-funded programs. ^Atlanta MSA: Includes the following 29 counties; Barrow, Bartow, Butts, Carroll Cherokee, Clayton, Cobb, Coweta, Dawson, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnet, Haralson, Heard, Henry, Jasper, Lamar, Meriwether, Morgan, Newton, Paulding, Pickens, Pike Rockdale, Spalding, and Walton. **Marijuana: The data does not differentiate between marijuana and synthetic cannabinoids.
See *Sentinel Community Site (SCS) Data Tables* and *Overview & Limitations* section for more information regarding the data.
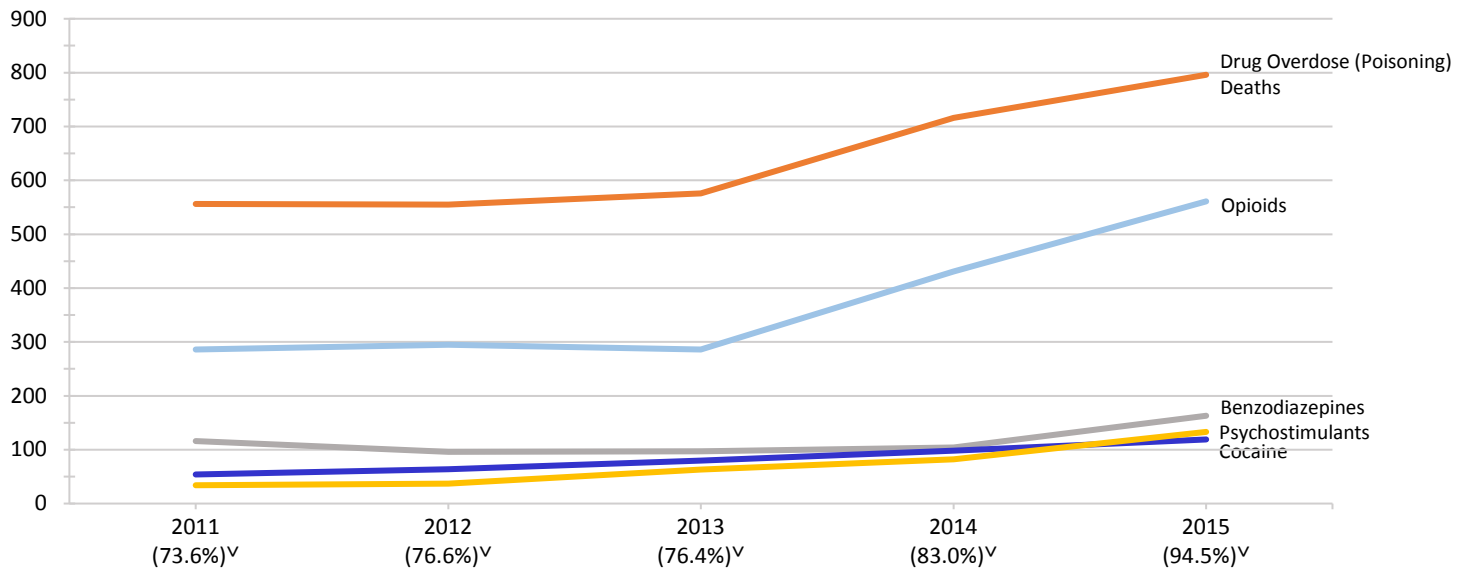**Source**: Data provided to the Atlanta Metro NDEWS SCE by the Georgia Department of Human Services.

Drug Overdose (Poisoning) Deaths

## National Vital Statistics System (NVSS) via CDC WONDER

Trends in Drug Overdose (Poisoning) Deaths*, by Drug**, Atlanta MSA^, 2011–2015
(Number of Deaths and Percent of Drug Overdose (Poisoning) Deaths with Drug(s) Specified^)

Trends in Opioid Overdose (Poisoning) Deaths*, by Opioid, Atlanta MSA^, 2011–2015
(Number of Deaths, by Drug** and Percent of Drug Overdose (Poisoning) Deaths with Drug(s) Specified^)
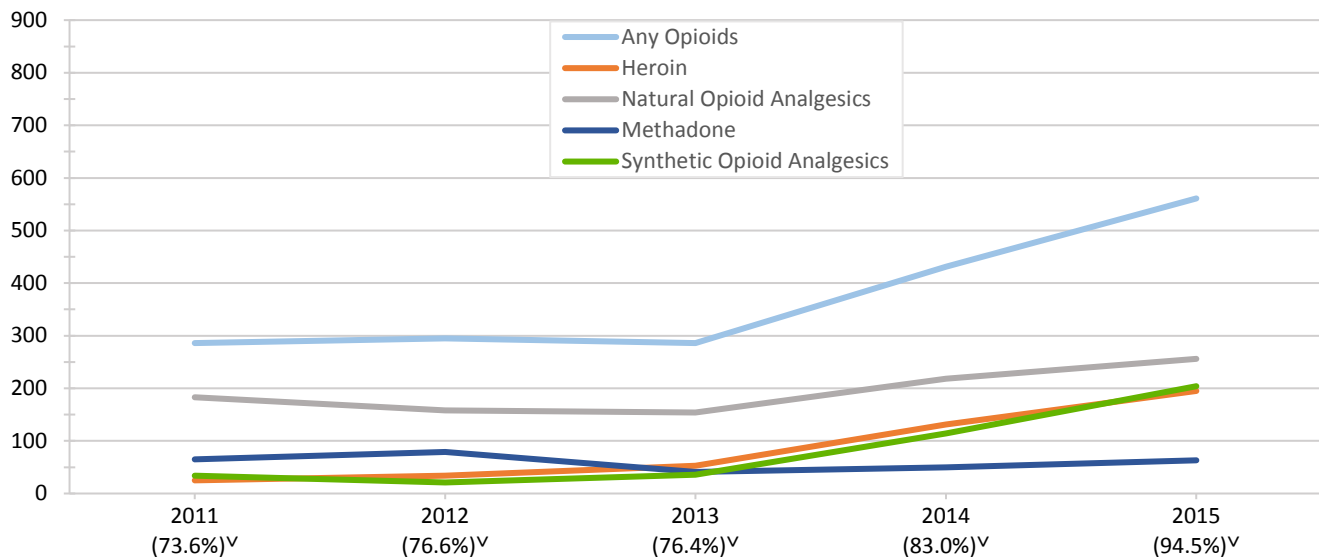
*Drug Overdose (Poisoning) Deaths: Defined as deaths with ICD-10 underlying cause-of-death (UCOD) codes: X40-X44, X60-X64, X85, and Y10-Y14. **Drug Overdose (Poisoning) Deaths, by Drug: Drug overdose (poisoning) deaths with ICD-10 multiple cause-of-death (MCOD) T-codes: Benzodiazepines (T42.4); Cocaine (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). ^Atlanta MSA: Comprised of Barrow, Bartow, Butts, Carroll, Cherokee, Clayton, Cobb, Coweta, Dawson, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Haralson, Heard, Henry, Jasper, Lamar, Meriwether, Morgan, Newton, Paulding, Pickens, Pike, Rockdale, Spalding, and Walton Counties. ^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 1999-2015, available on the CDC WONDER Online Database, released 2016. Data compiled in the Multiple cause of death 1999-2015 were provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Retrieved between February-June 2017, from http://wonder.cdc.gov/mcd-icd10.html

Law Enforcement Drug Seizures

National Forensic Laboratory Information System (NFLIS)

Drug Reports* for Items Seized by Law Enforcement in the Atlanta MSA^ in 2016
DEA National Forensic Laboratory Information System (NFLIS)

Top 10 Drug Reports and Selected Drug Categories

Drug Identified	Number (#)	Percent of Total Drug Reports (%)
TOTAL Drug Reports	14,961	100%
Top 10 Drug Reports		
Methamphetamine	4,680	31.3%
Cocaine	2,900	19.4%
Unspecified Pharmaceutical Preparation	1,540	10.3%
Alprazolam	1,345	9.0%
Heroin	892	6.0%
Oxycodone	664	4.4%
Hydrocodone	424	2.8%
Cannabis	327	2.2%
Amphetamine	168	1.1%
Tetrahydrocannabinolic Acid	143	1.0%
Top 10 Total	**13,083**	**87.4%**
New Psychoactive Substances (NPS) Drug Categories†		
Synthetic Cathinones	295	2.0%
Synthetic Cannabinoids	73	0.5%
Piperazines	58	0.4%
Fentanyl and Other Fentanyls‡	55	0.4%
2C Phenethylamines	19	0.1%
Tryptamines	8	<0.1%
Any Opioid†	**2,456**	**16.4%**

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

Synthetic Cathinones
(n=295)

N-Ethylpentylone (29%)
Dibutylone (24%)
Ethylone (20%)
Pentylone (15%)
alpha-PVP (3%)

Synthetic Cannabinoids
(n=73)

XLR-11 (26%)
FUB-AMB (18%)
AB-CHMINACA (16%)
AB-FUBINACA (15%)
5-Fluoro-ADB (8%)

Piperazines
(n=58)

TFMPP (57%)
Piperazine (22%)
BZP (14%)
1-(2-Fluorophenyl)Piperazine (3%)
mCPP (3%)

*Drug Report: Drug that is identified in law enforcement items, submitted to and analyzed by federal, state, or local forensic labs, and included in the NFLIS database. The NFLIS database allows for the reporting of up to three drugs per item submitted for analysis. The data presented are a total count of first, second, and third listed reports for each selected drug item seized and analyzed. The timeframe is January-December 2016.   ^Atlanta MSA: Includes the following 29 counties: 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.   **Select NPS Drug Categories: The 3 most prevalent NPS drug categories. Percentages may not sum to 100 due to either rounding, missing data and/or because not all possible categories are presented in the table.

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

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

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

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

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

This *SCE Narrative* contains the following sections:

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

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

National Drug Early Warning System (NDEWS) Atlanta Metro Sentinel Community Site (SCS) Drug Use Patterns and Trends, 2017: SCE Narrative

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Highlights

- Multiple data sources have indicated an increased supply of **methamphetamine** in Atlanta with elevated average purity levels reaching approximately 90%. Increased purity levels of methamphetamine have led to more deaths both in Atlanta and throughout Georgia.

- In 2017, two large seizures of **methamphetamine** totaling more than $16 million in street value were made in Fulton County. The largest seizure occurred in Norcross, GA, where more than 650 lbs. of liquid methamphetamine was confiscated.

- Despite reports of expanding **heroin** use across metropolitan Atlanta and Georgia in 2016, multiple indicators (NFLIS, Poison Control, and GA Medical Examiner) have suggested that heroin seizures, exposure calls, and deaths for heroin were down compared with the previous year.

- A decrease in **heroin**-related seizures, exposure calls, and deaths in 2016 suggests a reversal in trend compared with the previous four years. Ethnographic reports with local heroin users, however, have suggested a greater prevalence of **fentanyl** in the retail heroin market.

- Compared with the previous two years, the availability and purity of **cocaine** hydrochloride and crack cocaine in Atlanta increased in 2016. Statewide Mortality and Poison Control data for 2016 indicated increases compared with 2014 and 2015. The majority of cocaine in Atlanta continues to be Columbian, and the city remains a primary hub for distribution along the East Coast.

- Ethnographic reports and local HIDTA officials have acknowledged a more recent phenomenon of the local retail **cocaine** supply being **mixed with fentanyl**.

- The types and amounts of **synthetic cathinones** available in Atlanta have continued to change with the influx of ethylone in 2016. In South Georgia, law enforcement and public health officials have indicated an increasing amount of **Alpha PVP** (Flakka) entering the state via Florida.

- **Alprazolam** continues to be the primary benzodiazepine abused in metropolitan Atlanta and throughout Georgia, according to numerous indicators from 2016. It is the benzodiazepine most frequently detected in Georgia Poison Control calls, Georgia Medical Examiner results, NFLIS data, and ethnographic reports with users.

- Continuing a trend that was discovered in 2015, conversations with local users indicated a stable, yet elevated, supply of and demand for **liquid alprazolam**. Although "super pills" caused deaths in Florida and were confiscated in Kentucky and Tennessee in 2016, this combination of alprazolam and fentanyl has not yet been reported in the Atlanta MSA.

- Local ethnographic reports have suggested an increased demand for higher quality **marijuana** and **THC-based liquids**, with the latter being increasingly smoked in vapor pens and e-cigarettes.

- Georgia has passed several **drug-related laws** that expand the use of THC-based oils, in both the quantity of the substance one can carry and the number of permissible medical conditions allowing for its use. Additional legislation, starting in April 2017, allowed for naloxone to be sold over the counter without a prescription.

Primary and Emerging Substance Use Problems

BENZODIAZEPINES

- Alprazolam continues to be the primary benzodiazepine abused in metropolitan Atlanta and throughout Georgia, according to numerous indicators from 2016. It is the benzodiazepine most frequently detected in Georgia Poison Control calls, Georgia Medical Examiner results, NFLIS data, and ethnographic reports with users.

- Continuing a trend that was discovered in 2015, conversations with local users indicated a stable, yet elevated, supply of and demand for liquid alprazolam. Although "super pills" caused deaths in Florida and were confiscated in Kentucky and Tennessee in 2016, this combination of alprazolam and fentanyl has not yet been reported in the Atlanta MSA.

Data indicators related to the supply, use of, and demand for benzodiazepines were mixed in metropolitan Atlanta in 2016. Alprazolam continued to be the preferred benzodiazepine, followed by diazepam and lorazepam. Statewide mortality data from 2007 to 2011 indicated significant increases in deaths with benzodiazepines on board at time of death. Nevertheless, since 2011, this prevalence has stabilized. Similar trends were also found among benzodiazepine-related deaths in Fulton County during the past four years. NFLIS reports for 2016 have indicated a significant increase in the number of alprazolam-related seizures compared with 2015 and 2014. Specifically, 1,345 seizures, which represented 9.0% of total drug seizures in metropolitan Atlanta, were obtained in 2016, compared with 966 (5.4%) in 2015 and 714 (4.2%) in 2014. As indicated in Figure 1, the number of benzodiazepine-related drug poisoning calls in Atlanta during 2016 decreased by more than 8% from the previous year.

Figure 1. Drug Poisoning Calls in Metropolitan Atlanta by Select Drug (2012–2016)
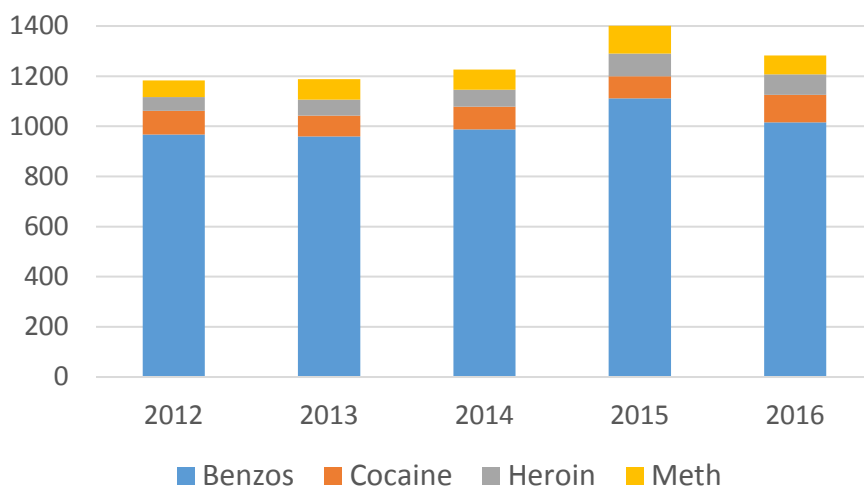
Source: Georgia Poison Control Call Volume Database.

Results from ethnographic reporting have indicated a growing supply of, and preference for, liquid alprazolam, which could be purchased for between $2 and $3 per milliliter in metropolitan Atlanta. Retail pricing for 1-milligram "blue footballs" (nickname commonly used to describe a 1-mL dose of alprazolam in pill form) in Atlanta decreased from between $2 and $4 in 2015 to between $2 and $3 in 2016. For the 2-mg alprazolam bars, the cost ranged between $5 and $10. Although "super pills," consisting of both alprazolam and fentanyl, were discovered in nearly 30 states, including Florida, Kentucky, Tennessee, and Ohio, by the end of 2016, law enforcement officials had not yet discovered this combination in Georgia.

Atlanta witnessed a recent increase in public attention related to the illicit use of benzodiazepines. In March 2016, a three-year investigation culminated in the arrest and firing of two pharmacists and three technicians at Emory University Hospital, a prominent medical facility located in Midtown Atlanta. These arrests involved illegally ordering large amounts of alprazolam in pill form and illegally selling the product on Atlanta's streets.

COCAINE/CRACK

- Compared with the previous two years, the availability and purity of cocaine hydrochloride and crack cocaine in Atlanta increased in 2016. Statewide Mortality and Poison Control data for 2016 indicated increases compared with 2014 and 2015. The majority of cocaine in Atlanta continues to be Columbian, and the city remains a primary hub for distribution along the East Coast.

- Ethnographic reports and local HIDTA officials acknowledged a more recent phenomenon of the local retail cocaine supply being mixed with fentanyl.

Although Atlanta has historically been known for its high use of both cocaine hydrochloride and crack cocaine, multiple data sources (e.g., substance abuse public treatment admissions, Georgia Medical Examiner's Office, and Georgia Poison Control Center) indicated a decrease in the drug's use from 2000 to 2013. Nevertheless, from 2013 to 2015, multiple sources indicated a stabilization at these lower levels. In 2016, however, several indicators, including local ethnographic reporting with drug users and information provided by local HIDTA officials, suggested an increase in cocaine-related demand and use in metropolitan Atlanta. Cocaine-related telephone calls to the Georgia Poison Control Center for metropolitan Atlanta increased nearly 25% from 2015 to 2016, and statewide toxicology results for 2016 showed a 7.5% increase in decedents with cocaine on board at the time of death. Cocaine law enforcement seizures, however, have been stable from 2012 through 2016. Local HIDTA officials have acknowledged that in 2016, the demand for cocaine increased while the retail, midlevel, and wholesale pricing of the drug remained stable. The DEA has confirmed that the upper range of local cocaine purity increased from 50% to 60% in 2016, and ethnographic results among local users also have suggested an increase in purity in 2016. The cocaine in Atlanta continues to be predominantly Columbian, although there have been increasing amounts of higher grade Mexican and Peruvian cocaine transported into Atlanta.

Local HIDTA officials have reported 2016 retail prices for crack cocaine to be between $20 and $40 for a rock and $80 and $100 for a gram of cocaine hydrochloride. Whole prices for cocaine in the first three

months of 2016 averaged between $32,000 and $36,000 per kilogram. These prices reflect a stable market for cocaine prices over the past two years.

The number of deaths associated with cocaine use in Georgia has fluctuated significantly since 2007 (Figure 2). It is important to note that the use of cocaine statewide was considerably higher between 7 and 10 years ago. Nevertheless, public health officials have noted an increase in deaths over the past four years although cocaine use dropped considerably from 2012 to 2016 compared with earlier periods. Multiple sources, including DEA officials, statewide Medical Examiner reports, and ethnographic reporting with drug users, have indicated the presence of the synthetic opiate, fentanyl, mixed with cocaine hydrochloride as a potential cause of this increase in cocaine-related deaths.

Figure 2. Georgia's Number of Decedents With Select Drugs on Board at Time of Death (2007–2016)
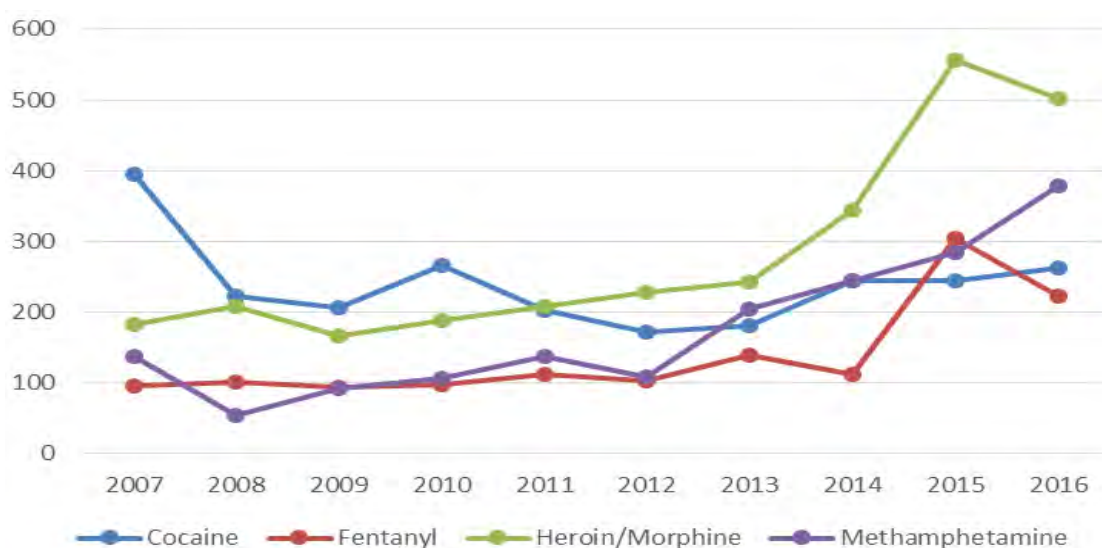
Source: Georgia Medical Examiner's Office.

Using patterns and preferred routes of administration related to local cocaine use remained consistent in 2016. Crack cocaine comprised nearly two thirds of all cocaine users in metropolitan Atlanta, and its users continued to be predominantly African American and older than 35 years of age. Users of cocaine hydrochloride tended to be White, young, affluent, and residing in suburban counties.

MARIJUANA

- Local ethnographic reports have suggested an increased demand for higher quality marijuana and THC-based liquids, with the latter being increasingly smoked in vapor pens and e-cigarettes.

In 2016, marijuana remained the most widely available and commonly used illicit drug in both metropolitan Atlanta and Georgia. Availability remained high, whereas demand for marijuana containing elevated THC increased. In addition, recent results from ethnographic reporting and discussions with local Drug Enforcement Administration (DEA) officials indicated a sharp increase in demand for liquid THC that could be consumed via e-cigarette, vapor technologies, or both. Liquid forms of THC were

purchased in local smoking-oriented stores (e.g., head shops), via the Internet, and bought in states like Colorado and Washington. Prices for liquid THC in 2016 ranged from $15 to $35 per cartridge, and users reported that supply was increasing in metropolitan Atlanta.

Atlanta continued to serve as a primary distribution center for marijuana. The majority of marijuana available in Atlanta continued to come from Mexico, with smaller amounts originating in Canada and the Caribbean. Local HIDTA officials, along with results from local ethnographic reporting, have noted increases in THC levels found in Mexican-produced marijuana in Atlanta. Law enforcement officials have suggested that this increase in purity was an effort on behalf of Mexican growers and distributors to compete with higher quality domestic marijuana grown in Colorado, Washington, and California.

Results from the Georgia Poison Control center have indicated a recent uptick in marijuana-related calls, especially at the state level. Marijuana-related calls for metropolitan Atlanta increased from 51 in 2012, 58 in 2013, 61 in 2014, 85 in 2015, and 99 in 2016, whereas statewide calls increased from 87 to 186 during this same time period. Nevertheless, the NFLIS report for 2016 has indicated a 14% decrease in marijuana-related seizures when compared with the previous year.

METHAMPHETAMINE

- Multiple data sources have indicated an increased supply of methamphetamine in Atlanta with elevated average purity levels reaching approximately 90%. Increased purity levels of methamphetamine have led to more deaths both in Atlanta and throughout Georgia.

- In 2017, two large seizures of methamphetamine totaling more than $16 million in street value were made in Fulton County. The largest seizure occurred in Norcross, GA, where more than 650 lbs. of liquid methamphetamine was confiscated.

Atlanta has traditionally had the highest rates of methamphetamine use among other major U.S. cities east of the Mississippi River. In addition to high rates of use, the purity levels of crystal methamphetamine in Atlanta during 2016 reached an average of nearly 90% and conversion of methamphetamine from a liquid to a crystallized form is increasingly being conducted in the city. In fact, two large methamphetamine-related raids took place in the city in 2017 with nearly $16 million worth of the drug being seized. During these two busts, law enforcement officers confiscated 650 lbs. of liquid methamphetamine.

Results from the last two annual reports from Atlanta's DEA Field Division have described local methamphetamine availability as high compared with stable in years 2011 through 2013. The frequency of Georgia deaths where methamphetamine was on board has continued to increase over the last three years. In 2016, there were 379 statewide decedents where methamphetamine was present at the time of death compared with 285 in 2015 and 263 in 2014. Nonetheless, two parameters (NFLIS report and the State Postmortem Report) have indicated a reversal in trend for 2016. The number of methamphetamine reports among drug items seized and analyzed by NFLIS in 2016 (N = 4,680) has decreased in comparison with the previous year (5,358 seizures in 2015) for the first time since 2012. This drop in the number of methamphetamine items seized represents a reversal of a multiyear increase trend. Similarly, Georgia Poison Control Center call results related to methamphetamine for 2016 (N = 75) have

indicated a decrease for the first time in the last five years. In comparison, the Georgia Poison Control Center reported 111 calls in 2015, 82 in 2014, 80 in 2013, and 67 in 2012.

Pricing for methamphetamine in Atlanta continued a three-year decrease in 2016. During 2016, local HIDTA officials reported that a gram of crystal methamphetamine could be purchased for $65 per gram and an ounce of the drug could be bought for between $350 and $1,500 with an average cost of $550. Wholesale prices of methamphetamine fluctuated between $10,000 and $16,000.

Although ethnographic reports and local HIDTA officials have reported increasing use of the drug in Atlanta's African American community, local users of methamphetamine have continued to be mostly White. Historically, separate drug distribution systems have existed between methamphetamine and cocaine at the retail level. Therefore, it was uncommon for street dealers to sell both types of stimulants. Conversations with law enforcement officials and results from local ethnographic reporting have suggested that greater numbers of retail distributors are now selling both methamphetamine and cocaine.

NEW PYSCHOACTIVE SUBSTANCES (OTHER THAN OPIOIDS)

- The types and amounts of **synthetic cathinones** available in Atlanta have continued to change with the influx of ethylone in 2016. In South Georgia, law enforcement and public health officials have indicated an increasing amount of **Alpha PVP** (Flakka) entering the state via Florida.

Synthetic Cathinones

In this section, local epidemiological results for synthetic cannabinoids, cathinones, and MDMA will be presented. Reports from street-level ethnographers have suggested that use of synthetic cannabinoids and cathinones remains popular, especially among adults younger than 30 years of age. Synthetic cannabinoids, typically sold in local head shops, convenience stores, and gas stations, were available under several product names identified as "not for human consumption." Supply and cost of synthetic cannabinoids has remained stable in the metropolitan area. Nevertheless, ethnographic reports have suggested these drugs are increasingly being used via e-cigarettes and other vaporization pens to avoid detection. In 2016, Poison Control Center call data for counties representing the Atlanta MSA remained stable in drug exposure cases related to synthetic cathinones.

Significant changes among the number of metropolitan Atlanta-based drug seizures of cathinones occurred between 2015 and 2016. The number of seized methylone items as identified by NFLIS, after doubling from 2012 to 2013, decreased from 695 reports in 2013, to 183 reports in 2014, to 66 reports in 2015, and significantly decreasing to 5 in 2016. Although a significant decrease was found in methylone, just the opposite was reported among seizures of ethylone. In 2013, only 1 report was found for ethylone compared with 359 reports in 2014 and 483 reports in 2015. This three-year trend sharply reversed in 2016, where the number of Atlanta-based drug seizures for ethylone decreased from 483 to 58. Ethnographic reporting has indicated that retail drug dealers have been marketing mollies as pure MDMA, but in reality, mollies are predominantly ethylone.

Drug indicators for cathinones must be interpreted with caution as a result of uncertain classifications of data related to the drug, Molly. Results from conversations with law enforcement officers and street-

level ethnographic efforts have suggested that Molly has been marketed as "pure ecstasy" or "pure MDMA." Nevertheless, results from the Georgia Crime Lab have suggested that a low percentage of pills sold as Molly in metropolitan Atlanta contained MDMA. Rather, the primary substance found in Molly is a cathinone product, specifically ethylone and methylone. Although methylone was frequently found in Molly in 2013, it was mostly replaced in Molly by ethylone in 2014 and 2015 and methamphetamine in 2016. The Georgia Poison Control Center, while identifying a drug exposure call as "Molly," does not differentiate based on the chemical composition of the drug. As a result, it is unknown if the exposure call relates to a drug that consists of MDMA, a cathinone, or a mixture of these substances.

Although not prevalent in Atlanta, HIDTA and other law enforcement officials have suggested that Alpha PVP has crossed over into South Georgia from Florida. Also known as flakka or gravel, the use of this drug has caused multiple psychotic episodes in users in Valdosta, Georgia, and neighboring towns. Yet, there have been no arrests of persons under the influence of Alpha PVP nor confiscation of the drug in metropolitan Atlanta.

OPIOIDS

- Despite reports of expanding **heroin** use across metropolitan Atlanta and Georgia in 2016, multiple indicators (NFLIS, Poison Control, and GA Medical Examiner) have suggested that heroin seizures, exposure calls, and deaths for heroin were down compared with the previous year.

- A decrease in heroin-related seizures, exposure calls, and deaths in 2016 suggests a reversal in trend compared with the previous four years. Ethnographic reports with local heroin users, however, have suggested a greater prevalence of fentanyl in the retail heroin market.

Heroin

Although Atlanta has been identified by local DEA officials as an emerging primary distribution center for heroin, all drug indicators for 2016 pointed toward a decrease in heroin use. Traditionally known for having low indicators for heroin, Atlanta witnessed elevated use of the drug starting in 2013. As indicated in Figure 3, heroin comprised 6.0% and narcotic analgesics represented an additional 10.4% of all drug seizures in metropolitan Atlanta.

Figure 3. Drug Reports[*] for Items Seized by Law Enforcement in Atlanta MSA^ by Selected Drug Categories[**] of Interest, Number of Drug-Specific Reports, Percentage of Analyzed Drug Category Reports, & Percentage of Total Analyzed Drug Reports, DEA National Forensic Laboratory Information System (2016)

Drug Identified, by Selected Drug Category**	Number (#)	Percent of Drug Category (%)	Percent of Total Reports (%)
Total Drug Reports*	14,961	100.0%	100.0%
Opioids Category	2,456	100.0%	16.4%
Heroin	892	36.3%	6.0%
Narcotic Analgesics	1,558	63.4%	10.4%
OXYCODONE	664	27.0%	4.4%
HYDROCODONE	424	17.3%	2.8%
TRAMADOL	115	4.7%	0.8%
METHADONE	83	3.4%	0.6%
CODEINE	66	2.7%	0.4%
MORPHINE	66	2.7%	0.4%
BUPRENORPHINE	47	1.9%	0.3%
FENTANYL	47	1.9%	0.3%
HYDROMORPHONE	14	0.6%	< 0.1%
U-47700	14	0.6%	< 0.1%
OXYMORPHONE	5	0.2%	< 0.1%
FURANYL FENTANYL	3	0.1%	< 0.1%
PROPOXYPHENE	3	0.1%	< 0.1%
3-METHYLFENTANYL	2	< 0.1%	< 0.1%
BUTYRYL FENTANYL	2	< 0.1%	< 0.1%
MITRAGYNINE	2	< 0.1%	< 0.1%
MEPERIDINE	1	< 0.1%	< 0.1%
Narcotics	6	0.2%	< 0.1%
METHORPHAN	3	0.1%	< 0.1%
CARFENTANIL	1	< 0.1%	< 0.1%
NALTREXONE	1	< 0.1%	< 0.1%
PAPAVERINE	1	< 0.1%	< 0.1%

^Atlanta MSA: The Atlanta-Sandy Springs-Roswell, Georgia MSA includes the following 29 counties: Barrow, Bartow, Butts, Carroll, Cherokee, Clayton, Cobb, Coweta, Dawson, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Haralson, Heard, Henry, Jasper, Lamar, Meriwether, Morgan, Newton, Paulding, Pickens, Pike, Rockdale, Spalding, and Walton. The principal cities of the Atlanta MSA include: Atlanta, Sandy Springs, Roswell, Alpharetta, and Marietta.

[*]Drug Report: Drug that is identified in law enforcement items, submitted to and analyzed by federal, state, or local forensic labs, and included in the NFLIS database. The time frame is January - December 2016.

[**]Selected Drug Categories: Opioids, Synthetic Cannabinoids, Synthetic Cathinones, 2C Phenethylamines, Piperazines, and Tryptamines are drug categories of current interest to the NDEWS Project because of the recent increase in their numbers, types, and availability.

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

Heroin-related cases from the Georgia Medical Examiner's Office decreased from 2015 to 2016 (556 vs. 501). This is a change from 2013 to 2015 (243 vs. 556) where cases had nearly doubled. In 2016, more than 23% of all decedents tested positive for heroin and a third of this total reported positive results for fentanyl. Calls from the Georgia Poison Control for metropolitan Atlanta doubled from 54 in 2012 to 91 in 2015. Nevertheless, this trend reversed in 2016 as the number of calls decreased for metropolitan Atlanta from 91 in 2015 to 81 in 2016. Heroin-related drug reports for items seized by law enforcement in metro Atlanta in 2016 also have indicated a decrease in use compared with the previous year, closer amounts seized in 2015. Only 6.0% (*N* = 892) of heroin-related reports were identified in 2016, compared with 6.2% in 2015, 5.9% in 2014, 5.0% in 2013, and 2.9% in 2012.

The supply of heroin had increased significantly because of large shipments from South America and Mexico coming directly into Atlanta from 2013 to 2016. Additionally, new and continued use of heroin among young adults (18–28 years old) in mostly White, suburban areas has largely fueled the increased demand for the drug. For years prior to 2014, the sale of heroin had been conducted in open air markets in a part of the inner city named "The Bluff." When substance abuse treatment admissions for heroin were less than 3.5% annually, the exchange of the drug, even among those persons who lived in the suburbs and other parts of the city, largely took place in this neighborhood. Users would enter The Bluff by car or public transportation, purchase their heroin, and return home. In 2014, retail distribution of heroin, as a result of increased law enforcement presence in The Bluff and of increased demand among more affluent young adults, was conducted more extensively throughout the city, especially in less urban, White suburbs in Northwest and Northeast Atlanta.

The decrease seen in heroin prevalence across indicators does suggest a reversal in trend compared with the previous four years. This reversal aligns with ethnographic reports with local heroin users, which have suggested a greater prevalence of fentanyl in the retail heroin market. This increased presence of fentanyl appeared in multiple data indicators as a drug that is frequently used in combination with other opiates (e.g., heroin) and stimulants (e.g., cocaine). Among decedents reported by the Georgia Medical Examiner's Office, there was nearly a tripling of cases that tested positive for fentanyl from 2014 to 2015. In Fulton County alone, nearly 30% of all deaths tested positive for the drug in 2015. Among decedents reported, there was a decrease from 305 in 2015 to 222 in 2016, mirroring the trend in heroin. Local HIDTA officials have corroborated local ethnographic reports that Atlanta's heroin supply is being cut with fentanyl. Nevertheless, the decrease in heroin-related deaths could also be caused by recent legal changes aimed at increasing access to the lifesaving opioid antagonists (naloxone).

Infectious Diseases Related to Substance Use

According to the Georgia Department of Public Health reports, the number of new HIV diagnoses in the Atlanta MSA has continued to rise over the last three years. In 2013, there were 1,665 new HIV infections; in 2014, 1,764 cases of new infections were recorded; and in 2015, the Georgia Department of Public Health recorded 1,867 new infections. Males accounted for the majority of new infections in

2015 (1,564). The proportion of new infections for males and females remained consistent over the last three years (males 83%; females 16%).

Male-to-male sexual contact (MSM) remained the most prevalent transmission category accounting for 73% of total transmissions (1,374). These results for MSM sexual contact reflect a 12% increase from 2014. Injection drug use (IDU) accounted for 2% of new transmissions (51) in 2015, which was identical to the rate reported in the previous year, and MSM/IDU accounted for an additional 1% (27), indicating no change in prevalence compared with 2014.

Among persons diagnosed in 2015, African American/Black accounted for 72% (1,354), Whites accounted for 15% (287), and Hispanic/Latino made up 7% (135) of new infections. The most significant change in new infection rates was noted for African American/Black persons. The percentage of new infections for this populations increased 8% in comparison with the previous year.

Legislative and Policy Updates

- Georgia has passed several drug-related laws that expand the use of THC-based oils, in both the quantity of the substance one can carry and the number of permissible medical conditions allowing for its use. Additional legislation, starting in April 2017, allowed for naloxone to be sold over the counter without a prescription.

In April 2017, the Jeffrey Dallas Gay Jr. Act, a bill that allows for the opioid antagonist naloxone to be sold over the counter without a prescription, went into effect. Under this law, Georgia health officers are allowed to issue standing orders to prescribe opioid antagonists (naloxone) on a statewide basis. This passage of this bill allows pharmacists to dispense opioid antagonist to any person at risk of experiencing an opioid-related overdose or to a pain management clinic, first responder, harm reduction organization, family member, friend, or other person in a position to assist a person at risk of experiencing an opioid-related overdose. Additionally, this bill provides immunity from any civil or criminal liability for the pharmacist dispensing the opioid antagonists and for the person administering the opioid antagonist.

On July 2017, Georgia Senate Bill 16 took effect throughout the state. This bill allows for an individual with a registration card issued by the Department of Public Health to possess up to 20 fluid ounces of low levels of THC oil and permits reciprocity of medical cannabis registration cards between Georgia and other states so long as the medical cannabis in a person's possession meets Georgia's legal requirements. The implementation of this bill also increased the list of medical conditions that are eligible for treatment with medical cannabis. The medical conditions included in this policy were Tourette's syndrome, autism spectrum disorder, epidermolysis bullosa, Alzheimer's disease, AIDS, and peripheral neuropathy. Lastly, this law changes the reporting requirements for doctors, reducing the reporting schedule from quarterly to semiannually and including the THC levels used in treatment.

In February 2017, House Bill 400 (Opioid Abuse Prevention) was introduced by Representative Stacey Evans. This bill proposed the limiting of opioid prescribing by imposing regulations such as requiring the prescribing of nonopioid prescription to treat pain prior to prescribing an opioid, and limiting opioid prescriptions to no more than a seven-day supply with no refills. This bill did not make the crossover to the Senate during the legislation session, but introduction of such legislation highlights the growing concern for the opioid abuse within the state.

Data Sources

Data for this report were drawn from the following sources:

Forensic drug analysis data came from the National Forensic Laboratory Information System (NFLIS) and represent evidence seized in suspected drug cases throughout metropolitan Atlanta that were tested by the GBI Forensic Laboratory from 2011 to 2016. NFLIS methodology allows for the accounting of up to three drugs for each item submitted for analysis. The data presented are a combined count, including primary, secondary, and tertiary reports for each drug. Data for 2016 are preliminary and subject to change.

Newly diagnosed and ongoing HIV/AIDS cases in Metro Atlanta and Georgia were provided by the Georgia Department of Human Resources' Public Health Department. Results from 2015 were compared in this report.

Law enforcement reports of local drug use trends, prices, and availability were obtained from officials at the Atlanta High Intensity Drug Trafficking Area (HIDTA). Annual meetings with HIDTA staff are supplemented with multiple telephone consultations throughout the year. Drug use trends, prices, and supply have been reported from 2010 to 2016.

State drug-related mortality data were obtained from the Georgia Medical Examiner's Office. Data represent the number of postmortem specimens that tested positive for a particular drug and were collected from fiscal years (FYs) 2007 through 2016.

Poison exposure call data were extracted using general terms from the Georgia Poison Control Center and represent the count of drug exposure calls by drug from 2006 to 2016.

Qualitative information and purity data are a result of street-level ethnographic reporting with drug users and law enforcement officials in the metropolitan Atlanta area. As a result of the SCE's research efforts over the past 15 years, relationships with persons involved with local illicit drug distribution have been maintained that allow for the corroboration of information with other data sources.

Contact Information: For additional information about the drugs and drug use patterns discussed in this report, please contact Brian J. Dew, Ph.D., Associate Professor and Chair, Department of Counseling and Psychological Services, Georgia State University, P.O. Box 3980, Atlanta, GA 30302, Phone: 404–413–8168, Fax: 404–413–8013, E-mail: bdew@gsu.edu.

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
Atlanta Metropolitan Statistical Area (MSA)^, Georgia
2011–2015 ACS 5-Year Estimates

	Estimate	Margin of Error
Total Population (#)	**5,535,837**	******
Age		
18 years and over (%)	74.4%	+/-0.1
21 years and over (%)	70.3%	+/-0.1
65 years and over (%)	10.3%	+/-0.1
Median Age (years)	35.7	+/-0.1
Race (%)		
White, Not Hisp.	49.4%	+/-0.1
Black/African American, Not Hisp.	32.5%	+/-0.1
Hispanic/Latino (of any race)	10.5%	**
American Indian/Alaska Native, Not Hisp.	0.2%	+/-0.1
Asian, Not Hisp.	5.3%	+/-0.1
Native Hawaiian/Pacific Islander, Not Hisp.	0.0%	+/-0.1
Some Other Race	0.3%	+/-0.1
Two or More Races	1.9%	+/-0.1
Sex (%)		
Male	48.5%	+/-0.1
Female	51.5%	+/-0.1
Educational Attainment (*Among Population Aged 25+ Years*) (%)		
High School Graduate or Higher	88.2%	+/-0.1
Bachelor's Degree or Higher	35.8%	+/-0.2
Unemployment (*Among Civilian Labor Force Population Aged 16+ Years*) (%)		
Unemployment Rate	9.5%	+/-0.2
Income ($)		
Median Household Income (in 2015 inflation-adjusted dollars)	$57,000	+/-272
Health Insurance Coverage (*Among Civilian Noninstitutionalized Population*) (%)		
No Health Insurance Coverage	16.8%	+/-0.2
Poverty (%)		
All People Whose Income in Past 12 Months Is Below Poverty Level	15.6%	+/-0.2

NOTES:

Margin of Error: Can be interpreted roughly as providing a 90% probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value.

^Atlanta MSA: In 2013, the U.S. Office of Management and Budget (OMB) revised MSA delineations across the country; the new Atlanta-Sandy Springs-Roswell, Georgia MSA comprises 29 counties (previously, 28 counties). The 29 counties are Barrow, Bartow, Butts, Carroll, Cherokee, Clayton, Cobb, Coweta, Dawson, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Haralson, Heard, Henry, Jasper, Lamar, Meriwether, Morgan, Newton, Paulding, Pickens, Pike, Rockdale, Spalding, and Walton. The principal cities of the Atanta MSA include Atlanta, Sandy Springs, Roswell, Alpharetta, and Marietta.

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

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

Table 2a: Self-Reported Substance Use Behaviors
Among Persons 12+ Years in Atlanta 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: Atlanta^	
	Estimated % (95% CI)*	Estimated #*
Used in Past Month		
Alcohol	49.91 (45.72 – 54.10)	1,213,751
Binge Alcohol**	19.50 (16.89 – 22.40)	474,135
Marijuana	7.95 (6.34 – 9.93)	193,391
Use of Illicit Drug Other Than Marijuana	3.87 (2.88 – 5.20)	94,212
Used in Past Year		
Cocaine	2.15 (1.36 – 3.37)	52,302
Nonmedical Use of Pain Relievers	4.18 (3.25 – 5.37)	101,747
Substance Use Disorders in Past Year*		
Illicit Drugs or Alcohol	**7.99 (6.64 – 9.60)**	**194,422**
Alcohol	6.47 (5.19 – 8.04)	157,410
Illicit Drugs	3.06 (2.34 – 4.00)	74,476

NOTES:

^Atlanta Region: NSDUH Substate Region 3, which comprises Clayton, DeKalb, Fulton, Gwinnett, Newton, and Rockdale 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 (2,431,810) 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 Atlanta Region^, by Age Group, 2012–2014
Estimated Percent and 95% Confidence Interval (CI)*, Annual Averages Based on Combined 2012 to 2014 NSDUH Data

Substance Use Behaviors	Substate Region: Atlanta^					
	12–17		18–25		26+	
	Estimated Percent (95% CI)*		Estimated Percent (95% CI)*		Estimated Percent (95% CI)*	
Used in Past Month						
Binge Alcohol**	4.90	(3.65 – 6.57)	28.47	(24.13 – 33.25)	19.88	(16.74 – 23.45)
Marijuana	6.78	(5.09 – 8.97)	19.82	(16.09 – 24.17)	6.07	(4.37 – 8.36)
Use of Illicit Drug Other Than Marijuana	4.44	(3.11 – 6.30)	6.04	(4.29 – 8.43)	3.43	(2.33 – 5.02)
Used in Past Year						
Cocaine	0.49	(0.25 – 0.96)	3.67	(2.30 – 5.81)	2.11	(1.22 – 3.61)
Nonmedical Use of Pain Relievers	5.14	(3.70 – 7.11)	7.72	(5.92 – 10.02)	3.45	(2.44 – 4.86)
Substance Use Disorder in Past Year*						
Illicit Drugs or Alcohol	5.03	(3.67 – 6.85)	15.88	(12.74 – 19.61)	7.03	(5.54 – 8.89)
Alcohol	2.02	(1.38 – 2.93)	11.55	(8.99 – 14.74)	6.19	(4.74 – 8.04)
Illicit Drugs	3.96	(2.80 – 5.57)	7.63	(5.64 – 10.24)	2.16	(1.45 – 3.21)

NOTES:
^Atlanta Region: NSDUH Substate Region 3, which comprises Clayton, DeKalb, Fulton, Gwinnett, Newton, and Rockdale 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 Behaviors Among *Georgia* ^ Public High School Students, 2013[1]
Estimated Percent and 95% Confidence Interval (CI)
2011 and 2013 YRBS*

Substance Use Behaviors	2013 vs 2011			2013 by Sex			2013 by Race		
	2013	2011	p-value	Male	Female	p-value	White	Black	Hispanic
	Percent			Percent			Percent		
	Estimate (95% CI)	Estimate (95% CI)		Estimate (95% CI)	Estimate (95% CI)		Estimate (95% CI)	Estimate (95% CI)	Estimate (95% CI)
Used in Past Month									
Alcohol	27.9 (23.8 - 32.3)	34.6 (30.7 - 38.7)	**0.02**	25.0 (20.1 - 30.7)	30.3 (25.7 - 35.4)	0.06	31.9 (25.4 - 39.2)	22.6 (18.3 - 27.5)	30.8 (23.4 - 39.5)
Binge Alcohol**	13.3 (11.1 - 15.8)	17.5 (14.4 - 21.0)	**0.04**	13.8 (10.5 - 17.9)	12.7 (10.4 - 15.4)	0.58	17.4 (13.5 - 22.1)	7.9 (6.1 - 10.1)	15.8 (10.8 - 22.6)
Marijuana	20.3 (17.0 - 23.9)	21.2 (18.8 - 23.9)	0.64	21.3 (17.5 - 25.7)	19.1 (15.8 - 22.9)	0.20	16.9 (13.0 - 21.8)	23.1 (18.4 - 28.6)	23.9 (18.5 - 30.3)
Ever Used in Lifetime									
Alcohol	59.2 (55.1 - 63.2)	66.1 (62.2 - 69.8)	**0.01**	55.5 (50.5 - 60.3)	62.8 (57.8 - 67.5)	**0.01**	61.2 (55.1 - 66.9)	55.2 (51.3 - 59.1)	65.4 (57.2 - 72.7)
Marijuana	35.9 (31.7 - 40.2)	37.9 (34.4 - 41.6)	0.44	38.0 (32.6 - 43.7)	33.7 (29.8 - 37.7)	0.06	31.3 (25.3 - 38.0)	41.2 (35.6 - 47.0)	40.0 (30.6 - 50.2)
Cocaine	7.0 (5.4 - 9.1)	6.7 (5.3 - 8.5)	0.80	8.0 (5.8 - 10.9)	5.6 (4.2 - 7.6)	0.07	5.3 (3.6 - 7.6)	6.5 (4.0 - 10.4)	11.0 (7.8 - 15.4)
Hallucinogenic Drugs	—	—	~	—	—	~	—	—	—
Inhalants	9.9 (8.2 - 12.0)	13.2 (11.8 - 14.8)	**0.01**	11.2 (8.6 - 14.5)	8.2 (6.7 - 9.9)	0.06	8.1 (5.7 - 11.4)	9.1 (6.7 - 12.1)	15.0 (10.5 - 21.0)
Ecstasy also called "MDMA"	7.1 (5.6 - 8.8)	8.5 (6.8 - 10.6)	0.24	8.7 (6.6 - 11.4)	5.0 (3.8 - 6.7)	**0.00**	5.6 (3.8 - 8.2)	6.2 (3.7 - 10.3)	11.2 (7.7 - 15.9)
Heroin	—	4.7 (3.4 - 6.3)	~	—	—	~	—	—	—
Methamphetamine	—	6.0 (4.8 - 7.6)	~	—	—	~	—	—	—
Rx Drugs without a Doctors Prescription	17.7 (16.1 - 19.5)	—	~	19.5 (16.7 - 22.6)	15.7 (13.4 - 18.4)	0.08	18.5 (14.8 - 22.9)	14.9 (11.7 - 18.9)	18.7 (13.3 - 25.6)
Injected Any Illegal Drug	—	2.9 (2.2 - 3.9)	~	—	—	~	—	—	—

NOTES:

[1]2013: 2015 YRBS data not available for Atlanta or Georgia so 2013 Georgia data is presented.

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

^Georgia: data not available for Atlanta so data for State of Georgia provided; weighted data were available for Georgia 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 1,969 with an overall response rate of 72%; the 2013 sample size was 1,992 with a 61% 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, *Atlanta MSA^*, 2012-2016

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

	Calendar Year									
	2012		2013		2014		2015		2016	
	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)
Total Admissions (#)	**9,000**	**100%**	**8,911**	**100%**	**8,384**	**100%**	**unavail**	**unavail**	**unavail**	**unavail**
Primary Substance of Abuse (%)										
Alcohol	4,470	49.7%	4,205	47.2%	3,856	46.0%	unavail	unavail	unavail	unavail
Cocaine/Crack	928	10.3%	862	9.7%	845	10.1%	unavail	unavail	unavail	unavail
Heroin	377	4.2%	548	6.1%	631	7.5%	unavail	unavail	unavail	unavail
Prescription Opioids	629	7.0%	619	6.9%	366	4.4%	unavail	unavail	unavail	unavail
Methamphetamine	567	6.3%	667	7.5%	736	8.8%	unavail	unavail	unavail	unavail
Marijuana**	1,435	15.9%	1,423	16.0%	1,342	16.0%	unavail	unavail	unavail	unavail
Benzodiazepines	185	2.1%	192	2.2%	140	1.7%	unavail	unavail	unavail	unavail
MDMA	6	<1%	6	<1%	3	<1%	unavail	unavail	unavail	unavail
Synthetic Stimulants	69	0.8%	118	1.3%	119	1.4%	unavail	unavail	unavail	unavail
Synthetic Cannabinoids**	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
Other Drugs/Unknown	334	3.7%	271	3.0%	346	4.1%	unavail	unavail	unavail	unavail

NOTES:

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

^Atlanta MSA: Includes the following 29 counties—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.

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

unavail: Data not available.

NOTE: Data for Calendar Years 2015 and 2016 are not available for the Atlanta Metro SCS at this time.

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

Table 4b: Demographic and Drug Use Characteristics of Primary Treament Admissions* for Select Substances of Abuse, *Atlanta MSA^*, 2014**

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 (#)	**3,856**	**100%**	**845**	**100%**	**631**	**100%**	**467**	**100%**	**736**	**100%**	**1,342**	**100%**	**140**	**100%**
Sex (%)														
Male	2,622	68.0%	495	58.6%	359	56.9%	200	42.8%	307	41.7%	875	65.2%	82	58.6%
Female	1,234	32.0%	350	41.4%	272	43.1%	267	57.2%	429	58.3%	467	34.8%	58	41.4%
Race/Ethnicity (%)														
White, Non-Hisp.	1,819	47.2%	148	17.5%	485	76.9%	396	84.8%	686	93.2%	421	31.4%	120	85.7%
African-Am/Black, Non-Hisp	1,859	48.2%	663	78.5%	118	18.7%	56	12.0%	26	3.5%	803	59.8%	15	10.7%
Hispanic/Latino	97	2.5%	21	2.5%	13	2.1%	3	0.6%	8	1.1%	69	5.1%	5	3.6%
Asian/Pacific Islander	11	0.3%	0	0.0%	9	1.4%	4	0.9%	5	0.7%	6	0.4%	0	0.0%
Other	70	1.8%	13	1.5%	6	1.0%	8	1.7%	11	1.5%	43	3.2%	0	0.0%
Age Group (%)														
Under 18	9	0.2%	1	0.1%	4	0.6%	4	0.9%	5	0.7%	178	13.3%	2	1.4%
18-25	307	8.0%	55	6.5%	160	25.4%	88	18.8%	133	18.1%	453	33.8%	30	21.4%
26-44	1,816	47.1%	379	44.9%	352	55.8%	307	65.7%	510	69.3%	592	44.1%	82	58.6%
45+	1,724	44.7%	410	48.5%	115	18.2%	68	14.6%	88	12.0%	119	8.9%	26	18.6%
Route of Administration (%)														
Smoked	0	0.0%	612	72.4%	7	1.1%	12	2.6%	349	47.4%	1,282	95.5%	2	1.4%
Inhaled	0	0.0%	188	22.2%	80	12.7%	34	7.3%	112	15.2%	5	0.4%	0	0.0%
Injected	0	0.0%	15	1.8%	523	82.9%	48	10.3%	215	29.2%	0	0.0%	2	1.4%
Oral/Other/Unknown	3,856	100.0%	30	3.6%	21	3.3%	373	79.9%	60	8.2%	55	4.1%	136	97.1%
Secondary Substance (%)														
None	1,477	38.3%	239	28.3%	143	22.7%	130	27.8%	218	29.6%	581	43.3%	23	16.4%
Alcohol	0	0.0%	341	40.4%	71	11.3%	46	9.9%	115	15.6%	447	33.3%	12	8.6%
Benzodiazepines	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	0	0.0%
Cocaine/Crack	1,050	27.2%	12	1.4%	99	15.7%	12	2.6%	38	5.2%	103	7.7%	8	5.7%
Heroin	84	2.2%	19	2.2%	0	0.0%	20	4.3%	36	4.9%	8	0.6%	15	10.7%
Prescription Opioids	84	2.2%	6	0.7%	79	12.5%	0	0.0%	65	8.8%	23	1.7%	34	24.3%
Methamphetamine	131	3.4%	12	1.4%	72	11.4%	5	1.1%	0	0.0%	118	8.8%	19	13.6%
Marijuana**	837	21.7%	196	23.2%	78	12.4%	9	1.9%	212	28.8%	0	0.0%	14	10.0%

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.

^Atlanta MSA: Includes the following 29 counties—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.

**2014: Data for Calendar Years 2015 and 2016 are not available at this time; therefore, CY 2014 data, the most current data available, are presented.

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

unavail: Data not available.

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

Table 5: Drug Poisoning Deaths*, by Drug** and Year, _Atlanta MSA_^, 2011–2015
Number, Crude Rate, and Age-Adjusted Rate*** (per 100,000 population)

	2011			2012			2013			2014			2015		
	Number (#)	Crude Rate	Age-Adjusted Rate	Number (#)	Crude Rate	Age-Adjusted Rate	Number (#)	Crude Rate	Age-Adjusted Rate	Number (#)	Crude Rate	Age-Adjusted Rate	Number (#)	Crude Rate	Age-Adjusted Rate
Drug Poisoning Deaths	**556**	**10.3**	**10.0**	**555**	**10.2**	**9.9**	**576**	**10.4**	**10.1**	**716**	**12.8**	**12.5**	**796**	**13.9**	**13.6**
Opioids‡	**286**	**5.3**	**5.1**	**295**	**5.4**	**5.2**	**286**	**5.2**	**5.1**	**431**	**7.7**	**7.5**	**561**	**9.8**	**9.6**
Heroin	25	0.5	0.4	34	0.6	0.6	53	1.0	0.9	131	2.3	2.3	195	3.4	3.4
Natural Opioid Analgesics	183	3.4	3.3	158	2.9	2.8	154	2.8	2.7	218	3.9	3.8	256	4.5	4.3
Methadone	65	1.2	1.2	79	1.4	1.4	41	0.7	0.7	50	0.9	0.9	63	1.1	1.1
Synthetic Opioid Analgesics	34	0.6	0.6	21	0.4	0.4	36	0.7	0.6	114	2.0	2.0	204	3.6	3.5
Benzodiazepines	**116**	**2.2**	**2.1**	**96**	**1.8**	**1.7**	**97**	**1.8**	**1.7**	**104**	**1.9**	**1.8**	**163**	**2.9**	**2.8**
Benzodiazepines **AND** Any Opioids	95	1.8	1.7	81	1.5	1.4	86	1.6	1.5	89	1.6	1.6	144	2.5	2.5
Benzodiazepines **AND** Heroin	SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP	14	UNR	UNR	24	0.4	0.4
Psychostimulants															
Cocaine	54	1.0	0.9	64	1.2	1.1	80	1.4	1.4	98	1.7	1.7	119	2.1	2.0
Psychostimulants with Abuse Potential	34	0.6	0.6	37	0.7	0.7	63	1.1	1.1	82	1.5	1.5	133	2.3	2.3
Cannabis (derivatives)	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**	**SUP**
Percent with Drugs Specified‡	73.6%			76.6%			76.4%			83.0%			94.5%		

NOTES:

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

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

^Atlanta MSA: Comprised of Barrow, Bartow, Butts, Carroll, Cherokee, Clayton, Cobb, Coweta, Dawson, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Haralson, Heard, Henry, Jasper, Lamar, Meriwether, Morgan, Newton, Paulding, Pickens, Pike, Rockdale, Spalding, and Walton Counties.

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

‡Opioids: Includes any of these MCOD codes T40.0-T40.4, or T40.6
  Heroin (T40.1); _Natural Opioid Analgesics_ (T40.2) - Including morphine and codeine, and semi-synthetic opioid analgesics, including drugs such as oxycodone, hydrocodone, hydromorphone, and oxymorphone; _Methadone_ (T40.3); _Synthetic Opioid Analgesics_ (T40.4) - Other than methadone, including drugs such as tramadol and fentanyl; _Other and Unspecified Narcotics_ (T40.6)
Benzodiazepines: (T42.4)
  Benzodiazepines AND _Any Opioids_ (T42.4 AND T40.0-T40.4, or T40.6)
    Benzodiazepines AND _Heroin_ (T42.4 AND T40.1)
Psychostimulants:
  Cocaine (T40.5); Psychostimulants with Abuse Potential [excludes cocaine] (T43.6)
Cannabis (derivatives): (T40.7)

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

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

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

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

Drug Identified	Number (#)	Percent of Total Drug Reports* (#)
Total Drug Reports	**14,961**	**100.0%**
METHAMPHETAMINE	4,680	31.3%
COCAINE	2,900	19.4%
UNSPECIFIED PHARMACUETICAL PREPARATION	1,540	10.3%
ALPRAZOLAM	1,345	9.0%
HEROIN	892	6.0%
OXYCODONE	664	4.4%
HYDROCODONE	424	2.8%
CANNABIS	327	2.2%
AMPHETAMINE	168	1.1%
TETRAHYDROCANNABINOLIC ACID	143	1.0%
CLONAZEPAM	141	0.9%
TRAMADOL	115	0.8%
N-ETHYLPENTYLONE	85	0.6%
METHADONE	83	0.6%
DIBUTYLONE (BETA-KETO-N,N-DIMETHYL-1,3-BENZODIOXOLYLBUTANAMINE; BK-DMBDB)	72	0.5%
CODEINE	66	0.4%
MORPHINE	66	0.4%
3,4-METHYLENEDIOXYMETHAMPHETAMINE (MDMA)	59	0.4%
3,4-METHYLENEDIOXYETHYLCATHINONE (ETHYLONE)	58	0.4%
DIAZEPAM	55	0.4%
BUPRENORPHINE	47	0.3%
FENTANYL	47	0.3%
PENTYLONE (ß-KETO-METHYLBENZODIOXOLYLPENTANAMINE)	45	0.3%
PROMETHAZINE	44	0.3%
PSILOCIN	42	0.3%
METHYLPHENIDATE	40	0.3%
LISDEXAMFETAMINE	36	0.2%
LORAZEPAM	36	0.2%
CARISOPRODOL	34	0.2%
1-(3-TRIFLUOROMETHYL)PHENYL-PIPERAZINE (TFMPP)	33	0.2%
LYSERGIC ACID DIETHYLAMIDE (LYSERGIDE)	31	0.2%
PHENYLIMIDOTHIAZOLE ISOMER UNDETERMINED	31	0.2%
ETIZOLAM	27	0.2%
ZOLPIDEM	26	0.2%
NO CONTROLLED DRUG IDENTIFIED	25	0.2%
CAFFEINE	20	0.1%
DIPHENHYDRAMINE	20	0.1%
TESTOSTERONE	19	0.1%
XLR-11 (1-(5-FLUOROPENTYL-1H-3-YL)(2,2,3,3-TETRAMETHYLCYCLOPROPYL)METHANONE)	19	0.1%
1,4-BUTANEDIOL	17	0.1%
KETAMINE	16	0.1%
LIDOCAINE	16	0.1%
HYDROMORPHONE	14	< 0.1%
QUETIAPINE	14	< 0.1%
U-47700	14	< 0.1%
3,4-METHYLENEDIOXYAMPHETAMINE (MDA)	13	< 0.1%
FUB-AMB	13	< 0.1%
PIPERAZINE	13	< 0.1%
2-(4-IODO-2,5-DIMETHOXYPHENYL)-N-(2-METHOXYBENZYL)ETHANAMINE (25-I-NBOME)	12	< 0.1%
AB-CHMINACA (N-[(1S)-1-(AMINOCARBONYL)-2-METHYLPROPYL]-1-(CYCLOHEXYLMETHYL)-1H-INDAZOLE-3-CARBOXAMIDE)	12	< 0.1%
DIMETHYLSULFONE	12	< 0.1%
AB-FUBINACA	11	< 0.1%
PHENTERMINE	10	< 0.1%
ALPHA-PYRROLIDINOPENTIOPHENONE (ALPHA-PVP)	9	< 0.1%
BENZOCAINE	9	< 0.1%
NICOTINAMIDE	9	< 0.1%

Drug Identified	Number (#)	Percent of Total Drug Reports* (#)
4-CHLOROMETHCATHINONE (4-CMC; CLEPHEDRONE)	8	< 0.1%
ACETAMINOPHEN	8	< 0.1%
N-BENZYLPIPERAZINE (BZP)	8	< 0.1%
4-CHLORO-ALPHA-PYRROLIDINOVALEROPHENONE (4-CHLORO-ALPHA-PVP)	7	< 0.1%
BENOCYCLIDINE (1-[1-(1-BENZOTHIOPHEN-2-YL)CYCLOHEXYL]PIPERIDINE)	7	< 0.1%
GUAIFENESIN	7	< 0.1%
TRAZODONE	7	< 0.1%
5-FLUORO-ADB	6	< 0.1%
BUTALBITAL	6	< 0.1%
DIMETHYLTRYPTAMINE (DMT)	6	< 0.1%
NORDIAZEPAM	6	< 0.1%
ADB-FUBINACA (N-(1-AMINO-3,3-DIMETHYL-1-OXOBUTAN-2-YL)-1-(4-FLUOROBENZYL)-1H-INDAZOLE-3-CARBOXAMIDE)	5	< 0.1%
DOXYLAMINE	5	< 0.1%
IBUPROFEN	5	< 0.1%
N-METHYL-3,4-METHYLENEDIOXYCATHINONE (METHYLONE)	5	< 0.1%
OXYMORPHONE	5	< 0.1%
TRENBOLONE	5	< 0.1%
BUPROPION	4	< 0.1%
CANNABIDIOL	4	< 0.1%
SILDENAFIL CITRATE (VIAGRA)	4	< 0.1%
TEMAZEPAM	4	< 0.1%
2-(4-BROMO-2,5-DIMETHOXYPHENYL)-N-(2-METHOXYBENZYL)ETHANAMINE (25-B-NBOMe)	3	< 0.1%
2-(4-CHLORO-2,5-DIMETHOXYPHENYL)-N-(2-METHOXYBENZYL)ETHANAMINE (25-C-NBOME)	3	< 0.1%
4-CHLORO-N-ETHYLCATHINONE	3	< 0.1%
BUSPIRONE	3	< 0.1%
CANNABINOL	3	< 0.1%
FURANYL FENTANYL	3	< 0.1%
GABAPENTIN	3	< 0.1%
INOSITOL	3	< 0.1%
LACTOSE	3	< 0.1%
METHORPHAN	3	< 0.1%
PROPOXYPHENE	3	< 0.1%
PSEUDOEPHEDRINE	3	< 0.1%
1-(2-FLUOROPHENYL)PIPERAZINE	2	< 0.1%
3-METHYLFENTANYL	2	< 0.1%
5-FLUORO AMB	2	< 0.1%
AMOXICILLIN	2	< 0.1%
ANASTROZOLE	2	< 0.1%
BUTYRYL FENTANYL	2	< 0.1%
CATHINONE	2	< 0.1%
CHLORDIAZEPOXIDE	2	< 0.1%
CLONAZOLAM	2	< 0.1%
CYCLOBENZAPRINE	2	< 0.1%
ISONICOTINAMIDE	2	< 0.1%
MAB-CHMINACA (ADB-CHMINACA)	2	< 0.1%
META-CHLORPHENYLPIPERAZINE (MCPP)	2	< 0.1%
METHANDROSTENOLONE (METHANDIENONE)	2	< 0.1%
MITRAGYNINE	2	< 0.1%
MMB2201	2	< 0.1%
PHENAZEPAM	2	< 0.1%
PREGABALIN	2	< 0.1%
PROCAINE	2	< 0.1%
QUININE	2	< 0.1%
STANOZOLOL	2	< 0.1%
SUCROSE	2	< 0.1%
4-BROMO-2,5-DIMETHOXYPHENETHYLAMINE (2C-B)	1	< 0.1%
4-CHLORO-ALPHA-PYRROLIDINOPROPIOPHENONE (4-CHLORO-ALPHA-PPP)	1	< 0.1%

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

Drug Identified	Number (#)	Percent of Total Drug Reports* (#)
5-FLUORO-ADBICA	1	< 0.1%
5-METHOXY-N,N-DIMETHYLTRYPTAMINE (5-MEO-DMT)	1	< 0.1%
5-METHOXY-N-METHYL-N-ISOPROPYLTRYPTAMINE (5-MEO-MIPT)	1	< 0.1%
ALPHA-PYRROLIDINOHEPTAPHENONE (PV8)	1	< 0.1%
BARBITAL	1	< 0.1%
BARBITURIC ACID	1	< 0.1%
BOLDENONE	1	< 0.1%
BROMAZEPAM	1	< 0.1%
BUTABARBITAL	1	< 0.1%
BUTYLONE (ß-KETO-N-METHYLBENZO-DIOXYLPROPYLAMINE)	1	< 0.1%
CARFENTANIL	1	< 0.1%
CATHINE	1	< 0.1%
CHLORPHENIRAMINE	1	< 0.1%
CLONIDINE	1	< 0.1%
DIPYRONE	1	< 0.1%
DRONABINOL	1	< 0.1%
ESTAZOLAM	1	< 0.1%
FLUOXETINE	1	< 0.1%
MANNITOL	1	< 0.1%
MEPERIDINE	1	< 0.1%
METHOCARBAMOL	1	< 0.1%
METOCLOPRAMIDE	1	< 0.1%
METOPROLOL	1	< 0.1%
METRONIDAZOLE	1	< 0.1%
NALTREXONE	1	< 0.1%
NANDROLONE	1	< 0.1%
NAPROXEN	1	< 0.1%
NIACINAMIDE	1	< 0.1%
NICOTINE	1	< 0.1%
NICOTINIC ACID	1	< 0.1%
PAPAVERINE	1	< 0.1%
PHENDIMETRAZINE	1	< 0.1%
PHENOBARBITAL	1	< 0.1%
PROPRANOLOL	1	< 0.1%
TADALAFIL	1	< 0.1%
TAMOXIFEN	1	< 0.1%
TAPENTADOL	1	< 0.1%
TIZANIDINE	1	< 0.1%

NOTES:
^Atlanta MSA: The Atlanta-Sandy Springs-Roswell, Georgia MSA includes the following 29 counties: Barrow, Bartow, Butts, Carroll, Cherokee, Clayton, Cobb, Coweta, Dawson, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Haralson, Heard, Henry, Jasper, Lamar, Meriwether, Morgan, Newton, Paulding, Pickens, Pike, Rockdale, Spalding, and Walton. The principal cities of the Atanta MSA include: Atlanta, Sandy Springs, Roswell, Alpharetta, and Marietta.
*Drug Report: Drug that is identified in law enforcement items, submitted to and analyzed by federal, state, or local forensic labs, and included in the NFLIS database. The time frame is January - December 2016.

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

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

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

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

Drug Identified, by Selected Drug Category**	Number (#)	Percent of Drug Category (%)	Percent of Total Reports (%)
Total Drug Reports*	**14,961**	**100.0%**	**100.0%**
Opioids Category	**2,456**	**100.0%**	**16.4%**
Heroin	**892**	**36.3%**	**6.0%**
Narcotic Analgesics	**1,558**	**63.4%**	**10.4%**
OXYCODONE	664	27.0%	4.4%
HYDROCODONE	424	17.3%	2.8%
TRAMADOL	115	4.7%	0.8%
METHADONE	83	3.4%	0.6%
CODEINE	66	2.7%	0.4%
MORPHINE	66	2.7%	0.4%
BUPRENORPHINE	47	1.9%	0.3%
FENTANYL	47	1.9%	0.3%
HYDROMORPHONE	14	0.6%	< 0.1%
U-47700	14	0.6%	< 0.1%
OXYMORPHONE	5	0.2%	< 0.1%
FURANYL FENTANYL	3	0.1%	< 0.1%
PROPOXYPHENE	3	0.1%	< 0.1%
3-METHYLFENTANYL	2	< 0.1%	< 0.1%
BUTYRYL FENTANYL	2	< 0.1%	< 0.1%
MITRAGYNINE	2	< 0.1%	< 0.1%
MEPERIDINE	1	< 0.1%	< 0.1%
Narcotics	**6**	**0.2%**	**< 0.1%**
METHORPHAN	3	0.1%	< 0.1%
CARFENTANIL	1	< 0.1%	< 0.1%
NALTREXONE	1	< 0.1%	< 0.1%
PAPAVERINE	1	< 0.1%	< 0.1%
Synthetic Cathinones Category	**295**	**100.0%**	**2.0%**
Synthetic Cathinones	**290**	**98.3%**	**1.9%**
N-ETHYLPENTYLONE	85	28.8%	0.6%
DIBUTYLONE (BETA-KETO-N,N-DIMETHYL-1,3-BENZODIOXOLYLBUTANAMINE; BK-DMBDB)	72	24.4%	0.5%
3,4-METHYLENEDIOXYETHYLCATHINONE (ETHYLONE)	58	19.7%	0.4%
PENTYLONE (ß-KETO-METHYLBENZODIOXOLYLPENTANAMINE)	45	15.3%	0.3%
ALPHA-PYRROLIDINOPENTIOPHENONE (ALPHA-PVP)	9	3.1%	< 0.1%
4-CHLOROMETHCATHINONE (4-CMC; CLEPHEDRONE)	8	2.7%	< 0.1%
4-CHLORO-ALPHA-PYRROLIDINOVALEROPHENONE (4-CHLORO-ALPHA-PVP)	7	2.4%	< 0.1%
4-CHLORO-N-ETHYLCATHINONE	3	1.0%	< 0.1%
4-CHLORO-ALPHA-PYRROLIDINOPROPIOPHENONE (4-CHLORO-ALPHA-PPP)	1	0.3%	< 0.1%
ALPHA-PYRROLIDINOHEPTAPHENONE (PV8)	1	0.3%	< 0.1%
BUTYLONE (ß-KETO-N-METHYLBENZO-DIOXYLPROPYLAMINE)	1	0.3%	< 0.1%
Synthetic Cathinones (Hallucinogen)	**5**	**1.7%**	**< 0.1%**
N-METHYL-3,4-METHYLENEDIOXYCATHINONE (METHYLONE)	5	1.7%	< 0.1%
Synthetic Cannabinoids Category	**73**	**100.0%**	**0.5%**
XLR-11 (1-(5-FLUOROPENTYL-1H-3-YL)(2,2,3,3-TETRAMETHYLCYCLOPROPYL)METHANONE)	19	26.0%	0.1%
FUB-AMB	13	17.8%	< 0.1%
AB-CHMINACA (N-[(1S)-1-(AMINOCARBONYL)-2-METHYLPROPYL]-1-(CYCLOHEXYLMETHYL)-1H-INDAZOLE-3-CARBOXAMIDE)	12	16.4%	< 0.1%
AB-FUBINACA	11	15.1%	< 0.1%
5-FLUORO-ADB	6	8.2%	< 0.1%
ADB-FUBINACA (N-(1-AMINO-3,3-DIMETHYL-1-OXOBUTAN-2-YL)-1-(4-FLUOROBENZYL)-1H-INDAZOLE-3-CARBOXAMIDE)	5	6.8%	< 0.1%
5-FLUORO AMB	2	2.7%	< 0.1%
MAB-CHMINACA (ADB-CHMINACA)	2	2.7%	< 0.1%
MMB2201	2	2.7%	< 0.1%
5-FLUORO-ADBICA	1	1.4%	< 0.1%
Piperazines Category	**58**	**100.0%**	**0.4%**
Piperazines (Hallucinogen)	**50**	**86.2%**	**0.3%**
1-(3-TRIFLUOROMETHYL)PHENYL-PIPERAZINE (TFMPP)	33	56.9%	0.2%
PIPERAZINE	13	22.4%	< 0.1%

Drug Identified, by Selected Drug Category**	Number (#)	Percent of Drug Category (%)	Percent of Total Reports (%)
1-(2-FLUOROPHENYL)PIPERAZINE	2	3.4%	< 0.1%
META-CHLORPHENYLPIPERAZINE (MCPP)	2	3.4%	< 0.1%
Piperazines (Stimulant)	**8**	**13.8%**	**< 0.1%**
N-BENZYLPIPERAZINE (BZP)	8	13.8%	< 0.1%
Phenethylamines (2C Series) (H) Category	**19**	**100.0%**	**0.1%**
2-(4-IODO-2,5-DIMETHOXYPHENYL)-N-(2-METHOXYBENZYL)ETHANAMINE (25-I-NBOME)	12	63.2%	< 0.1%
2-(4-BROMO-2,5-DIMETHOXYPHENYL)-N-(2-METHOXYBENZYL)ETHANAMINE (25-B-NBOMe)	3	15.8%	< 0.1%
2-(4-CHLORO-2,5-DIMETHOXYPHENYL)-N-(2-METHOXYBENZYL)ETHANAMINE (25-C-NBOME)	3	15.8%	< 0.1%
4-BROMO-2,5-DIMETHOXYPHENETHYLAMINE (2C-B)	1	5.3%	< 0.1%
Tryptamines Category	**8**	**100.0%**	**< 0.1%**
DIMETHYLTRYPTAMINE (DMT)	6	75.0%	< 0.1%
5-METHOXY-N,N-DIMETHYLTRYPTAMINE (5-MEO-DMT)	1	12.5%	< 0.1%
5-METHOXY-N-METHYL-N-ISOPROPYLTRYPTAMINE (5-MEO-MIPT)	1	12.5%	< 0.1%

NOTES:

^Atlanta MSA: The Atlanta-Sandy Springs-Roswell, Georgia MSA includes the following 29 counties: Barrow, Bartow, Butts, Carroll, Cherokee, Clayton, Cobb, Coweta, Dawson, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Haralson, Heard, Henry, Jasper, Lamar, Meriwether, Morgan, Newton, Paulding, Pickens, Pike, Rockdale, Spalding, and Walton. The principal cities of the Atanta MSA include: Atlanta, Sandy Springs, Roswell, Alpharetta, and Marietta.

*Drug Report: Drug that is identified in law enforcement items, submitted to and analyzed by federal, state, or local forensic labs, and included in the NFLIS database. The time frame is January - December 2016.

**Selected Drug Categories: Opioids, Synthetic Cannabinoids, Synthetic Cathinones, 2C Phenethylamines, Piperazines, and Tryptamines are drug categories of current interest to the NDEWS Project because of the recent increase in their numbers, types, and availability.

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

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

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

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

Overview and Limitations of American Community Survey (ACS) Data

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

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

Sources

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

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

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

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

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

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

Notes about Data Terms

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

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

Estimated # is the estimated number of persons aged 12 years or older in the civilian, noninstitutionalized population who used the specified drug or are dependent on/abuse a substance; the estimated number of persons using/dependent on a particular drug was calculated by multiplying the prevalence rate and the population estimate from Table C1 of the NSDUH report. The population estimate is the simple average of the 2012, 2013, and 2014 population counts for persons aged 12 years or older.

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

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

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

Sources

*Data Sources***:** Adapted by the NDEWS Coordinating Center from data provided by the Substance Abuse and Mental Health Services Administration (SAMHSA), Substate Estimates of Substance Use and Mental Disorders from the *2012–2014 National Surveys on Drug Use and Health: Results and Detailed Tables.* Rockville, MD. 2014. Available at: http://www.samhsa.gov/data/population-data-nsduh/reports?tab=38; Accessed on August 2016.

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

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

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

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

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

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

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

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

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

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

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

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

Notes about Data Terms

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

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

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

Past Month Binge Alcohol Use is defined as "*having five or more drinks of alcohol in a row within a couple of hours on at least 1 day during the 30 days before the survey*".

Sources

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

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

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

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

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

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

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

Overview and Limitations of Treatment Admissions Data from Local Sources

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

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

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

❖ **Atlanta Metro**

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

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

Notes & Definitions:
Admissions: includes admissions to publicly-funded programs.
Marijuana/Synthetic Cannabinoids: the data do not differentiate between marijuana and synthetic cannabinoids.

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

❖ **Chicago Metro**

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

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

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

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

❖ **Denver Metro**

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

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

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

❖ **King County (Seattle Area)**

Notes & Definitions:

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

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

❖ **Los Angeles County**

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

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

❖ **Maine**

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

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

❖ **New York City**

Notes & Definitions:
Non-Crisis Admissions: Includes non-crisis admissions to outpatient, inpatient, residential, and methadone maintenance treatment programs licensed in the state.
Crisis Admissions: Includes detox admissions to all licensed treatment programs in the state
Each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period.
Prescription Opioids: Includes nonprescription methadone, buprenorphine, other synthetic opiates, and OxyContin.
Benzodiazepines: Includes benzodiazepines, alprazolam, and rohypnol.
Synthetic Stimulants: Includes other stimulants and a newly created category, synthetic stimulants (created in 2014).

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

❖ **Philadelphia**

Notes & Definitions:
Admissions: Includes admissions for uninsured and underinsured individuals admitted to any licensed treatment programs funded through the Philadelphia Department of Behavioral Health and Intellectual disAbility Services (DBHIDS). Each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period.
2015 and 2016 Data: Pennsylvania expanded Medicaid coverage under the Affordable Care Act and more than 100,000 additional individuals became eligible in 2015. As individuals who historically have been uninsured become insured, the number of individuals served through the BHSI (Behavioral Health Special Initiative) program has declined; thus treatment admissions reported by BHSI declined from 8,363 in 2014 to 3,507 in 2016. However, similar patterns of substance use were observed among those seeking treatment in 2014 and in 2015.
Beginning in FY2015, services funded by the Pennsylvania Department of Drug and Alcohol Programs and tracked by BHSI for OAS are required to report through an Internet portal. This new reporting system does not require drug of choice in the data collection. The impact of this change in reporting protocol resulted in an increase in the proportion of "unknown" drug of choice in subsequent years.
Methamphetamine: Includes both amphetamines and methamphetamine.
Other Drugs: May include synthetics, barbiturates, and over-the-counter drugs. Synthetic Stimulants and Synthetic Cannabinoids are not distinguishable from "Other Drugs" in the reporting source.

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

❖ **San Francisco County**

Notes & Definitions

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

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

❖ **Southeastern Florida (Miami Area)**

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

Notes & Definitions:

Admissions: Includes admissions of all clients in programs receiving any public funding located in Miami-Dade, Broward and Palm Beach counties as provided by the Florida Department of Children and Families Office of Substance Abuse and Mental Health. Each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period.
2012–2013: Data for Palm Beach County is not available for 2012–2013, therefore, data for 2012–2013 only includes data for Broward and Miami-Dade counties.

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

❖ **Texas**

Notes & Definitions:

Admissions: Includes all admissions reported to the Clinical Management for Behavioral Health Services (CMBHS) of the Texas Health and Human Services Commission, Behavioral Health Services (HHSC BHS). Each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period.
Methamphetamine: Includes amphetamines and methamphetamine.
Please Note: Treatment data presented in this year's report differ from data presented in previous NDEWS reports because the treatment data for Texas have been revised.

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

❖ **Wayne County (Detroit Area)**

Notes & Definitions:

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

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

Sources

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

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

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

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

Overview and Limitations of CDC WONDER Multiple Cause of Death Data

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

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

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

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

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

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

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

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

Notes About Data Terms

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Heroin (T40.1)

Methadone (T40.3)

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

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

Cocaine (T40.5)

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

Cannabis (derivatives) (T40.7)

Benzodiazepines (T42.4)

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

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

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

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

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

Sources

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

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

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

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

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

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

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

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

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

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

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

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

Notes about Reporting Labs

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

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

Notes about Data Terms

SCS Drug Report: Drug that is identified in law enforcement items, submitted to and analyzed by Federal, State, or local forensic labs and included in the NFLIS database. This database allows for the reporting of up to three drug reports per item submitted for analysis.

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

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

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

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

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

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

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

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

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

Sources

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

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

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

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