Drug Abuse Trends in Miami-Dade County Florida:

June 2015
# TABLE OF CONTENTS

## SECTION I. INTRODUCTION

- **SECTION I A. REPORT HIGHLIGHTS** ........................................................................................................ 2
- **SECTION I B. AREA DESCRIPTION** ......................................................................................................... 3
- **SECTION I C. DATA SOURCES** ............................................................................................................... 3

## SECTION II. EMERGING DRUGS and PATTERNS of DRUG USE ..................................................... 4

**NEW ISSUES and SUBSTANCES with SIGNIFICANT INCREASES in INDICATORS of ABUSE**

- **HEROIN and NONMEDICAL USE of PRESCRIPTION OPIOIDS** ......................................................... 4
- **SYNTHETIC CATHINONES (“FLAKKA” and “MOLLY”)** ........................................................................ 9
- **SYNTHETIC CANNABINOIDS (“FAKE MARIJUANA”)** ......................................................................... 13
- **METHAMPHETAMINE/AMPHETAMINES** ......................................................................................... 14
- **VAPING** ............................................................................................................................................... 15

## SECTION III. UPDATE on CONTINUING DRUG USE PROBLEMS ................................................ 15

**MAJOR SUBSTANCES with ONGOING but STABLE INDICATORS of ABUSE**

- **COCAINE/CRACK** ............................................................................................................................... 15
- **MARIJUANA/CANNABIS** ......................................................................................................................... 17
- **NONMEDICAL USE of PRESCRIPTION BENZODIAZEPINES** ............................................................ 19

## SECTION IV. APPENDIX with DATA TABLES ............................................................................... 20
Miami-Dade County, Florida Drug Epidemiology Network  
Annual Report - June 2015

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The Center for Applied Research on Substance Use and Health Disparities  
Nova Southeastern University

Section IA. Highlights

- An Opiate epidemic involving heroin and the nonmedical misuse of pharmaceutical opioids is increasing in Miami-Dade County with rising numbers of deaths, primary treatment admissions, and crime lab cases between 2013 and 2014.
- None-the-less the proportion of heroin consequences among all substances is lower in Miami-Dade County and the State of Florida than in most other areas of the nation.
- Synthetic cathinone (e.g., ethylene, alpha-PVP, and methylene) crime lab cases in Southeast Florida during 2014 totaled 1,811 representing a 46-percent increase over the previous year and accounting for 16 percent of such reports nationwide and 54 percent of those in Florida.
- Alpha-PVP is sold as “Flakka” in the region and is attributed to 18 deaths in neighboring Broward County between September 2014 and May 22, 2015 and numerous incidents of excited delirium medical emergencies and bizarre behavior in Southeastern Florida.
- Synthetic Cannabinoid crime lab cases totaled 228 during 2014 in the three Southeast Florida counties representing a 57-percent increase over the previous year but just 11 percent of the 2014 reports Statewide. There were 25 Poison Information Center exposure calls for THC-homologs during 2014 in Miami-Dade County and 14 such reports in the first four months of 2015.
- Cocaine remains a major drug problem locally with significant increases in treatment admissions between 2013 and 2014. Cocaine-related deaths remained stable in Miami-Dade between the same two years with an 8-percent increased projected Statewide.
- While significantly below the rates and numbers reported in the US West and the Atlanta, Georgia metro area in the East, methamphetamine deaths, treatment admissions, and crime lab reports increased in Florida during 2014 continuing a trend in rising consequences since 2011.
- More than half of marijuana primary treatment clients in Miami-Dade are below the age of 18 years.
- MDMA has dramatically decreased in recent years as the drug detected in “ecstasy” or “Mollys.”
- Benzodiazepine-related deaths have decreased a projected 37-percent Statewide and 16-percent in Miami-Dade County since 2010.
Injecting drug use (IDU) is the route of administration for 77 percent of the 2014 primary heroin treatment clients and 25 percent of primary prescription opioid treatment clients in Miami-Dade County.

Increasingly e-cigarette and other vaporizing devices are reported for use of marijuana, methamphetamine, and new psychoactive synthetic drugs including alpha-PVP (“Flakka”).

Section IB. Area Description

The total population of Miami-Dade County is 2,549,075. Those age 21 years or older comprise 79 percent of the population and 64.9 percent are Hispanic or Latino. Black, Non-Hispanics make up 17.1 percent of the County’s residents while 15.6 percent are White, Non-Hispanic. Asians account for 1.5 percent and 0.9 percent are of other racial/ethnic groups. The median household income is $43,100.00 and 19.9 percent are people whose income in the past year was below the poverty level. The National Survey on Drug Use and Health estimates that there are 106,346 current (past 30-days) users of marijuana in the County and 61,337 current users of an illicit drug other than marijuana.

Section IC. Data Sources

Florida Department of Law enforcement: Florida Medical Examiners Commission Interim and annual reports on Drugs Detected in Deceased Persons in Florida January 2010 - June 2014

Florida Department of Children and Families: Primary Drug Treatment Admissions in Miami-Dade County 2010 – 2014 and Florida Youth Substance Abuse Surveys 2000 - 2014

Florida Agency for Health Care Administration: Opioid Poisoning Hospitalization Cases 2007-13

Florida Poison Information Center exposure calls for calendar year 2014 and January-April 2015


Center for Disease Control and Prevention: 2011 and 2013 Youth Risk Behavior Surveys

Florida Department of Health: Diagnosis of HIV and Hepatitis B and C for Miami-Dade County

U.S. Census Bureau: 2009-2013: Five-Year American Community Survey Demographic and Socio-Economic Characteristics of the Southeastern Florida MSA

US Substance Abuse and Mental Health Administration: Substate Estimates from the 2010-2012 National Survey on Drug Use and Health (NSDUH)

The Miami Coalition for a Safe and Drug-Free Community Drug Epidemiology Network (DEN)
Section II. Emerging Drugs and Patterns of Drug Use

This section of the report explores new issues and substances with significant increases in their indicators of abuse between the two most current reporting periods generally 2013 vs. 2014.

Heroin and Nonmedical Use of Prescription Opioids

From 2000 to 2010 there was a dramatic increase in the availability of diverted pharmaceutical opioids and deaths linked to their nonmedical misuse as well as primary opioid addiction treatment admissions across the State of Florida. Numerous new laws and regulations took effect beginning in 2010 along with the tamper-resistant reformulation of high dose extended release opioids for which the collective impacts are reflected in declining opioid deaths beginning in 2011. At the same time heroin deaths began to increase sharply from 2012 to 2014 across Florida, rising 403-percent from 62 in 2011 to a projected 312 in 2014 based on reported cases from the first half of that year. In Miami-Dade County, heroin deaths increased 167-percent from 15 in 2011 to 40 in 2013 which is stable with the projected number for 2014. While heroin consequences are fewer in Florida than in other states and areas of the country, the sharp escalation in its 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 person in Florida. That toll steadily decline 23-percent to 5,085 by 2013 and then stabilized to a projected 5,106 opioid...
occurrences in 2014 based on the first half of that year. Seventy percent of the 2014 deaths are related to 5 of the 11 opioids tracked by the Florida Medical Examiners Commission. Those 5 are morphine, oxycodone, hydrocodone, methadone, and fentanyl totaling 1,778 medical examiner occurrences in the first six months of 2014 across Florida and 120 in Miami-Dade County. Drug occurrences include reports where the drug was detected in a decedent and considered to be “present” at the time of death plus those cases when the drug was determined to be a “cause of death.”

Florida’s Response to Rx Drug Abuse

- **July 2010** – **Senate Bill 2272** Legal authority to close “Pill Mills” and limited practitioner dispensing of CS Schedule II to 3-day supply
- **August 2010** – **Tamper-resistant OxyContin®**.
- **March 2011** – Law Enforcement Strike Force
- **July 2011** - **House Bill 7095** Comprehensive law bans practitioner dispensing of CS II and new regulations. Permits PDMP to operate.

Number of Selected **Lethal** Rx Opioid Occurrences
Among Deceased Persons in Florida 2008 to 2014

- **CS-II Dispensing Limits & OxyContin Tamper Resistant**
- **Strike Force**
- **House Bill 7095 Takes Effect**

Source: FDLE – Drug: Identified In Deceased Persons by Florida Medical Examiners
Jan 2008 - Jun 2014 Reports
There were 5,917 hospital admissions for non-fatal opioid poisonings (overdoses) in Florida during 2013, the most current reporting year. Among these patients 88 percent did not have a diagnosis of an opioid dependency and were considered to be legally prescribed users of these medications. There were 246 such hospital admissions in Miami-Dade County during 2013 with 89 percent being without an opioid dependency admission. The number of these hospital admissions peaked in 2011 in both the State of Florida at 6,464 and in Miami-Dade County with 263 admissions.

There were 231 admissions for opiates other than heroin reported as primary treatment admissions in Miami-Dade County during 2014 up from 181 in 2013 and 139 in 2012. The 2014 admissions accounted for 3.7 percent of all addiction treatment primary admissions. Males accounted for 60 percent of the prescription opioid treatment clients and 21 percent were between 18 and 25 years of age, 45 percent were aged 26-34, and 34 percent were 35 and older. Injecting drug use was the primary route of administration for 25 percent of these clients. Heroin accounted for an additional 7.4 percent of the 2014 primary admissions for a combined rate of 11 percent for all opiates (heroin and opioids) up from 9 percent in 2009.
There were 1,774 prescription opioid crime laboratory reports, or 6 percent of the 26,992 total primary, secondary, and tertiary NFLIS reports for Miami-Dade, Broward, and Palm Beach Counties combined in 2014. This category of drugs ranked fourth among all substances analyzed in the three counties in 2014. The number of prescription opioid crime laboratory reports increased 87-percent between 2013 and 2014.

<table>
<thead>
<tr>
<th>Drug</th>
<th>2014</th>
<th>% Δ vs. 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>COCAINE</td>
<td>8,942</td>
<td>Down 12%</td>
</tr>
<tr>
<td>Marijuana/CANNABIS</td>
<td>4,587</td>
<td>Down 13%</td>
</tr>
<tr>
<td>Synthetic CATHINONES</td>
<td>1,811</td>
<td>Up 46%</td>
</tr>
<tr>
<td>Rx OPIOIDS</td>
<td>1,744</td>
<td>Up 87%*</td>
</tr>
<tr>
<td>Rx BENZODIAZEPINES</td>
<td>1,521</td>
<td>Up 79%*</td>
</tr>
<tr>
<td>HEROIN</td>
<td>1,333</td>
<td>Up 44%</td>
</tr>
<tr>
<td>METHAMPHETAMINE</td>
<td>387</td>
<td>Up 83%</td>
</tr>
<tr>
<td>AMPHETAMINE</td>
<td>306</td>
<td>Up 410%</td>
</tr>
<tr>
<td>Synthetic CANNABINOIDs</td>
<td>228</td>
<td>Up 57%</td>
</tr>
<tr>
<td>ACETAMINOPHEN</td>
<td>213</td>
<td>Up 228%</td>
</tr>
<tr>
<td>ALL OTHER</td>
<td>5,920</td>
<td>Up 84%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>26,992</td>
<td>Up 17%</td>
</tr>
</tbody>
</table>

*Data are for January–December 2014 and include primary, secondary, and tertiary reports.


In the first six months of 2014 there were 156 heroin-related deaths across Florida including 20 in Miami-Dade County. The local heroin decedents included 4 who were aged 18-24, 10 between 25 and 34 years of age, 3 aged 35-50, and 3 more older than 50. There were an additional 59 morphine deaths in Miami-Dade County in the first half of 2014. Because heroin rapidly metabolizes to morphine in the body, it is possible that many of the morphine deaths may be related to heroin abuse.
Metabolism of Heroin

- Heroin (diacetylmorphine) is metabolized to morphine.

- Heroin undergoes rapid deacetylation to 6-monoacetylmorphine (6-MAM), which is about 6 times more potent than morphine.

- 6-MAM is further deacetylated to morphine.

- The effects of heroin are attributed to the combined effect of heroin, 6-MAM, and morphine.

- Diacetylmorphine $\rightarrow$ 6-monoacetylmorphine (6-MAM) $\rightarrow$ Morphine
There were 466 admissions for heroin reported as primary treatment admissions in Miami-Dade County during 2014, up from 161 in 2012 and 294 in 2013. Males accounted for 73 percent of the local heroin clients in 2014 and 17 percent were between 18 and 25 years of age, 40 percent were 26-34, and 43 percent were aged 35 and older. Injecting was the primary route of administration for 77 percent of the heron clients.

There were 1,333 heroin crime laboratory reports, or 5 percent of the 26,992 total primary, secondary, and tertiary NFLIS reports for Miami-Dade, Broward, and Palm Beach Counties combined in 2014. This category of drugs ranked sixth among all substances analyzed in the three counties in 2014. The number of heroin crime laboratory reports increased 44-percent between 2013 and 2014.

**Synthetic Cathinones**

The most dramatic emerging drug problem in Southeastern Florida is the second generation synthetic cathinone, alpha-PVP, sold using the street name “Flakka” rather than the term “gravel” as found in most other parts of the country. Cathinones are chemically designed to mimic but be more potent than the stimulant in the Khat plant found in Africa and the Middle East. Drugs from the first generation of synthetic cathinones were known as “bath salt” stimulants and are now illegal as is alpha-PVP. Flakka is a colloquial Hispanic word referring to a slender, elegant, and beautiful woman who charms all. But this charmer is a killer. There have been 18 deaths among alpha-PVP users in Broward County between September 2014 and May 22, 2015 including 7 between April 24 and May 22 as well as 3 deaths from ethylone, the latest synthetic cathinone to appear. Numerous cases of excited delirium among Flakka users have been broadcast around the world. Broward County hospitals are reporting an
estimated 20 alpha-PVP overdose or excited delirium emergency department cases per day since March 2015.

Excited delirium is a syndrome of seriously elevated body temperature (or hyperthermia) as well as a breakdown of muscle tissue that leads to the release of muscle fiber contents into the blood (or rhabdomyolysis) and kidney failure. It is often linked to violent behavior by paranoid users with super human strength who are convinced that are being chased by imaginary animals, police, or people who are trying to kill them. Excited delirium can also result in death.

**EXCITED DELIRIUM**

Excited Delirium is a medical emergency that presents itself as a law enforcement problem. 
- Early and advanced coordination with EMS is key.

**Excited Delirium is not easy to recognize.**
- Training is important so that dispatch or other personnel recognize behavioral signs.

**Excited Delirium containment requires backup personnel.**
- Do not approach until it is safe to do so and always ensure several officers are present.

**Excited Delirium victims exhibit superhuman strength and are impervious to pain.**
- Do not “Hog Tie”

**Excited Delirium is a life-threatening emergency.**

Sold in quantities as small as 1/10th of a gram for as little as $3.00 to $5.00 it is highly profitable for the dealers whose actual cost is very low. Alpha-PVP is sold over the internet from China for about $1,500 per kilogram and shipped by world-wide express services to local mid-level dealers in packages containing from 1 to 5 kilograms. A single kilogram provides up to 10,000 doses at a 1/10th of a gram which selling for $5.00 each will yield $50,000 in sales or a profit of $48,500. However it also requires high volume in sales. Yet with a retail price of $5.00, most anyone can afford it and with a highly addictive drug repeat business is assured. Thus younger and poorer populations are targeted as customers. It is being actively sold to and by homeless persons.

There were 132 synthetic cathinone deaths in Florida during 2013 including 31 where the drug was considered to be a cause of death. There were an additional 72 medical examiner occurrences in the first half of 2014 with 19 attributed as being the cause of death.
In all of Florida, there were 25 Florida Poison Information Center exposure calls for alpha-PVP in the first 4 months of 2015; these included 13 in Broward County, 10 in Palm Beach County, and 2 calls from Miami-Dade County. Exposure calls involve cases usually from a hospital emergency department where a patient is experiencing adverse consequences after smoking or ingesting a substance, but the count of exposure calls are fewer than the actual number of cases.

In Southeastern Florida, there were 1,811 crime lab reports for synthetic cathinones in 2014, up from 1,242 in 2013, 496 in 2012, and 74 in 2011. Among the 2014 crime lab reports there were 659 for ethylone, 576 for alpha-PVP, 471 for methylone, 53 for dimethylene (bk-MDDMA), 24 for butylone, 17 for MDPV, 6 for 4-MEC, 3 for dibutylone, 2 for brephedrone (4-BMC).
Number of Crime Lab Cases of Synthetic Cathinones (sold as “ecstasy,” “Molly,” or “Flakka”) in 2014: USA, South Florida, and State of Florida

<table>
<thead>
<tr>
<th>Synthetic Cathinone</th>
<th>USA</th>
<th>South Florida*</th>
<th>Florida</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methylone</td>
<td>3,872</td>
<td>&lt;71</td>
<td>1,110</td>
</tr>
<tr>
<td>alpha-PVP</td>
<td>2,720</td>
<td>&lt;76</td>
<td>672</td>
</tr>
<tr>
<td>Ethylene</td>
<td>3,862</td>
<td>&lt;59</td>
<td>1,396</td>
</tr>
<tr>
<td>Total</td>
<td>10,454</td>
<td>1,706</td>
<td>3,178</td>
</tr>
</tbody>
</table>

Source: US DEA - National Forensic Laboratory Information System (NFLIS)  
(State of Florida 2014 Annual Data queried February 13, 2015)  
(USA and South Florida 2014 Annual Data queried: March 23, 2015)  
* South Florida Data includes Miami-Dade, Broward, and Palm Beach Counties

Ethylone and methylone are mostly sold as “Molly” capsules. There were only 86 crime lab cases for MDMA in 2014 down from 299 in 2011 in Southeastern Florida. Statewide the number declined from 1,352 in 2010 to 150 in 2014.
Synthetic Cannabinoids

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. However, drug tests are now available for their detection for some but not all of these ever changing substances. Also, the five synthetic cannabinoids that were federally scheduled in 2011 were made illegal by the 2011 Florida Legislature, which also banned other cannabinoids in 2012. There were 175 exposure calls statewide to Florida Poison Information Centers in 2014 for various synthetic cannabinoids (e.g., “K2” or “Spice”), down from 194 in 2013 and 537 in 2012 and 517 calls in 2011. Among the calls in 2014, 25 were from Miami-Dade County, 2 were from Broward County, and 3 were from Palm Beach County. In the first 4 months of 2015, there were 88 poison exposure calls for synthetic cannabinoids in all of Florida as compared to 34 in the first four months of 2014 and 78 in the same time period during 2013. Of the exposure calls from January through April 2015, 14 were from Miami-Dade, 10 were from Broward, and 1 was from Palm Beach County. Nationally there have been 1,900 Poison Information Center exposure calls for synthetic cathinones between January and April 2015 with high numbers reported in Louisiana, Mississippi, and Alabama.

There were also 2 Synthetic Cannabinoid deaths in the first half of 2014 across Florida with 1 of the occurrences being considered a cause of death compared to 26 such occurrences in calendar year 2013 of which 13 were considered to be a cause of death,

Across all of Florida the number of crime lab reports for synthetic cannabinoids increase from 9 in 2010 to 1,996 in 2014.
In Southeastern Florida there were 228 crime lab reports for synthetic cannabinoids in 2014, up from 145 in 2013, 190 in 2012, and 19 in 2011. Among the 14 different synthetic cannabinoids reported in 2014 were 88 items for XLR-11, 55 for AB-Fubinaca, 26 for PB-22, 20 for Tetrahydrocannabinols, 17 for AB-Pinaca, 5 for AB-Chminaca, 5 for UR-144, 3 for 5-Flouro AMB, 3 for THJ 2201, 2 for AM-2201, as well as one each for 5F-PB-22, AKB48 N, JWH-018, and JWH-122.

**Methamphetamine/Amphetamines**

Indicators of methamphetamine abuse reflect continuing increases in the drug’s use in 2014 and 2015, yet remained at low levels relative to other substances and other areas of the nation. Methamphetamine was cited as the primary drug for addiction treatment by 27 clients in Miami-Dade County during 2014. However private treatment counselors continued to report a resurgence in methamphetamine abuse among men who have sex with men beginning in 2012.

It is suspected that the methamphetamine being used locally is produced in Mexico. Domestic clandestine laboratory production in Florida mostly appears still to be in the north and central parts of the State using the 2-liter soda bottle “shake and bake” method that yields 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 109 deceased persons during the first half of 2014 statewide in Florida, compared with 81 in the first half of 2013 and 169 for the full year of 2013. Methamphetamine was considered a cause of death in 40 (37 percent) of the cases during the first half of 2014. There were also 132 reports of amphetamine detected among decedents across Florida in the first 6 months of 2014, compared to 111 such occurrences in the first half of 2013. Amphetamine was considered the cause of death in 28 (or 21 percent) of the cases in the first half of 2014.

There were 27 primary treatment admissions for methamphetamine in Miami-Dade County during 2014. Males accounted for 64 percent of the clients in 2014 and 67 percent were between 18 and 34 years of age. Injecting was the primary route of administration for 36 percent of the clients. There were also 16 primary treatment admissions for amphetamine during 2014. Males accounted for 50 percent of the amphetamine clients and 56 percent were between 18 and 34 years of age.

There were 387 methamphetamine crime laboratory reports, or 1.4 percent of the 26,992 total primary, secondary, and tertiary NFLIS reports for Miami-Dade, Broward, and Palm Beach Counties combined in 2014. Methamphetamine ranked seventh among all substances analyzed in the three counties in 2014. The number of methamphetamine crime laboratory reports increased 83-percent between 2013 and 2014. There were also 306 amphetamine crime laboratory reports, or 1.1 percent of the 2014 total ranking eighth among all substances and representing a 410-percent increase from the 60 amphetamine crime lab reports in 2013.
Vaping

The Oxford English Dictionary’s word of the year for 2014 was “vape” used to describe inhaling and exhaling vapors produced by an electronic cigarette or similar device. Usage of the word doubled last year. While most use of vaporizing devices are for liquid nicotine, illicit drug are increasing being vaped including marijuana, methamphetamine, alpha-PVP (“Flakka”), crushed and liquefied pharmaceuticals. An even more advanced vaping deliver system for marijuana wax or “budder” is called dabbing and uses a special water pipe with metal that can withstand extreme temperatures from a butane torch.

Marijuana wax is produced by soaking left over marijuana leaves and stems of plants in a solvent such as butane which extracts various components of the plant including any number of cannabinoids which are the active drugs in the marijuana. The gooey residue is then allowed to dry-out resulting in a sticky paste ranging in color from brown to dark green or yellow. The wax can be smeared onto a marijuana joint or tobacco cigarette, placed in a water pipe, or most often melted in a vaporizer or electronic cigarette devise. The inhaled wax vapors have a much higher dose level of not only THC but other cannabis ingredients. Products called marijuana wax could also be made from synthetic marijuana chemicals bought online from China.

Section III. Update on Continuing Drug Use Problems

This section of the report monitors the most current available data on issues related to major substances with ongoing but generally stable indicators of abuse between the two most current reporting periods 2013 vs. 2014.

Cocaine/Crack

The proportion of indicators for consequences of cocaine use in Miami-Dade County as compared to other drugs continues to be among the highest rates in the Nation. The relatively steady decline in cocaine problems from 2007 to 2010 stabilized through 2013. However the numbers of deaths in which cocaine was detected increased in all of Florida in the first half of 2014 while remaining stable in Miami-Dade County. The percent of deaths considered to be caused by cocaine among the total number of cases where the drug was detected also increased across the State and locally. Both the number and proportion of primary treatment admissions for cocaine among all substances increased between 2013 and 2014. The majority of cocaine-related deaths and addiction treatment admissions were among those older than 35 years. Many of the indicators reflected cocaine use in combination with other drugs, including a significant majority of cocaine-related deaths.
There were 697 primary treatment admissions for cocaine smoking (crack) and an additional 443 for powder cocaine in Miami-Dade County during 2014. These cases accounted for a total of 1,140 (or 18 percent) of the 6,306 primary treatment admissions in publicly-funded programs (including 2,151 for alcohol) in Miami-Dade County during 2014, as reported by the Florida Department of Children and Families. These totals represent a modest increase in the proportion of cocaine primary admissions from 2013 (n=683), when cocaine accounted for 16.3 percent of all admissions. Males accounted for 62 percent of the 2014 clients, and 59 percent (n=677) were age 35 or older; none were below the age of 18.

Cocaine continued to be the most commonly analyzed substance by local crime laboratories. It accounted for 8,942 NFLIS reports, or 33 percent of the 26,992 total primary, secondary, and tertiary crime laboratory reports for Miami-Dade, Broward, and Palm Beach Counties combined in 2014. This represents a 12-percent decline compared to the 10,147 cocaine crime laboratory reports in 2013.

Projections from the National Survey on Drug Use and Health (NSDUH) Substate Data estimate that there were 34,419 users of cocaine in the past year aged 12 and above living in Miami-Dade and Monroe (The Florida Keys) Counties. The estimate for Broward County was 24,271 and an additional 19,507 in Palm Beach County for a total of 78,197 for these four southeastern Florida counties or 27 percent of the estimated 283,287 past year cocaine users Statewide.

**Marijuana/Cannabis**

Marijuana remains the number two primary substance for addiction treatment after alcohol in Miami-Dade County. The portion of primary marijuana clients among all treatment admissions declined 9-percent between 2010 and 2014, a trend observed nationally. Yet the actual number of clients increased locally as it did for most all other substances. Consequences of marijuana use and addiction continued at high levels, particularly among adolescents and young adults.

Cannabinoids were detected in 492 deaths statewide in Florida during the first half of 2014, a 23-percent increase from the 401 occurrences during the first six months of 2013. One of the occurrences was considered to be a cause of death.

There were 1,849 primary treatment admissions for marijuana in Miami-Dade County during 2014. These cases accounted for 29.3 percent of the 4,061 primary treatment admissions. This total was second only to alcohol. The 2014 proportion of marijuana admissions was slightly below that from 2013 when the drug accounted for 33 percent of all admissions but significantly lower than 2012 at 39 percent. Among the 2014 marijuana clients, 71 percent were male; 50 percent were younger than 18; 21 percent were age 18–25; 17 percent were 26–34; and 12 percent were age 35 or older.

Cannabis/THC (tetrahydrocannabinol) accounted for 4,587 crime laboratory reports, or 17 percent of the 26,992 total primary, secondary, and tertiary NFLIS reports for Miami-Dade, Broward, and Palm Beach Counties combined in 2014. This total decreased 13-percent from the number of marijuana crime laboratory cases in 2013. As in previous years, marijuana ranked second among all substances analyzed in the three counties.
Projections from the NSDUH estimate that there were 106,346 current (past 30 day) marijuana users aged 12 and above living in Miami-Dade and Monroe (The Florida Keys) Counties. There were no significant difference in the current use of marijuana among high school students between 2011 and 2013 in Miami-Dade County according to the Youth Risk Behavior Survey results. However, the Florida Youth Substance Abuse Surveys revealed the rate of Miami-Dade middle school students reporting past 30 day use of marijuana declined from 6.3 percent in 2010 to 2.6 percent in 2014 while the rate for high school students increased from 13.6 percent in 2010 to 17.8 in 2012 before turning downward to 16.8 percent in 2014.
Nonmedical Use of Prescription Benzodiazepines

Benzodiazepines in general and specifically alprazolam (Xanax®) continued as a substantial problem in South Florida, particularly when used non-medically in combination with other pharmaceuticals, alcohol, and illicit drugs. There were 1,954 reports of a benzodiazepine present in deceased persons across Florida in the first half of 2014, representing a 15-percent decrease in the total number of benzodiazepine occurrences compared with the first half of 2013 (n=2,287) and a 25-percent decrease since the first half of 2012 (n=2,622).

Of the benzodiazepine occurrences in the first half of 2014, 41 percent were considered “a cause of death.” Among the benzodiazepine medical examiner (ME) reports statewide, 577 were attributed to alprazolam, 302 to nordiazepam (Nordaz®), 270 were for diazepam (Valium®); 231 for temazepam (Restoril®, and Normison®), and 574 were attributed to 6 other benzodiazepines.

In Miami-Dade County there were 56 reports of alprazolam detected in deceased persons during the first half of 2014, of which 30 percent were considered lethal. There were also 15 reports of diazepam detected in deceased persons with 20 percent considered to be the cause of death.

There were 99 admissions for benzodiazepines reported as primary treatment admissions in Miami-Dade County during 2014. Females accounted for 56 percent of the 2014 benzodiazepine clients.

Prescription benzodiazepines accounted for 1,521 crime laboratory reports, or 6 percent of the 26,992 total primary, secondary, and tertiary NFLIS reports for Miami-Dade, Broward, and Palm Beach Counties combined in 2014. This category of drugs ranked fifth among all substances analyzed in the three counties in 2014. The number of prescription benzodiazepine crime laboratory reports increased 79-percent between 2013 and 2014.