Southeastern Florida (Miami Area) Sentinel Community Site (SCS) Drug Use Patterns and Trends, 2016

October 2016

NDEWS Coordinating Center

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

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

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

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

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

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

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

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

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

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

The *SCS Snapshots* for each of the 12 Sentinel Community Sites and detailed information about NDEWS can be found on the NDEWS website at www.ndews.org.
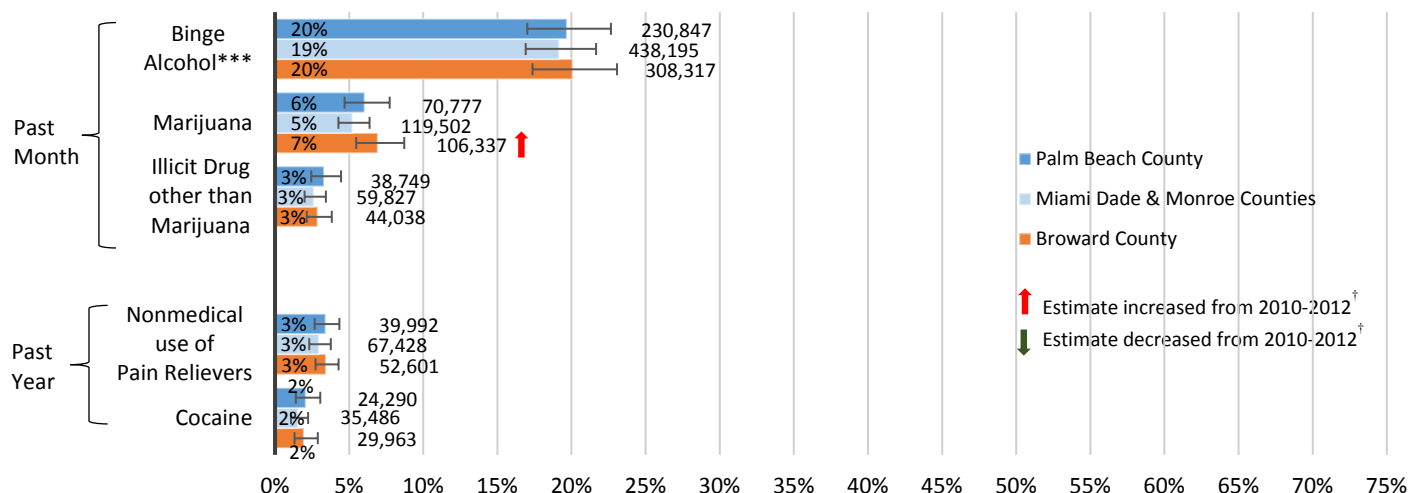
Southeastern FL (Miami Area) SCS Snapshot, 2016

Substance Use

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

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

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

Legend:
- Palm Beach County
- Miami Dade & Monroe Counties
- Broward County
- ↑ Estimate increased from 2010-2012[†]
- ↓ Estimate decreased from 2010-2012[†]

Past Month:
- Binge Alcohol***: 20% (230,847); 19% (438,195); 20% (308,317)
- Marijuana: 6% (70,777); 5% (119,502); 7% (106,337) ↑
- Illicit Drug other than Marijuana: 3% (38,749); 3% (59,827); 3% (44,038)

Past Year:
- Nonmedical use of Pain Relievers: 3% (39,992); 3% (67,428); 3% (52,601)
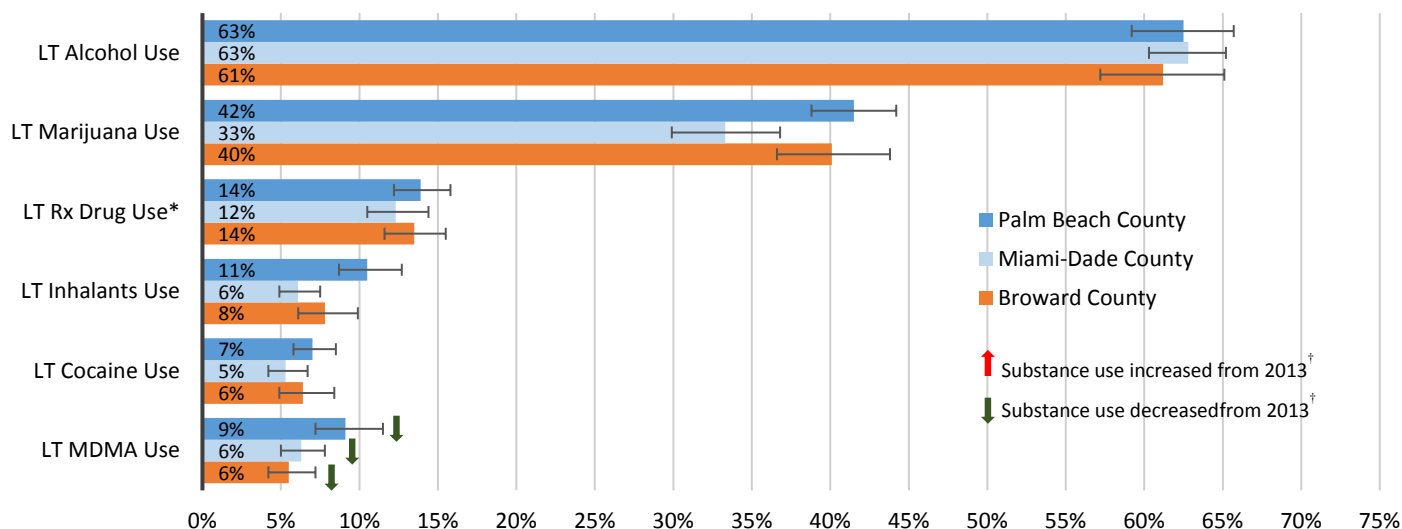- Cocaine: 2% (24,290); 2% (35,486); 2% (29,963)

*U.S. Population: U.S. civilian non-institutionalized population. ^Southeastern Florida Region: NSDUH Regions Broward Circuit 17 (Broward County); Southeast Circuit 15 (Palm Beach County); and South Circuits 11 and 16 (Miami-Dade and Monroe Counties). **Estimated Number: Calculated by multiplying the prevalence rate and the population estimate of persons 12+ years (1,172,607 [Palm Beach County], 2,285,489 [Miami-Dade & Monroe Counties], and 1,536,230 [Broward County]) from Table C1 of the NSDUH Report. ***Binge Alcohol: Defined as drinking five or more drinks on the same occasion. [†]Statistically significant change: p<0.05.
Source: Adapted by the NDEWS Coordinating Center from data provided by SAMHSA, NSDUH. Annual averages based on 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, Southeastern Florida^, 2015

Estimated Percent and 95% Confidence Interval

Legend:
- Palm Beach County
- Miami-Dade County
- Broward County
- ↑ Substance use increased from 2013[†]
- ↓ Substance use decreased from 2013[†]

- LT Alcohol Use: 63%; 63%; 61%
- LT Marijuana Use: 42%; 33%; 40%
- LT Rx Drug Use*: 14%; 12%; 14%
- LT Inhalants Use: 11%; 6%; 8%
- LT Cocaine Use: 7%; 5%; 6%
- LT MDMA Use: 9% ↓; 6% ↓; 6% ↓

^Southeastern Florida: Data not available for region as a whole so data provided for each county separately.
*LT Rx Drug Use: Defined as ever taking prescription drugs without a doctor's prescription one or more times during their life.
[†]Statistically significant change: p<0.05 by t-test.
See *Sentinel Community Site (SCS) Data Tables* and *Overview & Limitations* section for more information regarding the data.
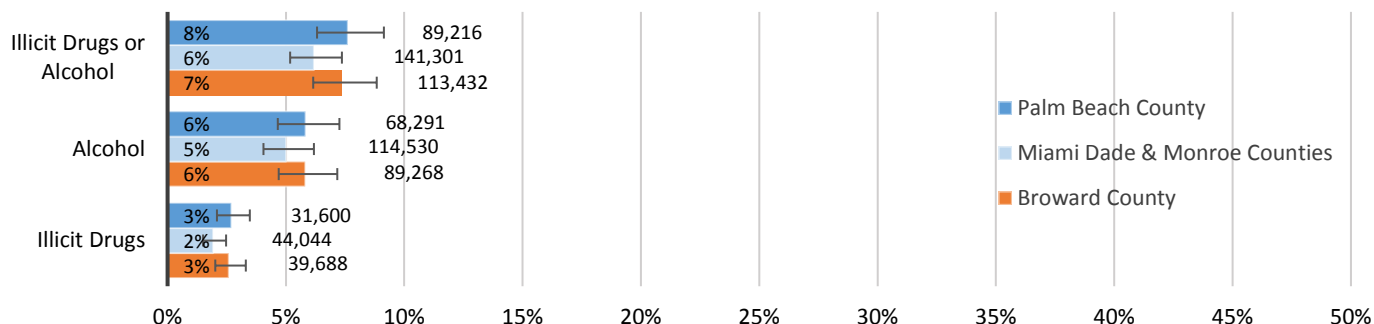**Source**: Adapted by the NDEWS Coordinating Center from data provided by CDC, 1991-2015 High School YRBS data.

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, Southeastern Florida Region^, 2012-2014

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

Illicit Drugs or Alcohol
- 8% — 89,216 (Palm Beach County)
- 6% — 141,301 (Miami Dade & Monroe Counties)
- 7% — 113,432 (Broward County)

Alcohol
- 6% — 68,291 (Palm Beach County)
- 5% — 114,530 (Miami Dade & Monroe Counties)
- 6% — 89,268 (Broward County)

Illicit Drugs
- 3% — 31,600 (Palm Beach County)
- 2% — 44,044 (Miami Dade & Monroe Counties)
- 3% — 39,688 (Broward County)

Legend:
- Palm Beach County
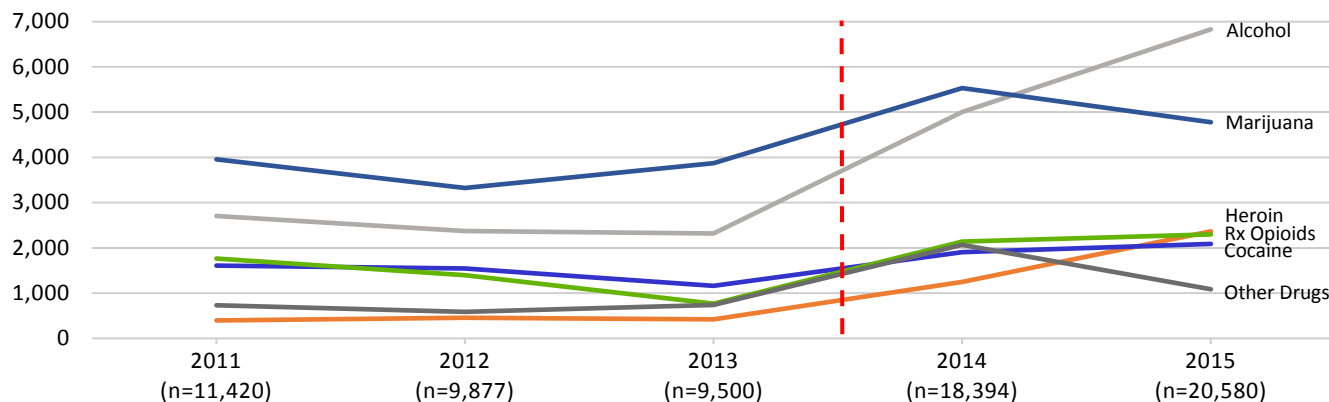- Miami Dade & Monroe Counties
- Broward County

(x-axis: 0% to 50%)

*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)*. ^Southeastern Florida Region: NSDUH Regions Broward Circuit 17 (Broward County); Southeast Circuit 15 (Palm Beach County); and South Circuits 11 and 16 (Miami-Dade and Monroe Counties). ***Estimated Number: Calculated by multiplying the prevalence rate and the population estimate of persons 12+ years (1,172,607 [Palm Beach County], 2,285,489 [Miami-Dade & Monroe Counties], and 1,536,230 [Broward County]) from Table C1 of the NSDUH Report.
Source: Adapted by the NDEWS Coordinating Center from data provided by SAMHSA, NSDUH. Annual averages based combined 2012 to 2014 NSDUH data.
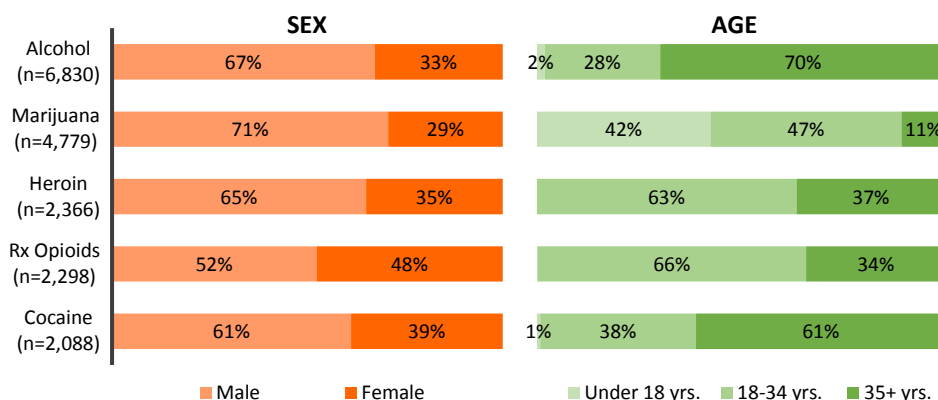
Treatment Admissions Data from Local Sources

Trends in Treatment Admissions*, by Primary Substance of Abuse, Southeastern Florida (Miami Area)^, 2011-2015

(n = Number of Treatment Admissions)

Series (ending 2015): Alcohol (~6,900); Marijuana (~4,800); Heroin / Rx Opioids / Cocaine (~2,100-2,300); Other Drugs (~1,000)

X-axis:
- 2011 (n=11,420)
- 2012 (n=9,877)
- 2013 (n=9,500)
- 2014 (n=18,394)
- 2015 (n=20,580)

Demographic Characteristics of Treatment Admissions*, Southeastern Florida (Miami Area)^, 2015

	SEX		AGE		
	Male	Female	Under 18 yrs.	18-34 yrs.	35+ yrs.
Alcohol (n=6,830)	67%	33%	2%	28%	70%
Marijuana (n=4,779)	71%	29%	42%	47%	11%
Heroin (n=2,366)	65%	35%		63%	37%
Rx Opioids (n=2,298)	52%	48%		66%	34%
Cocaine (n=2,088)	61%	39%	1%	38%	61%

Legend: Male, Female, Under 18 yrs., 18-34 yrs., 35+ yrs.

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*Treatment Admissions: Includes all admissions to programs receiving any public funds. Data for Palm Beach County is not available for 2011-2013, therefore 2011-2013 only includes data for Broward and Miami-Dade counties; 2014-2015 includes data for all three counties in the Miami MSA.
^Southeastern Florida (Miami Area): Includes the three counties of the Miami MSA – Broward, Miami-Dade, and Palm Beach counties. Percentages may not sum to 100 due to rounding. See *Sentinel Community Site (SCS) Data Tables* and *Overview & Limitations* section for more information regarding the data.
**Source**: Data provided to the Southeastern Florida NDEWS SCE by the Florida Department of Children and Families and the Broward Behavioral Health Coalition.

Drug Overdose (Poisoning) Deaths

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

Trends in Drug Overdose (Poisoning) Deaths*, by Drug**, Southeastern Florida (Miami Area)^, 2010–2014
(Number of Deaths and Percent of Drug Overd ose (Poisoning) Deaths with Drug(s) Specified^)
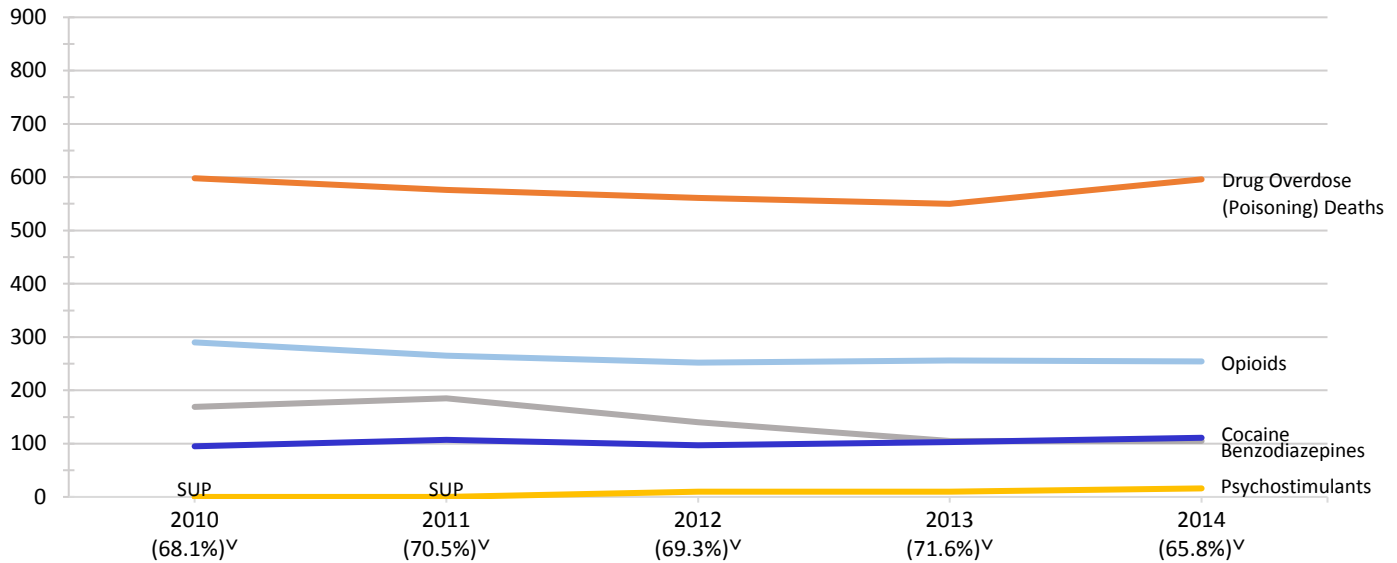
Trends in Opioid Overdose (Poisoning) Deaths*, by Opioid, Southeastern Florida (Miami Area)^, 2010–2014
(Number of Deaths, by Drug** and Percent of Drugoverdose (Poisoning) Deaths with Drug(s) Specified^)
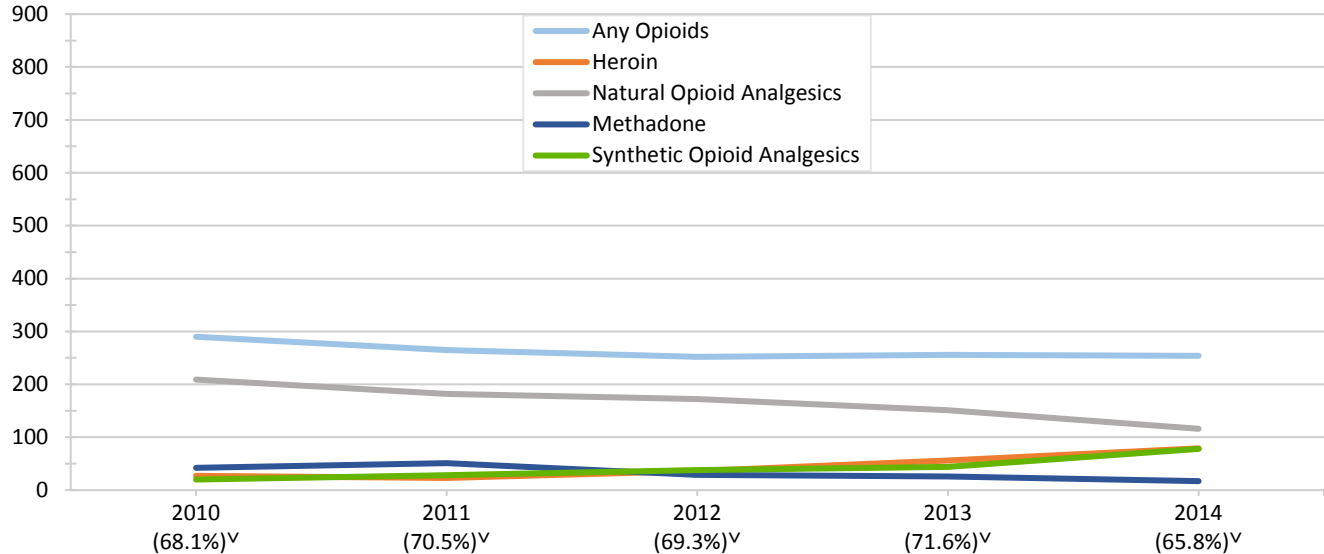
*Drug Overdose (Poisoning) Deaths: Defined as deaths with ICD-10 underlying cause-of-death (UCOD) codes: X40-X44, X60-X64, X85, and Y10-Y14. **Drug Overdose (Poisoning) Deaths, by Drug: Drug overdose (poisoning) deaths with ICD-10 multiple cause-of-death (MCOD) T-codes: Benzodiazepines (T42.4); Cocaine (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). ^Southeastern Florida: Comprised of Broward, Miami-Dade, and Palm Beach 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. See *Sentinel Community Site (SCS) Data Tables* and/or *Overview & Limitations* for additional information on mortality data.

Source: Adapted by the NDEWS Coordinating Center from data provided by the Centers for Disease Control and Prevention (CDC), National Center for Health Statistics, Multiple cause of death 1999-2014, available on the CDC WONDER Online Database, released 2015. Data compiled in the Multiple cause of death 1999-2014 were provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Retrieved between December 2015 - May 2016, from http://wonder.cdc.gov/mcd-icd10.html

Law Enforcement Drug Seizures

National Forensic Laboratory Information System (NFLIS)

Drug Reports* for Items Seized by Law Enforcement in the Miami MSA^ in 2015
DEA National Forensic Laboratory Information System (NFLIS)

Top 10 Drug Reports and Selected Drug Categories

Drug Identified	Number (#)	Percent of Total Drug Reports (%)
TOTAL Drug Reports	**22,660**	**100%**
Top 10 Drug Reports		
Cocaine	7,763	34.3%
Cannabis	3,991	17.6%
Alpha-pyrrolidinopentiophenone (Alpha-PVP)	2,139	9.4%
Heroin	1,657	7.3%
Alprazolam	1,382	6.1%
No Controlled Drug Identified	833	3.7%
3,4-methylenedioxyethylcathinone (Ethylone)	706	3.1%
Oxycodone	647	2.9%
Methamphetamine	399	1.8%
Hydromorphone	251	1.1%
Top 10 Total	**19,768**	**87.2%**
Selected Drugs/Drug Categories		
Opioids	3,252	14.4%
Fentanyl	230	1.0%
Other Fentanyls***	10	<0.1%
Synthetic Cathinones	2,916	12.9%
Synthetic Cannabinoids	162	0.7%
Tryptamines	42	0.2%
Piperazines	38	0.2%
2C Phenethylamines	18	<0.1%

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

Synthetic Cathinones
(n=2,916)

alpha-PVP (73%)
Ethylone (24%)
Dibutylone (0.7%)
Methylone (0.6%)
MDPV (0.3%)
Other (0.9%)

Synthetic Cannabinoids
(n=162)

XLR-11 (33%)
AB-CHIMANCA (24%)
AB-FUBINACA (12%)
5-Fluoro-AMB (9%)
JWH-018 (6%)
Other (16%)

Tryptamines
(n=42)

5-MeO-DiPT (48%)
DMT (36%)
4-AcO-DMT (5%)
5-MeO-DALT (5%)
5-MeO-MiPT (2%)
DET (2%)
DPT (2%)

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

^Miami MSA: Includes Broward, Miami-Dade, and Palm Beach Counties.

**Percentages may not sum to 100 due to rounding. ***Other Fentanyls are substances that are structurally related to fentanyl (e.g., acetylfentanyl and butyrl fentanyl). See *Notes About Data Terms* in *Overview and Limitations* section for full list of Other Fentanyls that were reported to NFLIS during the January to December 2015 timeframe. See *Sentinel Community Site (SCS) Data Tables* and *Overview & Limitations* for more information regarding the data.

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

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

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

This *SCE Narrative* contains the following sections:

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

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

National Drug Early Warning System (NDEWS) Southeastern Florida (Miami Area) Sentinel Community Site (SCS) Drug Use Patterns and Trends, 2016: SCE Narrative

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Highlights

- **Benzodiazepines** and particularly alprazolam (e.g., Xanax®) are the universal mixtures in polysubstance abuse patterns including both concurrent and sequential nonmedical use.

- **Cocaine** indicators have remained high but relatively stable across the region over the past several years, mostly involving those older than 35 years of age.

- **Marijuana** was the primary drug of use reported by 91% of adolescents younger than 18 years of age entering addiction treatment programs in the three Southeast Florida counties (Broward, Miami-Dade, and Palm Beach) in 2015 and accounted for 43% of marijuana admissions for all age groups.

- Indicators of **methamphetamine** remain relatively low compared with other drugs in Southeast Florida but have been steadily increasing since 2011**.**

- Constantly changing availability of specific **synthetic cathinones** from clandestine labs in China has dramatically influenced their use and serious consequences in Southeast Florida, in particular, in Broward County in 2015.

- **Synthetic cannabinoid** crime lab cases declined between 2014 and 2015 in the three Southeast Florida counties as Poison Information Center exposure calls increased. These products seem to be in greater supply and use in other parts of Florida.

- The sharp escalations of **heroin** use, treatment admissions, and deaths in Florida along with stable and high levels of **prescription opioid** indicators constitute an opioid epidemic.

- **Non-pharmaceutical fentany**l from foreign clandestine labs is a major factor for the increase in opioid deaths related to adulterated heroin and counterfeit medications.

Changes in Legislation

The 2016 Florida Designer Drugs Enforcement Act was passed unanimously by both chambers of the Florida Legislature and was signed by Governor Rick Scott to go into effect on July 1, 2016. It bans synthetic drugs by their pharmaceutical action in the brain rather than by their chemical molecular structure. The aim of the law is to make new substances illegal even before they appear. Therefore, it bans the following classes of synthetic designer drugs:

- Synthetic cannabinoids
- Substituted cathinones
- Substituted phenethylamines
- N-Benzyl phenethylamines
- Substituted tryptamines
- Substituted phenylcyclohexylamines

The law also strengthens Florida's controlled substance analog law with a more workable definition of the term "substantially similar chemical structure." This provision should make it easier to prosecute cases involving yet unscheduled opiate analogs.

The legislature also approved Florida's first syringe exchange program only for Miami-Dade County but restricted the use of any public funds to operate the center or mobile vans. The program is to be conducted by the University of Miami. Florida law has prohibited syringe exchange programs for years and still does for any other program or county in the State.

A local ordinance adopted in Manatee County (just north of Sarasota) mandates the use of Florida's involuntary placement law, the Hal S. Marchman Alcohol and Other Drug Services Act of 1993 (referred to as the "Marchman Act"), for any paramedic patient who has had an opiate overdose reversal with naloxone and refuses admission to a hospital emergency department. Hospitals are also required to provide safe prescription drug disposal information at discharge, including Deterra™ disposal bags.

Dispensing of naloxone is to be available under a universal prescription for anyone in Florida, effective July 1, 2016, at pharmacies that choose to accept the program.

# Substance Use Patterns and Trends

BENZODIAZEPINES

- Benzodiazepines and particularly alprazolam (e.g., Xanax®) are the universal mixtures in polysubstance abuse patterns including both concurrent and sequential nonmedical use.

The number of benzodiazepines detected in deceased persons in Florida peaked at 6,188 occurrences in 2010 prior to various efforts to reduce prescription drug diversion. That number then declined steadily to 4,304 in 2013 but has remained stable since that time with 4,364 occurrences projected for 2015 based on the total from the first 6 months of that year. Alprazolam was the number one benzodiazepine detected representing 31% of the 2015 reports followed by nordiazepam (15%), diazepam (13%), temazepam (11%), and clonazepam (10%). In the three Southeast Florida counties (Broward, Miami-Dade, and Palm Beach), alprazolam was detected in 158 deceased persons in the first half of 2015 with 43% of those cases considered a cause of death and 94% found in combination with some other drug.

There were 2,389 hospital benzodiazepine overdose poisoning cases in the three Southeast Florida counties during 2014, which is the most current available data from the Florida Agency for Health Care Administration (ACHA). Only 7% of those cases had a secondary diagnosis of substance dependency. Nine percent of these hospital overdose patients were younger than 19 years of age, 10% were 19–24, 37% were 25–49, 29% were 50–64, and 15% were aged 65 and older.

Exhibit 1. Number of Nonmedical Rx Benzodiazepine Reports Detected among Deceased Persons in Florida 2005-2015
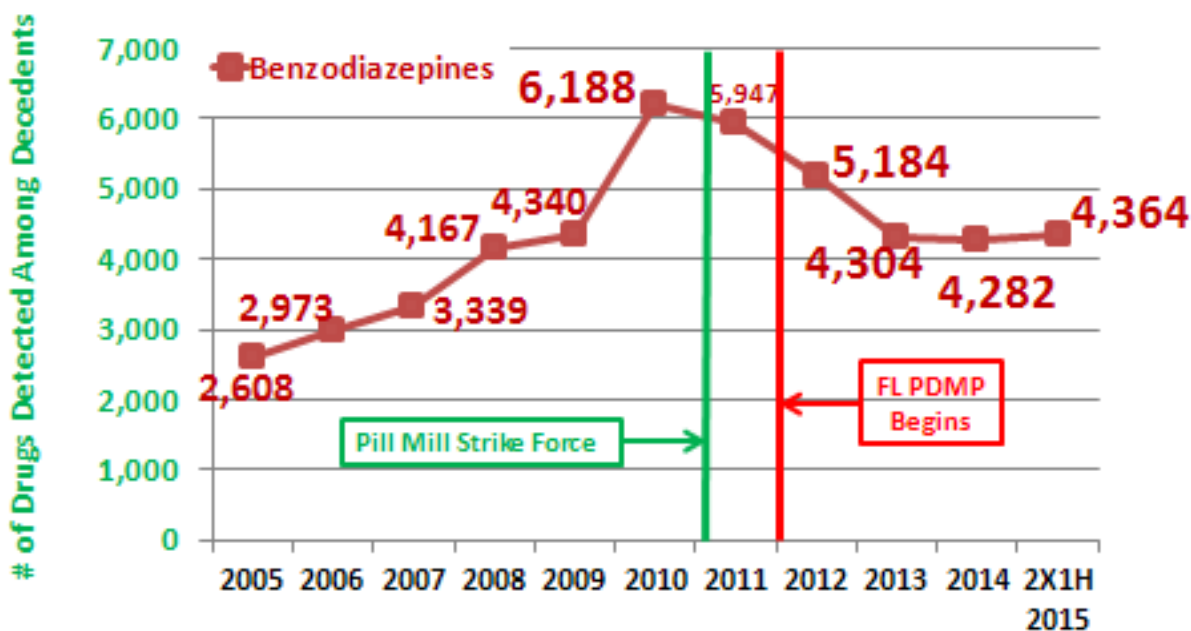
A benzodiazepine was the primary drug of abuse cited by 483 addiction treatment clients across the three counties in 2015 accounting for 2% of all admissions, including those for alcohol. Many more clients included benzodiazepines as secondary or tertiary drugs of abuse. Slightly more than half or 51% of the primary benzodiazepine clients were male and 49% were female.

There were 1,459 benzodiazepine National Forensic Laboratory Information System (NFLIS) crime lab reports in 2015 in Southeast Florida representing 8% of all substances analyzed. Alprazolam accounted for 88% of the benzodiazepine crime lab cases.

COCAINE

- Cocaine indicators have remained high but relatively stable across the region over the past several years, mostly involving those older than 35 years of age.

Cocaine-related deaths increased 9% between 2014 and 2015 in the Southeast Florida region with the sharpest rise reported in Broward County. The drug was considered the cause of death in one third of the Miami-Dade County cases during the first half of 2015 and in two thirds of those in Broward and Palm Beach counties. Many deaths involved polydrug use with 86% of the 2015 cases having one or more other substances present at the time of death. There was only one cocaine-related decedent younger than 18 years of age, 17% were 18–25, 23% were 26–34, 34% were 35–50, and 27% were older than 50 years of age.

Exhibit 2. Number of Cocaine Reports Detected Among Decedents in Southeast Florida: 2001-2015

Number of Cocaine Reports Detected Among Decedents in Southeast Florida: 2001 - 2015
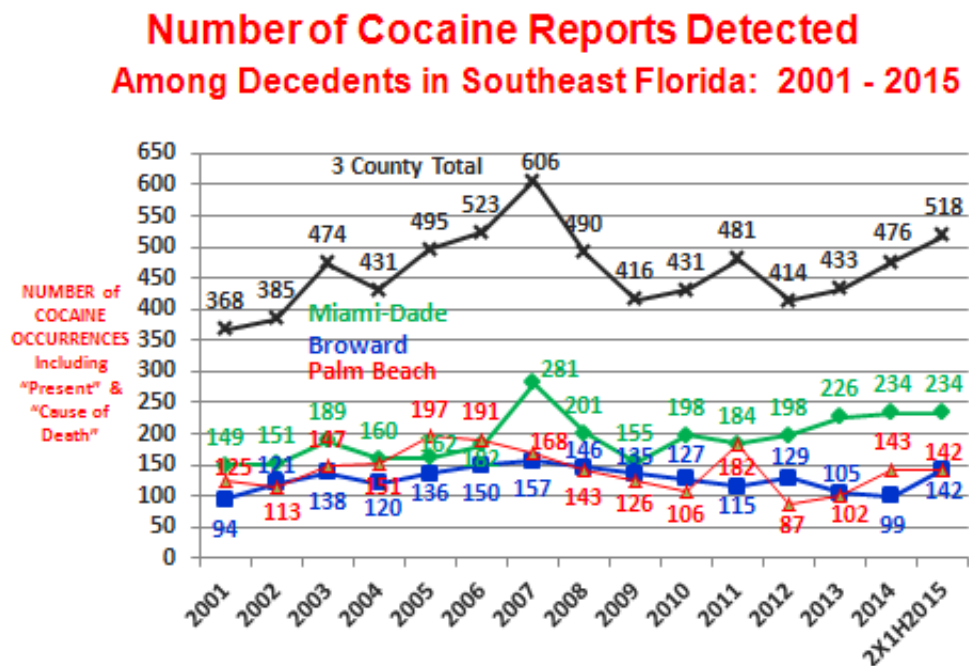
SOURCE: *Florida Medical Examiners Commission Reports Jan 2001-Jun 2015*

Primary addiction treatment admissions for cocaine totaled 2,088 patients across the three-county region in 2015 accounting for 10% of all admissions. Males accounted for 61% of these clients with crack cocaine specified by 62% of all cocaine patients. Only 16, or less than 1%, of the admissions were for someone younger than 18 years of age, 13% were 18–25, 26% were 26–34, and 61% were age 35 or older. Smoking cocaine was the route of administration reported by 53% of the cocaine clients with intranasal sniffing cited by 33% and injection cited by 2%. The remaining 11% reported oral or other/unknown routes of administration.

The 7,411 cocaine crime lab cases in the Southeast Florida counties during 2015 accounted for 39% of all drug reports in the state, which meant the region maintained the number one rank it has held for more than 30 years.

MARIJUANA

- Marijuana was the primary drug of use reported by 91% of adolescents younger than 18 years of age entering addiction treatment programs in the three Southeast Florida counties in 2015 and accounted for 43% of marijuana admissions for all age groups.

Primary addiction treatment admissions for marijuana totaled 4,779 patients across the three-county region in 2015, accounting for 23% of all admissions. In 2014, marijuana was the primary drug cited by 30% of treatment clients in the three counties of the Southeast Florida region. Males accounted for 71% of the 2015 clients. Youth younger than 18 years of age totaled 2,030 or 43% of the marijuana admissions, 29% were 18–25, 18% were 26–34, and 11% were age 35 or older.

The 3,524 cannabis crime lab cases in the Southeast Florida counties during 2015 accounted for 17% of all drug reports, which was ranked second among all other drugs.

Prevalence rates of current (past 30-day) marijuana use as reported to the Florida Youth Substance Abuse Survey (FYSAS) are shown in the below for the three Southeast Florida counties from 2004 to 2014. (The 2016 FYSAS findings are scheduled for release in December 2016.) Throughout this decade, as shown in the exhibit, Palm Beach County students reported the highest rates of marijuana use peaking in 2010 before declining in 2012 and increasing again in 2014 to 14.8% of middle and high school students. Miami-Dade and Broward counties have reported more similar findings across the 10-year period peaking in 2012 before declining to 10.6% for Miami-Dade and 11.0% for Broward students.

Exhibit 3. Current (past 30-day) Marijuana Use among Florida Middle and High School Students: 2000-2014

Current (past 30-day) Marijuana Use among Florida Middle and High School Students: 2000-2014
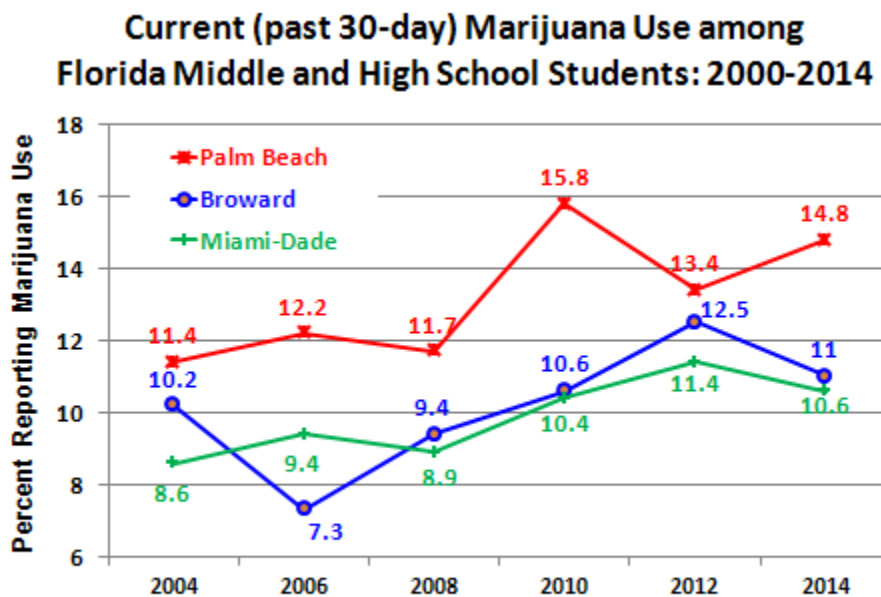
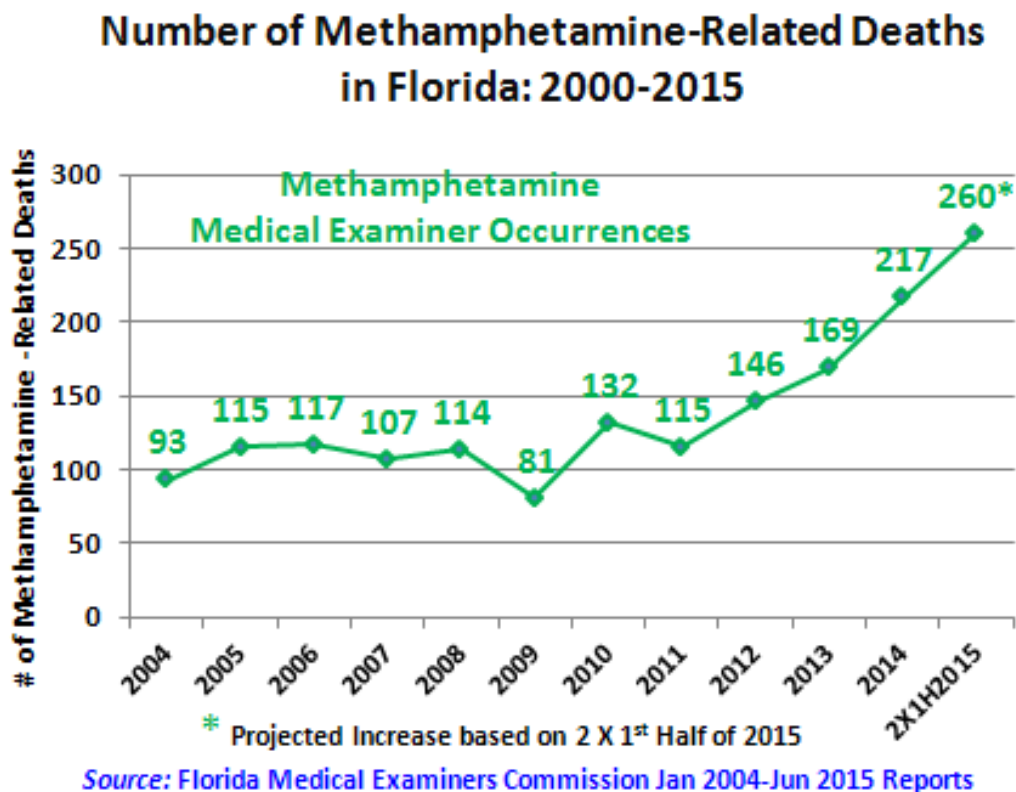Source: Florida Youth Substance Abuse Surveys 2000-2014

METHAMPHETAMINE

- Indicators of methamphetamine remain relatively low compared with other drugs in Southeast Florida but have been steadily increasing since 2011**.**

Significantly higher rates of methamphetamine treatment admissions and crime lab cases are reported in other areas of Florida than the southeastern region, in particular, in the Tampa Bay, Western Panhandle, and Orlando areas. According to the Florida Department of Law Enforcement and the South Florida HIDTA, most methamphetamine being used in Florida is produced in Mexico. Domestic clandestine laboratory production in Florida primarily seems still to be in the northern and central parts of the state where the 2-liter soda bottle "shake and bake" method is used to yield a relatively small amount of methamphetamine for personal use by the "cook" and for sharing with those who may have helped supply the precursor, pseudoephedrine.

Methamphetamine was detected among 130 deceased persons during the first half of 2015 statewide in Florida, compared with 112 in the first half of 2014 and 217 for the full year of 2014. Only the state totals of methamphetamine- and amphetamine-related deaths are available and are not reported for counties or regions. Methamphetamine was considered a cause of death in 63 (48%) of the cases during the first half of 2015. There were also 179 reports of amphetamine detected among decedents across Florida in the first 6 months of 2015, compared with 132 such occurrences in the first half of 2014. Amphetamine was considered the cause of death in 43 (or 24%) of the cases in the first half of 2015.

Exhibit 4. Number of Methamphetamine-Related Deaths in Florida: 2000-2015

Number of Methamphetamine-Related Deaths in Florida: 2000-2015

Methamphetamine Medical Examiner Occurrences

Y-axis: # of Methamphetamine -Related Deaths (0 to 300)

Data points:
- 2004: 93
- 2005: 115
- 2006: 117
- 2007: 107
- 2008: 114
- 2009: 81
- 2010: 132
- 2011: 115
- 2012: 146
- 2013: 169
- 2014: 217
- 2X1H2015: 260*

* Projected Increase based on 2 X 1st Half of 2015

Source: Florida Medical Examiners Commission Jan 2004-Jun 2015 Reports

There were 15 sympathomimetic amines deaths in the first half of 2015 across Florida with 6 occurrences considered a cause of death compared with 25 such occurrences in calendar year 2014, of which 2 were considered to be a cause of death. Sympathomimetic amines are a group of stimulants that include the appetite suppressant, phentermine, and other sympathomimetic amines not tracked elsewhere in this report.

There were 96 primary treatment admissions (1.6% of all admissions) for methamphetamine in Broward County, 27 in Miami-Dade County (0.4% of all admissions), and 43 in Palm Beach County (0.5% of all admissions) during 2015. Methamphetamine was the primary drug reported by 0.8% of all clients statewide in 2015. Males accounted for 63% of the 166 methamphetamine clients across the region, and 50% were between 18 and 34 years of age, whereas 46% were age 35 and older. Smoking methamphetamine was the route of administration reported by 53% of these clients with intranasal sniffing cited by 6% and injection cited by 19%. The remaining 22% reported oral or other/unknown routes of administration. Private treatment counselors continued to report serious methamphetamine abuse problems among men who have sex with men and who are not included in the number of clients from treatment programs receiving public funding. These clients are at high risk of infectious disease transmission related to both unprotected sexual activity and injecting drug use.

A total of 51 primary treatment admissions for amphetamine were reported in Broward County, 18 in Miami-Dade County, and 12 in Palm Beach County during 2015. Males accounted for 60% of the 81 amphetamine clients across the region in 2015, and 65% were between 18 and 34 years of age, whereas 31% were age 35 and older.

There were 326 methamphetamine crime laboratory reports, or 1.7% of the 18,853 total primary, secondary, and tertiary NFLIS reports for Miami-Dade, Broward, and Palm Beach counties combined in 2015. Methamphetamine ranked eighth among all substances analyzed in the three counties in 2015. Also, 133 amphetamine crime laboratory reports were filed, or 0.7% of the 2015 total ranking tenth among all substances.

NEW PSYCHOACTIVE SUBSTANCES (OTHER THAN OPIOIDS)

Synthetic Cathinones

- Constantly changing availability of specific synthetic cathinones from clandestine labs in China has dramatically influenced their use and serious consequences in Southeast Florida, in particular, in Broward County in 2015.

An epidemic of the synthetic cathinone, *alpha*-PVP, the drug sold as "flakka," erupted in Broward County in September 2014. Consequences of its abuse rapidly escalated in 2015 with the drug linked to 63 deaths and thousands of hospital emergency cases, many from the excited delirium syndrome. Broward County had more crime lab cases of *alpha*-PVP than any other county in the nation. Palm Beach County also experienced "flakka" problems but fewer than in neighboring Broward County. Miami-Dade had less *alpha*-PVP consequences than the two counties to its north but higher levels of ethylone cases sold as "Molly."

A Flakka Response Community Action Team was formed in April 2015 under the direction of the United Way of Broward County Commission on Substance Abuse, the Broward Addiction Recovery Center, the Broward Sheriff's Office, and numerous other federal and local partners. Their work resulted in almost daily town hall meetings, numerous media alerts, development of a medical emergency protocol, and trainings for first responders. In part because of worldwide negative media coverage about flakka, as well as diplomatic efforts, the government of China banned *alpha*-PVP and 115 other novel psychoactive substances on October 1, 2015. As a result, by the end of 2015, hospital emergency department cases, arrests, and treatment admissions related to *alpha*-PVP abuse dramatically declined. By early 2016, it had disappeared from street drug sales, according to the Broward Sheriff's Office and the Ft. Lauderdale Police Department.

Sold in quantities as small as one tenth of a gram for as little as $3.00 to $5.00, it was highly profitable for the dealers whose actual cost was very low. *Alpha*-PVP was sold over the Internet from China for about $1,500 per kilogram and shipped by worldwide express services to local mid-level dealers in packages containing from 1 to 5 kilograms. A single kilogram provided up to 10,000 doses at one tenth of a gram, which when sold for as much as $5.00 each yielded up to $50,000 in sales or a profit of $48,500. Nevertheless, it also required a high volume in sales. Yet, with a retail price of $3.00–$5.00, most anyone could afford it, and with a highly addictive drug, such as this one, repeat business was assured. Thus,

younger and poorer populations were targeted as customers. It was actively sold to and by homeless persons.

There were 132 synthetic cathinone deaths in all of Florida during 2013 and 134 in 2014. An additional 89 synthetic cathinone medical examiner occurrences were reported statewide in the first half of 2015 with 25 attributed as a cause of death.

Exhibit 5. Synthetic Cathinone Deaths in Florida

Source: Florida Medical Examiners Commission 2015 Interim Report
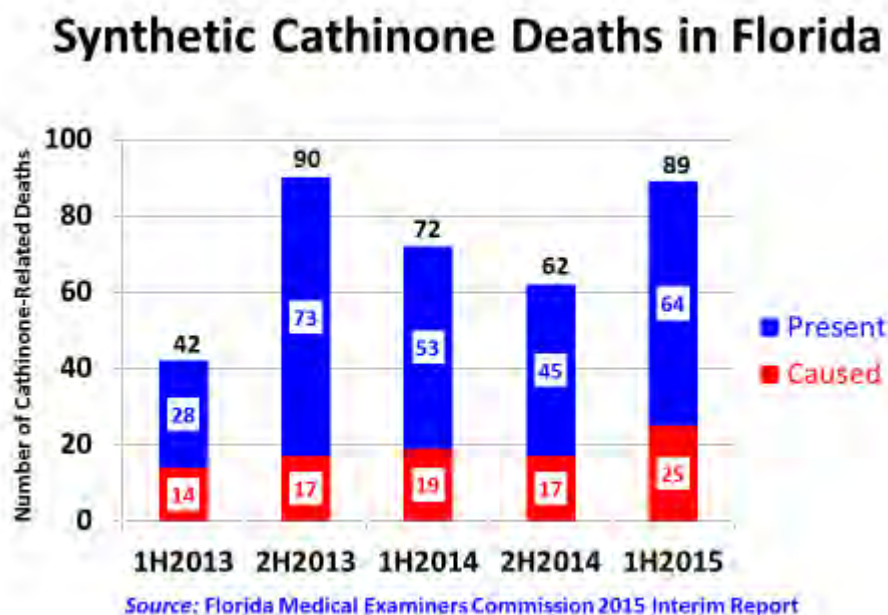
There were 63 *alpha*-PVP deaths in Broward County from September 27, 2014 to December 11, 2015, and 0 have been reported since that date. Also, 17 *alpha*-PVP deaths occurred in Palm Beach County between May 5 and October 15, 2015.

In the last six months of 2015, there were 1,872 *alpha*-PVP emergency department cases in just four hospitals of the Broward Health System in the northern part of Broward County. Most of these cases exhibited symptoms of excited delirium syndrome. Males accounted for 81% of the patients. The race and ethnicity of the *alpha*-PVP emergency department cases included 996 Black non-Hispanics, 751 White non-Hispanics, 110 White Hispanics, 7 Black Hispanics, 6 Asians, and 2 American Indians. The ages of the *alpha*-PVP patients are shown in the graph below. The mean age was 34 years, and only 2% (*n* = 44) were younger than 20 years of age, suggesting a history of chronic crack cocaine or other simulant abuse as a contributing factor to excited delirium with *alpha*-PVP use.

Exhibit 6. Flakka Hospital Cases: Broward Health June 1-December 27, 2015
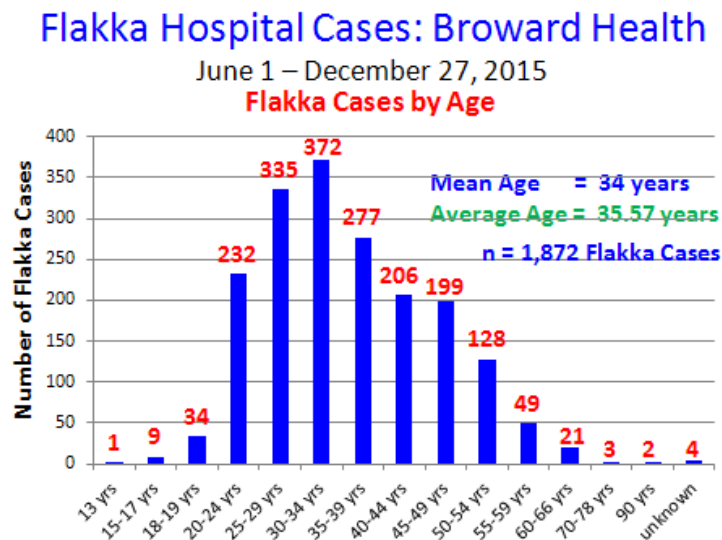
After the October 1, 2015 ban on production and sale of *alpha*-PVP by the Chinese government, the number of Broward Health hospital emergency department cases related to the drug declined from more than 300 per month from June to October to 187 in November and 54 in December 2015.

Exhibit 7. Flakka Hospital Cases Broward Health Medical Centers: June 1–December 27, 2015
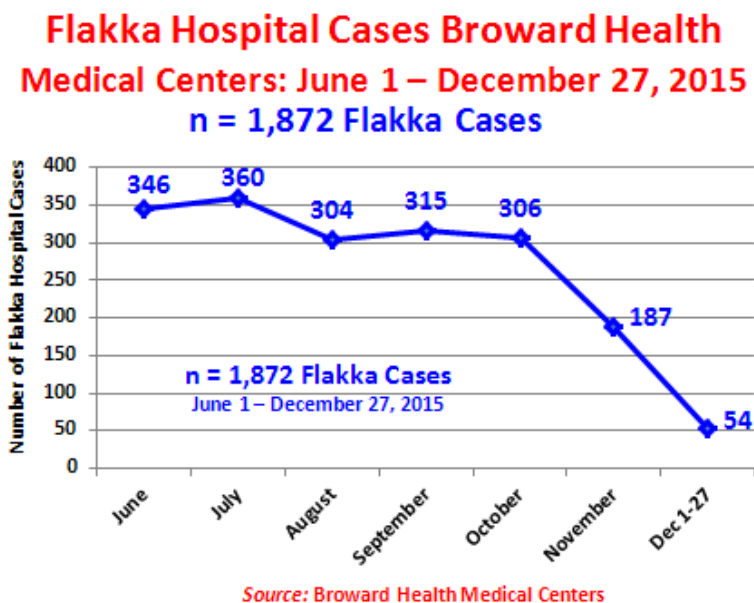
There were 405 primary treatment admissions (7% of all admissions) for *alpha*-PVP in Broward County in 2015, just 2 in Palm Beach County, and 1 in Miami-Dade. Males accounted for 86% of the Broward *alpha*-PVP treatment clients, and all were reported by the Broward Addiction Recovery Center (BARC). Across the three-county region, there were an additional 59 primary treatment admission for other synthetic stimulants in 2015. The BARC *alpha*-PVP treatment admissions declined sharply after the October 2015 Chinese ban of the drug as illustrated in the graph below.

Exhibit 8. Broward Addiction Recovery Center Flakka Treatment Admissions September 2014-January 2016

Broward Addiction Recovery Center
Flakka Treatment Admissions
September 2014 – January 2016   n= 469

Source: Broward Addiction Recovery Center (BARC)
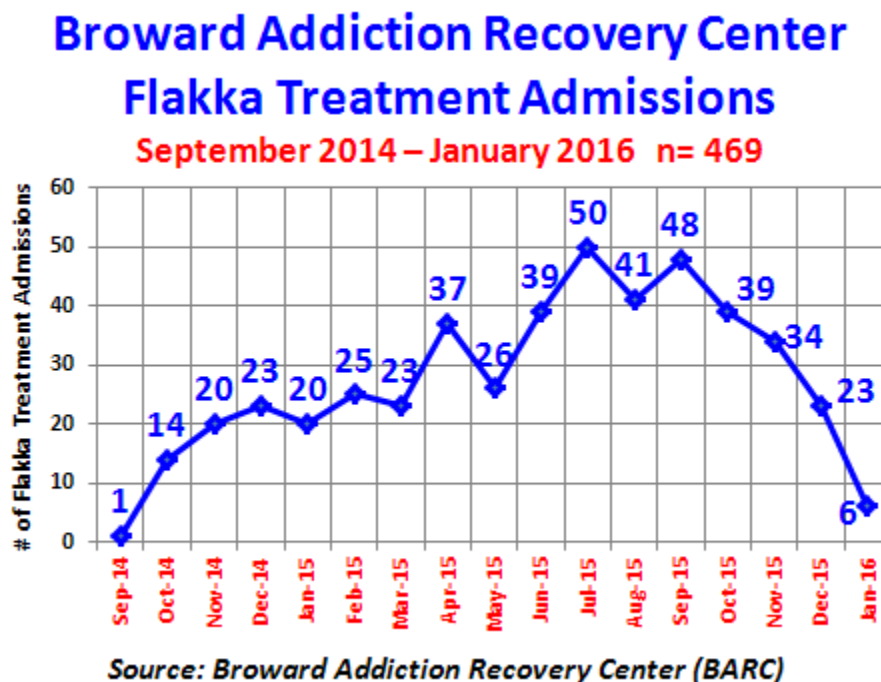
In all of Florida, there were 145 Poison Information Center exposure calls for *alpha*-PVP during 2015 compared with only 5 in 2014. The 2015 total includes 76 calls from Broward County, 13 for Palm Beach County, and 13 calls from Miami-Dade County. During the first quarter of 2016, there were 19 exposure calls for *alpha*-PVP in all of Florida, including 3 from Broward County and 2 each for Palm Beach and Miami-Dade counties. Exposure calls usually involve cases from a hospital emergency department where a patient is experiencing adverse consequences after smoking or ingesting a substance.

There were 2,602 crime lab reports for synthetic cathinones in 2015 in the Southeast Florida region, which is a 44% increase from 1,811 in 2014 and greater than previous year totals of 1,242 in 2013, 496 in 2012, and 74 in 2011. Among the 2015 crime lab reports, there were for 1,950 for *alpha*-PVP and 652 for ethylone. Ethylone was sold as "Molly" capsules or powder. Only 89 crime lab cases for MDMA were filed in 2015, which was similar to the 86 in 2014 but a significant decline from the 299 cases in 2011.

The graph below illustrates the changing patterns of synthetic cathinones and 3-4 MDMA ("ecstasy") across the state of Florida from 2010 to 2015. The blue portion of the bar graph is for MDMA, and the red

portion labeled "other cathinones" includes the so-called bath salts such as MDPV and 4 MEC. Methylone was introduced in 2011 and sold as "Molly" and dramatically increased until mid-2014 when it was banned by the Chinese government and replaced by ethylone. Small amounts of *alpha*-PVP appeared in 2012 and 2014 and then increased in the fourth quarter of 2014 until the Chinese ban on October 1, 2015. In 2016, ethylone has largely been replaced by dibutylone, the drug now sold as "Molly."

Exhibit 9. Number of Synthetic Cathinone and MDMA Crime Lab Reports in Florida: 2010-2015

Number of Synthetic Cathinone and MDMA Crime Lab Reports in Florida: 2010-2015

	2010	2011	2012	2013	2014	2015
■ Ethylone	0	1	5	4	1,426	1,827
□ Methylone	1	123	739	2,813	1,042	29
■ Alpha-PVP	0	1	82	45	781	2,012
■ Other Cathinones	19	248	484	241	281	7
■ MDMA	1071	674	182	115	136	158
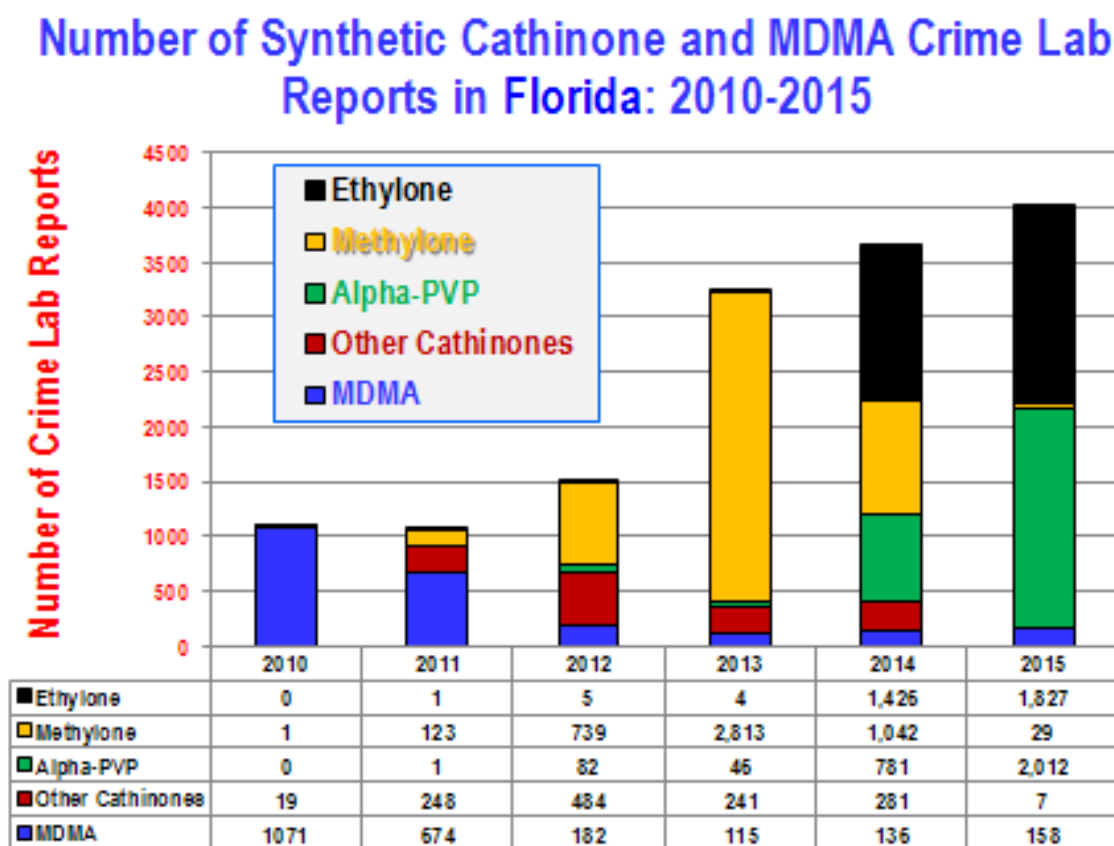
Source: US DEA - National Forensic Laboratory System Data Queried Jan 19, 2016

Across Florida, there were 199 Poison Information Center exposure calls for hallucinogenic amphetamines during 2015 compared with 321 in 2014. The 2015 total includes 35 calls from Miami-Dade County, 12 calls from Broward County, and 11 for Palm Beach County. Hallucinogenic amphetamines include drugs sold as "Molly" and "ecstasy." During the first quarter of 2016, there were 44 exposure calls for hallucinogenic amphetamines in all of Florida, including 17 calls from Miami-Dade County, 4 calls from Broward County, and 3 for Palm Beach County.

Synthetic Cannabinoids

- Synthetic cannabinoid crime lab cases declined between 2014 and 2015 in the three Southeast Florida counties as Poison Information Center exposure calls increased. These products seem to be in greater supply and use in other parts of Florida.

The availability of unregulated synthetic cannabinoids increased via retail sale throughout 2010 and the first half of 2011. Their use was mostly among those who were subject to frequent drug testing that did not identify these products. Nevertheless, drug tests are now available for their detection for some but not all of these ever changing substances and many of the early synthetic cannabinoids are now illegal.

There were 276 exposure calls statewide to Florida Poison Information Centers in 2015 for various unspecified synthetic cannabinoids, representing a 58% increase from the 175 calls in 2014. In 2013, there were 194 calls, which showed a decrease from the 537 calls in 2012 and 517 calls in 2011. Among the calls in 2015, 30 were from Miami-Dade County, 11 were from Broward County, and 3 were from Palm Beach County. During the first quarter of 2016, there were 84 poison exposure calls for synthetic cannabinoids in all of Florida, including 4 from Miami-Dade County, 1 for Broward County, and 0 from Palm Beach County.

A total of 10 synthetic cannabinoid deaths were reported in the first half of 2015 across Florida, with 3 occurrences considered a cause of death compared with 9 such occurrences in calendar year 2014, of which 3 were considered to be a cause of death.

There were 70 crime lab reports for synthetic cannabinoids in 2015 in the three Southeast Florida counties, which represents a 69% decline from the 228 reports in 2014. Overall, 145 such reports were cited in 2013, 190 in 2012, and 19 in 2011. Broward County's crime labs reported 18 items for XLR-11 and 13 for AB-Fubinaca in 2015. Miami-Dade had 9 reports for AB-CHMINACA. There was no synthetic cannabinoid crime lab report for Palm Beach County in 2015.

OPIOIDS

- The sharp escalations of heroin use, treatment admissions, and deaths in Florida along with stable and high levels of prescription opioid indicators constitute an opioid epidemic.

- Non-pharmaceutical fentanyl from foreign clandestine labs is a major factor for the increase in all opioid deaths.

Nonmedical Use of Prescription Opioids

In the first decade of the 21st century, there was a dramatic increase in the availability of diverted pharmaceutical opioids and deaths linked to their nonmedical misuse as well as primary addiction treatment admissions for prescription opioids. The problems were reported statewide with Broward and Palm Beach counties having the highest number of consequences. Numerous new laws and regulations took effect beginning in 2010 along with the abuse-deterrent reformulation of high-dose, extended-release opioids. The collective impacts of these supply-reduction strategies were reflected in declining opioid deaths beginning in 2011. At the same time, heroin deaths increased sharply from 2012 to 2015 across Florida, rising 1,010% from 57 in 2011 to a projected 686 in 2015 based on the first half of that year. In the three

Southeast Florida counties, heroin deaths increased 868% from 28 in 2011 to 271 for 2015. The sharp escalations of heroin use, treatment admission, and deaths in Florida along with stable and high levels of prescription opioid indicators constitute an opiate epidemic.

In 2010, there were 6,608 opioids detected in deceased persons in Florida. That toll steadily declined 23% to 5,085 by 2013 and then increased to 5,624 opioid occurrences in 2014. The projected number of opioid occurrences among deceased persons in 2015 is 6,174 based on the first six months of the year. The projected total includes 1,340 occurrences for morphine, many of which are believed to be heroin, and 794 fentanyl occurrences, including many that are considered to be non-pharmaceutical fentanyl from foreign clandestine labs used to adulterate street heroin or sold as counterfeit medications. Seventy-one percent of the 2015 opioid deaths were related to 5 of the 11 opioids tracked by the Florida Medical Examiners Commission. Those 5 are morphine, oxycodone, hydrocodone, methadone, and fentanyl totaling 2,184 medical examiner occurrences in the first six months of 2015 across Florida. That total includes 416 reports in the 3 Southeast Florida counties representing a 13% increase from the 368 occurrences for the same 5 opioids during the first six months of 2014. The total for the first half of 2015 includes 123 in Palm Beach County, 131 in Broward, and 162 in Miami-Dade.

Exhibit 10. Number of Selected Lethal Opioid Occurrences Among Deceased Persons in Florida: 2008-2015

Number of Selected Lethal Opioid Occurrences Among Deceased Persons in Florida 2008 to 2015

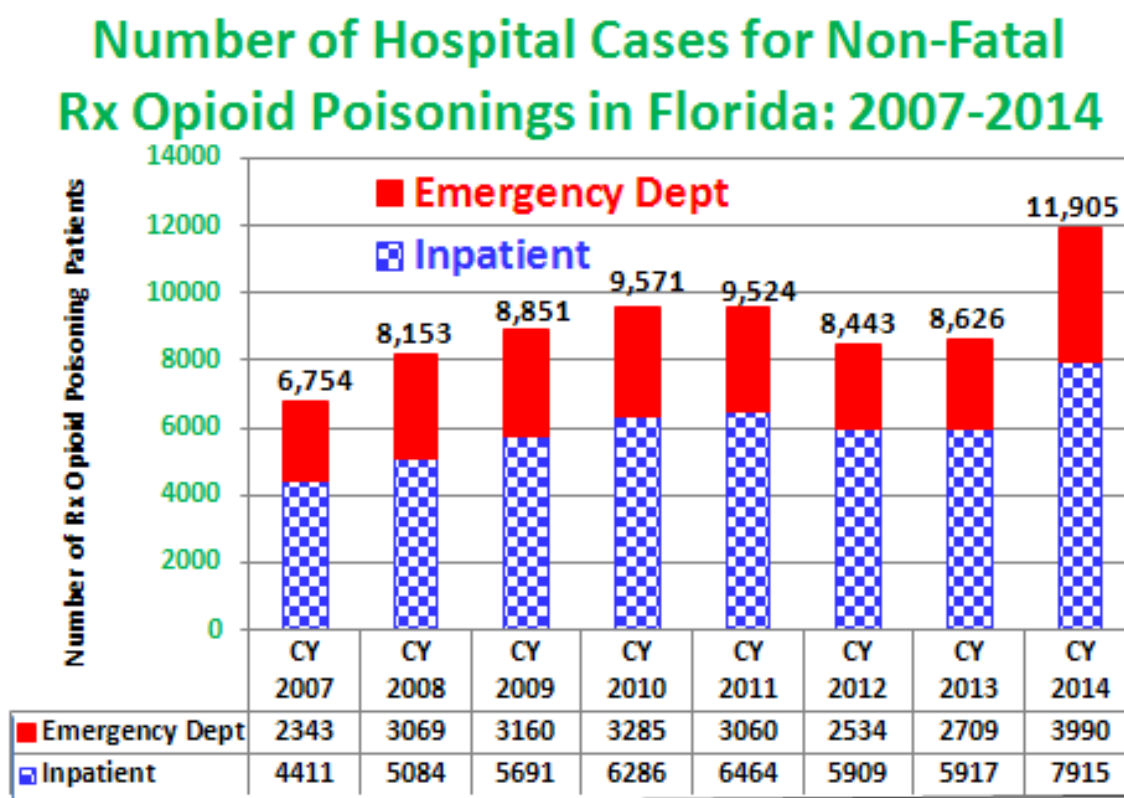|	1H'08	2H'08	1H'09	2H'09	1H'10	2H'10	1H'11	2H'11	1H'12	2H'12	1H'13	2H'13	1H'14	2H'14	1H'15
Oxycodone	476	465	533	652	715	801	607	640	392	343	279	255	219	251	274
Methadone	337	336	380	340	336	358	341	350	274	238	221	168	170	142	158
Morphine	153	147	160	142	110	152	144	201	176	239	268	300	295	410	387
Hydrocodone	141	129	136	129	139	176	136	171	118	126	158	133	119	131	108
Fentanyl									65	71	85	100	139	258	289

Source: FDLE – Drugs Identified In Deceased Persons by Florida Medical Examiners
Jan 2008 - Jun 2015 Reports

The most currently available data on hospital overdose cases are from calendar year 2014 when there were 11,905 hospital prescription opioid overdose poisonings across the state for which 98% or all but 194 patients survived. Between 2007 and 2014, these overdoses totaled 71,827. In 2014, 33.5% occurred among emergency department patients and 66.5% were admitted as inpatients. It is interesting to note that only 7% of these patients were diagnosed as also having a substance abuse disorder and 55% were simply discharged to home and their own self-care. Included in the state total for 2014 were 704 hospital prescription opioid overdose poisonings in Palm Beach County, 826 in Broward County, and 482 in Miami-Dade County.

Exhibit 11. Number of Hospital Cases for Non-Fatal Rx Opioid Poisonings in Florida: 2007-2014

Number of Hospital Cases for Non-Fatal Rx Opioid Poisonings in Florida: 2007-2014

	CY 2007	CY 2008	CY 2009	CY 2010	CY 2011	CY 2012	CY 2013	CY 2014
Emergency Dept	2343	3069	3160	3285	3060	2534	2709	3990
Inpatient	4411	5084	5691	6286	6464	5909	5917	7915

Source: Analysis of data from the Florida Agency for Health Care Administration

There were 1,317 admissions for opiates other than heroin reported as primary treatment admissions in Palm Beach County, 766 in Broward County, and 215 in Miami-Dade County during 2015. Males accounted for 52.3% of the 2,298 opioid clients across the region in 2015, and 65.6% were between 18 and 34 years of age and 34.2% were aged 35 or older.

A total of 1,158 prescription opioid crime laboratory reports were filed, or 6% of the 18,853 total primary, secondary, and tertiary NFLIS reports for Miami-Dade, Broward, and Palm Beach counties combined in 2015. This category of drugs ranked sixth among all substances analyzed in the three counties in 2015. The number of prescription opioid crime laboratory reports decreased 35% between 2014 and 2015 but constituted 6% of crime lab cases in both years.

Heroin

Heroin-related deaths increased 109%, rising from 139 in 2014 to 291 in 2015 across the Southeast Florida region with the sharpest rise reported in Palm Beach and Broward counties. Heroin was considered the cause of death in 94% of the heroin-related cases in Southeast Florida in 2015. Many deaths involved polydrug use with 90% of the 2015 cases having one or more other substances present at the time of death. There was no heroin-related decedent younger than 18 years of age in the region, 20% were 18–25, 30% were 26–34, 34% were 35–50, and 16% were older than 50 years of age.

Exhibit 12. Number of Heroin Deaths in 3 Southeast Florida Counties: 2000-2015
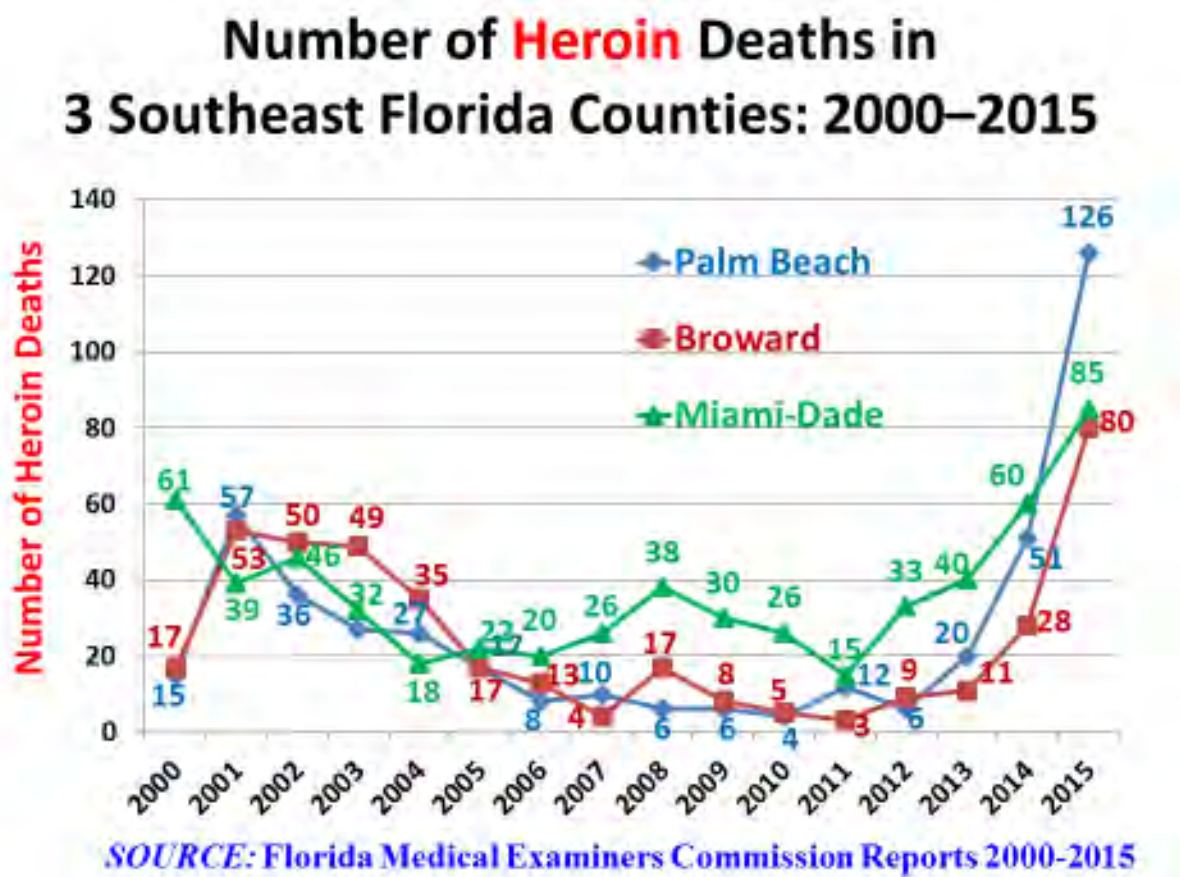
Florida heroin hospital overdose poisonings totaled 1,925 in 2014, for which 99% or all but 25 patients survived. Only 29% were diagnosed as having a substance abuse disorder. Among the heroin patients, 70% were discharged to home and their own self-care. Heroin hospital overdose poisonings in 2014 totaled 268 in Palm Beach, 233 in Broward, and 83 in Miami-Dade.

Primary addiction treatment admissions for heroin totaled 2,366 patients across the three-county region in 2015 accounting for 11.5% of all admissions. Males accounted for 65% of these clients. Only 1 admission

was for a client younger than 18 years of age, 18% were 18–25, 45% were 26–34, and 37% were age 35 or older. Injecting heroin was reported by 54% of clients, but that rate is probably higher because the route of administration was recorded as unknown for 36%. Intranasal snorting was reported by 9% of clients, and 2% reported smoking heroin.

There were 1,401 heroin crime laboratory reports, or 7.4% of the 18,853 total primary, secondary, and tertiary NFLIS reports for Miami-Dade, Broward, and Palm Beach counties combined in 2015. Heroin ranked fourth among all substances analyzed in the three counties in 2015. The number of heroin crime laboratory reports increased 5% between 2014 and 2015 and rose from sixth to fourth place among all substances.

Non-Pharmaceutical Opioids

The increasing availability of poisonous opiate analogs and their distribution are critical issues related to the opiate epidemic. These novel psychoactive opiates are found not only as adulterated street heroin but also as counterfeit medications, including fake "Xanax®" pills and as oxycodone and hydrocodone tablets. There have been at least nine deaths in Pinellas County, Florida, just north of Tampa Bay, attributed to counterfeit medications laced with fentanyl during the first half of 2016. Other opiate analogs include U-47700, which has been increasingly reported over the past few months, including law enforcement seizures of U-47700 on the East coast of Florida and at least three reported deaths in Pinellas County so far in 2016.

The first and only seizure of W-18 in the United States during 2015 as reported to the U.S. Drug Enforcement Administration's national crime lab system occurred in Broward County. The package weighed 2.5 pounds, which was estimated as enough to produce massive numbers of overdoses. W-18 is a synthetic opioid reported to be 100 times more potent than fentanyl. The Broward County seizure was part of a federal case in which the defendant received a 10-year sentence for having had fentanyl or its analogs shipped to him from China with the help of a Canadian prison inmate (U.S. vs. Adolphe Joseph). W-18 is one of a series of 32 synthetic opioids developed in the 1980s at the University of Alberta in Canada. It seems to be the most powerful of the "W" compounds. These substances have never been reported to have been used clinically, and there has been no scientific study of their actions, adverse effects, or reversibility.

Local Research Highlights

Investigators at the Center for Applied Research on Substance Use and Health Disparities (ARSH) at Nova Southeastern University are working on several novel studies of drug abuse trends.

1. *Benzodiazepine (BZD) dependence among multidrug users in the club scene*. BZDs are among the most frequently prescribed drugs with the potential for abuse, and young adults report the highest rates of BZD misuse in the United States. The study is examining health and social risk factors associated with BZD dependence (more than 10% of the sample met DSM-IV criteria) among a large cohort of young adult polydrug users who misuse BZDs. Preliminary analyses indicate that BZD-dependent misusers initiated at

an average age of 16. BZD dependence was associated with younger age; drug overdose history; severe mental distress; victimization history; and heavy prescription opioid use. Compared with a study conducted with a similar cohort five years earlier, BZD initiation was younger, dependence more prevalent, and heavy opioid use new among the current cohort. The association of BZD dependence with overdose and heavy opioid use is especially alarming given the ongoing opioid epidemic.

2. *Antiretroviral (ARV) medication diversion and misuse.* The channeling of ARVs from legal sources to the informal market is a well-documented concern in Southeastern Florida, and research has shown that some high-risk individuals, including HIV-negative men who have sex with men (MSM), seek ARVs from informal sources for use without a prescription or medical supervision. An ongoing qualitative study is examining the South Florida informal ARV market and the use of nonprescribed ARVs for HIV prevention. Preliminary data indicate that HIV-negative MSM have limited information about effective pre- and postexposure prophylaxis use and that they use nonprescribed ARVs for protection against HIV infection in conjunction with condoms for additional protection, during condomless sex, and during condomless sex while high (e.g., methamphetamine). HIV-positive MSM describe sharing or selling ARVs to HIV-negative MSM as a benevolent act to help friends and sex partners avoid HIV infection. The informal, nonprescribed, and nonmedically supervised use of ARVs for HIV prevention has the potential to undermine the protective benefits of pre- and postexposure prophylaxis, as well as to leave men unprotected against HIV transmission and at risk for ARV resistance.

3. *Trends in non-pharmaceutical fentanyl (NPF) law enforcement activity.* ARSH's quarterly national survey of law enforcement agencies regarding prescription drug diversion activity began signaling the advance of NPF into the United States from Canada in early 2014, beginning in the state of Ohio. Until the second quarter of 2015, reports were of NPF in powder form, alone or mixed with heroin. Reports of such cases gradually advanced down the East and West coasts. In early 2015, Ohio reported the first signal of NPF sold as counterfeit prescription medications, including opioid and benzodiazepine products. Since then, reports of mass production of counterfeit pills have been made by agencies in Los Angeles, New York, Ohio, and Seattle, as well as numerous sites in Canada, and cases involving NPF have spread throughout the country. Reports of diversion of pharmaceutical fentanyl products did not increase over the period.

Data Sources

Data for this report were drawn from the following sources:

Data on drug-related deaths are from the Florida Department of Law Enforcement: Florida Medical Examiners Commission Interim and Annual Reports on Drugs Detected in Deceased Persons in Florida, January 2010 - June 2015.

Treatment admissions data are from the Florida Department of Children and Families and the Broward Behavioral Health Coalition: Primary Drug Treatment Admissions by County, 2015. Data for Palm Beach County is not available for 2011-2013. Therefore 2011-2013 only includes data for Broward and Miami-Dade counties; 2014-2015 includes data for all three counties in the Miami MSA.

Treatment admissions data related to *alpha*-PVP are from the Broward Addiction Recovery Center.

Poison exposure call data are from the Florida Poison Information Center exposure calls for calendar year 2015 and January-March 2016.

Data on crime lab cases are from the U.S. Drug Enforcement Administration: National Forensic Laboratory Information System: - Southeast Florida crime lab cases 2014 data. Queried: March 22, 2016 (NOTE: The NFLIS data used in this narrative were run at an earlier time than the NFLIS data prepared by the DEA for NDEWS. Therefore, the numbers and percentages cited in this narrative may not match the numbers and percentages in the NDEWS SCS Tables or in the Data Snapshot.)

Trends of prevalence data on drug use among high school students are from the Centers for Disease Control and Prevention: 2011 and 2013 Youth Risk Behavior Surveys and from the Florida Department of Children and Families: *Florida Youth Substance Abuse Surveys* (FYSAS) 2000 – 2015.

Poisoning overdose hospitalization cases data for opioids, heroin and benzodiazepines 2007-2014 are from the Florida Agency for Health Care Administration.

Data on *alpha*-PVP-related excited delirium hospital emergency department cases are from the Broward Health Hospital System.

Information on emerging drug issues are from the United Way of Broward County Commission on Substance Abuse – Surveillance Support Committee.

Information on synthetic cathinones and other novel psychoactive substances are from the Broward County Flakka Community Action Team.

For additional information about the drugs and drug use patterns discussed in this report, please contact James N. Hall, Epidemiologist, Center for Applied Research on Substance Use and Health Disparities, Nova Southeastern University, 7255 NE 4th Avenue, Suite 112, Miami, FL 33138, Phone: 786–547–7249, E-mail: upfrontin@aol.com.

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.

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- American Community Survey (ACS) 5-Year Estimates, 2010-2014

- National Survey on Drug Use and Health (NSDUH): Survey of U.S. Population, 2010-2012

- Youth Risk Behavior Survey (YRBS): Survey of Student Population, 2013

- Treatment Admissions, 2011-2015

- CDC WONDER Drug Poisoning Deaths, 2010-2014

- National Forensic Laboratory Information System (NFLIS), 2015

Table 1: Demographic and Socio-Economic Characteristics
Broward, Miami-Dade, **and** *Palm Beach Counties* **and** *Miami MSA^, Florida*
2010-2014 ACS 5-Year Estimates

| | Southeastern Florida Counties | | | | | | Miami MSA^ | |
| | Broward | | Miami-Dade | | Palm Beach | | | |
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total Population (#)	**1,815,269**	**	**2,600,861**	**	**1,359,074**	**	**5,775,204**	**
Age								
18 years and over (%)	78.1%	**	78.9%	+/-0.1	80.0%	**	78.9%	+/-0.1
21 years and over (%)	74.5%	+/-0.1	74.8%	+/-0.1	76.5%	+/-0.1	75.1%	+/-0.1
65 years and over (%)	14.7%	+/-0.1	14.6%	+/-0.1	22.1%	+/-0.1	16.4%	+/-0.1
Median Age	39.8		38.8		43.9		40.2	
Race (%)								
White, Not Hisp.	41.4%	+/-0.1	15.4%	+/-0.1	58.4%	+/-0.1	33.7%	+/-0.1
Black/African American, Not Hisp.	26.6%	+/-0.1	17.0%	+/-0.1	17.3%	+/-0.1	20.1%	+/-0.1
Hispanic/Latino (of any race)	26.4%	**	65.2%	**	20.0%	**	42.4%	**
American Indian/Alaska Native	0.2%	+/-0.1	0.1%	+/-0.1	0.1%	+/-0.1	0.1%	+/-0.1
Asian	3.3%	+/-0.1	1.5%	+/-0.1	2.5%	+/-0.1	2.3%	+/-0.1
Native Hawaiian/Pacific Islander	0.0%	+/-0.1	0.0%	+/-0.1	0.0%	+/-0.1	0.0%	+/-0.1
Some Other Race	0.4%	+/-0.1	0.2%	+/-0.1	0.4%	+/-0.1	0.3%	+/-0.1
Two or More Races	1.6%	+/-0.1	0.6%	+/-0.1	1.4%	+/-0.1	1.1%	+/-0.1
Sex (%)								
Male	48.5%	+/-0.1	48.5%	+/-0.1	48.4%	+/-0.1	48.5%	+/-0.1
Female	51.5%	+/-0.1	51.5%	+/-0.1	51.6%	+/-0.1	51.5%	+/-0.1
Educational Attainment (*Among Population Aged 25+ Years*) (%)								
High School Graduate or Higher	87.9%	+/-0.3	79.5%	+/-0.3	87.7%	+/-0.3	84.1%	+/-0.1
Bachelor's Degree or Higher	30.2%	+/-0.4	26.4%	+/-0.3	32.8%	+/-0.4	29.1%	+/-0.2
Unemployment (*Among Civilian Labor Force Population Aged 16+ Years*) (%)								
Percent Unemployed	11.3%	+/-0.3	11.2%	+/-0.3	10.8%	+/-0.3	11.1%	+/-0.2
Income ($)								
Median Household Income (in 2014 inflation-adjusted dollars)	$51,574	+/-451	$43,099	+/-456	$52,878	+/-510	$48,435	+/-281
Insurance Coverage *(Among Civilian Noninstutionalized Population)* (%)								
No Health Insurance Coverage	21.7%	+/-0.4	28.3%	+/-0.3	19.2%	+/-0.4	24.1%	+/-0.3
Poverty (%)								
All People Whose Income in Past Year is Below Poverty Level	14.6%	+/-0.3	20.5%	+/-0.4	14.6%	+/-0.4	17.3%	+/-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.
^Miami MSA: The Miami-Ft. Lauderdale-West Palm Beach MSA is made up of Broward, Miami-Dade, and Palm Beach Counties. The principal cities of the Miami MSA include: Miami, Fort Lauderdale, West Palm Beach, Pompano Beach, Miami Beach, Boca Raton, Kendall, Deerfield Beach, Delray Beach, and Jupiter.
****The estimate is controlled; a statistical test for sampling variability is not appropriate.

SOURCES: Adapted by the NDEWS Coordinating Center from data provided by the U.S. Census Bureau, 2010-2014 American Community Survey (ACS) 5-Year Estimates.

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Table 2a: Self-Reported Substance Use Behaviors Among Persons 12+ Years in Southeastern Florida ^, 2010-2012
Estimated Percent, 95% Confidence Interval, and Estimated Number,
Annual Averages Based on 2010, 2011, 2012 NSDUHs

Substance Use Behaviors	Substate Region: Southeast^				Substate Region: Southern^	
	Broward County		Palm Beach County		Miami-Dade & Monroe Counties	
	Estimated % (95% CI)	Estimated #*	Estimated % (95% CI)	Estimated #*	Estimated % (95% CI)	Estimated #*
Used in Past Month						
Alcohol	49.49 (45.61 -53.37)	736,911	51.26 (46.76 -55.74)	584,766	43.97 (40.81 -47.17)	970,132
Binge Alcohol**	20.08 (17.60 -22.81)	298,993	18.93 (16.18 -22.01)	215,950	18.48 (16.35 -20.82)	407,733
Marijuana	5.29 (4.23 - 6.60)	78,769	5.20 (4.00 - 6.74)	59,321	4.82 (3.98 - 5.82)	106,346
Use of Illicit Drug Other Than Marijuana	2.80 (2.12 - 3.68)	41,692	2.96 (2.20 - 3.96)	33,767	2.78 (2.17 - 3.55)	61,337
Used in Past Year						
Cocaine	1.63 (1.21 - 2.20)	24,271	1.71 (1.26 - 2.33)	19,507	1.56 (1.20 - 2.04)	34,419
Nonmedical Use of Pain Relievers	3.47 (2.71 - 4.44)	51,669	3.40 (2.59 - 4.46)	38,787	3.07 (2.38 - 3.96)	67,735
Dependence or Abuse in Past Year*						
Illicit Drugs or Alcohol	6.89 (5.61 - 8.43)	102,593	7.04 (5.62 - 8.77)	80,311	5.81 (4.79 -7.04)	128,189
Alcohol	5.68 (4.50 - 7.13)	84,576	5.56 (4.32 - 7.12)	63,428	4.81 (3.89 - 5.92)	106,125
Illicit Drugs	2.44 (1.95 - 3.06)	36,332	2.46 (1.94 - 3.11)	28,063	1.89 (1.50 - 2.38)	41,700

NOTE: 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.

^ **South Florida:** includes NSDUH Substate Regions Southeast and Southern. **Southeast Region** comprises Palm Beach and Broward Counties and **Southern Region** comprises Miami-Dade and Monroe Counties.

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

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

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

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

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

Estimated Percent, by Age Group

Past Month Binge Alcohol* Use

Geographic Region	12-17 Est. % (95% CI)	18-25 Est. % (95% CI)	26+ Est. % (95% CI)
Southeast Region			
Broward County	6.5 (5.1 - 8.3)	32.6 (28.2 - 37.4)	19.9 (17.0 - 23.1)
Palm Beach County	6.7 (5.2 - 8.5)	33.3 (28.7 - 38.2)	18.3 (15.2 - 21.9)
Southern Region (i.e., Miami-Dade & Monroe Counties)	6.3 (5.0 - 7.8)	28.2 (24.7 - 32.0)	18.2 (15.7 - 21.1)

Past Year Marijuana Use

Geographic Region	12-17 Est. % (95% CI)	18-25 Est. % (95% CI)	26+ Est. % (95% CI)
Southeast Region			
Broward County	12.8 (10.5 - 15.7)	27.4 (23.1 - 32.3)	6.7 (5.2 - 8.6)
Palm Beach County	11.7 (9.3 - 14.6)	29.0 (24.5 - 33.9)	6.8 (5.1 - 8.8)
Southern Region (i.e., Miami-Dade & Monroe Counties)	11.0 (9.0 - 13.3)	24.4 (21.2 - 27.9)	4.9 (3.8 - 6.2)

Illicit Drugs or Alcohol Dependence or Abuse in Past Year

Geographic Region	12-17 Est. % (95% CI)	18-25 Est. % (95% CI)	26+ Est. % (95% CI)
Southeast Region			
Broward County	6.1 (4.5 - 8.0)	16.5 (13.5 - 20.0)	5.6 (4.3 - 7.4)
Palm Beach County	5.5 (4.0 - 7.5)	17.4 (14.2 - 21.1)	5.9 (4.4 - 7.8)
Southern Region (i.e., Miami-Dade & Monroe Counties)	5.9 (4.5 - 7.7)	13.2 (11.1 - 15.7)	4.6 (3.5 - 6.0)

Past Month Marijuana Use

Geographic Region	12-17 Est. % (95% CI)	18-25 Est. % (95% CI)	26+ Est. % (95% CI)
Southeast Region			
Broward County	6.5 (5.0 - 8.5)	15.9 (12.6 - 19.9)	3.6 (2.7 - 5.0)
Palm Beach County	6.2 (4.6 - 8.3)	16.2 (12.7 - 20.4)	3.7 (2.6 - 5.3)
Southern Region (i.e., Miami-Dade & Monroe Counties)	5.7 (4.4 - 7.3)	15.9 (13.3 - 18.9)	2.9 (2.2 - 4.0)

Past Year Cocaine Use

Geographic Region	12-17 Est. % (95% CI)	18-25 Est. % (95% CI)	26+ Est. % (95% CI)
Southeast Region			
Broward County	0.6 (0.3 - 1.1)	5.3 (3.6 - 7.7)	1.2 (0.8 - 1.8)
Palm Beach County	0.7 (0.4 - 1.3)	6.3 (4.3 - 9.1)	1.2 (0.8 - 1.8)
Southern Region (i.e., Miami-Dade & Monroe Counties)	0.8 (0.5 - 1.3)	5.1 (3.7 - 7.0)	1.1 (0.7 - 1.6)

Alcohol Dependence or Abuse in Past Year

Geographic Region	12-17 Est. % (95% CI)	18-25 Est. % (95% CI)	26+ Est. % (95% CI)
Southeast Region			
Broward County	3.4 (2.4 - 4.6)	12.1 (9.6 - 15.1)	5.0 (3.8 - 6.7)
Palm Beach County	3.1 (2.2 - 4.5)	13.3 (10.6 - 16.5)	4.8 (3.5 - 6.6)
Southern Region (i.e., Miami-Dade & Monroe Counties)	3.6 (2.6 - 4.8)	10.6 (8.8 - 12.8)	4.0 (3.0 - 5.3)

Past Month Use of Illicit Drug Other than Marijuana

Geographic Region	12-17 Est. % (95% CI)	18-25 Est. % (95% CI)	26+ Est. % (95% CI)
Southeast Region			
Broward County	4.0 (2.9 - 5.5)	5.8 (4.2 - 8.0)	2.2 (1.5 - 3.2)
Palm Beach County	3.7 (2.6 - 5.1)	6.8 (5.0 - 9.3)	2.4 (1.6 - 3.5)
Southern Region (i.e., Miami-Dade & Monroe Counties)	4.0 (2.9 - 5.3)	6.0 (4.5 - 7.9)	2.1 (1.5 - 3.0)

Past Year Use: Nonmedical Use of Pain Relievers

Geographic Region	12-17 Est. % (95% CI)	18-25 Est. % (95% CI)	26+ Est. % (95% CI)
Southeast Region			
Broward County	5.0 (3.7 - 6.6)	7.0 (5.3 - 9.3)	2.8 (2.0 - 3.9)
Palm Beach County	4.7 (3.4 - 6.5)	7.9 (6.0 - 10.4)	2.7 (1.9 - 3.9)
Southern Region (i.e., Miami-Dade & Monroe Counties)	3.7 (2.7 - 5.0)	5.6 (4.3 - 7.3)	2.6 (1.8 - 3.7)

Illicit Drug Dependence or Abuse in Past Year

Geographic Region	12-17 Est. % (95% CI)	18-25 Est. % (95% CI)	26+ Est. % (95% CI)
Southeast Region			
Broward County	4.2 (3.0 - 5.9)	8.4 (6.3 - 11.1)	1.4 (1.0 - 2.0)
Palm Beach County	4.0 (2.8 - 5.7)	8.8 (6.6 - 11.6)	1.5 (1.0 - 2.2)
Southern Region (i.e., Miami-Dade & Monroe Counties)	3.4 (2.4 - 4.8)	5.8 (4.4 - 7.5)	1.1 (0.7 - 1.6)

NOTES:
95% Confidence Interval (CI): provides a measure of the accuracy of the estimate. It defines the range within which the true value can be expected to fall 95 percent of the time.
^South Florida: includes NSDUH Substate Regions Southeast and Southern. **Southeast Region** comprises Palm Beach and Broward Counties and **Southern Region** comprises Miami-Dade and Monroe Counties.
*Binge Alcohol Use: defined as drinking 5 or more drinks on the same occasion on at least 1 day in the past 30 days.
**Dependence or Abuse: based on definitions found in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).

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

Table 3.1: Self-Reported Substance Use-Related Behaviors Among Broward County^ Public High School Students, 2013

Estimated Percent and 95% Confidence Interval (CI)

2011 and 2013 YRBS*

Substance Use Behaviors	2013 vs 2011 Percent			2013 by Sex Percent			2013 by Race Percent		
	2013 Estimate (95% CI)	2011 Estimate (95% CI)	p-value	Male Estimate (95% CI)	Female Estimate (95% CI)	p-value	White Estimate (95% CI)	Black Estimate (95% CI)	Hispanic Estimate (95% CI)
Used in Past Month									
Alcohol	29.7 (26.6 - 33.1)	37.2 (34.6 - 40.0)	0.00	30.6 (25.8 - 35.8)	28.8 (25.9 - 32.0)	0.50	38.4 (31.9 - 45.4)	18.2 (14.1 - 23.0)	35.8 (31.1 - 40.7)
Binge Alcohol**	13.8 (11.5 - 16.5)	17.6 (15.5 - 20.0)	0.03	15.5 (12.3 - 19.2)	12.0 (9.5 - 15.0)	0.07	21.6 (16.2 - 28.2)	5.3 (3.1 - 8.8)	17.3 (13.2 - 22.3)
Marijuana	22.9 (20.1 - 26.1)	22.1 (19.8 - 24.5)	0.66	27.0 (22.6 - 31.9)	18.8 (16.0 - 21.9)	0.00	26.7 (21.9 - 32.0)	18.4 (13.9 - 23.9)	24.5 (20.7 - 28.8)
Ever Used in Lifetime									
Alcohol	64.4 (61.2 - 67.5)	66.9 (63.3 - 70.3)	0.29	64.1 (60.1 - 67.9)	64.8 (60.3 - 69.1)	0.78	71.2 (64.9 - 76.8)	53.9 (48.7 - 59.1)	71.3 (67.2 - 75.1)
Marijuana	38.0 (34.3 - 41.9)	38.1 (34.9 - 41.4)	0.98	40.3 (35.4 - 45.4)	35.6 (31.5 - 39.9)	0.07	42.6 (35.2 - 50.4)	33.1 (27.1 - 39.7)	39.8 (35.9 - 43.8)
Cocaine	4.9 (3.8 - 6.4)	5.5 (4.3 - 6.9)	0.55	6.3 (4.6 - 8.6)	2.9 (2.1 - 4.2)	0.00	5.7 (3.5 - 9.3)	2.2 (1.0 - 4.6)	6.1 (4.6 - 8.0)
Hallucinogenic Drugs	—	—	~	—	—	~	—	—	—
Inhalants	6.5 (5.2 - 8.3)	9.0 (6.7 - 11.9)	0.11	6.9 (5.2 - 9.0)	5.8 (4.1 - 8.2)	0.38	5.0 (2.9 - 8.3)	6.1 (4.2 - 8.9)	5.9 (4.0 - 8.6)
Ecstasy also called "MDMA"	7.7 (6.3 - 9.3)	9.2 (6.9 - 12.0)	0.31	8.6 (6.3 - 11.8)	6.2 (4.8 - 8.0)	0.18	7.0 (5.0 - 9.9)	2.5 (1.4 - 4.5)	12.2 (9.5 - 15.4)
Heroin	2.3 (1.3 - 4.3)	2.1 (1.2 - 3.5)	0.80	2.4 (1.2 - 4.6)	1.6 (0.6 - 3.9)	0.41	1.1 (0.4 - 3.1)	1.5 (0.6 - 4.1)	2.9 (1.5 - 5.4)
Methamphetamine	3.0 (2.1 - 4.3)	3.3 (2.0 - 5.2)	0.81	3.3 (2.0 - 5.2)	2.1 (1.3 - 3.3)	0.19	1.9 (0.8 - 4.3)	1.7 (0.8 - 3.4)	3.5 (2.1 - 6.0)
Rx Drugs without a Doctors Prescription	12.2 (10.4 - 14.3)	12.8 (11.0 - 14.9)	0.66	13.9 (11.2 - 17.2)	9.7 (7.5 - 12.3)	0.04	16.9 (13.5 - 20.8)	6.9 (4.5 - 10.4)	13.5 (10.4 - 17.5)
Injected Any Illegal Drug	2.2 (1.3 - 3.7)	1.4 (0.8 - 2.6)	0.30	2.3 (1.3 - 4.0)	1.8 (0.9 - 3.3)	0.43	2.0 (0.9 - 4.7)	2.0 (1.0 - 4.1)	2.5 (1.2 - 5.4)

NOTES:

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

^**Broward County:** weighted data were available for Broward County 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 1,681 with an overall response rate of 80%; the 2013 sample size was 1,443 with a 69% 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 3.2: Self-Reported Substance Use-Related Behaviors Among Miami-Dade County^ Public High School Students, 2013
Estimated Percent and 95% Confidence Interval (CI)
2011 and 2013 YRBS*

Substance Use Behaviors	2013 vs 2011 Percent			2013 by Sex Percent			2013 by Race Percent		
	2013	2011	p-value	Male	Female	p-value	White	Black	Hispanic
	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	38.5 (34.5 - 42.6)	35.1 (32.0 - 38.4)	0.20	33.5 (28.5 - 39.0)	43.6 (39.2 - 48.0)	0.00	47.3 (35.2 - 59.7)	26.3 (20.4 - 33.1)	41.7 (37.2 - 46.4)
Binge Alcohol**	17.8 (15.6 - 20.2)	17.5 (15.4 - 19.8)	0.85	16.6 (13.4 - 20.5)	18.8 (15.9 - 22.2)	0.36	30.1 (21.8 - 39.8)	11.2 (8.1 - 15.4)	18.8 (16.2 - 21.7)
Marijuana	19.8 (17.5 - 22.3)	18.3 (16.3 - 20.6)	0.36	19.7 (16.6 - 23.2)	19.9 (16.3 - 23.9)	0.95	27.4 (21.0 - 34.8)	18.8 (14.9 - 23.4)	19.5 (16.9 - 22.3)
Ever Used in Lifetime									
Alcohol	64.6 (60.0 - 69.0)	63.1 (60.1 - 66.1)	0.59	61.0 (55.2 - 66.5)	68.5 (64.0 - 72.7)	0.01	68.4 (57.4 - 77.7)	55.1 (47.0 - 63.0)	67.8 (62.7 - 72.5)
Marijuana	34.6 (30.9 - 38.6)	32.2 (29.4 - 35.1)	0.31	34.9 (30.6 - 39.4)	34.1 (29.4 - 39.2)	0.77	37.9 (30.0 - 46.4)	32.2 (27.8 - 37.0)	35.3 (30.9 - 39.8)
Cocaine	5.3 (4.2 - 6.7)	6.1 (5.0 - 7.6)	0.36	4.6 (3.2 - 6.7)	5.9 (4.4 - 7.9)	0.28	6.4 (3.2 - 12.4)	3.0 (1.7 - 5.4)	5.9 (4.6 - 7.7)
Hallucinogenic Drugs	—	—	~	—	—	~	—	—	—
Inhalants	6.0 (4.8 - 7.4)	9.9 (8.1 - 12.1)	0.00	4.6 (3.5 - 6.2)	7.2 (5.3 - 9.6)	0.04	4.8 (2.1 - 10.2)	7.9 (5.6 - 11.0)	5.5 (4.2 - 7.1)
Ecstasy also called "MDMA"	10.3 (8.5 - 12.5)	9.9 (8.2 - 11.9)	0.73	9.0 (7.0 - 11.6)	11.4 (9.0 - 14.3)	0.10	9.9 (5.5 - 17.1)	4.7 (3.1 - 7.1)	12.4 (10.1 - 15.3)
Heroin	1.9 (1.2 - 2.8)	3.0 (2.1 - 4.2)	0.10	2.4 (1.6 - 3.6)	1.1 (0.5 - 2.3)	0.02	2.5 (0.9 - 7.0)	2.0 (0.9 - 4.3)	1.8 (1.1 - 2.8)
Methamphetamines	2.4 (1.7 - 3.4)	4.0 (3.1 - 5.2)	0.02	2.2 (1.4 - 3.4)	2.4 (1.5 - 3.8)	0.83	2.7 (1.0 - 7.3)	1.9 (0.8 - 4.3)	2.6 (1.8 - 3.7)
Rx Drugs without a Doctors Prescription	11.3 (9.7 - 13.2)	10.7 (9.3 - 12.3)	0.57	10.5 (8.6 - 12.9)	12.1 (10.1 - 14.3)	0.22	10.0 (5.9 - 16.4)	7.1 (5.5 - 9.1)	13.0 (11.2 - 15.1)
Injected Any Illegal Drug	1.6 (1.1 - 2.5)	3.7 (2.8 - 5.0)	0.00	2.0 (1.2 - 3.3)	1.1 (0.5 - 2.3)	0.18	2.5 (0.9 - 7.1)	1.9 (0.8 - 4.2)	1.4 (0.8 - 2.3)

NOTES:

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

^**Miami-Dade County:** weighted data were available for Miami-Dade County 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 2,302 with an overall response rate of 75%; the 2013 sample size was 2,426 with a 83% 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 3.3: Self-Reported Substance Use-Related Behaviors Among Palm Beach County ^ Public High School Students, 2013

Estimated Percent and 95% Confidence Interval (CI)
2011 and 2013 YRBS*

Substance Use Behaviors	2013 vs 2011			2013 by Sex			2013 by Race		
	Percent			Percent			Percent		
	2013	2011	p-value	Male	Female	p-value	White	Black	Hispanic
	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	38.7 (34.8 - 42.7)	43.5 (39.6 - 47.4)	0.09	38.6 (33.8 - 43.5)	38.8 (34.2 - 43.5)	0.94	45.7 (39.6 - 51.9)	28.3 (23.0 - 34.2)	39.5 (35.1 - 44.2)
Binge Alcohol**	19.6 (16.8 - 22.7)	25.2 (22.2 - 28.4)	0.01	21.2 (17.5 - 25.3)	17.6 (14.5 - 21.2)	0.11	26.2 (21.4 - 31.7)	8.2 (5.7 - 11.7)	21.3 (17.6 - 25.5)
Marijuana	27.8 (24.8 - 31.1)	26.6 (23.8 - 29.6)	0.57	30.9 (27.4 - 34.8)	24.5 (20.7 - 28.7)	**0.00**	30.3 (25.3 - 35.7)	22.9 (18.0 - 28.8)	28.2 (23.8 - 33.1)
Ever Used in Lifetime									
Alcohol	65.9 (61.9 - 69.8)	68.8 (65.3 - 72.2)	0.27	64.3 (58.6 - 69.6)	68.0 (63.8 - 71.9)	0.20	69.8 (64.0 - 75.0)	55.6 (48.4 - 62.5)	66.7 (61.0 - 72.0)
Marijuana	44.2 (40.2 - 48.2)	43.5 (40.2 - 46.9)	0.81	48.2 (43.1 - 53.3)	39.7 (35.1 - 44.4)	**0.00**	48.7 (42.0 - 55.4)	37.0 (31.0 - 43.4)	45.4 (40.5 - 50.3)
Cocaine	7.8 (6.1 - 9.8)	6.8 (5.7 - 8.1)	0.38	8.4 (6.2 - 11.3)	6.8 (4.7 - 9.6)	0.32	6.3 (4.6 - 8.7)	6.6 (3.5 - 12.0)	7.6 (5.4 - 10.6)
Hallucinogenic Drugs	—	—	~	—	—	~	—	—	—
Inhalants	10.1 (7.9 - 13.0)	9.8 (8.5 - 11.3)	0.83	10.6 (7.8 - 14.3)	9.0 (6.2 - 12.9)	0.44	6.3 (4.3 - 9.3)	14.1 (9.0 - 21.4)	9.1 (6.2 - 13.4)
Ecstasy also called "MDMA"	14.5 (11.8 - 17.8)	10.7 (9.0 - 12.7)	**0.03**	16.8 (13.4 - 21.0)	11.3 (8.5 - 14.9)	**0.01**	14.4 (10.7 - 19.0)	9.5 (5.5 - 16.1)	16.5 (10.9 - 24.0)
Heroin	5.7 (3.9 - 8.2)	4.4 (3.4 - 5.8)	0.29	7.4 (5.2 - 10.6)	3.1 (1.8 - 5.5)	**0.00**	3.4 (2.0 - 5.8)	5.6 (2.6 - 11.7)	6.3 (3.9 - 10.1)
Methamphetamines	7.2 (5.1 - 10.1)	4.8 (3.7 - 6.2)	0.08	8.1 (5.9 - 11.1)	5.7 (3.3 - 9.6)	0.08	4.5 (2.9 - 6.7)	8.3 (4.4 - 15.2)	7.7 (5.0 - 11.7)
Rx Drugs without a Doctors Prescription	14.6 (12.5 - 17.1)	14.0 (12.3 - 15.8)	0.65	17.9 (14.7 - 21.8)	10.7 (8.3 - 13.6)	**0.00**	15.8 (12.8 - 19.4)	11.8 (7.8 - 17.5)	12.6 (9.7 - 16.3)
Injected Any Illegal Drug	6.1 (4.5 - 8.2)	3.8 (2.8 - 5.2)	**0.04**	7.7 (5.4 - 10.7)	4.1 (2.7 - 6.2)	**0.02**	3.6 (2.2 - 5.8)	8.3 (4.6 - 14.5)	6.4 (3.5 - 11.5)

NOTES:

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

^**Palm Beach County:** weighted data were available for Palm Beach County 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 2,198 with an overall response rate of 75%; the 2013 sample size was 1,836 with a 77% overall response rate.

****Binge Alcohol:** defined as had five or more drinks of alcohol in a row within a couple of hours on at least 1 day during the 30 days before the survey.

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

Table 4a: Trends in Admissions* to Substance Abuse Treatment Programs, Southeastern Florida (Miami Area)^ Residents, 2011-2015**
Number of Admissions and Percent of Admissions with Selected Substances Cited as Primary Substance of Abuse at Admission, by Year and Substance

	Calendar Year									
	2011		2012		2013		2014		2015	
	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)
Total Admissions (#)	**11,189**	**100%**	**9,931**	**100%**	**9,500**	**100%**	**18,394**	**100%**	**20,580**	**100%**
Primary Substance of Abuse (%)										
Alcohol	2,708	24.2%	2,375	23.9%	2,318	24.4%	5,006	27.2%	6,830	33.2%
Cocaine/Crack	1,607	14.4%	1,548	15.6%	1,161	12.2%	1,906	10.4%	2,088	10.1%
Heroin	396	3.5%	453	4.6%	422	4.4%	1,249	6.8%	2,366	11.5%
Prescription Opioids	1,761	15.7%	1,399	14.1%	767	8.1%	2,142	11.6%	2,298	11.2%
Methamphetamine	29	0.3%	27	0.3%	45	0.5%	76	0.4%	166	0.8%
Marijuana	3,957	35.4%	3,324	33.5%	3,875	40.8%	5,532	30.1%	4,779	23.2%
Benzodiazepines	219	2.0%	151	1.5%	154	1.6%	343	1.9%	483	2.3%
MDMA	11	0.1%	14	0.1%	18	0.2%	50	0.3%	17	0.1%
Synthetic Stimulants	0	0.0%	0	0.0%	2	<0.1%	23	0.1%	464	2.3%
Synthetic Cannabinoids	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	<0.1%
Other Drugs/Unknown	732	6.5%	586	5.9%	738	7.8%	2,067	11.2%	1,087	5.3%

NOTES:
^**Southeastern Florida:** Includes the three counties of the Miami MSA -- Broward, Miami-Dade, and Palm Beach Counties.
***Admission:** Includes all admissions to programs receiving any public funds. Each admission does not necessarily represent a unique individual, since some individuals are admitted to treatment more than once in a given period.
****2011-2013:** Data for Palm Beach County is not available for 2011-2013, therefore 2011-2013 only includes data for Broward and Miami-Dade Counties; **2014 and 2015** includes data for all three counties in the Miami MSA.

SOURCE: Data provided to the Southeastern Florida NDEWS SCE by the Florida Department of Children and Families and the Broward Behavioral Health Coalition.

Table 4b: Demographic and Drug Use Characteristics of Primary Treatment Admissions* for Select Substances of Abuse, Southeastern Florida (Miami Area)^ Residents, 2015

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

	Primary Substance of Abuse																	
	Alcohol		Cocaine/Crack		Heroin		Prescription Opioids		Methamphetamine		Marijuana		Benzo-diazepines		Synthetic Stimulants		Synthetic Cannabinoids	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Number of Admissions (#)	6,830	100%	2,088	100%	2,366	100%	2,298	100%	166	100%	4,779	100%	483	100%	464	100%	2	100%
Sex (%)																		
Male	4,591	67.2%	1,277	61.2%	1,538	65.0%	1,203	52.3%	105	63.3%	3,379	70.7%	247	51.1%	380	81.9%	0	0.0%
Female	2,239	32.8%	811	38.8%	828	35.0%	1,095	47.7%	61	36.7%	1,400	29.3%	236	48.9%	84	18.1%	2	100.0%
Race/Ethnicity (%)																		
White, Non-Hisp.	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
African-Am/Black, Non-Hisp	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
Hispanic/Latino	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
Asian	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
Other	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
Age Group (%)																		
Under 18	128	1.9%	16	0.8%	1	<0.1%	5	0.2%	6	3.6%	2,030	42.5%	unavail	unavail	unavail	unavail	unavail	unavail
18-25	530	7.8%	263	12.6%	428	18.1%	408	17.8%	28	16.9%	1,368	28.6%	unavail	unavail	unavail	unavail	unavail	unavail
26-44	1929	28.2%	797	38.2%	1501	63.4%	1508	65.6%	83	50.0%	2231	46.7%	unavail	0.0%	unavail	0.0%	unavail	0.0%
18-34	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
45 +	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
26 +	6,172	90.4%	1,809	86.6%	1,937	81.9%	1,885	82.0%	132	79.5%	1,381	28.9%	unavail	unavail	unavail	unavail	unavail	unavail
Route of Administration (%)																		
Smoked	30	0.4%	1,103	52.8%	39	1.6%	74	3.2%	88	53.0%	4,445	93.0%	unavail	unavail	unavail	unavail	unavail	unavail
Inhaled	10	0.1%	691	33.1%	205	8.7%	177	7.7%	10	6.0%	15	0.3%	unavail	unavail	unavail	unavail	unavail	unavail
Injected	18	0.3%	37	1.8%	1,266	53.5%	917	39.9%	31	18.7%	14	0.3%	unavail	0.0%	unavail	0.0%	unavail	0.0%
Oral/Other/Unknown	6,772	99.2%	226	10.8%	856	36.2%	1,130	49.2%	37	22.3%	305	6.4%	unavail	unavail	unavail	unavail	unavail	unavail
Secondary Substance (%)																		
None	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
Alcohol	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
Cocaine/Crack	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
Heroin	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
Prescription Opioids	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
Methamphetamine	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
Marijuana	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
Benzodiazepines	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail

NOTES:

^**Southeastern Florida:** Includes the three counties of the Miami MSA -- Broward, Miami-Dade, and Palm Beach Counties.

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

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

SOURCE: Data provided by the Southeastern Florida NDEWS SCE, the Florida Department of Children and Families and the Broward Behavioral Health Coalition.

Table 5: Drug Poisoning Deaths*, by Drug* and Year, Southeastern Florida^, 2010–2014
Number, Crude Rate, and Age-Adjusted Rate*** (per 100,000 population)

	2010			2011			2012			2013			2014		
	Number (#)	Crude Rate	Age-Adjusted Rate	Number (#)	Crude Rate	Age-Adjusted Rate	Number (#)	Crude Rate	Age-Adjusted Rate	Number (#)	Crude Rate	Age-Adjusted Rate	Number (#)	Crude Rate	Age-Adjusted Rate
Drug Poisoning Deaths	598	10.7	10.3	576	10.2	9.7	561	9.7	9.1	550	9.4	9.0	596	10.1	9.7
Opioids‡	290	5.2	5.1	265	4.7	4.5	252	4.4	4.2	256	4.4	4.3	254	4.3	4.2
Heroin	27	0.5	0.5	23	0.4	0.4	36	0.6	0.6	56	1.0	1.0	79	1.3	1.4
Natural Opioid Analgesics	209	3.8	3.7	182	3.2	3.1	172	3.0	2.8	151	2.6	2.5	116	2.0	1.8
Methadone	42	0.8	0.8	51	0.9	0.9	29	0.5	0.5	26	0.4	0.4	17	UNR	UNR
Synthetic Opioid Analgesics	20	0.4	0.3	28	0.5	0.5	38	0.7	0.6	44	0.8	0.7	78	1.3	1.3
Benzodiazepines	169	3.0	3.0	185	3.3	3.2	140	2.4	2.3	105	1.8	1.7	105	1.8	1.7
Benzodiazepines **AND** Any Opioids	140	2.5	2.5	150	2.6	2.6	109	1.9	1.8	86	1.5	1.4	82	1.4	1.4
Benzodiazepines **AND** Heroin	10	UNR	UNR	SUP	SUP	SUP	SUP	SUP	SUP	13	UNR	UNR	21	0.4	0.4
Psychostimulants															
Cocaine	95	1.7	1.7	107	1.9	1.8	97	1.7	1.6	103	1.8	1.8	111	1.9	1.9
Psychostimulants with Abuse Potential	SUP	SUP	SUP	SUP	SUP	SUP	10	UNR	UNR	10	UNR	UNR	16	UNR	UNR
Cannabis (derivatives)	SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP
Percent with Drugs Specified‡		68.1%			70.5%			69.3%			71.6%			65.8%	

NOTES:

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

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

^Southeastern Florida: Comprised of Broward, Miami-Dade, and Palm Beach 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 1999-2014, available on the CDC WONDER Online Database, released 2015. Data compiled in the Multiple cause of death 1999-2014 were provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Retrieved between December 2015 - May 2016, from http://wonder.cdc.gov/mcd-icd10.html

Table 6a: Drug Reports* for Items Seized by Law Enforcement in *Miami MSA^* in 2015
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*	**22,660**	**100.0%**
COCAINE	7,763	34.3%
CANNABIS	3,991	17.6%
ALPHA-PYRROLIDINOPENTIOPHENONE (ALPHA-PVP)	2,139	9.4%
HEROIN	1,657	7.3%
ALPRAZOLAM	1,382	6.1%
NO CONTROLLED DRUG IDENTIFIED	833	3.7%
3,4-METHYLENEDIOXYETHYLCATHINONE (ETHYLONE)	706	3.1%
OXYCODONE	647	2.9%
METHAMPHETAMINE	399	1.8%
HYDROMORPHONE	251	1.1%
FENTANYL	230	1.0%
AMPHETAMINE	224	1.0%
ACETAMINOPHEN	209	0.9%
PHENYLIMIDOTHIAZOLE ISOMER UNDETERMINED	197	0.9%
CAFFEINE	142	0.6%
HYDROCODONE	122	0.5%
CLONAZEPAM	114	0.5%
3,4-METHYLENEDIOXYMETHAMPHETAMINE (MDMA)	112	0.5%
TESTOSTERONE	100	0.4%
BUPRENORPHINE	92	0.4%
MORPHINE	92	0.4%
XLR-11 (1-(5-FLUOROPENTYL-1H-3-YL)(2,2,3,3-TETRAMETHYLCYCLOPROPYL)METHANONE)	54	0.2%
DIAZEPAM	48	0.2%
QUININE	44	0.2%
CODEINE	43	0.2%
AB-CHMINACA (N-[(1S)-1-(AMINOCARBONYL)-2-METHYLPROPYL]-1-(CYCLOHEXYLMETHYL)-1H-INDAZOLE-3-CARBOXAMIDE)	38	0.2%
LYSERGIC ACID DIETHYLAMIDE (LYSERGIDE)	38	0.2%
PSILOCYBIN/PSILOCYN	30	0.1%
LORAZEPAM	28	0.1%
CARISOPRODOL	26	0.1%
METHADONE	24	0.1%
1,4-BUTANEDIOL	23	0.1%
NALOXONE	23	0.1%
N-BENZYLPIPERAZINE (BZP)	23	0.1%
PHENACETIN	23	0.1%
KETAMINE	22	< 0.1%
UNKNOWN	22	< 0.1%
5-METHOXY-N,N-DIISOPROPYLTRYPTAMINE (5-MEO-DIPT)	20	< 0.1%
AB-FUBINACA	20	< 0.1%
LIDOCAINE	20	< 0.1%
TRENBOLONE	20	< 0.1%
ASPIRIN	19	< 0.1%
DIBUTYLONE (BETA-KETO-N,N-DIMETHYL-1,3-BENZODIOXOLYLBUTANAMINE; BK-DMBDB)	19	< 0.1%
OXYMORPHONE	18	< 0.1%
TEMAZEPAM	18	< 0.1%

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Drug Identified	Number (#)	Percent of Total Drug Reports* (#)
3,4-METHYLENEDIOXYAMPHETAMINE (MDA)	17	< 0.1%
BENOCYCLIDINE (1-[1-(1-BENZOTHIOPHEN-2-YL)CYCLOHEXYL]PIPERIDINE)	17	< 0.1%
DIMETHYLSULFONE	17	< 0.1%
HYDROXYZINE	17	< 0.1%
N-METHYL-3,4-METHYLENEDIOXYCATHINONE (METHYLONE)	17	< 0.1%
METHYLPHENIDATE	16	< 0.1%
PSILOCIN	16	< 0.1%
1-(3-TRIFLUOROMETHYL)PHENYL-PIPERAZINE (TFMPP)	15	< 0.1%
5-FLUORO AMB	15	< 0.1%
6-MONOACETYLMORPHINE	15	< 0.1%
DIMETHYLTRYPTAMINE (DMT)	15	< 0.1%
OXANDROLONE	15	< 0.1%
STANOZOLOL	14	< 0.1%
TRAMADOL	14	< 0.1%
BENZOCAINE	13	< 0.1%
NANDROLONE	13	< 0.1%
2-(4-IODO-2,5-DIMETHOXYPHENYL)-N-(2-METHOXYBENZYL)ETHANAMINE (25-I-NBOME)	12	< 0.1%
DILTIAZEM	11	< 0.1%
METHANDROSTENOLONE (METHANDIENONE)	11	< 0.1%
PROMETHAZINE	11	< 0.1%
SILDENAFIL CITRATE (VIAGRA)	11	< 0.1%
PHENTERMINE	10	< 0.1%
BOLDENONE	9	< 0.1%
DIPHENHYDRAMINE	9	< 0.1%
JWH-018 (1-PENTYL-3-(1-NAPHTHOYL)INDOLE)	9	< 0.1%
DIHYDRONORMORPHINONE	8	< 0.1%
METHYLENEDIOXYPYROVALERONE (MDPV)	8	< 0.1%
ZOLPIDEM	8	< 0.1%
IBUPROFEN	7	< 0.1%
LISDEXAMFETAMINE	7	< 0.1%
QUETIAPINE	7	< 0.1%
AM-2201 (1-(5-FLUOROPENTYL)-3-(1-NAPHTHOYL)INDOLE)	6	< 0.1%
NICOTINE	6	< 0.1%
OXYMETHOLONE	6	< 0.1%
ACETYLFENTANYL	5	< 0.1%
ADD'L SUBSTAN.BELVD.PRESNT-NOT IDEN	5	< 0.1%
BREPHEDRONE (4-BROMOMETHCATHINONE) (4-BMC)	5	< 0.1%
DIMETHYLONE (3,4-METHYLENEDIOXYDIMETHYLCATHINONE; bk-MDDMA)	5	< 0.1%
4-METHYL-N-ETHYLCATHINONE (4-MEC)	4	< 0.1%
BUSPIRONE	4	< 0.1%
BUTYLONE (ß-KETO-N-METHYLBENZO-DIOXYLPROPYLAMINE)	4	< 0.1%
DEHYDROCHLORMETHYLTESTOSTERONE	4	< 0.1%
LACTOSE	4	< 0.1%
MANNITOL	4	< 0.1%
MESTEROLONE	4	< 0.1%
TADALAFIL	4	< 0.1%
UR-144 ((1-PENTYLINDOL-3-YL)-(2,2,3,3-TETRAMETHYLCYCLOPROPYL)METHANONE)	4	< 0.1%
3,4-METHYLENEDIOXY-N-ETHYLAMPHETAMINE (MDEA)	3	< 0.1%
BUTYRYL FENTANYL	3	< 0.1%
CLOMIPHENE CITRATE	3	< 0.1%
PAROXETINE	3	< 0.1%
PROCAINE	3	< 0.1%

Drug Identified	Number (#)	Percent of Total Drug Reports* (#)
PROPOXYPHENE	3	< 0.1%
RCS-4 (1-PENTYL-3-(4-METHOXYBENZOYL)INDOLE)	3	< 0.1%
SUCROSE	3	< 0.1%
2-(4-BROMO-2,5-DIMETHOXYPHENYL)-N-(2-METHOXYBENZYL)ETHANAMINE (25-B-NBOMe)	2	< 0.1%
2-(4-CHLORO-2,5-DIMETHOXYPHENYL)-N-(2-METHOXYBENZYL)ETHANAMINE (25-C-NBOME)	2	< 0.1%
4-ACETOXY-N,N-DIMETHYLTRYPTAMINE (4-ACO-DMT)	2	< 0.1%
4-BROMO-2,5-DIMETHOXYPHENETHYLAMINE (2C-B)	2	< 0.1%
AB-PINACA	2	< 0.1%
ALPHA-PYRROLIDINOHEXANOPHENONE (ALPHA-PHP)	2	< 0.1%
Beta-HYDROXYTHIOFENTANYL	2	< 0.1%
BUPROPION	2	< 0.1%
CHLORDIAZEPOXIDE	2	< 0.1%
CYCLOBENZAPRINE	2	< 0.1%
DIMETHYL TEREPHTHALATE	2	< 0.1%
DROSTANOLONE	2	< 0.1%
ESZOPICLONE	2	< 0.1%
FENPROPOREX	2	< 0.1%
FLUOROAMPHETAMINE	2	< 0.1%
FLUOROMETHCATHINONE	2	< 0.1%
GABAPENTIN	2	< 0.1%
GAMMA HYDROXY BUTYL LACTONE	2	< 0.1%
INOSITOL	2	< 0.1%
JWH-073 (1-BUTYL-3-(1-NAPHTHOYL)INDOLE)	2	< 0.1%
METHOCARBAMOL	2	< 0.1%
N,N-DIALLYL-5-METHOXYTRYPTAMINE (5-MEO-DALT)	2	< 0.1%
NAPROXEN	2	< 0.1%
PHENDIMETRAZINE	2	< 0.1%
PHENETHYLAMINE	2	< 0.1%
SERTRALINE	2	< 0.1%
TETRACAINE	2	< 0.1%
THJ 2201(1-(5-FLUOROPENTYL)-1H-INDAZOL-3-YL)(NAPHTHALEN-1-YL)METHANONE	2	< 0.1%
TRAZODONE	2	< 0.1%
W-18 (4-CHLORO-N-(1-(4-NITROPHENETHYL)PIPERIDIN-2-YLIDENE)BENZENESULFONAMIDE)	2	< 0.1%
2,5-DIMETHOXY-4-METHYLAMPHETAMINE (DOM)	1	< 0.1%
2-MAPB (N,A-DIMETHYL-2-BENZOFURANETHANAMINE)	1	< 0.1%
3-BROMOMETHCATHINONE	1	< 0.1%
3-METHOXYPHENCYCLIDINE (3-MEO-PCP)	1	< 0.1%
4-CHLORO-2,5-DIMETHOXYAMPHETAMINE (DOC)	1	< 0.1%
4-CHLOROMETHCATHINONE (4-CMC; CLEPHEDRONE)	1	< 0.1%
4-METHOXYMETHAMPHETAMINE	1	< 0.1%
5-FLUORO-ADBICA	1	< 0.1%
5F-PB-22 (1-(5-FLUOROPENTYL)-1H-INDOLE-3-CARBOXYLIC ACID 8-QUINOLINYL ESTER)	1	< 0.1%
5-METHOXY-N-METHYL-N-ISOPROPYLTRYPTAMINE (5-MEO-MIPT)	1	< 0.1%
AKB48 N-(5-FLUOROPENTYL)	1	< 0.1%
ALPHA-PYRROLIDINOHEPTAPHENONE (PV8)	1	< 0.1%
AMOXICILLIN	1	< 0.1%
ANASTROZOLE	1	< 0.1%
ANIRACETAM	1	< 0.1%

Drug Identified	Number (#)	Percent of Total Drug Reports* (#)
BROMAZEPAM	1	< 0.1%
BUTABARBITAL	1	< 0.1%
BUTALBITAL	1	< 0.1%
CANNABIDIOL	1	< 0.1%
CANNABINOL	1	< 0.1%
CITALOPRAM	1	< 0.1%
CLOBENZOREX	1	< 0.1%
DIACETAMIDE	1	< 0.1%
DICLOFENAC	1	< 0.1%
DIETHYLTRYPTAMINE (DET)	1	< 0.1%
DIPENTYLONE (N,N-DIMETHYLPENTYLONE)	1	< 0.1%
DIPROPYLTRYPTAMINE (DPT)	1	< 0.1%
ESCITALOPRAM	1	< 0.1%
ETIZOLAM	1	< 0.1%
HYDROCHLOROTHIAZIDE	1	< 0.1%
HYDROQUINONE	1	< 0.1%
MAB-CHMINACA (ADB-CHMINACA)	1	< 0.1%
MESCALINE	1	< 0.1%
METHASTERONE	1	< 0.1%
METRONIDAZOLE	1	< 0.1%
MICONAZOLE	1	< 0.1%
MINOXIDIL	1	< 0.1%
MITRAGYNINE	1	< 0.1%
MODAFINIL	1	< 0.1%
NORTESTOSTERONE DECANOATE	1	< 0.1%
PB-22 (1-PENTYL-1H-INDOLE-3-CARBOXYLIC ACID 8-QUINOLINYL ESTER)	1	< 0.1%
PENTYLONE (ß-KETO-METHYLBENZODIOXOLYLPENTANAMINE)	1	< 0.1%
PIRACETAM	1	< 0.1%
PREDNISONE	1	< 0.1%
PSILOCYBINE	1	< 0.1%
SIBUTRAMINE	1	< 0.1%
THJ-018 (1-NAPHTHALENYL(1-PENTYL-1H-INDAZOL-3-YL)-METHANONE)	1	< 0.1%
TITANIUM DIOXIDE	1	< 0.1%
TIZANIDINE	1	< 0.1%
TRIACETIN	1	< 0.1%
TRIAZOLAM	1	< 0.1%
URB597 (3-(AMINOCARBONYL)[1,1-BIPHENYL]-3-YL)-CYCLOHEXYLCARBAMATE)	1	< 0.1%
XYLAZINE	1	< 0.1%

NOTES:
^Miami MSA: Includes Broward, Miami-Dade, and Palm Beach Counties.
*Drug Report: Drug that is identified in law enforcement items, submitted to and analyzed by federal, state, or local forensic labs, and included in the NFLIS database. The time frame is January to December 2015.

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

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

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

NPS Category Drug Identified	Number (#)	Percent of Drug Category** (%)	Percent of Total Reports (%)
Total Drug Reports*	**22,660**	**100.0%**	**100.0%**
Opioids Category	**3,252**	**100.0%**	**14.4%**
Heroin	**1,657**	**51.0%**	**7.3%**
Narcotic Analgesics	**1,549**	**47.6%**	**6.8%**
OXYCODONE	647	19.9%	2.9%
HYDROMORPHONE	251	7.7%	1.1%
FENTANYL	230	7.1%	1.0%
HYDROCODONE	122	3.8%	0.5%
BUPRENORPHINE	92	2.8%	0.4%
MORPHINE	92	2.8%	0.4%
CODEINE	43	1.3%	0.2%
METHADONE	24	0.7%	0.1%
OXYMORPHONE	18	0.6%	< 0.1%
TRAMADOL	14	0.4%	< 0.1%
ACETYLFENTANYL	5	0.2%	< 0.1%
BUTYRYL FENTANYL	3	< 0.1%	< 0.1%
PROPOXYPHENE	3	< 0.1%	< 0.1%
Beta-HYDROXYTHIOFENTANYL	2	< 0.1%	< 0.1%
W-18 (4-CHLORO-N-(1-(4-NITROPHENETHYL)PIPERIDIN-2-YLIDENE)BENZENESULFONAMIDE)	2	< 0.1%	< 0.1%
MITRAGYNINE	1	< 0.1%	< 0.1%
Narcotics	**46**	**1.4%**	**0.2%**
NALOXONE	23	0.7%	0.1%
6-MONOACETYLMORPHINE	15	0.5%	< 0.1%
DIHYDRONORMORPHINONE	8	0.2%	< 0.1%
Synthetic Cathinones Category	**2,916**	**100.0%**	**12.9%**
Synthetic Cathinones	**2,891**	**99.1%**	**12.8%**
ALPHA-PYRROLIDINOPENTIOPHENONE (ALPHA-PVP)	2,139	73.4%	9.4%
3,4-METHYLENEDIOXYETHYLCATHINONE (ETHYLONE)	706	24.2%	3.1%
DIBUTYLONE (BETA-KETO-N,N-DIMETHYL-1,3-BENZODIOXOLYLBUTANAMINE; BK-DMBDB)	19	0.7%	< 0.1%
BREPHEDRONE (4-BROMOMETHCATHINONE) (4-BMC)	5	0.2%	< 0.1%
DIMETHYLONE (3,4-METHYLENEDIOXYDIMETHYLCATHINONE; bk-MDDMA)	5	0.2%	< 0.1%
4-METHYL-N-ETHYLCATHINONE (4-MEC)	4	0.1%	< 0.1%
BUTYLONE (ß-KETO-N-METHYLBENZO-DIOXYLPROPYLAMINE)	4	0.1%	< 0.1%
ALPHA-PYRROLIDINOHEXANOPHENONE (ALPHA-PHP)	2	< 0.1%	< 0.1%
FLUOROMETHCATHINONE	2	< 0.1%	< 0.1%
3-BROMOMETHCATHINONE	1	< 0.1%	< 0.1%
4-CHLOROMETHCATHINONE (4-CMC; CLEPHEDRONE)	1	< 0.1%	< 0.1%
ALPHA-PYRROLIDINOHEPTAPHENONE (PV8)	1	< 0.1%	< 0.1%
DIPENTYLONE (N,N-DIMETHYLPENTYLONE)	1	< 0.1%	< 0.1%
PENTYLONE (ß-KETO-METHYLBENZODIOXOLYLPENTANAMINE)	1	< 0.1%	< 0.1%
Synthetic Cathinones (Hallucinogen)	**25**	**0.9%**	**0.1%**
N-METHYL-3,4-METHYLENEDIOXYCATHINONE (METHYLONE)	17	0.6%	< 0.1%
METHYLENEDIOXYPYROVALERONE (MDPV)	8	0.3%	< 0.1%

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NPS Category Drug Identified	Number (#)	Percent of Drug Category** (%)	Percent of Total Reports (%)
Synthetic Cannabinoids Category	**162**	**100.0%**	**0.7%**
XLR-11 (1-(5-FLUOROPENTYL-1H-3-YL)(2,2,3,3-TETRAMETHYLCYCLOPROPYL)METHANONE)	54	33.3%	0.2%
AB-CHMINACA (N-[(1S)-1-(AMINOCARBONYL)-2-METHYLPROPYL]-1-(CYCLOHEXYLMETHYL)-1H-INDAZOLE-3-CARBOXAMIDE)	38	23.5%	0.2%
AB-FUBINACA	20	12.3%	< 0.1%
5-FLUORO AMB	15	9.3%	< 0.1%
JWH-018 (1-PENTYL-3-(1-NAPHTHOYL)INDOLE)	9	5.6%	< 0.1%
AM-2201 (1-(5-FLUOROPENTYL)-3-(1-NAPHTHOYL)INDOLE)	6	3.7%	< 0.1%
UR-144 ((1-PENTYLINDOL-3-YL)-(2,2,3,3-TETRAMETHYLCYCLOPROPYL)METHANONE)	4	2.5%	< 0.1%
RCS-4 (1-PENTYL-3-(4-METHOXYBENZOYL)INDOLE)	3	1.9%	< 0.1%
AB-PINACA	2	1.2%	< 0.1%
JWH-073 (1-BUTYL-3-(1-NAPHTHOYL)INDOLE)	2	1.2%	< 0.1%
THJ 2201(1-(5-FLUOROPENTYL)-1H-INDAZOL-3-YL)(NAPHTHALEN-1-YL)METHANONE	2	1.2%	< 0.1%
5-FLUORO-ADBICA	1	0.6%	< 0.1%
5F-PB-22 (1-(5-FLUOROPENTYL)-1H-INDOLE-3-CARBOXYLIC ACID 8-QUINOLINYL ESTER)	1	0.6%	< 0.1%
AKB48 N-(5-FLUOROPENTYL)	1	0.6%	< 0.1%
MAB-CHMINACA (ADB-CHMINACA)	1	0.6%	< 0.1%
PB-22 (1-PENTYL-1H-INDOLE-3-CARBOXYLIC ACID 8-QUINOLINYL ESTER)	1	0.6%	< 0.1%
THJ-018 (1-NAPHTHALENYL(1-PENTYL-1H-INDAZOL-3-YL)-METHANONE)	1	0.6%	< 0.1%
URB597 (3-(AMINOCARBONYL)[1,1-BIPHENYL]-3-YL)-CYCLOHEXYLCARBAMATE)	1	0.6%	< 0.1%
Tryptamines Category	**42**	**100.0%**	**0.2%**
5-METHOXY-N,N-DIISOPROPYLTRYPTAMINE (5-MEO-DIPT)	20	47.6%	< 0.1%
DIMETHYLTRYPTAMINE (DMT)	15	35.7%	< 0.1%
4-ACETOXY-N,N-DIMETHYLTRYPTAMINE (4-ACO-DMT)	2	4.8%	< 0.1%
N,N-DIALLYL-5-METHOXYTRYPTAMINE (5-MEO-DALT)	2	4.8%	< 0.1%
5-METHOXY-N-METHYL-N-ISOPROPYLTRYPTAMINE (5-MEO-MIPT)	1	2.4%	< 0.1%
DIETHYLTRYPTAMINE (DET)	1	2.4%	< 0.1%
DIPROPYLTRYPTAMINE (DPT)	1	2.4%	< 0.1%
Piperazines Category	**38**	**100.0%**	**0.2%**
Piperazines (Hallucinogen)	**15**	**39.5%**	**< 0.1%**
1-(3-TRIFLUOROMETHYL)PHENYL-PIPERAZINE (TFMPP)	15	39.5%	< 0.1%
Piperazines (Stimulant)	**23**	**60.5%**	**0.1%**
N-BENZYLPIPERAZINE (BZP)	23	60.5%	0.1%
Phenethylamines (2C Series) (H) Category	**18**	**100.0%**	**< 0.1%**
2-(4-IODO-2,5-DIMETHOXYPHENYL)-N-(2-METHOXYBENZYL)ETHANAMINE (25-I-NBOME)	12	66.7%	< 0.1%
2-(4-BROMO-2,5-DIMETHOXYPHENYL)-N-(2-METHOXYBENZYL)ETHANAMINE (25-B-NBOMe)	2	11.1%	< 0.1%
2-(4-CHLORO-2,5-DIMETHOXYPHENYL)-N-(2-METHOXYBENZYL)ETHANAMINE (25-C-NBOME)	2	11.1%	< 0.1%
4-BROMO-2,5-DIMETHOXYPHENETHYLAMINE (2C-B)	2	11.1%	< 0.1%

NOTES:

^Miami MSA: Includes Broward, Miami-Dade, and Palm Beach Counties.

*Drug Report: Drug that is identified in law enforcement items, submitted to and analyzed by federal, state, or local forensic labs, and included in the NFLIS database. The time frame is January to December 2015.

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

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

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

National Drug Early Warning System (NDEWS) Sentinel Community Site (SCS) Drug Use Patterns and Trends, 2016: Overview and Limitations About Data Sources

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

Area Description Indicators

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

Overview and Limitations

Data on demographic, social, and economic characteristics are based on 2010–2014 American Community Survey (ACS) 5-Year Estimates. The U.S. Census Bureau's ACS is a nationwide survey designed to provide communities with reliable and timely demographic, social, economic, and housing data on an annual basis. Although the main function of the decennial census is to provide counts of people for the purpose of congressional apportionment and legislative redistricting, the primary purpose of the ACS is to measure the changing social and economic characteristics of the U.S. population. As a result, the ACS does not provide official counts of the population in between censuses. Instead, the Census Bureau's Population Estimates Program will continue to be the official source for annual population totals, by age, race, Hispanic origin, and sex.[a]

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

Sources

Data Sources: Adapted by the NDEWS Coordinating Center from data from the American Community Survey; *2010–2014 American Community Survey 5-Year Estimates;* Tables DP02, DP03, and DP05; using American FactFinder; http://factfinder2.census.gov; Accessed on [5/24/2016]; U.S. Census Bureau.

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

Substance Use Indicators

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

Overview and Limitations

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

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

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

Notes about Data Terms

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

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

Estimated # is the estimated number of persons aged 12 years or older who used the specified drug or are dependent on/abuse a substance; the estimated number of persons using/dependent on a particular drug was calculated by multiplying the prevalence rate and the population estimate from Table C1 of the NSDUH report.

The population estimate is the simple average of the 2012, 2013, and 2014 population counts for persons aged 12 years or older.

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

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

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

Sources

*Data Sources***:** Adapted by the NDEWS Coordinating Center from data provided by the Substance Abuse and Mental Health Services Administration (SAMHSA), Substate Estimates of Substance Use and Mental Disorders from the *2012–2014 National Surveys on Drug Use and Health: Results and Detailed Tables.* Rockville, MD. 2014. Available at: http://www.samhsa.gov/data/population-data-nsduh/reports?tab=38; Accessed on [8/5/2016].

*Overview/Methods/Limitations Sources***:** [a]Adapted by the NDEWS Coordinating Center from Substance Abuse and Mental Health Services Administration (SAMHSA), *2012–2014 National Surveys on Drug Use and Health: Guide to Substate Tables and Summary of Small Area Estimation Methodology.* Rockville, MD 2016. Available at:
http://www.samhsa.gov/data/sites/default/files/NSDUHsubstateMethodology2014/NSDUHsubstateMethodology2014.html; Accessed on [8/5/2016].

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

Overview and Limitations

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

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

For States and large urban school districts, the YRBSs are administered by State and local education or health agencies. Each State, territorial, tribal, and large urban school district YRBS employs a two-stage, cluster sample design to produce a representative sample of students in grades 9–12 in its jurisdiction. All the data presented in these tables area based on weighted data. Weighted results are representative of all students in grades 9–12 attending public schools in each jurisdiction. According to CDC, "weighted results mean that the overall response rate was at least 60%. The overall response rate is calculated by multiplying the school response rate times the student response rate."[a]

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

The data apply only to youths who attend school and, therefore, are not representative of all persons in this age group. Nationwide, in 2009, approximately 4% of persons aged 16–17 years were not enrolled in a high-school program and had not completed high school.[b] The NHIS and Youth Risk Behavior Supplement conducted in 1992 demonstrated that out-of-school youths are more likely than youths attending school to engage in the majority of health-risk behaviors.[c]

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

Notes about Data Terms

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

Sources

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

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

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

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

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

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

Treatment for Substance Use Disorders

Treatment Admissions Data from Local Data Sources

Overview and Limitations

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

Treatment admissions data are made available to the NDEWS Coordinating Center by the NDEWS Sentinel Community Epidemiologist for each SCS. Calendar year 2015 treatment admissions data were available for 10 of 12 SCSs. Calendar Year 2015 data were not available for the Chicago Metro SCS; Fiscal Year 2015 for Chicago (not entire Chicago metro area) is provided. No treatment data for the Atlanta Metro SCS was available for 2015. See below for site-specific information about the data.

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

❖ **Atlanta Metro**

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

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

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

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

❖ **Chicago Metro**

Data Availability: Only fiscal year data are available at this time.

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

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

Declines in overall treatment admissions are due to several factors, including budget cuts and changes in providers and payers that affect the reporting of these data (e.g., the expansion of Medicaid under the ACA to cover some forms of drug treatment).
Prescription Opioids: Includes oxycodone/hydrocodone, nonprescription methadone, and other opiates.

Source: Data provided to the NDEWS Chicago SCE by the Illinois Department of Substance Use.

❖ **Denver Metro**

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

Notes & Definitions:
Admissions: Includes admissions to all Colorado alcohol and drug treatment agencies licensed by the Colorado Department of Human Services, Office of Behavioral Health (OBH). Each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period.
Prescription Opioids: Includes nonprescription methadone and other opiates and synthetic opiates.
MDMA: Coded as "club drugs," which are mostly MDMA.
Other Drugs/Unknown: Includes inhalants, over-the-counter, and other drugs not specified.

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

❖ **King County (Seattle Area)**

Notes & Definitions:
Admissions: Includes admissions to all modalities of care in publicly funded programs. Each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period.
Prescription Opioids: Includes oxycodone/hydrocodone, nonprescription methadone, and other opiates.

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

❖ **Los Angeles County**

Notes & Definitions:

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

Prescription Opioids: Includes drug categories labeled "oxycodone/OxyContin" and "other opiates or synthetics."

Source: Data provided to the Los Angeles NDEWS SCE by the California Department of Health Care Services, Mental Health Services Division, Office of Applied Research and Analysis, CalOMS (2013 and 2014 data) and the California Department of Drug and Alcohol Programs (2011 and 2012 data).

❖ **Maine**

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

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

❖ **New York City**

Notes & Definitions:

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

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

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

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

Benzodiazepines: Includes benzodiazepines, alprazolam, and rohypnol.

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

Source: Data provided to the New York City NDEWS SCE by the New York State Office of Alcoholism and Substance Abuse Services (OASAS), Client Data System accessed May 2016 from Local Governmental Unit (LGU) Inquiry Reports.

❖ **Philadelphia**

Notes & Definitions:
Admissions: Includes admissions for uninsured and underinsured individuals admitted to any licensed treatment programs funded through the Philadelphia Department of Behavioral Health and Intellectual disAbility Services (DBHIDS). Each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period.

2015 Data: Pennsylvania expanded Medicaid coverage under the Affordable Care Act and more than 100,000 additional individuals became eligible in 2015. As individuals who historically have been uninsured become insured, the number of individuals served through the BHSI (Behavioral Health Special Initiative) program has declined; thus treatment admissions reported by BHSI declined from 8,363 in 2014 to 4,810 in 2015. However, similar patterns of substance use were observed among those seeking treatment in 2014 and in 2015.

Methamphetamine: Includes both amphetamines and methamphetamine.

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

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

❖ **San Francisco County**

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

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

❖ **Southeastern Florida (Miami Area)**

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

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

2011–2013: Data for Palm Beach County is not available for 2011-2013, therefore, 2011–2013 only includes data for Broward and Miami-Dade counties.

Source: Data provided to the Southeastern Florida NDEWS SCE by the Florida Department of Children and Families and the Broward Behavioral Health Coalition.

❖ **Texas**

Notes & Definitions:
Admissions: Includes all admissions reported to the Clinical Management for Behavioral Health Services (CMBHS) of the Department of State Health Services (DSHS). Each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period.
Methamphetamine: Includes amphetamines and methamphetamine.
Synthetic Cannabinoids: DSHS collects data on "other Cannabinoids," which may not include all the synthetic cannabinoids.
Females: Calculated using formula "1 minus Male %."

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

❖ **Wayne County (Detroit Area)**

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

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

Sources

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

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

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

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

Consequences of Drug Use Indicators

Drug Overdose (Poisoning) Deaths

Overview and Limitations

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

The drug-specific poisoning deaths presented in the 2016 National Drug Early Warning System (NDEWS) reports are deaths that have been certified "as due to acute exposure to a drug, either alone or in combination with other drugs or other substances" (Goldberger, Maxwell, Campbell, & Wilford, p. 234)[2] and are identified by using the World Health Organization's (WHO's) *International classification of diseases, 10th Revision* (ICD-10)[3] **underlying cause-of-death** codes X40–X44, X60–X64, X85, and Y10–Y14. Drug-specific poisoning deaths are the subset of drug overdose (poisoning) deaths with drug-specific **multiple cause-of-death** codes (i.e., T-codes). For the definitions of specific ICD-10 codes, see the section titled ***Notes About Data Terms***. Each death certificate may contain up to 20 causes of death indicated in the multiple cause-of-death (MCOD) field. Thus, the total count across drugs may exceed the actual number of dead persons in the selected population. Some deaths involve more than one drug; these deaths are included in the rates for each drug category.

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

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

Several factors related to death investigation and reporting may affect measurement of death rates involving specific drugs. At autopsy, toxicological lab tests may be performed to determine the type of legal and illegal drugs present. The substances tested for and circumstance in which tests are performed vary by jurisdiction. Increased attention to fatal poisonings associated with prescription pain medication may have led to changes in reporting practices over time such as increasing the level of substance specific detail included on the death certificates. Substance-specific death rates are more susceptible to measurement error related to these factors than the overall poisoning death rate. ([The Safe States Alliance, p. 63](#))[4]

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

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

Notes About Data Terms

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Heroin (T40.1)

Methadone (T40.3)

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

Synthetic Opioid Analgesics (T40.4)

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

Cocaine (T40.5)

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

Cannabis (derivatives) (T40.7)

Benzodiazepines (T42.4)

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

Population (used to calculate rates): The population estimates used to calculate the crude rates are bridged-race estimates based on Bureau of the Census estimates of total U.S., state, and county resident populations. The year 2010 populations are April 1 modified census counts. The year 2011–2014 population estimates are bridged-race postcensal estimates of the July 1 resident population. Click here for more information about CDC WONDER Multiple Cause of Death data)

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

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

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

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

Sources

Data Sources: Adapted by the NDEWS Coordinating Center from data taken from the Centers for Disease Control and Prevention, National Center for Health Statistics, *Multiple cause of death 1999–2014*, available on the CDC WONDER Online Database, released 2015. Data compiled in the *Multiple cause of death 1999–2014*

were provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Retrieved between December 16, 2015 and February 9, 2016, from http://wonder.cdc.gov/mcd-icd10.html

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

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

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

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

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

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

Availability Indicators

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

Overview and Limitations

NFLIS systematically collects results from drug analyses conducted by state and local forensic laboratories. These laboratories analyze controlled and noncontrolled substances secured in law enforcement operations across the United States. The DEA describes NFLIS as:

> "a comprehensive information system that includes data from forensic laboratories that handle the Nation's drug analysis cases. The NFLIS participation rate, defined as the percentage of the national drug caseload represented by laboratories that have joined NFLIS, is currently over 97%. Currently, NFLIS includes 50 State systems and 101 local or municipal laboratories/laboratory systems, representing a total of 277 individual laboratories. The NFLIS database also includes Federal data from DEA and U.S. Customs and Border Protection (CBP) laboratories."[a]

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

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

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

Notes about Reporting Labs

Reporting anomalies were identified in several NDEWS SCSs in 2015 and are described below:

- ❖ **Denver Metro Area:** The Aurora Police Department laboratory's last reported data are from July 2014, following the migration to a new laboratory information management system (LIMS).
- ❖ **San Francisco County:** The San Francisco Police Department (SFPD) laboratory has been closed since 2010; however, beginning in January 2012, the Alameda Sheriff Department laboratory began reporting their SFPD cases to NFLIS. All available data from the SFPD were included in the counts.
- ❖ **Texas:** The Austin Police Department laboratory closed, and no data were provided for 2015. The Houston Forensic Science Government Corporation (formerly Houston Police Department Crime Lab) lab was added in April 2014 and has been reporting data since then.

Notes about Data Terms

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

For each site, the NFLIS drug reports are based on submissions of items seized in the site's catchment area. The catchment area for each site is described in the Notes section below each table. The time frame is January–December 2015. Data were queried from the DEA's NFLIS Data Query System (DQS) on May 18, 2016 using drug item submission date.

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

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

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

3-METHYLFENTANYL

ACETYL-ALPHA-METHYLFENTANYL

ACETYLFENTANYL

Beta-HYDROXYTHIOFENTANYL

BUTYRYL FENTANYL

P-FLUOROBUTYRYL FENTANYL (P-FBF)

P-FLUOROFENTANYL

Sources

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

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