- Data from the HDMP suggest that for CY 2009, South American heroin continued to be the primary type of heroin east of the Mississippi River, as has been the case since the mid-1990s. Mexican black tar and, to a lesser extent, Mexican brown powder heroin dominated markets west of the Mississippi.
  - Average purity levels for South American heroin increased in 5 of 10 CEWG areas (Atlanta, Chicago, Detroit, St. Louis, and Washington, DC) from 2008 to 2009. They declined in five other areas—Baltimore, Boston, Miami, New York City, and Philadelphia. Average prices for South American heroin fell in 5 of 10 CEWG areas (Atlanta, Boston, Miami, St. Louis, and Washington, DC). They remained stable in one area (Chicago), and they rose in four areas (Baltimore, Detroit, New York City, and Philadelphia) (section IV, table 5).
  - From 2008 to 2009, Mexican heroin average purity declined in 9 of 11 CEWG areas, namely Denver, El Paso, Houston, Los Angeles, Minneapolis, Phoenix, San Diego, San Francisco, and Seattle, while average purity increased in Dallas and San Antonio. The average price for Mexican heroin was lower in 2009, compared with 2008, in 4 of 11 CEWG reporting areas (Dallas, Los Angeles, Minneapolis, and San Antonio), and it was higher in 7 areas (Denver, El Paso, Houston, Phoenix, San Diego, San Francisco, and Seattle) (section IV, table 6).

# Opiates/Opioids Other than Heroin (Narcotic Analgesics)

The increase in indicators for opiates/opioids other than heroin (including narcotic analgesics) reported by CEWG area representatives in recent reporting periods persisted into the first half of 2010. Representatives from all CEWG areas reported stable, mixed, or increasing indicators; no area reported a decrease from previous reports. The primary prescription opioids appearing in indicator data across all regions continued to be oxycodone and hydrocodone, although methadone was still reported as a problem in some CEWG areas, namely Phoenix, Seattle, San Francisco, Boston, Maine, and New York City. Nonmedical use of buprenorphine continued to be reported by area representatives from Chicago, Cincinnati, Detroit, Boston, Maine, and the Baltimore/Maryland/Washington, DC, areas.

#### Western Region CEWG Areas:

All CEWG areas in the West reported stable or increasing indicators for narcotic analgesics. Increased indicators were reported by area representatives from Phoenix, Albuquerque, Texas, Denver, and Seattle. In San Francisco, indicators remained low but were showing possible slight increases, according to the area representative. Indicators in Los Angeles were reported as mixed but mostly up, and those in San Diego and Honolulu were reported as low and stable.

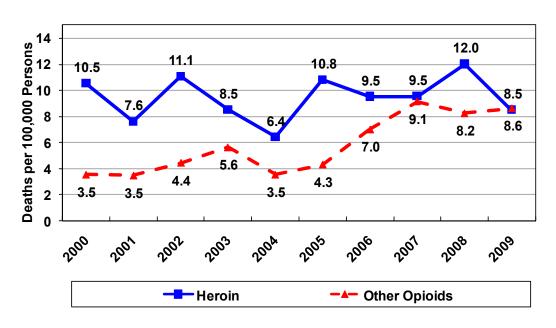
- **Phoenix Report.** In Phoenix, estimated DAWN ED visits involving nonmedical use of pharmaceutical opioids increased significantly, from 4,412 visits in 2008 to 5,883 in 2009. DAWN ED visits involving oxycodone, hydrocodone, and morphine showed statistically significant increases in 2009 over 2007.
- Albuquerque/New Mexico Report. Figure 9 illustrates an increase in "other opioid" overdose deaths in Albuquerque since 2004. With regard to specific opioids, while methadone and hydrocodone overdose death rates decreased from 2008 to 2009, there was a 28-percent increase in the overdose death rate from oxycodone. Oxycodone was the third leading cause of overdose death in 2009, behind heroin and cocaine. The number of hospitalizations with a primary diagnosis related to heroin and synthetic opiates increased from 341 in the first half of 2008 to 455 in the second half of 2009 in the State of New Mexico. The Albuquerque Drug Enforcement Administration cited controlled prescription drugs as the primary drug threat in the area in the first half of 2010.

- **Texas Report.** In Texas, where the area representative reported increasing indicators for other opiates, hydrocodone indicators (deaths, calls to poison control, and drug items analyzed in forensic laboratories) exceeded oxycodone indicators. The "Houston Cocktail" (also called "The Holy Trinity"), a combination of hydrocodone, alprazolam, and carisoprodol, continued to be popular, according to the area representative.
- **Denver/Colorado Report.** Denver area treatment admissions for other opioids have been gradually increasing since 2007 (when they constituted 5 percent of all admissions); they rose to 8 percent in the first half of 2009, and 9 percent in the first half of 2010. Other opioids were the most common drugs found in Colorado drug-related deaths from 2005 to 2009 (figure 10).
- **Seattle Report.** The Seattle area representative reported that drug-caused deaths involving pharmaceutical opioids remained elevated. They remained the most common type of overdose

death in the first half of 2010, representing 53 percent of such deaths in that area. The number and proportion of primary pharmaceutical opioid treatment admissions in the Seattle area also increased continuously from 2003 to the first half of 2010, although they remained less frequent than admissions for other major drugs of abuse.

- Los Angeles Report. In Los Angeles, where indicators for other opiates were reported as mixed, treatment admissions for oxycodone as the primary drug of abuse increased from 184 in the second half of 2009 to 279 in the first half of 2010. Reports of opiates/opioids (other than heroin/morphine) also increased among coroner toxicology cases, from 808 cases in 2009 to 850 projected in 2010 (based on actual January to November data).
- **San Diego Report.** Primary treatment admissions for narcotic analgesics in San Diego remained low and stable at 4 percent of all primary treatment admissions in that area.

#### Figure 9. Unintentional Drug-Specific Overdose Death Rates<sup>1</sup> for Other Opioid-Related Deaths, Compared With Heroin Deaths, Albuquerque, New Mexico: 2000–2009



<sup>&</sup>lt;sup>1</sup>Rates are age-adjusted to the 2000 U.S. Standard Population.

SOURCE: The New Mexico Office of the Medical Investigator, as reported by Nina Shah at the January 2011 CEWG meeting

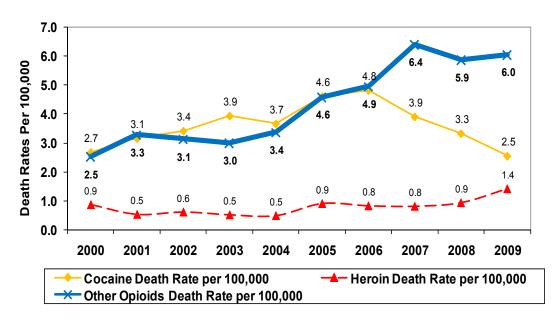
#### Southern Region CEWG Areas:

In CEWG areas in the southern region of the country, indicators for opiates other than heroin and narcotic analgesics continued to be high and increasing.

• Miami MSA/South Florida Report. According to the area representative, most heroin-related deaths in South Florida also involved opioids, based on an analysis of Florida Medical Examiners Commission data by the Center for the Study and Prevention of Substance Abuse at Nova Southeastern University. This study found that in 59 percent of all heroin deaths in Florida during 2009, at least one prescription opioid was also detected at the time of death. Oxycodone continued as the most frequently reported opioid involved in nonmedical use in the South Florida area, according to the area representative, in the first half of 2010. Prescription opioid indicators remained stable at very high levels. There were increasing reports of injection drug use among nonmedical users of prescription opioids in the first half of 2010 in Broward County, according to anecdotal information reported by the Broward County Public Defender's Office and the Broward County Drug Court staff.

• Atlanta Report. In Atlanta, indicators for both oxycodone and hydrocodone were reported as showing recent increases. Oxycodone-related treatment admissions increased in the first half of 2010 to 3.7 percent of all admissions, compared with 2.4 percent in 2009. Forensic laboratories in the Atlanta area reported an increase in the number of drugs seized and identified as containing either oxycodone or hydrocodone in the first half of 2010. The number of analyzed drug items identified as containing oxycodone increased from 339 in 2008, to 524 in 2009, to an annualized estimate of 764 in 2010 (based on 382 items identified in the first half of 2010). Similarly, the number of analyzed drug items identified as containing hydrocodone increased from 400 in 2008, to 515 in 2009, to an annualized estimate of 584 in 2010 (based on 292 items in the first half of 2010).

# Figure 10. Other Opioids and Selected Other Drug-Related Death Rates (per 100,000 Population), Colorado: 2000–2009



SOURCE: Health Statistics Section, Colorado Department of Public Health and Environment, as reported by Kristen Dixion at the January 2011 CEWG meeting

• Baltimore/Maryland/Washington, DC, Report. Numbers of primary treatment admissions for other opiates were also on the rise in the Baltimore/Maryland/Washington, DC, area. For example, in Maryland, primary treatment admissions for other opiates continued their steady increase since 2006; they totaled 5,476 admissions in 2009 and 3,363 in the first half of 2010.

#### Midwestern Region CEWG Areas:

In the Midwest, indicators for opiates other than heroin were reported as stable in Detroit and increasing in Chicago, Cincinnati, Minneapolis/St. Paul, and St. Louis.

- **Detroit Report.** The area representative from Detroit reported that other opiates were more of a problem in the rest of the State than in the city of Detroit based on multiple indicators. The Detroit area representative also reported evidence that the Holy Trinity combination (hydrocodone, alprazolam, and clonazepam) that appeared in Texas also showed up in 57 cases reported to Poison Control Center at Children's Hospital of Michigan in the first half of 2010. The area representatives from Texas and Detroit reported this combination in their areas in 2009 also.
- Minneapolis/St. Paul Report. Primary treatment admissions for other opiates have increased steadily in the Minneapolis/St. Paul area since 2000, and they totaled 8.7 percent of total primary admissions (including alcohol) in the first half of 2010 (compared with 8.3 percent in 2009).
- **St. Louis Report.** Similarly, an increase in primary treatment admissions for other opiates was observed in the St. Louis reporting area, where such admissions increased to 205 in the first half of 2010, compared with 157 in the first half of 2009. Anecdotal information there, reported by the area representative, indicated a rise in the abuse of narcotic analgesics, particularly oxycodone, in the eastern region of the State, with a growing problem with prescription drug abuse in the rural areas surrounding the city of St. Louis.

• **Cincinnati Report.** In Cincinnati, where oxycodone and hydrocodone continued to be the most prevalent of the opioid pharmaceutical products reported as abused, the number of both of these drug items submitted for forensic analysis in the first half of 2010 exceeded those submitted for all of 2009.

#### Northeastern Region CEWG Areas:

Indicators for opiates other than heroin varied across the CEWG areas in the Northeast, from low but rising in New York City, to moderate and stable or increasing in Boston, to moderate and mixed in Philadelphia, and to high and increasing in the State of Maine, as reported by area representatives.

- New York City Report. Although prescription drug indicators remained relatively low in New York City, compared with other substances, many kinds of prescription drugs were available on the street and gaining in popularity, according to street study reports. Treatment admissions for other opiates remained low, but they increased in the first half of 2010 from 2009. Weighted DAWN ED visit data showed a 123-percent significant increase in visits involving nonmedical use of opiates/opioids in 2009 compared with 2004. Within that category, oxycodone, methadone, and hydrocodone all increased significantly in 2009 over 2004 levels, by 262 percent, 92 percent, and 49 percent, respectively.
- **Boston Report.** In Boston, primary treatment admissions for other opioids remained stable from previous reporting periods, at 4 percent of all admissions, but the number of admissions in FY 2010 (*n*=862) was the highest recorded in the past 10 years. The proportion of other opioid helpline calls climbed from 15 percent in FY 2008 to 19 percent in FY 2009, and to 22 percent in FY 2010 (figure 11). In addition, weighted DAWN estimates of opiate/opioid-involved ED visits increased significantly in the Boston area, by 6 percent from 2008 to 2009 and by 17 percent from 2007 to 2009.

- Maine Report. According to the Maine representative, prescription opioid indicators remained high in that State in 2010. Pharmaceutical-related arrests rose from 21 percent of all drug-related arrests in 2007 to 38 percent in 2010 (partial data are for January–October 2010). The percentage of treatment admissions for prescription opioids increased to 57 percent of all primary admissions (excluding primary alcohol admissions) in the State of Maine in the first half of 2010 (figure 12).
- **Philadelphia Report.** Numbers of primary treatment admissions for oxycodone increased in Philadelphia, from 10 admissions in 2007 to 410 in the first half of 2010, while other indicators there for prescription opioids remained stable from previous reporting periods.

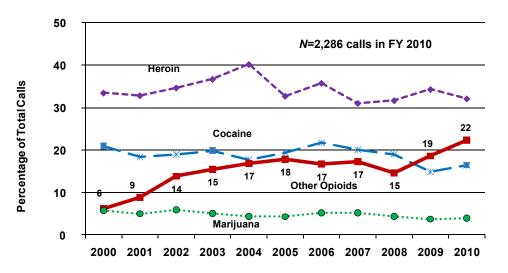
#### Other Highlights:

• **Buprenorphine** indicators were reported as increasing in several CEWG areas in the first half of 2010. Of the eight CEWG areas for which area representatives reported data on buprenorphine,

increased indicators were noted for the first half of 2010 in six areas, namely Boston, Maine, Baltimore and Maryland, Chicago, Cincinnati, and Detroit.

- Baltimore/Maryland/Washington, DC, **Report.** Drug items testing positive for buprenorphine in forensic laboratories increased in the State of Maryland. In the first half of 2010, 463 items were identified as containing buprenorphine, compared with 368 items in the first half of 2009. According to the area representative, probationers/ parolees interviewed as participants in a pilot study designed to collect information about the use of buprenorphine in neighborhoods across the city of Baltimore reported on buprenorphine patterns. They stated that buprenorphine was easily available in Baltimore neighborhoods and is purchased on the street to self-medicate.
- **Detroit, Chicago, and Cincinnati Reports.** In the Midwest, buprenorphine was reported as a pharmaceutical opioid

# Figure 11. Percentage of Helpline Drug Mentions Involving Other Opioids and Selected Other Illicit Drugs, Greater Boston: FY 2000–FY 2010<sup>1</sup>



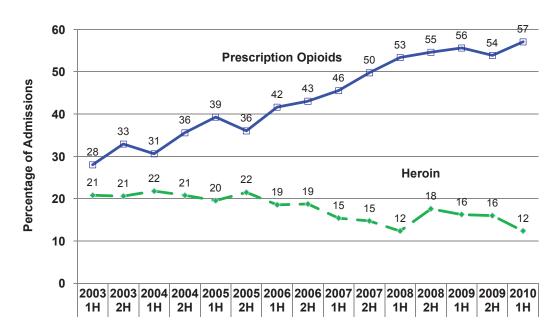
<sup>1</sup>FY 2010 runs from July 1, 2009, through June 30, 2010. Greater Boston includes Boston, Brookline, Chelsea, Revere, and Winthrop (CHNA 19).

SOURCE: Massachusetts Substance Abuse Information and Education Helpline, as reported by Daniel P. Dooley at the January 2011 CEWG meeting

drug of concern by Detroit, Chicago, and Cincinnati area representatives. In the first half of 2010, buprenorphine appeared for the first time in the top 10 drugs detected in forensic laboratories among items seized in Detroit. It also continued to climb the NFLIS rankings in Chicago, where buprenorphine was second in the first half of 2010 among the top four opioids identified in forensic laboratories, behind hydrocodone and ahead of methadone and oxycodone (in 2009, buprenorphine was third behind hydrocodone and methadone). The area representative reported continuing ongoing use of the drug in the Chicago area to avoid withdrawal or to better manage an addiction to heroin. In Cincinnati, calls to poison control involving buprenorphine-containing pharmaceuticals continued to increase, with a 60-percent increase in human exposure calls from 2009 to 2010, and with some increase in cases suspected as intentional abuse of the drug. In addition, the number of drug items submitted for forensic analysis that contained buprenorphine increased by nearly 116 percent in the first half of 2010 from the previous year.

• Boston and Maine Reports. In the Northeast, the Boston area representative reported a statistically significant 39-percent increase in estimated buprenorphineinvolved DAWN ED visit rates from 2008 to 2009. Buprenorphine diversion was identified as an emergent problem in Maine in 2010, according to the area representative. Figure 13 shows the percentage of buprenorphine among other selected opioids that was identified in impaired drivers' urinalysis results. Buprenorphine-positive test results rose from approximately 2 percent in 2006–2008, to approximately 7 percent in 2010. Poison center calls to the Northern New England Poison Center for medication identification showed an increase in buprenorphine identifications from 57 in 2005, to 154 in 2009, and to 334 in 2010.

#### Figure 12. Percentage of Primary Treatment Admissions with Primary Substance Abuse Problems With Heroin and Prescription Opioids (Narcotic Analgesics), Maine: 1H 2003–1H 2010



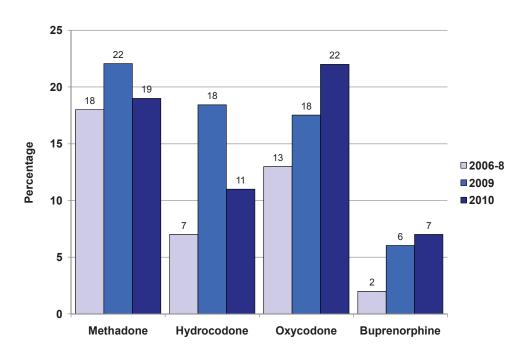
SOURCE: Maine Office of Substance Abuse, as reported by Marcella Sorg at the January 2011 CEWG meeting

- Qualitative reports in some CEWG areas of the abuse of **codeine** continued into the first half of 2010.
  - The Texas area representative reported anecdotal evidence suggesting the popularity of dipping joints in promethazine with codeine cough syrup, as well as drinking "Syrup" (soft drinks laced with codeine cough syrup).
- Methadone continued to appear in drug abuse indicators across the CEWG areas, with several areas reporting increases in indicators.
  - **Seattle Report.** According to the area representative, methadone-related deaths continued to be a concern in Seattle, where the most common pharmaceutical opioids involved in deaths in that area were methadone and oxycodone.
  - **Maine Report.** The Maine area representative reported similar findings. Narcotic

analgesics caused 74 percent of overdose deaths in the first half of 2010 in Maine, with the most frequently identified drugs being methadone and oxycodone, as in 2008 and 2009.

- San Francisco Report. Although the percentages remained very low compared with the proportions of other admissions, treatment admissions for clients enrolled in methadone maintenance programs in San Francisco increased from FY 2008 (0.3 percent) to FY 2009 (0.6 percent).
- Detroit, Boston, and New York City Reports. The area representatives from Detroit, Boston, and New York City reported increases in estimated methadone-involved ED visits in 2009, compared with 2008, in Detroit and Boston and from 2004 to 2009 and 2007 to 2009 in New York City.

# Figure 13. Percentage of Selected Opioids Identified in Urinalyses of Impaired Drivers, Maine: 2006–2008 Through 2010



SOURCE: Maine Health and Environmental Testing Laboratory, as reported by Marcella Sorg at the January 2011 CEWG meeting

- Methadone-related indicators, however, decreased in some areas.
  - Albuquerque/New Mexico and Cincinnati Reports. Deaths related to methadone decreased in Albuquerque (where the death rate for methadone declined from 4.1 per 100,000 persons in 2008 to 1.9 in 2009), and methadone-related calls to the Cincinnati Drug and Poison Information Center decreased from 64 in CY 2009 to 48 in CY 2010.
- Fentanyl continued to show up in indicators in several CEWG areas, but numbers were still small and generally decreasing.
  - St. Louis, Cincinnati, Detroit, and Minneapolis/St. Paul Reports. Fentanyl did, however, emerge in death data in St. Louis County, as well as surrounding counties, according to the St. Louis area representative. It also continued to appear in death data and poison control call data in the Cincinnati area, and area representatives from Detroit and Minneapolis/St. Paul reported increases in estimated fentanylinvolved ED visits from 2008 to 2009.
- **Tramadol**, an opioid analgesic used to treat pain, surfaced as a drug of concern in the Midwest.
  - **Detroit and Minneapolis/St. Paul Reports.** Tramadol was reported as a drug of concern in two CEWG areas in the Midwest, Detroit and Minneapolis/St. Paul. In Detroit, significant increases in estimated DAWN ED visits involving nonmedical use of tramadol occurred in 2009.

# Additional Highlights:

• In the first half of 2010, treatment admissions for primary abuse of **opiates other than heroin** as a percentage of total admissions, including primary alcohol admissions, ranged from approximately 2 to approximately 11 percent in 16 of 18 reporting CEWG areas. The outlier was Maine, where nearly 32 percent of primary treatment admissions were for other opiate problems (section IV, table 7; appendix table 1). While none of the 18 CEWG reporting areas ranked other opiates as being first as primary substances of abuse in percentages of total treatment admissions, including alcohol admissions, other opiates ranked second in Maine, and third in Broward County and Minneapolis/St. Paul (table 2).

- Of total drug items identified in forensic laboratories in 23 CEWG areas, **oxycodone and hydrocodone** often appeared in the top 10 ranked drug items in terms of frequency in the first half of 2010. In Atlanta and Maine, oxycodone ranked third among drug items identified, and it ranked fourth in five other CEWG areas—Boston, Cincinnati, Miami, Maryland, and Philadelphia (table 1). Hydrocodone ranked fourth among drug items identified in Atlanta and Detroit (table 1; section IV, table 8).
- **Buprenorphine** ranked 4th in identified NFLIS drug items in Baltimore; 5th in Boston, Maine, and Maryland; 7th in Seattle; 8th in Detroit and Washington, DC; 9th in New York City and San Diego; and 10th in Albuquerque and Philadelphia in the first half of 2010 (table 1; section IV, table 8).
- Methadone ranked in the top 10 identified drugs in New York City (7th); San Francisco (8th); and Baltimore, Maine, and Maryland (10th each) during this reporting period (table 1; section IV, table 8).

# Benzodiazepines/Depressants

Indicators for benzodiazepines across all CEWG regions continued to be stable, mixed, or increasing during the first half of 2010 for the 15 out of 21 CEWG areas that reported on them. Alprazolam continued to be the most frequently identified benzodiazepine in the NFLIS data reported in this period.

#### Western Region CEWG Areas:

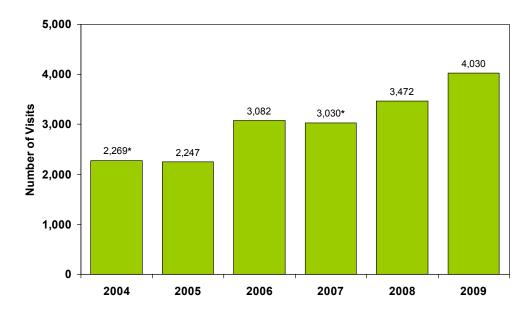
• **Phoenix Report.** In the CEWG areas in the western region, estimated benzodiazepine-involved ED visits increased in 2009, compared

with 2004 and 2007, in Phoenix (figure 14). In Albuquerque, overdose deaths and inpatient hospitalizations for the broad class of sedative/tranquilizers (including alprazolam) increased from 2008 to 2009.

- Los Angeles Report. Los Angeles indicators for benzodiazepines were reported as mixed. While benzodiazepines, tranquilizers, and sedatives together accounted for a very small percentage (0.5 percent) of all treatment admissions in Los Angeles, they increased slightly in numbers from 72 in the second half of 2009 to 80 in the first half of 2010. These types of drugs were present in 12 percent of Los Angeles coroner toxicology cases, which was a decrease from 16 percent in 2009.
- **Denver/Colorado Report.** The Denver area representative reported very small numbers of treatment admissions for the primary abuse of benzodiazepines, and the few benzodiazepine indicators were relatively stable.

- **Seattle Report.** In Seattle, benzodiazepines were present in 22 percent of drug-caused deaths, and they were almost always detected in combination with other drugs.
- Miami MSA/South Florida Report. Benzodiazepine indicators in the Miami MSA/South Florida area remained at relatively high levels, but they were observed to have stabilized in the first half of 2010. Benzodiazepine-related deaths decreased in the first half of 2010 from the second half of 2009 (down by 18 percent in Miami-Dade County and by 38 percent in Broward County). Estimated DAWN ED visits involving benzodiazepines increased in 2009 over 2008 in Broward County.
- Atlanta Report. Elsewhere in the South, indicators for alprazolam remained stable in Atlanta. Alprazolam accounted for 1.2 percent of primary treatment admissions in Atlanta in 2009, compared with 1.4 percent in the first half of 2010. Alprazolam-containing drug items analyzed in forensic laboratories were also stable in Atlanta,

#### Figure 14. Number of Estimated DAWN ED Visits Involving Benzodiazepines, Phoenix: 2004–2009<sup>1</sup>



<sup>1</sup>Statistically significant differences in estimated visits are indicated by the use of the symbol, "\*", next to the count for each year that differs significantly from 2009. No significance testing of data for 2005 or 2006, compared with 2009, was available from CBHSQ. SOURCE: Weighted DAWN, 2009, CBHSQ, SAMHSA, as reported by James Cunningham at the January 2011 CEWG meeting

with 582 estimated drug items in 2010 (based on annualizing 291 cases in the first half of 2010), compared with 583 in 2009.

#### Midwestern Region CEWG Areas:

Increases in benzodiazepine-related indicators were reported in some areas of the Midwest.

- **Detroit Report.** In Detroit, weighted DAWN alprazolam-involved visits and clonazepam-involved visits increased significantly for females from 2008 to 2009 (41 and 61 percent, respectively). Clonazepam-involved weighted DAWN visits also increased significantly for males from 2008 to 2009 (33 percent).
- Chicago Report. Weighted benzodiazepineinvolved DAWN ED visit rates showed a statistically significant increase in Chicago in 2009 compared with 2004.
- **St. Louis Report.** The St. Louis area representative reported that primary treatment admissions for benzodiazepines in that area increased by two-thirds from the first half of 2008 (*n*=25) to the first half of 2009 (*n*=42) and to the first half of 2010 (*n*=31).
- **Cincinnati Report.** In Cincinnati, human exposure cases involving alprazolam and clonazepam reported to the Cincinnati Drug and Poison Information Center remained relatively stable during 2010, compared with 2009, although they continued at a high level.

#### Northeastern Region CEWG Areas:

- New York City Report. In the Northeast, the area representative from New York City reported a 63-percent statistically significant increase in weighted DAWN ED visit rates involving benzodiazepines as a category from 2004 to 2009. Within that category, alprazolam visit rates increased by 79 percent over the 6-year period.
- **Maine Report.** Benzodiazepines continued to play a substantial role in Maine drug problems in 2010, according to the area representative. Benzodiazepines caused 31 percent of drug-induced

deaths in Maine (up from 12 percent in 2000), usually as co-intoxicants in narcotic deaths. Impaired driver urinalyses in 2010 included 40 percent positive for one or more benzodiazepine—17 percent were for alprazolam, and 5 percent were for clonazepam. Primary treatment admissions for benzodiazepines were estimated to increase slightly in Maine in 2010, with 99 admissions in 2009 and 102 admissions in 2010 (annualized from 51 in the first half of 2010).

- **Philadelphia Report.** While the use of benzodiazepines in Philadelphia was lower than use of marijuana, alcohol, cocaine, or heroin, it continued to be common in conjunction with other drugs, according to the area representative. Alprazolam was the most widely used benzodiazepine in Philadelphia, ranking third among all deaths in Medical Examiner toxicology reports when the cause of death was drug intoxication.
- **Boston Report.** All indicators were reported as remaining stable at a moderate level in Boston for benzodiazepines in FY 2010.

# Other Highlights:

- Texas and Atlanta had the highest percentages of alprazolam drug items identified in forensic laboratories in the first half of 2010, at 5.7 and 4.9 percent, respectively (section IV, table 9). Alprazolam ranked third in frequency among the top 10 drug items identified in forensic laboratories in Miami; fourth in New York City and Texas; fifth in Atlanta, Detroit, Philadelphia, and St. Louis; and sixth in Baltimore, Cincinnati, Maryland, and Phoenix (table 1).
- Drug items containing clonazepam accounted for 2.6 percent of all drug items in Boston, where clonazepam was the sixth most frequently identified drug in forensic laboratories in the first half of 2010 (table 1; section IV, table 9).
- Diazepam ranked 10th in Miami, San Diego, and San Francisco among drug items identified in NFLIS forensic laboratories in the first half of 2010 (table 1).

#### **Methamphetamine**

Methamphetamine indicators continued to be more prominent in the West than in any other region of the country. While many area representatives in the western region of the country had reported declining indicators for methamphetamine in 2008 and 2009, including Denver, Phoenix, San Diego, and San Francisco, some indicators appeared to be stabilizing or increasing in the first half of 2010 in these areas.

#### Western Region CEWG Areas:

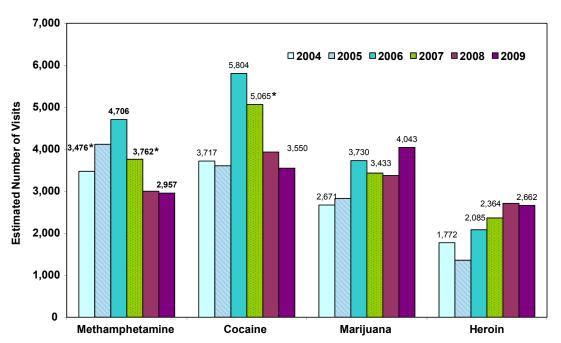
Six CEWG area representatives in the West— Albuquerque, Denver, Honolulu, Los Angeles, Phoenix, and San Francisco—reported stable and mixed indicators for methamphetamine. In three areas—Texas, San Diego, and Seattle—indicators were seen as increasing or stabilizing.

• **Phoenix Report.** Methamphetamine was still a prominent drug in Phoenix, and most

indicators there were flat or slightly increasing, as reported by the area representative. Consistent with this, estimated numbers of DAWN ED visits involving methamphetamine changed little from 2008 to 2009 (figure 15). Seizures of clandestine methamphetamine laboratories remained low, with only 9 seized in the first half of 2010, compared with 29 in 2009.

- Albuquerque/New Mexico Report. In Albuquerque, where indicators were reported as mixed, methamphetamine as a drug threat was considered to be moderate to high in 2010, according to the area representative. Most methamphetamine in New Mexico came from Mexico through California and Arizona, but local production was reported by the area representative as being popular in Albuquerque.
- Los Angeles Report. Methamphetamine indicators continued to be relatively high in Los Angeles. According to the area representative,

# Figure 15. Estimated Number of DAWN ED Visits Involving Methamphetamine<sup>1</sup> and Other Major Illicit Drugs, Phoenix: 2004–2009



<sup>1</sup>Statistically significant differences in estimated visits are indicated by the use of the symbol, "\*", next to the count for each year that differs significantly from 2009. Significance testing was not available from CBHSQ for 2005 or 2006 data, compared with 2009 data. SOURCE: Weighted DAWN, 2009, CBHSQ, SAMHSA, as reported by James Cunningham at the January 2011 CEWG meeting

methamphetamine remained the primary drug of concern for law enforcement agencies in the Los Angeles County region. However, indicators for methamphetamine were mixed for this reporting period. For example, in Los Angeles, while the number of primary treatment admissions for methamphetamine declined somewhat in the first half of 2010 over 2009, the number of drug items seized and identified in forensic laboratories as containing methamphetamine increased. Coroner toxicology cases testing positive for methamphetamine (representing 14 percent of positive tests) also increased in 2010 (402 cases) over 2008 levels (359 cases).

- San Francisco Report. Following a decline that began in 2006 and continued into the 2009 reporting period, indicators for methamphetamine were reported as stable and mixed in the San Francisco area. Primary methamphetamine admissions were stable (in San Francisco County) or down (in counties surrounding San Francisco), but drug items seized and identified as containing methamphetamine in forensic laboratories increased (from 17.3 percent in 2008 to 24.7 percent in the first half of 2010). Weighted methamphetamine-involved DAWN ED visits for the five-county San Francisco area were also up by 9 percent from 2007 to 2009.
- Denver/Colorado Report. In Colorado, methamphetamine remained one of the top five drugs of concern, according to the area representative, and indicators there were seen as mixed. Primary treatment admissions for methamphetamine declined in the Denver metropolitan area to 18 percent of all admissions in the first half of 2010, from a high of 23 percent in the first half of 2007. The proportions of drug items seized and analyzed in forensic laboratories that contained methamphetamine remained relatively stable in Denver in the first half of 2010, at 15 percent of all drug items, compared with 13 percent in 2009 (ranking third amount all drug items in both reporting periods). The area representative reported high methamphetamine purity levels in the Denver area, where much of

the drug is supplied by Mexican drug trafficking organizations.

- · Honolulu/Hawaii Report. The increases in methamphetamine indicators reported by the Honolulu area representative in 2009 were seen as having stabilized during this 2010 reporting period. Treatment admissions in the State of Hawaii, when annualized for 2010, were projected to return to 2008 levels. Deaths on the island of Oahu in which methamphetamine was detected in toxicology screens were relatively stable at an annualized estimate of approximately 76 for 2010 (based on 38 cases in the first half of 2010), compared with 73 such deaths in 2009. Methamphetamine-related arrests in Honolulu, however, had risen, from 337 in 2009 to a 2010 estimate of approximately 480 (based on annualization of the 242 reported arrests reported in the first half of 2010).
- **Texas Report.** Methamphetamine indicators in Texas were starting to increase in the first half of 2010, according to the area representative, reversing a downward trend that began in 2006.
- San Diego Report. Similarly, methamphetamine indicators in the San Diego area were reported as showing some increases, reversing a decline that began there in 2005. The prevalence of test-positives for methamphetamine among female arrestee urinalysis results was 38 percent in 2009, compared with 31 percent in 2008. Among male arrestees, it was 22 percent in 2009, compared with 20 percent in 2008. Proportions of primary treatment admissions for methamphetamine were relatively stable in the first half of 2010, at 29 percent of all admissions (figure 16). Percentages of drug items identified as containing methamphetamine from State and local drug seizures analyzed in forensic laboratories were also stable in the first half of 2010, at 19.8 percent (compared with 20.2 percent in CY 2009 and 20.0 percent in CY 2008).
- **Seattle Report.** Methamphetamine indicators that had been mostly stable in previous reporting periods in Seattle were showing increases from the area representative's perspective.

While treatment admissions for primary methamphetamine remained stable, statewide death and motor vehicular data showed increased indicators. In Washington State, the presence of methamphetamine identified in the toxicology of decedents increased from 221 to 236 deaths for the 12-month FY periods ending in June 2009 and June 2010 respectively. Over this same time period, DUIs (Driving Under the Influence) in which methamphetamine was detected increased substantially, from 387 to 499 cases.

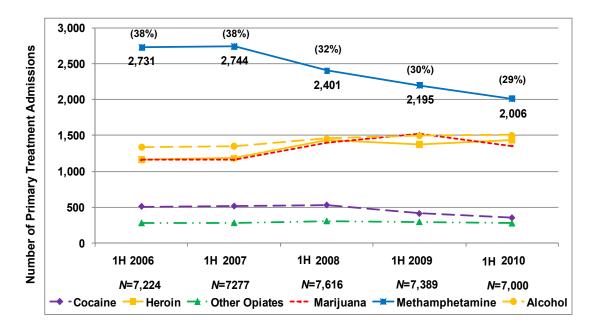
#### Southern Region CEWG Areas:

All CEWG areas in the southern region of the United States continued to report low indicators for methamphetamine.

• Atlanta Report. In Atlanta, methamphetamine remained at stable levels during the first half of 2010. However, drugs seized and identified by forensic laboratories as containing methamphetamine showed an increase in Atlanta in the first half of 2010. This continues a trend that began in 2009. Proportions of treatment admissions for primary methamphetamine in the Atlanta area have been stable at approximately 6 percent since 2008 and were relatively evenly geographically distributed across the metropolitan area.

- Miami MSA/South Florida Report. Consequences indicators for methamphetamine remained very low in the Miami/South Florida area; however, the number of methamphetaminerelated deaths increased by 25 percent statewide, from 39 in the last half of 2009 to 49 in the first half of 2010.
- **Baltimore/Maryland/Washington, DC, Report.** Methamphetamine indicators also remained relatively low in both Maryland and Washington, DC, and were reported by the area representative as confined to isolated communities.

#### Figure 16. Number (and Percentage) of Primary Methamphetamine Treatment Admissions, Compared With Selected Other Primary Drug Admissions, San Diego: January–June (1H), 2006–2010



SOURCE: California Outcomes Measurement System (CaIOMS)/California Alcohol and Drug Data System (CADDS), as reported by Robin Pollini at the January 2011 CEWG meeting

#### Midwestern Region CEWG Areas:

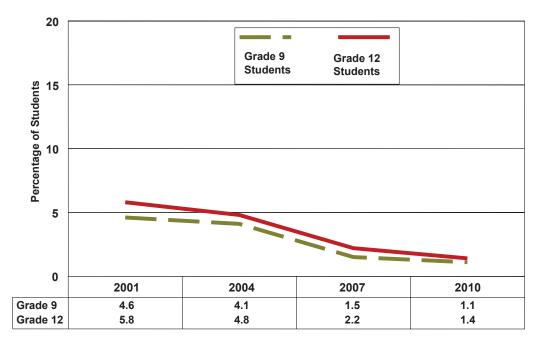
Methamphetamine indicators were also relatively low in the Midwest, although the drug continued to be an important one to monitor in that region, according to area representatives.

- **St. Louis Report.** In the St. Louis area, methamphetamine remained a drug of concern in rural areas according to the area representative. While the bulk of the available methamphetamine in the area was believed to have been imported from Mexico, clandestine methamphetamine laboratories continued to be numerous. Based on anecdotal evidence, local "cooks" continued to develop creative ways of networking to gain access to the chemicals needed to make methamphetamine. St. Louis continued to rank first in the country in the number of small clandestine methamphetamine laboratories.
- **Cincinnati Report.** Use of methamphetamine in Cincinnati remained low in the first half of

2010 relative to other drugs, but cases of human exposure called into the Cincinnati Drug and Poison Information Center increased by 67 percent, and the number of clandestine laboratory seizures increased in the first half of 2010 over comparable 2008 and 2009 levels.

• **Minneapolis/St. Paul Report.** The area representative from Minneapolis/St. Paul reported continuing downward trends for methamphetamine indicators in the Twin Cities area. Estimated numbers of methamphetamine-involved ED visits in Minneapolis decreased significantly from 1,741 in 2004 to 970 in 2009. Past-year use of methamphetamine reported by Minnesota 12th graders also declined, from 5.8 percent in 2001 to 1.4 percent in 2010 (figure 17). In the first half of 2010, proportions of primary methamphetamine treatment admissions represented 6.3 percent of all admissions in the Minneapolis metropolitan area, compared with 6.0 percent in 2009 (down from approximately 12 percent in 2005).

# Figure 17. Self-Reported Past-Year Methamphetamine Use Prevalence Among Minnesota Students: 2001–2010



SOURCE: Minnesota Student Survey, 2010, as reported by Carol Fa kowski at the January 2011 CEWG meeting

- **Detroit Report.** All indicators for methamphetamine remained relatively low in Detroit. Based on information from a law enforcement focus group conducted by the area representative, methamphetamine was considered more of a problem in the western side of the State than in the urban Detroit area.
- Chicago Report. Similarly, methamphetamine-related treatment admissions were reported as more common in the "downstate" region of Illinois than in urban Chicago.

#### Northeastern Region CEWG Areas:

All CEWG area representatives in the four Northeast areas—New York City, Boston, Maine, and Philadelphia—continued to report methamphetamine indicators as low in the first half of 2010.

- New York City Report. In New York City, proportions of primary methamphetamine treatment admissions and drug items analyzed by NFLIS as containing methamphetamine remained at very low levels. According to street reports, there was very little methamphetamine street selling activity in the city, although the drug was still available to users. Estimated DAWN ED visits involving methamphetamine, however, showed a significant increase (63 percent) from 2004 to 2009 in the five boroughs of New York.
- **Boston and Philadelphia Reports.** Similar relatively low indicator levels were reported for the Boston and Philadelphia areas. In Boston, methamphetamine represented less than 1 percent of all estimated ED visits, treatment admissions, helpline calls, and drug laboratory samples analyzed in 2009 and in the first half of 2010.
- Maine Report. The area representative from Maine also continued to report very small numbers for methamphetamine indicators, along with a mixed picture of change, based on primary treatment admissions, arrests, and drug items containing methamphetamine identified in forensic laboratories. There was a very slight increase in methamphetamine arrests, from 3 percent in 2009 to 4 percent in 2010, with most arrests

occurring near the Canadian border. The number of primary methamphetamine treatment admissions remained low and stable, with an estimated 36 admissions in 2010 (annualized from 18 in the first half of 2010), compared with 33 in 2009. A majority (54 percent) of the methamphetamine forensic samples identified were tablets, similar to 2009, according to the area representative.

#### Other Highlights:

- Because methamphetamine is synthetic and must be manufactured, several methods to produce it are used. The popularity of certain production methods depends, among other factors, on the availability of precursors in a specific area. The P2P (phenyl-2-propanone) production method has become more common recently because pseudoephedrine is no longer available in Mexico and is only available in small quantities in the United States. The P2P precursors have been controlled in the United States since the early 1980s, but the ingredients are available in Mexico. Most of the methamphetamine samples currently examined in DEA laboratories are made with the P2P process.
  - **Texas Report.** The Texas area representative reported that most of the methamphetamine in that State came from Mexico, where it was made using a refined P2P process. This process can produce methamphetamine that is nearly as potent as the d-methamphetamine made with pseudoephedrine.
- Prices for methamphetamine were down in several areas in the western region, including Phoenix, Los Angeles, Albuquerque, and San Diego.
  - **Los Angeles Report.** In Los Angeles, for example, the wholesale price of crystal methamphetamine was \$14,000 per pound in the fourth quarter of 2009, compared with \$9,000–\$13,000 per pound in the third quarter of 2010.
  - Albuquerque/New Mexico Report. In Albuquerque, the wholesale price of

Mexican "ice" decreased from \$26,000– \$28,000 per kilogram in December 2008 to \$18,000–\$20,000 per kilogram in June 2009.

 San Diego Report. Finally, in San Diego, the price per pound was \$9,000-\$12,000 in 2009, compared with \$10,000-\$20,000 in 2007.

#### Additional Highlights:

- The proportions of primary treatment admissions, including primary alcohol admissions, for methamphetamine in 18 reporting CEWG areas in this 2010 reporting period were especially high in Hawaii and San Diego, at approximately 36 and 29 percent, respectively. They were also relatively high in Phoenix and San Francisco, at approximately 18 and 16 percent, respectively (section IV, table 10; appendix table 1). Methamphetamine ranked first in treatment admissions as a percentage of total admissions in Hawaii and San Diego; third in Colorado, Denver, Phoenix, and San Francisco; fourth in Los Angeles; and fifth in Atlanta, Minneapolis/St. Paul, St. Louis, and Seattle (table 2).
- In the first half of 2010, methamphetamine ranked first among all drugs in proportions of forensic laboratory items identified in Honolulu and Minneapolis/St. Paul; second in Atlanta, Phoenix, San Diego, and San Francisco; and third in four CEWG areas-Albuquerque, Denver, Los Angeles, and Texas (table 1). The largest proportions of methamphetamine items identified were reported in Honolulu (close to 45 percent), followed distantly by San Francisco (approximately 25 percent), and Atlanta and Minneapolis/St. Paul (approximately 24 percent each). In contrast, less than 1 percent of drug items identified as containing methamphetamine were reported in nine CEWG metropolitan areas east of the Mississippi: Baltimore, Boston, Chicago, Cincinnati, Detroit, Maryland, Miami, New York City, and Philadelphia (figure 23; appendix table 2).

# Marijuana/Cannabis

All 21 CEWG areas continued to report high levels for marijuana indicators in the first half of 2010 as in previous periods, and marijuana continued to be reported as widely available across all areas. The Boston area representative reported some moderation in marijuana arrests and forensic laboratory data, which was attributed to a 2009 change in Massachusetts marijuana laws that affected arrests and drug seizure activity. Most area representatives reported increasing, stable, or mixed indicators, but the area representative from Philadelphia reported that indicators there could be decreasing slightly.

#### Western Region CEWG Areas:

Marijuana remained a major drug of abuse in the western CEWG areas. All nine CEWG area representatives in the West reported continuing high marijuana indicators, which were described as stable, increasing, or mixed. Marijuana indicators were high and stable or mixed in Albuquerque, Hawaii, Los Angeles, San Diego, San Francisco, Seattle, and Texas. They were high and increasing in Denver, and they were mostly increasing in Phoenix, as reported by the area representatives.

• Denver/Colorado Report. Excluding alcohol, marijuana continued to be the most common primary drug of abuse among treatment admissions both statewide in Colorado and in the greater Denver area, and the supply and demand for marijuana continued to be very high, according to the area representative. Marijuana represented the highest percentage of treatment admissions (excluding alcohol) in the State (at 39 percent) and in the Denver area (at 41 percent) in the first half of 2010. Marijuana ranked first in 2009 in Colorado drug-related hospital discharges, with both the number and rate increasing over 2008 (4,451 marijuana-related discharges in 2009, compared with 4,256 in 2008). Marijuana/cannabis continued to rank second, behind cocaine, in proportion of drugs seized and identified in forensic laboratories in Denver in the first half of 2010, increasing slightly from 26.4 percent of all drugs in 2009 to 27.1 percent in the first half of 2010.

- · Phoenix Report. The Phoenix area representative reported that primary marijuana treatment admissions in Maricopa County remained stable in the first half of 2010, at 16 percent of all admissions (they accounted for 15 percent in the first half of 2009). Other marijuana indicators, however, were increasing. Marijuanarelated hospital admissions in Maricopa County continued an upward trend that began in 2007, rising from 1,833 admissions in the second half of 2009 to 2,103 admissions in the first half of 2010. Drug items seized and identified in Phoenix area forensic laboratories as containing marijuana/cannabis increased sharply in the first half of 2010, to 1,703 items, from 1,076 items in the first half of 2009.
- · Honolulu/Hawaii Report. The Honolulu representative reported a mixed picture for marijuana in this reporting period, although most indicators were increasing. In Honolulu, numbers of treatment admissions for marijuana appeared to be decreasing. Primary treatment admissions for marijuana in the State of Hawaii numbered 2,358 in 2009, with an estimated approximate number of 1,800 marijuana admissions for 2010 (annualized from 902 reported cases for the first half of the year). However, the number of decedents who tested positive for marijuana in their toxicology screens appeared to be increasing on Oahu; there were 49 such deaths in 2009, compared with 27 in the first half of 2010 (annualized to 54). Similarly, police cases involving marijuana in Honolulu appeared to be increasing in the first half of 2010 (at 102-annualized to 201—compared with 178 in 2009).

According to the area representatives, marijuana indicators in the first half of 2010 were high relative to other drugs and stable in Albuquerque, Seattle, and Texas, and they were reported by CEWG area representatives as high and mixed in Los Angeles, San Francisco, and San Diego.

• Los Angeles Report. In Los Angeles, the proportion of drug items seized and identified as containing marijuana/cannabis in NFLIS data showed that the increase that began in 2007

continued, increasing from 37.9 percent of all items in 2009 to 40.1 percent in the first half of 2010. Primary marijuana treatment admissions also continued to increase, as they have since 2006. At 24.3 percent of all admissions in the first half of 2010 (a slight increase over 23 percent in the first half of 2009), marijuana admissions exceeded admissions for all other drugs, including alcohol in the first half of 2010. Figure 18 shows the increasing proportions of marijuana treatment admissions for both primary marijuana problems and primary or secondary marijuana problems in Los Angeles from 2000 to 2009. Conversely, the number of coroner toxicology cases with marijuana detected in Los Angeles was projected by the area representative to decrease in 2010 to 353 cases, from 401 cases in 2009.

- San Francisco Report. In San Francisco, primary treatment admissions for marijuana in the five-county bay area were stable from 2007 to this reporting period (FY 2010) at approximately 10 percent of all admissions. Marijuana-involved DAWN ED visits and visit rates increased for the bay area in 2009, by 32 percent from 2007 and by 76 percent from 2004. The proportion of items seized and identified as marijuana/cannabis in forensic laboratories in the San Francisco area, however, declined, from approximately 32 percent in 2008 to approximately 26 percent in the first half of 2010.
- San Diego Report. The San Diego area representative also reported mixed marijuana indicators, but the changes observed were generally slight. Primary marijuana treatment admissions in San Diego County dropped somewhat in the first half of 2010 (to 19 percent from 21 percent in 2009), reversing the previous increasing trend each year from 2007 to 2009. Similarly, drug items seized and identified in forensic laboratories in the NFLIS system as containing marijuana/cannabis showed a small decrease in this reporting period, from 51.7 percent of all items identified in 2009 to 48.2 percent in the first half of 2010. The prevalence of marijuana-positive

urinalysis results among all arrestees—male and female adults and juveniles—increased, however, in 2009 data. After reaching a 9-year low of 26 percent in 2008, marijuana test-positive prevalence among female arrestees rose in 2009 to 28 percent; the prevalence for males was 36 percent in 2008 and 37 percent in 2009. The largest shift was in marijuana test-positive prevalence among juvenile arrestees, which jumped from 44 percent in 2008 to 51 percent in 2009.

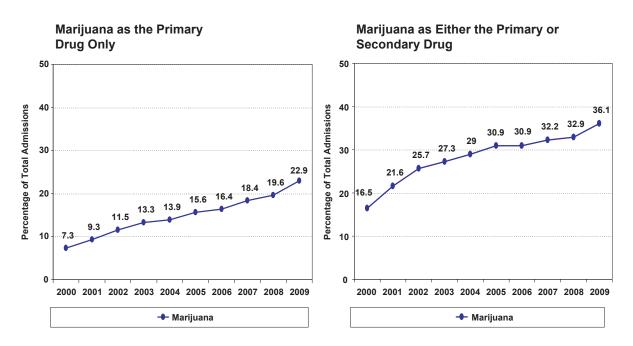
• Albuquerque/New Mexico and Los Angeles Reports. Marijuana prices were increasing in some areas in the West, including Albuquerque and Los Angeles, according to the area representatives. The greatest increase occurred in Los Angeles, where the wholesale price for domestic marijuana approximately doubled from the fourth quarter of 2009 (\$750 per pound) to the third quarter of 2010 (\$1,300– \$1,800 per pound).

#### Southern Region CEWG Areas:

According to the CEWG area representatives, marijuana indicators continued to be relatively high in all three CEWG areas in the South. While they were reported as increasing in Atlanta and the Baltimore/Maryland/Washington, DC, area, they were seen as stable in the Miami/South Florida area in the first half of 2010.

• Atlanta Report. Marijuana continued as the most commonly used illicit substance in Atlanta, based on primary treatment admissions. Primary marijuana treatment admissions in the first half of 2010, marijuana test-positive urinalysis results among male arrestees in 2009, and crisis line calls related to marijuana in the first quarter of 2010 all showed increases over previous reporting periods. Treatment admissions for marijuana for the 28-county Atlanta MSA constituted 25.8 percent of all admissions in the first half of 2010, representing a slight increase over the 23.3

# Figure 18. Treatment Admissions for Marijuana as the Primary Drug of Abuse Only or as Either the Primary or Secondary Drug of Abuse, Los Angeles: 2000–2009



SOURCE: Los Angeles Alcohol and Drug Program Administration (LAADPA)/California Alcohol And Drug Program (CAADP); California Alcohol and Drug Data System (CADDS) for 2000–2005, and California Outcome Monitoring System (CalOMS) for 2006–2009; California Department. of Finance, as reported by Mary-Lynn Brecht at the January 2011 CEWG meeting percent of all admissions in 2009. Among male arrestees in Fulton County, the percentage testing positive for marijuana increased from 39.2 percent in 2008 to 44.9 percent in 2009. There was also an increase in the percentage of male arrestees in the city of Atlanta reporting any treatment for marijuana (27.1 percent in 2009, compared with 23.2 percent in 2008). Finally, calls to the statewide Georgia crisis line for marijuana in the first quarter of 2010 continued to rise; marijuana was the most reported illicit drug among calls, according to the area representative.

- Baltimore/Maryland/Washington, DC, Report. In Maryland, primary marijuana treatment admissions and NFLIS drug items testing positive for marijuana/cannabis in forensic laboratories were increasing. There were an estimated number of approximately 12,000 primary treatment admissions in 2010 in Maryland (based on annualization of the figure of 5,943 such admissions for the first half of 2010). This compares with 10,911 admissions for marijuana in Maryland in 2009. The proportions of items containing marijuana/cannabis that were seized and analyzed in Maryland forensic laboratories increased slightly to 47.0 percent of all items, from 42.7 percent in 2009.
- Miami MSA/South Florida Report. Although marijuana levels were reported as remaining high in the Miami MSA/South Florida CEWG area, most indicators appeared to be stabilizing in the first half of 2010, according to the area representative.

#### Midwestern Region CEWG Areas:

All CEWG areas located in the Midwest continued to report high and stable or increasing marijuana indicators.

• **Detroit Report.** The Detroit area representative reported that marijuana was widespread there, with high and stable and some possibly increasing indicators. In Detroit, primary treatment admissions for marijuana increased to their highest proportion ever reported in FY 2010, accounting for 17.3 percent of all admissions in that year, compared with 14.6 percent in FY 2009. The weighted DAWN ED visit rate involving marijuana in the five-county Detroit area showed a significant increase from 2008 to 2009 for the total population.

• **Minneapolis/St. Paul Report.** Similarly, marijuana indicators in Minneapolis/St. Paul were high and stable with some possible increases in the first half of 2010, according to the area representative. In the Twin Cities area, the proportion of treatment admissions with marijuana as the primary substance of abuse was higher than for any other substance except alcohol. Such admissions constituted 19.3 percent of total admissions in the first half of 2010, compared with 18.1 percent in 2009. In 2009, 46.9 percent of male arrestees in Hennepin County tested positive for marijuana, close to the 47.8 percent in 2008, but an increase over 42.7 percent in 2007.

Area representatives from Cincinnati, St. Louis, and Chicago reported high and stable indicators for marijuana in the first half of 2010.

- **Cincinnati Report.** While marijuana availability and use remained high across the Cincinnati area, some indicators pointed to a leveling off. However, marijuana continued to dominate all other reported drugs (excluding alcohol) as the most frequently reported primary drug of abuse among treatment admissions in Cincinnati. Marijuana accounted for 28.9 percent of Cincinnati admissions during the first half of 2010—stable since the 28.0 percent reported in 2009.
- **St. Louis Report.** In St. Louis, primary treatment admissions for marijuana, which showed increases from 2007 to 2008 (from 20.3 to 23.7 percent), and then decreased slightly in 2009 (to 21.3 percent), remained stable in the first half of 2010, at 22.5 percent of all admissions.
- Chicago Report. In Chicago, marijuana/cannabis continued to be the most frequently identified drug among drug items seized and analyzed in forensic laboratories (at 59 percent of all items, compared with 58 percent in 2008 and 2009).

#### Northeastern Region CEWG Areas:

Marijuana indicators in three CEWG areas located in the Northeast remained relatively high (New York City, Maine, and Philadelphia), while moderate levels were reported as persisting in Boston, according to the area representatives.

- New York City Report. In New York City, marijuana primary treatment admissions continued to increase, reaching the highest level ever reported at 28 percent of all treatment admissions. More clients in treatment had a primary, secondary, or tertiary problem with marijuana than with any other drug. According to street reports, marijuana continued to be of good quality and widely available in the city.
- Maine Report. The Maine area representative reported continuing high levels and mixed indicators for marijuana. There was an increase in the percentage of arrests for marijuana from 2008 to 2010 through December (figure 19), and the proportion of drug items seized and identified in forensic laboratories as containing marijuana/

cannabis rose from 7 percent of all items in 2009 to 10 percent in 2010. Conversely, the proportion of urinalysis tests of impaired drivers in Maine that were positive for cannabinoids decreased to 22 percent in 2010 from 30 percent in 2006–2008.

- **Philadelphia Report.** High levels of marijuana indicators continued to be reported by the Philadelphia area representative. Marijuana ranked first in proportions of primary treatment admissions (22.8 percent of all admissions); first in number of drug items analyzed in forensic laboratories (38.1 percent of samples seized and identified); and first in the Philadelphia Adult Probation and Parole Department (APPD) study, with 53.4 percent of all drug-positive urine drug screens positive for marijuana. The area representative reported, however, that some indicators—primary treatment admissions and APPD screens—may have decreased slightly in the first half of 2010 from 2009.
- **Boston Report.** In Boston, the effects of a change in 2009 in the Massachusetts marijuana possession law that decriminalized possession

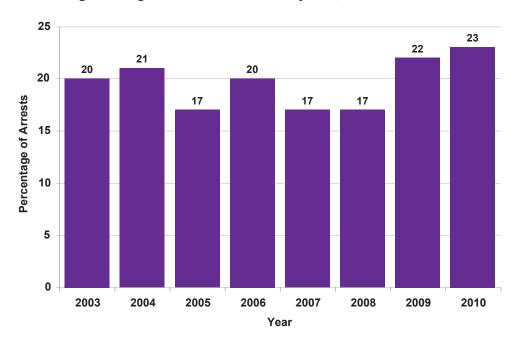


Figure 19. Percentage of Drug-Related Arrests for Marijuana, Maine: 2003–2010

SOURCE: Maine Drug Enforcement Agency, as reported by Marcella Sorg at the January 2011 CEWG Meeting and revised March 2012

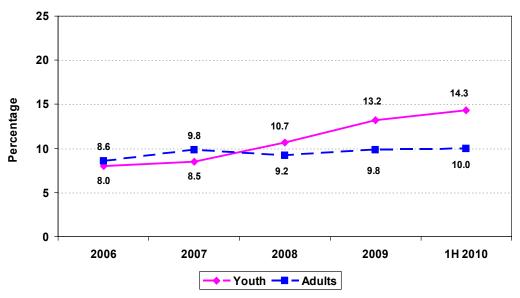
of an ounce or less of the drug continued to be observed in the first half of 2010. The proportion of marijuana/cannabis drug items seized and identified in NFLIS forensic laboratories declined from 43 percent in 2008, to 24 percent in 2009, and to 26 percent in the first half of 2010. Marijuana drug arrests also decreased in Boston. Treatment and other indicators not directly affected by the new legislation were stable at moderate levels there. The proportion of marijuana treatment admissions has remained stable between 4 and 5 percent for 10 years, from FY 2001 to FY 2010. The proportion of marijuana helpline calls also remained stable at 4 percent from FY 2008 to FY 2010.

#### Other Highlights:

• Several CEWG representatives reported high and increasing marijuana indicators for youth in their areas. Younger treatment admissions for marijuana than for other drugs were noted in several CEWG areas by the area representatives.

- **New Mexico Report.** New Mexico high school students reported the highest prevalence use rates during the 2009–2010 school year among students nationally for current marijuana use (at 28 percent) and initiating use before age 13 (18.4 percent).
- **Seattle Report.** In Seattle, marijuana has represented the majority of primary treatment admissions for youth since 1999. In the first half of 2010, 65 percent of youth treatment admissions reported marijuana as the primary drug, up from approximately 60 percent in 2008.
- Los Angeles Report. In Los Angeles, marijuana was reported as the primary substance of abuse by 24 percent of all treatment admissions in the first half of 2010, with more than one-half (59 percent) of those marijuana admissions among adolescents younger than 18, a larger percentage for this age group than in 2009 (54 percent). Figure 20 shows the relative stability of

Figure 20. Percentage of Primary Treatment Admissions for Marijuana as the Primary Substance of Abuse, Los Angeles, Youth Versus Adults<sup>1</sup>: 2006–1H 2010



<sup>1</sup>Percentages of treatment admissions among youth with mar juana as the primary drug of abuse are for those younger than 18, while adult admissions are for those age 18 and older.

SOURCE: Los Angeles Alcohol and Drug Program Administration (LAADPA)/California Alcohol And Drug Program (CAADP); California Alcohol and Drug Data System (CADDS); and California Outcome Monitoring System (CalOMS); California Department of Finance, as reported by Mary-Lynn Brecht at the January 2011 CEWG meeting proportions of primary treatment admissions for marijuana among adults 18 and older (rising slightly from 8.6 percent in 2006 to 10 percent in 2009), compared with greater increases among youth younger than 18 (from 8.0 percent in 2006 to 14.3 percent in the first half of 2010).

- **Baltimore/Maryland/Washington, DC, Report.** Youth treatment clients in Maryland were more likely to mention marijuana than any other drug as the primary drug, according to the area representative. In Washington, DC, the proportion of juvenile arrestees testing positive for marijuana increased slightly during this reporting period, from 52.2 percent in 2009 to 54.7 percent in 2010 (January–November).
- **Miami MSA/South Florida Report.** The area representative from South Florida reported that the 2010 Florida Youth Substance Abuse Survey showed increases in prevalence of past-30-day marijuana use among middle and high school students statewide, as well as in Miami-Dade and Broward Counties.
- **Minneapolis/St. Paul Report.** In the Minneapolis/St. Paul CEWG area, in the first half of 2010, 68.3 percent of the clients admitted to treatment with marijuana as the primary problem were younger than 26 (31.3 percent were younger than 17). Past-year marijuana use by Minnesota 12th graders increased from 21.8 percent in 1992 to 30.6 percent in 2010.
- **Texas Report.** Smoking marijuana in blunt cigars ("blunts") continued to be a popular mode for young marijuana users, according to the area representative from Texas. Nine percent of Texas secondary students used marijuana in blunts "most of the time or always" in 2010, compared with 8 percent who used pipes, 7 percent who used joints, and 6 percent who used bongs.

- Percentages of primary marijuana treatment admissions, including primary alcohol admissions, were highest in the first half of 2010 in Miami MSA/Dade County (38.7 percent), followed by Miami MSA/Broward County (34.0 percent), Cincinnati (28.9 percent), and New York City (27.7 percent). The lowest proportions of such admissions were in Boston (4.1 percent) (section IV, table 11; appendix table 1).
- Marijuana ranked first as the primary drug problem among total drug admissions, including alcohol admissions, in 4 of 23 CEWG reporting areas: Miami MSA/Broward County, Miami MSA/ Dade County, Philadelphia, and Los Angeles. Marijuana ranked second among primary drugs of admission in seven additional areas: Atlanta, Cincinnati, Colorado, Denver, Minneapolis/St. Paul, New York City, and Seattle (table 2).
- · Marijuana/cannabis ranked in either first or second place in frequency in the proportion of drug items identified in forensic laboratories in the first half of 2010 in all CEWG areas, with the exception of Atlanta, where it ranked seventh. Marijuana/cannabis ranked in first place among identified drugs in 13 of 23 CEWG areas in this reporting period: Baltimore, Boston, Chicago, Cincinnati, Detroit, Los Angeles, Maryland, Philadelphia, Phoenix, St. Louis, San Diego, San Francisco, and Texas. It ranked second in the remaining nine CEWG areas (table 1). The highest proportions of marijuana items identified in the NFLIS system were in Chicago, Detroit, and St. Louis, at approximately 59, 51, and 50 percent, respectively (figure 23; appendix table 2).

#### MDMA/Ecstasy and Other Club Drugs, Including MDA, GHB, LSD, and Ketamine

#### *MDMA (3,4-methylenedioxymethamphetamine)*

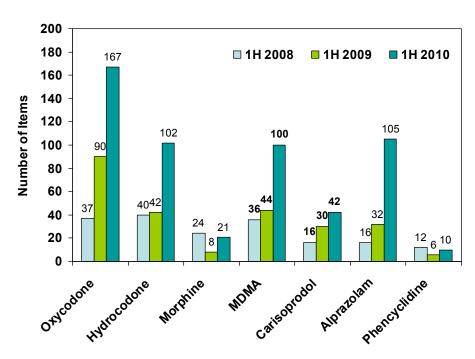
MDMA indicators continued to be low across all regions of the country when compared with most other drug indicators. However, MDMA remained a persistent problem in several CEWG areas, as reported by area representatives in Update Briefs and slide presentations in 10 of the 21 CEWG reporting areas. A slight upward trend in indicators was reported in the first half of 2010 in six areas in the West (Albuquerque, Los Angeles, Phoenix, San Diego, Hawaii, and Texas); three areas in the Midwest (Chicago, Minneapolis/St. Paul, and St. Louis); and one CEWG area in the Northeast (New York City). The area representatives from Phoenix and Los Angeles cited MDMA as a substance to monitor in future reporting periods. Declines in MDMA indicators were noted by three area representatives—from Denver, Atlanta, and Miami/South Florida.

#### Western Region CEWG Areas:

MDMA persisted as a problem reported by area representatives in the western region of the country. Area representatives from Albuquerque/New Mexico, Phoenix, Los Angeles, San Diego, San Francisco, Hawaii, and Texas reported relatively low but increasing MDMA indicators. Drug items seized and identified as containing MDMA in NFLIS forensic laboratories increased in Albuquerque, Phoenix, Los Angeles, and San Diego.

- Albuquerque/New Mexico Report. The percentage of MDMA items in Albuquerque increased slightly, from 0.9 percent of all identified items in 2008 to 1.5 percent in the first half of 2010.
- **Phoenix Report.** In Phoenix, the number of MDMA items increased from 36 in the first half of 2008, to 44 in the first half of 2009, and to 100 in the first half of 2010 (figure 21).
- Los Angeles Report. The percentage of MDMA items analyzed in Los Angeles increased in the first half of 2010 to 4.7 percent of all items, up from 2.8 percent in 2009.
- San Diego Report. Similarly, drug items seized and identified as containing MDMA/ ecstasy in forensic laboratories in the San Diego

# Figure 21. Number of NFLIS Drug Items Identified in Forensic Laboratories as Containing MDMA and Selected Other Drugs, Maricopa County (Phoenix): 1H 2008–1H 2010



SOURCE: NFLIS, DEA, retrieved on December 16, 2010, as reported by James Cunningham at the January 2011 CEWG meeting

area increased slightly in the first half of 2010 to 2.2 percent of all items analyzed, up from 1.9 percent in 2009.

- Honolulu/Hawaii Report. The Honolulu/ Hawaii area representative noted that items identified as MDMA in forensic laboratories in the first half of 2010 represented approximately twice the number of samples analyzed as in previous reporting periods.
- Phoenix and San Francisco Reports. The Phoenix area representative reported a large increase in estimated MDMA-involved DAWN ED visits, from 94 in 2007 to 361 in 2009 (the highest number reported in 4 years). In San Francisco, the area representative reported that estimated MDMA-involved ED visits were 188 in 2007 and 369 in 2009 (a 96-percent increase from 2007 to 2009).
- Los Angeles Report. In Los Angeles, primary treatment admissions for MDMA nearly doubled in the first half of 2010 from 2009, but they still remained at a low level, at 0.5 percent of all admissions.

#### Southern Region CEWG Areas:

• Atlanta and Miami MSA/South Florida Reports. In the South, the area representatives from Atlanta and Miami/South Florida reported low MDMA indicators that continued to decrease. Primary treatment admissions for MDMA declined from 0.2 percent of all admissions in Atlanta in 2009 to 0.1 percent in the first half of 2010. In Miami-Dade County, the rate of weighted DAWN ED visits involving MDMA decreased from 11.9 per 100,000 population in 2008 to 7.7 per 100,000 in 2009. The estimated DAWN ED rate remained stable, however, in Broward County, at 7.3 per 100,000 in 2008 and 8.3 per 100,000 in 2009.

#### Midwestern Region CEWG Areas:

All five area representatives in the Midwest reported a continuing presence of MDMA indicators.

- Chicago Report. In Chicago, where MDMA was reported by the area representative as remaining popular in low income African-American neighborhoods, drug items seized and identified as containing MDMA increased to 1.9 percent of all NFLIS items in the first half of 2010, compared with 1.6 percent in 2009 and 1.0 percent in 2008.
- **Minneapolis/St. Paul Report.** In the Minneapolis/St. Paul Twin Cities area, numbers of estimated MDMA-involved DAWN ED visits increased from 204 in 2004 to 475 in 2009.
- **Cincinnati Report.** The area representative from Cincinnati reported low to moderate levels of MDMA, with indicators increasing slightly. MDMA-related calls to the Cincinnati Drug and Poison Information Center increased from 17 in 2009 to 20 in 2010.

#### Northeastern Region CEWG Areas:

- New York City Report. MDMA indicators were reported by the area representative as increasing in New York City in the first half of 2010. NFLIS items seized and identified as containing MDMA increased in number and ranking, rising from 11th place in 2008 to 6th in the first half of 2010. Additionally, there was a statistically significant 43-percent increase in estimated MDMA-involved ED visits in the five boroughs of New York City from 2008 to 2009 (figure 22).
- **Maine Report.** MDMA-related drug arrests by the Maine Drug Enforcement Agency increased from 1 percent of all arrests in 2009 to 3 percent in 2010.

#### **Other Highlights:**

• New Mexico and St. Louis Reports. An increase in ecstasy use by youth was reported in New Mexico and St. Louis based on the YRBS and the Missouri School Survey. In New Mexico, the YRBS estimate for current ecstasy use increased significantly among high school students, from 5.1 percent in 2007 to 8 percent in 2009 (New Mexico ranked first among all States in the 2009 YRBS data).

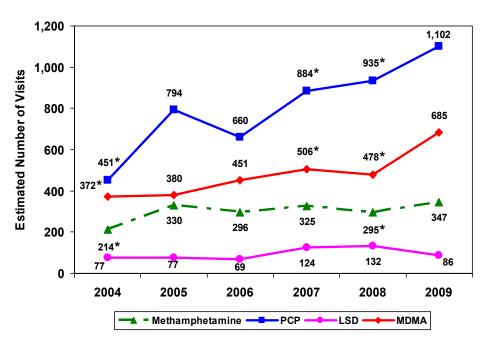
• MDMA was the fourth most frequently identified NFLIS drug item in Chicago, Minneapolis/ St. Paul, Honolulu, and San Francisco in the first half of 2010 (table 1; section IV, table 12). It ranked fifth in proportion of drug items identified in forensic laboratories in Denver and Los Angeles. MDMA represented 5.9, 4.8, 4.8, 4.7, and 4.0 percent of total drug items identified in forensic laboratories in the first half of 2010 in Minneapolis/St. Paul, Denver, San Francisco, Los Angeles, and Seattle, respectively (section IV, table 12).

# *Other Club Drugs, Including MDA, GHB, LSD, and Ketamine*

Other Club Drugs (including MDA [3,4-methylenedioxyamphetamine], GHB [gamma hydroxybutyrate], and ketamine) appeared relatively infrequently in indicator data for all areas. However, LSD (lysergic acid diethylamide) remained a drug of concern to CEWG representatives.

- **MDA** was reported among forensic items identified in 9 of 23 areas: Atlanta, Baltimore, Denver, Honolulu, Maryland, New York City, Philadelphia, San Francisco, and Texas (section IV, table 13). Like ketamine, GHB, and LSD, MDA did not figure among the top 10 most frequently identified drug items by NFLIS in any CEWG area in the first half of 2010 (table 1).
- **GHB** drug items were not among the top 10 drug items identified by NFLIS for any CEWG area in the first half of 2010, although 11 of 23 areas reported 1 or more such items, including Albuquerque, Atlanta, Chicago, Los Angeles, Miami, New York City, St. Louis, San Diego, San Francisco, Seattle, and Washington, DC (section IV, table 13).
- Ketamine was among the drug items identified in the NFLIS system in the first half of 2010 in 19 of 23 areas, with exceptions being Cincinnati, Minneapolis/St. Paul, Texas, and Washington, DC. Ketamine did not appear among the top 10

# Figure 22. Estimated Number of DAWN ED Visits Involving MDMA, PCP, LSD, and Methamphetamine, New York City: 2004–2009<sup>1</sup>



<sup>1</sup>Statistically significant differences in estimated visits are indicated by the use of the symbol, "\*", next to the count for each year that differs significantly from 2009. No significance testing of data for 2005 or 2006, compared with 2009, was available from CBHSQ. SOURCE: Weighted DAWN, 2009, CBHSQ, SAMHSA, as reported by Rozanne Marel at the January 2011 CEWG meeting

ranked drug items in any CEWG area (section IV, table 13).

 In the first half of 2010, LSD was among identified drug items in 14 of 23 CEWG areas: Atlanta, Chicago, Cincinnati, Denver, Detroit, Los Angeles, Maine, Maryland, New York City, Philadelphia, Phoenix, St. Louis, San Diego, and San Francisco, although it made up 1 percent or less of all drug items identified in those areas (section IV, table 13).

### PCP

PCP (phencyclidine) remained a drug of concern in the Baltimore/Maryland/Washington, DC, area, New York City, and Philadelphia, and it persisted on the drug scene in several other CEWG areas and across all CEWG regions, including San Francisco, Los Angeles, Chicago, and St. Louis, as reported by those CEWG area representatives.

#### Western Region CEWG Areas:

• PCP continued to be detected in drugs analyzed in forensic laboratories in the first half of 2010 in all CEWG areas in the West, with the exception of Denver and Honolulu. However, indicators remained very low (less than 1 percent).

#### Southern Region CEWG Areas:

• Baltimore/Maryland/Washington, DC, Report. The area representative reported elevated indicators for PCP in comparison to many other regions. Primary treatment admissions for PCP in Maryland were reported as increasing in the first half of 2010, while the percentage of adult arrestees testing positive for PCP increased slightly in Washington, DC, from 8.9 percent in 2009 to 9.8 percent in 2010 (through November). In comparison, analyzed drug items testing positive for PCP remained low in Baltimore and Maryland (less than 1.0 percent) and relatively stable in Washington, DC (5.8 percent).

#### Midwestern Region CEWG Areas:

• **St. Louis Report.** The representative from the St. Louis area reported a continuing although low

presence of PCP in urban areas, where it was said to be an indigenous drug in Kansas City and St. Louis.

### Northeastern Region CEWG Areas:

- **New York City Report.** The New York City area representative reported a significant 18-percent increase in the estimated number of PCP-involved DAWN ED visits in the city from 2008 to 2009.
- **Philadelphia Report.** In Philadelphia, where the area representative reported continuing moderate PCP levels, the most common route of administration of the drug continued to be smoking in combination with marijuana in "blunts" (blunt cigars). Some indicators in Philadelphia, namely treatment admissions and positive toxicology detection in decedents, were reported as increasing in the first half of 2010, according to the area representative. PCP represented 4.6 percent of all Philadelphia treatment admissions, compared with 3.9 percent in 2009. PCP was detected in 7.3 percent of decedents, compared with 5 percent in 2009.
- In Washington, DC, PCP was fourth among the top drug items identified in forensic laboratories in the first half of 2010. PCP ranked sixth in drug items identified in that period in Philadelphia, seventh in Maryland and Los Angeles, eighth in New York City, and ninth in Chicago (table 1).
- Washington, DC, and Philadelphia reported the highest percentages of PCP drug items identified in the first half of 2009 in NFLIS data, at 5.8 and 2.1 percent of drug items identified, respectively (section IV, table 13).

### Other Drugs (Including BZP, TFMPP, Carisoprodol, Levamisole, Salvia Divinorum, Psilocin/Psilocybin, Quetiapine, Cathinone/Cathine, Gabapentin, and Foxy Methoxy)

Polysubstance abuse, noted in previous CEWG reporting periods, persisted across all CEWG areas, and high levels of alcohol abuse continued to be noted for several CEWG areas.

#### BZP (1-Benzylpiperazine)

BZP, a synthetic stimulant that is illegal and has no accepted medical use in the United States, continued to be reported by area representatives as an emerging drug of concern in several CEWG areas across all CEWG regions. BZP was permanently controlled in 2004 as a Schedule I substance under the Controlled Substances Act, and it is one of the DEA's emerging drugs of interest.

Several CEWG area representatives reported stable or increasing BZP indicators in the first half of 2010, including Seattle and Texas in the West; Miami in the South; Detroit and Chicago in the Midwest; and New York City in the East.

- BZP continued to be detected in tablets sold as MDMA, as reported by area representatives from Denver and Miami, where 65 percent of crime laboratory samples alleged to be ecstasy were identified as BZP.
- In the first half of 2010, BZP appeared among the identified drugs in NFLIS forensic laboratories in all 23 CEWG areas (section IV, table 13). BZP ranked among the top 10 most frequently identified drug items in NFLIS data in the first half of 2010 in 7 of 23 CEWG areas. BZP ranked 5th in Chicago and Washington, DC; 8th in Maine; 9th in Denver; and 10th in Detroit, Minneapolis/St. Paul (tied with psilocin), St. Louis, and Texas.

# *TFMPP or 1-(3-trifluoromethylphenyl) piperazine*

TFMPP<sup>11</sup> is a synthetic substance with no accepted medical use in the United States that is used for its hallucinogenic effects. Often taken in combination with BZP as a substitute for MDMA, TFMPP is currently not a DEA-controlled substance. It is, however, causing growing concern among representatives in several CEWG areas, including Atlanta and Texas. Because it is not a controlled substance, it may frequently not be reported or tested for in forensic laboratories, a dynamic which would influence indicator data. It is also one of the DEA's emerging drugs of interest.

• According to NFLIS data for the first half of 2010, TFMPP ranked ninth among drug items identified in forensic laboratories in Atlanta, where 76 such drug items were identified (table 1). TFMPP drug items constituted 1.3 percent of Atlanta's drug items in the first half of 2010 (section IV, table 13, footnote 1, appendix table 2).

# Carisoprodol (Soma®)

Carisoprodol is a muscle relaxant and central nervous system depressant that is available by prescription as Soma®<sup>12</sup>. It is not controlled on the Federal level (although scheduling action under the Controlled Substances Act by the DEA is pending), but several States have scheduled Soma® as a controlled substance.

- **Texas Report.** Carisoprodol continued as a popular drug in the illicit drug market in Texas, according to the area representative. It is part of the combination with hydrocodone and alprazolam that is known as the "Houston Cocktail" or "Holy Trinity."
- **Phoenix Report.** Figure 21 shows increases in numbers of carisoprodol items among NFLIS drug items identified in Phoenix forensic laboratories in the first half of 2010 (*n*=42) compared with the first halves of 2008 (*n*=16) and 2009 (*n*=30), although numbers were relatively very low.
- NFLIS data for the first half of 2010 show that carisoprodol was identified among drug items analyzed in area forensic laboratories in 14 of 23 CEWG reporting areas: Albuquerque, Atlanta, Cincinnati, Detroit, Honolulu, Los Angeles,

<sup>&</sup>lt;sup>11</sup>More information on TFMPP can be found in the Federal Register Notice 68 FR 52872.

<sup>&</sup>lt;sup>12</sup>More information about carisoprodol and Soma® can be found at <u>http://www.nlm.nih.gov/medlineplus/druginforma-</u> <u>tion.html.</u>

Maine, Miami, Phoenix, St. Louis, San Diego, San Francisco, Seattle, and Texas (section IV, table 13). In the first half of 2010, drug items containing carisoprodol ranked seventh in Texas and ninth in Honolulu and Phoenix among the top 10 most frequently identified NFLIS drug items in the period (table 1).

### Levamisole

• Several CEWG area representatives continued to report increased use of levamisole, a veterinary drug used to control parasites in livestock, as a cutting agent used with cocaine. Not available for human use in the United States, use of levamisole can lead to an autoimmune disorder, agranulocytosis (or neutropenia), characterized by a marked decrease in white blood cells. Seven area representatives—from Denver, Miami, Cincinnati, Detroit, Minneapolis/St. Paul, Maine, and Philadelphia—reported on levamisole as an adulterant in cocaine being present in indicators in the first half of 2010 (see section on cocaine).

# Salvia Divinorum

- Salvia divinorum<sup>13</sup> is a perennial herb that produces short-acting hallucinogenic effects when chewed, smoked, or brewed in tea. It is available on the Internet and is favored by adolescents. Some States control it as a Schedule I drug. It is not currently federally controlled, but it is one of the DEA's emerging drugs of interest. Because it is difficult for poison control centers to identify, its use is often difficult to detect and monitor.
- **Texas Report.** The only CEWG area representative reporting on Salvia in this reporting period was the Texas representative, who reported 13 Salvia calls to the Texas Poison Centers in 2010 (an increase from the 7 in 2009, but a sizeable decrease since the 73 reported in 2008).

### Psilocin/Psilocybin

• Psilocin (also called psilocin/psilocybin and psilocybine) is a hallucinogen that ranked 8th in Denver, 9th in Albuquerque and Los Angeles, and 10th in Minneapolis/St. Paul (tied with BZP) in the NFLIS data for the January–June 2010 reporting period (table 1). Psilocin/psilocybin was reported among drug items in forensic laboratories in 21 of 23 CEWG areas in the first half of 2010, with no cases reported for Baltimore or Honolulu (section IV, table 13).

### Quetiapine

- Quetiapine and quetiapine fumarte, antipsychotic drugs marketed as Seroquel®<sup>14</sup>, were among drug items identified in Boston NFLIS data in the first half of 2010. There were 76 such items identified, ranking 13th in the NFLIS data. These drugs were also reported in Texas data, ranking in 16th place there, with 149 items. Los Angeles data showed 38 drug items identified as containing quetiapine, constituting 0.2 percent of all items seized and identified in Los Angeles County in the first half of 2010. Ten or fewer items containing quetiapine or quetiapine fumarte were identified in this reporting period in Cincinnati, Honolulu, Minneapolis/St. Paul, Phoenix, and San Diego.
- In no CEWG areas did quetiapine appear among the top 10 drug items identified in forensic laboratories in the first half of 2010 (table 1).

# Khat (Cathinone, Cathine)

• Khat<sup>15</sup> is a plant indigenous to East Africa and the Arabian Peninsula and is used for its stimulant effects in East Africa and the Middle East. It has maintained a hidden presence within the Somali immigrant community in the Minneapolis/St. Paul area, according to the area representative. Its active ingredients, cathinone and cathine, are

 <sup>&</sup>lt;sup>13</sup>More information about Salvia divinorum can be found at: <u>http://www.nlm.nih.gov/medlineplus/medlineplus.html</u>.
 <sup>14</sup>More information about quetiapine and Seroquel® can be found at: <u>http://www.nlm.nih.gov/medlineplus/druginformation.html</u>.

<sup>&</sup>lt;sup>15</sup>More information about Khat and cathinone can be found at: <u>http://www.nida.nih.gov/Infofacts/khat.html</u>.

controlled substances in the United States. Cathinone, a Schedule I drug, is present only in the fresh leaves of the flowering plant and converts to the considerably less potent cathine in approximately 48 hours. Users chew the leaves, smoke it, or brew it in tea.

• Cathinone was found at very low levels in NFLIS data for the first half of 2010 in 11 of 23 reporting areas: Minneapolis (*n*=39), New York City (*n*=30), Denver (*n*=11), Chicago and Cincinnati (*n*=4 each), Seattle (*n*=2), and Detroit, Honolulu, Maine, San Francisco, and Washington, DC (*n*=1 each) (section IV, table 13, footnote 1).

#### Gabapentin

- Gabapentin<sup>16</sup>, sold under the brand names Neurontin<sup>®</sup> and Gabarone<sup>®</sup>, appeared for the first time in the top 10 identified NFLIS drugs in any CEWG area in the first half of 2010, ranking eighth in Boston. The drug, a central nervous system depressant, is not a scheduled drug under the Federal Controlled Substances Act. Although rarely encountered as a diverted pharmaceutical, law enforcement sources report that the drug is increasingly being abused (<u>http://www.justice.gov/dea/programs/forensicsci/microgram/mg0904/mg0904.pdf</u>).
- Gabapentin was identified in 109 samples in the NFLIS system in the first half of 2010 in Boston, in 8 samples in Los Angeles, 5 in Minneapolis/St. Paul, 4 in Phoenix, and 1 each in Honolulu and Maine. It ranked ninth among the most frequently identified drug items in the first half of 2010 in Boston, but it was not found within the top 10 drug items in any other CEWG area (table 1).

#### Foxy Methoxy (5-Methoxy-N, N-diisopropyltryptamine, or 5-MeO-DIPT)

• Foxy Methoxy<sup>17</sup> is a synthetic substance abused for its hallucinogenic effects. It is illegal in the

United States and is controlled as a Schedule I substance under the Controlled Substances Act. Foxy Methoxy was not detected in any indicator data for CEWG areas in the first half of 2010, and for the third reporting period it was not mentioned as a drug of concern in any CEWG area.

#### Spotlight on Spice and Synthetic Cannabinoids, Mephedrone, and "Bath Salts"

#### Spice and Synthetic Cannabinoids

• "Spice"<sup>18</sup> is used to describe a diverse family of herbal mixtures marketed under many names, including K2, fake marijuana, Yucatan Fire, Skunk, Moon Rocks, and others. These products contain dried, shredded plant material and, presumably, chemical additives that are responsible for their psychoactive (mind-altering) effects. While Spice products are labeled "not for human consumption," they are marketed to people who are interested in herbal alternatives to marijuana (cannabis). While Spice products do contain dried plant material, chemical analyses of seized Spice mixtures have revealed the presence of synthetic cannabinoid compounds that bind to the same cannabinoid receptors in the body as THC (delta-9-tetrahydrocannabinol), the primary psychoactive component of marijuana. Some of these compounds, however, bind more strongly to the receptors, which could lead to a much more powerful and unpredictable effect. Notably, these compounds have not been fully characterized for their effects and importantly, their toxicity in humans. Because the chemical composition of the various products sold as Spice is unknown, it is likely that some varieties also contain substances with dramatically different effects than those expected by the user. "Spice" and synthetic cannabinoids were noted as emerging drugs of concern at the June 2009 and June 2010 CEWG meetings, and concern about these "designer

<sup>&</sup>lt;sup>16</sup>More information on gabapentin can be found at: <u>http://www.nlm.nih.gov/medlineplus/druginformation.html</u>.

<sup>&</sup>lt;sup>17</sup>More information on 5-MeO-DIPT can be found at: <u>http://www.deadiversion.usdoj.gov/drugs\_concern/5meodipt.htm</u>. <sup>18</sup>More information about Spice can be found at: <u>http://www.nida.nih.gov/Infofacts/Spice.html</u>.

cannabinoids" continued in several CEWG areas during this reporting period. Because the consumption of synthetic cannabinoids for their psychoactive properties can lead to emergency room visits and calls to poison control centers, the DEA placed five synthetic cannabinoids under temporary scheduling, for possible control under the Controlled Substances Act in January 2011<sup>19</sup>. These substances are the following:

- o 1-pentyl-3-(1-naphthyl)indole (JWH-018);
- o 1-butyl-3-(1-naphthoyl)indole (JWH-073);
- 1-[2-(-morpholinyl)ethyl]3-(1-naphthoyl) indole (JWH-200);
- o 5-(1,1-dimethylheptyl)-2[(1R,3S)-3hydroxycyclohexyl]-phenol (CP-47,497); and
- 5-(1,1-dimethyloctyl)-2-[(1R,3S)-3hydroxycyclohexyl]-phenol (cannabicyclohexanol: CP-47,497 C8 homologue).
- Four CEWG area representatives in the West reported evidence of synthetic cannabinoids in their areas (three, Albuquerque, Phoenix, and Denver, from anecdotal or qualitative sources, and one, Texas, from poison control center calls). Three representatives in the Midwest (Minneapolis/St. Paul, Detroit, and St. Louis) and one in the South (Miami/South Florida) also reported on synthetic cannabinoids.

#### Western Region CEWG Areas:

- Albuquerque/New Mexico Report. In Albuquerque, qualitative information from law enforcement and sentinel surveillance indicated that JWH-018 was available, according to the area representative.
- **Phoenix Report.** Elsewhere in the western region, Spice was reported by the Phoenix area representative. Spice has received media attention in that area in this reporting period.

- **Denver/Colorado Report.** The Denver area representative reported that while synthetic cannabinoids (Spice, K2, and "Black Mamba") have been a growing concern in the Denver metropolitan area, there are few indicators that have the ability to isolate and capture the data.
- **Texas Report.** The Texas area representative reported the continuing presence in the State of marijuana homologs, with calls to Texas Poison Centers related to exposure to them increasing.

#### Midwestern Region CEWG Areas:

- **Minneapolis/St. Paul Report.** In the Midwest, the Minneapolis/St. Paul area representative reported a continuing synthetic marijuana presence in the Twin Cities. The use of products such as Spice and K2 by youth created rising public concern throughout Minnesota in 2010, according to the area representative. In Minneapolis/St. Paul, the Hennepin Regional Poison Center documented 76 synthetic marijuana exposures in 2010.
- **Detroit Report.** Similarly, the Detroit area representative reported on calls to the Poison Control Center at Children's Hospital of Michigan for exposure to K2 and similar smoked herbal products; 37 such cases were reported in the first half of 2010.
- **St. Louis Report.** The St. Louis area representative reported that herbal preparations such as K2 were the focus of many news stories in that area the first half of 2010.

#### Southern Region CEWG Areas:

• Miami MSA/South Florida Report. In the South, the area representative from Miami/South Florida reported that synthetic cannabinoids continued to be an emerging issue of concern there, where they were widely available in retail outlets.

<sup>&</sup>lt;sup>19</sup>Notice of temporary scheduling can be found at: <u>http://www.justice.gov/dea/programs/forensicsci/microgram/mg2011/</u> mg0111.pdf.

#### Mephedrone

- Mephedrone<sup>20</sup> (4-methylmethcathinone) is a synthetic cathinone that has been popular in Europe. It is currently being monitored by the European Union's European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), as reported at the June 2010 and January 2011 CEWG meetings. Mephedrone is another example of the increasing popularity of newly emerging "designer drugs" that are marketed on the Internet and perceived by users as "legal highs."
- Concerns about mephedrone that were reported by area representatives at the June 2010 CEWG meeting continued into this reporting period. Three area representatives, from Texas, Miami, and St. Louis, reported mephedrone as a new drug showing up in qualitative data and anecdotal information. Mephedrone has been identified in Texas key informant interviews and toxicology laboratory and poison control data in Texas, although the mentions have been low, according to the area representative. Mephedrone is one of the DEA's emerging drugs of interest.

#### "Bath Salts"

Synthetic stimulants marketed as "bath salts"<sup>21</sup> have recently appeared in some CEWG areas, and they were reported as emerging drugs of concern in the first half of 2010 in the Minneapolis/St. Paul and St. Louis areas. Marketed and sold as legal substances under names such as "Ivory Wave," "Purple Wave," or "Vanilla Sky," they may cause serious medical reactions (such as chest pain, increased heart rate, hallucinations, extreme paranoia, and delusions) when ingested. An increase in calls to poison control centers across the country related to these substances in 2010 prompted the Office of National Drug Control Policy to release a statement of concern on February 1, 2011<sup>22</sup>.

### **HIV/AIDS Related to Drug Abuse**

The CEWG continues to monitor trends in injection drug use as important for understanding the consequences of drug use, including human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS). Ten out of 21 area representatives reported HIV/AIDS data at the January 2011 meeting. Area representatives reported at this meeting that transmission of or exposure to HIV and AIDS through injection drug use had decreased in New York City and Seattle; remained stable in New Mexico, Colorado, and Atlanta; and increased in San Francisco and also very slightly in Detroit.

- New York City Report. The proportion of new HIV cases diagnosed in New York City in which reported exposure was from injection drug use declined from 6.7 percent in the first half of 2008 to 4.6 percent in the first half of 2009.
- **Seattle Report.** The Seattle area representative reported a similar decrease. The proportion of King County residents diagnosed with HIV who were exposed through injection drug use declined from 7 percent in 2001 to 4 percent 2009.
- Albuquerque/New Mexico Report. The proportion of people in New Mexico living with HIV/AIDS with injection drug use as a mode of exposure has not changed since 2006, according to the area representative. As of December 2010, 9 percent were injection drug users, and 10 percent were men who have sex with men (MSM) and also injection drug users.
- **Denver/Colorado Report.** Similarly, cumulative AIDS data in Colorado through September 2010 indicated that cases related to injection drug use remained stable statewide at 9 percent.

<sup>&</sup>lt;sup>20</sup>More information on mephedrone can be found at: <u>http://www.deadiversion.usdoj.gov/drugs\_concern/mephedrone.</u> <u>htm</u>.

<sup>&</sup>lt;sup>21</sup>More information about substances sold as "bath salts" can be found at: <u>http://www.nlm.nih.gov/medlineplus/news/</u><u>fullstory\_108485.html</u>.

<sup>&</sup>lt;sup>22</sup>The statement is available at: <u>http://www.whitehousedrugpolicy.gov/news/press11/020111.html</u>.

- Atlanta Report. In Atlanta, the proportion of cumulative AIDS cases attributed to injection drug use or MSM and injection drug use remained at 15 percent in the first half of 2010.
- San Francisco Report. In San Francisco, cumulative AIDS reports in San Francisco County increased by 7.6 percent among heterosexual injection drug users in the 6-year time period from December 2004 to September 2010 (this group constituted 7 percent of the total caseload); reports for MSM injection drug users increased in the same 6 years by 12.5 percent.
- **Detroit Report.** The Detroit area representative reported a slight increase in exposure through injection drug use in new HIV cases. As of October 2010, 7 percent of the people newly diagnosed with HIV infection reported injection drug use as a risk behavior, either alone or combined with other high-risk sexual behaviors, compared with 5 percent in 2010.

# International Drug Abuse Patterns and Issues

#### Europe

- Drug abuse trends in Europe were presented to the CEWG by a representative from the EMCDDA, the agency that collects drug-related information for 30 countries—27 European Union member States, along with Croatia, Turkey, and Norway.
- Cannabis remained the most popular illicit drug across Europe. Overall, cannabis trends were reported as stable or declining, although each country showed a somewhat different pattern. The EMCDDA representative reported a 7-percent last-year prevalence and 4-percent lastmonth prevalence in Europe. Estimates show that up to 3 million young Europeans could be using cannabis on a daily basis.
- Cocaine remained popular, with relatively high prevalence rates, in the United Kingdom, Spain, Ireland, Italy, and Denmark. However, cocaine use prevalence in these countries has stabilized in recent years. Last-year prevalence of cocaine

use across Europe was 1.3 percent, representing 4 million Europeans, with 3 million between ages 15 and 34.

- Heroin prevalence estimates remained relatively stable in Europe, but some indicators (drugs seized and identified as containing heroin, deaths, and treatment admissions) in the European Union and the EMCDDA showed moderate increases. Indicators continued to point to an aging population of heroin users.
- Amphetamines and ecstasy remained popular in several European countries (Nordic and central European countries), according to the EMCDDA representative, but there was an overall stabilization of use prevalence. In some countries, however, methamphetamine may be displacing amphetamine among established problem drug users, specifically the Czech Republic and Slovakia.
- The EMCDDA representative reported on the continuing work of the European Union's Early Warning System (EWS). The EWS provides a system for rapid exchange of information on new psychoactive substances that may pose public health or social threats. Work of the EWS has focused over the past few years on identifying newly emerging synthetic cannabinoids (including Spice), synthetic cathinones (including mephedrone), and other "legal highs" marketed and sold over the Internet (see Emerging Drugs section).

# Canada

• According to the representative from Health Canada, cannabis continued to be the dominant illicit drug in Canada, with the highest levels of self-reported past-year use, as well as the highest number of exhibits analyzed in laboratories. Survey results from the Canadian Alcohol and Drugs Use Monitoring Survey (CADUMS) showed that cannabis use remained stable in 2009, compared with 2008. The number of cannabis exhibits analyzed in laboratories has remained stable since 2005. • Cocaine exhibits continued to be the second most frequently analyzed and identified drug exhibits in Canada; however, fewer cocaine exhibits were analyzed in 2008 and 2009 than in previous years. The Health Canada representative noted a slight increase across the country in methamphetamine exhibits seized and analyzed, as well as an increase in prescription opioid exhibits identified in 2009. However, a significant decrease was reported in the number of Canadians age 15 and older who indicated pastyear use of a psychoactive pharmaceutical drug (i.e., opioid pain reliever, stimulant, sedative, or tranquilizer) in the CADUMS, from 28 percent in 2008 to 25 percent in 2009.

### Australia

- A representative from the national Drug and Alcohol Research Centre at the University of New South Wales in Sydney, Australia, reported to the CEWG on the Australian drug monitoring system, the Ecstasy and Related Drugs Reporting System (EDRS), and the primary drugs of concern in Australia—reported as ecstasy/ MDMA and cocaine.
- Results of the EDRS in 2010 indicated that although ecstasy remained the drug of preference among participants in the EDRS survey of regular ecstasy users across Australia, some ecstasy indicators (percentage of survey participants who stated they were weekly ecstasy users; percentage stating that ecstasy was their drug of choice; and availability and purity of the drug) decreased in 2010 over 2009 levels. In 2010, 23 percent of the survey participants stated they used ecstasy weekly, a decline from 30 percent in 2009. Thirty-eight percent of the survey participants in 2010 reported that ecstasy was their drug of choice, compared with 42 percent in 2009. A significant increase was observed in the number of participants reporting that ecstasy was becoming difficult to obtain in 2010 (26 percent, compared with 12 percent in 2009). Also, a significant number of participants reported low drug purity (56 percent in 2010, compared with 24 percent in 2009).

• In contrast, cocaine preference has increased over time (13 percent of the national survey sample in 2010 reported cocaine as their preferred drug, compared with 8 percent in 2009). Its use was noted across all jurisdictions in Australia in 2010, whereas it was previously localized in the two largest cities, Sydney and Melbourne. In addition, the majority of survey participants in 2010 reported that cocaine was considered "easy to very easy" to obtain, in contrast to previous years when it was considered "very difficult."

# Thailand

- A representative from the WHO Collaborating Centre for Research and Training in Drug Dependence in Bangkok, Thailand, reported to the CEWG on substance abuse and monitoring systems in Thailand. According to the representative, the War on Drugs operation in Thailand, implemented in 2003, changed the monitoring system and influenced levels and patterns of drug indicators. The numbers of clients in treatment increased, and the number of drug offenders decreased with the new government policy, which for the first time regarded people dependent on drugs as patients, not criminals, and used treatment as a tool for recovery rather than prosecution.
- Many types of illicit substance abuse have been reported in Thailand. The most common indigenous natural products are cannabis/ganja and opium. While the country has experienced a heroin problem for 5 decades, heroin use has decreased since the legal control of the opium franchise in 1960, according to the Thailand representative. During the past 10 years, the number of heroin clients in treatment decreased about 106-fold.
- Illicit amphetamine (in tablet form) appeared along with heroin in the early 1960s in Thailand. Methamphetamine abuse evolved into a major epidemic in 1996, and methamphetamine continued as a major drug of concern in 2010. An increase in injection among methamphetamine users, as well as other drug users (such as heroin

users), has led in recent years to an increase in Thailand in HIV infection attributed to injection drug use. The percentage of HIV infection attributed to injection drug use reached its highest point in 2009 since 1997, at 52 percent, doubling from 26 percent in 2007.

#### Jamaica

• From the Caribbean, a representative from the National Council on Drug Abuse in Jamaica reported on illegal drug use trends in Jamaica. Among illegal drugs, cannabis/ganga use is predominant in Jamaica. As an endemic drug, many users in the country do not think of it as a drug, but rather as a medicine or spiritual vehicle, according to the Jamaican representative. Levels of cannabis use, however, were reported as stable. Similarly, cocaine use was also seen has having stabilized in Jamaica. Increases in use of heroin were reported, and prescription drug use was described as an emerging problem of concern. In addition, in 2009, a large seizure (2,785 tablets) of MDMA/ecstasy was reported by Jamaican law enforcement officials. Qualitative reports indicated that some workers in Jamaica's commercial sex trade were transitioning from cocaine to ecstasy use.

	Table 1. N	NFLIS Top 10 Drug Items Analyze	10 Drug	Items Ar	alyzed t	oy CEWG A	rea and I	Rank (Base	d on Freq	uency) 1	or 23 CE	d by CEWG Area and Rank (Based on Frequency) for 23 CEWG Areas: January–June 2010
HERN REGION           1         6         3         4         5         7         8         7         8         7           nd         2         3         4         5         7         8         7         8         7           nd         2         3         4         5         7         8         7         8         7           nd         2         3         4         5         10         7         9         7         8         7           ugun,         1         5         10         7         7         2         6         4           HEAS         1         6         7         7         7         2         6         4           Ugun,         1         4         7         6         7         7         2         6         4           Mclin         2         3         4         7         6         7         1         7         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1 <t< td=""><td>CEWG Areas</td><td>Cocaine/ Crack</td><td>Heroin</td><td>Oxy- codone</td><td>Hydro- codone</td><td>Alprazolam</td><td>Clonaz- epam</td><td>Metham- phetamine</td><td>Cannabis/ THC</td><td>MDMA</td><td>Phencyc- lidine (PCP)</td><td>Other Drugs</td></t<>	CEWG Areas	Cocaine/ Crack	Heroin	Oxy- codone	Hydro- codone	Alprazolam	Clonaz- epam	Metham- phetamine	Cannabis/ THC	MDMA	Phencyc- lidine (PCP)	Other Drugs
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11         5         4         8         3          9         2         6            HEASTERN REGION         1         3         10          -         -         7         2         6            HEASTERN REGION         1         3         4          -         7         2         6          4           HEASTERN REGION         1         4         3         7          7         2         6         4           Prik City         1         3         5         10         4         7         6          1         7         2         6         4           Prik City         1         3         5         10         4         5         7          1         1         4         9         5         1	Maryland	2	с	4	I	9	8	1	-	6	7	Buprenorphine=5; Methadone=10
Ighthin         1         3         10             - </td <td>Miami</td> <td>-</td> <td>5</td> <td>4</td> <td>ø</td> <td>ę</td> <td>1</td> <td>Q</td> <td>0</td> <td>Q</td> <td>I</td> <td>Hallucinogen (Nonspecified)=7; Diazepam=10</td>	Miami	-	5	4	ø	ę	1	Q	0	Q	I	Hallucinogen (Nonspecified)=7; Diazepam=10
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2 6 - 5 4 9 3 1 8 -	Seattle	-	e	5	8	6	1	4	2	9	ł	Buprenorphine=7; Amphetamine=10
	Texas	2	9	1	5	4	0	с	-	8	ł	Carisoprodol=7; 1-Benzylpiperazine=10

SOURCE: NFLS, DEA, data for all areas except New York City were retrieved on December 16, 2010; New York City data were retrieved on December 20, 2010; see appendix tables 2.1–2.23; data are subject to change and may differ according to the date on which they were queried

# Table 2.Top-Ranked Primary Drugs as a Percentage of Total Treatment Admissions, Including<br/>Primary Alcohol Admissions, in 21 CEWG Areas<sup>1</sup>, by Region and Ranking: FY 2010 and<br/>1H 2010 (the First Half of 2010)<sup>2</sup>

CEWG Areas <sup>3</sup>	Alcohol	Cocaine/ Crack	Heroin⁴	Other Opiates/ Opioids	Metham- phetamine⁵	Marijuana/ Cannabis	Other Drugs/ Unknown
SOUTHERN REGION	I						
Atlanta	1	3	6	4	5	2	7
Baltimore	2	4	1	5	7	3	6
Maryland	1	5	2	4	7	3	6
Miami MSA/ Ft. Lauderdale- Broward County	2	4	6	3	7	1	4
Miami MSA/ Miami-Dade County	2	3	6	4	7	1	5
NORTHEASTERN RE	GION						
Boston	2	3	1	4	7	5	6
Maine	1	6	4	2	7	3	5
New York City	1	4	3	6	7	2	5
Philadelphia	2	3	4	6	7	1	5
MIDWESTERN REGI	ON						
Cincinnati <sup>4,5</sup>	1	4	3	4	6 <sup>5</sup>	2	5
Detroit	1	4	2	5	7	3	6
Minneapolis/St. Paul	1	6	4	3	5	2	7
St. Louis	1	4	2	6	5	3	7
WESTERN REGION							
Colorado	1	4	5	6	3	2	7
Denver	1	4	5	6	3	2	7
Hawaii	2	5	6	NR <sup>6</sup>	1	3	4
Los Angeles	2	5	3	7	4	1	6
Phoenix	1	6	2	7	3	4	5
San Diego	2	5	3	6	1	4	7
San Francisco⁴	1	2	4	4	3	5	6
Seattle	1	3	4	6	5	2	7

<sup>1</sup>The CEWG areas not included in the table due to lack of availability of treatment admissions data for the reporting period are Washington, DC, Chicago, and Albuquerque and Texas in the southern, midwestern, and western regions, respectively. <sup>2</sup>Data are for January–June 2010 for all areas with the exception of San Francisco where data are for FY 2010.

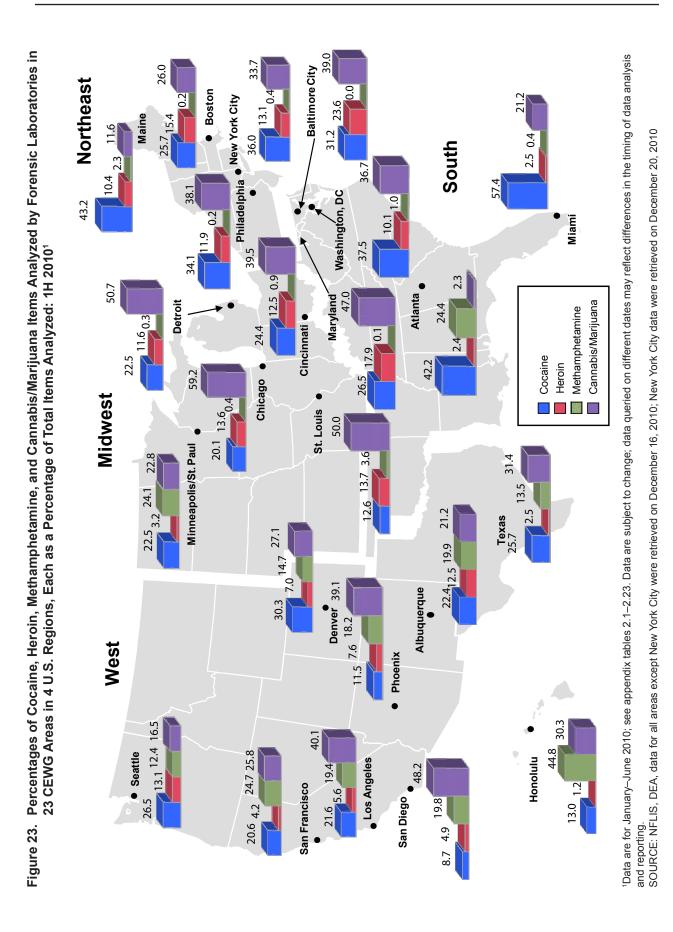
<sup>3</sup>Data for Atlanta include data for the 28-county Atlanta Metropolitan Statistical Area. Boston data include data for the cities of Boston, Brookline, Revere, Chelsea, and Winthrop. Data for New York City are for the five boroughs of New York. Cincinnati data are for Hamilton County, while Minneapolis/St. Paul data pertain to metropolitan counties: Anoka, Dakota, Hennepin, Ramsey, and Washington. Data for St. Louis include data for the City of St. Louis and the County of St. Louis, as well as Jefferson, Franklin, Lincoln, St. Charles, and Warren Counties. Denver data are for the Denver/Boulder area. Data for Los Angeles cover Los Angeles County; data for Phoenix are for Maricopa County; for San Diego, San Diego County; for San Francisco, San Francisco County; and for Seattle, King County.

<sup>4</sup>Heroin and other opiates are grouped together for Cincinnati and San Francisco and are reported for heroin only.

<sup>5</sup>Methamphetamine, amphetamine, and MDMA are grouped together for Cincinnati.

<sup>6</sup>NR=Not reported by the CEWG area representative.

SOURCE: January 2011 State and local CEWG reports



# Section III. Update Briefs and International Reports: January 2011 CEWG Meeting

#### Introduction

The 69th semiannual meeting of the Community Epidemiology Work Group (CEWG) was held on January 19–21, 2011, in Scottsdale, Arizona. During this meeting 21 CEWG area members reported on current drug trends and patterns in their areas, based on data newly available since the June 2010 CEWG area report. Five international presentations were also given. The following Update Briefs and International Reports were provided by the speakers.

#### **CEWG AREA UPDATE BRIEFS**

#### Drug Abuse Patterns and Trends for Albuquerque and New Mexico— Update: January 2011

Nina Shah, M.S.

For inquiries regarding this report, please contact Nina Shah, M.S., Drug Epidemiologist, New Mexico Department of Health, 1190 St. Francis Drive, P.O. Box 26110, Santa Fe, NM 87502, Phone: 505–476–3607, Fax: 505–827–0013, E-mail: nina.shah@state.nm.us.

**Overview of Findings:** Marijuana indicators were high and stable, with particularly high rates of use among students. Although synthetic marijuana has not been detected in large surveillance datasets, law enforcement reported that the substance was available in New Mexico. Survey estimates show a significant increase in ecstasy/ MDMA abuse among New Mexico high school students. Cocaine indicators were high, but stable or decreasing. Cocaine overdose death and inpatient hospitalizations decreased from 2008

to 2009. The prevalence of cocaine use among New Mexico high school students remained stable during the 2009–2010 school year, ranking highest among Youth Risk Behavior Survey (YRBS) States. Cocaine was the most common item analyzed by Albuquerque forensic laboratories during the first half of 2010. Methamphetamine indicators were mixed as overdose deaths slightly increased from 2008 to 2009, prevalence of use among students decreased from 2007 to 2009, and hospitalizations remained stable from 2008 to 2009. There were slightly more methamphetamine laboratory incidents in the Albuquerque area during 2010 than in 2009. Heroin indicators were high, but stable or decreasing. Although heroin overdose deaths decreased in 2009, a notable trend emerged in that younger heroin users were dying of overdose. No increase in heroin use was found among high school students (4 percent in 2007 and 3 percent in 2009), but the issue has emerged as a serious community concern. Prescription drug indicators have worsened for the most part. Even though methadone and hydrocodone overdose death rates decreased from 2008 to 2009, the overdose death rate from oxycodone increased 28 percent during that period. Oxycodone was the third leading cause of overdose death in 2009, behind heroin and cocaine. Preliminary treatment data showed that admissions for abuse of other opiates and synthetics increased, and reports of painkiller abuse among high school students increased from 12 percent in 2007 to 14 percent in 2009. Overdose deaths and inpatient hospitalizations from the broad class of sedative/tranquilizers (e.g., alprazolam) also increased from 2008 to 2009. The Albuquerque Drug Enforcement Administration (DEA) cited controlled prescription drugs as the primary drug threat in the first half of 2010.

Updated Drug Abuse Patterns and **Emerging Patterns:** During the 2009–2010 school year, high school students in New Mexico reported the highest prevalence rates among students nationally of current marijuana use (28 percent) and initiating use before age 13 (18.4 percent). The proportion of State-funded treatment admissions for marijuana, among all admissions, was unchanged. In 2009, these clients were youngest (median age: 27 years) compared with other clients in treatment, as 59 percent were in treatment for the first time. Seventy-eight percent were male, 38 percent were White, and 33 percent were Hispanic. Of items analyzed by Albuquerque area forensic laboratories in the first half of 2010, 21 percent were marijuana, the second highest proportion of items analyzed. Synthetic marijuana (i.e., JWH-018) has not been reported in forensic laboratory data, although qualitative information indicated that the substance was available. The estimate for current ecstasy use increased significantly among high school students, from 5.1 percent in 2007 to 8 percent in 2009, ranking first among States in the 2009 YRBS. Overdose deaths caused by cocaine decreased 16 percent from 2008 to 2009, and inpatient hospitalizations were relatively stable (*n*=163 in 2008 and *n*=144 in 2009). Youth use prevalence remained stable (5.4 percent in 2007 and 5.6 percent in 2009), ranking highest in the Nation for lifetime and current cocaine use in the 2009–2010 school year. The proportion of primary cocaine/crack treatment admissions decreased, from 7.6 percent in 2008 to 4.4 percent in 2009 among all admissions. Forty percent smoked the drug (crack users). Almost one-half of crack admissions were female, 43 percent were Hispanic, 24 percent were White, and 14 percent were Black. They were the oldest of all clients, with a median age of 39.8 years. Admissions that used cocaine through oral (14 percent), inhalation (68 percent), and injection (17 percent) routes were 63 percent male, 48 percent Hispanic, 22 percent White, and 7 percent Black. In 2009, a greater proportion (52 percent) of admissions reported a secondary drug (largely alcohol and marijuana) than during 2006–2008 (32–42). In the first half of

2010, 22 percent of items analyzed by Albuquerque forensic laboratories were cocaine, the highest proportion of all substances. The high-end wholesale price of powder cocaine decreased in Albuquerque (from \$28,000 per kilogram to \$24,000 per kilogram) but remained stable in Las Cruces (\$16,000 per kilogram) from December 2008 to June 2009. The methamphetamine overdose death rate remained low, increasing slightly from 2008 (1.1 per 100,000) to 2009 (1.7 per 100,000), with the highest overdose death and hospitalization rates persisting in southeastern New Mexico. Statewide, amphetamine hospitalizations remained stable since early 2008, and current methamphetamine use among high school students decreased slightly from 2007 (4.4 percent) to 2009 (3.9 percent). The number of treatment admissions for methamphetamine decreased from 2008 (n=598; 5.2 percent) to 2009 (*n*=426; 4.6 percent). Almost one-half of methamphetamine admissions were female, and one-half were White. Clients were slightly older than in prior years, with a median age of 32.8 years in 2009, compared with a median age of 30-31 during 2006-2008. For most treatment admissions (61 percent), smoking was the primary route of administration, and a large proportion of clients were referred through the criminal justice system (45 percent). Methamphetamine items constituted 20 percent of items analyzed by Albuquerque forensic laboratories in the first half of 2010. The number of laboratory incidents in Albuquerque was slightly higher in 2010 than 2009. In Albuquerque, the wholesale price of Mexican "ice" decreased from \$26,000-\$28,000 per kilogram in December 2008 to \$18,000-\$20,000 per kilogram in June 2009. National Drug Intelligence Center (NDIC) information indicated this latter price range persisted through the first half of 2010. The methamphetamine drug threat was considered low to moderate. Heroin indicators were high and stable or decreasing. The heroin overdose death rate decreased from 2008 to 2009. Of note, people age 21 and younger represented less than 2 percent of people who died from a heroin overdose since 2004. That percentage significantly increased to 8 percent in 2008 and 12

percent in 2009. No increase in use was found in youth survey data (3.9 percent in 2007 and 3.2 percent in 2009). The proportion of heroin treatment admissions among all admissions remained stable from 2008 to 2009, at 6.4 and 6.7 percent, respectively. Heroin treatment admissions were mostly male (62 percent) and Hispanic (63 percent). In 2009, heroin admissions were considerably younger than in prior years (median age: 33.2 years). Eighty percent reported injecting the drug in 2009, and the proportion reporting smoking the drug increased from 11 percent in 2008 to 14 percent in 2009. Of items analyzed by Albuquerque area forensic laboratories in the first half of 2010, 12.5 percent were heroin items. In Las Cruces, the wholesale price of Mexican black tar heroin decreased from December 2008 to June 2009 (from \$18,000-\$20,000 per pound to \$12,000-\$15,000 per pound). The wholesale price in Albuquerque was stable. The New Mexico Prescription Drug Monitoring Program revealed that 44 percent of New Mexicans age 10 and older were prescribed a controlled substance during a recent 27-month time period, underscoring the prevalence of these drugs. Although the total prescription opioid overdose death rate decreased statewide from 2008 (9.1 per 100,000) to 2009 (8.4 per 100,000), oxycodone-related indicators increased. Oxycodone overdose deaths increased from 2.9 per 100,000 in 2008 to 3.7 per 100,000 in 2009; it was the third leading cause of overdose death in 2009, behind heroin and cocaine; and it was the fifth most common drug analyzed by Albuquerque forensic laboratories in the first half of 2010. Methadone overdose deaths declined to the lowest level since 2002, and they were most common among Albuquerque residents compared with the rest of the State (rate ratio=1.85). Multidrug methadone overdose deaths during 2005-2009 were more often in combination with other prescription drugs than illicit drugs, as was the case during 1998–2002. Hospitalizations with a primary diagnosis of heroin and synthetic opiates increased from 341 in the first half of 2008 to 455 in the second half of 2009, likely driven by morbidity related to prescription opioids as opposed to heroin. Treatment

admissions for other opiate and synthetic abuse increased, from 2.5 percent of admissions in 2008 to 3.7 in 2009. There was a growing proportion of Hispanics among these admissions (42 percent in 2008 and 52 percent in 2009), and the median age has gradually decreased (35.0 in 2007, 34.0 in 2008, and 32.4 in 2009). No apparent change in route of administration was detected. Controlled prescription drugs were cited by the Albuquerque DEA as the primary drug threat in the first half of 2010. Sedative and tranquilizer (i.e., benzodiazepines) indicators increased. The overdose death rate increased 30 percent from 2008 to 2009, and the number of overdose deaths caused by alprazolam, the fourth leading cause of drug overdose deaths in 2009, increased from less than 10 prior to 2004 to 56 in 2009. The number of hospitalizations with a primary diagnosis in the broad category of sedative/ hypnotic, barbiturate, tranquilizer, and benzodiazepines increased by 17 percent from 2008 to 2009. The statewide overdose death rate caused by antidepressants also increased, from 3.0 per 100,000 in 2008 to 4.2 per 100,000 in 2009. The mode of exposure for living injection drug users (IDUs) with human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) (n=3,304) has not changed in recent years; roughly 19 percent were IDUs and men who have sex with men (MSM)/IDUs. As of December 2010, these cases with HIV/hepatitis C (HCV) co-infection were largely male (80 percent); 48 percent were White; and 37 percent were Hispanic. Forty-six percent were age 30-39 at diagnosis, but 42 percent of living cases were 50 or older.

**Data Sources:** *Treatment data* were provided by the State Behavioral Health Services Division, Human Services Department. The State behavioral health system contract transition in mid-2009 impacted the second half of 2009 Treatment Episode Data Set (TEDS). Data collection issues are under investigation. Therefore, 2009 data were the most recent, but were considered preliminary. These are State-funded treatment admissions only, including opiate replacement therapy. New Mexico TEDS for 2006–2008 was

also accessed in order to compare previous year trends. School survey data were from the Centers for Disease Control and Prevention (CDC)sponsored YRBS conducted during the 2009–2010 school year. In addition, New Mexico administered a middle school survey. The data are reported as percentages with 95 percent confidence intervals. Hospitalization inpatient discharges for 2003-2009 were obtained from the New Mexico Health Policy Commission. Crime laboratory data for the first half of 2010 were provided by the National Forensic Laboratory Information System (NFLIS), DEA. Drug price data for June 2009 were from the NDIC. NDIC Field Intelligence provided preliminary pricing information for Albuquerque through December 2009. Infectious disease data related to drug use was obtained from the State HIV and Hepatitis Epidemiology Surveillance Program, New Mexico Department of Health. Mode of exposure among living HIV-infected/AIDS IDUs is reported, and prevalent HIV/HCV co-infection cases are described. Unintentional drug overdose death data for 2003–2009 were provided by the State-centralized New Mexico Office of the Medical Investigator. Rates are age-adjusted rates and expressed per 100,000. Drug-specific overdose death rates were also calculated.

# Drug Abuse Patterns and Trends in Atlanta, GA—Update: January 2011

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Updated Drug Abuse Trends and Emerging Patterns: Cocaine and marijuana remained the dominant drugs of abuse in the metropolitan Atlanta area. Cocaine was the drug most mentioned in National Forensic Laboratory

Information System (NFLIS) drug items seized and analyzed for the 28 metropolitan area counties during the first half of 2010. Treatment admissions data indicated that cocaine was the primary substance in 17.7 percent of admissions in the first half of 2010. This represents a decrease from 19.8 percent in 2009 and 22.8 percent in 2008. Cocaine mentions as a secondary drug of choice among primary heroin treatment admissions increased from 15.0 percent in 2009 to 20.6 percent in the first half of 2010, but they remained below the 27.2 percent reported in 2008. Cocaine use, including the use of powered cocaine and crack cocaine, among treatment admissions in the first half of 2010 in Atlanta continued to be predominantly among African-Americans. The ratio of African-Americans to all other races was 2.67:1. This disparity was similar for crack cocaine and powder cocaine. Equal numbers of males and females reported cocaine as their primary reason for admission. However, gender comparisons between the two routes of cocaine use showed that more males reported using powder cocaine and slightly more females reported using crack cocaine. Seventy-one percent of clients in public treatment for cocaine were older than 35. More than 70 percent of crack cocaine clients were older than 35, while roughly 60 percent of powder cocaine clients were older than 35. More than 80 percent of crack cocaine clients in treatment reported smoking the drug, while the main routes of administration for powder cocaine were smoking and snorting, with snorting being slightly more popular. Calls to the Georgia Crisis and Access line involving cocaine were stable. Among the five major counties closest to the center of the city (Fulton, DeKalb, Cobb, Gwinnett, and Clayton), Fulton, Cobb, and Gwinnett experienced decreases in prison arrests for the possession of cocaine. Those in Clayton County slightly increased, and those in DeKalb County remained stable. Based on treatment data, cocaine use was largely found closer to the city of Atlanta, with 82.6 percent of the treatment admissions in the 28-county metropolitan statistical area reported in the surrounding five counties. Among male arrestees in 2008 in Fulton County, the percentage

testing positive for cocaine decreased, from 39.8 percent in 2008 to 36.3 percent in 2009. In the same population, self-reports of ever receiving treatment for crack cocaine increased, from 47.4 percent in 2008 to 59.6 percent in 2009, while self-reports of ever receiving treatment for powder cocaine increased only 1 percentage point, to 43.2 percent, during that time period. Marijuana remained the most commonly used substance in Atlanta, having surpassed cocaine use reported in public treatment data in 2009. The percentage of treatment admissions in the first half of 2010 was 25.8 percent, representing a slight increase from 2009. Marijuana was the secondary drug in 20.6 percent of cocaine and 25 percent of methamphetamine treatment admissions. Marijuana appeared to be more spread across urban and nonurban counties than cocaine, with 69.6 percent of primary marijuana treatment admissions in the five counties closest to the city. Roughly 70 percent of admissions for marijuana were male, and nearly 60 percent were African-American. The most represented age group was the 18-25 group, constituting more than 35 percent of marijuana primary treatment admissions. There was a slight decrease in admissions for clients younger than 18. Among male arrestees in 2008 in Fulton County, the percentage testing positive for marijuana increased slightly, from 39.2 percent in 2008 to 44.9 percent in 2009. There also was a slight increase in the percentage of male arrestees self-reporting any treatment for marijuana, from 23.2 percent in 2008 to 27.1 percent in 2009. Crisis line calls from the first quarter of 2010 indicated that calls for marijuana continued to rise. Marijuana was the most reported illicit drug among calls. Methamphetamine use varied across indicators. Treatment admissions for methamphetamine have been stable at approximately 6 percent since 2008. During the first half of 2010, female methamphetamine treatment admissions outnumbered those among males at a ratio of 1.78:1. Consistent with previous years, smoking was the primary route of administration. Whites remained the most frequent users of methamphetamine at a ratio of 13.06 compared with other races. Percentages of public treatment admissions

were approximately 30 percent across three age groups: 18-25, 26-34, and 35 and older. NFLIS showed an increase in drug items seized and identified as methamphetamine in the first half of 2010, continuing a trend that began in 2009. In the first half of 2010, 43 percent of treatment admissions were in the counties closest to the city, compared with only 30 percent of treatment admissions during the same period in 2009. This indicates that while methamphetamine use is lower than that of other drugs it may be becoming more distributed across the metropolitan area. Among male arrestees in 2008 in Fulton County, less than 1 percent tested positive. In the same population, self-reports of ever receiving treatment for methamphetamine decreased, from 59.2 percent in 2008 to 39.2 percent in 2009. Heroin indicators showed a possible increase in use in the Atlanta area. The percentage of primary treatment admissions in the first half of 2010 was 5.7 percent, compared with 4.9 percent in 2009. Admissions were concentrated in the urban counties (80 percent), similar to previous years. Among male arrestees in Fulton County, self-reports of ever receiving treatment for heroin use increased, from 47.5 percent in 2008 to 84.4 percent in 2009. Purity levels of Southwest Asian (SWA) heroin decreased, while purity levels for South American (SA) heroin increased slightly between 2008 and 2009. The price per milligram pure of SWA heroin decreased from 2008 to 2009 from \$1.49 to \$0.69, while the price of SA heroin decreased from \$1.31 to \$0.80 during the same period. Alprazolam levels remained consistent for treatment admissions at 1.4 percent in 2008, compared with 1.2 percent in 2009. NFLIS data also indicated consistency across years for alprazolam, with 291 seizures in the first half 2010, compared with 583 for the entire year of 2009. Indicators of oxycodone continued to show an increase in the Atlanta area. Oxycodone treatment admissions in the first half of 2010 constituted 3.7 percent of primary admissions, compared with 2.4 percent in 2009. NFLIS data showed a steady increase, from 230 seizures in the first half of 2009 of items seized and identified as oxycodone to 382 in the same period in 2010. This pattern was similar

for **hydrocodone**, with NFLIS data showing 292 items in the first half of 2010, compared with 201 seizures in the first half of 2009. It is of note that three of the top five drugs seized and identified in forensic laboratories were prescription medications. Drug indicators (treatment admissions and drugs seized and identified by NFLIS) suggested that **MDMA** (methylenedioxymethamphetamine) decreased slightly in the first half of 2010, continuing a trend from 2009.

Data Sources: Treatment data were provided by the Georgia Department of Human Resources. Coverage includes all direct providers of treatment services that receive county or State program funds in the 28 counties that constitute metropolitan Atlanta. Data on all client admissions for drug and alcohol treatment—not just clients receiving treatment paid for using public funding sources—are included in the data set. This report presents admissions data from January through June 2010—the most recent data available—and makes comparisons with percentages from prior years. Percentages of treatment admissions are calculated from total admissions excluding admissions for alcohol only as the primary substance of abuse. Forensic laboratory data were provided by NFLIS, Drug Enforcement Administration, for the first half of 2010. While these data are described, they can only be compared with 2007 results due to the establishment of new methodology methods. For purposes of comparison with the previous year, half-year 2010 data are extrapolated. Cannabis seizures may not be accurate due to changes in field testing practices. In 2004, Georgia initiated a statewide administrative policy that when cannabis is seized by law enforcement officers, laboratory testing is not required. This results in artificially low numbers of such drug items identified in the CEWG area relative to other CEWG areas. Prison/jail admissions data were provided by the Georgia Department of Corrections and include the calendar year 2010. Georgia Crisis and Access Line Call data were provided by the Georgia Department of Human Resources. Coverage

includes all statewide telephone calls for Georgia's single point of entry program, a required step toward seeking substance abuse treatment from a public facility. This report presents call data from July 2006 through June 2010. Arrestee data were provided by the Arrestee Drug Abuse Monitoring program and cover male arrestees in the city of Atlanta/Fulton County, Georgia. There were two facilities in the sample. Heroin price and purity data were provided by the Heroin Domestic Monitoring Program.

#### Drug Abuse Patterns and Trends in Baltimore City, Maryland, and Washington, DC—Update: January 2011

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**Overview of Findings:** Throughout the Washington, DC, and Maryland region, cocaine, marijuana, and heroin continued to be the primary drug problems in the first half of 2010. In general, indicators for marijuana and other opiates were increasing across the region, while indicators for cocaine and heroin were more mixed. The Washington/Baltimore High Intensity Drug Trafficking Area (HIDTA) reported that cocaine and marijuana were the most frequent drugs seized and identified in the region. The third most frequently found drug in the Marvland part of the HIDTA region was heroin, while in DC it was PCP (phencyclidine). While other parts of the country have seen shifts in the use of methamphetamine, its use remained low throughout Marvland and Washington, DC, and was confined to isolated communities.

Updated Drug Abuse Trends and Emerging Patterns: In Washington, DC, in 2010, cocaine/crack, marijuana, and heroin continued to be the primary illicit drug problems. Cocaine remained one of the most serious drugs of abuse, as evidenced by the fact that more adult arrestees and more items seized tested positive for cocaine than for any other drug. However, the percentage of adult arrestees testing positive for cocaine continued to decrease. In comparison, the percentage testing positive for opiates remained about the same, and the percentage testing positive for PCP increased slightly. In the first 9 months of 2010, 27 percent of adult arrestees tested positive for cocaine, and approximately 9-10 percent tested positive for opiates and/or PCP. In addition, more seized items tested positive for cocaine (37.5 percent) in the first 6 months of 2010 than for any other drug, as reported by the National Forensic Laboratory Information System (NFLIS). Overdose deaths increased, from 90 in 2007 to 105 in 2008. They were also more likely to be related to cocaine (60 percent) than to any other drug. During the first 9 months of 2010, juvenile arrestees were more likely to test positive for marijuana (55.8 percent) than for any other drug, and the percentage appeared to be increasing. The percentage testing positive for cocaine decreased in 2009 and remained about the same in the first 9 months of 2010. The percentage of adult and juvenile offenders in Washington, DC, testing positive for amphetamines remained considerably lower than for other drugs and decreased in 2010. In Maryland, there were 60,404 primary admissions to certified treatment programs in 2009. This appeared to be increasing in the first half of 2010. Admissions most frequently involved alcohol, heroin, marijuana, crack, and other cocaine. Cocaine and marijuana accounted for more than three-quarters of the positive drug items tested through NFLIS during the first 6 months of 2010. Approximately one in five items tested were positive for heroin, and nearly all of these items (87 percent) were from Baltimore City. The number of drug intoxication deaths in Maryland increased from 721 in 2008 to 760 in 2009, but appeared to be decreasing in the first half of 2010. **Narcotics** (heroin, methadone, oxycodone, fentanyl, and other) were the most frequently identified drugs in drug intoxication deaths in the first half of 2010. Approximately one in four of the drug intoxication deaths occurred in Baltimore City.

Data Sources: Drug seizure data were provided by NFLIS, the Drug Enforcement Administration, and the Washington/Baltimore HIDTA. Heroin cost data were obtained from the Heroin Domestic Monitoring Program, and data on the retail distribution of selected prescription opioid medications were obtained from the Automation of Reports and Consolidated Orders System Retail Drug Summaries. Mortality data were obtained from the Office of the Chief Medical Examiner, Washington, DC, and the Maryland office of the Chief Medical Examiner. Adult and juvenile arrestee data were adapted from information obtained from the District of Columbia Pretrial Services Agency. Treatment admissions data for Maryland and Baltimore City were obtained from the Alcohol and Drug Abuse Administration State of Maryland Automated Record Tracking system and for Washington, DC, from the Treatment Episode Data Set.

# Drug Abuse Patterns and Trends in Greater Boston—Update: January 2011

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**Overview of Findings:** Cocaine and heroin continued as the dominant drugs of abuse in Boston during this reporting period. Cocaine figured prominently among drug-related deaths, drug arrests, and drug laboratory samples derived from drug arrests. Heroin dominated as the primary drug in emergency department (ED) visits and substance treatment admissions and was cited most often among calls to the substance abuse helpline. Marijuana, other opiates/synthetics (including oxycodone), and benzodiazepines remained present at more moderate levels. Methamphetamine and other "club drugs" remained at relatively low levels overall.

Updated Drug Abuse Trends and Emerging Patterns: In Boston, cocaine indicators were mainly decreasing but remained at very high levels when compared with other drugs. Cocaine figured in 35 percent of all drugrelated deaths in 2008. Cocaine was the second most prominent drug among identified drugs in ED visits. The rate of estimated cocaine-involved ED visits had a significant 12-percent decrease from 2008 to 2009. The proportion of primary cocaine treatment admissions also decreased, from 9 percent in fiscal year (FY) 2007 to 6 percent in FY 2010. The proportion of cocaine calls to the helpline remained fairly stable, at 15 percent in FY 2009 and 16 percent in FY 2010. After adjusting for the impact of a major change in 2009 in Massachusetts law that effectively decriminalized possession of small amounts of marijuana, the nonmarijuana proportion of Class B drug arrests (mainly cocaine) decreased, from 70 percent in 2007 to 63 percent in 2009. Similarly, the adjusted (nonmarijuana) proportion of cocaine drug laboratory samples decreased, from 40 percent in 2007, to 38 percent in 2008, and to 36 percent in the first half of 2010. The most recent heroin abuse indicators were mostly stable at extremely high levels in Boston. Heroin and/or other opioids figured in 57 percent of Boston drug-related deaths in 2008. Heroin was the most prominent drug among drugs identified during ED visits. The rate of estimated heroin-involved ED visits was stable from 2008 to 2009. The proportion of primary heroin treatment admissions increased, from 46 percent in FY 2006 to 51 percent in both FY 2009 and FY 2010. The proportion of heroin calls to the substance abuse helpline increased slightly, from 32 percent in FY 2008 to 34 percent in FY 2009, and then decreased back to 32 percent in FY 2010.

The adjusted (nonmarijuana) level of Class A drug arrests (mainly heroin) was stable at 28 percent from 2008 to 2009. The adjusted proportion of heroin drug laboratory samples was stable at approximately 21 percent in 2009 and in the first half of 2010. The most recent Drug Enforcement Administration (DEA) data indicated that streetlevel heroin in Boston cost \$5-\$80 per bag and \$40-\$120 per gram, with an average purity level at 17 percent. The price per milligram pure increased from \$1.37 in 2007 to \$1.62 in 2008. Indicators for other opiates/opioids were stable or increasing at moderate levels. The rate of estimated ED visits involving nonmedical use of opiates/opioids increased significantly by 17 percent from 2007 to 2009. The proportion of other opioid primary treatment admissions was stable from FY 2009 to FY 2010 at 4 percent. The number of other opioid primary treatment admissions in FY 2010 (n=862) was the highest recorded in more than 10 years. The proportion of other opioid helpline calls increased, from 15 percent in FY 2008 to 19 percent in FY 2009, and to 22 percent in FY 2010. The proportion of oxycodone adjusted (nonmarijuana) drug laboratory samples increased, from 8 percent in 2008, to 9 percent in 2009, and to 11 percent in the first half of 2010. Except for the indicators directly affected by the major change in the marijuana possession law, marijuana indicators were stable at varied levels. The rate of estimated marijuana ED visits was stable from 2008 to 2009. The proportion of marijuana treatment admissions has remained stable, between 4 and 5 percent, for 10 years, from FY 2001 to FY 2010. The proportion of marijuana helpline calls remained at 4 percent from FY 2008 to FY 2010. As a result of the new marijuana law in 2009, the proportion of Class D drug arrests (mainly marijuana) decreased from 35 percent in 2008 to 21 percent in 2009. Similarly, the proportion of marijuana drug laboratory samples decreased, from 43 percent in 2008, to 24 percent in 2009, and to 26 percent in the first half of 2010. Methamphetamine abuse levels remained low in Boston, representing less than 1 percent of all estimated ED visits, treatment admissions, helpline calls, and drug laboratory samples. The number of primary admissions for methamphetamine totaled 69 in FY 2009 and 35 in FY 2010. The number of methamphetamine calls to the helpline from FY 2000 to FY 2010 totaled fewer than 25 for each year. Methamphetamine drug laboratory samples totaled 69 in 2008, 66 in 2009, and 22 in the first half of 2010. Indicators for benzodiazepine abuse in Boston were mostly stable at moderate levels. The rate of estimated ED visits involving nonmedical use of benzodiazepines was stable from 2007 to 2009. Klonopin® (clonazepam) was identified in more than one-half of the ED visits with an identified benzodiazepine in 2009. In FY 2010, the proportion of benzodiazepine primary treatment admissions reached 1 percent of the total; 10 percent (up from 6 percent in FY 2002) of treatment admissions cited benzodiazepines as primary, secondary, or tertiary drugs. The proportion of benzodiazepine calls to the helpline remained between 4 and 6 percent from FY 2005 to FY 2010. Clonazepam and alprazolam ranked sixth and seventh among NFLIS drug laboratory samples in the first half of 2010.

Data Sources: Drug-related deaths data for the city of Boston were provided by the Massachusetts Department of Public Health Vital Records. ED drug visit estimates for 2004–2009 for a seven-county Boston metropolitan area composed of five Massachusetts counties, including Essex, Middlesex, Norfolk, Plymouth, Suffolk, and two New Hampshire counties, including Rockingham and Strafford, were provided by the Drug Abuse Warning Network, Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. State-funded substance abuse treatment admissions data for the Boston region comprising the cities of Boston, Brookline, Chelsea, Revere, and Winthrop (Community Health Network Area [CHNA] 19), for FYs 2001 through 2010 (July 1, 2000, through June 30, 2010) were provided by the Massachusetts Department of Public Health, Bureau of Substance Abuse Services. Helpline data provided information on drug mentions during calls received by the Massachusetts Substance Abuse Information

and Education Helpline for a Boston region comprising the cities of Boston, Brookline, Chelsea, Revere, and Winthrop (CHNA 19) for FYs 2000 through 2010. Drug arrest data for the city of Boston for 2002 through 2009 were provided by the Boston Police Department, Drug Control Unit and Office of Research and Evaluation. A 2009 Massachusetts law decriminalizing possession of less than an ounce of marijuana took effect January 1, 2009, and has impacted drug arrest indicators. Forensic laboratory data for the Boston Metropolitan Statistical Area for 2008, 2009, and the first half of 2010 were provided by the DEA's National Forensic Laboratory Information System, Data Ouerv System, December 16, 2010. Drug price and purity information was provided by the DEA New England Field Division, May 2010.

# Drug Abuse Patterns and Trends in Chicago—Update: January 2011

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Overview of Findings: Cocaine, heroin, and marijuana continued to be the major substances of abuse for Chicago and the surrounding metropolitan area in 2009 and 2010. Major indicators suggested that levels of cocaine, heroin, and marijuana abuse were high and steady, while some indicators suggested cocaine use was declining. Drug Enforcement Administration (DEA) Heroin Domestic Monitor Program (HDMP) data indicated that heroin purity increased again in 2009 to the highest level of this decade. Among Chicago high school students sampled by the Youth Risk Behavior Survey, the proportions reporting ever using cocaine (6.7 percent) or heroin (4.7 percent) were the highest measured by the survey to date. Students' lifetime use of marijuana and methamphetamine

declined in 2009, compared with 2007, while lifetime use of 3,4-methylenedioxymethamphetamine (MDMA) and inhalants was stable.

Updated Drug Abuse Trends and Emerging Patterns: Levels of cocaine abuse continued to be high and stable, but they may be declining. Weighted estimates from the Drug Abuse Warning Network (DAWN) for calendar year (CY) 2009 showed that 40 percent of total estimated emergency department (ED) visits for major substances of abuse were cocaine related. Cocaine declined to 20 percent of all drug items identified by the National Forensic Laboratory Information System (NFLIS) in mid-2010, second to marijuana. Wholesale prices for a kilogram of powder cocaine in Chicago reported by the National Drug Intelligence Center (NDIC) narrowed in range and may have declined slightly at \$22,000-\$26,000 in June 2009. The NDIC reported significantly lower prices for a gram of cocaine (\$50-\$75) in mid-2009 compared with year-end 2008. Ethnographic reports suggested that powder cocaine was in low demand on the street and its quality had declined. Crack cocaine remained highly available, and its quality was reported between moderate to excellent. Heroin levels of abuse were high and stable. Weighted estimates accessed from DAWN for CY 2009 showed that 36 percent of total ED reports for major substances of abuse were heroin related. Heroin ranked third and constituted 14 percent of drug items identified by NFLIS in mid-2010. The average purity of heroin as reported by the DEA increased from 22.4 percent in 2007, to 23.8 percent in 2008, and to 26.6 percent in 2009, the highest level since 1999. The price per milligram pure remained low and unchanged at \$0.37. The NDIC reported that the mid-level cost of an ounce of Mexican brown powder heroin in mid-2009 (\$800-\$1,000) represented a substantial decline compared with 2008. Major indicators of drug use suggested that marijuana abuse was high and stable in 2009. Weighted estimates from DAWN for CY 2009 showed that 22 percent of ED reports for major substances of abuse were marijuana related, which was an increase from CY

2008. Marijuana was the predominant drug item analyzed by NFLIS for mid-2010, representing 59 percent all drug samples. High-quality marijuana (e.g., hydroponic and BC Bud) continued to be available in Chicago and was priced significantly higher than commercial-grade marijuana. Average wholesale prices for high-end marijuana varied but were within the typical range at \$4,000 per pound, while commercial grade Mexican marijuana sold for around \$1,400 per pound, according to the NDIC. The NDIC reported significant increases in the cost of a gram of high-quality and commercial grade marijuana in mid-2009, compared with yearend 2008. Among prescription drugs, those most often cited in ethnographic reports as being used without prescription were Xanax®, Vicodin®, Klonopin®, clonidine, and methadone. MDMA remained popular in low-income African-American neighborhoods, and weighted DAWN estimates suggested that between 2004 and 2008 use of MDMA grew among African-Americans but not among non-Hispanic Whites. In 2009, African-Americans again led DAWN estimates of MDMA visits, but the difference compared with Whites narrowed. Primary users were in their teens and twenties. Prices generally ranged between \$10 and \$20 per tablet on the South Side and West Side. Buprenorphine was the fourth most commonly seized prescription drug identified by NFLIS in mid-2010, ahead of methadone, which ranked fifth. Suboxone® is the most commonly reported form of buprenorphine, and its use without a prescription is typically to avoid withdrawal or to better manage an addiction to heroin. Drug injection by young African-Americans continued to be rare. New injection drug users (IDUs) were likely to be White and to reside in suburban Chicago. HIV/ AIDS Update: The Chicago Department of Public Health reported a cumulative total of 32,275 known cases of human immunodeficiency virus/ acquired immune deficiency syndrome (HIV/ AIDS) in Chicago. The rate of persons living with HIV was about 2.8 times greater in Chicago, compared with the United States. The prevalence and incidence of HIV infection in IDUs have declined markedly, compared with the 1980s and 1990s.

The proportion of new HIV infections with injection drug use as a risk factor fell to a new low in 2008, at 16.8 percent. In that year, African-Americans represented about 35 percent of the population of Chicago but 80 percent of new HIV infections attributed solely to injection drug use. Injectionrelated HIV diagnoses in 2008 were most often found in persons who were at least 50, followed by persons age 40–49. HIV prevalence among injecting and noninjecting "hard" drug users was converging in low-income Chicago neighborhoods.

Data Sources: ED visit data were derived for CY 2009 from the DAWN online query system administered by the Center for Behavioral Health and Statistics and Quality, Substance Abuse and Mental Health Services Administration. The DAWN data are weighted and are estimates for the reporting area. The 2009 YRBS, prepared by the Centers for Disease Control and Prevention (CDC), provided student drug use data representative of students in grades 9 through 12 in Chicago public schools. Price and purity data for heroin for 1991–2009 were provided by the DEA's HDMP. Drug price data for 2009 came from the "National Illicit Drug Prices" by the NDIC. Data from NFLIS for the first half of 2010 were used to report on drugs items identified in forensic laboratories after being seized by law enforcement in Chicago. Ethnographic data on drug availability, prices, and purity are from observations and interviews conducted by the Community Outreach Intervention Projects, School of Public Health, University of Illinois at Chicago. HIV prevalence data for 2005–2009 were derived from the NIDAfunded "Sexual Acquisition and Transmission of HIV-Cooperative Agreement Program" (SATH-CAP) study in Chicago (U01 DA017378).

# Drug Abuse Patterns and Trends in Cincinnati (Hamilton County)— Update: January 2011

#### Jan Scaglione, Pharm.D., M.T., DABAT

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**Overview of Findings:** The predominant drug issues in Cincinnati continued to involve both cocaine/crack cocaine and marijuana as primary drugs of abuse. Cocaine indicators decreased somewhat from a relatively high to moderate level for the first half of 2010, compared with 2009 data. Indicators for marijuana in the Cincinnati region were consistently reported at high levels, with a leveling off seen during the first half of 2010, compared with 2009 data sources. Marijuana as a primary drug of abuse accounted for 28.9 percent of all treatment admissions, and it represented 39.5 percent of items submitted for forensic analysis for the Cincinnati area. Indicators for heroin were at a moderate level, with a rise in some indicators during 2010 from the previous year. The number of items submitted for forensic analysis involving heroin increased by nearly 15 percent in the first half of 2010, compared with 2009 data. Methamphetamine indicators continued to be low relative to other drugs in Cincinnati, with some increase in indicators. MDMA (3,4-methylenedioxymethamphetamine) indicators remained low to moderate in Cincinnati, with a slight increase noted during 2010. Abuse of prescription drugs, specifically benzodiazepines and opioid narcotics, continued to be an increasing drug issue in Cincinnati. Calls to poison control involving buprenorphinecontaining pharmaceuticals increased 60 percent from 2009 to 2010, with some increase in cases suspected as intentional abuse of the drug.

Updated Drug Abuse Trends and Emerging Patterns: Cocaine/crack cocaine as a primary drug of abuse reported during admission to treatment programs accounted for 17 percent of admissions, excluding alcohol, during the first half of 2010. The Cincinnati Regional Narcotics Unit (RENU) removed a combined total of more than 11,000 grams of cocaine/crack cocaine during 2010. Indicators for cocaine/crack dropped to moderate levels during the first half of 2010. There were 26 percent fewer calls recorded by poison control in 2010, compared with 2009. Cocaine and crack cocaine seizures submitted to the Drug Enforcement Administration (DEA) laboratory for analysis in the first half of 2010 revealed tetramisole (levamisole) impurities in 78 percent of the analyzed samples. Marijuana dominated all other reported drugs as primary among treatment admissions, accounting for nearly 42.3 percent of admissions, excluding alcohol, during the first half of 2010. While marijuana availability and use remained high across the Cincinnati region, indicators pointed to a leveling off at a high level. Heroin remained at a moderate level, with mixed indicators for the Cincinnati region for the first half of 2010, compared with 2009. Treatment admissions for primary heroin abuse were not delineated from other opiate/opioid admissions, but the number of overall heroin and opioid admissions accounted for 30.5 percent of total admissions, excluding alcohol. The number of items submitted in the first half of 2010 for forensic analysis and identified as heroin increased to 12.5 percent, from 10.9 percent the previous year. Purity levels dropped, and poison control data showed a 25-percent decrease in reported human heroin exposure cases in 2010. Use of methamphetamine in Cincinnati remained low, but exposure cases called to poison control increased by 67 percent, and the number of methamphetamine laboratory busts increased over 2008 levels. MDMA availability and use in Cincinnati during 2010 remained at a low to moderate level, with a nearly 18-percent increase in calls recorded by poison control over the previous year. Prescription narcotics containing either oxycodone or hydrocodone remained the most prevalent of the opioid products abused in Cincinnati. An increase in the number of items submitted for forensic analysis in the first half of 2010 exceeded those submitted for the entire 2009 year. Abuse of methadone appeared to be decreasing in 2010, compared with the previous year. The most frequent benzodiazepine abused continued to be alprazolam, according to both users and law enforcement. Human exposure cases involving alprazolam and clonazepam reported to poison control remained relatively stable during 2010, compared with 2009. **Emerging Patterns:** Indicators for buprenorphine abuse, using poison control data, continued to show growing numbers of both human exposure calls as well as drug identification calls. The total number of human exposure calls rose by 60 percent in 2010 over the previous year. Drug identification calls to poison control are often used as indicators of pharmaceutical diversion. The number of items submitted for forensic analysis for buprenorphine increased nearly 116 percent in the first half of 2010 from the previous year.

Data Sources: Medical Examiner data were obtained by the Hamilton County Coroner's Office for drug-related deaths for the first half of 2010, for comparison with death data from 2006-2009. Data resulted from positive toxicology evidence of drug or alcohol use found in decedents. Cases were classified as accidental, suicide, or homicide. Drug or alcohol findings were not necessarily recorded as cause of death. Qualitative data came from focus group interviews conducted for the Ohio Substance Abuse Monitoring Project, funded by the Ohio Department of Alcohol and Drug Addiction Services. Drug purity data were provided by the DEA, Cincinnati Resident Office, for January to December 2010. Treatment data were provided by the Hamilton County Mental Health and Recovery Services Board for fiscal years 2006 to 2009, and the first half of calendar year (CY) 2010. Data were provided for publicly funded treatment programs within Hamilton County only. Primary drug of use at admission was determined through billing data submitted by reporting agencies. Data were captured by group classification and not necessarily by specific drug type or route of administration. Poison control data were provided by the Cincinnati Drug and Poison Information Center for CYs 2006 through 2010. There are two call "types" recorded—either drug information, or actual human exposure to a product. Most exposures involved intentional

abuse/misuse/suspected suicide, but all were captured in the data set. All exposure cases are for human cases only; animal cases were excluded, as were "confirmed" nonexposure cases. **Drug seizure data** were provided by the Cincinnati RENU for CYs 2006–2010. **Forensic laboratory data** were provided by the National Forensic Laboratory Information System, DEA, for the first half of 2010. **Additional drug seizure data** were provided by the Warren County Drug Task Force. **Methamphetamine clandestine laboratory data** were provided by the Ohio Bureau of Criminal Identification & Investigation.

### Drug Abuse Patterns and Trends in Colorado and the Denver/ Boulder Metropolitan Area—Update: January 2011

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**Overview of Findings:** Ranked the highest in relation to other drugs and with most indicators trending upward, marijuana continued to be a major drug of abuse in Colorado and the Denver/Boulder metropolitan area, based on data on treatment admissions, hospital discharges, law enforcement drug testing, and estimated emergency department (ED) visits. Cocaine continued to rank in the top three of Colorado and Denver/Boulder area indicators, including treatment admissions, hospital discharges, estimated ED visits, drug-related mortality, poison control center calls, and law enforcement drug testing. However, the cocaine indicators reflected mostly downward trends. Among Colorado and Denver/Boulder area indicators, methamphetamine was stable with mixed trends, based on a large proportion of treatment admissions, a decrease in methamphetamine-involved ED visits in 2009 from 2007, and relatively small proportions of hospital discharges and death mentions. Heroin abuse indicators, although being relatively low in proportionate share compared with other drugs, remained mostly stable with some slight increases, based on treatment admission and mortality data. Statewide and in the Denver/Boulder area, opioids (other than heroin) were a small but increasing percentage of treatment admissions. Other opioids also represented a substantial proportion of estimated ED visits, hospital discharges, and drugrelated mortality. Beyond abuse of illicit drugs, alcohol remained Colorado's most frequently abused substance and accounted for the most treatment admissions, estimated ED visits, poison center calls, drug-related hospital discharges, and drug-related mortality.

Updated Drug Abuse Trends and Emerging Patterns: Excluding alcohol, marijuana continued to be the primary drug of abuse statewide and in the greater Denver area. During the first half of 2010, admissions for marijuana represented 39 percent of total drug treatment admissions in Colorado and accounted for 41 percent of Denver area admissions. There was more than a 200-percent statistically significant increase in the Denver metropolitan area weighted marijuana-involved Drug Abuse Warning Network (DAWN) ED visit rate from 2004 (50.5) to 2008 (151.7); the rate in 2009 decreased to 124.1 (a statistically significant 17-percent decrease). However, marijuana continued to rank first (excluding alcohol) in Denver ED visit rates. Marijuana ranked first (excluding alcohol) in 2009 Colorado drug-related hospital discharges (N=4,451; rate per 100,000=88); both the number and rate of discharges increased from 2008 (N=4,256; rate per 100,000=85). Also, marijuana/cannabis was the second most common drug seized and identified by forensic laboratories in the first half of 2010 in Arapahoe, Denver, and Jefferson Counties, based on National Forensic Laboratory Information System (NFLIS) data. Federal drug seizures for marijuana across Colorado, after being relatively stable from 2003 (444.1 kilograms) to 2006 (656.8 kilograms), increased to 24,089.2 kilograms in 2008.

These are the most recent data available. There were several large-scale outdoor marijuana grow operations in Colorado National Forests as well as sophisticated indoor grow operations seized by the Drug Enforcement Administration (DEA). As of January 2009, Denver had more medical marijuana dispensaries per capita than any other city in the United States and has been named "America's Cannabis Capital" by the National Organization for the Reform of Marijuana Laws. The supply and demand for marijuana were both very high. Denver-area substance use treatment providers have reported an overall climate in which marijuana is much more accessible and less stigmatized. The large influx of medical marijuana care centers may be contributing to the quality, increased availability, and increased use of marijuana. The implications of medical marijuana and its impact on substance use disorder treatment will need continued monitoring. Methamphetamine, which accounted for the next highest proportion of treatment admissions statewide (excluding alcohol), overtook cocaine admissions in the first half of 2003; they continued to increase and peaked during the second half of 2005 (at 33 percent). Primary methamphetamine admissions decreased slightly to 31 percent during the first half of 2006 and remained fairly stable (between 24 and 27 percent) from 2008 through 2009. In the first half of 2010, methamphetamine admissions represented 25 percent of all statewide treatment admissions. In greater Denver, methamphetamine reached a high proportion of 23 percent in the first half of 2007, but such admissions have since declined to 18 percent in the first half of 2010. The weighted methamphetamine DAWN ED visit rate per 100,000 for the Denver metropolitan area was 33.9 in 2009, compared with 35.6 in 2008. Methamphetamine could not be identified separately, but rather was included in the stimulants category in Colorado drug-related hospital discharge data. Excluding alcohol, stimulants ranked fourth (behind marijuana, opioids, and cocaine) in 2009 drug-related Colorado hospital discharges (*N*=1,577; rate per 100,000=31); both the number and rate of discharges increased from 2008

(N=1,431; rate per 100,000=29). Stimulants (mostly methamphetamine) were the fourth most common drug (excluding alcohol) in Colorado death mentions in 2009, at a rate of 1.1 per 100,000 for the State. Methamphetamine was the third most common drug seized and identified by forensic laboratories in the first half of 2010 in Arapahoe, Denver, and Jefferson Counties, based on NFLIS data. Federal drug seizures for methamphetamine across Colorado increased each year from 2003 (14.8 kilograms) to 2006 (50.3 kilograms). In 2007, Federal drug seizures for methamphetamine sharply declined (totaling 8 kilograms), but they increased in 2008 (26.4 kilograms). Likewise, methamphetamine laboratory seizures in Colorado declined from 345 in 2003 to 33 in 2008. These are the most recent data available to date. Cocaine admissions (excluding alcohol) statewide remained mostly stable (between 18 and 22 percent) from 2002 through 2008 and declined to 16 percent in the first half of 2009; they then reached a 10-year low of 14 percent in the first half of 2010. Denverarea primary cocaine admissions decreased from 24 percent in the first half of 2007, to 22 percent in the first half of 2008, to a 10-year low of 16 percent in the first half of 2010. The weighted cocaineinvolved ED visit rate per 100,000 for the Denver metropolitan area decreased, from 168.5 in 2008 to 109.6 in 2009, which represents a statistically significant decrease of 34 percent. Excluding alcohol, cocaine ranked third (behind marijuana and opioids) in 2009 Colorado substance abuse-related hospital discharges (N=3,264; rate per 100,000=64), but both the number and rate of discharges decreased from 2008 (N=3,533; rate per 100,000=71). Cocaine was the second most common drug (excluding alcohol and behind other opioids) in Colorado death mentions in 2009, at a rate of 2.5 per 100,000 for the State; this was down from a 3.3 rate in 2008. Cocaine was the most common drug submitted for testing by law enforcement in the first half of 2010 in Arapahoe, Denver, and Jefferson Counties, based on NFLIS data. Federal drug seizures for cocaine across Colorado, after decreasing from 65.5 to 36 kilograms from 2003 to 2004, increased substantially in 2005

(131.5 kilograms) and 2006 (135.1 kilograms) but declined sharply in 2007 (44.0 kilograms). Federal drug seizures for cocaine increased slightly in 2008 (to 52.6 kilograms). These are the most recent data available. In the first half of 2010, heroin ranked fourth in both statewide and greater Denver treatment admissions, representing 10 and 13 percent of admissions (excluding alcohol), respectively. The weighted heroin-involved ED visit rate per 100,000 for the Denver metropolitan area was 51.7 in 2009, compared with 52.8 in 2008. Although heroin was not among the most common drugs found in Colorado death mentions, it remained fairly stable from 2005 to 2008, at a rate of 0.9 per 100,000; heroin death mentions increased slightly to a rate of 1.4 in 2009. Heroin lagged far behind cocaine, marijuana/ cannabis, and methamphetamine among drugs submitted for testing by law enforcement in the first half of 2010 in Arapahoe, Denver, and Jefferson Counties based on NFLIS data. The DEA reported that all Denver heroin samples purchased through the 2009 Heroin Domestic Monitor Program (HDMP) were Mexican heroin, which is similar to previous years. The average heroin purity decreased, from 47.8 percent in 2008 to 40.7 percent in 2009, while the price of Mexican heroin increased from \$0.24 to \$0.37 per milligram pure in 2009. Other opioids (i.e., prescription opioids, narcotic analgesics) ranked fifth in both statewide and greater Denver treatment admissions (excluding alcohol), accounting for 10 and 9 percent of admissions, respectively, in the first half of 2010. Statewide, other opioid admissions have gradually been on the rise from the first half of 2007 (5 percent) to the first half of 2008 (7 percent) to the first half of 2009 (9 percent). Similarly, in the greater Denver area, primary opioid admissions climbed from 5 percent in the first half of 2007, to 6 percent in the first half of 2008, to 8 percent in the first half of 2009. The Denver metropolitan weighted ED visit rate per 100,000 for narcotic analgesics remained stable from 2008 (104.6) to 2009 (104.4) Excluding alcohol, opioids ranked second in 2009 Colorado substance abuse-related hospital discharges (*N*=4,210; rate per 100,000=83); both the number and rate of discharges increased from 2008

(N=3,890; rate per 100,000=78). Other opioids were the most common type of drug (excluding alcohol) in Colorado death mentions in 2009, at a rate of 6.0 per 100,000 for the State, which remained fairly stable from 5.9 per 100,000 in 2008. Other opioids were the most common drugs found in Colorado drug-related deaths from 2005 to 2009. Oxycodone (2.2 percent) and hydrocodone (1.2 percent) were in the top 10 drugs analyzed in the first half of 2010 in Arapahoe, Denver, and Jefferson Counties, based on NFLIS data. Benzodiazepines ("benzos," barbiturates, clonazepam, other sedatives, and tranquilizers) represented 1 percent of State treatment admissions in the first half of 2010. The rate of weighted benzodiazepine-involved DAWN ED visit rates in the Denver metropolitan area was 69.8 in 2009, compared with 72.0 in 2008. MDMA (3,4-methylenedioxy-methamphetamine) accounted for only 0.3 percent of State treatment admissions (excluding alcohol) in the first half of 2010. There were 295 weighted MDMA-involved DAWN ED visits in the Denver metropolitan area in 2009, compared with 354 in 2008. The DEA states that Canada is the source for most MDMA encountered in Colorado. Other local law enforcement and intelligence agencies also reported increased availability and distribution by Asian traffickers. The purity of MDMA seizures declined over recent years to approximately 50 percent pure. **BZP** (1-benzylpiperazine) was not identified by any of the most common drug indicators, but has typically been combined with MDMA and TFMPP (1-3-(trifluoromethylphenyl)piperazine). BZP was recently made a Schedule 1 controlled substance, which may have caused the decrease in exhibits as reported by the Denver Crime Laboratory. Synthetic cannabinoids (Spice, K2, and Black Mamba) have been a recent growing concern; however, there are few indicators that have the ability to isolate and capture the data, making it difficult to determine actual usage levels. HIV/AIDS Update: Cumulative acquired immunodeficiency syndrome (AIDS) data through September 2010 indicated cases related to injection drug use remained stable.

Data Sources: Treatment data were provided by the Colorado Department of Human Services, Division of Behavioral Health (DBH). Data from client admissions to all DBH-licensed treatment providers from January-June 2010 were included in the data set. Unweighted ED DAWN Live! data from the Center for Behavioral Health Statistics and Quality (CBHSQ) Substance Abuse and Mental Health Services Administration (SAMHSA) provided drug reports in ED visits occurring for January-June 2010. No comparisons with earlier time periods or discussions of trends can be done with unweighted data. Data in this report reflect cases that were received by DAWN as of January 4, 2011. Unweighted DAWN data are reported for the Denver area only. Weighted DAWN ED visit data from the CBHSO, SAMHSA were available to report drugs involved in ED visits occurring in 2004–2009 (output produced 10/5/2010). Rates per 100,000 were based on U.S. Census, County-Level Population Estimates (CPOP file). Forensic laboratory data were provided by NFLIS, DEA, for the first half of calendar year (CY) 2010 (January-June) for Denver, Jefferson, and Arapahoe Counties. While the NFLIS data are described, they cannot be compared with earlier data to establish trends, as a new methodology renders them not comparable. Hospital discharge data were obtained from the Colorado Department of Public Health and Environment and from the Colorado Hospital Association. These data represent CY 2009. Mortality data were obtained from the Colorado Department of Public Health and Environment and represent CY 2009. Poison and drug control center call data were obtained from the Rocky Mountain Poison and Drug Center. Information on drug seizure quantities was obtained from the standard DEA report, State Facts: Colorado 2008. Heroin drug price and purity data came from the DEA's 2009 HDMP report published in November 2010. Intelligence and qualitative data were obtained from a questionnaire developed by the Denver Office of Drug Strategy and sent in September 2010 to law enforcement, treatment, research, public health, and street outreach agencies, as well as from the

Proceedings of the Denver Epidemiology Work Group. Intelligence data and information were also obtained from the National Drug Intelligence Center, U.S. Department of Justice, High Intensity Drug Trafficking Area Program, Office of National Drug Control Policy, Rocky Mountain Region. **AIDS data** were obtained from the Colorado Department of Public Health and Environment (HIV/STD Surveillance Program Disease Control and Environmental Epidemiology).

# Drug Abuse Patterns and Trends in Detroit, Wayne County, and Michigan—Update: January 2011

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**Overview of Findings:** Heroin and cocaine were the two major drugs of abuse in the Detroit/ Wayne County area in the first half of 2010, and marijuana was widespread. Cocaine treatment admissions declined as a proportion of total admissions, and crack cocaine continued to be the dominant form of cocaine found in the city of Detroit. Treatment admissions declined for heroin but remained at a high level. The most striking trend for heroin admissions was the continued influx of young and White treatment clients, similar to that occurring in the rest of Michigan. Data for 2009 showed an increase in estimated emergency department (ED) heroin-involved visits, compared with 2008. In 2009, both price and purity increased for South American heroin. In the first half of 2010, deaths with heroin declined from 2009. This decline may be influenced by the initiation of an overdose intervention in the county. Treatment admissions for marijuana as the primary drug of abuse increased to their highest proportion ever. The percent of treatment admissions who were homeless continued to drop in fiscal year (FY)

2010 to 21 percent from a high of 28.7 percent in FY 2008. However, 40 percent of the admissions for cocaine were homeless. Levamisole continued to be detected in cocaine at the Medical Examiner's (ME) office. Calls to the Poison Control Center for intentional human consumption of cocaine and ecstasy declined; calls for heroin increased. BZP (1-benzylpiperazine) climbed in ranking of volume of specific drugs detected among items seized. For the first time, buprenorphine appeared in the ranking of the top 10 drugs detected among items seized and identified in forensic laboratories.

Updated Drug Trends and Emerging Patterns: Treatment admissions with cocaine as the primary drug accounted for 18.9 percent of Detroit publicly funded admissions in FY 2010<sup>23</sup>, continuing cocaine's decline from its decade-long height of 33.8 percent in FY 2000; 91 percent of these admissions were for crack cocaine. The decline, however, might have been stabilizing as admissions with cocaine as the primary drug accounted for 19.0 percent of Detroit publicly funded admissions in FY 2009. The proportion of publicly funded admissions in the rest of the State with cocaine as the primary drug was much lower (8.2 percent). Of the cocaine admissions, 58.6 percent were male; 90.3 percent were African-American; and 86.3 percent were older than 35. The percentage of admissions older than 35 in Detroit was higher than in the rest of Michigan (66.0 percent). The Detroit cocaine treatment admissions had a high rate of homelessness (40 percent) compared with all admissions (21 percent). In the first half of 2010, the Wayne County ME reported 121 deaths involving cocaine, the highest number for all drugs, but this number was lower than the 280 deaths with cocaine in 2009 when annualized for 2010. Levamisole continued to be detected in many decedents (78 in first half of 2010, compared with 176 for all of 2009). The number of calls to the Poison Control Center for intentional human

consumption appeared to stabilize, from 108 in 2009 to an annualized count of 106 in 2010. The weighted ED cocaine rate per 100,000 population in the five-county Detroit area showed a significant decline from 2008 to 2009 for total population, and for both genders. A focus group of law enforcement officials reported little change in cocaine trends during the first 6 months of 2010. Cocaine continued to rank second in volume of drug items seized in Wayne County, according to the National Forensic Laboratory Information System (NFLIS). In FY 2010, primary treatment admissions with heroin as the primary drug declined to 30.9 percent of publicly funded admissions, from 36 percent in FY 2009. This decline brought the percentage of admissions with heroin as the primary drug back to the level of FY 2007. The proportion of publicly funded admissions in the rest of the State with heroin as the primary drug was much lower (13.8 percent). Of the Detroit heroin admissions, 61.8 percent were male, 80.5 percent were African-American, and 85.7 percent were older than 35. The percentage of admissions older than 35 in Detroit was higher than in the rest of Michigan (28.2 percent). In FY 2009, 83.2 percent of Detroit admissions for heroin were African-American, and 90.5 percent were older than 35. In FY 2010, similar to FY 2009, White heroin treatment clients continued to have a younger mean age and were more likely to inject heroin than African-American heroin treatment clients: 36.1 versus 50.6 years and 73.3 versus 33.6 percent, respectively. In the first half of 2010, the Wayne County ME reported an annualized 170 deaths involving heroin, a decrease from 245 in 2009. An overdose prevention program was implemented in 2010 and may have contributed to the decline. Calls to the Poison Control Center about intentional use of heroin by humans increased at an annualized rate for 2010 (88), compared with 70 calls in 2009. The weighted ED heroin rate per 100,000 population in the five-county Detroit area showed a significant

<sup>&</sup>lt;sup>23</sup>The Detroit area representative reported treatment data by calendar year data for the first half of 2010 in the crossarea treatment tables contained in this Highlights and Executive Summary report. However, fiscal year data are reported in this Update Brief.

increase from 2008 to 2009 for total population and for females. Heroin continued to rank third in NFLIS findings for Wayne County. Price and purity data for 2009 showed an increase in mean purity levels and in price. Treatment admissions with marijuana as the primary drug increased in FY 2010 to the highest proportion ever, at 17.3 percent of all admissions, compared with 14.6 percent in FY 2009. Of these admissions, the percentage of males was 67.2 percent; 91.1 percent were African-American: and the proportion vounger than 18 was 28.9 percent. The percentage of publicly funded admissions in the rest of the State with marijuana as the primary drug was similar (14.9 percent). There was criminal justice involvement in 60.7 percent of the marijuana admissions in FY 2010, compared with 31.3 percent for all admissions. The weighted ED marijuana rate per 100,000 population in the five-county Detroit area showed a significant increase from 2008 to 2009 for total population and for females. Marijuana continued to rank first in NFLIS analyses for Wayne County. A focus group of law enforcement officials reported not yet seeing the impact of the Medical Marihuana Act of 2008. The indicators for methamphetamine remained low. It was not in the top 10 drugs in volume of drug items seized and identified in Wayne County according to NFLIS. Ecstasy use was still evident in ED and ME reports, but the number of calls to the Poison Control Center continued to decline from the peak in 2004. MDMA (3,4-methylenedioxymethamphetamine) ranked sixth in NFLIS data for Wayne County. Buprenorphine ranked eighth in NFLIS analyses for Wayne County, and ED visits increased significantly from 152 in 2008 to 327 in 2009. People with newly diagnosed human immunodeficiency virus (HIV) infection continued to be disproportionately living in the five-county area of Detroit (68 versus 42.4 percent of the total population for Michigan), African-American (60 versus 14.3 percent of the total population for Michigan), and male (82 percent). Seven percent of the people newly diagnosed with HIV infection reported injection drug use, either alone or combined with other high-risk sexual behavior, as a risk behavior. In 2009, 65 percent of people with newly diagnosed HIV infection were African-American, 80 percent were male, and 5 percent reported injection drug use.

Data Sources: Mortality data came from the Wayne County ME for January-June 2010. Drug-related crime data came from a law enforcement officials' focus group conducted by Cynthia L. Arfken, Ph.D. Poison control data came from calls made to the Poison Control Center at Children's Hospital of Michigan for January-June 2010. Treatment admissions data were provided by the Bureau of Substance Abuse and Addiction Services, Division of Substance Abuse and Gambling Services, Michigan Department of Community Health for Fiscal Year 2010. ED data came from the Drug Abuse Warning Network, Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. Forensic laboratory data were provided by NFLIS. HIV data came from Michigan Department of Community Health for January–October 2010.

## Drug Abuse Patterns and Trends in Honolulu and Hawaii—Update: January 2011

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**Overview of Findings:** The previously reported trends in overall drug use continued, with most categories of drug use lower in indicators than in the June 2010 report (based on data from the last half of 2009). The cause of this decrease is not totally clear. The street wisdom remained the same as always, "Sometimes it is up, sometimes it is down; now it is okay."

Updated Drug Abuse Trends and **Emerging Patterns:** In the first half of 2010, the Hawaii economy continued to feel the effects of the recession on the mainland and elsewhere. Large construction projects continued to grind to a halt or took a hiatus. Reports on closures and layoffs at local businesses remained common. Concerns continued about balancing the budget in light of several pessimistic reports on revenue forecasts from the State's Council on Economic Revenues, and news reports from the mainland indicating the depth of the recession taking place contributed to a mood of pessimism and worry. For the first time in decades, higher unemployment was present in all sectors of the economy in Hawaii, with the overall unemployment rate above 7 percent. Tourism continued to decline as Asia and the mainland continued to feel the effects of their own economic changes; people responded by tightening their collective belts and eliminating extras such as business meetings and vacations in Hawaii. The legislature was busy preparing for the November elections with the Governor and Lt. Governor's race a major highlight. The primary focus of the legislature was to balance the budget and still pay for expensive labor contracts for teachers, civil servants, the university, and other State-employed labor, while avoiding raising taxes. As a result, no legislation of any consequence for substance abuse, crime, and health were passed. Drug prices have remained relatively stable for more than 2 years, regardless of the size of seizures, number of arrests, or degree of apparent surveillance. The systems of delivery remained in place, and new dealers replaced those incarcerated for trafficking. Street reports continued to suggest no shortages of drugs, just a need to know where to look and who to ask. Street reports indicated that methamphetamine and cocaine were readily available, but prices were quite high given the state of the economy. However, as has been seen before in Honolulu, drug prices seem to be relatively inelastic and do not fluctuate much. While confirmation of these suggestions is not easy, the comments are the result of several independent interviews. The four major drugs identified after seizure or capture and sent for analysis to laboratories participating in the National Forensic Laboratory Information System (NFLIS) shifted, with methamphetamine declining, cocaine rising, cannabis rising, and heroin declining. Previous reports of MDMA persisted and were double those of 2009. Methamphetamine was still identified most often, followed by cannabis and cocaine, with MDMA fourth.

Treatment admissions data in Hawaii are based on self-reported primary drug information. Honolulu Police Department data are either cases or arrests; this report uses cases. Data related to the Medical Examiner (ME) office represent all decedents dying without an immediately apparent cause of death; dying when violence was involved, including traffic accidents; or dying unattended. The ME office is only located in Honolulu. During this period, primary admissions for cocaine use continued their multiyear decline. Honolulu Police data demonstrated the decline in reporting the lowest number of cocaine cases in 5 years. The ME office also provided data demonstrating the lowest number of deaths in which cocaine was revealed in the toxicological screen performed. Cocaine remained as the third most frequently analyzed drug by NFLIS laboratories. Heroin admissions for treatment were the lowest in 5 years. Police arrests for heroin use decreased as well, again the lowest in 5 years. However, ME data showed an increase in the toxicological screens of decedents. Heroin has been minimal in the drug items identified by NFLIS. Primary marijuana treatment admissions were relatively stable in the first half of 2010 (at 920 admissions), compared with the first half of 2009 (with 1,281). Police cases increased during this period, and the numbers of decedents with THC (tetrahydrocannabinol), a metabolite of cannabis, in their blood were also up. Cannabis (including THC or similar products) was the second most identified drug category analyzed by NFLIS laboratories. MDMA appeared to have a regular place in the top five substances identified through NFLIS.

**Data Sources:** *Data for this period were obtained from the following sources: Hawaii High* 

Intensity Drug Trafficking Area reports; Honolulu Police Department Narcotics and Vice Data sets; Hawaii Office Drug Enforcement Administration Reports; State of Hawaii Office of Narcotic Control; Office of the U.S. Attorney; State of Hawaii, Department of Health, Alcohol and Drug Abuse Division and the Infectious Disease Branch, STD/ AIDS statistics division; Attorney General's Office; Crime Data Statistics Office; City and County of Honolulu, ME Office; State of Hawaii Department of Business, Economic Development, and Tourism; and Hawaii Drug Policy Forum Reports. Data were also collected from NFLIS; private drug treatment facilities; Department of Psychiatry, University of Hawaii; Queens Hospital; and the Hawaii Health Information Corporation. All data pertain to adults within the State of Hawaii. The State of Hawaii does little analysis of its data on clients in treatment. Univariate statistics are available, but even bivariate data showing profiles of users of specific drugs are not routinely generated, and accessing those data by people who are not affiliated with the Alcohol and Drug Abuse Division is not permitted. No analysis of polydrug use is conducted, nor of recidivists in the treatment system. Although 6-month post-treatment data are collected, differential analyses of those succeeding in treatment compared with those that do not succeed are not completed.

## Drug Abuse Patterns and Trends in Los Angeles County—Update: January 2011

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**Overview of Findings:** This report updates data on drug abuse indicators for the Los Angeles County CEWG area since the last reporting period.

The overall number of treatment admissions in January–June 2010 was about 6 percent lower than that of the corresponding period in 2009 (23,870 and 25,346, respectively). The four primary substances accounting for the largest percentages of primary admissions were marijuana (24 percent), alcohol (23 percent), heroin (20), and methamphetamine (15 percent). These percentages continued the slight upward trends for marijuana and heroin and the downward trend for methamphetamine. Marijuana (40 percent), cocaine (22 percent), and methamphetamine (19 percent) accounted for a majority of Los Angeles-based illicit drug items seized and identified by the National Forensic Laboratory System (NFLIS) for January-June 2010; results indicated a continuing upward trend for marijuana and a decrease for cocaine; the percentage for methamphetamine increased over 2009, reversing a downward trend from 2005. Reports of opiates/opioids (other than heroin/morphine), methamphetamine, and antidepressants increased among coroner toxicology cases. Wholesale prices for methamphetamine continued a decline from previous periods. Some increase was seen for cocaine and domestic or Mexican marijuana over 2009 prices; however, these changes were not reflected in retail street price changes.

Updated Drug Abuse Patterns and Emerging Trends: For January–June 2010, the percentage of alcohol and other drug (AOD) primary treatment admissions for methamphetamine declined somewhat over calendar year (CY) 2009 levels. Hispanics (56 percent) and females (48 percent) continued to represent higher proportions of methamphetamine admissions than they did of admissions for other major substances. Approximately one in five of NFLIS-reported items identified in forensic laboratories contained methamphetamine, ranking it third among types of substances analyzed (after cocaine and marijuana/cannabis), an increase over 2009. Third quarter wholesale prices for methamphetamine showed a continuing decline from 2008-2009 levels. Methamphetamine remained the primary drug of concern to law enforcement agencies in the Los Angeles County region. Coroner toxicology cases testing positive for methamphetamine (14 percent) increased in 2010 over 2008-2009 levels, with levels similar to those of heroin and cocaine. Cocaine accounted for 10 percent of Los Angeles County AOD treatment admissions in the first half of 2010, a decline over CY 2009 (13 percent). African-Americans represented an increasing majority of cocaine treatment admissions, at 63 percent of cocaine admissions, up from 61 percent during the first half of 2009 and 56 percent in 2007. Of January–June 2010 NFLIS items, 22 percent contained cocaine, a decrease from 2009 (when cocaine accounted for 27 percent of all items). Cocaine was present in 14 percent of coroner toxicology cases, a decrease from 2009 levels. The wholesale price of cocaine increased by mid-2010 over 2009 levels. Treatment admissions for MDMA (3,4-methylenedioxymethamphetamine) nearly doubled over the same period in 2009 but remained at a very low level (0.5 percent). MDMA remained at a ranking of fifth among drugs identified by NFLIS for Los Angeles County, while representing a higher percentage for January–June 2010 (4.7 percent of items) than for 2009 (2.8 percent). Benzodiazepines, tranquilizers, and sedatives together accounted for a very small percentage (0.5 percent) of total primary treatment admissions. These types of drugs were present in 12 percent of coroner toxicology cases, a decrease from 2009 levels. The category of "other" amphetamines and stimulants, which includes several prescription drugs, such as Adderall® and Ritalin®, accounted for 1.3 percent of treatment admissions. In January-June 2010, 20 percent of primary treatment admissions were for heroin, a slight increase over 2009 levels (18 percent). Heroin was identified in 6 percent of NFLIS items. Heroin/morphine was present in 16 percent of coroner toxicology cases in 2010, a decrease from 20 percent in 2009 but an increase in numbers of cases over 2009 numbers. Approximately 3 percent of primary treatment admissions were for other opioids/narcotics excluding heroin, a slight increase over 2009 levels. Hydrocodone, oxycodone, and codeine together accounted for

2.0 percent of NFLIS items, a slight decrease from 2009 levels (2.5 percent). Los Angeles County Coroner toxicology cases showed that other opioids/narcotics were present in 29 percent of cases in 2010 (January-November 2010). Marijuana was reported as the primary drug for 24 percent of Los Angeles County treatment admissions. More than one-half (59 percent) of marijuana admissions were for adolescents younger than 18, a larger percentage for this age group than in 2009 (54 percent). Marijuana/cannabis was identified in 40 percent of NFLIS items, continuing an increasing trend. THC (tetrahydrocannabinol), a metabolite of cannabis, was identified in 12 percent of coroner toxicology cases, a decrease from 2009 levels. Emerging Patterns: A slight increase was consistent across indicators for heroin and MDMA, but indicator trends were mixed for other substances.

Data Sources: Treatment data were provided by Los Angeles County Department of Public Health, Alcohol and Drug Program Administration (tables produced by California Department of Alcohol and Drug Programs [ADP]) from Cal-OMS (California Outcome Monitoring System). CalOMS is a statewide client-based data collection and outcomes measurement system for AOD prevention and treatment services. Submission of admission/discharge information for all clients is required of all counties and their subcontracted AOD providers, all direct contract providers receiving public AOD funding, and all privatepay licensed narcotic treatment providers. Data for this report include admissions in Los Angeles County for January–June 2010. Forensic laboratory data were provided by NFLIS, Drug Enforcement Administration, for January-June 2010. Drug price data were derived from reports from the Los Angeles County Regional Criminal Information Clearinghouse (LA CLEAR) (provided by R. Lovio). The prices included in this report reflect the best estimates of the analysts in the Research and Analysis Unit at LA CLEAR, as available for the "Third Quarter Report 2010," based primarily on field reports, interviews with law enforcement agencies throughout the Los Angeles High

Intensity Drug Trafficking Area (LA-HIDTA), and post-seizure analysis. **Drug threat** data were from the "U.S. Department of Justice LA-HIDTA 2010 Drug Market Analysis." **Mortality data** for January–November 2010 were from the Los Angeles County Department of the Coroner (provided by O. Brown) and indicate positive drug results from toxicology cases (not necessarily specific causes of death).

# Drug Abuse Patterns and Trends in Maine—Update: January 2011

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**Overview of Findings:** This report updates drug abuse indicators in Maine to 2010. During the last decade illicit drug abuse has been dwarfed by a growing problem with pharmaceuticals; this continued in 2010. Heroin and cocaine indicators have declined, continuing a multiyear trend. Marijuana indicators showed a slight increase in the percent of arrests, seizures, and admissions, but fewer impaired drivers. Abuse of narcotic analgesics continued as the most salient of Maine drug abuse problems in 2010, causing 74 percent of overdose deaths alone or in combination with other drugs or alcohol; 38 percent of arrests; 19 percent of law enforcement seizures; 59 percent of impaired driver urinalyses; and 57 percent of primary treatment admissions, excluding alcohol. Buprenorphine diversion has been identified as an emergent problem.

**Updated Drug Trends and Emerging Patterns: Heroin** abuse remained a serious problem, but most indicators were stable or decreasing. Heroin/morphine deaths declined to only 6 percent in early 2010. Arrests for heroin, which peaked in

2007, declined to 5 percent in 2010. The number of arrests, however, remained stable. Heroin law enforcement seizures dropped to 9 percent of samples analyzed in 2010. Primary heroin/morphine admissions for the first half of 2010 constituted 12 percent of all admissions, excluding alcohol, down from a 22-percent peak in 2005. Cocaine indicators in 2010 were stable or decreasing. Deaths from cocaine in the first half of 2010 constituted 7 percent of all drug-induced deaths, stable since 2008. Cocaine/crack arrests dominated the illicit drug arrests of the Maine Drug Enforcement Agency (MDEA) during the mid-2000s, but the proportion of arrests decreased substantially to 22 percent in 2010. Although cocaine was the largest single category of samples tested in Maine's forensic laboratory, it declined to 40 percent of all samples analyzed in the first half of 2010. Primary treatment admissions for crack and cocaine combined had been at a 14-percent plateau from 2005 to 2007, but declined gradually to 6 percent during the first half of 2010, 2 percent for crack and 4 percent for powder cocaine. Thirty-two percent of cocaine samples tested positive for levamisole and 3 percent for diltiazem, down from 38 and 11 percent, respectively, in 2009. Marijuana indicators remained moderately high, but mixed. Arrests had declined to 17 percent in 2008, but increased to 23 percent in 2010. Drug samples seized and identified as marijuana increased slightly, from 7 percent in 2009 to 10 percent in 2010. Since 2007, marijuana admissions have been at a plateau of about 18-20 percent. Urine tests of impaired drivers in 2010 decreased to 22 percent positive for cannabinoids, down from 30 percent in 2006-2008. Prescription narcotics misuse and abuse remained high in 2010 indicators, with seizures and admissions continuing to increase. Pharmaceutical narcotics caused 74 percent of overdose deaths in the first half of 2010; methadone and oxycodone continued to dominate frequencies. Deaths due to long-acting pharmaceutical morphine increased, totaling more than 50 percent of heroin/morphinecaused deaths. Nonlaw-enforcement medication identifications of pharmaceutical morphine by the poison control center doubled from 2005 to 2010.

Pharmaceutical narcotics arrests increased from 21 percent in 2007 to 38 percent in 2010. Seizure samples analyzed and identified as narcotic analgesics also increased to 19 percent in 2010, up from 12 percent in 2008. About one-half of the morphine samples were tablets. A total of 59 percent of impaired drivers tested positive for pharmaceutical narcotics in 2010. Some 24 percent were positive for oxycodone, an increase from previous years, and 18 percent were positive for methadone, a decrease from 2009. Twenty-eight percent tested positive for at least one opioid in combination with at least one benzodiazepine. In early 2010, admissions for pharmaceutical narcotics increased to 57 percent of admissions, excluding alcohol. Buprenorphine caused three deaths in 2008 and two during 2009 but none in early 2010. Four percent of law enforcement seizures tested in 2010, and 7 percent of impaired driver urinalyses in 2010, contained buprenorphine, up slightly from 2009. Nonlaw-enforcement poison center calls for medication identification showed an increase in buprenorphine identifications, from 57 in 2005 to 334 in 2010. Benzodiazepines continued to play a substantial role in Maine drug problems in 2010. Although involved in only 3 percent of seizures analyzed and 2 percent of arrests, benzodiazepines caused 31 percent of drug-induced deaths (an increase from 12 percent in 2000), usually as co-intoxicants in narcotic deaths. Impaired driver urinalyses in 2010 included 40 percent positive for one or more benzodiazepines, including 17 percent for alprazolam and 5 percent for clonazepam. Methamphetamine indicators were mixed but with very small numbers. Methamphetamine represented 4 percent of 2010 arrests, up slightly from 3 percent in 2009. Most arrests were near the Canadian border. There were five confirmed clandestine methamphetamine laboratories in 2010; in 2009 there was only one. Most (54 percent) of the methamphetamine forensic laboratory samples were tablets, similar to 2009. Nearly all of the tablets (91 percent) contained no other drugs; 9 percent had caffeine. This was a change from 2009, when most samples contained caffeine and a substantial minority had other substances, such as TFMPP (1-3-(trifluoromethylphenyl)piperazine), BZP (1-benzylpiperazine), procaine, and diphenhydramine. There were no deaths due to methamphetamine in the first half of 2010. Primary methamphetamine admissions remained well under 1 percent in the first half of 2010. MDMA indicators were mixed but with small numbers. MDMA arrests in 2010 represented 3 percent of all arrests, up from 1 percent in 2009. Four percent of drug samples analyzed in 2010 were MDMA, up slightly from 3 percent in 2009. Primary admissions for MDMA constituted only one-tenth of 1 percent in the first 6 months of 2010. Emerging issues included continuing problems with the high volume of prescription drug abuse, including more deaths due to long-acting pharmaceutical morphine, as well as rising indicators for buprenorphine diversion. Benzodiazepine deaths continued at very high levels, constituting approximately one-third of the drug-induced deaths. Samples of seized methamphetamine pills have changed in the past year, with most containing methamphetamine alone. MDMA arrests have tripled, although the number of arrests was small.

Data Sources: Data sources updated in this report include the following sources. Treatment admission data for January–June 2010 were provided by the Maine State Office of Substance Abuse, including all admissions for programs receiving State funding. This report updates admissions, excluding those for shelter and detoxification; comparisons extend back to 2003. Forensic laboratory data through calendar year 2010 were provided by the Maine State Health and Environmental Testing Laboratory, which tests samples seized statewide and reports these results to the National Forensic Laboratory Information System. Data for 2010 were compared with previous years back to 2003. The Health and Environmental Testing Laboratory has also provided urine test data for impaired drivers through calendar year 2010; these were compared with data from 2006 to 2009. Arrest data through calendar year 2010 were provided by the MDEA, which directs eight multijurisdictional task forces covering the State, generating approximately 60 percent of all Uniform Crime Report (UCR) drug-related offenses statewide. Data were refined this year for the period 2006–2010 to focus only on arrests by the MDEA, excluding arrests by other agencies to which MDEA provided assistance, and excluding arrests for nondrug offenses. Data for 2010 were compared with previous years back to 2003. Mortality data, updated through June 2010, were provided by the Office of Chief Medical Examiner, with comparisons back to 1997. That office investigates all suspected overdose cases statewide, including complete forensic testing (screening and quantification) for a broad panel of abused and therapeutic drugs. Poison control center calls to the Northern New England Poison Center were updated through 2010, focusing in this analysis on nonlaw-enforcement medication identification calls since 2005.

## Drug Abuse Patterns and Trends in Miami-Dade and Broward Counties, Florida—Update: January 2011

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**Overview of Findings:** Cocaine consequences continued to decline in Florida during the first half of 2010 and particularly in Miami-Dade County. Heroin indicators declined over the past decade and sharply in the past year, as consequences related to the nonmedical use of prescription opioids have increased. Oxycodone deaths and other consequences continued to increase across Florida, as delays have occurred in implementing a Prescription Drug Monitoring Program and other legislation aimed at regulating rampant "rogue pain clinics." Benzodiazepine consequences remained at high levels but stabilized in the first half of 2010. Adolescent marijuana use continued to increase as

perceived risks about it were softening, according to 2010 State and local school surveys. Widespread availability of synthetic cannabinoids was reported in retail outlets. Local alleged "ecstasy" pills often contained BZP (1-benzylpiperazine); MDMA was also reported by South Florida crime laboratories. Emerging issues included the role of street-level purity and retail price in the decline of cocaine consequences; increasing reports of injection drug use among nonmedical users of prescription opioids; and retail sales of unregulated synthetic cannabinoids and hallucinogens/stimulants.

Updated Drug Abuse Trends and Emerging Patterns: Cocaine-related deaths declined sharply in Miami-Dade County while stabilizing in Broward County between the last half of 2009 and the first half of 2010. Most of these deaths involved more than one drug, therefore the higher rate of prescription drug deaths in Broward may contribute to more cases of cocaine detected among decedents there. Cocaine still accounted for the highest number of estimated emergency department (ED) visits, as compared with all other substances in the Drug Abuse Warning Network (DAWN) weighted ED estimates for 2009 in the two South Florida DAWN divisions; however, this was a significant decline from the number of estimated cocaine-involved visits in 2008 in both divisions. Cocaine crime laboratory reports declined to 57 percent of all cases in the first half of 2010, compared with 67 percent of cases in 2007. Primary treatment admissions for cocaine declined from 23 percent of 1999 admissions (including alcohol) for the State of Florida to 14 percent in 2009. Levamisole was detected as an adulterant in all Miami-Dade County cocaine deaths in 2010. Deaths in which heroin was detected decreased statewide and in Miami-Dade County during the first half of 2010 and remained stable in Broward County. Heroin-related deaths have declined statewide since 2000, while deaths linked to prescription opioids escalated. Based on an analysis of Florida Medical Examiners Commission data by Nova Southeastern University, in 59 percent of all heroin deaths in Florida during 2009, at least one

prescription opioid was also detected at the time of death. There were increasing reports of injection drug use among nonmedical users of prescription opioids. Miami-Dade County continued to report the lowest per capita rates of nonmedical prescription opioid deaths in the State. There were 65 occurrences of an opioid identified among deceased persons in Miami-Dade County during the first half of 2010, with 175 such reports in Broward County and 148 in Palm Beach County. Consequences of methamphetamine abuse remained very low; however, deaths related to it increased 25 percent statewide, from 39 in the last half of 2009 to 49 in the first half of 2010. BZP (1-benzylpiperazine) continued to be detected in most alleged ecstasy tablets in Broward County. However, testing is not done for TFMPP (3-(trifluromethylphenyl)piperazine), which is frequently found in combination with BZP elsewhere. Statewide, MDMA-related deaths increased slightly, from 19 in the last half of 2009 to 22 in the first half of 2010. The per capita rate of MDMA ("ecstasy") weighted DAWN ED visit estimates decreased significantly from 11.9 per 100,000 in 2008 to 7.7 in 2009 for Miami-Dade County, while remaining stable at 7.3 per 100,000 in 2008 and 8.3 in 2009 for Broward and Palm Beach Counties, respectively. Indicators of marijuana consequences remained stable and high, accounting for 3,378 estimated marijuanainvolved ED visits in Miami-Dade County in 2009 and 2,870 estimated visits for Broward and Palm Beach Counties. The 2010 Florida Youth Substance Abuse Survey reported increases in prevalence of past-30-day marijuana use among middle and high school students statewide as well as in Miami-Dade and Broward Counties. At the same time, fewer students reported perceived harm and wrongfulness in using marijuana, and measures of its social acceptance increased. Synthetic cannabinoids were widely available and used mostly by those subject to frequent drug testing. Alprazolam continued as the most often cited **benzodiazepine** observed in most abuse indicators. There were 55 occurrences of either alprazolam or diazepam identified among deceased persons in Miami-Dade County during the first half of 2010 and 136

such reports in Broward County-decreases of 18 percent in Miami-Dade County and 38 percent in Broward County over the numbers for the second half of 2009. The 2,900 estimated DAWN ED visits for nonmedical benzodiazepine misuse during 2009 in Broward and Palm Beach Counties represented a significant 28-percent increase over the total estimates for 2008, while the 1,587 estimated visits during 2009 in Miami-Dade County were stable from the 1,524 visits in 2008. Emerging Patterns: The continued decline of cocaine consequences locally and nationally appeared to be related to lower purity and rising street prices per gram of pure cocaine. The nonmedical use of prescription opioids has created an increase in injection drug use among people in their twenties who are often naive about the risk of infected syringes. Most drug deaths are preventable, with multiple missed intervention opportunities. The introduction of synthetic cannabinoids in the region has created a distribution network of retail merchants who are poised to offer new unregulated drugs as their current products are scheduled and made illegal.

Data Sources: Drug-related death data came from the Florida Medical Examiners Commission 2010 Interim Report on Drugs Identified in Deceased Persons by Florida Medical Examiners, covering the first half of 2010 from the Florida Department of Law Enforcement. Weighted DAWN ED estimates for 2009 from the Center for Behavioral Health Statistics and Quality (CBHSQ), Substance Abuse and Mental Health Services Administration (SAMHSA), are reported separately for the Miami-Dade and Ft. Lauderdale (Broward and Palm Beach Counties) divisions. A comparison of treatment data by primary drug from 1999 and 2009 are from the Treatment Episode Data Set from SAMHSA's CBHSQ, as reported by the Florida Department of Children and Families for all publicly funded adult and youth treatment programs. Forensic laboratory data were provided by the National Forensic Laboratory Information System, Drug Enforcement Administration, for January–June 2010. School

survey data were provided by the 2010 Florida Youth Substance Abuse Survey from the Florida Department of Children and Families. Heroin and opioid user information, including injection drug use trends, came from an analysis of Florida Medical Examiners Commission data by the Center for the Study and Prevention of Substance Abuse at Nova Southeastern University and anecdotal information reported by the Broward County Public Defender's Office and staff for the Broward County Drug Court.

#### Drug Abuse Patterns and Trends in Minneapolis and St. Paul, Minnesota—Update: January 2011

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Overview of Findings: This report is produced twice annually for participation in the Community Epidemiology Work Group of the National Institute on Drug Abuse, an epidemiological surveillance network of researchers from 21 U.S. metropolitan areas. The Minneapolis/St. Paul ("Twin Cities") metropolitan area includes Minnesota's largest city, Minneapolis (Hennepin County), the capital city of St. Paul (Ramsey County), and the surrounding counties of Anoka, Dakota, and Washington. Population estimates from 2009 for each of these counties are as follows: Anoka, 335,308; Dakota, 400,675; Hennepin, 1,168,983; Ramsey, 517,748; and Washington, 236,517, according to the Minnesota Department of Administration Office of Geographic and Demographic Analysis, Office of the State Demographer. This totals 2,659,631 people, which is equal to one-half of the Minnesota State population. In the five-county metropolitan area, 84 percent of the population is White. African-Americans constitute the largest minority group in Hennepin County, while Asians

are the largest minority group in Ramsey, Anoka, Dakota, and Washington Counties. Most indicators regarding heroin and other opiate abuse remained at heightened levels in the Twin Cities in 2010, while the indicators related to the abuse of cocaine continued to decline. Heroin accounted for 3.3 percent of treatment admissions in 2000, compared with 6.7 percent in the first half of 2010. Other opiates accounted for 1.4 percent of treatment admissions in 2000 and 8.7 percent in the first half of 2010. Cocaine-related admissions accounted for 14.4 percent of treatment admissions in 2005, but they accounted for only 5.8 percent in the first half of 2010. In Hennepin County, cocaine-related deaths declined in 2009, as did estimated emergency department (ED) cocaine-involved visits and the drug's use among adult male arrestees. The 2010 Minnesota Student Survey found continuing declines in the use of cocaine, alcohol, methamphetamine, and tobacco among Minnesota public school students. The use of synthetic marijuana products, also known as "fake pot," resulted in 76 reports to the Hennepin Regional Poison Center in 2010, and their use was banned in some Minnesota communities.

Updated Drug Abuse Trends and Emerging Patterns: The decline in cocainerelated treatment admissions continued into the first half of 2010. Cocaine was the primary substance problem for 5.8 percent of total treatment admissions in the first half of 2010, compared with 6.4 percent of total treatment admissions in 2009, 9.9 percent in 2008, 11.6 percent in 2007, and 14.1 percent in 2006. Most cocaine admissions were for crack cocaine; 73.7 percent of clients were age 35 or older; and one-half (50.1 percent) were African-American. Cocaine-related deaths fell in Hennepin County from 21 in 2008 to 10 in 2009. In Ramsey County, there were 10 cocaine-related deaths in 2008 and 11 in 2009. Cocaine use among arrestees also declined. In 2009, 18.7 percent of male arrestees in Hennepin County tested positive for cocaine, compared with 22.5 percent in 2008 and 27.5 percent in 2007. Cocaine accounted for 22.5 percent of items seized by law enforcement and identified

by the National Forensic Laboratory Information System (NFLIS) in the first half of 2010 in the Twin Cities, compared with 21.6 percent nationally. In 2009, the Substance Abuse and Mental Health Services Administration (SAMHSA) issued a nationwide alert about cocaine that had been adulterated with levamisole, a veterinary anti-parasitic drug approved for use in cattle, sheep, and swine but not approved for human use. Humans who ingest cocaine mixed with levamisole can experience reduced white blood cells and suppressed immune function that impairs the body's ability to fight off even minor infection. Between March and May 2010, the Minnesota Poison Control System identified three confirmed and two suspected cases of neutropenia associated with levamisole and recent cocaine. Two additional exposures were reported since July 2010. To help determine the extent to which cocaine in Minnesota was contaminated with levamisole, the Minnesota Bureau of Criminal Apprehension laboratory tested 198 cocaine samples between June 16 and August 31, 2010, and found that 47.9 percent of them contained levamisole. Cocaine samples with levamisole have increased nationwide since 2002. According to the U.S. Drug Enforcement Administration (DEA), 70 percent of cocaine samples analyzed nationwide in July 2009 contained levamisole. Drug Abuse Warning Network (DAWN) estimated cocaine-involved ED visits in the Twin Cities fell significantly from 5,390 in 2008 to 3,843 in 2009. Past-year cocaine use was reported by 4.7 percent of Minnesota 12th graders in 2010, compared with 2.9 percent reported by 12th graders nationally. Treatment admissions for both heroin and other opiates steadily increased in the Twin Cities since the turn of the century. In 2000, heroin accounted for 3.3 percent of total treatment admissions, and other opiates accounted for 1.4 percent. However, in this reporting period (January-June 2010), heroin-related admissions fell slightly and accounted for 6.7 percent of treatment admissions, compared with 8 percent in 2009. Treatment admissions involving other opiates continued an upward trend and accounted for 8.7 percent of total admissions in the first half of

2010, compared with 8.3 percent in 2009. For the most part, these admissions involved the nonmedical use of prescription pain medications. Of those clients admitted to treatment for other opiates, almost one-half (46.5 percent) were female, and oral was the primary route of administration (70 percent). From 2008 to 2009, opiate-related deaths rose from 31 to 36 in Ramsey County and declined from 84 to 77 in Hennepin County. In 2009, 5.8 percent of male arrestees in Hennepin County tested positive for opiates, compared with 6.1 percent in 2008 and 4.7 percent in 2007. Heroin accounted for 3.2 percent of items seized and identified by NFLIS in the first half of 2010 in the Twin Cities, compared with 7.1 percent of all seizures nationally. Both oxycodone and hydrocodone represented a larger percentage of law enforcement drug seizures nationally than in Minnesota. There were 1,651 estimated heroin-involved ED visits in the Twin Cities in 2008, compared with 1,855 in 2009. Overall, the total number of episodes involving the nonmedical use of narcotic analgesics in the Twin Cities EDs increased significantly from 1,723 in 2004 to 3,168 in 2009. From 2003 to 2009, fentanyl-involved episodes rose significantly from 94 to 184; hydromorphone increased significantly from 123 estimated visits in 2007 to 228 in 2009; and estimated oxycodone-involved visits increased significantly from 601 in 2004 to 1,383 in 2009. Hydrocodone-involved ED visits did not increase or decrease significantly. Tramadol is a prescription medication used to treat moderate pain. It is not federally scheduled in the United States, and it is sometimes sold at online pharmacies. According DAWN, there were 63 estimated tramadol-involved ED visits in the Twin Cities in 2005, compared with 164 in 2009 (this is not, however, a statistically significant increase). The Minnesota Board of Pharmacy maintains a program to help identify individuals who inappropriately obtain excessive amounts of controlled substances from multiple prescribers and pharmacies. The Minnesota Prescription Monitoring Program (PMP) has collected data (through 11/29/2010) on more than 5.6 million controlled substance prescriptions. Pharmacies licensed and

located in Minnesota must report to the PMP all schedule II, III, and IV controlled substance prescriptions that they dispense. Past-year use of heroin was reported by 1.4 percent of Minnesota 12th graders in 2010, compared with 0.9 percent nationally. Past-year use of prescription pain killers was reported by 6.3 percent of Minnesota 12th graders in 2010, compared with 8.7 percent of 12th graders nationally who reported the use of narcotics other than heroin. Treatment admissions with marijuana as the primary substance problem accounted for 19.3 percent of total admissions in the Twin Cities in the first half of 2010, compared with 18.1 percent in 2009. Most clients (68.3 percent) admitted to treatment with marijuana as the primary substance problem were younger than 26. In 2009, 46.9 percent of male arrestees in Hennepin County tested positive for marijuana, compared with 42.7 percent in 2007. Marijuana accounted for 22.8 percent of items seized by law enforcement and identified by NFLIS in the first half of 2010 in the Twin Cities, compared with 36.9 percent nationally. There were 4,302 estimated marijuana-involved ED visits in the Twin Cities in 2006, compared with 5,596 in 2009. Past-year use of marijuana by Minnesota 12th graders increased from 21.8 percent in 1992 to 30.6 percent in 2010, but it was still less than the percentage reported nationally in 2010 (34.8 percent). The use of synthetic marijuana by youth created rising public concern throughout Minnesota in 2010. Known as K2 or Spice and other names, these new herbal mixtures are sold as incense, but when smoked, mimic the effects of actual marijuana. K2 is sold online and in "head-shops," under numerous other names such as "Smoke XXXX," "Stairway to Heaven," "Karma Kind," or "California Dreams." Sold in small zip-lock plastic bags with handmade packaging, these new synthetic marijuana mixtures are seen as a legal alternative to marijuana. They are loose mixtures of herbs allegedly spraved with synthetic cannabinoids, the active ingredients in marijuana. The DEA, using its emergency scheduling authority, initiated action in November 2010 to temporarily control five chemicals that are used to make "fake pot" products-JWH-018, JWH-073,

JWH-200, CP-47,497, and cannabicyclohexanol. Several States and college towns in Minnesota, including Duluth, have already banned the sale and possession of these mixtures. Movements are underway in Minnesota to ban these products statewide as well, with pending action by the State Board of Pharmacy and a Minnesota legislator who intends to introduce a bill banning them statewide. Since the DEA action, several retail outlets that sell synthetic marijuana products in Minnesota are contending in pending litigation that the recent DEA emergency scheduling will have a significant detrimental economic impact on their businesses. One Minneapolis store, for example, reported that 70 percent of its sales from January through October 2010 were synthetic marijuana, accounting for over \$609,000 in gross profits. The retailers claim that the DEA action is both unconstitutional and illegal. Reports from metropolitan area school-based counselors indicate growing abuse of these mixtures and several incidents in which use produced highly combative and aggressive behavior, vomiting, seizures, and one case of extreme hair loss by an adolescent who was using 3 grams per day. The Hennepin Regional Poison Center documented 76 synthetic THC (tetrahydrocannabinol, a metabolite of cannabis) exposures in 2010. Primary treatment admissions for methamphetamine increased slightly in the first half of 2010 to 6.3 percent of admissions, compared with 6 percent in 2009 and 12 percent in 2005, the highest year. Among these admissions, more than onethird (36.1 percent) were female, 80.4 percent were White, and 78.5 were age 26 or older. In 2009, 3.6 percent of adult male arrestees in Hennepin County tested positive for methamphetamine, compared with 3.2 percent in 2007. Seizures of methamphetamine by law enforcement in the Twin Cities accounted for 24.1 percent of items seized and identified by NFLIS in the first half of 2010, compared with only 10.5 percent of seizures nationally. Estimated ED visits involving methamphetamine in the Twin Cities decreased significantly from 1,741 in 2004 to 970 in 2009. Past-year use of methamphetamine by Minnesota 12th graders declined from 5.8 percent in 2001 to