

Drug Abuse Trends in Miami-Dade and Broward Counties, South Florida: June 2014

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ABSTRACT

The key finding for this reporting period is that there has been substantial progress in reducing prescription drug diversion across Florida, along with moderate declines in consequences related to the nonmedical use of pharmaceuticals. Deaths and treatment admissions for prescription opioids still remained at high levels throughout Florida. The level of “doctor shopping” for medications declined by 51 percent statewide between the first quarter of 2012 and the last quarter of 2013. However, the availability of hydromorphone (e.g., Dilaudid®) and deaths related to its misuse were rapidly rising. The second key finding is that the synthetic cathinone, methylone, along with other hallucinogens are the fastest rising drugs among reports from seized items analyzed by National Forensic Laboratory Information System (NFLIS) crime laboratories in the South Florida area. There were 1,194 methylone reports, mostly sold as “Mollys,” compared with only 54 MDMA (3,4-methylenedioxymethamphetamine) reports in 2013. In all, there were 36 different emerging synthetic drugs identified among reports from seized items analyzed in South Florida crime laboratories in 2013, for a total of 1,540 such reports. Deaths in which cocaine was found to be present increased in Miami-Dade County while they declined in Broward County, yet deaths caused by the drug declined in both counties. Cocaine treatment admissions also continued to decline in Miami-Dade and Broward Counties in 2013. Cocaine reports among seized items analyzed by NFLIS laboratories continued to outnumber those for all other substances, but they declined by 11 percent between 2012 and 2013. Heroin indicators, while at relatively low levels, were escalating in both counties. Heroin reports among seized items analyzed by NFLIS laboratories increased by 3 percent between 2012 and 2013. Consequences of marijuana use and addiction continued at high levels, particularly among adolescents and young adults. Primary marijuana treatment admissions in 2013 declined by 18 percent compared with the previous year in Miami-Dade County and by 34 percent in Broward County. The increasing use of civil citations in lieu of criminal charges for juveniles has reduced the high level of adolescents among marijuana treatment clients. Twelve different synthetic cannabinoids were detected among items analyzed by NFLIS laboratories in South Florida during 2013, for a total of 146 reports, including 68 reports for XLR-11. However, there were sharp decreases in the number of poison information center exposure calls for these substances in 2013 compared with 2011 and 2012 both across the State and in the two South Florida counties. Production of marijuana concentrates, such as “Wax” or “Budder” was increasingly found in seized local grow house operations. While methamphetamine consequences were at low levels compared with other substances, methamphetamine reports

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among seized items analyzed by NFLIS laboratories increased by 24 percent in 2013 compared with 2012, and deaths in which methamphetamine was detected increased statewide by 11 percent from 146 in 2012 to an estimated 162 for 2013 (annualized from the number of deaths in the first half of 2013).

INTRODUCTION

This report reviews data from 2012 and 2013 for drug-related deaths, addiction treatment admissions, poison information center exposure calls (through April 2014), and crime laboratory analysis. Information is presented by primary substance of abuse, with topics including cocaine, heroin, nonmedical use of prescription opioids, benzodiazepines, methamphetamine and amphetamines, marijuana (including synthetic cannabinoids), emerging psychoactive substances, MDMA (3,4-methylenedioxymethamphetamine) or ecstasy, GHB (gamma hydroxybutyrate), and muscle relaxants. While the information is classified by a single drug or category, the reader should note an underlying problem of polysubstance abuse as mentioned throughout this report.

Area Description

The population of the State of Florida is 19,552,860, according to the 2013 U.S. Census estimates, of whom 23.2 percent are Latino/Hispanics. White persons of all ethnicities constitute 78.3 percent, including 57 percent who are White non-Hispanic; 16.6 percent are Black; and 2.7 percent are Asian. Foreign-born persons account for 19.3 percent of the State's population.

Located in the extreme southern portion of the Florida peninsula, Miami-Dade County has the State's largest population, with 2,617,176 residents, according to the 2013 U.S. Census estimates. Latinos/Hispanics account for 64.3 percent of the population; White persons of all ethnicities represent 77.6 percent, including 16.3 percent who are White non-Hispanic; 19.2 percent are Black; and 1.7 percent are Asian. Miami is the county's largest city, with 413,892 residents. Foreign-born persons account for 51.2 percent of the county's population. More than 100,000 immigrants arrive in Florida each year; one-half establish residency in Miami-Dade County.

Broward County, situated due north of Miami-Dade, is composed of Ft. Lauderdale, plus 31 other municipalities and an unincorporated area. The county covers 1,197 square miles, including 25 miles of coastline. According to the 2013 U.S. Census, the Broward County population is 1,838,844. The population is 66.1 percent White, including 41.9 percent who are White non-Hispanic; 27.9 percent are Black; and 3.5 percent are Asian. Latino/Hispanics constitute 26.5 percent of the population. Foreign-born persons account for 31.4 percent of the county's population. Broward County is the second most populated county in Florida and accounts for 9.4 percent of Florida's population.

Palm Beach County (population 1,372,171) is located due north of Broward County and is the third most populated county in the State. The county population is 76.9 percent White, including 58.7 percent who are White non-Hispanic; 18.2 percent are Black; and 2.6 percent are Asian. Latino/Hispanics constitute 20.1 percent of the population. Twenty-two percent of the county's population is foreign born. Together, the 5.8 million people of these three counties constitute 30 percent of the State's 19.5 million population.

Since 2003, these three counties have constituted the federally designated Metropolitan Statistical Area (MSA) for South Florida, making it the sixth largest MSA in the Nation.

Data Sources

This report describes current drug abuse trends in South Florida, using the data sources summarized below:

- **Data on drug-related mortality** presented were provided by the Florida Department of Law Enforcement (FDLE) Medical Examiners Commission's *2013 Interim Report of Drugs Identified in Deceased Persons between January and June 2013*. The report provides information on the total number of various drugs detected in 4,159 decedents, mostly for whom an autopsy was performed but not for all of the more than 94,000 deaths that occurred in Florida during the first 6 months of 2013. The numbers of drugs detected are referred to as "occurrences" and should not be confused with the actual number of drug-related deaths. Medical examiners (MEs) reported the number of drug-related deaths (whether the drug was the cause of death or was merely found to be present) through toxicology reports submitted to the Medical Examiners Commission. In order for a death to be considered "drug-related," there needs to be at least one drug identified in the decedent, which is a drug occurrence. The vast majority of these deaths (or cases) had more than one drug occurrence. The State's local MEs were asked to distinguish between the drugs being a "cause" of death or merely "present" in the body at the time of death. A drug is only indicated as the cause of death when, after examining all evidence and the autopsy and toxicology results, the ME determines the drug played a causal role in the death. It is not uncommon for a decedent to have multiple drugs listed as a cause of death. When an ME determines a drug is merely present or detected in the decedent, the drug may not have played a causal role in the death. It is not uncommon for a decedent to have multiple drugs listed as present. Therefore, the number of drug occurrences exceeds the number of decedents because of multiple drugs, including alcohol, identified in the same person. While this report provides the most current count of deaths in which substances have been detected (the first half of 2013), it is very likely that the numbers will increase for the first half of the year, when the 12-month annual report is released due to cases finalized after the reporting deadline.
- **Drug treatment data on primary admissions to all addiction treatment programs** receiving any public funding in Miami-Dade and Broward Counties during calendar years 2010 through 2013 were provided by the Florida Department of Children and Families as of May 21, 2014.
- **Crime laboratory drug analyses reports** were queried from the Drug Enforcement Administration's (DEA's) National Forensic Laboratory Information System (NFLIS) Data Query System on May 9, 2014, for Miami-Dade, Broward, and Palm Beach Counties for the timeframe January through December 2013. The NFLIS methodology allows for the accounting of up to three drugs per item submitted for analysis. The numbers of NFLIS reports include primary, secondary, and tertiary substances for crime laboratory items analyzed and provide a more complete surveillance than when only the primary substance detected was reported. It is now appropriate to compare the 2013 NFLIS data with those from 2011 and 2012 as reported in the June 2013 South Florida CEWG Report. It should also be noted that the NFLIS data combine some, but not all, pharmaceutical items into the category of "controlled substance." This factor means that the numbers provided for reports of specific medications or categories (e.g., prescription opioids or

benzodiazepines) may be fewer than those submitted to local crime laboratories. More information on the NFLIS methodology is available at: <http://www.deadiversion.usdoj.gov/>.

- **Data related to Level 5 “doctor shopping”** are from the Florida Department of Health 2012–2013 Prescription Drug Monitoring Program Annual Report.
- **Reports on poison exposure calls for synthetic cannabinoids and synthetic cathinones** are from the Florida Poison Information Center–Miami for all of Florida and the three southeast Florida counties for calendar years 2012 and 2013 and January–April 2014.
- **Prevalence of substance use data** are from the 2008–2010 National Survey on Drug Use and Health (NSDUH) Substate Estimates of Substance Use and Mental Disorders by the Substance Abuse and Mental Health Services Administration’s Center for Behavioral Health Statistics and Quality, released in 2012.

Other information on drug use patterns was derived from ethnographic research and the United Way of Broward County’s Commission on Substance Abuse’s Surveillance Support Committee.

DRUG ABUSE PATTERNS AND TRENDS

Cocaine/Crack

Cocaine problems in South Florida continued to be at the highest rates in the Nation, yet the relatively steady decline in cocaine consequences that began in 2007 has stabilized over the past 3 years. The numbers of deaths in which cocaine was detected increased in Miami-Dade County in the first half of 2013 and they declined in Broward County (exhibit 1), yet deaths caused by the drug declined in both counties in 2013 as they rose statewide. In Miami-Dade and Broward Counties, the numbers of cocaine deaths stabilized between 2010 and 2012. Treatment admissions for cocaine declined sharply across the State between 2007 and 2011 and then stabilized in 2012. The proportion of cocaine treatment admissions in both Miami-Dade and Broward Counties declined from 2009 to 2013. The majority of cocaine-related deaths and addiction treatment admissions were among those older than 35. Many of the indicators reflected cocaine use in combination with other drugs, including all of the 2013 cocaine-related deaths in both South Florida counties.

Throughout Florida, the number of cocaine-related deaths increased by 4.4 percent in the first half of 2013 ($n=668$) compared with the second half of 2012 ($n=640$). A cocaine-related death is defined as a death in which cocaine is detected in the decedent and may or may not be considered the cause of death. In 2012, there were 1,318 cocaine-related deaths in Florida, compared with 1,144 in 2011, 1,402 in 2010, 1,462 in 2009, and 1,791 in 2008. The 2007 total of 2,179 cocaine-related deaths was the highest number since the drug has been tracked beginning in the late 1980s. The number of cocaine-related deaths increased by 97 percent between 2001 and 2007; the key factor for that rise appears to be a corresponding 105-percent increase in deaths with cocaine in combination with other drugs, particularly prescription medications. Among the 668 cocaine-related deaths in Florida during the first half of 2013, 89 percent of the cases involved cocaine in combination with at least 1 other drug.

In Florida, a drug is considered to be a cause of death if it is detected in an amount considered a lethal dose by the local ME. Among the 668 cocaine-related deaths statewide in the first half of 2013, the drug was considered to be a cause of death in 291 deaths (or 44 percent of the cases). Among the decedents accounting for the cocaine-related deaths in the first half of 2013, 0.4 percent ($n=3$) were younger than 18; 10 percent were age 18–25; 20 percent were 26–34; 42 percent were 35–50; and 27 percent were older than 50.

There were 119 deaths related to cocaine use in Miami-Dade County during the first half of 2013, for an annualized estimate of 238 deaths, compared with 198 in 2012 (exhibit 1). Cocaine was found in combination with another drug in 100 percent of the cases. Cocaine was detected at a lethal level in 31 percent of the cases in the first half of 2013. While the number of cocaine occurrences (cocaine-related deaths) increased by 20 percent between 2012 and 2013, the number of deaths caused by the drug remained stable, with a 1-percent decline. None of the cocaine-related decedents in the first half of 2013 were younger than 18; 12.6 percent were age 18–25; 23.5 percent were 26–34; 34.5 percent were 35–50; and 29.4 percent were older than 50. Miami-Dade County had the highest number of cocaine-related deaths in the first half of 2013 among the State's 24 ME Districts.

There were 41 deaths related to cocaine abuse in Broward County in the first half of 2013, for an annualized estimate of 82 deaths, compared with 129 in 2012 (exhibit 1), representing a 36-percent decline. Cocaine was found in combination with another drug in all of the cases. Cocaine was detected at a lethal level in 68 percent of the Broward County cases in the first half of 2013, representing a 24-percent decline in the number of deaths caused by the drug. Two of the 2013 cocaine-related fatalities were younger than 18; 3 of the decedents were age 18–25; 17 percent were 26–34; 46 percent were 35–50; and 24 percent were older than 50. Broward County's number of cocaine-related deaths ranked sixth among the 24 ME districts in the State during the first half of 2013.

The Jacksonville ME district reported the second highest number of cocaine-related deaths in the State during the first half of 2013, with 68 cases, followed by the Orlando ME district, with 59 cases, Palm Beach County with 50, and the St. Petersburg ME district with 47.

There were 424 primary treatment admissions for cocaine smoking (crack), and an additional 259 for powder cocaine in Miami-Dade County during 2013 (exhibit 2). These admissions accounted for a total of 683 (or 17 percent) of the 4,061 primary treatment admissions in publicly funded programs in which a primary drug was cited (including 1,424 for alcohol) in Miami-Dade County during 2013. These totals represent a decrease in the proportion of cocaine primary admissions from 2012 ($n=941$), when cocaine accounted for 24 percent of all admissions. Males accounted for 52 percent of the 2013 clients, and 56 percent ($n=380$) were age 35 or older; only 3 clients were 17 or younger.

In Broward County, there were 285 primary admissions for cocaine smoking (crack) and an additional 85 for powder cocaine, accounting for a total of 370 (or 10 percent) of the 3,611 publicly funded primary treatment admissions in which a primary drug was cited (including 1,104 for alcohol) in 2013 (exhibit 3). These totals represent a modest decrease in the proportion of cocaine primary admissions from 2012 ($n=607$), when cocaine accounted for 11 percent of all admissions. Males accounted for 68 percent of the 2013 clients; 66 percent ($n=246$) were age 35 or older and 1 was 17 or younger.

Cocaine continued to be the most commonly analyzed substance by local crime laboratories. It accounted for 10,147 reports among seized drug items analyzed by NFLIS, or 44 percent of the

23,069 total primary, secondary, and tertiary crime laboratory reports for Miami-Dade, Broward, and Palm Beach Counties combined in 2013 (exhibit 4). This represents an 11-percent decline compared with the 11,411 cocaine crime laboratory reports in 2012. There were also 154 reports for phenylimidothiazole isomer, assumed to be levamisole, found along with cocaine in 2013; this represented a 37-percent decline compared with 2012, suggesting less adulteration at the time of production in the source country.

Projections from the NSDUH Substate Estimate show that there were 36,899 users of cocaine in the past year age 12 and older living in Miami-Dade and Monroe (the Florida Keys) Counties. The estimate for Broward County was 22,710, and there were an additional 16,445 in Palm Beach County, for a total of 76,054 for these four southeastern Florida counties. This represented 27 percent of the 283,287 past-year cocaine users statewide. These same four counties also constitute 27 percent of the State's population age 12 and older.

Heroin

Heroin consequences remained at low levels across Florida. Death data were mixed, however (exhibit 5). The number of heroin-related deaths (occurrences) increased sharply between 2011 and 2012, declined in the first half of 2013 compared with the last half of 2012 statewide and in Broward county, but they increased in Miami-Dade during that period. South American heroin has been entering the South Florida area over the past two decades. However, reports and seizures of Mexican heroin in South Florida have been noted since 2008. The proportion of primary treatment admissions for heroin increased in the two South Florida counties between 2012 and 2013. The number of crime laboratory reports for heroin among seized drug items analyzed by NFLIS laboratories increased by 33 percent in the region between 2012 and 2013. Many heroin consequences also involved the nonmedical use of prescription opioids.

Throughout Florida, the number of heroin-related deaths increased by 89 percent in the first half of 2013 ($n=70$) compared with the first half of 2012 ($n=37$). However, the number of these deaths in the first 6 months of 2013 decreased by 12.5 percent compared with the second half of 2012 ($n=80$). Heroin continued to be the most lethal drug, with 97 percent ($n=68$) of heroin-related deaths in the first half of 2013 caused by the drug. Polysubstance abuse was noted in all of the 2013 heroin-related deaths. Deaths caused by heroin declined in Florida from 2001 to 2006, increased between 2006 and 2008, declined again in 2009 and 2010, and then increased in 2011. Substantial increases in abuse and consequences of narcotic analgesic use occurred as heroin problems were waning, but as prescription opioid deaths started to decline in 2011, heroin deaths began to increase.

There were 18 heroin-related deaths in Miami-Dade County during the first half of 2013, for an annualized rate of 36 occurrences, compared with 33 in 2012 (exhibit 5). Heroin deaths peaked in Miami-Dade County in 2000, with 61 fatalities. In the first half of 2013, heroin was found at a lethal dose level in all but 1 of the 18 deaths in which the drug was detected in the county. Other drugs were found in combination with heroin in all of the cases. None of the heroin-related decedents were younger than 18; 17 percent were age 18–25; 28 percent were age 26–34; 33 percent of the heroin-related decedents were age 35–50; and 22 percent were older than 50. The age of Miami-Dade heroin decedents during the first 6 months of 2013 identifies a younger population using the drug in contrast with the first half of 2012, when 20 percent of the heroin deaths occurred among those younger than 35, compared with 45 percent in same time period in 2013.

There were two heroin-related deaths in Broward County during the first half of 2013, the same number as in the first 6 months of 2012. However, 7 such deaths in the second half of 2012 brought the total for that year to 9 deaths, compared with 3 in 2011, 5 in 2010, 8 in 2009, and 17 in 2008 (exhibit 5). Lethal heroin deaths peaked in Broward County in 2001 with 53 fatalities. As with all deaths in 2012 and 2011, both of the heroin deaths in the first half of 2013 were considered to be caused by the drug, and heroin was found in combination with at least one other drug. Both of the heroin decedents in the first half of 2013 were age 26–34, compared with 22 percent of such deaths in all of 2012.

There were 294 primary treatment admissions for heroin in Miami-Dade County during 2013 (exhibit 2). These cases accounted for 7 percent of the 4,061 primary treatment admissions in publicly funded programs for which a primary drug was cited (including 1,424 for alcohol). This proportion is an increase compared with the proportion of primary heroin admissions in 2012 ($n=161$), when the drug accounted for 4 percent of all admissions. Males accounted for 69 percent of the 2013 clients; none of the clients were 17 or younger; 13 percent were age 18–25; 39 percent were 26–34; and 48 percent ($n=140$) were age 35 or older. Injection drug use was the primary route of administration for 74 percent of the 2013 heroin treatment clients.

In Broward County, there were 224 primary admissions for heroin (or 6 percent) of the 3,611 treatment admissions to programs receiving any public funding and for which a primary drug was cited (including 1,104 for alcohol) in 2013 (exhibit 3). This total represents a modest increase in the proportion of primary heroin admissions from 2012 ($n=292$), when the drug accounted for 5 percent of all admissions. Males accounted for 69 percent of the 2013 clients; none were younger than 18; 16 percent were age 18–25; 38 percent were 26–34; and 46 percent were age 35 or older. Injection drug use was the primary route of administration for 87 percent of the 2013 treatment clients.

Heroin accounted for 925 crime laboratory reports, or 4 percent of the 23,069 total primary, secondary, and tertiary reports among drug items seized and analyzed by NFLIS laboratories for Miami-Dade, Broward, and Palm Beach Counties combined in 2013 (exhibit 4). The number of heroin crime laboratory reports increased by 33 percent between 2012 and 2013 following a 13-percent increase between 2011 and 2012.

Nonmedical Use of Prescription Opioids

The nonmedical use of prescription opioids continued as Florida's most deadly and addictive drug problem. However, numerous new laws and regulations took effect beginning in 2010, along with the tamper-resistant reformulation of OxyContin®. The impacts of these are reflected in declining deaths beginning in 2011. Injection drug use was reported by 58 percent of Broward County prescription opioid treatment clients as their primary route of administration and 21 percent of clients in Miami-Dade County.

In July 2010, a new Florida law provided the legal authority to close “pill mills” involved in direct sales of large quantities of opioid medications and benzodiazepines. The same law limited to a 3-day supply the amount of controlled Schedule II medication that any practitioner could directly dispense to patients. One month later, the tamper-resistant reformulated OxyContin® extended release pills were shipped by the manufacturer, replacing those which could be crushed by abusers to release the full dosage all at once. In March 2011, a law enforcement Strike Force was created to raid and shut down “pill mills.” After much debate, the Florida Legislature passed House Bill 7095, a

comprehensive law which took effect in July 2012. The law provided stricter medical and pharmacy regulations, banned any dispensing by practitioners of controlled Schedule II medications, funded the State Strike Force, and permitted a Prescription Drug Monitoring Program to begin operations in the autumn of 2012. Timeline markers of these interventions are displayed on exhibits 6 and 7 of this report tracking deaths related to nonmedical prescription drug misuse. The Florida Prescription Drug Monitoring Program reported a 51-percent decrease in the level of “doctor shopping,” as measured by the number of patients seeing 5 or more different prescribers and using 5 or more different pharmacies in the past 90 days between the first 3 months of 2012 and the last 3 months of 2013. The number of Level 5 “doctor shopping” patients declined from 2,864 in the first quarter of 2012 to 1,415 in the last quarter of 2013.

During the first half of 2013, 2,363 individuals died in Florida with 1 or more prescription drugs in their system; 41 percent ($n=975$) of these deaths had at least 1 prescription medication that was considered a cause of death. That means that an average of 37.5 persons died per week in Florida from a lethal prescription drug overdose in the first half of 2013; that average, however, represents a decrease of 2.6 deaths per week from the 2012 average of 40.1 deaths per week and a decrease of 11.3 deaths per week from 48.8 in 2011. Prescription drugs accounted for 78 percent of all drug occurrences among deceased person when alcohol is excluded during the first half of 2013.

Reports of hydrocodone (Vicodin® and Lortab®), oxycodone (OxyContin®, Roxicodone®, and Percocet®), and methadone (Dolophine®) identified among decedents have been tracked in Florida since 2000. Beginning in 2003, morphine (MS Contin® and Roxanol®), propoxyphene (Darvon®), fentanyl (Fentora®), hydromorphone (Dilaudid®) meperidine (Demerol HCl®), tramadol (Ultram®), buprenorphine (Buprenex® and Suboxone®), oxymorphone (Opana® and Numophan®), and other opioids were included in the Florida ME Commission’s surveillance monitoring program. Propoxyphene is no longer included as of the first half of 2011.

In total, there were 2,645 prescription opioids detected in decedents during the first half of 2013 (exhibit 6), of which 2,575 were identified as a specific drug, with 47.5 percent ($n=1,225$) of those considered at a lethal dose and a cause of death. The number of drug occurrences exceeded the number of deaths, because many decedents had more than one substance detected, including another prescription medication, illicit drug, or alcohol. Among the opioid occurrences in the first half of 2013, 541 (or 21 percent) were for oxycodone, 457 (or 17 percent) were for morphine, 431 (or 16 percent) were for hydrocodone, 324 (or 12 percent) were for methadone, 228 (or 9 percent) were for tramadol, 220 (or 8 percent) were for hydromorphone, 137 (or 5 percent) were for fentanyl, 124 (or 5 percent) were for oxymorphone, 113 (or 4 percent) were for other identified opioids, and 70 (or 3 percent) were for opioids not identified as a specific drug.

There was a 6.7-percent decline in the category of prescription opioids detected among deceased persons in Florida during the first half of 2013 compared with the first half of 2012. This followed a 13-percent decrease between all of 2011 and 2012, a 4-percent decrease between 2010 and 2011 (reversing a 10-percent increase between 2009 and 2010), and another 10-percent rise between 2008 and 2009.

Across Florida, the 431 hydrocodone occurrences detected among deceased persons in the first half of 2013 represented a 9-percent increase over the 396 occurrences in the previous 6 months. The 457 ME occurrences for morphine in the first half of 2013 represent a modest 1-percent increase

over the previous semiannual period. These were the only two prescription opioids with increasing occurrences in the first 6 months of 2013; eight others had declining occurrences. However, the 220 hydromorphone occurrences in the first half of 2013 (exhibit 8) represented a 19-percent increase over the 185 occurrences in the first half of 2012; the 228 tramadol occurrences in the first half of 2013 were an 8-percent increase compared with the first 6 months of 2012 ($n=211$). The most lethal prescription opioids statewide in the first half of 2013 were methadone, which was considered a cause of death for 68 percent ($n=221$) of the decedents in which it was detected; fentanyl, which was a cause of death for 62 percent ($n=85$) of the deaths related to it; morphine, which was a cause of death for 59 percent ($n=268$) of its related deaths; and oxycodone, which was a cause of death for 52 percent ($n=279$) of its occurrences (exhibit 7). Most of the statewide ME prescription opioid cases were polydrug episodes, including 94 percent of the oxycodone cases, 92 percent of the methadone cases, 91 percent of morphine cases, and 86 percent of the hydrocodone cases.

Occurrences of four prescription opioids (oxycodone, morphine, hydrocodone, and methadone) detected among deceased persons during the first half of 2013 totaled 101 in Broward County, 82 in Palm Beach County, and 79 in Miami-Dade County. Miami-Dade County recorded 36 morphine occurrences among deceased persons in the first half of 2013, along with 23 oxycodone occurrences, 16 for hydrocodone, and 4 for methadone. These 79 opioid occurrences during the first 6 months of 2013 were 9-percent lower than the 87 occurrences in the first half of 2012 for the same four narcotic analgesics. Among occurrences for these 4 opioids in the first half of 2013, 47 percent ($n=37$) were considered lethal doses, and in 100 percent of the cases they were found in combination with at least 1 other substance. While there were fewer occurrences of these four opioids among decedents in the first half of 2013, 32 percent more were found to be the cause of death compared with 2012. One of the opioid occurrences in the first half of 2013 was reported for a decedent younger than 18, along with 8 percent for those age 18–25, 11 percent for age 26–34, 26 percent for age 35–50, and 53 percent for those older than 50.

Broward County recorded 39 occurrences for morphine among deceased persons in the first half of 2013, along with 28 oxycodone reports, 19 for hydrocodone, and 15 for methadone. These 101 combined opioid occurrences during the first 6 months of 2013 represented a 17-percent decline from the 118 reports in the first half of 2012 for the same 4 narcotic analgesics. Among reports for these four opioids in the first half of 2013, 71 percent were considered lethal doses, and in 100 percent of the cases, they were found in combination with at least one other substance. None of the opioid occurrences in the first half of 2013 were reported for a decedent younger than 18; 8 percent were for those age 18–25, along with 19 percent for those age 26–34, 25 percent for those age 35–50, and 49 percent for those older than 50.

Palm Beach County recorded 33 oxycodone occurrences among deceased persons in the first half of 2013, along with 23 for morphine, 17 for hydrocodone, and 9 for methadone. These 82 combined opioid occurrences during the first 6 months of 2013 represented a 14-percent decline from the 96 reports in the first half of 2012 for the same 4 narcotic analgesics. Among occurrences for these four opioids in the first half of 2013, 70 percent were considered lethal doses, and 100 percent were found in combination with at least one other substance. None of the opioid occurrences in the first half of 2013 were reported for a decedent younger than 18; 2 percent were for those age 18–25; 15 percent were for those age 26–34; 35 percent were for those age 35–50; and 48 percent were for those older than 50.

There were 181 primary treatment admissions for “opiates other than heroin” (prescription opioids) in Miami-Dade County during 2013 (exhibit 2). These cases accounted for a total of 4.5 percent of the 4,061 treatment admissions in programs receiving any public funding for which a primary drug was cited (including 1,424 for alcohol). This total is stable with the proportion of primary prescription opioid admissions in 2012 ($n=139$), when the drug accounted for 3.5 percent of all admissions. Males accounted for 55 percent of the 2013 opioid clients. One of these was younger than 18; 24 percent were age 18–25; 40 percent were 26–34; and 35 percent were age 35 or older. Among these clients, 21 percent ($n=38$) reported injecting prescription opioids, while smoking was reported by 4 percent, sniffing by 10 percent, and oral administration by 65 percent as their primary method of use.

There were 1,030 primary treatment admissions for “opiates other than heroin” (prescription opioids) in Broward County during 2013 (exhibit 3). These cases accounted for 29 percent of the 3,611 publicly funded treatment admissions in which a primary drug was cited (including 1,104 for alcohol). This total is an increase in the proportion of primary prescription opioid admissions in 2012 ($n=1,260$), when the drug accounted for 23 percent of all admissions. Males accounted for 59 percent of the 2013 opioid clients. Among these clients, one was younger than 18; 20 percent were age 18–25; 44 percent were 26–34; and 35 percent were age 35 or older. Among these clients, 58 percent ($n=593$) reported injecting prescription opioids; sniffing was reported by 13 percent; 25 percent reported oral administration; and 4 percent cited smoking as their primary method of use.

Hospitals reported 69 cases of neonatal abstinence syndrome in Broward County during 2012 and 35 in Miami-Dade County. The number of cases in Broward increased by 25 percent between 2011 and 2012, and they increased in Miami-Dade County by 40 percent. While these cases could be for maternal use of any addictive drug except alcohol, most are considered to be related to the mothers’ nonmedical misuse of prescription opioids. Statewide, the number of cases increased by 192 percent between 2007 and 2011, rising from 536 to 1,563, and then rose 4 percent from 2011 to 1,630 cases in 2012.

Prescription opioids accounted for 933 crime laboratory reports, or 4 percent of the 23,069 total primary, secondary, and tertiary reports among drug items seized and analyzed by NFLIS laboratories for Miami-Dade, Broward, and Palm Beach Counties combined in 2013 (exhibit 4). Prescription opioids ranked fifth among other substances analyzed in the three counties. The number of prescription opioid crime laboratory reports decreased by 4 percent between 2012 and 2013. Oxycodone accounted for 408 (or 44 percent) of the opioid reports, down from 70 percent of all opioids in 2012. Additionally, there were 252 reports for hydromorphone in 2013 (which was an increase from 151 in 2012 and 24 in 2011), 104 for hydrocodone, 57 for morphine, 36 for buprenorphine, 25 for methadone, 18 for codeine, 12 for oxymorphone, 10 for fentanyl, 7 for tramadol, and dihydromorphine (Paramorphone®). There were also 655 “unspecified controlled substance” crime laboratory reports in 2013 that may have included additional prescription opioids.

Projections from the NSDUH 2008–2010 Substate Estimates show that there were 54,109 people age 12 and older living in Miami-Dade and Monroe (the Florida Keys) Counties who reported the nonmedical use of pain relievers in the past year. The estimate for Broward County was 43,091, and there were an additional 38,661 in Palm Beach County, for a total of 145,862 for these 4 southeastern Florida counties, or 22 percent of the 653,263 past-year nonmedical users of pain relievers statewide. These same four counties constitute 27 percent of the State’s population age 12 and older.

Nonmedical Use of Prescription Benzodiazepines

Benzodiazepines in general and specifically alprazolam (Xanax®) continued as a substantial problem in South Florida, particularly when used nonmedically in combination with other pharmaceuticals, alcohol, and illicit drugs. There were 2,287 occurrences of a benzodiazepine present in deceased persons across Florida in the first half of 2013, representing a 15-percent decrease in the total number ($n=2,622$) of benzodiazepine occurrences compared with the first half of 2012. However, this represented a 3-percent increase over the second half of 2012 ($n=2,209$) (exhibit 6). Of the benzodiazepine occurrences in the first half of 2013, 25 percent ($n=568$) were considered “a cause of death.” Among the benzodiazepine ME occurrences reported statewide, 673 were attributed to alprazolam, followed by 379 to nordiazepam (Nordaz®), 370 to diazepam (Valium®), and 259 to temazepam (Restoril® and Normison®); 608 were attributed to 6 other benzodiazepines.

In Miami-Dade County, there were 55 occurrences of alprazolam detected in deceased persons during the first half of 2013, of which 38 percent were considered lethal. At least one other drug was involved in 100 percent of the occurrences. There were also 15 occurrences of diazepam detected in deceased persons in Miami-Dade County; none were considered to be the cause of death, and 100 percent of these deaths involved at least 1 other drug. These 70 ME occurrences for the 2 benzodiazepines in the first 6 months of 2013 compare with 80 such occurrences for alprazolam and diazepam in the first half of 2012. None of the benzodiazepine mentions in the first half of 2013 involved a person younger than 18; 4 percent of the decedents were age 18–25; 12 percent were 26–34; 34 percent were 35–50; and 50 percent were older than 50.

In Broward County, there were 51 occurrences of alprazolam detected in deceased persons during the first half of 2013, of which 63 percent were considered a cause of death. At least one other drug was involved in 100 percent of the occurrences. There were also 22 occurrences of diazepam detected in deceased persons in Broward County; 41 percent were considered to be the cause of death; and 100 percent of these deaths involved at least 1 other drug. These 73 ME occurrences for the 2 benzodiazepines in the first 6 months of 2013 compare with 97 such occurrences for alprazolam and diazepam in the first half of 2012. None of the benzodiazepine mentions in the first half of 2013 involved a person younger than 18; 5.5 percent of the decedents were age 18–25; 15 percent were 26–34; 37 percent were 35–50; and 42.5 percent were older than 50.

In Palm Beach County, there were 43 occurrences of alprazolam detected in deceased persons during the first half of 2013, of which 49 percent were considered lethal. At least one other drug was involved in 100 percent of the occurrences. There were also 21 occurrences of diazepam detected in deceased persons in Palm Beach County; 19 percent were considered to be the cause of death; and 100 percent of these deaths involved at least 1 other drug. These 64 ME occurrences for the 2 benzodiazepines in the first 6 months of 2013 compare with 70 such occurrences for alprazolam and diazepam in the first half of 2012. None of the benzodiazepine mentions in the first half of 2013 involved a person younger than 18; 1.5 percent of the decedents were age 18–25; 17 percent were 26–34; 33 percent were 35–50; and 48.5 percent were older than 50.

There were 72 admissions for benzodiazepines reported as primary treatment admissions in Miami-Dade County during 2013, or 1.8 percent of the 4,061 total treatment admissions in which a primary drug was cited in Miami-Dade County (exhibit 2). This proportion is stable with such admissions in 2011, when 58 cases also represented 1.5 percent of the total. Females accounted for 50 percent of the 2013 benzodiazepine clients.

In Broward County, there were 73 primary admissions for benzodiazepines during 2013, or 2 percent of 3,611 primary admissions in which a primary drug was cited (exhibit 3). This proportion is stable with such cases in 2012, when 93 cases represented 1.7 percent of the total. Females accounted for 66 percent of the 2013 benzodiazepine clients.

Prescription benzodiazepines accounted for 849 crime laboratory reports, or 3.6 percent of the 23,069 total primary, secondary, and tertiary reports from drug seized drug items analyzed by NFLIS laboratory for Miami-Dade, Broward, and Palm Beach Counties combined in 2013 (exhibit 4). This category of drugs ranked seventh among all substances analyzed in the three counties in 2013. The number of prescription benzodiazepine crime laboratory reports decreased by 4 percent between 2012 and 2013. Alprazolam accounted for 744 (or 89 percent) of the benzodiazepine reports in 2013. Additionally, there were 52 clonazepam (Klonopin®) reports, 31 for diazepam, 13 for lorazepam (Ativan®), 7 for temazepam (Restoril®), and 1 each for medazepam (Nobrium®, Rudotel®) and nitrazepam (Alodorm®, Arem®). There were also 669 “unspecified controlled substance” crime laboratory reports in 2013 that may have included additional prescription benzodiazepines.

Methamphetamine/Amphetamines

Indicators of methamphetamine abuse reflect increases in the drug’s use in the most recent reporting periods, yet they remained at low levels relative to other substances. Methamphetamine was cited as the primary drug for addiction treatment among less than one-half of 1.0 percent of addiction treatment clients in South Florida during 2013. Numerous anecdotal reports from private treatment counselors suggested a resurgence in methamphetamine abuse among men who have sex with men (MSM) beginning in 2012. Methamphetamine use is also reported among heavy users of “club drugs.”

It is suspected that the methamphetamine being used locally is produced in Mexico. Domestic clandestine laboratory production in Florida mostly appears 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 81 deceased persons during the first half of 2013 statewide in Florida, compared with 73 in the first half of 2012 and 146 for the full year of 2012. There were 115 methamphetamine ME occurrences in 2011, 132 in 2010, 81 in 2009, and 114 in 2008. Methamphetamine was considered a cause of death in 36 (44 percent) of the 81 cases during the first half of 2013. There were also 111 occurrences of amphetamine detected among decedents across Florida in the first 6 months of 2013; this number was stable with the 110 such occurrences in the previous semiannual period. Amphetamine was considered the cause of death in 19 percent of the 111 cases in the first half of 2013.

There were 15 primary treatment admissions for methamphetamine in Miami-Dade County during 2013 (exhibit 2). These clients accounted for 0.4 percent of the 4,061 primary treatment admissions in which a primary drug was cited (including 1,424 for alcohol). This proportion is stable from 2012, when the drug accounted for 0.3 percent ($n=11$) of all admissions. Among 2013 methamphetamine clients, 73 percent were male; none of the clients were younger than 18; 20 percent ($n=3$) were age 18–25; 40 percent ($n=6$) were 26–34; and 47 percent ($n=5$) were 35 or older. The age of one female

client who cited “ice” as her primary drug is not known. There were also six primary admissions for other amphetamines; three were male; two were age 18–25; one was age 26–34; and three were age 35 or older. Among the 15 methamphetamine clients, 9 cited smoking as their primary method of use; 3 reported sniffing; 3 reported oral ingestion; and none injected the drug.

There were 17 primary treatment admissions for methamphetamine in Broward County during 2013 (exhibit 3). These cases accounted for 0.5 percent of the 3,611 primary treatment admissions in which a primary drug was cited (including 1,104 for alcohol). While less than 1.0 percent, this proportion is greater than the 0.3 percent ($n=16$) of all admissions from 2012. Males accounted for 82 percent ($n=14$) of the 2013 methamphetamine clients. One was younger than 18; one was age 18–25; 41 percent ($n=7$) were age 26–34; and 47 percent ($n=8$) were age 35 or older. There were also nine primary admissions (four males and five females) for other amphetamines, none of whom was younger than 18; four were 18–25; three were age 25–34; and two were 35 or older. Among the 17 methamphetamine clients, 10 cited smoking as their primary method of use, 3 reported injecting, 1 reported sniffing, and 3 cited oral ingestion. Among the nine amphetamine clients, eight reported oral ingestion, and one cited smoking as the route of administration.

Methamphetamine accounted for 211 crime laboratory reports, or 0.9 percent of the 23,069 total primary, secondary, and tertiary reports among seized drug items analyzed by NFLIS laboratories for Miami-Dade, Broward, and Palm Beach Counties combined in 2013 (exhibit 4), representing a 24-percent increase compared with the 170 reports in 2012. There were also 60 amphetamine crime laboratory reports in 2013.

Marijuana/Cannabis and Synthetic Cannabinoids

Marijuana remained the number one primary substance for addiction treatment in Miami-Dade County in 2014 (exhibit 2), but it ranked third in Broward County behind alcohol and prescription opioids (exhibit 3). Treatment admissions for marijuana declined in both counties between 2012 and 2013, a trend also observed nationally. Consequences of marijuana use and addiction continued at high levels, particularly among adolescents and young adults.

Cannabinoids were detected in 401 deaths statewide in Florida during the first half of 2013, representing a 7-percent increase from the 376 occurrences during the previous 6 months. One of the occurrences was considered to be a cause of death. There were also 16 synthetic cannabinoid occurrences in the first half of 2013 across Florida, with 38 percent being considered a cause of death.

The availability of unregulated synthetic cannabinoids increased through 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 194 exposure calls statewide to Florida Poison Information Centers in 2013 for various synthetic cannabinoids (e.g., “K2” or “Spice”); this number was down from 537 in 2012 and 517 calls in 2011. Among the calls in 2013, nine were from Miami-Dade County, seven were from Broward County, and six were from Palm Beach County. In the first 4 months of 2014, there were only 34 poison exposure calls for synthetic cannabinoids in all of Florida, compared with 78 in the first

4 months of 2013 and 271 in the same time period during 2012. Exposure calls involve cases usually from a hospital emergency department where someone is experiencing adverse consequences after smoking or ingesting a substance.

There were 1,351 primary treatment admissions for marijuana in Miami-Dade County during 2013 (exhibit 2). These admissions accounted for 33 percent of the 4,061 primary treatment admissions for which a primary drug was cited (including 1,424 for alcohol) among all clients to any program receiving some public funding. This total was higher than for any other substance. The 2013 proportion of marijuana admissions was below that from 2012, when the drug accounted for 40 percent ($n=1,576$) of all admissions. Among the 2013 marijuana clients, 72 percent were male; 62 percent were younger than 18; 20 percent were age 18–25; 10 percent were 26–34; and 8 percent were age 35 or older.

In Broward County, there were 748 primary admissions for marijuana (or 21 percent) of the 3,611 primary treatment admissions in which a primary drug was cited, including 1,104 for alcohol (exhibit 3). The 2013 proportion of marijuana admissions was well below that from 2012, when the drug accounted for 32 percent ($n=1,748$) of all admissions. Males accounted for 77 percent of the 2013 clients; 35 percent were younger than 18; 34 percent were age 18–25; 19 percent were 26–34; and 12 percent were 35 or older. It is believed that the drop in the number of marijuana treatment admissions in 2013 is due to more juvenile offenders being charged with a civil citation rather than facing juvenile justice criminal charges and mandatory drug treatment.

Cannabis/THC (tetrahydrocannabinol) accounted for 5,276 crime laboratory reports, or 22.8 percent of the 23,069 total primary, secondary, and tertiary reports among drug items seized and analyzed by NFLIS laboratories for Miami-Dade, Broward, and Palm Beach Counties combined in 2013 (exhibit 4). This total represented a 2-percent decrease from the number of marijuana crime laboratory reports in 2012. As in previous years, marijuana ranked second among all substances analyzed in the three counties.

The total number of South Florida crime laboratory synthetic cannabinoid reports among seized items analyzed by NFLIS increased from 19 reports in 2011, to 190 in 2012, to 146 in 2013. Among the 12 different synthetic cannabinoids reported in 2013 were 68 reports for XLR-11, 27 for PB-22, 15 for 5F-PB-22, 13 for UR-144, and 10 for AM-2201 (a decrease from 114 reports in 2012). Additionally, in 2013, there were seven crime laboratory reports for JWH-018, as well as one each for AKB48, AM-2233, JWH-122, JWH-203, JWH-250, and AB-Fubinaca.

In the spring of 2014, South Florida law enforcement departments reported finding paraphernalia for manufacturing marijuana wax in seized grow house operations. Marijuana wax, also called “Budder,” or butane hash oil, or even “ear wax hash,” is produced by soaking leftover marijuana leaves and stems of plants in a solvent (such as butane) which extracts various components of the plant, including any number of cannabinoids that are the active drugs in the marijuana. The gooey residue is then allowed to dry out as the butane vaporizes into the air, 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 device. The inhaled wax vapors have a much higher dose level of not only THC but other marijuana/cannabis ingredients that cause unwanted adverse effects. Consequences of using these substances may range from severe hallucinations, to anxiety, paranoia, and heart problems. Wax is not only more potent than the marijuana/cannabis itself, it is also more toxic. Products called marijuana wax could also be made from synthetic marijuana chemicals bought online from China.

Projections from the NSDUH estimated that there were 185,938 marijuana users in the past year age 12 and older living in Miami-Dade and Monroe (the Florida Keys) Counties. The estimate for Broward County was 148,199, and there were an additional 100,302 in Palm Beach County, for a total of 434,439 for these 4 southeastern Florida counties (or 27 percent of the 1,634,705 past-year marijuana users statewide). These same four counties also constitute 27 percent of the State's population age 12 and older. Past-month users of marijuana total 251,439 in these same 4 counties (or 26.5 percent of the 947,386 past-month users statewide). The average annual number of first-time marijuana users totaled 59,955 in the 4 southeastern Florida counties and 219,818 statewide based on the NSDUH Substate Estimates. Among Miami-Dade residents age 12 and older, 55 percent reported that use of marijuana once a month or more presented a great risk, as did 43 percent of those in Broward County and 39 percent in Palm Beach County.

Emerging Psychoactive Substances and Other Hallucinogens

The Florida ME Commission reported for the first time on deaths related to emerging synthetic drugs during the first half of 2013 across the State of Florida. During that time, 64 such drug occurrences were noted, including the 16 synthetic cannabinoid occurrences mentioned in the marijuana section of this report. There were also 28 deaths in the first half of 2013 related to synthetic cathinones (e.g., methyldone, "Molly," or "bath salts"), one-half of which were considered to be a cause of death. There were also five deaths related to the category of "Phenethylamines and Piperazines," with two of them considered a cause of death. This category would include both MDMA and MDA (3,4-methylenedioxyamphetamine), although neither was specifically identified in the 2013 occurrences. Additionally there was one tryptamine death considered to be caused by the drug. There were 14 deaths related to "Sympathomimetic Amines," of which one-half were considered a cause of death.

In the State of Florida, there were only 10 Florida Poison Information Center exposure calls for synthetic cathinones ("bath salts") in the first 4 months of 2014; these included 2 calls from Miami-Dade County, 1 from Palm Beach County, and none from Broward County. In all of 2013, there were 43 exposure calls for "bath salts;" these included 1 call from Miami-Dade County, 1 from Broward County, and 2 from Palm Beach County. In 2012, the total number of "bath salt" calls totaled 72 for all of Florida, with 11 from the 3 southeast Florida counties.

In 2013, there were 984 reports for "unspecified hallucinogens" among drug items seized and analyzed by South Florida crime laboratories, ranking fourth among all substances and representing an increase of 88 percent compared with 2012 (exhibit 4). There were also 1,242 crime laboratory reports for synthetic cathinones in 2013; this was an increase from 496 in 2012 and 74 in 2011. Methyldone was detected in 1,194 of these samples (exhibit 4), most of which were alleged to be "Molly" capsules. There were also 16 items analyzed as MDPV (3,4-methylenedioxypropylvalerone) and 15 as 4-MEC (4-methyl-N-ethylcathinone), along with 7 additional synthetic cathinones.

Other crime laboratory reports included 39 piperazines in 2013, with 21 BZP (1-benzylpiperazine) reports and 18 TFMPP (1-[3-trifluoromethylphenyl] piperazine) reports. These reports are fewer than in 2012, when there were 113 BZP items and 86 reports for TFMPP. BZP in combination with TFMPP is often sold as "ecstasy."

Among the category of 2C-phenethylamines were 19 crime laboratory reports for 2C-I-NBOME and 8 for LSD (lysergic acid diethylamide), as well as 1 each for 2C-B, 2C-E, and 2C-C-NBOME. There were also 23 reports for tryptamines among items analyzed by NFLIS laboratories, including 5 for

5-MeO-DIPT (5-Methoxy-N,N-Diisopropyltryptamine) or “Foxy methoxy” and 5 reports each for DMT and psilocybin/psilocin. There were also three reports for 5-MeO-DALT. In 2012, there were 89 reports for 5-MeO-DIPT.

MDMA

Measures of MDMA abuse have declined in the South Florida area to low numbers in recent years, while reports of other hallucinogenic amphetamines often sold as “ecstasy” or “Mollys” have increased. ME and crime laboratory reports with toxicological testing of the actual substance reflect dramatically declining numbers of MDMA but increasing cases of methylone and other emerging psychoactive drugs as cited above.

There were nine MDMA-related deaths statewide in Florida in 2012, with the drug being cited as the cause of death in three of these cases. There were also six reports of MDA-related deaths statewide in Florida during 2012, one of which was considered the cause of death. During the previous year, there were 19 MDMA-related deaths and 7 for MDA.

There were nine primary treatment admissions for MDMA in Miami-Dade County in 2013 and two in Broward County (exhibits 2 and 3). In 2012, there were 10 primary treatment admissions for MDMA in Miami-Dade County, while there were 4 in Broward County.

MDMA accounted for 54 reports among seized drug items analyzed by NFLIS laboratories, or 0.2 percent of the 23,069 total primary, secondary, and tertiary NFLIS reports for Miami-Dade, Broward, and Palm Beach Counties combined in 2013. This number is down from the 107 items in 2012 and the 299 reports in 2011. MDMA ranked 21st among all substances analyzed in the three counties during 2013, down from 17th in 2012 and 8th in 2011.

GHB

Abuse of the anesthetic GHB declined substantially over the past decade. There are several compounds that are converted by the body to GHB, including GBL (gamma butyrolactone) and 1,4-butanediol (1,4-BD). Over the past few years, GHB abuse had involved only the abuse of 1,4-BD, but GHB reports appeared among items analyzed by NFLIS in 2012, and GBL reports were present in 2012 and 2013. Commonly used with alcohol, these substances have been implicated in drug-facilitated rapes and other crimes. GHB was declared a federally controlled Schedule I drug in March 2000, and indicators of its abuse have declined since that time.

There were no GHB-related deaths statewide during the first half of 2013, compared with seven in the first half of 2012. There were nine GHB-related deaths statewide each year in both 2012 and 2011, eight in 2010, six in 2009, three in 2008, five in 2007, four in 2006, and nine in 2005. Statewide in Florida, GHB-related deaths increased from 23 in 2000 to 28 in 2001; they then declined to 19 in 2002 before declining to 11 in 2003 and 2004.

There were 4 crime laboratory reports for 1,4-BD and 4 for GBL among the 23,069 total primary, secondary, and tertiary reports among items analyzed by NFLIS for Miami-Dade, Broward, and Palm Beach Counties combined in 2013. In 2012, there were five reports for 1,4-BD and three each for GHB and GBL. In 2011, there were nine crime laboratory reports for 1,4-BD and none for either GHB or GBL among items analyzed by NFLIS.

Seven ME occurrences were reported for ketamine during the first half of 2013 in Florida, but none was considered a cause of death.

Nonmedical Use of Prescription Muscle Relaxants and Sedatives

Muscle relaxants may be abused in combination other drugs, particularly with prescription opioids and benzodiazepines. There were 129 reports of carisoprodol (Soma®) or meprobamate among deceased persons across Florida in the first half of 2013, compared with 175 such reports during the first half of 2012. There were 151 carisoprodol/meprobamate occurrences during the second half of 2012 for a total of 326 in all of 2012, compared with 478 in 2011, 513 in 2010, 455 in 2009, and 415 deaths in 2008. Among the occurrences during the first half of 2013, 28 percent ($n=36$) were considered to be a cause of death. The 15-percent decrease in muscle relaxant deaths between the second half of 2012 and the first half of 2013 reflects a similar decline as seen for other prescription medications over the same two reporting periods.

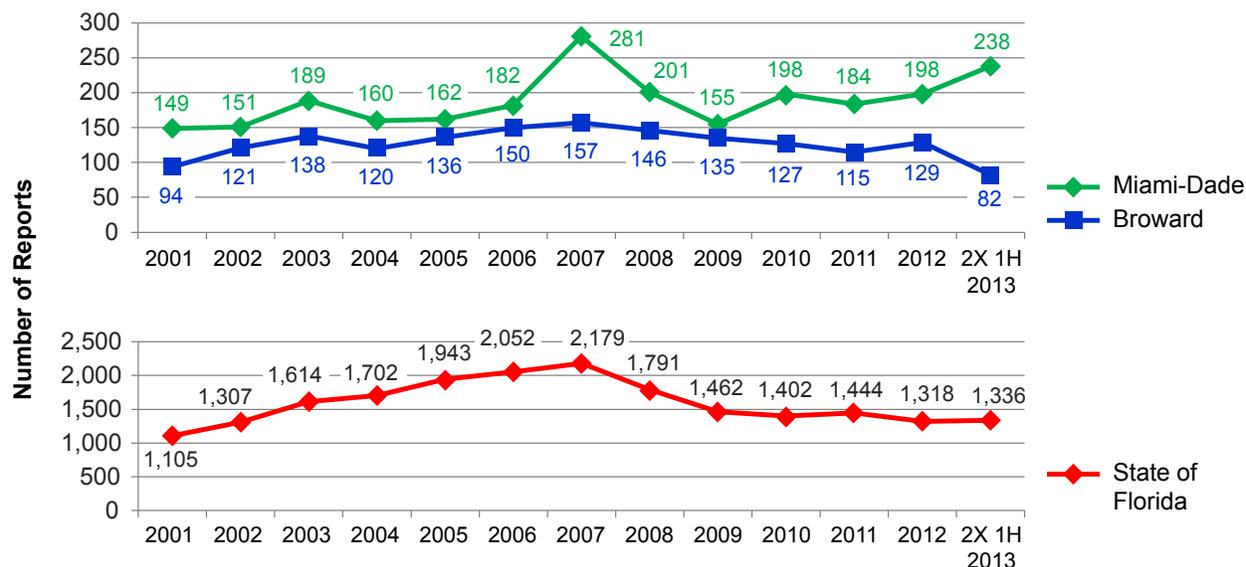
There was one primary treatment admission for carisoprodol in Miami-Dade County in 2013 and one in Broward County; both were females. There were 13 reports of carisoprodol among items analyzed by NFLIS laboratories in the South Florida MSA in 2013; this represents a steady decrease from the 33 in 2012, 42 reports in 2011, and 55 in 2010.

There were 155 ME occurrences for the sedative-hypnotic zolpidem (Ambien®) in the first half of 2013, representing a 7-percent decline compared with the 167 occurrences in the previous 6 months. Among the occurrences in the first half of 2013, 21 percent ($n=32$) were considered a cause of death.

There were five primary treatment admissions for sedative/hypnotics in Miami-Dade County in 2013 and two in Broward County. Among items analyzed by NFLIS laboratories in 2013, there were 9 zolpidem reports in the South Florida MSA in 2013, compared with the 11 reports in 2012 and 6 in 2011.

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Exhibit 1. Number of Cocaine Reports¹ Detected Among Decedents, Miami-Dade and Broward Counties and the State of Florida: 2000–Estimated 2013²



¹Number of cocaine occurrences including “present” and “cause of death.”

²2013 data are annualized from the data for the first 6 months of 2013.

SOURCE: Florida Medical Examiners Commission Interim Report, January–June 2013

Exhibit 2. Number of Treatment Admissions, by Primary Substance of Abuse, Miami-Dade County, Florida: 2010–2013

Primary Treatment Substance	2010	2011	2012	2013
Alcohol	1,242	1,406	1,069	1,424
Crack Cocaine	549	615	551	424
Powder Cocaine	369	437	390	259
Heroin	183	227	161	294
Prescription Opioids	246	302	139	181
Marijuana	1,741	2,008	1,576	1,351
Methamphetamine	22	17	11	15
Amphetamine	5	5	4	6
MDMA (3,4-methylenedioxy-methamphetamine)	6	4	10	9
PCP (Phencyclidine)	0	1	1	0
Benzodiazepine	71	79	58	72
All Other Drugs	30	230	18	26
Substance Unknown	84	91	78	0
Total Admissions	4,548	5,338	4,066	4,061

SOURCE: Florida Department of Children and Families, data submitted May 21, 2014

Exhibit 3. Number of Treatment Admissions, by Primary Substance of Abuse, Broward County, Florida: 2010–2013

Primary Treatment Substance	2010	2011	2012	2013
Alcohol	1,142	1,302	1,360	1,104
Crack Cocaine	424	432	472	285
Powder Cocaine	57	123	135	85
Heroin	156	169	292	224
Prescription Opioids	1,118	1,459	1,260	1,030
Marijuana	1,689	1,949	1,748	748
Methamphetamine	34	12	16	17
Amphetamine	2	8	8	9
MDMA (3,4-methylenedioxy-methamphetamine)	5	7	4	2
PCP (Phencyclidine)	0	0	0	1
Benzodiazepine	101	140	93	73
All Other Drugs	37	219	47	15
Substance Unknown	304	178	430	18
Total Admissions	5,069	5,851	5,865	3,611

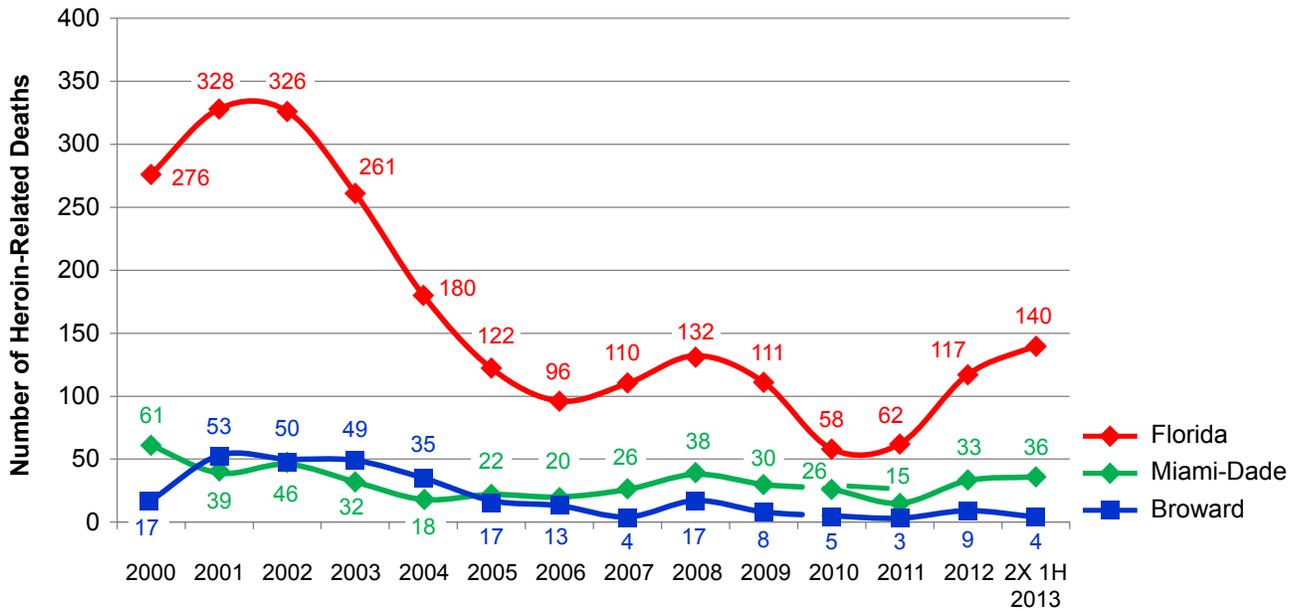
SOURCE: Florida Department of Children and Families, data submitted May 21, 2014

Exhibit 4. Top 10 Most Frequently Identified Drug Reports Among Drug Items Analyzed in NFLIS Forensic Laboratories, South Florida: 2013¹

Drug	2013 Number	Direction and Percentage Change Compared With 2012
Cocaine	10,147	Down 11%
Marijuana/Cannabis/THC	5,276	Down 2%
Methylone (N-Methyl-3,4-Methylenedioxycathinone)	1,194	Up 208%
Hallucinogen	984	Up 88%
Prescription Opioids	933	Down 4%
Heroin	925	Up 33%
Prescription Benzodiazepines	849	Down 4%
Methamphetamine	211	Up 24%
Phenylimidothiazole Isomer	154	Down 37%
Caffeine	131	Down 45%
All Other Analyzed Drugs	2,272	Down 18%
Total	23,069	Down 3%

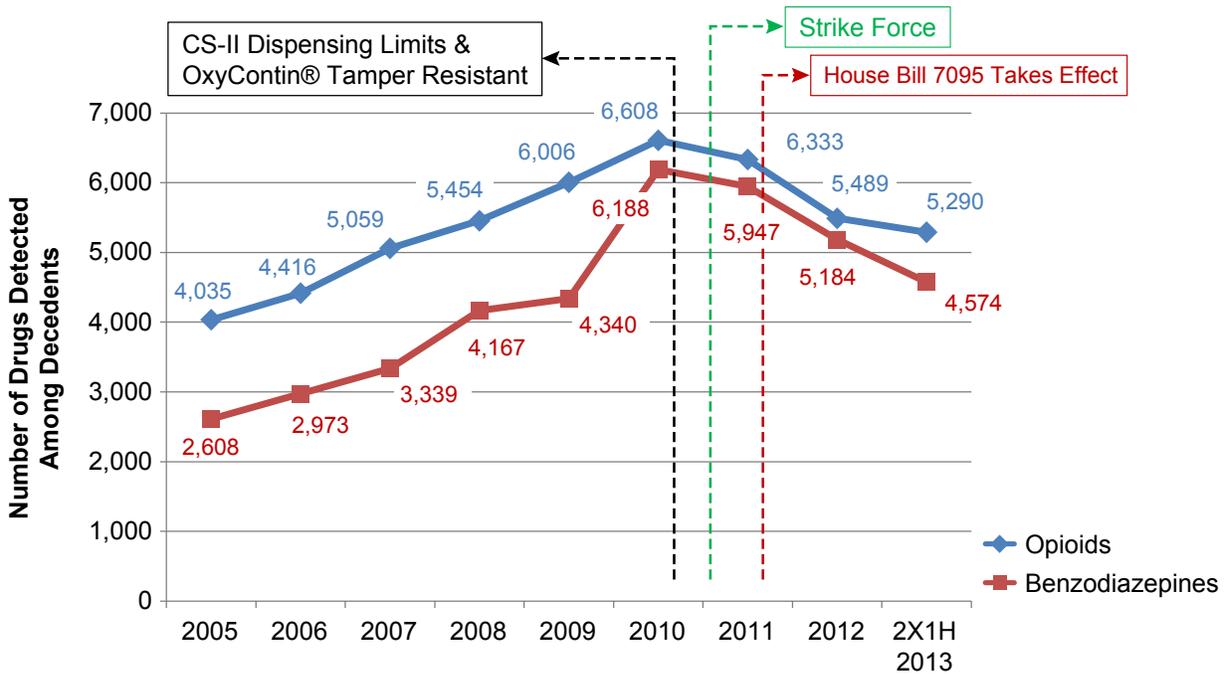
¹Data are for January–December 2013 and include primary, secondary, and tertiary reports.
SOURCE: NFLIS, DEA, data retrieved May 9, 2014

Exhibit 5. Number of Heroin-Related Deaths, Miami-Dade and Broward Counties and the State of Florida: 2000–Estimated 2013¹



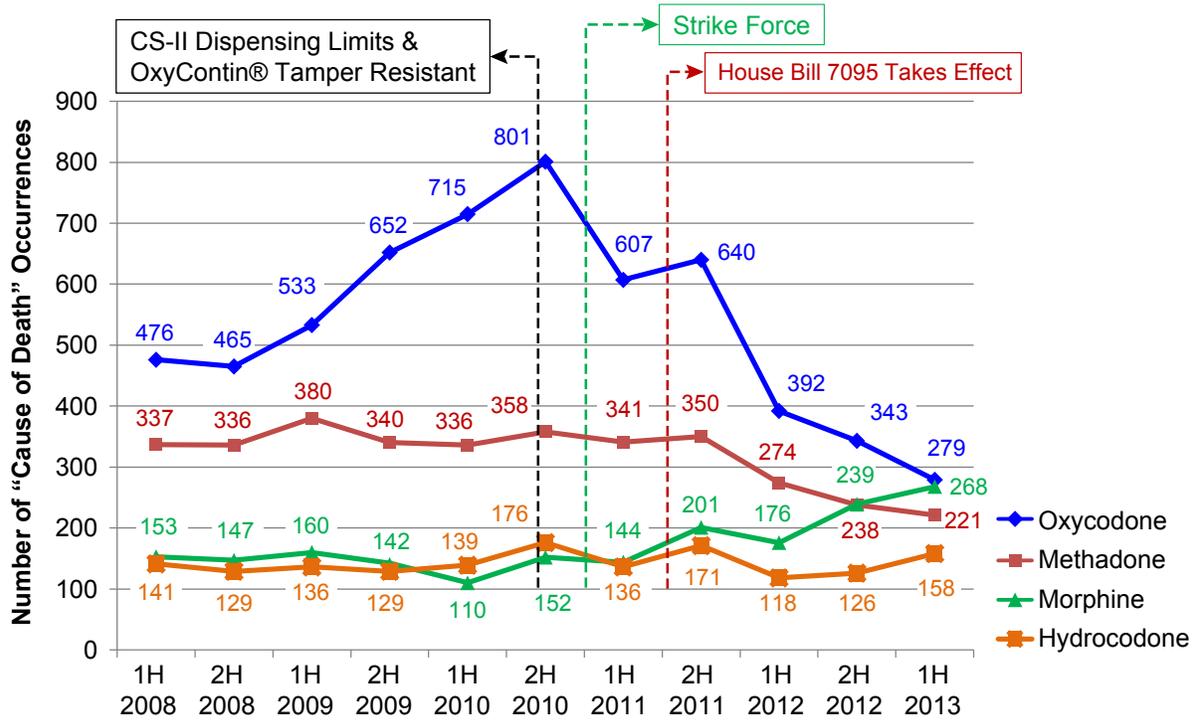
¹2013 data are annualized from the data for the first 6 months of 2013.
SOURCE: Florida Medical Examiners Commission Reports, 2000–2013

Exhibit 6. Number of Reports of Nonmedical Prescription Opioids and Benzodiazepines Detected Among Decedents, Florida: 2005–Estimated 2013¹



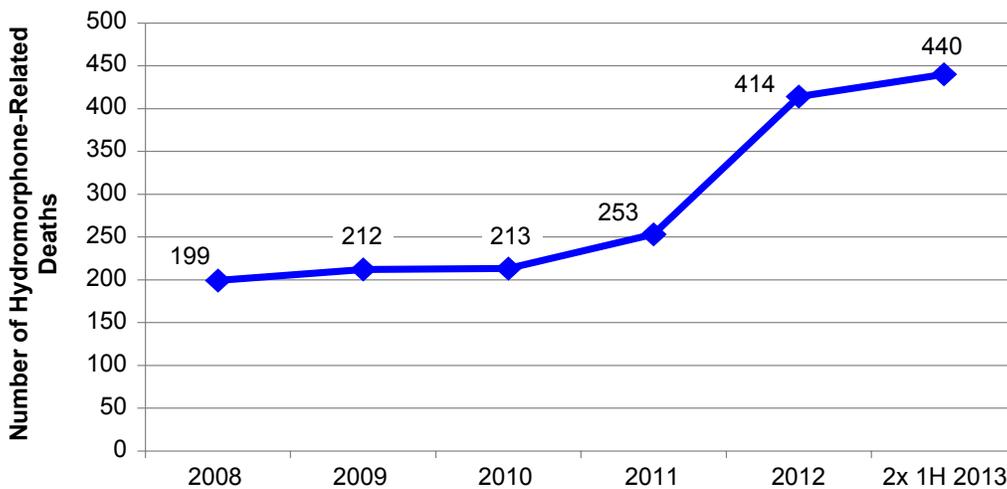
¹2013 data are annualized from the data for the first 6 months of 2013.
SOURCE: Florida Department of Law Enforcement – Drugs Identified In Deceased Persons by Florida Medical Examiners, January 2005–June 2013 Reports

Exhibit 7. Number of Selected Lethal Prescription Opioid Occurrences Among Deceased Persons, Florida: January 2008–June 2013, by Half-Year



SOURCE: Florida Department of Law Enforcement – Drugs Identified In Deceased Persons by Florida Medical Examiners, January 2008–June 2013 Reports

Exhibit 8. Number of Hydromorphone-Related Deaths,¹ Florida: 2008–2013²



¹Hydromorphone-related deaths include those in which the drug is listed as “present” and “cause of death.”

²2013 data are annualized from the data for the first 6 months of 2013.

SOURCE: Florida Department of Law Enforcement – Drugs Identified In Deceased Persons by Florida Medical Examiners, January 2008–June 2013 Reports