

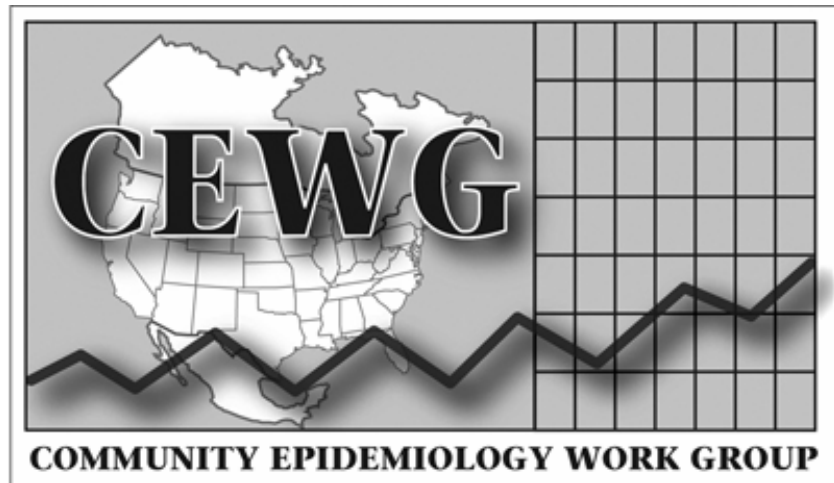
EPIDEMIOLOGIC TRENDS IN DRUG ABUSE

VOLUME II

Proceedings of the Community
Epidemiology Work Group

January 2006

NATIONAL INSTITUTE ON DRUG ABUSE



EPIDEMIOLOGIC TRENDS IN DRUG ABUSE

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U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
NATIONAL INSTITUTES OF HEALTH

Division of Epidemiology, Services and Prevention Research
National Institute on Drug Abuse
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The National Institute on Drug Abuse (NIDA) acknowledges the contributions made by representatives of the Community Epidemiology Work Group (CEWG) who have invested their time in preparing the reports presented at the semiannual CEWG meetings; representatives from agencies that contribute data and technical knowledge; and other researchers who participate in the meetings. This publication was prepared by MasiMax Resources, Inc., under contract number N01-DA-1-5514 from NIDA.

This publication, *Epidemiologic Trends in Drug Abuse, Volume II*, contains the individual papers presented and data reported at the January 2006 CEWG meeting by CEWG representatives from 21 areas in the United States. In addition, *Volume II* includes a paper by a

researcher on drug-related hospital admissions in Arizona, papers by members of a panel on criminal justice efforts in Phoenix/Arizona, and an update on drug abuse patterns and trends in Mexico by researchers involved in Mexico's Epidemiologic Surveillance System of Addictions.

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For more information about the Community Epidemiology Work Group and other research-based publications and information on drug abuse and addiction, visit NIDA's Web site at <<http://www.drugabuse.gov>>.

Both Volumes I and II (available in limited supply) can be obtained by contacting the National Clearinghouse for Alcohol and Drug Information

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Foreword

This publication includes papers presented at the 59th semiannual meeting of the Community Epidemiology Work Group (CEWG) held in Phoenix, Arizona, on January 18–20, 2006, under the sponsorship of the National Institutes of Health, National Institute on Drug Abuse (NIDA).

CEWG representatives from 21 sentinel areas in the United States presented reports, citing the most recent data on drug abuse patterns, trends, and emerging problems in their areas. A University of Arizona researcher presented data/information on drug-related hospital admissions. There were also presentations by two panels. One was a Panel on Criminal Justice Indicator Data in Phoenix/Arizona.

In the second panel, international researchers presented findings on drug abuse patterns and emerging trends in Central America, Mexico, and Taiwan. In addition,

representatives from Federal agencies that contribute information to the CEWG provided updates on their data systems.

The papers of the 21 CEWG representatives and papers by other presenters are contained in this volume. The roles and functions of the CEWG are summarized in the next section.

Information reported at each CEWG meeting is disseminated to drug abuse prevention and treatment agencies, public health officials, researchers, and policymakers. The information is intended to alert authorities at the local, State, regional, and national levels and the general public to current drug abuse patterns and trends and emerging drug problems so that appropriate and timely action can be taken. Researchers also use this information to develop research hypotheses that might explain social, behavioral, and biological issues related to drug abuse.

Moirá P. O'Brien
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National Institutes of Health
Department of Health and Human Services

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The CEWG Network: Roles and Functions

ROLES OF THE CEWG

The CEWG is a unique epidemiologic network; it is designed to inform drug abuse prevention and treatment agencies, public health officials, policy-makers, and the general public about current and emerging drug abuse patterns. The 21 geographic areas represented in the CEWG are shown in the map below.



The CEWG has functioned as a drug abuse surveillance system since 1976. The CEWG uses multiple sources of information to identify and assess current and emerging drug abuse patterns, trends, and issues. Each source provides information about the abuse of particular drugs, drug-using populations, and/or different facets of the behaviors and outcomes related to drug abuse. The information obtained from each source is considered a drug abuse *indicator*. Typically, indicators do not provide estimates of the number (prevalence) of drug abusers at any given time or the rate at which drug-abusing populations may be increasing or decreasing in size. However, indicators do assist in characterizing different types of drug abusers, such as those who have been treated in emergency rooms, have been admitted to drug treatment programs, or died with drugs found in their bodies. Data on items submitted for forensic chemical analysis serve as indicators on availability of different substances and engagement of law enforcement at the local level. Other data such as

drug price and purity are indicators of availability, accessibility, and potency of specific drugs. The CEWG examines drug abuse indicators over time to monitor the nature and extent of drug abuse and associated problems within and across geographic areas.

THE FUNCTIONS OF CEWG MEETINGS

The CEWG convenes semiannually. Ongoing communication is maintained between meetings through e-mail, conference calls, and mailings.

The interactive semiannual meetings are a major and distinguishing feature of the CEWG. The meetings

provide a foundation for the continuous monitoring and surveillance of current and emerging drug problems and related health and social consequences. Through the meetings, the CEWG accomplishes the following:

- ◆ Dissemination of the most up-to-date information on drug abuse patterns and trends in each CEWG area
- ◆ Identification of changing drug abuse patterns and trends within and across CEWG areas
- ◆ Planning for followup on identified problems and emerging drug abuse problems

Presentations by each CEWG representative include a compilation of multiple sources of quantitative drug abuse data. Going beyond publicly accessible data, CEWG representatives provide a unique local perspective gathered from both public records and qualitative research. Information is most often

obtained from local substance abuse treatment providers and administrators, personnel of other health-related agencies, law enforcement officials, and drug abusers.

At each meeting, time is devoted to presentations by invited speakers. These special sessions typically focus on...

- ◆ Presentations by a panel of experts on a current or emerging drug problem identified in prior CEWG meetings
- ◆ Updates by Federal personnel on key data sets used by CEWG representatives
- ◆ Drug abuse patterns and trends in other countries

Identification of changes in drug abuse patterns is part of the interactive discussions at each CEWG meeting. Through this process, members can alert one another to the emergence of a potentially new drug of abuse that could spread from one area to another. The CEWG has pioneered in identifying the emergence of several drug epidemics, such as those involving abuse of methaqualone (1979), crack (1983), methamphetamine (1983), and “blunts” (1993). Through the semi-annual meetings, the CEWG is uniquely positioned to provide crucial perspectives on urgent drug abuse issues in a timely fashion and to illuminate their various facets within the local context.

Planning for followup on issues and problems identified at a meeting is initiated during discussion sessions. Postmeeting planning continues through e-mails and conference calls, which assist in formulating agenda items for a subsequent meeting and raising new issues for exploration at the following meeting.

Emerging/Current Trend is an approach initiated at the CEWG meeting in June 2003 and is a direct product of planning at a prior meeting and subsequent followup activities. The Emerging/Current Trend at the January 2005 meeting featured a panel on methamphetamine abuse. In June 2004, a special panel addressed the abuse of prescription drugs. In June 2003, a special panel was convened on Methadone-Associated Mortality, and, in December 2003, a PCP Abuse Panel addressed the issue of phencyclidine abuse as a localized emerging trend.

The Emerging/Current Trend approach draws upon the following:

- ◆ CEWG representatives’ knowledge of local drug abuse patterns and trends
- ◆ Small exploratory studies
- ◆ Presentations of relevant information from federally supported data sources
- ◆ Presentations by other speakers knowledgeable in the selected topic area

EPIDEMIOLOGY
OF
DRUG
ABUSE:

CEWG
AREA
PAPERS

Drug Trends in Metropolitan Atlanta

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ABSTRACT

Drug abuse indicators showed that cocaine/crack remained a primary drug of abuse in Atlanta during the first half of 2005, with the drug dominant among ED reports, treatment admissions, and seized items analyzed by NFLIS. However, primary cocaine-related treatment admissions in the first 6 months of 2005 continued a 4-year downward trend. Indicators for marijuana use remained widespread but stable, with the drug accounting for more than 20 percent of all public treatment admissions and nearly 28 percent of illicit drug admissions in the Atlanta metropolitan area in the first half of 2005. Use of marijuana continued to increase among younger users, especially among individuals younger than 18. Multiple indicators demonstrated that methamphetamine is the fastest growing drug problem in metropolitan Atlanta. Methamphetamine is being consumed by both females and males, while users are more likely to be White. However, there are indications that methamphetamine use is increasing among African-Americans. Use of both benzodiazepines and narcotic pain relievers increased largely because of increased street availability and Internet access. In the first 6 months of 2005, an increase in Xanax and hydrocodone was noted by multiple epidemiological indicators. Heroin use in Atlanta, already low compared with other metropolitan areas, is slightly decreasing. Consumers of heroin remain the oldest of any classification of drug user.

INTRODUCTION

Area Description

The metropolitan Atlanta area is located in the northwest corner of the State of Georgia and includes 20 of the State's 159 counties. The metropolitan area comprises more than 6,100 square miles, or 10.5 percent of Georgia's total size. Currently, Georgia is the 10th most populous State in the Nation. From April

2000 to July 2002, the State's population grew 4.6 percent, and it now ranks fourth among all States.

With an estimated 4.4 million residents, the metropolitan Atlanta area includes nearly 52 percent of the State's population of nearly 8.4 million residents (U.S. Bureau of the Census 2003). The Atlanta metropolitan area ranks ninth among the Nation's major population centers. The city of Atlanta, with a population of approximately 369,000, represents 8.2 percent of the overall metropolitan population (American Community Survey 2003). The city is divided into two counties, Fulton County and DeKalb County, which include 18.8 and 15.9 percent of the metropolitan population, respectively.

There are demographic differences between the city of Atlanta and the larger metropolitan area, which more closely reflects the State as a whole. African-Americans are the largest ethnic group within the city (60 percent), followed by Whites (37 percent), Hispanics (6 percent), and Asians (2 percent). For the overall metropolitan Atlanta area, those numbers reverse. Whites account for the majority (62.5 percent), followed by African-Americans (29 percent), Hispanics (7.9 percent), and Asians (3.7 percent). Per capita family income in 2003 for the city of Atlanta was higher at \$32,635 than in the metropolitan area, at \$26,145. The poverty rate inside the city is 24 percent, compared with only 9.6 percent in the metropolitan area. The housing vacancy rate outside the city (8.9 percent) is much lower than in the city (17.5 percent).

In fiscal year (FY) 2004, the Georgia Bureau of Investigation (GBI)'s statewide drug enforcement efforts were led by 3 regional drug offices and 13 multi-jurisdictional task force programs. As a result of these combined efforts, 2,979 drug offenders were arrested. As of December 2004, there were 23 existing drug courts in Georgia (of these, 13 were for adult felony drug offenses, 3 were for adult misdemeanor drug offenses, and 7 were for juvenile drug offenses). One adult felony drug court was located in Atlanta. In 2004, 34 percent of those on probation in Georgia, 19 percent of prisoners, and 37 percent of parolees had been convicted of a drug-related offense.

Additional factors that influence substance use in the State include the following:

- Georgia is both a final destination point for drug shipments and a smuggling corridor for drugs transported along the east coast. Extensive interstate highway, rail, and bus transportation net-

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works, as well as international, regional, and private air and marine ports of entry, serve the State.

- The State is strategically located on the I-95 corridor between New York City and Miami, the key wholesale-level drug distribution centers on the east coast and major drug importation hubs. In addition, Interstate Highway 20 runs directly into Georgia from drug entry points along the southwest border and gulf coast.
- The city of Atlanta has become an important strategic point for drug trafficking organizations, as it is the largest city in the South. It is considered a convenient nexus for all east/west and north/south travel. The city's major international airport also serves as a distribution venue for illicit substances.
- The entire State, Atlanta in particular, has experienced phenomenal growth over the last several years, with a corresponding increase in drug crime and violence. With Georgia bordering North Carolina, South Carolina, Tennessee, Alabama, and Florida, Atlanta is the base for several major dealers who maintain trafficking cells in these States, especially Mexican-based traffickers who hide within legitimate Hispanic enclaves.

Data Sources

Principal data sources for this report include the following:

- **Emergency department (ED) data** were derived for the first half of calendar year 2005 from the Drug Abuse Warning Network (DAWN) *Live!* restricted-access online query system administered by the Office of Applied Studies (OAS), Substance Abuse and Mental Health Services Administration (SAMHSA). Eligible hospitals in the Atlanta area totaled 39; hospitals in the DAWN sample numbered 32, with the number of emergency departments in the sample totaling 36. (Some hospitals have more than one emergency department.) During this 6-month period, between 15 and 16 EDs reported data each month. The completeness of data reported by participating EDs varied by month (see exhibit 1). Exhibits in this paper reflect cases that were received by DAWN as of December 3, 2005. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted. Therefore, these data are subject to change. Data derived from DAWN *Live!* represent drug reports in drug-related ED visits. Drug reports exceed the number of ED visits, since a

patient may report use of multiple drugs (up to six drugs and alcohol). The DAWN *Live!* data are unweighted and, thus, are not estimates for the reporting area. These data cannot be compared to DAWN data from 2002 and before, nor can preliminary data be used for comparison with future data. Only weighted DAWN data released by SAMHSA can be used for trend analysis. A full description of the DAWN system can be found at <<http://dawninfo.samhsa.gov>>.

- **Drug abuse treatment program data** are from the Georgia Department of Human Resources for primary drugs of abuse among clients admitted to Atlanta's public drug treatment programs between January and June 2005 and FYs 2001–2005. Data for nonmetropolitan Atlanta counties of Georgia were also reported.
- **Drug price, purity, and trafficking data** are from the Drug Enforcement Administration (DEA), the National Drug Intelligence Center (NDIC), and the Office of National Drug Control Policy (ONDCP). Information for the first half of calendar year 2005 on the price, purity, and source of several drugs was provided by the DEA's Domestic Monitoring Program (DMP). Additional information came from *Narcotics Digest Weekly*, published by the NDIC. Other data are from the Atlanta High Intensity Drug Trafficking Area (HIDTA) Task Force, a coordination unit for drug-related Federal, State, and local law enforcement agencies.
- **Forensic drug analysis data** are from the National Forensic Laboratory Information System (NFLIS) and represent evidence in suspected drug cases throughout metropolitan Atlanta that were tested by the GBI Forensic Laboratory from October 2004 through September 2005 (FY 2005).
- **Ethnographic information** was collected from local drug use researchers and is used for several purposes: (1) to corroborate the epidemiologic drug indicators, (2) to signal potential drug trends, and (3) to place the epidemiologic data in a social context.
- **Acquired immunodeficiency syndrome (AIDS) data** are from the Department of Human Resources, Division of Public Health, and represent AIDS cases in Georgia and a 20-county Atlanta metropolitan from January 1981 through December 2004. Additional information and data on sexually transmitted disease were provided by the Centers for Disease Control and Prevention (CDC).

DRUG ABUSE PATTERNS AND TRENDS

Cocaine/Crack

With 3,878 unweighted reports in the first half of calendar year 2005, cocaine was the most frequently reported DAWN *Live!* ED drug in the metropolitan Atlanta area (exhibit 2). Cocaine ED reports were higher among men than women (exhibit 3), with a ratio of 2.2:1. There were 648 ED reports among White patients, 3,083 by African-Americans, 54 by Hispanics, and 93 by persons of unknown race/ethnicity. ED reports among patients between the ages of 35 and 54 totaled 3,838 (69 percent of all ED reports). Exhibit 4 shows the number of DAWN *Live!* cocaine reports in the first half of calendar year 2005 by month.

In FY 2005, cocaine continued to be the primary drug of choice for individuals seeking assistance at publicly funded treatment centers in metropolitan Atlanta (exhibit 5). However, the number of primary admissions in metropolitan Atlanta for cocaine ($n=1,115$) in this period reflects a continuing downward trend. From FYs 2000 to 2002, approximately one-half of all treatment admissions in metropolitan Atlanta were cocaine-related. In FY 2003, this percentage decreased to 42 percent. In FY 2004, cocaine-related admissions declined to 39.5 percent. In the first half of 2005, primary cocaine-related treatment admissions dropped to 37.2 percent. The ratio of men to women in treatment for cocaine was 1.5:1, a proportion that was considerably higher than the 1.3:1 found in 2004. A smaller percentage of African-Americans entered treatment for cocaine-related issues in the first half of 2005 than in previous years. Approximately 58 percent of cocaine-related admissions were African-American in the first half of 2005 (exhibit 6). In 2004, African-Americans accounted for more than 70 percent of treatment admissions. From 2002 to 2003, African-American accounted for 75 percent of treatment admissions. A greater percentage of Whites entered treatment for cocaine-related admissions outside metropolitan Atlanta in the first half of 2005 than in the previous year. Whites represented 63.2 percent of the treatment population outside the Atlanta area, and African-Americans represented 35.2 percent. In 2004, African-Americans outnumbered Whites (55 percent vs. 45 percent) in cocaine-related public treatment admissions outside of metropolitan Atlanta. Those older than 35 accounted for the largest number of both metropolitan and nonmetropolitan cocaine admissions (81 percent). In metropolitan Atlanta, smoking continued to be the most preferred route (79 percent), followed by inhalation (11 percent), oral (5 percent), and injection (1 percent).

According to the DEA, Atlanta HIDTA, and key street informants, cocaine remains readily available in Atlanta. Atlanta is a growing distribution hub for surrounding States and Europe. Atlanta also serves as part of a smuggling corridor along the East Coast. Powder cocaine and crack dominate the Georgia drug scene. The primary sources for cocaine are Texas and California. HIDTA intelligence analysts implicate Mexico-based drug trafficking organizations, whose members blend within enclaves of Hispanic workers. According to HIDTA and NDIC, cocaine prices remain relatively stable in Atlanta. Powder cocaine typically sells for \$80–\$120 per gram. Crack rocks sell for as little as \$3, but they typically are priced at \$10–\$15.

The Georgia Threat Assessment (DEA, 2005) reports that other than marijuana, crack is the most available drug in the city. Officials estimate that 75 percent of all drug-related arrests involve crack cocaine. Powder cocaine availability at the retail level in Georgia is limited, except in large cities such as Atlanta. NFLIS reported that cocaine accounted for more than 56 percent of confiscated substances in suspected drug cases that were tested in forensic laboratories in FY 2005 (exhibit 7). In 2004, cocaine accounted for 44 percent of confiscated substances, compared with 40 percent in 2003.

Heroin

Heroin abuse indicators in Atlanta during the first half of 2005 remained low compared with other metropolitan areas. Furthermore, ED reports, public substance abuse treatment admissions, and ethnographic data obtained through corroboration with local street outreach workers suggest that heroin use is decreasing.

The number of unweighted ED reports of heroin in the first half of 2005 ($n=231$) was less than reports for cocaine, marijuana, methamphetamine, and benzodiazepines (exhibits 2 and 8). A sizeable majority of cases reported were male (exhibit 3), with a 2.6:1 male-to-female ratio. African-American heroin ED reports exceeded White reports (1.6:1). The ED heroin reports among Hispanics hovered around 2 percent ($n=4$). More than 60 percent of all reports represented persons between ages 35 and 54 ($n=139$). Nearly 10 percent of reports occurred among 18–24-year-olds.

In FY 2005, treatment admissions for individuals who reported heroin as their primary drug of choice accounted for 2.4 percent of all treatment admissions in the State; these admissions were mostly concentrated in metropolitan regions. Nearly 5 percent of metropolitan Atlanta admissions were for heroin (ex-

hibit 5), compared with 1.3 percent in nonmetropolitan areas. Compared to FY 2004, heroin-related treatment admissions declined by 20 percent in FY 2005. Admission ratios for men were higher (1.7:1) than those for women in metropolitan regions, with a nonmetropolitan ratio of 1.3:1 for male-to-female treatment admissions. Whites outnumbered African-Americans (108 to 100) in FY 2005 (exhibit 6), thereby reversing a trend in FY 2004, when African-Americans outnumbered Whites (230 to 206) in metropolitan Atlanta treatment admissions. Outside of metropolitan Atlanta, Whites accounted for an overwhelmingly high percentage (88 percent) of heroin-related treatment admissions, followed by African-Americans (8 percent) and Hispanics (4.4 percent). The proportion of heroin-related treatment admissions for Hispanics doubled in FY 2005 compared to FY 2004. A significant majority of heroin treatment admissions in both metropolitan (84 percent) and nonmetropolitan (86 percent) Atlanta were 35 and older, as in previous reporting periods. While treatment admissions for heroin are relatively low for those younger than 35, it is important to note that 7 percent of heroin treatment admissions are for individuals younger than 17. Nearly two out of three heroin treatment admissions preferred to inject the drug, followed by inhalation (24.4 percent), oral (5.8 percent), and smoking (3.6 percent). Most heroin users admitted to treatment did not report having a secondary drug of choice, although metropolitan users were overall more likely than nonmetropolitan users to report a secondary drug of choice. Among heroin users in metropolitan Atlanta, 30 percent reported cocaine as a secondary drug of choice, compared with 16 percent for nonmetropolitan users. The Georgia Department of Public Health estimates the rate of heroin addicts in Atlanta to be 159 per 100,000 population (n =approximately 7,000).

The NDIC's *Georgia Threat Assessment* (June 2005) reports that heroin availability in metropolitan Atlanta is stable and that the city remains a high traffic area for heroin distribution. The majority of heroin available in Atlanta is South American, followed by heroin from southwest Asia. The DEA (June 2005) reported that the average purity of South American heroin was 40.9 percent and cost on average \$2.30 per milligram. Law enforcement groups, including HIDTA and the DEA, report local heroin is supplied via sources in Chicago, New York, and the southwest border and that there has been increased Hispanic involvement in trafficking. Reports from outlying metropolitan Atlanta counties suggest an increase in heroin traffic in their jurisdictions. Approximately 1 percent (n =179) of NFLIS-tested seized drug items

tested positive for heroin from October 2004 through September 2005 (exhibit 7).

Law enforcement groups, including HIDTA and the DEA, report that Mexican criminal groups are primarily responsible for the trafficking of South American heroin in Georgia. These groups use commercial and private vehicles to bring the drugs into the State. Heroin also enters the State through Colombian and Nigerian groups that transport the drug via airline couriers. Additionally, NDIC and the DEA mention that Dominican criminal groups drive heroin into Georgia from New York and Philadelphia. Some of that heroin is sold in Atlanta, but the majority of the drug is shipped elsewhere.

Other Opiates/Narcotics

Indicators suggest that narcotic pain relievers are growing in popularity in metropolitan Atlanta. According to unweighted DAWN *Live!* data, there were 176 ED oxycodone/combinations reports and 248 hydrocodone/combinations reports in the first 6 months of 2005 (exhibit 8). While nearly equal percentages of oxycodone-related ED reports involved men and women, a greater percentage of hydrocodone-related ED reports were women (1.3:1) (exhibit 3).

Treatment data for other opiates or narcotics were only available for secondary and tertiary drug abuse categories. Continuing a stable trend, other opiates accounted for about 2–3 percent of secondary drugs abused statewide and for about 1 percent of tertiary drugs abused in the first 6 months of 2005. The use of opiates as a secondary abuse category was cited more often in nonmetropolitan areas (2.7 percent) than in metropolitan Atlanta (1.1 percent).

According to NFLIS data, oxycodone and hydrocodone each accounted for about 1 percent of lab identifications of drugs seized by law enforcement from October 2004 through September 2005 (exhibit 7). OxyContin, the most widely recognized oxycodone product, is a growing drug threat in Georgia, according to the DEA. Twenty-milligram tablets sold on the illegal market for \$10 in the first half of 2005. Because of increases in the supply of illegal OxyContin on the street and the rise of the Internet as a supply source, this price represented a sharp decline from the average calendar year 2004 price of \$20. Hydrocodone (Vicodin) and hydromorphone (Dilaudid) are also abused in Atlanta, and 20-milligram tablets typically sell for \$5 to \$10. These drugs are typically obtained by “doctor-shopping,” purchasing from dealers, and/or ordering via the Internet.

Marijuana

Ethnographic sources consistently confirm that marijuana is the most commonly abused drug in Atlanta. Most epidemiological indicators show an upward trend in marijuana use.

There were 1,325 unweighted marijuana ED reports in the first half of 2005 (exhibit 2). There were more than twice as many marijuana reports for men as for women. The number of ED reports involving African-Americans was higher than those involving Whites (1.6:1). Seventy-seven percent of all ED reports for marijuana were distributed fairly evenly among patients age 18–24, 25–34, and 35–44. Nine percent of patients were in the 12–17 age group (exhibit 3).

Nearly 21 percent of public treatment admissions in FY 2005 in metropolitan Atlanta were for those who considered marijuana their primary drug of choice (exhibit 5). Male admissions were just slightly less than double those of females in metropolitan Atlanta (1.8:1), with the gap narrowing in nonmetropolitan regions (1.3:1). The proportion of African-Americans who identified marijuana as their primary drug of choice increased slightly in metropolitan Atlanta from the previous year (58 percent, compared with 56 percent in FY 2004). Similar to FY 2004, the vast majority of users (81 percent) in FY 2005 were at least 35 years old. Younger users of marijuana are seeking treatment at higher rates than in previous years. In metropolitan Atlanta, the percentage of treatment admissions of individuals 17 and younger (8.5 percent) was more than double the number of 18–25-year-old users (3.6). In FY 2004, these percentages were nearly equal. This trend was consistent in nonmetropolitan public treatment facilities, where individuals 17 and younger (8.5 percent) were also more likely to enter treatment than individuals age 18–25 (3.5 percent). Alcohol was the most popular secondary drug of choice for marijuana users, followed by cocaine and methamphetamine for both metropolitan and nonmetropolitan Atlanta admissions.

Marijuana, which is readily available in Atlanta and the rest of Georgia, retails for about \$10–\$20 per gram and \$100–\$350 per ounce, according to the DEA. Atlanta serves as a regional distribution center for marijuana. Most of the marijuana in Georgia comes from Mexico, although locally grown marijuana is also on the market. Colombian and Jamaican marijuana are purportedly present but less available. Mexican drug cartels are the primary transporters and wholesale distributors of Mexican-grown marijuana. Local gangs (African-American and Hispanic) and

local independent dealers (African-American and White) are the primary resale distributors.

The NFLIS report for FY 2005 indicates that nearly 1 percent of all drug-related items confiscated tested positive for marijuana (exhibit 7). This percentage indicates a substantial decrease from the 25 percent average in the previous 4 years. According to *The Georgia Governor's Task Force on Drug Suppression*, 58 percent of Georgia's 159 counties have been reported as significant locations for marijuana cultivation.

Ethnographic data continue to support treatment and law enforcement data that indicate the widespread availability and use of marijuana in Atlanta. Hydroponic cultivation of marijuana has become more popular, in part because of the DEA's eradication program.

Stimulants

Methamphetamine use is increasing faster than use of any other illicit substance. Law enforcement efforts to stop the spread of this drug have involved seizures and closures of clandestine labs. Methamphetamine is an increasing threat in the suburban areas because of the drug's price and ease of availability, and it is replacing some traditional drugs as a less expensive, more potent alternative. Moreover, frequent media reports; recent strengthening of criminal penalties for the manufacture, transfer, and possession of methamphetamine; and the statewide illegalization of transporting materials used in its production have fueled the growing concerns over the dangers the drug poses. Methamphetamine is not only a party drug, but it is also used for weight loss or as a way to keep up with demanding work schedules.

There were 447 unweighted ED reports of methamphetamine in the Atlanta metropolitan area from January through June 2005 (exhibit 2). During this same period, the ratio of men to women among methamphetamine ED reports was 1.9:1. Of these ED drug reports, Whites accounted for nearly 85 percent of methamphetamine ED reports (exhibit 3), while African-Americans accounted for 10 percent, and Hispanics represented 2 percent. ED reports among patients between the ages of 25 and 44 totaled 346 (61 percent of all methamphetamine ED reports). Nearly 18 percent of methamphetamine-related ED reports represented individuals younger than 20.

There were 266 unweighted ED amphetamine reports in the Atlanta metropolitan area from January through June 2005 (exhibit 2). The gap between male and female ED reports for amphetamine was narrow

(exhibit 3), with a male-to-female ratio of 1.4:1. More than 8 out of 10 ED reports represented White patients, while African-Americans represented 12 percent of amphetamine ED reports.

The proportion of treatment admissions in metropolitan and nonmetropolitan areas for methamphetamine continues to rise faster than for any other classification of drug. In FY 2005, 11.9 percent ($n=529$) of public treatment admissions reported methamphetamine as the primary drug of choice, compared with 8.5 percent ($n=680$) in FY 2004, 5.1 percent (543) in FY 2003, and 3.1 percent (377) in FY 2002 (exhibit 5). The proportion of admissions for methamphetamine in nonmetropolitan Atlanta was more than 17.5 percent, the highest percentage ever reported. The percentage of women in metropolitan Atlanta who reported to treatment for methamphetamine-related causes increased in FY 2005 and represented more than 59 percent of all methamphetamine-related admissions (compared with 53 percent in FY 2004). In treatment centers outside of metropolitan Atlanta, the percentage of women entering treatment (56 percent) in the first half of 2005 remained nearly identical to FY 2004. Most users were White; in fact, Whites accounted for 96 percent of this treatment group in metropolitan Atlanta during FY 2005 (exhibit 6). The proportions of African-American and Hispanic users remained stable. Regardless of demographic area, more than 78 percent of statewide treatment admissions were individuals older than 35. Metropolitan Atlanta treatment admissions were most likely to smoke methamphetamine (55 percent), followed by snort (19.5 percent), and inject (11.5 percent). Compared with FY 2004, these results reflect a 17-percent increase among individuals preferring to smoke methamphetamine (55 vs. 47 percent). Nonmetropolitan Atlanta treatment admissions preferred to smoke (60 percent), inject (17 percent), or snort (13 percent) methamphetamine.

According to the DEA and HIDTA, methamphetamine popularity continues to rise, in part because of its low price and availability. In 2005, methamphetamine typically sold for \$110 per gram, \$1,316 per ounce, and \$8,250 per pound.

Law enforcement officials report that methamphetamine has emerged as the primary drug threat in suburban communities neighboring Fulton and DeKalb Counties. The Atlanta HIDTA Task Force found that more than 68 percent of participating law enforcement agencies identified methamphetamine as posing the greatest threat to their areas. Methamphetamine accounted for less than 33 percent of NFLIS tests of seized drugs in FY 2005, compared with 30 percent in 2004 and 23 percent in 2003. In 2005, the propor-

tion of positive methamphetamine tests of seized drugs ranked second behind only cocaine (exhibit 7). In 2003, the proportion of methamphetamine-positive seizures had ranked third behind cocaine and marijuana. The HIDTA Task Force seized more methamphetamine in 2004 than in previous years. These seizures in 2004 included 14.6 kilograms of methamphetamine and 11.4 kilograms of crystal methamphetamine or “ice.” HIDTA investigators also report an increase among African-Americans using methamphetamine in Atlanta. Ethnographic data from Atlanta-area drug research studies among methamphetamine users support this trend.

Depressants

The use of depressants, especially benzodiazepines, is on the rise in Atlanta. The most commonly abused benzodiazepine is alprazolam (Xanax). Less than 2 percent of those admitted for drug treatment chose benzodiazepines as their secondary or tertiary drug of choice.

From January through June 2005, the number of unweighted ED reports in metropolitan Atlanta consisted of the following: (a) barbiturates ($n=71$); (b) benzodiazepines (635) (exhibit 8); and (c) miscellaneous anxiolytics, sedatives, and hypnotics (207). Most of these ED reports were for White women between the ages of 35 and 54.

The treatment data from publicly funded programs included depressants such as barbiturates and benzodiazepines only as secondary and tertiary drug choices for 2004. In metropolitan Atlanta, nearly 1 percent of primary heroin and methamphetamine users chose benzodiazepines as a secondary drug choice. These percentages are consistent with the figures from the previous 4 years.

The DEA considers benzodiazepines and other prescription depressants to be a growing threat in Georgia. The pills are widely available on the street or via the Internet. Their abuse now exceeds that of oxycodone and hydrocodone. According to the NDIC and DEA, local dealers tend to work independently and typically sell to “acquaintances and established customers.” These primarily White dealers and abusers steal prescription pads, rob pharmacies, and attempt to convince doctors to prescribe the desired pills.

Hallucinogens

The epidemiological indicators and law enforcement data do not indicate much hallucinogen use in Atlanta. Despite these data, there was an increase in ethnographic reports of phencyclidine (PCP) use in

the past 12 months, especially in combination with marijuana and ecstasy.

In the first 6 months of 2005, there were eight unweighted ED reports for lysergic acid diethylamide (LSD). Most of the 2005 ED reports involved men rather than women, with a ratio of 3:1. Whites outnumbered African-Americans (80 vs. 20 percent) in ED reports for LSD. The majority of LSD reports represented 18–29-year-olds (50 percent) and 35–54-year-olds (50 percent). The total number of ED reports for PCP in 2005 was nine. PCP reports were highest among White males between the ages of 18 and 24 and 35 and 44.

Treatment data for hallucinogens are only available for secondary and tertiary drug abuse categories, and these are listed as PCP and “other hallucinogens.” From January through June 2005, hallucinogens were listed three times as a secondary or tertiary drug of choice in metropolitan Atlanta. “Other hallucinogens” were listed three times as a secondary drug of abuse and four times as a tertiary drug in nonmetropolitan areas. These secondary and tertiary data indicate a decreased use of hallucinogens compared with previous years.

In FY 2005, LSD accounted for only 0.05 percent of drugs analyzed by NFLIS. The DEA reported an increase in the availability of LSD, especially among White traffickers/users age 18–25. LSD is usually encountered in school settings and is imported through the U.S. Postal Service. No PCP items were reported by NFLIS in FY 2005.

Club Drugs

While so-called club drugs—methylenedioxyamphetamine (MDMA or ecstasy), gamma hydroxybutyrate (GHB), and ketamine—appear relatively infrequently in epidemiological data, ethnographic and sociologic research suggests continued frequency in their use, particularly among metropolitan Atlanta’s young adult population.

There were 74 unweighted ED MDMA reports in the first half of 2005. MDMA reports among male patients exceeded those among females by almost double (1.8:1 ratio) (exhibit 3). African-Americans outnumbered Whites (1.6:1), and there were three reports for Hispanic patients. Young adults (21–29) represented 50 percent of ED MDMA reports. The reported route of administration for MDMA was almost exclusively oral.

Atlanta serves as a distribution point for MDMA to other cities in the Nation. According to the NDIC,

most of the MDMA available in Georgia is produced in northern Europe and flown into major U.S. cities, including Atlanta. The NFLIS reported that in FY 2005, MDMA accounted for 2.4 percent of substances tested in suspected drug cases (exhibit 7); methylenedioxyamphetamine (MDA) accounted for another 0.2 percent. Results from ethnographic research indicate that most dealers are White middle and upper class high school and college students between the ages of 18 and 25. The drug retails at \$10–\$20 per tablet, although ethnographic data indicate that many users buy ecstasy in bulk. Users report that bulk ecstasy rates are \$5–\$10 per pill. An emerging trend among young adults is “candy flipping,” or combining MDMA and LSD, according to a local university report.

There were a total of 31 unweighted GHB ED reports from January through June 2005. GHB reports for males exceeded those for females (exhibit 3), at a ratio of 9.3:1. GHB ED patients were also predominantly White (8 to 1 African-American, with only 2 Hispanic reports in this time period). Sixty-seven percent of GHB reports occurred among those age 25–44. There were no ED GHB reports for those younger than 18, and there was only one report for the 45-and-older category. The reported preferred route of administration was almost exclusively oral.

The NDIC reports that the primary distributors and abusers of GHB are White young adults. The HIDTA Atlanta Division reports that in 2005, liquid GHB sold for \$500–\$1,000 per gallon and \$15–\$20 per dose (one dose is usually the equivalent of a capful from a small water bottle).

In the first half of 2005, there were three reported ketamine-related unweighted ED reports among males and none among females.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

By the end of 2004, Georgia continued to be ranked eighth in the Nation for cumulative reported AIDS cases. However, the number of new AIDS cases dropped substantially (11.4 percent) in 2004 from 2003 (1,850 to 1,640 cases). Given the continued population increase in the State, the per capita rate of reported AIDS cases fell from 21.3 per 100,000 population in 2003 to 18.6 per 100,000 population in 2004. There were estimated to be 14,245 persons living with AIDS in Georgia at the end of 2004. Data for a full year of new human immunodeficiency virus (HIV) cases were reported for the first time by the State in 2004. The State reported 2,154 persons who were newly diagnosed with HIV but did not have AIDS.

In 2004, the population of newly reported AIDS cases in Georgia was represented primarily by African-Americans (76 percent). Men represented 74 percent of the overall cases. The largest decline in reported cases in 2004 came from the African-American population. New female African-American AIDS cases declined 32 percent from 2003 to 2004, and new male African-American AIDS cases declined by 12 percent. White female cases remained flat between these comparative years, while White male cases increased by 4 percent.

The majority of new AIDS cases in 2004 were evenly split between two age categories: 30–39 (34 percent) and 40–49 (34 percent). The majority of new AIDS cases came from the metropolitan Atlanta area, with Fulton and DeKalb Counties accounting for the greatest number of persons newly diagnosed. In 2004, Clayton, Fulton, and Gwinnett Counties each experienced a significant decline in reported AIDS cases from 2003 (down 38 percent, 8 percent, and 34 percent, respectively).

Georgia’s newly reported incidents of chlamydia, gonorrhea, and syphilis each declined sharply from 2003 to 2004. Reported gonorrhea cases declined 5.7 percent from 2002 to 2003, and they declined 31.5 percent from 2003 to 2004 ($n=18,830, 17,749,$ and $12,151,$ respectively). Reported chlamydia cases increased 2.9 percent from 2002 to 2003 and fell by 23.6 percent between 2003 and 2004 ($n=34,844, 35,845,$ and $27,386,$ respectively). Syphilis cases increased by 14.9 percent from 2002 to 2003 and then fell 52 percent in 2004 ($n=1,948, 2,239,$ and $1,074,$ respectively). In 2004, there were 469 new cases of acute hepatitis B, compared with 598 cases in 2003, representing a 21.6-percent decline. There were 17 acute hepatitis C cases reported in 2004, compared with 14 cases in 2003. The majority of Georgia’s new hepatitis cases were reported in Fulton and DeKalb Counties.

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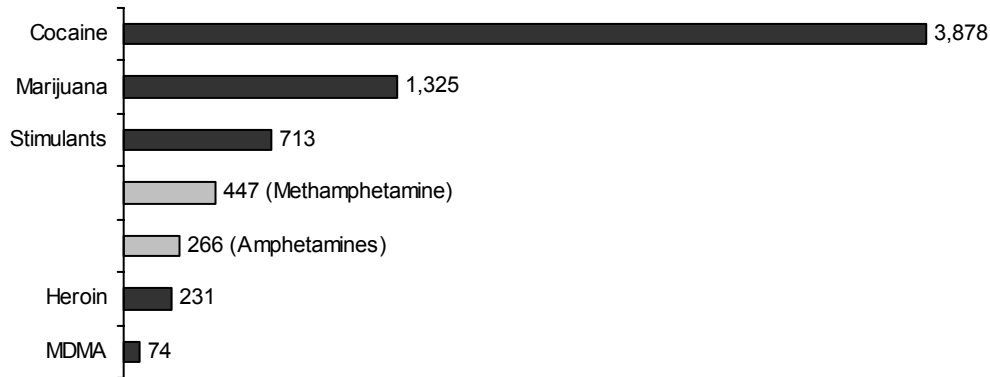
Exhibit 1. Data Completeness for Atlanta Metropolitan Area DAWN Live! Emergency Departments¹ by Month: January–June 2005

Total Eligible Hospitals ¹	No. of Hospitals in DAWN Sample	Total EDs in DAWN Sample ²	No. of EDs Reporting per Month: Completeness of Data (%)			No. of EDs Not Reporting
			90–100%	50–89%	<50%	
39	32	36	14–15	0-1	0–1	20-21

¹Short-term, general, non-Federal hospitals with 24-hour emergency departments based on the American Hospital Association Annual Survey.

²Some hospitals have more than one emergency department.
SOURCE: DAWN Live!, OAS, SAMHSA, updated 12/3/2005

Exhibit 2. Number of Drug Reports in Drug-Related ED Visits, by Drug Category (Unweighted¹): January–June 2005



¹The unweighted data are from 36 EDs reporting to Atlanta hospitals reporting to DAWN from January through June 2005. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted, and, therefore, are subject to change.

SOURCE: DAWN *Live!*, OAS, SAMHSA; updated 12/3/2005

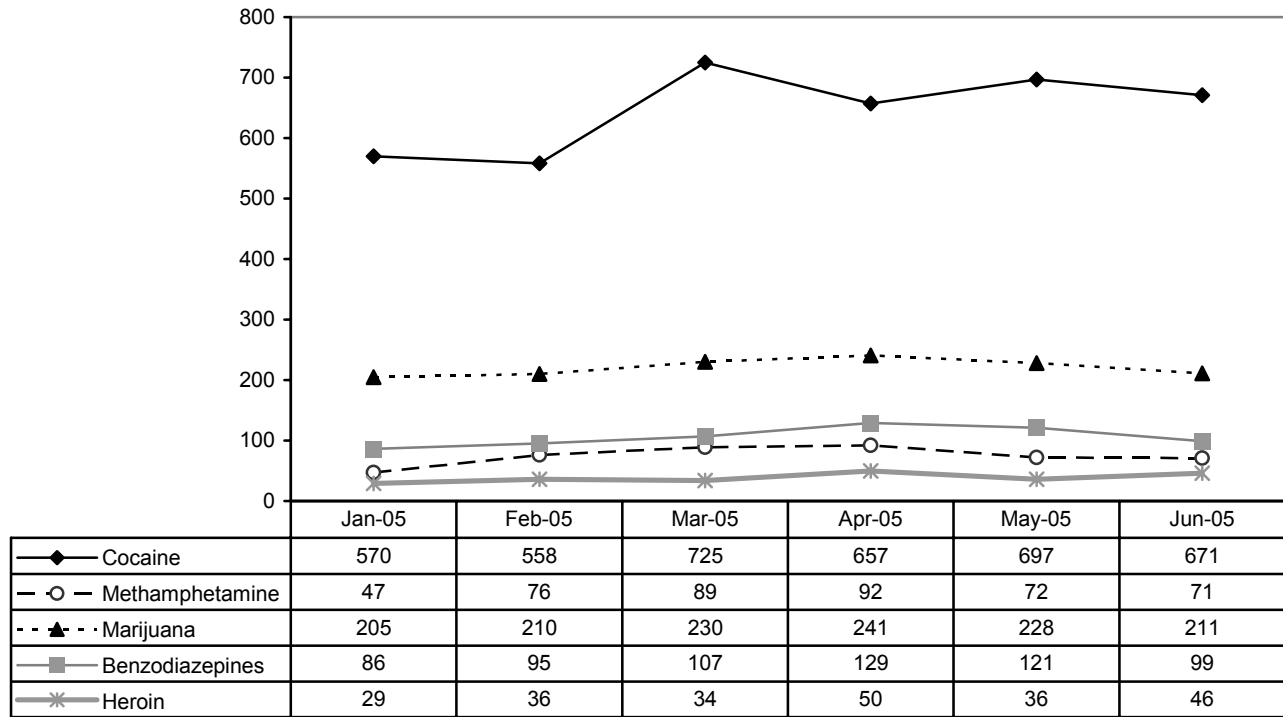
Exhibit 3. Patient Demographic Characteristics of Drug Reports in Drug-Related ED Visits for Selected Drugs, by Case Type and Percent (Unweighted¹): January–June 2005

Demographic Characteristic	Cocaine (n=3,878)	Methamphetamine (n=447)	Marijuana (n=1,325)	Heroin (n=231)	Benzo-diazepine (n=635)	Hydro-codone/ Combos (n=248)	Oxy-codone/ Combos (n=176)	Ampheta-mines (n=266)	GHB (n=31)	Ecstasy (n=74)
Gender										
Male	69.0	65.5	76.0	71.9	47.1	43.5	51.1	57.9	90.3	64.9
Female	30.9	34.5	24.0	28.1	52.9	56.5	48.9	42.1	9.7	35.1
Not documented	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.2	0.0	0.0
Race/Ethnicity										
White	16.7	84.6	37.5	37.7	83.9	65.7	71.6	82.3	80.6	35.1
African-American	79.5	10.3	58.9	58.4	12.9	28.2	22.7	12.0	12.5	55.4
Hispanic	1.5	2.0	1.4	1.7	1.1	1.6	2.3	3.4	6.4	4.1
NTA ²	0.3	1.5	0.6	0.4	0.3	1.2	1.1	0.7	0.0	4.1
Not documented	2.0	1.5	1.5	1.7	1.7	3.2	2.3	1.5	0.0	1.3
Age Group										
11 and younger	0.1	0.2	0.1	0.0	0.3	0.4	0.0	0.4	0.0	0.0
12–17	0.8	5.8	8.9	0.0	4.6	4.4	0.6	12.8	0.0	6.7
18–24	5.4	28.4	24.2	9.5	13.2	14.1	8.0	21.8	29.0	46.0
25–34	19.5	36.0	27.1	22.5	20.4	21.4	15.9	34.2	41.9	35.1
35–44	43.7	24.2	26.1	37.2	27.1	26.2	26.1	21.4	25.8	10.8
45–54	25.2	4.9	12.0	22.9	19.7	16.1	24.4	8.3	0.0	1.3
55 and older	5.2	0.4	1.6	7.8	14.3	17.3	24.4	0.6	3.2	0.0
Not documented	0.1	0.0	0.0	0.0	0.3	0.0	0.5	0.3	0.0	0.0

¹The unweighted data are from 36 EDs reporting to Atlanta hospitals reporting to DAWN from January through June 2005. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted, and, therefore, are subject to change.

²NTA=Not tabulated above.

Exhibit 4. Number of Drug Reports in Drug-Related ED Visits, by Drug Category, Selected Drugs by Month: January–June 2005 (Unweighted¹)



¹The unweighted data are from 36 EDs reporting to Atlanta hospitals reporting to DAWN from January through June 2005. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted, and, therefore, are subject to change.

SOURCE: DAWN *Live!*, OAS, SAMHSA; updated 12/3/2005

Exhibit 5. Percentages of Primary Treatment Admissions in Atlanta, by Drug: FYs 2001–2005

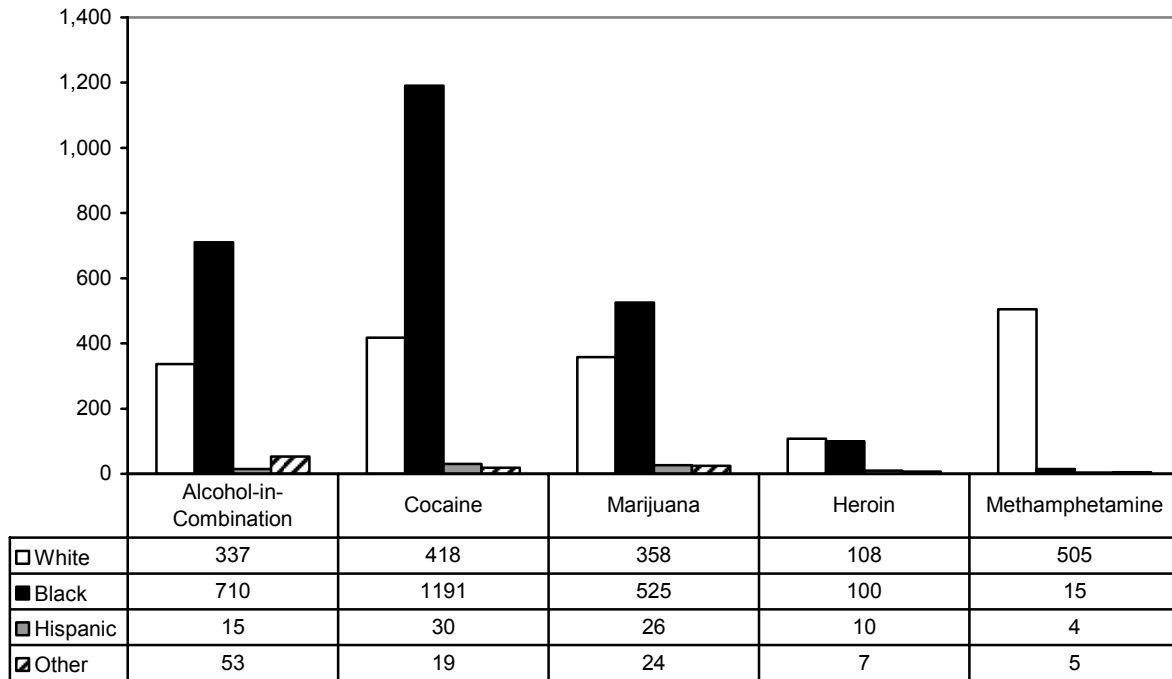
Drug	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005 ¹
Cocaine/Crack	58.5	43.1	42.8	39.5	37.2
Heroin	6.7	7.6	6.3	5.6	5.0
Marijuana	15.5	18.7	20.0	21.7	20.9
Methamphetamine	1.6	3.1	5.1	8.5	11.9
Other Drugs ²	26.1	21.3	25.8	24.6	25.0
Total Admissions (N=)	(7,996)	(7,909)	(7,178)	(7,996)	(4,460)

¹Includes data from January–June 2005.

²Includes "alcohol-in-combination."

SOURCE: Georgia Department of Human Resources

Exhibit 6. Metropolitan Atlanta Public Substance Abuse Treatment Admissions, Selected Drugs by Race: January–June 2005



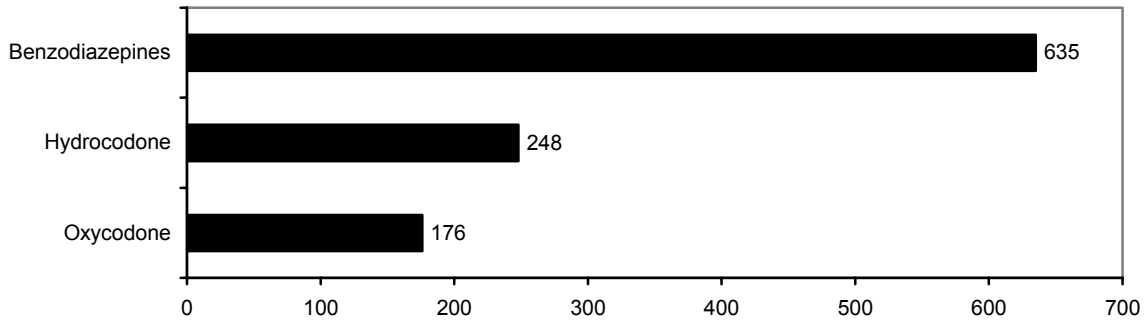
¹Other category includes: Asian, American Indian, Multicultural, other race.
SOURCE: Georgia Department of Human Resources

Exhibit 7. Number of Analyzed Items and Percentage of All Items Tested in Atlanta: FY 2005

Drug	Number	Percent
Cocaine	8,648	56.1
Methamphetamine	5,060	32.8
MDMA/MDA	397	2.6
Alprazolam	271	1.8
Hydrocodone	188	1.2
Heroin	179	1.2
Cannabis	159	1.0
Oxycodone	125	0.8
Carisoprodol	53	0.3
Diazepam	48	0.3
Other ¹	319	1.9
Total	15,420	100.0

¹Includes amphetamine, clonazepam, morphine, codeine, psilocin, non-controlled nonnarcotic drugs, methylphenidate, ketamine, gamma hydroxybutyrate, hydromorphone, 1-(3-trifluoromethylphenyl)-piperazine, lorazepam, and lysergic acid diethylamide.
SOURCE: NFLIS, DEA

Exhibit 8. Prescription Drug Misuse—Number of Drug Reports in Drug-Related ED Visits, Selected Drugs, by Case Type (Unweighted¹): January–June 2005



¹The unweighted data are from 36 EDs reporting to Atlanta hospitals reporting to DAWN from January through June 2005. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted, and, therefore, are subject to change.

SOURCE: DAWN *Live!*, OAS, SAMHSA; updated 12/3/2005

Drug Use in the Baltimore Metropolitan Area: Epidemiology and Trends, 2000–First Half 2005

Leigh A. Henderson, Ph.D., and Doren H. Walker, M.S.¹

ABSTRACT

Heroin remained the most significant substance among drug-related treatment admissions in Baltimore in the first half of 2005, responsible for 53 percent of admissions. Heroin use in the Baltimore metropolitan area is complex. There were several groups of heroin users differing by urbanicity, route of administration, age, and race. Baltimore had a core of older African-American heroin users, both intranasal users and injectors (39 and 20 percent of all heroin treatment admissions, respectively, in the first half of 2005). White users entering treatment for heroin were younger and were predominantly injectors rather than intranasal users (27 and 29 percent of all heroin treatment admissions, respectively, in the first half of 2005). Cocaine indicators were mixed, and the cocaine snapshot is complicated by the fact that for every treatment admission reporting primary cocaine use, 2.6 reported secondary use. In the first half of 2005, primary cocaine use was reported by 14 percent of treatment admissions, and secondary cocaine use was reported by 37 percent. Cocaine smoking was the most prevalent route of administration among both primary and secondary users. Cocaine smoking and intranasal use were associated with intranasal heroin use in 35–40 percent of all those who smoked cocaine or used it intranasally. Cocaine injection was associated with heroin injection in 90 percent of all those who injected cocaine. Younger cocaine users tended to be White, while the African-American cocaine-using population aged. Marijuana treatment admissions, which increased between 2000 and 2004, may have stabilized or begun to decline. Marijuana was reported more frequently as a secondary substance by treatment admissions in the first half of 2005 (17 percent) than as a primary substance (13 percent). Primary marijuana use was associated with the use of other drugs among 59 percent of treatment admissions, primarily alcohol, although cocaine, heroin, and other opiates were reported. Some 38 percent of marijuana admissions were younger than

18, and 81 percent were male. Criminal justice referrals continued to constitute the majority of marijuana treatment admissions—59 percent in the first half of 2005. Indicators for opiates and narcotics other than heroin continued to increase. In the first half of 2005, treatment admissions for primary opiate use were almost all White. About one-half were male, and they were a younger population than in 2001; a wide range of secondary substances was reported. Similar numbers of treatment admissions reported primary and secondary opiate use. Secondary users were also predominantly White and about 50 percent male, but the proportion that was female increased since 2001. Most reported opiate abuse secondary to heroin injection (30 percent) or intranasal heroin use (20 percent). Stimulants other than cocaine were rarely mentioned as the primary substance of abuse by treatment admissions. Tranquilizer use secondary to primary opiate use was reported by 14 percent of primary opiate treatment admissions.

INTRODUCTION

Area Description

The Baltimore primary metropolitan statistical area (PMSA) was home to some 2.6 million persons in 2004. It comprises Baltimore City and the suburban counties of Anne Arundel, Baltimore, Carroll, Harford, Howard, and Queen Anne's. Baltimore City is the largest independent city in the United States. The city's population declined from 735,000 in 1990 to 629,000 in 2003. The population of the surrounding counties grew from approximately 1.7 million in 1990 to 1.9 million in 2004.

The city and the suburban counties represent distinctly different socioeconomic groups. In 2000, median household income in the city was \$34,000, and 23 percent of the population lived in poverty. In the suburban counties, however, median household income ranged from \$52,000 to \$82,000, and the poverty level averaged 6 percent. In 2000, the median value of a single-family home was \$69,100 in the city and averaged \$152,000 in the suburban counties. The 2004 population composition of the city differed markedly from that of the surrounding counties: 32 percent White and 64 percent African-American, versus 77 percent White and 16 percent African-American, respectively. Two percent of the population in the city and 3 percent of the population in the suburban counties was Asian. Two percent of the population in both the city and the suburban counties were Hispanic.

¹The authors are affiliated with Synectics for Management Decisions, Inc., Arlington, Virginia.

The Baltimore area is a major node on the north-south drug trafficking route. It has facilities for entry of drugs into the country by road, rail, air, and sea. Baltimore is located on Interstate 95, which continues north to Philadelphia, New York, and Boston, and south to Washington, DC, Richmond, and Florida. Frequent daily train service is available on this route. The area is served by three major airports (Baltimore-Washington International Airport in Baltimore County and Reagan National and Dulles Airports in the vicinity of Washington, DC, approximately 50 miles from the Baltimore City center). Baltimore is also a significant active seaport. The area has numerous colleges and universities and several military bases.

Data Sources

Information for this report was obtained from the sources shown below:

- **Population and demographic data**, including population estimates for 1990–2004 and income, poverty, and housing cost estimates for 2004 for Maryland counties, were derived from U.S. Bureau of the Census data (electronic access: <<http://factfinder.census.gov>> last accessed January 11, 2005).
- **Treatment admissions data** were provided by the Maryland Alcohol and Drug Abuse Administration, Department of Health and Mental Hygiene, for 1992 through the first half of 2005. Data are presented for the PMSA as a whole, as well as separately for Baltimore City and the suburban counties. Included are those programs receiving both public and private funding. All clients are reported, regardless of individual source of funding. Significant omissions are the Baltimore City and Fort Howard Veterans' Administration Medical Centers, which do not report to the State data collection system. Treatment data in this report exclude admissions for abuse of alcohol alone (about 13 percent of all treatment admissions in the first half of 2005). Admissions with primary abuse of alcohol and secondary/tertiary abuse of drugs (about 11 percent of all admissions) are included. Numbers of admissions for the first half of 2005 may increase as data are received from late-reporting treatment providers.
- **Emergency department (ED) drug data** were accessed through the Drug Abuse Warning Network (DAWN) *Live!*, a restricted-access online query system, which is administered by the Office of Applied Studies (OAS), Substance Abuse and Mental Health Services Administration (SAMHSA). Data are for the Baltimore PMSA for the first half of 2005. Data reflect cases that were received by DAWN as 12/6-12/7/2005. Eligible hospitals in the DAWN area totaled 21; hospitals in the DAWN sample totaled 21, with the number of EDs in the sample totaling 24 (some hospitals have more than one ED.) The data reported are incomplete. During the 6-month period, between 9 and 17 EDs reported monthly. The completeness of data reported by participating EDs varied by month (see exhibit 1). All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted. Data are unweighted, noncomparable across areas, and subject to change. DAWN data are recorded for the following case types: Suicide attempt, Seeking detox, Alcohol only (for those younger than 21), Adverse reaction, Overmedication, Malicious poisoning, Accidental ingestion, and Other. Data are reported for all case types combined (except Seeking detox, which is reported separately for all major substances combined) for illicit drugs of abuse (cocaine, heroin, marijuana, amphetamines, methamphetamine, methylenedioxymethamphetamine [MDMA, ecstasy], gamma hydroxybutyrate [GHB], ketamine, lysergic acid diethylamide [LSD], phencyclidine [PCP], miscellaneous hallucinogens, inhalants, and combinations not tabulated above [NTA]). For other substances (e.g., prescription-type drugs such as opiates/opioids), only the case types Seeking detox, Overmedication, and Other are included. The information derived from DAWN *Live!* represents drug reports in drug-related ED visits. Reports exceed the number of ED visits, since patients may report use of multiple drugs (up to six drugs plus alcohol). The data cannot be compared to DAWN data for 2002 and earlier, nor can preliminary data be used for comparison with future data. Only weighted data released by SAMHSA can be used for trend analysis. A full description of the DAWN system can be found at the DAWN Web site: <<http://dawninfo.samhsa.gov>>.
- **Mortality data** were provided by DAWN, OAS, SAMHSA, for the Baltimore PMSA for 2003. In 2003, DAWN covered 100 percent of the Baltimore/Towson area. Data were accessed from *Drug Abuse Warning Network, 2003. Area Profiles of Drug Mortality*. DAWN Series D-27, DHHS Pub. No. (SMA) 05-4023. Rockville, MD, 2005.
- **Illicit drug prices** were provided by the National Drug Intelligence Center, *Narcotics Digest*

Weekly 3(52), December 28, 2004, for July 2004–December 2004.

- **Data on drug seizures** were provided by the National Forensic Laboratory Information System (NFLIS), for October 2004–September 2005.

DRUG ABUSE PATTERNS AND TRENDS

Polydrug use in general is the norm in the Baltimore PMSA. About 70 percent of drug-related treatment admissions in the first half of 2005 reported problems with at least one substance other than their primary substance. In 2003, 87 percent of the 538 drug-related deaths reported to the area's medical examiners involved multiple substances. DAWN ED data for 1H 2005 (see notes under *Data Sources* above) reported 1,606 DAWN detox cases and 7,785 mentions of major substances of abuse among these cases, with an average of 2.7 substances per case.

Cocaine/Crack

Cocaine indicators were mixed, and the cocaine snapshot is complicated by the fact that for every treatment admission reporting primary cocaine use, 2.6 reported secondary use (exhibit 2). The cocaine treatment admission rate in the total PMSA increased from 164 per 100,000 population age 12 and older in 2001 to 226 per 100,000 in 2003 (exhibit 3). The rate declined slightly, to an annualized rate of 182 per 100,000, in the first half of 2005.

In the first half of 2005, cocaine represented 46 percent of the unweighted DAWN non-detox ED reports for illicit drugs of abuse, and heroin represented 36 percent. The cocaine patients were 66 percent male and 43 percent White; 23 percent were age 45 or older. The cocaine and heroin patients were demographically similar, and it is likely that many of the ED reports reflect co-use of cocaine and heroin. Cocaine was present in 226 (42 percent) drug-related deaths in 2003.

Smoked cocaine (crack) represented 78 percent of the treatment admissions for primary cocaine use in the first half of 2005. Intranasal cocaine use represented 14 percent, and cocaine injection represented 6 percent (exhibit 4). The population in treatment for cocaine use has aged. The median age at admission increased from 37 to 40 between 2001 and the first half of 2005, and the proportion age 35 or older increased from 65 percent to 72 percent. The proportion of admissions who had been in treatment before, however, did not increase; the proportions of those entering treatment for the first time, regardless of

years of cocaine use, were similar throughout the time periods examined. Males made up 55–60 percent of treatment admissions from 2001 through the first half of 2005. The proportion who were African-American remained between 60 and 64 percent. Referral to treatment through the criminal justice remained relatively low, at about 29–38 percent, and this showed no consistent pattern. Daily use of cocaine jumped to 48 percent in the first half of 2005 after remaining at 36–39 percent between 2001 and 2004. (This may be either a data aberration or an indication of some change in the way cocaine is being used, and it bears scrutiny in the future.) Use of other drugs in addition to smoked cocaine was reported by 62 percent of admissions. Alcohol was reported as a secondary substance by 41 percent, marijuana was reported by 21 percent, and use of intranasal heroin was reported by 13 percent.

Primary use of cocaine represented 14 percent of drug-related treatment admissions in the first half of 2005, about one-quarter of the 53 percent of admissions represented by primary heroin use (exhibit 3). Despite the apparent dominance of heroin in the Baltimore PMSA, testing of some 26,000 items in FY 2005 by NFLIS found that 41 percent were cocaine and 22 percent were heroin. This apparent discrepancy may be explained by the use of cocaine as a secondary substance. Cocaine was reported as a secondary substance by 38 percent of treatment admissions in the first half of 2005 (exhibit 3). In other words, for every person who reported cocaine as a primary substance, 2.6 reported it as a secondary substance. Overall, 52 percent of treatment admissions reported cocaine abuse as a primary or secondary problem.

Exhibit 5 compares the characteristics of treatment admissions for primary and secondary cocaine use according to the route of administration of cocaine. Among primary cocaine users, 79 percent reported smoking, 14 percent reported intranasal use, and 6 percent reported injection. Among secondary users, however, 52 percent reported smoking, 17 percent reported intranasal use, and 30 percent reported injection.

User characteristics were generally more pronounced among routes of administration than between primary and secondary users (exhibit 5). As a group, admissions who smoked cocaine were about 50 percent male; they were likely to be older with few younger users, to be African-American, to have been in treatment before, and to receive treatment in the city. As a group, intranasal cocaine users were about two-thirds male. They had both older and younger populations, as well as relatively high proportions of Whites, of

admissions first entering treatment after 3 years or less of cocaine use, and of admissions treated in the suburban counties. As a group, cocaine injectors resembled cocaine smokers but had higher proportions of males (about two-thirds) and Whites (about 50 percent).

Exhibit 5 highlights the strong association between cocaine and heroin use and suggests that the preferred route of heroin administration is related to the preferred route of cocaine administration. Cocaine smoking was associated with intranasal heroin use. Among primary cocaine smokers in the first half of 2005, 13 percent used intranasal heroin; only 4 percent used heroin by another route. Among secondary cocaine smokers, 54 percent reported their primary substance as intranasal heroin, and 20 percent reported heroin injection. Overall, 38 percent of all cocaine smokers used intranasal heroin and 14 percent injected heroin. Intranasal cocaine and heroin use were similarly associated. Overall, 34 percent of all intranasal cocaine users also used intranasal heroin; 10 percent injected heroin. In contrast, almost all cocaine injectors (90 percent) injected heroin—91 percent as a primary and 73 percent as a secondary substance. Only 2 percent of cocaine injectors reported intranasal heroin use.

Exhibit 6 compares the number of cocaine treatment admissions (primary and secondary combined) in the first half of 2005 by route of administration, age, and race. For all three routes of administration, the younger users tended to be White rather than African-American.

Prices for powder cocaine for the second half of 2004 were reported as \$20,000–\$32,000 per kilogram at the wholesale level, \$900–\$1,200 per ounce at mid-level, and \$20–\$200 per gram at the retail level. Prices for crack cocaine were reported as \$20,000–\$26,000 per kilogram at the wholesale level, \$600–\$1,200 per ounce at midlevel, and \$40–\$200 per gram at the retail level.

Heroin

Heroin remained the most significant substance among drug-related treatment admissions in Baltimore in the first half of 2005, responsible for 53 percent of admissions (exhibit 2). Opiates were present in 469 (87 percent) drug-related deaths in 2003. The heroin treatment admission rate increased from 659 per 100,000 population age 12 and older in 2001 to 917 per 100,000 in 2003 (exhibit 3). However, it declined slightly to an annualized rate of 662 per 100,000 in the first half of 2005.

In the first half of 2005, heroin represented 36 percent of the unweighted DAWN non-detox ED reports for illicit drugs of abuse, and cocaine represented 46 percent. The heroin patients were 66 percent male and 42 percent White; 24 percent were age 45 or older. The heroin and cocaine patients were demographically similar, and it is likely that many of the ED reports reflect co-use of heroin and cocaine (see exhibit 5).

Heroin use in the Baltimore metropolitan area is complex. There are several groups of heroin users differing by urbanicity, route of administration, age, and race. In the first half of 2005, the heroin treatment admission rate was about 12 times higher in Baltimore City than in the suburban counties (exhibit 3).

In Baltimore City, intranasal use was the preferred route of administration among treatment admissions (exhibit 3), and the admission rate for intranasal use was 23 percent higher than for injection. In the suburban counties, however, the rate for heroin injection was 112 percent higher than for intranasal use.

Exhibit 7 compares the number of treatment admissions in the first half of 2005 by route of administration, age, and race. Baltimore has a core of older African-American heroin users, both injectors and intranasal users. White users entering treatment for heroin use were younger and were predominantly injectors, although there is a significant group of White intranasal heroin users as well.

Exhibit 8 tabulates the characteristics of these four main groups of heroin users admitted to treatment in Baltimore. African-American intranasal heroin users made up the largest segment (39 percent) of the heroin users admitted to treatment in Baltimore in the first half of 2005, while White intranasal heroin users made up 9 percent (exhibit 8). Most of the African-American intranasal users (92 percent) were treated in Baltimore City, compared with 65 percent of the White intranasal users. (Among the White intranasal users, however, the proportion treated in the city rather than the suburban counties has increased from 41 percent in 2003.) The African-American and White intranasal heroin users differed substantially in age, duration of use, treatment referral source, and secondary drugs reported. Among the African-American intranasal heroin users, 81 percent were age 35 and older in the first half of 2005, compared with 42 percent of their White counterparts. Less than 1 percent of the African-American intranasal users were younger than age 26, compared with 26 percent of the White intranasal users. Among the 33 percent of African-American intranasal heroin users entering

treatment for the first time, the median duration of use was 16 years. Among the 43 percent of the same group among Whites, the median duration of use was 5 years. Daily use was reported by 76 percent of the African-Americans and by 87 percent of the Whites. A larger proportion of African-American intranasal users entered treatment through the criminal justice system (30 percent, compared with 11 percent of their White counterparts). More than one-half of the African-American intranasal heroin users (54 percent) reported secondary abuse of cocaine (44 percent smoking and 10 percent intranasal use), compared with 39 percent of the White intranasal users. However, the White intranasal heroin users were more likely to report use of opiates other than heroin than were the African-American intranasal users (12 percent and 2 percent, respectively).

White heroin injectors made up 28 percent of the heroin users admitted to treatment in Baltimore in the first half of 2005, while African-American heroin injectors made up 20 percent (exhibit 8). Many of the contrasts between the White and African-American injectors were similar to those seen between the White and African-American intranasal heroin users. Most of the African-American injectors (91 percent) were treated in Baltimore City, compared with 57 percent of the White heroin injectors. (Among the White heroin injectors, however, the proportion treated in the city rather than the suburban counties has increased from 42 percent in 2003.) The African-American and White heroin injectors differed substantially in age, duration of use, treatment referral source, and secondary drugs reported. Among the White heroin injectors, 31 percent were age 35 and older in the first half of 2005, compared with 88 percent of their African-American counterparts. Thirty-six percent of the White heroin injectors were younger than 26, compared with 2 percent of the African-American heroin injectors. Among the 38 percent of White heroin injectors entering treatment for the first time, the median duration of use was 6 years. Among the 28 percent of the same group among African-Americans, the median duration of use was 22 years. Daily use was reported by 81 percent of the Whites and by 78 percent of the African-Americans. A smaller proportion of White heroin injectors entered treatment through the criminal justice system (14 percent, compared with 24 percent of their African-American counterparts). One-half of the White heroin injectors reported secondary abuse of cocaine (primarily injection [30 percent] and smoking [15 percent]), compared with 72 percent of the African-American heroin injectors (primarily injection [53 percent] and smoking [16 percent]). However, the White heroin injectors were more likely to report use of opiates other than heroin than were the African-

American heroin injectors (8 percent and 2 percent, respectively).

Of the 25,575 items from Baltimore tested by NFLIS in FY 2005, 22 percent were heroin.

Most of the heroin sold in Baltimore is from South America, although among 34 samples purchased by the DEA's Domestic Monitor Program in 2004, there were 2 from Southwest Asia and 1 from Southeast Asia. The purity of the South American heroin was 27.5 percent, and the price was \$0.50 per milligram pure. Both purity and price were lower than the national averages (32.5 percent purity and \$1.00 per milligram pure).

Other Opiates and Narcotics

Indicators for opiates and narcotics other than heroin continued to increase (exhibit 2). Treatment admission rates for opiates other than heroin doubled between 2001 and the first half of 2005, from 34 per 100,000 population age 12 and older to an annualized rate of 70 per 100,000 in the first half of 2005 (exhibit 3). In 2005, there were 1,541 unweighted ED reports involving opiates/opioids in the DAWN ED category that includes prescription-type drugs of misuse. Twenty-two percent of these reports involved oxycodone, 4 percent specified hydrocodone, 61 percent specified other opiates, and the opiate was unspecified in 12 percent of reports.

Opiates other than heroin were reported by 6 percent of admissions as the primary substance of abuse, and they were reported by an additional 5 percent as a secondary substance (exhibit 3). Exhibit 10 compares admissions reporting opiates other than heroin as primary substances with those reporting them as secondary substances.

Among primary opiate users in the first half of 2005, males were a slim majority (53 percent), and almost all were White (90 percent) (exhibit 10). The population distribution of primary opiate users grew more youthful between 2001 and the first half of 2005. There were few admissions younger than 18, but the proportion of those age 18–25 increased from 20 to 27 percent, and the proportion of those age 26–34 increased from 23 to 28 percent. The proportion of older users (35 and older) declined from 55 to 43 percent, and the median age fell from 36 to 32. The location of the treatment population shifted dramatically; 79 percent were treated in the suburban counties in 2001, compared with 52 percent in the first half of 2005.

The preferred route of administration among primary opiate users shifted from 86 percent oral and 6 percent intranasal use in 2001 to 79 percent oral and 16 percent intranasal use in the first half of 2005. Daily use of opiates was the norm, reported by 82 percent in the first half of 2005. Most entered treatment of their own volition (only 8 percent were referred through the criminal justice system in the first half of 2005). More than 1 in 4 opiate admissions first entered treatment within 3 years of beginning opiate use, a proportion that remained relatively constant between 2001 and the first half of 2005. However, the proportion of those entering treatment for the first time after more than 3 years of use increased from 18 to 28 percent over that period.

Secondary substances were diverse, and they were reported by 54 percent of primary opiate admissions in the first half of 2005. No single substance was predominant. Use of alcohol, cocaine, marijuana, heroin, and tranquilizers were each reported by 12–17 percent of primary opiate admissions in the first half of 2005.

Secondary opiate users were similar in several respects to primary opiate users. They were predominantly White. A similar increase in intranasal use between 2001 and the first half of 2005 was apparent, as was the shift from treatment in the suburban counties to treatment in the city. Patterns of first treatment entry and duration of use were similar. There were, however, several significant differences. Although in the first half of 2005 56 percent of secondary opiate users were male, this represented a decline from 63 percent in 2001. There was a significant increase in the proportion of secondary opiate users who were younger than age 18 (from 6 to 12 percent between 2001 and the first half of 2005). Daily use of opiates, at 48 percent in the first half of 2005, was significantly lower. The likelihood of referral to treatment through the criminal justice system was 7–10 percentage points higher every year between 2001 and the first half of 2005.

Heroin was reported as the primary substance at treatment entry by 51 percent of secondary opiate admissions in the first half of 2005; 30 percent reported heroin injection and 20 percent reported intranasal heroin use. Other primary substances were alcohol (21 percent), cocaine, and marijuana (11 percent each). Tranquilizers, important secondary substances among primary opiate users, were not significant primary substances among secondary opiate users.

Marijuana

Marijuana treatment admissions, which increased between 2000 and 2004, may have stabilized or begun to decline (exhibit 2). The annual marijuana treatment admission rate increased from 207 per 100,000 population age 12 and older in 2001 to 251 per 100,000 in 2003, then declined to an annualized rate of 170 per 100,000 in the first half of 2005 (exhibit 3). The proportion of marijuana treatment admissions in the first half of 2005 was higher in the suburban counties (20 percent of county admissions) than in Baltimore City (10 percent of city admissions). However, the admission rate for the first half of 2005 was higher in the city (170 per 100,000 population age 12 and older, compared with 59 per 100,000 in the counties).

In the first half of 2005, marijuana represented 15 percent of the unweighted DAWN non-detox ED reports for illicit drugs of abuse. Sixty-five percent of these patients were male, and 65 percent were White. Twenty-five percent were younger than 18, and another 28 percent were age 18–24.

More often than not, marijuana use in the indicator data sets was associated with the use of alcohol or other drugs. Marijuana was consistently reported more frequently as a secondary substance than as a primary substance from 2001 through the first half of 2005 (exhibit 3). Thirteen percent of admissions in the first half of 2005 reported marijuana as a primary substance, while 17 percent reported it as a secondary substance. Among treatment admissions for primary marijuana use in the first half of 2005, 59 percent reported using additional substances (a decline from the 68 percent reporting secondary substances in 2001) (exhibit 11). Alcohol was the most common secondary substance (reported by 49 percent in the first half of 2005), but other drugs were also represented—cocaine (9 percent), heroin (4 percent), opiates other than heroin (3 percent), hallucinogens (3 percent), and a range of other substances (primarily stimulants and PCP—10 percent).

Persons entering treatment for marijuana use were young. In the first half of 2005, 38 percent were younger than 18, although this represented a decline from the 48 percent who were younger than 18 in 2001. Marijuana admissions remained primarily male (81 to 82 percent) from 2001 through the first half of 2005. African-American admissions became a slim majority over White admissions in 2002, but the proportions remained relatively constant from 2001 through the first half of 2005, at 43–50 percent White and 48–54 percent African-American. Hispanics rep-

resented a small but steadily increasing proportion of marijuana treatment admissions.

The criminal justice system was responsible for referring the majority of admissions to treatment—59 percent in the first half of 2001, a slight decline from 64 percent in 2001. Daily marijuana use was not the norm; it was reported by 39 percent of admissions in the first half of 2005. Some 29 percent of marijuana admissions in the first half of 2005 first entered treatment within 3 years of beginning marijuana use, and 42 percent first entered treatment after more than 3 years of use. Although there was a slight upward trend in the proportion of admissions using marijuana for more than 3 years before entering treatment, the median duration of use among those entering treatment for the first time remained unchanged from 2001 through the first half of 2005, at 4 years.

Of the 25,575 items from Baltimore tested by NFLIS in FY 2005, 34 percent were cannabis.

Prices for marijuana for the second half of 2004 were reported as \$2,390–\$4,000 per pound for hydroponic marijuana or \$1,000–\$1,600 per pound for commercial grade marijuana at the wholesale level. Midlevel prices were \$275 per ounce for hydroponic and \$130 per ounce for commercial grade. At the retail level, prices were \$35–\$60 per one-quarter ounce or \$20–\$40 per bag.

Stimulants

Stimulants other than cocaine were rarely mentioned as the primary substance of abuse by treatment admissions (exhibit 3). Nevertheless, the numbers, although small, increased from 44 admissions in 2001 to 82 in 2004 and were at 37 for the first half of 2005. The majority (78 percent) of stimulant admissions in the first half of 2005 were for methamphetamine, and 14 percent were for amphetamine. The treatment admission rate for stimulants was between 2 and 4 per 100,000 population age 12 and older from 2001 through the first half of 2005.

In 2005, all stimulants combined represented less than 1 percent of the unweighted DAWN non-detox ED reports of illicit drugs of abuse.

Other Drugs

All other drugs (sedatives, tranquilizers, hallucinogens, PCP, inhalants, over-the-counter drugs, and any other drugs not specified elsewhere) were responsible for less than 2 percent of treatment admissions in the first half of 2005 (exhibit 3). Treatment admission rates did not demonstrate any particular trends. From

2001 through the first half of 2005, the treatment admission rates per 100,000 population age 12 and older were between 2 and 5 admissions per 100,000 for benzodiazepines and other tranquilizers, between 3 and 4 admissions per 100,000 for barbiturates and other sedatives, between 2 and 4 admissions per 100,000 for hallucinogens, between 2 and 5 admissions per 100,000 for PCP, and between less than 1 and 1 per 100,000 for both inhalants and over-the-counter drugs.

In the first half of 2005, there were 477 unweighted DAWN ED reports involving benzodiazepines, 48 involving MDMA, 27 involving PCP, 11 involving inhalants, 5 involving LSD, 5 involving ketamine, and none involving GHB.

BALTIMORE INNOVATIVE PROGRAMS

The Baltimore City Health Department, the Johns Hopkins University Bloomberg School of Public Health, and the Open Society Institute in Baltimore implemented the “Staying Alive” program in April 2004. The program, adapted from an ongoing program in Chicago, seeks to train current opiate-dependent individuals and their families and friends in the administration of Narcan, a heroin antagonist, to individuals who have overdosed in their presence. In addition to demonstrating proper administration procedures to overdose victims, the program focuses on safe self-administration of heroin in an effort to prevent overdose and the spread of diseases such as HIV/AIDS and hepatitis B and C. The program has trained approximately 900 individuals who are either dependent on an opiate or associated with someone who is. Of those trained, at least 120 individuals have indicated that the administration of Narcan to a person who has overdosed led to that person's successful recovery. Once the drug is administered to an overdose victim, the trained individual can replenish the Narcan and needles at any of the city's needle exchange locations. Since the implementation of the program, there has been a 22-percent decrease in overdose deaths, from 336 in 2002 to 261 in 2004 (Cannon 2005). This decrease has been largely attributed to the Staying Alive program.

Another innovative program, recently implemented in Baltimore and funded by the Center for Substance Abuse Prevention, is the Interim Methadone Maintenance Program. As described by Dr. Robert Schwartz of the Friends Research Institute, Inc., the Interim Methadone Maintenance Program is designed to provide methadone treatment to heroin addicts currently waiting to be admitted to one of the city's comprehensive treatment programs. Although the heroin addicts are not provided comprehensive services such

as mental health counseling, medical aid, and job training, data suggest that providing methadone alone can significantly improve the lives of those addicted to heroin by decreasing criminal activity and reducing heroin use (Schwartz, personal communication). Within 120 days of enrollment in the program, clients are transferred to a comprehensive treatment program. About 76 percent of those participating in the program have entered a comprehensive treatment program, and only 16 percent dropped out of the Interim Methadone Treatment program prior to 120 days (Schwartz, personal communication).

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

The annual acquired immunodeficiency syndrome (AIDS) case report rate for 2004 for the Baltimore PMSA (39 cases per 100,000) ranked fifth behind New York City (59 per 100,000), Miami (46 per 100,000), San Francisco (45 per 100,000), and Fort Lauderdale (40 per 100,000) (CDC 2003).

The Baltimore PMSA accounted for 64 percent and 63 percent, respectively, of Maryland's incident and prevalent human immunodeficiency virus (HIV) cases, 59 percent of its incident AIDS cases, and 60 percent of its prevalent AIDS cases (AIDS Administration 2004). Baltimore City alone accounted for 51 percent of Maryland's 2003 incident and prevalent HIV cases, 46 percent of its incident AIDS cases, and 47 percent of its prevalent AIDS cases. The Baltimore metropolitan area had an AIDS incidence rate of 33 per 100,000 population for 2003 and an HIV incidence rate of 49 per 100,000. The AIDS prevalence rate in the Baltimore metropolitan area in 2003 was 298 per 100,000 population, and the HIV prevalence rate was 382 per 100,000.

In 2003, Baltimore City's prevalent HIV/AIDS cases were 62 percent male and 81 percent African-American (AIDS Administration 2004). Forty-four percent were age 40–49, and another 24 percent were age 30–39. Fifty-six percent of the prevalent HIV/AIDS cases in Baltimore City in which the risk category was determined were injection drug users (IDUs), 15 percent were non-IDU men who had sex with men, and 26 percent involved heterosexual transmission. In the suburban counties, prevalent HIV/AIDS cases were 66 percent male and 55 percent African-American. Forty-one percent were age 40–49, and another 29 percent were age 30–39. For cases in which the risk category was determined, 36 percent of prevalent HIV/AIDS cases in the suburban counties were IDUs, 29 percent were non-IDU men who had sex with men, and 31 percent involved heterosexual transmission. In Maryland as a whole,

IDUs represented 47 percent of prevalent HIV/AIDS cases in 2003.

In 1999, Baltimore City ranked highest among the 20 cities most burdened by sexually transmitted diseases (STDs) for gonorrhea (949 per 100,000 population), fifth for chlamydia (819 per 100,000 population), and third for syphilis (38 per 100,000 population) (CDC 2000). By 2003, STD rates for Baltimore City had decreased for gonorrhea (to 617 per 100,000) and for syphilis (to 23 per 100,000), but had increased for chlamydia (to 1,001 per 100,000) (AIDS Administration 2004).

Voluntary HIV testing is offered to Maryland prison entrants. Among those tested in 2003, 5 percent were positive for HIV (AIDS Administration 2004). A 2002 survey of entrants to Baltimore City detention facilities and Maryland State prison entrants found that newly incarcerated females had much higher HIV rates than newly incarcerated males (13 percent and 4 percent, respectively) (AIDS Administration 2004).

The survey of prison entrants also found that 25 percent had been infected by hepatitis B and 30 percent had antibodies to hepatitis C (Solomon et al. 2004).

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Exhibit 1. Baltimore DAWN ED Sample and Reporting Information: January–June 2005

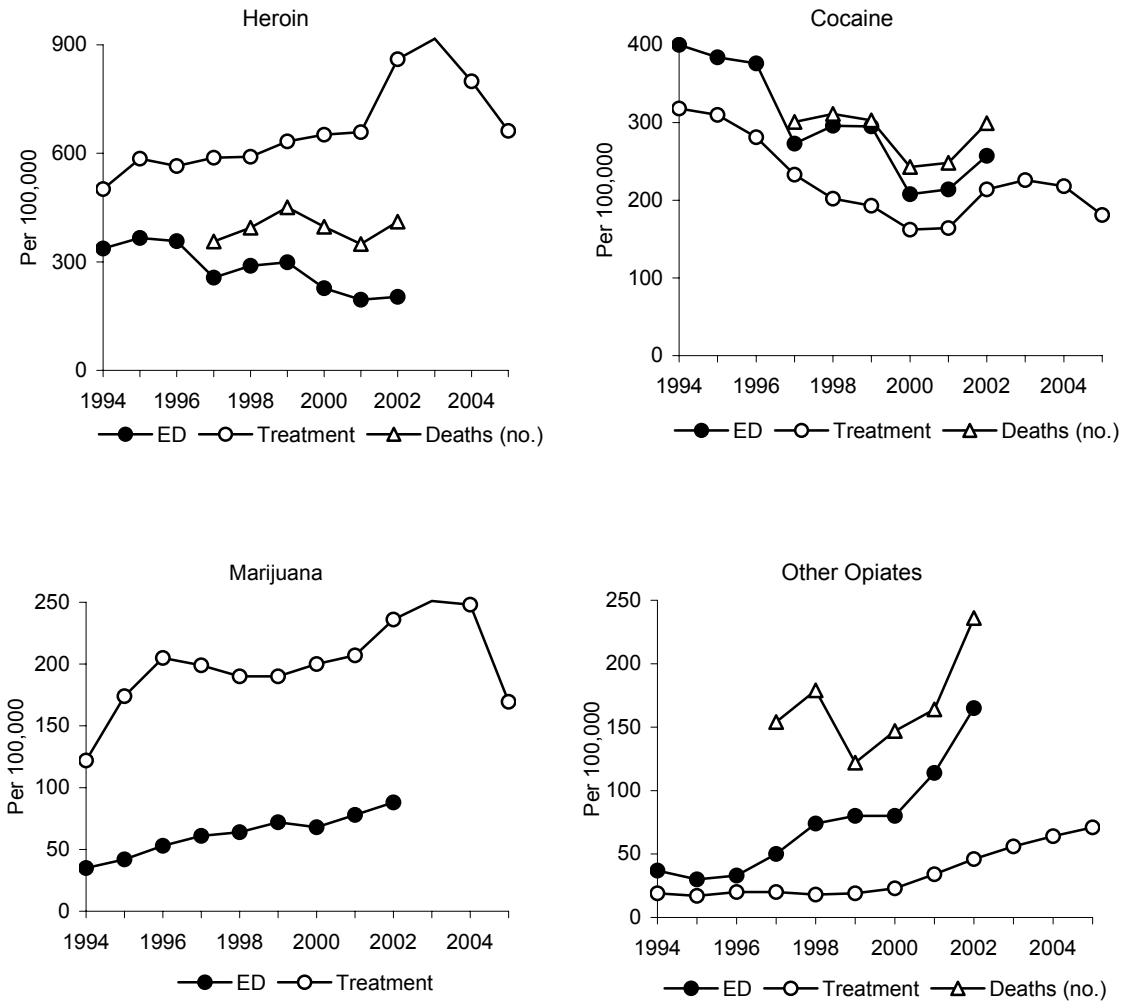
Total Eligible Hospitals ¹	No. of Hospitals in DAWN Sample	Total EDs in DAWN Sample ²	No. of EDs Reporting per Month: Completeness of Data (%)			No. of EDs Not Reporting
			90–100%	50–89%	<50%	
21	21	24	7–11	1–4	1–4	7–15

¹Short-term, general, non-Federal hospitals with 24-hour emergency departments based on the American Hospital Association Annual Survey.

²Some hospitals have more than one emergency department.

SOURCE: DAWN *Live!*, OAS, SAMHSA, updated 12/6-12/7, 2005

Exhibit 2. Annual Rates of Drug-Related Treatment Admissions and ED Mentions per 100,000 Population, and Numbers of Drug-Related Deaths in Baltimore: 1994– First Half 2005



SOURCES: DAWN, OAS, SAMHSA, and Alcohol and Drug Abuse Administration, Maryland Department of Health and Mental Hygiene

Exhibit 3. Characteristics of Drug-Related Treatment Admissions in Baltimore, by Percent: 2001–First Half 2005

	Total PMSA			Baltimore City			PMSA excluding Baltimore City								
	2001	2002	2003	2004	2005	2001	2002	2003	2004	1H 2005	1H 2005				
(Number of Admissions)	(28,194)	(34,682)	(36,963)	(34,338)	(13,874)	(13,729)	(19,137)	(21,142)	(20,856)	(8,893)	(14,465)	(15,545)	(15,821)	(13,482)	(4,981)
Primary Substance (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Alcohol with Secondary Drug	17.4	14.4	13.3	13.9	12.5	8.1	7.6	6.6	7.7	6.5	26.2	22.7	22.1	23.6	23.2
Cocaine	12.4	13.3	13.3	13.9	14.4	12.5	13.4	12.9	14.4	13.4	12.3	13.2	13.8	13.1	16.1
Smoked	9.3	10.1	10.0	11.0	11.3	9.8	10.9	10.5	12.0	11.4	8.8	9.2	9.3	9.5	11.2
Intranasal	2.0	1.8	2.1	1.7	2.0	1.5	1.1	1.2	1.2	1.0	2.3	2.6	3.3	2.6	3.9
Injected	0.9	1.1	1.0	0.9	0.8	1.0	1.2	1.1	1.0	0.9	0.8	1.1	0.9	0.7	0.7
Other	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.3	0.3	0.3	0.3	0.3
Marijuana/Hashish	15.7	14.7	14.7	15.8	13.4	11.6	11.3	11.4	11.5	9.7	19.6	18.8	19.2	22.5	20.1
Heroin	50.0	53.5	53.8	50.9	52.5	66.1	65.7	66.3	62.9	64.5	34.8	38.5	37.2	32.2	31.1
Injected	22.4	24.8	25.6	24.4	25.3	26.2	27.4	28.4	27.2	28.2	18.8	21.7	21.9	20.0	20.2
Intranasal	24.9	25.6	25.0	24.9	25.7	36.6	34.5	34.3	34.1	34.8	13.8	14.8	12.5	10.7	9.6
Other	2.7	3.0	3.2	1.6	1.4	3.3	3.8	3.6	1.7	1.5	2.2	2.0	2.8	1.5	1.4
Other Opiates	2.6	2.9	3.3	4.0	5.6	1.1	1.5	1.6	2.6	4.6	4.0	4.6	5.6	6.3	7.5
Stimulants	0.2	0.2	0.2	0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.4	0.5
All Other	1.7	1.1	1.4	1.2	1.3	0.5	0.5	1.1	0.8	1.2	2.8	1.9	1.7	1.8	1.5
Primary Substance (annual admissions per 100,000 population aged 12+)															
Alcohol with Secondary Drug	229	231	226	218	79	208	274	268	310	114	236	217	212	190	68
Cocaine	164	214	226	218	91	322	485	521	582	234	111	126	132	106	47
Smoked	122	163	169	173	71	251	395	424	484	199	79	88	89	77	33
Intranasal	26	29	36	27	13	39	41	48	49	17	21	25	32	21	11
Injected	12	18	17	14	5	25	43	43	41	15	7	10	8	6	2
Other	4	4	4	4	1	6	6	7	9	2	3	3	3	3	1
Marijuana/Hashish	207	236	251	248	85	297	410	462	465	170	176	180	184	182	59
Heroin	659	860	917	799	331	1,693	2,378	2,686	2,547	1,126	313	367	357	260	92
Injected	295	399	437	383	160	672	992	1,153	1,102	493	169	207	210	162	60
Intranasal	328	412	425	391	162	937	1,248	1,389	1,378	608	125	141	120	86	28
Other	36	48	55	25	9	84	138	144	67	26	19	19	27	12	4
Other Opiates	34	46	56	64	35	29	53	65	104	80	36	44	54	51	22
Stimulants	2	3	3	4	2	2	2	4	6	2	2	3	3	3	2
All Other	22	18	24	19	8	13	19	45	34	21	26	18	17	15	4
Secondary Substance (%)^f															
None	25.0	24.8	26.7	27.2	29.5	28.8	26.2	28.6	28.3	32.9	21.3	23.2	24.1	25.5	23.3
Alcohol	30.1	29.1	28.3	27.8	25.1	30.6	29.6	28.0	27.4	23.6	29.6	28.6	28.7	28.5	27.8
Cocaine	35.5	38.4	37.4	36.3	36.9	42.6	45.0	44.4	42.8	41.4	28.8	30.3	28.0	26.1	28.7
Marijuana/Hashish	21.7	20.4	18.1	18.3	16.6	14.4	14.4	11.7	12.3	11.0	28.7	27.7	26.6	27.6	26.6
Heroin	5.7	6.6	6.2	5.5	6.0	6.0	7.3	6.7	6.4	6.6	5.4	5.7	5.5	4.2	5.0
Other Opiates	3.0	3.4	3.5	3.9	4.5	1.6	1.8	1.7	2.5	3.0	4.5	5.3	5.9	6.1	7.1
All Other	8.2	5.9	6.0	6.6	6.9	2.9	3.2	3.2	5.4	5.2	13.3	9.1	9.8	8.5	10.1

^fRates for 2005 are not annual; they are for January-June only.

^gSecondary substance^g totals equal more than 100 percent because they include secondary and tertiary substances.

SOURCE: Based on data from Alcohol and Drug Abuse Administration, Maryland Department of Health and Mental Hygiene

Exhibit 4. Characteristics of Primary Cocaine Treatment Admissions in Baltimore, by Percent: 2001–First Half 2005

	Total PMSA				Baltimore City				PMSA Excluding Baltimore City					
	2001	2002	2003	2004 1H 2005	2001	2002	2003	2004 1H 2005	2001	2002	2003	2004 1H 2005		
(Number of Admissions)	(3,505)	(4,616)	(4,904)	(4,766)	(1,993)	(1,722)	(2,564)	(2,999)	(1,190)	(1,783)	(2,052)	(2,184)	(1,767)	(803)
Percent of All Admissions	12.4	13.3	13.3	13.9	14.4	12.5	13.4	12.9	14.4	12.3	13.2	13.8	13.1	16.1
Gender														
Male	55.9	55.9	59.6	57.2	57.7	50.1	51.9	55.0	54.4	61.6	60.9	65.4	62.4	62.6
Female	44.1	44.1	40.4	42.8	42.3	49.9	48.1	45.0	45.6	38.4	39.1	34.6	37.6	37.4
Age at Admission														
Younger than 18	1.2	1.1	1.1	2.1	1.9	1.2	1.1	1.0	1.6	1.2	1.1	1.2	2.8	3.1
18–25	8.3	7.4	8.0	7.6	8.6	4.8	3.7	4.7	4.5	11.7	11.9	12.1	12.9	14.1
26–34	25.7	24.1	22.1	19.7	17.8	22.2	20.1	16.9	16.1	29.0	29.0	28.5	25.8	22.0
35 and older	64.8	67.5	68.8	70.6	71.8	71.8	75.0	77.3	77.7	58.0	58.1	58.2	58.6	60.8
(Median Age at Admission)	(37 yrs)	(38 yrs)	(39 yrs)	(39 yrs)	(40 yrs)	(38 yrs)	(39 yrs)	(40 yrs)	(41 yrs)	(36 yrs)	(36 yrs)	(36 yrs)	(37 yrs)	(37 yrs)
Race/Ethnicity														
White	36.6	34.3	36.6	35.1	37.6	14.3	14.5	15.9	17.1	58.2	59.1	62.2	65.6	68.9
African-American	62.0	64.1	61.4	63.1	60.0	84.6	84.6	82.9	81.8	40.1	38.5	34.7	31.5	27.4
Hispanic	0.6	0.9	1.4	1.3	1.6	0.3	0.6	0.8	0.8	0.8	1.3	2.1	2.0	2.4
Other	0.8	0.7	0.6	0.5	0.9	0.8	0.3	0.3	0.3	0.9	1.2	1.0	0.9	1.4
Route of Administration														
Smoking	74.7	76.3	75.0	79.3	78.9	77.9	81.6	81.3	83.1	71.5	69.7	67.2	72.7	69.6
Intranasal	15.7	13.4	15.9	12.5	14.1	12.3	8.5	9.3	8.4	19.0	19.6	24.3	19.5	24.0
Injection	7.3	8.6	7.4	6.4	5.6	7.8	8.8	8.2	7.0	6.7	8.3	6.4	5.3	4.4
Other	2.3	1.7	1.7	1.8	1.4	2.0	1.1	1.3	1.5	2.7	2.3	2.2	2.5	2.0
Daily Use	35.5	39.4	38.9	38.4	48.1	42.2	50.1	47.5	43.3	29.0	26.0	28.1	30.2	38.1
Criminal Justice Referral	37.5	33.5	32.2	35.8	28.9	30.6	26.8	26.8	32.4	44.2	41.8	38.9	41.5	33.7
User/Treatment Status														
First Treatment (≤ 3 Years' Use)	8.0	7.4	7.0	7.3	9.0	7.8	6.3	6.5	5.2	8.2	8.7	7.6	11.0	14.2
First Treatment (> 3 Years' Use)	32.8	35.0	32.9	31.1	35.1	32.1	34.5	31.6	29.3	33.4	35.6	34.5	34.3	39.9
Prior Treatment	59.2	57.6	60.1	61.5	55.9	60.1	59.2	61.9	65.6	58.4	55.7	57.9	54.7	46.0
(Median Duration of Use)	(11 yrs)	(12 yrs)	(12 yrs)	(12 yrs)	(13 yrs)	(11 yrs)	(12 yrs)	(12 yrs)	(13 yrs)	(11 yrs)	(12 yrs)	(12 yrs)	(11 yrs)	(11 yrs)
Secondary Substance ²														
None	29.6	28.0	29.9	29.9	34.3	34.6	29.6	32.9	31.2	24.7	26.0	26.1	27.7	26.7
Alcohol	47.4	47.1	45.7	46.6	41.7	42.3	44.1	40.8	43.2	52.3	50.9	51.8	52.3	49.9
Marijuana/Hashish/THC	26.0	23.9	22.2	23.4	22.1	20.4	19.8	18.1	19.3	31.5	29.1	27.2	30.3	31.0
Heroin	21.3	25.8	23.8	20.7	20.7	27.0	31.8	28.9	26.2	15.7	18.4	17.5	11.3	14.2
Intranasal	12.1	16.2	13.2	12.9	11.6	17.8	21.8	17.5	17.3	6.6	9.2	8.0	5.4	6.8
Injected	6.7	7.7	8.4	6.2	7.3	7.0	7.8	9.2	7.1	6.4	7.5	7.5	4.7	5.6
Other Opiates	1.7	1.9	2.1	2.7	3.0	0.8	0.9	0.8	1.5	2.6	3.1	3.8	4.8	6.1
All Other	4.7	3.2	3.5	5.1	3.5	0.9	1.2	1.6	4.6	8.4	5.8	5.8	5.9	6.1

¹For first-time treatment admissions.

²“Secondary substance” totals equal more than 100 percent because they include secondary and tertiary substances.

SOURCE: Based on data from Alcohol and Drug Abuse Administration, Maryland Department of Health and Mental Hygiene

Exhibit 5. Characteristics of Cocaine Treatment Admissions (Primary and Secondary) in Baltimore, by Route of Administration and Percent: First Half 2005

	Route of Administration for Primary Cocaine Use				Route of Administration for Secondary Cocaine Use					
	Total	Smoked	Intranasal	Injected	Other	Total	Smoked	Intranasal	Injected	Other
(Number of Cocaine Admissions)	(1,993)	(1,572)	(282)	(112)	(27)	(5,108)	(2,656)	(857)	(1,522)	(73)
Percent of Cocaine Admissions	100.0	78.9	14.1	5.6	1.4	100.0	52.0	16.8	29.8	1.4
Gender										
Male	57.7	55.2	67.0	67.9	63.0	55.7	46.2	67.7	65.1	63.0
Female	42.3	44.8	33.0	32.1	37.0	44.3	53.8	32.3	34.9	37.0
Age at Admission										
Younger than 18	1.9	1.7	3.9	-	-	1.3	1.0	3.9	0.2	5.5
18-25	8.6	6.0	17.0	23.2	14.8	12.1	7.5	18.8	16.2	16.4
26-34	17.8	17.6	18.4	17.0	22.2	20.1	19.3	19.6	21.2	32.9
35 and older	71.8	74.7	60.6	59.8	63.0	66.5	72.2	57.8	62.4	45.2
(Median Age at Admission)	(40 yrs)	(40 yrs)	(38 yrs)	(39 yrs)	(37 yrs)	(38 yrs)	(39 yrs)	(36 yrs)	(39 yrs)	(33 yrs)
Race/Ethnicity										
White	38.0	32.1	62.1	57.1	51.9	38.1	29.2	52.3	44.9	50.7
African-American	60.5	66.5	35.5	42.9	48.1	60.8	69.8	45.9	53.9	47.9
Other	1.5	1.4	2.5	-	-	1.2	0.9	1.9	1.1	1.4
Daily Use	48.1	50.2	35.8	50.0	44.4	44.3	44.4	30.1	52.4	37.0
Criminal Justice Referral	28.9	28.1	35.5	25.9	18.5	26.9	25.9	36.2	22.9	35.6
User/Treatment Status										
First Treatment (≤ 3 Years' Use)	9.0	8.0	15.6	5.4	18.5	6.0	4.7	12.5	4.3	9.6
First Treatment (> 3 Years' Use)	35.1	34.7	38.3	35.7	22.2	28.6	28.1	32.8	27.1	32.9
Prior Treatment	55.9	57.4	46.1	58.9	59.3	65.4	67.2	54.7	68.7	57.5
(Median Duration of Cocaine Use)	(13 yrs)	(13 yrs)	(9 yrs)	(16 yrs)	(11 yrs)	(13 yrs)	(13 yrs)	(9 yrs)	(14 yrs)	(13 yrs)
Urbanicity										
Baltimore City	59.7	64.4	31.6	68.8	40.7	72.0	78.5	49.1	74.0	64.4
Suburban Counties	40.3	35.6	68.4	31.3	59.3	28.0	21.5	50.9	26.0	35.6
Primary or Secondary Substance			Secondary Substance					Primary Substance		
None	34.3	37.6	25.9	8.9	37.0	n/a	n/a	n/a	n/a	n/a
Alcohol	41.7	41.3	48.2	32.1	40.7	15.7	17.8	29.8	3.9	21.9
Marijuana/Hashish/THC	22.1	21.2	30.9	10.7	25.9	3.1	3.4	6.9	0.3	8.2
Heroin	20.7	17.2	20.2	75.0	3.7	77.9	75.8	57.1	94.0	65.8
Intranasal	11.6	12.5	12.1	0.9	3.7	35.9	53.7	41.8	2.3	19.2
Injected	7.3	3.6	2.5	73.2	-	40.5	20.4	13.1	91.4	35.6
Other Opiates	3.0	2.7	3.5	4.5	11.1	2.5	2.3	5.4	1.1	2.7
All Other	3.5	3.3	5.0	1.8	7.4	0.8	0.8	0.9	0.7	1.4

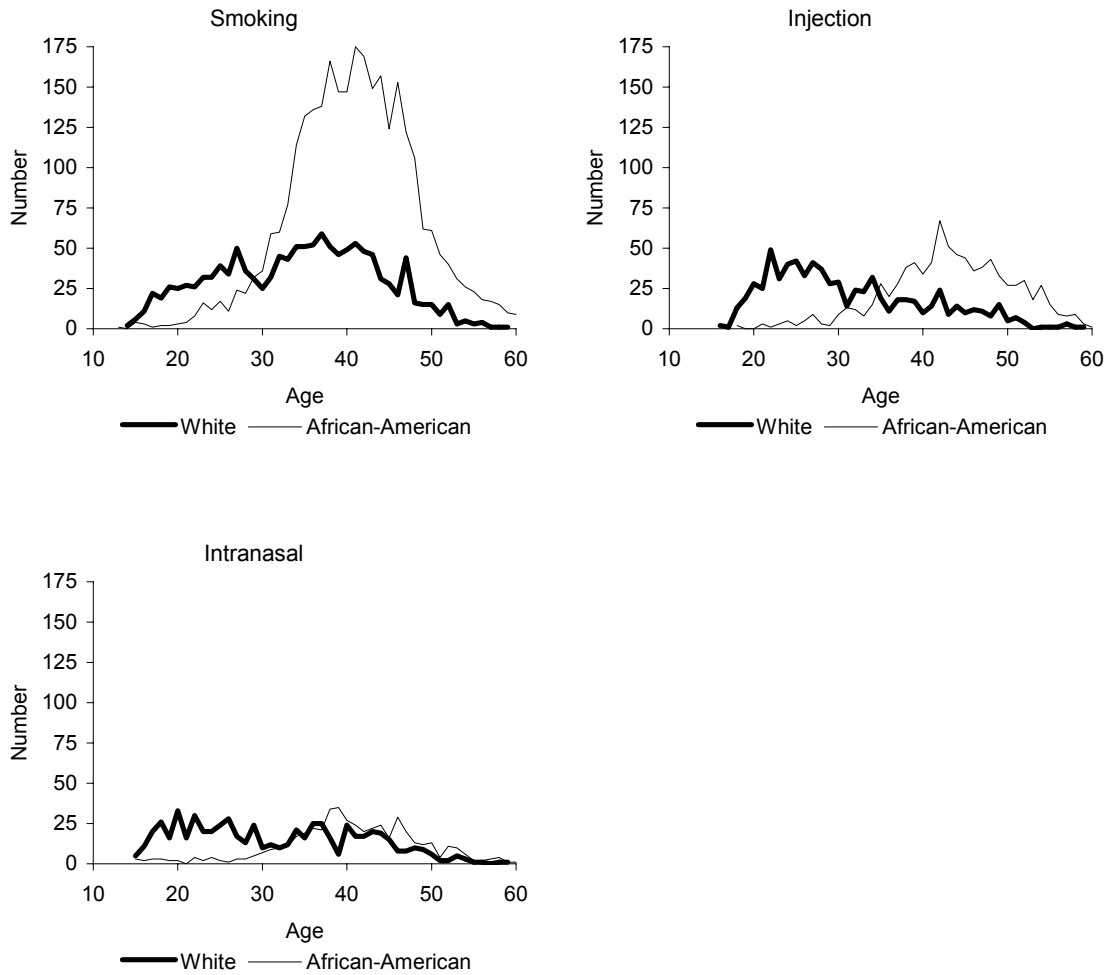
¹ "Secondary substance" totals equal more than 100 percent because they include secondary and tertiary substances.

- Quantity is zero.

n/a Not applicable.

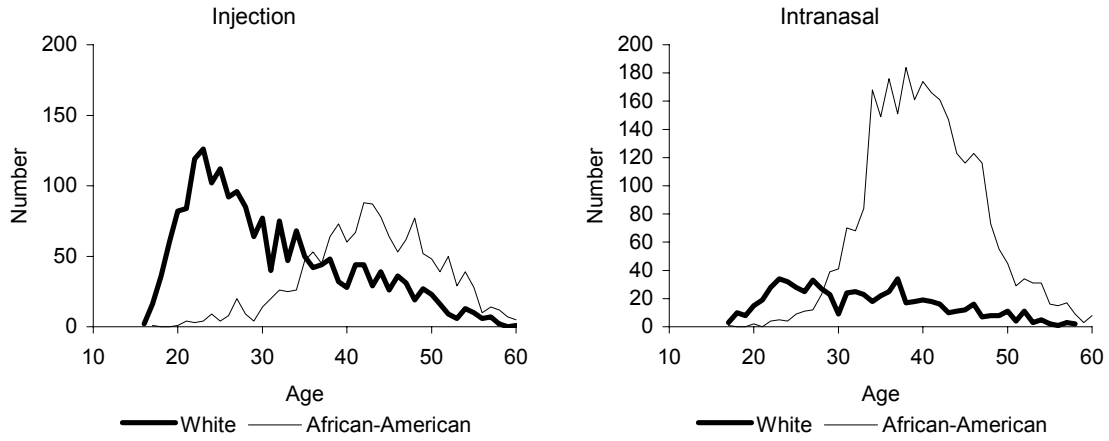
SOURCE: Based on data from Alcohol and Drug Abuse Administration, Maryland Department of Health and Mental Hygiene

Exhibit 6. Numbers of Primary, Secondary, and Tertiary Cocaine Treatment Admissions in Baltimore, by Route of Administration, Age, and Race: First Half 2005



SOURCE: Alcohol and Drug Abuse Administration, Maryland Department of Health and Mental Hygiene

Exhibit 7. Numbers of Primary Heroin Treatment Admissions in Baltimore, by Route of Administration, Age, and Race: First Half 2005



SOURCE: Alcohol and Drug Abuse Administration, Maryland Department of Health and Mental Hygiene

Exhibit 8. Characteristics of Primary Heroin Treatment Admissions in Baltimore, by Percent: 2001–First Half 2005

	Total PMSA				Baltimore City				PMSA Excluding Baltimore City				
	2001	2002	2003	2004 1H 2005	2001	2002	2003	2004 1H 2005	2001	2002	2003	2004 1H 2005	
(Number of Admissions)	(14,102)	(18,547)	(19,902)	(17,472)	(7,285)	(12,564)	(14,015)	(13,126)	(5,734)	(5,033)	(5,887)	(4,346)	(1,551)
Percent of All Admissions	50.0	53.5	53.8	50.9	52.5	66.1	66.3	62.9	64.5	34.8	38.5	37.2	31.1
Gender													
Male	56.2	56.9	56.0	56.9	57.6	52.4	54.2	55.0	56.7	63.0	62.5	61.9	60.9
Female	43.8	43.1	44.0	43.1	42.4	47.6	45.8	45.0	43.3	37.0	37.5	38.1	39.1
Age at Admission													
Younger than 18	0.8	0.9	0.7	0.6	0.3	0.3	0.6	0.4	0.1	1.6	1.6	1.5	1.1
18–25	13.4	13.6	13.3	13.2	13.5	6.5	6.8	7.3	8.1	25.9	28.0	30.1	33.6
26–34	31.1	27.5	24.2	22.9	21.9	30.5	26.7	21.0	20.3	32.2	29.2	27.2	27.7
35 and older	54.7	57.9	61.8	63.3	64.3	62.7	65.9	71.3	71.5	40.3	41.2	41.1	37.7
(Median Age at Admission)	(36 yrs)	(36 yrs)	(37 yrs)	(38 yrs)	(38 yrs)	(37 yrs)	(38 yrs)	(39 yrs)	(39 yrs)	(32 yrs)	(32 yrs)	(31 yrs)	(30 yrs)
Race/Ethnicity													
White	32.3	33.6	34.2	36.0	36.7	15.9	19.0	22.8	27.9	61.8	64.4	68.6	69.4
African-American	66.2	64.8	64.3	62.1	60.4	83.2	79.9	75.6	70.3	35.5	33.2	29.2	23.8
Hispanic	0.8	0.8	0.9	1.3	2.2	0.4	0.6	1.0	1.2	1.4	1.3	1.2	5.9
Other	0.8	0.7	0.6	0.6	0.7	0.4	0.5	0.5	0.7	1.4	1.1	1.0	0.9
Route of Administration													
Intranasal	49.8	48.0	46.4	48.9	49.0	55.4	52.5	54.1	53.9	39.8	38.5	33.8	30.7
Injection	44.8	46.5	47.7	47.9	48.2	39.7	41.8	43.3	43.7	54.0	56.4	59.0	64.9
Other	5.3	5.5	5.9	3.2	2.8	4.9	5.7	2.6	2.3	6.2	5.1	7.2	4.4
Daily Use	71.7	72.8	73.6	71.5	78.3	76.1	78.1	74.1	81.4	63.7	61.7	64.9	66.7
Criminal Justice Referral	27.7	24.1	23.5	27.0	22.3	27.2	24.5	23.8	21.5	28.5	23.2	22.9	25.3
User/Treatment Status													
First Treatment (≤ 3 Years' Use)	7.8	7.0	5.8	5.7	5.8	5.8	5.0	4.0	3.9	11.3	11.2	10.1	11.5
First Treatment (> 3 Years' Use)	26.9	27.8	24.4	26.5	29.0	28.1	29.2	27.2	27.1	24.7	24.8	20.6	36.4
Prior Treatment	65.3	65.2	69.9	67.8	65.2	66.0	65.8	70.1	68.7	64.0	64.0	69.3	52.1
(Median Duration of Use) ¹	(10 yrs)	(11 yrs)	(12 yrs)	(12 yrs)	(12 yrs)	(12 yrs)	(12 yrs)	(14 yrs)	(14 yrs)	(7 yrs)	(7 yrs)	(7 yrs)	(8 yrs)
Secondary Substance ²													
None	29.4	26.7	29.0	28.6	31.0	30.4	26.3	27.6	32.4	27.7	27.7	30.0	25.7
Alcohol	27.0	25.5	23.9	23.5	20.9	27.3	25.9	24.2	20.6	26.5	24.6	22.4	21.7
Cocaine	53.9	56.8	55.6	55.4	54.6	56.5	60.2	58.8	55.2	49.2	49.6	46.6	52.5
Smoked	21.9	23.9	24.8	26.8	27.6	25.2	27.8	30.3	30.3	16.0	15.8	16.5	17.9
Intranasal	8.7	8.8	7.7	7.5	6.7	7.8	8.0	6.7	5.8	10.4	10.5	8.7	10.1
Injected	21.6	22.6	21.7	20.5	19.6	21.6	22.8	21.3	18.6	21.6	22.3	20.9	23.6
Marijuana/Hashish/THC	14.1	14.4	12.1	11.8	10.6	10.5	11.8	9.1	8.1	20.6	19.7	19.3	19.9
Other Opiates	3.3	3.6	3.5	4.1	4.6	1.6	2.0	1.7	2.4	6.4	7.2	7.6	9.8
All Other	3.6	3.7	3.5	4.9	3.6	1.9	2.6	2.4	4.8	6.6	6.2	6.2	5.5

¹For first-time treatment admissions.

²Secondary substance totals equal more than 100 percent because they include secondary and tertiary substances.

SOURCE: Based on data from Alcohol and Drug Abuse Administration, Maryland Department of Health and Mental Hygiene

Exhibit 9. Characteristics of Heroin Treatment Admissions in Baltimore, by Route of Administration, Race, and Percent: First Half 2005

	Route of Heroin Administration and Race					
	Total	Inhalation		Injection		All Other Routes & Races
		African-American	White	African-American	White	
(Number of Heroin Admissions)	(7,285)	(2,865)	(667)	(1,451)	(2,017)	(285)
Percent of All Heroin Admissions	100.0	39.3	9.2	19.9	27.7	3.9
Gender						
Male	57.6	55.1	55.3	63.3	57.6	59.3
Female	42.4	44.9	44.7	36.7	42.4	40.7
Age at Admission						
Younger than 18	0.3	*	0.4	0.1	0.9	0.7
18–25	13.5	0.8	26.1	1.7	35.7	14.4
26–34	21.9	18.0	31.0	10.5	31.9	25.6
35 and older	64.3	81.1	42.4	87.7	31.4	59.3
(Median Age at Admission)	(38 yrs)	(40 yrs)	(32 yrs)	(43 yrs)	(28 yrs)	(37 yrs)
Daily Use	78.3	75.6	87.1	77.5	81.1	67.7
Criminal Justice Referral	22.3	30.1	11.2	23.9	13.5	23.9
User/Treatment Status						
First Treatment (≤ 3 Years' Use)	5.8	2.2	16.3	0.5	10.8	7.7
First Treatment (> 3 Years' Use)	29.0	31.4	26.7	27.6	27.3	30.5
Prior Treatment	65.2	66.4	57.0	72.0	61.9	61.8
(Median Duration of Use) ¹	(12 yrs)	(16 yrs)	(5 yrs)	(22 yrs)	(6 yrs)	(12 yrs)
Urbanicity						
Baltimore City	78.7	91.9	65.4	91.3	57.2	66.0
Suburban Counties	21.3	8.1	34.6	8.7	42.8	34.0
Secondary Substance ²						
None	31.0	32.7	36.1	21.3	32.4	40.4
Alcohol	20.9	23.0	16.9	23.8	16.5	23.9
Cocaine	54.6	54.3	38.8	72.0	49.8	41.4
Smoked	27.6	43.7	24.4	16.1	15.0	22.8
Intranasal	6.7	9.5	12.1	2.5	3.7	8.8
Injected	19.6	0.7	2.1	52.8	30.2	7.4
Marijuana/Hashish/THC	10.6	11.0	13.2	4.8	13.5	10.2
Other Opiates	4.6	1.8	12.1	1.7	7.9	6.0
All Other	3.6	1.1	7.2	1.5	7.4	4.2

¹For first-time treatment admissions.

²"Secondary substance" totals equal more than 100 percent because they include secondary and tertiary substances.

* Less than 0.05%.

SOURCE: Based on data from Alcohol and Drug Abuse Administration, Maryland Department of Health and Mental Hygiene

Exhibit 10. Characteristics of Admissions for Opiates Other than Heroin1 (Primary and Secondary Use) in Baltimore, by Route of Administration and Percent: 2001–First Half 2005

	Primary Use of Opiates Other than Heroin				Secondary Use of Opiates Other than Heroin				
	2001 (700)	2002 (954)	2003 (1,142)	2004 (1,254)	2001 (721)	2002 (977)	2003 (1,097)	2004 (1,101)	1H 2005 (512)
(Number of Non-Heroin Opiate Admissions and Secondary Admissions)	49.3	49.4	51.0	53.2	50.7	50.6	49.0	46.8	42.7
Pct of Primary and Secondary Admissions									
Gender									
Male	50.4	52.9	55.6	53.3	62.6	56.3	57.3	60.5	56.3
Female	49.6	47.1	44.4	46.7	37.4	43.7	42.7	39.5	43.8
Age at Admission									
Younger than 18	2.3	3.7	2.3	2.8	10.2	8.2	10.6	12.0	6.4
18–25	20.1	21.2	28.2	23.8	20.5	26.0	26.3	27.9	30.7
26–34	22.7	21.8	20.8	24.8	25.4	24.9	22.4	20.8	24.8
35 and older	54.9	53.3	48.6	48.6	43.9	40.8	40.7	39.3	38.1
(Median Age at Admission)	(36 yrs)	(35 yrs)	(34 yrs)	(34 yrs)	(33 yrs)	(31 yrs)	(31 yrs)	(30 yrs)	(30 yrs)
Race/Ethnicity									
White	91.3	89.8	92.0	87.9	88.5	85.2	84.4	87.8	86.3
African-American	6.9	8.4	6.8	10.4	10.4	13.8	13.3	10.9	12.3
Other	1.9	1.8	1.1	1.7	1.1	1.0	2.3	1.3	1.4
Route of Administration									
Oral	85.9	86.0	78.6	81.2	86.4	82.3	80.1	83.3	82.0
Intranasal	6.0	6.6	13.6	12.6	5.6	8.0	9.7	11.1	12.7
Other	8.1	7.3	7.8	6.2	8.1	9.7	10.2	5.6	5.3
Daily Use	78.9	75.8	75.0	74.1	47.4	45.9	45.3	44.6	47.9
Criminal Justice Referral	12.3	9.3	10.5	11.6	19.4	16.3	17.2	18.0	16.2
User/Treatment Status									
First Treatment (≤ 3 Years' Use)	30.1	22.2	25.8	25.6	22.6	21.3	21.0	22.4	27.0
First Treatment (> 3 Years' Use)	18.0	20.7	19.8	21.6	14.4	16.6	14.1	20.0	26.4
Prior Treatment	51.9	57.1	54.4	52.8	63.0	62.1	64.9	57.6	46.7
(Median Duration of Opiate Use ²)	(3 yrs)	(3 yrs)	(3 yrs)	(3 yrs)	(2 yrs)	(3 yrs)	(3 yrs)	(3 yrs)	(3 yrs)
Urbanicity									
Baltimore City	20.7	27.1	24.6	35.9	19.2	25.9	23.9	32.2	36.1
Suburban Counties	79.3	72.9	75.4	64.1	81.0	74.1	76.1	67.8	63.9
Primary or Secondary Substance ³	Secondary Substance				Primary Substance				
None	43.1	46.8	42.1	49.9	n/a	n/a	n/a	n/a	n/a
Alcohol	23.4	20.9	23.4	17.0	23.7	21.5	24.7	21.1	20.7
Cocaine	14.3	12.2	15.6	14.9	7.6	7.9	8.8	10.0	10.7
Marijuana/Hashish/THC	15.7	14.7	16.7	14.6	12.2	10.5	11.2	14.0	11.1
Heroin	8.3	11.1	1.0	10.3	48.1	55.0	48.9	49.2	51.4
Intranasal	5.9	6.4	6.1	6.1	20.9	24.0	20.1	21.4	19.5
Injected	2.1	3.5	2.8	3.7	25.7	26.8	25.3	26.0	29.9
Tranquilizers	9.9	7.2	8.2	7.1	3.3	1.7	2.2	1.4	2.9
All Other	11.1	6.4	10.1	5.6	8.3	5.1	6.4	5.7	6.1

¹Includes codeine, hydrocodone, hydromorphone, meperidine, morphine, opium, oxycodone, pentazocine, propoxyphene, tramadol, and any other drug with morphine-like effects; does not include non-prescription use of methadone.

²For first-time treatment admissions.

³Secondary substance totals equal more than 100 percent because they include secondary and tertiary substances.

n/a Not applicable.

SOURCE: Based on data from Alcohol and Drug Abuse Administration, Maryland Department of Health and Mental Hygiene

Exhibit 11. Characteristics of Primary Marijuana Treatment Admissions in Baltimore, by Percent: 2001–First Half 2005

	Total PMSA				Baltimore City				PMSA Excluding Baltimore City						
	2001	2002	2003	2004	1H 2005	2001	2002	2003	2004	1H 2005	2001	2002	2003	2004	1H 2005
(Number of Admissions)	(4,423)	(5,096)	(5,446)	(5,430)	(1,866)	(1,592)	(2,167)	(2,413)	(2,395)	(866)	(2,831)	(2,929)	(3,033)	(3,035)	(1,000)
Percent of All Admissions	15.7	14.7	14.7	15.8	13.4	11.6	11.3	11.4	11.5	9.7	19.6	18.8	19.2	22.5	20.1
Gender															
Male	82.2	81.2	82.2	81.5	81.0	80.0	78.6	80.9	79.2	78.6	83.4	83.1	83.2	83.3	83.0
Female	17.8	18.8	17.8	18.5	19.0	20.0	21.4	19.1	20.8	21.4	16.6	16.9	16.8	16.7	17.0
Age at Admission															
Younger than 18	47.9	46.9	43.8	41.9	37.5	56.3	58.1	51.1	48.9	41.3	43.2	38.7	38.1	36.4	34.2
18–25	31.8	33.6	36.4	36.5	41.5	25.2	24.5	29.9	29.9	37.5	35.5	40.3	41.5	41.7	44.9
26–34	11.1	10.7	11.2	13.2	11.8	9.5	9.4	11.1	13.3	13.0	12.0	11.7	11.3	13.0	10.7
35 and older	9.3	8.7	8.6	8.4	9.2	9.0	8.0	7.9	7.9	8.1	9.4	9.3	9.2	8.9	10.2
(Median Age at Admission)	(18 yrs)	(18 yrs)	(18 yrs)	(19 yrs)	(19 yrs)	(17 yrs)	(17 yrs)	(17 yrs)	(18 yrs)	(18 yrs)	(18 yrs)	(19 yrs)	(19 yrs)	(19 yrs)	(19 yrs)
Race/Ethnicity															
White	49.5	45.4	43.2	43.2	44.7	23.3	22.3	19.2	17.4	20.4	64.2	62.5	62.2	63.5	65.7
African-American	47.7	51.4	53.6	53.2	51.2	75.4	75.9	78.3	80.4	77.4	32.1	33.3	34.0	31.7	28.6
Hispanic	1.5	1.6	1.7	2.2	2.6	0.8	0.8	1.5	1.6	1.2	1.9	2.2	1.9	2.7	3.9
Other	1.3	1.6	1.5	1.4	1.4	0.6	1.0	1.0	0.6	1.0	1.7	2.0	1.9	2.1	1.8
Daily Use	36.4	38.0	36.4	34.4	39.3	49.6	48.6	47.8	46.3	55.0	28.9	30.1	27.3	25.0	25.7
Criminal Justice Referral	64.4	64.2	63.2	64.3	59.1	61.7	60.4	59.3	61.8	59.5	65.9	67.1	66.3	66.3	58.8
User/Treatment Status															
First Treatment (≤ 3 Years' Use)	33.3	32.1	30.1	28.1	28.5	36.8	36.0	31.5	26.5	29.7	31.3	29.1	29.0	29.4	27.5
First Treatment (> 3 Years' Use)	37.9	37.5	36.9	38.6	42.3	39.8	36.3	36.0	36.5	43.2	36.8	38.3	37.6	40.3	41.6
Prior Treatment	28.8	30.5	33.1	33.2	29.2	23.3	27.7	32.5	37.0	27.1	31.9	32.5	33.5	30.3	30.9
(Median Duration of Use) ¹	(4 yrs)	(4 yrs)	(4 yrs)	(4 yrs)	(4 yrs)	(4 yrs)	(4 yrs)	(4 yrs)	(4 yrs)	(4 yrs)	(4 yrs)	(4 yrs)	(4 yrs)	(4 yrs)	(4 yrs)
Secondary Substance ²															
None	32.3	34.2	36.5	38.8	40.5	32.7	35.7	39.6	43.8	44.3	32.0	33.1	34.0	34.8	37.1
Alcohol	58.6	56.2	55.1	52.9	49.2	58.6	55.1	52.8	47.3	44.0	58.7	57.1	57.0	57.3	53.8
Cocaine	9.0	9.3	7.9	8.0	8.5	9.2	8.4	7.0	8.0	7.3	8.8	9.9	8.6	7.9	9.6
Smoked	3.9	3.9	3.6	3.7	4.8	3.6	3.3	3.4	4.8	4.0	4.1	4.4	3.7	2.9	5.4
Intranasal	3.8	4.0	3.2	3.6	3.2	4.5	2.9	2.1	2.4	2.4	3.5	4.9	4.1	4.5	3.8
Heroin	4.2	4.6	3.6	2.7	3.8	4.6	4.8	3.8	3.3	6.1	3.9	4.5	3.5	2.3	1.8
Intranasal	2.7	2.9	2.0	1.5	2.2	3.3	2.9	2.1	2.0	3.8	2.3	2.9	1.9	1.2	0.8
Other Opiates	2.0	2.1	2.3	2.9	3.2	2.1	1.4	1.7	2.3	2.8	2.0	2.6	2.7	3.3	3.6
Hallucinogens	6.4	4.1	3.9	3.1	2.7	4.1	4.0	3.6	2.8	3.9	7.7	4.2	4.2	3.4	1.7
All Other	4.8	4.7	5.0	3.9	9.5	2.9	3.5	4.1	3.5	14.3	5.9	5.7	5.6	4.3	5.4

¹For first-time treatment admissions.

²Secondary substance² totals equal more than 100 percent because they include secondary and tertiary substances.

SOURCE: Based on data from Alcohol and Drug Abuse Administration, Maryland Department of Health and Mental Hygiene

Greater Boston Patterns and Trends in Drug Abuse: January 2006

Daniel P. Dooley¹

ABSTRACT

Heroin and cocaine continue to dominate as the two most heavily abused illicit drugs in Boston. Indicators for both remain at very high levels. Recent heroin indicators available for trend analysis are mixed but starting to show some downward movement. The proportion of heroin treatment admissions continued to increase in FY 2005, even as the actual number of heroin admissions decreased. The proportion of heroin calls to the substance abuse Helpline in FY 2005 decreased notably (21 percent) from the previous year. Street-level heroin purchases by the Domestic Monitor Program (DEA) reveal decreases in average purity, from 50 percent pure in 2002 to 28 percent pure in 2004. Cocaine indicators remained fairly stable. However, due mainly to increases in the number of crack admissions, the proportion of cocaine or crack treatment admissions did increase slightly for the first time in 7 years of reporting. Treatment admissions for marijuana have steadily decreased in number and as a proportion of all admissions during the past 6 years, while other marijuana indicators have remained mostly stable. There are some indications that the alarming rise in oxycodone abuse may be starting to ease. FY 2005 numbers and proportions of both treatment admissions and Helpline calls for opiates decreased for the first time in 5 years, but they remain at historically high levels. The number of oxycodone calls to the Helpline decreased 24 percent from FY 2004. However, oxycodone drug lab submissions appear to be increasing as measured over the first 9 months of 2005. Benzodiazepine misuse and abuse levels remain stable at high levels. Methamphetamine abuse numbers remain very small, but some are starting to increase. Remaining well below 1 percent of all treatment admissions, primary admissions for methamphetamine increased from 53 in FY 2004 to 75 in FY 2005. In 2004, there were 254 adult HIV/AIDS cases diagnosed in Boston. Primary transmission risk factor of these cases included 9 percent who were IDUs, 4 percent who had sex with IDUs, and 39 percent with an unknown/undetermined risk factor. Most of the drug abuse and misuse indicators allowing trend

analysis show decreasing overall numbers in greater Boston. The total number of greater Boston treatment admissions has fallen 27 percent since FY 2002. The total number of drug and alcohol calls to the substance abuse Helpline decreased 14 percent during the same period. The number of Boston drug arrests decreased 10 percent from 2002 to 2004. Taken together, these decreases might suggest a general decrease in the overall level of drug abuse in Boston, but many factors not directly related to drug use can impact changes seen in these numbers.

INTRODUCTION

Area Description

This report presents data from a number of different sources with varied Boston-area geographical parameters. A description of the relevant boundary parameters is included with each data source description. For simplicity, these are all referred to as “Boston” throughout the text.

According to the 2000 U.S. census, Massachusetts ranks 13th in population (6,349,097 people). The 746,914 people in the metropolitan Boston area represent 12 percent of the total Massachusetts population. The 2000 census data show that there were 589,141 residents of the city of Boston. The racial composition includes 50 percent White non-Hispanic, 23 percent Black non-Hispanic, 14 percent Hispanic/Latino, and 8 percent Asian.

Several characteristics influence drug trends in Boston and throughout Massachusetts:

- Contiguity with five neighboring States (Rhode Island, Connecticut, New York, Vermont, and New Hampshire) linked by a network of State and interstate highways
- Proximity to Interstate 95, which connects Boston to all major cities on the east coast, particularly New York
- A well-developed public transportation system that provides easy access to communities in eastern Massachusetts
- A large population of college students in both the greater Boston area and western Massachusetts
- Several seaport cities with major fishing industries and harbor areas

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- Logan International Airport and several regional airports within a 1-hour drive of Boston
- State budget restraints on social service spending
- A high number of homeless individuals seeking shelter

Data Sources

There are systemic factors specific to each data source that do not directly relate to the level of abuse in the larger population, but they may contribute to changes seen in the data. For example, field sources have indicated that past reductions in treatment funding caused reductions in available services and, ultimately, reductions in the number of admissions at a time when the number of potential clients exceeded the number of available treatment slots. As a result, decreasing admissions numbers were not an indication of a reduction in the number of people seeking treatment. How such systemic factors influence totals and subpopulation differences within a data source is often unknown. Further, to what degree an individual data source is representative of the larger drug-abusing population is largely unknown. Conclusions drawn from the data sources within this text are subject to these limitations. At best, these data present a partial picture of Boston's collective drug abuse experience. An understanding of this should improve as current data sources improve and new sources develop. One such source, the new Drug Abuse Warning Network, is currently in the process of establishing new baselines for drug misuse deaths and emergency department reports. Eventually, DAWN should support trend analyses that will further inform efforts to better understand drug abuse patterns in Boston over time.

Information for this report was obtained from the sources shown below:

- **State-funded substance abuse treatment admissions data** for a Boston region comprising the cities of Boston, Brookline, Chelsea, Revere, and Winthrop (Community Health Network Area [CHNA] 19), for fiscal year (FY) 1998 through FY 2005 (July 1, 1997, through June 30, 2005) were provided by the Massachusetts Department of Public Health (DPH), Bureau of Substance Abuse Services. Exhibit 1 details demographic characteristics for admissions to greater Boston State-funded treatment programs for FY 1997–FY 2005.
- **Emergency department (ED) data** were provided by the Drug Abuse Warning Network (DAWN), Office of Applied Studies (OAS), Substance Abuse and Mental Health Services Administration (SAMHSA), for a Boston metropolitan area consisting of five Massachusetts counties: Essex, Middlesex, Norfolk, Plymouth, and Suffolk. In the Boston metropolitan area, 32 of the 47 eligible hospitals are in the new DAWN sample. The EDs in the new sample total 37. (Some hospitals have more than one ED.) For this report, data were accessed from the DAWN *Live!* restricted-access online query system for the first half of 2005 (January 1, 2005– June 30, 2005), updated on December 6–7, 2005. These data are unweighted. They are not estimates for the Boston area and cannot be used for comparison with future data, nor can these data be compared with DAWN data from 2002 and earlier. Only weighted data released by SAMHSA can be used in trend analysis. The data reported here are incomplete. Between 19 and 20 EDs reported each month during the time period (exhibit 2). Data are subject to change. Data presented in this paper represent drug reports in drug misuse visits to the ED. For prescription drugs, three case types were reported: Seeking Detox, Over Medication, and Other. Drug reports exceed the number of visits, since a patient may report use of multiple drugs (up to six drugs plus alcohol). A full description of the DAWN system can be found at <http://dawninfo.samhsa.gov>.
- **Drug-related death data** were provided by DAWN, OAS, SAMHSA, for 2003 for a Boston metropolitan area consisting of five Massachusetts counties including Essex, Middlesex, Norfolk, Plymouth, and Suffolk and two New Hampshire counties, Rockingham and Strafford. These data cover 100 percent of the population.
- **Analysis of seized drug samples** for a Boston region comprising the cities of Boston, Brookline, Chelsea, Revere, and Winthrop (CHNA 19) for 1997 through 2004 and the first 9 months of 2005 were provided by the Massachusetts Department of Public Health Drug Analysis Laboratory in Amherst, Massachusetts. The Boston-area drug sample counts do not include samples analyzed at the Worcester County or State Police laboratories.
- **Information on drug mentions in Helpline calls** for a Boston region comprising the cities of Boston, Brookline, Chelsea, Revere, and Winthrop (CHNA 19) for FY 2000 through FY 2005 (July 1, 1999, through June 30, 2005) were provided by the Massachusetts Substance Abuse Information and Education Helpline.

- **Drug arrests data** for the city of Boston for 1997–2004 were provided by the Boston Police Department, Drug Control Unit and Office of Research and Evaluation. For arrest data only, Black and White racial designations include those who identify themselves as Hispanic.
- **Drug price, purity, and availability data** for New England were provided by the Drug Enforcement Administration (DEA), New England Field Division Intelligence Group, June 2005.
- **Adult acquired immunodeficiency syndrome (AIDS) and human immunodeficiency virus (HIV) data** for 2004, and cumulative data through December 1, 2005, were provided by the Massachusetts Department of Public Health AIDS Surveillance Program.

DRUG ABUSE PATTERNS AND TRENDS

Cocaine/Crack

Cocaine (including crack) is one of the most heavily abused drugs in Boston. Recent cocaine/crack indicators are mostly stable at high levels of use and abuse.

After decreasing for 6 successive years, the number of cocaine or crack treatment admissions increased from 1,470 in FY 2004 to 1,532 in FY 2005. Cocaine or crack as the primary drug accounted for 8 percent of all admissions in FY 2005 (exhibit 3). Of these, 952 (62 percent) indicated crack as the client's primary drug. There were 4,730 mentions (25 percent of all admissions) of current (past-month) cocaine or crack use among those admitted to State-funded treatment programs in FY 2005 (exhibit 3).

The proportion of treatment admissions reporting cocaine or crack as primary drug in FY 2005 reflected an increase of 11 percent from FY 2004 but a decrease of 43 percent from FY 1998. The 11-percent increase from FY 2004 was driven by a 19-percent increase in the proportion of crack admissions, while the proportion of powder cocaine admissions did not change. Similarly, the proportion of admissions reporting current cocaine or crack use increased 11 percent from FY 2004 to FY 2005, but it decreased 16 percent from FY 1998 to FY 2005. The 11-percent increase from FY 2004 was driven by a 28-percent increase in the proportion of admissions reporting current crack use, while the proportion of current powder cocaine use did not change.

The gender distribution of cocaine/crack primary drug treatment admissions in FY 2005 (63 percent male and 37 percent female) reflected an increasing

male proportion (up 9 percent from FY 2004 and 12 percent from FY 2003) and a decreasing female proportion (down 13 percent from FY 2004 and 15 percent from FY 2003) (exhibit 4a).

The mean age of those admitted for powder cocaine treatment in FY 2005 was 37.8 years. The mean age of those admitted for crack was 38.6 years. Age group analysis reveals an aging cocaine/crack treatment admissions cohort and the possible emergence of a younger cohort. Though the proportion of those age 19–29 (16 percent) decreased 44 percent from FY 1998 to FY 2005, the number and proportion of those age 19–29 increased (8 percent and 18 percent, respectively) from FY 2004 to FY 2005. The proportion of those age 30–39 (39 percent) in FY 2005 was a decrease of 26 percent from FY 1998. However, the proportion of those age 40–49 (36 percent) increased 126 percent from FY 1998 to FY 2005. Similarly, the proportion of those age 50 and older (9 percent) increased 268 percent during that same period.

The FY 2005 racial/ethnic distribution for cocaine or crack admissions (56 percent Black, 25 percent White, 16 percent Latino) revealed a shift toward higher Latino percentages (up 31 percent from FY 2004 and 60 percent from FY 1998) and lower Black percentages (down 12 percent from FY 1998) (exhibit 4a).

Close to one-third (32 percent) of cocaine or crack primary drug admissions reported being homeless in FY 2005, constituting a dramatic 30-percent increase from FY 2004 (exhibit 4a).

In the unweighted data accessed from DAWN *Live!* for the first half of 2005, cocaine reports totaled 1,947.

In 2003, cocaine was indicated in 216 of the 486 drug misuse deaths in greater Boston (44.4 percent)—more than any other drug. One-third of those ($n=72$) were single-drug deaths.

Cocaine or crack was indicated in 949 calls to the Substance Abuse Helpline in FY 2005, a decrease of 7 percent from 1,017 calls in FY 2004 (exhibit 5). The proportion of Helpline calls with mentions of cocaine/crack increased slightly from 18 percent in FY 2004 to 19 percent in FY 2005.

In 2004, 2,632 seized samples of cocaine/crack were analyzed. The proportion of cocaine/crack samples among all drug samples analyzed (30 percent) did not change from 2003, but it decreased 14 percent between 1997 and 2004.

There were 1,650 Class B (mainly cocaine and crack) drug arrests in 2004 (exhibit 6). Class B arrests accounted for the largest proportion of drug arrests (43 percent) in the city of Boston in 2004. The proportion of Class B arrests in 2004 was similar to 2003 but reflected a 9-percent decrease from 1997.

The proportion of White Class B arrests (31 percent) decreased 20 percent from 1997 to 2004, while the proportion of Black Class B arrests (68 percent) increased 13 percent. The proportion of Class B arrests of those age 40 and older (27 percent) increased 66 percent from 1997 to 2004, while arrests for those age 25–39 (44 percent) decreased 19 percent, and arrests for those younger than 20 decreased 27 percent during the same period.

In 2004, the DEA reported that cocaine cost \$50–\$90 per gram and the purity was increasing in Boston (exhibit 7). A rock of crack cost \$10–\$20. Cocaine remained “readily available at all levels” throughout Massachusetts.

Heroin

Heroin remains one of the most abused drugs in Boston. After years of continued growth, some indicators are beginning to show decreasing numbers but remain at very high levels. The proportion of heroin treatment admissions continued to rise, with nearly one-half of all clients in treatment reporting heroin as their primary drug.

In FY 2005, there were 9,261 treatment admissions (49 percent of all admissions) with clients reporting heroin as their primary drug (exhibit 3). There were 8,744 clients (47 percent of all admissions) reporting current (past-month) heroin use among those admitted to State-funded treatment programs (exhibit 3).

The proportion of treatment admissions that reported heroin as the primary drug in FY 2005 reflected a 3-percent increase from FY 2004 and a 41-percent increase from FY 1998. Similarly, the proportion reporting current heroin use increased 3 percent from FY 2004 to FY 2005 and 41 percent from FY 1998 to FY 2005.

The gender distribution of heroin or other opiates primary drug treatment admissions in FY 2005 (74 percent male and 26 percent female) (exhibit 4b) reflected a small increase in the male proportion (up 3 percent from FY 2004) and a decrease in the female proportion (down 8 percent from FY 2004).

The mean age of those admitted for heroin treatment in FY 2005 was 34.8 years.

The following heroin treatment demographic data include those admitted for other opiates use as well.

The proportion of heroin or other opiate admissions for clients age 19–29 (35 percent) increased 6 percent from FY 2004 to FY 2005 and 23 percent from FY 1998 to FY 2005 (exhibit 4b). The proportion of those age 30–39 (33 percent) remained stable from FY 2004 to FY 2005 but decreased 23 percent between FYs 1998 and 2005. The proportion of those age 40–49 (24 percent) remained fairly stable from FY 1998 to FY 2005, while the proportion of those age 50 and older (7 percent) increased 268 percent during that same period.

The FY 2005 racial/ethnic distribution for heroin or other opiates admissions (60 percent White, 16 percent Black, 20 percent Latino) remained stable from FY 2004 but revealed a longer-term shift toward an increasing White proportion (up 24 percent from FY 1988) and a decreasing Black proportion (down 33 percent from FY 1998) (exhibit 4b).

Seventy-five percent of heroin or other opiate primary drug admissions reported having no income in FY 2005. Forty-two percent reported being homeless, a dramatic 67-percent increase from FY 1998. Approximately two-thirds (67 percent) of heroin or other opiate primary drug admissions reported past-year injection drug use.

In the unweighted data accessed from DAWN *Live!* for the first half of 2005, heroin reports totaled 1,570.

In 2003, heroin/morphine was indicated in 109 of the 486 drug misuse deaths (22.4 percent). Fifty of those were single-drug misuse deaths.

Heroin was mentioned in 1,562 calls (31 percent of the total) to the Helpline in FY 2005 (exhibit 5). The proportion of heroin Helpline call mentions decreased 21 percent from FY 2004 to FY 2005.

In 2004, 1,139 seized samples of heroin (13 percent of all drug samples) were analyzed. The proportion of heroin samples among all drug samples analyzed decreased 17 percent from 2003 to 2004.

There were 791 Class A (mainly heroin and other opiates) drug arrests in 2004 (exhibit 6). The proportion of Class A drug arrests among all drug arrests in the city of Boston in 2004 (21 percent) was stable from 2003 and 2002 but decreased 8 percent from 1997. The proportion of Class A male arrests in 2004 (82 percent) reflected a 6-percent decrease from 2003 but was similar to 2002 and 1997 proportions. The proportion of Class A arrests among those age 20–24

in 2004 (18 percent) reflected an 88-percent increase from 1997.

The DEA reported that in Boston, street heroin cost \$6–\$20 per bag (exhibit 7) or \$0.87 per milligram pure in 2004. Samples purchased by the Domestic Monitor Program found the average purity decreased from 50 percent in 2002 to 28 percent in 2004. Analyzed samples were South American in origin and distributed in wax or colored glassine packets. Heroin is considered “readily available throughout New England” and is available in all forms: bag, bundle, gram, ounce, kilogram, and cylinder-shaped bullets/eggs.

Narcotic Analgesics

After years of growing narcotic analgesic abuse, indicators are mixed at historically high levels.

In FY 2005, there were 532 clients (3 percent of all admissions) admitted to treatment who identified other opiates/synthetics as their primary drug, and there were 1,075 mentions (6 percent of all admissions) of current other opiate use among those admitted to State-funded treatment programs (exhibit 3).

The number of clients reporting other opiates as their primary drug decreased 32 percent from 781 in FY 2004 to 532 in FY 2005. Similarly, the number of clients reporting current other opiate use decreased 30 percent from 1,529 in FY 2004 to 1,075 in FY 2005.

Of the 532 other opiate treatment clients in FY 2005, 67 percent were male, 92 percent were White, and 55 percent were younger than 30.

Preliminary unweighted data from DAWN *Live!* show 1,396 reports of opiates/opioids in the first half of 2005. There were 743 oxycodone reports and 123 reports of hydrocodone.

Narcotic analgesics (not including methadone) were reported present among 188 of 486 (39 percent) drug misuse deaths in 2003. Forty-one of those deaths were single-drug deaths, representing 20 percent of the 206 total single-drug deaths. Morphine was identified in 85 of the total 486 drug misuse deaths. Of these, 15 were single-drug deaths. Oxycodone was identified in 72 drug misuse deaths (15 percent of the total). Of these, 13 were single-drug deaths. Methadone was identified in 35 drug misuse deaths; 8 of these were single-drug deaths. Fentanyl was mentioned in 13 drug misuse deaths, of which 6 were single-drug deaths.

In FY 2005, there were 931 calls (19 percent of the total) to the Helpline during which opiates were mentioned (exhibit 5). Oxycodone (including OxyContin) was mentioned in 526 calls. The number of Helpline calls with oxycodone mentions decreased 24 percent from FY 2004 to FY 2005. The number of calls with methadone mentions increased 32 percent (from 155 in FY 2004 to 204 in FY 2005). In FY 2005, there were 120 calls with Percocet mentions, 43 calls with Vicodin mentions, 11 calls with codeine mentions, 8 calls with morphine mentions, and 4 calls with Roxicet mentions.

In 2004, 246 seized samples of oxycodone (3 percent of all drug samples) were analyzed. The proportion of oxycodone samples among all drug samples analyzed was stable from 2003 to 2004.

The DEA reports that OxyContin is “available” on the street and typically costs about \$1 per milligram (exhibit 7).

Marijuana

The most recent marijuana indicators for greater Boston are stable at relatively high levels.

In FY 2005, there were 611 treatment admissions (3 percent of all admissions) with clients reporting marijuana as their primary drug (exhibit 3). There were 1,720 mentions (9 percent of all admissions) of current (past-month) marijuana use among those admitted to State-funded treatment programs (exhibit 3). The proportion reporting marijuana as their primary drug decreased from 4 percent in FY 2004 to 3 percent in FY 2005. Similarly, the proportion with mentions of current marijuana use decreased from 10 percent in FY 2004 to 9 percent in FY 2005.

The gender distribution of marijuana primary drug treatment admissions remained fairly stable from FY 2004 (73 percent male and 27 percent female in FY 2005) (exhibit 4c).

The mean age of those admitted for marijuana treatment in FY 2005 was 28.0 years (exhibit 4c). The proportion of marijuana admissions of clients age 18 and younger (12 percent) in FY 2005 reflected a 29-percent decrease from FY 2004 and a 58-percent decrease from FY 1998. The proportion of those age 19–29 (52 percent) remained fairly stable from FY 1998 through FY 2005. The proportion of those age 30–39 (24 percent) increased 39 percent from FY 1998 to FY 2005. Similarly, the proportion of those age 40–49 (10 percent in FY 2005) increased 93 percent during that same period.

The FY 2005 racial/ethnic distribution for marijuana primary admissions (52 percent Black, 22 Latino, and 21 percent White) continued a trend of an increasing Black proportion and a decreasing White proportion (exhibit 4c).

Forty-five percent of marijuana primary drug admissions reported having no income in FY 2005. Fifteen percent reported being homeless, a dramatic 39-percent increase from FY 2004.

In the unweighted data from DAWN *Live!*, there were 1,141 marijuana reports during the first half of 2005.

Marijuana was identified in 18 of the 486 drug misuse deaths in 2003.

Marijuana was mentioned in 226 calls to the Helpline in FY 2005 (exhibit 5). The proportion of Helpline calls with marijuana mentions remained stable at 5 percent from FY 2003 to FY 2005.

There were 3,358 seized samples of marijuana, more than any other drug, analyzed by the drug lab in 2004. The proportion of marijuana samples analyzed in 2004 (38 percent of all drug samples) was similar to the proportions in 2003 and 2002.

There were 1,247 Class D (mainly marijuana) drug arrests in 2004 (exhibit 6). The proportion of Class D arrests among all drug arrests (33 percent) in the city of Boston in 2004 remained stable from 2003 and 2002, but increased 24 percent from 2001.

The proportion of Black (including Hispanics) Class D arrests (70 percent) in 2004 reflected increases of 6 percent from 2003, 13 percent from 2002, and 25 percent from 1997. The proportion of White (including Hispanics) Class D arrests (29 percent) decreased 10, 21, and 32 percent, respectively, during the same periods.

In 2004, the DEA reported that marijuana was readily available in Massachusetts and sold for \$800–\$1,500 per pound for “commercial grade” and \$1,000–\$1,200 per pound for “sinsemilla grade.” A marijuana cigarette or “joint” typically cost \$5 (exhibit 7). Commercial grade is said to be “readily available,” and high potency hydroponic marijuana termed “Hydro” is said to be “available” throughout New England.

Benzodiazepines

As a group, benzodiazepines are showing high levels of abuse.

In the unweighted DAWN *Live!* data for the first half of 2005, there were 975 benzodiazepine reports. Clonazepam, alprazolam, lorazepam, and diazepam were the most often indicated benzodiazepines in preliminary ED data for the first half of 2005.

Benzodiazepines were mentioned in 88 of 486 drug misuse deaths in 2003. Of these, 16 were single-drug deaths.

In FY 2005, there were 168 calls (3 percent of the total) to the Helpline during which benzodiazepines (including Ativan, Valium, Xanax, Klonopin, Rohypnol, Halcion, and others) were mentioned (exhibit 5). The number of Helpline calls with benzodiazepine mentions in FY 2005 reflected a decrease of 18 percent from a 6-year peak of 204 in FY 2002.

Arrest and drug lab data are currently unavailable for benzodiazepines.

Methylenedioxymethamphetamine (MDMA)

MDMA (ecstasy) indicators show stable and relatively low levels of abuse.

The unweighted data from DAWN *Live!* for the first half of 2005 show 66 MDMA reports.

In FY 2005, there were 17 calls to the Helpline during which MDMA was self-identified as a substance of abuse (less than 1 percent of all mentions). The number of MDMA Helpline calls in FY 2005 reflected a decrease of 62 percent from a peak of 45 calls in FY 2002 (exhibit 5).

Drug lab submissions show the number of MDMA samples decreased steadily from a peak of 106 in 2000 to 24 (fewer than 1 percent of the 8,901 total samples) in 2004.

The DEA reported that one MDMA tablet cost between \$20 and \$25 retail in 2004 (exhibit 7). Distributed at clubs and on college campuses, MDMA has remained widely available “in spite of law enforcement seizures.”

Other Drugs

Amphetamines

Unweighted DAWN data for the first half of 2005 show 42 amphetamine reports.

The number of Helpline calls with stimulant mentions remained stable from 49 in FY 2004 to 52 in FY 2005.

The number of amphetamine lab samples (methamphetamine included) remained fairly steady from 2002 to 2004 (42 in 2002, 47 in 2003, and 38 in 2004). There were 52 samples analyzed in the first 9 months of 2005.

Methamphetamine

Though still relatively small in number, methamphetamine treatment admissions increased from 5 in FY 2001 to 53 in FY 2004 to 75 in FY 2005. Of these 75 in FY 2005, 96 percent were male, 80 percent were White, and 81 percent were age 30 and older.

In the unweighted DAWN *Live!* data for the first half of 2005, there were 35 methamphetamine ED reports.

Calls to the Helpline with methamphetamine mentions increased from 2 in FY 2000 to 10 in FY 2003 and to 16 in FY 2005 (exhibit 5).

The DEA reported that methamphetamine cost \$250 per gram in 2004 and was available “in limited (user-level) quantities” in New England (exhibit 7). The purity level was unknown.

Ketamine

Only six ketamine ED reports appeared in the unweighted DAWN data for the first half of 2005. In FY 2005, there were five calls to the Helpline during which ketamine was mentioned. Ketamine lab samples decreased in number from 43 in 2002 to 11 in 2003 and 8 in 2004. In 2004, the DEA reported that a vial of ketamine cost \$55–\$100 (exhibit 7).

Barbiturates

In the unweighted DAWN *Live!* data for the first half of 2005, there were 38 barbiturates ED reports.

Lysergic Acid Diethylamide (LSD), Phencyclidine (PCP), and Gamma Hydroxybutyrate (GHB)

In the unweighted DAWN *Live!* data for the first half of 2005, there were 9 LSD reports, 16 PCP reports, and 12 GHB reports. The DEA reported that LSD cost \$5 per dose, and GHB cost \$150 per ounce (exhibit 7).

INFECTIOUS DISEASES RELATED TO SUBSTANCE ABUSE

In 2004, there were 254 adult HIV and AIDS cases diagnosed in Boston. The primary risk factor for these cases included 9 percent who were injection drug users (IDUs), 4 percent who had sex with IDUs, and 39 percent with an unknown/undetermined transmission status. As of December 1, 2005, cumulative adult AIDS cases numbered 6,163. By primary risk factor, these included 26 percent who were IDUs, 7 percent who had sex with IDUs, and 13 percent for whom the risk behavior was unknown/undetermined.

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Exhibit 1. Demographic Characteristics of Admissions to Greater Boston State-Funded Substance Abuse Treatment Programs,¹ by Percent: FY 1997–FY 2005²

Characteristic	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gender								
Male	75	74	76	77	77	74	73	76
Female	25	26	24	23	23	26	27	24
Race								
White	49	48	49	48	49	50	54	53
Black	32	33	32	30	29	28	26	27
Hispanic	15	16	16	18	18	18	17	16
Other	4	4	4	4	4	4	3	4
Age at Admission (Average age)	(35.6)	(36.5)	(36.7)	(36.5)	(36.5)	(36.7)	(36.9)	(37.0)
18 and younger	3	2	2	2	2	2	2	1
19–29	24	22	21	22	24	24	26	26
30–39	42	41	40	38	37	34	31	32
40–49	23	27	29	29	28	30	30	30
50 and older	8	9	9	9	10	10	11	11
Marital Status								
Married	10	10	10	10	10	10	9	9
Separated/divorced	22	21	19	18	18	18	17	16
Never married	68	69	71	72	72	72	74	75
Annual Income								
None	56	54	59	61	69	68	63	69
\$1–\$1,000	3	4	3	2	2	2	3	3
\$1,000–\$9,999	24	26	21	19	14	14	18	15
\$10,000 and higher	16	16	17	18	16	16	16	13
Homeless	31	31	30	34	37	37	36	42
Criminal Justice System Involvement	26	28	27	26	27	24	23	19
Mental Health								
No prior treatment	80	79	80	81	80	80	78	81
Prior treatment ³	20	21	20	19	20	20	22	19
Needle Use in Past Year	25	26	26	27	32	37	38	38
Total (N)	(23,008)	(24,653)	(24,478)	(25,334)	(25,586)	(24,440)	(20,041)	(18,774)

¹Excludes prisoners and out-of-State admissions.

²FYs run July 1–June 30, with the year named for the January–June portion of the year.

³Counseling or hospitalization.

SOURCE: Massachusetts Department of Public Health, Bureau of Substance Abuse Services; prepared by the Boston Public Health Commission, Research Office

Exhibit 2. DAWN ED Sample and Reporting Information: January–June 2005

CEWG Area	Total Eligible Hospitals ¹	No. of Hospitals in DAWN Sample	Total EDs in DAWN Sample ²	No. of EDs Reporting per Month: Completeness of Data (%)			No. of EDs Not Reporting
				90–100%	50–89%	<50%	
Boston	47	32	37	17–19	0–2	1–4	17–19

¹Short-term, general, non-Federal hospitals with 24-hour emergency departments based on the American Hospital Association Annual Survey.

²Some hospitals have more than one emergency department.

SOURCE: DAWN Live!, OAS, SAMHSA, updated 12/6–7/2005

Exhibit 3. Percentages of Admissions to State-Funded Substance Abuse Treatment Programs, by Primary Drug and Drug Used in the Past Month in Greater Boston¹: FY 1997–FY 2005²

	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Primary Drug									
Alcohol	46	45	45	45	44	40	36	35	35
Heroin and/or Other	29	35	36	37	42	46	50	52	52
Opiates									
Heroin	29	35	36	36	40	43	47	48	49
Other Opiates	0	0	1	1	2	3	3	4	3
Cocaine and/or Crack	19	14	13	12	9	9	8	7	8
Cocaine (powder)	9	7	7	5	4	4	3	3	3
Crack	10	7	6	6	5	5	5	4	5
Marijuana	4	4	5	5	4	4	4	4	3
Other ³	1	1	1	1	1	1	1	1	2
Total (N)	25,470	23,008	24,653	24,478	25,334	25,586	24,440	20,041	18,774
Drug Used Past Month									
Alcohol	60	59	59	58	56	53	50	47	47
Heroin and/or Other	29	34	35	37	42	45	48	49	51
Opiates									
Heroin	28	33	34	35	39	42	45	46	47
Other Opiates	2	3	3	4	5	6	7	8	6
Cocaine and/or Crack	34	30	30	28	25	24	24	23	25
Cocaine (powder)	22	21	21	20	18	17	18	16	16
Crack	19	16	15	13	12	11	11	11	14
Marijuana	16	14	14	13	13	11	11	10	9
Total (N)	25,470	23,008	24,653	24,478	25,334	25,586	24,440	20,041	18,774

¹Excluding prisoners and out-of-State admissions.

²FYs run July 1–June 30, with the year named for the January–June portion of the year.

³Includes barbiturates, other sedatives, tranquilizers, hallucinogens, amphetamines, “over-the-counter,” and other drugs.

SOURCE: Massachusetts Department of Public Health, Bureau of Substance Abuse Services; prepared by the Boston Public Health Commission, Research Office

Exhibit 4a. Demographic Characteristics of Clients¹ in Greater Boston State-Funded Substance Abuse Treatment Programs with a Primary Problem with Cocaine/Crack, by Percent: FY 1997–FY 2005²

Characteristic	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gender								
Male	61	59	59	62	63	56	57	63
Female	39	41	41	38	37	44	43	37
Race								
White	24	23	23	26	25	27	27	25
Black	64	63	65	60	61	58	58	56
Latino	10	11	10	12	11	11	12	16
Other	3	3	3	3	3	4	3	3
Age at Admission (Average age)	(33.6)	(35.2)	(35.5)	(36.0)	(36.7)	(37.1)	(38.0)	(38.3)
18 and younger	1	1	<1	1	<1	1	1	<1
19–29	28	19	18	15	15	15	13	16
30–39	53	56	55	55	51	49	45	39
40–49	16	21	23	26	29	31	35	36
50 and older	2	4	4	4	5	5	7	9
Marital Status								
Married	10	11	10	11	12	12	10	12
Separated/divorced	19	19	16	17	19	19	21	18
Never married	71	71	74	72	69	70	69	70
Annual Income								
\$0–\$999	57	56	59	58	60	56	54	61
\$1,000–\$9,999	27	29	24	22	23	26	29	25
\$10,000 and higher	17	16	17	21	18	18	17	14
Homeless	26	23	21	23	28	24	24	32
Criminal Justice System Involvement	25	30	29	30	33	31	31	27
Mental Health Treatment History	22	27	28	29	31	36	36	35
Needle Use in Past Year	6	6	5	7	7	9	8	9
Total (N)	(3,266)	(3,165)	(2,837)	(2,291)	(2,230)	(1,985)	(1,470)	(1,532)

¹Excludes prisoners and out-of-State admissions.

²FYs run July 1–June 30, with the year named for the January–June portion of the year.

SOURCE: Massachusetts Department of Public Health, Bureau of Substance Abuse Services; prepared by the Boston Public Health Commission, Research Office

Exhibit 4b. Demographic Characteristics of Clients¹ in Greater Boston State-Funded Substance Abuse Treatment Programs with a Primary Problem with Heroin or Other Opiates, by Percent: FY 1997–FY 2005²

Characteristic	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gender								
Male	72	72	75	76	77	74	72	74
Female	28	28	25	24	23	26	28	26
Race								
White	48	49	51	50	53	56	61	60
Black	24	24	22	21	19	18	15	16
Latino	22	22	23	25	25	22	21	20
Other	6	5	5	5	4	5	3	4
Age at Admission								
(Average age)	(34.6)	(35.2)	(35.3)	(35.1)	(34.6)	(35.2)	(35.1)	(34.6)
18 and younger	1	1	1	1	1	1	1	1
19–29	29	27	27	29	32	31	33	35
30–39	42	42	40	39	37	35	32	33
40–49	24	25	27	26	24	26	26	24
50 and older	4	6	5	6	6	7	8	7
Marital Status								
Married	11	10	11	10	10	9	7	7
Separated/divorced	21	20	19	17	15	16	16	13
Never married	68	70	71	73	75	75	77	80
Annual Income								
\$0–\$999	69	67	72	73	78	78	74	78
\$1,000–\$9,999	21	23	16	15	11	12	16	14
\$10,000 and higher	10	10	12	12	11	10	10	8
Homeless	25	26	22	29	35	40	39	42
Criminal Justice System Involvement	18	20	19	19	19	16	16	15
Mental Health Treatment History	17	18	16	16	16	16	18	16
Needle Use in Past Year	63	63	63	58	62	68	68	67
Total (N)	(8,145)	(8,932)	(9,151)	(10,613)	(11,850)	(12,210)	(10,402)	(9,793)

¹Excludes prisoners and out-of-State admissions.

²FYs run July 1–June 30, with the year named for the January–June portion of the year.

SOURCE: Massachusetts Department of Public Health, Bureau of Substance Abuse Services; prepared by the Boston Public Health Commission, Research Office

Exhibit 4c. Demographic Characteristics of Clients¹ in Greater Boston State-Funded Substance Abuse Treatment Programs with a Primary Problem with Marijuana, by Percent: FY 1997–FY 2005²

Characteristic	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Gender								
Male	78	76	73	78	77	77	71	73
Female	22	24	27	22	23	23	29	27
Race								
White	32	28	28	29	27	26	29	21
Black	42	44	47	47	48	49	47	52
Latino	22	23	21	22	20	22	20	22
Other	4	4	4	3	5	4	3	5
Age at Admission (Average age)	(24.2)	(25.1)	(25.4)	(24.3)	(24.8)	(25.2)	(26.3)	(28.0)
18 and younger	29	24	19	27	24	22	17	12
19–29	48	50	56	51	50	52	52	52
30–39	18	17	18	16	19	18	21	24
40–49	5	6	5	6	6	7	7	10
50 and older	1	2	2	1	1	2	2	2
Marital Status								
Married	6	4	5	5	6	6	6	7
Separated/divorced	6	6	7	6	7	6	6	7
Never married	89	90	88	90	88	89	88	85
Annual Income								
\$0–\$999	50	59	55	57	60	64	53	51
\$1,000–\$9,999	31	27	27	22	21	21	28	28
\$10,000 and higher	19	14	18	21	19	16	19	21
Homeless	8	9	10	11	12	9	11	15
Criminal Justice System Involvement	47	53	48	48	50	43	44	44
Mental Health Treatment History	31	23	27	25	29	31	35	28
Needle Use in Past Year	2	2	2	2	2	2	2	2
Total (N)	(928)	(1,125)	(1,109)	(1,100)	(1,054)	(1,046)	(857)	(611)

¹Excludes prisoners and out-of-State admissions.

²FYs run July 1–June 30, with the year named for the January–June portion of the year.

SOURCE: Massachusetts Department of Public Health, Bureau of Substance Abuse Services; prepared by the Boston Public Health Commission, Research Office

**Exhibit 5. Substance Abuse Helpline Drug Mentions in Greater Boston,¹ by Number and Percent:
FY 2000–FY 2005²**

Drug ³	FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Alcohol-only	2,034	(37)	2,206	(39)	1,965	(34)	1,627	(31)	1,597	(28)	1,730	(35)
Cocaine/ Crack	1,118	(20)	1,1068	(19)	1,072	(18)	1,041	(20)	1,017	(18)	949	(19)
Heroin	1,832	(33)	1,862	(33)	2,038	(35)	1,895	(36)	2,230	(40)	1,562	(31)
Narcotic Analgesics	344	(6)	508	(9)	785	(14)	832	(16)	1,025	(18)	931	(19)
Marijuana/ Hashish	309	(6)	291	(5)	339	(6)	261	(5)	253	(5)	226	(5)
Benzodiazepines	151	(3)	154	(3)	204	(4)	187	(4)	175	(3)	168	(3)
Methamphetamine	2	(<1)	7	(<1)	11	(<1)	10	(<1)	14	(<1)	16	(<1)
MDMA	43	(1)	40	(1)	45	(1)	32	(1)	24	(<1)	17	(<1)
Hallucinogens	17	(<1)	24	(<1)	8	(<1)	14	(<1)	8	(<1)	6	(<1)
Inhalants	100	(2)	55	(1)	40	(1)	15	(<1)	25	(<1)	12	(<1)
Total Number of Calls	5,478		5,695		5,814		5,221		5,627		4,977	

¹Greater Boston includes Boston, Brookline, Chelsea, Revere, and Winthrop (CHNA 19).

²Fiscal year runs from July through June of named year. For example, FY 2000 runs from July 1999 through June 2000.

³Narcotic Analgesics include codeine, methadone, morphine, oxycodone (including OxyContin), Percocet, Roxicet, Vicodin, and other opiates. Benzodiazepines include Ativan, Halcion, Klonopin, Librium, Rohypnol, Valium, and Xanax. Hallucinogens include LSD, PCP, psilocybin, and mescaline. Inhalants include acetone, aerosols, glue, markers, paint, and other inhalants.

SOURCE: Massachusetts Substance Abuse Information and Education Helpline; data analysis performed by Boston Public Health Commission Research Office

Exhibit 6. Boston Police Department Arrests by Substance,¹ by Number and Percent: 1997–2004

Drug Class	1997	1998	1999	2000	2001	2002	2003	2004
	Number (%)	Number (%)	Number (%)	Number (%)	Number (%)	Number (%)	Number (%)	Number (%)
A (Mostly Heroin)	1,392 (22.7)	1,061 (22.5)	984 (24.0)	1,022 (27.1)	905 (26.4)	947 (22.5)	939 (22.5)	791 (20.8)
B (Mostly Cocaine)	2,918 (47.5)	2,225 (47.1)	1,847 (45.1)	1,532 (40.6)	1,428 (41.7)	1,762 (41.9)	1,736 (41.6)	1,650 (43.3)
D (Mostly Marijuana)	1,617 (26.3)	1,211 (25.6)	1,133 (27.7)	1,093 (29.0)	982 (28.7)	1,375 (32.7)	1,366 (32.7)	1,247 (32.8)
Other	216 (3.5)	226 (4.8)	133 (3.3)	123 (3.3)	111 (3.2)	125 (3.0)	133 (3.2)	119 (3.1)
Total Drug Arrests	6,143	4,723	4,097	3,770	3,426	4,209	4,174	3,807
Total Arrests	27,843	25,481	23,592	22,216	20,470	21,025	20,686	19,577
Drug Percentage of Total Arrests	(23.7)	(18.5)	(17.4)	(17.0)	(16.7)	(20.0)	(20.2)	(19.4)

¹Includes all arrests made by the Boston Police Department (i.e., arrests for possession, distribution, manufacturing, trafficking, possession of hypodermic needles, conspiracy to violate false substance acts, and forging prescriptions).
SOURCE: Boston Police Department, Office of Planning and Research; prepared by the Boston Public Health Commission, Research Office

Exhibit 7. Drug Street Price, Purity, and Availability in Boston: November 2003–December 2004

Drug	Price	Purity	Availability
Heroin	\$53–\$100 per gram \$60–\$100 per bundle \$6–\$20 per bag	High (bag: 40%–60%)	Readily
Cocaine (Powder)	\$50–\$90 per gram retail	Increasing	Steady, available
Crack	\$10–\$20 per rock		
Marijuana	\$5 per joint \$200–\$250 per ounce	Commercial Grade	Readily
Methamphetamine	\$250 per gram	Unknown	Limited quantities
MDMA (Ecstasy)	\$20–\$25 per tablet		High (clubs & colleges)
OxyContin	\$1 per milligram		
LSD	\$5 per dose		
Ketamine	\$55–\$100 per vial		
GHB	\$5 per capful, \$150 per ounce		

SOURCES: New England Field Division, Drug Enforcement Administration (DEA) as of June 2005; Prepared by the Boston Public Health Commission, Research Office

Patterns and Trends of Drug Abuse in Chicago

Dita Broz, M.P.H., Wayne Wiebel, Ph.D., and Lawrence Ouellet, Ph.D.¹

ABSTRACT

Many epidemiological indicators suggest that heroin, cocaine, and marijuana continue to be the most commonly used illicit substances in Chicago. Drug treatment services rendered for heroin use have increased in recent years, reaching 33,662 episodes in FY 2005, which corresponds to a 125-percent increase from FY 2000. Cocaine was the second most commonly reported reason for entering publicly funded treatment programs in FY 2005, and this trend has been stable over the past 5 years. Most cocaine-related treatment services were for crack cocaine. Reported marijuana-related treatment services have increased more rapidly in the rest of the State than in Chicago, suggesting a possible stabilizing trend in the city. According to preliminary unweighted data from DAWN Live!, heroin, cocaine, and marijuana were the top three illicit drugs most often reported in emergency departments during the first half of 2005. Heroin, cocaine, and marijuana were also the substances most frequently seized by law enforcement in Chicago, together accounting for 98 percent of all items seized. The use of marijuana and alcohol by 8th, 10th, and 12th grade students in Chicago declined between 2000 and 2004 according to the Illinois Youth Survey; however, prevalence of use remained high (25 percent and 60 percent, respectively). Methamphetamine indicators continued to show low but increasing levels of use in some areas of Chicago, especially on the north side, where young gay men and clubgoers congregate. Methamphetamine use is significantly higher in downstate Illinois. Treatment episodes for primary methamphetamine use in Chicago accounted for only 1 percent of total episodes reported in Illinois in FY 2005. Most MDMA indicators were stable at low levels; however, ethnographic and survey reports suggest an increased trend in use among young African-Americans. LSD and PCP indicators continue to show levels of use below the national average. Abuse of prescription drugs remains low. However, nearly 15 percent of students interviewed for the 2004 Illinois Youth Survey reported past-year use of 'pain pills,' and the same proportion used 'other

prescription' drugs. Injection drug use declined from 20 percent in 2000 to 12 percent in 2004 as the likely mode of HIV transmission among newly diagnosed persons in Chicago.

INTRODUCTION

This report is produced biannually for the Community Epidemiology Work Group of the National Institute on Drug Abuse. As part of this epidemiological surveillance network, researchers from 21 U.S. areas monitor trends in drug abuse using the most recent data from multiple sources.

Area Description

Due to its geographic location and multifaceted transportation infrastructure, Chicago is a major hub for the distribution of illegal drugs throughout the Midwest. Located in northeastern Illinois, Chicago stretches for 25 miles along the southern tip of Lake Michigan's shore. The 2000 U.S. census estimated the population of Chicago at 2.9 million and Cook County (which includes Chicago) at 5.4 million. In June 2003, the U.S. Office of Management and Budget (OMB) revised definitions for the Nation's Metropolitan Statistical Areas (MSAs). The Chicago-Naperville-Joliet, Illinois, MSA includes Cook, DeKalb, DuPage, Grundy, Kane, Kendall, McHenry, and Will Counties, and its population size was estimated at slightly more than 9 million (ranking third in the Nation).

According to the U.S. Census Bureau, the city population increased about 4 percent between 1990 and 2000. The number of Hispanics living in Chicago increased 38 percent between 1990 and 2000, while the number of Whites and African-Americans declined by 14 and 2 percent, respectively. Among U.S. cities, Chicago has the second largest Mexican-American and Puerto Rican populations.

Based on the 2000 census, the Chicago population is 36 percent African-American, 31 percent White, 26 percent Hispanic, and 4 percent Asian-American/Pacific Islander. In 2000, the median age of Chicagoans was 31.5, with 26 percent of the population younger than 18 and 10 percent age 65 or older. The unemployment rate is 6.2 percent, and the percentage of families living below the poverty level with children younger than 18 is 11.4 percent.

Data Sources

This report is based on the most recent data available from the various sources detailed below:

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- **Treatment data** for the State of Illinois and Chicago for fiscal years (FYs) 2000–2005 (July 1–June 30) were provided by the Illinois Division of Alcoholism and Substance Abuse (DASA).
- **Emergency department (ED) data** were derived for the first half of calendar year 2005 from the Drug Abuse Warning Network (DAWN) *Live!* restricted-access online query system administered by the Office of Applied Studies (OAS), Substance Abuse and Mental Health Services Administration (SAMHSA). Eligible hospitals in the Chicago area totaled 88; hospitals in the DAWN sample numbered 76, with 78 EDs in the sample. (Some hospitals have more than one ED.) During this 6-month period, between 26 and 30 EDs reported data each month. The completeness of data reported by participating EDs varied by month (exhibit 1). Exhibits in this paper reflect cases that were received by DAWN as of 12/7/2005. Data derived from DAWN *Live!* represent drug reports in drug-related ED visits. Drug reports exceed the number of visits, since a patient may report use of multiple drugs (up to six drugs plus alcohol). The DAWN *Live!* data are unweighted and, thus, are not estimates for the reporting area. These data cannot be compared to DAWN data from 2002 and before, nor can preliminary data be used for comparison with future data. Only weighted DAWN data released by SAMHSA can be used for trend analysis. A full description of the DAWN system can be found on the DAWN Web site: <<http://dawn.info.samhsa.gov>>.
- **Drug-related mortality data** were derived from the DAWN, OAS, SAMHSA, mortality system for 1998–2003. The DAWN system recently restructured its data collection methods; mortality estimates produced as of 2003 are not comparable to previous years. In 2003, 122 jurisdictions in 35 metropolitan areas and 6 States reported mortality data to DAWN. Of the 14 targeted counties in the Chicago metropolitan area, only 5 (DuPage, Kane, Kendall, Lake, and McHenry) reported mortality data to DAWN in 2003, covering about 26 percent of the population. A full description of the DAWN system can be found on the DAWN Web site: <<http://dawn.info.samhsa.gov>>. Data on deaths related to accidental drug poisonings were available through 2003 from the Chicago Department of Public Health (CDPH).
- **Incidence data on drug-related calls** were provided by the Illinois Poison Center (IPC) in Chicago for Cook County for 2001 through 2004. The IPC answered 96,956 calls in 2004 on household products, herbal products, medication overdoses, adverse reactions to medications, alcohol or drug misuse, occupational accidents, chemical spills, and other poisonings.
- **Criminal justice data** were available from the Illinois Criminal Justice Information Authority (ICJIA), which collects, maintains, and updates a variety of criminal justice data to support its research and evaluation efforts. ICJIA regularly publishes criminal justice research, evaluation reports, and statistical profiles. ICJIA's drug arrest data for 1990–2002 and the 2004 special report on methamphetamine trends in Illinois were reviewed.
- **Price and purity data** were provided by the Drug Enforcement Administration (DEA), Domestic Monitor Program (DMP), for heroin for 1991–2004. Purity data on drug samples analyzed through September 2005 were provided by the Illinois State Police (ISP), Division of Forensic Science. Drug price data are from the National Drug Intelligence Center, *Narcotics Digest Weekly*, Vol. 3, No. 52, December 28, 2004. Data from the National Forensic Laboratory Information System (NFLIS) for FY 2003 through FY 2005 were used to report on drugs 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 (COIP), School of Public Health, University of Illinois at Chicago (UIC).
- **Survey data on student and household populations** were derived from several sources. Student drug use data were provided by the 2004 Illinois Youth Survey, which is prepared by the Chestnut Health Systems for the Illinois Department of Human Services. Data on substance use and abuse were provided by SAMHSA's National Survey on Drug Use and Health, 2002, 2003, and 2004.
- **Most recent drug use estimates** were derived from two currently ongoing studies of young heroin users in metropolitan Chicago conducted by COIP at the UIC School of Public Health. The Family Process and Risk Reduction Study (Family Process), funded by the National Institute on Drug Abuse (NIDA), assesses a human immunodeficiency virus (HIV) prevention intervention that targets young injection drug users (IDUs) and their parents. Participants are age 18–25 and have injected in the last 6 months ($n=636$ as of June 2005). All data from the Fam-

ily Process Study are preliminary. Current non-injecting heroin users (NIHUs) age 16–30 were recruited for the NIDA-funded NIHU Study to evaluate the rate of transition to injecting and drug and sexual practices associated with HIV, hepatitis B (HBV), and hepatitis C (HCV) infections ($n=649$ as of June 2005).

- **Acquired immunodeficiency syndrome (AIDS) and HIV data** were derived from both agency sources and UIC studies. IDPH and CDPH surveillance reports provided statistics on AIDS and HIV through 2004. The CDPH summer 2005 “STD/HIV/AIDS Chicago” report included results from a survey of men who have sex with men (MSM) conducted as part of CDC’s National HIV Behavior Surveillance system between December 2004 and November 2005. The agency data are complemented by UIC’s studies of IDUs conducted by COIP at UIC’s School of Public Health. One is the NIDA-funded “AIDS Intervention Study,” based on a panel of IDUs participating from 1988 to 1996. The second is the CDC-funded HIV Incidence Study (CIDUS I and II). The CIDUS data are from analyses of a 1994–1996 study of 794 IDUs, age 18–50, in Chicago (Ouellet et al. 2000) and a 1997–1999 study of 700 IDUs, age 18–30, in Chicago and its suburbs (Thorpe et al. 2000; Bailey et al. 2001).

Several of the sources traditionally used for this report have not been updated by their authors or were unavailable at the time this report was generated. Because some information has not changed—and to avoid redundancy—this report occasionally refers readers to a previous Chicago CEWG report for more information in a particular area. For a discussion of the limitations of survey data, the reader is referred to the December 2000 Chicago CEWG report.

DRUG ABUSE PATTERNS AND TRENDS

This report of drug abuse patterns and trends is organized by major pharmacologic categories. Readers are reminded, however, that multidrug consumption is the normative pattern among a broad range of substance abusers in Chicago. Various indicators suggest that drug combinations play a substantial role in drug use prevalence. Preliminary unweighted DAWN data show that 27 percent of all ED drug reports in Chicago during the first half of 2005 were alcohol-in-combination. During FY 2005, heroin was the most often mentioned reason for seeking treatment in Chicago. Among these treatment episodes, the most common secondary substances reported were cocaine (35 percent) and alcohol (10 percent).

Cocaine/Crack

The majority of quantitative and qualitative cocaine indicators suggest that use remains stable at high levels and that cocaine continues to be a serious drug problem for Chicago.

Treatment services rendered for primary cocaine use remained stable between FY 2000 and FY 2005 in Chicago. Cocaine use was the second most common reason to enter treatment in FY 2005; a total of 16,845 persons were treated for cocaine-related problems, of which the majority reported crack cocaine use (91 percent) (exhibit 2). Cocaine was the most commonly mentioned secondary drug among persons treated for primary alcohol and heroin-related problems. In FY 2005, African-Americans remained the largest group treated (82 percent) for cocaine abuse, and males accounted for more services rendered (59 percent) than females (exhibit 2).

Preliminary unweighted data accessed from DAWN *Live!* for the first half of 2005 show that more than one-third (35.6 percent) of total ED reports for major substances of abuse (including alcohol) were cocaine related. ED cocaine reports totaled 3,865 during this period (exhibit 3). The majority of the cocaine reports involved males (65 percent) and those between 35 and 54 years of age (67 percent). Sixty percent of the cocaine ED reports were for African-Americans. (Race was not documented for 12 percent of the cocaine ED reports.)

In 2003, both the DAWN ME drug-induced or drug-related death data and CDPH death certificate data showed that cocaine remains a factor in more deaths in the Chicago area than any other illicit drug. However, multiple drug use was involved in majority of these cases. According to the 2003 DAWN ME report, multidrug use was involved in 64 percent of cocaine-related deaths.

According to the Illinois Poison Center, cocaine-related calls increased slightly between 2001 and 2004, from 116 to 135, respectively. In 2004, cocaine continued to generate more calls than any other “street drug” (29 percent of all “street drugs”).

State (ISP) and Federal (NFLIS) labs reported that cocaine was the drug most often received for testing after cannabis. (See exhibit 4 for NFLIS data.) Cocaine purity for samples weighing 2–25 grams tested by the ISP was 77 percent in 2004 and 73 percent as of September 2005, but analyses were conducted on only a few samples. Thus, reasonable comparison with earlier data is not possible.

Cocaine prices have not changed since the June 2003 report. Ounce prices for powder cocaine were reported by street sources to be between \$400 and \$800, depending on the drug's quality and the buyer's relationship to the seller. Gram prices for powder and rock cocaine ranged from \$50 to \$150, with most reports around \$75. Ounces of crack cocaine ("rock") sold for about the same price as ounces of powder cocaine, with reports ranging from \$900 to \$1,600. The NDIC reported the wholesale price of a kilogram of cocaine in Chicago was \$18,000–\$22,000 for powdered cocaine. Additional prices reported by NDIC for powdered and crack cocaine appear in exhibit 5.

Cocaine use among 8th through 12th grade students in Cook County (which includes Chicago) was relatively unchanged from 2000 to 2004 according to the Illinois Youth Survey (exhibit 6). Past-year cocaine use was reported by 2.6 percent of students in 2004, compared with 2.8 percent in 2000. In 2004, cocaine use was more common among males than females (3.1 percent and 2.3 percent, respectively) and among Whites than African-Americans (3.8 percent and 0.9 percent, respectively).

According to SAMHSA, an average of 14.1 percent of persons age 12 or older living in metropolitan Chicago ever used cocaine; of those, 2.5 percent were crack cocaine users between 2002 and 2004 (exhibit 7). Recent cocaine use was considerably lower, at 2.5 percent in the past year.

Cocaine use appears common among heroin users in Chicago. In an ongoing study of non-injecting heroin users (NIHU Study), 70 percent of participants reported ever using powder cocaine, and 34 percent used it in the past 6 months. Crack cocaine use was reported by 67 percent of the study participants, and 52 percent reported using crack in the past 6 months. Among IDUs (Family Process Study), 84 percent reported ever using powder cocaine, and 64 percent of them used it in the past 12 months. Somewhat fewer participants had ever used crack cocaine (75 percent), but 83 percent of lifetime users reported using it in the past 12 months.

Heroin

Heroin abuse indicators in this reporting period continue to suggest high and increasing levels of use in the Chicago area.

The number of persons treated for heroin use in State-supported programs increased between FY 2000 and FY 2005 in both Chicago and the rest of the State (125-percent and 135-percent increases, respectively). In FY 2005, heroin was the most common reason for

seeking treatment in Chicago and accounted for 45 percent of all services rendered (exhibit 2). Of the 33,662 persons treated in FY 2005, the majority (82 percent) reported intranasal "snorting" as the primary route of administration, while only 15 percent injected (exhibit 2). Patients entering treatment programs outside of Chicago reported injecting as their primary route of administration more often than patients in Chicago (42 percent injected). Demographic differences between patients from Chicago and the rest of the State may account for some of this difference. Patients entering treatment in Chicago were more likely to be African-American (82 percent), while patients from the rest of Illinois were more likely to be White (57 percent).

Preliminary unweighted DAWN *Live!* ED data for the first half of 2005 indicate that heroin is the third most frequently reported major substance of abuse, following only cocaine and alcohol (exhibit 3). The majority of heroin ED reports involved males (61 percent), those between ages 35 and 54 (61 percent), and African-Americans (59 percent). (Race was not documented for 14 percent of the heroin reports.)

The DAWN ME system recorded 27 heroin-related deaths in 2003 in the Chicago MSA; 5 of those were single-drug deaths. According to CDPH, three deaths in the city were attributed to heroin use in 2003.

Based on the 2004 DMP report, heroin from several geographic source areas, including South America, Southeast Asia, Southwest Asia, and Mexico, was consistently available. This makes Chicago unique among other U.S. cities. The purity of street-level heroin continued to decline between 2000 and 2004 after it peaked in 1997 at about 31 percent. In 2004, South American heroin exhibits purchased by DMP in Chicago averaged 13.8 percent pure, a 42-percent decrease from 2000 and a 17-percent decrease from 2003 (exhibit 8). The average price per milligram pure increased slightly in 2004 to \$0.56.

The amount of heroin analyzed in Cook County by the ISP laboratory decreased slightly from 21 kilograms in 2003 to 18 kilograms in 2004. According to NFLIS, heroin was the third most often seized drug in Chicago in 2005, accounting for nearly 17 percent of all items seized (exhibit 4).

Participants in a study of young non-injecting heroin users reported high availability of heroin on the streets of Chicago. Sixty-three percent reported "a lot" (the highest rating) of heroin on the street in the past 30 days. Use of brand-name heroin was reported by 29 percent of participants. Most (80 percent) paid \$10 per bag in the 30 days prior to interview. Regard-

ing heroin quality in the past 30 days, only 10 percent gave the highest quality rating (“very good”); 31 percent thought the quality was “good,” and 50 percent perceived the heroin quality as “fair.”

Compared to marijuana and cocaine, heroin use in the general population age 12 and older is low according to SAMHSA. The National Survey on Drug Use and Health reported an annual average of lifetime heroin use of 1.7 percent between 2002 and 2004, while the proportions were 42.0 percent for marijuana and 14.0 percent for cocaine (exhibit 7).

Preliminary analysis of data collected for the currently ongoing study of young non-injecting heroin users in Chicago (NIHU), conducted by COIP at UIC, found that at followup, White study participants and those younger than 23 were significantly more likely to initiate injection. African-Americans in the study appeared resistant to injection initiation despite a longer duration of use. A recent report (Kane-Willis and Schmitz-Bechteler 2004) examined age and race trends among persons treated for heroin use in Illinois and found that Whites were far more likely to be age 18–24 (41 percent) than were African-Americans (2 percent) and Hispanics (20 percent).

Heroin prices have not changed since the June 2003 report. The wholesale price for heroin was \$100,000–\$125,000 per kilogram during the second half of 2004 (exhibit 5). On the street, heroin is commonly sold in \$10 and \$20 units (bags), though bags for as little as \$5 are available. Prices for larger quantities varied greatly, depending on the type and quality of heroin, the buyer, and the area of the city where the heroin was sold. At outdoor drug markets, purchases of multibag quantities—versus grams and fractions of ounces—were the most common means of buying larger amounts of heroin. Data indicated that buyers on the West Side could obtain 11–13 \$10 bags for \$100 (sometimes called a “jab”). Recent ethnographic reports suggest that some dealers offer regular customers a free piece of crack cocaine along with their heroin purchase (typically on Fridays) and distribute free samples when they have “new product,” practices that indicate a potential increase in competition.

Other Opiates/Narcotics

During FY 2005, 685 patients were treated for opiates other than heroin in Chicago. Similar to patients receiving services for heroin use, the majority of opioid-related treatment episodes were among males (54 percent) and African-Americans (69 percent), and cocaine was the secondary drug of choice (36 percent) (exhibit 2). Most reported intranasal “snorting” as the primary mode of administration (64 percent).

According to unweighted data accessed from DAWN *Live!*, 904 opiate/opioid ED reports were recorded in Chicago during the first half of 2005. Hydrocodone accounted for 22 percent of the overall opiate/opioid reports. A substantial proportion (27 percent) of hydrocodone ED reports were classified as “seeking detox.” Six percent of the opiate/opioid-related reports were specifically attributed to oxycodone misuse.

In 2003, 50 deaths related to opiate/opioid (other than heroin and methadone) misuse were recorded in the DAWN ME system. Multidrug use was associated with 86 percent of deaths; 11 were ruled as suicide. Methadone misuse was responsible for 15 deaths during the same year. According to CDPH, 19 methadone-related deaths were reported in 2003. Only one death was attributed to the use of other opioids that year.

The occasional use of other opiates is common among young non-injecting heroin users in Chicago. Fifty-seven percent of NIHU Study participants reported ever trying codeine, Tylenol 3 and 4, Dilaudid, Demerol, morphine, or methadone without a legal prescription. Ethnographic reports suggest that codeine may be used by heroin users to moderate withdrawal symptoms or to help kick a drug habit.

In Illinois, treatment services rendered related to the use of other opioids, tranquilizers, or sedatives in FY 2004 accounted for 2 percent of total treatment episodes (excluding alcohol). The majority (80 percent) of treatment for other opiates occurred outside Chicago and among Whites (75 percent); the majority (62 percent) reported administering these drugs orally. Readers are referred to the June 2004 and December 2004 Chicago CEWG reports for more details regarding other opioids, tranquilizers, or sedatives treatment data.

Methamphetamine/Amphetamines

Since the mid-1990s, many indicators of methamphetamine (“speed”) use in Illinois increased steadily. Overall, use of methamphetamine remains low in Chicago, though some indicators have increased slightly, reflecting higher use of methamphetamine in some parts of the city.

Since FY 2002, treatment services rendered for methamphetamine use have been steadily increasing from 29 episodes to 78 in FY 2005. Most patients in FY 2005 were male (77 percent) and White (68 percent) (exhibit 2). Smoking was the most commonly reported primary route of administration (47 percent), followed by inhalation (33 percent). A more pronounced increase in methamphetamine treatment epi-

sodes was reported in the rest of the State. Treatment episodes increased from 698 in FY 2000 to 5,134 in FY 2005. Exhibit 9 illustrates the substantial difference between the number of methamphetamine treatment episodes recorded in the city of Chicago and those in the rest of the State for the period of FYs 2000 to 2005. This trend in treatment supports other indicators that suggest lower use of methamphetamine in Chicago compared to the rural parts of the State. Similar to treatment demographics in Chicago, most methamphetamine treatment episodes in FY 2005 in the rest of the State involved males (54 percent) and Whites (97 percent).

Treatment services rendered for amphetamine outnumber those for methamphetamine in Chicago, though the opposite is true in the rest of the State. In FY 2005, 96 amphetamine episodes were reported in Chicago, which is a 50-percent increase from the previous year. Amphetamine treatment episodes in the rest of the State numbered 493 in FY 2005. Demographic and drug use characteristics of amphetamine patients were similar to those for patients treated for methamphetamine use.

During the first half of 2005, unweighted DAWN *Live!* data showed 47 ED methamphetamine reports for Chicago (exhibit 3). ED patient characteristics were similar to patients receiving treatment services in publicly funded programs. Males (77 percent), persons age 25–44 (72 percent), and Whites (at least 47 percent) accounted for the majority of ED methamphetamine reports. (Race was not documented for 19 percent of these reports.) During the first half of 2005, 17 preliminary amphetamine ED reports were registered by DAWN *Live!* (exhibit 3).

Methamphetamine calls to the Illinois Poison Center in Chicago are infrequent. From 2004 to 2005, the Poison Center received a total of 18 such calls. However, there were 94 amphetamine-related calls in 2004 and 62 in 2005.

Data from the ISP indicated that more methamphetamine continued to be seized than cocaine or heroin in nearly 50 percent of Illinois counties in 2004. In 2004, the amount of methamphetamine received by ISP from Cook County was about 8 kilograms, while the total methamphetamine received from all Illinois counties was about 24 kilograms, similar to the previous year. According to the NFLIS report, 0.36 percent of the items analyzed in Chicago in FY 2004 were methamphetamine, compared with 0.59 percent in FY 2005—which is a considerable increase from the 0.21 percent reported FY 2003 (exhibit 4).

The most recent ICJIA analysis of criminal justice data related to methamphetamine use in Illinois supports the

pattern of considerably lower use in Chicago compared with the rest of the State. The number of methamphetamine-related arrests in Illinois increased significantly between 1997 and 2003; the greatest increase was experienced by rural task force units (from 0 to 513 arrests). Since 1994, the ICJIA has reported a dramatic increase in the quantity of methamphetamine seized and clandestine labs closed. Seventy-seven percent of lab seizures in 2003 were in rural counties. Readers are referred to the June 2005 Chicago CEWG report for more detailed discussion of the ICJIA data on methamphetamine trends in Illinois.

The Illinois Youth Survey added questions regarding methamphetamine use for the first time in 2004. In Cook County, past-year use was reported by 1.1 percent of 8th through 12th grade students (exhibit 6). African-American and White youth reported similar frequency of methamphetamine use (1.3 percent and 1.2 percent, respectively), while Hispanics reported past-year use considerably less often (0.04 percent). Methamphetamine use among 8th through 12th grade students was significantly more common in rural counties in Illinois; 2.1 percent of surveyed students living in such counties reported past-year use.

According to SAMHSA, an average of 3 percent of persons age 12 or older living in the metropolitan Chicago area reported lifetime methamphetamine use between 2002 and 2004, which is lower than the national average of 5 percent (exhibit 7). The CDPH Office of HIV/AIDS Surveillance interviewed 1,147 MSM who were age 18 or older in 2004. Eleven percent of surveyed men reported using methamphetamine at least once in the past 12 months. Of those who used in the past year, nearly one in five reported using at least once per week.

Within Chicago, a low but stable prevalence of methamphetamine use has been reported for a number of years in the North Side gay community. Ethnographic data suggest that methamphetamine availability increased substantially since June 2001 in some of these networks, who may use the drug to enhance sexual experiences. There were also reports from persons who said they began to use methamphetamine in order to lose weight but became addicted to the drug.

In the NIHU Study, 19 percent of participants reported ever trying amphetamine or methamphetamine, and only 5 percent reported using it in the 6 months prior to the interview. Among injectors in the Family Process study, 20 percent of participants reported amphetamine use, and 8 percent used it in the previous 12 months. It is likely that participants' use of the drug often took place somewhere other than Chicago or Illinois.

Methamphetamine prices have not changed since June 2003, when it was reported that bags of methamphetamine sold for \$20. Most drug users reported that the drug remained difficult to obtain. However, police and street reports suggest that some Mexico-based drug dealers are attempting to introduce methamphetamine for local consumption by offering free samples, which may eventually change the low and stable trend of methamphetamine use in Chicago. Furthermore, one street-level report suggested a limited availability of methamphetamine on the West Side. There was also one report of methamphetamine being sold at a South Side street drug market. According to the NDIC 2004 report, methamphetamine cost \$1,000–\$1,300 per ounce and \$340 per gram (exhibit 5).

Marijuana

Marijuana continues to be the most widely available and used illicit drug in Chicago.

Marijuana users represented 12 percent of all treatment episodes in Chicago in FY 2005 and 23 percent of episodes in the rest of the State. Marijuana-related episodes increased both as an absolute number and as a percentage of total episodes in the city and the rest of the State between FY 2000 and FY 2005, though the increase was approximately 15 percent larger in the rest of the State. Alcohol remained the most commonly reported secondary drug among persons receiving treatment for marijuana. In Chicago, treatment episodes for marijuana were highest for males (77 percent) and for African-Americans (76 percent) (exhibit 2).

Preliminary unweighted data accessed from DAWN *Live!* show that ED reports of marijuana during the first half of 2005 represented 14 percent of all the major substance of abuse reports, including alcohol. Of the 1,473 marijuana ED reports reported during this period, one-half involved African-American patients, followed by Whites (25 percent). (Race was not documented for 14 percent of the reports.) The majority of these patients were male (68 percent) and younger than 35 (63 percent).

According to the 2003 DAWN ME report, 11 percent of total deaths recorded mentioned marijuana. All of these deaths were multidrug related.

According to the DEA, the bulk of marijuana shipments are transported by Mexico-based polydrug trafficking organizations that conceal marijuana among legitimate goods in tractor-trailers coming into the Chicago area from the southwest border. The primary wholesalers of marijuana are the same Mexico-based organizations that supply most of the cocaine, methamphetamine, and Mexican heroin in the

Midwest. Marijuana produced locally (indoor and outdoor) by independent dealers is also available.

In general, currently available marijuana is of variable quality. The abundance and popularity of marijuana across the city has led to an increased array of varieties and prices. Marijuana prices, which remained level since the June 2003 report, ranged from \$650 to \$4,000 per pound, depending on the type and quality. Ounces typically sold for about \$80–\$250. On the street, marijuana was most often sold in bags for \$5–\$20 or as blunts. The NDIC reported the following prices for marijuana in Chicago in 2004: \$900–\$1,200 per pound, \$50–\$75 per ounce, and \$4–\$6 per gram (exhibit 5).

Both ISP and NFLIS laboratories analyzed more marijuana samples than samples for any other drug. Forty-nine percent of drug samples analyzed by the NFLIS for Chicago in FY 2005 were identified as cannabis (exhibit 4).

Past-year marijuana use among 8th through 12th grade students in Cook County decreased between 2000 and 2004 according to the Illinois Youth Survey, from 29 to 25 percent (exhibit 6). Marijuana use decreased among White and Hispanic students, while use among African-Americans remained approximately the same. Males continued to report past-year use more often (28 percent) than female students (22 percent) in 2004.

Based on the National Drug Abuse and Health Survey conducted by SAMHSA, marijuana use was reported by the highest proportion of Chicagoans age 12 or older between 2002 and 2004. The average annual prevalence of lifetime marijuana use was 42 percent; 11 percent reported using in the past year (exhibit 7).

Marijuana use was common among the young heroin users participating in local studies. Sixty-seven percent of non-injecting heroin users and 73 percent of young injectors smoked marijuana in the 6–12 months prior to their interview.

Club Drugs

The number of treatment services rendered for “club drugs” in Chicago increased between FY 2004 and FY 2005 from 30 to 76 episodes. During FY 2005, 92 percent of “club drug” treatment episodes were among males, and 74 percent were among African-Americans.

In the Chicago area, methylenedioxymethamphetamine (MDMA or ‘ecstasy’) continues to be the most

prominently identified of the club drugs, and its use appears to have increased among African-Americans.

The preliminary unweighted data extracted from DAWN *Live!* show 42 MDMA reports in the first half of 2005 (exhibit 3). MDMA ED reports were more common among male patients (60 percent), African-Americans (43 percent), and those younger than 30 (81 percent).

In 2004, MDMA use increased among 8th through 12th grade students in Cook County, according to the Illinois Youth Survey. Past-year MDMA use was reported by 2 percent of students in 2004, compared with 1 percent in 2002 (exhibit 6). The increase was highest among African-Americans and more notably among African-American female students; none reported MDMA use in 2002, while 1.4 percent reported use in 2004.

According to SAMHSA, the average annual lifetime prevalence of MDMA use among persons age 12 or older was nearly 4 percent between 2002 and 2004, slightly lower than the national average (exhibit 7).

MDMA samples sent to the ISP laboratory from Cook County increased from 0.8 kilograms in 2003 to 3.1 kilograms in 2004. Similarly, the NFLIS reported an increase in the proportion of all items analyzed for Chicago that were MDMA, from 0.16 percent in FY 2003 to 0.29 percent in FY 2004; this proportion continued to increase in FY 2005 to 0.41 percent (exhibit 4).

Drugs sold as ecstasy remained available in most mainstream dance clubs and at many house parties. “Raves” featuring ecstasy use are said to be close to nonexistent. Recent ethnographic reports suggest that ecstasy may be purchased in some “open air” street markets on the west side and south side of Chicago. It continued to be sold in pill or capsule form, and the price range remained unchanged from December 2002: \$20–\$40 per pill. Individuals with connections to suppliers or producers reported prices as low as \$12–\$15 per pill. According to the 2004 NDIC report, MDMA prices slightly decreased. In 2003, wholesale prices ranged between \$10 and \$12 per tablet, compared with the \$4–\$10 reported in 2004; the retail price was \$25–\$35 per dosage unit in 2003, while it remained closer to \$25 in 2004. There have been increasing reports of ecstasy use from participants in local studies of drug users that suggest increased use of ecstasy by African-Americans in their teens and twenties. This use of ecstasy occurs not only in the context of club going, but also among street populations, including sex workers. Some of these observers claim that ecstasy can be obtained in

“upper” and “downer” forms, which suggests a combination of drugs.

Gamma hydroxybutyrate (GHB), a central nervous system depressant with hallucinogenic effects, is used infrequently in Chicago, mainly by young White males.

No treatment services were provided for GHB use in FY 2005, and, according to preliminary unweighted data accessed from DAWN *Live!*, there were only 16 GHB ED reports during the first half of 2005.

GHB is sold as a liquid (also referred to as “Liquid G”), in amounts ranging from drops (from a dropper at raves or parties) to capfuls. Prices for a capful have been reported at \$5–\$25. Compared with other club drugs, overdoses are more frequent with GHB, especially when used in combination with alcohol. GHB is not tracked in most quantitative indicators, but its use is perceived to be low compared with ecstasy.

Ketamine, an animal tranquilizer, is another depressant with hallucinogenic properties and is often referred to as “Special K.” DASA reported only six patients served for ketamine use in FY 2005 in publicly funded treatment programs in Illinois, and only one of those was in Chicago. As reported in the June 2004 Chicago CEWG report, street reports indicate that ketamine is usually sold in \$5–\$30 bags of powder or in liquid form. The drug is somewhat available at rave parties or in clubs frequented by younger adolescents.

PCP, LSD, and Other Hallucinogens

Treatment services rendered for hallucinogen use in Chicago increased from 30 in FY 2002 to 284 in FY 2003 and remained relatively stable between FY 2004 and FY 2005. Much of the increase since FY 2002 occurred among African-Americans and female patients, while hallucinogen-related treatment episodes decreased among Hispanics. During FY 2005, 66 percent of treatment episodes were reported among African-Americans and 42 percent were among female patients, compared with 47 percent and 13 percent, respectively, in FY 2002.

In general, both phencyclidine (PCP) and lysergic acid diethylamide (LSD) use in Chicago remain low, though in comparison, use of PCP appears to be more common. According to unweighted data accessed from DAWN *Live!*, there were 48 PCP and 9 LSD ED reports during the first half of 2005 (exhibit 3). No deaths related to hallucinogens were reported to the DAWN ME system in 2003.

The amount of PCP samples received by the ISP laboratory for analysis decreased significantly between 2002 and 2004, from 4.2 kilograms to 0.59 kilograms. The FY 2005 NFLIS report partly mirrored this decrease. The proportion of PCP seizures decreased from 0.50 percent in FY 2004 to 0.29 percent in FY 2005 (exhibit 4). LSD seizures were consistently less than 0.1 percent of total drug items seized in Chicago during this period (exhibit 4).

According to the Illinois Youth Survey, hallucinogen (including LSD and PCP) use decreased markedly among 8th through 12th grade students in Cook County in 2004. Past-year use was reported by 4 percent of students in 2000, but less than 2 percent reported use in 2004 (exhibit 6). Hallucinogen use was reported more often by males (3.0 percent) than females (0.9 percent) and by White students (2.8 percent) than African-Americans (0.6 percent).

Ethnographic reports on PCP use are available in the June 2003 Chicago CEWG report. On the west side, 2–3 PCP “sticks” about the size of toothpicks were reportedly available for \$5–\$10, according to the June 2003 CEWG report. Some “wicky sticks” are said to also include embalming fluid, and these cost more. Sherm sticks typically are cigarettes or small cigars dipped in PCP, drained, and dried. The cigarettes—most often Mores®—are sold for about \$20–\$30 each and are mainly available on the far South Side. PCP was also said to be sold in sugar cubes for \$20 each. Liquid PCP (“water”) was said to sell for \$120 for a vial.

LSD hits typically cost \$5–\$10. LSD is available in the city and suburbs.

In the study of young non-injecting heroin users, 36 percent of participants reported ever trying LSD, mescaline, mushrooms, or other hallucinogens, but only a few (6 percent) reported use in the 6 months prior to their interview. Among young injectors, 74 percent of participants reported ever trying hallucinogens, and 32 percent reported use in the 12 months prior to their interview. Whites were much more likely than African-Americans to report recent use of hallucinogens.

Recent reports from young heroin snorters indicate that in this population, PCP use is more common than LSD use. Fifty-one percent of study participants reported ever trying PCP, and 15 percent used in the 6 months prior to their interview.

According to some accounts by White youth, hallucinogenic mushrooms remain available. Reported prices were \$20–\$40 per mushroom.

Benzodiazepines/Barbiturates

In Chicago, depressants, such as benzodiazepines and barbiturates, are commonly taken with narcotics to potentiate the effect of opiates, frequently heroin. Depressants may also be taken with stimulants to moderate the undesirable side effects of chronic stimulant abuse. Chronic cocaine and speed abusers often take depressants along with stimulants, or when concluding “runs,” to help induce sleep and to reduce the craving for more stimulants (especially in the case of cocaine).

Treatment data suggest depressants are not the primary drugs of choice for most users. In FY 2005, DASA reported 39 treatment episodes for tranquilizers and 22 episodes for sedatives/hypnotics. After alcohol, cocaine was the most common secondary drug among these patients.

In 2003, 17 benzodiazepine misuse-related deaths were reported to the DAWN ME system from the Chicago MSA. Fourteen of these deaths were ruled as suicide.

Preliminary unweighted data accessed from DAWN *Live!* showed that 563 ED reports were related to the misuse of benzodiazepines during the first half of 2005. Nearly one-third of these mentions were classified as overmedication.

Benzodiazepine-related calls to the Illinois Poison Center in Chicago repeatedly represented nearly one-half of all substance misuse calls between 2001 and 2004. Approximately 500 to 600 calls annually were reported during this time period. Calls for barbiturate use remained low during this period, at approximately 40 calls annually.

According to SAMHSA, the average lifetime use among persons age 12 or older surveyed between 2002 and 2004 was 6.5 percent for tranquilizers and 2.9 percent for sedatives; both prevalence rates are lower than the national average (exhibit 7).

Lifetime use of tranquilizers or barbiturates without a prescription (diazepam [Valium], amitriptyline [Elavil], lorazepam [Ativan], and alprazolam [Xanax]) was reported by 31 percent of young non-injecting heroin users in the NIHU Study. Thirteen percent reported use in the past 30 days. In the Family Process Study, 43 percent of young injectors reported ever using barbiturates, and 30 percent used them during the previous 12 months.

No updated prices for depressants were available. As stated in past Chicago CEWG reports, alprazolam

typically sells for \$2–\$3 for 0.5-milligram tablets and \$5–\$10 for 1-milligram tablets.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

While Chicago accounts for 23 percent of Illinois' population, nearly 70 percent of statewide AIDS cases are from Chicago. Of the 31,369 AIDS cases reported to IDPH through August 31, 2004, 21,596 resided in the city of Chicago at the time of diagnosis. Cook County, which includes Chicago, and the collar counties (DuPage, Kane, Lake, McHenry, and Will) accounted for 86 percent of cumulative AIDS cases diagnosed in Illinois. CDPH estimated that by the end of June 2005, a total of 19,220 Chicagoans were living with HIV and AIDS.

In 2004, CDPH reported 1,115 HIV diagnoses (as of 6/30/05). Male-to-male sexual contact continued to be the leading mode of transmission (44 percent). Injection drug use declined from 20 percent of HIV diagnoses in 2000 to 12 percent in 2004. Since 2003, heterosexual contact has replaced injection drug use as the second leading mode of reported transmission.

Between December 2003 and November 2004, CDPH surveyed 1,147 adult MSM as part of the Centers for Disease Control and Prevention's (CDC's) newly implemented National HIV Behavioral Surveillance System. More than one-half of the surveyed men reported using an illicit drug in the past 12 months. Methamphetamine use, which was reported by 11 percent of participants, was associated with higher rates of unprotected anal sex and with attending bathhouses. Self-reported HIV prevalence was significantly higher among methamphetamine users (22 percent) than among non-users (8 percent). Other illicit drugs, such as powder cocaine and club drugs (e.g., GHB, MDMA, ketamine) were also associated with higher HIV prevalence and high-risk sexual behavior. These findings highlight the need to address substance use as it relates to transmission of HIV and not just in the MSM community, but among all Chicagoans at risk.

Recent studies of young IDUs conducted by authors of this report indicate high levels of HIV risk behaviors but very low levels of HIV infection, particularly among those who reside in the suburbs. It should be noted, however, that the studies are not directly comparable, because each had unique sampling and recruitment strategies. Analysis of the NIHU Study ($n=571$) of young noninjecting heroin users found an HIV and HCV seroprevalence of 4 and 2 percent, respectively. During the 12-month followup period, no HIV seroconversions and eight HCV seroconversions were observed.

ACKNOWLEDGMENTS

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Exhibit 1. DAWN ED Sample and Reporting Information: January–June 2005

CEWG Area	Total Eligible Hospitals ¹	No. of Hospitals in DAWN Sample	Total EDs in DAWN Sample ²	No. of EDs Reporting per Month: Completeness of Data (%)			No. of EDs Not Reporting
				90–100%	50–89%	<50%	
Chicago	88	76	78	26–30	0–2	0–2	45–50

¹Short-term, general, non-Federal hospital with 24-hour emergency departments based on the American Hospital Association Annual Survey.

²Some hospitals have more than one emergency department.

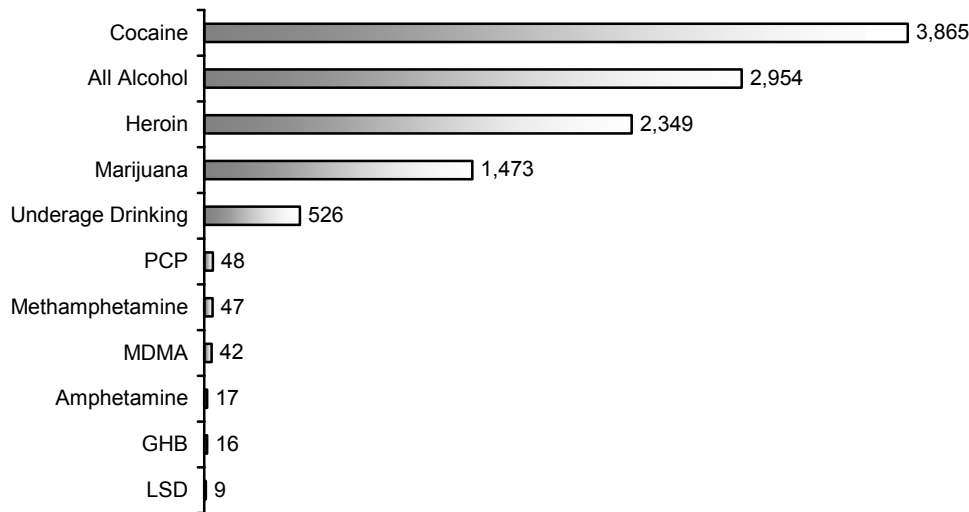
SOURCE: DAWN *Live!*, OAS, SAMHSA, updated 12/6-7, 2005

Exhibit 2. Demographic Characteristics of Persons Served in Publicly Funded Treatment Programs in Chicago, by Primary Substance and Percent: FY 2005

Characteristics (N=75,617)	Heroin (n=33,662)	Cocaine (n=16,845)	Alcohol (n=12,158)	Marijuana (n=9,338)	Other Opioids (n=685)	Methamphetamine (n=78)
Percent of Total	45	22	16	12	1	<1
Gender						
Male	51	59	75	77	54	77
Female	49	41	25	23	46	23
Race/Ethnicity						
White	8	10	19	7	19	68
African-American	82	82	58	76	69	15
Hispanic	8	6	21	15	11	5
Other	2	2	2	2	1	12
Age						
17 or younger	-	-	3	41	-	3
18-64	99	100	96	59	100	97
65 and older	1	-	1	-	-	-
Route of Administration						
Oral	1	2	100	4	16	9
Smoking	2	91	-	95	6	47
Inhalation	82	7	-	1	64	33
Injecting	15	-	-	-	14	10
Secondary Drug	Cocaine 35	Alcohol 44	Cocaine 28	Alcohol 37	Cocaine 36	Alcohol Marijuana 19

SOURCE: Illinois Department of Human Services, Division of Alcoholism and Substance Abuse

Exhibit 3. Numbers of Selected Illicit Drug Reports in Chicago EDs (Unweighted¹): January–June 2005



¹Unweighted data are from 26–30 Chicago EDs reporting to DAWN in January–June 2005. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted and, therefore, are subject to change.
SOURCE: DAWN *Live!*, OAS, SAMHSA, updated 12/6–7/2005

Exhibit 4. Drug Seizures in Chicago: FY 2003–2005¹

Selected Substance	FY 2003		FY 2004		FY 2005	
	Count	Percent	Count	Percent	Count	Percent
Cannabis	28,872	47.03	30,176	47.15	34,144	49.01
Cocaine	20,733	33.77	21,384	33.41	22,428	32.19
Heroin	11,050	18.00	11,247	17.57	11,597	16.65
Methamphetamine	127	0.21	230	0.36	412	0.59
3,4-Methylenedioxyamphetamine	97	0.16	188	0.29	286	0.41
Phencyclidine	177	0.29	320	0.50	202	0.29
Hydrocodone	36	0.06	33	0.05	79	0.11
Methadone	59	0.10	55	0.09	69	0.10
Alprazolam	32	0.05	42	0.07	59	0.08
Psilocin	23	0.04	9	0.01	53	0.08
Codeine	12	0.02	24	0.04	41	0.06
Diazepam	21	0.03	24	0.04	31	0.04
Clonazepam	19	0.03	16	0.02	26	0.04
Oxycodone	NA	NA	12	0.02	23	0.04
Amphetamine	NA	NA	17	0.03	16	0.02
3,4-methylenedioxyamphetamine	28	0.05	26	0.04	15	0.02
Ketamine	15	0.02	22	0.03	15	0.02
Propoxyphene	3	<0.01	NA	NA	13	0.02
Morphine	10	0.02	20	0.03	10	0.01
Psilocybine	11	0.02	6	0.01	9	0.01
Lorazepam	13	0.02	10	0.02	8	0.01
Pseudoephedrine	4	0.01	NA	NA	8	0.01
Chlordiazepoxide	4	0.01	NA	NA	2	<0.01
Lysergic acid diethylamide	4	0.01	NA	NA	2	<0.01
Total Items Reported	61,391		64,002		69,668	

¹Drug items analyzed between October 1st and September 30th of each year.
SOURCE: NFLIS, DEA

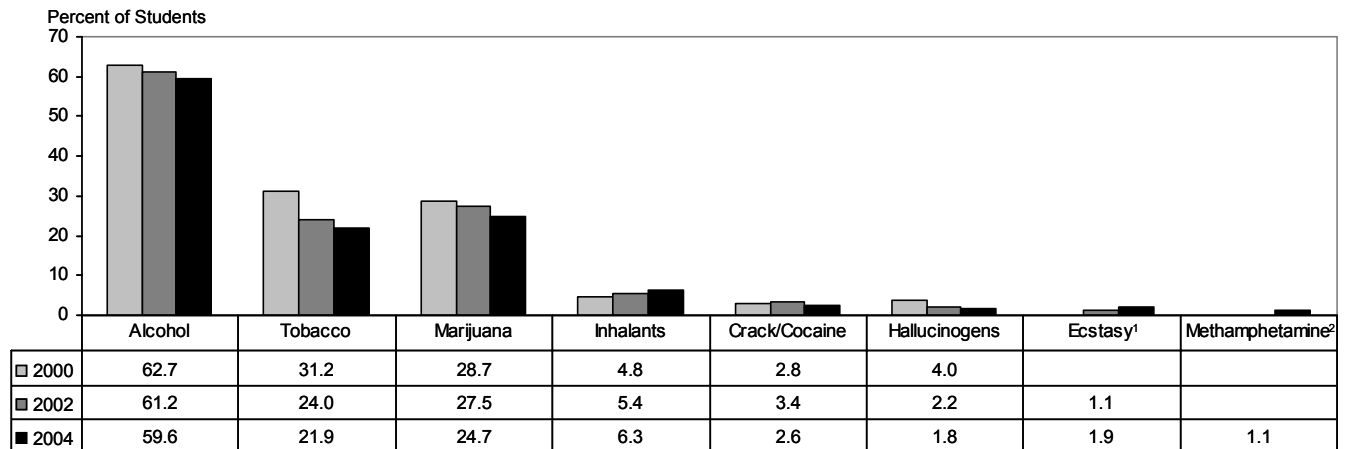
Exhibit 5. Illicit Drug Prices in Chicago: July–December 2004

Drug	Wholesale Price	Midlevel Price	Retail Price
Cocaine Powder	\$18,000–\$22,000 per kilogram	\$900–\$1,100 per ounce	\$125 per gram
Crack Cocaine	NR ¹	\$700–\$900 per ounce	\$125 per gram/10 per rock
Heroin	\$100,000–\$125,000 per kilogram	\$2,500–\$3,000 per ounce	\$100–\$125 per gram
Marijuana	\$900–\$1,200 per pound	\$50–\$75 per ounce	\$4–\$6 per gram
Methamphetamine	NR	\$1,000–\$1,300 per ounce	\$340 per gram
MDMA	\$4–\$10 per dosage unit	\$15 per dosage unit	\$25 per dosage unit

¹NR=Not reported.

SOURCE: National Drug Intelligence Center, *Narcotics Digest Weekly*, Vol. 3. No. 52, December 28, 2004 (Product No. 2004-R0485-052)

Exhibit 6. Past-Year Substance Use Prevalence Among 8th, 10th, and 12th Grade Students in Chicago, by Percent: 2000–2004



¹Ecstasy was added to the survey in 2002.

²Methamphetamine was added to the survey in 2004.

SOURCE: 2000, 2002 and 2004 Illinois Youth Survey, Cook County; prepared by the Chestnut Health Systems for the Illinois Department of Human Services

Exhibit 7. Types of Illicit Drug Use among Persons Age 12 or Older in the Chicago Metropolitan Statistical Area and the United States, by Percent: Averages Based on 2002–2004 Data

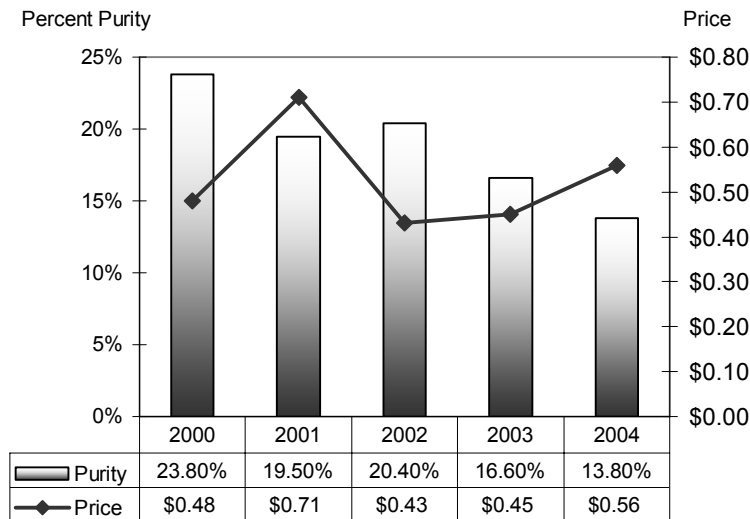
Drug	Chicago MSA		United States	
	Lifetime	Past Year	Lifetime	Past Year
Marijuana and Hashish	42.4	10.5	40.4	10.7
Cocaine	14.1	2.5	14.4	2.5
Crack	2.5	0.7	3.4	0.6
Heroin	1.7	0.3	1.5	0.2
Hallucinogens	13.0	1.6	14.5	1.8
LSD	9.0	0.2	10.1	0.3
PCP	3.2	0.1	3.0	0.1
Ecstasy	3.8	0.9	4.5	1.0
Inhalants	9.9	0.9	9.6	0.9
Nonmedical Use of Psychotherapeutics ¹	18.4	5.1	20.0	6.2
Pain Relievers	12.1	3.9	13.0	4.8
OxyContin ²	0.6	0.3	1.3	0.5
Tranquilizers	6.5	1.7	8.3	2.1
Methamphetamine	3.0	0.1	5.1	0.6
Sedatives	2.9	0.2	4.1	0.3

¹Nonmedical use of prescription drugs does not include over-the-counter drugs.

²OxyContin use estimates are based on 2004 data only.

SOURCE: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, and 2004

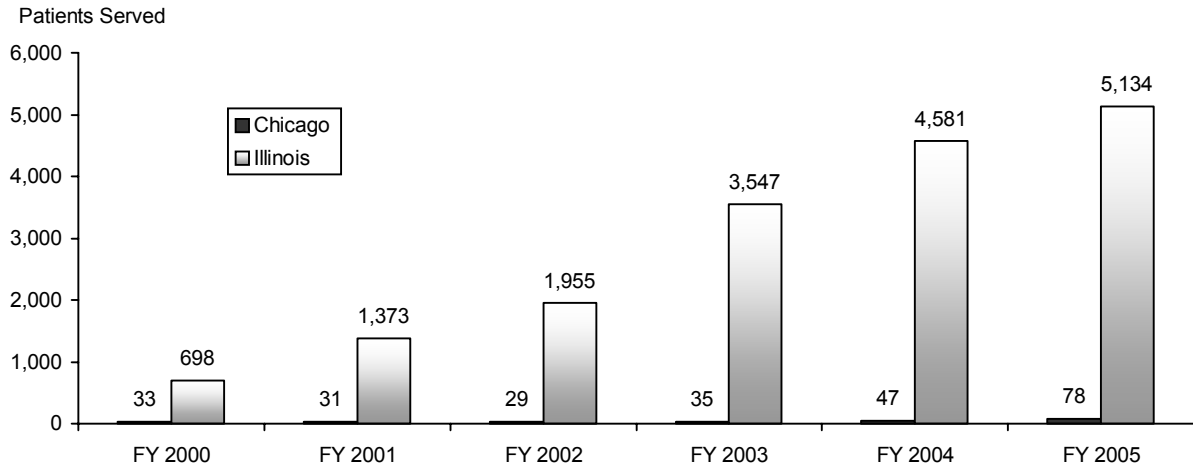
Exhibit 8. Heroin¹ Price and Purity Trends in Chicago: 2000–2004



¹South American heroin.

SOURCE: DMP, DEA

Exhibit 9. Number of Persons Served in Publicly Funded Treatment Programs in Illinois for Methamphetamine: FY 2000–FY 2005



SOURCE: Illinois Department of Human Services, Division of Alcoholism and Substance Abuse

Patterns and Trends in Drug Abuse in Denver and Colorado: January–June 2005

Tamara Hoxworth¹

ABSTRACT

The use and trafficking of illegal drugs continues to be an expanding problem for Colorado, with much of the transporting, distribution, and selling of illegal substances supported by organized crime entities, mostly from Mexico and California. Excluding alcohol, marijuana abuse has continued to result in the highest number of treatment admissions annually since 1997. Additionally, marijuana, along with 'other opiates' (excluding heroin), represents the highest percentage of users entering treatment within 3 years of initial use. In the first half of 2005, cocaine ranked third in the number of treatment admissions, behind marijuana and methamphetamine, but it accounted for the highest drug incidence rate per 100,000 persons for hospital discharges from 1996 through 2004 and for the highest number of ED reports in the first half of 2005. Cocaine also accounted for the highest drug-related mortality rates from 1996 through 2002, but it was surpassed in 2003 by all opiates including heroin and in 2004 by opiates other than heroin. Cocaine had the highest number of drug-related calls to the Rocky Mountain Poison & Drug Center for calendar years 2001 through 2003 for the Denver area, but it was surpassed by methamphetamine in 2004 and in the first half of 2005. Since 2003, methamphetamine has surpassed cocaine in numbers of treatment admissions statewide, and in the first half of 2005, methamphetamine admissions surpassed those for cocaine in the Denver/Boulder metropolitan area. Most indicators for methamphetamine abuse have been increasing, and drug enforcement officials and treatment providers have corroborated reports of increased methamphetamine use and trafficking in Colorado. While the amount of methamphetamine seized by law enforcement has increased in recent years, the number of clandestine laboratory closures has decreased since 2003. Theories about the decrease in lab closures are discussed in this paper. Most indicators for heroin abuse have decreased, with the exception of drug seizures, which have increased since 2002. Anecdotal reports

from Denver drug detectives and outreach workers suggest that heroin availability has increased, its price has fallen, and as a result, use is increasing, especially among youth on the street. In 2003 and 2004, opiate-related drug misuse mortalities exceeded those that were cocaine related. In a recent local survey of treatment providers statewide, more than one-half of respondents reported an increase in opiate prescription diversion, especially OxyContin. Beyond abuse of illicit drugs, alcohol remained Colorado's most frequently abused substance and accounts for the most treatment admissions, emergency department reports, poison center calls, drug-related hospital discharges, and drug-related mortality.

INTRODUCTION

Area Description

Denver, the capital of Colorado, is located slightly northeast of the State's geographic center. Covering only 154.6 square miles, Denver is bordered by several suburban counties: Arapahoe on the southeast, Adams on the northeast, Jefferson on the west, Broomfield on the northwest, and Douglas on the south. These areas made up the Denver Population and Metropolitan Statistical Area (PMSA) through 2004, which accounted for 50 percent of the total population.

For this report, both statewide data and data for the Denver/Boulder metropolitan area were reviewed and analyzed; the latter includes the counties of Denver, Boulder, Adams, Arapahoe, Broomfield, Clear Creek, Douglas, Gilpin, and Jefferson and accounts for 56 percent of the total population.

Denver and the surrounding counties experienced rapid population growth from the 1990s through 2003, and Colorado was the third fastest growing State in the Nation until 2004, when the growth rate declined. The State population more than doubled from 1960 to 2000, but recently, the population moving out of Colorado exceeded new arrivals. Colorado now ranks among those States with the lowest rates of net domestic immigration and is 14th on the list of fastest growing States. Statewide, the population is expected to increase from the 2004 census projection of 4,642,589 to 4,706,754 by the end of 2005, or by 1 percent.

The median age of residents in the Denver area is 33.1. For the population 25 and older, 79 percent are high school graduates and 35 percent have bachelor's degrees. Males account for 50.5 percent of the population. Ethnic and racial characteristics of the area are

¹The author is affiliated with the Alcohol and Drug Abuse Division, Colorado Department of Human Services, Denver, Colorado.

as follows: 65 percent White, 11 percent Black or African-American, 3 percent Native American Indian, 3 percent Asian, and 0.1 percent Native Hawaiian and Other Pacific Islanders. Hispanics or Latinos of any race compose 32 percent of the area's population.

The major industries in Colorado are communications, utilities, agriculture, and transportation. By the end of 2004, Colorado's employment growth rate of 2.6 exceeded that of the Nation (1.6). The per capita income for the city is \$24,101. The median household income is \$55,883, and the median family income is \$47,203. Eleven percent of families and 14 percent of individuals in the area are below the poverty level. The unemployment rate in Colorado as of August 2005 was 5.0. Nationally, it was 4.9.

The Violent Crime Rate National Ranking for Colorado is 27 out of 50.

Two major interstate highways, I-25 and I-70, intersect in Denver. I-25 runs north-south from Wyoming through New Mexico, and I-70 runs east-west from Maryland through Utah. The easy transit across multiple States via these highways, along with the following other factors, may influence drug use in Denver and Colorado:

- The area's major international airport is nearly at the Nation's midpoint.
- The area is characterized by a growing population and expanding economic opportunities.
- A large tourism industry draws millions of people to Colorado each year.
- Remote, rural areas are ideal for the undetected manufacture, cultivation, and transport of illicit drugs.
- Several major universities and small colleges are in the area.
- A young citizenry is drawn to the recreational lifestyle available in Colorado.

Data Sources

Information for this report was obtained from the sources shown below:

- **Treatment data** are provided by the Drug/Alcohol Coordinated Data System (DACODS), which is maintained by the Alcohol and Drug Abuse Di-

vision (ADAD) at the Colorado Department of Human Services. Data for this system are collected on clients at admission and discharge from all Colorado alcohol and drug treatment agencies licensed by ADAD. Treatment admissions are reported by the primary drug of use (as reported by the client at admission) unless otherwise specified. Annual figures are given for calendar years 1997 through 2004 and the first 6 months of 2005. To emphasize, when 2005 data are reported, they are for January 1 through June 30 only.

- **Drug-related emergency department (ED) reports** for the Denver metropolitan area from January through June 2005 were derived from the Drug Abuse Warning Network (DAWN) *Live!* restricted-access online query system administered by the Office of Applied Studies (OAS), Substance Abuse and Mental Health Services Administration (SAMHSA). Eligible hospitals in the Denver area totaled 14; hospitals in the DANW sample numbered 14, with the number of emergency departments in the sample also totaling 14. During this 6-month period, seven EDs reported data each month (*see exhibits 1a and 1b*). Exhibits in this paper reflect cases that were received by DAWN as of December 7, 2005. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted. Therefore, the data presented in this paper are subject to change. Data derived from DAWN *Live!* represent drug reports in drug-related ED visits. Drug reports exceed the number of ED visits, since a patient may report use of multiple drugs (up to six drugs and alcohol). The DAWN *Live!* data are unweighted and, thus, are not estimates for the reporting area. These data cannot be compared to DAWN data from 2002 and before, nor can preliminary data be used for comparison with future data. Only weighted DAWN data released by SAMHSA can be used for trend analysis. A full description of the DAWN system can be found at <<http://dawn.info.samhsa.gov>>.
- **Drug-related mortality data** are from two sources: (1) for the Denver-Aurora County area for 2003, data are from SAMHSA's *Drug Abuse Warning Network, 2003: Area Profiles of Drug-Related Mortalities*; and (2) statewide data for 2004 are from the Colorado Department of Public Health and Environment (CDPHE).
- **Hospital discharge data** statewide for 1997–2004 were provided by the Colorado Hospital Association through CDPHE's Health Statistics Section. Data included diagnoses (ICD-9-CM codes)

for inpatient clients at discharge from all acute care hospitals and some rehabilitation and psychiatric hospitals. These data exclude ED care.

- **Rocky Mountain Poison and Drug Center (RMPDC) data** are presented for Colorado. The data represent the number of calls to the center regarding “street drugs” from 1996 through June 2005.
- **Statistics on seized drug items** were obtained from *Colorado Fact Sheet Reports* published by the Drug Enforcement Administration (DEA).
- **Availability, price, and purity data** were obtained from Denver Police, the December 28, 2004, issue of *Narcotics Digest Weekly* (Vol. 3, No. 52), and from the DEA Denver Field Division’s report, *Denver, Colorado, Profile of Drug Indicators, June 2004*.
- **Human immunodeficiency virus (HIV) and acquired immunodeficiency (AIDS) data** were obtained from the CDPHE and are presented for 2001 through 2004.
- **Population statistics** were obtained from the Colorado Demography Office, Census 2000, including estimates and projections, and <factfinder.census.gov>.
- **Qualitative and ethnographic data** for this report were available from clinicians from treatment programs across the State, Denver Vice Detectives, street outreach workers, and local researchers.

DRUG ABUSE PATTERNS AND TRENDS

Cocaine/Crack

Of the five major illicit drugs of abuse (cocaine, heroin, other opiates, methamphetamine, and marijuana), cocaine ranks third in statewide and Denver-area treatment admissions, and those indicators have remained stable. Excluding alcohol, cocaine ranks first in ED reports of illicit drugs and hospital discharges and second in numbers of deaths and poison control center calls. While hospital discharges have increased since 1997, all other indicators have remained stable or decreased.

During the first half of 2005, cocaine was reported as a primary drug in 19 percent of treatment admissions (excluding alcohol) statewide (exhibit 2). Since 2000, cocaine represented 19 to 21 percent of statewide

admissions each year, and through 2002, it was second to marijuana in the volume of treatment admissions. Since 2003, however, methamphetamine admissions have exceeded cocaine admissions.

In the Denver metropolitan area, cocaine was reported in 20 percent of treatment admissions (excluding alcohol) during the first half of 2005 (exhibit 3). While it remained second to marijuana in treatment admissions from 2000 through 2004, methamphetamine admissions slightly exceeded those for cocaine in treatment admissions in the first half of 2005.

Statewide, the proportion of male cocaine admissions rose from 55 percent in 2000 to 62 percent in 2004 and, as shown in exhibit 3, was at 59 percent during the first half of 2005. This increase is more substantial when data are restricted to the Denver metropolitan area, where males constituted 51 percent of cocaine admissions in 2000, 63 percent in 2004, and 60 percent in the first half of 2005 (exhibit 4).

Historically, Whites have accounted for the largest proportion of cocaine admissions statewide (44 percent overall in 2000 through the first half of 2005). However, the proportion of Hispanics/Latinos, which is 31 percent of admissions overall, increased each year statewide (from 27 percent in 2001 to 36 percent in the first half of 2005), and in Denver (from 23 percent in 2001 to 35 percent in the first half of 2005). From 2000 to the first half of 2005, the proportion of Black treatment admissions declined from 22 to 19 percent statewide and from 31 to 22 percent in the Denver metropolitan area.

Statewide, 3 percent of primary cocaine admissions in the first half of 2005 were for persons younger than 18, and 17 percent were for persons younger than 25 (exhibit 4). Roughly 70 percent of cocaine admissions from 2000 to the first half of 2005 were for persons age 25–44. However, that age group’s proportion declined steadily from 76 percent in 2000 to 68 percent in the first half of 2005, while the proportion of those older than 44 increased from 8 to 16 percent during that time, which may be indicative of a cohort that is aging.

The Denver metropolitan area showed similar trends, with a decline in cocaine admissions of those age 25–44 (from 80 to 66 percent from 2000 to 2004; 68 percent in the first half of 2005) and a rise in persons older than 44 (from 8 to 17 percent from 2000 to 2004; 15 percent in the first half of 2005). The Denver area also experienced an increase from 9 to 14 percent in admissions for persons age 18–24 from 2000 to the first half of 2005.

In the first half of 2005, cocaine users in Colorado and Denver reported an average age of onset of 23 (median=21, exhibit 6). From 2000 onward, the mean age of onset was between 22 and 23 statewide and in the Denver metropolitan area.

In the first half of 2005, the mean number of years from reported onset of cocaine use to the first treatment episode was 9.1 years for statewide admissions and 9.8 years for Denver-area admissions (exhibit 6), down from 10.6 years (for both State and Denver area admissions) in 2004. Before 2004, the mean time to enter treatment remained between 10.0 and 10.2 years statewide and 10.0 and 10.7 years in the Denver metropolitan area.

In addition to traditional demographics, the proportion of new users (those using less than 3 years) and users entering treatment for the first time (persons with no prior treatment episodes) were examined. Statewide, around 13 to 14 percent of cocaine users had been using less than 3 years from 2000 through 2004. In the first half of 2005, 16 percent of cocaine users admitted to treatment were defined as new users (exhibit 6). In the Denver area, the proportion of new users in treatment increased from 10 percent in 2003 to 13 percent in 2004 and 16 percent in the first half of 2005.

Statewide, the proportion of first-time treatment admissions declined from 36 percent in 2000 to 31 percent in 2004. In the first half of 2005, 33 percent of all cocaine-related treatment admissions statewide had no prior treatment episodes. In the Denver area, first-timers constituted 34 percent of cocaine-related admissions in the first half of 2005, up from 28 percent in 2003. Prior to 2003, the proportion of new treatment admissions wavered between 29 and 31 percent.

Statewide in the first half of 2005, the proportions of clients who smoked, inhaled, or injected cocaine were 60, 32, and 6 percent, respectively (exhibit 4). The proportion that smoked increased slightly from 2000 (58 percent) to 2004 (61 percent). From 2002 to the first half of 2005, the proportion inhaling cocaine increased from 26 to 32 percent and the proportion injecting fell from 12 to 6 percent.

The Denver-area proportions were similar to statewide figures. In the first half of 2005, 59, 36, and 4 percent of Denver-area cocaine users smoked, inhaled, or injected the drug, respectively (exhibit 5). However, while smoking has been fairly stable statewide, in the Denver area, the proportion of cocaine smokers declined steadily from 2000 (69 percent) to the first half of 2005 (59 percent). Compared

with Colorado overall, the Denver area had a more dramatic rise in inhaling cocaine (from 22 to 36 percent from 2002 to the first half of 2005) and a larger decline in injecting (from 12 to 4 percent from 2002 to the first half of 2005).

Treatment data show that cocaine users most often use alcohol as a secondary drug (exhibits 4 and 5), and treatment providers have indicated that marijuana is commonly used with cocaine to enhance its effects or lessen the effects of withdrawal.

Excluding alcohol, cocaine accounted for the most illicit drug-related ED reports in the unweighted DAWN *Live!* data for the Denver area in the first half of 2005 and was second only to alcohol in the “major substances of abuse” category. There were 1,021 ED reports for cocaine (40.5 percent of illicit drug ED reports, excluding alcohol) (exhibit 7).

Statewide, cocaine-related deaths climbed from 92 in 1997 (23.6 per million) to 146 in 1999 (36.1 per million). While they declined to 116 in 2000 (27 per million), they increased again to 134 in 2001 (30.4 per million), 153 in 2002 (34.1 per million), 180 in 2003 (39.2 per million), and declined again in 2004 to 170 (36.5 per million). In 2003 and 2004, cocaine was behind alcohol and opiates (including heroin, morphine, and other opioids and narcotics) in the numbers of deaths. The 2003 DAWN data for Denver/Aurora County show a similar pattern, with cocaine-related deaths fewer than those for alcohol and “other opiates” (exhibit 8).

Cocaine has been second only to alcohol in drug-related hospital discharges since 1998, and cocaine-related hospital discharges rose steadily from 1997 (56 per 100,000) through 2004 (90 per 100,000) (exhibit 9).

From 2001 through 2003, poison control center call data for street drugs were reported for the city and county of Denver only. In 2004, data were received for both the city of Denver and the entire State, but from that point on, only statewide data were available. From 2001 through 2003, cocaine was second only to alcohol in the number of Denver calls received by the Rocky Mountain Poison & Drug Center, and the number of cocaine calls rose from 59 in 2001 to 68 in 2003 (exhibit 10). In 2004, cocaine constituted 59 calls in Denver and 120 calls statewide. In the first half of 2005, cocaine accounted for 51 poison center calls statewide and was exceeded by statewide methamphetamine calls.

Reports from clinicians, researchers, and street outreach workers around the State corroborate the con-

tinuing cocaine problems reflected in the indicator data. However, qualitative reports indicate a shift to methamphetamine among some stimulant users, especially the younger population. Clinicians report that cocaine is rarely a primary drug for those younger than 18, regardless of urban or rural setting.

Heroin

Of the five major illicit drugs (excluding alcohol), heroin ranks fourth on all indicators except deaths, for which it ranks last. Most heroin indicators have decreased, with the exception of amounts of heroin seized and anecdotal reports of increased availability and use.

During the first half of 2005, heroin was reported as a primary drug in 8 percent of treatment admissions (excluding alcohol) statewide and 12 percent in the Denver metropolitan area (exhibits 2 and 3). Since 2000, treatment admissions fell from 16 to 8 percent statewide and from 28 to 12 percent in the Denver area. Since 2001, heroin admissions have trailed behind marijuana, methamphetamine, and cocaine admissions statewide.

Until 2003, the volume of heroin admissions exceeded admissions for cocaine and methamphetamine in Denver. However, in 2003, heroin admissions dropped below cocaine admissions; in 2004, they dropped even further, below both cocaine and methamphetamine admissions.

Heroin admissions have been predominately male. From 2000 to the first half of 2005, the proportion of male heroin admissions wavered between 63 and 66 percent statewide and from 64 to 67 percent in the Denver area. In the first half of 2005, males constituted 65 percent of heroin admissions statewide and 66 percent in the Denver area (exhibits 4 and 5).

Historically, Whites have accounted for the largest proportion of heroin admissions. Statewide in the first half of 2005, Whites, Hispanics, and Blacks represented 66, 21, and 9 percent of admissions, respectively. Through June, 2005 had the lowest proportion of Hispanic admissions since 2000.

In the first half of 2005, 62 percent of heroin admissions from the Denver area were White. The proportion of White admissions was highest in 2001, at 65 percent, but the proportion decreased to 60 percent in 2003 and 2004. Also in the 2005 reporting period, Blacks constituted 11 percent of admissions, and that proportion vacillated between 8 and 11 from 2000 to 2005. The proportion of Hispanic heroin admissions decreased from 25 to 21 percent from 2000 to 2002

and rose to 27 percent in 2003. Thereafter, the proportion of Hispanic heroin admissions declined to 23 percent in the first half of 2005.

Statewide, the average age of heroin users admitted to treatment in the first half of 2005 was 37 (median=36). Since 2001, less than 1 percent of heroin users in treatment were younger than 18. Changes in two age ranges over time are indicative of an aging cohort. The proportion of persons age 35–44 declined from 34 to 23 percent from 2000 to the first half of 2005, and the proportion of those 45 and older increased from 25 to 33 percent from 2000 to 2004. In the first half of 2005, 29 percent of heroin admissions statewide were for persons older than 44.

The Denver metropolitan area showed similar trends in those age groups. There was a decline in heroin admissions of persons age 35–44 (33 percent in 2000 to 21 percent in the first half of 2005) and a rise in persons 45 and older from 2000 to 2004 (26 to 37 percent). In the first half of 2005, the 45 and older group represented 32 percent of heroin admissions.

Heroin users tend to be the oldest drug-using group and start using at the oldest age of any admissions group. Among the first half of 2005 admissions statewide, the mean and median ages of onset were 21.4 and 19.0, respectively (exhibit 6). The mean and median ages decreased slightly from 2000 to the first half of 2005 (mean, 22.6 to 21.4 and median, 20.0 to 19.0).

Denver showed a similar trend, with a decrease from 2000 to 2005 in the mean age (from 22.9 to 21.9) and in the median age (from 21.0 to 19.0).

Among heroin admissions in the first half of 2005, the mean time to enter treatment was 12.0 years for the State and 12.4 for the Denver metropolitan area (exhibit 6). Statewide, the mean time to enter treatment rose from 8.9 to 14.0 years from 2000 to 2004. During that same period, Denver showed a similar trend, with an increase from 7.8 to 14.8 years.

Statewide in the first half of 2005, 13 percent of heroin users had been using less than 3 years (exhibit 6), a slight increase from 11 percent in 2003 and 2004. In Denver, the proportion of new users in treatment decreased from 15 to 10 percent from 2000 to 2004 and jumped to 15 percent in 2005.

In the first half of 2005, first-timers constituted 22 percent of treatment admissions both statewide and in the Denver metropolitan area (exhibit 6). Statewide, the proportion of first-timers remained steady at 22 percent, except for a rise to 24 percent in 2002, fol-

lowed by a decline to 20 percent in 2003. In Denver, from 2000 to 2002, the proportion of first-timers rose from 20 to 23 percent and declined to 21 percent in 2003 and 2004.

Heroin is a drug that is predominately injected. Statewide, the proportion of heroin injectors remained between 86 and 88 percent between 2000 and 2004; as shown in exhibit 4, in the first half of 2005, 85 percent of heroin admissions were injectors. Also in 2005, 8 and 6 percent, respectively, smoked and inhaled heroin, and these proportions did not vary greatly over the 5 ½-year period.

Denver's proportions were similar to statewide figures. The proportion injecting remained between 86 and 88 percent from 2000 to 2004 and was 83 percent in the first half of 2005 (exhibit 5). The proportion who smoked heroin remained between 5 and 7 percent from 2000 to 2004; in the first half of 2005, 9 percent of heroin admissions reported smoking the drug. The proportion inhaling ("sniffing") remained between 4 and 6 percent from 2000 to 2004 and was 7 percent in 2005.

Treatment data, overall, show that heroin users most often used cocaine as a secondary drug (exhibits 4 and 5), followed by marijuana and other opiates.

DAWN *Live!* unweighted data showed 309 heroin-related ED reports in the first half of 2005, accounting for 12.2 percent of illicit drug reports (exhibit 7).

In 2003, there were seven heroin-related deaths reported by DAWN in the Denver/Aurora County area (exhibit 8).

Statewide, in 2003, mortality data reported 247 deaths (5.4 per 100,000) related to all opiates (including heroin, morphine, other opioids, and narcotics), but in 2004, heroin-related deaths were separated out from all other opiates. In 2004, there were only 22 heroin-related deaths (exhibit 8); however, because of the variation in how drugs were classified and in the geographical areas reporting, no mortality trends can be assessed for heroin alone.

CDPHE statewide hospital discharge data from 1997–2004 combined all narcotic analgesics, including heroin. While trends in this indicator for heroin alone cannot be assessed, this indicator for all narcotics increased steadily, with the rate doubling in 7 years (from 36 per 100,000 population in 1997 to 73 per 100,000 in 2003) (exhibit 9). In 2004, however, the number of hospital discharges for all narcotics decreased to 61 per 100,000.

The number of Denver-area calls for heroin and morphine combined remained fairly steady with 19, 16, 22, and 18 calls each year from 2001 through 2004, respectively (exhibit 10). Since 2004, statewide heroin calls have been broken out separately, and there were 20 heroin calls statewide in 2004 and 14 calls statewide during the first half of 2005.

Reports from Denver Vice Detectives and street outreach workers report increased availability and falling prices for heroin (exhibits 11 and 12), resulting in more widespread heroin use among youth on the street.

Other Opiates

This category excludes heroin and includes all other opiates and narcotic analgesics such as methadone, morphine, hydrocodone, hydromorphone, codeine, and oxycodone. Of the five major illicit drugs, this category ranked last in treatment admissions (which stayed stable over the last several years). Other opiates ranked third in volume of hospital discharges, which increased steadily through 2003 and declined in 2004. While this category accounted for the highest number of deaths (excluding alcohol), discrepancies in the classification of opiates and geographical areas reported precluded assessment of mortality trends.

During the first half of 2005, opiates other than heroin were reported as primary drugs in 4 percent of treatment admissions (excluding alcohol) statewide (exhibit 2). Since 2001, this proportion remained between 4 and 5 percent. In Denver, other opiates have constituted 5 percent of treatment admissions (excluding alcohol) since 2001 (exhibit 3).

Treatment admissions related to nonheroin opiates have always had higher proportions of females than the four other major drugs. Statewide, females represented 55 percent of other opiate treatment admissions in 2001, but this proportion dropped and stayed between 51 and 52 percent through 2004. In the first half of 2005, the proportion of female other opiate treatment admissions was at its lowest: 50 percent.

In Denver, females accounted for 56 percent of nonheroin opiate treatment admissions in 2001; however, this proportion declined to 49 percent in 2004 and was at 52 percent in the first half of 2005 (exhibit 5).

Statewide and in Denver, Whites account for the largest proportion of treatment admissions related to other opiates. Since 2000, the proportion of Whites statewide fluctuated between 81 and 88 percent. In the first half of 2005, Whites constituted 85 percent

of other opiate admissions statewide (exhibit 4). Black treatment admissions for other opiates were higher (5 percent) in the first half of 2005 than before (between 2 and 3 percent). The proportion of Hispanic admissions in Colorado vacillated between 6 and 13 percent and totaled 8 percent in the first half of 2005.

In the Denver metropolitan area, the proportion of White admissions for other opiates fluctuated between 80 and 89 percent from 2000 to the first half of 2005. Similar to the State overall, Blacks represented a higher proportion of admissions in the first half of 2005 (7 percent) than in prior years. Hispanic admissions were at a low of 4 percent in 2000 and jumped to 12 percent in 2001. Since 2002, the proportion of Hispanics vacillated between 5 and 9 percent and was at 5 percent in the first half of 2005 (exhibit 5).

Statewide, the average age of other opiate users admitted to treatment in the first half of 2005 was 37 (median=36.5); 2 percent were younger than 18 and 27 percent were older than 44. Two age ranges demonstrate a possible trend toward younger users. From 2000 to the first half of 2005, the proportion of those age 18–24 increased from 6 to 14 percent, while the proportion of those age 35–44 declined from 39 to 30 percent.

Likewise, in Denver, there was an overall increase in admissions of users of other opiates for persons age 18–24 (from 5 to 12 percent from 2000 to the first half of 2005).

Like heroin users, other opiates users tend to be older than other drug-using groups and start to use at an older age. In the first half of 2005, the mean and median ages statewide were 25.3 and 23.0, respectively, among other opiates treatment admissions (exhibit 6). Between 2001 and the first half of 2005, the mean and median ages decreased slightly (mean, from 27.4 to 25.3 and median, from 27.0 to 23.0).

Denver showed a similar trend, with a decrease from 2000 to the first half of 2005 in the mean age (from 28.0 to 25.1) and in the median age (from 27.0 to 21.5).

In the first half of 2005, the mean time to enter treatment for other opiate admissions was 8.4 years statewide and 9.6 years for the Denver metropolitan area (exhibit 6). Statewide, the mean time to enter treatment declined from 12 percent since 2003. Denver showed a similar decline from 13.4 percent in 2003.

In the first half of 2005, 20 percent of users of other opiates admitted to treatment in Colorado and in Denver had been using less than 3 years (exhibit 6).

Statewide, this proportion was at its lowest (14 percent) in 2003 and jumped to 20 percent, where it remained since 2004. In Denver, the proportion of new users in treatment increased from 11 to 20 percent from 2002 through the first half of 2005.

In the first half of 2005, first-time other opiate admissions represented 37 percent of treatment admissions statewide and in the Denver metropolitan area (exhibit 6). Statewide, the proportion of first-timers increased from 32 to 37 percent from 2002 to the first half of 2005. In Denver, from 2000 to the first half of 2005, the proportion of first-timers fluctuated widely between 29 and 38 percent with no clear trend.

Nonheroin opiates are most often taken orally. Statewide, between 2000 and the first half of 2005, the proportion of admissions ingesting other opiates orally ranged from 83 to 87 percent. In the first half of 2005, 83 percent of this admissions group ingested other opiates orally, and 6 and 9 percent, respectively, inhaled and injected other opiates (exhibit 4). From 2000 to the first half of 2005, the proportion injecting declined from 12 to 9 percent, and the proportion inhaling increased from 1 to 6 percent, most likely reflecting the practice of crushing and inhaling OxyContin.

Denver's proportions were similar to statewide figures. The proportion of other opiate admissions ingesting orally ranged from 84 to 89 percent from 2000 to 2004; it was 85 percent in the first half of 2005 (exhibit 5). The proportions who injected and inhaled were both 7 percent in 2005. The Denver area did not show the same decline as seen statewide in the numbers injecting, but inhaling increased from 2002—from 0 to 7 percent.

Treatment data, overall, show that other opiates users most often used alcohol as a secondary drug (exhibits 4 and 5), followed by marijuana and cocaine.

In the first half of 2005, the unweighted DAWN *Live!* data show 490 ED reports for opiates/opioids (exhibit 7).

In 2003, statewide mortality data showed 247 deaths (5.4 per 100,000) related to all opiates (including heroin, morphine, other opioids, and narcotics). In 2004, heroin deaths were categorized separately from all other opiates. In 2004, there were 238 other opiate-related deaths. In 2003, other opiate-related deaths in the Denver/Aurora County area totaled 138, excluding those involving suicide (exhibit 8).

As noted earlier, CDPHE statewide hospital discharge data from 1997 to 2004 combined all narcotic

analgesics, including heroin. This indicator increased steadily, with the rate doubling in 7 years, from 36 per 100,000 population in 1997 to 73 per 100,000 in 2003. In 2004, however, the number of hospital discharges for all narcotics decreased to 61 per 100,000.

There were no poison control center calls reported for opiates other than heroin and morphine.

More than one-half of respondents completing a survey of treatment providers reported seeing increased diversion of other opiates, particularly OxyContin. Recently, six local high-school girls (four were cheerleaders) were caught selling morphine in their school after one of the girls stole the morphine from her grandmother's prescription.

Methamphetamine

Methamphetamine ranked first in the number of poison control center calls, second in statewide and Denver-area treatment admissions (excluding alcohol), and third in quantity of drug seizures. For hospital discharges and deaths, methamphetamine was not reported separately, but included in the general category of "amphetamines & stimulants," which ranked fourth on both of these indicators. Of seven methamphetamine-specific indicators, five increased. Price remained stable, but laboratory closures declined since 2002. Despite this decline, law enforcement agencies report that the numbers of methamphetamine-related arrests and quantities of the drug seized by law enforcement have increased over recent years. Theories about these occurrences are discussed below.

In the first half of 2005, methamphetamine was the primary drug reported for 30 percent of all treatment admissions (excluding alcohol) statewide (exhibit 2). The proportion of methamphetamine admissions increased each year (from 14 percent in 2000 to 30 percent in the first half of 2005). In 2003, methamphetamine exceeded cocaine in illicit drug admissions and has been second to marijuana admissions ever since.

In the Denver metropolitan area, methamphetamine represented proportionately fewer treatment admissions (21 percent in the first half of 2005) than statewide. However, as observed statewide, the proportion of methamphetamine admissions (excluding alcohol) in Denver rose each year, from 9 to 21 percent from 2000 to the first half of 2005. Furthermore, in 2004, methamphetamine admissions exceeded those for heroin, and in the first half of 2005, these admissions surpassed those for heroin and cocaine.

After admissions for nonheroin opiates, methamphetamine admissions have the highest proportion of females statewide and in Denver (46 and 43 percent, respectively, in the first half of 2005) (exhibits 4 and 5). Statewide, the proportion of female admissions stayed at 46 percent from 2000 through 2002, jumped to 50 percent in 2003, decreased to 44 percent in 2004, and totaled 46 percent in the first half of 2005.

In the Denver area, the proportion of female methamphetamine admissions was at 50 percent in 2000 and 2001, decreased to 46 percent in 2002, jumped to a high of 53 percent in 2003, and has been at a low of 43 percent since 2004.

Methamphetamine admissions in Colorado and Denver are predominately White (82 percent for both in the first half of 2005) (exhibits 4 and 5). From 2000 to the first half of 2005, the proportion of White treatment admissions declined from 88 to 82 percent statewide and from 90 to 82 percent in the Denver area. At the same time, the proportion of Hispanic/Latino methamphetamine admissions rose from 8 to 14 percent statewide and from 7 to 14 percent in Denver.

Compared with cocaine, methamphetamine admissions tend to be younger. In the first half of 2005, the average age of persons admitted to treatment statewide was 30.2 (median=29), and 31 percent were younger than 25. Sixty-two percent of admissions were for persons age 25 to 44, and this proportion remained steady since 2001. In Denver, the average age of treatment admissions was 31 (median=30) in the first half of 2005. Twenty-seven percent of methamphetamine admissions in Denver were younger than 25; however, this proportion fluctuated from 23 to 34 percent over the period from 2000 to 2005 (first half). Sixty-four percent were age 25–44; this proportion also wavered over the years from 61 to 70 percent.

Since 2000, the mean age of onset for methamphetamine admissions statewide stayed between 20 and 21, and the median age remained between 18 and 19 (exhibit 6).

Denver's numbers are similar. The average age of onset for methamphetamine abuse reported in 2005 (first half) admissions was 21.2 (median=19.0) (exhibit 6). From 2000 to the first half of 2005, the mean age remained between 19.9 and 21.0; the median age fluctuated slightly between 18.0 and 20.0.

From 2000 to the first half of 2005, the average time for methamphetamine abusers to enter treatment de-

creased from 8.7 to 7.5 years statewide and from 9.1 to 7.7 years in Denver (exhibit 6).

Statewide, the proportion of new users rose from 15 to 19 percent from 2000 to 2003 and was at 18 percent in 2004 and the first half of 2005 (exhibit 6). In Denver, the proportion of new users in treatment increased from 10 percent in 2000 to 19 percent in 2004 and 17 percent in 2005, suggesting a trend of some users entering treatment earlier.

Statewide, 37 percent of methamphetamine treatment admissions in the first half of 2005 were first-timers (exhibit 6); that proportion had declined from 45 to 36 percent from 2000 to 2004. In Denver, 33 percent of the 2005 methamphetamine admissions were first-timers, and the proportion remained between 34 and 36 percent from 2000 to 2004.

Statewide, in the first half of 2005, the proportions of clients who smoked, injected, or inhaled methamphetamine were 64, 21, and 12 percent, respectively (exhibit 4). The proportion who smoked increased dramatically from 2000 (39 percent) to the first half of 2005 (64 percent), while the proportions who injected and inhaled both decreased substantially during that time. Injectors decreased from 34 to 21 percent, and inhalers declined from 21 to 12 percent.

During the first half of 2005 in the Denver area, the proportions who smoked, injected, or inhaled methamphetamine were 60, 23, and 14 percent, respectively (exhibit 5). As with the State overall, the proportion who smoked increased substantially from 36 to 61 percent from 2000 to 2004 and at the same time, those who injected declined from 38 to 23 percent. While there appears to be an overall downward trend, the proportion of inhalers declined from 20 to 9 percent from 2000 to 2003, but during 2004 and 2005 (first half), the proportions were 13 and 14 percent, respectively.

Treatment data, overall, show that methamphetamine users most often use marijuana as a secondary drug, followed by alcohol (exhibits 4 and 5).

The unweighted DAWN *Live!* ED data for the Denver PMSA show 600 stimulant reports in the first half of 2005; 442 reports were specifically for methamphetamine.

Methamphetamine-related deaths were reported under the “Stimulant” category in both DAWN (2003) and CDPHE data (2004). In 2004, there were 45 stimulant-related deaths reported statewide, and 26 such deaths were reported for the Denver area in DAWN in 2003 (exhibit 8).

Methamphetamine was also included in the stimulants category in hospital discharge data; overall, amphetamine-related hospital discharges increased from 16 per 100,000 population in 1999 to 49 per 100,000 in 2004 (exhibit 9).

In 2004, methamphetamine exceeded cocaine in the number of poison control center calls in Denver, and it accounted for the highest number of calls for street drugs. In 2004, there were 66 Denver-area calls and 95 statewide calls related to methamphetamine (exhibit 10). In the first half of 2005, there were already 65 methamphetamine-related calls.

Colorado treatment providers have reported that past users of cocaine have switched to methamphetamine because of its cheaper price and longer lasting high.

It was noted earlier that the number of laboratory closures has decreased; some factors that may have contributed to this include the recent enactment of legislation restricting the purchase of cold medicines and other precursor chemicals, the effectiveness of law enforcement, and increased community awareness and cooperation with law enforcement that has kept labs at bay. Other experts from the DEA and North Metro Drug Task Force expressed a belief that the number of laboratories has not declined, but that manufacturers have become more savvy at clandestine efforts.

It was also mentioned earlier that despite the decline in laboratory closures, the numbers of methamphetamine-related arrests and the quantities seized (exhibit 11) have increased. Some Denver Vice Detectives explained that this may be happening because Colorado’s supply of Mexican methamphetamine has risen to compensate for less local production. And while Mexican methamphetamine has had the reputation of being much lower quality than locally produced methamphetamine (which is reflected in substantial price differences [exhibit 12]), some authorities said that the quality of the Mexican methamphetamine currently entering Colorado rivals that of locally produced methamphetamine.

In 2004, staff at the Denver Public Health Sexually Transmitted Disease (STD) Clinic surveyed clientele ($n=981$) and noted an increased use of methamphetamine among men who have sex with men (MSM) (exhibit 13). They found that MSM methamphetamine users were more likely to use the Internet for connecting with casual sex partners and more likely to have unprotected sex than nonusers. MSM methamphetamine users were also twice as likely to have gonorrhea or HIV than nonusers. A related finding in 2004 was that 11 percent of randomly surveyed

patients ($n=202$) at the Denver Health Infectious Disease/AIDS Clinic reported use of methamphetamine within 3 months before the survey.

Marijuana

Of the five major illicit drugs, marijuana ranks first in treatment admissions and amounts seized, second in hospital discharges, and third in poison control center calls. The number of Denver-area treatment admissions for marijuana increased in recent years, as did the number of hospital discharges and amount of marijuana seized.

Excluding alcohol, marijuana has continued to account for the highest numbers of treatment admissions statewide and in the Denver area. From 2000 to 2003, the proportion of marijuana admissions (excluding alcohol) decreased from 43 to 35 percent statewide and, as shown in exhibit 2, constituted 37 percent of admissions in 2004 and in the first half of 2005.

In Denver, the proportions of marijuana admissions also declined from 37 percent in 2001 to 32 percent in 2003, but jumped up to 39 percent in 2004 and 40 percent in the first half of 2005 (exhibit 3).

Historically, marijuana admissions have represented the highest proportion of males among drug groups. In the first half of 2005, 76 percent of marijuana admissions statewide and 80 percent in Denver were male (exhibits 4 and 5). In prior years, the proportion males represented ranged from 72 to 75 percent of admissions statewide; however, in Denver, there appeared to be an upward trend in the proportion of males (69 to 80 percent from 2000 to 2005).

In the first half of 2005, Whites, Hispanics, and Blacks accounted for 52, 30, and 13 percent of marijuana admissions, respectively, statewide (exhibit 4). From 2003 to 2005 (first half), the proportion of White admissions decreased from 58 to 52 percent. However, the proportion of Black marijuana admissions increased between 2000 (7 percent) and 2005 (first half) (13 percent). The proportion of Hispanics decreased from 31 to 26 percent from 2000 to 2003, but increased in 2004 and in the first half of 2005 (28 and 30 percent, respectively).

In Denver, there was a clear downward trend in the proportion of White marijuana admissions from 2000 to the first half of 2005 (58 to 42 percent), but it was accompanied by a consistent rise in Black admissions during that time (11 to 21 percent). As with the statewide trend, Hispanics declined from 2000 to 2003 (27 to 24 percent), but increased to 29 and 32

percent, respectively, in 2004 and the first half of 2005.

In Colorado and Denver, marijuana users are typically the youngest of the treatment admissions groups. The average age in the first half of 2005 was 23.2 (median=20) statewide and 22.3 (median=19) in Denver. For both the State and Denver, there appeared to be slight upward trends in the age of treatment admissions. From 2000 to the first half of 2005, the median age increased from 18 to 20 statewide and from 17 to 19 in Denver, which may be reflective of an aging cohort in treatment.

Marijuana users not only tend to be the youngest of drug-using groups, but they also start to use at the youngest age. In the first half of 2005, the mean and median ages of onset statewide were both 14, and, for the Denver area they were 13.8 and 14.0, respectively (exhibit 6). Since 2000, the age of onset has remained stable both statewide and for Denver-area admissions.

Statewide in the first half of 2005, 21 percent of marijuana users had been using less than 3 years (exhibit 6), a slight decrease from 25 percent in 2003. In Denver, the proportion of new users in treatment decreased from 28 to 23 percent from 2003 to the first half of 2005.

In the first half of 2005, the mean time to enter treatment was 7.7 years statewide and 7.0 years for Denver-area admissions (exhibit 6). For the State as a whole and the Denver area, both the mean and median times to enter treatment increased by about a year since 2000.

In the 2005 reporting period, first-timers represented 52 percent of treatment admissions statewide (exhibit 6), a decline from 60 percent since 2000. In Denver, first-timers constituted 54 percent of admissions, and that proportion was also a decline (from 60 percent in 2001).

Treatment data, overall, show that marijuana users most often use alcohol as a secondary drug (exhibits 4 and 5), followed by methamphetamine and cocaine.

In the first half of 2005, there were 477 unweighted ED marijuana reports; these accounted for 18.9 percent of the illicit drug reports (exhibit 7).

CDPHE reported that the marijuana-related mortality data for the Denver PMSA has been quite small, from 1 in 1996 to a peak of 31 in 2001, with a decline to 5 in 2002. The annual numbers of cases since 2003 have been too small to report. No marijuana-related

deaths were reported in the DAWN 203 medical examiner/coroner data.

Marijuana-related hospital discharges increased steadily from 52 per 100,000 population in 1999 to 80 per 100,000 in 2004 (exhibit 9).

From 2002 through 2004, the number of Denver-area marijuana poison control center calls declined from 37 to 29. In 2004, there were 68 marijuana calls statewide, and in the first half of 2005, there were 35 marijuana calls (exhibit 10).

Other Drugs

This section covers five categories of drugs: other depressants (including barbiturates, benzodiazepines, tranquilizers, and other sedatives/hypnotics); stimulants and amphetamines other than cocaine, and, in some data sources, methamphetamine; club drugs; hallucinogens; and other drugs (over the counter drugs, inhalants, steroids, and other nonspecified drugs). The combination of all five categories represented less than 2 percent of treatment admissions statewide and less than 1 percent in the Denver metropolitan area in the first half of 2005.

During the first half of 2005, there were 12,270 treatment admissions in Colorado, including 42 admissions for other depressants, 27 for “other” stimulants, 22 for club drugs, 15 for hallucinogens, and 47 for other drugs. The small numbers preclude looking at demographic trends. However, the proportion of treatment admissions decreased slightly since 2000 for all categories except club drugs. The proportion of club drugs, which were not tracked until 2002, remained stable at around two-tenths of 1 percent.

In the first half of 2005, there were 37 unweighted ED reports for methylenedioxymethamphetamine (MDMA) (exhibit 7), 6 for gamma hydroxybutyrate (GHB), 11 for lysergic acid diethylamide (LSD), 6 for phencyclidine (PCP), 28 for miscellaneous hallucinogens, 20 for inhalants, and 9 for combinations not specified. All of these were among the 3,900 reports for “major substances of abuse.” There were also 296 unweighted ED reports for benzodiazepines and 86 for muscle relaxants.

Statewide in the first half of 2005, there were 47 deaths related to depressants and 45 related to stimulants other than cocaine. These figures are twice the volume of heroin-related deaths ($n=22$), but one-quarter the number of cocaine deaths (170), and fewer than 20 percent of the deaths related to non-heroin opiates (238). Before 2003, methamphetamine

deaths were reported separately, but since 2003, methamphetamine-related deaths were reported within the general category of “other stimulants/amphetamines.”

In 2005, there were 722 hospital discharges related to depressants, 2,284 involving stimulants/amphetamines (this category excludes cocaine but includes methamphetamine and psychostimulants, which are most likely club drugs), and 91 related to hallucinogens. While the hospital discharge rate (per 100,000 population) for the general stimulants/amphetamines category increased dramatically since 1999 (see exhibit 9), cases involving methamphetamine and club drugs cannot be isolated for analysis. The trend for discharges involving depressants cannot be assessed because this information was not available until 2004.

Poison control center calls for “other drugs” were reported for the following classes: stimulants/amphetamines (excluding cocaine and methamphetamine), club drugs, and hallucinogens. From 2001 through 2003, the number of stimulant/amphetamine-related calls in Denver was three in 2001 and 2002 and six in 2003 (exhibit 10). In 2004, the number of calls for this category was 4 for Denver and 316 statewide. Club drug calls for the city of Denver increased from 30 in 2001 to 55 in 2002 and then decreased to 40 in 2003. There was a discrepancy in the 2004 Denver and statewide numbers of club drug calls. In the June 2005 CEWG report, 39 club drug calls were reported for Denver, but only 11 such calls statewide were reported. When looking at the categories for GHB and hallucinogenic amphetamine (MDMA), there were 43 calls reported statewide for calendar year 2004 and 19 calls statewide in the first half of 2005. For hallucinogens, there were 29 calls statewide in 2004 and 17 in the first half of 2004.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

Of the 8,237 AIDS cases reported in Colorado through September 30, 2005, 9.2 percent were classified as injection drug users (IDUs), and another 10.8 percent were classified as homosexual or bisexual males and IDUs (exhibit 14). The proportion of newly diagnosed HIV and AIDS attributed to injection drug use has stayed fairly stable since 2001 (exhibits 15 and 16).

For inquiries concerning this report, please contact Tamara Hoxworth, Research Analyst, Department of Human Services, Colorado Alcohol and Drug Abuse Division, 4055 S. Lowell Boulevard, Denver, CO 80236, Phone: 303-866-7497, Fax: 303-866-7481, E-mail: <Tamara.hoxworth@state.co.us>.

Exhibit 1a. Denver DAWN ED Sample and Reporting Information: January–June 2005

Total Eligible Hospitals ¹	No. of Hospitals in DAWN Sample	Total EDs in DAWN Sample ²	No. of EDs Reporting per Month: Completeness of Data (%)		No. of EDs Not Reporting
			90–100%	< 90%	
14	14	14	7	0	7

¹Short-term, general, non-Federal hospitals with 24-hour emergency departments based on the American Hospital Association Annual Survey.

²Some hospitals have more than one emergency department. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted. Therefore, these data are subject to change.

SOURCE: DAWN *Live!* OAS, SAMHSA, updated 12/07/05

Exhibit 1b. Data Completeness for the Denver Metropolitan Area DAWN *Live!* Emergency Departments (n=14),¹ by Month: January–June 2005

Data Completeness	Number of EDs by Month					
	Jan-05	Feb-05	Mar-05	Apr-05	May-05	Jun-05
Basically Complete (90% or greater)	7	7	7	7	7	7
Partially Complete (< 90%)	0	0	0	0	0	0
No Data Reported	7	7	7	7	7	7
Total EDs in Sample	14	14	14	14	14	14

¹Total eligible hospitals in area=14; hospitals in DAWN sample=14; emergency departments in DAWN sample=14. Tables reflect cases received by DAWN as of 12/07/05. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted. Therefore, these data are subject to change.

SOURCE: DAWN *Live!*, OAS, SAMHSA, updated 12/07/05

Exhibit 2. Numbers and Percentages of Treatment Admissions by Primary Drug Type in Colorado: 2000–2005

Drug		2000	2001	2002	2003	2004	2005¹	Total
Alcohol	<i>n</i>	6,582	6,315	6,850	7,226	9,704	4,869	41,546
	%	40	39	39	38	41	40	39
Marijuana	<i>n</i>	4,137	4,252	4,348	4,204	5,243	2,768	24,952
	%	25	26	25	22	22	23	24
	(excluding alcohol) %	43	42	40	35	37	37	39
Methamphetamine	<i>n</i>	1,314	1,660	2,071	2,775	3,781	2,209	13,810
	%	8	10	12	14	16	18	13
	(excluding alcohol) %	14	16	19	23	27	30	22
Cocaine	<i>n</i>	1,917	1,888	2,193	2,352	2,972	1,374	12,696
	%	12	11	12	12	12	11	12
	(excluding alcohol) %	20	19	20	20	21	19	20
Heroin	<i>n</i>	1,576	1,480	1,419	1,665	1,258	591	7,989
	%	10	9	8	9	5	5	8
	(excluding alcohol) %	16	15	13	14	9	8	12
Other Opiates ²	<i>n</i>	321	395	411	544	611	306	2,588
	%	2	2	2	3	3	2	2
	(excluding alcohol) %	3	4	4	5	4	4	4
Depressants ³	<i>n</i>	64	64	158	130	100	42	558
	%	0.4	0.4	0.9	0.7	0.4	0.3	0.5
	(excluding alcohol) %	0.7	0.6	1.5	1.1	0.7	0.6	0.9
Other Amphetamines/Stimulants	<i>n</i>	108	91	104	78	55	27	463
	%	0.7	0.6	0.6	0.4	0.2	0.2	0.4
	(excluding alcohol) %	1.1	0.9	1.0	0.7	0.4	0.4	0.7
Hallucinogens ⁴	<i>n</i>	77	73	43	31	27	15	266
	%	0.5	0.4	0.2	0.2	0.2	0.1	0.3
	(excluding alcohol) %	0.8	0.7	0.4	0.3	0.2	0.2	0.4
Club Drugs ⁵	<i>n</i>	NA	NA	12	37	56	22	127
	%	NA	NA	0.1	0.2	0.2	0.2	0.1
	(excluding alcohol) %	NA	NA	0.1	0.3	0.4	0.3	0.2
Other ⁶	<i>n</i>	149	150	58	74	82	47	560
	%	0.9	0.9	0.3	0.4	0.3	0.4	0.5
	(excluding alcohol) %	1.5	1.5	0.5	0.6	0.6	0.6	0.9
Total	<i>N</i>	16,245	16,368	17,667	19,116	23,889	12,270	105,555
(excluding alcohol)	<i>N</i>	9,663	10,053	10,817	11,890	14,185	7,401	64,009

¹Includes data collected from 1/01/05 through 6/30/05 only.

²Includes nonprescription methadone and other opiates and synthetic opiates.

³Includes barbiturates, benzodiazepine tranquilizers, clonazepam, and other sedatives.

⁴Includes LSD, PCP, and other hallucinogens.

⁵Includes Rohypnol, ketamine (Special K), GHB, and MDMA (ecstasy).

⁶Includes inhalants, over-the-counter and other drugs not specified.

SOURCE: Drug/Alcohol Coordinated Data System, Alcohol and Drug Abuse Division, Colorado Department of Human Services

Exhibit 3. Numbers and Percentages of Treatment Admissions by Primary Drug Type in the Denver/Boulder Metropolitan Area: 2000–2005

Drug		2000	2001	2002	2003	2004	2005¹	Total
Alcohol	<i>n</i>	2,252	2,489	1,978	2,348	3,474	1,757	14,298
	%	34	33	32	29	33	34	32
Marijuana	<i>n</i>	1,545	1,851	1,454	1,854	2,670	1,393	10,767
	%	23	25	23	23	26	27	24
	(excluding alcohol) %	35	37	34	32	39	40	36
Methamphetamine	<i>n</i>	380	562	515	945	1,251	718	4,371
	%	6	7	8	12	12	14	10
	(excluding alcohol) %	9	11	12	16	18	21	15
Cocaine	<i>n</i>	979	1,027	942	1,256	1,572	695	6,471
	%	15	14	15	15	15	13	15
	(excluding alcohol) %	22	21	22	22	23	20	22
Heroin	<i>n</i>	1,576	1,480	1,419	1,665	1,258	591	7,989
	%	18	16	16	15	9	8	13
	(excluding alcohol) %	28	24	23	21	13	12	20
Other Opiates ²	<i>n</i>	184	238	207	300	338	170	1,437
	%	3	3	3	4	3	3	3
	(excluding alcohol) %	4	5	5	5	5	5	5
Depressants ³	<i>n</i>	29	32	78	55	47	24	265
	%	0.4	0.4	1.3	0.7	0.5	0.5	0.6
	(excluding alcohol) %	0.7	0.6	1.8	1.0	0.7	0.7	0.9
Other Amphetamines/Stimulants	<i>n</i>	23	25	33	31	24	9	145
	%	0.3	0.3	0.5	0.4	0.2	0.2	0.3
	(excluding alcohol) %	0.5	0.5	0.8	0.5	0.3	0.3	0.5
Hallucinogens ⁴	<i>n</i>	32	31	15	18	16	6	118
	%	0.5	0.4	0.2	0.2	0.2	0.1	0.3
	(excluding alcohol) %	0.7	0.6	0.4	0.3	0.2	0.2	0.4
Club Drugs ⁵	<i>n</i>	NA	NA	5	22	29	11	67
	%	NA	NA	0.1	0.3	0.3	0.2	0.2
	(excluding alcohol) %	NA	NA	0.1	0.4	0.4	0.3	0.2
Other ⁶	<i>n</i>	25	29	19	38	38	19	168
	%	0.4	0.4	0.3	0.5	0.4	0.4	0.4
	(excluding alcohol) %	0.6	0.6	0.4	0.7	0.6	0.6	0.6
Total	<i>N</i>	6,672	7,460	6,224	8,090	10,369	5,204	44,019
	(excluding alcohol) <i>N</i>	4,420	4,971	4,246	5,742	6,895	3,447	29,721

¹Includes data collected from 1/01/05 through 6/30/05 only.

²Includes nonprescription methadone and other opiates and synthetic opiates.

³Includes barbiturates, benzodiazepine tranquilizers, clonazepam, and other sedatives.

⁴Includes LSD, PCP, and other hallucinogens.

⁵Includes Rohypnol, ketamine (Special K), GHB, and MDMA (ecstasy).

⁶Includes inhalants, over-the-counter, and other drugs not specified.

SOURCE: Drug/Alcohol Coordinated Data System, Alcohol and Drug Abuse Division, Colorado Department of Human Services

Exhibit 4. Demographic Characteristics of Clients Admitted to Treatment in the State of Colorado, by Percent: January–June 2005

Characteristics	Alcohol (Only or in Combo)	Cocaine	Heroin	Other Opiates	Marijuana	Metham- phetamine	(Other) Stimulants ¹	All Other
Total (N=12,270)	(4,869)	(1,374)	(591)	(306)	(2,768)	(2,209)	(27)	(126)
Gender								
Male	72	59	65	50	76	54	70	63
Female	28	41	35	50	24	46	30	37
Race/Ethnicity								
White	67	42	66	85	52	82	52	70
African-American	5	19	9	5	13	1	4	8
Hispanic	23	36	21	8	30	14	44	19
Other	5	3	4	2	4	3		3
Age at Admission								
17 and younger	6	3	1	2	37	4	0	11
18–24	18	14	15	14	30	27	7	24
25–34	25	32	31	27	20	39	44	29
35–44	29	36	23	30	9	23	33	21
45–54	18	14	23	19	3	7	11	10
55 and older	5	2	6	8	1	0	4	4
Route of Administra- tion								
Smoking	0	60	8	1	95	64	30	15
Sniffing	2	32	6	6	3	12	7	10
Intravenous	0	6	85	9	0	21	18	2
Other/multiple	98	1	1	84	2	2	44	72
Secondary Drug	Marijuana 25	Alcohol 34	Cocaine 34	Alcohol 13	Alcohol 41	Marijuana 36	Alc./Marij. each 22	Alcohol 21
Tertiary Drug	Cocaine 5	Alcohol 14	Alcohol 7	Alcohol 6	Alcohol 9	Alcohol 16	Alc./Cocaine each 7	Alcohol 13

¹Includes other stimulants (e.g., Ritalin, etc.) and amphetamines (Benzedrine, Dexadrine, Desoxyn, etc.).

SOURCE: Drug/Alcohol Coordinated Data System, Alcohol and Drug Abuse Division, Colorado Department of Human Services

**Exhibit 5. Demographic Characteristics of Clients Admitted to Treatment in Denver, by Percent:
January–June 2005**

Characteristics	Alcohol (Only or in Combo)	Cocaine	Heroin	Other Opiates	Marijuana	Metham- phetamine	(Other) Stimulants ¹	All Other
Total (N=5,204):	(1,757)	(695)	(402)	(170)	(1,393)	(718)	(9)	(6)0
Gender								
Male	70	60	66	48	80	57	78	70
Female	30	40	34	52	20	43	22	30
Race/Ethnicity								
White	65	39	62	85	42	82	56	70
African-American	6	22	11	7	21	1	11	15
Hispanic	23	35	23	5	32	14	33	12
Other	6	3	4	3	5	3	0	3
Age at Admission								
17 and younger	6	3	1	3	44	3	0	12
18–24	15	14	13	12	27	24	0	22
25–34	28	31	33	23	18	40	44	27
35–44	29	37	21	31	9	24	22	23
45–54	17	13	26	22	2	8	22	10
55 and older	5	2	6	9	0	1	11	7
Route of Administra- tion								
Smoking	0	59	9	1	94	60	22	20
Sniffing	5	36	7	7	4.5	14	11	10
Intravenous	0	4	83	7	0.1	23	44	2
Other/multiple	94	1	1	85	1.4	3	22	68
Secondary Drug	Marijuana 24	Alcohol 36	Cocaine 33	Alcohol 12	Alcohol 39	Marijuana 30	Alc./Marij. 33	Alcohol 25
Tertiary Drug	Cocaine/Marij. each 5	Alcohol 13	Alcohol 7	Alcohol 6	Alc./Cocaine each 8	Alcohol 12	Alc./Marij. each 11	Marijuana 13

¹Includes other simulants (e.g., Ritalin, etc.) and amphetamines (Benzedrine, Dexadrine, Desoxyn, etc.).

SOURCE: Drug/Alcohol Coordinated Data System, Alcohol and Drug Abuse Division, Colorado Department of Human Services

Exhibit 6. Age of Onset, Years to Treatment, and Proportions of New Users (< 3 Years) and New to Treatment (Tx) Admissions for Colorado and the Denver Area: January–June 2005

Area		Cocaine	Heroin	Other Opiates	Methamphetamine	Marijuana
Statewide		(n=1,374)	(n=591)	(n=306)	(n=2,209)	(n=2,768)
Age at Onset	Mean	23.2	21.4	25.3	20.8	14.0
	Median	21	19	23	18	14
Years to Tx	Mean	9.1	12.0	8.4	7.5	7.7
	Median	7	7	5	6	5
% New Users		16	13	20	18	21
% New to Tx		33	22	37	37	52
Denver Area		(n=695)	(n=402)	(n=170)	(n=718)	(n=1,393)
Age at Onset	Mean	22.9	21.9	25.1	21.2	13.8
	Median	21	19	21.5	19	14
Years to Tx	Mean	9.8	12.4	9.6	7.7	7.0
	Median	8	7	4	6	5
% New Users		16	15	20	17	23
% New to Tx		34	22	37	33	54

SOURCE: Drug/Alcohol Coordinated Data System, Alcohol and Drug Abuse Division, Colorado Department of Human Services

Exhibit 7. Number and Percentage of Reports in Drug-Related ED Visits in Denver, by Drug Category (Unweighted¹): January–June 2005

Category/Drug	Number	Percent
Major Substances of Abuse (N=3,900)		
Alcohol	1,376	35.3
Illicit Drugs (Excluding Alcohol) (n=2,524)		
Cocaine	1,021	40.5
Heroin	309	12.2
Marijuana	477	18.9
Methamphetamine	442	17.5
Amphetamines	158	6.2
MDMA	37	1.5
Other ²	80	3.1
Other Substances (n=2,176) ³		
Benzodiazepines	296	—
Opiates/opioids	490	—
Muscle relaxants	86	—

¹Unweighted data from 7 Denver area hospital EDs reporting to DAWN. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted. Therefore, these data are subject to change.

²Includes GHB, ketamine, LSD, miscellaneous hallucinogens, inhalants, combinations not tabulated above.

³All “other substances” are not included here; therefore, no percentages are provided.

SOURCE: DAWN *Live!*, OAS, SAMHSA, updated 12/07/05

Exhibit 8. Drug-Related Deaths for Denver and Colorado: 2003 and 2004

Drug	Denver/Aurora Co. (2003)	Statewide (2003)	Statewide (2004)
Alcohol	130 ¹	1,141	1,052
Cocaine/Crack	102	180	170
Heroin	7	*	22
Other Opiates ²	138	247	238
Stimulants	26	47	45
Benzodiazepines ²	30	NR ³	NR
Antidepressants ²	28	NR	NR

¹Includes alcohol-in-combination with other drugs (all ages) and alcohol alone (decedents younger than 21).

²Includes "misuse," excludes "suicide."

³NR=Not reported.

*=Unknown.

SOURCES: DAWN, OAS, SAMHSA, and Colorado Department of Public Health and Environment

Exhibit 9. Numbers and Rates of Colorado Drug-Related Hospital Discharges Per 100,000 Population for Selected Drugs: 1997–2004

Drug	1997	1998	1999	2000	2001	2002	2003	2004
Alcohol (n)	NA ¹	17,154	18,577	18,744	20,644	21,433	23,750	24,889
Rate		418	441	432	464	474	518	535
Amphetamines (n)	959	815	682	942	1,161	1,463	1,814	2,284
Rate	24	20	16	22	26	32	40	49
Cocaine (n)	2,245	2,492	2,517	2,732	2,787	3,305	3,658	4,174
Rate	56	61	60	63	63	73	80	90
Marijuana (n)	2,118	2,227	2,204	2,455	2,755	3,016	3,246	3,729
Rate	53	54	52	57	62	67	71	80
Narcotic Analgesics (n)	1,458	1,566	1,639	2,053	2,237	2,605	3,368	2,850
Rate	36	38	39	47	50	58	73	61
Population	3,995,923	4,102,491	4,215,984	4,335,540	4,446,529	4,521,484	4,586,455	4,653,844

¹NA=Not available.

SOURCE: Colorado Department of Public Health and Environment, Colorado Hospital Association

Exhibit 10. Number of Drug-Related Calls¹ to the Rocky Mountain Poison & Drug Center in Denver and Colorado: 2001–2005²

Drug	Denver				Statewide	
	2001	2002	2003	2004	2004	2005 ²
Alcohol	110	149	150	223	762	415
Cocaine/Crack	59	66	68	59	120	51
Heroin/Morphine	19	16	22	18	20	14
Marijuana	34	37	36	29	68	35
Methamphetamine	20	39	39	66	95	65
Other Stimulants/Amphetamines	3	3	6	4	316	80
Club Drugs	30	55	40	39	11	12
Inhalants	4	16	10	4	29	U ³

¹ Human exposure calls only for Colorado statewide.

² Includes January through June 2005.

³ U = Unknown.

SOURCE: Rocky Mountain Poison & Drug Center

Exhibit 11. Federal Drug Seizures in Colorado: 2002–2004

Drug	Quantity Seized		
	2002	2003	2004
Cocaine	45.0 kilograms	65.5 kilograms	36.0 kilograms
Heroin	0.0 kilograms	3.9 kilograms	4.6 kilograms
Methamphetamine	18.9 kilograms	14.8 kilograms	28.8 kilograms
(Methamphetamine laboratories)	(483)	(345)	(144)
Marijuana	43.5 kilograms	444.1 kilograms	774.6 kilograms
Ecstasy	NR ¹	1,128 tablets	0 tablets

¹NR=Data not reported.

SOURCE: U.S. Drug Enforcement Administration State Factsheets for Colorado 2003–2005

Exhibit 12. Price and Purity of Selected Drugs in Denver: 2005

Drug	Wholesale Price	Retail Price	Street Price	Percent Purity at Retail Level
Powder Cocaine	\$14,000–\$19,000 kg	\$600–\$800 oz	\$50–\$100 gm	50–60%
Crack Cocaine		\$700–\$1,100 oz	\$20–\$50 rock	75–85%
Heroin	\$20,000–\$45,000 kg	\$1,100–\$1,200 oz	\$50–\$100 gm	6–73%
Methamphetamine	\$10,000–\$15,000 lb (Mex ¹) \$14,000–\$21,000 (LP ²)	\$600–\$1,400 oz	\$70–\$150 gm	14–50%(Mex) 70–90%(LP)
Marijuana	\$ 400–\$1,000 lb (Mex) \$1,500–\$4,000 lb (LP) \$2,000–\$5,000 lb (BC Bud)	\$ 50–\$ 80 oz (Mex) \$200–\$400 oz (LP) \$600 (BC Bud)	\$1 joint or \$5 bag (Mex) \$10 joint (BC Bud)	–
Ecstasy	–	–	\$6–\$25/pill	–
OxyContin	–	–	\$5–\$10/pill	Prescription

¹Mex=Mexican.

²LP=Locally produced.

SOURCE: DEA, National Drug Intelligence Center, local law enforcement

Exhibit 13. Sexual Risk and Methamphetamine (MA) Use in Denver MSM: 2004

	MA Users n=108	Nonusers n=873	Odds Ratio
Mean Age	33.1	39.4	
Mean Number of Male/Female Partners Last 12 Months	12.5 / 5.0	7.7 / 2.3	
Percent That Had Any Unprotected Sex Last 12 Months	76 (70.4%)	380 (43.5%)	3.1 (2.0–4.8)
Percent That Ever Tested for HIV	101 (93.5%)	815 (93.4%)	
Percent With Positive Result on Most Recent HIV Test	32 (31.7%)	121 (14.9%)	2.7 (1.7–4.2)

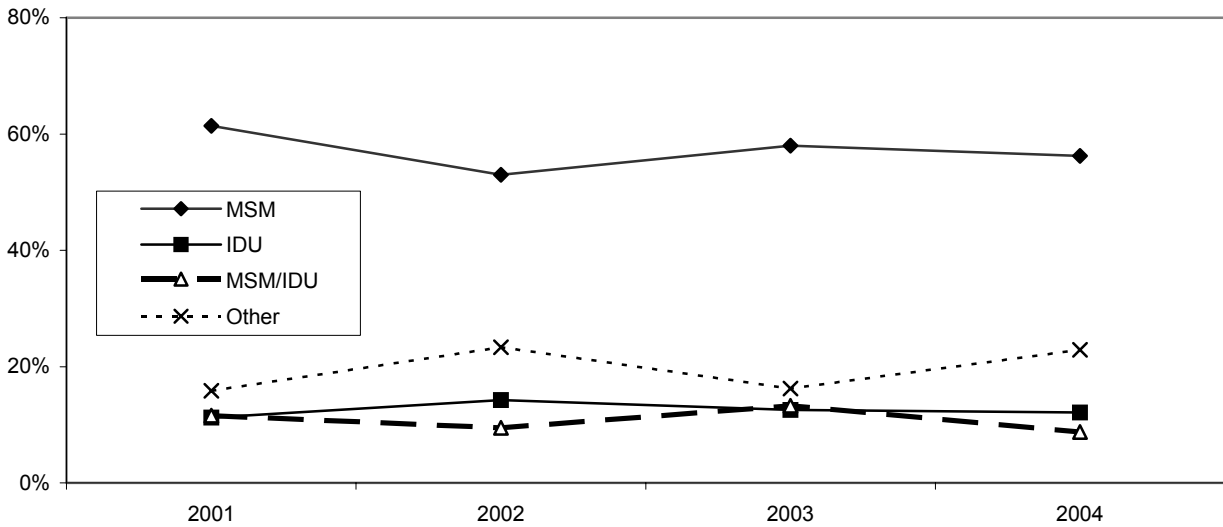
SOURCE: Dr. Mark Thrun, Denver Public Health 2004–2005 National HIV Behavioral Surveillance (NHBS) Survey

Exhibit 14. Colorado AIDS Cases by Exposure Category: Cumulative Through September 30, 2005

	Number of AIDS Cases ¹	Percent of AIDS Cases	Number of Individuals Testing Positive for HIV	Percent of Individuals Testing Positive for HIV
Gender				
Male	7,574	92.0	5,381	89.8
Female	663	8.0	608	10.2
Total	8,237	100.0	5,989	100.0
Exposure Category				
Men who have sex with men (MSM)	5,532	67.2	3,807	63.6
Injection drug user (IDU)	759	9.2	519	8.7
MSM and IDU	886	10.8	545	9.1
Heterosexual contact	509	6.2	410	6.8
Other	180	2.2	63	1.3
Risk not identified	371	4.5	645	10.8

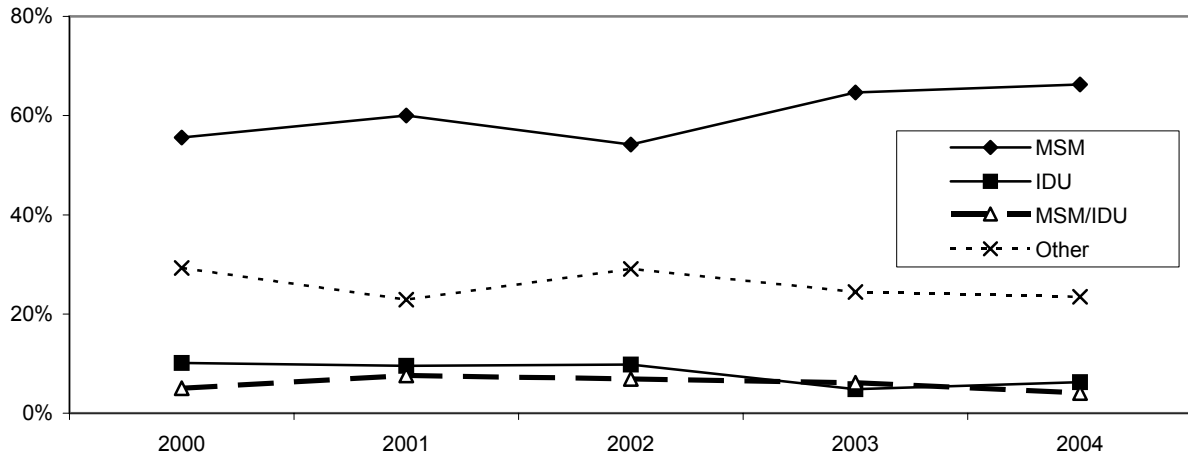
¹In October 2004, Colorado omitted cases who moved to other States, thereby reducing their HIV/AIDS database by 758 cases. Thus, reports produced before October 2004 show higher numbers of cases than reports produced after October 2004.
SOURCE: Colorado Department of Public Health & Environment

Exhibit 15. Percentage of New AIDS Cases in Colorado, by Exposure and Year: 2001–2004



SOURCE: Colorado Department of Public Health and Environment

Exhibit 16. Percentage of New HIV Cases in Colorado, by Exposure and Year: 2001–2004



SOURCE: Colorado Department of Public Health and Environment

Drug Abuse in Detroit, Wayne County, and Michigan

Cynthia L. Arfken, Ph.D.¹

ABSTRACT

Cocaine and heroin are the two major drugs of abuse in the area, but marijuana is the most widespread. Cocaine treatment admissions continued to stabilize; a high percentage of ED drug reports, ME reports, and number of items reviewed by forensic laboratories involved cocaine. In 2005 time periods, heroin treatment admissions, especially as the primary substance of abuse, continued to be high, as were ED and ME reports; however, there were few heroin items reviewed by forensic laboratories. Heroin may be moving into younger, more middle class populations. Indicators for methamphetamine remain low. The numbers of prescriptions filled for opiates have increased, especially for hydrocodone, methadone, codeine, and fentanyl. A lethal combination of heroin and fentanyl appeared in Detroit and northern Michigan during the second half of 2005.

INTRODUCTION

Area Description

Detroit and surrounding Wayne County are located in the southeast corner of Michigan's Lower Peninsula. In 2000, the Wayne County population totaled 2.1 million residents (of whom 46 percent live in Detroit) and represented 21 percent of Michigan's 9.9 million population.

Currently, Michigan is the eighth most populous State in the Nation. In 2000, Detroit ranked 10th in population among cities (with 951,000 people), but the population has since dropped below 900,000. It has the highest percentage of African-Americans (82 percent) of any major city in the country. The following factors contribute to probabilities of substance abuse in the State:

- Michigan has a major international airport, with a new terminal that opened 2002; 10 other large airports that also have international flights; and 235 public and private small airports. Long-term projections for the Detroit Metropolitan Airport forecast a 31-percent increase in flights during the next 10 years.

- The State has an international border of 700 miles with Ontario, Canada; land crossings at Detroit (bridge and a tunnel), Port Huron, and Sault Ste. Marie; and water crossings through three Great Lakes and the St. Lawrence Seaway, which connects to the Atlantic Ocean. Many places along the 85 miles of heavily developed waterway between Port Huron and Monroe County are less than one-half mile from Canada. Michigan has more than 1 million registered boats. In 2004, three major bridge crossings from Canada (Windsor Tunnel, Ambassador Bridge, and Port Huron) had 21.2 million vehicles cross into Michigan. Southeast Michigan is the busiest port on the northern U.S. border with Canada. Detroit and Port Huron also have nearly 10,000 trains entering from Canada each year.

Additional factors influence substance use in Detroit:

- The percentage of individuals living below the poverty line in 2000 (26.1 percent) was more than twice the national level (12.4 percent). The percentage has increased dramatically with the economic downturn.
- The percentage of working age individuals (age 21–64) with a disability is substantially higher than the national level (32.1 versus 19.2 percent).
- There are chronic structural unemployment problems. At the State level, the unemployment rate remains among the highest in the country since 2002, with no housing appreciation boom. Within the State, Detroit has one of the lowest rates of employed adults.

Data Sources

Data for this report were drawn from the sources shown below:

- **Emergency department (ED) data** were derived for January–June 2005 from the Drug Abuse Warning Network (DAWN) *Live!* restricted-access online query system administered by the Office of Applied Studies (OAS), Substance Abuse and Mental Health Services Administration (SAMHSA). Eligible hospitals in the Detroit area totaled 39; hospitals in the DAWN sample numbered 28, with the number of EDs in the sample totaling 29. (Some hospitals have more than one emergency department.) During this 6-month period, between 21 and 22 EDs reported data each month. The completeness of data reported by participating EDs did not vary much by month (*see exhibit 1*). Exhibits in this paper reflect cases that

¹The author is affiliated with Wayne State University, Detroit, Michigan.

were received by DAWN as of December 6–7, 2005. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted. Therefore, the data presented in this paper are subject to change. Data derived from DAWN *Live!* represent drug reports in drug-related ED visits. Drug reports exceed the number of ED visits, since a patient may report use of multiple drugs (up to six drugs and alcohol). The DAWN *Live!* data are unweighted and, thus, are not estimates for the reporting area. These data cannot be compared to DAWN data from 2002 and before, nor can preliminary data be used for comparison with future data. Only weighted DAWN data released by SAMHSA can be used for trend analysis. A full description of the DAWN system can be found at the DAWN Web site: <http://dawninfo.samhsa.gov>.

- **Treatment admissions data** for fiscal year (FY) 2005 were provided by the Bureau of Substance Abuse and Addiction Services, Division of Substance Abuse and Gambling Services, Michigan Department of Community Health (MDCH), for the city of Detroit for those persons whose treatment was covered by Medicaid or Block Grant funds. The data do not include admissions funded by the Department of Corrections. The city of Detroit uses a “Treatment on Demand” approach without a wait list (unless the client is seeking a specific provider). MDCH, following revised Treatment Episode Data Set (TEDS) Federal guidelines, is converting to an episode-based reporting system in which changes in levels of care that are part of the treatment plan (moving from residential treatment to outpatient, for example) are not reported as new separate admissions but rather as transfers within an episode. This transition has not been fully implemented by all publicly funded programs. As this change is fully implemented, it is expected that total admissions will decline, and comparisons of admissions trends before and after this change are not recommended. Treatment data in this report are limited to admissions in which treatment is the only indicator source for a particular drug or group of drugs.
- **Mortality data** were provided by the Wayne County Office of the Medical Examiner (ME). The Wayne County ME provided summary data on deaths with positive drug toxicology from January through October 2005. These drug tests are mostly routine when the decedent had a known drug use history, was younger than 50, died of natural causes or homicide, was a motor vehicle accident victim, or there was no other

clear cause of death. In addition, the ME provided summaries on the numbers of deaths attributed to drug abuse from 2000 to 2004.

- **Heroin purity and price data** were provided by the Drug Enforcement Administration (DEA). Data on heroin purity from 2002 to 2004 were from the DEA’s Domestic Monitor Program (DMP).
- **Drug intelligence data** were provided by the DEA, Michigan State Police, and the National Drug Intelligence Center.
- **Drug distribution data** were provided by the High Intensity Drug Trafficking Area, Investigative Support and Deconfliction Center, of Southeast Michigan (HIDTA-SEM). Nine counties (not all in southeast Michigan) now cooperate in HIDTA-SEM.
- **Data on drug content** among drug seizures were provided by the National Forensic Laboratory Information System (NFLIS) for 2004 and 2005.
- **Information on the number of prescriptions** filled in 2003–2004 was obtained from a special report by the Michigan Board of Pharmacists, 2004.
- **Poison control case data** from contact data on cases of intentional abuse of substances from January through September 2005 were provided by the Children’s Hospital of Michigan Poison Control Center in Detroit. This center is one of two in Michigan; its catchment area is eastern Michigan. Some statewide poison control data (from both regional centers) were provided.
- **Drug-related infectious disease data** were provided by the MDCH on the acquired immunodeficiency syndrome (AIDS) and human immunodeficiency virus (HIV) prevalence estimates as of October 1, 2005.

DRUG ABUSE PATTERNS AND TRENDS

Cocaine/Crack

For FY 2005, 24.5 percent of Detroit publicly funded treatment admissions listed cocaine/crack as the primary drug of abuse (exhibit 2). An additional 16.7 percent of treatment admissions listed cocaine/crack as the secondary drug. Clients seeking treatment for cocaine were more likely to be male (63.7 percent), African-American (88.1 percent), and age 35–44 (35.1 percent).

Cocaine constituted 46.0 percent of drug items reviewed by forensic laboratories in FY 2005 (exhibit 3).

According to unweighted DAWN *Live!* data, cocaine was the most frequent major substance of abuse reported in DAWN ED data in the metropolitan Detroit area between January and June 2005. The number of metropolitan Detroit ED cocaine reports was 2,679, representing 33.2 percent of the total reports (including alcohol reports) and 23.2 percent of reports excluding alcohol. Patients reporting cocaine were most likely to be male (62.2 percent), African-American (72.1 percent), and age 30–54 (79.5 percent).

Cocaine was detected in 318 deaths between January and October 2005 in Wayne County.

According to intelligence reports, crack cocaine is found in the city of Detroit, while powder cocaine is found elsewhere in the State. Prices are stable and low.

Heroin

In FY 2005, 30.8 percent of Detroit publicly funded treatment admissions listed heroin as the primary drug of abuse (exhibit 2). An additional 3.3 percent of treatment admissions listed heroin as the secondary drug. Clients seeking treatment for heroin were likely to be male (64.6 percent), African-American (82.3 percent), and age 45–54 (43.2 percent).

Only 12.2 percent of drug items reviewed by forensic laboratories were found to be heroin in FY 2005 (exhibit 3).

According to DAWN *Live!* unweighted data, 16.3 percent of ED reports for major substances of abuse (including alcohol) in the metropolitan Detroit area were for heroin. Excluding alcohol, heroin accounted for 24.5 percent of the reports. Patients reporting heroin were most likely to be male (61.9 percent), African-American (61.3 percent), and between the ages of 30 and 54 (73.1 percent).

Heroin was detected in 322 deaths between January and October 2005 in Wayne County.

Heroin street prices remained stable and relatively low in Detroit. Nearly all heroin continues to be white in color, with purity averaging 38.9 percent for South American heroin. South America remains the dominant source, although heroin originating in Southwest Asia has been identified (exhibit 4).

Other Opiates/Narcotic Analgesics

Other opiates represented 1.5 percent of primary treatment admissions in Detroit in FY 2005 (exhibit 2). The percentage of statewide treatment admissions listing other opiates as the primary drug of abuse increased from 1.2 percent in 1994 to 4.0 percent in 2003.

According to the number of prescriptions filled in 2002 and 2003, oxycodone products were most the most common Schedule II drugs; they represented 38 percent of all opioid prescriptions in 2002 and 34 percent in 2003. Prescriptions for fentanyl products, however, increased by 95 percent between 2002 and 2003 to represent 25 percent of the opioid prescriptions being filled in 2003. From 2003 to 2004, the percentage of prescriptions filled for Schedule II medications increased by 15.8 percent to 2,038,628 (exhibit 5). The percentage of prescriptions filled for Schedule III medications increased by 11.6 percent to 5,291,229, and the increase for Schedule IV medications was 9.4 percent. Only for Schedule V medications was there a drop in the growth of prescriptions filled (-2.2 percent). The rate of growth for oxycodone products slowed from 62.6 percent (2002 to 2003) to 10.6 percent for the period 2002 to 2004. The largest growth between 2003 and 2004 occurred for fentanyl lozenge products (298.5 percent).

Toxicology findings from the Wayne County ME laboratory showed 223 cases of codeine positivity between January and October 2005 (year-end projection of 268). This number is similar in magnitude compared with the 241 cases in 2002 and 232 in 2003. For oxycodone/combinations, there was a gradual increase, with 22 deaths during this 2005 time period (year-end projection of 26), compared with 10 in 2000, 13 in 2001, 12 in 2002, and 19 in 2003. For hydrocodone/combinations, there was also a gradual increase with 103 deaths in January–October 2005 (year-end projection of 124), compared with 60 in 2000, 80 in 2001, 120 in 2002, and 108 in 2003. Methadone was found in 65 decedents during January–September 2005.

Information from the Children’s Hospital of Michigan Poison Control Center (covering primarily eastern lower Michigan) on intentional abuse cases reported seven cases for codeine in Wayne County in January–September 2005, compared with nine cases during the same months for 2004. For oxycodone/combinations, there were five cases in the 2005 months, compared with four cases during the

same months for 2004. For hydrocodone/combinations, there were 32 cases during January–September 2005, compared with 22 cases during the same months for 2004.

According to unweighted DAWN *Live!* data, metropolitan Detroit-area ED hydrocodone/combinations represented 295 reports from January to June 2005. In contrast, there were 68 reports of oxycodone/combinations. Other medications in the DAWN data included codeine with 189 reports, methadone with 132 reports, and fentanyl with 84 reports.

According to intelligence reports, other opiates are common and viewed as a gateway to heroin, especially if obtaining prescription opiates becomes difficult. Because of difficulty in prosecuting diversion cases, the DEA is the sole agency investigating these cases.

Marijuana

Marijuana indicators remain mostly stable but at highly elevated levels. A new brand of marijuana has been reported: “purps,” or “purple haze,” which is similar in potency to BC Bud. It is hydroponic marijuana from Canada. Mexican marijuana remains widely available.

Marijuana accounted for 18.6 percent of all substance abuse publicly funded treatment admissions (including alcohol) in FY 2005 for Detroit (exhibit 2). Clients seeking treatment for marijuana were likely to be male (76.7 percent), African-American (84.6 percent), and age 35–44 (23.0 percent).

According to unweighted DAWN *Live!* data for January–June 2005, metropolitan Detroit-area ED marijuana reports represented 17.3 percent of major drug reports including alcohol and 24.5 percent excluding alcohol. Patients reporting marijuana were most likely to be male (63.5 percent), African-American (69.3 percent), and, although younger than cocaine or heroin users, between the ages of 30 and 54 (50.8 percent).

Marijuana represented the largest number of seizures and the highest cumulative value. Many law enforcement agencies (42 percent) in 2003 indicated that marijuana is the greatest threat to the State.

Stimulants

The latest treatment data show that admissions for primary drugs of abuse for stimulants other than cocaine included no admissions for amphetamines and only four admissions for methamphetamine in Detroit in FY 2005. Unweighted DAWN *Live!* ED data for

January–June 2005 show 77 reports of amphetamines and 16 for methamphetamine.

Only seven drug items reviewed by forensic laboratories were found to be methamphetamine in FY 2005 (exhibit 3).

Michigan’s border with Canada has been the focus of efforts to stop the flow of large amounts of pseudoephedrine and ephedrine into the United States. These imports are the necessary ingredients for making methamphetamine and have been destined for the western United States and Mexico. Indictments of numerous individuals and seizures of millions of pseudoephedrine dosage units have continued.

Methamphetamine may be present in the gay population, but it has only been found when arrests are made for other problems. In those situations, the methamphetamine has been in powder form.

Club Drugs

The club drugs category includes methylenedioxy-methamphetamine (MDMA or ecstasy), gamma hydroxybutyrate (GHB), flunitrazepam (Rohypnol), and ketamine. Indicators seem to be stabilizing or declining for ecstasy and ketamine and declining for GHB, although intelligence suggests there may be an increase in MDMA abuse.

Unweighted DAWN *Live!* ED data for January–June 2005 show 90 reports of MDMA and 4 for GHB.

Toxicology findings from the Wayne County ME laboratory showed 10 cases of MDMA between January and October 2005. All of the cases also were positive for methamphetamine, and the decedents had died violently. One source may be pills that contain both MDMA and methamphetamine, or these cases may indicate polydrug ingestion.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

Michigan continues to rank 17th among all States, with an AIDS case rate of 163 per 100,000 population. As of October 1, 2005, a cumulative total of 13,613 cases of AIDS had been reported in Michigan. Of the people currently living with AIDS or HIV, 43 percent live in the city of Detroit.

Injection drug users (IDUs) account for 17 percent of AIDS cases: 11 percent have only this risk factor, and 6 percent are IDUs who also have male-to-male sex as a risk factor.

Of the 9,173 men currently living with AIDS or HIV, 17 percent are IDUs and 6 percent are in the dual risk group.

41 percent were infected through heterosexual contact, and 33 percent have undetermined risk factors.

Among the 2,759 women currently living with AIDS or HIV, 23 percent are IDUs (25 percent among Black women and 19 percent among White women),

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Exhibit 1. Detroit DAWN ED Sample and Reporting Information: January–June 2005

Total Eligible Hospitals ¹	No. of Hospitals in DAWN Sample	Total EDs in DAWN Sample ²	No. of EDs Reporting per Month: Completeness of Data (%)			No. of EDs Not Reporting
			90–100%	50–89%	<50%	
39	28	29	19–21	0–2	0–1	7–8

¹Short-term, general, non-Federal hospitals with 24-hour emergency departments based on the American Hospital Association Annual Survey. Unweighted data from Detroit hospitals reporting to DAWN.

²Some hospitals have more than one emergency department. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted. Therefore, these data are subject to change.

SOURCE: DAWN Live!, OAS, SAMHSA, updated 12/6–12/7, 2005

Exhibit 2. Treatment Admissions in Detroit, by Primary and Secondary Drugs of Abuse and Percent: FY 2005

Drug	Primary Drug of Abuse	Secondary Drug of Abuse
Alcohol	29.3	16.0
Heroin	30.8	3.3
Cocaine	24.5	16.7
Other Opiates	1.5	0.8
Marijuana	10.9	7.7
Other Drugs	2.9	3.9

N=10,829

SOURCE: Michigan Department of Community Health, Division of Substance Abuse and Gambling Services, Bureau of Substance Abuse and Addiction Services

Exhibit 3. Numbers and Percentages of Seized Drug Items Analyzed in Detroit: FY 2005

Substance	Number of Items Seized	Percent of Items Seized
Cocaine	1,823	46.05
Cannabis	1,625	41.05
Heroin	484	12.23
Codeine	11	0.28
Methamphetamine	7	0.18
Propoxyphene	6	0.15
Synthetics	1	0.03
Methadone	1	0.03
3,4-methylenedioxymethamphetamine	1	
Total Items Reported	3,959	100.0

SOURCE: NFLIS

Exhibit 4. Purity and Price of Heroin in Detroit: 2004

Origin	Sample Numbers	Price Per Milligram	Purity
South American	21	0.86	38.9
Southwest Asian	8	0.85	47.3

SOURCE: DMP, DEA

Exhibit 5. Numbers of Drug Prescriptions for Opioids in Michigan: 2003–2004

Drug	2003	2004	Percent Change
Fentanyl Lozenge	1,292	5,149	298.5
Methadone	79,845	110,328	38.2
Oxycodone Products	223,838	247,531	10.6
Fentanyl Patch	218,558	264,092	20.8
Hydrocodone Products	3,174,922	3,686,073	16.2

SOURCE: Michigan Board of Pharmacists

Illicit Drug Use in Honolulu and the State of Hawai'i

D. William Wood, M.P.H., Ph.D.¹

ABSTRACT

This report represents the half-year 2005 report on illicit drug use in Honolulu. During this 6-month time period, there was a 25-percent increase in Medical Examiner reports for decedents positive for methamphetamine; a 20-percent increase in treatment admissions for primary methamphetamine drug admissions; a 20-percent increase in methamphetamine cases reported by the Honolulu Police Department; a 15-percent increase in positive decedent presence of other opiates; seizures of 47,000 marijuana plants; an 8-percent increase in treatment admissions for marijuana; and a 30-percent increase in alcohol-related deaths. As these major increases in drug activity were being reported, the State was undergoing a major fiscal recovery. Unemployment was nearly nonexistent, at 3 percent. As of June 2005, Caucasians represented nearly two-fifths of the population. In this report, a new data source is presented in the form of data from the Medicaid UB-82 forms prepared by every hospital in the State. This data source, based on audited codings and billings to insurance companies and the Federal Government, provides accurate, timely, and descriptive information.

INTRODUCTION

This report presents current information on illicit drug use in Hawai'i, based on the Honolulu Community Epidemiology Work Group (CEWG), described later in this section.

Area Description

The Aloha State, Hawai'i, was the 50th State to join the Union (1959) and will celebrate 47 years of statehood next year. During that time period, the population of the State has grown from 632,772 in 1960 to approximately 1.4 million (2005 estimate) today. The population is now nearly all urban dwellers (90 percent), but at statehood, that proportion was closer to 75 percent. In addition, while the State has boasted of having no ethnic majority group, changes since the 2000 census suggest that there may be a shift under-

way, with Caucasians now representing nearly two-fifths of the population.

The State depends on tourism, government, and the military as its mainstays of the economy; however, at statehood, agriculture was still strongly in third place, with government and the military in first and second places, respectively. Those shifts have made a tremendous change in the social fabric of the islands. Where once there were pineapple and sugar cane fields, now there are resorts and housing developments. Where once the "Aloha Spirit" prevailed throughout the islands, now it is a commodity to be marketed to foreigners to the islands as an attraction for their visits.

The tourism boom of the millennium started as a bust resulting from the September 11, 2001, attacks and the subsequent decline in air travel across the Nation and internationally. However, as the economies of the mainland and other nations recovered and rebuilt, tourism again became the number one industry in the State. The subsequent explosion in the construction industry has meant that anyone who wants a job can get one. With less than 3 percent of the population unemployed, disposable incomes have risen dramatically. At the same time, housing and living costs have risen even more quickly.

Housing in 1959 was seen as expensive by most standards, with a three-bedroom home on a small (8,000 square foot) lot costing \$23,500. However, that same house in 2005 cost a buyer an average of \$640,500, an increase of 2,634 percent. Currently, the Federal Government Cost of Living Allowance for Hawai'i is set at 22 percent, meaning that the U.S. Government has determined that costs for basic living items are 22 percent higher in Hawai'i than in the Nation, in general.

The result of these shifts and economic determinants is that for the average resident of the State, the possibility of buying a house is nonexistent; the costs of food and basic necessities, while high, are within their income potentials; and the average incomes of construction and service employees are inflated because of overtime and skilled worker shortages. These surplus funds are being directed into purchases of nonessentials, such as big-screen TVs, high performance cars, renovations to properties owned, and, for increasingly more people, illicit drug purchases.

Data Sources

Much of the data presented in this report are from the Honolulu CEWG, which met on November 18, 2005. The meeting was hosted by the Hawai'i High Inten-

¹The author is affiliated with the Department of Sociology, University of Hawai'i at Manoa, Honolulu, Hawai'i.

sity Drug Trafficking Area (HIDTA) program office, whose staff facilitated the attendance of the Drug Enforcement Administration (DEA) representatives, as well as persons knowledgeable about drug data from Honolulu and neighbor islands. The State of Hawai'i Narcotics Enforcement Division, although invited, did not participate in the CEWG meeting. The Honolulu Police Department submitted data and was able to attend and participate in the CEWG meeting, as did the State's Alcohol and Drug Abuse Division. This report is focused only on drug activities on O'ahu (Honolulu County) for the first 6 months (January to June) of calendar year 2005. Other specific data sources are listed below:

- **Treatment admissions and demographic data** were provided by the Hawai'i State Department of Health, Alcohol and Drug Abuse Division (ADAD) for the first half of 2005. Previous data from ADAD are updated for this report whenever ADAD reviews its records. These data represent all State-supported treatment facilities (90 percent of all facilities). About 5–10 percent of these programs and two large private treatment facilities do not provide data. During this reporting period, approximately 45 percent of the treatment admissions were paid for by ADAD; the remainder were covered by State health insurance agencies or by private insurance. The rate of uninsurance for the State is about 10 percent.
- **Drug-related death data** were provided by the Honolulu City and County Medical Examiner (ME) Office for 1991 through the first half of 2005. These data are based on toxicology screens performed by the ME Office on bodies brought to them for examination. The types of circumstances that would lead to the body being examined by the ME include unattended deaths, deaths by suspicious cause, and clear drug-related deaths. In short, while the ME data are consistent, they are not comprehensive and account for only about one-third of all deaths on O'ahu. To allow a direct comparison between ME data and treatment data, the ME data were multiplied by a factor of 10 on the exhibits.
- **Law enforcement case data** for the first half of 2005 were received from the Honolulu Police Department (HPD), Narcotics/Vice Division only.
- **Drug price data** were provided for the first half of 2005 by the HPD, Narcotics/Vice Division.

- **Uniform Crime Reports (UCR) data** were accessed from the State's Attorney General's Web site for 1975–2003.

Emergency department (ED) drug mentions data have not been available in Hawai'i since 1994. Discussions with the Healthcare Association of Hawai'i regarding inclusion in the Drug Abuse Warning Network (DAWN) program have resulted in a briefing of all hospital CEOs and the sharing of DAWN information. Over the past 2 years, the healthcare industry of the State has been hoping for a meeting with this program. To date, nothing is scheduled. However, in a continual attempt to secure new datasets, the CEWG for Honolulu and Hawai'i State was able to secure hospital emergency department admissions data for 2004 from the Hawai'i Health Information Corporation. These data provide the audited numbers of ICD-9CM diagnoses by age, sex, marital status, and patient home geo-descriptor that were billed using the UB-82 hospital billing forms from the Centers for Medicaid Services, DHHS, and were billed to the Federal Government or health insurance companies in 2004 (see <http://www.unlv.edu/Research_Centers/chia/hospitalinpatientdata/html/hospitalfilingrequirements.htm>).

DRUG ABUSE PATTERNS AND TRENDS

General Comments

Hawaiians and Whites remain the majority user groups among the 17 identified ethnic groups (plus 2 other categories: "other" and "unknown/blank") who access ADAD facilities for substance abuse treatment. During the first half of 2005, 44.4 percent and 22.0 percent of the admissions were Hawaiians/Part Hawaiians or Whites, respectively. All other groups represented significantly lower proportions of admissions. A two-to-one ratio of males to females characterizes treatment admissions, and, by far, the age groups 35–44 (24.2 percent), 25–34 (24.1 percent), and younger than 18 (23.4 percent) dominated the admissions. More than one-third (38.5 percent) of admissions were from court referrals.

Methamphetamine remains the leading primary substance of abuse for those admitted to treatment, accounting for 44.2 percent of all admissions in the first half of 2005. Marijuana remained the third most frequently reported primary substance for treatment admissions (20.5 percent), behind alcohol (24.3 percent). It is important to point out, however, that almost all admissions are polydrug treatment admissions, and most list alcohol as a substance of abuse. While marijuana abuse accounts for the majority of treatment admissions among those younger than 18

(the third most frequently admitted age group), the abuse of ice or crystal methamphetamine still looms as a major treatment category for this group.

The police data used in this report are only for the Honolulu Police Department. In previous reports, attempts have been made to include whatever data were available from neighbor island police departments. The frequency and consistency of reporting made it impossible to continue the practice, and from this point forward only HPD data will be reported.

During 2005, drug prices in general rose in most categories (see exhibit 1). The size of the drug supply seems stable, with seizures having little impact on price structure.

Cocaine/Crack

Powder cocaine and crack treatment admissions in Hawai'i were relatively stable or slightly declining during the current period. There were 363 primary cocaine treatment admissions in 2004; for the first half of 2005, that number was 162 (exhibit 2). If the patterns of admissions prevail for the entire year, approximately 324 cocaine/crack admissions will occur. This shows that the number of clients listing cocaine as the primary drug, after being quite stable for several years, began a decline in 1999 that continued through the first half of 2005. Powder cocaine/crack now ranks fourth among primary drugs of treatment admissions, after methamphetamine, alcohol, and marijuana.

The Honolulu ME reported 12 deaths with a cocaine-positive toxicology screen during the first half of 2005, which compares to the 22 deaths in all of 2004 (exhibit 2). In 2003, there were 26 deaths, compared with 22–24 in 1999–2002. It should be remembered that data on the chart have been adjusted to allow for their presentation on the same axes by multiplying all death data by a constant of 10.

According to the HPD, cocaine prices have remained relatively stable over the past several years. One-quarter gram of crack sold for \$20–\$40 in 2005. The same amount of cocaine powder, while not listed on the HPD chart, was estimated to cost \$25–\$35 (exhibit 1). Police cases for cocaine/crack returned to their decade-long decline during the first half of 2005, with 75 cases (exhibit 3). If that number continues for the entire year, then the decline will be confirmed and the annual number of cases for 2005 will be about 150 cases. This compares with 239 cases from 2004. Over the past several years, the number of HPD cocaine cases plummeted from more

than 1,200 cases in 1996 to possibly as few as 150 cases in 2005.

Heroin and Other Opiates

China white heroin has been uncommon in Hawai'i for many years, but it is occasionally available for a premium price. The heroin market for Honolulu is dominated by black tar heroin, and it is readily available in all areas of the State. HPD data show 3,600 grams of black tar and 18.5 grams of China white powder were seized in the first 6 months of 2005. This exceeds the seizures of heroin for the entire year of 2004 (1,251 grams of black tar and 1.6 grams of powder) and is even higher than the 3,502 grams of black tar seized in 2003 and the 0.019 grams of powder seized in 2003. For 2002, 992 grams of black tar and 494 grams of powder were seized. In 2001, 530 grams of powder were seized, along with 3,258 grams of black tar heroin. According to the HPD in 2005, black tar heroin prices have dropped in Honolulu to \$20–\$50 per one-quarter gram, \$500–\$800 per one-quarter ounce (7 grams), and \$1,700–\$2,000 per ounce (exhibit 1).

Heroin treatment admissions in Hawai'i continued the decline begun in 1999 (exhibit 4). In 1998, record levels of treatment admissions were recorded, with more than 500 individual admissions that year. In the first half of 2005, however, heroin ranked sixth among treatment admissions at 2.4 percent ($n=99$).

The Honolulu ME reported that deaths in which opiates were detected again rose in the first half of 2005; however, the residuals of heroin versus other opiates could not be definitively separated for several cases. For now, only nine heroin deaths are confirmed for the first 6 months of 2005 (exhibit 4). Decedents with a positive toxicological result for other opiates were primarily comprised of those in whom oxycodone, morphine, or methadone were detected. The exact medication (OxyContin or another) used was not specified. Six decedents had oxycodone present, 8 had hydrocodone, and rest of the 37 “other opiates” decedents ($n=23$) had morphine present in their toxicology screens. An additional concern regarding methadone was expressed by the Medical Examiner's office this year. Previously, the ME had been asked to review its records and to monitor the appearance of methadone among decedents. In the first half of 2005, there were 14 decedents with methadone in the toxicology screens, compared with 25 decedents in all of 2004, 22 in 2003, and 28 in 2002.

The HPD reported 16 heroin cases in the first half of 2005, compared with 25 cases in 2001, 44 in 2002, 30 in 2003, and 34 in 2004 (exhibit 5). In spite of the

very high number of cases reported in 1998, the decade-long trend in heroin cases is a downward one from the 54 cases reported in 1995.

Marijuana

Statewide, marijuana treatment admissions for the first half of 2005 showed a slight increase over previous years. If the number of admissions continues for the rest of the year, the net result will be an annualized increase in admissions of about 8 percent over the 2004 admissions. In 2004, 1,461 admissions were reported for the year (exhibit 6). There was an increase in 2003, following the slight decline in admissions in 2002. Those admitted for treatment in 2004 continued to be younger persons referred by the courts. In examining these treatment data, it is important to remember that the number of persons in treatment for marijuana use in 2004 was triple the number in treatment in 1992. It is also important to note that while marijuana is listed as the primary drug of use at admission, many users of other drugs use marijuana as a secondary or tertiary drug of choice.

Between 1994 and 1999, the O'ahu ME reported 12–21 deaths per year in which marijuana was found in the specimens submitted for toxicology screening (exhibit 6). Those numbers increased to 25 in 2000, 36 in 2001, 30 in 2002, 32 in 2003, and 31 in 2004. In the first half of 2005, the number of decedents with a positive tetrahydrocannabinol (THC) toxicological screen was 26, which if extended for the entire year will result in 52, the highest number to be reported since record collection began on 1991. Again, in most instances, marijuana was used with other drugs if there was a drug-related death.

The HPD continues to monitor, but to not specifically report, case data for marijuana. As mentioned in previous CEWG reports, possession cases are steady at about 650 per year, although distribution cases have continued to increase. Law enforcement sources speculate that much of the Big Island's marijuana is brought to O'ahu for sale. Exhibit 7 shows the HPD reported 72 marijuana cases in the first half of 2005. In the first half of 2005, three marijuana plants were seized and a total of 2,704 grams of dried marijuana were seized. The comparable numbers for 2004 were 1,045 plants and 24,814 grams of dried marijuana.

As shown in exhibit 1, marijuana cost \$20–\$40 per joint and \$300–\$550 per ounce during 2005.

Methamphetamine

Hawai'i's drug of choice among the 18–34-year-old population group remains crystal methamphetamine.

“Ice” has been a drug of concern among treatment providers and law enforcement officers for two decades now and seems to be worsening in every report. The methamphetamine seized in Hawai'i shows that the purity is near perfect (more than 90 percent). Such high purity is necessary for the smoking of the drug—Hawai'i's chosen route of administration.

Statewide methamphetamine treatment admissions remained extremely high ($n=1,845$, accounting for 44 percent of admissions during the first half of 2005), continuing the increase in admissions observed for the past 13 years (exhibit 8). In 2003, there were 3,182 such admissions, up from 2,677 in 2002. The increase in demand for treatment space for methamphetamine abusers has been nearly 2,000 percent since 1991. This situation has so far outstripped the treatment system's capacity, that people who might want treatment for alcohol or any other drug would not likely receive it in a timely manner. With court diversion programs in place, the available treatment slots for non-judicial treatment admissions are extremely tight.

Between 1994 and 2000, the O'ahu ME mentioned crystal methamphetamine in 24–38 cases per year (exhibit 8). In 2001, that number jumped to 54, and methamphetamine-positive decedents increased to 62 in 2002. In 2003, the number of decedents with ice detected in their toxicology reports was 56. For 2004, there were 67 deaths with positive toxicology results for methamphetamine, representing 76.5 deaths per 1,000,000 population for the island of O'ahu. In the first half of 2005, there were 44 deaths in which methamphetamine was found in the decedent's toxicological screen. If that pattern continues, there will have been 88 methamphetamine-related deaths in Honolulu by the end of 2005. That will represent a death rate of 97.7 per million population.

Crystal methamphetamine prices decreased slightly in the first half of 2005. The drug is sold in the islands as “clear” (a clear, white form) or “wash” (a brownish, less processed form). Prices for ice varied widely in 2005 according to these two categories and availability, as illustrated by prices in Honolulu: \$40 (wash) or \$80 (clear) per 0.25 gram; \$500 (wash) or \$750 (clear) per one-quarter ounce; and \$1,800–\$2,800 (wash) per ounce (exhibit 1).

HPD methamphetamine case data for Honolulu had previously peaked at 984 in 1995 (exhibit 9). The annual number of cases subsequently declined each year, and they totaled 616 in 2002 and 964 in 2003. In 2004, a total of 883 cases were reported. For the first half of 2005, 504 cases were registered by the Honolulu Police Department, which will set a record

for number of cases (1,008) if the case activity remains similar for the rest of the year. Minimal data are available from the neighbor islands, but they also show an increase in cases.

NFLIS data for FY 2003 and FY 2004 show that methamphetamine was the most often seized substance, with 62 percent of the FY 2003 and 57 percent of the FY 2004 samples testing positive for the drug.

Depressants

Barbiturates, sedatives, and sedatives/hypnotics are combined into this category. Few data were provided about these drugs in the islands.

ADAD maintains three categories under this heading: benzodiazepines, other tranquilizers, and barbiturates. Treatment admissions for these drugs are minimal in terms of impact on the State system. Annually, the numbers admitted to treatment for these drugs total less than 10.

The number of ME mentions for depressants in Honolulu has remained stable for several years at five or less.

The HPD has not reported depressant case data since 1991. Neighbor island police reported fewer than 15 cases per year since 1996.

Hallucinogens

Statewide, hallucinogen treatment admissions have totaled less than five per year during recent periods. No hallucinogen ME mentions have been reported since the beginning of data collection.

Prices for lysergic acid diethylamide (LSD) were \$4–\$6 per "hit" and \$225–\$275 per 100 dosage unit sheets (a "page") in 2005 (exhibit 1).

Overall Death Data

An examination of exhibit 10 shows that over the past 14.5 years, the Honolulu Medical Examiner drug cases have varied considerably. Brief descriptions of drug trends, as seen from the Medical Examiner's viewpoint, were very complex in the early 1990s, with low numbers of cases for cocaine, methamphetamine, and marijuana. In addition, it is important to note that the accumulation of drug cases in 1993–1995 became quite high.

By 2000, heroin cases had started to decline, but marijuana and methamphetamine cases began to soar

in numbers. Cocaine cases remained relatively stable throughout this period, but they appear to have begun a decline in the mid 2000–2005 period. Alcohol cases, which were only added to the series in 2000, show a continual and rapid increase.

A New Data Set

In examining exhibits 11 through 15, several things need to be known about the data. First is the source of the data. Because Hawai'i has not been and is not a part of the DAWN Network, the Honolulu CEWG had to be innovative in seeking indicators of emergency room and medical examiner data. For the past 14 years, data have been systematically collected, recorded, and reported from the Medical Examiner's Office of the City and County of Honolulu. The limited findings are reported to members of the Honolulu CEWG as well as at the national CEWG meetings. Over the years, the Medical Examiner's Office has become more sophisticated in the recording of its data and, with the next report, the Honolulu CEWG will be utilizing its new computer database for reporting. This should improve the detail and allow for some basic demographic data and some sense of the presence of a polydrug pattern in decedents.

However, this has not solved the lack of sentinel data from the hospital systems of Hawai'i. For this, the Honolulu CEWG has succeeded in securing, for this report, the cooperation of a data warehouse in Hawai'i known as the Hawai'i Health Information Corporation (HHIC), a for-profit collaboration of all the hospitals within the State. The data held by the HHIC is proprietary and tightly controlled because of the Health Insurance Portability and Accountability Act (HIPAA), as well as collaborator concerns regarding confidentiality. Nonetheless, they have kindly allowed CEWG members to see what they could provide with respect to illicit drug use for the year 2004.

In the charts (exhibits 12–15), data have been presented by age and island of residence for ICD9-CM diagnoses on admission to the emergency departments of all hospitals in the State. Verification of the data is multiple, with each hospital receiving preliminary data from its own facility for edit checks and preliminary review. Data are also those sent to payers for reimbursement on the Federal UB-82 claims form used for Medicaid and Medicare patients.

That form and its full content can be found at the following URL: http://www.unlv.edu/Research_Centers chia/hospitalinpatientdata/html/hospitalfiling requirements.htm.

As can be seen, the O'ahu chart shows the extent to which amphetamines (used to include both amphetamine and methamphetamine admissions) are by far the most common admission diagnoses. It also shows the degree to which opioid admissions become important for the older age groupings. Since alcohol is not an illicit substance, it is not included in the charts, but with minimal effort, it could be. The message here is that this is a database that exists in many

States and may be useful as an adjunct to DAWN data if available or as a substitute if DAWN data are not available.

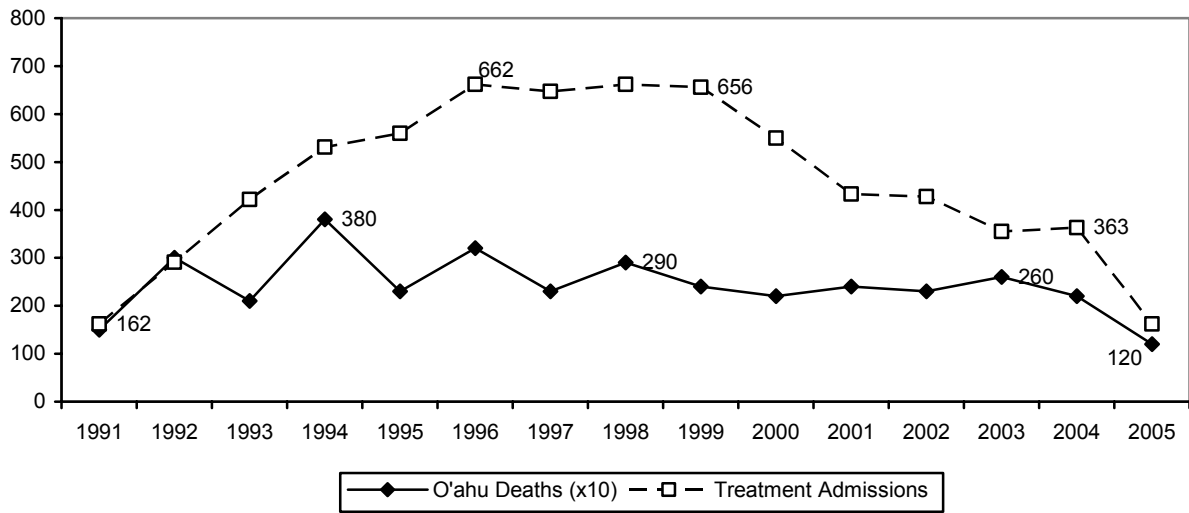
For inquiries concerning this report, please contact D. William Wood, Ph.D., Department of Sociology, University of Hawai'i at Manoa, 2424 Maile Way, Room 247 Saunders Hall, Honolulu, HI 96822, Phone: 808-956-7693, Fax: 808-965-3707, E-mail: dwwood@hawaii.edu.

Exhibit 1. Drug Prices in Honolulu: 2005¹

Drug	Paper (1/4 Gram)	½ Teen (0.88 Grams)	8-Ball (1/8 Ounce)	Quarter (1/4 Ounce)	“O” (1 Ounce)	“LBs” (1 Pound)	“Kilos” (1 Kilogram)
Heroin White	\$30–\$70				\$1,700–\$2,000	\$30,000	\$70,000
Black tar	\$20–\$50			\$500–\$800	\$1,700–\$2,000		
Cocaine Powdered		\$100–\$120	\$250–\$350	\$400–\$600	\$1,100–\$1,500	\$13,500–\$25,000	\$26,500–\$52,000
Rock	\$20–\$40		\$200–\$300				
Crack	\$20–\$40	\$60–\$90	\$140–\$225	\$300–\$450	\$1,050–\$1,200		
Crystal Meth.	\$40–\$80	\$100–\$150	\$300–\$450	\$500–\$750	\$1,800–\$2,800	\$18,000–\$28,000	
LSD	\$4–\$6			\$225–\$275 (100s)			
Marijuana	\$20–\$40				\$300–\$550	\$6,000–\$9,000	
Hashish	\$10–\$15						
Phencyclidine (PCP)	\$10–\$20	\$100		\$350–\$550	\$900–\$1,200		
MDMA	\$15–\$50						
Vicodin	\$3–\$5 tab						
Valium	\$3–\$5 tab						
Xanax	\$3–\$8 tab						

¹Represents the first half of 2005.
SOURCE: Honolulu Police Department

Exhibit 2. Cocaine Death¹ and Treatment Data in Hawai'i: 1991–2005²

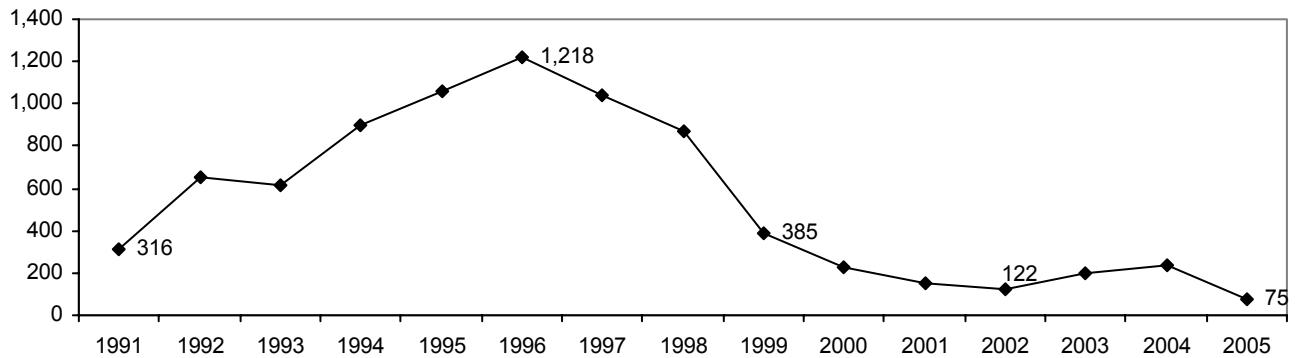


¹Multiplied by 10; data are for Honolulu City and County.

²All data are for the first half of 2005; data are for the State of Hawai'i.

SOURCES: Honolulu City and County Medical Examiner Office and State Department of Health, Alcohol and Drug Abuse Division

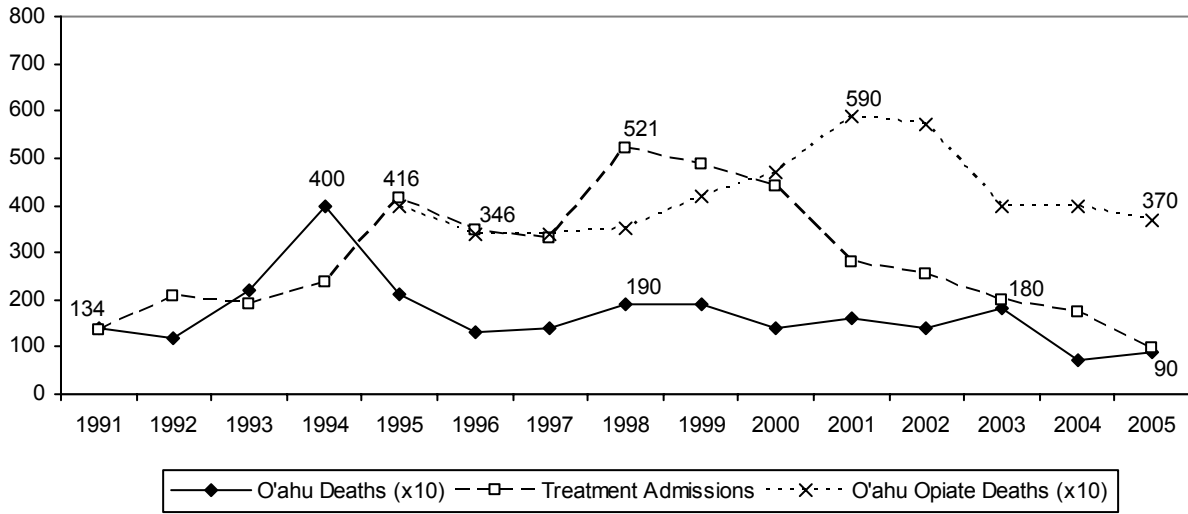
Exhibit 3. Police Data on Cocaine Cases in Honolulu: 1991–2005¹



¹Data represent the first half of 2005.

SOURCE: Honolulu Police Department, Narcotics/Vice Division

Exhibit 4. Heroin Death¹ and Treatment Data in Hawai'i: 1991–2005²

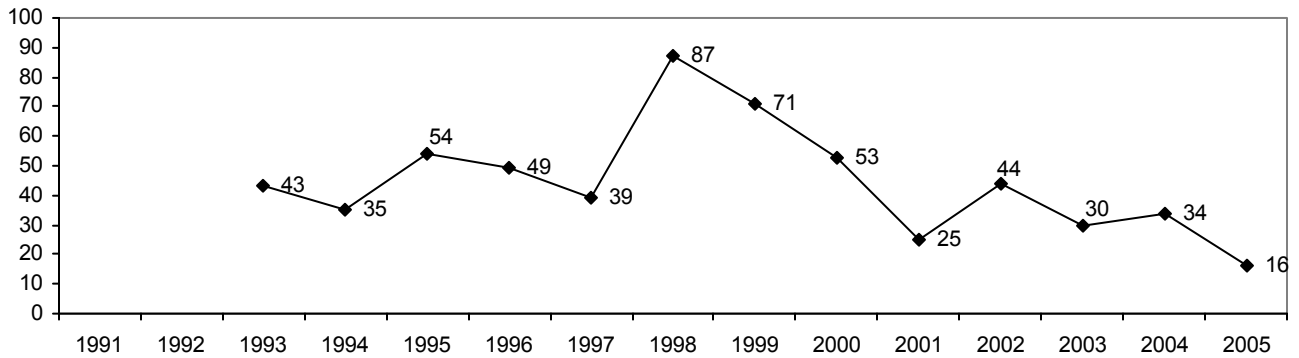


¹Multiplied by 10; data are for Honolulu City and County.

²All data are for the first half of 2005; data are for the State of Hawai'i.

SOURCES: Honolulu City and County Medical Examiner Office and State Department of Health, Alcohol and Drug Abuse Division

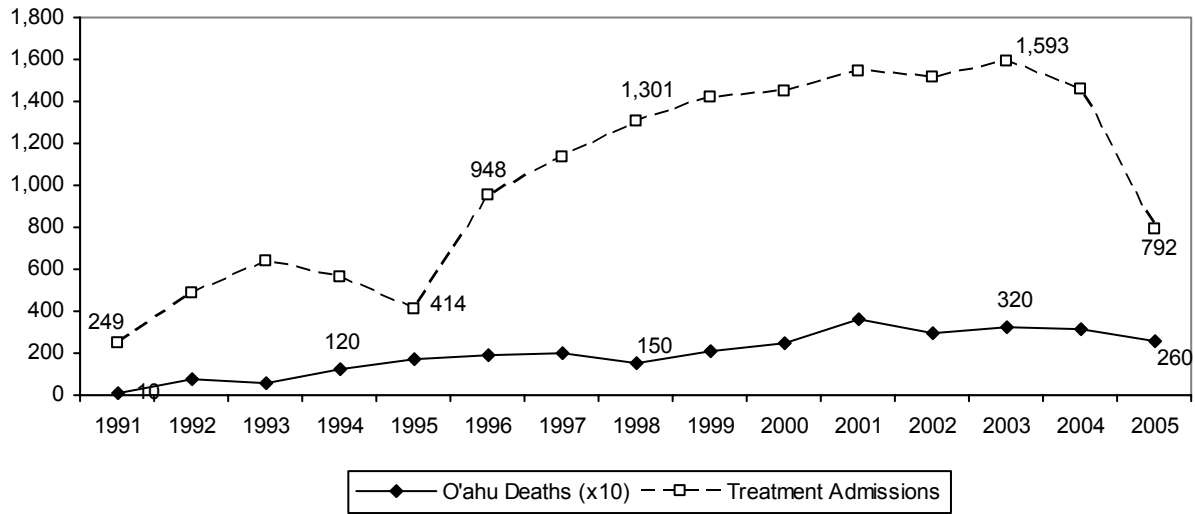
Exhibit 5. Police Data on Heroin Cases in Honolulu: 1991–2005¹



¹Data represent the first half of 2005; data for 1991 and 1992 were not available.

SOURCE: Honolulu Police Department, Narcotics/Vice Division

Exhibit 6. Marijuana Death¹ and Treatment Data in Hawai'i: 1991–2005²

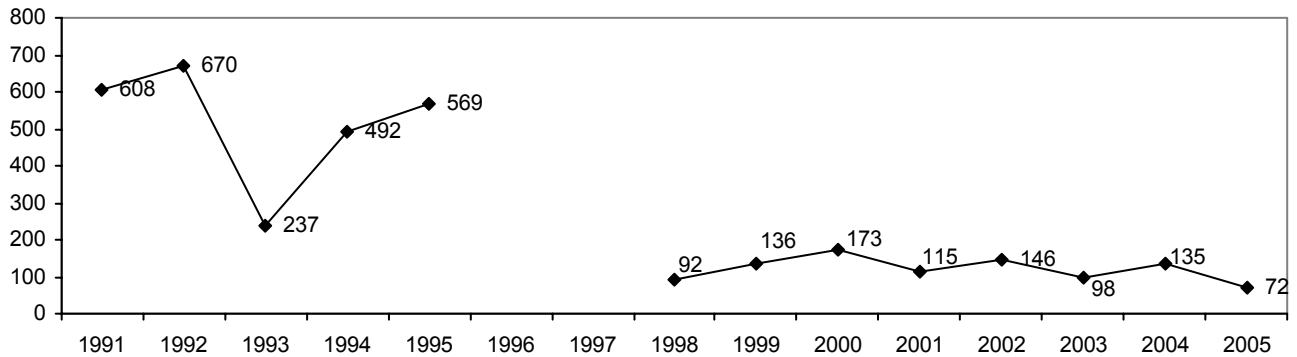


¹Multiplied by 10; data are for Honolulu City and County.

²All data are for the first half of 2005; data are for the State of Hawai'i.

SOURCES: Honolulu City and County Medical Examiner Office and State Department of Health, Alcohol and Drug Abuse Division

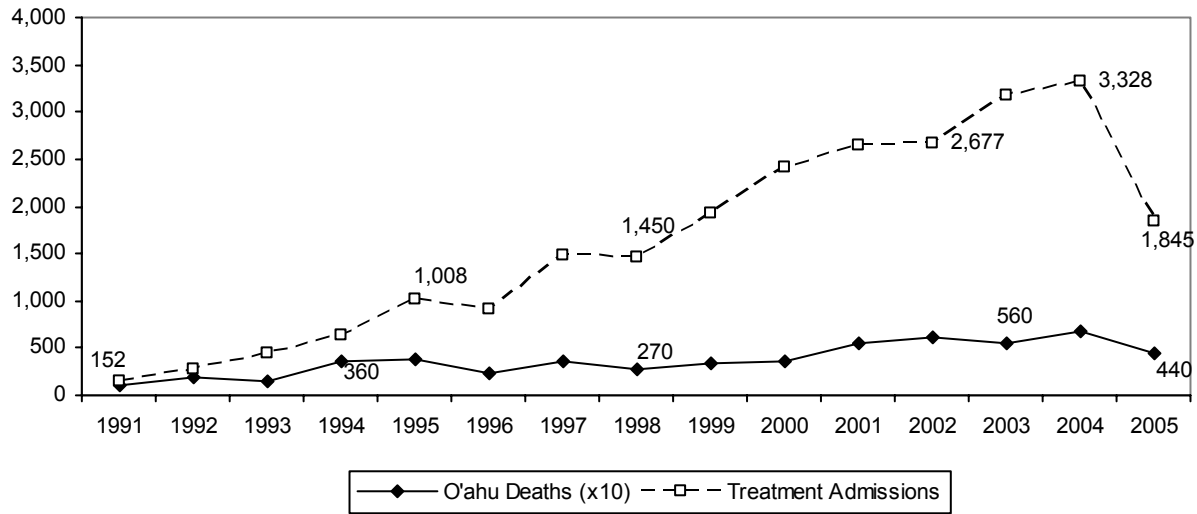
Exhibit 7. Police Data on Marijuana Cases in Honolulu: 1991–2005¹



¹Data represent the first half of 2005; data for 1996 and 1997 were not available.

SOURCE: Honolulu Police Department, Narcotics/Vice Division

Exhibit 8. Methamphetamine Death¹ and Treatment Data in Hawai'i: 1991–2005²

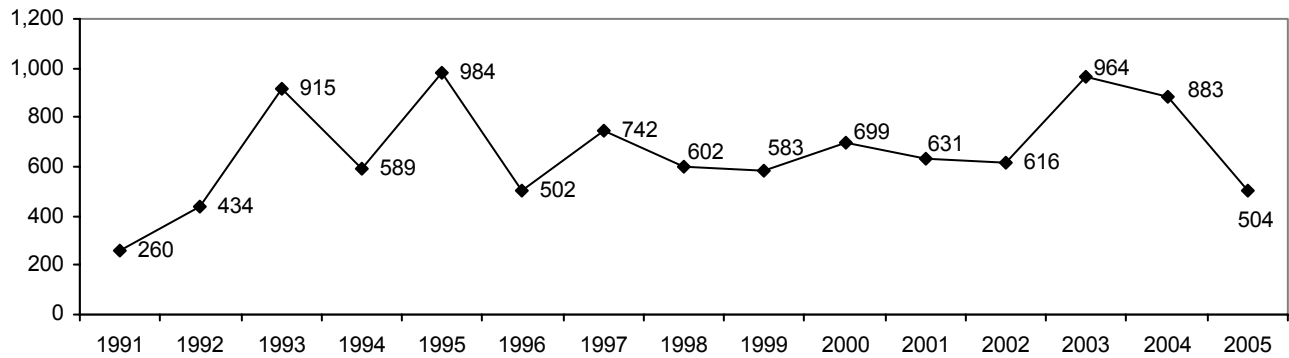


¹Multiplied by 10; data are for Honolulu City and County.

²All data are for the first half of 2005; data are for the State of Hawai'i.

SOURCES: Honolulu City and County Medical Examiner Office and State Department of Health, Alcohol and Drug Abuse Division

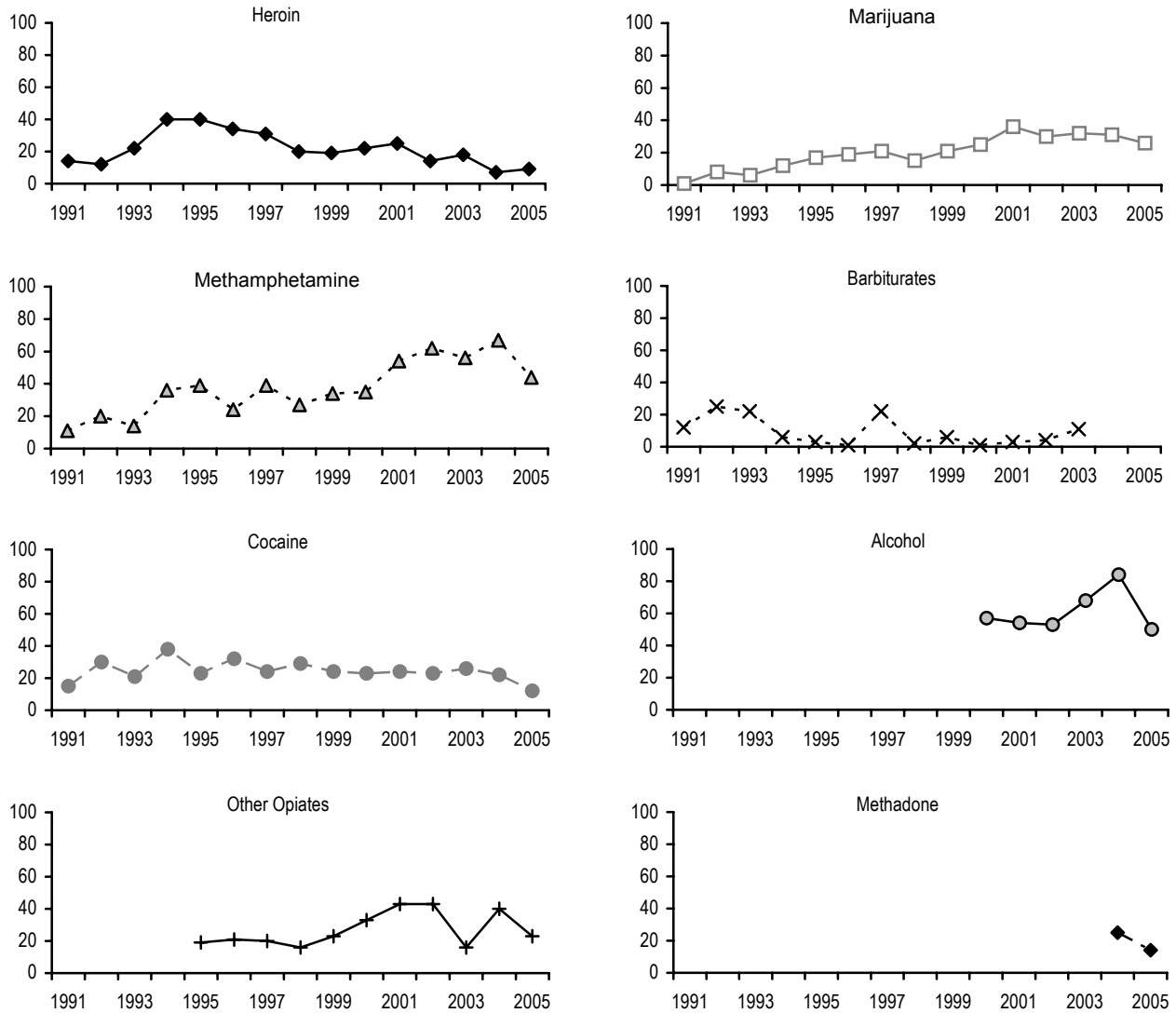
Exhibit 9. Police Data on Methamphetamine Cases in Honolulu: 1991–2005¹



¹Data represent the first half of 2005.

SOURCE: Honolulu Police Department, Narcotics/Vice Division

Exhibit 10. Annual Data on Drugs Present at Death in Honolulu: 1991–2005¹

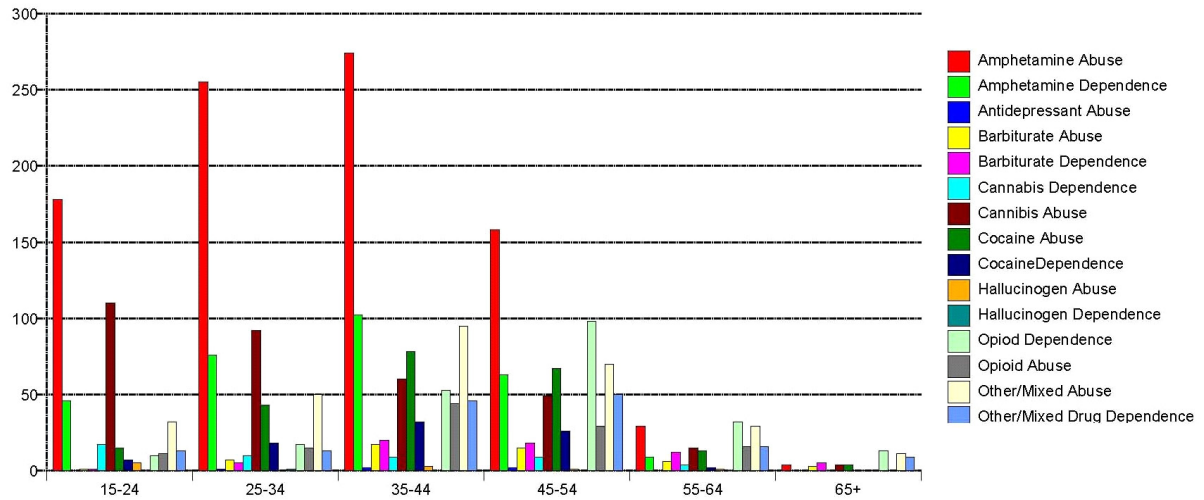


	Heroin	Marijuana	Methamphetamine	Barbiturates	Cocaine	Alcohol	Other Opiates	Methadone
1991	14	1	11	12	15			
1992	12	8	20	25	30			
1993	22	6	14	22	21			
1994	40	12	36	6	38			
1995	40	17	39	3	23		19	
1996	34	19	24	1	32		21	
1997	31	21	39	22	24		20	
1998	20	15	27	2	29		16	
1999	19	21	34	6	24		23	
2000	22	25	35	1	22	57	33	
2001	25	36	54	3	24	54	43	
2002	14	30	62	4	23	53	43	
2003	18	32	56	11	26	68	16	
2004	7	31	67	--	22	84	40	25
2005	9	26	44		12	50	23	14

¹Represents the first half of 2005.

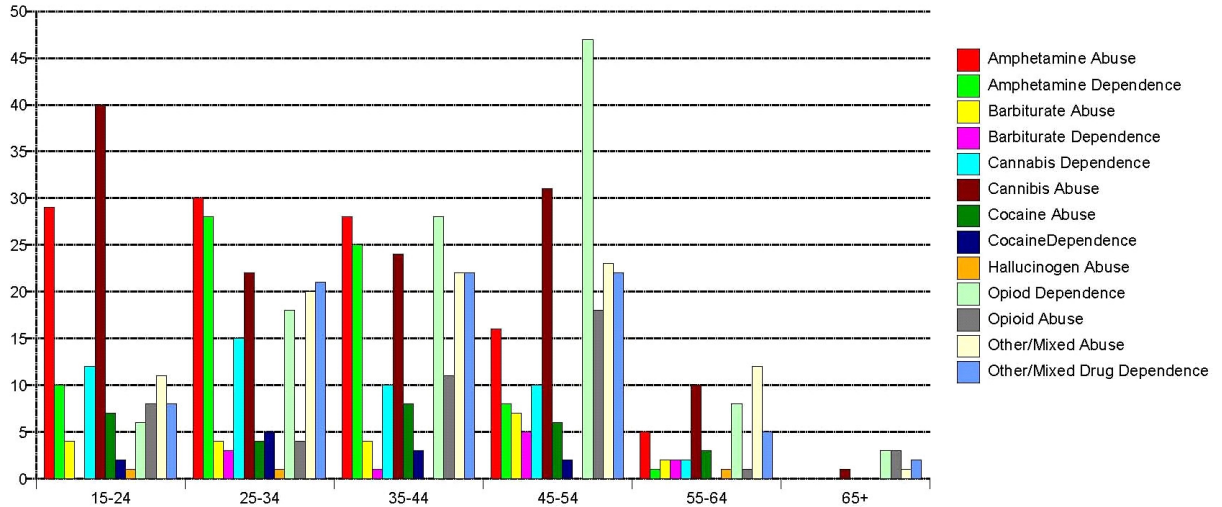
SOURCE: Honolulu City and County Medical examiner Office

Exhibit 11. Hospitalizations for Illicit Drug Use in O'ahu, by Age: 2004¹



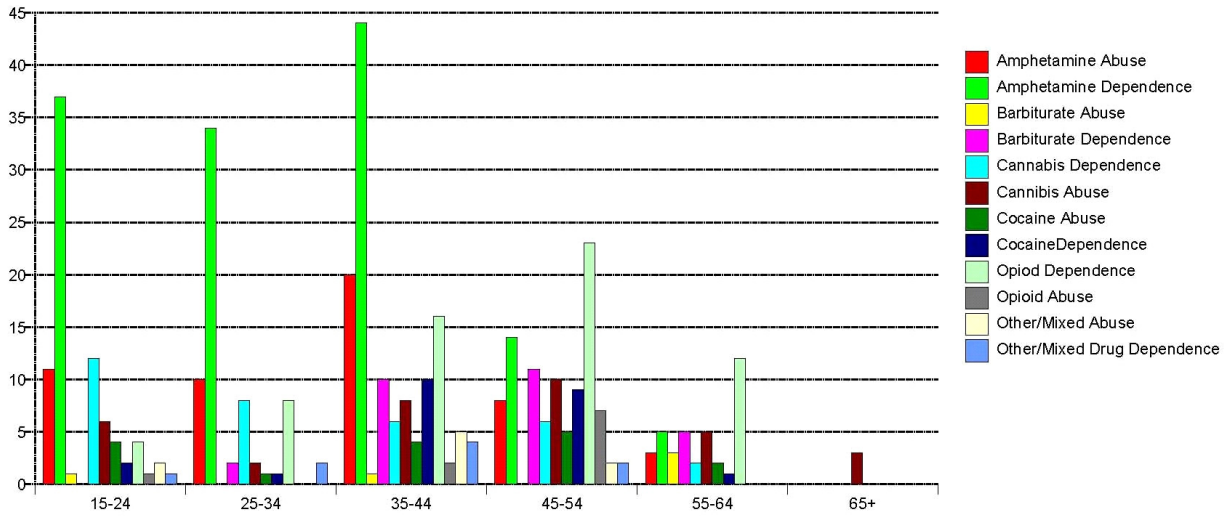
¹Counts within type of drug are not patient counts. A patient will be counted for each drug that he/she is using.
SOURCE: Hawai'i Health Information Corporation Inpatient Database

Exhibit 12. Hospitalizations for Illicit Drug Use in the Island of Hawai'i, by Age: 2004¹



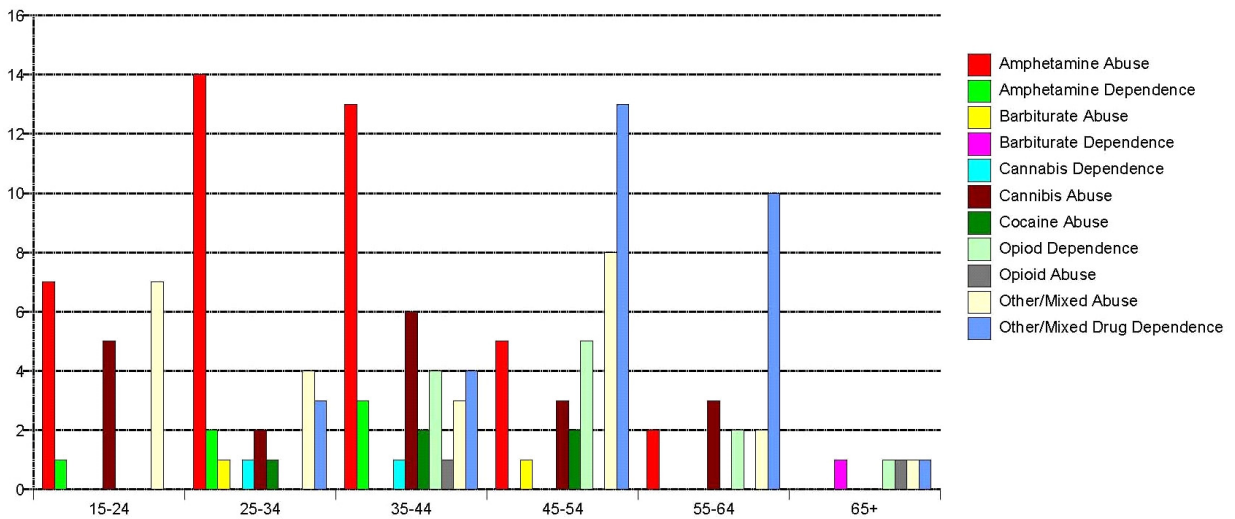
¹Counts within type of drug are not patient counts. A patient will be counted for each drug that he/she is using.
SOURCE: Hawai'i Health Information Corporation Inpatient Database

Exhibit 13. Hospitalizations for Illicit Drug Use in Maui, by Age: 2004¹



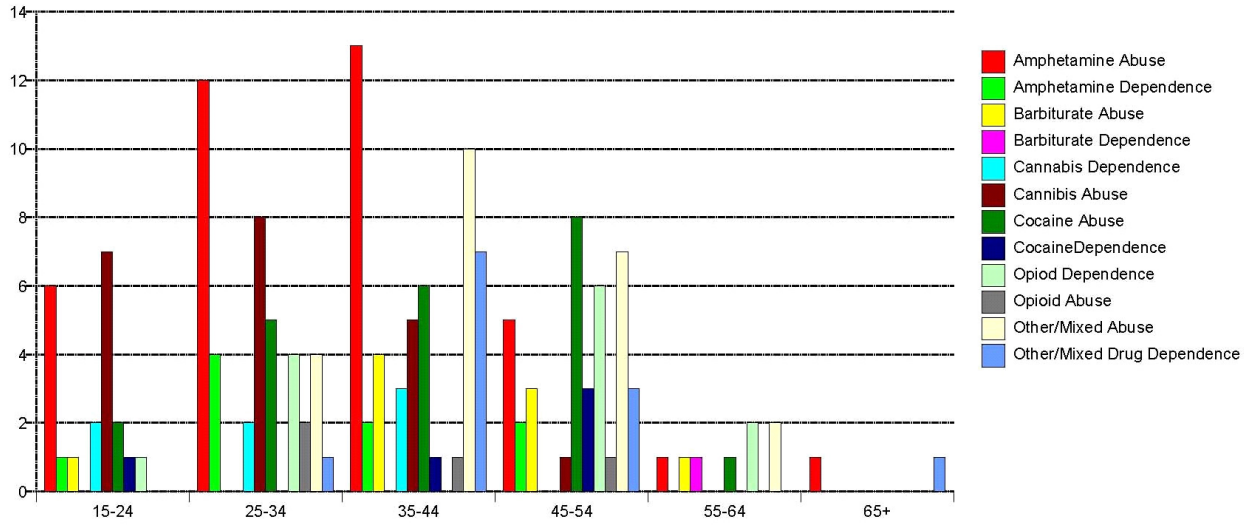
¹Counts within type of drug are not patient counts. A patient will be counted for each drug that he/she is using.
SOURCE: Hawai'i Health Information Corporation Inpatient Database

Exhibit 14. Hospitalizations for Illicit Drug Use in Kauai, by Age: 2004¹



¹Counts within type of drug are not patient counts. A patient will be counted for each drug that he/she is using.
SOURCE: Hawaii Health Information Corporation Inpatient Database

Exhibit 15. Out-of-State Hospitalizations for Illicit Drug Use in Hawai'i, by Age: 2004¹



¹Counts within type of drug are not patient counts. A patient will be counted for each drug that he/she is using.
SOURCE: Hawaii Health Information Corporation Inpatient Database

Patterns and Trends in Drug Abuse in Los Angeles County, California: A Semi-Annual Update

Beth Rutkowski, M.P.H.¹

ABSTRACT

Two main themes dominate Los Angeles County-level substance abuse indicator data in the current reporting period (through June 2005): (1) a relatively stable or mixed pattern for many drugs and (2) increasing patterns for methamphetamine. Between January 1999 and June 2004, heroin was consistently the most frequently used primary drug among Los Angeles County-level substance abuse treatment admissions. In the latter half of 2004, primary heroin and methamphetamine treatment admissions were nearly equal. By the first half of 2005, primary methamphetamine admissions overtook heroin treatment admissions by a substantial margin (6,392 admissions vs. 4,870 admissions). During this latest timeframe, cocaine/crack admissions remained stable at 18 percent of all admissions and 21 percent of admissions excluding alcohol. Primary marijuana admissions continued to creep to approximately 16 percent of the total and 20 percent of illicit drug admissions. According to unweighted data from 6–11 Los Angeles-area hospitals that provided basically complete data to DAWN in the first half of 2005, alcohol (1,064 reports), cocaine (969), stimulants (631), and marijuana (548) were the four major substances of abuse most frequently reported. The 4-county Los Angeles HIDTA region led all California-based HIDTAs in terms of clandestine methamphetamine laboratory seizures, accounting for 43 percent of the 128 seizures made in California in the first 6 months of 2005. Even though Indiana, Kentucky, Missouri, and Arkansas each had more laboratory seizures than California in the first half of 2005, and despite the steady decline in the number of methamphetamine laboratories throughout the State, California remains the home of the domestic methamphetamine ‘superlab.’ Seventy-one percent of the 14 superlabs seized throughout the United States were located in California; 50 percent of those were located in 2 southern California counties—Los Angeles and Orange. Cocaine and methamphetamine together accounted for 70 percent of all Los Angeles-based items analyzed and recorded by the NFLIS. Drug prices

and purities were relatively stable in the first half of 2005, with small changes occurring at the midlevel and retail level for certain drugs. Los Angeles County-level California Poison Control System major drug exposure calls in the first half of 2005 were dominated by methamphetamine/amphetamine, cocaine/crack, marijuana, heroin, and MDMA. Furthermore, among prescription and over-the-counter medication-related exposure calls, opiates/analgescics were the most frequently mentioned category, followed by benzodiazepines and Coricidin HBP. Adolescent substance use data gathered from the California Healthy Kids Survey for the 2003–2004 school year illustrated that lifetime and past-month usage percentages among Los Angeles County secondary school students in grades 7, 9, and 11 were either the same or lower than percentages reported in previous school years. Aside from alcohol, students were most likely to report lifetime marijuana use (20 percent), followed by inhalants (13 percent), cocaine or methamphetamine (each at 7 percent), and LSD/other psychedelics or ecstasy (each at 6 percent). Indicator data for prescription drugs, PCP, LSD, MDMA, and GHB remained limited, but use and abuse are reported among some of the nontraditional indicators.

INTRODUCTION

Area Description

Los Angeles County has the largest population (9,937,739, 2004 estimate) of any county in the Nation. If Los Angeles County were a State, it would rank ninth in population behind California, New York, Texas, Florida, Pennsylvania, Illinois, Ohio, and Michigan. Approximately 29 percent of California’s residents live in Los Angeles County. The population of Los Angeles County has increased 3.7 percent since the 2000 census. Nearly 90 percent of all Los Angeles County residents live within 88 incorporated cities; the remaining 10 percent reside in unincorporated areas of the county. The five most populated cities are, in descending order of population, Los Angeles (3,694,820), Long Beach (461,522), Glendale (194,973), Santa Clarita (151,088), and Pomona (149,473).

Just over one-half of all Los Angeles County residents are female (50.6 percent) (exhibit 1). More than one-quarter (28.0 percent) are younger than 18; 9.7 percent are older than 65. The racial and ethnic composition of Los Angeles County residents is quite diverse. Of those residents who report being of one race, just under one-half identify as White (48.7 percent), followed by Asians (11.9 percent), Blacks/Afri-

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can-Americans (9.8 percent), American Indians/Alaska Natives (0.8 percent), and Native Hawaiians/Other Pacific Islanders (0.3 percent). About one-quarter of residents (23.5 percent) identify with another race (not specified). Furthermore, 5 percent report two or more races. Residents of Hispanic/Latino origin may be of any race. Therefore, they are included in the appropriate racial categories above. Nearly 45 percent of Los Angeles County residents are of Hispanic/Latino origin; approximately 31 percent of Whites are not of Hispanic/Latino origin.

Los Angeles County encompasses approximately 4,080 square miles and includes the islands of San Clemente and Santa Catalina. The county is bordered on the east by Orange and San Bernardino Counties, on the north by Kern County, on the west by Ventura County, and on the south by the Pacific Ocean. Los Angeles County's coastline is 81 miles long.

Two of the busiest maritime ports in the world—Long Beach and Los Angeles—are located in Los Angeles County. The Port of Long Beach is the Nation's busiest maritime cargo container facility, while the Port of Los Angeles ranks second, according to a report by the National Drug Intelligence Center (NDIC) in 2001. Los Angeles County is also home to the world's third busiest airport—Los Angeles International Airport. The airport handles more than 1,000 cargo flights each day; 50 percent of this activity is international in origin or destination (NDIC 2001).

Residents of Los Angeles County primarily rely on automobiles for transportation, and the Los Angeles area has one of the most intricate highway systems in the world. Of these, Interstates 5, 10, and 15 connect the area to the rest of the Nation. Interstate 5 runs from the U.S.-Canada border to the U.S.-Mexico border and links Los Angeles to other major west coast cities, such as San Diego, Oakland, San Francisco, Sacramento, Portland, and Seattle. Interstate 10 originates in Santa Monica, California, and runs across the United States to I-95 in Jacksonville, Florida; Interstate 15 originates in the area and runs northeast through Las Vegas, Nevada, to the U.S.-Canada border in Montana. In addition, State highways 1 and 101 are extensively traveled road-ways.

The National Drug Threat Assessment 2005 identified 12 primary drug market areas throughout the United States that serve as major consumption and distribution centers of cocaine, marijuana, methamphetamine, heroin, and methylenedioxymethamphetamine (MDMA or ecstasy). California is one of the most active drug smuggling and production areas in the United States and contains three market areas—Los Angeles, San Diego, and San Francisco.

This is caused, in part, by the State's proximity to the Pacific Ocean and Mexico. Los Angeles is a national-level transportation hub and distribution center, and it is the only primary market for all five of the major drugs of abuse listed above (NDIC 2005).

Data Sources

This report describes drug abuse trends in Los Angeles County from January 1998 to September 2005. Information was collected from the following sources:

- **Drug treatment data** were derived from the California Department of Alcohol and Drug Programs (ADP), California Alcohol and Drug Data System (CADDSS), and correspond to Los Angeles County alcohol and other drug treatment and recovery program admissions for January 2001 to June 2005. This is the second semiannual report for which user demographic data are presented by route of administration for the major drugs of abuse (including cocaine/crack, heroin, and methamphetamine). It should be noted that admissions for heroin treatment are disproportionately represented because of reporting requirements for facilities that use narcotic replacement therapy to treat heroin users. Both private and publicly funded narcotic treatment providers must report their admissions to the State, while for other drug types, only publicly funded providers must report.
- **DAWN emergency department (ED) data** for the Los Angeles division (i.e., Los Angeles County only) of the Los Angeles metropolitan area were accessed from the Office of Applied Studies (OAS), Substance Abuse and Mental Health Services Administration (SAMHSA)'s restricted-access database—DAWN *Live!*—for the first half of calendar year 2005 (based on updates from December 6–7, 2005, and December 20, 2005). Thirty-eight of the 79 eligible hospitals in the Los Angeles area are in the DAWN sample. The sample includes 41 emergency departments (some hospitals have more than 1 ED). The data are incomplete and are based on 6 to 11 EDs reporting basically complete data each month over the 6-month period (exhibit 2). The data are unweighted and, thus, are not estimates for the Los Angeles area. The data cannot be compared to DAWN data for 2002 and before, nor can the preliminary data be used for comparison with future data. Only weighted DAWN data released by SAMHSA can be used for trend analysis. The preliminary unweighted data for January–June 2005 represent drug reports in drug-related visits; reports exceed the number of

visits, since a patient may report use of multiple drugs (up to six drugs and alcohol). The analysis for this paper includes the “major substances of abuse,” as well as prescription drug misuse. For major substances of abuse, all case types are included (i.e., suicide attempt, seeking detoxification, alcohol only [for those younger than 21], adverse reaction, overmedication, malicious poisoning, accidental ingestion, and other) (exhibit 3). For pharmaceuticals (nonmedical use), only overmedication, malicious poisoning, and other case types are included. As noted earlier, the data included in this report are preliminary. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted. Therefore, preliminary data are subject to change. A full description of DAWN can be found at <<http://www.dawninfo.samhsa.gov>>.

- **Poison control center call data** were accessed from the California Poison Control System (CPCS) for January 2000 through June 2005. The CPCS provides poison information and telephone management advice and consultation about toxic exposures; hazard surveillance to achieve hazard elimination; and professional and public education on poison prevention, diagnosis, and treatment. The information obtained from the CPCS includes calls in which there was a confirmed exposure to an illicit substance (e.g., cocaine, heroin, marijuana, ecstasy), a prescription drug or substance with common household uses, or a combination of both. The statistical analysis contained in this report is preliminary and focuses mostly on illicit substances; more indepth analyses of the prescription and household substance categories will be conducted for future area reports.
- **Drug availability, price, purity, seizure, and distribution data** were derived from the Los Angeles Police Department (LAPD), the Los Angeles High Intensity Drug Trafficking Area (HIDTA), the Los Angeles County Regional Criminal Information Clearinghouse (LA CLEAR), the National Drug Intelligence Center (NDIC), and the Drug Enforcement Administration (DEA).
- **Drug analysis results** from local forensic laboratories were derived from the Drug Enforcement Administration, National Forensic Laboratory Information System (NFLIS). The statistics correspond to items analyzed between October 1, 2004, and September 30, 2005 (fiscal year [FY] 2004–2005). It is important to note that data from the Los Angeles County Sheriff’s Depart-

ment laboratory are complete, but data from the LAPD laboratory are not complete for some months.

- **Adolescent substance use statistics** were accessed from the Los Angeles County-level California Healthy Kids Survey (CHKS) data for the 1997–1998, 1998–1999, 1999–2000, 2000–2001, 2001–2002, 2002–2003, and 2003–2004 school years from WestEd. The CHKS is a modular survey that assesses the overall health of secondary school students (in grades 7, 9, 11, and a small sample of non-traditional school students). In California, Local Education Agencies (LEAs) and County Offices of Education (COEs) that accept funds under the Federal Title IV Safe and Drug Free Schools and Communities (SDFSC) program or the State Tobacco Use Prevention Education (TUPE) program must administer the CHKS at least once every 2 years. Individual school districts are given the opportunity to administer the survey in every school year, however, if the resources exist to do so. Section A (Core Module) includes questions on lifetime and past-30-day use of alcohol, drugs, and tobacco. Another module (Section C) is comprised of additional questions related to alcohol and drug use, violence, and safety.
- **Demographic and geographic data** were provided by the United Way of Greater Los Angeles, Los Angeles County Online, and the U.S. Census Bureau (*State and County QuickFacts*).
- **Acquired immunodeficiency syndrome (AIDS) and human immunodeficiency virus (HIV) data** (cumulative through December 2004) were provided by the Los Angeles County Department of Health Services, HIV Epidemiology Program, Advanced HIV (AIDS) Quarterly Surveillance Summary, July 2005.

DRUG ABUSE PATTERNS AND TRENDS

Cocaine/Crack

Approximately 18 percent of all Los Angeles County treatment and recovery program admissions in January–June 2005 reported a primary crack or powder cocaine problem (exhibit 4). The total number of primary cocaine/crack admissions increased slightly (7 percent) from the second half of 2004 to the first half of 2005. But as a percentage of the total, cocaine admissions have remained quite stable at 17.6–19.3 percent for several CEWG reporting periods (exhibits 4 and 5). Alcohol was the most commonly reported secondary drug problem among primary cocaine admis-

sions (37 percent) (exhibit 6), followed by marijuana (19 percent). Smoking is the reported route of administration for 86 percent of all cocaine admissions, followed by inhalation (12 percent). When asked whether they had used any drug intravenously in the year prior to admission, approximately 4 percent of all primary cocaine admissions reported that they had used needles to administer one or more drugs intravenously at least once during the specified time period (exhibit 6).

Sixty-five percent of the primary cocaine admissions reported in the first half of 2005 were male, similar to the gender breakdown seen in the previous calendar year. Black non-Hispanics continued to dominate cocaine admissions (at 56 percent), followed by Hispanics (at 27 percent, a slight upswing from the 22 percent seen in the second half of 2004) and White non-Hispanics (13 percent). In terms of age at admission, 36 percent were concentrated in the 36–45 age group; an additional 21 percent of all primary cocaine admissions were between the ages of 26 and 35 (exhibit 6).

Primary cocaine treatment admissions are more likely than treatment admissions for any other substance (alcohol, prescription medications, or illicit drugs) to report being homeless at admission (28 percent). The percentage of cocaine admissions referred to treatment through the criminal justice system in the first half of 2005 continued to decrease to 13 percent of all admissions (down from 20 percent in the first half of 2004). More frequently mentioned referral sources included self-referral (30 percent) or referral through Proposition 36 (a.k.a., SACPA) court/probation (33 percent). Forty-three percent of primary cocaine admissions had never been admitted to treatment in Los Angeles County for their primary cocaine problem, which represented an increase over the percentage of first-time admissions recorded in the second half of 2004 (35 percent). An additional 37 percent had one or two prior treatment episodes. Forty-two percent had earned a high school diploma or GED. At the time of admission, approximately 15 percent were employed either full- or part-time.

Cocaine injectors were more likely than cocaine inhalers or crack smokers to be male (88 percent), White non-Hispanic (63 percent), 36 or older (75 percent), or to have been through four or more prior treatment episodes (21 percent). Crack smokers were more likely than cocaine inhalers or injectors to be female (37 percent), Black non-Hispanic (62 percent), homeless (30 percent), or have a high school diploma/GED (43 percent). Lastly, cocaine inhalers were more likely than their counterparts to be Hispanic (64 percent), referred by the court/criminal justice system (15 percent), or employed full- or part-time (39 percent).

Preliminary unweighted data accessed from DAWN *Live!* for January through June 2005 indicate that of the 3,715 major substances of abuse including alcohol reported in the Los Angeles division, 969 (26 percent) were cocaine/crack (exhibit 7). Excluding alcohol, cocaine accounted for 37 percent of the reports for major substances of abuse. Cocaine was the second most likely major substance to be reported, following alcohol. Sixty-seven percent of the patients reporting cocaine use were male; 49 percent were Black (followed by 29 percent White and 16 percent Hispanic); 34 percent were age 35–44; and 27 percent reported smoking crack. A total of 1,630 chief complaints were logged for patients reporting cocaine. The top three specific complaints were psychiatric condition (500 complaints), intoxication (187 complaints), and chest pain (170 complaints). Cocaine-using patients were most likely to either be discharged home (39 percent) or admitted to a psychiatric unit (37 percent).

California Poison Control System calls involving the use of cocaine/crack by Los Angeles County residents increased from 66 in 2001 to a high of 97 in 2003. In 2004, the number of cocaine exposure calls dropped by 24 percent to 74. In the first half of 2005, the number of calls related to cocaine exposure dropped further to 22 (exhibit 8a). Between July 2004 and June 2005, 67 percent of the cocaine-exposed callers were male, and 53 percent were between the ages of 26 and 44. An additional 22 percent were between the ages of 18 and 25 (exhibit 9).

A total of 3,490 cocaine arrests were made within the city of Los Angeles in the first 5 months of 2005. This represented a 5-percent deficit from the number of cocaine arrests made during the same time period in 2004. Cocaine arrests accounted for 28 percent of all narcotics arrests made between January 1 and May 31, 2005.

Citywide cocaine (including crack and powder) seizures increased 12 percent, from 1,090 pounds seized in the first 5 months of 2004 to 1,221 pounds seized in the same timeframe in 2005. The street value of the seized cocaine accounted for 50 percent of the total street value of all drugs seized between January and May 2005.

Data from NFLIS for FY 2004–2005 (October 1, 2004, to September 30, 2005) showed that out of 57,179 analyzed items reported by participating laboratories within Los Angeles County, 36.2 percent ($n=20,680$) were found to be cocaine/crack. Cocaine/crack was the most likely illicit drug to be found among items tested in the county, followed closely by methamphetamine and more distantly by cannabis (exhibit 10).

According to the 2005 National Drug Threat Assessment, Los Angeles is considered a national-level cocaine distribution center. Local traffickers are responsible for supplying wholesale quantities of the drug to significant drug markets in every region of the country, including Atlanta, Chicago, Honolulu, Indianapolis, Las Vegas, Minneapolis, New Orleans, New York, Philadelphia, and Washington, DC (NDIC 2005). Mexican and Colombian traffickers control the wholesale distribution of cocaine and crack in Los Angeles; African-American and Hispanic street gangs control distribution at the retail level. Despite the fact that all substance use and abuse indicators are higher for crack than for powder cocaine, powder cocaine availability and use is reported in the area. The current midlevel price range of crack cocaine has remained consistent with previous area reports of \$500–\$1,200 per ounce (exhibit 11), as did the retail price range (\$10–\$40 per rock). The current wholesale price for 1 kilogram of powder cocaine ranges from \$14,000 to \$17,000, which is identical to the wholesale price cited in the past few CEWG reports. The current midlevel and retail prices of powder cocaine remained stable, as well, at \$500–\$600 per ounce and \$80 per gram. The purity of powder cocaine was reported as 73–76 percent pure, down slightly from the level (78 percent) cited in the last few CEWG reports.

According to CHKS data for the 2003–2004 school year (exhibit 12), 7.4 percent of all Los Angeles County secondary school students (including 7th, 9th, and 11th graders, and a small sample of nontraditional students) who responded to the survey had ever used cocaine (crack or powder), and 3.8 percent were current cocaine users (defined as any use in the past 30 days). A breakdown of the data by grade level illustrated that among responding ninth graders, 5.4 percent had ever used cocaine and 3.0 percent were current cocaine users. A higher percentage of 11th graders than 9th graders reported current cocaine/crack use in the past 30 days. Of the lifetime cocaine users, 55 percent were male and 45 percent were female. The gender distribution was slightly wider for past-30-day use of cocaine (63 percent male vs. 37 percent female). Frequent cocaine use is defined as 20 or more days of use in the previous 30 days. Twenty-four percent of the current cocaine users reported frequent use. Among the frequent users, 74 percent were male. When asked about past-6-month use of cocaine (any form), methamphetamine, or other stimulants, 7.1 percent of 9th graders and 6.5 percent of 11th graders responded in the affirmative (exhibit 13).

Long-term trends calculated from CHKS data spanning over the most recent 5 school years (exhibit 14) indicate that the pattern of past-30-day cocaine (powder or crack) use among responding secondary school

students was similar to usage patterns for some of the other licit and illicit drugs, such as lysergic acid diethylamide (LSD)/other psychedelics and methamphetamine. Past-30-day cocaine/crack use decreased consistently from the peak level seen in 1999–2000 (4.9 percent) to 3.8 percent in 2002–2003. In 2003–2004, current cocaine use remained stable at 3.8 percent of all respondents.

Heroin

From January to June 2005, 4,870 Los Angeles County treatment and recovery program admissions were attributable to primary heroin abuse, compared with 5,341 admissions reported in the county in the second half of 2004 (exhibit 4). In 2003, it was thought that heroin admissions were leveling off at roughly 25.4 percent of all admissions, after several consistent half-year decreases. In the first half of 2004, a shift occurred, and the percentage of primary heroin admissions among all Los Angeles County treatment and recovery programs decreased slightly to 24.5 percent of all admissions. Later that year, the percentage continued to fall to 23.2 percent of all admissions. Because of the further decrease recorded in the first half of 2005, primary heroin treatment admissions are now second to methamphetamine by a substantial margin (25.6 percent vs. 19.5 percent of all admissions).

Demographics of heroin admissions have remained stable over recent reporting periods. In the first half of 2005, primary heroin admissions were predominantly male (72 percent), most likely to be age 41–50 (37 percent), and somewhat more likely to be Hispanic (47 percent) than White non-Hispanic (37 percent) or Black non-Hispanic (11 percent) (exhibit 6). Compared with other major types of illicit drug admissions, primary heroin admissions in the first half of 2005 had the largest proportion of users age 36 and older (74 percent). Slightly less than one-third (32 percent) of all primary heroin admissions initiated their heroin use prior to age 18, which is quite low compared with other primary substances, such as alcohol, marijuana, methamphetamine, and phencyclidine (PCP). If primary heroin admissions abused another drug secondarily to heroin, it was most likely to be cocaine/crack (24 percent), followed by alcohol (11 percent).

Heroin administration patterns remained relatively stable in the first half of 2005, with injectors accounting for 87 percent, smokers accounting for 8 percent, and inhalers (snorters) accounting for 4 percent (exhibit 6). When asked whether they had used any drug intravenously in the year prior to admission, 89 percent of all primary heroin admissions reported that

they had used needles to administer one or more drugs intravenously at least once during the specified time period.

Nineteen percent of all primary heroin admissions were homeless at time of admission, up slightly from 16 percent in the second half of 2004. Only 4 percent were referred by the court or criminal justice system. Primary heroin users were most likely to have self-referred for the current treatment episode (71 percent of all heroin admissions). In a measure of current legal status, the majority (73 percent) were not involved at all with the criminal justice system. This corroborates with the very low proportion of criminal justice referrals among primary heroin users. Twenty-five percent indicated that they had never received treatment for their heroin problem, whereas 46 percent reported three or more primary heroin treatment episodes. Forty-four percent of all primary heroin admissions graduated from high school (stable from the last reporting period), and, at the time of admission, 22 percent were employed full- or part-time (exhibit 6).

Heroin injectors were more likely than their inhaler or smoker counterparts to be Hispanic (50 percent), homeless (19 percent), age 36 or older (73 percent), or to have been through four or more prior treatment episodes (38 percent). Heroin smokers were more likely than heroin inhalers or injectors to be male (76 percent), White non-Hispanic (59 percent), employed full- or part-time (33 percent), or have a high school diploma/GED (47 percent).

Preliminary unweighted data accessed from DAWN *Live!* for the first half of calendar year 2005 indicate that of the 3,715 major substances of abuse reported in the Los Angeles division, 372 (10 percent) were heroin (exhibit 7). Excluding alcohol, heroin accounted for 14 percent of the major substances of abuse reports. Heroin was the fifth most likely major substance to be reported, following alcohol, cocaine, stimulants (amphetamines and methamphetamine), and marijuana. Eighty-one percent of the patients reporting heroin use were male; 43 percent were White (followed by 27 percent Hispanic and 24 percent Black); 38 percent were age 45–54; and 72 percent reported injecting heroin. A total of 659 chief complaints were logged for individuals reporting heroin. The top three complaints were abscess/cellulitis/skin/tissue (149 complaints), psychiatric condition (79 complaints), and altered mental status (62 complaints). Heroin-using patients were most likely to be discharged home (55 percent) or admitted to a psychiatric unit (16 percent).

Los Angeles County-based California Poison Control System calls involving exposure to heroin fluctuated between 15 and 22 from 2001 to 2004 (exhibit 8a). In the first half of 2005 alone, 13 heroin exposure calls were reported, which may indicate a shifting upward trend. Between July 2004 and June 2005, 83 percent of the heroin-exposed callers were male, and 57 percent were between the ages of 26 and 54. An additional 26 percent of the callers were between the ages of 18 and 25.

A total of 246 heroin arrests were made within the city of Los Angeles from January 1 to May 31, 2005. This represented a 21-percent decrease from the number of heroin arrests made during the same timeframe in 2004. Heroin arrests accounted for approximately 2.6 percent of all narcotics arrests made from January to May.

Eighteen pounds of black tar heroin were seized within the city of Los Angeles from January to May 2005, a large increase of 167 percent compared with the amount seized during the same time in 2004. Seizures of other types of heroin increased, as well, from 6 pounds seized between January and May 2004 to 11 pounds seized during the same timeframe in 2005. The street value of all seized heroin accounted for approximately 2 percent of the total street value of all drugs seized in the early part of 2005.

According to NFLIS data based on 57,179 analyzed items reported by participating laboratories within Los Angeles County between October 1, 2004, and September 30, 2005, only 4.4 percent (2,492) of all items analyzed were found to be heroin (similar to the amount recorded in FY 2004). This small proportion corresponds to the small proportion of heroin (black tar and other forms) reported among Los Angeles Police Department seizures statistics.

As in the past, Los Angeles is the primary market for Mexican black tar heroin (NDIC 2005). The most common transportation method is by private and commercial vehicles transporting the drug from the southwest border via interstate highways. In addition, Mexican black tar heroin remains the predominant type of heroin used by Los Angeles County users. Mexican criminal groups control the transportation and wholesale, midlevel, and retail activity (NDIC 2005). According to LA CLEAR, the wholesale price per kilogram of Mexican black tar heroin is approximately \$20,000 (the same price reported in the last few CEWG reports) (exhibit 11). The current mid-level range is \$300–\$700 per “pedazo” (Mexican ounce), which is down from the range reported in June 2005 (\$500–\$800); and the retail price is stable

at \$90–\$100 per gram. A regular ounce is 28.5 grams, whereas a pedazo is 25.0 grams. Black tar heroin available on the streets of Los Angeles ranges in purity from 20 to 25 percent.

Mexican brown powder heroin sells for a wholesale price of \$25,000 per kilogram, when available in the area. Retail distribution of Southeast Asian heroin remains limited, but it is associated with a wholesale price range of \$70,000–\$80,000 per kilogram. The lack of China white on the streets is related, in part, to local users' preference for black tar.

The LA HIDTA and NDIC continue to report that Colombian drug trafficking organizations may be establishing networks within the Los Angeles area to distribute South American heroin. The wholesale price for a kilogram of Colombian heroin is \$86,000–\$90,000 (compared with the previously reported upper limit of \$100,000). This type of heroin has a purity level of 94 percent. The LA HIDTA also reports that because the Los Angeles metropolitan area has one of the largest Middle Eastern populations in the United States, Southwest Asian opium trafficking activities have increased in the area. Southwest Asian opium is associated with a cost of \$650–\$800 for an 18-gram stick.

In accordance with CHKS data for the 2003–2004 school year (exhibit 12), 3.3 percent of all Los Angeles County secondary school students (including 7th, 9th, and 11th graders, and a small sample of nontraditional students) who responded to the survey had ever used heroin. A breakdown of the data by grade level illustrated that lifetime heroin use was nearly identical among responding 9th graders (3.1 percent) and 11th graders (3.0 percent). When asked about past-6-month use of other drugs, heroin, or sedatives, 6.3 percent of 9th graders and 5.2 percent of 11th graders responded in the affirmative (exhibit 13).

Other Opiates/Narcotics

Other opiates/synthetics continue to constitute a marginal percentage of all Los Angeles County treatment admissions. In the second half of 2004, other opiates/synthetics represented 1.6 percent of all admissions (373 admissions). More recently, in the first half of 2005, the percentage of primary other opiate/synthetic admissions decreased to less than 1 percent of all admissions (203 admissions; 0.9 percent). Despite the small overall numbers of admissions, it will be important to carefully monitor future treatment admissions data, given the increase in prescription opiate abuse/misuse in other major CEWG areas. Other opiates/synthetics admissions were typically male (61 percent), White non-Hispanic (50 percent),

and age 36–50 (46 percent). None of the primary other opiate/synthetic admissions were younger than 18. Interestingly, 74 percent administered other opiates/synthetics orally, but an additional 22 percent reported smoking. Sixty-one percent of primary other opiate/synthetic admissions reported no secondary or tertiary substance use. An additional 9 percent reported secondary alcohol use, 8 percent reported secondary heroin use, and 4 percent reported secondary cocaine/crack use. Reports of primary non-prescription methadone admissions continued to be minimal among Los Angeles County treatment admissions (48 admissions, representing 0.2 percent of all admissions).

According to reports from many CEWG representatives, nonheroin opiate users across the Nation have a definite preference of oxycodone (i.e., OxyContin) over hydrocodone (i.e., Vicodin). In Los Angeles, however, hydrocodone is much more likely to show up in recent drug indicator data than oxycodone. This is evidenced by the fact that among NFLIS exhibits in FY 2004–2005, 50 percent of the analgesic samples were found to be hydrocodone (vs. 7 percent oxycodone); among DAWN opiate/opioid drug reports (January–June 2005), 26 percent were hydrocodone (vs. 4 percent oxycodone); and among poison control calls for opiate/analgesic exposure (January–June 2005), 50 percent were for hydrocodone (vs. 4 percent for oxycodone).

In addition to encompassing major substances of abuse, unweighted data accessed from DAWN *Live!* cover pharmaceutical drug categories, such as psychotherapeutic agents (antidepressants, antipsychotics, anxiolytics, sedatives and hypnotics, and central nervous system [CNS] stimulants), CNS agents (analgesics, anticonvulsants, antiparkinson agents, and muscle relaxants), respiratory agents, cardiovascular agents, and anti-infectives. The case types that are of interest for pharmaceuticals include seeking detoxification, overmedication, and other. Of the 1,084 pharmaceutical reports falling within these three case types in the first 6 months of 2005 in the Los Angeles division, 227 (21 percent) were opiates/opioids (exhibit 15), and an additional 105 were other analgesics. For the opiates/opioids, “other” was the most frequently stated case type (129 reports; 57 percent of opiates/opioids), followed by overmedication (68; 30 percent), and more distantly by seeking detoxification (30; 13 percent). Among other analgesics, 68 percent (71) of the drugs were reported as overmedication cases.

Los Angeles County-based California Poison Control System calls involving exposure to opiates/analgesics increased from a low of 45 in 2001 to a high of 70 in

2004 (exhibit 8b). In the first half of 2005, 26 opiate/analgescic exposure calls were reported, which may indicate a change in the upward trend line seen in past years. Between January 2004 and June 2005, calls involving an exposure to hydrocodone were more likely than calls involving an exposure to oxycodone (54 calls vs. 3 calls, respectively).

Approximately 1,180 of the 57,179 items analyzed and reported to NFLIS between October 1, 2004, and September 30, 2005, were identified as pharmaceuticals/prescription/noncontrolled nonnarcotic medications (as opposed to illicit substances). Of those, a large proportion (623 items; 53 percent) were found to be narcotic/other analgesics. The most frequently cited analgesics were hydrocodone (309 items; 50 percent) and codeine (104; 17 percent). Other analgesics identified included oxycodone (44 items), methadone (33 items), and propoxyphene (28 items). To put these numbers/percentages into perspective, analgesics accounted for 1.1 percent of all items analyzed by participating Los Angeles County laboratories.

Efforts are underway throughout Los Angeles to quantify the extent of pharmaceutical diversion to the street. One result of this effort is the availability of expanded prices for diverted opiates/analgescics. All prices are stable since the June 2004 report. According to LA CLEAR, Vicodin, a member of the hydrocodone family of opiate pain relievers, retails for \$1 per 10-milligram tablet in Los Angeles County (exhibit 11). OxyContin, the trade name for the powerful analgesic oxycodone hydrochloride, sells on the streets for \$50 to \$80 per 80-milligram tablet. Percocet sells for \$1–\$5 per 5-milligram tablet (down from \$5–\$10); MS Contin sells for \$20 per 60-milligram tablet; codeine sells for \$1–\$2.50 per tablet (and \$80–\$200 for a pint of liquid codeine); Dilaudid (hydromorphone) sells for \$20–\$60 per 4-milligram tablet (down from \$100); fentanyl patches sell for \$25–\$100 each; and methadone sells for \$10 per tablet.

Methamphetamine/Other Amphetamines

The proportion of primary methamphetamine admissions to Los Angeles County treatment and recovery programs increased further from the second half of 2004 to the first half of 2005, surpassing heroin for the second 6-month period in a row (exhibit 4). The 6,392 primary methamphetamine admissions reported in January–June 2005 accounted for 25.6 percent of all admissions (compared with 23.4 percent indicated in the last area report). Methamphetamine is the one illicit drug that has continually increased among treatment admissions over the past 4 years (exhibit

5). Compared with other major illicit drug admissions, primary methamphetamine admissions had the largest proportion of females (40 percent), Asian/Pacific Islanders (3 percent), 18–25-year-olds (30 percent), and 26–35-year-olds (33 percent) (exhibit 6). In the first half of 2005, an additional 94 admissions were associated with primary amphetamine use (0.4 percent of all admissions; data not shown).

For the past few years, the proportion of Hispanics among primary methamphetamine admissions has been growing, as the proportion of Whites has been shrinking. In the second half of 2004, the proportion of White non-Hispanics was 39 percent, whereas the proportion of Hispanics was 47 percent among all primary methamphetamine admissions. In the first half of 2005, the racial/ethnic gap continued to widen, with Hispanics accounting for 54 percent of all primary methamphetamine admissions, compared with 36 percent for Whites.

At one time, females accounted for 49 percent of both primary methamphetamine and other amphetamine admissions. This practically equal distribution of males and females was unique to methamphetamine and other amphetamines. The shifting gender distribution with methamphetamine treatment admissions has been discussed in detail in recent reports. In calendar years 2003 and 2004, the percentage of females has fluctuated between 32 and 40 percent. In the second half of 2004, 32 percent of the primary methamphetamine admissions were females. In the first half of 2005, the percentage of females increased back up to 40 percent. It is important to monitor this drug category to see whether the gender distribution will ever return to a 50/50 ratio.

In the second half of 2004, 18–25-year-olds and 26–30-year-olds each accounted for 17 percent of all primary methamphetamine admissions. In the first half of 2005, the 21–25 age group was the modal group (21.6 percent). Primary methamphetamine admissions tended to most frequently report secondary abuse of marijuana (29 percent) or alcohol (23 percent).

As shown in exhibit 6, smoking continued as the most frequently mentioned way for primary methamphetamine admissions to administer the drug. In 1999, one-half of all primary methamphetamine admissions smoked the drug. By the first half of 2005, 71 percent reported this mode of administration. Conversely, the proportions of injectors and inhalers continued to decline, from 15.2 and 29.5 percent, respectively, in 1999, to 6 and 20 percent, respectively, in the first half of 2005.

Like primary methamphetamine admissions, the mode of other amphetamine administration has shifted in recent years, as well. Seventy-two percent of all other amphetamine admissions in the first half of 2005 smoked amphetamines, followed by 15.0 percent who inhaled, 5.0 percent who ingested orally, and 7.5 percent who injected (which represents a sizeable shift from the 1–2 percent reported in the last two reports). In 1999, a lower percentage smoked, and higher percentages injected, inhaled, and used other amphetamines orally.

Eleven percent of all primary methamphetamine admissions reported past-year intravenous use of one or more drugs. Approximately one-fifth of the primary methamphetamine treatment admissions were homeless (20.8 percent), and 14.3 percent were referred by the court or criminal justice system (down from the 18.1 percent in the second half of 2004). Fifty percent were entering treatment for the first time. Forty-one percent had graduated from high school, and, at the time of admission, 18.3 percent were employed full- or part-time.

Methamphetamine injectors were considerably more likely than their inhaler or smoker counterparts to be male (69 percent), White non-Hispanic (69 percent), 36 or older (39 percent), homeless (40 percent), on parole (19 percent), or to have been through four or more prior treatment episodes (13 percent). They were, by far, the most impaired of all primary methamphetamine abusers. Methamphetamine smokers were more likely than methamphetamine inhalers or injectors to be female (41 percent) or on probation at the time of admission (43 percent). Lastly, methamphetamine inhalers were more likely than their counterparts to be Hispanic (61.0 percent), have used methamphetamine for the first time at age 31 or older (15.5 percent), referred by the court/criminal justice system (15.0 percent), or employed (23.0 percent). An interesting difference emerged with regards to the percentage of Black non-Hispanics. In the past, no difference existed among the three modes of administration with regards to the percentage of Blacks—about 3 percent of the methamphetamine injectors, snorters, and smokers were Black. But in the first half of 2005, 5.6 percent of the methamphetamine injectors were Black, compared with 3.4 percent of the methamphetamine smokers and 3.2 percent of the methamphetamine snorters. No differences existed among the three modes of administration with regards to the percentage of admissions with a high school diploma/GED; about 37 percent of each group had either at time of admission.

Preliminary unweighted data accessed from DAWN *Live!* for January to June 2005 indicate that of the

3,715 major substances reported in the Los Angeles division, 631 (17 percent including alcohol and 24 percent excluding alcohol) were stimulants (exhibit 7). The stimulant category encompasses amphetamines (115 reports, 18 percent of stimulant reports) and methamphetamine (516 reports, 82 percent of stimulant reports). Stimulants were the third most likely major substance to be reported, following alcohol and cocaine. For the remainder of the DAWN discussion, stimulant user demographics will be broken out for methamphetamine and amphetamines.

Seventy-five percent of the patients reporting methamphetamine use to the DAWN *Live!* system were male, and 43 percent were White (followed by 39 percent Hispanic and 8 percent Black). More than one-half (57 percent) were age 25–44, and an additional 25 percent were 18–24. The three most frequently reported complaints were psychiatric condition (252 complaints), altered mental status (92 complaints), and intoxication (88 complaints). Methamphetamine-using patients were most likely to be discharged home (44 percent) or admitted to a psychiatric unit (36 percent). Twenty-two percent of the patients reporting methamphetamine use indicated that they smoked the drug, followed by 7 percent reporting inhalation. (Sixty-six percent of the reports did not have a corresponding route of administration.)

Sixty-seven percent of the patients reporting amphetamine use to DAWN were male, and 43 percent were White (followed by 32 percent Hispanic and 11 percent Black). More than one-half (52 percent) were age 25–44, and an additional 26 percent were 18–24.

California Poison Control System calls involving exposure to methamphetamine/amphetamine among Los Angeles County residents have fluctuated over the years, with a high of 63 calls in 2001, and approximately 50 to 55 calls in 2002 through 2004 (exhibit 8a). In the first half of 2005 alone, 39 methamphetamine/amphetamine-related exposure calls were made to the system. If an equal number of calls are made in the second half of 2005, the overall number will exceed the peak level seen in 2001. Between July 2004 and June 2005, a much higher percentage of callers reporting exposure to methamphetamine or other amphetamines were male (72 percent) than female (25 percent), and 50 percent were between the ages of 18 and 34 (exhibit 9). In addition to calls relating to methamphetamine and amphetamine exposure, a total of 43 Ritalin/Adderall exposure calls were recorded between January 2001 and June 2005.

Throughout the first 5 months of 2005, 260 amphetamine arrests were made within the city of Los Angeles, doubling the number of arrests made during

the same period in 2004 (130 arrests). Despite this large increase in the overall number of amphetamine arrests, as a class, such arrests continued to account for about 2 percent of the total. Arrests for methamphetamine are included in the category “other narcotics.” In early 2005, 6,226 arrests for other narcotics were made (many of which could be attributable to methamphetamine, but there is no way of knowing from the LAPD report), accounting for 50 percent of all arrests.

While methamphetamine is not reported separately in citywide drug arrests, it is broken out in citywide seizures. Citywide methamphetamine seizures increased considerably (108 percent), from 153 pounds seized in the first 5 months of 2004 to 320 pounds seized during the same timeframe in 2005. The street value of the seized methamphetamine accounted for approximately 20 percent of the total street value of all drugs seized between January and May 2005.

According to NFLIS data based on 57,179 analyzed items reported by participating laboratories within Los Angeles County between October 2004 and September 2005, 33 percent (18,987) of all items analyzed were found to be methamphetamine/amphetamine. Methamphetamine accounted for the second largest proportion of samples positively identified by NFLIS. An additional 12 items were identified as pseudoephedrine (accounting for less than one-tenth of a percent).

Los Angeles is considered by NDIC to be one of the largest methamphetamine markets in the United States. According to the LA HIDTA, 63 of the 110 identified criminal organizations in Los Angeles distribute methamphetamine (NDIC 2005). Mexican criminal groups based in both Mexico and California control the wholesale and midlevel distribution of methamphetamine and distribute the drug via private vehicles and commercial trucks. Not only does a large quantity of the drug stay in the southern California region, but methamphetamine is transported to other major cities and regions, including San Francisco and Phoenix, and the West Central, Southwest, and Southeast areas of the United States. Hispanic gangs, independent dealers, outlaw motorcycle gangs (OMGs), and Asian gangs control the retail distribution of methamphetamine within and beyond California. Local independent dealers, however, also distribute methamphetamine at the retail level.

The wholesale price per pound of methamphetamine ranged from \$5,000 to \$7,000 (exhibit 11), which is similar to the range reported in June 2005, but higher than the wholesale price reported in 2002–2004 (\$3,700 to \$5,000). The midlevel price was \$300 per

ounce (down from \$500 to \$800 reported in June 2005). According to one intelligence source, the purity of finished methamphetamine available in the Los Angeles area remains at approximately 30–35 percent. Given the many different production “recipes” and the multiple types of methamphetamine entering into and staying in the Los Angeles area (locally produced and Mexican produced), however, it is very possible that there is a wide range of purity (especially since such a high percentage of users report smoking methamphetamine).

Crystal methamphetamine has a wholesale price of \$6,500–\$11,000 per pound in Los Angeles (down from the range of \$8,000 to \$11,000 reported in June 2005). The midlevel price for an ounce of crystal methamphetamine is \$600–\$800, which represents a slight narrowing of the range reported in June 2005. At the retail level, crystal methamphetamine sells for \$20 per one-quarter gram, \$60 per one-sixteenth ounce, and \$100–\$125 per one-eighth ounce. A double case of pseudoephedrine (17,000 60-milligram tablets per case) sells for \$3,250–\$4,000.

In parts of the United States, the number of methamphetamine clandestine laboratory seizures has consistently increased. According to Rudy Lovio, Criminal Intelligence Specialist in the LA CLEAR Research and Analysis Unit, this increase is due to the proliferation of “Nazi” methamphetamine labs (small-scale labs capable of producing gram to ounce quantities of finished product) in the Midwest and rural South. Since calendar year 1999, however, the number of clandestine laboratory incidents has decreased consistently in both the LA HIDTA and in California overall. In 1999, 2,090 labs were seized in California (1,187 of which occurred in the 4-county LA HIDTA region). By 2004, only 449 labs were seized statewide (263 in the LA HIDTA). And in the first half of 2005 (through 6/23/05), 128 labs were seized throughout California (55 in the LA HIDTA). Possible explanations for the decrease in seizures include precursor chemical restrictions, chemical control laws, increased methamphetamine production in Mexico, and the downsizing of clandestine laboratory enforcement teams. Despite the decrease in the number of seizures, the wholesale and retail prices for methamphetamine have remained relatively stable over the same time period, which is a barometer for methamphetamine availability in Los Angeles County.

According to EPIC’s National Clandestine Laboratory Seizure System, California had the fifth highest number of laboratory-only seizures in the first 6 months of 2005 (128), following Indiana (213), Kentucky (195), Missouri (184), and Arkansas (139). Within California, the Los Angeles HIDTA once

again led the State in the overall number of methamphetamine-only seizures made in the first 6 months of 2005, accounting for 43 percent of all seizures made in California (55 of 128 total seizures). Of the 4 counties in the LA HIDTA, Los Angeles County had the second highest number of seizures during that time period (17), lagging behind San Bernardino County (18). Riverside County (12) and Orange County (8) rounded out the HIDTA.

Even though four States exceed California in terms of laboratory seizures, California leads the country in the number of domestic “superlabs.” Ten of 14 U.S. superlabs (71 percent) seized in the first half of 2005 were in California. In the past, these large-scale labs were capable of producing 10 or more pounds of finished methamphetamine in a single production cycle, but superlabs have stepped up the pace and are now capable of producing 20 or more pounds of finished drug in a single production cycle (NDIC 2004). The LA HIDTA reported the highest percentage of superlabs seized throughout California (5 out of 10 superlabs seized between January 1 and June 23, 2005, or 50 percent). Within the LA HIDTA, Orange County led with three superlab seizures, followed by Los Angeles County (two). Furthermore, totals reported in the LA HIDTA exceeded totals reported by all States outside of California.

The cost to clean up methamphetamine-related activities located in the LA HIDTA in the first half of 2005 totaled \$224,001. Fifty-eight percent of this total corresponds to the cost of cleaning up Riverside and San Bernardino County laboratories (29 percent for each county). It is important to note that these cleanup figures do not encompass building and environment remediation, which each cost taxpayers even more money.

A negative consequence of clandestine methamphetamine laboratory activity is the effect on children living in or around the makeshift, often home- or apartment-based, laboratories. Local, statewide, and national efforts, known as Drug Endangered Children Programs, have been launched to address the issue of what happens to children who are found at a methamphetamine laboratory when it is seized. Nationally, in the first half of 2005, 738 children were “affected” by methamphetamine laboratories. Approximately 5 percent of the affected children resided in California. Within California, 22 of the 33 (67 percent) affected children resided in the 4 LA HIDTA counties. The highest proportion was reported in San Bernardino County (10 of the 22 children), followed by Los Angeles County (7), Riverside County (3), and Orange County (2). It is important to note that these numbers are underreported, due

to differences in county- and State-level reporting procedures.

According to CHKS data for the 2003–2004 school year (exhibit 12), 7.3 percent of all Los Angeles County secondary school students (including 7th, 9th, and 11th graders, and a small sample of nontraditional students) who responded to the survey had ever used methamphetamine, and 3.7 percent were current methamphetamine users (defined as any use in the past 30 days). A breakdown of the data by grade level illustrated that among responding ninth graders, 5.4 percent had ever used methamphetamine and 2.9 percent were current users. A higher percentage of 11th than 9th graders reported methamphetamine use in the past 30 days. A nearly equal proportion of males and females identified as lifetime methamphetamine users (51 percent were male and 49 percent were female). The gender gap widened with past-30-day use of methamphetamine (63 percent male vs. 37 percent female). Frequent methamphetamine use is defined as 20 or more days of use in the previous 30 days. Twenty-three percent of the current methamphetamine users reported frequent use. Among the frequent users, 68 percent were male, and the remaining 32 percent were female. When asked about past-6-month use of cocaine, methamphetamine, or other stimulants, 7.1 percent of 9th graders and 6.5 percent of 11th graders responded in the affirmative (exhibit 13).

According to long-term trends calculated from CHKS data spanning over the most recent 5 school years (exhibit 14), the pattern of past-30-day methamphetamine use among responding secondary school students was similar to patterns seen for cocaine and LSD/other psychedelics. From 1999–2000 to 2001–2002, past-30-day methamphetamine use decreased consistently from the peak level of 4.6 percent in 1999–2000 to 4.1 percent in 2001–2002. In 2002–2003, the percentage of current methamphetamine users increased slightly to 4.3 percent, but it decreased to 3.7 percent (the lowest level yet) in 2003–2004.

Marijuana

The number of primary marijuana treatment admissions has fluctuated over several semi-annual reporting periods (exhibit 4), but the percentage of the total has remained somewhat fixed between 12 and 16 percent. In the first half of 2005, 4,041 primary marijuana admissions were reported in Los Angeles County. As a percentage of the total, marijuana accounted for 16.2 percent of all admissions (up nearly 2 percentage points from the percentage reported in July–December 2004). Like many of the other major drugs of abuse, the user demographics of primary

marijuana admissions were relatively stable in the first half of 2005. Seventy-six percent of the primary marijuana admissions were male, and individuals younger than 18 constituted 52 percent of these admissions (exhibit 6). Primary marijuana admissions were most likely to be Hispanic (55 percent), followed by Black non-Hispanics (27 percent) and White non-Hispanics (14 percent).

Alcohol was identified as a secondary drug problem for 42 percent of the primary marijuana admissions in the first half of 2005. An additional 14 percent reported methamphetamine, and 7 percent reported cocaine/crack as their secondary drug problem. Compared with other major illicit drug admissions, primary marijuana admissions had the largest proportion of males (76 percent) and users age 17 and younger (52 percent). When asked whether they had used any drug intravenously in the year prior to admission, less than 1 percent of all primary marijuana admissions answered affirmatively.

Approximately 8 percent of the primary marijuana treatment admissions in the first half of 2005 were homeless at the time of admission, and 21 percent were referred to treatment by the court or criminal justice system (a substantial decrease from the 30 percent of primary marijuana admissions referred by the criminal justice system in the latter half of 2004). Seventy-three percent were entering treatment for the first time (compared with 69 percent in the second half of 2004). Twenty-one percent had graduated from high school, and, at the time of admission, 13 percent were employed full- or part-time. Such characteristics reflect the fact that just under one-half of all primary marijuana admissions were younger than 18 at the time of admission.

Preliminary unweighted data accessed from DAWN *Live!* for January through June 2005 indicate that of the 3,715 major substances of abuse reported in the Los Angeles division, 548 (15 percent including alcohol) were marijuana reports (exhibit 7). Excluding alcohol, marijuana accounted for 21 percent of major substances of abuse reports. Marijuana was the fourth most likely major substance to be reported, following alcohol, cocaine, and stimulants. Seventy-four percent of the patients reporting marijuana use were male; 35 percent were Black (followed by 30 percent White and 27 percent Hispanic); and 53 percent were age 12–29. A total of 863 chief complaints were logged for individuals reporting marijuana. The top three complaints were psychiatric condition (324 complaints), intoxication (119 complaints), and altered mental status (80 complaints). Marijuana-using patients were most likely to be discharged home (42 percent) or admitted to a psychiatric unit (38 percent).

California Poison Control System calls involving exposure to marijuana among Los Angeles County residents were stable at 35–39 calls between 2001 and 2003 (exhibit 8a). In 2004, marijuana-related exposure calls decreased to 26 calls. And in the first half of 2005, 15 marijuana-related exposure calls were logged in the system. Between July 2004 and June 2005, 67 percent of the marijuana-exposed callers were male, and 83 percent were age 25 or younger.

A total of 2,088 marijuana arrests were made within the city of Los Angeles in the first 5 months of 2005; this number is stable when compared with the number of marijuana arrests made during the same time period in 2004 (2,076). Marijuana arrests accounted for approximately 17 percent of all narcotics arrests made between January 1 and May 31, 2005.

According to NFLIS data based on 57,179 analyzed items reported by participating laboratories within Los Angeles County between October 2004 and September 2005, 23 percent (13,098) of all items analyzed were found to be cannabis. Cannabis was the third most frequently identified substance in Los Angeles County.

Despite a recent decrease in marijuana-specific seizures, the drug continues to dominate drug seizures in the city of Los Angeles. The amount of marijuana seized decreased nearly 75 percent, from 16,545 pounds in January through May 2004 to 4,297 pounds in 2005. Between January and May 2005, the amount of marijuana seized accounted for 73 percent of the total weight of drugs (in pounds) seized. Cocaine was a very distant second, accounting for an additional 21 percent of the total weight. The street value of the seized marijuana accounted for approximately 27 percent of the total street value of all drugs seized in early 2005.

According to NDIC, California and Mexico appear to supply most of the marijuana available throughout the United States. In addition, cultivation of marijuana on U.S. public lands is widespread, especially in California. This is evidenced by the fact that more than two-thirds of all cannabis plants eradicated from National Forest System lands were located in California (NDIC 2004). Caucasian, Mexican, and Jamaican trafficking groups are responsible for the wholesale distribution of marijuana to Los Angeles. Street gangs and independent dealers distribute domestic and Mexican-grown marijuana in both Los Angeles and San Diego (NDIC 2005). The wholesale price of Mexican-grade marijuana ranges from \$300 to \$340 per pound (compared to \$300–\$400 reported in June 2005; exhibit 11). The midlevel and retail prices of

commercial grade marijuana are \$25–\$100 per ounce (compared to \$60 to \$100 in June 2005) and \$5–\$10 per gram. The wholesale price of domestic mid-grade marijuana is \$750 per pound, down from a range of \$1,000 to \$1,200. Midlevel and retail prices are \$50–\$200 per ounce and \$25 per gram. The wholesale price of high-grade sinsemilla is stable at \$2,500–\$6,000 per pound. An ounce of sinsemilla sells for \$300–\$600, and one-eighth ounce sells for \$60–\$80.

Indications regarding the local availability of BC Bud, a hybrid type of cannabis bud grown in Canadian British Columbia, continue to circulate. A pound of BC Bud, which would cost approximately \$1,500 in Vancouver, has a wholesale per pound value of \$6,000 in Los Angeles. Supposedly, a pound of BC Bud can be swapped straight across for a pound of cocaine. Demand for hashish, the compressed form of tetrahydrocannabinol (THC)-rich resinous cannabis material, remained limited throughout the Los Angeles HIDTA. When it is available, it has a wholesale price of \$8,000 per pound.

According to CHKS data for the 2003–2004 school year (exhibit 12), 19.8 percent of all Los Angeles County secondary school students (including 7th, 9th, and 11th graders, and a small sample of nontraditional students) who responded to the survey had ever used marijuana, and 10.3 percent were current marijuana users (defined as any use in the past 30 days). A breakdown of the data by grade level illustrated that among responding seventh graders, 7.3 percent had ever used marijuana and 4.3 percent were current marijuana users. A higher percentage of 9th graders than 7th graders and a higher percentage of 11th graders than 9th graders reported marijuana use in the past 30 days. When asked about past-6-month use of marijuana, 9.2 percent of 7th graders, 15.9 percent of 9th graders, and 22.7 percent of 11th graders responded in the affirmative (exhibit 13).

According to long-term trends calculated from CHKS data spanning over the 5 most recent school years (exhibit 14), the pattern of past-30-day marijuana use among responding secondary school students was more likely than the use of many other drugs, but slightly less likely than binge drinking. Past-30-day marijuana use has decreased consistently from the peak level of 13.2 percent seen in 1999–2000 to 10.3 percent in 2003–2004.

Club Drugs

Comprehensive indicator data relating to the use and abuse of club drugs is still lacking for Los Angeles County. Therefore, it is difficult to accurately and comprehensively describe the use and abuse patterns

of club drugs in Los Angeles County. Despite this lack of traditional indicator information, anecdotal evidence from a variety of sources continues to circulate with regard to the availability of club drugs in Los Angeles County, particularly methylenedioxymethamphetamine (MDMA or ecstasy) and gamma hydroxybutyrate (GHB).

Collectively, club drugs played a limited role in preliminary unweighted data accessed from DAWN *Live!* in the first half of 2005. Twenty-two of the 3,715 major substances of abuse reported in the Los Angeles division were MDMA (ecstasy), and 5 were GHB (exhibit 7). Rohypnol and ketamine did not have a presence at all.

The demographics of DAWN ED patients reporting MDMA use were interesting, when compared with the demographics for many other drug users in Los Angeles. Forty-five percent of the patients reporting MDMA use were female, and 36 percent were Black (followed by 27 percent White and 18 percent Hispanic). One-half of the MDMA users were between 12 and 24 years of age. Of the 34 complaints, the three most frequently reported complaints were psychiatric condition (13 complaints), altered mental status (6 complaints), and intoxication (5 complaints). Methamphetamine-using patients were most likely to be admitted to a psychiatric unit (41 percent) or discharged home (23 percent).

California Poison Control System calls involving exposure to ecstasy among Los Angeles County residents have decreased consistently over recent years, from a high of 50 in 2001 to a low of 16 in 2003 (exhibit 8a). In 2004, the number of ecstasy-related exposure calls increased slightly to 19 calls, and in the first half of 2005 alone, there were 12 ecstasy calls reported. If an equal number of calls are made in the second half of 2005, the overall number will exceed the 2003 and 2004 levels. Between July 2004 and June 2005, more callers reporting exposure to ecstasy were female (74 percent) than male (21 percent), and 73 percent were between the ages of 13 and 25 (exhibit 9). In addition to calls relating to ecstasy exposure, a total of 11 GHB exposure calls, 5 ketamine calls, and 4 Rohypnol calls were recorded between January 2004 and June 2005.

The California Poison Control System also kept track of calls relating to Coricidin HBP and dextromethorphan (DXM) exposures. Between July 2004 and June 2005, 45 Coricidin HBP calls and 15 DXM calls were logged in the system (exhibit 9). Fifty-six percent of Coricidin HBP calls and 47 percent of DXM calls were male. Furthermore, 87 percent of the Coricidin HBP calls and 60 percent of the DXM calls

were made because of exposure to individuals younger than 18. Those age 18–25 represented an additional 13 percent of the Coricidin HBP calls and 7 percent of the DXM calls.

According to NFLIS data based on 57,179 analyzed items reported by participating laboratories within Los Angeles County between October 2004 and September 2005, less than 1 percent (378) of all items analyzed were found to be MDMA, GHB, or ketamine. Of those three club drugs, MDMA was most likely to be detected; it represented 83 percent of the club drug samples analyzed by NFLIS. GHB represented an additional 10 percent of the samples, and ketamine accounted for 6 percent.

According to NDIC, Israeli and Russian drug trafficking organizations are responsible for most of the transportation and wholesale distribution of MDMA in Los Angeles. Asian criminal groups also supply significant quantities of the drug in the area (NDIC 2005). Asian and White independent dealers are responsible for retail marketing and distribution.

Wholesale and retail prices for certain club drugs have changed since the June 2005 report. In multiple quantities, MDMA has a wholesale price of \$6 per pill or capsule (exhibit 11). At the retail level, ecstasy usually sells for \$20–\$40 per pill. In the first half of 2005, however, the price dropped to \$10 to \$15 per tablet. In Los Angeles, ecstasy “boats” continue to be mentioned. A boat contains 1,000 MDMA pills and sells for \$6,000 (compared to \$8,000 that was reported in June 2004). Flunitrazepam (Rohypnol), when available, has a retail value of \$6–\$10 for a 1-milligram pill. On the street, ketamine sells for \$100–\$200 per 10-milliliter vial. In addition, ketamine retails for \$20 for two-tenths of a gram of powder. The wholesale price for GHB is \$275–\$350 per gallon, and a liter sells for \$80–\$100. A 16-ounce bottle of GHB, which once ranged from \$65 to \$100, now sells for \$120. Capfuls can still be purchased for \$5–\$20 each. The vast majority of GHB users ingested the drug as a liquid, either in straight shots or mixed with a drink. When available, gamma butyrolactone (GBL) sells for \$600 per liter.

According to CHKS data for the 2003–2004 school year (exhibit 12), 5.5 percent of all Los Angeles County secondary school students (including 7th, 9th, and 11th graders, and a small sample of nontraditional students) who responded to the survey had ever used ecstasy. Current use of ecstasy was not assessed, although a question regarding past-6-month use of psychedelics, ecstasy, or other club drugs was included in the survey. Overall, 6.2 percent of all respondents reported use of these drugs (exhibit 13).

By grade, 6 percent of 9th graders and 5 percent of 11th graders answered in the affirmative.

Phencyclidine and Hallucinogens

Primary PCP treatment admissions accounted for 0.6 percent of all admissions ($n=150$) in the first half of 2005 (exhibit 4). The proportion of PCP admissions among all admissions has been stable for several years, but the overall number of PCP admissions increased 89 percent from 1999 to the first half of 2003. In the second half of 2003, however, the number of PCP admissions decreased slightly (16 percent) to 262 admissions, and it continued to decrease further (12 percent) in the first half of 2004 to 230 admissions, and in the second half of 2004 to 135 admissions (41 percent decrease from the first half of the year). In the first half of 2005, there was a very slight upturn in the number of PCP admissions, representing an 11-percent increase in number. Marijuana (23 percent), alcohol (22 percent), and cocaine/crack (17 percent) were the three most frequently reported secondary drugs among primary PCP admissions. The vast majority (92 percent) of the primary PCP admissions smoked the drug. Interestingly, 5 percent reported taking PCP orally, and 1 percent reported injecting PCP. There were no notable changes from the previous reporting period in terms of user demographics. Other hallucinogens, such as LSD, peyote, and mescaline, continued to account for approximately 0.1 percent of the total treatment admissions.

Preliminary unweighted data accessed from DAWN *Live!* for January through June 2005 indicate that of the 3,715 major substances of abuse reported in the Los Angeles County division, 65 (2 percent) were PCP (exhibit 7). Eighty-two percent of the patients reporting PCP use were male, and 45 percent were Black (followed by 37 percent White and 17 percent Hispanic). Seventy-two percent were age 25–44, and an additional 9 percent were between 18 and 24. A total of 141 chief complaints were logged for patients reporting PCP. The top three complaints were psychiatric condition (42 complaints), altered mental status (36 complaints), and intoxication (30 complaints). Patients were more likely to smoke PCP (51 percent) than consume PCP orally (9 percent). PCP-using patients were most likely to be either admitted to a psychiatric ward (45 percent) or be discharged home (38 percent).

California Poison Control System calls involving exposure to PCP among Los Angeles County residents fluctuated between 6 and 17 calls from 2001 to 2004 (exhibit 8a). In the first half of 2005, there were four PCP-related exposure calls.

Thirty-seven PCP arrests were made within the city of Los Angeles in the first 5 months of 2005, which represented a 43-percent decline from the same time-frame in 2004 (65 arrests). Like amphetamine arrests, PCP arrests accounted for a very low proportion (less than 1 percent).

The street value of the PCP seized between January and May 2005 represented approximately 1.7 percent of the total street value of all drugs seized during that period. The total amount of PCP seized throughout the first 5 months of 2005 (4 pounds) was 77 percent lower than the amount seized during the same period in 2004 (17 pounds).

According to NFLIS data based on 57,179 analyzed items reported by participating laboratories within Los Angeles County between October 2004 and September 2005, 0.5 percent ($n=278$) of all items analyzed were found to be PCP, and a mere 3 items were found to be LSD.

The wholesale price for a gallon of PCP remains at the high level reported in June 2005, ranging from \$15,000 to \$20,000 (exhibit 11). The ounce price, however, remains at the decreased range of \$300–\$350. A sherm cigarette dipped in liquid PCP continues to sell for \$10–\$30, indicating a decrease from the range of \$20 to \$30 reported in June 2005. A tight-knit group of Los Angeles-based African-American street gang members continues to produce, supply, and distribute PCP in the Los Angeles area.

A sheet of approximately 100 doses of LSD has a wholesale price range of \$150–\$200. Typically, a single dose sells for \$5–\$10. At the retail level, psilocybin mushrooms cost about \$20 per one-eighth ounce.

According to CHKS data for the 2003–2004 school year, 5.8 percent of all Los Angeles County secondary school students (including 7th, 9th, and 11th graders, and a small sample of nontraditional students) who responded to the survey had ever used LSD or another psychedelic, and 2.9 percent had used LSD/other psychedelics in the past 30 days (exhibit 12). A breakdown of the data by grade level illustrated that among responding 9th graders, 4.4 percent had ever used LSD/other psychedelics, and 2.5 percent were current users. Among 11th graders, 5.9 percent had ever used LSD/other psychedelics, and 2.5 percent used a psychedelic at least once within the past 30 days.

According to long-term trends calculated from CHKS data spanning over the last 5 school years (exhibit 14), the pattern of past-30-day LSD/other psychedel-

ics use among responding secondary school students (in grades 7, 9, and 11) was similar to usage patterns seen with other licit and illicit drugs. Current use of LSD/other psychedelics has been trending downward since the late 1990s, to a low of 2.8 percent in 2002–2003. In 2003–2004, the percentage was slightly higher at 2.9 percent of all respondents.

Benzodiazepines, Barbiturates, and Sedative/Hypnotics

In the first half of 2005, treatment and recovery program admissions associated with primary barbiturate, benzodiazepine, or other sedative/hypnotic abuse continued to account for less than 1 percent of all admissions in Los Angeles County.

Of the 1,084 pharmaceuticals reported among those cases for seeking detoxification, overmedication, and other accessed from DAWN *Live!* for the first 6 months of 2005 in the Los Angeles division, 79 (7 percent) were antidepressants, 76 were antipsychotics (7 percent), 13 were barbiturates (1 percent), and 218 were benzodiazepines (20 percent) (exhibit 15). For all of the above categories except for antipsychotics, “other” was the most frequently stated reason for visiting the emergency department. The percentage of overmedication cases ranged from a low of 31 percent (for barbiturates) to a high of 58 percent (antipsychotics).

Los Angeles County-based California Poison Control System calls involving exposure to benzodiazepines fluctuated between 52 and 86 calls from 2001 to 2004 (exhibit 8b). Benzodiazepine-related calls had been on an upswing from 2002 (52 calls) to 2004 (86 calls). In the first half of 2005, however, 21 benzodiazepine exposure calls were reported, which may very well indicate a decrease from the number of calls seen in 2004. Between January 2004 and June 2005, 18 of the benzodiazepine-related exposure calls were for alprazolam, 23 were for clonazepam, and 11 were for diazepam. In addition to calls for benzodiazepine exposures, a total of 48 antidepressant exposure calls and 25 antipsychotic calls were reported between January 2001 and June 2005.

Approximately 1,180 of the 57,179 items analyzed and reported to the NFLIS system in FY 2005 were identified as pharmaceuticals/prescription/noncontrolled non narcotic medications (as opposed to illicit substances). Of those, roughly 24 percent (281 items) were found to be benzodiazepines. The most frequently cited benzodiazepines were diazepam (92 items; 33 percent) and clonazepam (85 items; 30 percent).

According to LA CLEAR, Valium retails for \$1 per 5-milligram tablet (exhibit 14), which is stable since the June 2004 report. Xanax retails for \$1 per 4-milligram tablet.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

A cumulative total of 49,728 adult/adolescent AIDS cases were reported in Los Angeles County through June 30, 2005. Of those cases, 792 were reported between January 1, 2005, and June 30, 2005. Currently, approximately 20,739 Los Angeles County residents are living with advanced HIV disease. Los Angeles County cumulative cases represent approximately 36 percent of the 137,415 cumulative cases in California and approximately 5 percent of the 929,985 cumulative cases nationwide. Of the cumulative cases reported in Los Angeles County, 46 percent were White, 30 percent were Hispanic, 20 percent were African-American, 44 percent were age 30–39, and 92 percent were male.

The proportion of newly diagnosed males solely exposed through injection drug use has ranged between 4 and 6 percent from 1998 to 2004 (exhibit 15). The proportions for other exposure categories, such as the combination of male-to-male sexual contact and injection drug use, heterosexual contact, blood transfusion, and hemophilia/coagulation disorder, have remained relatively stable since 1998. The proportion of men exposed to AIDS through male-to-male sexual contact has fluctuated slightly, from 66 percent in 1998, to 68 percent in 2003, and then down to 63 percent in 2004. The proportion of male cases with an “other” or “undetermined” exposure category accounted for 24 percent of all male cases diagnosed in 2004. Since the 2004 data are preliminary, it is possible that some of the cases in the “other/undetermined” category will be transferred into the other exposure categories.

The modal exposure category for females diagnosed with AIDS in 1998 was heterosexual contact (46 percent). This exposure category has been associated with a lower percentage of female AIDS cases since 2000; in 2004, it was associated with 35 percent of all newly diagnosed female AIDS cases. Female cases attributable to injection drug use, which were stable at 18–22 percent of all female cases from 2000 to 2002, decreased to 12 percent in 2003. But in 2004,

the percentage increased back up to 17 percent. The proportion of female cases with an “other” or “undetermined” exposure category continued to increase, accounting for 46 percent of all female cases diagnosed in 2004.

In Los Angeles County in 2004, approximately 7 percent of all AIDS cases involved injection drug use (alone) as the primary route of exposure. Among the 3,430 cumulative cases primarily attributable to injection drug use, 72 percent occurred among males. African-Americans are the modal group of male injection drug users (IDUs) (accounting for 37 percent), followed by Hispanics (32 percent) and Whites (30 percent). A similar pattern was seen with female IDU AIDS cases. African-Americans continued to constitute the greatest proportion (44 percent), followed by Whites (31 percent) and Hispanics (22 percent).

An additional 7 percent of the total cumulative cases were attributable to a combination of male-to-male sexual contact and injection drug use. Fifty-one percent of the male-to-male sexual contact and injection drug use cases were White.

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Exhibit 1. Population Characteristics, Los Angeles County and the State of California, by Percent: 2000 and 2003

Population Characteristics	Los Angeles County	California
Population, 2003 estimate (N)	(9,871,506)	(35,484,453)
Population, percent change, April 1, 2000, to July 1, 2003	3.7	4.8
Population, year 2000 (N)	(9,519,338)	(33,871,648)
Persons younger than 5	7.7	7.3
Persons younger than 18	28.0	27.3
Persons age 65 and older	9.7	10.6
Female	50.6	50.2
White	48.7	59.5
Black or African-American	9.8	6.7
American Indian or Alaska Native	0.8	1.0
Asian persons	11.9	10.9
Native Hawaiian or Other Pacific Islander	0.3	0.3
Persons reporting some other race	23.5	16.8
Persons reporting two or more races	4.9	4.7
White, not Hispanic/Latino origin	31.1	46.7
Persons of Hispanic/Latino origin	44.6	32.4

SOURCE: U.S. Census Bureau, State and County QuickFacts

Exhibit 2. Data Completeness for Los Angeles County DAWN Live! Emergency Departments (n=41)¹, by Month: January–June 2005

Data Completeness	Number of EDs by Month					
	January 2005	February 2005	March 2005	April 2005	May 2005	June 2005
Basically Complete ²	8	6	7	11	9	8
Partially Complete ³	3	4	2	0	2	2
Incomplete ⁴	1	0	1	0	0	1
No Data Reported	29	31	31	30	30	30
Total EDs in Sample ⁵	41	41	41	41	41	41

¹Total eligible hospitals in area=79; Hospitals in DAWN sample=38; Hospitals not in DAWN Sample=41. Tables reflect cases that have been received by DAWN as of either 12/06–07/2005 or 12/20/05; the exact date will be indicated in future tables.

²90% complete.

³50% to 89% complete.

⁴Less than 50% complete.

⁵Some hospitals in the DAWN sample have more than one emergency department. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted. Therefore, these data are subject to change.

SOURCE: DAWN Live!, OAS, SAMHSA, update 12/6–12/7/2005 and 12/20/05

Exhibit 3. Number of DAWN ED Cases, by Case Type (Unweighted¹), in the Los Angeles County Division, and Percent of All ED Visits: January–June 2005

Case Type	Number	Percentage of ED Visits
Suicide Attempt	241	5.5
Seeking Detoxification	86	2.0
Alcohol Only (age <21)	150	3.4
Adverse Reaction	1,243	28.2
Overmedication	333	7.6
Malicious Poisoning	21	<1.0
Accidental Ingestion	49	1.1
Other	2,286	51.8
Total	4,409	100.0

¹The unweighted data are from 6–11 EDs reporting to Los Angeles area hospitals. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted. Therefore, these data are subject to change.
SOURCE: DAWN Live!, OAS, SAMHSA, updated 12/06–07/05

Exhibit 4. Number and Percentage of Semiannual Treatment Admissions in Los Angeles County, by Primary Illicit Drug of Abuse: July 2002–June 2005

Primary Drug	07/02–12/02 Number (%)	01/03–06/03 Number (%)	07/03–12/03 Number (%)	01/04–06/04 Number (%)	07/04–12/04 Number (%)	01/05-06/05 Number (%)
Cocaine/Crack	4,354 (19.0)	5,242 (19.3)	4,815 (18.2)	5,137 (18.1)	4,124 (17.8)	4,397 (17.6)
Heroin	7,096 (30.9)	6,891 (25.4)	6,704 (25.4)	6,942 (24.5)	5,341 (23.2)	4,870 (19.5)
Marijuana	2,816 (12.3)	3,669 (13.5)	3,452 (13.1)	3,812 (13.4)	3,318 (14.4)	4,041 (16.2)
Methamphetamine	3,692 (16.1)	4,961 (18.3)	5,095 (19.3)	5,840 (20.6)	5,395 (23.4)	6,392 (25.6)
PCP	219 (0.9)	314 (1.2)	262 (1.0)	230 (0.8)	135 (0.6)	150 (0.6)
Total Admissions	22,934	27,110	26,393	28,371	23,059	24,972

SOURCE: California Alcohol and Drug Data System (CADDs)

Exhibit 5. Number and Percentage of Annual Treatment Admissions in Los Angeles County, by Primary Illicit Drug of Abuse: 2001–2004

Primary Drug	2001		2002		2003		2004	
	Number	(%)	Number	(%)	Number	(%)	Number	(%)
Cocaine/Crack	8,703	(18.9)	9,009	(19.3)	10,057	(18.8)	9,261	(18.0)
Heroin	17,560	(38.1)	14,863	(31.9)	13,595	(25.4)	12,283	(23.9)
Marijuana	4,286	(9.3)	5,502	(11.8)	7,121	(13.3)	7,130	(13.9)
Methamphetamine	5,418	(11.7)	7,145	(15.3)	10,056	(18.8)	11,235	(21.8)
PCP	405	(0.9)	415	(0.9)	576	(1.1)	365	(0.7)
Total Admissions	46,127		46,629		53,503		51,430	

SOURCE: California Alcohol and Drug Data System (CADDs)

Exhibit 6. Demographics of Treatment Admissions in Los Angeles County, by Primary Illicit Drug of Abuse and Percent: January–June 2005

Demographics	Cocaine/ Crack	Heroin	Marijuana	Metham- phetamine	All Admissions
Gender					
Male	65.1	72.7	75.8	59.9	67.1
Female	34.9	27.3	24.2	40.1	32.9
Race/Ethnicity					
White, non-Hispanic	13.2	37.2	13.8	36.4	28.1
Black, non-Hispanic	55.9	10.8	26.9	3.6	22.0
Hispanic	26.8	47.3	54.6	54.0	44.7
American Indian	0.7	0.9	0.7	0.9	0.9
Asian/Pacific Islander	1.3	0.9	2.0	2.8	1.8
Other	2.2	2.9	2.1	2.3	2.5
Age					
17 and younger	1.1	0.5	51.8	9.8	14.4
18–25	9.9	7.6	22.8	29.9	16.8
26–35	21.3	18.4	12.9	33.1	21.9
36 and older	67.7	73.5	12.5	27.2	46.9
Route of Administration					
Oral	1.3	1.1	1.2	1.9	19.9
Smoking	86.2	7.5	98.3	71.3	52.0
Inhalation	11.6	4.3	0.2	19.9	8.8
Injection	0.6	86.9	0.0	6.1	18.7
Unknown/other	0.4	0.3	0.3	0.7	0.6
Secondary Drug	Alcohol	Cocaine/ Crack	Alcohol	Marijuana	Alcohol
Positive for Intravenous Drug Use in Past Year	3.9	88.8	0.9	10.6	21.9
Homeless	28.2	19.1	7.9	20.8	19.5
Employed Full- or Part-Time	14.8	22.4	13.0	18.3	17.4
Graduated from High School	42.0	43.5	20.9	41.1	36.8
Referred by Court/Criminal Justice System (Not Including SACPA ¹ Referrals)	12.8	4.1	20.7	14.3	12.0
First Treatment Episode	43.3	25.1	73.4	49.6	49.8
Total Admissions (N)	(4,397)	(4,870)	(4,041)	(6,392)	(24,972)

¹SACPA = Substance Abuse and Crime Prevention Act of 2000 (a.k.a., Proposition 36).
SOURCE: California Alcohol and Drug Data System (CADDs)

Exhibit 7. Number of Drug Reports in Drug-Related ED Visits, by Drug Category (Major Substances of Abuse), in the Los Angeles County Division (Unweighted¹): January–June 2005

Major Substance of Abuse	Number of ED Reports ¹
<i>Alcohol</i>	(1,064)
Alcohol only (age <21)	150
Cocaine	969
Heroin	372
Marijuana	548
<i>Stimulants</i>	(631)
Amphetamines	115
Methamphetamine	516
MDMA (Ecstasy)	22
GHB	5
Ketamine	0
LSD	3
PCP	65
Miscellaneous hallucinogens	12
Inhalants	7
Combinations NTA	17
Total	3,715

¹The unweighted data are from 6 to 11 EDs reporting to the Los Angeles area hospitals. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted. Therefore, these data are subject to change.
SOURCE: DAWN *Live!*, OAS, SAMHSA, updated 12/06–07/05

Exhibit 8a. Los Angeles County Poison Control System Exposure Calls for Major Substances of Abuse: January 2001–June 2005

Major Substance	2001 Number	2002 Number	2003 Number	2004 Number	1H2005 Number	Cumulative Number
Cocaine/Crack ¹	66	77	97	74	22	336
Heroin ¹	15	20	17	22	13	87
Marijuana ¹	35	39	39	26	15	154
Methamphetamine/ Amphetamine ²	63	51	54	54	39	261
Ecstasy (MDMA) ¹	50	33	16	19	12	130
Rohypnol/flunitrazepam ¹	4	4	1	4	0	13
GHB ¹	35	25	10	8	3	81
Ketamine ²	2	3	1	3	2	11
PCP ¹	17	13	16	6	4	56
LSD ¹	2	6	1	2	1	12
Mushrooms ¹	1	0	2	0	0	3
Other hallucinogens ¹	0	2	2	3	2	9
Inhalants ²	0	3	2	5	1	11
Other Illicit ¹	1	2	0	0	0	3
Total	291	278	258	226	114	1,167

¹Includes calls for all exposure reasons.

²Includes calls for the following exposure reasons: intentional misuse, intentional abuse, intentional unknown, contamination/tampering, and other malicious.

SOURCE: California Poison Control System

Exhibit 8b. Los Angeles County Poison Control System Exposure Calls for Prescription and Over-the-Counter Medications and Common Household Substances: January 2001–June 2005

Substance ¹	2001 Number	2002 Number	2003 Number	2004 Number	1H2005 Number	Cumulative Number
Antidepressants	8	12	15	10	3	48
Antipsychotics	5	5	4	11	0	25
<i>Benzodiazepines</i>	(83)	(52)	(70)	(86)	(21)	(312)
Alprazolam	14	8	12	14	4	52
Clonazepam	23	10	15	17	6	71
Diazepam	17	8	16	8	3	52
Other	29	26	27	47	8	137
Barbiturates	1	0	2	1	0	4
<i>Opiates/Analgesics</i>	(45)	(62)	(67)	(70)	(26)	(270)
Codeine	6	2	4	2	4	18
Hydrocodone	10	32	39	41	13	135
Buprenorphine	1	0	0	3	0	4
Methadone	4	5	3	6	1	19
Oxycodone	4	7	9	2	1	23
Narcotic analgesics	6	6	8	7	5	32
Other (nonnarcotic)	14	10	4	9	2	39
Fentanyl	1	2	0	3	3	9
Dextromethorphan	10	10	12	11	9	52
Coricidin HBP	13	26	28	38	29	134
Miscellaneous Anxiolytics	4	2	8	1	0	15
Muscle Relaxants	6	8	13	11	4	42
Ritalin/Adderall	10	11	9	9	4	43
Other Stimulants	4	2	1	0	0	7
Other	20	23	16	23	8	90
Unknown	2	3	4	2	0	11
Total	212	218	249	276	107	1,062

¹Includes calls for the following exposure reasons: intentional misuse, intentional abuse, intentional unknown, contamination/tampering, and other malicious.

SOURCE: California Poison Control System

Exhibit 9. Los Angeles County Poison Control System Exposure Calls for Select Substances, by Gender, Age, and Percent¹: July 2004–June 2005

	Cocaine/ Crack	Methamphetamine/ Amphetamine	Ritalin/ Adderall	Ecstasy	Coricidin HBP	Dextro- methorphan
<i>Gender</i>						
Male	67	72	55	21	56	47
Female	27	25	45	74	42	53
Unknown	6	3	0	5	2	0
<i>Age Group</i>						
Younger than 13	15	17	18	11	9	0
13–17	2	15	55	26	78	60
18–25	22	28	18	47	13	7
26–34	31	22	9	16	0	7
35–44	22	7	0	0	0	13
45–54	7	8	0	0	0	0
55 and older	2	3	0	0	0	13
Total Number of Calls	55	60	11	19	45	15

¹Percentages may not add to 100 due to rounding.

SOURCE: California Poison Control System

Exhibit 10. Drug Items Analyzed by the National Forensic Laboratory Information System: Los Angeles County: October 2003–September 2005

Name of Substance	FY 2003–04		FY 2004–05	
	Count	(% of Total)	Count	(% of Total)
All Illicit Drugs	53,393	98.4%	55,999	97.9%
Cocaine/Crack	20,564	(37.9)	20,680	(36.2)
Methamphetamine/Amphetamine	17,749	(32.7)	18,987	(33.2)
Marijuana/Cannabis	12,210	(22.5)	13,098	(22.9)
Heroin	2,131	(3.9)	2,492	(4.4)
PCP	345	(<1.0)	278	(<1.0)
LSD	0	(0.0)	3	(<1.0)
MDMA/MDA	232	(<1.0)	313	(<1.0)
GHB/GBL/1,4-BDL	35	(<1.0)	37	(<1.0)
Ketamine	21	(<1.0)	24	(<1.0)
Rohypnol	0	(0.0)	4	(<1.0)
Psilocin/Psilocybin	106	(<1.0)	83	(<1.0)
All Prescription/OTC/Non-Controlled Substances	847	1.6%	1,180	2.1%
Analgesics	361	(<1.0)	623	(<1.0)
Benzodiazepines	163	(<1.0)	281	(<1.0)
Stimulants	15	(<1.0)	32	(<1.0)
Muscle Relaxants	44	(<1.0)	67	(<1.0)
Non-Controlled Non-Narcotic Drug	105	(<1.0)	96	(<1.0)
Other	159	(<1.0)	81	(<1.0)
Total	54,240	100.0%	57,179	100.0%

SOURCE: NFLIS, DEA

Exhibit 11. Illicit and Prescription Drug Prices in Los Angeles: January–June 2005

Type of Drug	Price		
	Wholesale	Midlevel	Retail
Cocaine Powder Crack Cocaine	\$14,000–\$17,000 per kilogram N/R ¹	\$500–\$600 per ounce \$500–\$1,200 per ounce	\$80 per gram \$10–\$40 per rock
Heroin Mexican Black Tar	\$20,000 per kilogram	\$300–\$700 per 25 grams	\$90–\$100 per gram \$10 per 1/10 gram
Mexican Brown Powder	\$25,000 per kilogram	N/R	N/R
Southeast Asian Per 700–750 grams	\$70,000–\$80,000	N/R	N/R
Per 300–350 grams	\$35,000–\$40,000	N/R	N/R
Southwest Asian Opium	\$30,000 per kilogram	N/R	\$650–\$800 per 18-gram stick
South American	\$86,000–\$90,000 per kilogram	N/R	N/R
Marijuana Mexican Low-Grade	\$300–\$340 per pound	\$25–\$100 per ounce	\$5–\$10 per gram
Domestic Mid-Grade	\$750 per pound	\$50–\$200 per ounce	\$25 per gram
Sinsemilla High-Grade	\$2,500–\$6,000 per pound	\$300–\$600 per ounce	\$60–\$80 per 1/8 ounce
BC Bud	\$6,000 per pound	N/R	N/R
Hashish	\$8,000 per pound	N/R	N/R
Methamphetamine	\$5,000–\$7,000 per pound	\$300 per ounce	N/R
Crystal Methamphetamine (Ice)	\$6,500–\$11,000 per pound	\$600–\$800 per ounce	\$20 per ¼ gram \$60 per 1/16 ounce \$100–125 per 1/8 ounce
Pseudoephedrine	\$3,250–\$4,000 double case (1 case=17,000 60-mg tablets)	N/R	N/R
PCP	\$15,000–\$20,000 per gallon	\$300–\$350 per ounce	\$10–\$30 per sherm cigarette
LSD	\$150–\$200 per sheet (100 doses)	N/R	\$5–\$10 per dose
Psilocybin Mushrooms	N/R	N/R	\$20 per 1/8 ounce
MDMA (ecstasy)	\$6,000 per boat (1,000 tablets)	N/R	\$10–\$15 per tablet
GHB	\$275–\$350 per gallon \$80–\$100 per liter \$120 per 16 ounce bottle	N/R	\$5–\$20 per capful
GBL	\$600 per liter	NR	N/R
Ketamine	N/R	\$100–\$200 per 10 milliliter vial	\$20 per two-tenths gram
Rohypnol (flunitrazepam)	N/R	N/R	\$6–\$10 per 1-mg pill
Steroids	N/R	N/R	\$10 per dose
Valium (diazepam)	N/R	N/R	\$1 per 5-mg tablet
Vicodin ES (hydrocodone)	N/R	N/R	\$1 per 10-mg tablet
OxyContin (oxycodone)	N/R	N/R	\$50–\$80 per 80-mg tablet
MS Contin	N/R	N/R	\$20 per 60-mg tablet
Percocet/Percodan	N/R	N/R	\$1–\$5 per 5-mg tablet
Dilaudid (hydromorphone)	N/R	N/R	\$20–\$60 per 4-mg tablet
Methadone	N/R	N/R	\$10 per tablet
Codeine	N/R	\$80–200 per liquid pint	\$1–\$2.50 per tablet
Duragesic Patch (fentanyl)	N/R	N/R	\$25–\$100 per patch
Xanax (alprazolam)	N/R	N/R	\$1 per 4-mg tablet
Ritalin (methylphenidate)	N/R	N/R	\$1–\$2 per tablet

¹N/R=Not reported.

SOURCE: 1st and 2nd Quarter 2005 Drug Price List, LA County Regional Criminal Information Clearinghouse

Exhibit 12. Reported Drug Use Among Los Angeles County Secondary School Students, by Percent: 2003–2004 School Year

Usage Patterns Among Survey Respondents	7th Grade ¹	9th Grade	11th Grade	All Respondents ²
Cocaine (any form)				
Lifetime	***	5.4	7.5	7.4
Past 30 days	***	3.0	3.5	3.8
Ecstasy				
Lifetime	***	4.3	5.7	5.5
Past 30 days	N/A ³	N/A	N/A	N/A
Heroin				
Lifetime	***	3.1	3.0	3.3
Past 30 days	***	N/A	N/A	N/A
Inhalants				
Lifetime	12.5	13.7	12.6	13.4
Past 30 days	5.5	5.3	4.1	5.3
LSD/Other Psychedelics				
Lifetime	***	4.4	5.9	5.8
Past 30 days	***	2.5	2.5	2.9
Marijuana				
Lifetime	7.3	20.4	32.8	19.8
Past 30 days	4.3	10.9	15.1	10.3
Methamphetamine				
Lifetime	***	5.4	7.2	7.3
Past 30 days	***	2.9	3.4	3.7

¹The 7th grade data for several drugs (i.e., cocaine/crack, ecstasy, heroin, LSD/other psychedelics, and methamphetamine) were based on responses from a very small subset of 7th graders. Therefore, these results have been suppressed (***).

²All respondents include responding 7th graders (when applicable), 9th graders, 11th graders, and a small sample of nontraditional students (enrolled in continuation or alternative schooling programs).

³ N/A=Not applicable.

SOURCE: California Healthy Kids Survey, Los Angeles County Sample, WestEd

Exhibit 13. Past-6-Month Substance Use Among Los Angeles County Secondary School Students, by Percent: 2003–2004 School Year

Usage Patterns Among Survey Respondents	7th Grade ¹	9th Grade	11th Grade	All Respondents ²
Any Alcohol	22.1	36.7	52.5	34.7
Inhalants	10.4	9.2	6.2	9.2
Marijuana	9.2	15.9	22.7	15.4
Cocaine (any form), Methamphetamine, or Other Stimulants	***	7.1	6.5	7.5
Psychedelics, Ecstasy, or Other Club Drugs	***	6.2	5.0	6.2
Other Drugs, Heroin, or Sedatives	***	6.3	5.2	6.2
Two or More Drugs at the Same Time	9.9	9.4	12.4	11.4

¹The 7th grade data for several drug categories were based on responses from a very small subset of 7th graders. Therefore, these results have been suppressed (***).

²All respondents include responding 7th graders (when applicable), 9th graders, 11th graders, and a small sample of nontraditional students (enrolled in continuation or alternative schooling programs).

SOURCE: California Healthy Kids Survey, Los Angeles County Sample, WestEd

Exhibit 14. Long-Term Trends in the Percentage of Current Substance Users Among a Sample of Los Angeles County Secondary School Students, by Percent: 1999–2004

Respondents ¹ Reporting Past 30-Day Use of...	School Year				
	1999–2000	2000–2001	2001–2002	2002–2003	2003–2004
At Least One Drink of Alcohol	29.2	28.4	25.4	24.8	24.6
5+ Alcoholic Drinks/Occasion (a.k.a., Binge Drinking)	14.4	13.4	12.4	12.4	12.3
Cocaine (Any Form)	4.9	4.3	3.9	3.8	3.8
Inhalants	5.7	5.1	5.0	5.3	5.3
LSD/Other Psychedelics	5.0	4.4	3.3	2.8	2.9
Marijuana	13.2	13.0	12.0	10.9	10.3
Methamphetamine	4.6	4.3	4.1	4.3	3.7

¹All respondents include responding 7th graders (when applicable), 9th graders, 11th graders, and a small sample of nontraditional students (enrolled in continuation or alternative schooling programs).

SOURCE: California Healthy Kids Survey, Los Angeles County Sample, WestEd

Exhibit 15. Prescription Drug Misuse—Number of Drug Reports in Drug-Related ED Visits, Selected Drugs, by Case Type in the Los Angeles County Division (Unweighted¹): January–June 2005

Selected Drug Categories, by Case Type	Number of ED Reports ¹
Antidepressants	79
Seeking detoxification	0
Overmedication	35
Other	44
Antipsychotics	76
Seeking detoxification	1
Overmedication	44
Other	31
Benzodiazepines	218
Seeking detoxification	7
Overmedication	72
Other	139
Barbiturates	13
Seeking detoxification	0
Overmedication	4
Other	9
Opiates/Opioids	227
Seeking detoxification	30
Overmedication	68
Other	129
Muscle Relaxants	36
Seeking detoxification	5
Overmedication	20
Other	11
Total of Other Substances	1,084

¹The unweighted data are from 6 to 11 EDs reporting to the Los Angeles area hospitals. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted. Therefore, these data are subject to change.

SOURCE: DAWN *Live!*, OAS, SAMHSA, updated 12/06–07/05 or 12/20/05

Exhibit 16. Annual Adult/Adolescent AIDS Cases by Gender, Year of Diagnosis, and Exposure Category: 1998–2004

Adult/Adolescent Exposure Category ¹	1998 Number (%)	1999 Number (%)	2000 Number (%)	2001 Number (%)	2002 Number (%)	2003 ² Number (%)	2004 ² Number (%)
Males							
Male-to-Male Sexual Contact	1,119 (66)	1,040 (66)	947 (64)	923 (64)	1,014 (66)	894 (68)	638 (63)
Injection Drug Use	99 (6)	77 (5)	91 (6)	91 (6)	83 (5)	51 (4)	56 (6)
Male-to-Male Sexual Contact/Injection Drug Use	120 (7)	100 (6)	112 (8)	102 (7)	102 (7)	91 (7)	48 (5)
Hemophilia or Coagulation Disorder	<5 (-)	<5 (-)	<5 (-)	5 (<1)	<5 (-)	<5 (-)	<5 (-)
Heterosexual Contact	60 (4)	57 (4)	53 (4)	71 (5)	61 (4)	58 (4)	28 (3)
Transfusion Recipient	<5 (-)	<5 (-)	<5 (-)	5 (<1)	6 (<1)	<5 (-)	<5 (-)
Mother with/at Risk for HIV	<5 (-)	<5 (-)	<5 (-)	<5 (-)	<5 (-)	<5 (-)	<5 (-)
Other/Undetermined	296 (17)	296 (19)	27363 (18)	42 (17)	277 (18)	225 (17)	244 (24)
Male Subtotal	1,700	1,575	1,477	1,439	1,544	1,324	1,014
Females							
Injection Drug Use	47 (22)	42 (20)	41 (18)	44 (20)	46 (21)	21 (12)	23 (17)
Hemophilia or Coagulation Disorder	<5 (-)	<5 (-)	<5 (-)	<5 (-)	<5 (-)	<5 (-)	<5 (-)
Heterosexual Contact	100 (46)	104 (48)	106 (47)	88 (39)	83 (38)	76 (43)	48 (35)
Transfusion Recipient	<5 (-)	<5 (-)	<5 (-)	6 (3)	8 (4)	<5 (-)	<5 (-)
Mother with/at Risk for HIV	<5 (-)	<5 (-)	<5 (-)	<5 (-)	<5 (-)	<5 (-)	<5 (-)
Other/Undetermined	64 (30)	65 (30)	77 (34)	86 (38)	82 (37)	77 (44)	63 (46)
Female Subtotal	216	215	226	225	220	175	138
Total	1,916	1,790	1,707	1,664	1,764	1,499	1,152

¹Exposure categories are ordered hierarchically. Cases with multiple exposure categories are included in the category listed first.

²Data are provisional due to reporting delay. Cases include those reported by June 30, 2005.

SOURCE: Los Angeles County Department of Health Services, HIV Epidemiology Program

Drug Abuse in South Florida: January–June 2005

James N. Hall¹ and Madeline Camejo,
Pharm.D.²

ABSTRACT

This report addresses the extent, prevalence, and consequences of illicit drug and medication abuse in South Florida during the first 6 months of 2005. The completion of the first half of the decade provides an early glimpse into what may be emerging substance abuse issues for the new century. After alcohol and tobacco, the growing abuse of medications causes the most number of drug-induced and drug-related deaths locally and across Florida. The exception is in Miami-Dade County, where cocaine dominates drug fatalities, and medication-related deaths are fewer than in any other area of the State. Palm Beach and Broward Counties, immediately north of Miami-Dade County, have the highest number of narcotic analgesic and benzodiazepine deaths in Florida. Annual cocaine use is reported by less than 2 percent of Miami-Dade and Broward residents, but consequences of its use are responsible for the highest number of illicit drug deaths, medical emergencies, and treatment admissions. Cocaine trends are declining slightly in South Florida but are increasing statewide. There are early indications that cocaine street purity levels may be declining in order to keep retail supplies readily available as wholesale kilogram prices are rising. Heroin deaths are down substantially across the region and the State as fatalities from prescription opiates are dramatically increasing, except in Miami-Dade County. Methamphetamine abuse and related problems are low in the region but have been increasing over the past year. Marijuana is the most prevalent illicit drug of abuse and dominates consequences among youth. Marijuana-related emergency department reports and addiction treatment admissions rank second behind cocaine (excluding alcohol). Club drug consequences continue to decline, as MDA and MDEA are also being sold as 'ecstasy' along with MDMA. GHB has been replaced by 1.4 butanediol, which is responsible for a declining number of cases linked to 'GHB.' Benzodiazepine-related consequences

are dramatically higher in Broward and Palm Beach Counties than in the rest of Florida, including Miami-Dade County. Methamphetamine abuse among a small number of users is linked to sharp increases in sexually transmitted diseases since 2001 in the region.

INTRODUCTION

This report reviews data from the first half of 2005 about drug-related deaths, medical emergencies, addiction treatment admissions, and law enforcement intelligence. Information is presented by primary substance of abuse, with topics including cocaine, heroin, other opiates, marijuana, gamma hydroxybutyrate (GHB), methylenedioxymethamphetamine (MDMA or "ecstasy"), methamphetamine, and benzodiazepines. While the information is classified by a single drug or category, the reader should note an underlying problem of polysubstance abuse as mentioned throughout this report. Exhibits for the report follow the narrative text.

Area Description

Located in the extreme southern portion of the Florida peninsula, Miami-Dade County has a population of nearly 2.6 million; 56 percent are Hispanic, 21 percent are Black, 21 percent are White, and 2 percent are Asian/Pacific Islander. Miami is Dade County's largest city, with 360,000 residents. More than 100,000 immigrants arrive in Florida each year; one-half establish residency in Miami-Dade County.

Broward County, situated due north of Miami-Dade, is composed of Ft. Lauderdale plus 28 other municipalities and an unincorporated area. The county covers 1,197 square miles, including 25 miles of coastline. According to the 2000 census, the population was 1,649,925. The population is roughly 63 percent White non-Hispanic, 21 percent Black non-Hispanic, and 17 percent Hispanic.

Broward County is the second most populated county in Florida and accounts for approximately 10 percent of Florida's population. Broward was the top growth county in Florida in the 1990s and added 367,000 more people during that decade. Palm Beach County (population 1,154,464) is located due north of Broward County and is the third most populated county in the State. Together, the 5.4 million people of these 3 counties constitute one-third of the State's 16.3 million population.

Starting in 2003, these three counties constitute the new federally designated Metropolitan Statistical Area (MSA) for South Florida, making it the sixth largest in

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the Nation. Previously, the MSA included only Miami-Dade County. This means that Broward and Palm Beach Counties will now be included in more national data sets tracking health-related conditions and criminal justice information. One change is that more local hospitals will become a part of the national Drug Abuse Warning Network (DAWN) that monitors emergency department (ED) reports of drug-related episodes.

Approximately 25 million tourists visit South Florida annually. The region is a hub of international transportation and the gateway to commerce between the Americas, accounting for sizable proportions of the Nation's trade: 40 percent with Central America, 37 percent with the Caribbean region, and 17 percent with South America. South Florida's airports and seaports remain among the busiest in the Nation for both cargo and international passenger traffic. These ports of entry make this region a major gateway for illicit drugs. Smuggling by cruise ship passengers is an important trend in South Florida drug trafficking and has apparently been growing because of airline security increases after September 11, 2001.

Several factors impact the potential for drug abuse problems in South Florida, including the following:

- Proximity to the Caribbean and Latin America exposes South Florida to the entry and distribution of illicit foreign drugs destined for all regions of the United States. Haiti and Jamaica remain as transshipment points for Colombian traffickers.
- South Florida is a designated High Intensity Drug Trafficking Area and one of the Nation's leading cocaine importation centers. It also became a gateway for Colombian heroin in the 1990s.
- Extensive coastline and numerous private air and sea vessels make it difficult to pinpoint drug importation routes into Florida and throughout the Caribbean region.
- Lack of a prescription monitoring system in Florida now makes the State a source for diverted medications throughout the southeastern United States.

Data Sources

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

- **Drug-related mortality data** were provided by the Florida Department of Law Enforcement (FDLE), Medical Examiners Commission's 2005 Interim Report of Drugs Identified in Deceased Persons by the Florida Medical Examiners Commission.
- **Emergency department data** were derived for the first half of 2005 from the DAWN *Live!* restricted-access online query system administered by the Office of Applied Studies (OAS), Substance Abuse and Mental Health Services Administration (SAMHSA). Eligible hospitals in only the Miami-Dade County Division totaled 21; hospitals in the DAWN sample numbered 19, with the number of emergency departments in the sample also totaling 19. (Some hospitals have more than one emergency department.) During this 6-month period, 10 EDs reported data each month. The completeness of data reported by participating EDs was considered basically complete, with 90 percent or greater of ED records reviewed and reported (see exhibit 1). Exhibits in this paper for Miami-Dade County reflect cases that were received by DAWN as of December 6–7, 2005. Eligible hospitals in the Ft. Lauderdale Division only (that includes Broward and Palm Beach Counties) totaled 27; there were 22 hospitals in the DAWN sample, and the number of emergency departments in the sample also totaled 22. During this 6-month period, 6 to 8 EDs reported data each month. The completeness of data reported by participating EDs varied by month (see exhibit 2). Exhibits in this paper for Broward and Palm Beach Counties reflect cases that were received by DAWN as of October 20, 2005. Based on this review, cases may be corrected or deleted. Therefore, the data presented in this paper are subject to change. Data derived from DAWN *Live!* represent drug reports in drug-related ED visits. Drug reports exceed the number of ED visits, since a patient may report use of multiple drugs (up to six drugs and alcohol). The DAWN *Live!* data are unweighted and, thus, are not estimates for the reporting area. These data cannot be compared to DAWN data from 2002 and before, nor can preliminary data be used for comparison with future data. Only weighted DAWN data released by SAMHSA can be used for trend analysis. A full description of the DAWN system can be found at the DAWN Web site: <http://dawninfo.samhsa.gov/>.

- **Drug treatment data** for the first half of 2005 were provided by the Broward Addiction Recovery Centers (BARC) of the Broward County Department of Human Services.
- **Crime lab drug analyses data** were derived from the Drug Enforcement Administration's (DEA) National Forensic Laboratory Information System (NFLIS) 2005 Annual Report for Miami-Dade and Broward Counties (October 2004 through September 2005) and by the Broward Sheriff's Office (BSO) Crime Lab for the first 6 months of 2005 in Broward County.
- **Drug pricing data** for South Florida were derived from the National Drug Intelligence Center (NDIC), *Narcotics Digest Weekly*, December 28, 2004.
- **Heroin price and purity information** is from the U.S. DEA's Domestic Monitoring Program (DMP) for 2002 to 2004.
- **Survey data** on the prevalence of cocaine, marijuana, and any illicit drug use among the general population age 12 and older in Miami-Dade and Broward Counties are provided by the Substate Substance Abuse Estimates from the 1999–2001 National Surveys on Drug Use and Health conducted by OAS, SAMHSA.

Other information on drug use patterns was derived from ethnographic research and callers to local drug information hotlines.

DRUG ABUSE PATTERNS AND TRENDS

Cocaine/Crack

South Florida's cocaine epidemic is characterized by morbidity and mortality rates that rank among the highest in the Nation. The steady flow of cocaine into the region for the past 30 years has fueled the epidemic with widely available cheap cocaine. Yet, in the first half of 2005, there are suggestions from users and law enforcement alike that cocaine street purity may be declining at the retail level as wholesale kilogram prices are rising. Cocaine abuse indicators dominate consequences of drug abuse at high, yet stable rates. The majority of cocaine deaths, medical emergencies, and addiction treatment reports are among those older than 35. Many of the indicators reflect cocaine use in combination with other drugs, including opiates and benzodiazepines.

Throughout Florida, the number of *cocaine-related* deaths increased in the first half of 2005, continuing a

rising trend since 2000. There were 872 cocaine-related fatalities during the first 6 months of 2005 across Florida, a 2.7-percent increase from the 848 deaths in the second half of 2004. Cocaine-related deaths are at their highest peak statewide since the drug has been tracked in the late 1980s. Among the cases in the first half of 2005 as well as those from 2004, 75 percent involved the use of another drug, thus reflecting prevalent polydrug abuse patterns with cocaine (exhibit 3). A large proportion of cocaine ED reports also involved at least one other substance.

In Florida, a drug is considered to be the cause of death if it can be detected in an amount considered a lethal dose by the local medical examiner (ME). Among the cocaine-related deaths statewide in the first 6 months of 2005, 333 were considered to be *cocaine induced*, a 5.7-percent increase from the previous semiannual period.

There were 77 deaths related to cocaine abuse in Miami-Dade County during the first half of 2005 (exhibit 4), representing a 4-percent decrease over the 2004 semiannual rate. Cocaine was detected at a lethal level in 12 percent of the cases in the first half of 2005 cases, down from 35 percent of the 2004 cases and 25 percent of the 2003 cocaine-related deaths. Cocaine was found in combination with another drug in 62 percent of the cases during the first 6 months of 2005, equal to the 2004 proportion. One of the 2005 cocaine-related fatalities was younger than 18; 12 percent were age 18–25, 12 percent were 26–34, 49 percent were 35–50, and 26 percent were older than 50. Cocaine-related deaths in Miami-Dade County totaled 160 in 2004, 189 in 2003, 151 in 2002, 149 in 2001, 144 in 2000, 226 in 1999, and 273 in 1998.

There were 54 deaths related to cocaine abuse in Broward County during the first half of 2005 (exhibit 5), representing an 8-percent decrease over the 59 cases from the second half of 2004. Cocaine was detected at a lethal level in 35 percent of the January–June 2005 cases in Broward County, a proportion that has been steadily declining since 2002, when it was the cause of death in 53 percent of the cocaine-related deaths. Yet, Broward County had the highest number of cocaine-induced deaths in the State during the first half of 2005. Cocaine was found in combination with another drug in 87 percent of the related death cases in the same period. None of the cocaine-related fatalities was younger than 18; 7 percent were age 18–25, 26 percent were 26–34, 54 percent were 35–50, and 13 percent were older than 50. Cocaine-related deaths in Broward County totaled 120 in 2004, 138 in 2003, 121 in 2002, 94 in 2001, 80 in 2000, and a record high 139 in 1999.

The West Palm Beach area had the highest number of cocaine-related deaths in the State during the first 6 months of 2005, with 91 cases, followed by Jacksonville with 80, Miami with 77, Orlando with 74, St. Petersburg with 73, and Broward County with 54. With 35 cocaine-induced deaths, Broward County had reported the highest number of lethal cocaine cases, followed by Palm Beach County with 32, Melbourne with 31, and Sarasota with 29.

Unweighted data on ED cocaine reports in Miami-Dade County were accessed from DAWN *Live!* for the first half of 2005. Cocaine was the most commonly reported illicit drug in local EDs, accounting for 60 percent of the 5,691 Miami-Dade major substances of abuse reports (not including alcohol-in-combination with another drug, any alcohol for those younger than 21, and medications) during the first 6 months of 2005 (exhibit 6).

Most (70 percent) of the 3,434 Miami-Dade cocaine-involved ED patients were male. Non-Hispanic Blacks accounted for 44 percent of the cocaine patients; 31 percent were non-Hispanic Whites; and 17 percent were Hispanics. Race/ethnicity was not documented or unknown for 8 percent of the patients. Cocaine-involved ED patients were age 35 or older in 61 percent of the reports, which continues a pattern of older cocaine ED patients. The patients' ages were as follows: less than 1 percent ($n=31$) were younger than 18, 12 percent were 18–24, 25 percent were 25–34, 36 percent were age 35–44, and 25 percent were 45 or older.

Cocaine was clearly the most commonly reported illicit drug in Broward County emergency department visits, accounting for 54 percent of the 4,406 unweighted Broward major substances of abuse reports (not including alcohol-in-combination with another drug, any alcohol for those younger than 21, and medications) in the first half of 2005 (exhibit 7).

Most (69 percent) of the 2,390 Broward cocaine ED patients were male. Fifty-eight percent were non-Hispanic Whites, 31 percent were non-Hispanic Blacks, and 11 percent were Hispanic/other. Cocaine-involved ED patients were age 35 or older in 58 percent of these cases. The patients' ages were as follows: 3 percent were in their teens, 12 percent were age 18–24, and 27 percent were 25–34.

Cocaine accounted for 2,010 (or 48 percent) of primary, secondary, and tertiary treatment drug mentions (excluding alcohol) among the 3,237 BARC patients who cited as least 1 drug of abuse at time of admission during the first half of 2005. Of the cocaine mentions, 45 percent (or 906 cases) were as the

primary drug of abuse. Fifty-six percent of the total cocaine treatment mentions were from White, non-Hispanic clients, 34 percent were from Black, non-Hispanic patients, and 10 percent were from Hispanics. BARC client data are for clients age 18 and older. Those age 18–24 accounted for 9 percent of the cocaine treatment mentions; 26 percent were 25–34; and 65 percent were older than 34. Among the 906 primary cocaine treatment mentions, 92 percent cited “cocaine/crack,” while 8 percent cited “cocaine” assumed to be snorted, not smoked.

Powder cocaine and crack are still described as “widely available” throughout Florida. Cocaine is still the most commonly analyzed substance by the Miami-Dade and Broward Sheriff's Office crime labs. It accounted for 12,166 cases (70 percent of all items tested) in Miami-Dade for fiscal year (FY) 2005 and for 6,422 cases (65 percent) of all items analyzed in Broward County in the same period. The second most commonly analyzed substances were marijuana in Miami-Dade County and controlled medications in Broward County.

According to the National Drug Intelligence Center (2004), in South Florida powder cocaine sells for \$18,000–\$26,000 per kilogram wholesale, \$700–\$800 per ounce, and \$40–\$110 per gram retail. Crack cocaine sells for \$700–\$800 per ounce, \$100 per gram, and \$10–\$20 per “rock” in South Florida. Ethnographic sources report that street purity has decreased while prices remain the same, suggesting that retail dealers are attempting to keep supplies readily available by adding more adulterants or cuts.

In 2005, for the first time, prevalence rates of drug use among the general population age 12 and older were published for substate areas of the Nation. This information is derived by combining 3 years of results from the National Survey on Drug Use and Health (NSDUH) to provide a large enough sample to make county-level estimates. Responses are from 1,744 Miami-Dade County residents and 960 residents of Broward County to the 1999, 2000, and 2001 NSDUH. These combined survey years provide an adequate sample of the 1,913,807 Miami-Dade residents and the 1,335,400 people in Broward County age 12 and older. The following findings provide local prevalence estimates for the general population age 12 and older:

- Cocaine use in the past year was reported by 1.55 percent (or 29,664) of Miami-Dade county residents. Cocaine use in the past year was reported by 1.46 percent (or 19,500) of Broward County residents. Nationally, the proportion was

1.72 percent, and the State percentage for Florida was 1.59 percent.

- The use of any illicit drug in the past month was reported by 5.7 percent ($n=108,513$) of Miami-Dade County residents older than 12; the proportion for Broward County was also 5.7 percent (76,118). Nationally, 6.7 percent of the population reported past-month illicit drug use, compared with 6.1 percent for the State.

Heroin

The purity of street-level heroin decreased by almost one-half between 2000 and 2004, as the price per milligram pure has more than doubled. Lower purity heroin may explain why deaths have also declined dramatically in South Florida and across the State. Less pure heroin may also explain substantial increases in abuse and consequences of narcotic analgesics in recent years. Frequently, benzodiazepines are involved as well. Most heroin deaths, ED visits, and addiction treatment admissions continue to be among older, White males. South American heroin has been entering the area over the past decade. Abuse of narcotic pain medication has fueled opioid consequences. Polydrug abuse patterns have facilitated first-time use of opiate drugs, including heroin.

Throughout Florida, there were 55 heroin-related deaths in the first 6 months of 2005, representing a 21-percent decline from the 70 such deaths in the second half of 2004. Yet, heroin was found to be the most lethal drug, with 89 percent ($n=49$) of heroin-related deaths being caused by the drug in the most recent reporting period. Heroin deaths continued a 4½-year decline, but deaths from prescription narcotic opiates have increased over the same period. Polysubstance abuse was noted in 85 percent of the heroin-related deaths statewide (exhibit 3). Across Florida, there were 180 heroin-related deaths in 2004, 261 in 2003, 326 in 2002, and 328 in 2001.

In the first half of 2005, the Orlando area ($n=10$), Broward County (8), Sarasota (8), and Miami (7) had the greatest number of heroin-related deaths in the State.

In Miami-Dade County, heroin was found at a lethal dose level in six of the seven deaths in which heroin was detected in the first half of 2005. Other drugs were detected in six (86 percent) of the cases (exhibit 4). None of the heroin-related fatalities was younger than 18; one was age 18–25; and the remaining 86 percent were 35–50.

The 7 heroin-related deaths in Miami-Dade during the first 6 months of 2005 reflect a 33-percent decrease over the 18 deaths from all of 2004. There had been a 44-percent decrease between 2003 and 2004. Heroin deaths peaked in Miami-Dade County in 2000 with 61 fatalities.

In Broward County, heroin was detected at a lethal dose level in all eight heroin-related deaths during the first 6 months of 2005. Other drugs were detected in all of these cases (exhibit 5). None of the heroin-related fatalities was younger than 18; 12 percent were age 18–25, 25 percent were 26–34, 63 percent were 35–50, and none were older than 50. The 8 heroin-related deaths during the first half of 2005 in Broward County reflected a 58-percent decrease from the 19 deaths in the second half of 2004. The 35 heroin-related deaths during 2004 in Broward County reflected a 29-percent decrease from the 49 in 2003. There were 50 heroin-related deaths in 2002 and 41 in 2001. The relatively low number of 24 heroin-related deaths in 2000 was attributed to a sharp rise in other opioid deaths linked to prescription narcotics. Heroin-related deaths rose from 9 in 1995 to 49 in 2003.

Based on unweighted data accessed from DAWN *Live!* from Miami-Dade County EDs during the first 6 months of 2005, there were a total of 819 heroin reports, representing 14 percent of major substances of abuse reports (not including alcohol and medications) (exhibit 6). Males accounted for 79 percent of these patients, and 48 percent were non-Hispanic Whites. Blacks represented 22 percent of the heroin ED patients, and Hispanics accounted for 21 percent of the patients. There was one patient younger than 5 and none age 6–17, while 11 percent were age 18–24, 32 percent were 25–34, and 57 percent were older than 34.

Unweighted data for the first 6 months of 2005 from the Broward EDs identified a total of 353 heroin reports, representing 8 percent of major substances of abuse reports (exhibit 7). The heroin ED patients were predominantly older White males seeking detoxification. Males accounted for 69 percent of the patients, and 72 percent were non-Hispanic Whites. Hispanics accounted for 18 percent of the heroin ED patients, and Blacks represented 10 percent of the patients. There were five patients (1 percent) younger than 18, while 14 percent were age 18–24, 21 percent were age 25–34, and 63 percent were older than 34. The most common reason for a heroin patient to visit an ED was seeking detoxification (51 percent of the cases).

Heroin accounted for 658 (20 percent) primary, secondary, and tertiary treatment drug mentions (excluding alcohol) among the 3,237 BARC patients

who cited as least 1 drug of abuse at time of admission during the first half of 2005. Of the heroin mentions, 78 percent ($n=515$) were as the primary drug of abuse. More than two-thirds (68 percent) of the heroin treatment mentions were from White, non-Hispanic clients; 19 percent were from Hispanics; and 12 percent were from Black, non-Hispanic patients. BARC client data are for clients age 18 and older. Those age 18–24 accounted for 8 percent of the heroin treatment mentions; 27 percent were 25–34; and 65 percent were older than 34.

Heroin accounted for 619 crime lab cases in Miami-Dade in FY 2005 according to the NFLIS, representing 3.6 percent of all drugs tested. There were 171 heroin cases worked by the Broward Lab in the same period, representing 1.7 percent of all samples.

According to DMP data for 2004, the South American heroin samples averaged 15.7 percent pure heroin, down 45 percent from the 2002 level. This was the largest decline among any of the cities sampled in the national program. The average price per milligram pure was \$1.53. Compared with 2002 samples, the price per milligram pure rose by 151 percent in 2004, also the greatest increase of all cities in the program over the 2-year period, and thus returned to levels recorded in 2001.

Colombian heroin is available in South Florida as described by law enforcement officials and epidemiologists/ethnographers. According to NDIC, 1 kilogram of heroin sells for \$45,000–\$65,000 in the region and for \$2,500 per ounce; retail prices are roughly \$100–\$150 per gram. The most common street unit of heroin is a bag (roughly 20 percent purity) weighing about one-tenth of a gram that sells for \$10.

Other Opiates

With declining heroin street purity and rising heroin prices, the abuse of prescription narcotic analgesics continues to rise, particularly in Broward and Palm Beach Counties. Opiates followed inhalants as the group of drugs mostly likely to be cited across Florida at lethal levels as the cause of death in cases in which the drug was detected. As mentioned above, during the first 6 months of 2005, heroin was considered the cause of death in 89 percent of the cases in which it was detected, followed by 67 percent of the methadone deaths, 59 percent of fentanyl cases, and 50 percent of oxycodone deaths. Deaths from opiates other than heroin (including hydrocodone, oxycodone, and methadone) have been tracked in Florida since 2000. Beginning in 2003, morphine, propoxyphene, fentanyl, hydromorphone, meperidine, and other

opioids were included in the Florida Medical Examiners Commission's surveillance monitoring program. Deaths for the opiates tracked, including heroin, totaled 118 in Broward County, 36 in Miami-Dade, and 191 in Palm Beach County in the first half of 2005.

Meperidine-, morphine-, and propoxyphene-related deaths statewide increased in the first half of 2005 compared with the previous 6 months. Deaths related to the other opiates declined over the two semiannual reporting periods.

Methadone deaths statewide totaled 428 in the first half of 2005 (exhibit 3), a 2-percent decline from the previous 6 months. The number of methadone-related deaths had been increasing between 2001 and 2004. Methadone was considered the cause of death in 67 percent of the 428 deaths related to the drug in the most recent semiannual period.

The number of oxycodone-related deaths decreased 7 percent statewide between the last half of 2004 and the first 6 months of 2005, when such deaths totaled 304. Oxycodone was the cause of death in 50 percent of the deaths related to it.

The number of hydrocodone deaths decreased 5 percent statewide between the last half of 2004 and the first 6 months of 2005, when such deaths reached 299. Hydrocodone was the cause of death in 39 percent of the hydrocodone-related deaths.

Additional opiate-related analgesic deaths statewide in the first 6 months of 2005 included morphine (304), propoxyphene (162), fentanyl (83), hydromorphone (41), meperidine (27), and other opioids (93). When the ME mentions for all opiate analgesics are added to those for heroin, these opioid-related ME mentions in Florida during the first 6 months of 2005 total 1,795 cases. This total is only slightly below the 1,828 alcohol-related deaths during the same period. Most of the statewide opioid cases were polydrug episodes, including 89 percent of the methadone ME cases, 87 percent of the oxycodone ME cases, 85 percent of the heroin deaths, 84 percent of the hydrocodone ME cases, 74 percent of morphine cases, and 73 percent of propoxyphene deaths.

Miami-Dade County recorded six oxycodone-related deaths during the first half of 2005, of which one (17 percent) was oxycodone induced. Five of these deaths (83 percent) involved oxycodone found in combination with at least one other drug (exhibit 4). Miami-Dade County recorded three hydrocodone-related deaths during the period, and one (33 percent) was hydrocodone induced. Miami-Dade County

recorded eight methadone-related deaths in the first half of 2005, with three (38 percent) considered methadone induced. Miami-Dade recorded 12 morphine-related deaths during the same period, of which none were morphine induced. There were two propoxyphene-related deaths in Miami-Dade County; one was propoxyphene induced.

Broward County recorded 41 oxycodone-related deaths during the first half of 2005, of which 27 (66 percent) were oxycodone induced. Of these deaths, 85 percent involved oxycodone found in combination with at least one other drug (exhibit 5). Broward County recorded 39 methadone-related deaths during the first half of 2005. Among the methadone deaths, 29 (74 percent) were considered methadone induced. Broward County recorded 19 morphine-related deaths during the first half of 2005, of which 8 (42 percent) were morphine induced. Broward County recorded 13 hydrocodone-related deaths in the first half of 2005, and 6 (46 percent) were hydrocodone induced. Broward County recorded six propoxyphene-related deaths in the first half of 2005, of which two (33 percent) were propoxyphene induced.

Unweighted data accessed from DAWN *Live!* for Miami-Dade County EDs for the first half of 2005 show 96 oxycodone ED reports. There were also 21 hydrocodone ED reports and 277 ED reports for other narcotic analgesics. Of the total 394 narcotic analgesic ED reports, 51 percent of the patients were seeking detoxification, 18 percent were considered overmedication reports, and 31 percent were considered drug abuse reports.

Unweighted data from the Broward County EDs for the first half of 2005 show 421 oxycodone ED reports. Males accounted for 59 percent of these patients. White, non-Hispanics represented 82 percent of the patients; 12 percent were Hispanic/other; and 5 percent were Black, non-Hispanics. Ten patients (2 percent) were younger than 18, while 13 percent of the oxycodone ED patients were age 18–24, 27 percent were 25–34, and 58 percent were older than 34. The most common reasons or chief complaints for the oxycodone ED patients to visit the ED were seeking detoxification (42 percent), psychiatric condition (15 percent), and overdose (11 percent).

Unweighted data from the Broward County EDs for the first 6 months of 2005 show 168 hydrocodone ED reports. Males accounted for 51 percent of these patients. White, non-Hispanics represented 75 percent of the patients; 16 percent were Hispanic/other, and 9 percent were Black, non-Hispanics. There were eight patients (5 percent) younger than 18, while 11 percent of the hydrocodone ED patients were age 18–24, 19

percent were 25–34, and 65 percent were older than 34. The most common reasons or chief complaints for the hydrocodone ED patients to visit the ED were for seeking detoxification (27 percent), respiratory problems (22 percent), and a psychiatric condition (21 percent).

Other opiates were cited as the primary drug of abuse by 336 of the 3,237 BARC patients at admission during the first half of 2005. Oxycodone accounted for 73 of these primary mentions, as well as an additional 24 secondary and 11 tertiary mentions. Of the 108 total oxycodone mentions, 87 percent were from White, non-Hispanic clients, 10 percent were from Hispanics, and 3 percent were from Black, non-Hispanic patients. BARC client data are for clients age 18 and older. Those age 18–24 accounted for 17 percent of the oxycodone treatment mentions, 37 percent were age 25–34, and 46 percent were older than 34.

The NFLIS reported 56 oxycodone crime lab cases, 37 hydrocodone cases, and 8 methadone cases during FY 2005 in Miami-Dade County. The Broward Sheriff's Office Crime Lab worked 132 oxycodone cases during the first half of 2005. There were also 68 hydrocodone cases, 4 hydromorphone cases, and 2 buprenorphine cases in the same period.

Methamphetamine

Methamphetamine abuse continues to be a local problem, as multiple supply sources have been identified. "Crystal," or smokable, methamphetamine has been shipped by overnight delivery from California for several years. Law enforcement sources confirm increased trafficking from Atlanta and North Carolina of high-grade Mexican-manufactured methamphetamine in the last year. There have also been several seizures of local methamphetamine labs. Mexican drug trafficking organizations are supplying powdered methamphetamine directly to local Latino populations of Central and South American nationalities. Outlaw motorcycle gang activity involved with local lab production and distribution has also been noted. Signs of methamphetamine abuse spreading to new populations indicate the local epidemic has progressed from the incubation period of the past 4 years to an expansion phase with growing numbers of users.

Methamphetamine-related deaths totaled 51 during the first half of 2005 statewide in Florida, representing an 11-percent increase from the 46 such deaths in the previous 6 months. Methamphetamine was considered the cause of death in 13 of the 51 cases (25 percent) during the most recent semiannual

reporting period. There were also 49 amphetamine-related deaths in first half of 2005 across Florida, a 6-percent decrease over the previous 6-month period. Amphetamine was considered the cause of death in 8 of the 49 cases in the first half of 2005.

Unweighted data accessed from DAWN *Live!* show 46 methamphetamine-related ED reports during the first half of 2005 in Miami-Dade County. Among those patients, 85 percent were males, 52 percent were non-Hispanic Whites, 28 percent were non-Hispanic Blacks, and 9 percent were Hispanics. One methamphetamine ED patient was younger than 18; 15 percent were age 18–24, 48 percent were age 25–34, and 30 percent were older than 34.

Unweighted data accessed from DAWN *Live!* show 98 amphetamine/methamphetamine-related ED reports during the first half of 2005 in Broward County. Among those patients, 74 percent were males, 80 percent were non-Hispanic Whites, 11 percent were non-Hispanic Blacks, and 9 percent were Hispanics. Six (6 percent) of the amphetamine/methamphetamine ED patients were between ages 12 and 18, 28 percent were 18–24, 30 percent were 25–34, and 37 percent were older than 34.

Methamphetamine accounted for 9 and other amphetamines accounted for 13 primary treatment mentions (excluding alcohol) among the 3,237 BARC patients who cited at least 1 drug of abuse at time of admission during the first half of 2005

The NFLIS reported the Miami-Dade Crime Lab analyzed 140 methamphetamine exhibits during FY 2005, representing 1 percent of all substances analyzed. In the first half of 2005, there were 96 Broward Sheriff's Office Crime Lab methamphetamine cases analyzed, equal to the number for all of 2004. In 2003, there were 90 such cases. The number of cases increased more than 400 percent since 2001.

Statewide, the number of clandestine methamphetamine labs or equipment seizures rose from 30 cases in FY 2000 (October 1999 to September 2000) to 332 in the FY ending September 30, 2004.

In South Florida, methamphetamine has some of the highest prices in the Nation: \$15,000–\$20,000 per pound and \$900–\$1,200 per ounce. Higher potency “crystal” methamphetamine sells for \$1,800–\$2,000 per ounce and \$50 per one-quarter gram.

Methamphetamine abuse and related sexual activity has contributed to sharp increase in sexually transmitted diseases in South Florida, particularly

among the men who have sex with men (MSM) population.

Marijuana

Marijuana is abused by more Americans, particularly youth, than any other illicit drug. Consequences of its abuse and addiction continue, even as rates of its use are declining among youth.

Cannabinoids were detected in 409 deaths statewide in Florida during the first half of 2005, a number similar to the 411 such cases in the last half of 2004.

Unweighted data from DAWN *Live!* for the first half of 2005 show that marijuana accounted for 1,253, or 22 percent, of the 5,691 Miami-Dade major substances of abuse reports (not including alcohol and medications) during the first half of 2005 (exhibit 6). Seventy-five percent of the marijuana ED patients were male. Non-Hispanic Blacks accounted for 46 percent of these patients; non-Hispanic Whites accounted for 30 percent; and Hispanic/others accounted for 20 percent. Race/ethnicity was not documented or was unknown for 5 percent of the patients. There were 69 patients (6 percent) younger than 18, while 31 percent of the patients were age 18–24, 27 percent were 25–34, and 36 percent were older than 34.

Unweighted ED data from Broward County show that marijuana was involved in 35 percent, or 1,524, of the 4,406 major substances of abuse ED reports in the first half of 2005 (exhibit 7). Sixty-nine percent of the marijuana ED patients were male. Non-Hispanic Whites accounted for 58 percent of these patients, non-Hispanic Blacks for 30 percent, and Hispanics/other for 12 percent. Marijuana is still the most commonly abused illicit drug among young people visiting the emergency department. Three-fourths of marijuana ED reports were among the 12–34 age group. There were 208 patients (14 percent) younger than 18, while 23 percent of patients were age 18–24, 38 percent were 25–34, and 25 percent were older than 34.

Marijuana accounted for 1,173 (or 36 percent) of primary, secondary, and tertiary treatment drug mentions (excluding alcohol) among the 3,237 BARC patients who cited at least 1 drug of abuse at time of admission during the first half of 2005 (exhibit 11). Of the marijuana mentions, 381 (or 32 percent) were as the primary drug of abuse. One-half (51 percent) of the marijuana treatment mentions were from White, non-Hispanic clients, 37 percent were from Black, non-Hispanic patients, and 11 percent were from Hispanics. BARC client data are for clients age 18 and older. Those age 18–24 accounted for 20 percent of

the marijuana treatment mentions; 29 percent were age 25–34, and 52 percent were older than 34.

The NFLIS reported 3,589 marijuana crime lab cases in Miami-Dade County in FY 2005, representing 21 percent of all exhibits analyzed. The NFLIS reported 1,288 marijuana crime lab cases in Broward County in FY 2005, representing 13 percent of all exhibits analyzed. Statewide, marijuana was seized more frequently than any other illicit drug in Florida. Marijuana is still described as widely available throughout Florida, with local commercial, sinsemilla, and hydroponic grades available. A pound of commercial grade marijuana sells for \$450–\$1,000 per pound. Hydroponic grades sell for \$2,500–\$4,000 per pound. Commercial grade prices range from \$100 to \$150 per ounce, while hydroponic grade marijuana sells for \$350–\$450 per ounce. Depending on its potency, marijuana may sell for \$5–\$18 per gram.

According to the National Survey on Drug Use and Health, marijuana use in the past month was reported by 4.4 percent (or 84,016) of Miami-Dade County residents and by 5.0 percent (or 66,369) of Broward County residents older than 12. Nationally, the proportion was 5.1 percent, compared with 4.8 percent for the State of Florida.

Methylenedioxymethamphetamine (MDMA or “Ecstasy”)

Measures of MDMA abuse suggest problems may have peaked in 2001, declined thereafter, and then stabilized between 2003 and 2005.

Ecstasy pills generally contain 75–125 milligrams of MDMA, although pills are often adulterated and may contain other drugs being sold as “ecstasy.”

There were nine MDMA-related deaths statewide in Florida during the first half of 2005, with the drug being cited as the cause of death in five of these cases. There were also five methylenedioxymethamphetamine (MDA)-related deaths statewide in Florida during the same time. An additional four deaths were related to other methylated amphetamines in the first 6 months of 2005, with those substances being the cause of two of the deaths. In 2004, there were 41 MDMA-related deaths, 27 MDA-related deaths, and 6 other deaths from an unidentified methylated amphetamine. During 2003 there were 34 MDMA-related deaths, 20 MDA-related deaths, and 1 other death from an unidentified methylated amphetamine.

Unweighted DAWN *Live!* data show 69 MDMA ED reports from Miami-Dade County during the first half

of 2005, representing only 1 percent of major substances of abuse ED reports.

In the unweighted DAWN data for Broward County during the first 6 months of 2005, there were 41 MDMA-related ED reports. Males accounted for 59 percent of the patients; 73 percent were non-Hispanic Whites, 17 percent were non-Hispanic Blacks, and 10 percent were Hispanics. Seventeen percent were younger than 18, 37 percent were age 18–24, 32 percent were age 25–34, and 15 percent were age 35 and older.

The NFLIS reported the Miami-Dade Crime Lab analyzed 142 MDMA exhibits as well as 23 MDA exhibits and 3 N-Ethyl-MDMA samples during FY 2005, representing 2 percent of all substances analyzed. In the first half of 2005, the Broward Sheriff’s Office Crime Lab had 43 MDMA cases analyzed, compared with 11 MDA cases and 3 methylenedioxy-N-ethylamphetamine (MDEA) cases. In the last half of 2004, the Crime Lab analyzed 35 MDMA cases, 13 MDA cases, and no MDEA cases. The number of MDMA cases peaked in the first half of 2001 with 132 cases and declined to 35 cases by the second half of 2004.

In South Florida, ecstasy tablets sell for \$5–\$7 per tablet wholesale (in bulk), \$10–\$20 retail for a single pill, or up to \$50 per pill at expensive nightclubs. These prices have remained the same since 2002.

Gamma Hydroxybutyrate

GHB, an anesthetic, has been a commonly abused substance in South Florida for the past 9 years. There are several compounds that are converted by the body to GHB, including gamma butyrolactone (GBL) and 1,4 butanediol (1,4 BD). Most recently, GHB abuse involves the abuse of 1,4 BD. Indicators of abuse of these drugs continue to decline. Commonly used with alcohol, they have been implicated in drug-facilitated rapes and other crimes. They have a short duration of action and are not easily detectable on routine hospital toxicology screens. GHB was declared a federally controlled Schedule I drug in March 2000, and indicators of its abuse have declined since that time. More recently, GHB and its related substances are reported to be used by those seeking to come down from the stimulant effects of methamphetamine.

There were six GHB-related deaths statewide during the first half of 2005. The drug was not considered the cause of death in any of these cases. There were 11 GHB-related deaths reported statewide during both 2003 and 2004. Of these cases, GHB was considered to be at lethal levels in 27 percent of the 2003 cases

and in 55 percent of the 2004 cases. In all of Florida, GHB-related deaths increased from 23 in 2000 to 28 in 2001 and then declined to 19 in 2002, before declining to 11 in 2003 and again in 2004.

Unweighted data accessed from DAWN *Live!* for Miami-Dade County show 12 GHB-related ED reports during the first half of 2005. There were six GHB DAWN *Live!* reports in Broward County during that time.

The NFLIS reported 20 crime lab cases of 1,4 BD in Miami-Dade County during FY 2005, along with 6 GHB cases and 5 GBL cases. The Broward Sheriff's Office crime lab reported nine cases of 1,4 BD, one case of GHB, and one case of GBL in the first half of 2005.

Benzodiazepines

Benzodiazepines in general and alprazolam (Xanax) in particular are a substantial problem. There were 962 benzodiazepine-related deaths across Florida in the first half of 2005, representing a 5-percent decrease over the 1,017 such deaths in the previous 6-month period. Of the benzodiazepine-related deaths in the first half of 2005, a benzodiazepine was identified as the cause of death in 274 cases (or 28 percent).

In Miami-Dade County, there were 12 alprazolam-related deaths during the first half of 2005, of which 3 (25 percent) were alprazolam induced. Ninety-two percent of the deaths involved at least one other drug. There were also five diazepam-related deaths in Miami-Dade County; none were caused by the drug, and 80 percent involved at least one other drug.

Broward County recorded 53 alprazolam-related deaths during the first half of 2005, of which 24 (45 percent) were drug induced. Only two (4 percent) of the deaths involved alprazolam alone. One of the Broward alprazolam-related decedents was younger than 18. In the same 6-month period, Broward County recorded 38 diazepam-related deaths, of which 10 (26 percent) were diazepam induced. All but six of these cases involved at least one other drug (exhibit 5).

Unweighted data on ED benzodiazepine reports in Miami-Dade County show 507 such reports during the

first half of 2005. Overmedication accounted for 34 percent of the reports, while seeking detoxification was the reason for 27 percent of the benzodiazepine reports. The remaining 39 percent are considered substance abuse reports.

Unweighted ED data from Broward County show that there were 1,540 benzodiazepine ED cases in the first half of 2005, ranking third behind alcohol and cocaine in the number of ED reports. Fifty-six percent of the benzodiazepine ED patients were male. Non-Hispanic Whites accounted for 81 percent of these patients, Hispanics/other represented 12 percent, and non-Hispanic Blacks constituted 7 percent. One-fifth of these patients were younger than 25, including 5 percent of total users younger than 18. Fifteen percent of patients were age 18–24, 21 percent were 25–34, and 59 percent were older than 34.

Benzodiazepines accounted for 406 (13 percent) primary, secondary, and tertiary treatment drug mentions (excluding alcohol) among the 3,237 BARC patients who cited as least 1 drug of abuse at time of admission during the first half of 2005. Of these mentions 70 (or 17 percent) were as the primary drug, 45 percent were as the secondary drug, and 38 percent were as the tertiary problem. Of the benzodiazepine mentions, 86 percent were from White, non-Hispanic clients, 9 percent were from Hispanics, and 5 percent were from Black, non-Hispanic patients. BARC client data are for clients age 18 and older. Those age 18–24 accounted for 22 percent of the benzodiazepine treatment mentions; 26 percent were 25–34; and 52 percent were older than 34.

The NFLIS reported that Miami-Dade had 344 benzodiazepine exhibits during FY 2005, including 306 alprazolam cases, 14 clonazepam samples, 13 diazepam exhibits, and 11 other benzodiazepines. During the first the half of 2005, the Broward Sheriff's Office Crime Lab analyzed 304 alprazolam cases, 28 unnamed benzodiazepine cases, and 14 clonazepam samples.

For inquiries regarding this report, please contact James N. Hall, Center for the Study and Prevention of Substance Abuse, Up Front Drug Information Center, Nova Southeastern University, Suite 215, 12360 Southwest 132nd Court, Miami, FL 33186, Phone: (786) 242-8222, E-mail: upfrontin@aol.com.

Exhibit 1. DAWN ED Miami-Dade County Sample and Reporting Information: January–June 2005

Total Eligible Hospitals ¹	No. of Hospitals in DAWN Sample	Total EDs in DAWN Sample ²	No. of EDs Reporting per Month: Completeness of Data (%)			No. of EDs Not Reporting
			90–100%	50–89%	<50%	
21	19	19	10	0	0–1	8–9

¹Short-term, general, non-Federal hospitals with 24-hour emergency departments based on the American Hospital Association Annual Survey.

²Some hospitals have more than one emergency department.

SOURCE: DAWN *Live!*, OAS, SAMHSA, updated 12/6–7, 2005

Exhibit 2. DAWN ED Ft. Lauderdale Sample and Reporting Information: January–June 2005

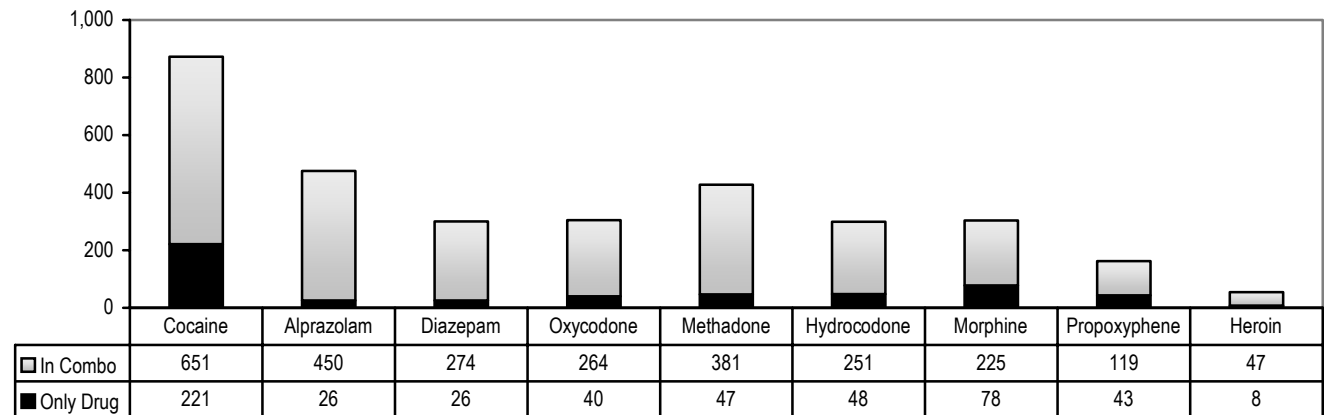
Total Eligible Hospitals ¹	No. of Hospitals in DAWN Sample	Total EDs in DAWN Sample ²	No. of EDs Reporting per Month: Completeness of Data (%)			No. of EDs Not Reporting
			90–100%	50–89%	<50%	
27	22	22	6–8	0	0–1	14–16

¹Short-term, general, non-Federal hospitals with 24-hour emergency departments based on the American Hospital Association Annual Survey.

²Some hospitals have more than one emergency department.

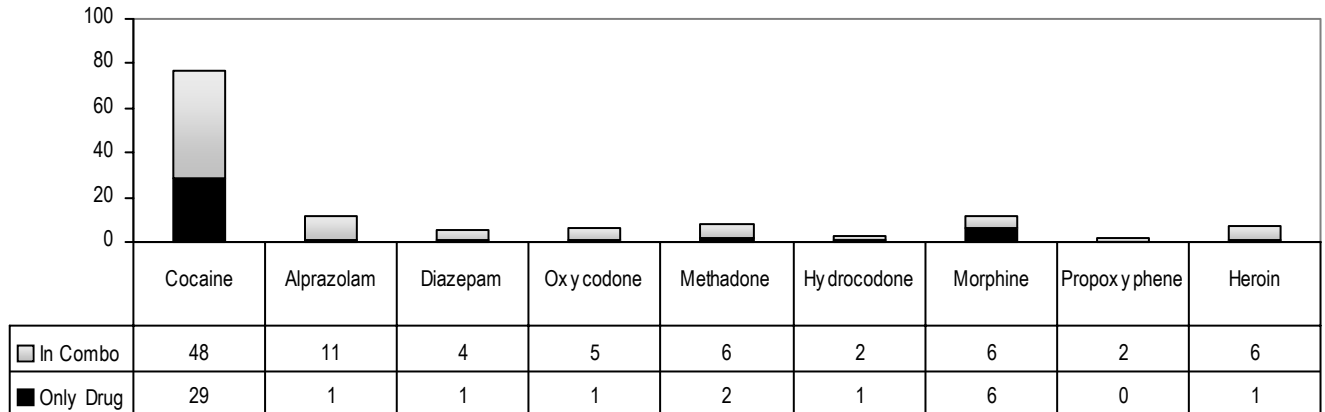
SOURCE: DAWN *Live!*, OAS, SAMHSA, updated 10/20, 2005

Exhibit 3. Numbers of Drug-Related Deaths in Florida, by Single Drug or In Combination: January–June 2005



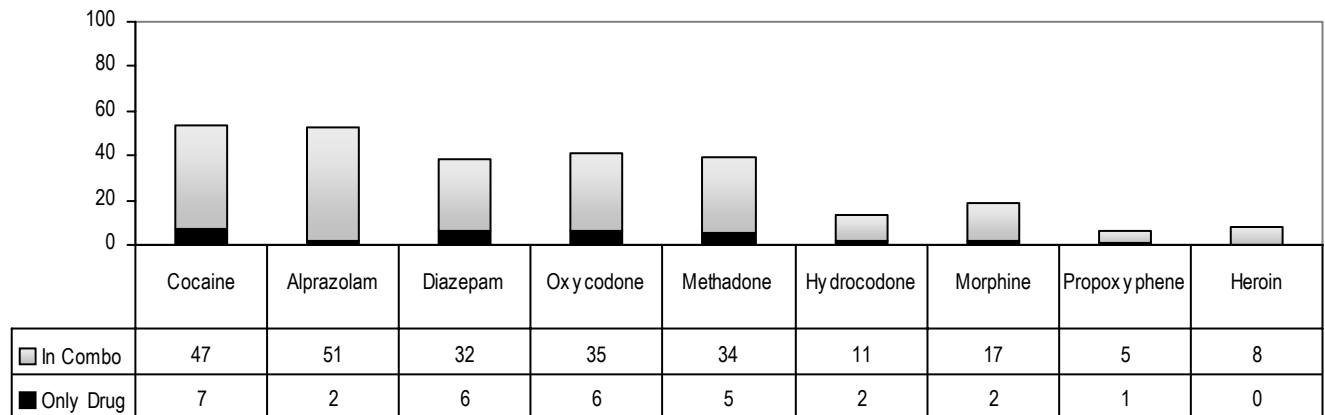
SOURCE: Florida Department of Law Enforcement, Florida Medical Examiners Commission Report 2004

Exhibit 4. Numbers of Drug-Related Deaths in Miami-Dade County, by Single Drug or In Combination: January–June 2005



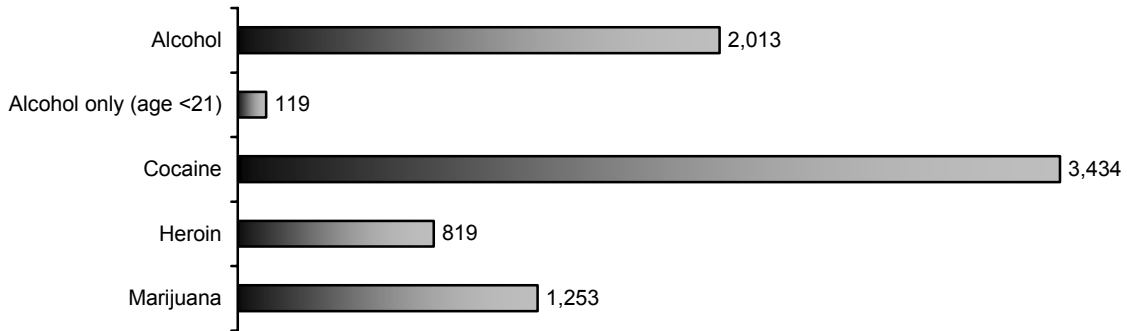
SOURCE: Florida Department of Law Enforcement, Florida Medical Examiners Commission Interim Report 2005

Exhibit 5. Numbers of Drug-Related Deaths in Broward County, by Single Drug or In Combination: January–June 2005



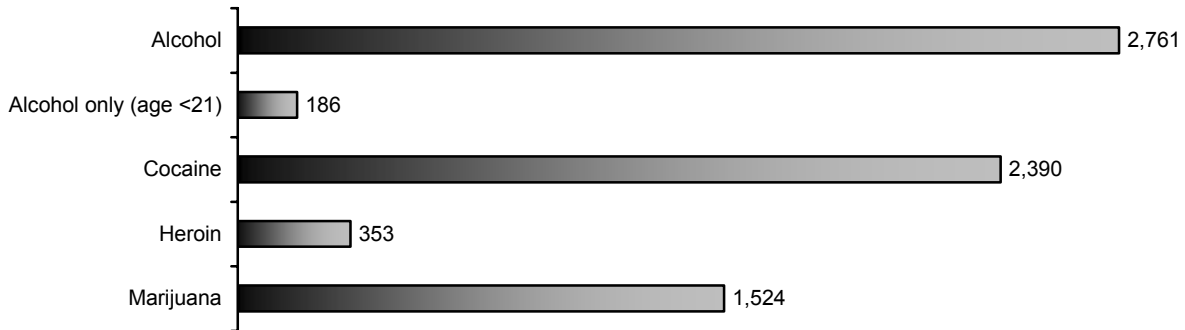
SOURCE: Florida Department of Law Enforcement, Florida Medical Examiners Commission Interim Report 2005

Exhibit 6. Numbers of Selected Drug Reports in Miami-Dade County DAWN ED Data (Unweighted¹), by Drug Category: January–June 2005



¹The unweighted data are from 10 Miami-Dade EDs reporting to DAWN in the first half of 2005. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted, and, therefore, are subject to change.
SOURCE: DAWN *Live!*, OAS, SAMHSA, updated 12/6-7, 2005

Exhibit 7. Numbers of Selected Drug Reports in Broward County DAWN ED Data (Unweighted¹), by Drug Category: January–June 2005



¹The unweighted data are from 6–8 Ft. Lauderdale Division EDs reporting to DAWN in the first half of 2005. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted, and, therefore, are subject to change.
SOURCE: Broward EDs; DAWN *Live!*, OAS, SAMHSA, updated 10/20, 2005.

Drug Abuse Trends: Minneapolis/St. Paul

Carol Falkowski¹

ABSTRACT

Throughout 2005, the consequences of methamphetamine abuse in the Twin Cities captured headlines, filled the airwaves, and strained public health, treatment, child welfare, and criminal justice systems. At the same time, other drugs exhibited mixed patterns, including a substantial increase in heroin indicators in Minneapolis, a continued high number of cocaine reports in hospital emergency departments, and a sustained decline in ‘club drugs.’ An unprecedented 12.1 percent of patients entering Twin Cities addiction treatment programs in 2005 (first half) reported methamphetamine as the primary substance problem, a level that for the first time closely approached that of cocaine (13.4 percent). Excluding alcohol, methamphetamine accounted for 21.1 percent of primary admissions in the first half of 2005 (compared with 24.4 percent for cocaine). While the number of small-time methamphetamine labs declined (largely attributed to a new State law limiting retail sales of pseudoephedrine products), the purity level of the drug increased substantially. In Minneapolis, the overall weight-based purity of methamphetamine seized by law enforcement was 73.1 percent in 2005, compared with 13.6 percent in 2001. Methamphetamine-related deaths appeared stable from 2004 to 2005. Heroin appeared in Minneapolis in 2005 in record high amounts—all of it black tar heroin of Mexican origin. Opiate-related deaths continued at heightened levels, while treatment admissions rose to 5.2 percent of admissions in 2005, up from 3.1 percent in 2000. In hospital emergency departments, cocaine-related reports outnumbered those involving any other illicit drug in 2005 (first half). At addiction treatment programs in the first half of 2005, more patients reported marijuana as the primary substance problem than any other illicit drug (19.0 percent of all admissions and 34.7 percent of admissions for illicit drug abuse), continuing a long-standing trend. Indicators regarding the abuse of ‘club drugs’ (GHB, MDMA, ketamine, LSD) showed persistent downward trends in 2005. The rate of alcohol consumption and binge drinking in Minnesota was among the highest in the Nation in 2004. Alcohol abuse exacted a costly toll among

young people and on the highways, although alcohol-related treatment admissions fell to 45.2 percent of total admissions in the first half of 2005, down from 54.6 percent in 2000. Tobacco use among youth declined in the Twin Cities and statewide in 2004 and 2005, but it remained prevalent among patients in addiction treatment programs.

INTRODUCTION

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 comprised of researchers from 21 U.S. areas who monitor emerging patterns and trends in drug abuse. It is available online at <www.hazelden.org/research>.

Area Description

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. Recent estimates of the population of each county are Anoka, 313,197; Dakota, 375,462; Hennepin, 1,239,837; Ramsey, 515,274; and Washington, 213,395. Together, these counties have a total population of 2,557,165, or roughly one-half of the Minnesota State population. In the five-county metropolitan area, 84 percent of the population are 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. St. Paul has the largest Hmong population of any U.S. city.

Outside of the Twin Cities area, the State is less densely populated and more rural in character. Minnesota shares an international border with Canada, a southern border with Iowa, an eastern border with Wisconsin, and a western border with North Dakota and South Dakota, two of the country’s most sparsely populated States. Illicit drugs are sold and distributed within Minnesota by Mexican drug trafficking organizations, street gangs, independent entrepreneurs, and other criminal groups. Drugs are typically shipped or transported into the Minneapolis/St. Paul metropolitan area for further distribution throughout the State.

Data Sources

Data for this report were obtained from the following sources:

¹The author is affiliated with Hazelden Foundation, Center City, Minnesota.

- **Treatment data** are from addiction treatment programs (residential, outpatient, extended care) in the five-county metropolitan area as reported on the Drug and Alcohol Abuse Normative Evaluation System (DAANES) of the Minnesota Department of Human Services (through June 2005).
- **Hospital emergency department (ED) data** were derived from the Drug Abuse Warning Network (DAWN) *Live!*, a restricted-access online query system administered by the Office of Applied Studies (OAS) of the Substance Abuse and Mental Health Services Administration (SAMHSA). These unweighted data are from participating hospital emergency departments in the Minneapolis and St. Paul Standard Metropolitan Statistical Area from January 1, 2005, through June 30, 2005, as accessed on December 6–7, 2005. The DAWN sample includes 26 of the 28 eligible hospitals in the area, with 26 emergency departments. The data reported in this paper are incomplete (exhibit 1). Over the 6-month period, between 11 and 13 EDs reported data each month. All DAWN cases are reviewed for quality control and based on the review, they may be corrected or deleted. Therefore, the data reported in this paper are subject to change. Data accessed from DAWN *Live!* represent drug reports in drug-related visits. Reports exceed the number of visits, because a patient may report use of multiple drugs (up to six drugs plus alcohol). The unweighted data are not estimates for the Minneapolis/St. Paul area and cannot be compared with data from 2002 and before, nor can these preliminary data be used for comparison with future DAWN data. Only weighted DAWN data released by SAMHSA can be used for trend analysis. See a full description of DAWN online at <<http://dawninfo.samhsa.gov>>.
- **Mortality data** on drug-related deaths are from the Hennepin County Medical Examiner and the Ramsey County Medical Examiner (through September 2005). Hennepin County cases include those in which drug toxicity was the immediate cause of death and those in which the recent use of a drug was listed as a significant condition contributing to the death. Ramsey County cases include those in which drug toxicity was the immediate cause of death and those in which drugs were present at the time of death.
- **Crime lab data** are from three sources: the National Forensic Laboratory Information System (NFLIS), sponsored by the U.S. Drug Enforcement Administration; the St. Paul Police crime lab; and the Minneapolis Department of Health and Family Support crime lab (through October 2005). NFLIS reports solid dosage drug analyses conducted by State and local forensic laboratories across the country on drugs seized by law enforcement. During the most current reporting period (October 1, 2004, through September 30, 2005, fiscal year [FY] 2005), only one Minnesota lab participated: the Bureau of Criminal Apprehension crime lab. This lab predominantly handles cases from the nonmetropolitan areas of the State and is located in St. Paul.
- **Alcohol and tobacco survey data** are from the Behavioral Risk Factor Surveillance System (BRFSS), an ongoing data collection program of the Centers for Disease Control and Prevention (CDC) and U.S. States and territories. Supported by CDC's Behavioral Surveillance Branch, it is designed to measure behavioral risk factors in the adult population (18 years of age or older) living in households. BRFSS field operations are managed by State health departments, which transmit the data to the CDC's National Center for Chronic Disease Prevention and Health Promotion's Behavioral Surveillance Branch. The 2004 data for Minnesota are based on 4,460 respondents age 18 and older. Summary reports of State-specific data are prepared by CDC and are available online at <www.cdc.gov/brfss>.
- **Student survey data** on selected drugs of abuse are from the 2001 and the 2004 Minnesota Student Surveys. Responses concerning drug use in the past year are presented for high school seniors in the metropolitan area, representing 14,140 respondents in 2001 and 16,156 in 2004.
- **Driving while intoxicated (DWI) and traffic fatality data** for 2004 are from the Office of Traffic Safety, Minnesota Department of Public Safety, available online at <www.dps.state.mn.us>.
- **Youth tobacco data and tobacco-related cost data** are from the Minnesota Department of Health, available online at <www.health.state.mn.us>.
- **Additional data on the consequences of methamphetamine** across various public systems in the State are from the Minnesota Bureau of Criminal Apprehension and the Minnesota Department of Public Safety for 2005.
- **Human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS) data** for 2004 are from the Minnesota Department

of Health, *HIV/AIDS in Minnesota: Annual Review*, online at <www.health.state.mn.us>.

Additional information is from interviews with treatment program staff, health officials, narcotics agents, corrections and law enforcement officials, crime lab specialists, and school-based drug/alcohol abuse counselors (conducted in November and December 2005).

DRUG ABUSE PATTERNS AND TRENDS

Cocaine/Crack

Admissions to addiction treatment programs with cocaine as the primary substance problem were stable in 2005 (first half), accounting for 13.4 percent of total treatment admissions, compared with 13.3 percent in 2004 and 13.5 percent in 2000. Most cocaine admissions were for crack cocaine. Regarding race/ethnicity, 48.0 percent were African-American, 42.8 percent were White, 4.6 percent were Hispanic, 2.4 percent were American Indian, and 0.6 percent were Asian (exhibit 2). The vast majority (86.7 percent) were age 26 and older. The average age of first cocaine use was 25.1.

Cocaine-involved reports dominated unweighted drug-related hospital emergency department data and outnumbered reports for any other illicit drug in the first half of 2005 (exhibit 3). Of the 1,532 cocaine patients, one-third (34.5 percent) were women (exhibit 4). More than one-fifth (22.8 percent) were age 25–34, and only 4.2 percent were younger than 18 (exhibit 5). DAWN reports that 39.6 percent were African-American, 37.3 percent were White, 2.8 percent were Hispanic, and 4.6 percent were in an “other” racial/ethnic category; race/ethnicity was not documented in 15.7 percent of the cocaine ED reports (exhibit 6). Considering only the 1,220 cocaine reports for which race/ethnicity was specified, 49.7 percent were African-American, 46.8 percent were White, and 3.5 percent were Hispanic.

Accidental overdose deaths involving cocaine in both Hennepin and Ramsey Counties appear stable. Hennepin County reported 36 in 2005 (through September), compared with 39 in 2004 (entire year). This includes a newborn for whom maternal use of cocaine was listed as a significant contributing condition. Ramsey County reported 8 such deaths in 2005 (through September), compared with 10 in 2004 (entire year).

Cocaine accounted for 27.3 percent of the drug seizures reported to NFLIS in FY 2005 (exhibit 7). Prices for powder cocaine were \$100 per gram,

\$800–\$1,200 per ounce, and up to \$22,000 per kilogram. The price of a rock of crack was unchanged at \$10–\$20. Upward variations in price were attributed to higher purity products. Gangs in both cities were involved in the street-level retail distribution of crack cocaine.

According to the Minnesota Student Survey data, past-year cocaine use was reported by 6.1 percent of metropolitan area high school seniors in 2004, compared with 5.5 percent in 2001. In one Twin Cities suburb, several middle school students were hospitalized in December after drinking a liquid that contained a high concentration of cocaine.

Heroin

Heroin-related admissions to addiction treatment programs accounted for 5.2 percent of total admissions in 2005 (first half), compared with 3.3 percent in 2004 and 3.1 percent in 2000. Because the 5 private, for-profit methadone programs (that serve roughly 1,600 patients in the metropolitan area) do not report to DAANES, these figures do not accurately reflect the total number of patients receiving treatment for heroin/opiate addiction in the Twin Cities.

Like those receiving treatment for cocaine, patients treated for heroin addiction tended to be older, with almost none (0.2 percent) younger than 18 (exhibit 2). Most (62.5 percent) were older than 35, and 22.6 percent were age 26–34. The most common route of administration was injection (61.8 percent), followed by sniffing (35.8 percent) and smoking, also known as “foiling” (2.6 percent). Most patients had prior treatment experience, with only 12 percent reporting their first treatment episode in 2005.

There were 376 unweighted heroin ED reports in 2005 (first half), ranking sixth behind cocaine, marijuana, methamphetamine, underage drinking, and prescription opiates. Of these patients, two-thirds (65.4 percent) were males (exhibit 4). More than one-half (54.8 percent) were age 35 and older, and a scant 0.8 percent were younger than 18 (exhibit 5). DAWN reports on race/ethnicity show that 50.8 percent were White, 33.2 percent were African-American, 1.3 percent were Hispanic, and 4.0 percent were an other racial/ethnic category; race/ethnicity was not documented for 10.6 percent of heroin reports. Considering only the 321 with known race/ethnicity, 59.5 percent were White, 38.9 percent were African-American, and 1.5 percent were Hispanic.

Opiate-related deaths, mostly accidental heroin overdoses, continued at heightened levels and have outnumbered cocaine-related deaths in both counties

since 2001. Hennepin County reported 47 opiate-related deaths in 2004 and 46 in 2005 (through September). Of these, seven involved fentanyl, seven involved methadone, and two involved oxycodone. Ramsey County reported 25 in 2004 and 19 in 2005 (through September). Of these, seven involved methadone and two involved oxycodone.

Law enforcement seizures of “black tar” heroin increased substantially in Minneapolis from 76 grams of heroin at the Minneapolis lab in 2004 to 1,538 grams in 2005—a twentyfold increase. Purity levels ranged from 19.6 up to 86.8 percent. In 2004, all of the heroin seized in Minneapolis was white, off-white, or tan powder, whereas in 2005, all of it was black tar heroin of Mexican origin. Similar patterns did not occur in Ramsey County. Retail heroin prices remained at \$20–\$40 per dosage unit or “paper,” \$300–\$400 per gram, and \$2,500 per ounce.

Other Opiates/Narcotics

Prescription narcotic analgesics, used medically in the treatment of pain, are also abused nonmedically for their euphoric, heroin-like effects. Of particular concern are prescription medications containing oxycodone: Percodan, Percocet, and the long-acting OxyContin. In 2005 (first half), 876 unweighted ED reports involved nonmedical use of a prescription opioid (exhibit 3). In May 2005, a 17-year-old suburban boy died from an apparent accidental overdose of OxyContin.

Within the Hmong immigrant population, a small proportion regularly smokes opium. Packages concealing opium continue to be shipped from Asia to residents of the Twin Cities Hmong community. In January 2005, 30 pounds of opium, with a reported street value of \$1.3 million, was seized as it was delivered to a suburban Woodbury couple.

Methamphetamine/Other Stimulants

The consequences attributable to methamphetamine abuse, distribution, and manufacture have been considerable in the Twin Cities and the entire State of Minnesota in recent years (exhibit 8). The Minnesota Department of Public Safety estimated the annual statewide public cost attributable to methamphetamine in Minnesota in 2004 at \$130 million. This includes law enforcement, adult prosecution, adult corrections, environmental clean-up, treatment, and child welfare costs. Excluded in this estimate are the costs of related crime, health care, treatment for insured and private pay patients, and juvenile offenders. According to the Minnesota Department of Corrections, methamphetamine offenders accounted for

51.7 percent of all drug offenders in State prisons in 2005, compared with 20 percent in 2001.

Legislative efforts concerning the sale of over-the-counter cold preparations that contain pseudoephedrine, a nasal decongestant used in the manufacture of methamphetamine, resulted in a new State law effective July 1, 2005, that mandates (1) pseudoephedrine pills must be sold from behind pharmacy counters; (2) sales are limited to people age 18 and older, who must show identification and sign a log; and (3) sales are limited to 6 grams (about two packages) every 30 days. There are also new criminal penalties, clean-up and notification requirements, child endangerment and vulnerable adult provisions, treatment grants to counties, and 10 new State law enforcement agents.

According to Minnesota Governor Tim Pawlenty, the number of methamphetamine labs significantly declined since the law took effect. Comparing the third quarter of 2005 with the third quarter of 2004, he reported the following: (1) a 78-percent decrease in methamphetamine labs seized, (2) a 75-percent reduction in arrests for methamphetamine manufacture, and (3) a 66-percent reduction in the amount of methamphetamine seized.

Methamphetamine-related treatment admissions continued to climb to an unprecedented, record-high of 12.1 percent of treatment admissions in 2005 (first half), compared with 10 percent in 2004 and only 3 percent in 2000. Of these, slightly more than one-third were women (35.7 percent), and the vast majority (90.1 percent) were White (exhibit 2). Smoking was the most common route of administration (67.1 percent), followed by sniffing (14.9 percent) and injecting (13.8 percent). Almost 40 percent of these admissions were between ages 18 and 25, and 11.5 percent were age 17 and younger. The average age of first methamphetamine use was 20.5.

Unweighted DAWN *Live!* data show methamphetamine ED reports totaled 673 in 2005 (first half). Forty-two percent were women (exhibit 4) and 45 percent were younger than 25 (exhibit 5). DAWN race/ethnicity data show that 74 percent were White, 3 percent were African-American, nearly 2 percent were Hispanic, and 2 percent “other”; race/ethnicity was not documented for 18 percent of the reports (exhibit 6). Of the 534 of known race/ethnicity, 93.6 percent were White, 4.3 percent were African-American, and 2.0 percent were Hispanic.

Hennepin County reported 6 accidental overdose deaths involving methamphetamine in 2005 (through September), compared with 11 in 2004 (entire year). This count excludes eight methylenedioxyamphetamines.

phetamine (MDMA) cases in 2004 and three in 2005. Ramsey County reported 4 methamphetamine-related deaths in 2005 (through September), compared with 10 in 2004 (entire year).

Methamphetamine remained a major focus of law enforcement at all levels in both metropolitan and non-metropolitan areas of the State. Seizures of methamphetamine by law enforcement accounted for 51.5 percent of the total samples reported to NFLIS in FY 2005 (see exhibit 7).

The most notable trend in Minneapolis was the dramatic increase in methamphetamine purity levels. Almost all of the samples in 2005 were high-purity crystal methamphetamine, compared with the lower quality, largely homemade methamphetamine of several years ago. The overall weight-based purity level of methamphetamine analyzed at the Minneapolis lab in 2005 was 73.1 percent, which compares with 57.8 percent in 2004, 26.9 percent in 2003, 18.3 percent in 2002, and 13.6 percent in 2001. According to law enforcement sources, this heightened purity reflects both an increase in the supply of imported rather than locally manufactured product, as well as an increase in the capacity of law enforcement to intercept the supply higher up the distribution chain before it is diluted and adulterated for retail sale. Methamphetamine prices were \$70–\$100 per gram, \$900–\$1,000 per ounce, and \$10,000–\$14,000 per pound.

Past-year methamphetamine use was reported by 5 percent of metropolitan area high school seniors in 2004, compared with 5.7 percent in 2001, according to the Minnesota Student Survey.

Methylphenidate (Ritalin), a prescription drug used in the treatment of attention deficit hyperactive disorder, is also used nonmedically to increase alertness and suppress appetite. The pills, sometimes known as “hyper pills,” or “homework pills,” are crushed, snorted, or ingested orally. They sold for \$5 per pill or were simply shared with fellow students at middle schools and high schools.

Marijuana

Again in 2005, more people entered addiction treatment programs for marijuana than for any other illicit drug (exhibit 2). Almost one out of five patients in addiction treatment programs (19.0 percent) reported marijuana as the primary substance problem, compared with 19.9 percent in 2004 and 21.2 percent in 2000. Of these, 42.9 percent were age 17 or younger, 33.3 percent were 18–25, and only 10.7 percent were 35 or older. For many (43.2 percent), it was their first

treatment episode. The average age of first marijuana use was 13.8.

There were 1,390 unweighted marijuana hospital ED reports in 2005 (first half), ranking second only to cocaine (exhibit 3). Sixty-five percent were male (exhibit 4), and nearly 56 percent were younger than 25 (exhibit 5). Race/ethnicity data show that nearly 57 percent were White, 19 percent were African-American, 2 percent were Hispanic, and 4 percent “other.” Race/ethnicity was not documented for 18 percent of the marijuana reports. Considering only reports for which race/ethnicity was known, nearly 73 percent were White, 25 percent were African-American, and less than 3 percent were Hispanic.

In December 2005, Washington County law enforcement arrested 4 suspects involved with a large-scale indoor marijuana growing operation involving 2,100 plants in 3 homes in suburban St. Paul Park. Another incident involved a Minneapolis teen who pleaded guilty in December to aiding and abetting the second-degree murder of an 18-year-old boy during the trade of an AK-47 rifle for marijuana in 2004. Marijuana accounted for 9.9 percent of drugs seized in FY 2005, according to NFLIS data (exhibit 7).

Marijuana sold for \$5 per joint and was readily available. Standard, commercial grade marijuana sold for \$50 per quarter ounce, \$150–\$175 per ounce, and \$1,200 per pound. The more potent “BC Bud” sold for up to \$100 per quarter ounce, \$600 per ounce, and \$5,000 per pound.

Past-year marijuana use was reported by 30.2 percent of metropolitan high school seniors in 2004, compared with 33.9 percent in 2001.

Club Drugs

In 2004 3,4 MDMA known as “ecstasy,” “X,” or “e,” contributed to the deaths of eight young males in Hennepin County, compared with three in 2005 (through September). In 2005 (first half), there were 74 unweighted hospital ED reports of MDMA (exhibit 3). MDMA use declined markedly among metropolitan area students in 2004, according to the Minnesota Student Survey. Past-year MDMA use was reported by 4.5 percent of high school seniors in 2004, down from 9.1 percent in 2001. It sold for \$20 per pill.

Gamma hydroxybutyrate (GHB), known as “G,” “Liquid E,” or “Liquid X,” is a concentrated liquid abused for its stupor-like depressant effects and used as a predatory knock-out, drug-facilitated rape drug.

There were seven unweighted ED reports of GHB in 2005 (first half). It sold for \$10 per capful.

Ketamine, also known as “Special K,” is a veterinary anesthetic that first appeared as a drug of abuse among young people in Minnesota in 1997. There were two unweighted ED reports of ketamine in 2005 (first half). It is snorted, injected, or put into capsules or pills and produces strong, dissociative effects.

Hallucinogens

Salvia Divinorum, a sage plant also known as diviner’s sage, can be smoked, chewed, or brewed in tea. Some high school students consume it at school by placing the leaves in their lunchtime beverages. Its abuse was last reported locally in 2004 at the University of Minnesota and at some metropolitan area high schools. Effects include intense but very short-lived hallucinations and out-of-body experiences.

Over-the-counter cough and cold products that contain dextromethorphan, a cough suppressant, continued to be abused by ingesting doses many times in excess of the recommended amount for hallucinogenic effects. Dextromethorphan (also known as “DXM”) is the active ingredient in Coricidin HBP Cough and Cold (known as “Triple Cs”) and Robitussin. Excessive dosages produce long-acting hallucinations, altered time perception, slurred speech, profuse sweating, uncoordinated movements, and high blood pressure. Being under the influence of these products is known as “Robo-tripping” or “Skittle-ing.”

Lysergic acid diethylamide (LSD or “acid”) is a strong, synthetically produced hallucinogen, typically sold as saturated, tiny pieces of paper known as “blotter acid,” for \$5–\$10 per dosage unit. There were 12 unweighted ED reports of LSD in 2005 (first half) and an additional 16 reports of “miscellaneous hallucinogens” (exhibit 3).

Phencyclidine (PCP), a dissociative anesthetic, is most often used in combination with marijuana in joints known as “wet sticks,” or “dipped joints,” but it can also be injected or snorted. In 2005 (first half) there were 21 unweighted ED reports of PCP.

Other Drugs

Khat, a plant with stimulant effects that is chewed or brewed in tea in East Africa and Middle Eastern cultures, is used within the Somali immigrant communities of the Twin Cities and Rochester, Minnesota. Its active ingredients, cathinone and cathine, are controlled substances in the United States. The Ramsey

County Sheriff seized 124 pounds of khat in the third quarter of 2005.

Prescription drug abuse, a category that includes the nonmedical abuse of a wide range of prescription drugs, increased in 2004 among students in the Twin Cities area, according to the Minnesota Student Survey. Past-year prescription drug abuse was reported by 11 percent of high school seniors in 2004, compared with 9.4 percent in 2001. Incidents of middle school-aged and high school-aged children bringing various pills to school to share with classmates continued throughout the area.

In 2005 (first half), there were 329 unweighted ED reports involving the nonmedical use of benzodiazepines, which are prescribed medically to treat anxiety disorders (exhibit 3).

Alcohol

Alcohol remained the most widely used mood-altering substance in Minnesota. In 2004, current (past-month) alcohol use was reported by 66.2 percent of Minnesotans age 18 and older in 2004, compared with 56.8 percent nationally. The only States with higher proportions were Wisconsin (67.8 percent), Massachusetts (67.4 percent), and Rhode Island (66.3 percent). States with the lowest proportions were Utah (28.7 percent), West Virginia (30.2 percent), and Kentucky (31.7 percent).

Binge drinking (consuming five or more drinks on one occasion) in the past month was reported by 19.8 percent of Minnesotans age 18 and older in 2004, compared with 14.9 percent nationally. The only States with higher proportions were the neighboring States of Wisconsin (21.8 percent) and North Dakota (20.4 percent). States with the lowest proportions were Tennessee (8.2 percent), Utah (9.2 percent), and Kentucky (9.6 percent).

DWI offenses are one of the most visible consequences of alcohol abuse. In 2003, there were 32,193 DWI offenses in Minnesota, one-half of which were in the Twin Cities area. Of those arrested, 41 percent were repeat offenders, and 51 percent were between the ages of 21 and 34. Minnesota was one of the last States to adopt 0.08 BAC (blood alcohol concentration) as the legal level for impaired driving, effective August 1, 2005.

In 2004, there were 51 alcohol-related fatalities in the five-county metropolitan area (exhibit 9). Statewide, of the 4,841 motor vehicle crashes that involved alcohol in 2004, 177 people died and 3,622 were injured, at an estimated economic cost of \$280 million.

In one recent case (December 2005) a 41-year-old man, who had been released from prison less than 5 months earlier for killing a woman while driving drunk, led police on a high-speed, wrong-way chase for 9 miles through the western metropolitan area before being arrested for DWI, fleeing a police officer, receiving stolen property, and refusing to submit to a chemical test.

Extreme college drinking remains a problem of significant magnitude and growing concern. The body of a 19-year-old boy from local Stillwater was discovered in the Red River near Minnesota State University at Moorhead, 5 days after he was last seen leaving a fraternity party. His autopsy revealed a BAC of 0.17 and tetrahydrocannabinol (THC) metabolites indicating marijuana. Nine men were charged in the case, six of them with the felony of selling liquor to a minor resulting in death. In 2004 at the same fraternity, a young man died of alcohol poisoning after drinking at a bar on his 21st birthday. The national fraternity has since suspended that chapter.

Admissions to addiction treatment programs with alcohol as the primary substance problem accounted for 45.2 percent of total admissions in 2005 (first half), down from 54.6 percent in 2000. Of these patients, one-quarter were women, 77.2 percent were White, 12.2 percent were African-American, 5.9 percent were Hispanic, and 3.2 percent were American Indian (exhibit 2). The average age of first alcohol use was 15.8.

There were 434 unweighted hospital ED reports of underage drinking in 2005 (first half) (exhibit 3).

Past-year alcohol use was reported by 60.4 percent of metropolitan area high school seniors in 2004, compared with 65.0 percent in 2001.

Tobacco

Tobacco use is the leading cause of preventable disease and death in Minnesota, producing \$1.6 billion in direct health care costs annually and an additional \$1 billion in lost productivity costs. Each year, 5,600 Minnesotans die from tobacco-related disease, representing 1 of every 7 deaths.

Current smoking was reported by 20.7 percent of people age 18 and older in Minnesota in 2004, compared with 20.8 percent nationally. States with the highest proportions were Kentucky (27.5 percent), West Virginia (26.8 percent), and Tennessee (26.1 percent). States with the lowest proportions were

Utah (10.4 percent), California (14.7 percent), and Idaho (17.4 percent).

Tobacco use declined among metropolitan area youth significantly in 2004, according to the Minnesota Student Survey. Past-year use of tobacco products was reported by 41.8 percent of high school seniors in 2004, compared with 48.4 percent in 2001.

A newly released statewide survey of youth smoking by the Minnesota Department of Health found that from 2000 to 2005, current (past-month) tobacco use among Minnesota middle school students (grades 6–8) fell from 12.6 to 9.5 percent, and among high school students (grades 9–12) such use declined from 40.0 to 29.3 percent.

Environmental tobacco smoke (ETS) is smoke from lit cigarettes that is not intentionally inhaled (also known as second-hand smoke). Exposure to ETS increases the risk of cancer and heart disease and exacerbates other respiratory conditions, such as asthma. Exposure to ETS causes 3,000 deaths from lung cancer and 35,000 deaths from heart disease annually among nonsmokers in the United States.

Two of three Minnesotans (65 percent) are exposed to ETS in a typical week—at home, at work, in a car, or at another location. Even among nonsmoking Minnesotans, 59 percent reported ETS exposure in the past week, according to 2003 Minnesota Adult Tobacco Survey. Children raised in smoking homes who are exposed to ETS are more prone to colds, bronchitis, pneumonia, ear infections, reduced lung function, and allergies than children living in smoke-free environments. An estimated 280,000 Minnesota children are exposed to ETS in the home annually.

As more cities and States enact indoor smoking bans in bars and restaurants, Hennepin County relaxed its countywide ordinance less than 1 year after it was first passed. Pursuant to recent action by the Hennepin County Board of Commissioners, bar owners in some parts of Hennepin County can apply for exemptions from the current county-wide smoking ban if one-half of their gross sales come from liquor, not food (effective 1/3/2006). Bars located in areas with more restrictive smoking bans cannot apply—Minneapolis, Bloomington, and Golden Valley. Ramsey County currently has a restaurant-only smoking ban.

Daily nicotine use (mostly tobacco) remained prevalent among patients in addiction treatment programs, ranging from 79.2 percent among heroin addicts to 61.4 percent among alcoholics (exhibit 2).

INFECTIOUS DISEASES RELATED TO SUBSTANCE ABUSE

As of December 31, 2004, a cumulative total of 7,547 people were diagnosed and reported with HIV/AIDS in Minnesota: 3,213 with HIV infection (non AIDS) and 4,334 diagnosed with AIDS. Of these, 2,697 were known to be deceased.

In Minnesota in 2004, of the 2,493 White males living with AIDS (the largest single demographic group), the exposure categories were as follows: men who have sex with men (85 percent); injection drug use (3 percent); men who have sex with men and injection drug use (8 percent); heterosexual contact (2 percent); and other (2 percent). Comparable figures for other groups are available from the Minnesota Department of Health. Of the 311 new HIV infections diagnosed in

2004, 39 percent were in Minneapolis, 14 percent were in St. Paul, 35 percent were in Twin Cities suburbs, and 12 percent were in out-State Minnesota.

In Minnesota in 2003, the Minnesota Department of Health reported 2,400 newly identified cases of hepatitis C virus (HCV), most of whom were chronically infected. Of the 23 acute cases, 57 percent reported past injection drug abuse. The level of HCV, a blood-borne liver disease, among injection drug abusers remained high, with estimated rates as high as 90 percent among patients in methadone treatment programs.

For inquiries concerning this report, please contact Carol Falkowski, Director of Research Communications, Hazelden Foundation, Butler Center for Research, 15245 Pleasant Valley Road, Box 11, Center City, MN 55012-0011, Phone: 651-213-4566, Fax: 651-213-4344, E-mail: <cfalkowski@hazelden.org>.

Exhibit 1. Minneapolis/St. Paul DAWN ED Sample and Reporting Information: January–June 2005

CEWG Area	Total Eligible Hospitals ¹	No. of Hospitals in DAWN Sample	Total EDs in DAWN Sample ²	No. of EDs Reporting per Month: Completeness of Data (%)			No. of EDs Not Reporting
				90–100%	50–89%	<50%	
Minneapolis/St. Paul	28	26	26	11–13	0–1	0–1	13–15

¹Short-term, general, non-Federal hospitals with 24-hour emergency departments based on the American Hospital Association Annual Survey.

²Some hospitals have more than one emergency department.

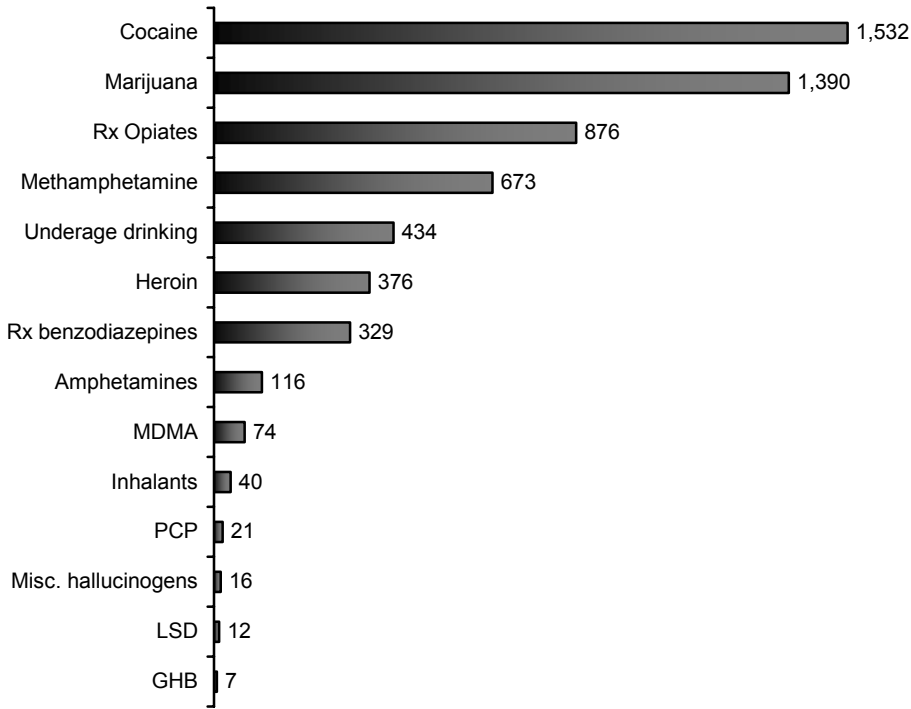
SOURCE: DAWN *Live!*, OAS, SAMHSA, updated 12/6-12/7, 2005

Exhibit 2. Characteristics of Patients Admitted to Twin Cities Area Addiction Treatment Programs by Primary Substance Problem and Percent: 1H 2005

Total Admissions (N=9,720)	Alcohol n=4,396 (45.2%)	Marijuana n=1,848 (19.0%)	Cocaine n=1,302 (13.4%)	Methampheta- mine n=1,178 (12.1%)	Heroin n=510 (5.2%)
Gender					
Male	74.1	75.0	68.9	64.3	66.9
Female	25.9	25.0	31.1	35.7	33.1
Race/Ethnicity					
White	77.2	65.4	42.8	90.1	52.9
African-American	12.2	22.9	48.0	1.0	39.2
Hispanic	5.9	4.6	4.6	3.9	3.9
American Indian	3.2	3.1	2.4	2.2	1.9
Asian	0.7	1.0	0.6	1.8	0.7
Age					
17 and younger	3.3	42.9	3.2	11.5	0.2
18–25	15.5	33.3	10.0	38.1	14.7
26–34	20.7	13.1	23.6	27.6	22.6
35 and older	60.5	10.7	63.1	22.8	62.5
Route of Admini- stration					
Smoking			81.5	67.1	2.6
Sniffing			17.0	14.9	35.8
Injecting			1.4	13.8	61.8
Oral				4.2	
Secondary Drug	Marijuana–55.6	Alcohol–65.5	Alcohol–53.9	Marijuana–48.5	Cocaine–42.3
Tertiary Drug	Cocaine–33.8	Alcohol–35.3	Alcohol–42.4	Alcohol–43.6	Alcohol–29.7
1st Treatment Epi- sode	30.1	43.2	16.9	26.8	12.0
Average Age 1st Use (in Years)	15.8	13.8	25.1	20.5	22.9
Daily Nicotine Use	61.4	65.1	69.7	77.5	79.2

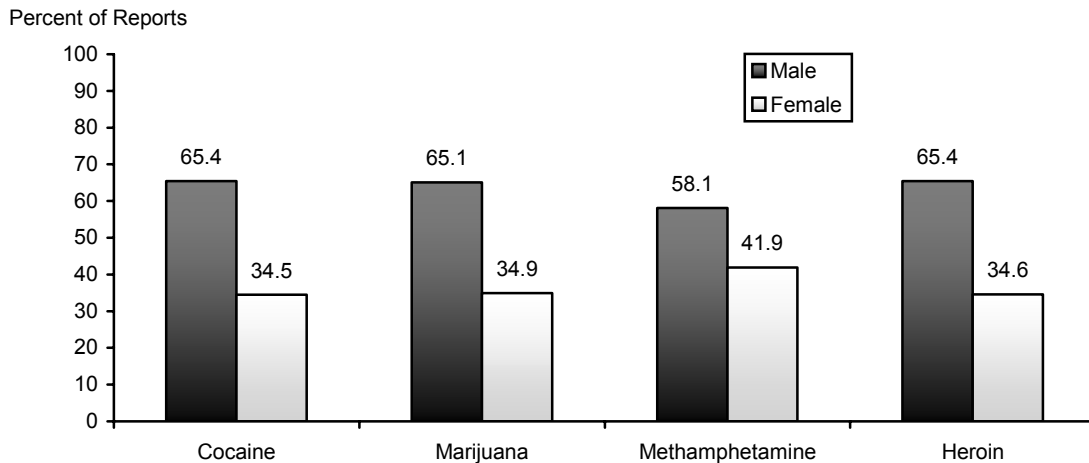
SOURCE: Drug and Alcohol Abuse Normative Evaluation System (DAANES), Minnesota Department of Human Services, 2005

Exhibit 3. Number of Reports on Drug-Related Hospital Emergency Department (ED) Visits in Minneapolis/St. Paul by Drug Category (Unweighted¹): 1H 2005



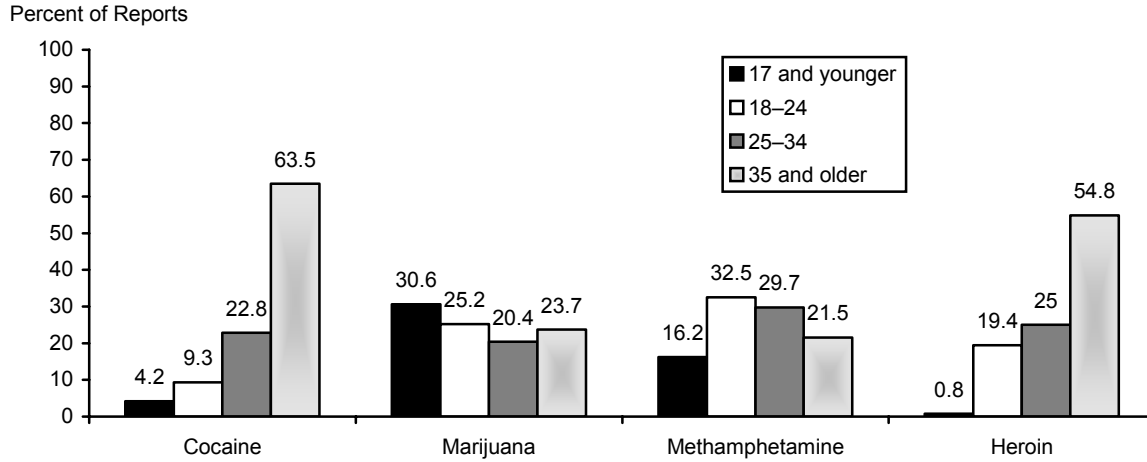
¹Reports are from 11 to 13 metropolitan area hospital emergency departments from 1/1/2005 through 6/30/2005. All DAWN cases are reviewed for quality control and based on this review, may be corrected or deleted. They are, therefore, subject to change. SOURCE: DAWN, OAS, SAMHSA, updated 12/6–12/7, 2005

Exhibit 4. Percentages of ED Reports in Minneapolis/St. Paul, by Drug and Patient Gender (Unweighted¹): 1H 2005



¹Reports are from 11 to 13 metropolitan area hospital emergency departments from 1/1/2005 through 6/30/2005. All DAWN cases are reviewed for quality control and based on this review, may be corrected or deleted. They are, therefore, subject to change. SOURCE: DAWN, OAS, SAMHSA, updated 12/6–12/7, 2005

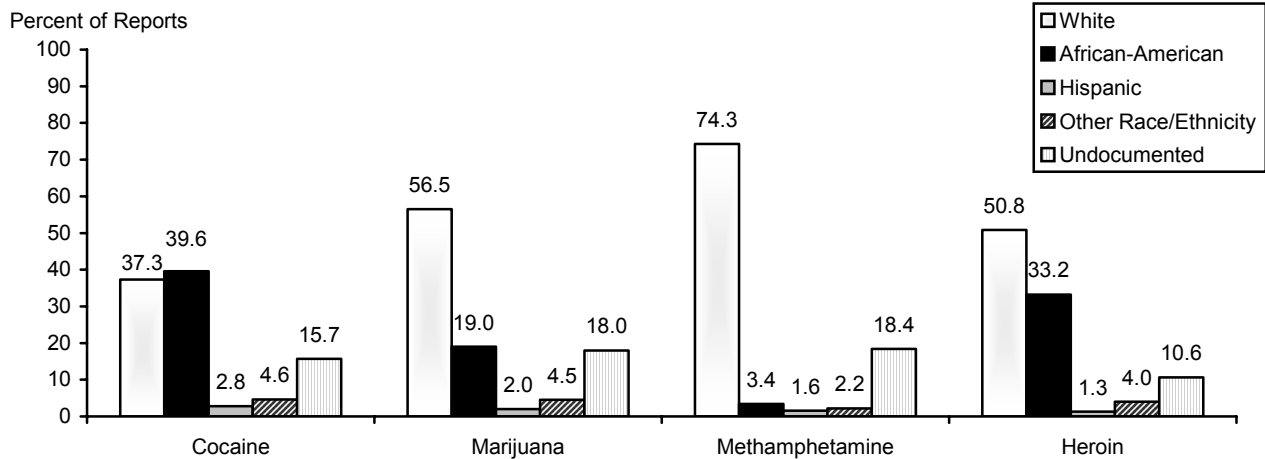
Exhibit 5. Percentages of ED Reports in Minneapolis/St. Paul, by Drug and Patient Age (Unweighted¹): 1H 2005



¹Reports are from 11 to 13 metropolitan area hospital emergency departments from 1/1/2005 through 6/30/2005. All DAWN cases are reviewed for quality control and based on this review, may be corrected or deleted. They are, therefore, subject to change. (SAMHSA) on 12/6-12/7, 2005.

SOURCE: DAWN, OAS, SAMHSA, updated 12/6-12/7, 2005

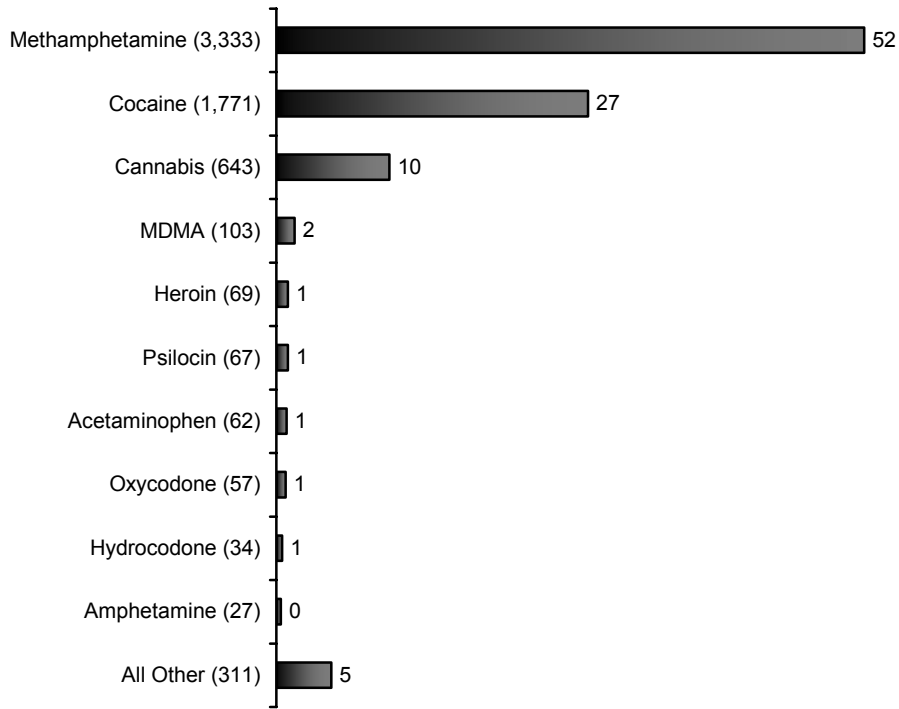
Exhibit 6. Percentages of ED Reports in Minneapolis/St. Paul, by Drug and Patient Race/Ethnicity (Unweighted¹): 1H 2005



¹Reports are from 11 to 13 metropolitan area hospital emergency departments from 1/1/2005 through 6/30/2005. All DAWN cases are reviewed for quality control and based on this review, may be corrected or deleted. They are, therefore, subject to change.

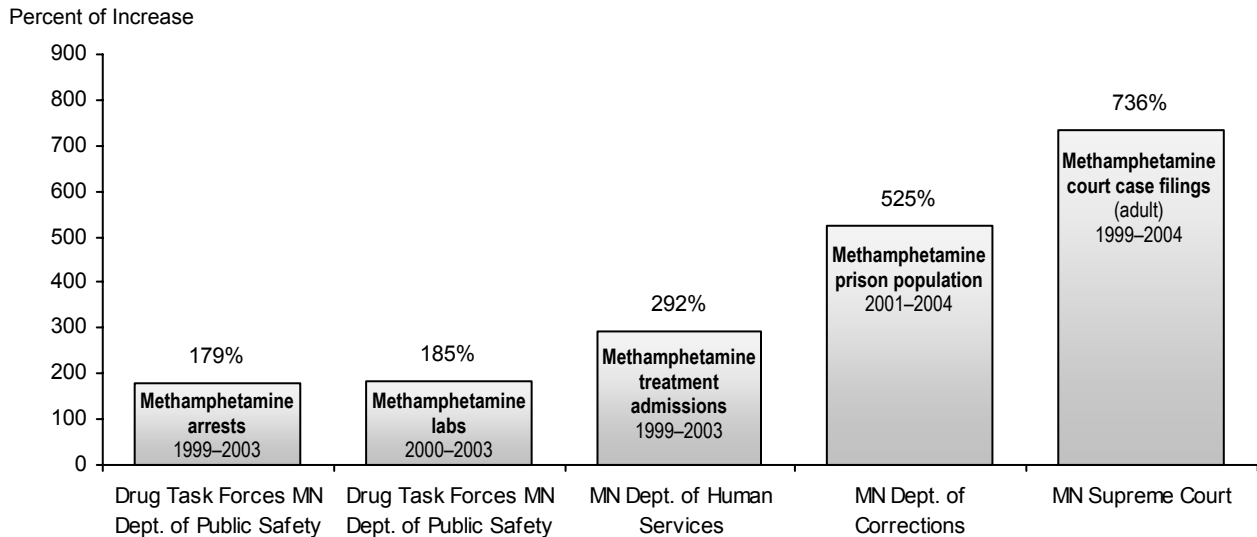
SOURCE: DAWN, OAS, SAMHSA, updated 12/6-12/7, 2005

Exhibit 7. Number of Seized Drug Items Analyzed by Forensic Labs in St. Paul, Minnesota, Ordered by Percentage of Total Items Analyzed: October 2004–September 2005



SOURCE: National Forensic Laboratory Information System (NFLIS), U.S. Drug Enforcement Administration

Exhibit 8. Increased Impact of Methamphetamine Abuse in Minnesota



SOURCE: Minnesota Bureau of Criminal Apprehension, Minnesota Department of Public Safety

Exhibit 9. Alcohol-Related Motor Vehicle Fatalities: 2004

County	Number of Alcohol-Related Motor Vehicle Fatalities	Percent of Motor Vehicle Fatalities That Were Alcohol-Related
Anoka	8	28.6
Dakota	8	24.2
Hennepin	18	37.5
Ramsey	10	45.5
Washington	7	38.9

SOURCE: 2005 Minnesota County Health Tables, Minnesota Center for Health Statistics, Minnesota Department of Health, using data from the Minnesota Department of Public Safety, Office of Traffic Safety

Drug Abuse in the Newark Primary Metropolitan Statistical Area

Allison S. Gertel-Rosenberg, M.S.¹

ABSTRACT

In this report, drug abuse indicators in the Newark primary metropolitan statistical area (Newark PMSA) are presented using substance abuse treatment data, medical examiner cases, and other information. The indicators demonstrate that the primary drugs of concern in the Newark PMSA are heroin and cocaine. Most primary admissions (79.7 percent) in State FY 2005 were for illicit drugs. Heroin accounted for 72.7 percent of all primary admissions for illicit drugs in the Newark PMSA, compared with 11.5 percent for primary crack/cocaine and 12.6 percent for primary marijuana use. Excluding alcohol, heroin accounted for 81.6 percent of admissions in Newark City (compared with 8.6 percent for cocaine and 8.4 percent for marijuana admissions). Heroin purity remains high, at 52.7 percent in 2005. Between October 2004 and September 2005, cocaine accounted for 45.5 percent of items analyzed by NFLIS, followed by heroin (31.3 percent) and marijuana (8.4 percent). United States Sentencing Commission data indicate that in FY 2003, heroin-related Federal sentences accounted for 33.2 percent of New Jersey's drug-related Federal sentences, compared with 7.1 percent nationally. With respect to transmission mode among people living with HIV/AIDS, injection drug use alone accounted for 30 percent of cases statewide and for 38 percent in Newark. Although heroin is the most prominent primary drug of abuse in New Jersey, the data regarding drugs in combination indicate that cocaine may also be playing an important role in the drug landscape of New Jersey. Further information regarding available treatment and population differences will be studied in future reports.

INTRODUCTION

Area Description

The Newark primary metropolitan statistical area (PMSA) consists of five counties (Essex, Morris, Sussex, Union, and Warren). In 2004, there were an

estimated 2,079,050 residents in the PMSA, with 38 percent living in Essex County (which contains Newark City), 26 percent in Union County, 23 percent in Morris County, and the rest residing in the remaining counties. According to the 2000 Census, the population of the Newark PMSA is diverse with respect to race: 66 percent are White, 22 percent are Black, and 4 percent are Asian. Hispanics accounted for 13 percent of the PMSA population in 2000. There is also a wide variation in racial/ethnic breakdowns for each county. In Essex County, 45 percent of the population are White and 41 percent are Black. Union County is 65 percent White and 21 percent Black. By comparison, Morris County is 87 percent White and 3 percent Black; Sussex County is 96 percent White and 1 percent Black; and Warren County is 95 percent White and 2 percent Black. Hispanics accounted for 20 percent of the population in Union, 15 percent in Essex, 8 percent in Morris, 3 percent in Sussex, and 4 percent in Warren. The counties are also very diverse by socioeconomic status. In the Newark PMSA as a whole, 5.8 percent of families with children younger than 18 live below the poverty level. For counties within the PMSA, the poverty status for families with children younger than 18 is 18 percent in Essex, 3 percent in Morris, 4 percent in Sussex, 9 percent in Union, and 5 percent in Warren. These social, demographic, and economic variations suggest substantial differences in drug use behaviors of residents by county.

New Jersey is situated between major industrial markets in New York and Pennsylvania and has been referred to as the “crossroads of the east.” It is a gateway State, with major interstate highways, roadways, airports, seaports, and other infrastructures capable of accommodating large amounts of passenger and cargo traffic from both the eastern and western parts of the United States. New Jersey can therefore be considered an ideal strategic, as well as vulnerable, corridor for the transportation of drug contraband and illicit currency.²

New Jersey has one of the highest concentrations of pharmaceutical and biochemical manufacturing firms in the country. According to the Drug Enforcement Administration (DEA), the most prevalent sources of diverted pharmaceutical drugs in New Jersey include doctor shopping, prescription forgery, and organized prescription rings. The forging of prescriptions is a continuing problem among employees in the medical field who use their positions to gain access to blank prescription pads. The most commonly diverted pharmaceuticals are the benzodiazepines and opiates, especially the hydrocodone products, with Percocet,

¹The author is affiliated with the Division of Addiction Services, Office of Policy Development, New Jersey Department of Human Services.

²DEA Briefs and Background State Fact Sheets. New Jersey 2005. <<http://www.usdoj.gov/dea/pubs/states/newjersey.html>>.

Percodan, Xanax, Dilaudid, Valium, and Vicodin representing the most common brand name drugs diverted. The DEA is also reporting an increase in the diversion of OxyContin, both in Newark and South Jersey, where it has become a particular problem among teenagers and young adults.

Illicit Substances in the News

In December 2005, the DEA announced that the DEA Task Force had arrested one Colombian national and seized 4½ pounds of heroin, along with approximately \$120,000 in cash. Additionally, the Task Force froze five bank accounts worth \$150,000 in New Jersey.

During a Federal money laundering investigation, the DEA Task Force encountered and dismantled a clandestine heroin re-packing mill in Ridgefield Park, New Jersey. The heroin re-packing mill contained steel presses, packing material, and drug paraphernalia. Further, several money counters, along with approximately \$120,000, were seized at the location.³

Data Sources

This report uses data from various sources, as indicated below:

- **Drug treatment data** were obtained from the New Jersey Substance Abuse Monitoring System (NJSAMS) and the Alcohol and Drug Abuse Data System (ADADS), statewide, episode-based data systems operated by the Division of Addiction Services of the Department of Human Services. The preliminary data for State fiscal year (FY) 2005 include profiles by primary drug of abuse in Newark City, the Newark PMSA, and the State. The 2004 Treatment Episode Data Set (TEDS), Office of Applied Studies (OAS), was used to depict additional demographic characteristics of statewide admissions and was accessed December 14, 2005.
- **Drug seizure and law enforcement data** were provided by the National Drug Intelligence Center's (NDIC) "New Jersey Drug Threat Assessment Update," released in April 2004, and the Drug Enforcement Administration's fact sheet, "New Jersey 2005," updated in February 2005. Updated data on Federal drug-related sentences were gathered from the United States Sentencing Commission (USSC), Office of Policy Analysis, for FY 2003. Additionally, the NDIC and local

law enforcement officials provided information on drug availability.

- **Drug seizure data** were provided by the Federal-wide Drug Seizure System (FDSS) for 2000–2004 on drug seizures by Federal officials.
- **Forensic analysis data** on specific drugs were provided by the Drug Enforcement Administration's National Forensic Laboratory Information System (NFLIS) for October 2004 through September 2005.
- **Mortality data** were obtained from the Division of Criminal Justice, State Medical Examiner Office Annual Report 2004. The data cover the period of January 1, 2004, through December 31, 2004. The data are presented by county, and this paper only references Essex County, where Newark is located. The report looks at both individual substances as well as common combinations.
- **Illicit drug price and purity data** on heroin purity and pricing was provided by the Domestic Monitor Program (DMP) and was published in June 2005. Additional pricing data were provided by the Drug Enforcement Administration, Newark Field Division, for July through September 2005.
- **Human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS) data** were obtained from the statewide AIDS Registry maintained by the New Jersey Department of Health and Senior Services, Division of AIDS Prevention and Control, HIV/AIDS Surveillance Program. Data for the State were compiled as of June 30, 2005. Data for the Newark PMSA and Newark City were compiled as of December 31, 2004.

SPECIAL CONSIDERATION: DRUG USE IN COMBINATION

The majority of what will follow in this report will focus on the primary drug of abuse at the time of admission or death. This section, however, focuses on the fact that many users and abusers of illicit substances are involved with more than one substance. Note that the percentages of secondary drug reference the individuals who noted a secondary drug, not a percentage based on the total number of primary users/abusers.

³ <http://www.usdoj.gov/dea/pubs/states/newsrel/nwk121905.html>.

Cocaine/Crack

Preliminary treatment admissions data for Newark City for July 2004 through June 2005 (State FY 2005) indicate that alcohol is the most common secondary drug among primary users of cocaine who report a secondary drug. Almost 37 percent of primary cocaine users with a secondary drug of abuse report that drug to be alcohol (exhibit 1). The same holds true for the Newark PMSA, where 37.4 percent of primary cocaine users with a secondary drug of abuse report that drug to be alcohol, and statewide, where 37.2 percent report their secondary drug of abuse to be alcohol.

Heroin

Preliminary treatment admissions data for Newark City for State FY 2005 indicate that cocaine is the most common secondary drug among primary users of heroin who report a secondary drug. More than 50 percent of primary heroin users in Newark City with a secondary drug of abuse report that drug to be cocaine (exhibit 1). The same holds true for the Newark PMSA, where 34.1 percent of primary heroin users with a secondary drug of abuse report that drug to be cocaine, and statewide, where 39.9 percent report their secondary drug of abuse to be cocaine.

Marijuana

Preliminary treatment admissions data for Newark City for FY 2005 indicate that alcohol (at 31.2 percent) is the most common secondary drug among primary users of marijuana who report a secondary drug (exhibit 1). The same holds true for the Newark PMSA, where 41.8 percent of primary marijuana users with a secondary drug of abuse report that drug to be alcohol, and statewide, where 46.8 percent report their secondary drug of abuse to be alcohol.

Stimulants

Preliminary treatment admissions data for Newark City for FY 2005 indicate that cocaine (at 25 percent) is the most common secondary drug used by primary users of stimulants who report a secondary drug (exhibit 1). The same holds true for the Newark PMSA, where 18.2 percent of primary stimulant users with a secondary drug of abuse report that drug to be cocaine, and statewide, where 22.3 percent report their secondary drug of abuse to be cocaine.

Alcohol (Alone or In Combination)

Preliminary treatment admissions data for Newark City for FY 2005 indicate that cocaine (at 27.4 per-

cent) is the most common secondary drug used by primary users of alcohol who report a secondary drug (exhibit 1). The most common secondary drug is different in the Newark PMSA, where 16.4 percent of primary alcohol users with a secondary drug of abuse report that drug to be marijuana, and statewide, where 19.3 percent report their secondary drug of abuse to be marijuana.

Mortality

The Office of the Medical Examiner reports on deaths that test positive for a combination of drugs. In Essex County in 2004, the medical examiner recorded 51 decedents testing positive for both opiates and cocaine; 15 decedents testing positive for opiates, cocaine, and ethanol; 17 decedents testing positive for opiates and ethanol; and 22 decedents testing positive for cocaine and ethanol (exhibit 2).

Conclusions

Although heroin is the most prominent primary drug of abuse in New Jersey, the data regarding drugs in combination indicate that cocaine may also be playing an important role in the drug landscape of New Jersey. Further information regarding available treatment and population differences will be studied in future reports.

DRUG ABUSE PATTERNS AND TRENDS

Cocaine/Crack

In preliminary data for July 2004 through June 2005 (State FY 2005), primary cocaine/crack treatment admissions accounted for 7.9 percent of all admissions in Newark City (compared with 7.2 percent in 2004) and for 8.6 percent of admissions for illicit drugs (i.e., excluding alcohol, compared with 7.9 percent in 2004) (exhibits 3 and 4).

In the Newark PMSA, the proportion of crack/cocaine admissions among all admissions was higher in FY 2005 as well: 9.2 percent in FY 2005, compared with 9.0 percent in 2004 and 7.8 percent in 2003. The proportion of primary crack/cocaine admissions (excluding alcohol) was somewhat higher in the Newark PMSA than in the city—11.5 percent in State FY 2005, consistent with the 11.3 percent of 2004 but up slightly from 9.8 percent in 2003.

The proportion of primary cocaine/crack admissions (excluding alcohol) statewide increased slightly from 14.0 percent in 2003 to 15.1 percent in 2004 and then held steady in FY 2005 at 15.8 percent. In FY 2005, the proportion of statewide primary crack/cocaine

admissions was much higher than that reported in Newark City (7 percentage points higher) and 4 percentage points higher than that in the PMSA (exhibit 3). TEDS data for the State for 2004 show that the racial differences in crack admissions are beginning to weaken. In 2004, 51 percent of those admitted to treatment for crack were Black or African-American, and 48 percent were White (exhibit 5), compared with 53 percent Black or African-American and 43 percent White in 2003. In 2004, primary crack admissions tended to be male rather than female (57 versus 43 percent). Admissions for primary abuse of powder cocaine, however, were substantially more likely to be male than female (69 versus 31 percent) and White than Black (72 versus 27 percent) in 2004 (exhibit 5).

The mortality data from the New Jersey Medical Examiner indicate that there were 138 cocaine deaths in Essex County in 2004 (exhibit 6). These 138 cases represent 23.8 percent of all drug abuse cases in Essex County and 35.8 percent of all drug abuse cases excluding alcohol. These may be cases of drug-related fatality or a case in which the decedent tested positive for cocaine.

Between October 2004 and September 2005, cocaine/crack accounted for 45.5 percent of the 3,438 items analyzed by NFLIS, the highest proportion for any drug (exhibit 7).

According to the 2003 NDIC National Drug Threat Survey (NDTS), 80.1 percent of law enforcement agency respondents in New Jersey reported that powdered cocaine was readily available (availability described as either high or moderate), while 73.0 percent reported that crack cocaine was readily available. Additionally, 29.2 percent of law enforcement officials throughout New Jersey identified cocaine, either powdered (12.1 percent) or crack (17.1 percent), as their greatest drug threat.

More cocaine is seized in the State than any other illicit drug, except marijuana. According to FDSS data, Federal law enforcement officials seized 2,083 kilograms of cocaine in 2004. This is more than four times the amount seized in 2002. Data from the USSC indicate that the percentage of drug-related Federal sentences in New Jersey that were related to cocaine in FY 2001 (45.1 percent) surpassed the percentage nationwide (42.5 percent) for the first time in the previous 5 years. In FY 2003, the percentage of drug-related Federal sentences in New Jersey attributable to cocaine rose to 52 percent, once again surpassing the national average (43.8 percent) (exhibit 8).

Cocaine, particularly crack, is the drug most often associated with violent crime in New Jersey. Federal, State, and local law enforcement officials in New Jersey report that dealers frequently carry firearms and commit drive-by shootings, assaults, and murders. According to the NDTS, 49.5 percent of New Jersey law enforcement agencies identified cocaine, either powdered (15 percent) or crack (34.5 percent), as the drug that most contributes to violent crime.

Between July and September 2005, the retail price for powder cocaine in northern New Jersey was \$30–\$100 per gram; crack sold for \$30–\$80 per gram (exhibit 9).

Heroin

As a proportion of illicit drug treatment admissions, primary heroin accounted for 81.6 percent in Newark City in FY 2005, which was unchanged from the 81.8 percent in 2004 (exhibits 3 and 4). In the Newark PMSA, primary heroin admissions accounted for 72.7 percent of illicit drug admissions in FY 2005, the same as in 2004, and for 57.9 percent of all treatment admissions (including alcohol).

Primary heroin admissions predominated across the State in FY 2005, accounting for 59.2 percent of all admissions for drugs other than alcohol (exhibit 3). This is unchanged from 2004 (exhibit 4). TEDS data for 2004 indicate that, statewide, 62.3 percent of primary heroin admissions were White and 35.1 percent were Black (exhibit 5). About 17.1 percent were Hispanic. Primary heroin users were also predominately male (65.5 percent).

The mortality data from the New Jersey Medical Examiner indicate that there were 148 opiate deaths in Essex County in 2004 (exhibit 6). These 148 cases represent 25.6 percent of all drug abuse cases in Essex County and 38.4 percent of all drug abuse cases excluding alcohol. These may be cases of drug-related fatality or a case in which the decedent tested positive for an opiate.

Although heroin is the leading drug among treatment admissions in Newark, it accounted for only 31.3 percent of the 3,438 items analyzed by NFLIS between October 2004 and September 2005 (exhibit 7).

According to the NDTS 2003, 73.4 percent of New Jersey law enforcement agencies reported that heroin was readily available, while 31.6 percent of agencies identified heroin as the greatest drug threat.

According to FDSS data, Federal law enforcement officials in New Jersey seized 91 kilograms of heroin in 2000, 169 kilograms in 2001, 188 kilograms in 2002, and 184 kilograms in 2004. USCC data indicate that in Federal FY 2002, heroin-related Federal sentences accounted for a significantly higher percentage of all drug-related Federal sentences in New Jersey (25.6 percent) than nationwide (7.1 percent). This trend continued in Federal FY 2003, when heroin-related Federal sentences accounted for 33.2 percent of New Jersey's drug-related Federal sentences, compared with 7.1 percent nationally (exhibit 8).

Heroin purity is still very high, but it decreased somewhat in 2003 in the Newark PMSA. In 2001, heroin was 70.5 percent pure, and in 2002, it was 71.4 percent pure. In 2003, however, heroin purity dropped to 61.3 percent pure. The decline in heroin purity continued in 2004, when the purity dropped to 52.7 percent. Despite this continuing decrease in purity, Newark still had the most pure heroin in any of the CEWG areas. The price per gram between July and September 2005 was \$23–\$100 (exhibit 9). According to the Domestic Monitor Program, almost all of the heroin sold in the Newark PMSA is South American. The DMP data also show an increase in the average price of heroin in Newark. In 2004, heroin cost \$0.50 per milligram pure, compared with \$0.33 in 2003 and \$0.39 in 2002.

Opiates Other Than Heroin

In FY 2005, primary treatment admissions for “other opiates or synthetics” in Newark City totaled 9 (0.2 percent of the admissions, excluding alcohol admissions). The number was higher in the PMSA—131 (1.2 percent of the admissions, excluding alcohol). This is unchanged from 2004, when figures for the city and PMSA, respectively, were 0.2 and 1.2 percent. In the State as a whole, primary admissions for other opiates in FY 2005 totaled 993, or 2.6 percent of all admissions, excluding alcohol. In 2004, the number of primary admissions for other opiates totaled 1,142—more than double the admissions reported in 1997 (513). The biggest increase in numbers of other opiate admissions occurred between 2000 (592) and 2002 (1,124). In the TEDS statewide data for 2004, 92 percent of the primary “other opiate” admissions were White, and 7 percent were Black (exhibit 5). Only 4 percent of the primary “other opiate” admissions were Hispanic. About 57 percent were male.

Oxycodone products such as OxyContin and Percocet are among the most commonly diverted or illicitly used pharmaceuticals in the State, according to NDTs 2003. In the second half of 2005, OxyContin

was sold for \$25–\$45 per tablet, and Percocet sold for \$3–\$6 per tablet (exhibit 9).

Marijuana

Primary marijuana treatment admissions represented 7.7 percent of all treatment admissions in Newark City in FY 2005, compared with 10.0 percent in the Newark PMSA and 12.8 percent in the State as a whole. As a proportion of illicit drug treatment admissions, marijuana accounted for 8.4 percent in Newark City and 12.6 percent in the Newark PMSA (exhibit 3) in FY 2005, both remaining relatively constant from 2004 (exhibit 4).

Statewide primary marijuana admissions (excluding alcohol) were more than twice the proportion of those in Newark City (17.9 vs. 8.4 percent) and about 5 percentage points higher than those in the Newark PMSA (17.9 vs. 12.6 percent) (exhibit 3). Statewide TEDS data for 2004 indicate that 82.3 percent of primary marijuana admissions were male, 56.7 percent were White, and 40.4 percent were Black (exhibit 5). About 18.9 percent of primary marijuana admissions statewide were Hispanic. Across the State, approximately 29 percent of primary marijuana admissions were younger than 18, and about 72 percent were younger than 26.

The mortality data from the New Jersey Medical Examiner indicate that there were 42 cannabinoid deaths in Essex County in 2004 (exhibit 6). The 42 cases represent 7.2 percent of all drug abuse cases in Essex County and 10.9 percent of all drug abuse cases excluding alcohol. These may be cases of drug-related fatality or a case in which the decedent tested positive for cannabinoids.

Among the 3,438 items analyzed by NFLIS between October 2004 and September 2005, marijuana accounted for 8.4 percent (exhibit 7).

Marijuana is the most widely available illicit drug in New Jersey. According to the NDTs 2003, 96.9 percent of New Jersey law enforcement agencies report that marijuana is readily available, although only 30.6 percent of New Jersey law enforcement agencies identified marijuana as their greatest drug threat.

According to FDSS data, 1,196 kilograms of marijuana were seized by law enforcement officials in New Jersey in 2004. Data from the DEA Domestic Cannabis Eradication/Suppression Program indicate that law enforcement officials eradicated 831 plants from outdoor grows in New Jersey in 2001 and 957 in 2002. In addition, law enforcement officials eradicated 182 plants from indoor grows in the State in

2001 and 1,345 in 2002. USSC data indicate that the percentage of drug-related Federal sentences related to marijuana in New Jersey in FY 2001 (8.4 percent) was significantly lower than the percentage nationwide (32.8 percent). The percentage of drug-related Federal sentences related to marijuana in New Jersey decreased in FY 2003 to 5.4 percent, compared with 26.2 percent nationally (exhibit 8).

Between July and September 2005, locally produced marijuana sold in Newark for \$5–\$30 per bag (exhibit 9).

Benzodiazepines

The distribution and abuse of pharmaceuticals is growing at an increasing rate in New Jersey. According to the NDTs 2003, 60.4 percent of New Jersey law enforcement agencies reported that pharmaceuticals were readily available. NDTs 2003 data further indicate that New Jersey law enforcement agencies reported alprazolam (Xanax) among the most commonly diverted or illicitly used pharmaceuticals in the State. Diverted pharmaceuticals often are sold behind closed doors and occasionally at open-air drug markets, primarily in Essex (Newark and Irvington), Camden, and Salem Counties. According to the DEA Newark Division, diverted Xanax sold for \$7 per tablet during the time period of July through September 2005 (exhibit 9).

Methamphetamine and Amphetamines

In FY 2005, only 22 primary amphetamine treatment admissions were reported in the Newark PMSA. As a primary drug of abuse, amphetamines were also rare in the State. There were 112 primary amphetamine admissions in FY 2005. The number of total admissions for primary amphetamine abuse remained relatively stable compared with what has been reported in the past. According to the 2004 TEDS data, amphetamine users are more likely to be male than female (60 percent versus 40 percent). Amphetamine users are also significantly more likely to be White (79 percent) than Black (11 percent) or Hispanic (14 percent). Approximately one-third of amphetamine users are age 25 or younger (32.7 percent), one-third are between the ages of 26 and 35 (33.1 percent), and one-third are older than 35 (34.2 percent).

There were only two amphetamine/methamphetamine mentions recorded by the New Jersey Medical Examiner's Office in Essex County in 2004 (exhibit 6).

Methamphetamine availability is limited in New Jersey. According to the NDTs 2003, 17.1 percent of New Jersey law enforcement agencies reported that

methamphetamine was readily available, and 1.3 percent of agencies identified methamphetamine as their greatest drug threat.

According to FDSS data, Federal law enforcement officials in New Jersey seized 0.8 kilograms of methamphetamine in 2004.

USSC data indicate that the percentage of drug-related Federal sentences related to methamphetamine in New Jersey in FY 2001 (5.2 percent) was lower than the percentage nationwide (14.2 percent). Sentencing data from FY 2003 indicate that methamphetamine-related sentences in New Jersey represented 1.0 percent of all drug-related sentences (exhibit 8). This continues to be significantly lower than the nationwide average of 17.1 percent in FY 2003.

Methamphetamine prices at the wholesale and mid-level have fluctuated in New Jersey. These price variations resulted primarily from increased costs associated with obtaining methamphetamine (particularly crystal methamphetamine) from other regions of the country and other countries and transporting the drug to New Jersey. Methamphetamine previously sold for \$8,500 to \$20,000 per kilogram and \$800 to \$1,000 per ounce; between July and September 2005, methamphetamine sold for between \$8,000 and \$18,000 per pound and \$2,800 to \$6,700 per ounce of crystal or "ice" (exhibit 9). On the retail level, ice sold for between \$100 and \$160 per gram.

Methylenedioxymethamphetamine (MDMA or Ecstasy)

Between July and September 2005, MDMA sold for between \$4 and \$25 per tablet (exhibit 9).

Phencyclidine (PCP)

The New Jersey Medical Examiner's Office indicated four deaths in Essex County in 2004 had a mention of PCP, either causal or testing positive for PCP at time of death (exhibit 6).

Between July and September 2005, PCP sold for between \$15 and \$25 per bag and for \$300–\$350 per ounce (exhibit 9).

Alcohol

In the Newark PMSA, alcohol-only or in combination treatment admissions as a proportion of all admissions were stable at 20.3 percent in FY 2005, compared with 20.0 percent in 2004.

The mortality data from the New Jersey Medical Examiner indicate that there were 194 alcohol deaths in Essex County in 2004 (exhibit 6). These 194 cases represent 35.5 percent of all drug abuse cases in Essex County. These may be cases of drug-related fatality or a case in which the decedent tested positive for alcohol.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

In 2004, New Jersey ranked fifth nationally in cumulative AIDS cases, third in cumulative pediatric AIDS cases, and fifth in cases reported in 2004. As of June 30, 2005, there were 66,389 cumulative HIV/AIDS cases reported in New Jersey, about 2,190 of which were reported between July 2004 and June 2005. Of the cumulative cases, 26,263 (39.6 percent of the State total) were in the Newark PMSA. A total of 65,139 cumulative HIV/AIDS cases statewide were adults/adolescents age 13 or older.

Statewide, the proportion of HIV/AIDS cases involving injection drug use has declined substantially. Thus, approximately 41 percent of cumulative HIV/AIDS cases statewide historically involved injection drug use alone, compared with 13 percent between July 2004 and June 2005. In Newark City, 49 percent of cumulative cases involved injection drug use alone (only cumulative transmission mode data are available for Newark).

The proportion of cases linked to heterosexual transmission in New Jersey has increased dramatically. Approximately 29 percent of cumulative cases and 46 percent of cases reported between July 2004 and June 2005 can be attributable to heterosexual transmission. The majority of this difference can be found in the “partners of unknown HIV risk” category. There has been a slight increase in the number of transmission cases involving men having sex with men (MSM). The cumulative proportion is 19 percent, while the proportion between July 2004 and June 2005 is 24 percent. Additionally, 16 percent of cases reported between July 2004 and June 2005 are still recorded in the “other or unknown” transmission mode category.

In Newark City, 10 percent of cumulative HIV/AIDS cases involved homosexual transmission, 20 percent involved heterosexual contact, and 19 percent in-

involved “other or unknown” transmission. A larger proportion of females (34 percent of cumulative cases in Newark and 53 percent in the State) were infected through heterosexual contact than males (11 percent and 19 percent in Newark and the State, respectively).

There has been a steady increase in the number of persons living with HIV/AIDS in Newark and in the State as a whole. The total number statewide has increased from 25,343 in 1997 to 33,313 as of June 30, 2005 (exhibit 10).

Among people living with HIV/AIDS as of June 30, 2005, about 35 percent statewide are female (exhibit 10). This compares to about 41 percent among cumulative cases in Newark City through December 31, 2004 (exhibit 11). Compared to the State as a whole, a substantially higher proportion of people living with HIV/AIDS in Newark City are non-Hispanic Black (79 vs. 55 percent) (exhibits 10 and 12). About 17 percent among those living with HIV/AIDS in Newark City and 21 percent statewide are Hispanic, and about 3 percent in Newark City and 22 percent statewide are non-Hispanic White.

With respect to transmission mode among people living with HIV/AIDS, injection drug use alone accounted for 30 percent of cases statewide and 38 percent in Newark City. Heterosexual contact accounted for 37 percent of cases statewide and 25 percent in Newark. Homosexual contact among MSM alone accounted for 19 percent statewide 10 percent in Newark, while male-to-male sexual contact and injection drug use combined were involved in 3 percent of cases statewide and 3 percent of cases in Newark (exhibits 10 and 11). The continued increase in heroin injection by the young (age 18–25) and the very high levels of heroin abuse and heroin-related deaths continue to pose a serious risk for an increase in the prevalence of infectious diseases. However, no data are yet available to document any rise in the prevalence of HIV/AIDS in New Jersey.

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Exhibit 1. Most Common Secondary Drug by Primary Drug Type in Newark City, the Newark PMSA, and New Jersey, by Percent: July 2004–June 2005 (FY 2005)

Primary Drug	Newark	Newark PMSA	New Jersey
Alcohol (Alone or In Combination)	Cocaine 27.4	Marijuana 16.4	Marijuana 19.3
Cocaine	Alcohol 36.8	Alcohol 37.4	Alcohol 37.2
Heroin	Cocaine 50.9	Cocaine 34.1	Cocaine 39.9
Other Opiates	Cocaine 55.6	Alcohol 16.0	Alcohol 12.8
Marijuana	Alcohol 31.2	Alcohol 41.8	Alcohol 46.8
Stimulants	Cocaine 25.0	Cocaine 18.2	Cocaine 22.3

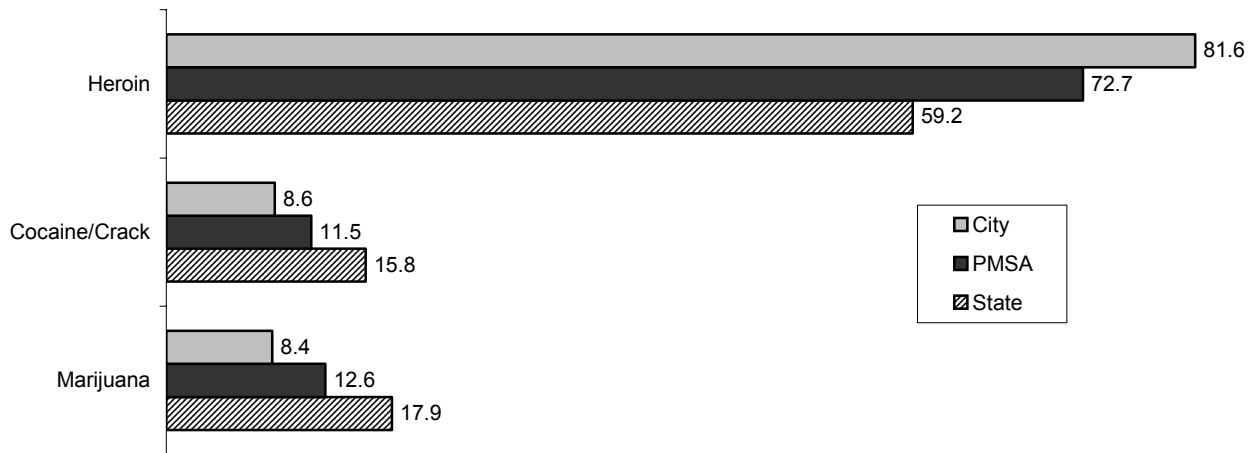
SOURCE: Alcohol and Drug Abuse Data System, New Jersey Substance Abuse Monitoring System, Division of Addiction Services, New Jersey Department of Human Services, accessed 12/14/05

Exhibit 2. Numbers of Decedents Testing Positive for Illicit Drug Combinations in Essex County: January–December 2004

Combination	Total
Opiates and Cocaine (No Alcohol)	51
Opiates, Cocaine, and Ethanol	15
Opiates and Ethanol (No Cocaine)	17
Cocaine and Ethanol (No Opiates)	22
Cannabinoids with Additional Drugs or Ethanol	23

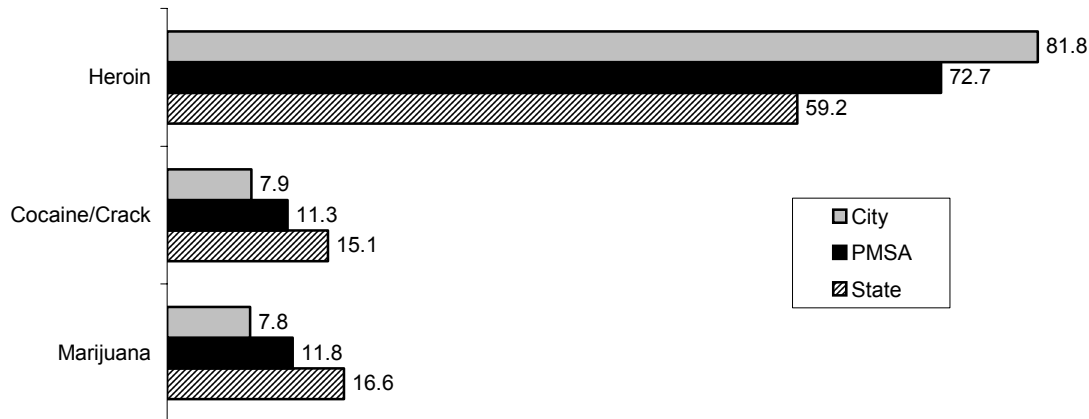
SOURCE: Office of the Medical Examiner Annual Report 2004

Exhibit 3. Percentages of Primary Treatment Admissions (Excluding Alcohol) for Selected Drugs in Newark City, the Newark PMSA, and New Jersey: July 2004–June 2005 (FY 2005)



SOURCE: Alcohol and Drug Abuse Data System, New Jersey Substance Abuse Monitoring System, Division of Addiction Services, New Jersey Department of Human Services

Exhibit 4. Percentages of Primary Treatment Admissions (Excluding Alcohol) for Selected Drugs in Newark City, the Newark PMSA, and New Jersey: January–December 2004



SOURCE: Alcohol and Drug Abuse Data System, New Jersey Substance Abuse Monitoring System, Division of Addiction Services, New Jersey Department of Human Services

Exhibit 5. Demographic Characteristics of Primary Substance Abuse Treatment Admissions in the State, by Percent: January–December 2004¹

Demographic Characteristic	Alcohol Only	Alcohol-in-Combination	Crack	Cocaine	Marijuana	Heroin	Other Opiates
Gender							
Male	74.3	75.4	56.7	69.0	82.3	65.5	57.2
Female	25.6	24.6	43.2	31.0	17.6	34.4	42.6
Race/Ethnicity							
White	83.1	71.5	47.7	71.5	56.7	62.3	91.6
Black	13.6	26.8	50.9	27.0	40.4	35.1	7.3
Hispanic	13.3	10.5	9.9	17.9	18.9	17.1	3.9
Age at Admission							
17 and younger	0.8	4.2	0.7	2.9	29.0	0.4	0.8
18–25	9.4	19.2	11.7	19.2	42.9	19.9	18.6
26–35	18.1	25.3	29.8	32.3	18.9	29.9	29.2
36 and older	71.7	51.3	57.8	45.6	9.2	48.8	51.4

¹Percentages may not add to 100 due to rounding or missing values.
SOURCE: TEDS, OAS, SAMHSA, accessed 12/14/05

Exhibit 6. Drug Abuse Cases Reported by the New Jersey Medical Examiner in Essex County: January–December 2004¹

Substance	Number	% of All Drug Cases	% of All Illicit Drug Cases
Amphetamines and Methamphetamine	2	0.3	0.5
Cannabinoids	42	7.2	10.9
Cocaine and Metabolites	138	23.8	35.8
Ethanol	194	33.5	N/A
Methadone	49	8.5	12.7
Opiates	148	25.6	38.4
PCP	4	0.7	1
Fentanyl	2	0.3	0.5

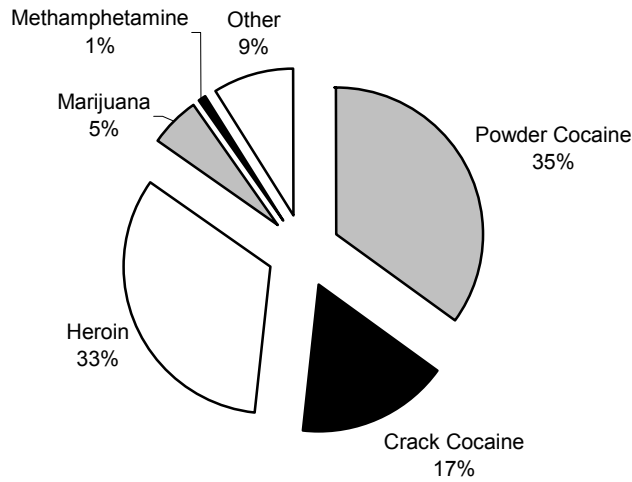
¹Includes drug-related fatalities and drug-positive cases from all manners of death.
SOURCE: Office of the Medical Examiner Annual Report 2004

Exhibit 7. Number of Items Analyzed for Specific Drugs in Newark and Percentage of Total Items: October 2004–September 2005¹

Substance	Number	Percent (%)
Cocaine	1,563	45.46
Heroin	1,076	31.30
Marijuana	288	8.38

¹N=3,438
SOURCE: NFLIS, DEA

Exhibit 8. Drug-Related Federal Sentences¹ in New Jersey, by Drug and Percent: FY 2003



¹N=295
SOURCE: United States Sentencing Commission, Office of Policy Analysis, 2003 Datafile

Exhibit 9. Illicit Drug Prices for Northern New Jersey: July–September 2005

Drug	Price
Heroin	
Kilogram	\$50,000–\$60,000
Ounce	\$1,500–\$3,360
Gram	\$23–\$100
Brick (50 Bags)	\$220–\$330
Bundle (10 Bags)	\$80–\$100
Bag	\$8–\$10
Cocaine	
Kilogram	\$17,000–\$30,000
Ounce	\$650–850
1/8 Ounce	\$100–\$600
Gram	\$30–\$100
Bag	\$5–\$40
Crack	
Kilogram	\$20,000–\$28,000
Ounce	\$650–\$850
1/8 Ounce	\$150–\$600
Gram	\$30–\$80
Clip (10 Vials)	\$250
Bag/Vial	\$5–\$40
Methamphetamine	
Pound	\$8,000–\$18,000
Pound (Crystal/“Ice”)	\$12,000–\$17,000
Ounce (Crystal/“Ice”)	\$2,800–\$6,700
1/8 Ounce	\$200
Gram (“Ice”)	\$100–\$160
Gram (Local Cook)	\$100
Marijuana	
Pound (Commercial)	\$1,000–\$4,000
Pound (Commercial)	\$8,000 Sour Diesel
1/2 Pound (Commercial)	\$300–\$1,500
Pound (Hydro)	\$2,000–\$6,000
1/2 Pound (Hydro)	\$500–\$2,500
Ounce	\$45–\$100
Ounce	\$425–\$450 White Willow
Gram	\$10–\$50
Bag	\$5–\$10
Bag	\$15–\$30 Hydro
Joint	\$2–\$20
Pharmaceuticals/Other Drugs	
Ketamine	\$20 per bump
PCP	\$15–\$25 per bag
MDMA	\$4–\$25 per tablet
OxyContin	\$20–\$45 per tablet
Percocet	\$3–\$6 per tablet
Xanax	\$7 per tablet
GHB	\$800–\$1,200 per gallon

SOURCES: DEA Newark Field Division, HIDTA, New Jersey Prosecutor’s Offices Narcotics Task Forces/other law enforcement agencies

Exhibit 10. Numbers and Percentages of Adult/Adolescent Cases Living with HIV/AIDS in New Jersey by Exposure Category, Race/Ethnicity and Gender as of June 30, 2005

Exposure Category and Race/Ethnicity	Males		Females		Total	
	N	(%)	N	(%)	N	(%)
Exposure Category						
Men/sex/men (MSM)	6,297	29	0	0	6,297	19
Injection drug user (IDU)	6,492	30	3,562	30	10,054	30
IDU/MSM	858	4	0	0	858	3
Heterosexual Contact	5,445	25	7,044	59	12,489	37
Other/Unknown	2,368	11	1,247	11	3,615	11
TOTAL	21,460	100	11,853	100	33,313	100
Race/Ethnicity						
White	5,311	25	1,964	17	7,275	22
Black	10,917	51	7,544	64	18,461	55
Hispanic	4,833	23	2,127	18	6,960	21
Asian/Pacific Islander	162	1	65	1	227	1
Other/Unknown	237	1	153	1	390	1
Total	21,460	100	11,853	100	33,313	100

SOURCE: New Jersey Department of Health and Senior Services, Division of AIDS Prevention and Control

Exhibit 11. Adult/Adolescents Living with HIV/AIDS in Newark City, by Exposure Category and Gender as of December 31, 2004

Exposure Category	Males		Females		Total	
	N	(%)	N	(%)	N	(%)
Men/sex/men (MSM)	565	17	0	0	565	10
Injection drug user (IDU)	1,292	39	852	36	2,144	38
IDU/MSM	159	5	0	0	159	3
Heterosexual Contact	506	15	908	39	1,414	25
Other/Unknown	822	25	596	25	1,418	25
Total	3,344	100	2,356	100	5,700	100

SOURCE: New Jersey Department of Health and Senior Services, Division of AIDS Prevention and Control

Exhibit 12. Race/Ethnicity of People Living with HIV/AIDS in Newark City as of December 31, 2004

Race/Ethnicity	Adult/Adolescent		Pediatric		Total	
	N	(%)	N	(%)	N	(%)
White, Non-Hispanic	198	3	0	0	198	3
Black, Non-Hispanic	4,546	79	82	92	4,628	79
Hispanic	980	17	7	8	987	17
Other	52	1	0	0	52	1
Total	5,776	100	89	100	5,865	100

SOURCE: New Jersey Department of Health and Senior Services, Division of AIDS Prevention and Control

Drug Abuse Indicators in New Orleans

Gail Thornton-Collins¹

ABSTRACT

This report focuses primarily on drug abuse indicator data collected in 2005 before Hurricane Katrina devastated New Orleans City and much of the parish. Most drug dealers and abusers were forced to evacuate and are living in other areas. Treatment programs are closed. At least 80 percent of the New Orleans residents had not returned to the city 3 months after Katrina. The full consequences of the impact on drug abusers and treatment services are still unclear. Prior to Katrina, cocaine/crack indicators remained high. In FY 2005, cocaine accounted for 40 percent of drug items analyzed by NFLIS, for nearly 43 percent of treatment admissions (excluding alcohol) in Orleans Parish in the first half of 2005, and for nearly 53 percent of the (unweighted) ED illicit drug reports in the first half of 2005. Heroin abuse indicators remained relatively stable from 2001 to 2005. South American heroin sold for \$1.69 per milligram pure in the last half of 2004, and, according to DEA, the average purity was 23.6 percent, considerably less than the average heroin purity of 31.8 percent purity reported in 2003. In FY 2005, 4.7 percent of drug items analyzed by NFLIS contained heroin. In the first half of 2005, 9.4 percent of treatment admissions were for primary heroin abuse (excluding heroin), and 15 percent of ED reports for illicit drugs were heroin reports. Marijuana abuse indicators remained high. Marijuana accounted for 50 percent of the items analyzed by NFLIS, for 42 percent of treatment admissions (excluding alcohol), and for 24 percent of the (unweighted) illicit drug reports. A growing problem is the abuse of narcotic analgesics, especially hydrocodone. In FY 2005, 1.3 percent of items analyzed by NFLIS contained hydrocodone; other narcotic analgesic items accounted for considerably less than 1 percent of the drug items analyzed. Hydrocodone ED reports were considerably higher (n=361) than those for oxycodone (86). Opiates other than heroin represented 4.9 percent of treatment admissions (excluding alcohol) in the first half of 2005. MDMA use in clubs and other social settings continued to be reported. Of the 8,308 drug

items analyzed by NFLIS in FY 2005, 1.2 percent contained MDMA/MDA, and 3.4 percent of the illicit drug ED reports in the first half of 2005 were for MDMA.

INTRODUCTION

Area Description

Located in southern Louisiana, the city of New Orleans covers 366 square miles, of which 164 are water. Nearly one-half of the metropolitan area's 1.3 million inhabitants live in Orleans Parish, the largest of Louisiana's 64 parishes. The total State population is about 4.5 million people, based on 2003 census projections (exhibit 1). As shown in exhibit 1, New Orleans, prior to Hurricane Katrina, had a much higher percentage of African-Americans than the State overall (67.2 vs. 32.1 percent) and a much lower percentage of Whites (28.1 vs. 64.0 percent). Nearly 21 percent of individuals in New Orleans lived below the poverty level, a proportion similar to the State overall. Three months after Katrina, at least 80 percent of the population had not returned to New Orleans (Randall 2005).

Serviced by several deep-water ports, New Orleans is located at the connection of two principal waterways: the Gulf Intracoastal Waterway and the Mississippi River. Barge lines, ocean carriers, and truck lines serve the Port of New Orleans.

Data Sources

Information for this report was collected from the sources described below:

- **Forensic laboratory testing data** were provided by the Drug Enforcement Administration (DEA) for fiscal year (FY) 2005, as reported to the National Forensic Laboratory Information System (NFLIS).
- **Drug treatment data** were provided by the Louisiana State Office for Addictive Disorders for Orleans Parish for FY 1995 through the first half of 2005, when 1,104 persons were treated in Orleans Parish.
- **Emergency department (ED) data** for the first half of 2005 were accessed through the Drug Abuse Warning Network (DAWN) *Live!* restricted-access online query system, which is administered by the Office of Applied Studies (OAS), Substance Abuse and Mental Health

¹The author was affiliated with the New Orleans Health Department, New Orleans, Louisiana during the time frame covered in this paper.

Services Administration (SAMHSA). Twenty of the 21 eligible hospitals in the New Orleans metropolitan area were in the DAWN sample, with a total of 22 EDs. (Some hospitals have more than one ED.) During the 6-month period, between 11 and 12 EDs reported data to DAWN each month; completeness of the data is summarized in exhibit 2. The data in this paper were updated by OAS on December 6–7, 2005; they are unweighted and are not estimates for the New Orleans area. Since all DAWN cases are reviewed for quality control, and may be corrected or deleted, the data reported here are subject to change. The information derived from DAWN *Live!* represents drug reports in drug-related visits; reports exceed the number of ED visits because a patient may report use of multiple drugs (up to six drugs and alcohol may be represented in DAWN). This paper presents data on major illicit drugs of abuse (excluding “Alcohol-in-Combination” and the “Alcohol Only” category that applies to patients younger than 21), reports for nonmedical use of prescription-type drugs, and reports involving alcohol. These data cannot be compared with DAWN data from 2002 and before, nor can these preliminary data be used for comparison with future data. Only weighted ED data released by SAMHSA can be used for trend analysis. A full description of the DAWN system can be found at the DAWN Web site: <<http://dawninfo.samhssa.gov>>.

- **Drug price and purity information** was extracted from *Narcotics Digest Weekly*, Volume 3, Number 52, December 28, 2004, National Drug Intelligence Center (NDIC), and the DEA for the last half of 2004. Data for heroin purity were derived from the DEA’s Domestic Monitor Program (DMP) for 2004.
- **Arrest data** for 2004 are from the New Orleans Police Department (NOPD).
- **Acquired immunodeficiency syndrome (AIDS) and human immunodeficiency virus (HIV) data** were provided by the Louisiana HIV/AIDS Surveillance System and represent cases reported in the first quarter of 2005.

No recent drug-related mortality or survey data were available for this reporting period. Trends in drug-related mortality data (DAWN) and trends in data from the Youth Risk Behavior Survey (YRBS) can be found in “Overview of Drug Abuse Indicators in New Orleans,” *Epidemiologic Trends in Drug Abuse, Proceedings Vol. II*, published by NIDA, June 2004.

DRUG ABUSE PATTERNS AND TRENDS

Cocaine/Crack

Crack has been and continues to be the most serious drug problem in New Orleans; it is associated with high rates of violence and crime in the city. In 2004, the DEA reported that crack and cocaine hydrochloride (HCl) were widely available in New Orleans in quantities ranging from kilograms to grams.

Approximately 40.0 percent of all items analyzed by NFLIS laboratories in New Orleans in FY 2005 were cocaine (exhibit 3), compared with 38.4 percent in 2003.

In the first half of 2005, 35 percent of all treatment admissions in Orleans Parish were for primary cocaine abuse (exhibit 4). Excluding alcohol, nearly 43 percent of admissions were primary cocaine abusers. A relatively high proportion (35.2 percent) of primary cocaine/crack treatment admissions in Orleans Parish were female. Most (86 percent) of the male and female primary cocaine/crack admissions were African-American.

Preliminary unweighted data accessed from DAWN *Live!* show that cocaine ED reports totaled 1,113 in the first half of 2005, accounting for 52.6 percent of the illicit drug reports (exhibit 5a), another indicator of the cocaine problem in New Orleans. Patients involved in these visits were most likely to be male (70.6 percent), 35 or older (57.5 percent), and African-American (61.0 percent) (exhibit 5b).

In New Orleans, Mexican and Caribbean drug trafficking organizations (DTOs) are the primary distributors of cocaine HCl at the wholesale level. DTOs usually do not sell cocaine in the crack form because of the more severe Federal sentencing guidelines for the distribution of cocaine in this form. Street dealers generally assume responsibility for converting cocaine HCl to crack. The dominant street-level crack dealers in New Orleans are African-Americans.

At the retail level, crack is commonly sold in the form of rocks and cookies in small plastic bags, clear plastic vials, and 35-millimeter film canisters. In the last half of 2004, the DEA reported that purity levels for crack ranged from 40 to 90 percent, while purity levels for HCl were more variable in the 17–90 percent range.

Powder cocaine is commonly sold in quarter, one-half, and 1 ounce quantities. In the last half of 2004, prices ranged from \$800 to \$1,200 per ounce at the midlevel and approximately \$18,000 to \$25,000 per

kilogram at the wholesale level (see exhibit 6). When cut/mixed with adulterants, and less potent, powder cocaine can be purchased at low prices at the street level. Crack has been available at \$5 to \$25 per rock and can be purchased on the street for \$900 to \$1,200 per ounce.

Heroin

Heroin indicators remained relatively stable in New Orleans from 2001 to 2004–2005.

In 2005, 4.7 percent ($n=392$) of all drug items analyzed by forensic labs in New Orleans were heroin (exhibit 3).

After increasing from 12.2 percent of all treatment admissions in 1999 to 14.8 percent in 2001, heroin treatment admissions remained level, at about 11 percent, from 2002 to 2004. In the first half of 2005, heroin represented 7.7 percent of all treatment admissions (exhibit 4) and 9.4 percent of admissions for illicit drugs (excluding alcohol). As in the prior 3½ years, most of the heroin admissions in the first half of 2005 were male (70.1 percent) and 68.8 percent were African-American.

The preliminary unweighted DAWN *Live!* data for the first half of 2005 show that 318 ED reports involved heroin, accounting for 15 percent of illicit drug reports (exhibit 5a). More than 70 percent of these patients were male (exhibit 5b). The patients were slightly more likely to be in the 25–35 age category (47.2 percent). Most were African-American (60.7 percent) or White (38.7 percent).

The DEA reported that the primary heroin traffickers for the heroin that is marketed in New Orleans are Colombian, Nigerian, and African-American. Much of the heroin is transported into the area from Texas in privately owned vehicles. Some of the heroin is also brought into the ports near New Orleans via vessels.

Like crack cocaine, heroin distribution and abuse has a major impact on the homicide and robbery rates in New Orleans. In 2004, the NOPD reported that a relatively high percentage of individuals arrested for robbery in 2004 were African-Americans in the 25–36 age category. The 2004 arrest data show that African-American males predominated in arrests involving heroin (exhibit 7). In 2004, there were 309 arrests for heroin possession and 87 for heroin distribution. Arrests for heroin distribution in 2004 were 50 percent lower than in 2003.

African-American trafficking organizations distribute heroin in government-supported housing projects and

in other low-income neighborhoods. Heroin is most commonly sold on the streets of New Orleans in “bags” or “papers.” Mixtures containing 0.3–0.5 grams are wrapped in small foil packages, which are placed in plastic sandwich bags for multiple sales. In the last half of 2004, bags or papers sold for \$20 to \$25 each at the retail level (exhibit 6), but it was possible to buy a bundle (25) of bags for about \$300.

In the last half of 2004, heroin sold for \$1.69 per milligram pure. Most of the DMP heroin street buys in New Orleans were of South American origin. The purity of the heroin averaged 23.6 percent, down from 31.8 percent in 2003.

Other Opiates/Narcotics

Indicators for opiates other than heroin remained low. Hydromorphone (Dilaudid) is being replaced by OxyContin as the most popular opiate of abuse in the New Orleans area, but hydrocodone (Vicodin), propoxyphene (Darvon), alprazolam (Xanax), oxycodone (Percodan), and hydromorphone are the most widely diverted opiates.

Of the 8,303 items analyzed by NFLIS in FY 2005, 179 (2.2 percent) were “other opiates/narcotics” (exhibit 3); 109 (40 percent) of these other opiate items were hydrocodone.

Among treatment admissions in Orleans Parish in FY 2004, 41 (4.9 percent, excluding alcohol) were for primary abuse of “other opiates or synthetic opioids” or nonprescription methadone. Sixty-three percent were female, and nearly 88 percent were White.

The unweighted DAWN ED data for the first half of 2005 show 790 reports of opiates/opioids. Of the opiate/opioid reports, 45.7 percent ($n=361$) were hydrocodone reports and 10.9 percent were oxycodone reports ($n=86$). Forty-one percent of the hydrocodone-involved visits were for overmedication, as were 31 percent of the oxycodone-involved visits.

In 2004, there were 1,087 arrests for possession of Schedule II narcotic drugs and 366 for distribution of Schedule II narcotics. Of the possession arrests, 55.6 percent were African-American males, and 26.0 percent were White males (exhibit 8). More than 46 percent of these arrestees for possession were between the ages of 21 and 33, nearly 41 percent were 36 or older, and nearly 13 percent were younger than 21. Of the 366 arrests for distribution of Schedule II narcotics, 241 (65.8 percent) were African-American males. Nearly 30 percent of those arrested for distribution of Schedule II narcotics were younger than 21; 34 percent were age 21–35 and 36 percent were 36 and older.

Marijuana

Marijuana indicators were stable in the 2005 reporting periods, but marijuana continued to be the most readily available illicit drug in New Orleans and the State of Louisiana. The price of marijuana decreased in recent years as the supply from Mexico increased. Mexican DTOs dominate the wholesale distribution of marijuana, which flows up through the Southwest border and through such Texas hub sites as Houston, Dallas, San Antonio, Brownsville, and El Paso. African-American and Mexican criminal groups transport large quantities of the drug and make it available to local dealers. Local independent dealers, street gangs, and other small groups are the local distributors.

Slightly more than one-half of the items analyzed in NFLIS labs in FY 2005 contained cannabis (exhibit 3), down from 52.2 percent in 2003.

In FY 2004, primary marijuana admissions in Orleans Parish exceeded those for other substances for the first time, accounting for nearly one-third (32.1 percent, $n=740$) of the 2,306 treatment admissions (exhibit 4). In the first half of 2005, marijuana accounted for 34 percent of all admissions and for nearly 42 percent of admissions excluding alcohol. Most (84 percent) were male.

There were 507 marijuana ED reports identified through DAWN *Live!* in the first half of 2005, accounting for 23.9 percent of unweighted illicit drug reports (exhibit 5a). Slightly more than 74 percent of the patients involved in these visits were male, and 50 percent were White (exhibit 5b). Nearly two-thirds were younger than 34.

In 2004, there were 5,967 arrests for marijuana possession and 1,048 arrests for marijuana distribution, reflecting little change from 2003 (exhibit 7).

According to NDIC, the price of marijuana was stable in the last half of 2004. Joints sold for as low as \$2, and grams could be purchased for \$10 (exhibit 6). Marijuana was sold by the ounce at the retail level for \$125–\$160 and by the pound wholesale for \$800–\$1,000.

Methamphetamine/Amphetamines

Methamphetamine indicators remained at low levels in New Orleans in 2003–2005. However, methamphetamine may be gaining popularity in some small towns and communities in the State, according to the DEA New Orleans Field Division (NOFD). Small clandestine methamphetamine labs have reportedly increased in some rural areas. Most methampheta-

mine seized in Louisiana came from Mexico and was transported from California or Texas in private and commercial vehicles.

Of the items analyzed by NFLIS labs in FY 2005, 47 (0.6 percent of all items analyzed) contained methamphetamine and 5 contained amphetamines (0.06 percent) (exhibit 3).

In the first half of 2005, only two primary methamphetamine abusers entered treatment programs in Orleans Parish; another two admissions were for primary amphetamine abuse.

Of the preliminary unweighted DAWN emergency department reports for illicit drugs in New Orleans in the first half of 2005, 33 involved amphetamines and 39 involved methamphetamine (exhibit 5a).

Club Drugs

Use of club drugs continued to be reported in clubs and bars around the city's French Quarter. Drugs such as methylenedioxymethamphetamine (MDMA or ecstasy) and gamma hydroxybutyrate (GHB) were most likely to be abused near metropolitan areas of the State where there are large college populations. Use of drugs such as ecstasy and flunitrazepam (Rohypnol) and similar "date rape" drugs are on the rise among youth in the city. Youth continue to be lured to these drugs because of their "hipness" and the myth that club drugs are safe. Ketamine abuse appears to have declined in the city, with little mention of the drug other than among teenagers experimenting with it.

Of the 8,303 items analyzed by NFLIS in FY 2005, 98 (1.2 percent) were MDMA or MDA (methylenedioxyamphetamine) (exhibit 3). Another three were ketamine, and one was lysergic acid diethylamide (LSD).

The unweighted DAWN *Live!* ED data for the first half of 2005 show 73 MDMA reports, representing 3.4 percent of illicit drug reports (exhibit 5a). ED reports for other drugs sometimes used in the "club scene" were few in number: six phencyclidine (PCP) reports, four GHB reports, nine LSD reports, and one ketamine report.

The retail cost of MDMA in the second half of 2004 was \$15–\$20 per tablet (exhibit 8).

Benzodiazepines

Benzodiazepines accounted for 1.2 percent of the items analyzed by NFLIS in FY 2005 (exhibit 3). Of the 102 benzodiazepine-type items, 67 (65.7 percent)

were alprazolam, and 32.3 percent were diazepam. In 2003, 1.0 percent of all drug items analyzed were a benzodiazepine. Of these 120 items, 62 percent were alprazolam.

Preliminary unweighted data accessed from DAWN *Live!* show that ED reports of benzodiazepines totaled 675 in the first half of 2005; nearly 33 percent of the benzodiazepine-involved visits were for over-medication.

Alcohol

Alcohol abuse is a serious problem in New Orleans, as it is in many cities and towns in the Nation. Alcohol and drugs are often used together, also a common pattern across the Nation.

In Orleans Parish, primary alcohol admissions accounted for slightly more than 18 percent of all admissions in the first half of 2005 (exhibit 4).

In the unweighted data accessed from DAWN *Live!* for the first half of 2005, there were 964 reports involving alcohol-in-combination with other drugs and another 132 “alcohol only” reports involving patients younger than 21.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

In the first quarter of 2005, there were 7,545 persons living with HIV (*n*=3,702) or AIDS (3,843) in metropolitan New Orleans. Of the 4,866 for whom exposure risk was known, 16 percent (489 men and 275 women) were exposed through injection drug use. Another 8 percent of the exposed cases were men who have sex with men and inject drugs. In addition, approximately 18 percent of the cases (650 women and 240 men) were exposed through heterosexual contact. Of the total 7,545 cases, 60 percent were Black non-Hispanic and 35 percent were White non-Hispanic. More than three-quarters (77.2 percent) were older than 34.

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Exhibit 1. Population Demographics for the City of New Orleans vs. the State of Louisiana, by Percent: 2000 and 2003 (Estimates)

Population Demographic	2000		2003 (Estimates) ¹	
	New Orleans	Louisiana	New Orleans	Louisiana
Total Population (<i>N</i>)	(484,674)	(4,468,976)	(451,316)	(4,361,271)
Male	46.9	48.4	46.1	48.1
Female	53.1	51.6	53.9	51.9
Median Age (Years)	(33.1)	(34.0)	(34.3)	(34.7)
One Race	98.7	98.9	99.3	98.9
White	28.1	63.9	28.1	64.0
Black or African-American	67.3	32.5	67.2	32.1
Asian	2.3	1.2	2.6	1.5
Other	1.1	1.3	1.4	1.2
Two or More Races	1.3	1.1	0.7	1.1
Hispanic or Latino (of any race)	3.1	2.4	3.1	2.5
Average Household Size (<i>n</i>)	(2.48)	(2.62)	(2.49)	(2.61)
Median Household Income (\$)	(\$27,133)	(\$32,566)	(\$35,677)	(\$34,141)
Individuals Living Below Poverty Level	27.9	19.6	20.8	20.3

¹These data apply to the time period before Hurricane Katrina.
SOURCE: U.S. Census Bureau

Exhibit 2. New Orleans DAWN ED Sample and Reporting Information: January–June 2005

Total Eligible Hospitals ¹	No. of Hospitals in DAWN Sample	Total EDs in DAWN Sample ²	No. of EDs Reporting per Month: Completeness of Data (%)			No. of EDs Not Reporting
			90–100%	50–89%	<50%	
21	20	22	8–9	0–2	0–1	11–12

¹Short-term, general, non-Federal hospitals with 24-hour emergency departments based on the American Hospital Association Annual Survey.

²Some hospitals have more than one emergency department.

SOURCE: DAWN Live!, OAS, SAMHSA, updated 12/6–7, 2005

Exhibit 3. Number of Analyzed Items and Percentage of All Items Tested¹ in New Orleans, by Drug: FY 2005

Drug	Number	Percent
Cannabis	4,168	50.2
Cocaine	3,299	39.7
Heroin	392	4.7
Other Opiates ²	179	2.2
Benzodiazepines ³	102	1.2
MDMA/MDA	98	1.2
Methamphetamine/Amphetamines	52	0.6

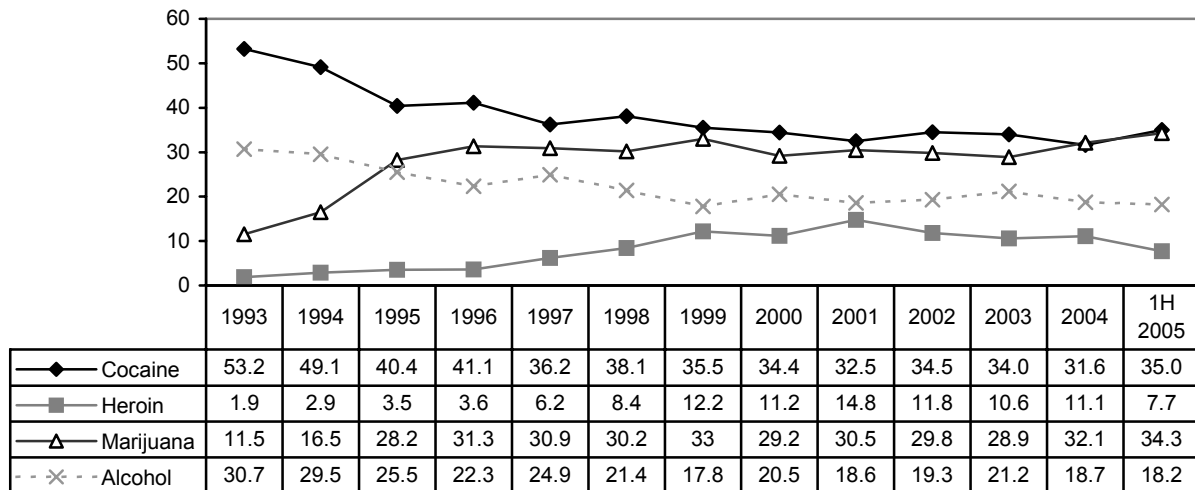
¹A total of 8,303 items were reported.

²Includes hydrocodone, oxycodone, methadone, codeine, morphine, and hydromorphone.

³Includes alprazolam, diazepam, lorazepam, and clonazepam.

SOURCE: NFLIS, DEA

Exhibit 4. Percentages of Treatment Admissions in Orleans Parish, by Selected Drug: FY 1995–1H 2005



SOURCE: Louisiana State Office of Alcohol and Drug Abuse

Exhibit 5a. Number and Percent of Selected Illicit¹ Drug Reports in DAWN ED (Unweighted²): 1H 2005

Drug	Number	Percent
Cocaine	1,113	52.6
Heroin	318	15.0
Marijuana	507	23.9
Amphetamines	33	1.6
Methamphetamine	39	1.8
MDMA	73	3.4

¹Excludes “Alcohol in Combination” and “Alcohol Only” reports for persons younger than 21.

²Unweighted data are from 8–11 New Orleans EDs reporting to DAWN in 2004. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted and, therefore, are subject to change.

SOURCE: DAWN *Live!*, OAS, SAMHSA, updated 12/6–12/7, 2005

Exhibit 5b. Demographic Characteristics of Patients Reporting Abuse of Illicit Drugs in New Orleans DAWN EDs, by Percent (Unweighted¹): 1H 2005

Characteristic	Cocaine	Heroin	Marijuana
Gender ²			
Male	70.6	70.4	74.2
Female	29.4	29.6	25.8
Age Group			
Younger than 25	13.1	20.7	42.0
25–34	29.4	47.2	23.1
35 and older	57.5	32.1	34.9
Race/Ethnicity			
White	37.9	38.7	50.1
Black	61.0	60.7	48.3
Hispanic	0.7	0.0	1.2
Other	0.2	0.0	0.4
Not documented	0.2	0.6	0.0

¹Unweighted data are from 8–11 New Orleans EDs reporting to DAWN. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted and, therefore, are subject to change.

²Gender was not documented for 2 heroin-involved visits.

SOURCE: DAWN *Live!*, OAS, SAMHSA, updated 1/13–1/14, 2005

Exhibit 6. Illicit Drug Prices in New Orleans: July–December 2004

Drug	Price in Dollars		
	Wholesale	Midlevel	Retail
Powder Cocaine	\$18,000–\$25,000 per kilogram \$9,000–\$10,000 per pound	\$800–\$1,200 per ounce	\$250 per ¼ ounce \$80–\$150 per gram
Crack	\$20,000–\$28,000 per kilogram \$8,000 per pound	\$900–\$1,200 per ounce	\$5–\$25 per rock \$80–\$125 per gram
Heroin	\$80,000–\$100,000 per kilo-gram	\$4,000–\$9,000 per ounce	\$20–\$25 per paper \$300–\$600 per gram
Marijuana	\$2,000 per kilogram \$800–\$1,000 per pound	\$125–\$160 per ounce	\$10 per gram \$2 per joint
Methamphetamine	\$20,000 per pound	\$1,400–\$1,600 per ounce	\$400–\$500 per ¼ ounce \$100 per gram
MDMA	\$8–\$12 per tablet	\$12–\$15 per tablet	\$15–\$20 per tablet

SOURCE: DEA and *Narcotics Digest Weekly*, NDIC

Exhibit 7. Drug Arrests in Orleans Parish by Race/Ethnicity, Gender, and Offense: 2003–2004

Drug/ Offense	Males						Females						Total	
	Black		White		Other		Black		White		Other		2003	2004
	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004		
Cocaine Possession	2,134	1,662	306	140	14	7	385	367	101	72	1	1	2,941	2,249
Cocaine Distribution	1,086	1,106	38	11	6	6	120	156	11	7	1	0	1,262	1,286
Heroin Possession	230	220	66	42	0	0	24	22	38	25	0	0	358	309
Heroin Distribution	155	76	5	3	0	0	16	6	0	2	0	0	176	87
Marijuana Possession	4,389	4,468	1,034	925	18	9	447	412	182	152	0	1	6,070	5,967
Marijuana Distribution	832	860	80	67	1	10	119	94	23	16	2	1	1,057	1,048
Other Drugs	197	198	51	58	1	1	24	239	25	17	0	0	298	513
Drug Paraphernalia	1,404	1,435	631	524	18	12	402	541	195	188	2	2	2,652	2,702

SOURCE: New Orleans Police Department

Exhibit 8. Arrests for Possession and Distribution of Schedule II Narcotics in New Orleans, by Age Group and Race/Ethnicity: 2004

Age Group	Possession							Total
	Males			Females				
	Black	White	Other	Black	White	Other		
<17	56	0	0	2	0	0	58	
17–20	43	24	2	7	7	0	83	
21–25	96	50	2	19	15	0	182	
26–30	76	53	0	16	18	0	163	
31–35	72	60	0	16	12	0	160	
36–40	80	31	0	21	10	0	143	
≥41	181	65	0	36	16	0	298	
Age Group	Distribution							Total
	Males			Females				
	Black	White	Other	Black	White	Other		
<17	57	1	1	2	0	0	61	
17–20	37	5	1	4	1	0	48	
21–25	49	16	0	5	4	0	74	
26–35	39	4	0	5	4	0	52	
≥36	59	37	1	20	14	0	131	

SOURCE: New Orleans Police Department

Drug Use Trends in New York City

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ABSTRACT

Drug use trends were again mixed for this reporting period. Cocaine indicators in New York City appeared to be stable, and cocaine remains a major problem in New York City. While primary cocaine admissions constitute one-quarter of New York City's drug and alcohol treatment admissions, many more admissions report cocaine as a secondary or tertiary substance of abuse. Although both cocaine powder and crack remain of good quality, many crack locations are seeing a decline in buyers and sellers. Prices for cocaine reported by the DEA for 2004 are considerably lower than those for 2003. Heroin indicators were mixed for this reporting period. Heroin remains widely available, although there has been a marked change in the purity and price of heroin in New York City. Between 2002 and 2004, the average purity for South American heroin fell from 61.5 to 43.3 percent, and the price rose from \$0.36 per milligram pure in 2002 to \$0.62 in 2004. Marijuana indicators, which had been reaching new peaks, seem to have stabilized. Marijuana continues to be of good quality and available in a wide variety of flavors and colors. Many dealers are marketing a premixed combination of two or three different types of marijuana. The most salient feature of the present drug scene is the general tendency of drug users, regardless of primary drug, to mix and combine multiple drugs for simultaneous use. Marijuana in a blunt cigar serves as the base to which other drugs are added. Although the numbers remain small, methamphetamine indicators are showing an increase in the gay community of New York City. PCP appears to be gaining in popularity in some sections of the city. Teens report mixing marijuana and PCP, and in some areas, crack is being soaked in PCP. Many kinds of prescription drugs continue to be available on the street, and they seem to be growing in popularity, based on indicator data and street observations. Of the 94,495 New Yorkers living with HIV or AIDS, men having sex with men and injection drug use history were the two major transmission risk factors.

INTRODUCTION

Area Description

New York City, with 8 million people, is by far the largest city in the United States. It is situated in the southeastern corner of the State on the Atlantic coast and encompasses an area of 320 square miles. It has nearly 600 miles of waterfront and one of the world's largest harbors.

Historically, New York City has been home to a large multiracial, multiethnic population. New York City is the largest and most racially/ethnically diverse city in the country. As has been true throughout its history, immigration continues to shape the character of New York City. It has contributed to a substantial shift in the racial/ethnic composition of New York. Findings from the 2000 census show that the population diversity continues: 35 percent are White; 27 percent are Black; 27 percent are Hispanic of any race; and 10 percent are Asian and Pacific Islander. The five largest Asian groups in the city are Chinese, Asian Indian, Korean, Filipino, and Pakistani, and the five largest groups of Hispanic origin are Dominican, Mexican, Puerto Rican, Colombian, and Ecuadorian. Moreover, New York City includes people who identify with races/ethnicities from all over the world. It is estimated, for example, that in Queens alone more than 120 languages are spoken. Nearly 3 million New York City residents are foreign born (2,871,032), which represents 36 percent of the resident population, and about 1.2 million legal immigrants became New York City residents between 1990 and 2000. The Dominican Republic remains the city's largest source of immigrants.

The city remains the economic hub of the Northeast. Its main industries include services and wholesale and retail trade. Of the more than 3.7 million people employed in the city, 22 percent commute from surrounding areas. Overall, the unemployment rate in New York City for October 2005 was 5.7 percent, compared with 4.9 percent in New York State and 5.0 percent in the Nation. According to the Bureau of Labor Statistics, the New York City rate is dramatically lower than it was in October 2003, when it was 8.3, but it is higher than the unemployment rate for October 2000, when the rate was 5.4. New York City is still experiencing the economic aftereffects of the September 11, 2001, attacks on the World Trade Center. Many jobs in New York City were lost as a result of decreased business activity and the relocation of business firms.

Census 2000 data showed that the median household income for New York City residents was \$38,323, compared with \$43,393 for State residents and \$41,994 for U.S. residents as a whole. The percentages of persons living below the poverty level for New York City

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and the State as a whole were 21.2 percent and 14.6 percent, respectively. The comparable figure for U.S. residents as a whole in 2000 was 12.4 percent.

Data Sources

This report describes current drug abuse trends in New York City from 1995 to 2005, using the data sources summarized below:

- Emergency department (ED) data** were derived for the first 6 months of 2005 from the Drug Abuse Warning Network (DAWN) *Live!* restricted-access online query system administered by the Office of Applied Studies (OAS), Substance Abuse and Mental Health Services Administration (SAMHSA). Eligible hospitals in the New York 5 Boroughs Division totaled 52; hospitals in the DAWN sample numbered 42, with the number of emergency departments in the sample totaling 64. (Some hospitals have more than one emergency department.) During this 6-month period, between 31 and 35 EDs reported data each month. The completeness of data reported by participating EDs varied by month (see exhibit 1). Exhibits in this paper reflect cases that were received by DAWN as of December 6–7, 2005. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted. Therefore, the data presented in this paper are subject to change. Data derived from DAWN *Live!* represent drug reports in drug-related ED visits. Drug reports exceed the number of ED visits, since a patient may report use of multiple drugs (up to six drugs and alcohol). The DAWN *Live!* data are unweighted and, thus, are not estimates for the reporting area. These data cannot be compared to DAWN data from 2002 and before, nor can preliminary data be used for comparison with future data. Only weighted DAWN data released by SAMHSA can be used for trend analysis. A full description of the DAWN system can be found at <http://dawninfo.samhsa.gov/>. ED drug mentions data before 2003 were derived from the DAWN, OAS, SAMHSA, for 1995 through 2002. These weighted data are based on a representative sample of hospitals in New York City and Westchester, Rockland, and Putnam Counties.
- Drug abuse-related death data** are from the DAWN mortality system. Data from 2003 covered New York, New York, Newark, New Jersey, and Edison, Pennsylvania. For 2003, the following nine counties participated: Morris, New Jersey; Union, New Jersey; Bronx, New York; Kings, New York; New York, New York; Putnam, New York; Queens, New York, Richmond, New York; and Suffolk, New York. Data from 1995 covered New York City, Long Island, and Putnam County and included heroin/morphine and unspecified types of opiates.
- Between 1996 and 2002, DAWN covered only New York City, and the category for heroin/morphine did not include other opiates. According to *Mortality Data from the Drug Abuse Warning Network, 2001*, incomplete data were received for the New York metropolitan area, so data for New York are not presented for 2001. Data from 2003 are not comparable with data prior to 2003.
- Treatment admissions data** were provided by the New York State Office of Alcoholism and Substance Abuse Services (OASAS) for 1995 through the first half of 2005 and included both State-funded and nonfunded admissions. Demographic data are for the first half of 2005. During the second quarter of 2005, the statewide reporting system for treatment admissions data was changed, and, therefore, the numbers for that period may represent an undercount of the actual treatment admissions.
- Drug-related arrest data** were provided by the New York City Police Department (NYPD) for 1994–2002.
- Forensic laboratory testing data** for New York City were provided by the Drug Enforcement Administration (DEA)'s National Forensic Laboratory Information System (NFLIS) for fiscal year (FY) 2005 (from October 1, 2004, through September 2005).
- Drug price, purity, and trafficking data** were provided by the DEA's Domestic Monitor Program (DMP) for heroin. These data are supplemented by information from the OASAS Street Studies Unit (SSU) reports.
- Cocaine use during pregnancy data** were provided by the New York City Department of Health for 1995–2004.
- Acquired immunodeficiency syndrome (AIDS) and human immunodeficiency virus (HIV) data** were provided by the New York City Department of Health and Mental Hygiene, HIV Epidemiology Program for 1981–2004.
- Hepatitis C data** were provided by the New York City Department of Health and Mental Hygiene, Bureau of Communicable Diseases for 2003–2004.

DRUG ABUSE PATTERNS AND TRENDS

Cocaine/Crack

In general, many cocaine indicators, which had been declining, are beginning to show increases, and the drug still accounts for major problems in New York City (exhibit 2).

While primary cocaine treatment admissions to State-funded and nonfunded programs in New York City declined from 17,572 in 1998 to 14,059 in 2000, they increased to 16,711 in 2004. In the first half of 2005, primary cocaine admissions numbered 7,626. It should be noted that even when the cocaine treatment admissions were in decline, they did not show the same type of dramatic long-term decline that was seen in the other indicators. In the first half of 2005, cocaine admissions constituted 24 percent of all New York City's 31,992 drug and alcohol treatment admissions (excluding alcohol-only). In addition to these primary cocaine admissions, there were 9,352 admissions who reported cocaine as a secondary substance and 2,311 who reported cocaine as a tertiary substance. Thus, among the 31,992 drug treatment admissions in the first half of 2005, 19,289 mentioned cocaine as a primary, secondary, or tertiary substance of abuse.

Exhibit 3 shows demographic characteristics of cocaine treatment admissions for the first half of 2005 by the two primary modes of use: smoking crack (representing 62 percent of cocaine admissions) and using cocaine intranasally (representing 35 percent). Those who smoke crack are more likely than intranasal users to be female (37 vs. 27 percent), Black (70 vs. 43 percent), readmissions to treatment (82 vs. 69 percent), and without income (33 vs. 23 percent), although for both groups, there were fewer clients with no source of income than in the previous reporting period. Those using intranasally are more likely to be Hispanic or White and to have some criminal justice status. The two groups are similar in secondary drugs of abuse, primarily alcohol and marijuana. It should be noted that all admissions for primary cocaine abuse represent an aging population, and those smoking crack tend to be older than those using cocaine intranasally.

For the five boroughs of New York City, there were 6,603 unweighted DAWN *Live!* reports for cocaine in January–June 2005.

DAWN figures for cocaine-involved deaths showed 520 cocaine-involved drug misuse deaths in 2003 (exhibit 2). For the cocaine drug-related deaths in 2003, 18 percent involved one drug.

Another important indirect indicator of cocaine involvement is the number of births in New York City to women who admit using cocaine during pregnancy. This not only indicates use among women, but it underscores a serious aspect of the cocaine problem. For several years, the number of women using cocaine during pregnancy increased. In 1989, the number of births to women who used cocaine peaked at 3,168. After 1989, the number steadily declined to 337 in 2004—an 89-percent decline over 15 years (exhibit 2).

Another data source, the DEA's National Forensic Laboratory Information System, showed that of the 45,413 drugs items analyzed for New York City in FY 2005, 24,254 (53 percent) were cocaine.

The DEA reports that prices for cocaine powder for July to December 2004 were \$16,000–\$26,000 per kilogram and \$613–\$950 per ounce. The DEA reports that crack sells for about \$18,000 per kilogram, \$1,000–\$1,500 per ounce, \$23–\$40 per gram, and \$7–\$10 per rock. These prices are considerably lower than those reported for the last half of 2003.

The NYPD reports a decline in cocaine arrests since 1995 ($n=40,846$) (exhibit 2). The number of cocaine arrests in 2002 was 13,574, a 67-percent decrease since 1995. Of the cocaine arrests in 2002, 79 percent involved crack.

According to the Street Studies Unit, cocaine hydrochloride (HCl) buying and use continues at a stable pace. Although cocaine has traditionally been sold from indoor locations, and involves the least street selling of the major drugs, field observers report that there are a substantial number of street sellers offering powder cocaine in various parts of New York City. Cocaine prices can fluctuate, as sellers vary the purity of the product and offer several different size packages. The street prices are usually \$20–\$25 for a one-half gram, called a “slip.”

Two methods have traditionally been used in the packaging of cocaine—plastic bags and aluminum foil. Many users prefer the malleability of aluminum, but they dislike the fact that the cocaine can “cook-up” (melt) in the foil from simple body heat, which may happen in the club setting.

According to the DEA, the majority of the cocaine in New York City is supplied by Colombians. Dominican drug gangs continue to dominate the distribution of cocaine in New York City. Many cocaine sellers appear to be part of an extended organization composed of family and friends. At the street level, most sellers are of the same ethnic identity as the largest ethnic group in the community.

There are three basic methods used to sell cocaine HCl. Many sellers prefer the delivery method, in which the buyer contacts the seller (via beeper, cell-phone, or Internet), places an order, and arranges a delivery. The seller does not enter the buyer's building. Rather, the seller and buyer meet on the street, and the seller typically charges \$10 extra for the delivery. In the second method, sellers work out of their own apartments. The third method is selling cocaine on the street. These sellers deal solely with the “personal use” buyer who may want to buy \$10 or \$20 amounts of cocaine. Individuals who are interested in buying larger quantities have

to use an indoor connection. The selling of cocaine on the street for personal use is typically found in Black and Hispanic low-income communities.

The majority of the cocaine HCl street buyers are Hispanic and Black. Compared to heroin and crack, however, cocaine also has the largest number of White street buyers. Cocaine users as a whole tend to have a higher socioeconomic status (SES). This is probably the result of cocaine's popularity among young, white-collar professionals. According to field observations, cocaine users appear to be almost evenly split in terms of gender, but the majority of the individuals actually making the buys continue to be males. Cocaine users appear to be younger on average than either heroin or crack users.

While a large number of cocaine HCl users report that they snort the drug, cocaine is also being smoked with heroin in a pipe or blunt. This is called the "50/50 effect" or "chasing the dragon."

Crack users report that crack cocaine continues to be highly available; however, due to police pressure, street sellers and low-level dealers are experiencing an extremely difficult and precarious period. As a result, sales activity near many crack locations appears to be down. The client base seems to be shrinking, and the clientele seem to be getting older. The quality of street crack remains stable.

Field researchers report that street-level crack in New York City continues to be sold in \$5 and \$10 packages. The \$10 bag seems to be much more common than the "nickel" bag or vial.

The most salient feature of the present drug trend is the general tendency by drug users, regardless of primary drug, to mix and combine multiple drugs for simultaneous use. Marijuana in a blunt cigar serves as the base to which other drugs are added. For example, crack and heroin are often added to marijuana and smoked in a blunt or pipe. As one informant put it, "Today, if anyone getting hooked on crack, it's because they have been sprinkling it on their marijuana."

As a marketing ploy, in some areas crack is being soaked in phencyclidine (PCP) (called dipping). One informant indicated that, "crack-heads enjoy the high because they bug-out longer [stay high longer] when it is dipped, and it takes longer to come down." The price of dipped crack seems to be the same as non-dipped crack.

There are three basic packaging methods associated with crack in New York City. They are thumb-nail size plastic bags, plastic vials, and glassine bags. Of these, the thumbnail-size bag continues to be the most popular packaging method. Vials and glassine bags are experiencing a steady decline as packaging methods.

According to street contacts, the middle-level dealers are predominantly Dominican and operate from the Washington Heights area of Manhattan. Street crack sellers are typically male and Black or Hispanic. Although street sellers often reflect the racial composition of the community, there appear to be more Hispanic street sellers than Black street sellers. Whether it is less profitability, a shrinking market, and/or pressure from law enforcement, it appears that many of the young individuals who get involved in drug dealing are opting to sell marijuana, and fewer are getting involved with dealing crack.

Heroin

Heroin continues to be a major drug problem in New York City. For example, one-third of New York City's primary treatment admissions were for heroin in the first half of 2005. Over the last 2 years, there has been a marked change in the price and purity of heroin, with a substantial decrease in purity and increase in price.

Primary heroin admissions to treatment programs in New York City gradually increased between 1995 and 2004, from 18,287 to 23,802, a 30-percent increase (exhibit 4). In the first half of 2005, primary heroin admissions numbered 10,658 and constituted 33 percent of New York City's 31,992 drug and alcohol treatment admissions (excluding alcohol-only). In addition to the 10,658 primary heroin admissions, 1,102 clients reported heroin as a secondary substance of abuse, and 536 reported it as a tertiary drug. Thus, most treatment admissions with heroin as a substance of abuse report it as the primary drug of abuse. This contrasts with cocaine; more than 60 percent of those reporting cocaine consider it a secondary or tertiary drug abuse.

Intranasal heroin use may have peaked in the second half of 1998, with 62 percent of heroin admissions to all New York City drug treatment programs reporting this as their primary route of administration. Since then, the proportions reporting intranasal use declined slightly and ranged from 59 to 61 percent. In the first half of 2005, the proportion using intranasally was 59 percent. Meanwhile, heroin injection increased among heroin admissions, from 32 percent in the second half of 1998 to 38 percent in the first half of 2005.

Exhibit 5 highlights general demographic characteristics of heroin abusers admitted to all New York City treatment programs in the first half of 2005 by mode of use. In general, primary heroin admissions were overwhelmingly male (76 percent), older than 35 (73 percent), more likely to be Hispanic (52 percent) than Black (27 percent) or White (19 percent), usually re-admissions to treatment (88 percent), and likely to report cocaine as a secondary drug of abuse (43 percent). Compared with heroin injectors, intranasal users

were more likely to be Black (33 vs. 18 percent) and have some criminal justice status (32 vs. 22 percent). In contrast, primary heroin injectors were more likely than intranasal users to be White (29 vs. 11 percent), to report cocaine as a secondary drug of abuse (49 vs. 38 percent), and to have started use before reaching age 20 (57 vs. 43 percent).

In addition to heroin admissions to traditional treatment programs, heroin admissions for detoxification or crisis services in New York City have become sizable in number. These special services are usually short term, provided in a hospital or community-based setting, and medically supervised. In 1995, 4,503 such admissions were reported for heroin abuse; by 2004 that figure increased to 15,964. In the first half of 2005, the number of admissions to crisis services for heroin was 7,605.

For the five boroughs of New York City, there were 3,995 preliminary unweighted DAWN *Live!* heroin ED reports for January through June 2005.

DAWN medical examiner (ME) figures for heroin-involved deaths in the New York metropolitan area show 104 drug misuse deaths in 2003 (exhibit 4). Of these, 13 percent were single-drug deaths. The category of opiates/opioids, which includes heroin (specified), methadone, and all other opiates/opioids, accounted for more drug misuse deaths than any other category in 2003.

NFLIS data show that 12 percent of the cases for New York City in FY 2005 ($n=5,522$) were related to heroin.

From 1992 to 2000, the DMP found average heroin purities to be generally above 60 percent. Findings for 2004, however, show an average purity for South American heroin of 43.3 percent, down from 61.5 percent in 2002, a decrease of 30 percent. The associated price is \$0.62 per milligram pure, an increase of 79 percent from \$0.36 per milligram pure in 2002. According to the DEA, kilogram prices for July to December 2004 were \$45,000–\$85,000 for South American heroin and \$55,000–\$90,000 for Southwest Asian heroin. The price for Southeast Asian heroin was \$70,000–\$75,000 per 700 grams.

Much like cocaine arrests, heroin arrests reached a high of 28,083 in 1989, declined for a few years, and then peaked in 1995 ($n=38,131$) (exhibit 4). Heroin arrests decreased from 33,665 in 2000 to 27,863 in 2001, but they increased again in 2002 to 34,098, an increase of 22 percent in the year.

According to the SSU field staff, heroin in New York City continues to be highly available and accessible. In general, heroin sellers tend to be less overt and less aggressive than their crack-selling counterparts. The selling of heroin in half-grams or larger amounts con-

tinues to be an indoor activity. Heroin for personal use (i.e., the \$10 bag) is primarily relegated to the street seller, who is better able to tolerate the greater pedestrian traffic. Street heroin is sold by independent sellers or small crews (2–4 individuals). The areas of the city in which heroin is most readily available are primarily low-income Hispanic and Black communities.

The source of most of the heroin sold and used in New York City is South America. According to the DEA, Colombians are the principal importers and smugglers. Street sources indicate that the high and middle-level distribution of heroin in New York City is done by Dominican drug gangs. The majority of the low-level distributors and street sellers in some sections of New York continue to be Hispanics, and in other sections, Blacks.

Heroin demonstrates far less price variation than other drugs, and the predominant price for street-bought heroin is \$10 per packet.

The glassine bag is by far the most popular heroin packaging method. Observers report a continued decline in the use of the thumbnail size-bags and aluminum foil as packaging methods for heroin.

The use of brand names for heroin is still common, although the use of brand names for other drugs has disappeared almost entirely. Heroin seems to be more dependent on reputation and word-of-mouth advertising. The following are examples of recent brand names: Dawn of the Dead, Death Row Devil's Juice, Gypsy, Hell Gate, Katrina, Ocean 12, Sting Rays, and 7up.

There are no significant changes in how heroin is being used. Field inquires concerning intravenous use found little evidence of injecting. Most users report either smoking or inhaling their heroin. Among adolescents and young adults, there seems to be a preference for a tri-combination of “cocaine, marijuana, and heroin.” Reports indicate that they put cocaine and marijuana in the blunt, and then heroin powder is sprinkled on top. Several street informants indicated that most heroin users prefer speedballing, a heroin/cocaine combination, rather than using heroin alone. According to some street sources, heroin dealers are using sleep medication to cut heroin. OxyContin as a cut for heroin is becoming increasingly popular. Although observations of heroin copping sites found evidence of young users (late teens and young adults), nevertheless, two-thirds of the buyers frequenting these copping locations were clearly in their thirties and forties.

Other Opiates/Narcotics

According to preliminary unweighted DAWN *Live!* data for the five boroughs of New York City for January through June 2005, there were 2,168 ED reports of

opiates/opioids. Of these reports for opiates/opioids, 46 percent were for detoxification.

Among ME deaths for the New York metropolitan area reported by DAWN, the category of opiates/opioids, which includes all legal and illegal narcotic analgesics and combinations, accounted for more drug misuse deaths than any other category. For specific narcotic-type drugs in DAWN ME reports, methadone accounted for 250 deaths in the New York metropolitan area in 2003, while all other opiates, excluding heroin, accounted for 532 deaths.

According to the SSU, OxyContin sold on the street for \$10 for an 80-milligram tablet. SSU staff also report that OxyContin is being used to cut heroin or to boost methadone.

Methamphetamine/Amphetamines

Although methamphetamine is popular in other parts of the Nation, there were relatively few arrests, ED reports, deaths, or treatment admissions related to the drug in New York City.

In the five boroughs of New York City, there were 98 DAWN ED reports for stimulants for January through June 2005, according to preliminary unweighted data, including 71 for methamphetamine and 27 for amphetamines.

With regard to DAWN ME figures, only seven stimulant deaths were reported in the New York metropolitan area in 2003.

According to a November 2003 report by the DEA, New York Field Division, “While methamphetamine trafficking and abuse are at relatively low levels in New York State and City when compared to cocaine and heroin, there are indications of increasing availability and use.”

According to the SSU, numerous sources in the gay community are concerned that the use of this drug is spreading among young gay males who frequent clubs and that the drug facilitates the spread of HIV. A number of gay male users have reported experiencing crystal methamphetamine binges during which they have engaged in unsafe sexual activity.

Marijuana

In New York City, marijuana indicators, which have recently increased steadily and dramatically, appear to be stabilizing (exhibit 6).

Primary marijuana admissions to all treatment programs had been increasing steadily over the past several years. The number increased more than nine-fold between 1991 and 2002, from 1,374 to 14,310, the highest annual number (exhibit 5). That total fell to 13,303 in 2004, and in the first half of 2005, the num-

ber of primary admissions was 6,704. In 1991, primary marijuana admissions represented less than 5 percent of all treatment admissions; by the first half of 2005, these admissions represented 21 percent of admissions (excluding alcohol-only) to all New York City treatment programs.

Exhibit 7 shows demographic characteristics of primary marijuana admissions to all New York City treatment programs in the first half of 2005. The vast majority were male (79 percent), and 28 percent were younger than 21. More than one-half (56 percent) were Black, about one-third (32 percent) were Hispanic, and 8 percent were White. Alcohol was the secondary drug of abuse for 36 percent of the marijuana admissions, and 60 percent had some criminal justice status.

For the five boroughs of New York City, there were 2,197 preliminary unweighted DAWN *Live!* ED reports for marijuana for January through June 2005.

DAWN ME mentions for marijuana-involved drug misuse deaths in the New York metropolitan area numbered 53 in 2003. None of these was a single-drug death.

According to NFLIS data, 27 percent of the cases for New York City in 2005 (12,344) were related to cannabis.

According to the DEA, marijuana prices can range from \$1,000 to \$2,000 per pound wholesale and from \$2,500 to \$6,000 per pound for hydroponic marijuana.

In spite of decriminalizing possession of small amounts of marijuana, the NYPD continues to make a large number of marijuana-related arrests in New York City. The number of arrests has stabilized, however (exhibit 5). Cannabis-involved arrests had reached a low of 4,762 in 1991, but they increased more than 12 times in the next 9 years to 60,455 in 2000. Arrests for 2002 (47,250) were at the same level as in 2001, which was the second largest yearly total. For arrests in 2002, approximately 98 percent were for misdemeanors, and 32 percent involved persons age 20 or younger. Moreover, cannabis arrests accounted for 48 percent of all drug arrests in New York City in 2002, a dramatic change from earlier years and a continuation of the trend seen in the last 5 years.

According to the SSU, marijuana is the most abused illicit substance in New York City, and according to street contacts, marijuana continues to be readily available. There are a variety of forms of marijuana that are currently available in New York City, including regular “Haze,” “Purple Haze,” “Blueberry Haze,” “Chocolate,” and Hydro. Of these, “Haze” seems to be the most popular or most readily available.

Street contacts also report that most of the marijuana that is currently available in New York City is considered

“good” to “very good” in quality. Nevertheless, many dealers seem to be marketing a pre-mixed combination of different types of marijuana for sale. Usually, these blends involve two or three types of marijuana mixed together. This may be motivated by a marketing ploy to promote greater mass appeal for their product or as a form of quality control intended to mask dips in the quality of any one type of marijuana. It can also be the result of a cultural phenomena stemming from hip-hop music, which involves a lot of sampling (taking small snips of different songs and putting them together). Most young buyers prefer to purchase these combo bags for \$20. They believe these “combo bags” will get them higher than a regular bag with a single type of marijuana.

Marijuana continues to be sold from inside locations (storefront businesses and apartments and homes). Marijuana is still sold in plastic bags, and the common price for a bag is \$10. This drug continues to have wide appeal—it is purchased by all ethnicities and a wide age range. There seems to be a trend towards selling dime bags on street locations that used to be dominated by crack selling. However, most street dealers tend to be either Hispanic or Black. Most street copping locations involve a small cluster of individuals (two to six).

New users seem to prefer smoking marijuana in blunt wrap paper, and the more experienced users seem to prefer full flavored blunts. It appears that the cigar industry may be exploiting the popularity of cigars in using drugs. They have greatly expanded the variety of flavored cigar products, which include vanilla, cherry, strawberry, orange, and grape—products not typically associated with serious cigar smoking—and have developed a marketing strategy to encourage their use by this often young population.

Club Drugs

Club drugs are a collection of various synthetic chemical compounds that are often abused by young people in festive social settings, such as dance clubs, after-hour clubs, and other special events. Club drugs include methylenedioxymethamphetamine (MDMA), gamma hydroxybutyrate (GHB), and ketamine. All-night parties are about endurance and sensory overstimulation, and, not surprisingly, many of the club drugs have stimulant or hallucinogenic properties. Since many of the club drugs are synthetic and manufactured, purity is not a real issue, but the quality of these products poses a serious concern. The chemical expertise of the producers, the ingredients used, and the laboratory conditions used to manufacture these substance are uncertain and potentially dangerous.

According to preliminary unweighted DAWN *Live!* ED data for the five boroughs of New York City, there were 66 reports for MDMA for January through June 2005. During this period, there were 13 preliminary un-

weighted DAWN *Live!* ED reports for ketamine and 21 preliminary unweighted DAWN *Live!* ED reports for GHB.

The number of DAWN deaths involving the category of club drugs (including MDMA, ketamine, GHB, gamma butyrolactone [GBL], and Rohypnol) totaled 10 in 2003 for the New York metropolitan area.

According to the SSU, street sources report that MDMA, a stimulant with hallucinogenic properties, is easy to obtain in many areas of the city. MDMA is often called “ecstasy,” “XTC,” Adam, or X, although other substances are often sold as ecstasy. MDMA is available in tablet, capsule, and powdered form. A dose sells for about \$2.65–\$15.00 per tablet wholesale and usually is \$20.00–\$25.00 per tablet retail, although there are reports of MDMA tablets selling for \$10.00 in some parts of the city.

Available as a club drug in New York City, the veterinary anesthetic ketamine produces hallucinogenic effects similar to PCP and visual effects similar to lysergic acid diethylamide (LSD). On the street, the drug is called “Special K,” “K,” “Vitamin K,” and “Cat Valium,” and sells for approximately \$25–\$50 per dosage unit. It comes in liquid, powdered, or tablet form, and it may be administered intranasally or injected. While ketamine is not currently a controlled substance under Federal law, it is listed as a controlled substance in New York State. It is available in club settings and has not been reported on the “street.”

Although not generally available on the street, GHB and the analogs (GBL, BD, GHV, GVL) can be easily obtained in many dance clubs. It is also known as liquid MDMA, “grievous bodily harm,” or “Georgia Homeboy.” It is usually available in liquid form, and in a club GHB may cost \$45–\$65 for a bottlecap full. A single dose costs about \$20.

The club drug sellers and users have comparable demographics, since they tend to interact in special youth-driven situations. Both sellers and buyers tend to be young (early twenties or younger to thirties), White, and disproportionately male, and most are in college or associate with a college or club-going crowd.

Although these drugs are part of the New York drug scene, their appeal at this point has been limited to a small minority of substance abusers. When field researchers asked their street sources with chronic histories of substance abuse about these drugs, most indicated that they never used these substances and did not know anyone selling or using them.

PCP and LSD

For the five boroughs of New York City, there were 231 preliminary unweighted DAWN *Live!* ED reports

for PCP for January through June 2005, the most for any drug other than cocaine, heroin, and marijuana.

LSD is a strong hallucinogen that has not been a major problem in New York City since the late 1960s and early 1970s. It is also known as acid, boomer, and yellow sunshine. According to preliminary unweighted DAWN *Live!* ED data for the five boroughs of New York City, there were 18 reports for LSD for January through June 2005.

According to DAWN ME data for the New York metropolitan area for 2003, hallucinogens (including PCP, LSD, and other hallucinogens) accounted for 12 drug misuse deaths.

PCP (angel dust) continues to be available in some areas of the city, especially Harlem. PCP sells for \$10 per bag. Teenagers report that they like to mix marijuana and PCP, because the PCP intensifies and prolongs the high. According to a street informant, the marijuana dampens the hallucinatory effects of the PCP, a primary criticism of people who have tried PCP and disliked it. Although PCP has never had the mass appeal of some other drugs, the damping effect of marijuana might serve to expand its user base. As reported in the section on crack, in some areas, crack is being soaked in PCP (dipping).

Benzodiazepines/Barbiturates

Psychoactive prescription drugs continue to be widely available and popular. The SSU continues to report a variety of drugs readily available on the street for \$1 or more per pill.

For the five boroughs of New York City, there were 1,010 benzodiazepine ED reports from January through June 2005, according to preliminary unweighted DAWN *Live!* data. Of these benzodiazepine reports, 32 percent were for patients seeking detoxification.

Among ME deaths reported by DAWN, benzodiazepine-involved drug misuse deaths numbered 201 in 2003—among the top five categories of drug misuse deaths. Antidepressants were also in the top 5 categories of drug misuse deaths, accounting for 210 such deaths in 2003. Moreover, antidepressants were the number one category in suicide deaths in the New York metropolitan area in 2003, with 29 such deaths.

According to the SSU, the three most popular or commonly sold pharmaceuticals on the street in this category are alprazolam (Xanax), amitriptyline (Elavil), and clonidine (Catapres). Xanax is often obtained through a prescription paid by Medicaid and sold on the street for \$5 per pill. A field worker reported that an informant told him, “Forget about OxyContin. It’s too expensive. All you need is two or three Xanax and 80 milligrams of methadone and you’ll have the same

high, and it will last a long while.” Based on field observations, these pills are readily available throughout the city. Given the high number of sellers and the number of transactions observed, the use of these illicit medications is high and is not expected to decline in the near future.

Since these drugs are manufactured by legitimate pharmaceutical companies, purity is not an issue. Most of these medications come in a variety of strengths, however, and not all strengths are found on the street. Observations indicate that the following pills are sold on the street: 1-milligram (\$3) and 2-milligram (\$5) Xanax tablets; 1-milligram (\$1) Elavil tablets; and 2-milligram (\$1) and 3-milligram (\$2–\$3) Catapres tablets (street name Cat or Cathy).

These medications usually come in their original package, typically bottles. The pill sellers typically obtain these drugs from pill-mill doctors, who write prescriptions indiscriminately. A visit to the doctor may cost the pill seller \$100; the doctor will typically write three prescriptions. A pharmacy fills the prescription and charges Medicaid. On the street, these pills are sold individually, and no packaging is necessary. Most of the medications in this category are sold in pill form and taken orally.

Although brand names are not applicable in this drug category, sellers tend to use the pharmaceutical name of the product. Sellers may also use slang terms in “hawking” or marketing the availability of a given pill. These terms include “football” and “sticks” for Xanax, due to the oval or elongated shapes of the tablets.

Pill street sellers and buyers appear to be a subpopulation of heroin and methadone users. The majority of the pill sellers operating near treatment facilities tend to be primarily Black or Hispanic; a substantial number of sellers and buyers are White. They are usually older (35–45 years old), and most appear to have a history of heroin abuse. Although most pill sellers are male, about one-third of the pill sellers, observed by field researchers, were female. Most pill sellers do not see themselves as drug dealers; instead, this activity is simply viewed as another “hustle,” used to generate money in order to support their drug habit.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

The AIDS epidemic, with its impact on injection drug users (IDUs), has played a crucial role in shaping the New York City drug scene over the last two decades. HIV first entered New York City in the mid- to late-1970s. AIDS reporting was mandated in 1983, but reporting of HIV infection began in June 2000.

According to the New York City Department of Health, a cumulative total of 147,504 adult and pediatric AIDS cases were reported in New York City as of December

31, 2004. Overall, reports show that 86,697 New Yorkers have died of AIDS, representing 59 percent of those who have contracted the disease.

As of December 31, 2004, 94,495 New Yorkers were diagnosed with HIV or AIDS; 33,688 were living with HIV (non-AIDS), and 60,807 were living with AIDS. The true number of persons living with HIV/AIDS (PLWHA) is actually higher, since the New York City Department of Health and Mental Hygiene estimates that one-quarter of persons living with HIV have never been tested and do not know that they are infected. AIDS incidence in New York City peaked in 1993, with 12,649 cases. Mortality dropped sharply beginning in 1996, but New York City residents continue to die of HIV. In 2004, 2,189 people with HIV or AIDS died of all causes.

Of the 94,495 PLWHA in New York City as of December 31, 2004, 64 percent were diagnosed with AIDS, and 36 percent were diagnosed with non-AIDS HIV. Sixty-nine percent were male, and 30 percent were female. In terms of race/ethnicity, 44 percent were Black, 32 percent were Hispanic, and 21 percent were White. For transmission risk factors, 28 percent (26,311) were men who have sex with men, 23 percent (22,111) had an injection drug use history, 18 percent reported a heterosexual transmission factor, 3 percent had a perinatal transmission risk factor, 1 percent had another risk factor, and 27 percent had an unknown risk factor or were under investigation.

In 2004, 3,653 New Yorkers were diagnosed with HIV. Between 2003 and 2004, new HIV diagnoses declined by 433 (11 percent), continuing the annual decline in new diagnoses since HIV reporting began in 2000. Among women, the largest decline was in Hispanics (25 percent); among men the largest decline was in Whites (14 percent). New HIV diagnoses declined in women of all ages except the 50–59 age group, while for men the decline was limited to those 30 and older. In 2004, 4,330 persons were newly diagnosed with AIDS, a decline of 616 (12 percent) from 2003. AIDS diagnoses decreased in both genders and among Blacks, Hispanics, and Whites. The largest decrease in new AIDS diagnoses was among Whites (20 percent).

The New York City Department of Health and Mental Hygiene, Bureau of Communicable Diseases, also has a surveillance of hepatitis C data. As of December 2005, there were 13,814 newly reported individuals with a diagnosis date (or specimen collection date) in 2004. For 2003, that figure was 15,129.

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Exhibit 1: DAWN ED Sample and Reporting Information in New York City: January–June 2005

Total Eligible Hospitals ¹	No. of Hospitals in DAWN Sample	Total EDs in DAWN Sample ²	No. of EDs Reporting per Month: Completeness of Data (%)			No. of EDs Not Reporting
			90–100%	50–89%	<50%	
52	42	64	24–30	4–7	0–5	29–33

¹Short-term, general, non-Federal hospitals with 24-hour emergency departments based on the American Hospital Association Annual Survey.

²Some hospitals have more than one emergency department.

SOURCE: DAWN *Live!*, OAS, SAMHSA, updated Dec. 6, 2005,–Dec. 7, 2005

Exhibit 2. Semiannual Cocaine Trends for Selected Indicator Data in New York City: 1995–2005

Year	Semiannual/ Annual Periods	Deaths Involving Cocaine ¹	Cocaine ED Mentions/ Reports ²	Treatment Admissions: Cocaine as Primary Drug of Abuse ³	Cocaine Arrests ⁴	Births to Women Using Cocaine ⁵
1995	1H		9,915	8,371		
	2H		9,808	7,836		
	Total	908	19,715	16,207	40,846	1,059
1996	1H		11,070	8,561		
	2H		10,522	8,817		
	Total	659	21,592	17,378	38,813	1,005
1997	1H		10,233	9,048		
	2H		9,969	8,401		
	Total	501	20,202	17,449	35,431	864
1998	1H		9,989	8,999		
	2H		9,560	8,573		
	Total	438	19,549	17,572	35,577	742
1999	1H		7,386	8,346		
	2H		7,413	7,567		
	Total	394	14,799	15,913	31,781	626
2000	1H		6,883	7,337		
	2H		7,367	6,722		
	Total	492	14,250	14,059	31,919	490
2001	1H		7,449	7,343		
	2H	–	6,450	7,032		
	Total		13,898	14,375	23,498	438
2002	1H		6,679	7,736		
	2H		7,282	7,872		
	Total	421	13,961	15,608	13,574	363
2003	1H			8,203		
	2H			7,911		
	Total	520		16,114		354
2004	1H			8,410		
	2H			8,301		
	Total		10,134	16,711		337
2005	1H		6,603	7,626		
	2H					
	Total					

SOURCES: ¹DAWN, OAS, SAMHSA, including New York City, Long Island, and Putnam County through 1995; starting with 1996 the data include New York City only. In 2003, data are for the 5 boroughs of New York City plus Suffolk and Putnam Counties in New York, and Union and Morris counties in New Jersey. Data from 2003 are not comparable to data prior to 2003.

²DAWN, OAS, SAMHSA, updated 12/6/2005-12/7/2005. The 2005 number of reports are unweighted data and are from 64 EDs in the 5 boroughs of New York City reporting to DAWN in 2005. During this 6-month period, however, between 31 and 35 EDS reported data each month. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted, and, therefore, are subject to change. Prior to 2003, DAWN, OAS, SAMHSA, weighted data were based on a representative sample of hospitals for New York City and Westchester, Rockland, and Putnam Counties. Data for 2004 and 2005 are not comparable to data prior to 2003, nor are 2004 and 2005 data comparable to each other.

³New York State Office of Alcoholism and Substance Abuse Services (OASAS)-funded and nonfunded treatment admissions.

⁴New York City Police Department.

⁵New York City Department of Health and Mental Hygiene.

Exhibit 3. Characteristics of Primary Cocaine Admissions¹ to State-Funded² and Nonfunded³ Treatment Programs in New York City, by Route of Administration and Percent: First Half of 2005

Demographic Characteristic	Percent Total (N=7,626)	Percent Smoking Crack (n=4,711)	Percent Using Cocaine Intrasally (n=2,633)
Gender			
Male	67	63	73
Female	33	37	27
Age at Admission			
25 and younger	7	4	11
26–35	21	20	23
36 and older	72	76	66
(Average age)	(39.7 years)	(40.3 years)	(38.7 years)
Race			
Black	60	70	43
Hispanic	24	18	36
White	14	11	18
No Source of Income ⁴	29	33	23
Some Criminal Justice Status	35	32	40
Readmissions	78	82	69
Age of First Use			
14 and younger	7	5	9
15–19	29	26	35
20–29	43	46	39
30 and older	21	23	18
Secondary Drug of Abuse			
Alcohol	38	41	36
Marijuana	22	20	25
Heroin	6	6	5

¹Figures on this table may differ somewhat from figures cited on other tables, because computer runs may have been executed at different times and files are being updated continuously.

²State-funded programs receive some or all funding through the New York State Office of Alcoholism and Substance Abuse Services (OASAS).

³Nonfunded programs receive funding through sources other than OASAS.

⁴Defined as not earning income, not receiving support from family or significant others, and not receiving any public assistance.

SOURCE: New York State Office of Alcoholism and Substance Abuse Services

Exhibit 4. Semiannual Heroin Trends for Selected Indicator Data in New York City: 1995–2005

Year	Semiannual/ Annual Period	Deaths Involving Heroin ¹	Heroin/ Morphine ED Mentions/ Reports ²	Treatment Admis- sions: Heroin as Primary Drug of Abuse ³	Heroin Arrests ⁴	Average Purity of Street Heroin (%) ⁵
1995	1H		5,288	9,286		
	2H		5,440	9,001		
	Total	751	10,706	18,287	38,131	(69.4)
1996	1H		5,654	9,161		
	2H		5,478	9,617		
	Total	192	11,132	18,778	37,901	(56.3)
1997	1H		4,900	10,276		
	2H		4,581	10,431		
	Total	272	9,481	20,707	35,325	(62.5)
1998	1H		4,613	10,793		
	2H		4,605	10,203		
	Total	230	9,218	20,996	37,483	(63.6)
1999	1H		4,153	10,690		
	2H		5,150	10,189		
	Total	174	9,302	20,879	32,949	(61.8)
2000	1H		5,378	10,944		
	2H		5,630	10,672		
	Total	194	11,009	21,616	33,665	(62.9)
2001	1H		5,428	11,324		
	2H	–	5,216	11,455		
	Total		10,644	22,779	27,863	(56.0)
2002	1H		4,954	11,357		
	2H		5,443	11,157		
	Total	224	10,397	22,514	34,098	(61.4)
2003	1H			11,540		
	2H			12,023		
	Total	104		23,563		(53.5)
2004	1H			12,059		
	2H			11,743		
	Total		6,374	23,802		
2005	1H		3,995	10,658		
	2H					
	Total					

SOURCES: ¹DAWN, OAS, SAMHSA, including New York City, Long Island, and Putnam County through 1995 (Between 1996 and 2002, the data include New York City only. Prior to 1996, the data include heroin/morphine deaths as well as opiates not specified by type. Between 1996 and 2002, the data include only heroin/morphine deaths.) In 2003, data are for the 5 boroughs of New York City plus Suffolk and Putnam Counties in New York, and Union and Morris Counties in New Jersey. Data from 2003 are not comparable to data prior to 2003.

²DAWN, OAS, SAMHSA, updated 12/6/2005-12/7/2005. The 2005 number of reports are unweighted data and are from 64 EDs in the 5 boroughs of New York City reporting to DAWN in 2005. During this 6-month period, however, between 31 and 35 EDS reported data each month. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted, and, therefore, are subject to change. Prior to 2003, DAWN, OAS, SAMHSA, weighted data were based on a representative sample of hospitals for New York City and Westchester, Rockland, and Putnam Counties. Data for 2004 and 2005 are not comparable to data prior to 2003, nor are 2004 and 2005 data comparable to each other.

³New York State Office of Alcoholism and Substance Abuse Services (OASAS)-funded and nonfunded treatment admissions.

⁴New York City Police Department.

⁵U.S. Drug Enforcement Administration.

Exhibit 5. Characteristics of Primary Heroin Admissions¹ to State-Funded² and Nonfunded³ Treatment Programs in New York City, by Route of Administration and Percent: First Half of 2005

Demographic Characteristic	Percent Total (N=10,658)	Percent Using Heroin Intranasally (n=6,295)	Percent Injecting Heroin (n=4,091)
Gender			
Male	76	76	75
Female	24	24	25
Age at Admission			
25 and younger	6	4	9
26–35	21	18	25
36 and older	73	77	66
(Average age)	(40.7 years)	(41.3 years)	(39.8 years)
Race			
Black	27	33	18
Hispanic	52	54	50
White	19	11	29
No Source of Income ⁴	25	24	25
Some Criminal Justice Status	28	32	22
Readmissions	88	86	90
Age of First Use			
14 and younger	13	11	16
15–19	36	32	41
20–29	35	37	32
30 and older	16	20	11
Secondary Drug of Abuse			
Alcohol	12	12	12
Marijuana	8	9	5
Cocaine	43	38	49

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²State-funded programs receive some or all funding through the New York State Office of Alcoholism and Substance Abuse Services (OASAS).

³Nonfunded programs receive funding through sources other than OASAS.

⁴Defined as not earning income, not receiving support from family or significant others, and not receiving any public assistance.

SOURCE: New York State Office of Alcoholism and Substance Abuse Services

Exhibit 6. Semiannual Marijuana Trends for Selected Indicator Data in New York City: 1995–2005

Year	Semiannual/ Annual Period	Marijuana ED Mentions/ Reports ¹	Treatment Admissions: Mari- juana as Primary Drug of Abuse ²	Cannabis Arrests ³
1995	1H	1,516	2,171	12,357
	2H	1,460	2,159	
	Total	2,974	4,330	
1996	1H	1,723	2,845	18,991
	2H	1,848	3,185	
	Total	3,571	6,030	
1997	1H	1,939	3,794	27,531
	2H	1,900	3,657	
	Total	3,839	7,451	
1998	1H	1,986	4,554	42,030
	2H	1,696	4,473	
	Total	3,682	9,027	
1999	1H	1,799	5,119	43,122
	2H	1,692	5,100	
	Total	3,491	10,219	
2000	1H	1,856	5,664	60,455
	2H	1,688	5,487	
	Total	3,544	11,151	
2001	1H	1,904	6,677	47,651
	2H	1,598	6,593	
	Total	3,502	13,270	
2002	1H	1,827	7,512	47,250
	2H	2,097	6,798	
	Total	3,924	14,310	
2003	1H		6,844	
	2H		6,627	
	Total		13,471	
2004	1H		6,835	
	2H		6,468	
	Total	3,118	13,303	
2005	1H	2,197	6,704	
	2H			
	Total			

SOURCES: ¹DAWN, OAS, SAMHSA, updated 12/6/2005-12/7/2005. The 2005 number of reports are unweighted data and are from 64 EDs in the 5 boroughs of New York City reporting to DAWN in 2005. During this 6-month period, however, between 31 and 35 EDS reported data each month. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted, and, therefore, are subject to change. Prior to 2003, DAWN, OAS, SAMHSA, weighted data, based on a representative sample of hospitals for New York City and Westchester, Rockland, and Putnam Counties. Data for 2004 and 2005 are not comparable to each other, nor are they comparable to data prior to 2003.

²New York State Office of Alcoholism and Substance Abuse Services (OASAS)-funded and nonfunded treatment admissions.

³New York City Police Department.

Exhibit 7. Characteristics of Primary Marijuana Admissions¹ to State-Funded² and Nonfunded³ Treatment Programs in New York City, by Percent: First Half of 2005

Demographic Characteristic	Percent of Total (N=6,704)
Gender	
Male	79
Female	21
Age at Admission	
20 and younger	28
21–25	24
26–35	28
36 and older	20
(Average Age)	(27.2 years)
Race	
Black	56
Hispanic	32
White	8
No Source of Income ⁴	20
Some Criminal Justice Status	60
Readmissions	53
Age of First Use	
14 and younger	50
15–19	42
20–29	7
30 and older	2
Secondary Drug of Abuse	
Alcohol	36
Cocaine	15

¹Figures on this table may differ somewhat from figures cited on other tables, because computer runs may have been executed at different times and files are being updated continuously.

²State-funded programs receive some or all funding through the New York State Office of Alcoholism and Substance Abuse Services (OASAS).

³Nonfunded programs receive funding through sources other than OASAS.

⁴Defined as not earning income, not receiving support from family or significant others, and not receiving any public assistance.

SOURCE: New York State Office of Alcoholism and Substance Abuse Services

Drug Use in Philadelphia, Pennsylvania

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ABSTRACT

Indicators remain mostly stable for the four major drugs of abuse—cocaine, heroin, marijuana, and alcohol. However, numerous other drugs are used that contribute to the abuse patterns in this city. Cocaine abuse, particularly in the form of crack, continues to lead the 2005 consequence data with respect to deaths with the presence of drugs (first half), treatment admissions, and laboratory tests performed by NFLIS. It was the second substance most frequently encountered in urine/drug screens performed by the Philadelphia Adult Probation and Parole Department (APPD). The street-level purity of heroin has been declining since 2001, which appears to have caused users to seek or approximate a high through the use of increased amounts or adding other drugs to use in combination. In 2005, heroin ranked third among deaths with the presence of drugs (first half), treatment admissions, and the NFLIS, and fourth in APPD urinalysis. Deaths with the presence of oxycodone ranked eighth among all positive toxicology reports in the first half of 2005. Marijuana, which is not tested for in decedents, was the most frequently detected drug by the APPD, ranked second in the NFLIS study, and was fourth for treatment admissions. Alcohol in combination with other drugs ranked second in drugs detected in decedents and treatment admissions. Alcohol ranked seventh in APPD urinalysis results. The two most frequently abused benzodiazepines continue to be alprazolam and diazepam, although others are abused/misused. Diazepam was the fourth most frequently detected drug in decedents since 1994 and ranked fourth in the NFLIS study. Benzodiazepines ranked fifth in the APPD data and fifth among drugs of abuse mentioned by clients in treatment. Methamphetamine indicators continue to be low compared with other drugs. Its use is largely confined to a relatively small segment of the population. The average number of drugs detected in decedents leveled off in

the first half of 2005, having increased steadily from 1.95 in 1995 to 3.75 in 2004. In the first half of 2005, the average was 3.7 per decedent.

INTRODUCTION

Area Description

Philadelphia, the largest city in the State, is located in the southeastern corner of Pennsylvania. The 2000 U.S. census count of 1,517,550 Philadelphia residents was updated in 2004 at 1,470,150. The population is 53.8 percent female, 47.0 percent White, 41.7 percent Black/African-American, 4.4 percent Asian, 5.0 percent other races, and 1.5 percent two or more races. Persons designated to be of Hispanic or Latino origin (of any race) were estimated at 7.3 percent of the population. In the 2000 census, an estimated 18.4 percent of families were below the poverty level. In 2004, this estimate was 24.2 percent.

Data Sources

This report focuses primarily on the city/county of Philadelphia and includes data from the sources shown below. Unless otherwise noted, fiscal year (FY) refers to a year starting July 1 and ending the following June 30.

- **Treatment admissions data** for programs in Philadelphia County were provided by the Behavioral Health Special Initiative Client Data System (BHSI/CDS) for the period January 1, 2003, through December 31, 2005. This is the first paper utilizing this data source, which replaces the source for previous reports. The authors believe the data from this source are more complete and up to date than data from the previous source.
- **Mortality data** were provided by the Philadelphia Medical Examiner's (ME) Office. These data cover mortality cases with toxicology reports indicating the detection of drugs in decedents in Philadelphia. The time period is January 1, 1994, through June 30, 2005. (The cases include persons who died from the adverse affects of one or multiple drugs, as well as persons who exhibited some substance presence but died from other causes. The Philadelphia ME also distinguishes between persons who appeared to have a lethal reaction to what might be considered a light or moderate amount of drugs and persons whose toxicology reports showed a high level of drugs in their systems.) Alcohol cases are only reported in combination with one or more other drugs. The ME does not test for

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the presence of marijuana/tetrahydrocannabinol (THC)/cannabis.

- **Criminal justice urinalysis data** for adults who are in probation or parole status were derived from reports from the First Judicial District of Pennsylvania, Adult Probation/Parole Department (APPD), for calendar year 2005.
- **Heroin purity and price data** were provided by the Drug Enforcement Administration (DEA), Domestic Monitor Program (DMP), through 2004.
- **Drug analysis data** were provided by the National Forensic Laboratory Information System (NFLIS) for drug samples tested by the Philadelphia Police Department forensic laboratory in Federal FY 2005 (October 1, 2004, through September 30, 2005).
- **Acquired immunodeficiency syndrome (AIDS) data** were provided by the Philadelphia Department of Public Health's AIDS Activities Coordinating Office on AIDS cases reported from November 1, 1981, to September 30, 2005.

In addition to these sources, this report draws on focus group discussions with former drug users currently enrolled in treatment programs, as well as outreach workers assigned to homeless populations, substance abusers, and persons with human immunodeficiency virus (HIV) infection.

DRUG ABUSE PATTERNS AND TRENDS

The four major drugs of abuse in Philadelphia continue to be cocaine, heroin, marijuana, and alcohol. These are frequently used in combination with each other and with other supplemental drugs. In 2005, 86.8 percent of drugs mentioned by people entering treatment were one of these four drugs (exhibit 1). During this period, 78 percent of the treatment admissions were male, 53 percent were African-American, 34 percent were White, 13 percent were Hispanic, and 13 percent were classified as some other racial/ethnic category. The average age range was 21–25 years.

In the first half of 2005, the average number of drugs detected in decedents by the ME (3.70) exceeded the previous 11-year average (1994 to 2004) of 2.55 drugs per case (exhibit 2). Only 13 percent of all mortality cases with positive toxicology reports were single-drug cases.

The number of mortality cases with positive toxicology reports in 2004 (888) was the highest on record, going back to at least 1970. There were only 418 such cases in the first half of 2005. Of the 418 deaths, adverse reaction to drugs accounted for 40.2 percent, followed by overdose (6.0 percent), violence (24.7 percent), and “other causes” (29.2 percent) (exhibit 3). From 1999 through 2004, adverse reaction to drugs as the identified cause of death accounted for 48.0 percent, overdose accounted for 4.8 percent, violence accounted for 20.1 percent, and 27.2 percent were attributable to other causes. In the first half of 2005, White male decedents ($n=143$) outnumbered African-American male decedents (141), while African-American females (49) outnumbered White females (48). The remaining 37 deaths were among Hispanics, Asians, and Native Americans. Overall, Whites accounted for 45.7 percent of the deaths; African-Americans constituted 45.5 percent; Hispanics represented 6.5 percent; Asians accounted for 2.2 percent; and Native Americans constituted 0.2 percent.

The total number of drugs detected during Federal FY 2005 in Philadelphia through the NFLIS was 25,611, with no count of alcohol. Of these, 88.8 percent were cocaine, marijuana, or heroin.

In the 2005 APPD study, adults on probation or parole tested positive in 54 percent of all tests. The leading drugs were marijuana, cocaine, other opiates, heroin, benzodiazepines, phencyclidine (PCP), and alcohol.

Cocaine/Crack

Cocaine/crack remains the major drug of abuse in Philadelphia. Treatment admissions data from 2003 through 2005 reveal cocaine as constituting the plurality of mentions (exhibit 1). African-Americans accounted for 63 percent of cocaine treatment admissions in 2005, followed by Whites (27 percent), Hispanics of any race (11 percent), and Asians and others (10 percent). Three-quarters were males, and 59 percent were age 36 or older.

ME data show that cocaine was present in 183 of the 418 decedents in the first half of 2005; since 1994, cocaine has been detected in the highest percentage of mortality cases (exhibit 2). Twenty-two of the 183 deaths with the presence of cocaine had no other drug present.

NFLIS data for FY 2005 revealed that cocaine was detected in the highest number of lab tests ($n=11,586$), representing 45.2 percent.

APPD urinalysis data of adults on probation or parole revealed the presence of cocaine in 37 percent of the tests in 2005. Cocaine ranked second to marijuana in the APPD data.

The predominant form of crack sold in Philadelphia is the “rock,” which usually costs \$5. Treys (\$3 rocks) continued to be available in 2005. Shapes of crack range from circular, to bumpy-circular, to pieces cut into the shape of a parallelogram. Powder cocaine is not as readily available in small (\$5) quantities, but \$10 and especially \$20 bags are quite common. Focus group participants continued to report that the majority of cocaine powder buys are for intranasal use, with the remainder either injected straight or injected in a “speedball.” These estimates were very similar to the focus group responses dating back to the spring of 2002.

Crack users continue to report frequent use in combination with 40-ounce bottles of malt liquor, beer, wine, or other drugs, including alprazolam, marijuana, or heroin.

Heroin/Morphine

According to DEA Domestic Monitor Program data, the average street-level purity of heroin in Philadelphia declined every year from 2000 (73.0 percent) through 2004 (51.6 percent) (exhibit 4). As a result, individuals who are new to treatment and treatment program directors have identified six behavior changes over the last 2 years:

- Switch to injecting from other routes of administration
- Inject more heroin
- Inject more frequently
- Add other drugs
- Switch to pharmaceutical products that have reliable purity and predictable effects (notably oxycodone products)
- Tire of pursuing the high and enter treatment

Treatment admissions data reveal heroin as constituting the third highest percentage of mentions in 2003 but the fourth highest percentage in 2004 and 2005 (exhibit 1). Whites accounted for 51 percent of heroin treatment admissions in 2005, followed by African-Americans (21 percent), Hispanics of any race (13 percent), and Asians and others (15 percent). Seventy-

seven percent were males, and 42 percent were age 21–30.

ME data show that heroin/morphine was present in 104 of the 418 decedents in the first half of 2005; heroin/morphine has continued to rank second in overall drug detections since 1994 (exhibit 2). Only 3 of the 104 deaths with the presence of heroin had no other drug present.

NFLIS data for FY 2005 revealed that heroin was detected in the third highest number of lab tests ($n=2,326$), representing 9.1 percent.

APPD urinalysis data of adults on probation or parole revealed the presence of heroin in 13 percent of the tests in 2005. Heroin ranked fourth in the APPD data.

Focus group participants continued to report that the \$10 bag of heroin remained the standard unit of purchase. The \$10 bag usually yields one hit, and \$20 bags are also available. All groups since autumn 2000 reported that the average heroin user injects the drug four or five times per day.

Other Opiates and Narcotics

Oxycodone

The nonmedical use of oxycodone products, including OxyContin, Percocet/Percodan, Roxicet, and Tylox, continues to be reported by individuals in treatment. The mentions of these drugs by people admitted to treatment programs have been unstable from 2003 to 2005 (exhibit 1).

Oxycodone was detected in 482 decedents from 1994 through the first half of 2005 (the eighth most frequently detected drug during that time period) (exhibit 2). Detections of oxycodone have been rapidly increasing since 2000, and the 2005 annual total will probably exceed the previous high from 2004. In the first half of 2005, oxycodone was present in 14.6 percent of all drug-positive deaths.

NFLIS data revealed that oxycodone was detected in the fifth highest number of lab tests in FY 2005 ($n=491$), or 1.9 percent.

Hydrocodone

Hydrocodone mentions in mortality cases have also increased in recent years. There were 40 positive toxicology ME reports for hydrocodone in 2003, 51 in 2004, 343 in the first half of 2005, and a total of 273 cases in the 11½-year period from 1994 through

mid-2005. Hydrocodone detections now rank 14th among all deaths with positive toxicology reports.

Methamphetamine

Methamphetamine and amphetamines remain a relatively minor problem in Philadelphia. Use of these drugs appears to be confined to a small portion of the population who use them primarily to prolong sexual encounters in unsafe settings.

Treatment admissions data from 2003 through 2005 reveal a miniscule proportion of methamphetamine mentions (less than 0.2 percent in 2005) (exhibit 1).

There were 98 deaths with the presence of methamphetamine from 1994 through 2004 and an additional 9 detections in the first half of 2005. Deaths with the presence of methamphetamine ranked tied for 33rd in the 11½ years from January 1994 through mid-2005.

In FY 2005, NFLIS data revealed that methamphetamine was detected in the 15th highest number of lab tests ($n=50$), representing 0.2 percent.

Other Amphetamines

Treatment admissions data from 2003 through 2005 also reveal a small proportion of amphetamine mentions (less than 0.2 percent in 2005) (exhibit 1).

There were 90 deaths with the presence of other amphetamines from 1994 through 2004, plus 8 additional detections in the first half of 2005.

NFLIS data revealed that amphetamine was detected in the 35th highest number of lab tests in FY 2005 ($n=4$), representing 0.02 percent of all samples analyzed.

Marijuana

Treatment admissions data show marijuana represented the fourth most mentions in 2003 and the third most in 2004 and 2005 (exhibit 1). African-Americans accounted for 60 percent of marijuana treatment admissions in 2005, followed by Whites (19 percent), Hispanics of any race (10 percent), and Asians and others (11 percent). Eighty-three percent were males, and 53 percent were age 30 or younger.

NFLIS data revealed that marijuana (cannabis) was detected in the second highest number of lab tests ($n=8,833$), representing 34.5 percent in FY 2005.

APPD urinalysis data of adults on probation or parole revealed the presence of marijuana in 44 percent of the tests in 2005, the highest amount in the APPD data.

Focus group participants since the spring of 2004 continued to report the increasing use of blunts, especially the use of flavored cigars. These groups and outreach workers continued to report that marijuana use is widespread throughout Philadelphia.

The combination of marijuana and PCP, frequently mixed in blunts, is commonly called a “love boat” or “wet” (which is also a term for PCP). This combination is becoming less popular, as PCP seems to be declining.

Blunts laced with crack (called “Turbo”) are still common. Blunt users commonly ingest beer, wine coolers, whiskey, alprazolam, or diazepam along with the blunt. Less commonly, blunt smokers use powder cocaine, vodka, barbiturates, clonazepam, oxycodone, cough syrup, and/or methamphetamine. These comments by users continue to underscore the common practice of multiple drug use, either simultaneously or sequentially.

Phencyclidine (PCP)

PCP began to gain popularity as an additive to blunts in 1994, and its use increased up to around the beginning of 2004. Since then, users reveal that use is declining, because of an aversion to “bad trips” and unpredictable experiences while on PCP.

Mentions of PCP use at admission to treatment declined precipitously from 2004 ($n=563$) to 2005 (347) (exhibit 1). African-Americans accounted for 43.6 percent of PCP treatment admissions in 2005, followed by Whites (16.7 percent), Hispanics of any race (16.2 percent), and Asians and others (23.6 percent). The majority (86 percent) were males, and 58 percent were age 30 or younger.

PCP was detected in 449 decedents from 1994 through 2004, making it the fifth most frequently detected drug during that time period, behind cocaine, heroin/morphine, alcohol-in-combination, and diazepam. However, with only 17 detections of PCP in the first half of 2005, PCP’s rank fell from fifth to ninth for the 11½-year combined data (exhibit 2).

NFLIS data revealed that PCP was detected in the sixth highest number of lab tests ($n=423$) in FY 2005, accounting for 1.65 percent of the total.

APPD urinalysis data of adults on probation or parole revealed the presence of PCP in 8 percent of the tests in 2005, the sixth highest amount in the APPD data.

Benzodiazepines

Benzodiazepines, particularly alprazolam (Xanax) and diazepam (Valium), continue to be used in combination with other drugs.

Treatment admissions data show benzodiazepines represented the fifth most mentions from 2003 through 2005 (exhibit 1). Whites accounted for 50 percent of benzodiazepine treatment admissions in 2005, followed by African-Americans (27.6 percent), Hispanics of any race (9.7 percent), and Asians and others (12.7 percent). Seventy-eight percent were males, and 56.5 percent were age 30 or younger.

Diazepam was detected in 585 decedents from 1994 through 2004, making it the fourth most frequently detected drug during that time period, behind cocaine, heroin/morphine, and alcohol-in-combination. There were an additional 31 detections of diazepam in decedents in the first half of 2005 (exhibit 2).

Alprazolam was detected in 316 decedents from 1994 through mid-2005, making it the 11th most frequently detected drug during that time period.

Benzodiazepine abuse was reported by focus group participants as common among users of heroin, oxycodone, cocaine, marijuana, and cough syrup. Since spring 2000, all focus groups have reported that alprazolam has overtaken diazepam as the “most popular pill” on the street.

From 1994 to mid-2005, there were 178 positive toxicology reports for oxazepam (Serax), making this drug the 22nd most frequently detected drug during that time.

From 1994 to mid-2005, there were 172 positive toxicology reports for olanzapine (Zyprexa), making this drug the 25th most frequently detected drug during that period.

Other Prescription Drugs of Note

Prescription drugs are most frequently detected among decedents in combination with other drugs of the same type and/or in combination with cocaine, heroin, or alcohol. ME mentions for the most frequently detected prescription drugs among decedents (not already noted above) included codeine (ranked fifth), methadone (sixth), diphenhydramine (seventh), and propoxyphene (tenth) (exhibit 2).

Additionally, deaths with the presence of fluoxetine (Prozac) ($n=189$ in the 11½-year data) now rank 20th.

Dextromethorphan is a common ingredient in numerous cough and cold medications. Focus group participants beginning in the spring of 2004 indicated that its use has increased among people age 30–40, particularly in combination with alprazolam and diazepam. The Philadelphia ME detected dextromethorphan in 40 cases in the first half of 2005, with an 11½-year total of 180 detections, ranking 21st.

Diphenhydramine is an ingredient in numerous over-the-counter medications that are abused in Philadelphia. Negative consequences appear most markedly among decedents in combination with other drugs. The Philadelphia ME detected diphenhydramine in 116 cases in 2003, 129 cases in 2004, and 51 cases in the first half of 2005. Deaths with the presence of diphenhydramine now rank seventh (exhibit 2).

Medications that contain codeine are also commonly abused in Philadelphia. The ME detected codeine in 120 cases in 2003 and again in 2004, plus 59 in the first half of 2005. In the 11½-year period ending mid-2005, drug deaths with the presence of codeine ranked fifth (exhibit 2).

Quetiapine (Seroquel), an antipsychotic, has only been on the market for about 5 years. Through mid-2005, there have been 65 quetiapine detections by the ME, ranking 48th.

Club Drugs

3,4-methylenedioxymethamphetamine (MDMA) was detected in 53 NFLIS lab tests in FY 2005 (0.2 percent), making it the 13th highest drug in the Philadelphia data. MDMA has been detected by the ME since 1999. Through mid-2005, this drug was detected in 48 decedents, including 6 cases in the first half of 2005. Focus groups held since spring 2001 have reported that MDMA is used in combination with marijuana and lysergic acid diethylamide (LSD), which helps describe its use among club-goers. However, LSD use has declined in last the 2 years. The focus groups conducted since autumn 2002 described MDMA users as evenly split by gender and as ranging in age from teenagers to persons in their early twenties. MDMA has also been infrequently reported as being used in combination with lemonade and alcohol.

The Philadelphia ME first detected 3,4-methylenedioxyamphetamine (MDA) in the second half of 1999. There have been 36 positive toxicology reports for MDA since then, including 6 cases in the first half

of 2005. MDA was detected in seven samples tested by the NFLIS in Federal FY 2005.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

As of September 30, 2005, Philadelphia recorded 17,501 cumulative AIDS cases among adults (exhibit 5). Among those cases, 6,183 (35.3 percent) involved injection drug users (IDUs) or needle-sharers. Another 876 (5.0 percent) were in the dual exposure category of IDUs who were also men who had sex with other men (MSM).

Cases reported as of September 30, 2005, with heterosexual contact as a risk factor continued to exceed the historical proportion. Heterosexual contact was the identified exposure category in 20.7 percent of all AIDS cases.

For inquiries concerning this report, please contact Samuel Cutler, City of Philadelphia, Department of Behavioral Health and Mental Retardation Services, Coordinating Office for Drug and Alcohol Abuse Programs (CODAAP), 1101 Market Street, Suite 800, Philadelphia, Pennsylvania 19107-2908, Phone: (215) 685-5414, Fax: (215) 685-4977, E-mail: <sam.cutler@phila.gov>.

Exhibit 1. Drugs of Abuse Mentioned at Admission to Treatment in Philadelphia: 2003–2005

Drugs Mentioned	2003	2004	2005
Cocaine	4,935	4,818	5,151
Alcohol	4,383	4,232	3,835
Heroin	3,313	3,124	3,107
Other Opiates/Synthetics	713	1,042	483
Marijuana	3,069	3,153	3,120
PCP	618	563	347
Other Hallucinogens	180	101	106
Methamphetamine	17	37	33
Other Amphetamines	74	41	29
Benzodiazepines	1,129	1,165	626
Other Tranquilizers	7	17	14
Barbiturates	121	80	26
Other Sedatives/Hypnotics	11	34	489
Inhalants	1	6	9
Over-the-Counter	4	6	3
Other (Not Listed)	94	133	160
Total	18,669	18,552	17,538

SOURCE: Behavioral Health Special Initiative Client Data System

Exhibit 2. Mortality Cases in Philadelphia with the Presence of the 10 Most Frequently Detected Drugs by the Medical Examiner: 1994–First Half 2005

ME-Identified Drugs	Year												Total
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	1H2005	
Cocaine	368	336	277	304	218	238	321	300	270	326	399	183	3540
Heroin/Morphine	262	318	290	336	249	236	332	316	275	208	214	104	3140
Alcohol-in-Combination	253	254	182	214	157	179	197	185	153	290	219	135	2418
Diazepam	58	44	35	58	39	67	46	56	28	66	88	31	616
Codeine	36	39	19	20	3	15	19	45	57	120	120	59	552
Methadone	23	12	26	24	10	36	36	46	55	79	132	59	538
Diphenhydramine	18	13	5	4	9	25	33	53	42	116	129	51	498
Oxycodone	4	2	1	14	29	17	49	53	68	81	103	61	482
Phencyclidine (PCP)	46	44	29	46	19	35	48	45	51	58	28	17	466
Propoxyphene	30	30	27	32	21	22	40	43	31	41	48	20	385
Total Deaths with the Presence of Drugs	617	632	565	607	534	533	680	661	593	841	888	419	7569
Total Drugs Mentioned	1,346	1,245	1,121	1,282	1,039	1,232	1,637	1,857	1,589	2,672	3,330	1,547	19,772
Average Number of Drugs Per Death	2.18	1.97	1.98	2.11	1.95	2.31	2.41	2.81	2.68	3.18	3.75	3.70	2.61

SOURCE: Philadelphia Medical Examiner's Office

Exhibit 3. Causes of Annual Mortality Cases in Philadelphia, as Determined by the Medical Examiner, by Percent: 1999–First Half 2005

ME-Identified Cause	1999	2000	2001	2002	2003	2004	1H2005
Adverse Effect of Drugs	55.7	56.6	56.4	57.7	30.4	31.0	40.2
Overdose	3.8	2.1	3.8	2.5	6.3	10.1	6.0
Violence by Another Person	9.6	13.0	10.0	11.6	17.2	16.3	15.8
Violence to Oneself	6.6	5.6	6.2	5.6	10.5	8.3	8.9
Other Causes ¹	24.3	22.7	23.6	22.6	35.6	34.2	29.2

¹Includes deaths with the presence of drugs caused by accident, injury, drowning, or a health or physical malady.

SOURCE: Philadelphia Medical Examiner's Office

Exhibit 4. Average Percentage of Purity of Street-Level Heroin in Philadelphia: 1994–2004

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
63.0	70.0	63.0	80.0	71.0	72.0	73.0	71.0	66.3	59.6	51.6

SOURCE: Drug Enforcement Administration, Domestic Monitor Program

Exhibit 5. Adult AIDS Cases in Philadelphia by Exposure Category: Cumulative Totals through September 30, 2005

Exposure Category	November 1, 1981, to September 30, 2005	
	Number	Percent
IDU	6,183	(35.3)
MSM and IDU	876	(5.0)
MSM	6,521	(37.3)
Heterosexual Contact	3,620	(20.7)
Blood Products	91	(0.5)
No Identified Risk Factor	210	(1.2)
Total Adult Cases	17,501	(100.0)

SOURCE: Philadelphia Department of Public Health, AIDS Activities Coordinating Office

Drug Abuse Trends in Phoenix and Arizona

Ilene L. Dode, Ph.D.¹

ABSTRACT

Stimulant abuse has emerged as the second leading cause of admissions to substance abuse treatment in Arizona, rising from 11 percent in FY 2002 to 26 percent in FY 2005. Stimulant admissions included methamphetamine (69 percent), cocaine/crack (30 percent), and other stimulants (1 percent). Forty-five percent of admissions were for alcohol, 18 percent were for marijuana, 7 percent were for narcotics, and 4 percent were for other drugs. Forty percent of families referred for treatment by Child Protective Services report methamphetamine as their primary drug of abuse, followed by alcohol (32 percent), marijuana (26 percent), and 'other' (2 percent). Of the 115 murders in Phoenix in the first 6 months of 2005, 38 people—1 in 3 victims—had methamphetamine in their system. Thirty-four of the 38 Phoenix murder victims in the first half of 2005 who died with methamphetamine in their systems were of Latino descent, representing 9 of every 10 cases. During the first half of 2005, 49 people in Maricopa County died of methamphetamine overdoses, methamphetamine-related heart attacks, and hemorrhages. The methamphetamine that is available on the streets in Phoenix is purer, cheaper, and more plentiful than ever before. Local methamphetamine labs have declined, while Arizona has become the leading pipeline for Mexican methamphetamine into the United States. As border enforcement increases, smugglers have turned to 'deep concealment' to move drugs through Arizona's ports of entry.

INTRODUCTION

Area Description

The Valley of the Sun covers more than 400 square miles. The thriving Phoenix metropolitan area encompasses more than 20 communities, including Chandler, Gilbert, Glendale, Mesa, Phoenix, Scottsdale, and Tempe. The Census Bureau's 2003 estimate shows that Maricopa County has 3.34 million people, compared with 2.86 million people in 1998. The population is 78.6 percent White, 3.8 percent Black/African-American, 2.6 percent Asian, 1.9 percent Native American, and 13.2 percent others. Hispanic/Latino

groups constitute 28.1 percent of the total for two or more races.

Arizona is now 17th in population (5,939,959) according to 2005 Census Bureau estimates. It is the eighth most urban State. Arizona is sixth in the percentage of residents who speak a language other than English at home. Arizona is younger than the Nation as a whole, with a median age of 34.2, compared with 35.3 nationally. Arizona ranked fifth in States with the highest percentage (26.6 percent) of 2005 population younger than 18, compared with 24.8 percent nationally.

Data Sources

This report is based on the most recent available data obtained from the following sources:

- **Treatment data** are from these sources: Arizona Department of Health Services (DHS), Division of Behavioral Health Services (BHS), Bureau for Substance Abuse Treatment and Prevention *Annual Report on Substance Abuse Treatment Programs*, December 2005 for statewide admissions in fiscal year (FY) 2005; the local (Maricopa County) Community Bridges treatment admissions report, July 1, 2004–June 30, 2005; and Treatment Assessment Screening Center (TASC), Inc., Maricopa County Adult Deferred Prosecution Program Annual Cumulative Report, March 1, 1989–September 30, 2005, and Client Drug Test Results Summary for Maricopa County Juvenile Probation April 1, 2005–September 2005.
- **Emergency department (ED) data** were derived for January 2005–June 2005 from the Drug Abuse Warning Network (DAWN) *Live!* restricted-access online query system administered by the office of Applied Studies (OAS), Substance Abuse and Mental Health Services Administration (SAMHSA), updated December 6–7, 2005. All 25 eligible hospitals in the Phoenix area were in the DAWN sample; 1 hospital had 2 emergency departments, bringing the ED sample to 26. During this 6-month period, between 12 and 14 EDs reported data each month; the ED completeness data are shown in exhibit 1. The types of cases covered are depicted in exhibit 2. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted. Therefore, the data presented in this paper are subject to change. Data derived from DAWN *Live!* represent drug reports in drug-related ED visits. Drug reports exceed the number of ED visits, since a patient may report use of multiple drugs (up to six drugs and alcohol). The DAWN *Live!* data are unweighted and,

¹The author is affiliated with EMPACT-Suicide Prevention Center, Phoenix, Arizona.

thus, are not estimates for the reporting area. These data cannot be compared to DAWN data from 2002 and before, nor can preliminary data be used for comparison with future data. Only weighted DAWN data released by SAMHSA can be used for trend analysis. A full description of the DAWN system can be found at <<http://dawn.info.samhsa.gov>>.

- **Information on substance-abusing families entering treatment** was provided by the Arizona Department of Economic Security, Division of Children, Youth, and Families, *Arizona Families F.I.R.S.T. Program Annual Evaluation Report* for the period July 1, 2003–June 30, 2004, submitted on February 28, 2005.
- **Information on child deaths related to the use of drugs or alcohol** was provided by the Arizona Department of Health Services, Public Health Prevention Service, Office of Women’s and Children’s Health, Arizona Child Fatality Review Program, 12th Annual Report, November 25, 2005.
- **Methamphetamine-related death data** for Maricopa County in the first half of 2005 are from the Maricopa County Medical Examiner.
- **Law enforcement data** were derived from the Drug Enforcement Administration (DEA), Phoenix Division Intelligence Quarterly Trends Report, Fourth Quarter FY 2005; and the U.S. Department of Justice, Federal Bureau of Investigation, Preliminary Semiannual Uniform Crime Report, January–June 2005.
- **Price/purity data** are from the DEA Phoenix Division Offices, U.S. Customs, Arizona Department of Public Safety, Phoenix Police Department, and the Maricopa County Sheriff’s Department.
- **School survey data** are from the 2004 Arizona Youth Survey and represent students statewide in grades 8, 10, and 12.
- **Data on the Endangered Children Program** are from the Office of the Arizona Attorney General Terry Goddard, Arizona Alliance for Drug Endangered Children (DEC) Program Annual Report, November 1, 2005.
- **Human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS) data** are from the Arizona Department of Health

Services (DHS), Division of Public Health Services, Bureau of Epidemiology and Disease Control, Office of HIV/STD Services, HIV/AIDS Annual Report, March 2004.

- **Population data** are from the U.S. Census Bureau Fact Sheet, American Community Surveys, for 2004 and 2005.

DRUG ABUSE PATTERNS AND TRENDS

Cocaine/Crack

In FY 2005, primary admissions into the ADHS/DBHS system for cocaine/crack abuse totaled 3,110, accounting for 7.6 percent of all admissions statewide and for 14.1 percent of admissions excluding alcohol.

During FY 2005, Community Bridges detoxification and recovery clinics served a total of 13,337 individuals who were homeless, indigent, and members of working poor families in Maricopa County. Of this total, 1.0 percent reported cocaine use and 3.8 percent reported crack use.

The TASC Adult Deferred Prosecution Program cumulative data do not reflect any change in the percentage of admissions for cocaine treatment in Maricopa County. From March 1989 through September 2005, 28.3 percent ($n=4,936$) of admissions were for cocaine treatment (exhibit 4). Seven percent of juveniles in TASC tested positive for cocaine during the first 10 months of 2005 (exhibit 5).

The number of unweighted cocaine drug reports in DAWN *Live!* was 926 during the first half of 2005 (exhibit 6). Cocaine represented 24.8 percent of major substances of abuse drug reports (excluding alcohol). Slightly more than 47 percent of the patients were White, 22 percent were Hispanic, and nearly 17 percent were Black (exhibit 7).

During the fourth quarter of 2005, the average purity of cocaine tested at the DEA Southwest laboratory was 71 percent, which represented no substantial change from previous report periods. Prices for an ounce of powder cocaine in FY 2005 compared with FY 2004 were static, at \$400–\$600. The price for a kilogram increased slightly from \$13,000–\$15,000 in 2004 to \$14,500–\$16,000, however the price in 2005 was less than that in 2001 (exhibit 8).

Crack cocaine continues to be readily available in the Phoenix metropolitan area and is sold in “rocks” that are either sold in plastic baggies, transferred “hand to hand,” or held in the dealer’s mouth because crack cocaine is not water-soluble. The price for a rock

dropped to \$10–\$20. An ounce sold for \$600–\$650, and a pound cost \$7,500.

The DEA reports that crack cocaine is not typically transported in large quantities or via long distances because of the more severe mandatory sentences for possession and distribution of crack cocaine.

Heroin and Morphine

The ADHS/DBHS data show that heroin was the primary substance of abuse for 5.7 percent of all individuals seeking treatment statewide in FY 2005 (exhibit 3) and for 10.6 percent of admissions excluding alcohol. In Maricopa County, ADHS/DBHS provides funding through the Regional Behavioral Health Agency (RBHA) for 2,340 methadone slots.

The Community Bridges data for the past 8 years have consistently shown that 10 percent of individuals seeking services at the Maricopa County clinics report use of heroin and other opiates.

A unique informal network of four Native American substance use treatment agencies delivers residential, outpatient, intensive outpatient, and in-home/in-school services for adults and their families using culturally appropriate practices, including sweat lodges, talking circles, and traditional healers. One of the rural tribal regional behavioral health authorities operates a 10-member buprenorphine program through a subcontracted Indian Health Services psychiatrist.

The number of unweighted heroin ED reports in Phoenix in the first half of 2005 was 415 (exhibit 6). Excluding alcohol, heroin represented 11.1 percent of DAWN *Live!* major illicit drug reports. Patients were primarily White (63.4 percent) or Hispanic (21.9 percent) (exhibit 7).

Black tar and Mexican brown powder heroin are readily available. Purity levels remained relatively constant throughout FY 2005. Purity levels ranged between 45.0 and 71.0 percent pure n, with an average of 55.6 percent milligram pure. Average purity for the past 4 years has ranged from 48.3 percent to 55.0 percent.

Phoenix and Tucson continue to serve as transshipment and distribution points for high-purity/low priced Mexican-produced heroin smuggled into Arizona.

In Phoenix the price for a “paper” dropped to \$10–\$15 from the long-time price of \$20. The Phoenix DEA, U.S. Customs, Arizona Department of Public Safety, Phoenix Police Department, and Maricopa

County Sheriff Department reported an increase in the price for an ounce of heroin. In the 2004 reporting period, the price was \$450–\$650, compared with \$800–\$850 this period (exhibit 8). However, ounce prices have decreased from \$1,100–\$1,500 in 2001.

Other Opiates

The DEA Diversion unit reported the most commonly abused drugs are Vicodin, Lortab, and other hydrocodone products; Percocet, OxyContin, and other oxycodone products; benzodiazepines; methadone; hydromorphone; morphine; meperidine (Demerol); and codeine products. Carisoprodol (Soma) in combination with other analgesic controlled substances, tramadol (Ultram), and nalbuphine (Nubain) continue to be highly abused prescription-only substances.

ADHS/DBHS reported that 0.9 percent of all primary admissions in FY 2005 were for opiates other than heroin (exhibit 3). Excluding alcohol, 1.7 percent of the admissions statewide were for other opiates.

The TASC Adult Deferred Prosecution Program reported 4.9 percent of admissions from March 1989 through September 2005 were for other opiates (exhibit 4).

Data from the Community Bridges program show that 4.8 percent of admissions for the first half of FY 2005 were for other opiates.

The unweighted number of ED drug reports for “other drugs” in DAWN *Live!* in the first half of 2005 included 879 for opiates/opioids (185 for hydrocodone, 241 for oxycodone, and 134 for opiates/opioids unspecified) (exhibit 9). Case types included seeking detoxification, overmedication, and other.

The most commonly abused pharmaceutical controlled substances in Phoenix in 2005 included OxyContin (\$20–\$80 per 80-milligram tablet and \$20–\$25 per 40-milligram tablet), Percocet (\$5 per tablet), Vicodin ES (\$5 per tablet), Valium (\$4 per 10-milligram tablet), Lortab (\$5–\$6 per 10-milligram), and Soma (\$2–\$5 per tablet) (exhibit 8).

Marijuana

Statewide in FY 2005, 18.2 percent of all admissions recorded by ADHS/DBHS were for marijuana abuse (exhibit 3). Excluding alcohol, marijuana accounted for 33.5 percent of the primary admissions. According to the December 2005 DBHS Annual Report on Substance Abuse Treatment Programs, more than

one-half (56.9 percent) of youth receiving treatment reported marijuana as their primary drug of choice. (The statewide data for FY 2005 include all adults and youth.)

The TASC Adult Deferred Prosecution Program reported 23.9 percent of admissions reported marijuana use/abuse from March 1989–September 2005 (exhibit 4). The TASC Client Drug Test Results Summary for Maricopa County Juvenile Probation for first quarter FY 2006 reports that 74 percent of youth tested positive for THC (tetrahydrocannabinol) (exhibit 5).

The unweighted number of marijuana ED drug reports in DAWN *Live!* from January through June 2005 was 749 (exhibit 6). Nearly 59 percent of these patients were White (exhibit 7).

During the fourth quarter of FY 2005, the DEA reported that the bulk of marijuana seized was not freshly harvested. A laboratory analysis of seized marijuana to determine potency and percent of THC was conducted in the first quarter of FY 2005. The results reflected a THC content of 7.18 percent.

There were reports of students selling marijuana for \$3 per joint or \$20 for a dime bag; otherwise, there were no changes in price from the previous CEWG reporting period. Prices for different quantities of marijuana in Phoenix and Tucson in 2001 and 2005 are shown in exhibit 8.

In the 2004 Arizona Youth Survey, the percentage of students reporting ever using marijuana was nearly 46 percent, down from the nearly 51 percent in 2002. Past-30-day use also declined, from approximately 25 percent in 2002 to 19 percent in 2004. Nevertheless, marijuana continued to be the most frequently reported illicit drug among Arizona students in grades 8, 10, 12.

Stimulants

The FY 2005 ADHS/DBHS Bureau for Substance Abuse Treatment and Prevention data show that 17.6 percent of all treatment admissions statewide were for methamphetamine (exhibit 3). The growth of methamphetamine as the presenting primary problem in the public behavioral health system is striking. Excluding alcohol, primary methamphetamine admissions accounted for 21.4 percent of admissions to treatment in FY 2002, compared with 37.5 percent in FY 2004 and 32.5 percent in FY 2005. Little variation exists between urban and rural areas, with the exception of Pima County (Tucson), where a lower proportion of treatment admissions reported methamphetamine use.

According to the fifth annual report for the Families in Recovery Succeeding Together program for substance-abusing families entering the Child Welfare System, 40 percent reported methamphetamine as the most frequently abused substance. Of the 1,763 individuals referred to the program, another 26 percent reported marijuana, along with 13 percent reporting cocaine and 32 percent reporting alcohol.

A statistical summary of the TASC Adult Deferred Prosecution Program revealed that 27.2 percent ($n=4,724$) of the March 1989 through September 2005 treatment admissions were for methamphetamine use/abuse (exhibit 4). In the first quarter of FY 2005–2006, 17.4 percent of the juveniles ($n=3,052$) submitting for drug testing at TASC tested positive for methamphetamine/amphetamine (exhibit 5).

At the Community Bridges detoxification and recovery centers in Maricopa County, 13 percent of the FY 2005 admissions reported methamphetamine as the drug choice.

In the first half of 2005, there were 1,118 (unweighted) methamphetamine ED reports, accounting for 30 percent of the illicit drug reports (exhibit 6). Approximately 61 percent of methamphetamine ED patients were White (exhibit 7).

The DEA reports the growing problem of conversion laboratories. The labs do not produce methamphetamine, but they do combine pure Mexican methamphetamine with cutting agents in preparation for sales. The most typical cutting agent is methylsulfonylmethane, commonly known as MSM, an over-the-counter joint pain reliever for animals and humans.

The operators of conversion labs also produce shards made of cutting agents that are mixed with methamphetamine. Paint thinner and acetone are mixed together and then frozen to produce a clear shard similar in appearance to methamphetamine.

Arizona reached an all-time high of 293 methamphetamine laboratory seizures in 2001. During the first 9 months of 2005, there were 65 laboratory seizures (exhibit 10). As local laboratories have been declining, Arizona has become the leading pipeline for Mexican-made methamphetamine into the United States. The Mexican methamphetamine laboratories are larger, more technologically advanced, and more cost effective.

Despite the decline of methamphetamine laboratories, methamphetamine use/abuse is being directly associated with increased violent crime rates. A local newspaper conducted a computer-assisted analysis of

every autopsy performed in Maricopa County (Phoenix area) in 2004. The research on death by methamphetamine revealed that 4 in 10 murder victims had methamphetamine in their blood. The data for the first 6 months of 2005 revealed that 38 of 115, or 1 in 3 murder victims, had methamphetamine in their blood.

In the first 6 months of 2005, 49 people in the Phoenix area died of methamphetamine overdoses, methamphetamine-related heart attacks, and hemorrhages. The Maricopa County Chief Toxicologist stated, “Deaths from methamphetamine use have been on a very steady rise for about five years or so.” Thirty-four of the 38 Phoenix murder victims who died with methamphetamine in their systems through June 2005 were of Latino descent.

According to the Phoenix Police Department and the Maricopa County Medical Examiner’s Office, 90 percent of suspects ($n=30$) shot by Phoenix police over an 18-month period ending June 2005 had methamphetamine in their blood.

Methamphetamine is directly associated with increased crime rates according to many law enforcement officers. The Preliminary Semiannual Uniform Crime Report revealed a decrease of 0.5 percent in the number of violent crimes in the first half of 2005 compared with figures reported for the first 6 months of 2004. Six of the CEWG cities showed an increase in violent offenses reported to law enforcement in

2005. Phoenix ranked third behind Minneapolis and St. Louis.

Other Drugs

Unweighted DAWN *Live!* data for the first half of 2005 show 671 benzodiazepine cases and 190 muscle relaxant cases for pharmaceutical misuse (exhibit 9).

Treatment programs that serve adolescents report anecdotally that gamma hydroxybutyrate (GHB), methylenedioxymethamphetamine (MDMA or ecstasy), lysergic acid diethylamide (LSD) and Coricidin HBP remain party drugs.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

The predominant reported mode of transmission of HIV in Arizona continues to be men having sex with men, which accounts for 70.3 percent of reported new cases of HIV disease among males (HIV or AIDS) and 62.6 percent of all reported new cases of HIV disease in 2003. After homosexual sex, injection drug use (with or without homosexual sex) accounted for 20.1 percent and heterosexual exposure accounted for 11.1 percent of reported new cases of HIV disease during 2003.

For inquiries concerning this report, please contact Ilene Dode, EMPACT-Suicide Prevention Center, Inc., 2528 East Geneva Drive, Tempe, AZ 85282, Phone: 480-784-1514, ext. 1116, Fax: 480-967-3528, E-mail <idode@aol.com>.

Exhibit 1. DAWN ED Sample and Reporting Information in Phoenix: January–June 2005

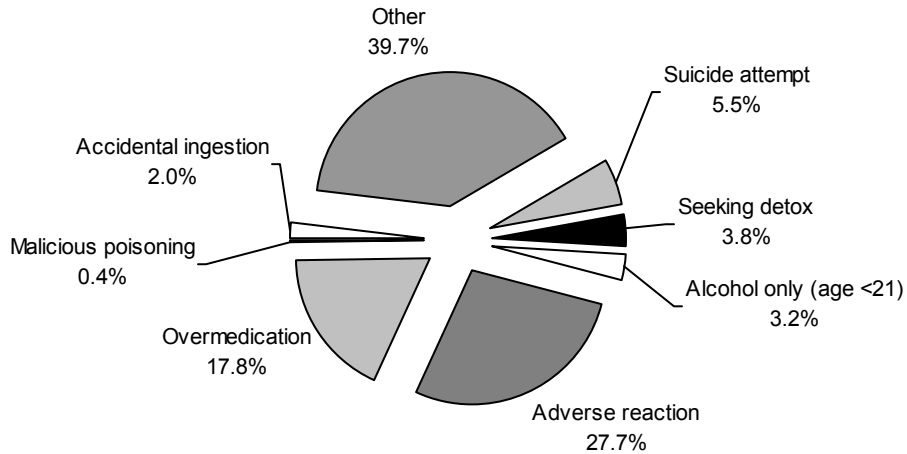
Total Eligible Hospitals ¹	No. of Hospitals in DAWN Sample ²	Total EDs in DAWN Sample	No. of EDs Reporting per Month: Completeness of Data (%)			No. of EDs Not Reporting
			90-100%	50-89%	<50%	
25	25	26	11–13	1–3	0	12–13

¹Short-term, general, non-Federal hospitals with 24-hour emergency departments based on the American Hospital Association Annual Survey.

²One hospital has more than one emergency department.

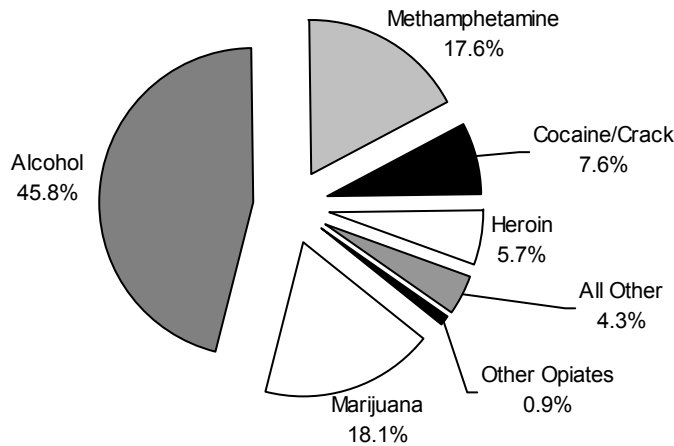
SOURCE: DAWN *Live!*, OAS, SAMHSA, updated 12/6–7, 2005

Exhibit 2. Drug-Related ED Visits in Phoenix, by Case Type (Unweighted¹): January–June 2005



¹The unweighted data are from 11–13 EDs reporting to DAWN in the first half of 2005. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted, and, therefore, are subject to change.
 SOURCE: DAWN Live!, OAS, SAMHSA, updated 12/6–7, 2005

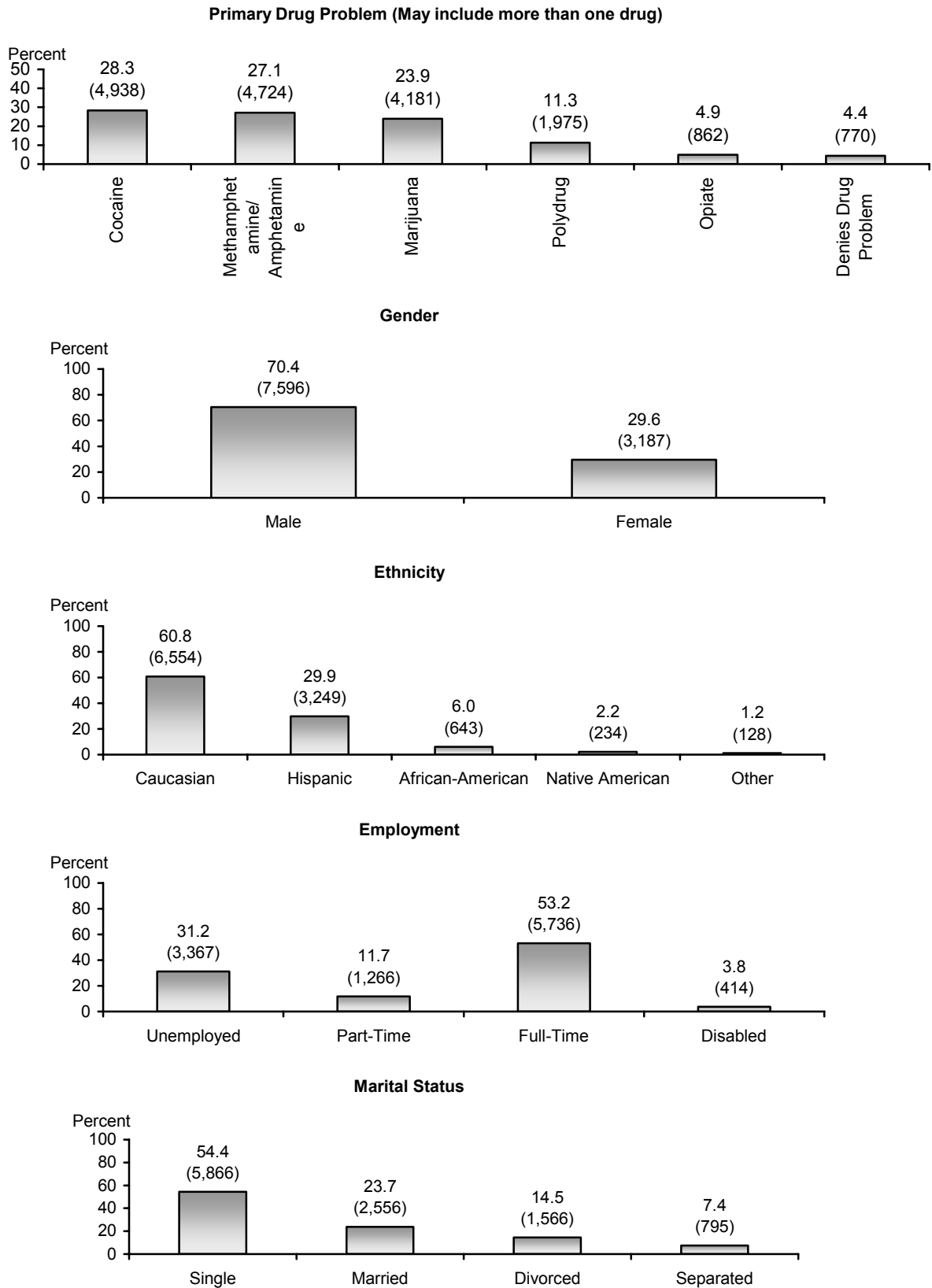
Exhibit 3. Primary Substances Used Among Arizona Treatment Admissions, by Percent: FY 2005



N=40,785

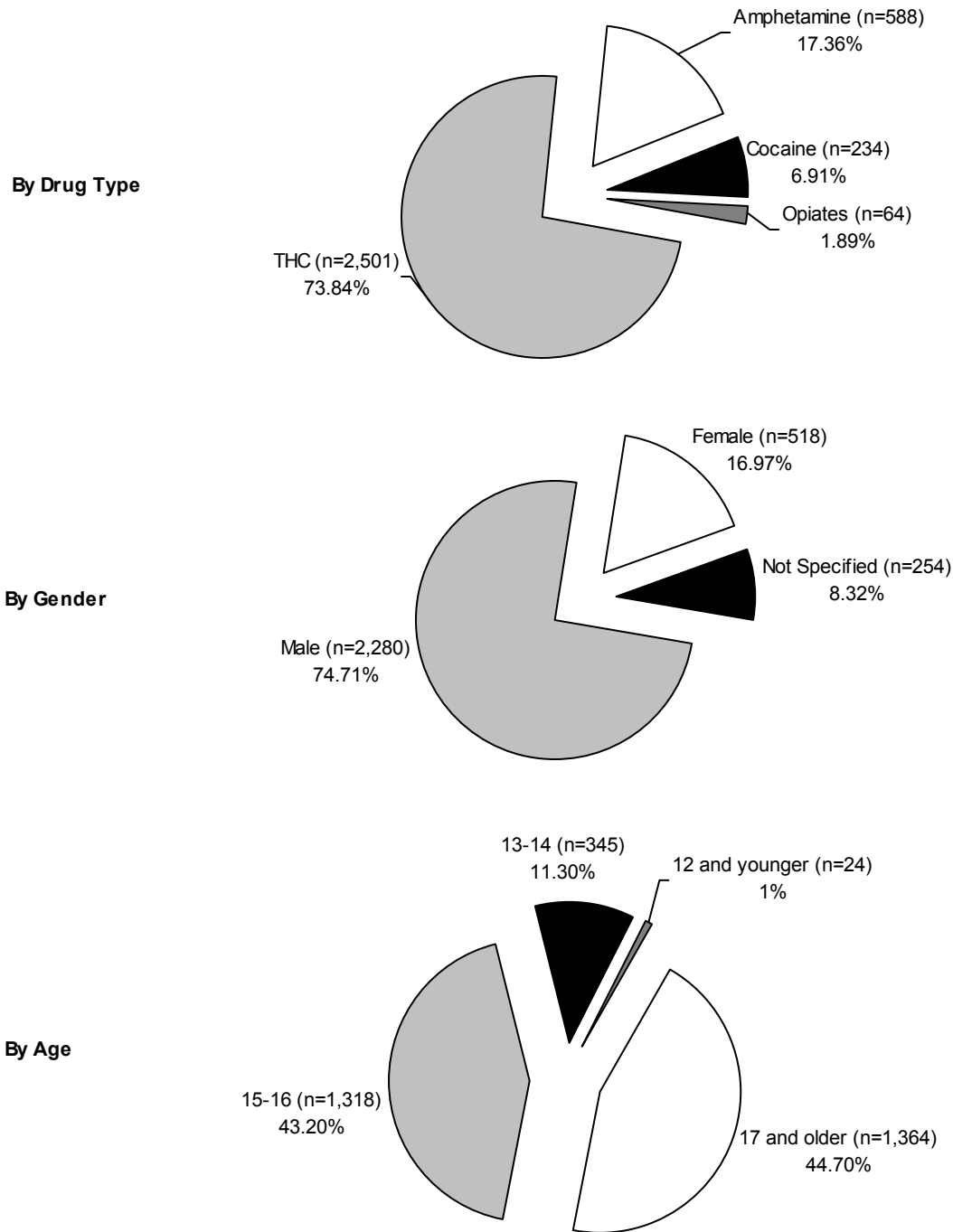
SOURCE: Arizona Department of Health Services, Division of Behavioral Health Services, Bureau for Substance Abuse Treatment and Prevention, November 30, 2005

Exhibit 4. Adult Deferred Prosecution Program Admissions for Selected Drugs in Phoenix: March 1, 1989–September 30, 2005



SOURCE: Adult Treatment and Assessment Screening Center (TASC) – Deferred Prosecution Program (Cumulative Statistical Report)

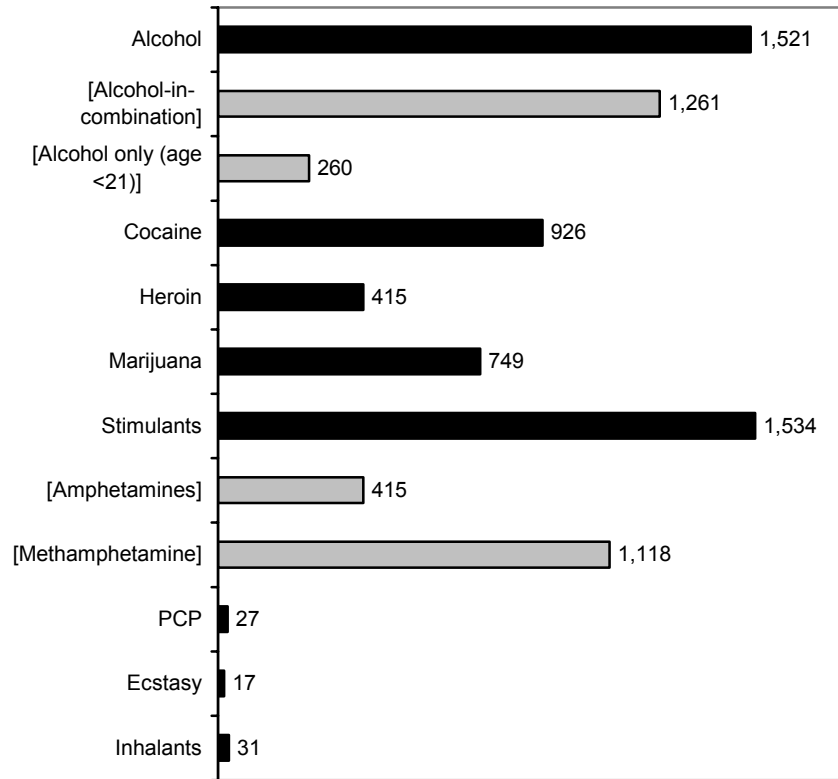
Exhibit 5. Positive Tests Among TASC Juvenile Clients, by Drug Type, Gender, Age, and Percent: April–September 2005



N=3,387

SOURCE: Treatment and Assessment Screening Center (TASC), Maricopa County Juvenile Probation

Exhibit 6. Number of Drug Reports in Drug-Related ED Visits in Phoenix, by Drug Category (Unweighted¹): January–June 2005



¹The unweighted data are from 11–13 EDs reporting to DAWN from January through June 2005. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted, and, therefore, are subject to change. SOURCE: DAWN *Live!*, OAS, SAMHSA, updated 12/6–7, 2005

Exhibit 7. Phoenix ED Patients, by Drug, Race/Ethnicity, and Percent (Unweighted¹): January–June 2005

Drug	White	Black	Hispanic	NTA ² /Not Documented
Cocaine	47.1	16.6	22.4	13.9
Heroin	63.4	1.9	21.9	12.8
Marijuana	58.9	10.9	17.4	12.8
Methamphetamine	61.4	4.9	18.7	15.0

¹The unweighted data are from 11–13 EDs reporting to DAWN from January through June 2005. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted, and, therefore, are subject to change.

²NTA=Not tabulated above (i.e., members of other racial/ethnic groups).

SOURCE: DAWN *Live!*, OAS, SAMHSA, updated 12/6–7, 2005

Exhibit 8. Drug Prices in Phoenix and Tucson: 2001 and 2005

Marijuana	2001		2005	
	Phoenix	Tucson	Phoenix	Tucson
Grams	NA ¹	NA	\$10–\$25	\$5–\$10
Ounce	\$75–\$150	\$65–\$105	\$75–\$150	\$65–\$105
Pound	\$500–\$750	\$400–\$600	\$500–\$750	\$400–\$600

Methamphetamine	2001		2005	
	Phoenix	Tucson	Phoenix	Tucson
Grams	NA	NA	\$80–\$100	NA
Ounce	\$300–\$600	\$500–\$900	\$600–\$800	NA
Pound	\$3,500–\$12,000 (higher price for ice)	\$3,800–\$6,000	\$7,000–\$9,600	NA
Kilogram	NA	NA	\$14,000–\$16,000	\$10,000–\$18,000

Cocaine	2001		2005	
	Phoenix	Tucson	Phoenix	Tucson
Rock (1/3 gram crack)	NA	NA	\$10–\$20	\$10–\$20
Crack (Ounce)	NA	NA	\$600–\$650	\$500–\$750
Crack (Pound)	NA	NA	\$7,500	NA
Eightball	\$100–\$140	\$80–\$130	\$80–\$120	\$80–\$130
Ounce	\$500–\$600	\$500–\$650	\$400–\$600	\$500–\$650
Kilogram	\$15,000–\$17,000	\$15,000–\$18,000	\$14,500–\$16,000	\$14,700–\$16,000

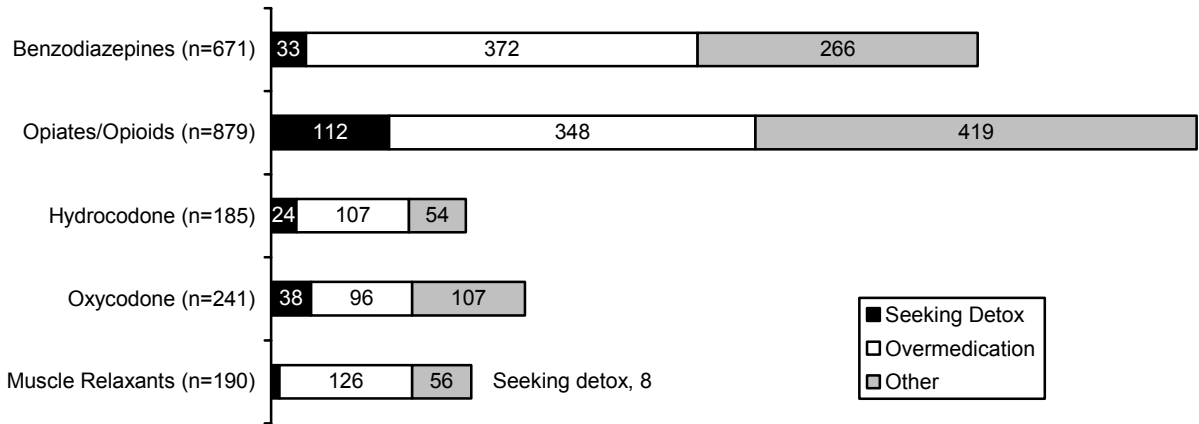
Heroin	2001		2005	
	Phoenix	Tucson	Phoenix	Tucson
“Paper” (1/4 gram)	\$20–\$30	\$20–\$25	\$10–\$15	\$20–\$25
Gram	\$70–\$100	\$60–\$110	\$40–\$47	\$50–\$110
Ounce	\$1,100–\$1,500	\$1,075–\$1,300	\$800–\$850	\$650–\$700
Kilogram	\$32,000–\$40,000	NA	\$28,000–\$35,000	\$32,000

Other Drugs	Dosage	Price
MDMA	1 tablet	\$20–\$30
OxyContin	80-mg tablet	\$20–\$80
Percocet	1 tablet	\$5
Vicodin ES	1 tablet	\$5
Valium	10-mg tablet	\$4
Lortab	10-mg tablet	\$5–\$6
Soma	1 tablet	\$2–\$5

¹NA=Not applicable.

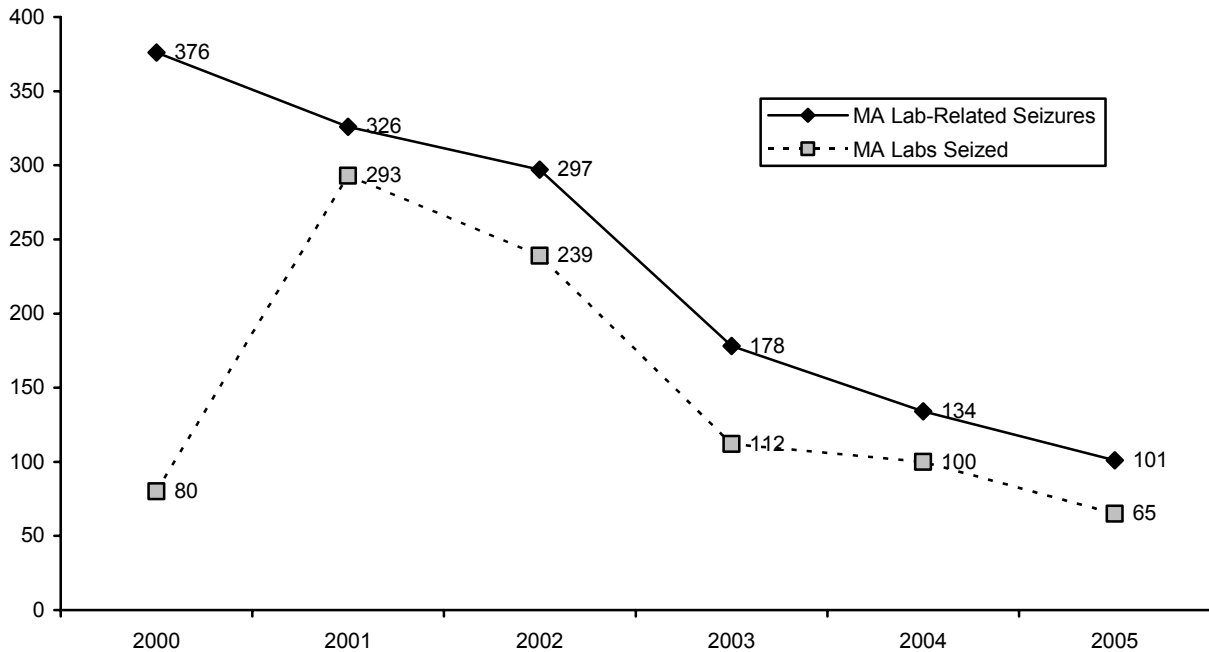
SOURCES: DEA Phoenix Division Offices, U.S. Customs Service, Arizona Department of Public Safety, Phoenix Police Department, Maricopa County Sheriff Department

Exhibit 9. Number of Drug Reports in Drug-Related ED Visits for Selected “Other Drugs,” by Case Type (Unweighted¹): January–June 2005



¹The unweighted data are from 11–13 EDs reporting to DAWN from January through June 2005. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted, and, therefore, are subject to change.
SOURCE: DAWN Live!, OAS, SAMHSA, updated 12/6–7, 2005

Exhibit 10. Methamphetamine (MA) Lab Incidents¹ in Arizona: 2000–2005



¹Includes labs, dumpsites, chemicals/glass/equipment.
SOURCE: Office of the Arizona Attorney General, Arizona Alliance for Drug Endangered Children (DEC), 2005

**Exhibit 11. Violent Offenses Related to Methamphetamine, as Reported to Law Enforcement in Arizona
Cities: 2004–2005**

City	2004	2005	Percent Change
Phoenix	4,767	5,221	9.5
Mesa	1,202	1,290	7.3
Glendale	643	683	6.2
Chandler	331	365	10.3
Tempe	473	523	10.6
Scottsdale	247	224	-9.3
Tucson	2,408	2,402	-0.2

SOURCE: Federal Bureau of Investigation, Department of Justice, Preliminary *Semiannual Uniform Crime Report*, December 19, 2005

Patterns and Trends in Drug Abuse in St. Louis

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ABSTRACT

St. Louis and St. Louis County law enforcement personnel continued to devote many resources to methamphetamine, and labs in rural areas continued to be a problem. Recent legislation to reduce access to pseudoephedrine-based cold medications may eventually reduce the clandestine lab activity, but this will have to be evaluated over a longer period of time. Preliminary figures for 2005 indicate that clandestine lab incidents have dropped more than 20 percent from the previous year. Jefferson County, just south of St. Louis, continued to be one of the most active areas for methamphetamine. Treatment admissions for heroin in the St. Louis area rose 65 percent from the first half of 2004 to the first half of 2005. During the same timeframe, admissions for the treatment of other opiates rose more than 52 percent. However, crack cocaine continued to be the major problem in the area. Marijuana indicators stabilized during this reporting period. Primary marijuana treatment admissions more than doubled between 1997 and 2001 and remained at this elevated level in the first half of 2005, increasing only 8.2 percent from the first half of 2004. Club drug use/abuse continued to be sparse and decreasing. In the St. Louis area, 5 percent of HIV cases had a risk factor of injection drug use, and another 5 percent were among men who have sex with men and also inject drugs. There has been increased interest in drug abuse epidemiology in the State, with recent grants from the Center for Substance Abuse Prevention supporting epidemiologic efforts. Preliminary results from an HIV surveillance project targeting IDUs in the St. Louis area are becoming available and promote understanding of this population.

INTRODUCTION

Area Description

The St. Louis metropolitan statistical area (MSA) includes approximately 2.7 million people and is the 18th largest MSA in the country. Most of the popula-

tion lives in the city of St. Louis and St. Louis County; others live in the surrounding rural Missouri counties of Franklin, Jefferson, Lincoln, St. Charles, and Warren. Recent redefinition of the MSA has resulted in an area that includes a total of eight Missouri counties and eight Illinois counties, reflecting the population sprawl since the last census. St. Louis City's population had continued to decrease to less than 350,000, many of whom are indigent and minorities. However, recent increases to the city's population have been noted. Violent crime increased in 2004, and it remains high in drug-trafficking areas. St. Louis County, which surrounds St. Louis City, has more than 1 million residents, many of whom fled the inner city. The county is a mix of established affluent neighborhoods and middle and lower class housing areas on the north and south sides. The most rapidly expanding population areas are in St. Charles and Jefferson Counties in Missouri and St. Clair and Madison Counties in southern Illinois, which have a mixture of classes and both small towns and farming areas. The populations in these rural counties total more than 800,000. The living conditions and cultural differences have resulted in contrasting drug use patterns.

Much of the information included in this report is specific to St. Louis City and County, with caveats that apply to the total MSA. Anecdotal information and some treatment data are provided for rural areas and for the State. Limited data are available for other parts of Missouri and most of the Illinois counties and offer a contrast to the St. Louis drug use picture.

Policy Issues

Methamphetamine production and use is a major concern for both law enforcement and the legislature. Small labs continue to place a hardship on law enforcement in terms of personnel and resources. The legislature has taken bold moves to require precursor drugs, such as pseudoephedrine, that are sold in local retail stores to be locked up or placed behind pharmacy counters. While this policy may now slow local producers, it does not address the major source of methamphetamine in the Midwest—Mexico, a fact that gets lost in the local problem of small “mom and pop” lab seizures. Illinois has recently passed similar legislation addressing access to pseudoephedrine. Attention to methamphetamine has masked ongoing problems with cocaine and marijuana and growing problems with opiates.

Missouri has been in a budget crisis for years, resulting in cuts in services, particularly in health services including drug treatment and mental health. Limited treatment continues to be available for drug abusers.

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The addiction model as understood through experience and research has shown that treatment services are cost effective to both society and the individual, yet the trend is to offer these services on a limited outpatient basis. The result is that some of these indicators cannot fully reflect the degree of use or abuse of the substances tracked.

While Missouri maintains its State Epidemiology Work Group (SEWG), an additional work group has been created as part of the Strategic Prevention Framework – State Incentive Grant (SPF-SIG) sponsored by the Center for Substance Abuse Prevention. Hopefully, these groups can be used to provide additional perspectives for future reports. In addition, there are a number of research projects being conducted in the area that may provide useful information about drug trends. For example, Dr. Dean Klinkenberg of the Missouri Institute of Mental Health is conducting a study of the St. Louis MSA as part of the Centers for Disease Control and Prevention’s National HIV Behavioral Surveillance System (NHBS). This study of injection drug users (IDUs) should provide insight to needle using and related behaviors among this hidden population.

Data Sources

The sources used in this report are indicated below:

- **Emergency department (ED) drug reports data** were derived for 2004 from the Drug Abuse Warning Network (DAWN) *Live!* restricted-access online query system administered by the Office of Applied Studies (OAS), Substance Abuse and Mental Health Services Administration (SAMHSA). Eligible hospitals in the St. Louis area totaled 37; hospitals in the DAWN sample numbered 36, with the number of emergency departments in the sample totaling 38 (exhibit 1). During this 12-month period in 2004, between 15 and 18 EDs reported data each month. The completeness of data reported by participating EDs varied by month (exhibit 1). Exhibits in this paper reflect cases that were received by DAWN as of June 3, 2005; race/ethnicity data reflect cases that were received by DAWN as of April 14, 2005. All DAWN cases were reviewed for quality control. St. Louis was not included in DAWN in 2005. Data derived from DAWN *Live!* in 2004 represent drug reports in drug-related ED visits in St. Louis EDs. Drug reports exceeded the number of ED visits, since a patient could report use of multiple drugs (up to six drugs and alcohol). The DAWN *Live!* data are unweighted and, thus, are not estimates for the reporting area. These data cannot be compared to DAWN data from 2002 and before,

nor can preliminary data be used for comparison with future data. Only weighted DAWN data released by SAMHSA can be used for trend analysis. A full description of the DAWN system can be found at the DAWN Web site: <<http://dawn.info.samhsa.gov>>.

- **Drug treatment data** were derived from the Treatment Episode Data Set (TEDS) database through the first half of 2005. Private treatment programs in St. Louis County provided anecdotal information.
- **Heroin price and purity information** was provided by the Drug Enforcement Administration (DEA), Domestic Monitor Program (DMP), through 2004.
- **Drug-related mortality data** were provided by the St. Louis City Medical Examiner’s Office through 2004.
- **Intelligence data** were provided by the Missouri Highway Patrol and the DEA.
- **Data on drug seizures** were provided by the National Forensic Laboratory Information System (NFLIS) for 2004 and for fiscal year (FY) 2005.
- **Toxicology laboratory drug testing** results for probation and parole offenders were provided by the Missouri Department of Corrections for 2004.
- **Human immunodeficiency virus (HIV), acquired immunodeficiency syndrome (AIDS), and sexually transmitted disease (STD) data** were derived from the HIV Vaccine Trials Unit at Saint Louis University and the St. Louis Metropolitan Health Department and AIDS Program.

DRUG ABUSE PATTERNS AND TRENDS

Cocaine indicators are stable in St. Louis. While methamphetamine has become a prominent drug of abuse in other cities and in the rural areas of Missouri, cocaine has retained its dominance in the St. Louis urban area. Possible reasons for this situation include racial differences, with Caucasians using methamphetamine and African-Americans using cocaine, and the strong influence of the distribution networks. The distribution of cocaine and heroin is primarily conducted by African-Americans. Methamphetamine is imported into St. Louis from Mexico or produced locally in the rural areas of the county and State.

Two types of heroin have continued to be available in the area, but the heroin is not as pure and is more expensive when compared with other cities. This Midwestern city is a destination market, with small entrepreneurial groups marketing the drug. Heroin is available in the suburbs and in some of the surrounding rural areas on a limited basis, thus illustrating that this drug is not confined to the lower socioeconomic strata in the city.

Drug education and prevention activities have continued at the community level. The National Council on Alcoholism and Drug Abuse (NCADA) and other local education programs target prevention of drug use in the area. Faith-based initiatives are being implemented. These groups are particularly active in the surrounding counties of St. Louis. The poor city economy continues to foster drug abuse and distribution. Marijuana continues to be a very popular drug of abuse among younger adults. Gangs continue to be involved in the drug trade and related violence, with Latino, African-American, and Asian youth and young adults involved in these groups. Interdiction programs include Operation Jetway and Operation Pipeline.

While not reported separately, alcohol abuse and underage use of alcohol are community concerns. Many traffic accidents and violence against persons include alcohol use in the situation. In St. Louis, 17.4 percent of treatment admissions are for alcohol alone, with alcohol used in combination with other drugs in another 11.0 percent of the treatment admissions. In the unweighted DAWN ED data, underage alcohol use represented 6.5 percent of the “major substance of abuse” reports in 2004.

With the severe cuts in services in this State, the treatment admissions data, an important indicator of longer-term use of drugs, may not accurately reflect the severity of the drug abuse problem.

Cocaine/Crack

The St. Louis City/County Medical Examiner (ME) reported that cocaine-related deaths trended downward from 128 in 1994 to 38 in 2004 (exhibit 2a). Many of the recent deaths involved alcohol and other drugs.

For 2004, the unweighted DAWN *Live!* data indicated that patient ED reports for cocaine had the following characteristics: more than one-half (51.8 percent) were White, and 58.6 percent were older than 34. The top two reasons for the ED visit were seeking detoxification or overmedication. The dispositions

for most of these patient visits included referral to treatment, admission to the psychiatric unit, or discharge to home; only three resulted in immediate death.

Among treatment admissions for illicit drug abuse in the first half of 2005, the proportion for primary cocaine abuse reflected a 9.2-percent increase compared with the first half of 2004. Cocaine remained the most common primary drug of abuse among all admissions (27.5 percent), followed by marijuana (22.7 percent) and heroin (14.4 percent) (exhibit 2a). In the first half of 2005, males constituted 57.9 percent and females represented 42.1 percent of cocaine admissions. Admissions for African-Americans (72.6 percent) were almost three times the proportion for White cocaine abusers. Most of those admitted were age 35 or older (71.5 percent). Marijuana and alcohol were the most frequently cited secondary and tertiary drugs of abuse. Most persons entering treatment referred themselves (58.7 percent) or were referred by the courts (24.8 percent).

Although the DEA’s emphasis has shifted from cocaine to methamphetamine and heroin, law enforcement sources, the DEA, and street informants continued to report high quality, wide availability, and low prices for cocaine. Cocaine is used and most available in the urban areas. In 2004, powder cocaine grams sold for \$100–\$125; purity averaged 70 percent (exhibit 2b). Crack prices remained at \$20 per rock on the street corner. All cocaine in St. Louis is initially in the powder form and is converted to crack for distribution. Cocaine was readily available on the street corner in rocks or grams. The price of a gram of crack in Kansas City was lower than in St. Louis (at \$100–\$120). The “rock” price is the same in smaller cities outside St. Louis when it is available, but the gram price is higher.

NFLIS data indicated that 2,389 (41.5 percent) drug items analyzed in 2004 were cocaine. Data from FY 2005 indicated that 2,703 cocaine items were analyzed, but the percentage of items identified as cocaine was relatively stable at 41.7 percent of all items. The Missouri Department of Corrections probation and parole toxicology data indicated that the Eastern Region, which includes the St. Louis area, had the highest percentage (31.2 percent) of positive tests for cocaine among this population. This compares to 21.9 percent of positive results for cocaine statewide in 2004 for the probation and parole population tested.

The continued use of cocaine has potentially severe long-term consequences by contributing to the spread

of STDs through multiple partners. Crack cocaine is considered to be a primary risk for HIV in many research trials.

Most cocaine users smoke crack cocaine, though some use powder cocaine. Only IDUs who combine cocaine and heroin (“speedball”) use cocaine intravenously. Younger users tend to smoke cocaine. Poly-drug use is also evident in the treatment data. The reported use of marijuana, heroin, and alcohol in addition to cocaine suggests this trend will likely continue.

Heroin

Heroin-related deaths reported by the St. Louis City/County ME leveled off in recent years. In 2004, there were 64 heroin-related deaths (exhibit 2a). Statewide heroin deaths caused by overdose alone were not much higher, because heroin purity is higher in the St. Louis area than in other cities in Missouri. While available primarily in the St. Louis and Kansas City areas, heroin is found among small pockets of IDUs who reside in small university towns throughout the State. More heroin deaths occurred in St. Louis County than in the inner city in 2004 (32 vs. 20); these deaths support other reports that heroin use is increasing in the suburbs.

Heroin consistently appears in all indicators (exhibit 2a). Unweighted data accessed from DAWN *Live!* on heroin ED reports for 2004 show that these patients were 60.9 percent White; 28.8 percent were age 18–24.

While heroin treatment admissions increased dramatically as a proportion of all admissions between 1996 and 2000, they leveled off in 2001–2003. In the first half of 2005, admissions were 65 percent higher than during the first half of 2004. When queried, private treatment programs stated that 25 percent of their admission screens were for heroin abuse, but admission depended on “ability to pay.” Some heroin abusers in need of treatment utilize “private pay” methadone programs. Rapid detoxification, using naltrexone, is still a treatment option at private hospitals, but it is expensive. About 35.0 percent of heroin admissions were younger than 25 in 2004, compared with only 27.6 percent in the first half of 2005. Of all heroin admissions, intravenous use was the primary method of administration in St. Louis County, but inhalation was more popular among admissions in St. Louis City. The increased availability of higher purity heroin has led to a wider acceptance of the drug in social circles. One of the reasons for its acceptance is that it does not have to be injected to get the desired effects.

In the first half of 2005, males accounted for 62.1 percent and females represented 37.9 percent of admissions. Admissions for African-Americans (50.5 percent) were almost the same as those for White heroin abusers (48.3 percent). Most of those admitted were age 35 or older (42.4 percent). Cocaine and marijuana were the most frequently cited secondary and tertiary drugs of abuse. Most persons entering treatment referred themselves (61.6 percent) or were referred by the courts (26.7 percent).

A steady supply of Mexican heroin remains available. The DEA has made buys of heroin in the region in addition to buys through the DMP. Mexican black tar heroin showed a peak of 24.0 percent purity in 1998; purity dropped to 15.1 percent in 2004. South American (Colombian) heroin, which is also white, is of poorer quality, averaging around 10 percent. Most heroin is purchased in aluminum foil or the number-5 gel capsule (one-tenth-gram packages of heroin in plastic wrap and aluminum foil) for \$10 (exhibit 2b).

Heroin costs were about \$2.93 per milligram for Mexican heroin in the 2004 DMP analysis, an increase of \$1.03 per milligram. The city is an end-user market and is dependent on transportation of the heroin from points of entry into the Midwest. The wholesale price remains at \$250–\$600 per gram. On street corners, heroin sells for \$250 per gram. Most business is handled by cellular phone, which has decreased the seller’s need to have a regular location. Runners continue to be used as “middlemen” between users and sellers to deliver small quantities of drug. In St. Louis and other smaller urban areas, small distribution networks sell heroin.

NFLIS reported that 10.0 percent of the items analyzed in 2004 were heroin. FY 2005 data indicated that this percentage is approximately the same (10.5 percent) and that 683 items analyzed had been identified as heroin. The Missouri Department of Corrections probation and parole toxicology data indicated that the Southeast Region had the highest percentage (18.5 percent) of positive tests for opiates among this population. This compares with 12.2 percent of positive results for opiates statewide in 2004 for the probation and parole population tested. While heroin is present in this region, it is believed that this high percentage may reflect the abuse of narcotic analgesics in this area. Preliminary data from the department does not permit determination of the type of opiate at this time. Results for the Eastern Region indicated that 14.9 percent of the probation and parole population tested in this region produced positive results for opiates.

Kansas City's heroin supply differs from that of St. Louis. Most heroin in Kansas City is black tar and is typically of poorer quality. The supply is consistent, and a \$10 bag of heroin is available. However, a Geo-Probe conducted in March 2004 produced exhibits with an average purity of 54.6 percent and an average cost of \$0.50 per milligram. Heroin has also become available in the smaller, more rural cities of Springfield and Joplin, each of which has a small IDU population that uses heroin and methamphetamine.

Other Opiates/Narcotics

Other opiates represent slightly more than 1 percent of all treatment admissions, but such admissions increased 52.7 percent from the first half of 2004 to the first half of 2005. Methadone remains available, which is probably a result of prescription abuse as well as patient diversion. NFLIS data for FY 2005 indicated that 1.9 percent of items analyzed were opiates other than heroin.

The unweighted DAWN data for 2004 accessed from DAWN *Live!* indicated 797 reports for other opiates; 40 percent were for overmedication and only 18 percent were for patients seeking detoxification. Reasons for the ED visit were not delineated for 40 percent of the reports.

OxyContin (a long-lasting, time-release version of oxycodone) abuse remained a concern for treatment providers and law enforcement officials. Prescription practices are closely monitored for abuse, and isolated deaths have been reported, but no consistent reports are available on the magnitude of this potential problem. OxyContin costs \$40 for an 80-milligram tablet on the street (exhibit 2b). The DAWN data indicated 247 oxycodone reports in 2004, with 38 percent of these patients coming to the ED because of overmedication.

The use of hydromorphone (Dilaudid) remained common among a small population of White chronic addicts. The drug costs \$30–\$75 per 4-milligram pill.

Marijuana

According to unweighted data accessed from DAWN *Live!*, marijuana ED reports in 2004 ($n=1,230$) represented 20 percent of the total ED reports for major substances of abuse. More than 45 percent of the patients who reported marijuana in 2004 were younger than 25.

Marijuana treatment admissions more than doubled from 1997 (1,573 admissions) to 2001 (3,210 admissions) and remained stable in 2003 and 2004, when

they represented 27.2 percent and 25.0 percent of all admissions, respectively (exhibit 2a). Admissions in the first half of 2005 accounted for 22.7 percent and represented an increase of 8.2 percent over the first half of 2004. Marijuana, viewed by young adults as acceptable to use, is often combined with alcohol, and alcohol was identified as the most popular secondary drug of abuse (29.4 percent of admissions). Almost two-thirds (65.2 percent) of persons admitted to treatment were referred by the courts. The 25-and-younger age group accounted for 58.7 percent of primary marijuana treatment admissions in the first half of 2005. Some of the prevention organizations report a resurgence in marijuana popularity and a belief by users that it is not harmful. Prevention programs are targeting this belief through education.

Because of the heroin, cocaine, and methamphetamine abuse problems and the recent “club drug” scare in St. Louis, law enforcement officials have focused less attention on marijuana abuse. Limited resources require establishing enforcement priorities. Often, probation for marijuana offenders requires participation in treatment for younger users who do not identify themselves as drug dependent. In focus groups with African-American adults from various social groups, more than one-half identified regular use of marijuana but did not identify this use as problematic. This ethnographic information supports the idea of cultural acceptance of marijuana use. A college town made possession of small quantities of marijuana a misdemeanor, further supporting these beliefs.

Marijuana is available from Mexico or domestic indoor growing operations. Indoor production makes it possible to produce marijuana throughout the year. In addition to the Highway Patrol Pipeline program, which monitors the transportation of all types of drugs on interstate highways, Operations Green Merchant and Cash Crop identify and eradicate crops. Much of the marijuana grown in Missouri is shipped out of the State. NFLIS reported that 41 percent of the drug items analyzed in FY 2005 were marijuana, similar to the proportion in 2004.

The Missouri Department of Corrections probation and parole toxicology data indicated that the Central Region had the highest percentage (50.8 percent) of positive tests for marijuana among this population. This compares to 44.9 percent of positive results for marijuana statewide in 2004 for the probation and parole population tested. Results for the Eastern Region indicated that 46.1 percent of the tested probation and parole population in this region produced positive results for marijuana. Marijuana was the most frequently identified substance statewide.

Stimulants

Methamphetamine, along with alcohol, remained a primary drug of abuse in both the outlying rural areas and statewide. (Most of Missouri, outside of St. Louis and Kansas City, is rural.) Methamphetamine continued to be identified as a huge problem in rural communities, with a focus on “mom and pop” box labs and intergenerational use of the drug.

In 2004, unweighted DAWN *Live!* data show methamphetamine ED reports totaled 286 (exhibit 2a). Ninety-two percent were White, with no predominant age group.

Methamphetamine (“crystal” or “speed”) was found at very low levels in city indicators in 1995, but reported use has slowly increased over the last 8 years. In rural areas, methamphetamine appeared regularly in the treatment data, but methamphetamine has been identified as a problem in all parts of the State. The urban, street-level distributors in St. Louis deal in cocaine, so methamphetamine use is not as widespread in the St. Louis area; this could indicate differences in dealing networks and access to locally produced drugs (“mom and pop” local production). However, an increase in availability and purity of Mexican methamphetamine and a growth in Hispanic groups in the St. Louis metropolitan area may change this trend. If pseudoephedrine-access laws are effective, these sources may replace “homegrown” supplies. Methamphetamine use is reported in the gay male and club communities in the city. An increase in treatment admissions may signal this change. Traditionally, cocaine and methamphetamine use have been split along racial lines in the State. The number of methamphetamine treatment admissions in St. Louis was 298 (4.6 percent) in the first half of 2005, an increase of 17.8 percent from the first half of 2004. In rural treatment programs, methamphetamine was the drug of choice after alcohol.

In the first half of 2005, males entering treatment were outnumbered (46.6 percent) by females (53.4 percent). Admissions for African-Americans were almost nonexistent (1.4 percent), as most admissions were White methamphetamine abusers (98.3 percent). Most of those admitted were age 26–34 (37.9 percent), reflecting a younger population of users than that of cocaine and heroin abusers entering treatment but slightly older than the most frequently reported age group entering for marijuana abuse. Marijuana and alcohol were the most frequently cited secondary and tertiary drugs of abuse. Persons entering treatment were most often referred by the courts (41.3 percent) or self-referred (36.2 percent).

The Midwest Field Division of the DEA decreased its cleanup of clandestine methamphetamine labs after training local enforcement groups; 2,788 incidents were reported for 2004 by the Missouri State Highway Patrol. Preliminary data for 2005 indicate that recent legislation has had an impact on the number of clandestine lab incidents, which fell to approximately 2,212. This decrease in incidents was attributed to Senate Bill 10, the pseudoephedrine control law signed into law in June and in effect on July 14, 2005. During the first full month of implementation, methamphetamine incidents (chemicals, glassware, dumpsites, and operational labs) decreased 54 percent compared with the same month of 2004. The intensity of these law enforcement efforts is based on the availability of funds for local police departments to clean up box labs under Community Oriented Policing Service (COPS) funding. Thefts of anhydrous ammonia continued to be identified as an issue in rural areas.

In the current methamphetamine scene, Hispanic traffickers, rather than the old network of motorcycle gangs, are the predominant distributors. Shipments from “super labs” in the Southwest are trucked in via the interstate highway system. This network is in contrast to the local “mom and pop” labs that produce personal quantities for family and friends. These local labs tend to use the Nazi method of production, with an output of 60 percent of the quantity of the starting products, although the red phosphorus method has recently been seen more frequently. Purity of the drugs produced by these labs and the amount of finished product depends on the experience/attentiveness of the “cooker” but tends to be higher (greater than 80 percent). Most of the available methamphetamine is produced in Mexico and trafficked through the Hispanic traffickers, with less pure methamphetamine obtained through this source. While much of the law enforcement resources and personnel are directed at the local production, the majority of methamphetamine that is available in the area comes through these Hispanic organizations. As the purity increases among the methamphetamine obtained from these groups and precursor drugs are less available, less local production may be seen. Some crystallized methamphetamine has been noted in the local market, usually indicating increased purity in the product.

The term “ice” has been applied to all methamphetamine with a crystalline appearance. Methamphetamine sold for \$700–\$1,300 per ounce in St. Louis and for as little as \$100–\$120 per gram in some areas. Methamphetamine was represented in only 1.5 percent of the NFLIS analysis in 2004 and in only 0.5 percent in FY

2005. The Missouri Department of Corrections probation and parole toxicology data indicated that the Southwest Region had the highest percentage (35.7 percent) of positive tests for amphetamines among this population. This compares to 16.2 percent of positive results for amphetamines statewide in 2004 for the probation and parole population tested. Results for the Eastern Region indicated that only 3.3 percent of the probation and parole population in this region produced positive results for amphetamines. While the data do not distinguish among types of amphetamines, most of the amphetamine found in Missouri is in the form of methamphetamine.

Use of methamphetamine and its derivatives has become more widespread among high school and college students, who do not consider these drugs as dangerous as others. Because methamphetamine is so inexpensive and appeals to a wide audience, it is likely that its use will continue to spread.

Depressants

Benzodiazepine abuse by prescription continues. In 2004, unweighted DAWN *Live!* data showed 808 benzodiazepine ED reports, with slightly more than one-half of the patients indicating overmedication. In the 2004 ED data, the ratio of benzodiazepines to opiates/opioid drugs was 1.0, indicating a significant degree of usage of this class of drug. Depressants accounted for 1.1 percent of items identified in the FY 2005 NFLIS data.

The remaining few private treatment programs often provide treatment for benzodiazepine, antidepressant, and alcohol abusers. Social setting detoxification has become the treatment of choice for individuals who abuse these substances. Since many of the private treatment admissions are polysubstance abusers, particular drug problems are not clearly identified.

Hallucinogens

Over the years, lysergic acid diethylamide (LSD) has sporadically reappeared in local high schools and rural areas. Blotters sell for \$5–\$7 per 35-microgram dose (exhibit 2b). Unweighted DAWN *Live!* data for 2004 showed a small number of LSD ED reports: 9.

Phencyclidine (PCP) has been available in limited quantities in the inner city and has generally been used as a dip on marijuana joints. While PCP is not seen in quantity, it remains in most indicator data, including ED reports (29 in unweighted 2004 DAWN *Live!* data), police exhibits, and as a secondary drug in ME data. Few items (0.1 percent) were identified in FY 2005 as PCP by NFLIS. The Missouri De-

partment of Corrections probation and parole toxicology data indicated that the Western Region had the highest percentage (14.7 percent) of positive tests for PCP among this population. This compares to 4.1 percent of positive results for PCP statewide in 2004 for the probation and parole population tested. Results for the Eastern Region indicated that only 4.5 percent of the probation and parole population in this region produced positive results for PCP. Most of the users of this drug in the inner city are African-American.

Club Drugs

Unweighted DAWN *Live!* ED data for 2004 showed few reports of methylenedioxymethamphetamine (MDMA)—only 27. Only 1.8 percent of items identified in the FY 2005 NFLIS were this substance. Reports of other club drugs were almost non-existent; one ketamine and three gamma hydroxybutyrate (GHB) ED reports occurred in 2004. MDMA is less available at dance parties and costs \$20–\$30 per tablet. Most of the reports about MDMA abuse are anecdotal or are part of a polydrug user's history. Public treatment programs reported no admissions for MDMA.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

HIV

HIV seropositivity among IDUs remained low in St. Louis. While the predominant number of cases occurs among men who have sex with men (MSM), the largest increase was found among young African-American females, who were infected through heterosexual or bisexual contact, and young homosexual African-American males. As a result, increased specialized minority prevention efforts have been initiated.

Of the total 6,672 persons living with HIV disease identified through June 2004, 5 percent were IDUs and 5 percent involved men who have sex with men and are also IDUs (MSM/IDUs) (exhibit 3). The number of infected African-Americans was increasing disproportionately among males and females.

HIV Research

Saint Louis University has continued research on HIV prevention vaccines. Most of the prevention vaccine trials have been Phase I trials in low-risk individuals, and MSM and high-risk women in the United States and high-risk heterosexuals in the Caribbean are being recruited for a new expanded Phase II trial in 2005. Another Phase II trial is slated to begin in 2006.

STDs and Hepatitis C

A resurgence of syphilis among MSM has led to increased surveillance and targeted prevention programs to this population. Rates of gonorrhea and chlamydia remain stable and high in the urban STD clinics. St. Louis ranks third in the country for gonorrhea, with cases remaining at approximately 1,000 per year, and second for chlamydia. HIV and syphilis/gonorrhea rates are high in neighborhoods known to have high levels of drug abuse, underscoring the concept of assortative mixing in cohorts. Inconsistent reporting of hepatitis C has made estimation of the problem and tracking of hepatitis C cases difficult.

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Exhibit 1. St. Louis DAWN ED Sample and Reporting Information: 2004

Total Eligible Hospitals ¹	No. of Hospitals in DAWN Sample	Total EDs in DAWN Sample ²	No. of EDs Reporting per Month: Completeness of Data (%)			No. of EDs Not Reporting
			90–100%	50–89%	<50%	
37	36	38	15–18	0–2	0–2	20–23

¹Short-term, general, non-Federal hospitals with 24-hour emergency departments based on the American Hospital Association Annual Survey.

²Some hospitals have more than one emergency department.

SOURCE: DAWN *Live!*, OAS, SAMHSA, updated June 3, 2005

Exhibit 2a. Indicators for Cocaine, Heroin, Marijuana, and Methamphetamine in St. Louis: 1996–2005

Indicator	Cocaine	Heroin	Marijuana	Methamphetamine
Number of Deaths by Year				
1996	93	51	NA ¹	9
1997	43	67	NA	11
1998	47	56	NA	9
1999	51	44	NA	4
2000	66	47	NA	9
2001	75	20	NA	3
2002	76	50	NA	–
2003	78	61	NA	–
2004	38	64	NA	–
DAWN <i>Live!</i> ED Data—Unweighted Data ²				
Number of Reports (2004)	1,702	601	1,230	286
Gender of Patients (%) (2004)				
Male	63.3	69.2	63.3	56.6
Female	36.7	30.8	36.7	43.4
Age (%) (2004)				
12–17	<1	<1	–	0
18–24	14.0	30.3	45.0	38.1
25–34	27.4	30.9	23.5	30.8
35 and older	58.6	38.8	31.5	31.1
Race (%) (2004)				
White	51.8	60.9	68.6	91.6
African-American	45.1	34.4	27.5	4.2
Hispanic	0.4	0.8	0.6	0.7
Other/unknown	2.7	3.8	3.4	3.4
Treatment Admissions Data				
Percent of All Admissions (2004)	29.1	10.4	25.0	4.6
Percent of All Admissions (1H 05)	27.5	14.4	22.7	4.6
Gender (%) (1H 05)				
Male	57.9	62.1	72.5	46.6
Female	42.1	37.9	27.5	53.4
Age (%) (1H 05)				
12–17	1.5	0.7	25.2	3.7
18–25	7.1	26.9	33.5	26.8
26–34	19.9	30.0	24.9	37.9
35 and older	71.5	42.4	16.4	31.6
Race/Ethnicity (%) (1H 05)				
White	26.6	48.3	39.3	98.3
African-American	72.6	50.5	59.4	1.4
Hispanic	1.8	1.8	1.4	1.7
Route of Administration (%) (1H 05)				
Smoking	91.8	2.0	97.7	53.7
Intranasal	5.1	36.5	0.4	15.1
Injecting	1.4	59.9	0.1	28.5
Oral/other	1.7	1.6	1.8	2.7

¹NA=Not applicable.

²Unweighted data are from 15–18 St. Louis EDs reporting to DAWN. All DAWN cases were reviewed for quality control, and, therefore, are subject to change. St. Louis was not covered in DAWN in 2005.

SOURCES: St. Louis City/County Medical Examiner's Office; DAWN *Live!*, OAS, SAMHSA, updated April 14 and June 3, 2005; TEDS database.

Exhibit 2b. Other Combined Indicators for Cocaine, Heroin, Marijuana, and Methamphetamine in St. Louis: 2002–2005

Indicator	Cocaine	Heroin	Marijuana	Methamphetamine and Other Drugs
Multisubstance Combinations	Older users combine with heroin, alcohol	Older users combine with cocaine, alcohol	Alcohol	Marijuana commonly used in combination, alcohol use common
Market Data (2004)	Powder \$100–\$125/g, 70% pure; Crack \$20/rock, 50–90% pure; 8-ball \$300	\$20/cap or foil; \$10 per number-5 gel capsule; \$3.17/mg pure—depending if MBT, SA, SWA; \$250–\$600/g, 13.9–23.2% pure	Sinsemilla \$700–\$1,800/lb, 20% THC; Imported \$2,000–\$4,000/lb	Methamphetamine \$100–\$120/g, Mexican (20–30%) and local (70–80% pure); hydromorphone \$30–\$50/4-mg pill; LSD blotters \$5–\$7/35 microgram, OxyContin \$40 per 80-mg pill
Qualitative Data	Readily available, urban choice	Younger users, 1/3 younger than 25, growing presence	Readily available, younger users in treatment	Rural/suburban users of amphetamine
Other Data of Note	N/R ¹	Primarily Mexican black tar; young users smoke/snort	N/R	Methamphetamine lab seizures plateaued; producers are super-labs—controlled by Hispanic groups; mom and pop labs

¹N/R=Not reported.

SOURCES: DEA; client ethnographic information

Exhibit 3. Persons Living with HIV Disease in St. Louis Metropolitan Area by Exposure Category, Gender, Race/Ethnicity, and Age: Year-to-Date and Cumulative Totals Reported Through June 2004

Category	HIV-Positive Test Results			
	Jan 2004–June 2004		Cumulative Through June 2004	
	Number	Percent	Number	Percent
Exposure Category				
MSM	61	50.0	4,583	70.0
IDU	6	5.0	301	5.0
IDU/MSM	3	2.0	319	5.0
Hemophilia	0	0.0	58	1.0
Heterosexual	12	10.0	920	14.0
Blood transfusion	0	0.0	34	0.2
Perinatal	0	0.0	41	1.0
Unknown	41	33.0	416	6.0
Total	123		6,672	
Gender and Race/Ethnicity				
Male				
White	40	33.0	2,914	45.0
African-American	62	51.0	2,582	40.0
Hispanic	1	0.0	79	1.0
Other	1	0.0	19	0.0
Unknown	0	0	208	3.0
Female				
White	4	3.0	170	2.0
African-American	14	12.0	671	10.0
Hispanic	2	0.0	15	0.0
Other	0	0.0	13	0.0
Age				
12 and younger	0	0.0	53	1.0
13–19	5	4.0	160	2.4
20–29	39	32.0	1,644	25.2
30–39	30	24.0	2,799	43.0
40–49	41	33.0	1,332	20.4
50 and older	8	7.0	522	8.0
Unknown	0	0	162	2.0
Total	123		6,672	

SOURCE: St. Louis Metropolitan AIDS Program

Drug Abuse Patterns and Trends in San Diego County, California

Steffanie Strathdee, Ph.D.,¹ and Robin Pollini, Ph.D.²

ABSTRACT

Methamphetamine was the primary drug of abuse for one-half (50.2 percent) of all drug treatment admissions (excluding alcohol) in San Diego County in the first half of 2005. Methamphetamine was also the drug most commonly cited in DAWN ED reports (31.4 percent) involving major illicit drugs from January 1 to June 30, 2005, and in adult arrestee monitoring programs in 2004 (43 percent). Heroin was the primary drug of abuse for more than one in five (22.8 percent) treatment admissions (excluding alcohol) in the first half of 2005. The majority (83.4 percent) of those admitted for heroin treatment in San Diego cited injection as their primary route of administration, representing 72.5 percent of all primary admissions who injected drugs. However, heroin (12.4 percent) ranked behind methamphetamine and marijuana in DAWN ED reports in the major illicit drug category. Treatment admissions for primary use of 'other opiates' (e.g., hydrocodone, oxycodone) remained low at 2.3 percent (excluding alcohol admissions), but they have been increasing over time. The number of ED reports attributed to these opioid drugs (n=426) exceeds reports for both heroin (n=263) and cocaine (n=318). Cocaine treatment admissions continued their slow decline in the first half of 2005.

INTRODUCTION

Area Description

More than 2.8 million people resided in San Diego County in 2000; 55.0 percent of the county's residents were White, 26.7 percent were Hispanic, 9.1 percent were Asian, and 5.5 percent were African-American (exhibit 1). By 2005, the population had grown to an estimated 3.1 million. Whites made up a smaller proportion of the population in 2005 (51.6 percent), while the proportion of Hispanics and Asians increased to 28.8 percent and 10.3 percent, respectively. The

median age of county residents in 2005 was 34. Household income (adjusted for inflation) increased by 10.2 percent between 2000 and 2005, from \$47,360 to \$52,192.

San Diego shares 80 miles of border with Mexico and, along with neighboring Imperial County, forms a principal transshipment zone for drugs smuggled from Mexico, including cocaine, marijuana, heroin, and methamphetamine. Methamphetamine continues to be the major drug of concern in the area, now accounting for one-half of all drug treatment admissions in San Diego County. Methamphetamine also is the most common drug detected among arrestees in San Diego County and reported in drug-related emergency department cases.

Data Sources

- **Forensic laboratory data** were provided by the National Forensic Laboratory Information System (NFLIS), Drug Enforcement Administration (DEA), for fiscal year (FY) 2005. There were 16,364 drug items analyzed by county laboratories in FY 2005.
- **Treatment data** were provided by the California Alcohol and Drug Data System (CADDSS). There were 6,925 admissions from January to June 2005, of which 1,373 were primary alcohol admissions. Treatment data provided by CADDSS in this report for 2001–2005 are not totally consistent with data accessed from San Diego County in prior reports.
- **Arrestee data** for juveniles and adults were obtained from the San Diego Association of Governments (SANDAG) Substance Abuse Monitoring (SAM) program, a regional continuation of the Federal Arrestee Drug Abuse Monitoring (ADAM) program that was discontinued in 2003. In 2004, 847 adult and 182 juvenile arrestees completed interviews for the SAM program, and 95 percent in each group provided a valid urine sample.
- **Emergency department (ED) data** for the first half of 2005 were accessed through Drug Abuse Warning Network (DAWN) *Live!*, which is a restricted-access online query system administered by the Office of Applied Studies (OAS), Substance Abuse and Mental Health Services Administration (SAMHSA). Seventeen of the 17 eligible hospitals in the San Diego metropolitan area are in the DAWN sample, with a total of 17 EDs in the sample. The data reported in this paper are not complete. During the 6-month

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period, between 9 and 10 EDs reported data to DAWN each month (exhibit 2). The data in this paper were updated by OAS on December 6–7, 2005; they are unweighted and are not estimates for the San Diego area. All DAWN cases are reviewed for quality control. Based on the review, cases may be corrected or deleted; therefore, the data reported in this paper are subject to change. The information derived from DAWN *Live!* for San Diego in the first half of 2005 represents 2,128 reports of illicit drugs (excluding alcohol), reports on nonmedical use of selected prescription-type drugs ($n=1,950$), and reports on alcohol-related visits (890). The number of drug reports in drug-related visits exceeds the number of ED visits, since a patient may report use of multiple drugs (up to six drugs and alcohol may be represented in DAWN). These data cannot be compared with DAWN data from 2002 and before, nor can these preliminary data be used for comparison with future data. Only weighted ED data released by SAMHSA can be used for trend analysis. A full description of the DAWN system can be found at <<http://dawninfo.samhsa.gov>>.

- **Drug price and purity data** are from the DEA’s San Diego and Imperial County Regional Narcotics Information Network, based on available data for 2005.
- **Acquired immunodeficiency syndrome (AIDS) data** were taken from the San Diego County Health and Human Services Agency (HHSA), “Acquired Immunodeficiency Syndrome (AIDS) Surveillance Report,” November 30, 2005. **Data on human immunodeficiency virus (HIV)** are from the HHSA “Human Immunodeficiency Virus (HIV) Surveillance Report,” November 30, 2005.

DRUG ABUSE PATTERNS AND TRENDS

Cocaine/Crack

Fifteen percent of drug items analyzed by forensic labs in FY 2005 were cocaine items (exhibit 3). Treatment admissions for primary cocaine abuse continued to decline slowly, accounting for 457 (8.2 percent) drug treatment admissions from January to June 2005, a 16.3-percent reduction from the first half of 2004 and a 37.3-percent reduction from the first half of 2001 (exhibit 4). More than two-thirds (68.7 percent) of those admitted for primary cocaine abuse in 2005 were male; 58.6 percent were African-American; and 75.5 percent were age 35 or older (exhibit 5). Most (82.9 percent) cited smoking as their primary route of administration (exhibit 6).

In contrast to treatment admissions data, a higher percentage of adult female arrestees tested positive for cocaine than male arrestees in 2004 (23 vs. 11 percent) (exhibit 7). The proportion of arrestees testing positive for cocaine in urinalysis gradually decreased among male arrestees from 2000 to 2004 (15 percent vs. 11 percent), while it fluctuated among female arrestees, reaching a low of 15 percent in 2003 and peak of 26 percent in 2000. Among juvenile arrestees, 7 percent and 5 percent reported using powder cocaine and/or crack, respectively, in the past month. The average age of first use for both drugs among juveniles was 14.4 years.

There were 318 unweighted ED reports of cocaine involvement in January–June 2005 (representing 14.9 percent of illicit drug reports) (exhibit 8). These reports occurred predominantly among male patients (66.7 percent) and those age 35 or older (58.2 percent). Nearly one-half (46.2 percent) were White (race was not documented in 13.5 percent of the reports).

Cocaine prices in San Diego County ranged from \$10 for one-tenth gram to \$60–\$120 per gram in 2005 (exhibit 9). The DEA reported that ounce/kilogram quantities averaged 70–91 percent purity.

Heroin

Two percent of drug items analyzed by forensic labs in FY 2005 were heroin items (exhibit 3). There were 1,266 primary heroin admissions in San Diego County in the first half of 2005, representing 22.8 percent of all illicit drug treatment admissions (exhibit 4). The number and proportion of primary heroin admissions have consistently decreased since 2001; the 2005 admissions represent a 13.8-percent decrease compared with the first half of 2004 and a 52.2-percent decrease from the first half of 2001. Heroin clients in 2005 were likely to be White non-Hispanic (48.5 percent) or Hispanic (40.0 percent); only 5.9 percent were African-American (exhibit 5). A majority were male (70.7 percent) and 35 or older (58.0 percent). The most common routes of heroin administration was injection (83.4 percent) and smoking (11.0 percent) (exhibit 6).

Among arrestees, 5 percent of males and 7 percent of females tested positive for heroin in 2004 (exhibit 7), and 5 and 4 percent, respectively, reported using heroin in the past 30 days. These percentages have remained relatively constant since 2000. One percent of juvenile arrestees tested positive for heroin in 2004.

There were 263 unweighted ED reports for heroin in the first half of 2005 (representing 12.4 percent of

illicit drug reports) (exhibit 8). Those treated were predominantly male (70.0 percent), age 35 or older (69.6 percent), and White (51.0 percent). Twenty-two percent were Hispanic. (Race/ethnicity was not documented for 17.9 percent of the reports.)

In 2004, the DEA Domestic Monitor Program estimated the average purity of Mexican heroin in San Diego to be 49.7 percent pure based on 39 qualified samples—the second highest average for Mexican heroin in the DEA western region (after El Paso, Texas), and a 4.8-percent increase over 2003. The price was \$0.20 per milligram pure and, according to the DEA, the “cheapest average heroin price for any type recorded in the nation, for the third year in a row.” In 2005, the price of black tar heroin was \$40–\$100 per gram, with purity ranging from a low of 11 percent to a high of 90 percent (exhibit 9). The price of powder heroin was estimated at \$80–\$100 per gram.

Other Opiates/Narcotics

There were few indicators for opiates other than heroin between January and June 2005. Those most frequently cited in forensic lab analysis were hydrocodone (0.9 percent), oxycodone (0.2 percent), codeine (0.2 percent), and morphine (0.2 percent). There were 126 drug treatment admissions for other opiates (exhibit 4). Although these represent only 2.3 percent of drug treatment admissions (excluding alcohol), the number of “other opiate” admissions has increased almost 18 percent since 2001. There were 426 unweighted ED reports for opiates other than heroin in the first half of 2005, exceeding the number of reports for both heroin ($n=263$) and cocaine ($n=318$). Hydrocodone was the most common of the opiates reported (27.9 percent), followed by oxycodone (14.3 percent). The DEA estimated the street value of hydrocodone (Vicodin) at \$3 per pill in 2005.

Marijuana

Forty-six percent of the 16,364 drug items analyzed in FY 2005 were cannabis (exhibit 3). There were 856 primary treatment admissions for marijuana in the first half of 2005, representing 15.4 percent of all primary illicit drug treatment admissions (exhibit 4). The proportion of marijuana admissions has varied since 2001, reaching a high of 23.6 percent in the first half of 2003 and a low of 14.4 percent in the second half of 2004.

Thirty-eight percent of adult male arrestees tested positive for marijuana in 2004; this percentage was relatively constant between 2000 and 2004 (exhibit

7). A statistically significantly lower proportion of women (28 percent) tested positive for marijuana in 2004. Forty-six percent of male arrestees and 40 percent of female arrestees reported using marijuana over the past 30 days. Among juvenile arrestees, 85 percent reported ever using marijuana, and 53 percent reported use in the past 30 days. Forty-two percent of juvenile arrestees tested positive for marijuana, down from a 5-year peak of 49 percent in 2003. The median age of first use among juveniles was 12.5.

There were 495 unweighted ED reports for marijuana between January and June 2005 (representing 23.3 percent of illicit drug reports) (exhibit 8). Of these, 63.8 percent were male and 50.1 percent were younger than 25. Slightly more than 55 percent were White (race was not documented for 22 percent of the reports).

The DEA estimated the 2005 price of marijuana in San Diego County at \$75–\$100 per ounce (exhibit 9).

Methamphetamine

Methamphetamine accounted for 31.3 percent of drug items analyzed in FY 2005 (exhibit 3), while amphetamine accounted for only 0.02 percent. Methamphetamine continues to rank first among primary drugs of abuse at treatment admission, with 50.2 percent of primary illicit drug admissions in the first half of 2005 were for methamphetamine abuse (exhibit 4). However, while the number of methamphetamine admissions increased 10.8 percent between the first halves of 2001 and 2005 and methamphetamine admissions have accounted for a growing proportion of all admissions since 2001, it is worth noting that the overall number of methamphetamine admissions continues to decline from a peak of 3,706 in the first half of 2002. The 2,785 primary methamphetamine users who entered treatment in 2005 were predominantly male (59.4 percent) and White (51.1 percent); 41.9 percent were age 35 or older (exhibit 5). Smoking was the primary route of administration (71.3 percent), followed by inhalation (13.9 percent) and injection (13.6 percent) (exhibit 6).

Among adult arrestees, 43 percent of men and 42 percent of women tested positive for methamphetamine in 2004, a statistically significant increase over the 28 percent and 29 percent, respectively, reported in 2000 (exhibit 7). Sixty-one percent of males and 59 percent of females had ever used methamphetamine, and 38 percent and 39 percent, respectively, reported using the drug in the past 30 days. Among juvenile arrestees, 13 percent tested positive for methamphetamine in 2004, a slight

decline from a 5-year peak of 15 percent in 2003. Thirty-five percent had ever used methamphetamine, and 23 percent reported using the drug in the past month. The average age of first use among juveniles was 14.2.

Similar to treatment admissions and positive drug tests among arrestees, there were also more unweighted ED reports for methamphetamine ($n=669$) than for any other drug (exhibit 8). These accounted for 31.4 percent of illicit drug reports. The majority of the 669 methamphetamine ED patients were male (67.7 percent); 47.7 percent were age 35 or older. Whites represented 56.7 percent of the patients (race/ethnicity was not documented for 22 percent of the reports).

The DEA estimated the 2005 price of methamphetamine at \$20 per one-quarter gram and \$40–\$50 per gram (exhibit 9). Gram purity levels averaged 50–95 percent, and ounce purity levels averaged 54–97 percent.

Other Drugs

Drugs in the “other” category include club drugs, benzodiazepines and other prescription drugs, and drugs not otherwise specified. These drugs accounted for only 1.1 percent of primary drug treatment admissions in the first half of 2005.

Methylenedioxymethamphetamine (MDMA) led the club drugs in both forensic lab items in FY 2005 ($n=86$) and ED reports (18) between January and June 2005. The estimated price per pill was \$25–\$30.

Phencyclidine (PCP) accounted for 21 forensic items in FY 2005 and 26 unweighted ED reports in the first half of 2005.

Benzodiazepines accounted for 1.4 percent ($n=224$) of forensic items in FY 2005. Among these, the most common were clonazepam (33.0 percent), diazepam (32.1 percent), and alprazolam (24.1 percent). There were 317 unweighted ED reports for benzodiazepines between January and June 2005.

Alcohol

There were 890 primary alcohol treatment admissions in San Diego County in January–June 2005. Of

those admitted to treatment, 73.8 percent were male, 65.7 percent were White, and 66.7 percent were age 35 or older. Sixty-four of these admissions (7.2 percent) were alcohol-only admissions among patients younger than 21.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

AIDS

From 1981 through November 2005, there were 12,515 adult/adolescent AIDS cases reported in San Diego County; 188 of these cases were reported between January and June 2005. The majority of AIDS cases reported in San Diego since 1981 have been among Whites (63 percent), followed by Hispanics (22 percent), and African-Americans (12 percent). The most common route of transmission among male AIDS cases was having sex with men (80 percent), followed by having sex with men and injection drug use (11 percent), and injection drug use only (7 percent). Among females, heterosexual contact was responsible for the majority of cases (54 percent), followed by injection drug use (37 percent).

HIV

From July 2002 through November 2005, there were 4,855 HIV cases reported in San Diego County. Among adult/adolescent cases, 62 percent were White, 22 percent were Hispanic, and 13 percent were African-American. Forty-one percent were age 30–39. The most common route of transmission among men was having sex with men (80 percent), followed by having sex with men and injection drug use (7 percent). Injection drug use and heterosexual contact accounted for 4 percent each. Among women, the most common route of HIV transmission was heterosexual contact (65 percent), followed by injection drug use (21 percent).

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Exhibit 1. Population Demographics of San Diego County, by Percent: 2000 and 2005

Population Demographic	2000 (N=2,813,833)	2005 (N=3,051,280)
Race/Ethnicity		
White	55.0	51.6
Black or African-American	5.5	5.3
Asian/Pacific Islander	9.1	10.3
American Indian	0.5	0.5
Other race	3.1	3.4
Hispanic/Latino (of any race)	26.7	28.8
Median Age (years)	(33.2)	(34.0)
Median Household Income (adjusted) (\$)	(\$47,360)	(\$52,192)

SOURCE: San Diego Association of Governments Population and Housing Estimates

Exhibit 2. San Diego DAWN ED Sample and Reporting Information: January–June 2005

Total Eligible Hospitals ¹	Number of Hospitals in DAWN Sample	Total EDs in DAWN Sample	Number of EDs Reporting per Month: Completeness of Data (%)			Number of EDs Not Reporting
			90–100%	50–89%	<50%	
17	17	17	8–9	0–2	0	7–8

¹Short-term, general, non-Federal hospitals with 24-hour emergency departments based on the American Hospital Association Annual Survey.

SOURCE: DAWN *Live!*, OAS, SAMHSA, updated 12/6–12/7, 2005

Exhibit 3. Number and Percentage of Selected Items Analyzed by Forensic Laboratories in San Diego County: FY 2005

Drug	Number	Percent
Cocaine	2,464	15.1
Heroin	286	1.7
Cannabis	7,555	46.2
Methamphetamines	5,121	31.3
All Other Drugs	938	5.7
Total	16,364	100.0

SOURCE: National Forensic Laboratory Information System

Exhibit 4. Numbers and Percentages of Primary Drug Treatment Admissions (Excluding Alcohol) in San Diego County: 2001–2005

Drug	1H-01 (%)	2H-01 (%)	1H-02 (%)	2H-02 (%)	1H-03 (%)	2H-03 (%)	1H-04 (%)	2H-04 (%)	1H-05 (%)	% Change 1H-01–1H-05
Cocaine	729 (9.5)	831 (9.7)	799 (8.9)	725 (8.6)	624 (8.1)	561 (8.4)	546 (8.7)	478 (8.8)	457 (8.2)	-37.3
Heroin	2,646 (34.4)	2,405 (28.1)	2,295 (25.7)	2,022 (23.9)	1,547 (20.0)	1,545 (23.3)	1,468 (23.4)	1,442 (26.6)	1,266 (22.8)	-52.2
Other Opiates	107 (1.4)	73 (0.9)	90 (1.0)	94 (1.1)	114 (1.5)	104 (1.6)	103 (1.6)	121 (2.2)	126 (2.3)	17.8
Marijuana	1,558 (20.3)	1,659 (15.6)	1,876 (21.0)	1,800 (21.3)	1,830 (23.6)	1,276 (19.2)	1,268 (20.2)	782 (14.4)	856 (15.4)	-45.1
Methamphetamines	2,513 (32.7)	3,433 (32.3)	3,706 (41.5)	3,624 (42.9)	3,501 (45.2)	3,044 (45.8)	2,800 (44.6)	2,504 (46.3)	2,785 (50.2)	10.8
All Other Drugs	133 (1.7)	156 (1.8)	166 (1.9)	179 (2.1)	134 (1.7)	111 (1.7)	94 (1.5)	86 (1.6)	62 (1.1)	-52.7
Drug Total	7,686 (100.0)	8,557 (100.0)	8,932 (100.0)	8,444 (100.0)	7,750 (100.0)	6,641 (100.0)	6,279 (100.0)	5,413 (100.0)	5,552 (100.0)	-27.7

SOURCE: California Alcohol and Drug Data System

Exhibit 5. Demographics of Clients Admitted to Treatment in San Diego County, by Number and Percent for Illicit Drugs: January–June 2005

Demographic	Cocaine (%)	Heroin (%)	Other Opiates (%)	Marijuana (%)	Methamphetamine (%)	All Other (%)	Total (%)
Gender							
Male	314 (68.7)	895 (70.7)	65 (51.6)	621 (72.6)	1,655 (59.4)	39 (62.9)	3,589 (64.6)
Female	143 (31.3)	371 (29.3)	61 (48.4)	235 (27.5)	1,130 (40.6)	23 (37.1)	1,963 (35.4)
Race/Ethnicity							
White non-Hispanic	121 (26.5)	614 (48.5)	112 (89.0)	358 (41.8)	1,424 (51.1)	25 (40.3)	2,654 (47.8)
African-American	268 (58.6)	75 (5.9)	1 (0.8)	164 (19.2)	164 (5.9)	14 (22.6)	686 (12.4)
American Indian	5 (1.1)	31 (2.4)	1 (0.8)	11 (1.3)	46 (1.7)	0 (0.0)	94 (1.7)
Asian/Pacific Islander	5 (1.1)	14 (1.1)	3 (2.4)	37 (4.3)	210 (7.5)	3 (4.8)	272 (4.9)
Hispanic	54 (11.8)	506 (40.0)	8 (6.3)	262 (30.6)	860 (30.9)	17 (27.4)	1,707 (30.7)
Age							
17 and younger	9 (2.0)	8 (0.6)	0 (0.0)	325 (38.0)	103 (3.7)	11 (17.7)	456 (8.2)
18–25	30 (6.6)	239 (18.9)	24 (19.1)	208 (24.3)	684 (24.6)	11 (17.7)	1,196 (21.5)
26–34	73 (16.0)	285 (22.5)	26 (20.6)	166 (19.4)	830 (29.8)	16 (25.8)	1,396 (25.1)
35 and older	345 (75.5)	734 (58.0)	76 (60.3)	157 (18.3)	1,168 (41.9)	24 (38.7)	2,504 (45.1)
Total Admissions	457 (8.2)	1,266 (22.8)	126 (2.3)	856 (15.4)	2,785 (50.2)	62 (1.1)	5,552 (100.0)

SOURCE: California Alcohol and Drug Data System

Exhibit 6. Routes of Drug Administration for Clients Admitted to Treatment in San Diego County: January–June 2005

Route of Administration	Cocaine (%)	Heroin (%)	Other Opiates (%)	Marijuana (%)	Methamphetamines (%)	All other (%)	Total (%)
Oral	0 (0.0)	17 (1.3)	109 (86.5)	13 (1.5)	29 (1.0)	28 (45.2)	196 (3.5)
Smoking	379 (82.9)	139 (11.0)	0 (0.0)	836 (97.7)	1,985 (71.3)	31 (50.0)	3,370 (60.7)
Inhalation	64 (14.0)	53 (4.2)	7 (5.6)	7 (0.8)	388 (13.9)	3 (4.8)	522 (9.4)
Injection	13 (2.8)	1,054 (83.4)	9 (7.1)	0 (0.0)	378 (13.6)	0 (0.0)	1,454 (26.2)
Unknown/Other	1 (0.2)	1 (0.1)	1 (0.8)	0 (0.0)	5 (0.2)	0 (0.0)	8 (0.1)
Total	457	1,264	126	856	2,785	62	5,550

SOURCE: California Alcohol and Drug Data System

Exhibit 7. Percent Positive Tests for Illicit Drugs Among Adult and Juvenile Arrestees in San Diego County: 2000–2004

Positive Drug Tests	2000	2001	2002	2003	2004	% Change 2000–2004
Cocaine						
Male adults	15	14	12	10	11	-26.7
Female adults	26	16	21	15	23	-11.5
Juveniles	--	--	--	--	6	--
Heroin						
Male adults	6	8	5	6	5	-16.7
Female adults	7	9	6	9	7	0.0
Juveniles	--	--	--	--	1	--
Marijuana						
Male adults	38	36	37	39	38	0.0
Female adults	27	28	33	29	28	3.7
Juveniles	42	45	46	49	42	0.0
Methamphetamine						
Male adults	28	32	34	38	43	53.6
Female adults	29	37	37	47	42	44.8
Juveniles	11	11	12	15	13	18.2

SOURCE: San Diego Association of Governments Substance Abuse Monitoring Program

Exhibit 8. Numbers and Percentages¹ of ED Reports for Selected Illicit Drugs of Abuse (Unweighted²): January–June 2005

Drug	Number	Percent
Cocaine	318	14.9
Heroin	263	12.4
Marijuana	495	23.3
Methamphetamines	669	31.4

¹Represents the percentages of all illicit drugs and excludes alcohol reports and reports of nonmedical use of prescription drugs.

²The unweighted data are from 9–10 EDs reporting to San Diego hospitals in January–June 2005. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted and, therefore, are subject to change.

SOURCE: DAWN Live!, OAS, SAMHSA; updated 12/6–12/7, 2005

Exhibit 9. Retail Prices for Selected Drugs in San Diego County: 2005

Drug	Price	Unit and Type
Cocaine	\$60–\$120	Gram
	\$20–\$140	One-quarter gram
	\$10	One-tenth gram
Heroin	\$80–\$100	Gram (powder)
	\$20	One-tenth gram (powder)
	\$40–\$100	Gram (Mexican black tar)
Marijuana	\$75–\$100	Ounce
Methamphetamines	\$40–\$50	Gram
	\$20	One-quarter gram
	\$140–\$250	One-quarter ounce

SOURCE: DEA San Diego and Imperial County Regional Narcotics Information Network

Patterns and Trends of Drug Use in the San Francisco Bay Area

John A. Newmeyer, Ph.D.¹

ABSTRACT

The 2002–2005 period saw no consistent upward or downward trend in the cocaine indicators for the San Francisco Bay area. The cocaine-user population is predominantly older than 30. Most indicators point to a substantial decline in heroin use in the period from 2000 to 2005; users remain predominantly White and older, with a median age perhaps as high as 40. Injection remains by far the preferred route of use. Methamphetamine indicators suggest a leveling off after significant increases during the 2001–2004 period. Marijuana use appears to have peaked in 2001 and to have declined substantially since then. Very little club drug use is evident. The prevalence of HIV among heterosexual drug injectors seems to have stabilized at a low level (6 to 10 percent).

INTRODUCTION

Area Description

The San Francisco Bay area consists of the following counties: San Francisco, San Mateo, Alameda, Contra Costa, and Marin. The population was 4,154,000 as of July 2004. The population is among the most multicultural of any urban region of the United States, with a particularly large, varied, and long-established Asian-American representation (19 percent of the total). The Hispanic population represents a wide cross-section of persons of Latin American origin. Blacks account for some 11 percent of bay area residents. San Francisco County has long been a mecca for gays: gay men constitute more than 15 percent of the adult male population.

The bay area experienced its initial growth during the California gold rush. In the succeeding century and a half, it expanded greatly as a center for shipping, manufacturing, finance, and tourism. In recent years, Pacific Basin trade and high technology, such as software and biotechnology development, have led to further expansion and to a highly diversified economy.

From 1994 to 2001, there was a steep rise in the cost of rental housing in the bay area, especially in San Francisco, Marin, and San Mateo Counties. This caused significant out-migration of lower income people, which may be exerting downward pressure on local drug-use prevalence. However, rental rates declined significantly from 2001 to 2003, which may have blunted these out-migration pressures. Unemployment rose from 2 to 6 percent during these 2 years, but eased back to 5 percent in 2004 and 2005.

Data Sources

The sources of data for the drug abuse indicators within this report are described below:

- **Treatment admissions data** were available for all five bay area counties for 2000 through the first half of 2005. These data were compiled by the California Department of Alcohol and Drug Programs (DADP). In addition, admissions data for San Francisco County were provided by the San Francisco Department of Public Health for fiscal years (FYs) 2000 through 2005.
- **Emergency department (ED) data** were accessed from the Drug Abuse Warning Network (DAWN) *Live!*, a restricted-access online query system administered by the Office of Applied Studies (OAS), Substance Abuse and Mental Health Services Administration (SAMHSA). The unweighted data are for three counties of the San Francisco Bay area (San Francisco, Marin, and San Mateo) for the first half of 2005. Seventeen of the 18 eligible hospitals in the area are in the DAWN sample. There are 19 emergency departments in the sample (some hospitals have more than 1 ED). The data for the first half of 2005 were incomplete. Over the 6-month period, between 10 and 11 EDs reported data each month, with all but 1 reporting data that were basically complete (90 percent or greater) (see exhibit 1). Data are preliminary and are not estimates for the San Francisco area. The DAWN *Live!* data were accessed on January 8, 2006. Since all DAWN cases are reviewed for quality control and may be corrected or deleted the data reported here are subject to change. The information derived from DAWN *Live!* represents drug reports in drug-related visits; reports exceed the number of ED visits, because a patient may report use of multiple drugs (up to six drugs and alcohol may be presented in DAWN). This paper focuses on demographic characteristics of different drugs in drug-related visits. These data cannot be compared with DAWN data from 2002 and before, nor can these preliminary data be

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used for comparison with future data. Only weighted ED data released by SAMHSA can be used for trend analysis. A full description of the DAWN system can be found at the DAWN Web site: <<http://dawninfo.samhsa.gov>>.

- **Medical examiner (ME) data on drug mentions** in decedents in three counties (San Francisco, Marin, and San Mateo) were provided by the DAWN mortality system for 2002, along with comparable data for 1997–2001. The DAWN system covered 100 percent of the metropolitan statistical area (MSA) jurisdiction and 100 percent of the MSA population in 2002. Data were also available from the San Francisco County Medical Examiner for that county for FYs 2000 through 2004.
- **Reports of arrests for drug law violations and counts of reported burglaries** were provided by the San Francisco Police Department (SFPD) for 2001 through the first 10 months of 2005.
- **Price and purity data** came from the Drug Enforcement Administration (DEA), Domestic Monitor Program (DMP), and referenced heroin “buys,” mostly made in San Francisco County. Data for 2004 were compared with those for 1994–2003. Data on trafficking in heroin and other drugs were available from the National Drug Intelligence Center’s (NDIC) report, *Narcotics Digest Weekly*, December 28, 2004. Additional data on trafficking and production were provided by the *National Drug Threat Assessment 2005* publication of the NDIC.
- **Three surveys of gay men** have been conducted in recent years. The San Francisco AIDS Office surveyed younger gay men (60 percent younger than 35) during 2004. The Stop AIDS Project conducted two surveys, in 2003 and 2005, of the overall gay male population.
- **Ethnographic information** was obtained through interviews with treatment program staff and outreach workers in January 2006. Their observations were compared with those made in January and June 2005 and pertained mostly to San Francisco County.
- **Acquired immunodeficiency syndrome (AIDS) surveillance data** were provided by the San Francisco Department of Public Health (SFDPH) and covered the period through September 30, 2005. Beginning in 2005, the SFDPH provided counts only of AIDS cases who were San Francisco resi-

dents; this resulted in surveillance counts about one-eighth less than previous counts that had included all persons, resident or non-resident, diagnosed in San Francisco.

- **Hepatitis B (HBV) data** for San Francisco County were available for 1996 through 2004 and were provided by the SFDPH.
- **Hepatitis C (HBC) virus prevalence** estimates were provided by the Urban Health Study for 2003.

DRUG ABUSE PATTERNS AND TRENDS

Cocaine/Crack

In the five-county bay area, the overall number of admissions for drug treatment, other than alcohol, fluctuated within a fairly narrow range between 2001 and the first half of 2005 (exhibit 2). No clear trend is evident. The proportion of cocaine/crack admissions among these admissions rose from 24 percent to 26 percent between 2001 and 2005, although the actual number declined from 7,428 to a projected 6,942. Among these admissions, more than 87 percent cited smoking—presumably of crack—as the preferred route of use. During FYs 2000 to 2005, San Francisco County cocaine admissions fluctuated narrowly, with no particular trend, in the range of 2,250 to 2,600 (exhibit 3).

Unweighted DAWN data show 1,349 cocaine ED reports in the first half of 2005. Cocaine ED reports in the first half of 2005 were predominantly Black (49.7 percent) and 65.8 percent male (11.0 percent of reports had no race/ethnicity documented). There were twice as many older than 45 (36 percent) as younger than 30 (17 percent). Smoking was the preferred route of use for three-fifths of these patients.

According to DAWN data, ME death mentions involving cocaine in three bay area counties fluctuated within a narrow range, with no particular trend, between 1997 and 2000 (exhibit 4). In 2002, however, total mentions were 39 percent below the 1997–2000 average. In San Francisco County, cocaine-related deaths declined by 32 percent (95 to 65) between FY 2000 and FY 2004. In FY 2004, these decedents were 69 percent male, 60 percent White, and 29 percent Black; they had a mean age of 42.

There were nearly 3,800 arrests on cocaine-related charges in San Francisco in 2004. The rate of arrests in the first 10 months of 2005 was about 14 percent lower than in a similar period of 2004.

According to the NDIC, local prices for powder cocaine in 2004 were \$16,000–\$21,000 per kilogram, \$530–\$800 per ounce, and as low as \$10 per one-quarter gram. Crack prices were around \$600 per ounce and \$20–\$50 per “rock.” These prices were up slightly from 2002.

A 2004 survey of young San Francisco gay men showed 17 percent reported use of cocaine in the past year, and 4 percent reported use of crack.

Local observers report that more young people in San Francisco are injecting “crack.”

In summary, the 2002–2005 period saw no consistent upward or downward trend in the cocaine indicators. The user population is predominantly older than 30.

Heroin

The number of treatment admissions for primary heroin problems in the five-county bay area fell by nearly one-half between 2000 and the first half of 2005 (exhibit 2). That decline may have slowed in the last 2 years. As a proportion of all primary drug admissions excluding alcohol, heroin constituted 64 percent in 1994, 55 percent in 1999, and only 33 percent in early 2005. Injection remains by far the predominant route of use: 80 percent reported that route, compared with 14 percent who reported inhalation as the preferred route. San Francisco County heroin admissions fell by 10 percent between FYs 2002 and 2005 (exhibit 2).

The unweighted DAWN *Live!* data for the first half of 2005 show 595 heroin reports. Reports of heroin during early 2005 were 64 percent male and 50 percent White. (Race/ethnicity was not documented for 16 percent of heroin ED patients.) Thirty-four percent were older than 45, and only 20 percent were younger than 30. For some 95 percent, injection was the preferred route of use.

ME death mentions involving heroin in 2002 were at their lowest level in 6 years (exhibit 4). The count for 2002 was 43 percent below the average for 1997–2000. Males accounted for 87 percent of the heroin-related death mentions in 2000. The median age of the decedents was 40. Heroin-related deaths in San Francisco County declined by 53 percent (122 to 57) between FY 2000 and FY 2004. In FY 2004, decedents were 74 percent male, 70 percent White, and 18 percent Black; they had a mean age of 43.

Arrests for heroin-related offenses totaled 6,136 in 2002, 16 percent higher than in 2001 and 3 percent higher than in 2000. However, in 2003, such arrests

were about 30 percent below, and in 2004 about 55 percent below, the 2002 level. The rate of arrests in the first 10 months of 2005 showed a significant further decline, to a level 66 percent below that in 2002.

Because many heroin users support their habits through property crimes, reported burglaries may be a good indicator of use. The number of such reports in San Francisco fell by 49 percent between 1993 and 1999 (11,164 to 5,704). After that low point, the count rose to 6,706 in 2001, fell to 5,507 in 2003, and rose again to nearly the 2001 level in 2004. The rate for the first 10 months of 2005 was higher by 8 percent than that for a similar period of 2004. These changes may reflect the price of heroin more than the prevalence of users; it is noteworthy that reported burglaries and the local price of heroin are both barely one-quarter of what they were 20 years ago.

The DEA’s DMP tested heroin street buys in the San Francisco area during 2004. The buys were of Mexican origin. The 2004 samples averaged 11 percent pure and \$0.98 per pure milligram (exhibit 5). Of the last 11 years, 2001 through 2004 were the 4 with the highest average price and lowest average purity.

Prices of Mexican black tar heroin ranged from \$9,200 to \$30,000 per kilogram and from \$230 to \$850 per ounce in 2004. Gram prices ranged from \$50 to \$75. In 2002, prices were \$16,000–\$30,000 per kilogram, \$450–\$850 per ounce, and around \$60 per gram.

A 2004 survey of young San Francisco gay men showed only 0.4 percent reported use of heroin in the past year.

The present author estimated that the prevalence of heterosexual injection drug users in San Francisco County fell from about 13,800 in 2000 to about 10,000 in 2004. (More than 90 percent of heroin users are injectors, and more than 90 percent of injectors are primary heroin users.)

To summarize, most indicators point to a significant decline in heroin use in the period from 2000 to 2005. Users remain predominantly White. The median age of users remains high, perhaps as high as 40.

Other Opiates/Narcotics

In the unweighted DAWN *Live!* ED reports during the first half of 2005, oxycodone and hydrocodone totaled 44 and 73, respectively. ME death mentions in the overall “narcotic analgesics” category fluctuated within a narrow range in 1997–2000, but then they dropped in 2001 and 2002 to a level 29 percent

below the 1997–2000 average (exhibit 3). Local observers noted a continued increase in the popularity of oxycodone, which is regarded as a safe alternative to heroin.

Methamphetamine/Amphetamines

The number of treatment admissions for primary speed problems in the five-county bay area increased steadily between 2000 and the first half of 2005 (exhibit 2). The increase may have slowed somewhat during 2004–2005. The proportion of primary speed users among all nonalcohol drug admissions rose from 14 percent in 2000 to 26 percent in early 2005. It was noteworthy that fully 64 percent of speed users claimed smoking as the preferred route; the proportions reporting injection or inhalation as preferred routes were each about one in six. Amphetamine treatment admissions in San Francisco County rose by 25 percent from FY 2001 to FY 2004 but were essentially unchanged in FY 2005 (exhibit 3).

In the unweighted DAWN *Live!* reports for the first half of 2005, methamphetamine reports totaled 671. Eighty-two percent of the ED reports in January–June 2005 were male, 58 percent were White, and two-thirds were older than 30. (Race/ethnicity was not documented for 10 percent of the methamphetamine ED patients.)

In the three-county bay area, ME death mentions involving methamphetamine fell from 58 in 1999 to 32 in 2001 and 38 in 2002 (exhibit 4). Of the methamphetamine-related death mentions in 2000, males accounted for 93 percent, and the median age was 40. Amphetamine-related deaths in San Francisco County increased from 15 to 28 between FY 2000 and FY 2003, but then fell back to 21 in FY 2004. In FY 2004, decedents were 81 percent male and 86 percent White; they had a mean age of 43.

According to the NDIC, in 2004 pounds of “crystal” methamphetamine sold in the \$10,000–\$13,000 range, ounces sold in the \$600–\$1,500 range, and grams sold in the \$80–\$100 range. In 1999, comparable price ranges were \$3,500–\$10,000 for pounds and \$500–\$1,000 for ounces. The DEA San Francisco Field Division reports that Mexican criminal groups control the local wholesale and midlevel distribution. Several counties near the bay area (Alameda, San Mateo, Santa Clara, Sacramento, San Joaquin, and Stanislaus) have been sites of “superlabs,” capable of producing 10 pounds or more of methamphetamine per production cycle. The National Drug Threat Assessment surveys indicate that Mexican criminal gangs control most wholesale and midlevel

distribution, though Hawaiian, Filipino, and other Asian drug trafficking organizations produce and distribute significant quantities of “ice.”

A 2003 survey of gay men in San Francisco found that 18 percent reported using crystal methamphetamine in the prior 6 months. A similar survey in 2005 found only 10 percent reporting such use.

Local observers report that the “speed” scene is going strong—especially among Blacks and Hispanics who used to prefer cocaine. The drug is easy to get, fairly cheap, and well-connected with sexual activity even for heterosexuals. “Young people think speed is safer than cocaine,” according to observers.

To summarize, methamphetamine indicators suggest a leveling off after significant increases during the 2001–2004 period.

Marijuana

Just 7 percent of admissions in San Francisco in the first half of 2005 were for primary marijuana use.

Arrests for marijuana-related offenses in San Francisco County numbered 1,736 in 2000. The count of arrests ranged between 1,300 and 1,450 in the next 3 years before returning to the 2000 level in 2004. The count of arrests for 2005 will be about 36 percent lower than that for 2004, if the trend from the January–October period is sustained.

Marijuana treatment admissions in San Francisco County reached a peak in FY 2003, then dropped by 26 percent in FY 2005 (exhibit 3).

In 2004, sinsemilla marijuana sold for \$3,000–\$6,000 per pound, and domestic marijuana sold for \$4,000–\$5,000 per pound. Domestic marijuana sold for about \$200 per ounce. A large, and increasing, quantity of marijuana is sold legally from medical marijuana outlets to certified purchasers. There appears to be effective regulation of price and quality in that new “market.”

In November 2004, Oakland voters passed Measure Z by a margin of 65 to 35 percent. This may portend an important development in American policy on marijuana, because Measure Z explicitly instructs the city of Oakland to create systems for the regulation and taxation of adult use of marijuana.

The overall indications are that marijuana use peaked in 2001 and has declined significantly since then.

Club Drugs

Unweighted ED reports of gamma hydroxybutyrate (GHB) numbered just 20 in the first half of 2005; 55 percent of these patients were younger than 30. Ketamine reports were very rare ($n=2$). The actual number of club drug ED mentions remained small compared with mentions for cocaine or methamphetamine. The same is the case for club drug ME mentions (exhibit 4).

The NDIC reports that in 2004, street prices of methylenedioxymethamphetamine (MDMA or “X”) were in the range of \$15–\$40 per “tab.” The unweighted MDMA ED reports were predominantly (69 percent) among people younger than 30. A 2004 survey of young San Francisco gay men showed 20 percent reported use of MDMA in the past year.

PCP/LSD

During the first half of 2005, only a very small proportion (0.4 percent) of all admissions in San Francisco were for primary lysergic acid diethylamide (LSD), phencyclidine (PCP), or other hallucinogen use. LSD ED mentions were rare in the unweighted DAWN data for the first half of 2005, numbering only 7. Mentions of phencyclidine (PCP) were more than three times more common ($n=26$).

Benzodiazepines

Unweighted ED reports of benzodiazepines in early 2005 totaled 203. Most were White (75 percent) and older than 30 (84 percent). ME mentions dropped from a 1999–2001 average of 54 to 34 in 2002 (exhibit 3).

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

AIDS

San Francisco County had a cumulative total of 26,372 AIDS cases of city residents through September 30, 2005. Of these cases, 1,940 (7.4 percent) were heterosexual injection drug users (IDUs). Another 3,627 AIDS cases (13.8 percent) were men who had sex with other men (MSM) and also injected drugs (MSM/IDUs). There were just 42 reported cases among lesbian IDUs, barely one-hundredth the number among MSM/IDUs. A total of 326 AIDS cases have been reported for transgender San Franciscans.

Among San Franciscans diagnosed in 2003 through 2005, heterosexual IDUs accounted for 14 percent, as compared to 10 percent among those diagnosed in 1994–1996, 14 percent of those diagnosed in 1997–

1999, and 14 percent of those diagnosed in 2000–2002. However, the overall case numbers in 2003–2005 were far lower than those of the late 1980s and early 1990s. As a result, the percentage of heterosexual IDUs among the cumulative AIDS caseload will probably not increase significantly from the current level of 7 percent.

The demography of the cumulative heterosexual IDU caseload with AIDS has changed very little in the past 15 years. This caseload is 68 percent male, 51 percent Black, 35 percent White, 11 percent Hispanic, and 2 percent Asian/Pacific Islander. By contrast, the gay/bisexual IDU caseload is 71 percent White, 16 percent Black, 10 percent Hispanic, and 1.5 percent Asian/Pacific Islander.

The heterosexual IDU demography is like that of heroin users except for over-representation of Blacks, while the gay male IDU demography is similar to that for male speed users.

Data from the Urban Health Study, which conducts semiannual surveys, indicate that in 2004 seroprevalence of heterosexual IDUs in San Francisco remained within the same 6–10 percent range that has prevailed for the past 16 years. By contrast, HIV prevalence among MSM/IDUs had ranged around 40 percent in the late 1980s, dropped to around 25 percent in the late 1990s, and rose again to the 30–35 percent range in 2004. Recent UHS data show extensive self-reported past-month injection of cocaine (21 percent) and amphetamines (30 percent) as well as heroin (68 percent). A surprisingly low proportion (approximately 15 percent) of heterosexual HIV-positive IDUs reported being on drug treatment for their condition.

Hepatitis B

From 1997 through 2001, reported cases of HBV in San Francisco County rarely deviated from a pace of a bit more than one per week. The pace dropped in 2002 and 2003 to about one every 10 days, then dropped further in 2004 to about one every 14 days.

Hepatitis C

UHS data from 2003 disclosed that fully two-thirds of all IDUs in the sample self-reported HCV seropositivity. UHS staff believe, on the basis of earlier HCV antibody testing, that true prevalence is between 90 and 95 percent. This has enormous implications for the long-term health of San Francisco’s IDU population—not only the current user population, but also the possibly much larger number with past (or future) injection drug use. “Coinfection” is also a

serious problem; a 2003 study by the University of California at San Francisco found that 73 percent of homeless and marginally housed people with HIV were also infected with hepatitis C.

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Exhibit 1. DAWN ED Sample and Reporting Information in the San Francisco Metropolitan Area: January–June 2005

Total Eligible Hospitals ¹	No. of Hospitals in DAWN Sample	Total EDs in DAWN Sample ²	No. of EDs Reporting per Month: Completeness of Data (%)			No. of EDs Not Reporting
			90–100%	50–89%	<50%	
18	17	19	10–11	0–1	0–1	7–9

¹Short-term, general, non-Federal hospitals with 24-hour emergency departments based on the American Hospital Association Annual Survey.

²Some hospitals have more than one emergency department.
SOURCE: DAWN Live!, OAS, SAMHSA, updated 12/6–7, 2005

Exhibit 2. Admissions to Drug Treatment Programs in the San Francisco Bay Area by Primary Drug of Abuse: 2000–2005

Drug	2000	2001	2002	2003	2004	2005 ¹
Cocaine	7,718	7,428	6,746	7,114	6,814	6,942
Heroin	17,416	14,673	11,461	9,898	9,089	8,872
Amphetamine	4,469	5,073	5,636	6,438	6,701	6,822
All Drugs	32,034	30,920	28,329	27,626	26,381	26,620

¹Data for 2005 are projected from the first half of the year.
SOURCE: California Department of Alcohol and Drug Programs (DADP)

Exhibit 3. Admissions to Drug Treatment Programs in San Francisco County by Primary Drug of Abuse: FYs 2000–2005

Drug	FY 2000	FY 2001	FY 002	FY 2003	FY 2004	FY 2005
Cocaine	2,600	2,306	2,440	2,274	2,527	2,350
Heroin	4,030	3,867	4,002	3,700	3,646	3,589
Amphetamine	1,008	991	1,053	1,144	1,235	1,242
Marijuana	915	867	1,067	1,110	950	822
All Drugs	8,690	8,191	8,764	8,406	8,520	8,759

SOURCE: San Francisco Department of Public Health

Exhibit 4. Medical Examiner Drug Mentions in Three Counties (including San Francisco): 1997–2002

Drug	1997	1998	1999	2000	2001	2002
Cocaine	127	158	158	146	106	90
Heroin/Morphine	159	164	192	148	117	95
Methamphetamine	49	45	58	45	32	38
Narcotic Analgesics	156	185	198	164	124	125
Benzodiazepines	71	62	50	55	56	34
Club Drugs ¹			6	6	5	4

¹Includes MDMA, ketamine, GHB, GBL, and Rohypnol.
SOURCE: DAWN, OAS, SAMHSA

Exhibit 5. Price and Purity of Heroin Samples: 1994–2004

Year	Price per Pure Milligram	Purity (Percent)
1994	\$0.95	29
1995	\$0.83	35
1996	\$0.83	24
1997	\$0.63	26
1998	\$0.33	26
1999	\$0.47	20
2000	\$0.70	15
2001	\$1.40	10
2002	\$0.99	12
2003	\$0.98	11
2004	\$0.98	11

SOURCE: DEA, DMP

Recent Drug Abuse Trends in the Seattle-King County Area

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ABSTRACT

Data for Seattle-King County, Washington, for the first half of 2005 revealed the following trends. Methamphetamine-involved deaths in the first half of 2005 (n=17) were nearly equal to the total for all of 2004 (18), representing a substantial increase and the highest level seen for such deaths in King County. Treatment admissions for which any use of methamphetamine was mentioned rose to their highest level—18 percent, double the proportion in 1999. Nearly one-third of local law enforcement drug seizures in the Seattle area tested positive for methamphetamine, up slightly since FY 2003, yet still lower than the 53 percent of samples from the rest of the State during FY 2005. Geographically, the pattern is reversed for cocaine, with 38 percent of tests in the Seattle area positive for cocaine, compared with 20 percent for the remainder of the State. Cocaine-involved deaths appear to be down slightly from the prior year, remaining in a range consistent with the prior 8 years. Forty-four percent of those admitted to treatment mentioned any use of cocaine, an increase to levels seen several years ago. Depressant-involved deaths, which had been increasing steadily since 1999, appear to have leveled off. Marijuana remained the most common illegal drug used by those entering drug treatment, with one-half of all people admitted to treatment noting marijuana as one of the top three drugs they use, a level consistent since 1999. Heroin deaths in the first half of 2005 (n=44) rose slightly compared with all of 2004 (76), but they were still well below the peak seen in 1998 (144). Prescription-type opiate-involved deaths continued to rise, with a first half of 2005 total of 67. This total suggests a higher annual total compared with the 118 in all of 2004

and possibly forecasting the sixth straight year of increases. Prescription-type opiates as the primary drug of abuse for those entering treatment increased to 3.0 percent of all admissions, up from 1.0 percent in 1999, and accounted for 4.4 percent of admissions excluding alcohol in the first half of 2005. Local law enforcement seizures testing positive for prescription-type opiates doubled to 5 percent in 2005 compared with 2003 in the Seattle area. In June 2005, 2,654 King County residents were receiving treatment at opiate substitution programs (for heroin and/or prescription-type opiates), up more than 10 percent from the same timeframe in 2004. Overall, the most striking trends involve the continued increases in indicator data for prescription-type opiates and methamphetamine.

INTRODUCTION

Area Description

Located on Puget Sound in western Washington, King County spans 2,130 square miles, of which the city of Seattle occupies 84 square miles. The combined ports of Seattle and nearby Tacoma make Puget Sound the second largest combined loading center in the United States. Seattle-Tacoma International Airport, located in King County, is the largest airport in the Pacific Northwest. The Interstate 5 corridor runs from Tijuana, Mexico, in the south, passes through King County, and continues northward to Canada. Interstate 90's western terminus is in Seattle; it runs east over the Cascade Mountain range, through Spokane, and across Idaho and Montana.

According to the 2000 census, the population of King County is 1,737,034. King County's population is the 12th largest in the United States. Of Washington's 5.9 million residents, 29 percent live in King County. The city of Seattle's population is 563,374; the suburban population of King County is growing at a faster rate than Seattle itself.

The county's population is 75.7 percent White, 10.8 percent Asian/Pacific Islander, 5.5 percent Hispanic, 5.4 percent African-American, 0.9 percent Native American or Alaska Native, 0.5 percent Native Hawaiian and Other Pacific Islander, and 2.6 percent "some other race." Those reporting two or more races constitute 4.1 percent of the population. Income statistics show that 8.0 percent of adults and 12.3 percent of children in the county live below the Federal poverty level, lower than the State averages of 10.2 percent and 15.2 percent, respectively.

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Data Sources

Information for this report was obtained from the sources described below:

- **Treatment data** were extracted from the Washington State Department of Social and Health Services, Division of Alcohol and Substance Abuse's Treatment and Assessment Report Generation Tool (TARGET) via the Treatment Analyzer system. TARGET is the department's state-wide alcohol/drug treatment activity database system. Data were compiled for King County residents from January 1, 1999, through June 30, 2005. Data are included for all treatment admissions that had any public funding. Department of Corrections (only a few cases) and private pay clients (at methadone treatment programs) are also included. Methadone waiting list data for those seen at syringe exchange are administered and provided by Public Health – Seattle & King County.
- **Emergency department (ED) drug data** were obtained from the DAWN *Live!* system administered by the Drug Abuse Warning Network (DAWN), Office of Applied Studies (OAS), Substance Abuse and Mental Health Services Administration (SAMHSA). Preliminary data for the first half of 2005 are presented. Total eligible hospitals in the area totaled 22; hospitals in the DAWN sample totaled 22. A total of 24 emergency departments have been selected for inclusion in the sample (some hospitals have more than 1 ED), however, during this period, between 11 and 14 hospitals reported data each month. Data were incomplete, with less than 50 percent complete data for 0–2 of these hospitals in each month (exhibit 1). These data are preliminary, meaning that they may change. Data represent drug reports and are not estimates for the reporting area. Data are utilized for descriptive purposes only. Data cannot be compared to DAWN data from 2002 and before, nor can preliminary data be used for comparison with future data. Only weighted data released by OAS may be used for trend analyses. The first year of data weighted will be for 2004, so reasonable trend analyses will not be possible for several years. Available data are for King and neighboring Snohomish Counties combined; Pierce County is part of the statistical sample, but no EDs in Pierce were reporting during the first half of 2005. There are new case types in DAWN, with the primary one presented here being the “other” case type, which includes “all ED visits related to recreational use, drug abuse, drug dependence, withdrawal, and any misuse” not classified in other categories, such as overmedication and seeking detox/treatment. For the sake of clarity, “other” will be referred to as “drug abuse/other” in this report. Unless specifically stated, data presented are for the drug abuse/other case type.
- **Drug-related mortality data** were provided by the King County Medical Examiner (ME). Data for the first half of 2005 are preliminary. The data include deaths directly caused by licit or illicit drug overdose and exclude deaths caused by antidepressants in isolation and by poisons. Totals may differ slightly from drug death reports published by the King County ME's office, which include fatal poisonings. Testing is not done for marijuana. Because more than one drug is often identified per individual drug overdose death, the total number of drugs identified exceeds the number of actual deaths.
- **Drug-related helpline data** are from the Washington State Alcohol/Drug Help Line (ADHL), which provides confidential 24-hour telephone-based treatment referral and assistance for Washington State. Data are presented for January 2001 to June 2005 for calls originating within King County. Data presented are for drugs mentioned. A caller may refer to multiple drugs; therefore, there are more drug mentions than there are calls. The data exclude information on alcohol and nicotine, which account for more than one-half of the calls. Data are presented primarily for illicit drugs only, prescription drugs have not been coded consistently over time, therefore limiting trend analyses. The large number of unknown drugs in 2001 and 2002 may obscure some trends as well.
- **Forensic drug analysis data** are from the National Forensic Laboratory Information System (NFLIS), which distributes data from the Washington State Patrol's Toxicology Laboratory on drug test results on local law enforcement seizures. These data include the top 25 drugs identified in fiscal year (FY) 2003–FY 2005. Data are presented for the Seattle area lab in comparison to the rest of the State.
- **Heroin price and purity information** was obtained from the Drug Enforcement Administration's (DEA's) Domestic Monitor Program (DMP) for FY's 2000–2004.
- **Law enforcement data** were provided by the High Intensity Drug Trafficking Area (HIDTA) officials.

- **Methamphetamine production data** are from the Washington State Department of Ecology (DOE), which is mandated to respond to and document all “Methamphetamine Incidents,” including operating labs, dump sites, and other sites associated with the manufacture of methamphetamine.
- **Data on infectious diseases related to drug use and injection drug use**, including the human immunodeficiency virus (HIV), acquired immunodeficiency syndrome (AIDS), and hepatitis, were provided by three sources. One source is “HIV/AIDS Epidemiology Report.” Data on HIV and AIDS cases (including exposure related to injection drug use) in Seattle-King County, other Washington counties, and Washington State (2001 through 2004) are provided by Public Health – Seattle & King County (PHSKC), Washington State Department of Health. HIV cases were reported to PHSKC or the Washington State Department of Health between 2000 and 2004. The third source of information, on 18–30-year-old injection drug users’ preferred drugs over time, was provided by the HIV epidemiology unit of PHSKC. These data are based upon four studies conducted from 1994 to 2003; they included the RAVEN (1994–1997), RAVEN II (1998), Kiwi (1998–2002), and DUIT (2002–2003) studies.
- **Key informant interview data** are obtained from discussions with treatment center staff, street outreach workers, and drug users.

Almost two-thirds of cocaine ED patients were male (65 percent), with twice as many Whites as Blacks. (It should be noted that for 60 percent of patients, race is not documented). Eighty-two percent of patients were age 25–54, with the majority being in the 35–44 age range. Twenty-three percent were age 25–34, 37 percent were 35–44, and 22 percent were 45–54. Route of administration data were missing for 75 percent of reports; smoking was the most commonly reported (13 percent), followed by 7 percent for injecting and 3 percent for inhaled/sniffed/snorted.

Cocaine-involved deaths totaled 34 in the first half of 2005, lower than the 47 in the prior 6 months, but within the general range seen since 1997 (exhibit 4). The median age of decedents was 45.5 in the first half of 2005, similar to the prior 2½ years, but up from the late 1990s. The overall median age was 41 for the entire timeframe (1997 through June 2005), slightly less than the median of 42 for all drug-induced decedents (exhibit 5).

All cocaine-involved deaths were ruled accidental from January to June 2005, whereas the average was 93.9 percent for deaths since 1997. Women represented 35.3 percent of all cocaine-involved deaths, the highest proportion for any 6-month period since 1997 and higher than the overall average of 22.6 percent for this timeframe. Women represented 29.0 percent of all drug deaths from 1997 through June 2005. The majority of cocaine-involved decedents were Caucasian: 70.6 percent in the first half of 2005 and 72.6 percent overall. However, a substantial, and disproportionate, minority were African-American: 23.5 percent in the first half of 2005, a bit above the average of 20.8 percent since 1997.

DRUG ABUSE PATTERNS AND TRENDS

Cocaine/Crack

There were 6,120 treatment admissions for alcohol and drug abuse in the first half of 2005. The proportion of treatment admissions involving cocaine (i.e., cocaine was mentioned as the primary, secondary, or tertiary drug of abuse at the time of entry into treatment) was 44 percent (exhibit 2). It was the primary drug of abuse for 17 percent of all admissions.

Unweighted cocaine ED reports for all case types totaled 2,086 in the first half of 2005, which accounted for 37 percent of all major illicit substance reports. Cocaine-related reports were 76 percent higher than the number of reports for heroin, and more than twice the number of reports for marijuana or methamphetamine (exhibit 3). For cocaine, drug abuse/other represented the largest proportion of case types (83 percent), followed by those seeking detox/treatment (16 percent).

In the first half of 2005, cocaine was the most common drug mentioned by adults calling the Helpline, accounting for 33 percent of calls. For youth, 14 percent of calls were for cocaine. Overall, cocaine represented 30 percent of all Helpline calls in the first half of 2005.

Accounting for 38.3 percent of seizures, cocaine was the most common substance identified in the Seattle area in FY 2005 according to NFLIS data on local law enforcement drug seizure testing (exhibit 6). In comparison, for the rest of the State, cocaine accounted for only 19.8 percent of seizures. Although cocaine remained the second most common drug detected in the laboratories statewide, cocaine seizures were substantially lower than methamphetamine seizures (53 percent).

Heroin

The proportion of treatment admissions involving any use of heroin totaled 22.1 percent in the first half of 2005 (exhibit 2). Heroin was the primary drug of abuse for 18 percent of total admissions, meaning heroin was the primary drug of abuse for 81 percent of heroin-related admissions.

Heroin was the third most frequently reported unweighted major illicit substance of abuse in the DAWN *Live!* system, after cocaine and prescription-type opiates (exhibit 3). Eighty-three percent of heroin reports were of the drug abuse/other case type; almost all of the remaining reports were for seeking detox/treatment (16 percent); and less than 1 percent were for suicide. Although ED reports for prescription-type opiates were 25 percent higher than reports for heroin, there are more actual drug-abuse cases for heroin than for prescription-type opiates. Sixty-one percent of heroin patients were male, with 39 percent of patients identified as White. (Fifty-six percent of reports did not have race/ethnicity documented.) Age distribution for heroin reports was very similar to that for cocaine: 30 percent of patients were age 25–34, 31 percent were 35–44, and 23 percent were 45–54. Injection was the most frequently reported route of administration (56 percent), although 42 percent of patients did not report on route of administration.

Heroin/opiate/morphine deaths totaled 44 in the first half of 2005, the highest total since the first half of 2002, but one-half the level seen at the peak during July–December 1998 (exhibit 4). (The category of heroin/opiate/morphine is the best approximation of heroin deaths, it excludes all deaths known to involve specific prescription-type opiates.) The most common manner of death for heroin-involved deaths was accidental, representing 93 percent of such deaths in the first half of 2005, similar to the 92 percent average since 1997 (exhibit 5). The proportion of women among heroin-involved deaths was 23 percent in the first half of 2005, a bit higher than the average of 19 percent.

Most decedents with heroin/opiate/morphine detected were Caucasian: 75 percent in the first half of 2005. This proportion is somewhat smaller than for any prior data since 1997 and, therefore, lower than the average of 83 percent over the entire timeframe. The proportion of Caucasian heroin decedents overall is similar to those without heroin/opiate/morphine detected. In the most recent timeframe, however, the proportion of African-Americans was higher for heroin/opiate/morphine than for the average for all other drugs: 23 versus 7 percent. Note, however, that the actual numbers are relatively small.

Heroin mentions in calls to the Helpline accounted for 13.5 percent of adult cases and 3.2 percent of youth calls in the first half of 2005.

NFLIS results show similar levels of law enforcement seizures for heroin in the Seattle area (5.6 percent) and the rest of the State (5.2 percent) in FY 2005 (exhibit 6). Although heroin was the fourth most common substance detected in each of these regions, it constitutes a relatively small percentage of seizures compared to cocaine, methamphetamine, and marijuana.

The predominant form of heroin on the streets is Mexican black tar. All DEA DMP buys of heroin that have been positively identified were found to be Mexican in origin. China white, a common form in Vancouver, British Columbia, and on the east coast of the United States, is uncommon in the local area, according to regional HIDTA and DEA information.

The median heroin purity of DMP buys in the city of Seattle was 14 percent in FY 2004, similar to the prior year, higher than in FYs 2001–2002, and below the 17 percent seen in FY 2000.

Other Opiates/Prescription-Type Opiates

For the purposes of this report, “other opiates/prescription-type opiates” include codeine, dihydrocodeine, fentanyl, hydrocodone (e.g., Vicodin), methadone, oxycodone (e.g., Percocet and OxyContin), propoxyphene (e.g., Darvon), sufentanil, tramadol (e.g., Ultram), hydromorphone (e.g., Dilaudid, Palladone), meperidine (e.g., Demerol), pharmaceutical morphine, acetylmethadol, and the “narcotic analgesics/combinations” reported in the DAWN ED data. Source information for methadone, whether pain medication or opiate treatment program, is rarely available.

There were 182 treatment admissions for prescription-type opiates as the primary drug in the first half of 2005, representing 3.0 percent of all admissions (up from 1.0 percent in 1999).

Unweighted ED drug reports for prescription-type opiates totaled 1,480 in the first half of 2005, second only to cocaine reports, with the drug abuse/other case type representing the largest proportion (54 percent), followed by adverse reaction and overmedication (each at 15 percent) (exhibit 3). Some misclassification of case type may remain, but it is believed that the other/drug abuse case type is likely the most accurate category, given that all other case types must be ruled out prior to assigning this case type. To understand more about those who are intentionally mis-

using prescription-type opiates, the drug abuse/other case type is discussed further below.

In 62 percent of prescription-type reports, route of administration was undocumented; 33 percent reported oral administration. Forty-three percent of patients were White, although it is important to note that race was not documented for one-half of the patients. Oxycodone accounted for 25 percent of prescription-type opiate reports, and hydrocodone represented 16 percent.

What constitutes a prescription-type opiate-related death is unclear, particularly among opiate-tolerant individuals. Issues of tolerance, potentiation with other drugs, and overlapping therapeutic and lethal dose levels complicate assigning causation in prescription-type opiate-involved fatalities. The source and form of prescription-type opiates involved in deaths are sometimes undetermined.

The increasing number of deaths involving prescription-type opiates appears to have slowed in the first half of 2005, during which time 67 such deaths were reported. This is up just slightly from 65 in the preceding half-year, but still substantially higher than the 38 reported in the first half of 2003 (exhibit 4).

Since 1997, deaths involving prescription-type opiates have been disproportionately White: 88 percent, compared with 81 percent for non-prescription-type opiate deaths (exhibit 5). The only other racial group with any substantial number of prescription-type opiate deaths is African-Americans, representing 8 percent of such deaths since 1997. No clear trends in racial groups for decedents involving prescription-type opiates are discernable.

Since 1997, females have consistently represented more of prescription-opiate involved deaths (41 percent) than deaths not involving these drugs (23 percent). A similar proportion of deaths were ruled suicide since 1997: 10 percent for prescription-type opiates and 11 percent for all other drug-involved deaths. No trends by manner of death are evident.

In the first half of 2005, for adults, 96 calls to the Helpline involved OxyContin, compared with 14 for youth. There were 160 adult calls for “prescription pain pills” in 2004, compared with 8 for youth. As a point of comparison, there were 208 calls about adult use of heroin in first half of 2005. Categorization of calls to the Helpline for other opiates and “prescription pain pills” has changed over time, and categories are not mutually exclusive.

Three types of prescription-type opiates are among the top 25 substances reported in the FY 2005 NFLIS data: oxycodone, hydrocodone, and methadone (exhibit 6). For the Seattle area, these three substances totaled 4.1 percent, which is only slightly higher than the rest of the State (3.7 percent of seizures).

Stimulants

Stimulants include a range of drugs, including methamphetamine, which is available almost exclusively as an illicit drug. Amphetamines are primarily prescription drugs: dextroamphetamine (e.g., Dexedrine) for weight control, and dl amphetamine (e.g., Adderall) and methylphenidate (e.g., Ritalin) for ADD/ADHD.

Eighteen percent of all treatment admissions involved methamphetamine in the first half of 2005 (exhibit 2). Methamphetamine as the primary drug represented 11 percent of treatment admissions, indicating that for the majority of methamphetamine-involved admissions, methamphetamine was the primary drug of use.

Unweighted DAWN *Live!* data indicated that 84 percent of methamphetamine ED reports were for the drug abuse/other case type, and 15 percent were seeking detox/treatment (exhibit 3). Seventy percent of methamphetamine patients were male. Most patients were White (47 percent). (Nearly 48 percent of the reports did not have race documented.) More than one-third (36 percent) of methamphetamine patients were age 25–34, which makes them generally younger than heroin and cocaine users.

Methamphetamine-involved deaths jumped from 11 in the second half of 2004 to 17 in the first half of 2005—the highest recorded number in King County (exhibit 4). For data for 1997 through June 2005, these decedents were the youngest of any of the major drugs, with a median age of 39.0, compared with 42.0 for all drugs. Almost all methamphetamine deaths, 95 percent, were ruled accidental during this period. A relatively high proportion (89 percent) were Caucasian. No notable trends in race, gender, or manner of death were evident for methamphetamine decedents during this period.

In the first half of 2005, the proportions of Helpline calls related to methamphetamine were 21 percent of adult calls and 16 percent of youth calls, placing it as the second most frequent Helpline call (after cocaine for adults and after marijuana for youth).

A category of amphetamine was added to the Helpline data in 2003. There were 25 adult calls and 1 youth call about amphetamine in the first half of 2005, though there may be underreporting due to an overlapping category of “prescription drugs.”

NFLIS data indicate that methamphetamine was the most common drug seized by law enforcement in Washington, outside of Seattle, in FY 2005 (exhibit 6). It is found at a much lower level in Seattle, where cocaine is the most commonly seized drug. Nearly one-third (31.4 percent) of Seattle-area drug tests were positive for methamphetamine, compared with 53.2 percent of drug tests for the rest of Washington. Methamphetamine and cocaine account for 70 and 73 percent of all seizures in Seattle and Washington State, respectively.

Federal law enforcement sources report that less methamphetamine is being manufactured in Washington but that demand is being met by an increase in supply from Mexico and Mexican groups in California.

Methamphetamine incidents, a combination of active labs used for manufacturing and dump sites of lab equipment or inactive labs, continued to decline for the State as a whole in the first half of 2005. The peak in incidents for the State and the two most populated counties occurred in 2001. In King County, the number of incidents remained flat in 2003 and 2004; such incidents declined in the first half of 2005 with a total of 80, compared with 199 for all of 2004. The surrounding counties of Pierce, Kitsap, and Snohomish all experienced declines in the first half of 2005 as well.

It is important to note that these data do not indicate the manufacturing methods or the quantities manufactured at the site of individual incidents. Reports from law enforcement indicate that “super” labs, those capable of producing large amounts of methamphetamine quickly, represent a small minority of manufacturing labs in the State.

Marijuana

Almost one-half (48 percent) of those admitted to treatment in the first half of 2005 reported current marijuana use (exhibit 2). Seventeen percent reported it as the primary drug of use, equaling approximately one-third of marijuana-involved admissions.

Unweighted marijuana ED reports totaled 982 in the first half of 2005, with 86 percent drug abuse/other case type, followed by 12 percent seeking detox/treatment (exhibit 3). Seventy-three percent of marijuana patients were male, and patients were

much younger than for other illegal drugs: 10 percent were age 12–17 and 42 percent were 18–29.

Calls to the Helpline for marijuana constituted 47 percent of youth calls and 17 percent of adult calls in the first half of 2005, similar to prior years.

Cannabis was the third most commonly identified substance in NFLIS data for both the Seattle area and the rest of Washington State in FY 2005 (exhibit 6). In the Seattle area, 15.7 percent of seizures tested positive, compared with 13.9 percent for the rest of the State.

Depressants

Barbiturates, benzodiazepines, and other sedative/depressant drugs in this analysis include alprazolam (Xanax), diazepam (Valium), lorazepam (Ativan), clonazepam (Klonopin), temazepam (Restoril), triazolam (Halcion), oxazepam (Serax), butalbital (Fioricet), chlordiazepoxide (Librium), diphenhydramine (Benadryl), hydroxyzine pamoate (Vistaril), meprobamate (Equanil), phenobarbital, promethazine (Phenergan), secobarbital (Seconal), and zolpidem (Ambien).

Depressants are rarely mentioned as a primary drug at intake to drug treatment. Less than 1 percent of admissions were for benzodiazepines, barbiturates, major tranquilizers, and other sedatives. Key informants report that these drugs are commonly used to enhance the effects of other drugs and are rarely taken as the primary drug recreationally.

Unweighted DAWN *Live!* ED drug reports for depressants (barbiturates, benzodiazepines, and anxiolytics/sedatives/hypnotics) totaled 948 for all case types (exhibit 3). The most common case type was drug abuse/other (45 percent), followed by overmedication (23 percent), and suicide attempt (16 percent). Note that because many visits are for multiple drugs, the case type may or may not reflect the reason for depressant use.

Deaths involving depressants have been level for the past 2 years, at the highest level since at least 1997, with 42 depressant-involved deaths in the first half of 2005 (exhibit 4). Overall, depressant-involved decedents were older than decedents for other drugs, with a median age of 43.5 from 1997 through June 2005 (exhibit 5). They also represented the largest proportions of suicide, with almost one in four deaths ruled a suicide. Females were disproportionately found to have depressants in their blood: 44 percent, compared with 29 percent for all drugs overall.

A benzodiazepine category was added to the Helpline data in 2003; there were 38 adult calls and 2 youth calls for benzodiazepines in the first half of 2005.

NFLIS data showed that 1.5 percent of exhibits from the Seattle-area lab and 1.1 percent for the rest of the State were benzodiazepines (i.e., diazepam, and clonazepam) in FY 2005.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE AND INJECTION DRUG USE TRENDS

Available data for people diagnosed with HIV infection between 1996 and 2004 are presented in exhibit 7. In King County, injection drug users (IDUs) and men who have sex with men (MSM) and also inject drugs (MSM/IDUs) both represent 7 percent of recent HIV cases. For Washington State as a whole, IDUs represent 10 percent and MSM/IDUs represent 6 percent.

Excepting MSM/IDUs, the rate of HIV infection among the 15,000–18,000 injection drug users who reside in King County has remained low and stable over the past 14 years. Various serosurveys conducted in methadone treatment centers and correctional facilities and through street and community-targeted sampling strategies over this period indicate that 4 percent or less of IDUs who are not MSM in King County are infected with HIV. Data from a

CDC-funded HIV Incidence Study (HIVIS 1996–2001) suggest that the rate of new infections among non-MSM/non-IDUs in King County is less than 0.1 percent per year.

Syringes exchanged and numbers of encounters have remained high in King County, with more than 2 million syringes exchanged and more than 60,000 encounters reported in 2004.

Hepatitis B and C are endemic among Seattle-area injectors. Epidemiologic studies conducted among more than 4,000 IDUs by Public Health’s HIV-AIDS Epidemiology Program between 1994 and 1998 reveal that 85 percent of King County IDUs may be infected with hepatitis C (HCV), and 70 percent show markers of prior infection with hepatitis B (HBV). Local incidence studies indicate that 21 percent of non-infected IDUs acquire HCV each year, and 10 percent of IDUs who have not had hepatitis B acquire HBV.

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Exhibit 1. DAWN ED Sample and Reporting Information for King and Snohomish Counties: January–June 2005

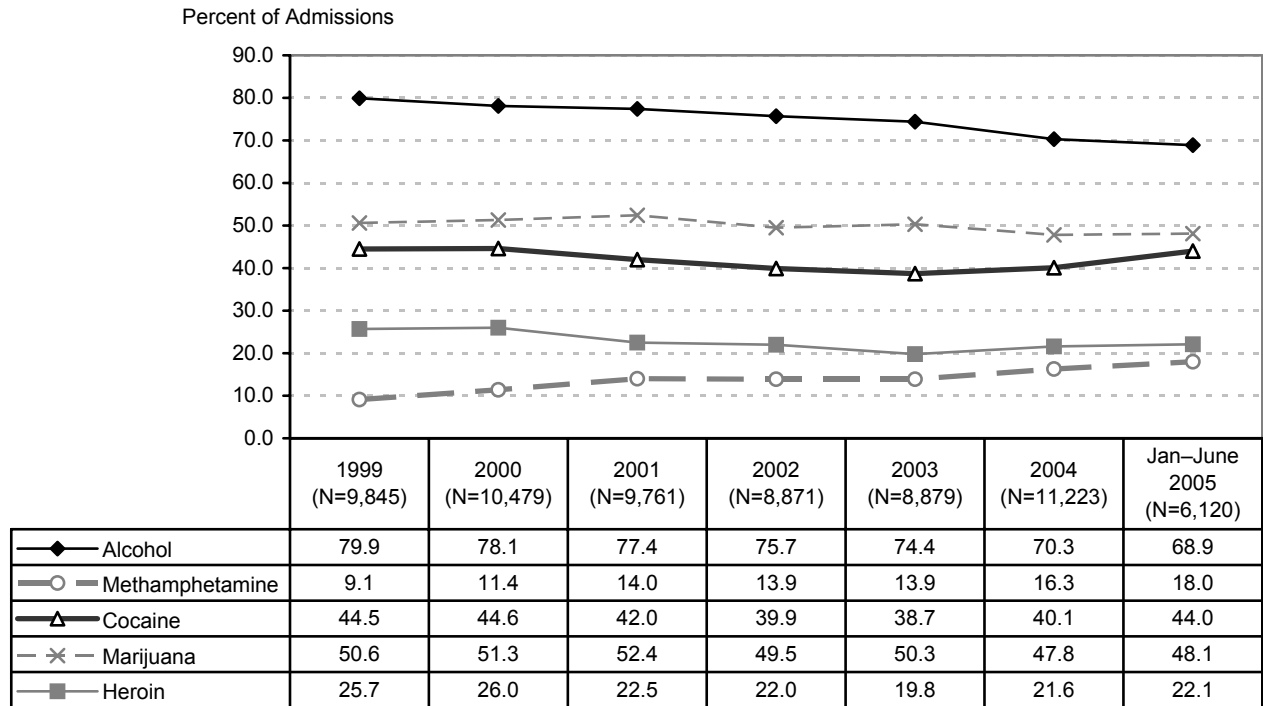
Total Eligible Hospitals ¹	No. of Hospitals in DAWN Sample	Total EDs in DAWN Sample ²	No. of EDs Reporting per Month: Completeness of Data (percent)			No. of EDs Not Reporting
			90–100 percent	50–89 percent	<50 percent	
22	22	24	8–12	0–2	0–2	11-14

¹Short-term, general, non-Federal hospitals with 24-hour emergency departments based on the American Hospital Association Annual Survey.

²Some hospitals have more than one emergency department; all 24 represented in this exhibit are from King and Snohomish Counties, with no participation yet by EDs in the Pierce County sample (see *Data Sources*).

SOURCE: DAWN *Live!*, OAS, SAMHSA, updated 2/16/06

Exhibit 2. Treatment Admissions¹ for Primary, Secondary, or Tertiary Use of Selected Drugs for Residents of King County, Washington, by Percent: January 1999–June 2005



¹Data include all ages, all treatment modalities, department of corrections and private pay clients at opiate substitution treatment clinics.

SOURCE: Washington State TARGET data system—Structured Ad Hoc Reporting System

Exhibit 3. Number of Selected Drug Reports (Unweighted¹) in Drug-Related ED Visits and Patient and Case Information, by Drug Category and Percent: January–June 2005

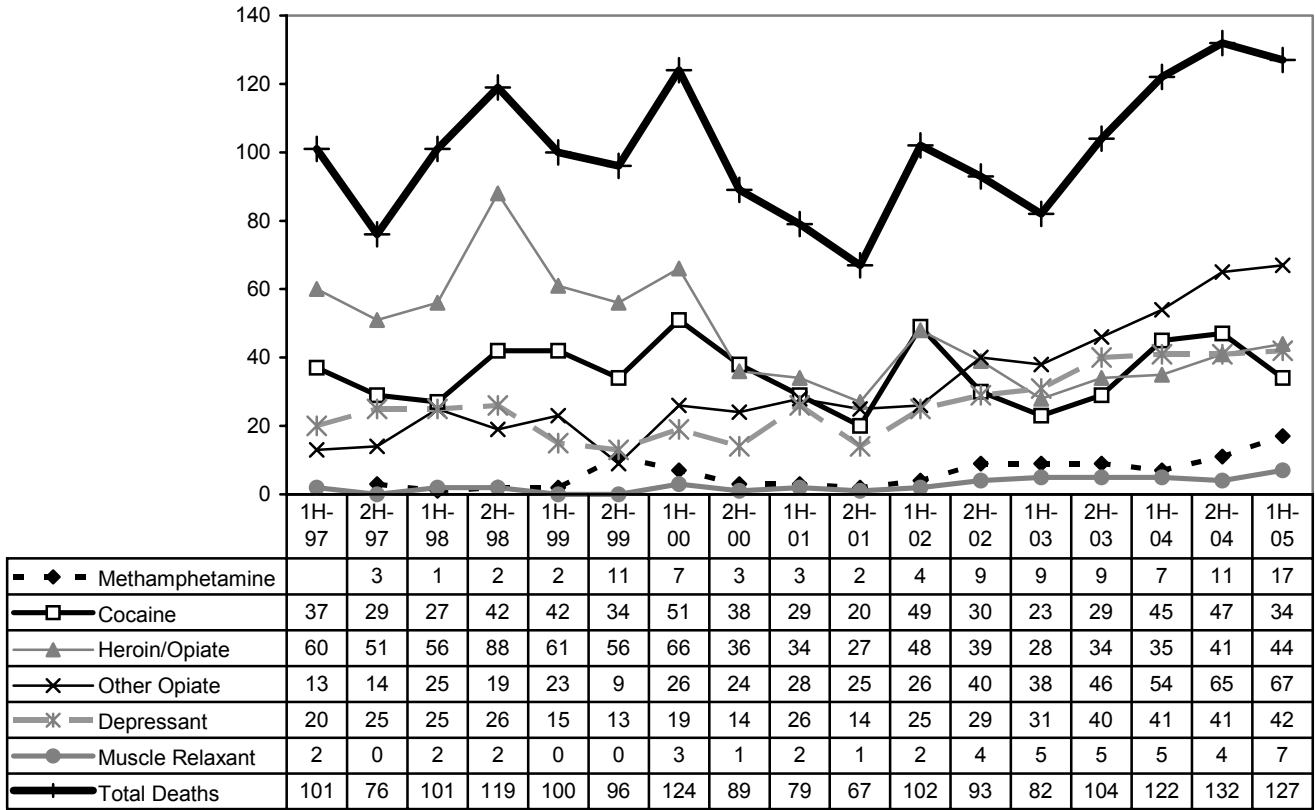
Patient/Case Information	Substance of Abuse					
	Cocaine	Heroin	Marijuana	Rx Opiates	Sedatives	Methamphetamine
Number of Drug Reports (January–June 2005)	2,086	1,185	982	1,480	948	886
Type of Case						
Suicide attempt	1.3	0.7	1.8	3.6	15.5	1.0
Seeking detox	15.6	16.5	12.0	11.8	8.4	14.9
Adverse reaction	0.0	0.0	0.0	15.3	7.1	0.0
Overmedication	0.0	0.0	0.0	14.7	22.8	0.0
Malicious poisoning	0.1	0.0	0.2	0.1	0.1	0.3
Accidental ingestion	0.0	0.0	0.0	0.5	0.7	0.1
Drug Abuse/Other	82.9	82.9	85.9	53.9	45.4	83.6
Gender						
Male	65.1	61.3	72.8	49.7	45.1	70.3
Female	34.9	38.6	27.1	50.1	54.6	29.6
Not documented	0.0	0.1	0.1	0.2	0.2	0.1
Race/Ethnicity						
White	24.6	38.8	41.6	43.4	40.9	46.5
Black	11.8	3.6	7.6	4.7	4.0	2.9
Hispanic	1.2	0.6	1.6	0.7	0.8	1.9
Race/ethnicity NTA ²	2.2	1.0	2.0	2.2	0.9	1.9
Not documented	60.3	56.0	47.0	49.1	53.3	46.7
Age Group						
5 and younger	0.1	0.2	0.1	0.5	0.6	0.1
6–11	0.0	0.0	0.0	0.1	0.5	0.1
12–17	1.1	0.6	9.9	1.8	4.1	4.2
18–20	3.3	4.1	11.5	4.1	5.5	9.3
21–24	8.1	7.2	16.0	9.3	6.5	16.4
25–29	11.9	14.9	14.8	9.9	8.8	20.1
30–34	11.0	14.4	12.4	11.1	10.4	16.3
35–44	36.7	30.7	20.6	24.3	30.4	23.3
45–54	22.3	23.5	11.3	25.1	21.7	9.1
55–64	4.7	4.0	3.1	7.8	7.8	1.2
65 and older	0.7	0.5	0.3	6.1	3.2	0.0
Not documented	0.1	0.1	0.1	0.3	0.4	0.0
Route of Administration						
Oral	1.2	0.2	0.8	33.3	41.5	2.3
Injected	7.3	55.7	0.0	2.2	0.3	11.7
Inhaled, sniffed, snorted	2.6	0.8	0.1	0.4	0.0	1.0
Smoked	13.3	0.9	19.2	0.1	0.0	10.3
Other	0.1	0.4	0.1	1.3	0.0	0.5
Not documented	75.5	42.0	79.7	62.7	58.2	74.3

¹The unweighted data are from 11–14 EDs reporting to the King and Snohomish Counties' hospitals reporting to DAWN in January–June 2005. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted and, therefore, are subject to change.

²NTA=Not tabulated above.

SOURCE: DAWN *Live!*, OAS, SAMHSA; accessed 02/14/06

Exhibit 4. Drug-Involved Deaths¹ in King County, Washington, Related to Illicit and Prescription Drugs: January 1997–June 2005



¹Data are duplicated, most deaths involve multiple drugs.
SOURCE: Medical Examiners Office, Public Health – Seattle & King County

Exhibit 5. Drug-Involved Deaths in King County, by Demographics, Manner of Death, and Percent: January 1997–June 2005

Demographic and Manner of Death	All Drugs	Heroin/Opiate	Cocaine	Alcohol	Other Opiate	Depressant	Methamphetamine
Times Identified (<i>N</i>)	1,710	803	605	604	542	446	99
Median Age (Years)	42.0	41.0	41.0	41.0	44.0	43.5	39.0
Female	29	19	23	19	41	44	20
Manner of Death							
Accident	81	92	94	83	80	64	95
Suicide	11	2	1	9	10	23	1
Homicide	0	0	0	0	0	0	0
Undetermined	8	6	5	7	10	13	4
Race/Ethnicity							
White	83	83	73	83	88	88	89
African-American	11	10	21	9	8	7	4
Asian/Pacific Islander	1	0	1	1	1	1	2
Native American	3	3	2	4	2	2	2
Hispanic	1	1	1	1	0	0	0
Other/Mixed	1	1	2	1	1	2	3

SOURCE: Medical Examiners Office, Public Health – Seattle & King County

Exhibit 6. Local Law Enforcement Seizure Drug Test Results in Seattle and the State of Washington: FYs 2003–2005

Seattle-Area Lab			
	FY 2003	FY 2004	FY 2005
Acetaminophen	0.3	0.2	
Alprazolam	0.3	0.1	0.2
Amphetamine	0.3	0.2	0.2
Buprenorphine			0.1
Caffeine	0.3	0.2	0.0
Cannabinol			
Cannabis	17.2	15.3	15.7
Carisoprodol	0.3		0.1
Cathinone	0.3		0.1
Clonazepam	0.5	0.3	0.5
Cocaine	40.5	40.4	38.3
Codeine	0.2		0.2
Diazepam	0.4	0.3	0.6
Dimethyl Sulfone			0.1
Heroin	5.0	4.7	5.6
Hydrocodone	0.7	0.9	1.1
Hydromorphone		0.1	0.1
Ibuprofen			
Ketamine	0.1		
Lorazepam		0.1	0.2
MDA	0.3	0.3	0.1
MDMA	1.4	1.0	
Methadone	0.4	0.7	1.2
Methamphetamine	27.2	29.4	31.4
Methandrosthenolone (Methandienone)	0.1		
Methylphenidate		0.3	0.2
Morphine	0.2	0.3	0.5
Non-Controlled Non-Narcotic Drug	0.3	0.3	
Oxycodone	0.9	1.4	1.8
PCP	0.9	0.6	0.2
Propoxyphene		0.1	
Pseudoephedrine	0.7	0.4	0.5
Psilocin	0.7	0.6	0.3
Psilocybine		0.3	0.3
Sodium Bicarbonate			
Temazepam			0.1
Testosterone			0.1
Zolpidem			0.1
Total of Top 25 (#)	99.25 (3,188)	98.83 (3,454)	100.0 (3,702)
Sub-totals			
Other opiates	2.43	3.55	4.97
Benzodiazepines	1.18	0.93	1.48

WA State Without Seattle-Area Lab			
	FY 2003	FY 2004	FY 2005
Acetaminophen	0.2	0.1	
Alprazolam	0.2	0.2	0.2
Amphetamine	0.3	0.4	0.3
Buprenorphine			
Caffeine	0.2	0.2	
Cannabinol	0.2		
Cannabis	15.5	15.6	13.9
Carisoprodol	0.2	0.1	0.1
Cathinone			
Clonazepam	0.3	0.3	0.3
Cocaine	20.6	18.2	19.8
Codeine	0.2	0.1	0.2
Diazepam	0.4	0.3	0.4
Dimethyl Sulfone			0.1
Heroin	6.5	4.8	5.2
Hydrocodone	1.1	1.3	1.3
Hydromorphone			0.1
Ibuprofen		0.1	0.1
Ketamine			
Lorazepam			0.2
MDA	0.1		
MDMA	0.5	0.5	0.1
Methadone	0.4	0.6	0.7
Methamphetamine	47.8	51.7	53.2
Methandrosthenolone (Methandienone)			
Methylphenidate	0.1	0.1	0.1
Morphine	0.3	0.4	0.4
Non-Controlled Non-Narcotic Drug	0.5	0.7	
Oxycodone	1.2	1.1	1.7
PCP			
Propoxyphene		0.1	0.1
Pseudoephedrine	0.8	0.7	0.5
Psilocin	0.5	0.7	0.5
Psilocybine	0.3	0.2	0.2
Sodium Bicarbonate	0.2	0.2	
Temazepam			
Testosterone			
Zolpidem			
Total of Top 25 (#)	98.62 (12,162)	98.63 (11,926)	100.0 (12,309)
Sub-totals			
Other opiates	3.25	3.51	4.39
Benzodiazepines	0.85	0.81	1.12

SOURCE: National Forensic Laboratory Information System

Exhibit 7. New HIV Infections in King County and Washington State, by Demographic Characteristics and Year of HIV Diagnosis: 1996–2004

Characteristics	King County			WA State		
	2002–2004 ¹		Trend ² 1996–2004	2002–2004 ¹		Trend ² 1996–2004
	No.	(%)		No.	(%)	
Total	1,006	(100)		1,576	(100)	
HIV Exposure Category						
MSM	651	(65)		901	(57)	
IDU	67	(7)		153	(10)	
MSM/IDU	71	(7)		102	(6)	
Heterosexual contact	109	(11)	up	218	(14)	up
Blood product exposure	3	(0)		6	(0)	
Perinatal exposure	0	(0)		2	(0)	
Undetermined ³	105	(10)		194	(12)	
Sex and Race/Ethnicity						
Male	889	(88)		1,319	(84)	
White ⁴	571	(57)	down	877	(56)	down
Black ⁴	155	(15)	up	207	(13)	up
Hispanic	103	(10)		149	(9)	
Other ⁴	60	(6)		86	(5)	
Female	117	(12)		257	(16)	
White ⁴	33	(3)		103	(7)	
Black ⁴	62	(6)	up	95	(6)	
Hispanic	8	(1)		25	(2)	
Other ⁴	14	(1)		34	(2)	
Race/Ethnicity						
White ⁴	604	(60)	down	980	(62)	down
Black ⁴	217	(22)	up	302	(19)	up
Hispanic	111	(11)		174	(11)	
Asian & Pacific Islander ⁴	33	(3)		56	(4)	
American Indian/ Alaska Native ⁴	21	(2)		40	(3)	
Multi Race ⁴	16	(2)	up	16	(1)	up
Unknown	4	(0)		8	(1)	
Age at HIV Diagnosis						
0–19	10	(1)		19	(1)	down
20–24	72	(7)		129	(8)	up
25–29	141	(14)	down	218	(14)	down
30–34	191	(19)	down	277	(18)	down
35–39	244	(24)		343	(22)	
40–44	173	(17)	up	266	(17)	up
45–49	90	(9)		159	(10)	
50–54	47	(5)		84	(5)	
55–59	24	(2)	up	47	(3)	up
60–64	8	(1)		18	(1)	
65 and older	6	(1)		16	(1)	

¹Due to delays in reporting, data from recent years are incomplete.

²Statistical trends were identified from the chi-square test for trend, calculated for the periods 1996–1998, 1999–2001, and 2002–2004.

³Includes persons for whom exposure information is incomplete (due to death, refusal to be interviewed, or loss to follow-up), patients still under investigation, patients whose only risk was heterosexual contact and where the risk of the sexual partner(s) was (were) undetermined, persons exposed to HIV through their occupation, and patients whose mode of exposure remains undetermined.

⁴And not Hispanic. The groups Asian, Native Hawaiian, and Other Pacific Islanders were grouped due to small cell sizes. All categories are mutually exclusive.

SOURCE: Public Health – Seattle & King County, Washington State Department of Health

Substance Abuse Trends in Texas: January 2006

Jane Carlisle Maxwell, Ph.D.¹

ABSTRACT

Cocaine continues to be readily available. It is the primary illicit drug for which Texans enter treatment, and it is a major problem on the border with Mexico, as documented in the school survey and treatment data. Crack cocaine continues to move beyond Black users to White and Hispanic users, including those on the border. Alcohol is the primary substance of abuse in Texas. Heroin purity is increasing and price is decreasing; addicts entering treatment are primarily injectors. Hydrocodone is a larger problem than oxycodone or methadone. Codeine cough syrup, 'Lean,' continues to be abused. Marijuana treatment admissions with criminal justice problems are less impaired than those who are referred from other sources. Methamphetamine is a growing problem, particularly in north and east Texas, and smoking 'ice' is now the major route of administration for persons entering treatment. Abuse of Xanax and Soma is increasing. Club drug users differ in their sociodemographic characteristics, just as the properties of these drugs differ. Ecstasy use is moving out of the White club scene, and the indicators are not decreasing. Ketamine continues to be abused. GHB and GBL remain a problem, particularly in the Dallas-Fort Worth Metroplex area. Although indicators are down, Rohypnol remains a problem along the Texas-Mexico border, PCP indicators are mixed, and dextromethorphan is a problem with adolescents. Inhalants remain a problem with different types of users. The number of AIDS cases of females and persons of color is growing. The proportion of cases related to the heterosexual mode of transmission now exceeds the proportion of cases related to injection drug use.

INTRODUCTION

Area Description

The population of Texas in 2004 was 22,158,126, with 51 percent White, 12 percent Black, 34 percent Hispanic, and 3 percent "Other." Illicit drugs continue to enter from Mexico through cities such as El Paso, Laredo, McAllen, and Brownsville, as well as through

smaller towns along the border. The drugs then move northward for distribution through Dallas-Fort Worth and Houston. In addition, drugs move eastward from San Diego through Lubbock and from El Paso to Amarillo and Dallas-Fort Worth.

There are multiple routes by which drugs enter Texas. The international airports in Houston and Dallas-Fort Worth are major ports for the distribution of drugs into and out of the State, and seaports are used to import heroin and cocaine via commercial cargo vessels, fishing boats, and "Go Fast" speedboats. Both private and express mail companies are used to traffic narcotics and smuggle money, and drugs are transported across the border by private vehicles and couriers who carry the drugs across on their bodies. Another problem is that U.S. citizens can buy controlled substances in Mexican pharmacies and then bring them into the States.

Data Sources

Substance Abuse Trends in Texas is an ongoing series that is published every 6 months as a report for the Community Epidemiology Work Group meetings sponsored by the National Institute on Drug Abuse (NIDA). This report updates the June 2005 report. To compare the January 2006 report with earlier periods, please access <<http://www.utexas.edu/research/cswr/gcattc/drugtrends.html>>.

All of the data included in this report are reviewed for quality control. Based on this review, cases may be corrected, deleted, or added. Therefore, these data are subject to change. The information on each drug is discussed in the following order of sources:

- **Student substance use data** came from the *Texas School Survey of Substance Abuse: Grades 7-12, 2004* and the *Texas School Survey of Substance Abuse: Grades 4-6, 2004*, which are published by the Department of State Health Services (DSHS), formerly the Texas Commission on Alcohol and Drug Abuse.
- **Data on use by Texans age 12 and older** came from the Substance Abuse and Mental Health Services Administration's (SAMHSA) National Surveys on Substance Use and Health (NSDUH). The State and metropolitan estimates of use of illicit drugs lifetime, past year, and past month for the population age 12 and older are based on the 2002–2004 surveys, and the regional estimates are based on the 1999–2001 surveys.

¹The author is affiliated with the Addiction Research Institute, Center for Social Work Research, Austin, Texas.

- **Poison control center data** came from the Texas Poison Center Network, DSHS, for 1998 through the first half of 2005. Analysis was provided by Mathias Forrester, epidemiologist with the Texas Poison Center Network, and by the author. In addition, findings from five papers authored by Forrester were used in this report: “Carisoprodol Abuse in Texas, 1998-2003,” “Flunitrazepam Abuse and Malicious Use in Texas, 1998-2003,” “Oxycodone Abuse in Texas, 1998-2003,” “Methylphenidate Abuse in Texas, 1998-2004,” and “Alprazolam Abuse in Texas: 1998-2004,” *Journal of Toxicology and Environmental Health, Part A*, 69:237–243, 2006.
- **Emergency department (ED) data** were derived for January–June 2005 from the Drug Abuse Warning Network (DAWN) *Live!* restricted-access online query system administered by the Office of Applied Studies (OAS), SAMHSA. Eligible hospitals in the Houston DAWN area totaled 40, with 38 in the DAWN sample, and 40 EDs in the sample. (Some hospitals have more than one ED.) During January–June 2005, between 12 and 14 Houston emergency departments reported data each month. Participation was not complete, as shown in exhibit 1. Exhibits in this paper reflect cases that were received by DAWN as of December 6, 7, and 21, 2005. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted. Therefore, the data presented in this paper are subject to change. Data derived from DAWN *Live!* represent drug reports in drug-related ED visits. Drug reports exceed the number of drug visits, since a patient may report use of multiple drugs (up to six drugs plus alcohol). The DAWN *Live!* data are unweighted and, thus, are not estimates for the reporting area. These data cannot be compared to DAWN data from 2002 or before, nor can preliminary data be used for comparison with future data. Only weighted DAWN data released by SAMHSA can be used for trend analysis. A full description of the DAWN system can be found at <<http://dawninfo.samhsa.gov>>.
- **Treatment data** were provided by DSHS’s client data system on clients admitted to treatment in DSHS-funded facilities from the first quarter of 1987 through June 30, 2005. For most drugs, the characteristics of clients entering with a primary problem with the drug are discussed, but in the case of club drugs, information is provided on any client with a primary, secondary, or tertiary problem with that drug. Analysis was by the author on data run on November 27, 2005.
- **Drug-involved deaths** for the State of Texas through 2004 came from death certificates from the Bureau of Vital Statistics, DSHS; analysis was by the author. Because justices of the peace, who have no medical training, can sign death certificates, the actual drugs involved may not be reported, but instead a notation such as “drug abuse” is used. Deaths in which the actual substance is not reported are not included in the data in this paper. Findings are also presented from Maxwell, J. C., Pullum, T.W., and Tannert, K. “Deaths of Clients in Methadone Treatment in Texas: 1994-2002,” *Drug and Alcohol Dependence*, 78(1); 73-82, 2005.
- **Drug and alcohol arrest data** come from the Uniform Crime Reports of the Texas Department of Public Safety (DPS).
- **Information on drugs identified by laboratory tests** are from the Texas Department of Public Safety, which reported results from toxicological analyses of substances submitted in law enforcement operations for 1998 through June 30, 2005, to the National Forensic Laboratory Information System (NFLIS) of the Drug Enforcement Administration (DEA). Analysis was by the author on data downloaded from NFLIS on November 17 and December 30, 2005.
- **Price, purity, trafficking, distribution, and supply** information was provided by quarterly reports on trends in trafficking from the Dallas, El Paso, and Houston Field Divisions of the DEA and from DEA’s 2004 Domestic Monitor Program.
- **Reports by users and street outreach workers** on drug trends for 2005 were reported to DSHS by workers at local human immunodeficiency virus (HIV) counseling and testing programs.
- **Acquired immunodeficiency syndrome (AIDS) data** were provided by DSHS for annual periods through December 2004.

DRUG ABUSE PATTERNS AND TRENDS

Impact of Hurricanes Katrina and Rita

Between September 1 and December 9, 2005, 530 individuals who were displaced by Hurricanes Katrina or Rita entered treatment in publicly funded Texas programs. Some 55 percent were admitted to

methadone, 18 percent were admitted to residential, and 9 percent were admitted to detoxification treatment. Such admissions occurred statewide, with 59 percent in programs in the Houston area, 13 percent in the Beaumont area, 9 percent in the Austin area, and another 9 percent in the Tyler-Longview area. Fifty-four percent of the evacuees were from outside Texas, and while the county of residence of non-Texans was not recorded, 54 percent had been born in New Orleans.

Of the evacuees, 68 percent were male, the average age was 37.6, 54 percent were Black, 40 percent were White, and 5 percent were Hispanic. In comparison, there were 20,551 individuals who were not evacuees who also entered treatment during this time period. Some 60 percent were male, the average age was 31.7, 18 percent were Black, 48 percent were White, and 31 percent were Hispanic. The primary problem of the evacuees was heroin (48 percent), other opiates (14 percent), alcohol (13 percent), crack cocaine (9 percent), and marijuana (8 percent). The primary problem for non-evacuees was alcohol (25 percent), marijuana (21 percent), crack cocaine (15 percent), stimulants (14 percent), and powder cocaine or heroin (9 percent each). There was no difference in the average number of months the two groups had been employed in the past year (3.8) or in their average education level (11 years); 90 percent of evacuees and 85 percent of non-evacuees had no health insurance.

Some 55 percent of the evacuees left treatment during this time period; 33 percent completed treatment. In comparison, 48 percent of the comparison non-evacuee group left treatment in this same period and 60 percent completed treatment. Of the evacuees who did not complete treatment, 59 percent left against medical advice, compared with 38 percent of non-evacuees. Thirty percent of the evacuees received no referral to other services, compared with 7 percent of non-evacuees.

These data provide insight into the characteristics of displaced substance abusers who sought treatment in Texas programs. Demographically, they differed from Texas clients, and because of the upheaval in their lives, they were less likely to complete treatment.

Austin street outreach workers reported new contacts who are evacuees from New Orleans. They were said to be hanging out on the streets in East Austin and the downtown area and using drugs, primarily heroin, crack cocaine, alcohol, and marijuana. These individuals were using the services of the outreach center. In the Galveston-Brazoria County area, most of the Hurricane Rita evacuees were reported to have

returned home, but Katrina evacuees are embedded in the community, with many living in low-cost beachfront motels. In Dallas, there was an increase in outreach efforts, as evacuees found themselves part of the homeless population due to Katrina. HIV outreach staff worked to provide testing, education, and referral to these individuals.

Cocaine/Crack

The *Texas School Survey of Substance Abuse: Grades 7-12, 2004* reported that lifetime use of powder and crack cocaine had dropped from a high of 9 percent in 1998 to 8 percent in 2004, while past-month use dropped from 4 percent in 1998 to 3 percent in 2004. Some 7.0 percent of students in nonborder counties had ever used powder or crack cocaine, and 2.5 percent had used it in the past month. In comparison, students in schools on the Texas border reported higher levels of cocaine use: 13 percent lifetime and 6 percent past-month use (exhibit 2).

The 2002–2004 National Survey on Drug Use and Health (NSDUH) estimated that 2.4 percent of Texans age 12 and older had used any form of cocaine in the past year, and 0.4 percent had used crack cocaine. The past-year proportions for the Dallas-Fort Worth metropolitan statistical area were 1.9 percent for all forms of cocaine and 0.5 percent for crack cocaine, while in the Houston metropolitan area, the proportions were 1.9 percent for cocaine and 0.2 percent for crack cocaine. The past-year use in the regions, based on the 1999, 2000, and 2001 NSDUH, was highest at 2.4 percent in the Central Texas, West Central Texas, Permian Basin, and Nortex regions and lowest in the East Texas region at 1.7 percent.

Texas Poison Control Center calls involving the use of cocaine increased from 503 in 1998 to 1,405 cases in 2004 and 644 in the first half of 2005. Some 61 percent of the cases in 2005 were male, and the average age was 30.

Cocaine was the major illicit drug in terms of DAWN emergency department reports. It represented 39 percent of the unweighted cases reported in Houston. Two-thirds (66 percent) of the patients were male, 30 percent were White, 46 percent were Black, and 20 percent were Hispanic; 21 percent were younger than 25, 24 percent were 25–34, and 55 percent were 35 or older.

Cocaine (crack and powder together) represented 27 percent of all admissions to DSHS-funded treatment programs in the first half of 2005 (exhibit 31).

Abusers of power cocaine made up 9 percent of all admissions to treatment. Among all cocaine admissions, cocaine inhalers were the youngest and most likely to be Hispanic and involved in the criminal justice or legal systems. Cocaine injectors were older than inhalers but younger than crack smokers, and they were most likely to be White (exhibit 3).

The term “lag” refers to the period from first consistent or regular use of a drug to the date of admission to treatment. Powder cocaine inhalers average 9 years between first regular use and entrance to treatment, while injectors average 16 years of use before they enter treatment.

Between 1987 and 2005, the percentage of Hispanic treatment admissions using powder cocaine increased from 23 percent to 54 percent, while for Whites and Blacks, the percentages dropped from 48 percent to 33 percent and from 28 percent to 11 percent, respectively. Exhibit 4 shows these changes by route of administration. It also shows that the proportion of Black crack cocaine admissions fell from 75 percent in 1993 to 47 percent in 2005, while the proportion of Whites increased from 20 percent in 1993 to 33 percent in 2005. Hispanic crack admissions rose from 5 percent to 18 percent in the same time period.

Cocaine is also a problem on the border. Twenty-six percent of all admissions to programs on the Texas side and 22 percent of all admissions on the Mexico side were for powder or crack cocaine. Some 34 percent of the Texas cocaine admissions and 26 percent of the Mexican cocaine admissions smoked crack cocaine.

The number of deaths statewide in which cocaine was mentioned has increased over the years, from 223 in 1992 to 699 in 2004 (exhibit 5). The average age of the decedents in 2004 was 40, and 43 percent were White, 25 percent were Hispanic, and 32 percent were Black. Seventy-seven percent were male.

Exhibit 6 shows that the proportion of substances identified as cocaine by the DPS labs is decreasing. In 1998, cocaine accounted for 40 percent of all items examined, compared with 31 percent in 2005.

In the fourth quarter of 2005, multikilogram quantities of powder cocaine were widely available in the Dallas-Fort Worth (DFW) Metroplex, according to the Dallas DEA Field Division. Cocaine is transported from Monterrey and Monclova, Coahuila, through Laredo, McAllen, Brownsville, and Eagle Pass to the DFW area. DFW is a transshipment and distribution

point for cocaine being sent to the Midwest, South, and Southeastern United States, and I-35 from Laredo to Dallas is a major route for the movement of cocaine. Houston is no longer as frequently used as a distribution point because of increased law enforcement on I-10 and Highway 59. Crack cocaine is concentrated in the DFW urban areas, particularly in Black and Hispanic neighborhoods. It is the most visible drug trafficked in the Tyler area.

According to the El Paso DEA Field Division, cocaine trafficking is tied to the Chicago/Northwest Indiana area. It is also smuggled into the United States through Presidio from Ojinaga, Mexico, and either sold locally or transported to the Midland/Odessa area.

Cocaine is readily available throughout the Houston DEA Field Division area, and crack cocaine is manufactured throughout the area, except in the Laredo district.

Cocaine continued to be readily available, but it became slightly more expensive in the second half of 2005 (exhibit 7). A gram of powder cocaine costs \$50–\$80 in Dallas, \$50–\$60 in El Paso, and \$100 in Amarillo and Lubbock. An ounce costs \$400–\$600 in McAllen, \$400–\$650 in Houston, \$500–\$600 in Austin, \$400–\$700 in Midland, \$550 in El Paso, \$400–\$650 in Houston, \$600–\$950 in Dallas, \$500–\$900 in Waco, \$650–\$850 in Amarillo, \$500–\$850 in Lubbock, \$700–\$1,000 in Tyler, and \$600–\$750 in Fort Worth.

Across the State, a rock of crack costs \$10–\$50, with \$10–\$20 being the most common price. An ounce of crack cocaine costs \$325–\$550 in Houston, \$500 in Galveston, \$400–\$600 in San Antonio, \$500–\$600 in Austin, \$500–\$700 in Waco, \$700–\$1,100 in Dallas, \$450–\$550 in Tyler, \$500–\$800 in Beaumont, \$450–\$1,000 in Amarillo and Lubbock, \$500 in El Paso, \$800 in Midland, \$500 in McAllen, and \$650–\$750 in Fort Worth.

In Houston, street outreach workers report an increase in crack cocaine users who are seeking residential treatment services, and many of these individuals have not been in treatment before. In Austin, there is an increase in homeless Black and White teenagers living in the Rundberg, St. John’s, and Cameron Road area. They are using crack, alcohol, and marijuana, and trading sex for money and drugs. Outreach workers report an increase in people with mental illness appearing at the Drop In Center in East Austin, as well as more violence on the street with gangs fighting over territory. There is also a need for treatment for monolingual Spanish

speakers. In Galveston and Brazoria counties, crack cocaine and marijuana are the most prevalent drugs.

Alcohol

Alcohol is the primary drug of abuse in Texas. In 2004, 68 percent of the population had ever used alcohol, and 33 percent had drunk alcohol in the last month. Of particular concern is heavy consumption of alcohol, or binge drinking, which is defined as drinking five or more drinks at one time. In 2004, 15 percent of all secondary students said that when they drank, they usually drank five or more beers at one time, and 13 percent reported binge drinking of liquor. Binge drinking increased with grade level. Among seniors, 27 percent binged on beer and 21 percent on liquor. While the percentage of binge drinking of beer has fallen over the years, the level of binge drinking of hard liquor has remained relatively stable since 1994 (exhibit 8).

Among students in grades 4–6 in 2004, 25.5 percent had ever drunk alcohol and 16.1 percent had drunk alcohol in the past school year. Use increased with grade level, as 11.6 percent of fourth graders had used alcohol in the school year, compared with 22.2 percent of sixth graders.

The 1999–2001 NSDUH estimated that 43.8 percent of Texans age 12 and older had drunk alcohol in the past month, and 22.2 percent had drunk five or more drinks on at least 1 day (binge drinking) in the past month. Past-month alcohol use was highest in the Central Texas region at 49.2 percent and lowest in the South Texas and Lower Rio Grande region at 35.3 percent; binge drinking was highest in the Central Texas region at 26.1 percent and lowest in the DFW region at 19.9 percent.

Of the Houston unweighted DAWN emergency department reports in the first half of 2005, 115 cases involved alcohol use/abuse by patients younger than 21. Of these cases involving minors, 47 percent were younger than 18.

In 2005, 24 percent of all clients admitted to publicly funded treatment programs had a primary problem with alcohol (exhibit 31). The characteristics of alcohol admissions have changed over the years. In 1988, 82 percent of the clients were male, compared with 66 percent in 2005. Between 1988 and 2005, the proportion of White clients declined from 63 to 58 percent, the proportion of Hispanic clients declined from 28 to 27 percent, and the proportion of Black clients increased from 7 to 13 percent. The average age of admissions increased from 35 to 37. The proportion of alcohol clients reporting no

secondary drug problem dropped from 67 percent to 52 percent, but the proportion with a problem with cocaine (powder or crack) increased from 7 percent to 23 percent. Consuming cocaine and alcohol at the same time produces cocaethylene, which intensifies cocaine's euphoric effects.

The alcohol clients were among the oldest (average age of 37), and more likely to be male than other admissions. Of the 6,967 alcohol admissions in the first half of 2005, 699 (10 percent) were younger than 21. Of these minors, the average age was 16, and average age of first use was 13. Seventy percent of the minors admitted for a primary problem with alcohol were referred to treatment by the criminal justice or legal system; 65 percent were male, 61 percent were Hispanic, 29 percent were White, and 7 percent were Black. Minors entering programs for alcohol treatment were more likely to report problematic use of other substances: 63 percent reported a second drug of abuse. Among adults, 46 percent reported a second problem. Marijuana was also a problem for 47 percent of minors and 12 percent of adults, powder cocaine was a problem for 7 percent of minors and 11 percent of adults, and crack cocaine was a problem for 1 percent of minors and 13 percent of adults.

More Texans are arrested for public intoxication (PI) than for any other substance abuse offense, although the arrest rate for PI per 100,000 population is decreasing (exhibit 9).

Heroin

The proportion of Texas secondary students reporting lifetime use of heroin dropped from 2.4 percent in 1998 to 1.6 percent in 2004. Past-month use dropped from 0.7 percent in 1998 to 0.5 percent in 2004.

The 2002–2004 NSDUH reported 0.1 percent of Texans age 12 and older had used heroin in the past year. In the DFW metropolitan area, 0.2 percent reported past-year use, while in the Houston metropolitan area, 0.0 percent reported past-year use.

Calls to Texas Poison Control Centers involving confirmed exposures to heroin ranged from 181 in 1998 to a high of 296 in 2000 and dropped to 184 in 2004 and 92 in the first half of 2005. Nine percent of the 2005 heroin exposures involved inhalation (snorting or smoking).

Heroin represented 2 percent of the major substances of abuse in the unweighted DAWN emergency department reports in Houston in 2005. Some 69 percent were male, 73 percent were White, 6 percent

were Black, and 16 percent were Hispanic. Thirteen percent were younger than 25, 24 percent were age 25–34, and 62 percent were age 35 and older.

Heroin is the primary drug of abuse for 9 percent of clients admitted to treatment. The characteristics of these addicts vary by route of administration, as exhibit 10 illustrates. Most heroin addicts entering treatment inject heroin. While the number of individuals who inhale heroin is small, note that the lag period between first use and seeking treatment for this group is 9 years, rather than 16 years for injectors. This shorter lag period means that, contrary to the street rumors that “sniffing or inhaling is not addictive,” inhalers can become addicted. They will either enter treatment sooner while still inhaling or they will shift to injecting, thus increasing their risk of hepatitis C and HIV infection, becoming more impaired, and entering treatment later.

Exhibit 11 shows that the proportion of treatment clients who are Hispanic has increased since 1996, but there has been little change since 2002.

In 2004, there were 415 deaths in Texas in which the death certificate included a mention of heroin, narcotics, opiates, or morphine (terms used by justices of the peace were not always as specific as desired). Some 62 percent were White, 30 percent were Hispanic, and 89 percent were Black; 75 percent were male. The average age was 39 (exhibit 12).

Exhibit 6 shows that the proportion of items identified as heroin by DPS labs has remained low at 1–2 percent over the past several years.

The predominant form of heroin in Texas is “black tar,” which has a dark gummy, oily texture that can be diluted with water and injected. Exhibit 13 shows the decline in price over the years. Depending on the location, “black tar” heroin sells on the street for \$10–\$20 per capsule, \$100–\$300 per gram, \$1,000–\$4,500 per ounce, and \$25,000–\$40,000 per kilogram. An ounce costs \$1,000–\$1,500 in Dallas, \$1,200–\$1,700 in Fort Worth, \$1,000 in El Paso, \$3,600–\$4,000 in Midland, \$3,500–\$4,500 in Lubbock, \$1,200–\$1,500 in Houston, \$2,000–\$2,600 in Galveston, \$1,300 in Laredo, \$700–\$1,350 in McAllen, \$1,400–\$1,600 in Austin, and \$1,200–\$1,600 in San Antonio.

“Mexican brown heroin,” which is black tar that has been cut with lactose or another substance and then turned into a powder to inject or snort, costs \$10 per cap and \$80–\$300 per gram. An ounce costs \$2,000–\$2,500 in San Antonio, \$800 in McAllen, \$800–\$1,600 in Dallas, and \$3,400–\$4,000 in Lubbock.

Colombian heroin sells for \$10 per cap, \$2,000–\$4,000 per ounce, and \$65,000–\$80,000 per kilogram in Dallas; \$84,000–\$90,000 in Midland; and \$50,000–\$80,000 in Houston. Asian heroin costs \$200–\$350 per gram, \$2,000–\$4,000 per ounce, and \$70,000 per kilogram in Dallas.

Over time, the purity of Mexican heroin in Texas has increased and the price has decreased. Exhibit 14 shows the purity and price of heroin purchased by DEA in four Texas cities under the Domestic Monitor Program. Heroin is much purer at the border in El Paso and decreases in purity as it moves north, since it is “cut” with other products as it passes through the chain of dealers.

In the Dallas area, “black tar” is readily available, according to the DEA Field Division. Sources report white and beige-colored heroin is now being produced in Mexico using Colombian production methods. Black tar is smuggled across the border to Laredo, McAllen, and Houston and then transported to the DFW area. Black tar in the Tyler, Longview, and Gilmer area comes from Dallas.

In El Paso in 2005, black tar heroin was reported by DEA as being the predominant type available. Heroin is generally transshipped through the Las Cruces area to northern New Mexico and Colorado. Limited amounts of brown heroin have been seized at the border, and there have been no reports of South American, Southeast Asian, or Southwest Asian heroin in the fourth quarter of 2005.

The DEA Houston Field Division reported the supply of brown and black tar heroin was stable. Colombian heroin is transported through Houston to the Northeastern United States. Austin street outreach workers report that high grade heroin that is a milky white color continues to be available.

Other Opiates

This group excludes heroin but includes opiates such as methadone, codeine, hydrocodone (Vicodin, Tussionex), oxycodone (OxyContin, Percodan, Percocet-5, Tylox), d-propoxyphene (Darvon), hydromorphone (Dilaudid), morphine, meperidine (Demerol), and opium.

The 2004 Texas secondary school survey found that 8.3 percent of students reported ever having drunk codeine cough syrup to get high, and 3.3 percent drank it in the past month. Some 9 percent of Black and White students reported lifetime use, as did 9 percent of Native American students and 5 percent of Hispanic students. There was no difference by

gender, but lifetime use increased with grade level from 3 percent of 7th graders to 11 percent of 12th graders.

The 2002–2004 NSDUH results reported that 4.7 percent of Texans aged 12 and older had used pain relievers and 0.3 percent had used OxyContin for nonmedical purposes in the past year. In the DFW metropolitan area, 5.0 percent had used pain relievers and 0.6 percent had used OxyContin nonmedically, and in the Houston metropolitan area, 4.1 percent had used pain relievers and 0.2 percent had used OxyContin nonmedically in the past year.

Hydrocodone is a larger problem in Texas than is oxycodone, but use of oxycodone is growing, as exhibit 15 shows. A study of oxycodone cases reported through the Texas Poison Center Network found that the proportion of calls that involved abuse of the drug more than doubled from 1998 to 2003. Oxycodone abuse involved males, adolescents, exposures at other residences and public areas, referral by the poison center to a health care facility, and some sort of clinical effect; one-half involved no other substance (Forrester 2004).

Cases involving methadone are increasing. Methadone is not only used in liquid and 50-milligram diskette forms in narcotic treatment programs, but 5- and 10-milligram pills are used for pain management. The poison control center, death certificate, and forensic laboratory data usually do not report the form of methadone being abused. Overdoses could be occurring among new patients in narcotic treatment programs, or they could be caused by liquid methadone that has been diverted from treatment, pain pills diverted from patients, or overdoses by pain patients who took too many of the pills or took other drugs in combination with the methadone pills. The number of poison control center cases involving misuse or abuse of methadone increased from 16 cases in 1998 to 106 in 2004 and 29 in the first half of 2005 (exhibit 14).

Of the unweighted hydrocodone, oxycodone, and methadone reports in 2005 in Houston DAWN hospitals, the patients reporting hydrocodone were less likely to be male and less likely to be White, while the methadone patients were older and less likely to be Black. The oxycodone patients were the youngest of those reporting use of any of these drugs. There were 378 hydrocodone and hydrocodone combination reports in Houston. Of these reports, 44 percent were male, 63 percent were White, 11 percent were Black, and 11 percent were Hispanic. Nineteen percent were younger than 25, 29 percent were 25–34, and 52 percent were 35 or older. In comparison,

there were 26 oxycodone and oxycodone/combination reports in Houston. Of the oxycodone cases, 54 percent were male, 73 percent were White, 4 percent were Black, and 4 percent were Hispanic. Some 23 percent were younger than 25, 23 percent were 25–34, and 54 percent were 35 or older. There were also 76 reports of methadone in Houston. Of the methadone patients, 52 percent were male, 83 percent were White, 3 percent were Black, and 14 percent were Hispanic; 14 percent were younger than 25, 28 percent were 25–34, and 59 percent were 35 or older.

Nearly 6 percent of all clients who entered publicly funded treatment during the first half of 2005 used opiates other than heroin. Of these, 32 used illegal methadone and 1,331 used other opiate drugs (exhibit 15). Those who reported a primary problem with illegal methadone or other opiates were different from those who reported a problem with heroin. They were much more likely to be female, to be White, to have recently visited an emergency department, and to report more health and psychological or emotional problems in the month prior to entering treatment.

Of the 201 deaths with a mention of hydrocodone statewide in 2004, 56 percent were male, 86 percent were White, 7 percent were Black, 6 percent were Hispanic, and the average age was 40. Of the 66 deaths with a mention of oxycodone, 67 percent were male, 88 percent were White, 6 percent were Black, 6 percent were Hispanic, and the average age was 36— younger than the hydrocodone decedents. Of the 164 deaths with a mention of methadone, 60 percent were male, 87 percent were White, 4 percent were Black, 9 percent were Hispanic, and the average age was 38. There were 32 deaths with a mention of fentanyl in 2004. Of these, 53 percent were male, 88 percent were White, 3 percent were Black, 9 percent were Hispanic, and the average age was 37.

Narcotic treatment programs are required to report the deaths of their clients. Between 1994 and 2002, 776 deaths were reported. Twenty percent died of liver disease, 18 percent died of cardiovascular disease, and 14 percent died of drug overdose. Compared with the standardized Texas population, narcotic treatment patients were 4.6 times more likely to die of a drug overdose, 3.4 times more likely to die of liver disease, 1.7 times more likely to die of a respiratory disease, 1.5 times more likely to die of a homicide, and 1.4 times more likely to die of AIDS (Maxwell et al. 2005).

In the Dallas DEA Field Division, there has been an increase in seizures of codeine cough syrup, and, in Tyler, OxyContin has surpassed hydrocodone as the

drug of choice among abusers of pharmaceuticals. Dilaudid sells for \$20–\$80 per tablet, and hydrocodone (Vicodin) sells for \$4–\$6 per tablet. OxyContin sells for \$1 per milligram in Fort Worth and \$8–\$20 per 20 milligrams in Tyler. Methadone sells for \$10 per 10-milligram tablet. Codeine cough syrup is mixed with Sprite or 7-Up and drunk in a soda bottle to avoid police attention. Promethazine syrup with codeine (“lean”) sells for \$200–\$300 per pint in Dallas and \$225 for a pint in Fort Worth. In the Houston Field Division, hydrocodone, promethazine with codeine, and other codeine cough syrups are the most commonly abused pharmaceutical drugs. In Houston, promethazine or phenergan cough syrup with codeine sells for \$75–\$100 for 4 ounces, \$125 for 8 ounces, and \$1,600 for a gallon. In San Antonio, hydrocodone sells for \$3 per pill and OxyContin costs \$1 per milligram; one OxyContin pill costs \$25 in McAllen. Dilaudid sells for \$10–\$15 per dose in McAllen. In the El Paso Field Division, morphine, Demerol, Darvocet, codeine, Vicodin cough syrup, and fentanyl are the major diverted pharmaceutical drugs.

DPS labs report increases in the number of exhibits of hydrocodone, oxycodone, and methadone each year from 1998 through 2004 (exhibit 15). There were two fentanyl exhibits in 2003, 13 in 2004, and 2 in the first half of 2005.

Outreach workers in Galveston report a rise in codeine cough syrup use among young adults age 18–35. Cough syrup ranks right behind crack cocaine and marijuana in terms of popularity.

Marijuana

Among Texas students in 2004 in grades 4–6, 2.5 percent had ever used marijuana, with 1.7 percent reporting use in the past school year. Among Texas secondary students (grades 7–12), 29.8 percent had ever tried marijuana, and 12.6 percent had used in the past month, levels lower than in 2000 (exhibit 16).

The 2002–2004 National Survey on Drug Use and Health estimated that 8.6 percent of Texans age 12 and older had used marijuana in the past year, with 4.7 percent using in the past month. Past-month use was 4.5 percent in the DFW metropolitan area and 4.4 percent in the Houston area. The regional estimates from the 1999–2001 surveys showed past-month use was highest in the Central Texas region (5.6 percent) and lowest in the South Texas-Lower Rio Grande region (2.6 percent).

The Texas Poison Control Centers reported 135 calls confirming exposure to marijuana in 1998, compared with 502 in 2004 and 241 in the first half of 2005.

Marijuana represented 21 percent of the major substances of abuse in the unweighted DAWN emergency department reports in Houston. Most of these patients (65 percent) were male; 35 percent were White, 37 percent were Black, and 21 percent were Hispanic. Some 46 percent were younger than 25, 25 percent were 25–34, and 29 percent were 35 or older.

Marijuana was the primary problem for 21 percent of admissions to treatment programs in 2005 (exhibit 31). The average age was 21. Some 43 percent were Hispanic, 32 percent were White, and 22 percent were Black; 76 percent had legal problems or had been referred from the criminal justice system, and these clients were less frequent users of marijuana than those who came to treatment for other reasons. The criminal justice-referred clients reported using marijuana on 6.2 days in the month prior to admission, as compared to 9.8 days for the non-criminal justice referrals. The same differences were reported for number of days in the past month that a second problem drug was used (2.9 vs. 5.5 days) and the number of days a third problem drug was used (2.7 vs. 5.1 days). Criminal justice referrals were more likely to report no second problem drug (43 percent vs. 40 percent for non-criminal justice referrals); 29 percent of both the criminal justice and non-criminal justice referrals reported a secondary problem with alcohol; 1.3 percent of criminal justice and 4.7 percent of non-criminal justice referrals had a secondary problem with crack cocaine; and 12 percent of criminal justice and 11 percent of non-criminal justice referrals had a secondary problem with powder cocaine. All of these differences were significant at $p < .0001$.

The Addiction Severity Index (ASI) scores were lower for justice referrals: 35 percent of the criminal justice referrals reported employment problems versus 47 percent of non-criminal justice referred clients; for sickness or health problems, 15 percent versus 19 percent; for family problems, 28 percent versus 49 percent; for social problems with peers, 22 percent versus 32 percent; for emotional problems, 20 percent versus 32 percent; and for substance abuse problems, 38 percent versus 54 percent. These differences, all of which were significant, indicate that marijuana users who are referred to treatment by the criminal justice system may be more appropriate for short-term intervention, with the more impaired marijuana users in need of more intensive treatment services.

Cannabis was identified in 35 percent of all the exhibits analyzed by DPS laboratories in 2000, but the proportion dropped to 27 percent in 2005 (exhibit 6).

Exhibit 17 shows the decline in the price of a pound of marijuana since 1992.

The Houston DEA Field Division reports hydroponic marijuana is available, especially in Asian communities, and that multikilogram amounts are available in the Austin area. In the Dallas-Fort Worth area, Mexican marijuana is readily available, but there are continuing seizures of domestically grown marijuana (both indoor and outdoor grown). The marijuana prices are now sometimes dropping to below the cost to dealers because of the increased availability. BC Bud is again available. Mexican marijuana is transhipped eastward either from Guadalajara/Juarez through El Paso to Amarillo, DFW, and Oklahoma, or from San Diego or San Bernardino to Lubbock, DFW, and Oklahoma. It is also shipped north from Monterrey through McAllen and Laredo to Houston, DFW, and Oklahoma. The largest seizures of marijuana in the El Paso Division are in El Paso and Alpine.

High quality sinsemilla sells for \$900–\$1,200 per pound in the Dallas-Fort Worth area, \$800 per pound in Lubbock, and \$600 per pound in Houston. Canadian BC Bud sells for \$3,300 in Houston and \$2,900–\$3,100 in Dallas. Hydroponic sells for \$3,500 per pound in Houston, \$4,600 in McAllen, \$3,000 in Austin, and \$3,800 in Dallas. The average price for a pound of commercial grade marijuana is \$140–\$160 in Laredo, \$250–\$500 in McAllen, \$350 in San Antonio, \$350–\$375 in Austin, \$350–\$425 in Houston, \$200 in El Paso, \$375–\$600 in Midland, \$350–\$800 in the Dallas-Fort Worth area, \$500–\$600 in Lubbock, and \$340–\$500 in Tyler. Locally grown indoor marijuana sells for \$3,800 per pound in Dallas.

Stimulants

Amphetamine-type substances come in different forms and with different names. “Speed” (“meth,” “crank”) is a powdered methamphetamine of relatively low purity and is sold in grams or ounces. It can be snorted or injected. “Pills” can be pharmaceutical grade stimulants such as dextroamphetamine, Dexedrine, Adderall, or Ritalin (methylphenidate), or they can be methamphetamine powder that has been pressed into tablets and sold as amphetamines or ecstasy. Pills can be taken orally, crushed for inhalation, or dissolved in water for injection. There is also a damp, sticky powder of higher purity than “Speed” that is known as “Base” in Australia and “Peanut Butter” in parts of the

United States. “Ice,” also known as “Crystal” or “Tina,” is methamphetamine that has been “washed” in a solvent to remove impurities; it has longer-lasting physical effects and purity levels above 80 percent. Ice can be smoked in a glass pipe, “chased” on aluminum foil, mixed with marijuana and smoked through a bong, or injected.

The secondary school survey reported that lifetime use of uppers was 6.0 percent, and past-month use was 2.5 percent in 2004.

The 2002–2004 NSDUH reported that past-year use of stimulants (which included amphetamines, methamphetamine, methylphenidate, and prescription diet pills) was 1.4 percent, and past-year use of methamphetamine was 0.7 percent. Past-year use of stimulants in the DFW metropolitan area was 1.1 percent, and use of methamphetamine was 0.7 percent, while in the Houston area, 1.3 percent had used stimulants and 0.5 percent had used methamphetamine.

There were 144 calls to Texas Poison Control Centers involving exposure to methamphetamine in 1998, 183 in 1999, 264 in 2000, 321 in 2001, 382 in 2002, 389 in 2003, 423 in 2004, and 146 in the first half of 2005. Of the 2005 calls, there were 63 mentions of “ice” or “crystal.” There were also 83 calls involving abuse or misuse of amphetamine pills, phentermine, or Adderall, and another 4 calls involving abuse or misuse of Ritalin. Forrester’s study of all calls involving Ritalin to poison control centers in Texas between 1998 and 2004 found that 8.5 percent involved misuse and abuse; of these calls, 62 percent involved males, 20 percent were younger than 13, 55 percent were age 13–19, and 25 percent were older than 19. Ninety-three percent had swallowed the drug, 7 percent had inhaled it, and 67 percent of these abuse/misuse callers also had used other substances. As compared to non-abuse calls, abusers were significantly more likely to be older, to have misused the drug while at school, and to suffer minor, moderate, or major effects from using the drug.

In the Houston unweighted DAWN ED reports, methamphetamine represented 2 percent of all reports in the major substances of abuse category, and amphetamines constituted 4 percent. Patients who reported use of methamphetamine were more likely to be male (70 percent) and younger; 44 percent were younger than 25, 36 percent were 25–34, and 21 percent were 35 and older. Seventy-two percent were White, 8 percent were Hispanic, and 3 percent were Black (race was not documented for 15 percent of the reports). Among amphetamine cases, 58 percent were male, 51 percent were White, 26 percent were Black,

and 14 percent were Hispanic. Amphetamine users tended to be older than methamphetamine patients: 43 percent were younger than 25, 28 percent were 25–34, and 29 percent were 35 or older.

Methamphetamine/amphetamine admissions to treatment programs increased from 5 percent of all admissions in 2000 to 13 percent in 2005, and the average age of clients admitted for a primary problem with stimulants increased. In 1985, the average age was 26; in 2005, it was 30. The proportion of White clients rose from 80 percent in 1985 to 87 percent in 2005, while the proportion of Hispanics dropped from 11 percent to 10 percent and the proportion of Blacks dropped from 9 percent to 1 percent. Unlike the other drug categories, more than one-half (53 percent) of these clients entering treatment were women (exhibit 31).

More clients now smoke “ice” than inject “speed.” The proportion smoking Ice increased from less than 1 percent in 1988 to 42 percent in 2005. The percentage of clients injecting methamphetamine dropped from 84 percent in 1988 to 41 percent in 2005 (exhibit 18).

Users of amphetamines or methamphetamine tend to differ depending on their route of administration, as exhibit 19 shows. Those who took the substance orally tended to be users of pills. Methamphetamine injectors were more likely to have been in treatment before (59 percent readmissions), compared with amphetamine pill takers (40 percent), ice smokers (41 percent), or inhalers (42 percent).

Statewide, there were 17 deaths in which amphetamines or methamphetamine were mentioned in 1997, 20 in 1998, 21 in 1999, 39 in 2000, 51 in 2001, 69 in 2002, 80 in 2003, and 99 in 2004. Of the decedents in 2004, 75 percent were male, 89 percent were White, 4 percent were Black, 7 percent were Hispanic, and the average age was 38.

To make methamphetamine, local labs are using the “Nazi method,” which includes ephedrine or pseudoephedrine, lithium, and anhydrous ammonia, and the “cold method,” which uses ephedrine, red phosphorus, and iodine crystals. The “Nazi method” is the most common method used in North Texas. Before these methods became common, most illicit labs used the “P2P method,” which is based on 1-phenyl-2-propanone. The most commonly diverted chemicals are 60-milligram pseudoephedrine tablets, such as Xtreme Relief, Mini-Thins, Zolzina, Two-Way, and Ephedrine Release.

Methamphetamine and amphetamine together represented 16 percent of all items examined by DPS laboratories in 2000, but the percentage increased to 25 percent in 2005 (exhibit 6). Twenty-four percent of the exhibits were methamphetamine, and less than 1 percent was amphetamine.

Methamphetamine is more of a problem in the northern half of the State, as exhibit 20 shows. In Abilene, 55 percent of all of the drug items examined by the DPS laboratory were methamphetamine, while in McAllen and Laredo, less than 1 percent were methamphetamine. Labs in the northern part of the State were also more likely to report analyzing substances that turned out to be ammonia or pseudoephedrine, chemicals used in the manufacture of methamphetamine. In addition, the proportions of methamphetamine exhibits elsewhere in the State are increasing each year, as shown by the fact that the percent in the DPS lab in the first half of 2004 in Corpus Christi was 12 percent, compared with 16 percent in the first half of 2005. In Austin, the proportions were 22 percent in 2004 and 28 percent in 2005.

The Houston Field Division reports that the availability of both Mexican and locally produced methamphetamine is increasing. Most of the methamphetamine comes from Mexico, but it is also manufactured in Texas by motorcycle gangs and independent producers using small mobile pseudoephedrine labs that produce small amounts for distribution in the local area.

The Dallas DEA Field Division reports that the availability of methamphetamine, especially ice, is steady or rising at the retail level. Mexican methamphetamine from Michoacán, Nuevo Leon, and Allende dominates the market, and it is available for purchase in multipound quantities. It is shipped through Laredo and McAllen to DFW. Local lab seizures have decreased, which may be related to the increase in Mexican ice, which has a larger profit margin than locally produced methamphetamine. Thus, low quality methamphetamine may be sold as “ice” by some dealers. High-purity methamphetamine is primarily distributed by Mexican nationals, but Asian gangs are also involved.

The El Paso Field Division reports methamphetamine traffickers operate out of California, Arizona, and Texas, with sources of supply being Mexico and California. Local street gangs distribute methamphetamine, and local production continues.

The purity for 1–10 grams has risen from 46 percent pure in the Dallas area in 2000 to 65 percent pure in

2004, according to NFLIS data. A pound of domestic methamphetamine sells for \$10,500 in Dallas, and a pound of Mexican methamphetamine sells for \$7,500–\$8,500. A pound sells for \$6,000–\$8,000 in San Antonio, \$8,000 in Midland, \$4,500–\$10,000 in Fort Worth, and \$7,000–\$8,000 in Lubbock. An ounce of domestic methamphetamine sells for \$600–\$800 in Dallas, while an ounce of Mexican sells for \$400. An ounce of methamphetamine sells for \$600 in Fort Worth, \$600–\$900 in Tyler, \$500–\$700 in Lubbock, \$500–\$850 in Houston, and \$700–\$1,000 in San Antonio.

The price of ice continues to drop, from \$13,000–\$17,000 per kilogram in the first half of 2004 to \$8,000–\$15,000 in the second half of 2005 in Houston. A kilogram costs \$22,000 in El Paso. An ounce of ice sells for \$1,400 in Dallas, \$800–\$1,000 in Fort Worth, \$750–\$1,100 in Tyler, \$700–\$1,200 in Houston, \$1,000–\$1,200 in Austin, \$1,200 in McAllen and \$1,000–\$1,500 in San Antonio.

Ice is being sold in North Austin around the Rundburg area. In Hispanic neighborhoods where English is not the primary language, “La Tina” is being smoked by sprinkling it onto a joint to “get high” or on a cigarette to “mellow out.” Of the Austin women tested for HIV in 2004, 2 percent of African-Americans and 4 percent of Hispanics had used methamphetamine while having sex. Use is also prevalent in the Houston gay community, and methamphetamine is increasing in popularity among adolescent users in Amarillo.

Depressants

This “downer” category includes three groups of drugs: barbiturates, such as phenobarbital and secobarbital (Seconal); nonbarbiturate sedatives, such as methaqualone, over-the-counter sleeping aids, chloral hydrate, and tranquilizers; and benzodiazepines, such as diazepam (Valium), alprazolam (Xanax), flunitrazepam (Rohypnol), clonazepam (Klonopin or Rivotril), flurazepam (Dalmane), lorazepam (Ativan), and chlordiazepoxide (Librium and Librax). Rohypnol is discussed separately in the Club Drugs section of this report.

The 2004 secondary school survey reported lifetime use of downers was 5.9 percent, and past-month use was 2.6 percent.

The 2002–2004 NSDUH reported 0.2 percent of Texans ages 12 and older had used sedatives in the past year, with 0.2 percent past-year use in the DFW metropolitan area and 0.1 percent in the Houston region.

A study on patterns of alprazolam abuse and drug identification (ID) calls received by several poison control centers found that of 25,954 alprazolam calls received, 42 percent were drug identification calls and 51 percent were human exposure calls, of which 18 percent were abuse calls. The number of drug ID calls and the number of abuse calls both increased during the 7-year period. Male patients accounted for 54 percent of abuse calls, and females represented 66 percent of nonabuse calls. Adolescent patients represented 43 percent of abuse calls but only 12 percent of nonabuse calls. Although the majority of both types of human exposures occurred at the patient’s own residence, abuse exposures were more likely than other exposures to occur at school (9 percent vs. 1 percent) and public areas (6 percent vs. 1 percent) (Forrester 2006).

About 1 percent of the clients entering treatment in 2005 had a primary problem with barbiturates, sedatives, or tranquilizers. These clients were the most likely to be female and highly impaired, based on their ASI scores (see exhibit 31).

Alprazolam, clonazepam, and diazepam are among the 15 most commonly identified substances according to DPS lab reports, although none of them represent more than 3 percent of all items examined in a year. Alprazolam (Xanax) cases outnumber other benzodiazepine cases (exhibit 21).

Alprazolam sells for \$5 in Dallas, \$3–\$5 in Fort Worth, \$5 in San Antonio, \$20 in McAllen, and \$5–\$10 in Tyler. Depending on the dosage unit, diazepam sells for \$1–\$10 in Dallas, Fort Worth, and Tyler.

Club Drugs and Hallucinogens

Exhibit 22 shows the demographic characteristics of clients entering DSHS-funded treatment programs statewide with a problem with a club drug. The row “Primary Drug” shows the percentage of clients citing a primary problem with the club drug shown at the top of the column. The rows under the heading “Other Primary Drug” show the percentage of clients who had a primary problem with another drug, such as marijuana, but who had a secondary or tertiary problem with one of the club drugs shown at the top of the table. Note that the treatment data uses a broader category, “Hallucinogens,” that includes lysergic acid diethylamide (LSD), dimethyltryptamine (DMT), STP, mescaline, psilocybin, and peyote.

Exhibit 22 shows that hallucinogen admissions are more likely to be male, gamma hydroxybutyrate (GHB) clients are the most likely to be White,

phencyclidine (PCP) clients are the most likely to be Black, Rohypnol clients are the youngest, and GHB clients are the oldest. While users of PCP are the most likely to have a primary problem with PCP (41 percent), users of Rohypnol, ecstasy, and hallucinogens are more likely to have primary problems with marijuana. Users of GHB tend to have a primary problem with methamphetamine (53 percent).

Exhibit 23 shows the percentage of exhibits identified by DPS laboratories that contained various club drugs. Only the proportion of PCP exhibits has not decreased over time, although the increase in MDMA exhibits between 2003 and 2004–2005 is of concern.

Dextromethorphan

The most popular dextromethorphan (DXM) products are Robitussin-DM, Tussin, and Coricidin Cough and Cold Tablets HBP, which can be purchased over the counter and can produce hallucinogenic effects if taken in large quantities. Coricidin HBP pills are known as “Triple C’s” or “Skittles.”

The 2004 Texas school survey reported that 4.3 percent of secondary students indicated they had used DXM. Use increased from 2.5 percent in 7th grade to 5.8 percent in 12th grade. There was no difference by gender, but Whites reported higher lifetime use (6.1 percent) than Native Americans (5.8 percent), Hispanics (3.6 percent), or Blacks (2.4 percent).

Poison control centers reported that the number of abuse and misuse cases involving dextromethorphan rose from 99 in 1998 to a high of 432 in 2002, and dropped to 232 in 2004, and 162 in the first half of 2005. Average age was 20.3. The number of cases involving abuse or misuse of Coricidin HBP was 7 in 1998 and rose to 268 in 2002 and then decreased to 229 cases in 2004 and 47 in the first half of 2005. Average age in 2005 was 15.6 years, which shows that youths can easily access and misuse this substance.

There was one death in 2004 in which dextromethorphan was one of the substances mentioned on the death certificate.

DPS labs examined 2 substances in 1998 that were dextromethorphan, compared with 13 in 1999, 36 in 2000, 18 in 2001, 42 in 2002, 10 in 2003, 15 in 2004, and 4 in the first half of 2005.

Ecstasy (Methylenedioxymethamphetamine or MDMA)

The 2004 Texas secondary school survey reported that lifetime ecstasy use dropped from a high of 8.6 percent in 2002 to 5.5 percent in 2004, while past-year use dropped from 3.1 percent to 1.8 percent.

The 2002–2004 NSDUH survey reported 1.1 percent of Texans had used ecstasy in the past year, with 1.3 percent using in the DFW and Houston metropolitan areas.

Texas Poison Control Centers reported 23 calls involving misuse or abuse of ecstasy in 1998, 46 in 1999, 119 in 2000, 155 in 2001, 172 in 2002, 284 in 2003, 302 in 2004, and 159 in the first half of 2005. In 2005, the average age was 21.

There were 71 unweighted reports in Houston in which ecstasy was one of the substances mentioned at admission to emergency departments reporting to DAWN. Some 56 percent of the ecstasy patients were male, 24 percent were White, 35 percent were Black, and 24 percent were Hispanic. Sixty-two percent were younger than 25, 30 percent were between 25 and 34, and 7 percent were 35 or older.

There were 63 admissions to treatment for a primary, secondary, or tertiary problem with ecstasy in 1998, compared with 114 in 1999, 199 in 2000, 349 in 2001, 521 in 2002, 502 in 2003, 561 in 2004, and 269 in the first half of 2005 (exhibit 22). Exhibit 24 shows that ecstasy has spread outside the White club scene and into the Hispanic and Black communities, as evidenced by the declining proportion of White treatment clients.

In 1999, there were two death certificates that mentioned ecstasy or MDMA in Texas. There was one death in 2000, five in 2001, five in 2002, two in 2003, and nine in 2004. Of the 2004 cases, 66 percent were male, 100 percent were White, and the average age was 28.

Exhibit 23 shows the substances identified by DPS labs. The labs identified MDMA in 5 exhibits in 1998, 107 exhibits in 1999, 387 in 2000, 817 in 2001, 632 in 2002, 490 in 2003, 737 in 2004, and 410 in the first half of 2005. Methylenedioxyamphetamine (MDA) was identified in 0 exhibits in 1998, 31 exhibits in 1999, 27 in 2000, 60 in 2001, 106 in 2002, 94 in 2003, 67 in 2004, and 18 in the first half of 2005.

According to the Houston DEA Field Division, ecstasy is more available at clubs, raves, and gyms,

and use is stable among Galveston and Beaumont college students. While most tablets contain MDMA, some have high concentrations of caffeine or methamphetamine, with traces of ketamine in some tablets. Ecstasy is available in downtown Austin nightclubs and use is stable, but use has increased in the Waco area among soldiers stationed at Fort Hood.

The Dallas DEA Field Division reports that ecstasy comes from Houston, Los Angeles, Las Vegas, or directly from Europe. Asian groups continue to be heavily involved in the sale and distribution of ecstasy. Combinations of drugs mentioned in Dallas include “candy flipping” (LSD and MDMA), “hippie flipping” (mushrooms and MDMA), “love flipping” (mescaline and MDMA), “robo flipping” (DXM and MDMA), and “elephant flipping” (PCP and MDMA).

Single dosage units of ecstasy sell for \$12–\$20 in Dallas, \$5–\$12.50 in Fort Worth, \$12–\$25 in Tyler, \$5–\$10 in Houston, \$25 in McAllen, \$20 in Laredo, \$6.50–\$7 in Austin, and \$11–\$16 in San Antonio. Multiple dosage units (1,000 tablets) sell for \$5,000–\$8,000 in Houston.

Gamma Hydroxybutyrate (GHB), Gamma Butyrate Lactone (GBL), 1-4 Butanediol (1,4 BD)

The number of cases of misuse or abuse of GHB or its precursors reported to Texas Poison Control Centers was 110 in 1998, 150 in 1999, 120 in 2000, 119 in 2001, 100 in 2002, 66 in 2003, 84 in 2004, and 63 in the first half of 2005. The average age of the abusers in 2005 was 24, and of the callers whose gender was known, 59 percent were male.

The unweighted DAWN ED data show there were five GHB reports in Houston in the first half of 2005.

Adults and adolescents with a primary, secondary, or tertiary problem with GHB, GBL, or 1,4 BD are seen in treatment. In 1998, 2 were admitted, compared with 17 in 1999, 12 in 2000, 19 in 2001, 35 in 2002, 31 in 2003, 45 in 2004, and 17 in the first half of 2005. In 2005, clients who used GHB tended to be the oldest of all the club drug users (average age 29) and were the most likely to be White (100 percent). GHB users were more likely to have used the so-called “hard-core” drugs; 47 percent had a history of injecting drug use and 53 percent had a primary problem with amphetamines or methamphetamine. Because of the sleep-inducing properties of GHB, users will also use methamphetamine so they can stay awake while they are “high” on GHB or they use GHB to “come down” from their use of methamphetamine (exhibit 22).

In 1999, there were three deaths that involved GHB, compared with five in 2000, three in 2001, two in 2002, two in 2003, and three in 2004. In 2004, 100 percent were male, 66 percent were White, and the average age was 33.

There were 18 items identified by DPS labs as being GHB in 1998, compared with 112 in 1999, 45 in 2000, 34 in 2001, 110 in 2002, 150 in 2003, 99 in 2004, and 48 through the first half of 2005. There were no items identified as GBL in 1998, four in 1999, seven in 2000, seven in 2001, nine in 2002, five in 2003, two in 2004, and one in 2005. There were no items identified as 1,4 BD in 1988, four in 1989, four in 2000, nineteen in 2001, five in 2002, and none in 2003, 2004, and 2005 (exhibit 23). In 2005, 98 percent of the GHB and GBL items were identified in the DPS lab in the Dallas area, which shows use of GHB is centered in this area of the State.

In Dallas, the price of GHB had increased from \$100–\$200 per gallon to \$500–\$1,600 per gallon. A dose of GHB costs \$20 in Dallas and \$5–\$10 in Lubbock and San Antonio. A 16-ounce bottle costs \$100 in San Antonio, and two 2-ounce bottles cost \$110 in Fort Worth. The DEA Field Division in Dallas reports that GHB is being manufactured in home laboratories; GBL ordered over the Internet is mixed with other chemicals and water to produce GHB.

Ketamine

Eight cases of misuse or abuse of ketamine were reported to Texas Poison Control Centers in 1998, compared with 7 in 1999, 15 in 2000, 14 in 2001, 10 in 2002, 17 in 2003, 7 in 2004, and 3 in the first half of 2005.

There were no reports of ketamine in the Houston DAWN emergency departments, and one client was admitted to a DSHS-funded treatment program in the first half of 2005 with a problem with ketamine.

Two deaths in 1999 involved use of ketamine, compared with none in 2000, one in 2001, one in 2002, none in 2003, and two in 2004.

In 1998, two substances were identified as ketamine by DPS labs. There were 26 in 1999, 49 in 2000, 120 in 2001, 116 in 2002, 85 in 2003, 79 in 2004, and 7 in the first half of 2005 (exhibit 23).

Ketamine costs \$2,200–\$2,500 per liter in Fort Worth and \$65 per vial in Tyler, with a dose selling for \$20 per pill or gram.

LSD and Other Hallucinogens

The secondary school survey shows that use of hallucinogens (defined as LSD, PCP, mushrooms, etc.) continues to decrease. Lifetime use peaked at 7.4 percent in 1996 and dropped to 4.8 percent by 2004. Past-month use dropped from a peak of 2.5 percent in 1998 to 1.6 percent in 2004.

The 2002–2004 NSDUH reported past-year use by Texans age 12 and older at 0.3 percent, with use at 0.3 percent in both the DFW and Houston metropolitan areas.

Texas Poison Control Centers reported 82 mentions of abuse or misuse of LSD in 1998, 113 in 1999, 97 in 2000, 70 in 2001, 129 in 2002, 20 in 2003, 22 in 2004, and 16 in the first half of 2005. There were also 98 cases of intentional misuse or abuse of hallucinogenic mushrooms reported in 1998, 73 in 1999, 110 in 2000, 94 in 2001, 151 in 2002, 130 in 2003, 172 in 2004, and 38 in 2005. The average age in 2005 was 19 for the LSD cases and 21 for the mushroom cases.

There were five unweighted reports of LSD and two unweighted reports of miscellaneous hallucinogens in the Houston DAWN emergency departments in the first half of 2005.

The number of adults and youths with a primary, secondary, or tertiary problem with hallucinogens entering treatment is decreasing. There were 636 in 2000, 486 in 2001, 436 in 2002, 319 in 2003, 266 in 2004, and 109 in the first half of 2005. Of the admissions in 2005, the average age was 21, 76 percent were male, 65 percent were White, 24 percent were Hispanic, and 11 percent were Black. Sixty-one percent were referred from the criminal justice or legal system, and 29 percent had a history of injection drug use (exhibit 22).

Statewide, there were two deaths in 1999 with a mention of LSD. No deaths with a mention of LSD have been reported since.

DPS labs identified 69 substances as LSD in 1998, compared with 406 in 1999, 234 in 2000, 122 in 2001, 11 in 2002, 10 in 2003, 25 in 2004, and 9 in the first half of 2005 (exhibit 23).

A dosage unit of LSD is selling for \$1–\$10 in Dallas, \$5–\$10 in Tyler, \$6–\$10 in Fort Worth, and \$8–\$12 in San Antonio. A dosage sheet of 100 sells for \$800 in San Antonio.

Phencyclidine (PCP)

The 2002–2004 NSDUH reported 0.1 percent past-year use of PCP in Texas. Past-year use was 0.1 percent in the DFW metropolitan area and 0.2 percent in Houston.

Texas Poison Control Centers reported cases of “Fry,” “Amp,” “Water,” “Wack,” or “PCP.” Often, marijuana joints are dipped in formaldehyde that contains PCP, or PCP is sprinkled on the joint or cigarette. The number of cases involving PCP increased from 102 in 1998 to a high of 237 in 2002 and decreased to 160 in 2004 and 41 in the first half of 2005. There were also 18 cases involving misuse or abuse of formaldehyde or formalin in 2003, 55 in 2004, and 24 in 2005. These formaldehyde or formalin cases may be linked to the use of PCP, but the records were not clear.

There were 73 unweighted reports of PCP in Houston DAWN emergency departments in the first half of 2005. Of these reports, 77 percent were male, 77 percent were Black, 12 percent were White, and 11 percent were Hispanic. Fifty-three percent were younger than 25, 40 percent were age 25–34, and 7 percent were 35 or older.

Adolescent and adult admissions to treatment with a primary, secondary, or tertiary problem with PCP have varied over time (exhibit 22), rising from 164 in 1998 to 417 in 2003 and then dropping to 295 in 2004 and 70 in the first half of 2005. Of these clients in 2005, 79 percent were Black, 41 percent were male, and 60 percent were involved in the criminal justice system. While 41 percent reported a primary problem with PCP, another 21 percent reported a primary problem with marijuana, which demonstrates the link between these two drugs as “Fry,” “Amp,” or “Water” (exhibit 22).

There were 3 death certificates in 1999, 3 in 2000, 5 in 2001, 8 in 2002, 2 in 2003, and 14 in 2004 that mentioned PCP. In 2004, 86 percent were male, 86 percent were Black, and the average age was 32.

DPS labs identified 10 substances as PCP in 1998, 84 in 1999, 104 in 2000, 163 in 2001, 125 in 2002, 143 in 2003, 164 in 2004, and 70 in the first half of 2005 (exhibit 23).

According to DEA, PCP costs \$30 per dosage unit in McAllen. In Dallas, it costs \$3,800 for a 16-ounce bottle, \$375–\$450 per ounce, \$25 per cigarette, and \$10 for a piece of a “sherm” stick. In Fort Worth, it costs \$26,000–\$28,000 per gallon.

Rohypnol

Rohypnol (flunitrazepam) is a benzodiazepine that was never approved for use in the United States. The drug is legal in Mexico, but since 1996, it has been illegal to bring it into the United States. It continues to be a problem along the Texas-Mexico border. As shown in exhibit 25, the 2004 secondary school survey found that students from the border area were about three times more likely to report Rohypnol use than those living elsewhere in the State (9.1 percent vs. 2.5 percent lifetime, and 3.5 percent vs. 2.5 percent current use). Use on both the border and in nonborder areas has declined since its peak in 1998.

The number of confirmed exposures to Rohypnol reported to the Texas Poison Control Centers peaked at 102 in 1998; 62 cases were reported in 2004 and 32 were reported in the first half of 2005. The average age in 2004 was 17; 52 percent were male; and 78 percent lived in counties on the border. A study of all the exposure calls between 1998 and 2003 found a significantly higher proportion of flunitrazepam abuse and malicious use calls occurred in border counties. The majority of the abuse calls involved males, while the majority of malicious use calls involved females. Most abuse calls involved adolescents, while the majority of the malicious calls involved adults. Abuse cases occurred most frequently at the patient's own residence or at school, while malicious use occurred most often in public areas, with the patient's own residence ranking second (Forrester 2004). This analysis provides evidence of two patterns of Rohypnol use: (1) recreational use and abuse by adolescent males and (2) use of the drug with criminal intent on adult women.

The number of youths and adults admitted into treatment with a primary, secondary, or tertiary problem with Rohypnol has varied: 247 in 1998, 364 in 1999, 324 in 2000, 397 in 2001, 368 in 2002, 331 in 2003, 221 in 2004, and 112 in the first half of 2005. In 2005, clients abusing Rohypnol were among the youngest of the club drug patients (age 16), and they were Hispanic (99 percent), which reflects the availability and use of this drug along the border (exhibit 22). Some 79 percent were involved with the criminal justice or legal system. While 10 percent of these clients said that Rohypnol was their primary problem drug, 52 percent reported a primary problem with marijuana.

DPS lab exhibits for Rohypnol numbered 43 in 1988, 56 in 1999, 32 in 2000, 35 in 2001, 26 in 2002, 17 in 2003, 17 in 2004, and 3 in the first half of 2005. This decline in the number of Rohypnol seizures, as

shown in exhibit 23, parallels the declines seen in other indicators.

Although Roche is reported to no longer be making the 2-milligram Rohypnol tablet (a favorite with abusers) generic versions are still produced, and the blue dye added to the Rohypnol tablet to warn potential victims is not in the generic version. Unfortunately, the dye is not proving effective, since people intent on committing sexual assault may employ blue tropical drinks and blue punches into which Rohypnol can be slipped.

Rohypnol was selling for \$2–\$4 per pill in San Antonio.

Other Abused Substances*Inhalants*

The 2004 elementary school survey found that 10.5 percent of students in grades 4 to 6 had ever used inhalants, and 7.6 percent had used in the school year. The 2004 secondary school survey found that 17 percent of students in grades 7–12 had ever used inhalants, and 6.7 percent had used in the past month.

Inhalant use exhibits a peculiar age pattern not observed with any other substance. The prevalence of lifetime and past-month inhalant use was higher in the lower grades and lower in the upper grades (exhibit 26). This decrease in inhalant use as students age may be partially related to the fact that inhalant users drop out of school early and hence are not in school in later grades to respond to school-based surveys. In addition, the Texas school surveys have consistently found that eighth graders reported use of more different kinds of inhalants than any other grade, and this may be a factor that exacerbates the damaging effects of inhalants and leads to dropping out.

The 2002–2004 NSDUH estimate was that 0.7 percent of Texas age 12 and older had used inhalants in the past year, with 0.7 percent prevalence in Dallas and 0.6 percent in Houston.

The poison control center data for the first half of 2005 show that automotive products such as carburetor cleaner, transmission fluid, and gasoline were the inhalants abused or misused the most often, with 29 calls. The average age was 23. There were 12 calls of abuse or misuse of paint (average age 32), 6 calls of misuse of Freon (average age 21), and 5 calls for misuse of air fresheners, dusting sprays, or body deodorants (average age of 15).

There were 20 unweighted reports of inhalants in the 2005 Houston DAWN emergency department data. Some 75 percent were male and 75 percent were Hispanic; 50 percent were younger than 25, 20 percent were 25–34, and 30 percent were 35 or older.

Inhalant abusers represented 0.2 percent of the admissions to treatment programs in the first half of 2005. The clients tended to be male (58 percent) and Hispanic (73 percent). The overrepresentation of Hispanics is related to the fact that DSHS had developed and funded treatment programs targeted specifically to this group. The average age of the clients was 21. Sixty-nine percent were involved with the criminal justice system; the average education was 9.2 years; 15 percent were homeless; and 18 percent had a history of injecting drug use.

In 2000, there were 12 deaths involving misuse of inhalants, compared with 15 in 2001, 8 in 2002, 13 in 2003, and 11 in 2004. The categorization of inhalant deaths is difficult and leads to under-reporting. However, of those reported in 2004, the average age was 30; 73 percent were male; 45 percent were White; and 55 percent were Hispanic.

Steroids

The Texas school survey reported that 2 percent of all secondary students surveyed in 2004 had ever used steroids and that less than 1 percent had used steroids during the month before the survey. Although steroids can be bought across the border, the school survey found lifetime usage lower among border students (1.4 percent) than among nonborder students (2.1 percent).

There were 97 persons admitted to DSHS-funded treatment in the first half of 2005 with a primary, secondary, or tertiary problem with steroids. Sixty-seven percent were male, 56 percent were White, and 44 percent were Hispanic; the average age was 29. Some 78 percent were involved with the criminal justice or legal system; and 44 percent had a primary problem with steroids and 22 percent had a primary problem with marijuana.

The NFLIS data for Texas reported testosterone was the steroid most likely to be seized and submitted for forensic testing, although it only represented 0.16 percent of all the items tested in the first half of 2005. Most of the steroid seizures were tested in DPS laboratories located on the border.

Carisoprodol (Soma)

Poison control centers confirmed exposure cases of intentional misuse or abuse of the muscle relaxant

carisoprodol (Soma) increased from 83 in 1998 to 298 in 2004, with 189 in the first half of 2005. Between 1998 and 2003, 51 percent of these poison control center cases involved males, and 83 percent involved persons older than 19. Carisoprodol is a substance that tends to be abused in combination with other substances. Only 39 percent of the cases involved that one drug; all the others involved combinations of drugs (Forrester 2004).

The unweighted Houston DAWN emergency department data showed that in the first half of 2005, there were 252 reports for carisoprodol; 43 percent were male, 70 percent were White, 12 percent were Black, and 6 percent were Hispanic. Twenty-one percent were younger than 25, 31 percent were 25–34, and 48 percent were 35 or older.

In 2004, carisoprodol was mentioned on 87 death certificates, up from 51 in 2003. Only three of the deaths involved only carisoprodol. Hydrocodone and alprazolam were substances that were most often mentioned along with carisoprodol on the other death certificates. Of the 2004 deaths, 60 percent were male, 93 percent were White, and the average age was 41.

DPS lab exhibits of carisoprodol reported to NFLIS increased from 13 in 1998 to 90 in 1999, 153 in 2000, 202 in 2001, 232 in 2002, 277 in 2003, 253 in 2004, and 170 in the first half of 2005.

According to the Dallas DEA Field Division, Soma sells for \$4–\$5 per tablet.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

Hepatitis C

Exhibit 27 shows that 18 percent of the 8,798 tests for HCV exposure given in 2003 were positive. Some 41 percent of those with positive tests were exposed through injection drug use. The proportions were higher for males, for American Indians and Blacks, and for persons age 40 and older. The highest HCV positivities were reported by persons tested at sexually transmitted disease clinics and drug treatment centers (22 percent each) and field outreach centers and corrections and probation settings (20 percent each).

Forty-eight percent of the 200 clients in narcotic treatment programs who were interviewed by the author as part of NIDA Grant R21 DA014744 said they were positive for hepatitis C, and 54 percent said a doctor had told them they had liver problems.

HIV and AIDS Cases

In 2004, the percentage of AIDS cases involving heterosexual exposures was greater than the percentage of cases related to injection drug use (exhibit 28). The proportion related to heterosexual contact rose from 1 percent in 1987 to 26 percent in 2004, while the proportion attributed to injection drug use was 15 percent in 2004.

In 1987, 3 percent of the AIDS cases were females older than age 12; in 2004, 23 percent were female. As exhibit 29 shows, the proportion of Whites has dropped, while the proportion of Blacks and Hispanics increased.

The proportion of adult needle users entering DSHS-funded treatment programs has decreased from 32 percent in 1988 to 18 percent for 2005. Heroin injectors are most likely to be older, and nearly two-thirds are people of color, while injectors of stimulants and cocaine are far more likely to be White (exhibit 30).

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Exhibit 1. DAWN ED Sample and Reporting Information in the Houston Metropolitan Area: January–June 2005

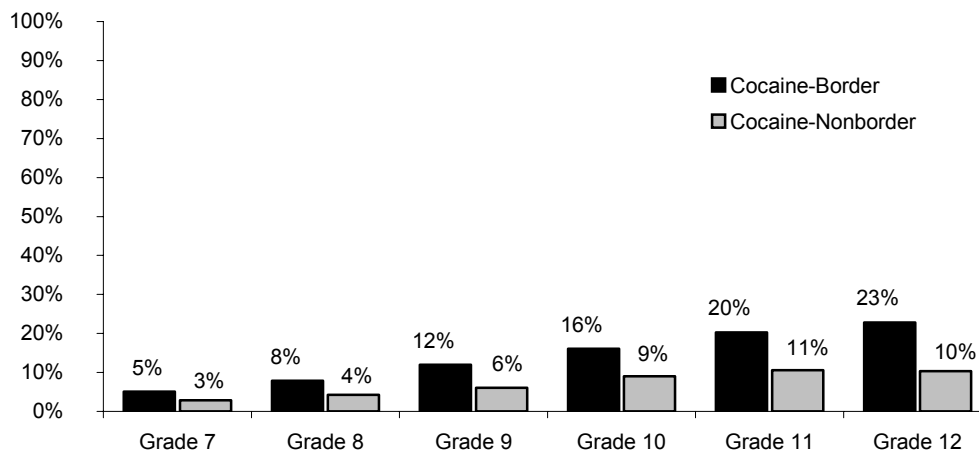
CEWG Area	Total Eligible Hospitals ¹	No. of Hospitals in DAWN Sample	Total EDs in DAWN Sample ²	No. of EDs Reporting per Month: Completeness of Data (percent)			No. of EDs Not Reporting
				90–100 percent	50–89 percent	<50 percent	
Houston	40	38	40	11–14	0–2	0–1	26–28

¹Short-term, general, non-Federal hospitals with 24-hour emergency departments based on the American Hospital Association Annual Survey.

²Some hospitals have more than one emergency department.

SOURCE: DAWN *Live!*, OAS, SAMHSA, updated 12/6-12/7, 2005

Exhibit 2. Percentage of Border and Nonborder Texas Secondary Students Who Had Ever Used Powder or Crack Cocaine, by Grade: 2004



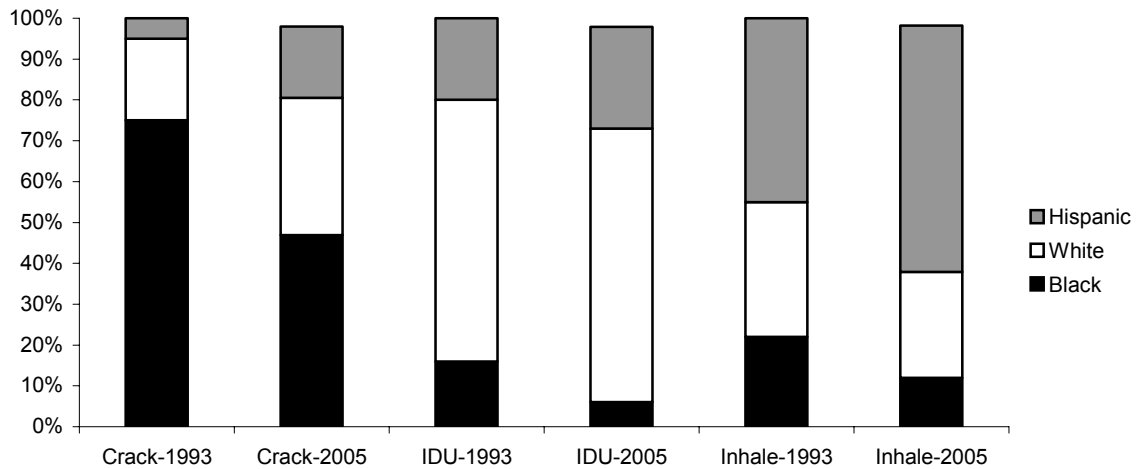
SOURCE: Texas Department of State Health Services

Exhibit 3. Characteristics of Clients Admitted to TDSHS-Funded Treatment with a Primary Problem with Cocaine, by Route of Administration: January–June 2005

Characteristics	Crack Cocaine Smoke	Powder Cocaine Inject	Powder Cocaine Inhale	Cocaine All ¹
Total Admissions (n)	(4,848)	(465)	(2,061)	(7,748)
% of Cocaine Admits	63	6	27	100
Lag-1st Use to Treatment (Yrs.)	(13)	(16)	(9)	(12)
Average Age	(37)	(36)	(29)	(35)
% Male	52	60	49	52
% Black	47	6	12	35
% White	33	67	26	33
% Hispanic	18	25	60	30
% CJ Involved	36	42	46	40
% Employed	12	15	33	20
% Homeless	16	15	4	13

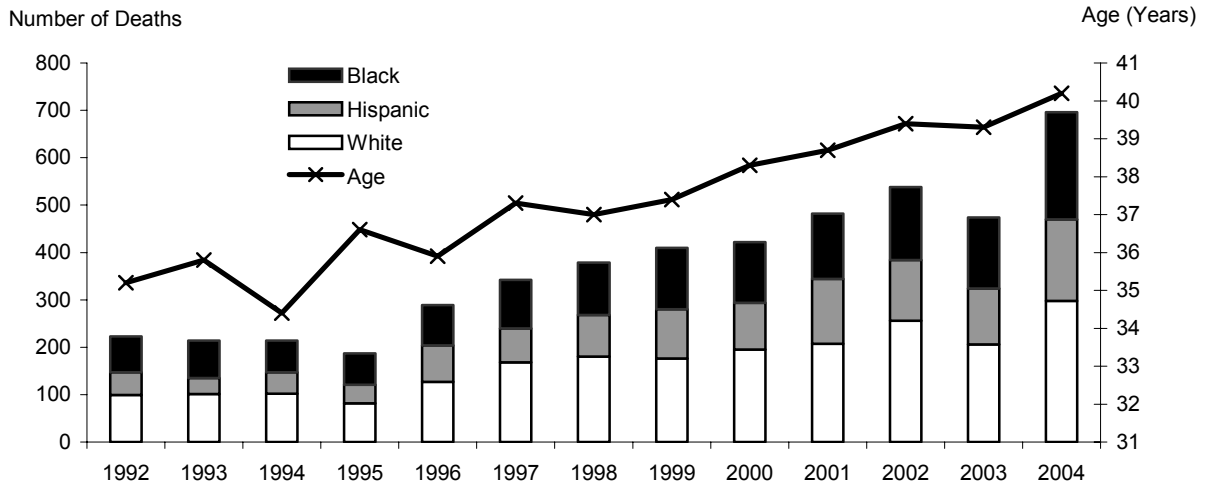
¹Includes clients with “Other” routes of administration.
SOURCE: TEXAS DEPARTMENT OF STATE HEALTH SERVICES

Exhibit 4. Routes of Administration of Cocaine by Race/Ethnicity from TDSHS Treatment Admissions: 1993 vs. January–June 2005



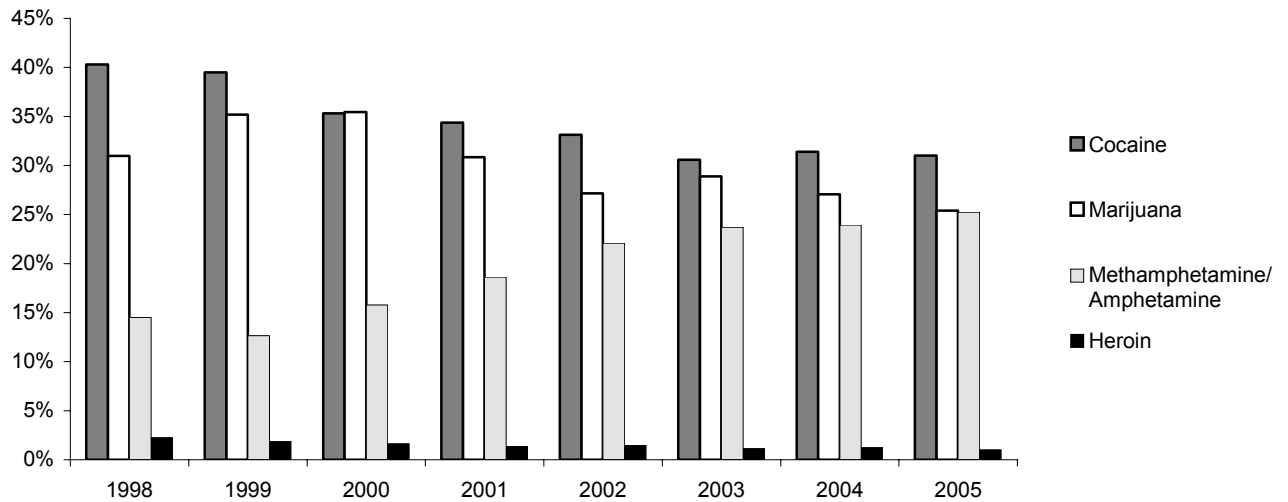
SOURCE: TEXAS DEPARTMENT OF STATE HEALTH SERVICES

Exhibit 5. Age and Race/Ethnicity of Persons Dying with a Mention of Cocaine in Texas: 1992–2004



SOURCE: Texas Department of State Health Services

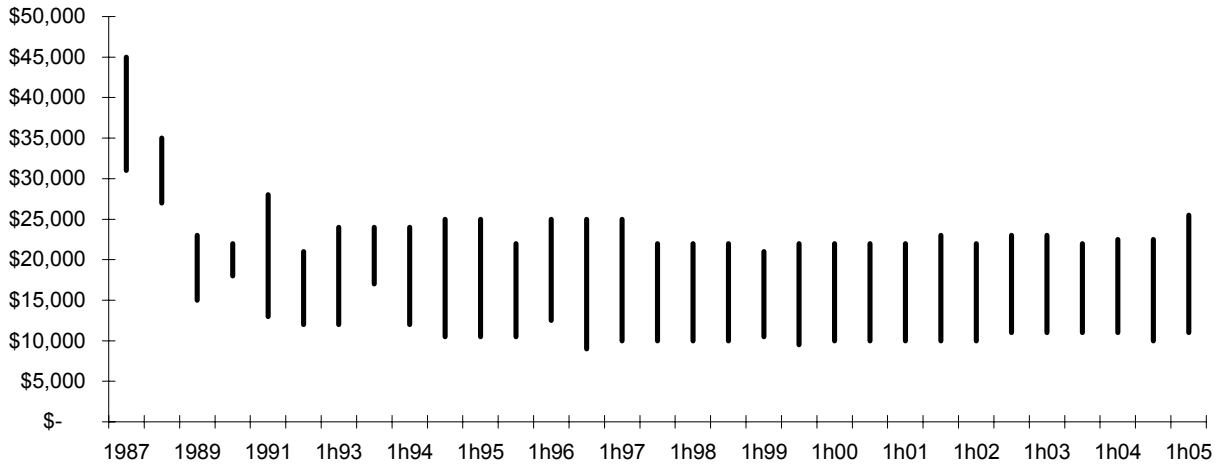
Exhibit 6. Substances Identified by Texas DPS Labs: 1998–2005¹



¹2005 estimate based on half-year data.

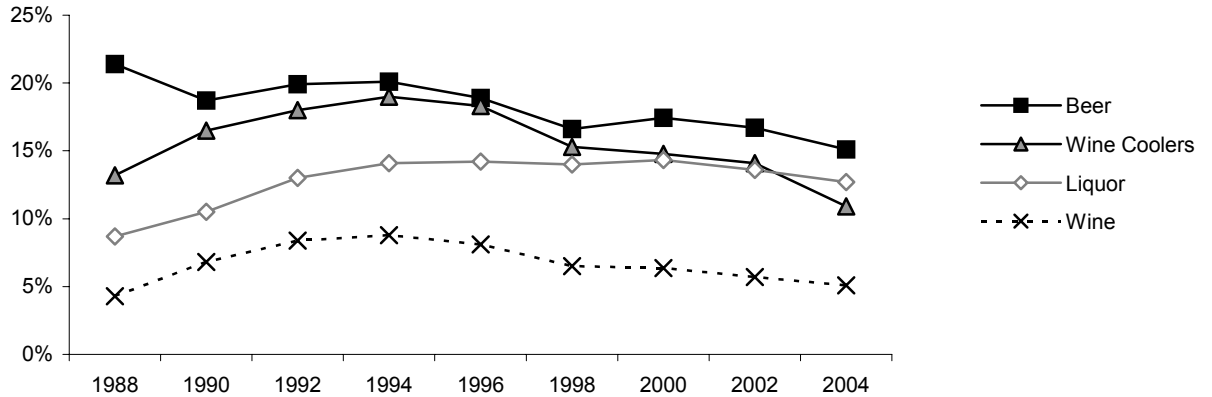
SOURCE: NFLIS, DEA

Exhibit 7. Price of a Kilogram of Cocaine in Texas as Reported by the DEA: 1987–2005¹



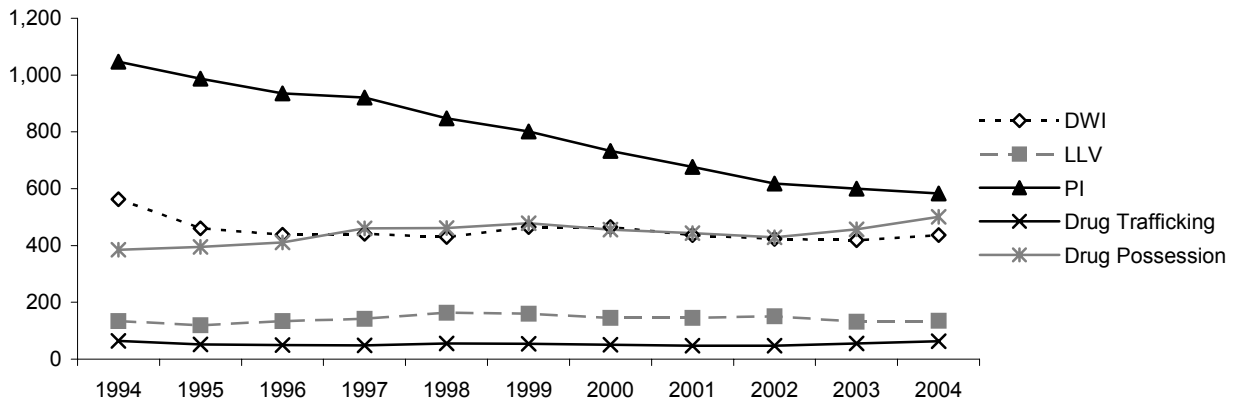
¹Prices reported by half year since 1993.
SOURCE: DEA

Exhibit 8. Percentage of Texas Secondary Students Who Reported They Normally Consumed Five or More Drinks at One Time, by Specific Alcoholic Beverage: 1988–2004



SOURCE: Texas Department of State Health Services

Exhibit 9. Texas Substance Abuse Arrests¹ per 100.000 Population in Texas: 1994–2004



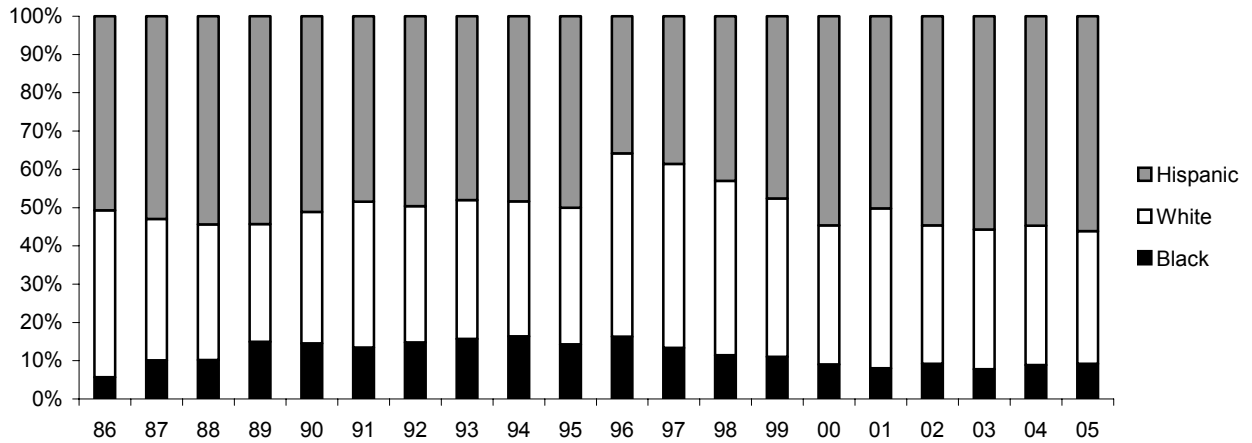
¹DWI=Driving while intoxicated; LLV=liquor law violation; PI=public intoxication
SOURCE: Texas DPS

Exhibit 10. Characteristics of Clients Admitted to TDSHS-Funded Treatment with a Primary Problem with Heroin, by Route of Administration: January–June 2005

Characteristics	Inject	Inhale	Smoke	All ¹
Total Admissions (n)	(2,148)	(333)	(25)	(2,588)
% of Cocaine Admits	83	13	1	100
Lag-1st Use to Treatment (Yrs.)	(16)	(9)	(11)	(15)
Average Age	(37)	(29)	(32)	(36)
% Male	71	54	60	65
% Black	6	31	0	9
% White	37	18	56	34
% Hispanic	55	50	40	55
% CJ Involved	31	35	28	30
% Employed	12	19	4	16
% Homeless	12	9	4	10

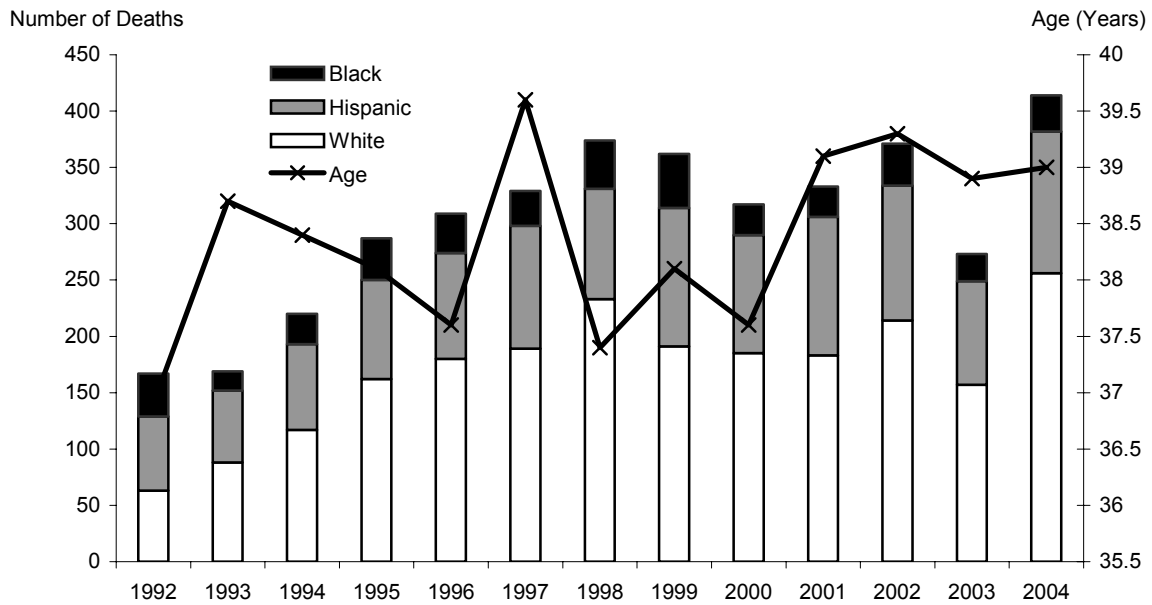
¹Includes clients with “Other” routes of administration.
SOURCE: Texas Department of State Health Services

Exhibit 11. Heroin Admissions to TDSHS-Funded Treatment by Race/Ethnicity: 1986–2005¹



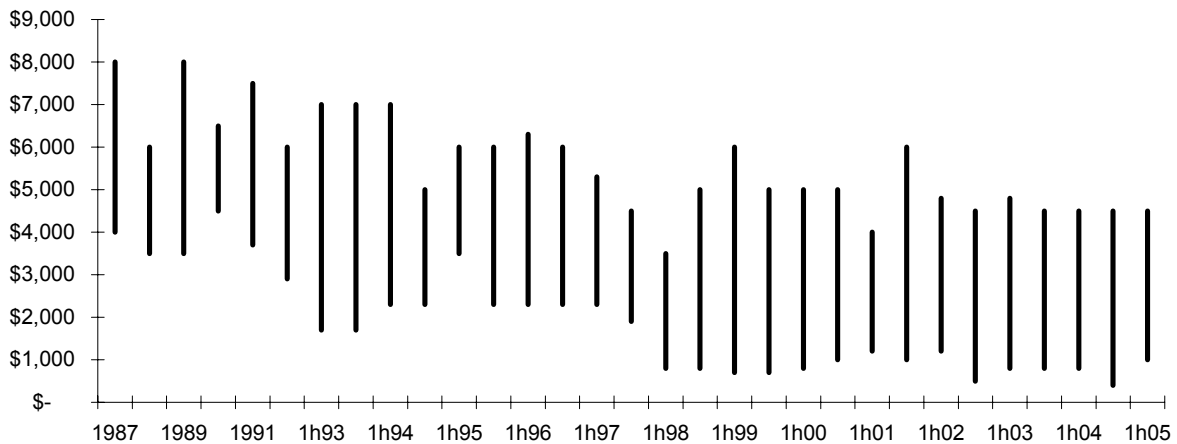
¹Data are for the first half of 2005 only.
SOURCE: Texas Department of State Health Services

Exhibit 12. Age and Race/Ethnicity of Persons Dying with a Mention of Heroin in Texas: 1992–2004



SOURCE: Texas Department of State Health Services

Exhibit 13. Price of an Ounce of Mexican Black Tar Heroin in Texas as Reported by the DEA: 1987–2005¹



¹Prices reported by half year since 1993.

SOURCE: DEA

Exhibit 14. Purity and Price per Milligram Pure of Heroin Purchased in Dallas, El Paso, Houston, and San Antonio by the DEA: 1995–2004

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Dallas										
Purity (%)	6.8	3.5	7.0	11.8	14.0	16.0	13.4	17.2	13.3	16.3
Price	\$2.34	\$6.66	\$4.16	\$1.06	\$1.01	\$0.69	\$1.36	\$0.75	\$0.98	\$0.90
El Paso										
Purity (%)					56.7	50.8	41.8	40.3	44.7	50.5
Price					\$0.49	\$0.34	\$0.44	\$0.27	\$0.40	\$0.27
Houston										
Purity (%)	16.0	26.1	16.3	34.8	17.4	18.2	11.3	28.2	27.4	24.8
Price	\$1.36	\$2.15	\$2.20	\$2.43	\$1.24	\$1.14	\$1.51	\$0.64	\$0.45	\$0.44
San Antonio										
Purity (%)									8.2	6.4
Price									\$1.97	\$2.24

SOURCE: DEA

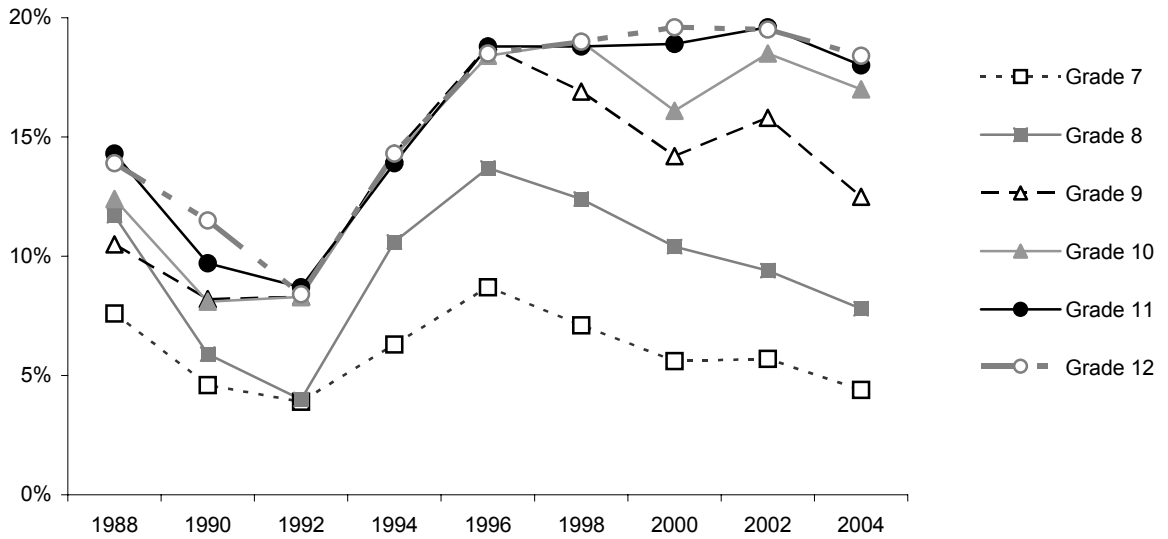
Exhibit 15. Hydrocodone, Oxycodone, and Methadone Indicators in Texas: 1998–1H 2005

Indicator	1998	1999	2000	2001	2002	2003	2004	1H 2005
Poison Control Center Cases of Abuse and Misuse								
Hydrocodone	192	264	286	339	429	414	516	257
Oxycodone	12	26	22	34	68	64	77	26
Methadone	16	19	21	26	50	41	106	29
TDSHS Treatment Admissions								
"Other Opiates" ¹	542	802	879	1,336	1,752	2,227	1,344	1,331
Methadone	53	68	44	50	63	66	55	32
Deaths with Mention of Substance (TDSHS)								
Hydrocodone		25	52	107	168	140	201	
Oxycodone		8	20	40	56	60	66	
Methadone	30	36	62	93	131	122	164	
Drug Exhibits Identified by DPS Laboratories								
Hydrocodone		479	629	771	747	1,212	1598	803
Oxycodone		36	72	115	106	174	270	97
Methadone	1	19	22	42	58	70	130	56

¹"Other Opiates" refers to those other than heroin.

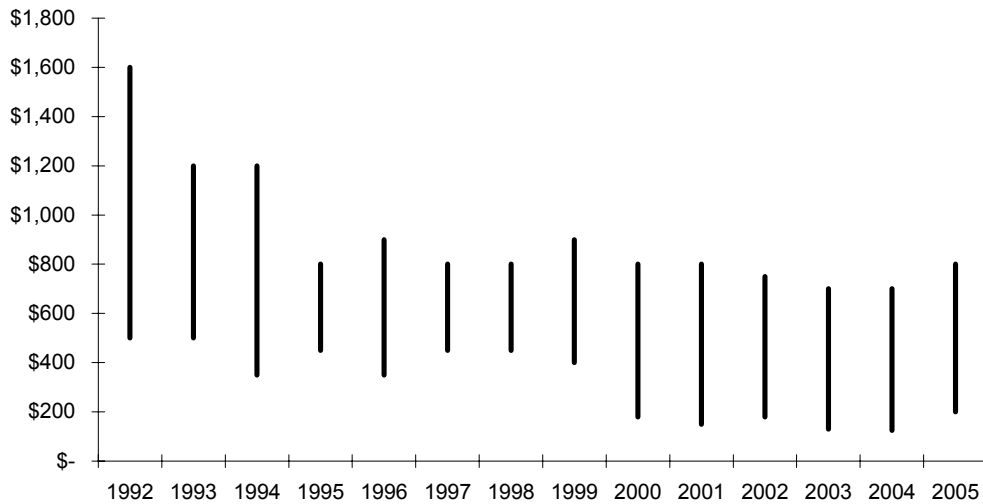
SOURCES: Texas Poison Center Network, Texas Department of State Health Services, and Texas Department of Public Safety

Exhibit 16. Percentage of Texas Secondary Students Who Had Used Marijuana in the Past Month, by Grade: 1988–2004



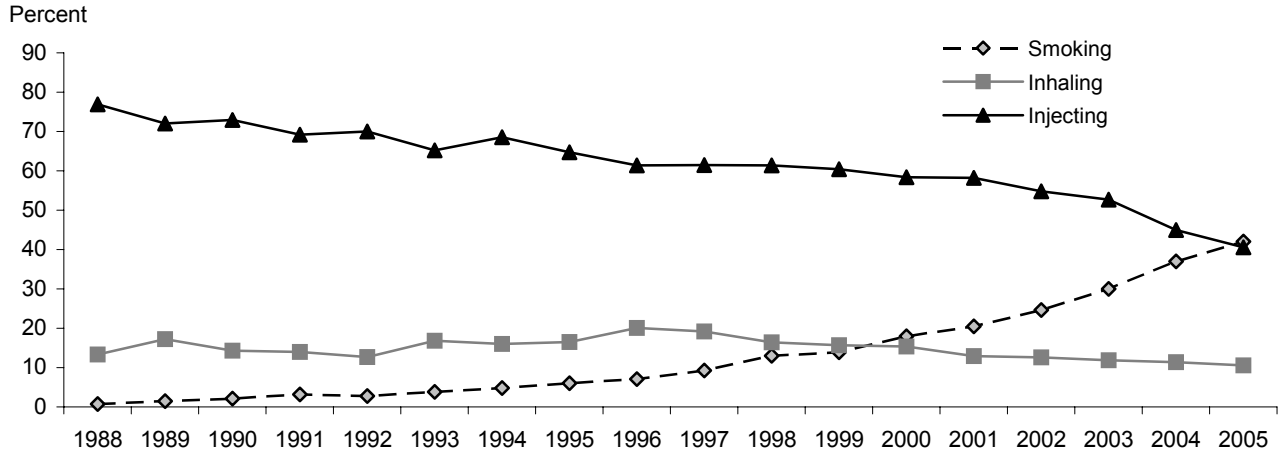
SOURCE: Texas Department of State Health Services

Exhibit 17. Price of a Pound of Commercial Grade Marijuana in Texas as Reported by the DEA: 1992–2004



SOURCE: DEA

Exhibit 18. Route of Administration of Methamphetamine by Clients Admitted to TDSHS-Funded Programs: 1988–1H 2005



SOURCE: Texas Department of State Health Services

Exhibit 19. Characteristics of Clients Admitted to TDSHS-Funded Treatment with a Primary Problem with Amphetamines or Methamphetamine, by Route of Administration: January–June 2005

Characteristics	Smoke	Inject	Inhale	Oral	All ¹
Total Admissions (n)	(1,541)	(1,480)	(387)	(173)	(3,641)
% of Cocaine Admits	42	41	11	5	100
Lag-1st Use to Treatment (Yrs.)	(9)	(13)	(9)	(10)	(11)
Average Age	(28)	(31)	(29)	(30)	(30)
% Male	45	50	45	37	47
% Black	2	0	1	3	1
% White	82	93	86	83	87
% Hispanic	13	5	13	10	10
% CJ Involved	52	51	55	44	52
% Employed	27	18	34	29	24
% Homeless	8	9	8	9	9

¹Includes clients with “Other” routes of administration.

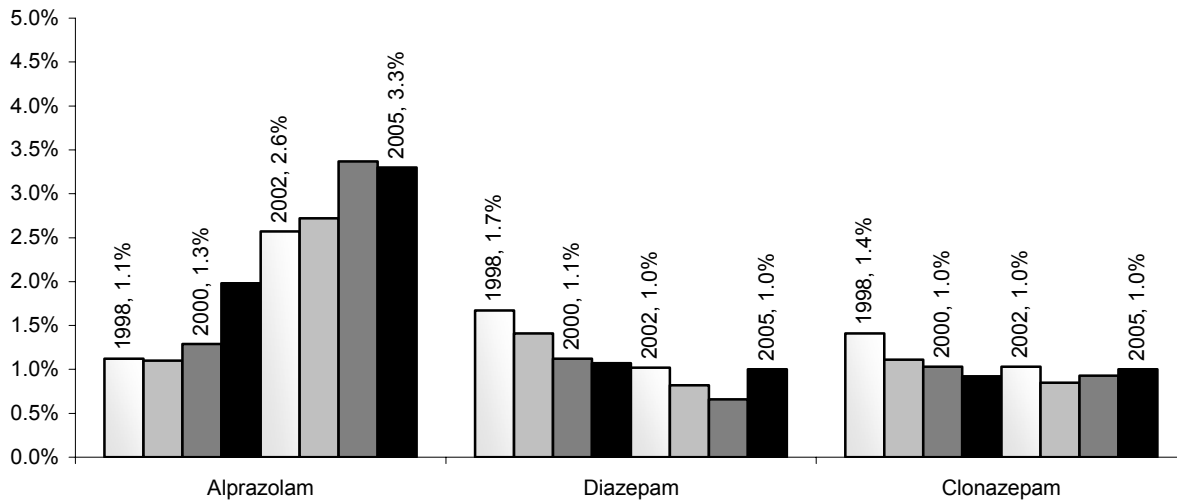
SOURCE: Texas Department of State Health Services

Exhibit 20. Percent of Items Analyzed by Texas DPS Laboratories Identified as Methamphetamine, by County and City: 1H 2005

County/City	Percent
Hidalgo (McAllen)	0.5
Webb (Laredo)	0.6
El Paso (El Paso)	3.8
Nueces (Corpus Christi)	16.1
Harris (Houston)	10.8
Travis (Austin)	27.9
McLennan (Waco)	30.2
Smith (Tyler)	30.3
Dallas (Dallas)	37.9
Midland (Odessa)	17.8
Taylor (Abilene)	54.9
Lubbock (Lubbock)	26.2
Potter (Amarillo)	41.4

SOURCE: NFLIS, DEA

Exhibit 21. Benzodiazepines Identified by DPS Labs in Texas: 1998–2005¹



¹2005 estimate based on half-year data.

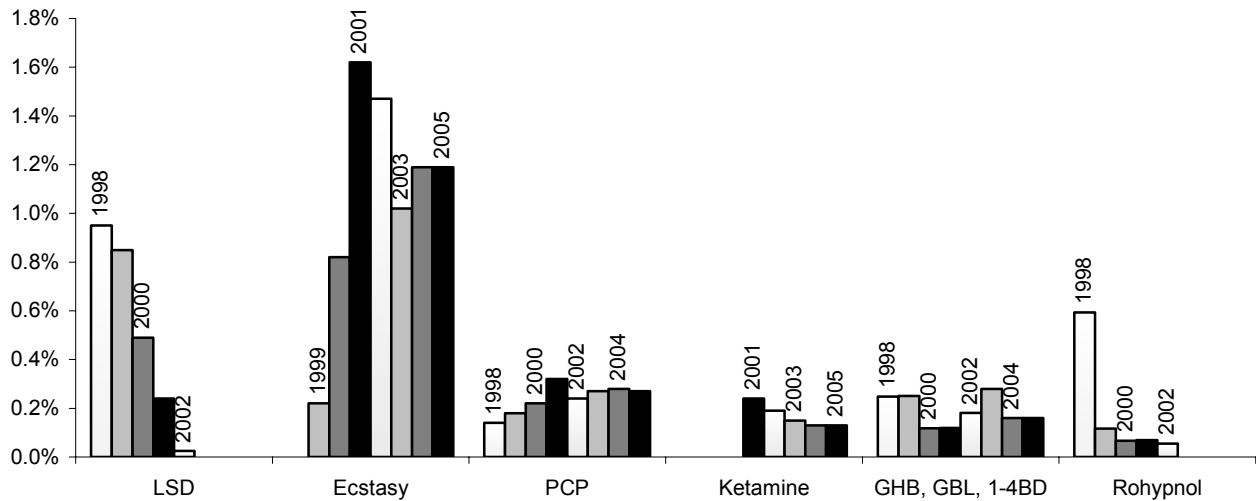
SOURCE: NFLIS, DEA

Exhibit 22. Characteristics of Clients Admitted to TDSHS-Funded Treatment with a Primary, Secondary, or Tertiary Problem with Club Drugs: 1H 2005

Characteristic	GHB	Hallucinogens	Ecstasy	PCP	Rohypnol
Total Admissions (n)	(17)	(109)	(269)	(70)	(112)
% Male	53	76	61	41	79
% White	100	65	49	7	0
% Hispanic	0	24	27	11	99
% Black	0	11	22	79	0
Average Age (Years)	(29)	(21)	(21)	(24)	(16)
% Criminal Justice Involved	71	61	70	60	79
% History Needle Use	47	29	12	0	6
% Primary Drug=Club Drug	24	21	15	41	10
Other Primary Drug					
% Marijuana	0	38	41	21	52
% Alcohol	0	9	7	3	13
% Methamphetamine/ Amphetamines	53	11	13	3	0
% Powder Cocaine	0	5	13	16	15
% Crack Cocaine	0	4	6	10	0
% Heroin	0	4	2	0	10
% Other Opiates	24	5	1	0	0

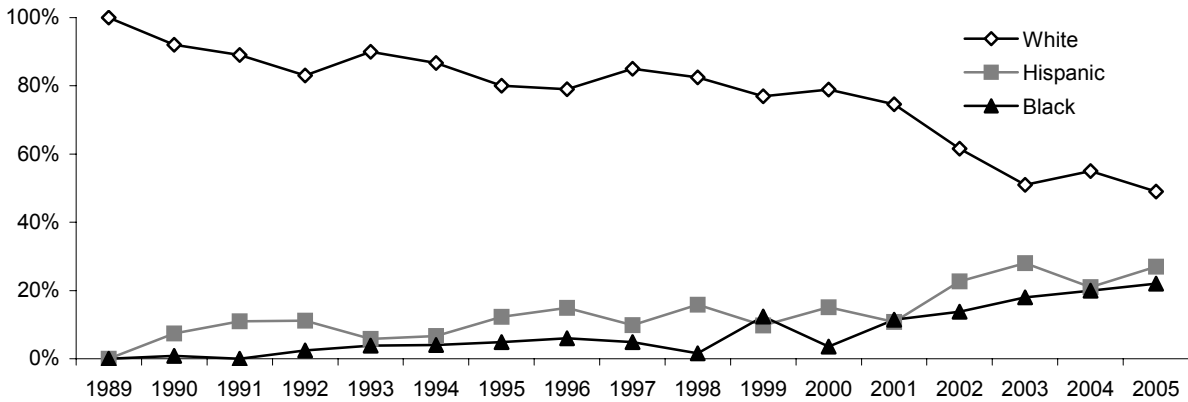
SOURCE: Texas Department of State Health Services

Exhibit 23. Club Drugs Identified by DPS Labs in Texas: 1998–2005¹



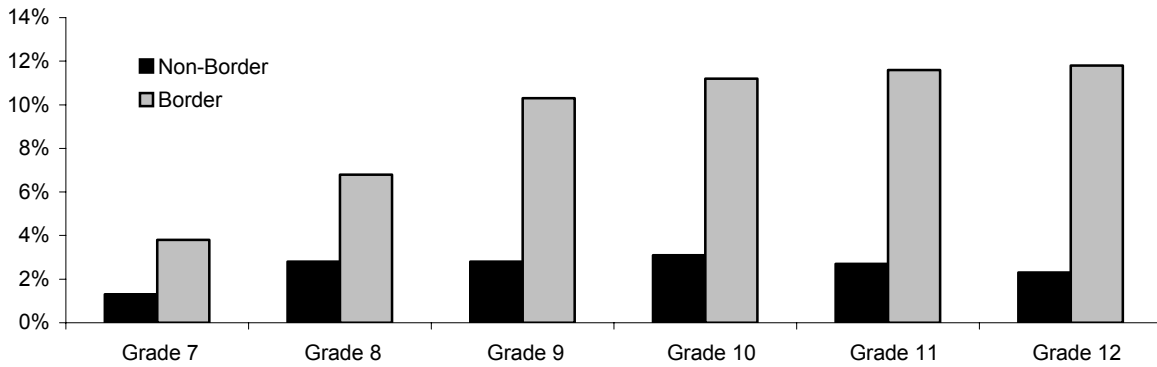
¹2005 estimates based on half-year data.
SOURCE: NFLIS, DEA

Exhibit 24. Characteristics of Clients Admitted to TDSHS-Funded Treatment with a Problem with Ecstasy: 1989–2005



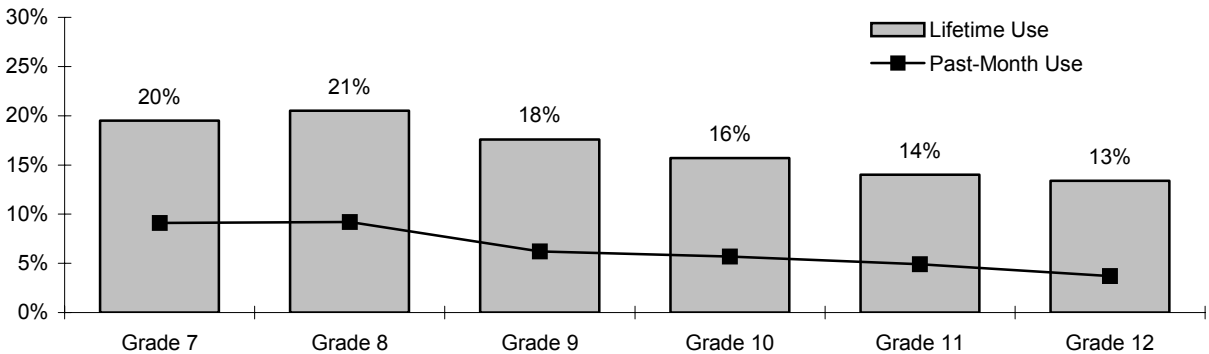
SOURCE: Texas Department of State Health Services

Exhibit 25. Percentage of Border and Nonborder Texas Secondary Students Who Had Ever Used Rohypnol, By Grade: 2004



SOURCE: Texas Department of State Health Services

Exhibit 26. Percentage of Texas Secondary Students Who Had Used Inhalants Ever or in the Past Month, by Grade: 2004



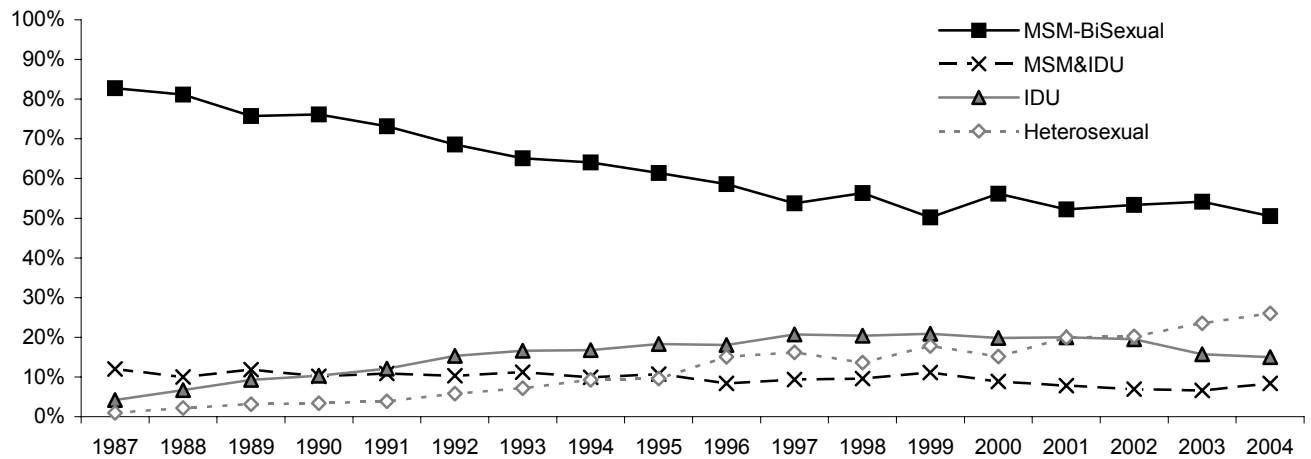
SOURCE: Texas Department of State Health Services

Exhibit 27. Texas HCV Exposures and Their Demographics: 2003

Demographic	Percent
Overall	17.8
By Mode of Exposure (%)	
Injection Drug Exposure	40.7
Medical exposure	13.3
Tattoo or piercing	5.3
Occupational	2.8
Other blood/needle	3.4
Sexual risk	7.6
Shared snorting equipment	3.3
No disclosed risk	5.1
Gender	
Male	19.3
Female	15.3
Race/Ethnicity	
Hispanic	12.1
Non-Hispanic	20.8
White	16.8
Black	20.4
Age Group	
13–19	2.3
20–24	6.3
25–29	11.5
30–39	23.8
40 and older	35.3

SOURCE: Texas Department of State Health Services

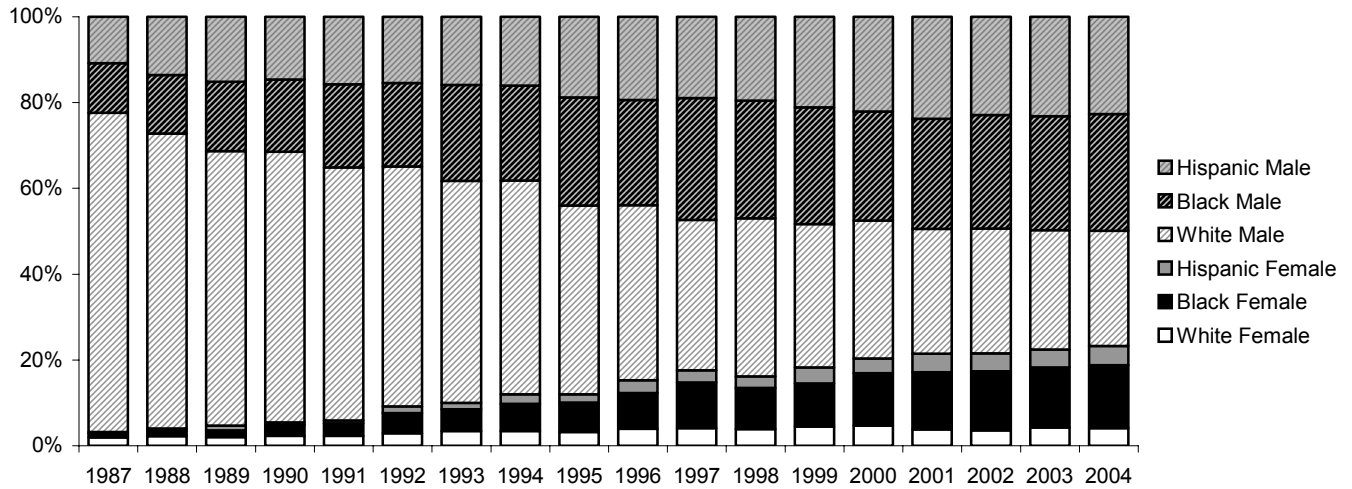
Exhibit 28. AIDS Cases¹ in Texas by Mode of Exposure: 1987–2004



¹Cases with risk not classified excluded.

SOURCE: Texas Department of State Health Services

Exhibit 29. Texas Male and Female AIDS Cases by Race/Ethnicity: 1987–2004



SOURCE: Texas Department of State Health Services

Exhibit 30. Characteristics of Clients Admitted to TDSHS-Funded Treatment Who Used Needles: 1H 2005

Characteristic	Heroin	Cocaine	Stimulants
Total Admissions (<i>n</i>)	(2,148)	(465)	(1,480)
% of All Needle Admissions by Drug	50	11	34
Lag-1st Use to Treatment (Years)	(16)	(16)	(13)
Average Age	(36)	(36)	(31)
% Male	66	60	50
% Black	6	6	0
% White	36	67	93
% Hispanic	56	25	5
% CJ Involved	30	42	51
% Employed	15	15	18
% Homeless	10	15	9

SOURCE: Texas Department of State Health Services

Exhibit 31. Adult and Youth Admissions to DSHS-Funded Treatment Programs: January–June 2005

Primary Substance	Total Admissions	% of All Admissions	Average Age	Average Age 1st Use	Avg. Lag 1st Use to Admission	% No Prior Treatment	% Married
Total	29,135	100.0	31.7	19.1	14	45.8	20.9
Heroin	2,588	8.9	35.6	21.3	15	22.7	19.2
Other Opiates	1,363	4.7	34.5	25.0	10	32.8	26.0
Alcohol	6,967	23.9	37.1	15.8	22	41.8	19.3
Depressants	434	1.5	28.0	21.5	7	45.6	19.6
Amphetamines	3,646	12.5	29.5	19.7	11	51.1	20.5
Cocaine Powder	2,686	9.2	30.3	20.8	10	52.3	24.4
Crack Cocaine	5,062	17.4	37.2	25.5	13	31.8	17.2
Marijuana	6,150	21.1	21.3	13.8	8	68.3	24.4
Hallucinogens	68	0.2	24.2	17.8	7	44.1	7.4
Other Drugs	171	0.6	24.5	18.1	9	60.2	21.1

Primary Substance	% Male	% Using Needles	% w/ History of IV Drug Use	% Black	% White	% Hispanic	% Employed
Total	59.0	17.7	30.5	18.6	48.6	30.7	29.1
Heroin	64.5	83.0	87.8	9.2	34.1	55.1	16.1
Other Opiates	45.9	17.5	39.5	6.5	83.6	8.7	11.8
Alcohol	65.8	4.7	21.3	12.7	57.5	27.4	28.2
Depressants	35.5	6.7	20.7	9.4	70.5	17.7	21.7
Amphetamines	46.5	41.3	53.5	1.3	87.1	9.6	24.2
Cocaine Powder	51.1	18.7	25.2	11.2	33.1	53.7	30.5
Crack Cocaine	51.7	5.4	29.2	46.9	33.6	17.5	14.4
Marijuana	70.8	1.8	5.5	22.1	32.2	43.2	53.9
Hallucinogens	47.1	10.3	14.7	66.2	16.2	17.6	22.1
Other Drugs	52.6	8.2	17.0	17.0	41.5	38.0	38.6

Primary Substance	Avg. Months Employed Over Last 12	% CJ/Legal System-Involved	Average Education	% Homeless	Avg. Income at Admission	# of Women Pregnant at Admission	% on Medication
Total	3.8	49.3	11.2	10.0	\$5,814	659	21.2
Heroin	2.7	30.2	11.3	9.5	\$3,355	69	36.3
Other Opiates	3.0	30.3	12.2	6.5	\$8,954	14	31.5
Alcohol	4.4	45.6	11.8	11.7	\$6,928	37	23.0
Depressants	2.9	46.5	11.3	5.5	\$3,769	15	29.0
Amphetamines	3.6	51.6	11.6	8.6	\$5,118	121	17.6
Cocaine Powder	4.1	46.3	11.2	5.9	\$6,020	87	17.9
Crack Cocaine	3.0	36.7	11.7	16.0	\$4,522	158	22.6
Marijuana	4.7	75.5	9.8	7.1	\$7,054	150	12.6
Hallucinogens	2.0	60.3	10.7	7.4	\$1,944	5	20.6
Other Drugs	3.9	67.8	10.6	8.8	\$6,687	3	22.2

(Continued)

**Exhibit 31. Adult and Youth Admissions to DSHS-Funded Treatment Programs: January–June 2005
(Continued)**

Primary Substance	% with an Emergency Room Visit	% with Sickness/ Health Problems	% with Employment Problems	% with Family/ Marital Problems	% with Social/Peer Problems	% with Psych./ Emotional Problems	% Reporting Drug/Alcohol Problems
Total	32.6	26.0	54.5	52.4	42.5	45.3	67.2
Heroin	31.3	26.0	69.4	63.8	56.9	43.4	87.1
Other Opiates	53.3	41.1	68.4	71.3	60.7	67.7	85.8
Alcohol	35.9	28.2	55.8	52.4	44.7	49.5	69.3
Depressants	48.8	35.3	59.4	63.4	51.6	58.3	73.5
Amphetamines	39.0	27.8	59.7	60.2	46.4	53.7	72.6
Cocaine Powder	33.6	21.0	47.2	48.5	35.7	40.8	62.4
Crack Cocaine	39.1	31.7	62.0	61.6	49.5	56.1	78.3
Marijuana	14.2	16.0	37.8	32.8	24.5	24.0	42.4
Hallucinogens	36.8	17.6	33.8	25.0	22.1	33.8	48.5
Other Drugs	22.8	24.6	42.7	39.2	32.7	39.8	50.9

SOURCE: Texas Department of State Health Services

Patterns and Trends of Drug Abuse in Washington, DC

Erin Artigiani, M.A., Margaret Hsu, M.H.S., Joseph B. Tedeschi, and Eric Wish, Ph.D.¹

ABSTRACT

Cocaine/crack, marijuana, and heroin continued to be the main illicit drug problems in Washington, DC, in 2005. The use and availability of PCP declined in 2004 and remained about the same in 2005. Cocaine continued to be one of the most serious drugs of abuse in the District, as evidenced by the fact that more adult arrestees tested positive for cocaine than for any other drug in 2005. More seized items tested positive for cocaine than for any other drug in FY 2005. Drug-related deaths, however, were more likely to be related to opiates than to cocaine in 2004. Pretrial Services test results indicate that PCP positives increased slightly during this time. Juvenile arrestees were more likely to test positive for marijuana than for any other drug. While other parts of the country have seen shifts in the use of methamphetamine, use remains low and confined to isolated communities in DC. Research is currently under way to better understand the use of methamphetamine in these communities.

INTRODUCTION

Area Description

The Nation's capital is home to approximately 570,898 people residing in 8 wards that remain largely distinguishable by race and economic status (U.S. Bureau of the Census, 2001 update). The northwest part of the city tends to be home to residents who are wealthy and White, while the northeast and southeast tend to be home to residents who are poor and African-American. Slightly more females than males live in DC, and the majority of the District's population continues to be African-American (60 percent). Nearly one-third of the population are White (31 percent), and the remainder are primarily Hispanic or Asian (U.S. Bureau of the Census, 2000 Census). The population of the District is slightly older than the Nation's general population. One in five residents are younger than 18, and slightly more than 12 percent are age 65 and older. More than one-third (39.1 percent) of adults age 25

or older have at least a bachelor's degree (Pach et al. 2002).

Data from the 2000 census reveal several key demographic changes since 1990. The total population decreased by 5.7 percent during the 1990s, from 606,900 in 1990 to 572,059 in 2000. The number of African-Americans decreased by 14.1 percent, the number of Asians increased by 38.6 percent, and the number of Hispanic residents grew by 37.4 percent. The White population also increased by a more modest 2 percent during this time period (Pach et al. 2002).

Alcohol abuse costs the District approximately \$700 million per year, and illicit drug use costs about \$500 million per year. In fiscal year (FY) 2005, the city spent approximately \$360 million to address the problem. Nearly 1 in 10 residents (approximately 60,000) are addicted to illegal drugs and/or alcohol. At least one-half (26,000–42,000) of these individuals have co-occurring substance abuse and mental health disorders. The DC Household Survey indicates that first-time drug use occurs at a younger age in the District than in the rest of the Nation (Citywide Comprehensive Substance Abuse Strategy for the District of Columbia 2003).

Homicides in the District decreased sharply from 248 in 2003 to 198 in 2004 and continued to decline in 2005 to 195. In 2004, drugs were listed as one of the four most common motives behind these homicides, along with arguments, retaliation, and robberies. The total number of index crimes reported citywide in 2004 decreased 18 percent from 40,546 in 2003 to 33,252 in 2004.

The major drug problems in the District continue to be cocaine/crack, marijuana, and heroin. The use and availability of phencyclidine (PCP) remained steady in 2005 after decreasing in 2004. The use of club drugs like methylenedioxymethamphetamine (MDMA) also appears to be continuing to decrease.

Information from the Department of Justice's National Drug Intelligence Center (NDIC) suggests that the District has a wide variety of drug transportation options, including an extensive highway system, three major airports, and rail and bus systems. While both NDIC and ethnographic information suggest that traffickers extensively use all of these options, Washington appears to be a secondary drug distribution center; most drugs intended for distribution in DC are distributed first to larger cities, such as New York and Miami (Pach et al. 2002). The street-level dealing in DC was

¹The authors are affiliated with the Center for Substance Abuse Research, College Park, Maryland. Some background material was taken from prior CEWG reports.

described as less organized and more free-flowing than the organized networks in these larger cities.

Data Sources

A number of sources were used to obtain comprehensive information regarding the drug use trends and patterns in Washington, DC. Data for this report were obtained from the sources shown below. In addition, interviews were conducted with a sample of substance abuse professionals in the fields of criminal justice, public health, and recovery.

- **Emergency department (ED) drug data** were derived for the first half of 2005 from the Drug Abuse Warning Network (DAWN) *Live!*, a restricted-access online system, maintained by the Office of Applied Studies (OAS), Substance Abuse and Mental Health Services Administration (SAMHSA). There are 34 eligible hospitals in the metropolitan area; 31 hospitals and 32 EDs are in the DAWN sample; and 3 hospitals are not in DAWN sample. Data were not complete from all 32 EDs and varied by month (see exhibit 1a). Exhibits in this report reflect cases that have been received by DAWN as of December 6–7, 2005. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted. Therefore, these data are subject to change. Data derived from DAWN *Live!* represent drug reports in drug-related visits. Drug reports exceed the number of ED visits, since a patient may report use of multiple drugs (up to six drugs and alcohol). The DAWN *Live!* data are unweighted, and, thus, are not estimates for the metropolitan area. These data cannot be compared with DAWN data from 2002 and before, nor can preliminary data be used for comparison with future data. Only weighted DAWN data released by SAMHSA can be used for trend analysis. A full description of the DAWN system can be found at the DAWN Web site: <<http://dawninfo.samhsa.gov>>.
- **Drug-related death data** for 2004 were obtained from the District's Chief Medical Examiner, December 15, 2005.
- **Drug treatment data** for 2000 to 2003 were obtained from the Treatment Episode Data Set (TEDS), OAS, SAMHSA. As of January 2006, DC had not yet submitted 2004 treatment admission data to TEDS.
- **Student survey data** were adapted by the Center for Substance Abuse Research (CESAR) from the

2005 DC Public Schools Youth Risk Behavior Survey (YRBS).

- **Arrest, crime, and law enforcement action data** were derived from the Metropolitan Police Department (MPD) Web site, <www.mpdc.dc.gov>, which shows crime statistics and press releases pertaining to law enforcement action through December 2005, and a special data run.
- **Arrestee urinalysis data** were derived from the District of Columbia Pretrial Services Agency for adult and juvenile arrestees from 2000 through October (juvenile data) 2005 and November (adult data) 2005.
- **Drug prices and trafficking trends** were obtained from the NDIC *Narcotics Digest Weekly Special Issue: Illicit Drug Prices January 2004–June 2004*, the Washington-Baltimore High Intensity Drug Trafficking Area (HIDTA) “Washington/Baltimore Threat Assessment” reports released in 2003 and 2004, and the Drug Enforcement Administration (DEA) for the third quarter of 2005.
- **Test results on drug items analyzed** by local crime labs were obtained from the National Forensic Laboratory Information System (NFLIS) for FY 2005.
- **Regional counts on methamphetamine labs seized** were obtained from the El Paso Intelligence Center (EPIC), National Clandestine Laboratory Seizure Database, and the Washington/Baltimore HIDTA.
- **Other information on drug use, including prescription drug use among college students and urinalysis data on probationers/parolees**, was derived from CESAR research studies and Drug Early Warning System County indicators, including *DEWS Investigates* reports and *CESAR Briefings*, available at <www.dewsonline.org> and <www.cesar.umd.edu>, respectively.
- **Census data** for the District of Columbia were derived from the “Council of the District of Columbia; Subcommittee on Labor, Voting Rights, and Redistricting; Testimony of the Office of Planning/State Data Center on Bill 14-137, The Ward Redistricting Amendment Act of 2002.”
- **Additional information** was provided by the HIV/AIDS Administration and members of the DC Epidemiology Workgroup.

DRUG ABUSE PATTERNS AND TRENDS

Cocaine/Crack

Cocaine, particularly in the form of crack, remains the most serious drug of abuse in the District, accounting for more ED reports and adult arrestee positive drug tests than any other drug, and more deaths than any drug besides opiates other than heroin. Only heroin accounted for a higher percentage of treatment admissions. Cocaine/crack continues to be sold at open-air markets in the poorer parts of the city and has changed little in price. The DEA reported that powder cocaine sold for \$24,000–\$27,000 per kilogram and \$900–\$1,200 per ounce during the third quarter of 2005. Crack also sells for \$900–\$1,200 per ounce. NFLIS data for FY 2005 show that analyzed drug items were more likely to test positive for cocaine than for any other drug (44 percent).

Unweighted DAWN *Live!* data for the first half of 2005 show that cocaine was the most frequently reported “major substance of abuse” (exhibit 1b). Of the 1,340 ED cocaine reports from January to June 2005, 61 percent were among male patients, 69 percent were among Blacks, and 26 percent were among Whites. Nearly three-quarters (71percent) were age 35 or older, 19 percent were age 25–34, and 9 percent were between the ages of 18 and 24 (exhibit 1c).

Cocaine-involved deaths totaled 62 in 2004 (exhibit 2).

In 2003, cocaine was the primary substance of abuse among approximately 29 percent of treatment admissions reported to TEDS, with 19 percent reporting smoked cocaine (referred to as “crack” here) (exhibit 3a). The percentage of primary admissions for nonsmoked cocaine (referred to as “powder” here) increased 51 percent from 474 admissions in 2001 to 717 in 2002, while those for crack decreased 19 percent, from 1,450 to 1,172 during this time period. In 2003, the number of admissions for crack (912) continued to decrease. Admissions for powder cocaine decreased for the first time since 2000. Treatment admissions in 2003 with powder cocaine and crack cocaine as the primary drugs of abuse were more likely to be male (65.7 and 64.7 percent, respectively) than female (exhibit 3b). More than 94 percent of both cocaine admissions groups were Black, and more than one-half were age 36–45.

Reports from the Pretrial Services Agency for the first 11 months of 2005 indicate that the percentage of adult arrestees testing positive for cocaine

remained about the same as in 2000 (exhibits 4a and 4b). In 2005, 37 percent of adult arrestees in Pretrial Services tested positive for cocaine. Nearly 4 percent of juvenile arrestees tested positive from January through October 2005. The percentage of juveniles testing positive appeared to have increased slightly from 20043 (exhibits 5a and 5b).

According to data from the Metropolitan Police Department, drug-related arrests related to cocaine and crack were second in frequency after marijuana. These arrests increased substantially from 2003 to 2004 (25 and 43 percent, respectively) (exhibit 6). The majority of these arrests involved adults and the sale or manufacture of these drugs. The arrests of juveniles for the sale or manufacture of cocaine and crack increased slightly (data not shown). In contrast, the results of the 2005 YRBS indicate that the percentage of public school students in grades 9–12 reporting lifetime use of any form of cocaine decreased from 6.2 percent in 2003 to 2.1 percent in 2005 (exhibit 7a).

Heroin

Heroin represents one of the three leading drug problems in the District, along with cocaine and marijuana. The MPD describes crack as a weekend drug, but heroin as having a more steady ongoing market. The DEA reported that heroin sold for \$64,000 to \$125,000 per kilogram in the Baltimore area and from \$140 to \$160 per gram in the DC area during the third quarter of 2005. NFLIS data for FY 2005 show that approximately 10 percent of analyzed drug items tested positive for heroin.

The unweighted DAWN *Live!* data show there were 570 heroin ED reports during the first 6 months of 2005 (exhibit 1b). Nearly two-thirds (63 percent) of these patients were male, 60 percent were Black, and 32 percent were White. Nearly three-quarters (73 percent) were age 35 or older (exhibit 1c).

Seventy-three deaths involving opiates/opioids were reported by the medical examiner in 2004 (exhibit 2).

In 2003, heroin was the primary substance of abuse for 41.9 percent of treatment admissions, a steady increase from 2000 (exhibit 3a). Of the 2,023 primary heroin admissions in 2003, approximately 72 percent were male and 96 percent were Black (exhibit 3b). More than three-quarters (84 percent) were age 36 to 55.

As with cocaine, reports from the Pretrial Services Agency indicate that the percentage of adult arrestees testing positive for opiates remained about the same from 2001 through the first 11 months of 2005 (ex-

hibits 4a and 4b). From January through November 2005, 9.3 percent of adult arrestees tested positive for opiates. Juvenile arrestees were not tested for opiates during this time period.

According to the Metropolitan Police Department, drug arrests in DC related to heroin were third in frequency after those for marijuana and cocaine. Heroin arrests involving adults increased steadily from 2002 to 2004 (20 percent) (exhibit 6). More than one-half (54 percent) of these arrests involved the sale or manufacture of heroin, and nearly all involved adults. The number of arrests of juveniles for the sale or manufacture of heroin decreased from 14 in 2003 to 5 in 2004.

Other Opiates/Narcotics

During the first 6 months of 2005, there were 485 ED reports involving opiates/opioids in the unweighted DAWN *Live!* data. Of these 485 reports, oxycodone/combinations accounted for 173 (36 percent) and hydrocodone/combinations represented 46 (10 percent). Approximately one-quarter (24 percent) of opiates/opioids reports were for overmedication, and 18 percent were for individuals seeking detoxification. More than one-half (57 percent) of the reports were designated “other” opiates/opioids.

Seventy-three deaths involving opiates/opioids were reported in 2004 (exhibit 2); 14 substances were specified as methadone and 62 were listed as other opiates.

Other opiates were the primary substance of abuse among 0.3 percent of the 4,832 treatment admissions in 2003 (exhibit 3a). This percentage remained about the same from 2000 to 2003.

Oxycodone and methadone combined accounted for less than 1 percent of analyzed drug items reported to NFLIS in FY 2005. According to the DEA, the price per dosage unit ranged from \$4.50 for Percodan/Percocet, to \$5 for generic hydrocodone, to \$35 for OxyContin during the third quarter of 2005.

Marijuana

Marijuana is widely used in the District, as it is in many other jurisdictions. Commercial-grade and high-grade marijuana are available for wide-ranging, but relatively stable, prices. Most of the marijuana is transported into the District via either shipping companies or large cardboard barrels in trucks and hidden compartments in vehicles, according to the Washington/Baltimore HIDTA. The DEA reports that high quality marijuana is imported from Canada

by Vietnamese groups. There are an increasing number of indoor grows as well. In fact, 233 plants (with an estimated street value of \$660,000), several weapons, and thousands of dollars worth of equipment were seized in an indoor grow bust in northeast DC in January 2006, according to HIDTA.

The DEA reported that marijuana sold for \$120 per ounce and \$1,400 per pound during the third quarter of 2005. NFLIS data for FY 2005 show that approximately 36 percent of analyzed drug items tested positive for marijuana, which made marijuana the second most frequently found drug.

From January through June 2005, 683 DAWN *Live!* ED reports involved marijuana (exhibit 1b). More than two-thirds of these patients were male (68 percent), 49 percent were Black, and 44 percent were White. In terms of age, 31 percent of the patients were age 18–24, 23 percent were age 25–34, and 28 percent were age 35 and older. Eighteen percent of the marijuana ED reports represented patients age 12–17 (exhibit 1c).

No marijuana-involved deaths were reported in 2004.

Marijuana was the primary substance of abuse for 7.0 percent of the 2003 treatment admissions, compared with 6.4 percent in 2001 and 8.0 percent in 2000 (exhibit 3a). More than three-quarters of the 336 primary marijuana admissions in 2003 were male, and 88 percent were Black (exhibit 3b). Approximately one-third (32.7 percent) of these admissions were between the ages of 12 and 17, and more than one-quarter (28.6 percent) were age 18–25.

The Pretrial Services Agency does not test adult arrestees for marijuana; however, more than one-half of juveniles tested positive for marijuana each year between 2000 and 2003. In 2004 and the first 10 months of 2005, 49 percent of juveniles tested positive for marijuana (exhibits 5a and 5b). The percentage of juveniles testing positive for marijuana decreased slowly since 1999.

According to data from the Metropolitan Police Department, marijuana-related arrests accounted for 39 percent of all drug-related arrests in 2004. These arrests increased substantially from 2002 to 2004 (30 percent) (exhibit 6). Nearly all of these arrests involved adults, and nearly two-thirds (63 percent) involved the possession of marijuana. The arrests of juveniles for the possession and sale or manufacture of marijuana increased from 2003 to 2004. In contrast, the results of the 2005 YRBS indicate that the percentage of public school students in grades 9–12 reporting lifetime and past-month use decreased,

respectively, from 41.7 and 23.5 percent in 2003 to 27.2 and 14.5 percent in 2005 (exhibits 7a and 7b).

Phencyclidine

According to the MPD, the number of adult arrests related to PCP more than doubled from 2001 to 2003 (from 106 to 259). According to the *Washington/Baltimore HIDTA 2003 Threat Assessment*, PCP was rapidly becoming the drug of choice at raves and nightclubs during this time, sometimes used in combination with marijuana and/or MDMA (ecstasy). In 2004, however, PCP use began to decline, and it continues to be well behind the use of crack and marijuana. PCP-related arrests declined 41 percent from 2003 to 2004 (exhibit 6).

NFLIS data for FY 2005 show that 1.8 percent of analyzed drug items tested positive for PCP, making it the fifth most frequently found drug after cocaine, marijuana, heroin, and methamphetamine.

There were 152 ED reports involving PCP in the unweighted DAWN *Live!* data during the first 6 months of 2005 (exhibit 1b).

There were two PCP-related deaths in the metropolitan area in 2004 (exhibit 2).

In 2003, PCP was the primary substance of abuse among 3.9 percent of treatment admissions, an increase from 2001 (1.8 percent) and 2000 (0.7 percent) (exhibit 3a). Of the 189 primary PCP admissions in 2003, nearly two-thirds were male, and nearly all were Black (exhibit 3b). More than one-half (55 percent) were age 18–25, and one-third were 26–35.

Data from the Pretrial Services Agency show a rise in PCP use among adult arrestees, from the low single digits in the late 1990s to the mid-teens in 2002 and 2003 (exhibits 4a and 4b). Positive tests for PCP use among adults declined, however, in 2004 to 6 percent, but they increased slightly in the first 11 months of 2005 to 7.5 percent. Trend data from 1987 to the present indicate that PCP use among the juvenile arrestee population mirrored that in the adult arrestee population (exhibits 5a and 5b), with spikes in the late 1980s, mid-1990s, and again in the current decade. The proportion of juveniles testing positive for PCP decreased from 13.4 percent in 2002 to 1.9 percent in 2004, but increased in the first 10 months of 2005 to 3.7 percent.

Amphetamines/Methamphetamine

Abuse of amphetamines and methamphetamine does not appear to be a major problem in the District. There were no deaths related to either methamphetamine or amphetamine in 2004.

From 2000 through 2003, amphetamines accounted for less than 1 percent of all treatment admissions in the District (exhibit 3a). Admissions involving methamphetamine as a substance of abuse increased steadily from 1 in 1998 to 47 in 2001. In 2002, only 29 methamphetamine mentions occurred, a decrease of 38 percent from 2001 (exhibit 3c).

The unweighted DAWN *Live!* data for the first 6 months of 2005 show 31 amphetamine ED reports and 20 methamphetamine ED reports (exhibit 1b); 11 of the methamphetamine patients were White, and 16 were male. In terms of age, 35 percent of the methamphetamine patients were age 18–24, 30 percent were age 25–34, and 35 percent were 35 and older. None of this patient group was age 12–17.

The Washington/Baltimore HIDTA and other members of the DC Epidemiological Workgroup report that methamphetamine use is established in the homosexual community. Detectives from the Metropolitan Police Department reported in 2004 that both tablet and powder methamphetamine were visible in the Washington, DC, club scene. However, there were no known methamphetamine labs in the District in 2005 and only two seizures, according to HIDTA.

NFLIS data for FY 2005 show that approximately 3 percent of analyzed drug items tested positive for methamphetamine, making it the fourth most frequently found drug. The DEA reported that methamphetamine sold for \$2,000 per pound, \$2,400 per ounce, and \$4,000 per gram during the third quarter of 2005. The Pretrial Services Agency does not regularly test for methamphetamine; however, a special study testing for methamphetamine and amphetamines found a positive rate of less than 1 percent among all specimens tested.

Amphetamine-related arrests ranged from 4 to 10 each year from 2001 to 2004 (exhibit 6). All arrests during this time involved adults. In 2004, 6 of the 10 arrests involved the sale or manufacture of amphetamines and 4 involved possession. The results of the 2005 YRBS also indicate a very low level of use of methamphetamine in DC. The percentage of public school students in grades 9–12 reporting

lifetime use decreased from 5.7 percent in 2003 to 2.0 percent in 2005 (exhibit 7a).

Prescription Stimulants

Drug Early Warning System (DEWS) staff at CESAR launched the Student Drug Research (SDR) survey in the spring of 2005 as a new tool for monitoring drug trends among college students. The SDR survey provides a unique opportunity to collect useful and timely information about emerging drugs and patterns of use among college students. Beginning with the 2005 survey in the fall, the panel of student reporters, which had been comprised exclusively of 26 student reporters (SRs) believed to be at high-risk for exposure to drug use, was expanded to be more reflective of the general student population by including an additional 21 SRs believed to be at low to moderate risk for exposure to drug use. The SRs have now participated in up to four surveys focused on their perceptions of drug availability and use by their peers during the spring and fall of 2005. The response rate has ranged from 62 to 88 percent.

Alcohol, marijuana, and Adderall continued to be the most frequently mentioned drugs. All were rated as easy or very easy to get around campus by the majority of SRs. Another prescription stimulant, Ritalin, was also rated as easy or very easy to get. Nonmedical use of prescription stimulants was perceived to be widespread. Prescription stimulants were used most often to study for and focus on exams. Student reporters rated the use of prescription stimulants for studying to be much less harmful than using them to party or mix with alcohol or other drugs. Other common reasons reported for using prescription stimulants include getting “up” for a party, increasing the effects of alcohol, and staying awake longer. The use of prescription stimulants to study was deemed less harmful and more socially acceptable than using them to party or mixing them with other drugs. Students using prescription stimulants to study tend to take the pills orally with some type of caffeine/energy drink, while those using them to party tend to use lower strength pills that they crush and snort.

A *DEWS Investigates* report on the results of the two initial surveys is available on the CESAR Web site at <www.cesar.umd.edu>.

Other Drugs

Abuse of club drugs, such as MDMA, gamma hydroxybutyrate (GHB), and ketamine is also relatively low in the District. MDMA is the most

readily available and frequently abused “club drug,” selling for \$8 to \$9 per tablet in the third quarter of 2005, according to the DEA Washington Division. This is less than one-half what it sold for in 2002.

During the first 6 months of 2005, the unweighted DAWN *Live!* data showed 34 MDMA ED reports, 6 GHB reports, 3 lysergic acid diethylamide (LSD) reports, and 2 ketamine reports (exhibit 1b). MDMA and methylenedioxymphetamine (MDA) accounted for approximately 1 percent of analyzed drug items tested through NFLIS in FY 2005. GHB and ketamine were each found in less than one-half of 1 percent of the NFLIS items. No drug items tested positive for LSD. In 2004, no deaths involving club drugs were reported, but two hallucinogen-related deaths were reported.

Nonmedical use of benzodiazepines was reported in the unweighted DAWN *Live!* system. From January to June 2005, there were 300 ED reports involving benzodiazepines. In 2004, four deaths related to benzodiazepines were reported (exhibit 2). According to the DEA, benzodiazepines sold for \$2 per dosage unit during the third quarter of 2005.

From January to June 2005, there were 1,171 alcohol reports in the unweighted DAWN *Live!* data (exhibit 1b). Fourteen deaths involving alcohol were reported in 2004. In 2003, primary alcohol admissions to drug treatment programs accounted for approximately 18 percent of all admissions, a slight decline from 2000 and 2001. The percentage of public school students in grades 9–12 reporting past-month alcohol use decreased sharply from 33.8 percent in 2003 to 23.1 percent in 2005. The percentage reporting binge drinking, however, stayed about the same (10.3 percent in 2003 and 9.2 percent in 2005) (exhibits 7a and 7b).

INFECTIOUS DISEASES RELATED TO SUBSTANCE ABUSE

The diagnosis of AIDS cases increased rapidly from 1982 to 1993, when cases peaked at 1,342. The number of cases decreased 49.0 percent from 1993 to 2001, but increased 37.5 percent in 2002. There were 943 diagnosed cases in 2002, the last year for which data are available. The number of male cases decreased steadily from 1998 to 2001, but increased in 2002. Males accounted for 70 percent of cases diagnosed in 2002. Almost three-quarters of the diagnoses in 2002 occurred among persons age 30–49 (exhibit 8). Nearly two-thirds (62 percent) of people in DC diagnosed with AIDS were African-American, and about 21 percent had a history of injection drug use. The rate of AIDS deaths per

100,000 population decreased from 47 in 1998 to 25 in 2003, according to the *HIV/AIDS Epidemiologic Profile for the District of Columbia 2004*. One hundred and fifty new AIDS diagnoses in 2004 were related to injection drug use.

DEWS INVESTIGATES: USING URINE SPECIMENS FROM PAROLEES/PROBATIONERS TO CREATE A STATEWIDE DRUG MONITORING SYSTEM

Trends in the drugs detected in urinalyses from offenders have been found to provide advance warning of drug epidemics in the greater community. The recent demise of the national Arrestee Drug Abuse Monitoring (ADAM) program and the Maryland Offender Population Urine Screening (OPUS) program has left Maryland and other States without important tools for forecasting drug epidemics. DEWS staff therefore worked with the Maryland Division of Parole and Probation (DPP) to pilot an innovative program of expanded testing of urine specimens that DPP staff had collected from probationers/parolees during the standard course of business. These specimens are normally thrown away after the testing process is complete.

DEWS staff oversampled drug-positive specimens that the DPP laboratory (Guilford Lab) had tested for a panel of five drugs (benzodiazepines, cocaine, marijuana, opiates, and PCP). While about 20 percent of all specimens screened by DPP tested positive in 2004, 75 percent of the 299 specimens selected by DEWS had tested positive in the DPP panel. The study specimens were then sent to an independent, private laboratory (Friends Medical Laboratory, Inc.) that tested them for the presence of more than 30 drugs. It was remarkably quick and inexpensive to sample the urine specimens and send them out for further testing.

Almost all (97 percent) of the probationers/parolees who tested positive for at least one of the drugs in the expanded screen had already tested positive for at least one of the five more common drugs tested for by the DPP. However, the use of some less common drugs, notably buprenorphine, methadone, and oxycodone, would have gone undetected by the DPP's drug screen. Sixteen specimens contained oxycodone, and 15 specimens contained buprenor-

phine. However, only one specimen tested positive for amphetamine, and confirmatory testing did not detect methamphetamine. Methamphetamine does not appear to be used by this population in Maryland. About one-half of the specimens that contained buprenorphine or oxycodone also contained two or more other drugs, raising the possibility of abuse of these prescription drugs in Maryland. The pattern of positive test results for cocaine, PCP, marijuana, and opiates was consistent with the types of drugs for which the general population in the sampled localities sought treatment.

CESAR staff believe that Maryland and other States should consider implementing a program of periodic expanded testing of urine specimens routinely collected from probationers/parolees. This is a relatively low cost and easy-to-execute program that will achieve two goals: (1) it will provide criminal justice agencies with the means to ensure that they are routinely testing for the drugs being used by the persons they supervise; and (2) it will provide the State with a tool for rapidly detecting and researching emerging drug problems. The full report is available on the CESAR Web site at <www.cesar.umd.edu>.

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- Citywide Comprehensive Substance Abuse Strategy for the District of Columbia, 2003
- DEWS Investigates: New Student Drug Research (SDR) Survey Examines Prescription Stimulant Misuse Among College Students. Center for Substance Abuse Research, University of Maryland College Park, July 2005.
- Pach, A.; Brown, J.; Hendrickson, J.; Odom, T.; and Nemes, S. "Patterns and Trends of Drug Abuse in Washington, D.C." *Epidemiologic Trends in Drug Abuse, Volume II: Proceedings of the Community Epidemiology Work Group June 2002*. Washington, D.C.: National Institute on Drug Abuse, 2002.

For inquiries concerning this report, please contact Erin Artigiani, M.A., Deputy Director for Policy, Center for Substance Abuse Research, University of Maryland, 4321 Hartwick Road, Suite 501, College Park, MD 20740, Phone: 301-405-9770, Fax: 301-403-8342, E-mail: <erin@cesar.umd.edu>.

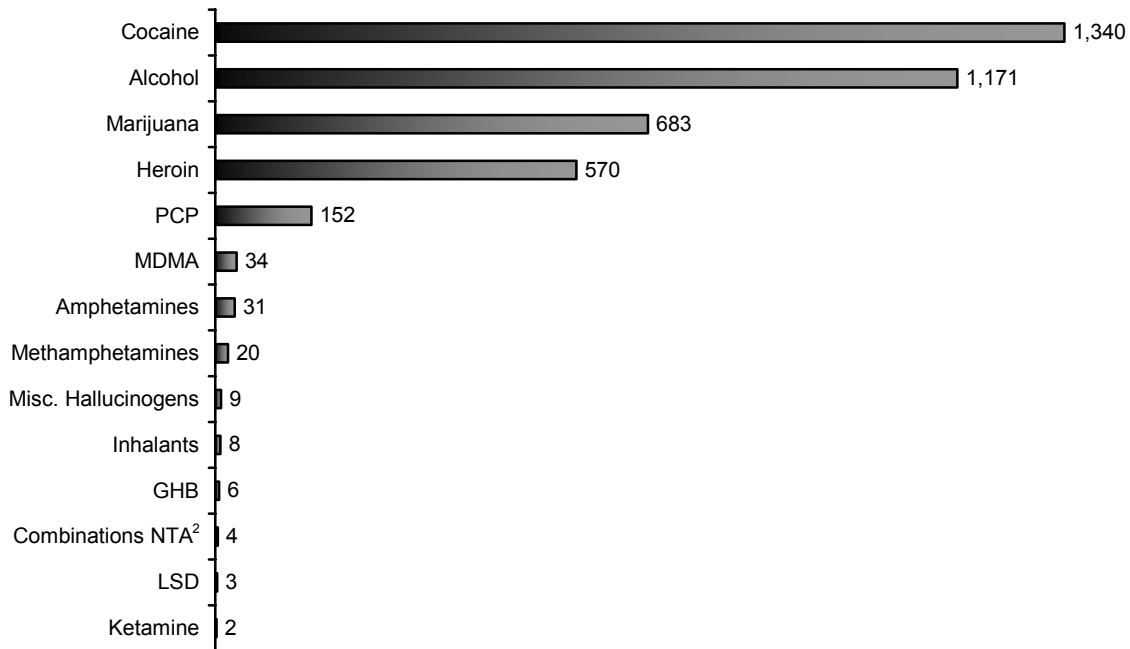
Exhibit 1a. Data Completeness for Washington, DC, Metropolitan Area DAWN Live! Emergency Departments, by Month and Year: 1H 2004 and 1H 2005

Data Completeness	Number of EDs, by Month and Year											
	2004						2005					
	Jan	Feb	Mar	Apr	May	Jun	Jan	Feb	Mar	Apr	May	Jun
Basically Complete	9	11	11	12	10	11	9	11	10	10	11	10
Partially Complete	4	2	2	1	3	2	4	2	2	2	1	0
Incomplete	0	0	2	0	0	1	0	0	1	1	0	1
No Data Reported	17	17	15	17	17	16	19	19	19	19	20	21

¹Total eligible hospitals in the area=34; hospitals in DAWN sample=31; EDs in the sample=32; hospitals not in DAWN sample=3. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted. Therefore, these data are subject to change.

SOURCE: DAWN Live!, OAS, SAMHSA, updated 12/6–12/7/2005

Exhibit 1b. Number of Drug Reports in Drug-Related ED Visits in the Washington, DC, Metropolitan Area, by Drug Category (Unweighted Data¹): January–June 2005



¹The unweighted data are from Washington, DC, metropolitan area hospitals reporting to DAWN. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted. Therefore, these data are subject to change.

²NTA = Not tabulated above (i.e., with other drugs shown in this exhibit).

SOURCE: DAWN Live!, OAS, SAMHSA, updated 12/6–12/7/2005

Exhibit 1c. Demographic Characteristics of Patients Reporting Cocaine, Heroin, and Marijuana Abuse in Washington, DC, Metropolitan Area DAWN EDs, by Percent (Unweighted Data¹): January–June 2005

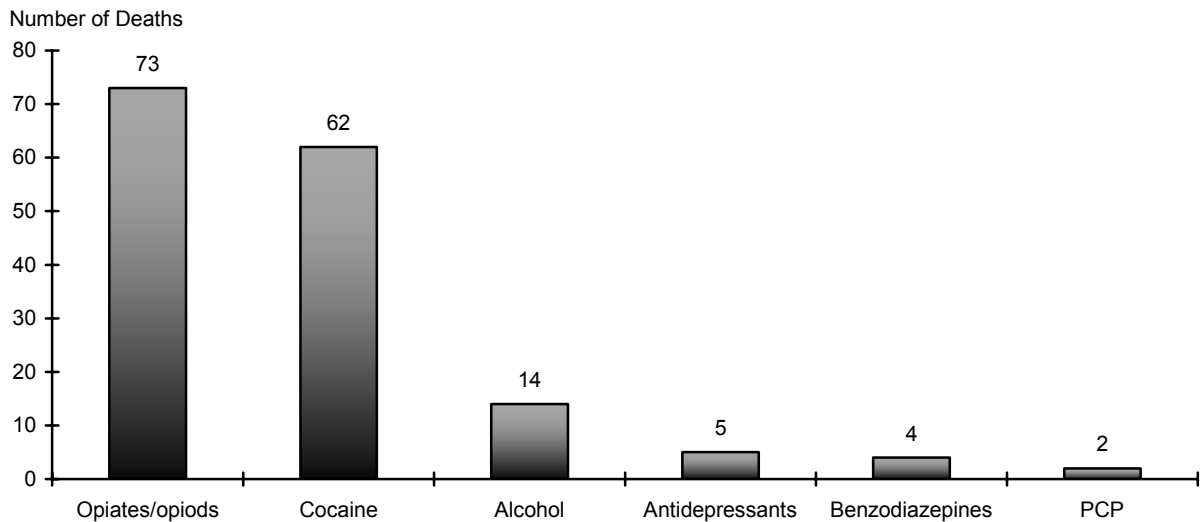
Characteristic	Cocaine Reports (n=1,340)	Heroin Reports (n=570)	Marijuana Reports (n=683)	Methamphetamine Reports (n=20)
Gender				
Male	61.1	62.6	67.9	80.0
Female	38.9	37.4	32.1	20.0
Race/Ethnicity				
White	25.9	31.8	44.4	55.0
Black	69.0	60.2	48.5	20.0
Hispanic	2.0	1.2	3.1	5.0
Race/Ethnicity NTA ²	0.7	1.1	1.2	0.0
Not Documented	2.4	5.8	0.3	20.0
Age				
17 and younger	0.9	1.1	18.2	0.0
18–24	9.3	10.9	30.5	35.0
25–34	18.7	15.4	23.0	30.0
35–44	41.0	29.8	19.8	25.0
45–54	25.5	34.2	7.5	10.0
55 and older	4.3	8.6	0.6	0.0
Not Documented	0.2	0.0	0.0	0.0

¹The unweighted data are from Washington, DC, metropolitan area hospitals reporting to DAWN. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted. Therefore, these data are subject to change.

²NTA=Not tabulated above.

SOURCE: DAWN Live!, OAS, SAMHSA, updated 12/6–12/7/2005

Exhibit 2. Number of Drug-Related Deaths in Washington, DC, by Drug: 2004



SOURCE: Office of the Chief Medical Examiner, Washington, DC

Exhibit 3a. Percentages of Treatment Admissions in Washington, DC, with Abuse of Selected Substances (Primary Substance of Abuse), by Year: 2000–2003

Drug	2000	2001	2002	2003
Total Admissions (N)	(6,025)	(5,755)	(5,659)	(4,832)
Cocaine (Smoked)	27.0	25.2	20.7	18.9
Cocaine (Other Form)	7.4	8.2	12.7	9.6
Heroin	35.2	37.9	39.2	41.9
Other Opiates	0.2	0.4	0.3	0.3
Marijuana	8.0	6.4	4.8	7.0
PCP	0.7	1.8	3.6	3.9
Alcohol	21.1	19.3	18.4	18.2
Amphetamines ¹	0.2	0.6	0.3	0.2

¹Amphetamines includes methamphetamines, Benzedrine, Dexedrine, Preludin, Ritalin, and any other amines and related drugs.
SOURCE: TEDS, SAMHSA

Exhibit 3b. Demographic Characteristics of Treatment Admissions in Washington, DC, by Selected Primary Drugs of Abuse and Percent¹: 2003

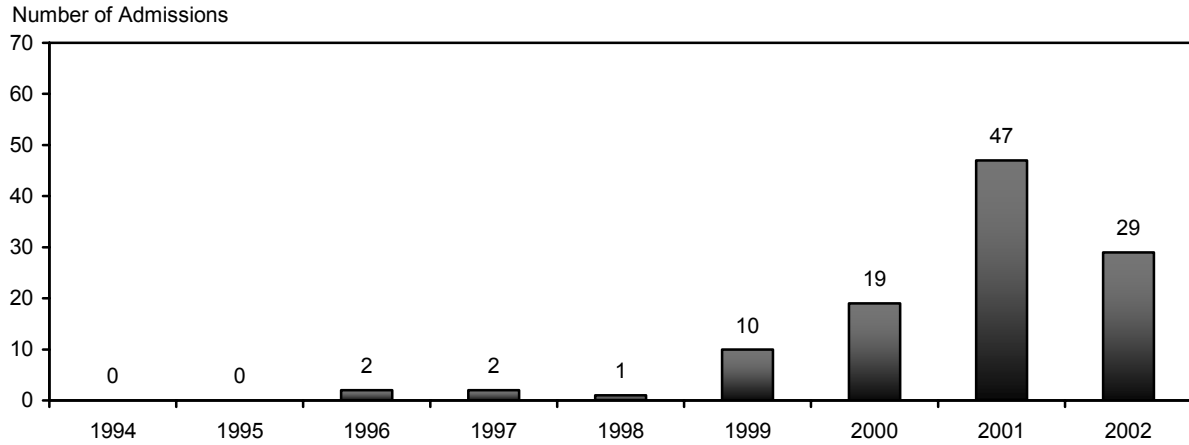
Drug	Cocaine (Smoked)	Cocaine (Other Form)	Heroin	Marijuana	PCP	Amphetamines ³
(N=)	(912)	(466)	(2,023)	(336)	(189)	(10)
Gender						
Male	64.7	65.7	72.0	75.9	63.0	90.0
Female	35.3	34.3	28.0	24.1	37.0	10.0
Race/Ethnicity						
Black	94.8	94.4	95.8	87.8	98.4	10.0
White	1.2	0.9	1.8	0.9	0.0	90.0
Other ²	4.0	4.8	2.3	11.3	1.6	0.0
Age Group						
17 and under	0.2	0.0	0.0	32.7	2.1	0.0
18–25	2.7	4.5	1.7	28.6	55.0	10.0
26–35	18.3	15.8	9.9	20.8	32.8	30.0
36–45	58.2	54.5	45.6	12.2	6.3	60.0
46–55	18.0	21.9	38.4	5.1	2.7	0.0
56 and older	2.4	3.2	4.4	0.6	1.1	0.0

¹May not add to 100 percent due to rounding.

²Primarily Hispanic or Latino.

³Amphetamines includes methamphetamines, Benzedrine, Dexedrine, Preludin, Ritalin, and any other amines and related drugs.
SOURCE: TEDS, SAMHSA

Exhibit 3c. Number of Treatment Admissions in Washington, DC, with Methamphetamine Mentioned as a Substance of Abuse: 1994–2002



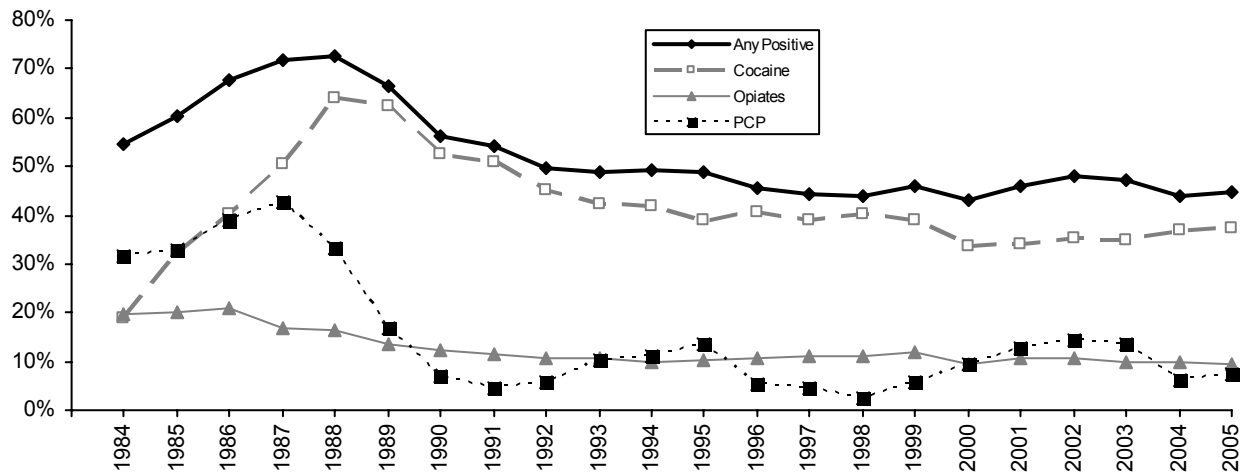
SOURCE: TEDS, SAMHSA

Exhibit 4a. Percentages of Adult Arrestees in Washington, DC, Testing Positive for Selected Drugs: 2000–2005¹

Drug	2000	2001	2002	2003	2004	2005
(N=)	(15,630)	(17,350)	(17,952)	(17,742)	(19,531)	(19,531)
Cocaine	33.6	34.2	35.2	34.8	36.6	37.2
PCP	9.3	12.7	14.2	13.5	6.2	7.5
Opiates	9.5	10.5	10.5	10.0	9.8	9.3
Any Drug	43.2	46.1	48.0	47.3	43.5	44.6

¹2005 data are for January–November only.
SOURCE: District of Columbia Pretrial Services Agency

Exhibit 4b. Percentages of Washington, DC, Adult Arrestees Testing Positive for Any Drug, Cocaine, PCP, and Opiates: 1984–2005¹



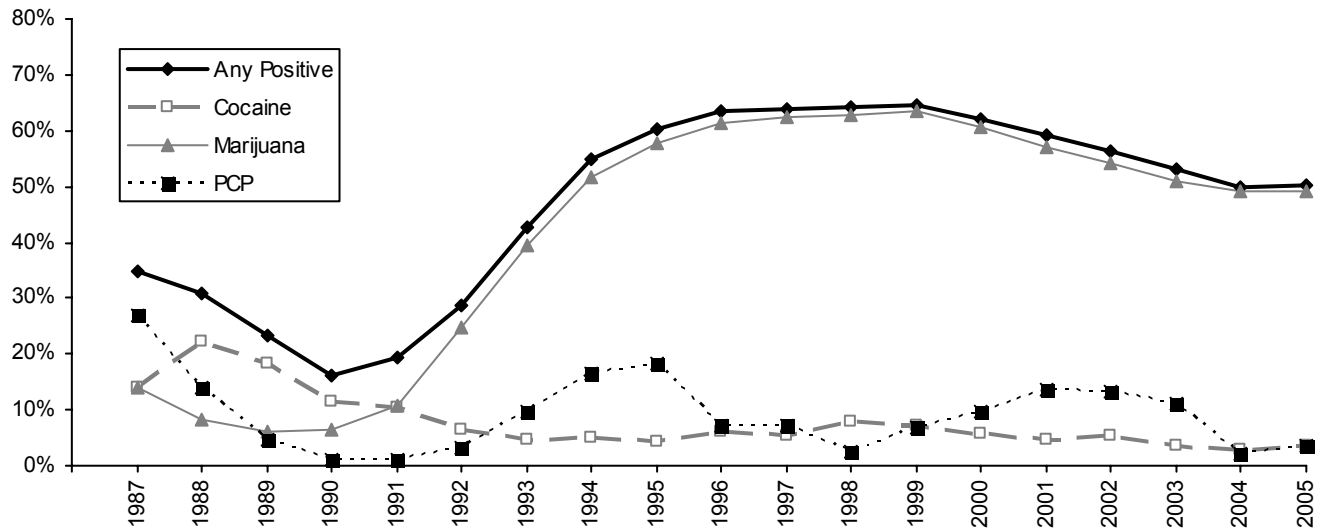
¹2005 data are for January–November only.
SOURCE: Adapted by CESAR from data from the District of Columbia Pretrial Services Agency

Exhibit 5a. Percentages of Juvenile Arrestees in Washington, DC, Testing Positive for Selected Drugs: 2000—2005¹

Drug	2000	2001	2002	2003	2004	2005
(N=)	(2,162)	(2,165)	(1,896)	(1,899)	(2,001)	(2,001)
Marijuana	60.7	56.9	54.2	50.8	49	49.2
Cocaine	5.7	4.8	5.5	3.7	3.3	3.5
PCP	9.8	13.5	13.4	11.1	1.9	3.7
Any Drug	62.0	59.1	56.4	53.1	49.6	50.3

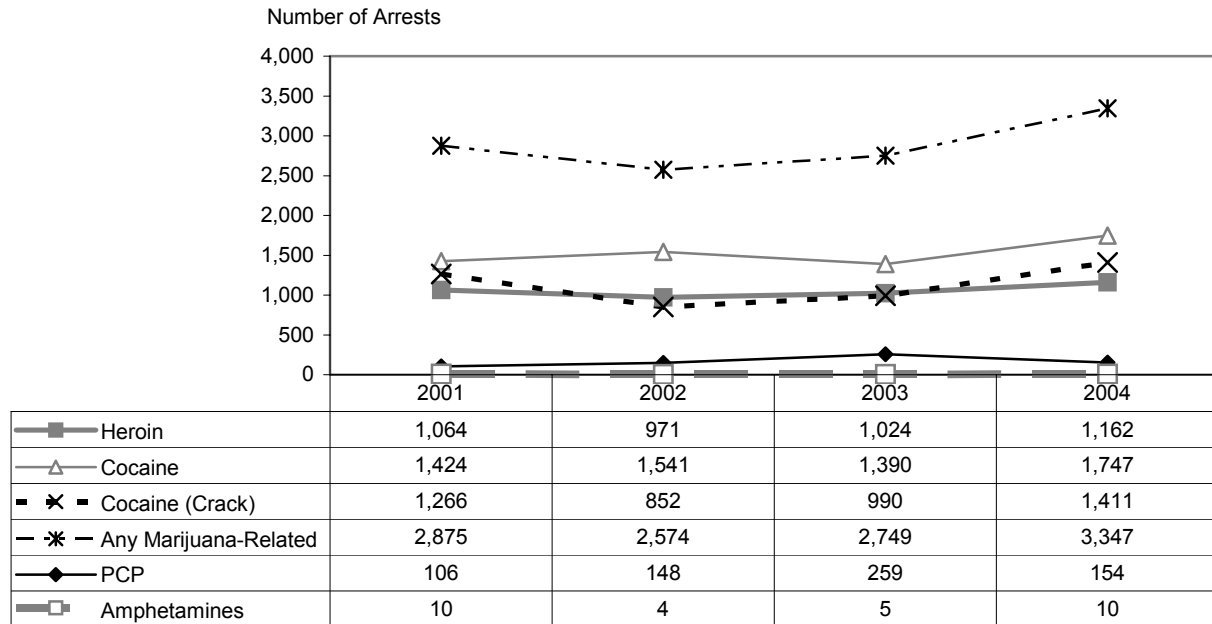
¹2005 data are for January–October only.
SOURCE: District of Columbia Pretrial Services Agency

Exhibit 5b. Percentages of Washington, DC, Juvenile Arrestees Testing Positive for Any Drug,¹ Cocaine, PCP, and Marijuana: 1987–2005²



¹"Any Positive" includes opiates from 1987 through mid-1994 (< 1%).
²2005 data are for January–October only.
SOURCE: Adapted by CESAR from data from the District of Columbia Pretrial Services Agency

Exhibit 6. Number of Drug-Related Arrests in Washington, DC, by Year and Type of Drug: 2001–2004



SOURCE: Adapted by CESAR from data from the Metropolitan Police Department 2005

Exhibit 7a. Lifetime Use of Tobacco and Other Drugs Among DC Public School Students in Grades 9–12, by Percent: 2003 and 2005

Lifetime Use of Tobacco and Other Drugs	2003	2005
Cigarette Smoking	55.5	35.8
Marijuana	41.7	27.2
Any Form of Cocaine	6.2	2.1
Methamphetamine	5.7	2.0

SOURCE: Adapted by CESAR from data from DC Public Schools 2005 YRBS

Exhibit 7b. Past-30-Day Tobacco, Alcohol, and Other Drug Use Among DC Public School Students in Grades 9–12, by Percent: 2003 and 2005

Past-30-Day Use of Tobacco, Alcohol, and Other Drugs	2003	2005
Cigarette Smoking	13.2	9.2
Alcohol Use	33.8	23.1
Marijuana Use	23.5	14.5
Binge Drinking	10.3	9.2
Offered, Sold, or Given an Illegal Drug on School Property	30.2	20.3

SOURCE: Adapted by CESAR from data from DC Public Schools 2005 YRBS

Exhibit 8. District of Columbia Diagnosed AIDS Cases by Gender, Race/Ethnicity, Age, and Exposure, by Number and Percent: 1981–2002

Characteristic	1998		1999		2000		2001		2002		Cumulative 1981–2002	
	N	%	N	%	N	%	N	%	N	%	N	%
Gender												
Male	719	72	526	74	471	69	468	68	658	70	12,098	80
Female	278	28	188	26	210	31	218	32	285	30	3,034	20
Total Cases	997		715		681		686		943		15,132	
Race/Ethnicity												
White	112	11	88	12	68	10	59	9	46	5	2,962	20
Black	837	84	591	83	562	83	567	83	584	62	11,286	75
Hispanic	42	4	27	4	32	5	28	4	22	2	485	3
Asian/Pacific Islander	<5	<1	5	<1	<5	<1	<5	<1	<5	<1	48	<1
Undisclosed/Unknown	<5	<1	<5	<1	15	2	29	4	289	31	351	2
Age Group												
0–12	8	<1	<5	<1	0	0	<5	<1	<5	<1	179	1
13–19	8	<1	<5	<1	7	1	<5	<1	8	<1	71	<1
20–29	120	12	89	12	89	13	75	11	85	9	2,248	15
30–39	395	40	265	37	253	97	235	34	319	34	6,327	42
40–49	330	33	249	35	231	34	251	37	347	37	4,575	30
50–59	107	11	83	12	78	11	94	14	149	16	1,363	9
60 and older	29	3	20	3	23	3	26	4	32	3	369	2
Mode of Exposure												
MSM	353	35	268	38	200	29	195	28	271	28	7,204	48
IDU/MSM	22	2	14	2	14	2	20	3	16	2	673	4
IDU	312	31	165	23	163	24	146	21	179	19	3,939	26
Heterosexual contact	191	19	169	24	176	26	149	22	253	27	2,095	14
Mother with HIV	8	<1	<5	<1	0	0	<5	<1	<5	<1	172	<1
Hemophilia	0	0	0	0	0	0	0	0	<5	<1	22	<1
Transfusion/transplant	<5	<1	<5	<1	<5	<1	<5	<1	<5	<1	104	<1
Unknown/other	108	11	90	13	126	19	172	25	219	23	923	6
Deaths During Period	156		130		89		48		41		6,932	

SOURCE: District of Columbia Department of Health, Division of Epidemiology, Administration for HIV/AIDS

SPECIAL
PRESENTATION
ON
DRUG-RELATED
HOSPITAL
ADMISSIONS
IN
ARIZONA

Special Presentation on Drug-Related Hospital Admissions in Arizona

Methamphetamine, Cocaine, and Heroin/Opioid Hospital Admissions in Arizona: 1990–2004

James K. Cunningham, Ph.D.

Hospital admissions can be used to help assess trends and patterns in health problems related to drug abuse. Analyses of acute care hospital admissions in Arizona indicate that ...

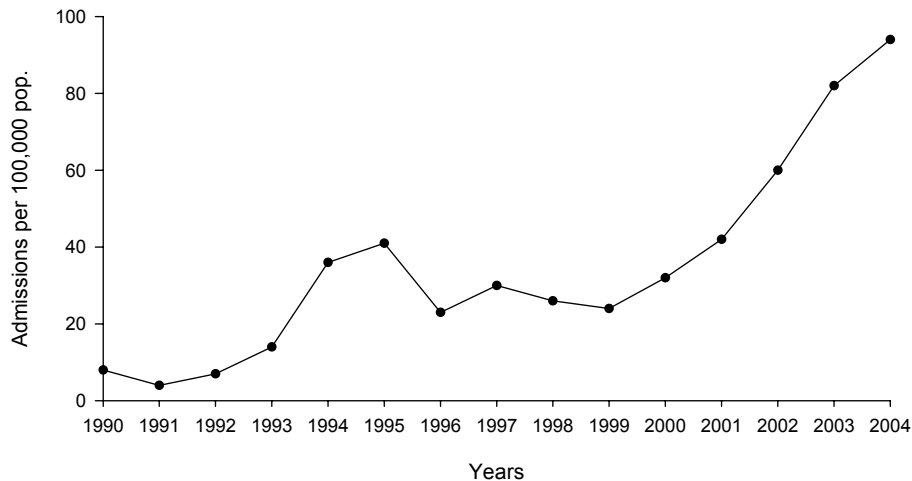
- Methamphetamine hospital admissions have dropped and surged multiple times, probably

related in part to the implementation and subsequent circumvention of various Federal precursor chemical regulations.

- During 2000–2004, methamphetamine hospital admissions surged more sharply than at any previous time in the study period.
- Despite the surge, the statewide rate for methamphetamine admissions in 2004 was similar to that year’s rates per 100,000 population for cocaine and heroin/opioid admissions.
- Among persons younger than 30 in Arizona, methamphetamine admissions rose sharply while cocaine and heroin/opioid admissions remained relatively flat.

As can be seen in exhibit 1, the rate of methamphetamine hospital admissions fluctuated in the 1990s and increased dramatically from 2000 to 2004.

Exhibit 1. Methamphetamine Hospital Admissions per 100,000 Population in Arizona: 1990–2004



SOURCE: Division of Applied Behavioral Health Policy, The University of Arizona

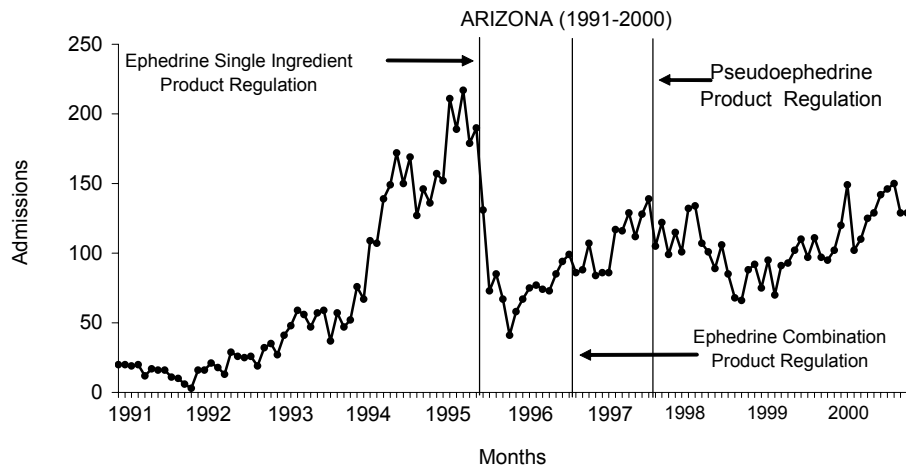
A possible explanation for the fluctuation lies with precursor chemical regulations that were federally enacted to control the availability of chemicals (particularly ephedrine and pseudoephedrine) used to produce methamphetamine. Each major regulation was associated with a significant drop in methamphetamine hospital admissions. However, each drop was followed by an eventual resurgence, probably because producers located new sources of precursor chemicals.

Specifically, methamphetamine producers initially used ephedrine and pseudoephedrine in bulk powder form. In response, the Federal Government regulated ephedrine and pseudoephedrine in that form in 1989 and methamphetamine hospital admissions dropped. Producers eventually circumvented this regulation by using single ingredient ephedrine products (e.g., ephedrine pills) that were still unregulated. The Federal Government regulated those products in August 1995, and admissions dropped again. Producers sub-

sequently turned to pseudoephedrine products, but the Federal Government regulated those products in October 1997, producing yet another drop. All three of these regulations targeted large-scale producers. Another regulation, implemented in October 1996, targeted ephedrine-combination products generally used by small-scale (“mom and pop”) producers, but it had little effect on methamphetamine hospital admissions.

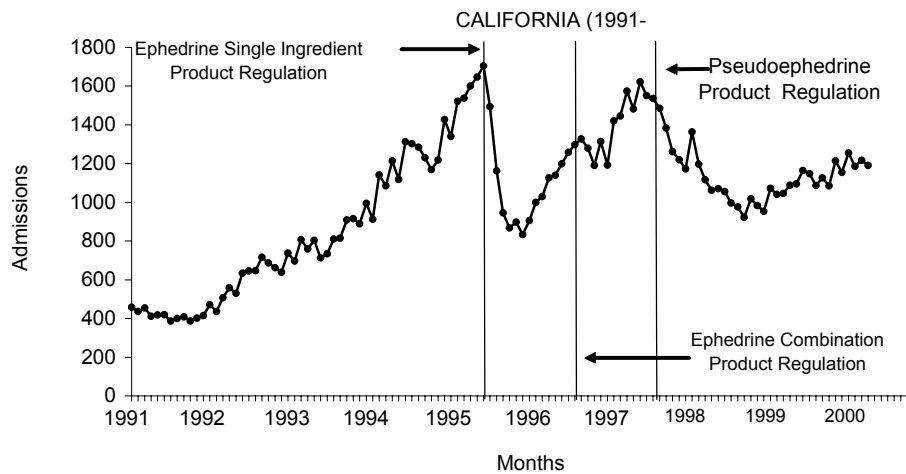
The numbers of hospital methamphetamine admissions in Arizona (1991–2000) and the months the 1990s regulations were implemented are shown in exhibit 2. To help confirm the reliability of the Arizona data, analyses of acute care hospital admissions in California and Nevada were also conducted. Essentially the same results were found (see exhibits 3 and 4).

Exhibit 2. Impacts of Precursor Chemical Regulations on Methamphetamine Hospital Admissions in Arizona: 1991–2000



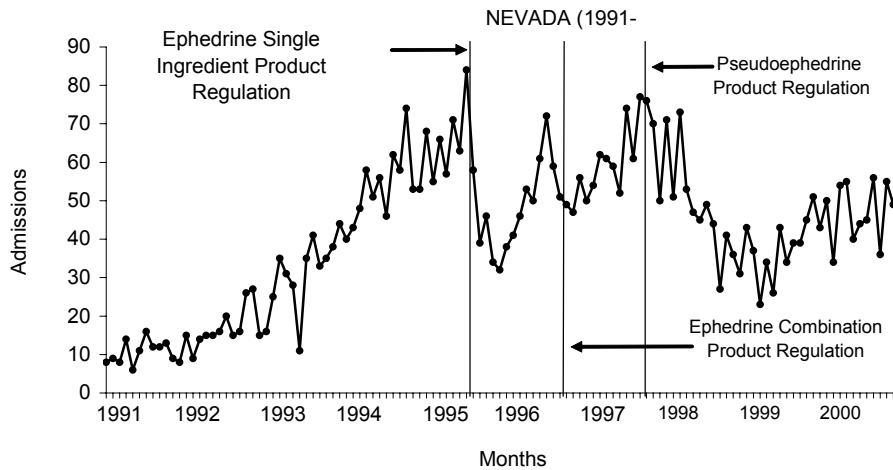
SOURCE: Public Statistics Institute

Exhibit 3. Impacts of Precursor Chemical Regulations on Methamphetamine Hospital Admissions in California: 1991–2000



SOURCE: Public Statistics Institute

Exhibit 4. Impacts of Precursor Chemical Regulations on Methamphetamine Hospital Admissions in Nevada: 1991–2000

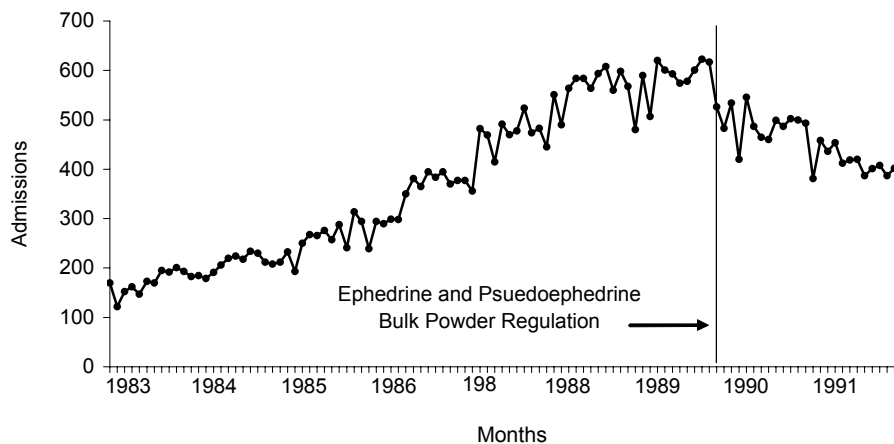


SOURCE: Public Statistics Institute

Arizona hospital admissions data are generally unavailable for the 1980s; however, California hospital admissions data from 1983 to 1991 were examined to assess whether admissions fell when ephedrine and

pseudoephedrine in bulk powder form were regulated in 1989. As can be seen in exhibit 5, methamphetamine hospital admissions in California began decreasing at the time the regulation was implemented.

Exhibit 5. Impacts of Precursor Chemical Regulations on Methamphetamine Hospital Admissions in California: 1983-1991



SOURCE: Public Statistics Institute

Following the Federal regulations just discussed, large-scale producers turned to countries other than the United States (e.g., China and India) to obtain precursor chemicals. These producers, most of whom are located in Mexico, produce the bulk of the illicit methamphetamine distributed in Arizona and the Southwest. Their access to chemicals from

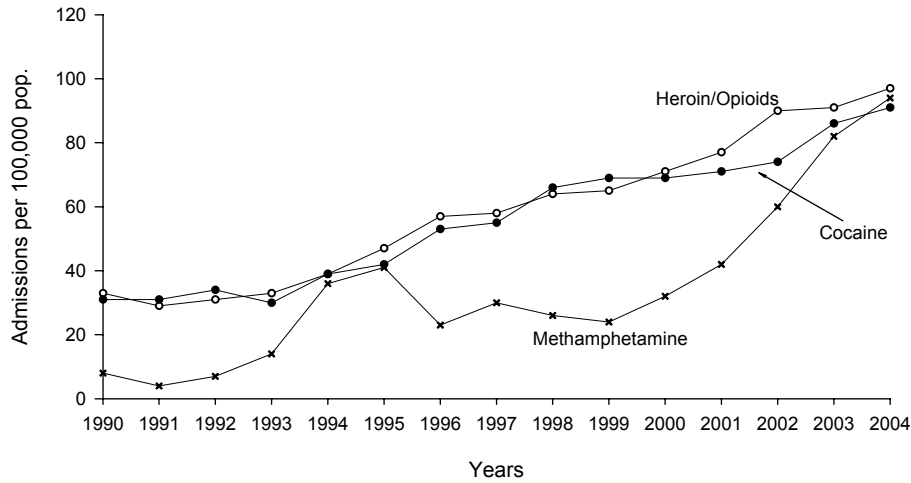
foreign countries may help explain the surge in hospital methamphetamine admissions during 2000–2004. Further attempts to significantly impact methamphetamine problems through precursor control probably will require effective international agreements and enforcement.

Methamphetamine Compared with Cocaine and Heroin/Opioids

Despite the sharp surge in methamphetamine admissions in Arizona during the end of the study period,

the admission rate for methamphetamine in 2004 was comparable to the rates for cocaine and heroin/opioids (exhibit 6). Note that cocaine and heroin/opioid hospital admission rates rose fairly steadily throughout the 15-year study period.

Exhibit 6. Methamphetamine, Cocaine, and Heroin/Opioid Hospital Admissions per 100,000 Population in Arizona: 1990–2004

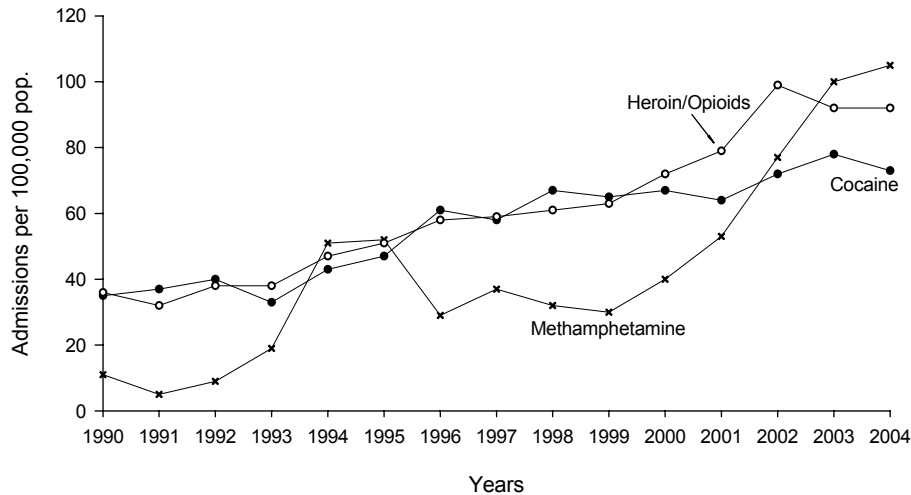


SOURCE: Division of Applied Behavioral Health Policy, The University of Arizona

Maricopa County, which includes the city of Phoenix, experienced a sharp rise in hospital methamphetamine admissions, as did the State overall. How-

ever, there was a decrease in cocaine admissions between 2003 and 2004, and in heroin/opioid admissions between 2002 and 2004.

Exhibit 7. Rates of Methamphetamine, Cocaine, and Heroin/Opioid Hospital Admissions per 100,000 Population in Maricopa County: 1990–2004

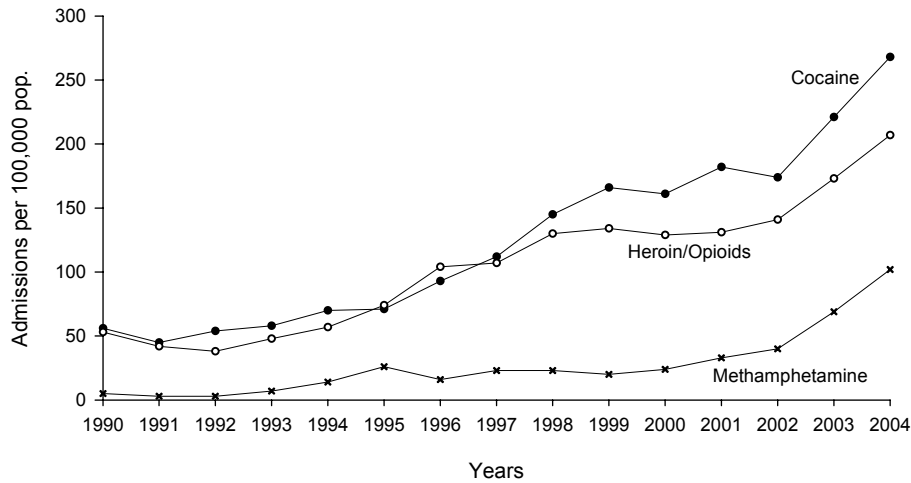


SOURCE: Division of Applied Behavioral Health Policy, The University of Arizona

In Pima County, which includes the city of Tucson, cocaine, heroin/opioids, and methamphetamine hospital admissions increased from 2000 to 2004 (exhibit 8). In 2004, the rate of methamphetamine hospital admissions in Pima County (102 per 100,000 population) was comparable to that for the State (94 per 100,000) and Maricopa County (105 per 100,000). But no such similarity existed for cocaine and heroin/opioid admissions. The rate for cocaine admis-

sions in Pima County (268 per 100,000) was substantially higher than that for the State and for Maricopa County (91 per 100,000 and 73 per 100,000, respectively). Similarly, the rate for heroin/opioid admissions in Pima County (207 per 100,000) was substantially higher than that for the state and Maricopa County (97 per 100,000 and 92 per 100,000, respectively).

Exhibit 8. Rates of Methamphetamine, Cocaine, and Heroin/Opioid Hospital Admissions per 100,000 Population in Pima County: 1990–2004

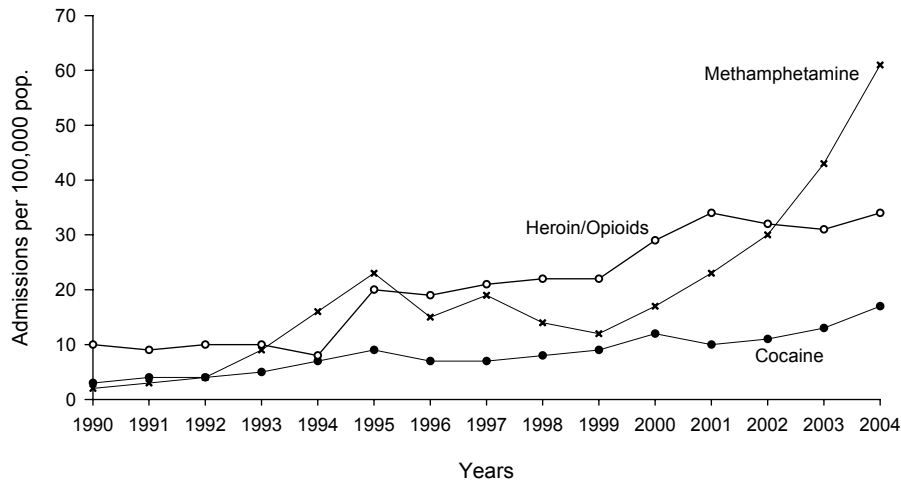


SOURCE: Division of Applied Behavioral Health Policy, The University of Arizona

In the rural counties of Arizona (i.e. counties other than Maricopa and Pima), methamphetamine hospital admissions substantially outnumbered cocaine and

heroin/opioid admissions during the last 2 years of the study period (exhibit 9).

Exhibit 9. Rates of Methamphetamine, Cocaine, and Heroin/Opioid Hospital Admissions per 100,000 Population in Arizona Rural Counties: 1990–2004

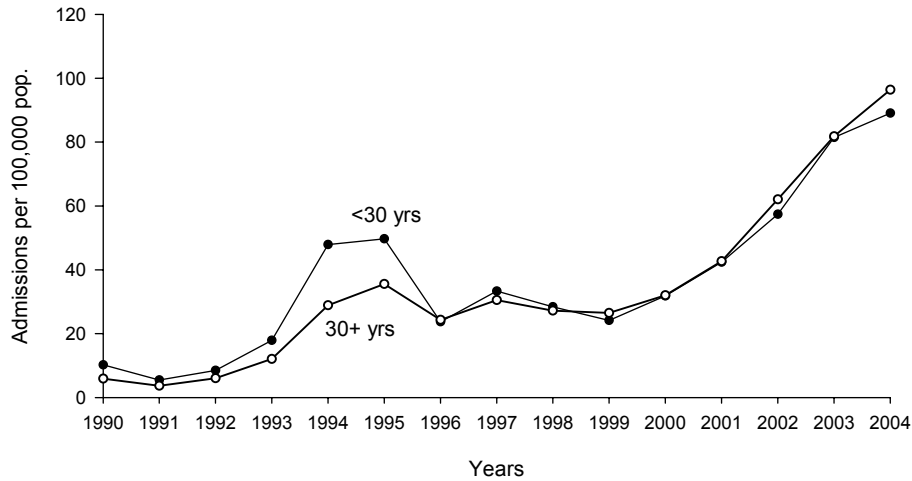


SOURCE: Division of Applied Behavioral Health Policy, The University of Arizona

During most of the study period, statewide methamphetamine hospital admission rates for persons younger than 30 were similar to those for persons 30

and older, and both groups experienced sharp rises in admissions during 2000–2004 (exhibit 10).

Exhibit 10. Rates of Methamphetamine, Cocaine, and Heroin/Opioid Hospital Admissions per 100,000 Population, By Age: 1990–2004

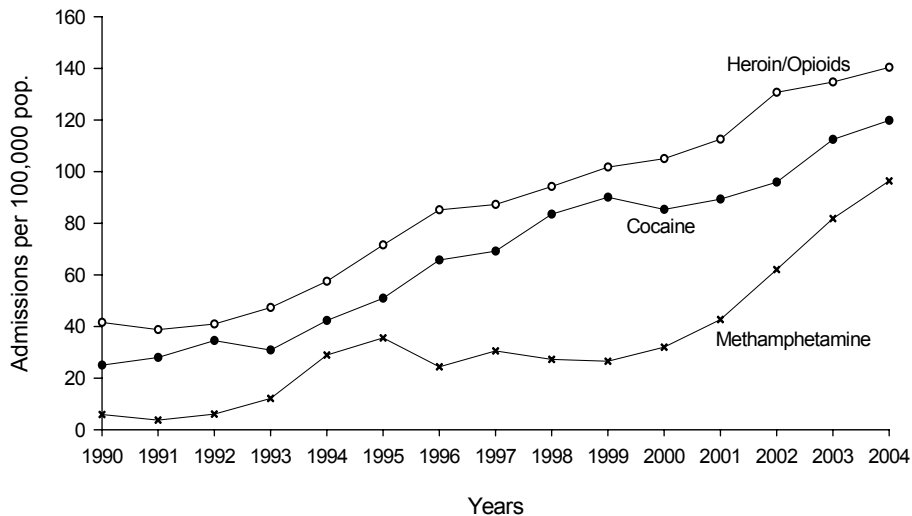


SOURCE: Division of Applied Behavioral Health Policy, The University of Arizona

Among persons 30 and older, cocaine and heroin/opioid admissions rose steadily throughout most of the study period (exhibit 11), while such admissions were fairly flat among persons younger than 30 (exhibit 12). Among persons 30 and older, heroin/opioid

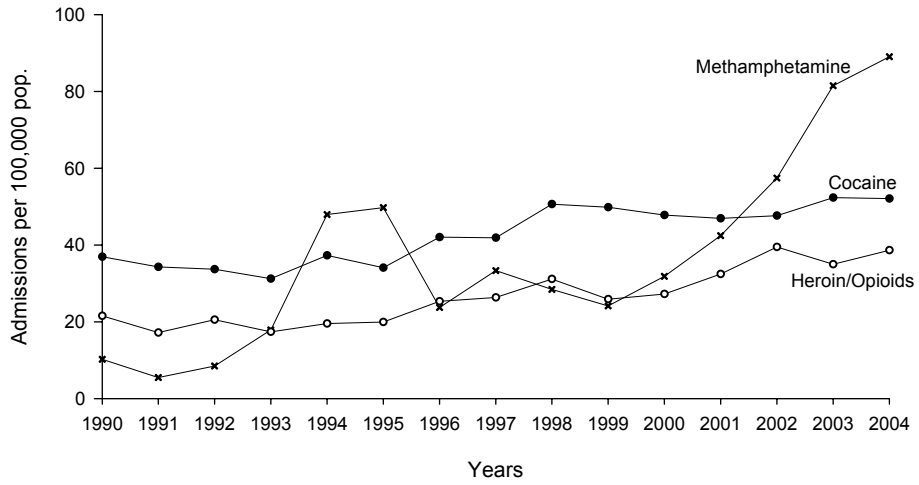
admissions outnumbered cocaine and methamphetamine admissions. Among persons younger than 30, methamphetamine hospital admissions outnumbered cocaine and heroin admissions.

Exhibit 11. Rates of Methamphetamine, Cocaine, and Heroin/Opioid Hospital Admissions per 100,000 Population Among Persons Age 30 and Older in Arizona: 1990–2004



SOURCE: Division of Applied Behavioral Health Policy, The University of Arizona

Exhibit 12. Rates of Methamphetamine, Cocaine, and Heroin/Opioid Hospital Admissions per 100,000 Population Among Persons Under Age 30 in Arizona: 1990–2004



SOURCE: Division of Applied Behavioral Health Policy, The University of Arizona

PANEL
ON
CRIMINAL
JUSTICE
INDICATOR
DATA
IN
PHOENIX
AND
ARIZONA

Panel on Criminal Justice Indicator Data in Phoenix and Arizona

Arizona TASC Drug Test Data

Barbara A. Zugor

In Maricopa County in 2005...

- *41 percent of adults in criminal justice programs tested positive for amphetamines/methamphetamine (A/MA)*
- *17 percent of juveniles on probation and in corrections tested A/MA positive*
- *31 percent of Project SAFE female high school students and 12 percent of the male students tested A/MA positive*

Trend data (2001–2005) show increasing percentages of A/MA-positive tests over time for males and females in most adult criminal justice programs in Maricopa County.

Background. The Arizona Treatment Assessment Screening Center, Inc. (TASC) is a nonprofit agency located in nine areas of the State. TASC provides a variety of services to the criminal justice and court systems in Arizona. These services include intake management; evaluation and diagnosis; psychological/psychiatric evaluations; individual, family, and group counseling; psychotropic medications; and education. The systems that receive these services include the County Attorney Adult Deferred Prosecution Program; adult and juvenile probation and parole; pretrial court services; drug courts; domestic relations courts; and the Department of Corrections programs.

In addition, TASC provides drug analysis and other services for Project SAFE, located primarily in Maricopa County. This project is targeted to high school students who have been found to have drugs in their possession or who appear to be “high” on drugs. In lieu of suspension or contacting the police, school counselors (who have parental permission) can refer the students to TASC for drug testing and counseling services. The objective is to get help for these youngsters and their families before the problem becomes more serious.

TASC-certified drug analysis laboratories make use of a variety of testing methods, from enzyme immunoassay to gas chromatography/mass spectrometry. In providing this service, collaborative working relationships have been established between these laboratories and criminal justice agencies, including probation, parole, and the courts. The TASC toxicology laboratories tested about 100,000 individuals (nonduplicated count based on IDs) and processed nearly 4 million tests (visually monitored) in 2005.

Overview of Major Findings. Urinalysis data collected and analyzed by TASC in recent years show that abuse of amphetamine/methamphetamine (A/MA) has been and continues to be a serious problem in Maricopa County criminal justice and high school populations. For example, in 2005...

- Of 34,408 positive drug screens reported for adults in criminal justice programs (e.g., Deferred Prosecution, pretrial, drug courts, probation, and Department of Corrections), 41 percent tested positive for A/MA.
- Of 13,353 positive tests for juveniles in Maricopa County standard probation, intensive probation with supervision, or juvenile corrections, 17 percent were positive for A/MA.
- Of 214 positive tests for female high school students in the Maricopa County Project SAFE program, 30.8 percent were positive for A/MA.

Tetrahydrocannabinol (THC) was found in most positive urinalysis tests reported for juvenile justice and high school student populations. For example, in 2005...

- Seventy-six percent of the positive tests for males ($n=11,550$ tests) and 65.8 percent of the positive tests for females (1,803) in the Maricopa juvenile justice system contained THC.
- Of 699 positive tests for Project SAFE male students, 70.4 percent were THC positive. More than one-half (52.8 percent) of the positive tests for females were also THC positive.

Among adults in Possession of Marijuana (POM) programs, 85.1 percent of the 3,631 positive tests for males were THC positive, as were 73.6 percent positive tests for females.

Testing Results from Adult Criminal Justice Programs in Urban and Rural Areas. As 2005 data in exhibit 1 show, relatively high percentages of the tests for adults in the criminal justice programs in

Maricopa County (41 percent) and rural areas in the State (51 percent) were positive for A/MA, compared with only 20 percent in Pima County. Approximately one-third of the tests in all three areas were positive for THC. A higher percentage of the Pima County tests were positive for cocaine (36 percent) than in

Maricopa County (18 percent) or in rural areas (3 percent). Opiate-positive tests among adults in the criminal justice department programs were slightly more likely in rural areas (10 percent) than in the more urbanized Maricopa and Pima Counties (7 and 8 percent, respectively).

Exhibit 1. Positive Drug Tests for Adults in Criminal Justice Programs in Maricopa County, Pima County, and Arizona Rural Areas, by Percent: 2005

Area	Number of Positive Tests	A/MA	THC	Cocaine	Opiates	Other ¹
Maricopa	34,408	41	33	16	7	3
Pima	7,672	20	34	36	8	2
Rural	2,753	51	31	3	10	5

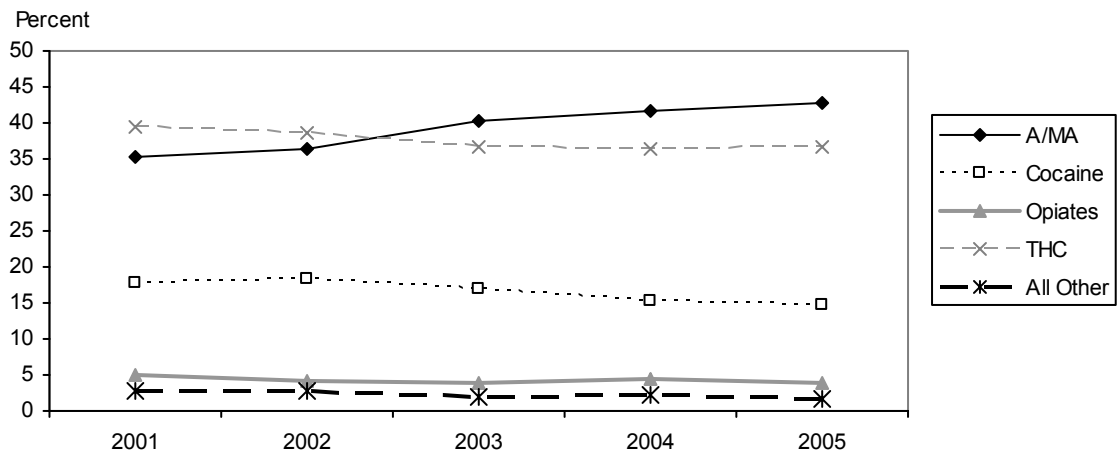
¹Includes mostly alcohol but also benzodiazepines, barbiturates, lysergic acid diethylamide (LSD), phencyclidine (PCP), and methylenedioxymethamphetamine (MDMA).

SOURCE: Treatment Assessment Screening Center

Trends in Findings. Data from programs involving adults tend to show increases in A/MA-positive tests over time and fairly stable patterns for other drugs. Exhibits 2 and 3 graphically depict this pattern for males and females in the Maricopa County Adult Probation Program from 2001 through 2005. Note the

higher percentages of A/MA-positive tests for females (53.0 percent) compared with males (42.9 percent) in 2005. The charts below each graph show there was little difference in the proportion of male and female donors who tested positive for one or more drugs over the 5-year time period.

Exhibit 2. Percentages of Positive Tests¹ Among Males in Maricopa County Adult Probation, by Drug: 2001–2005



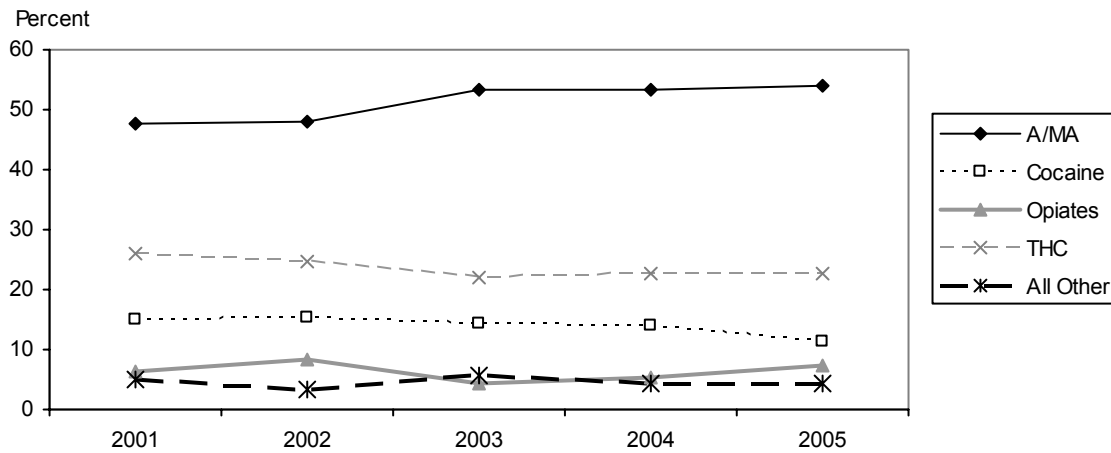
	Donors	Positive Donors	Samples	Positive Tests
2001	12,672	29.0	49,982	7,380
2002	13,446	28.3	56,404	7,714
2003	13,530	28.2	59,441	8,272
2004	15,652	29.5	81,279	11,210
2005	16,688	29.4	90,535	12,239

¹Positive tests include instances in which a donor tests positive for more than one drug.

²Includes mostly alcohol but also benzodiazepines, barbiturates, LSD, PCP, and MDMA.

SOURCE: Treatment Assessment Screening Center

Exhibit 3. Percentages of Positive Tests¹ Among Females in Maricopa County Adult Probation, by Drug: 2001–2005



	Donors	Positive Donors	Samples	Positive Tests
2001	2,994	25.2	12,705	1,526
2002	3,537	28.4	16,491	2,200
2003	3,901	29.7	19,396	2,614
2004	4,801	30.1	25,659	3,614
2005	5,110	31.0	27,980	3,992

¹Positive tests include instances in which a donor tests positive for more than one drug.
²Includes mostly alcohol but also benzodiazepines, barbiturates, LSD, PCP), and MDMA.
 SOURCE: Treatment Assessment Screening Center

Trends in other adult programs are similar to those for the Deferred Prosecution Program. The findings shown in exhibit 4 for five other adult programs show the percentage-point change between 2001 and 2005 for the first four programs and between 2004 and 2005 for the Adult Department of Corrections (ADOC) program. Except for the POM program,

A/MA-positive tests among males increased, with the percentage-point increase being highest for the Maricopa County Drug Court. There were slight percentage-point decreases in female A/MA-positive tests in the pretrial and ADOC programs between 2001 and 2005. For cocaine, opiates, and THC, the patterns were more likely to show decreases over time.

Exhibit 4. Trends in Positive Tests in 5 Other Adult Programs in Maricopa County, by Drug and Percentage-Point Change^{1,2}

Program	A/MA	Cocaine	Opiates	THC	Other ³
ADPP ¹					
Males	12.4	-10.6	-3.0	1.2	0.4
Females	18.1	-2.0	-11.8	3.5	8.8
Petrial ¹					
Males	6.9	-4.5	-1.7	-1.8	1.1
Females	-1.5	-7.8	7.9	-0.5	0.9
Drug Court ¹					
Males	15.3	-5.3	-0.8	-9.2	0.9
Females	7.6	-6.3	2.3	-4.3	0.5
POM ¹					
Males	-1.1	4.8	0.5	-1.2	- ⁴
Females	0.7	2.5	4.6	-5.8	- ⁴
ADOC ²					
Males	7.7	-1.2	0.9	0.2	1.3
Females	-4.9	9.1	-1.2	-6.8	3.6

¹Percentage-point changes are between 2001 and 2005 for the first four programs listed in the exhibit.

²Percentage-point changes are between 2004 and 2005.

³Includes mostly alcohol but includes also benzodiazepines, barbiturates, LSD, PCP, and MDMA.

⁴Zero in both years.

SOURCE: Treatment Assessment Screening Center

Among high school students in Project SAFE, primarily in Maricopa County, positive tests were predominately for THC—70.4 percent for males and 52.8 percent for females in 2005 (see exhibit 5). A comparison of 2001 to 2005 test data on THC shows a slight percentage-point increase among male students (3.0) and slight decrease among females (2.0). In 2005, nearly 31 percent female students tested positive for A/MA compared with 12 percent for males, with a decrease from 2001 to 2005 for males (6.8 percentage points) and a slight increase among

females during the same period (1.8 percentage points). Approximately 10 percent of male tests and 8 percent of female tests in 2005 were positive for cocaine; these figures represented an increase from 2001 among males (2.6 percentage points) but a decrease among females (5.0 percentage points). In 2005, approximately 3 percent of the positive tests for both male and female students were opiate positive; the percentage for males changed little from 2001, while that for females rose by more than 3 percentage points.

Exhibit 5. Positive Tests Among Youth in Project SAFE, by Drug and Percent: 2001–2005

Drug	Percent Positive in 2005	Percentage-Point Change: 2001–2005
THC		
Male	70.4	3.0
Female	52.8	-2.0
A/MA		
Male	12.0	-6.8
Female	30.8	1.8
Cocaine		
Male	10.4	2.6
Female	7.9	-5.0
Opiates		
Male	3.1	0.8
Female	3.3	3.3
Other		
Male	4.0	0.1
Female	5.1	1.9

¹Includes alcohol, benzodiazepines, barbiturates, LSD, PCP, and MDMA.

SOURCE: Treatment Assessment Screening Center

Tracking the Production, Trafficking, and Distribution of Illicit Drugs on the Arizona-Mexico Border

GS Jennifer McGinty

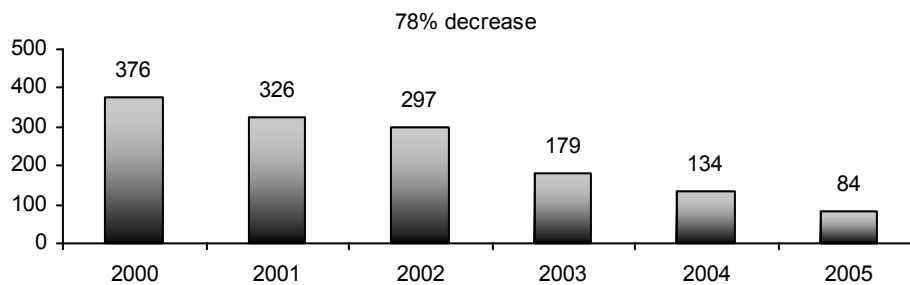
Data from the Phoenix Field Division, DEA, for the Phoenix area and Arizona show...

- *A steady decline in methamphetamine lab seizures from FY 2000 to FY 2005 but a sharp increase in Mexican methamphetamine seizures on the Arizona-Mexico border*
- *A slight decrease in cocaine purity in FY 2005*

- *An increase in the quantity (kilograms) of heroin seized by PFD from FY 2003 to FY 2005*

Methamphetamine. The Phoenix Field Division (PFD), Drug Enforcement Administration, reported a steady decline in the number of methamphetamine domestic clandestine lab “incidents” (i.e., lab seizures, dumpsites, and chemicals/glass/equipment) from 376 in fiscal year (FY) 2000 to 84 in FY 2005 (see exhibit 1). From FY 2004 to FY 2005, the amount of methamphetamine seized by the PFD decreased from 293 kilograms to 161 kilograms. Nationwide, according to the EPIC Clandestine Lab Seizure System (CLSS), the number of methamphetamine super labs (capable of producing 10 pounds or more per cycle) also decreased from 169 in FY 2002 to 135 in FY 2003, 63 in FY 2004, and 42 in FY 2005.

Exhibit 1. Methamphetamine Labs, Dumpsites, and Loose Chemicals Seized in Arizona: 2000–2004



SOURCE: Phoenix Field Division Lab Database

While methamphetamine lab seizures and incidents declined from FY 2002 to FY 2005, seizures of the drug increased along the Arizona-Mexican border by 128 percent, from 282 in FY 2002 to 644 in FY 2005. At the Nogales Point of Entry alone, there was a 370-percent increase in the amount of methamphetamine seized from 2002 (161.1 kilograms) to 2004 (680.8 kilograms). Mexican trafficking organizations, closely knit intergenerational family-based groups, were the major suppliers of methamphetamine being transported into Arizona. These groups purchase large supplies of ephedrine from international drug trafficking organizations and produce high-purity methamphetamine in labs capable of producing multiple pounds of the drug.

Phoenix serves as a major distribution hub, staging area, and transshipment point for the Mexican methamphetamine smuggled across the Southwest border. Most of the methamphetamine is destined for markets throughout the United States.

In Arizona, the average retail price for a gram of methamphetamine in 2005 varied from \$80 to \$100 in Phoenix and Tucson to \$40 to \$50 in Yuma.

Cocaine. Seventy to 93 percent of the cocaine in the United States is transported across the Southwest border. Most of the cocaine smuggled into Arizona is transported to Phoenix, where it is packaged and sent to distribution areas throughout the country. The PFD seized 1,476 kilograms of cocaine in FY 2003, 927 in FY 2004, and 1,341 in FY 2005. Kilograms of cocaine are generally wrapped in contact paper and colored cellophane and held together with duct tape. Axle grease, fabric softeners, and cayenne pepper are used to conceal the odor and possible dog alert.

Powder cocaine is converted into crack near the market areas and almost always transported in small quantities because of the severe mandatory sentencing for selling and/or possessing this drug. Crack is sold in vials and baggies or hand-to-hand, and sales

are generally made in public places (e.g., parking lots, street corners).

The DEA SMARTS Federal-wide Drug Seizure System data show that the average purity of cocaine in Arizona decreased slightly from 71 percent in FY 2004 to 65 percent in FY 2005. The retail price for one-eighth ounce of powder cocaine (8-ball) in 2005 was \$80–\$120 in Phoenix, \$80–\$130 in Tucson, and \$150–\$200 in Yuma. “Rocks” (crack) sold for \$10–\$20 in all three areas.

Heroin. Mexico produces less than 5 percent of the world’s opium poppy but supplies 30 to 40 percent of the U.S heroin market. In 2003, Mexico had the capacity to produce 11.9 metric tons (11,900 kilograms) of heroin. Eight kilograms of opium gum are needed to produce 1 kilogram of black tar heroin, the predominant type of heroin produced in Mexico.

The profiles of Mexican heroin trafficking organizations are different from those of organizations that traffic methamphetamine or cocaine. Most are citizens of the United States with family members living on both sides of the border. They are generally poly-drug organizations that are financially incapable of distributing in excess of 20 pounds at one time. Most heroin originates from the Mexican States of Durango, Sinaloa, and Sonora.

Arizona is a major importation and transshipment point for Mexican black tar in the United States. In 2005, 802 pounds of heroin were seized on the Southwest border. In Arizona, heroin is more available and cheaper in price in Yuma and Tucson.

The Phoenix Field Division seized 5 kilograms of heroin in FY 2003, 41 kilograms in FY 2004, and 53 kilograms in FY 2005.

Large organizations generally use vehicles to smuggle loads. Smaller family-based organizations smuggle 1 to 2 kilograms of heroin at a time. Pedestrians walk through POEs with heroin concealed on their bodies.

The average purity of black tar heroin, as reported by the PFD, was 52.7 percent in FY 2005, slightly less than the 55 percent purity reported in FY 2004. The retail price for one-quarter gram (“paper”) in 2005 was \$10 in Yuma, \$10–\$15 in Phoenix, \$20 in Nogales, and \$20–\$25 in Tucson.

Drug Abuse Patterns and Trends in Phoenix: A Law Enforcement Perspective

Lt. Brent Vermeer

In Phoenix in recent years...

- *Increasing amounts of high purity methamphetamine have been smuggled into the city. The Phoenix police made more methamphetamine-related arrests and seizures in 2005 than in previous years.*
- *Cocaine seizures decreased dramatically from 2003 to 2005.*
- *The price of black tar heroin has decreased, and the drug has become more available.*

Escalating Drug Problems. Drug abuse has become an increasing problem in Phoenix, especially because of the increased availability and use of methamphetamine of higher purity. Because of its closeness to the border, Phoenix serves as a drug distribution center for drug traffickers, and drugs can be purchased at “bargain basement prices.” The Drug Enforcement Bureau (DEB) made 1,608 drug-related arrests in 2004 and 1,389 in 2005, and 346 search warrants were issued in 2005. In fiscal year (FY) 2004, 39 percent of the homicides in Phoenix were drug related based on conclusive evidence, and another 8 percent were considered to be drug related.

For the past 2 years, the DEB has conducted a series of special operations based on a “problem-based resolution approach.” Various methods were used to assimilate into a drug-laden neighborhood to determine who were street-level dealers and who were midlevel dealers and above. Once adequate intelligence was obtained, indictments were sought. The DEB then swept the area, serving numerous search warrants and making multiple arrests. These sweeps resulted in 75 to 125 indictments per project, depending on the scope of the project (e.g., a target family or organization, a drug-infested neighborhood, an apartment complex notorious for drug sales). The sweeps were much more effective than the typical “drug bust” that results from a couple of “sales” cases from a single crack house and the service of a search warrant from that location. While such projects can be somewhat costly, the effects are much longer last-

ing and instill a greater sense of security in the affected neighborhood.

Methamphetamine. Methamphetamine law enforcement indicators (e.g., seizures, arrests, bookings) have been increasing in Phoenix in recent years, even though small clandestine methamphetamine labs have been decreasing in number in the city, county, and State. From 2003 to 2005, there was a 71-percent decrease in clandestine methamphetamine labs seized by the DEB. During this same period, increasing amounts of methamphetamine were being transported into Phoenix from Mexico. The purity of the Mexican methamphetamine (“ice”) was much higher than the purity produced by the local labs. Large bulk shipments of Mexican methamphetamine were smuggled into the Greater Phoenix area, some destined for other areas of the United States.

From 2003 to 2005, there was a 50-percent increase (from 241 to 362) in methamphetamine-related arrests made by the DEB in Phoenix (see exhibit 1).

People of all ages are using methamphetamine. More youngsters are taking risks with drugs. For example, in a West Side middle school in Phoenix, three students, age 11–12, came to school intoxicated in the fall of 2004. These students identified two dozen classmates who had either purchased or used methamphetamine. Upon further investigation, it was learned that a core group of six students had been stealing prescription drugs from their parents’ pill boxes and taking them to school, where they experimented with the drugs. This activity, referred to as “pharming,” eventually led these youngsters to transition into methamphetamine use when the drug became available. An older woman and her 19-year-old daughter who lived near the school sold methamphetamine to these youngsters.

The Phoenix Police Department conducted 60 community awareness presentations during 2005 to educate communities about the dangers associated with methamphetamine use. As a result of this program and other factors (e.g., newspaper reports), there was a 42-percent increase in methamphetamine-related

neighborhood narcotics complaints, from 440 in 2003 to 626 in 2005.

A city ordinance became effective on December 6, 2005, requiring that...

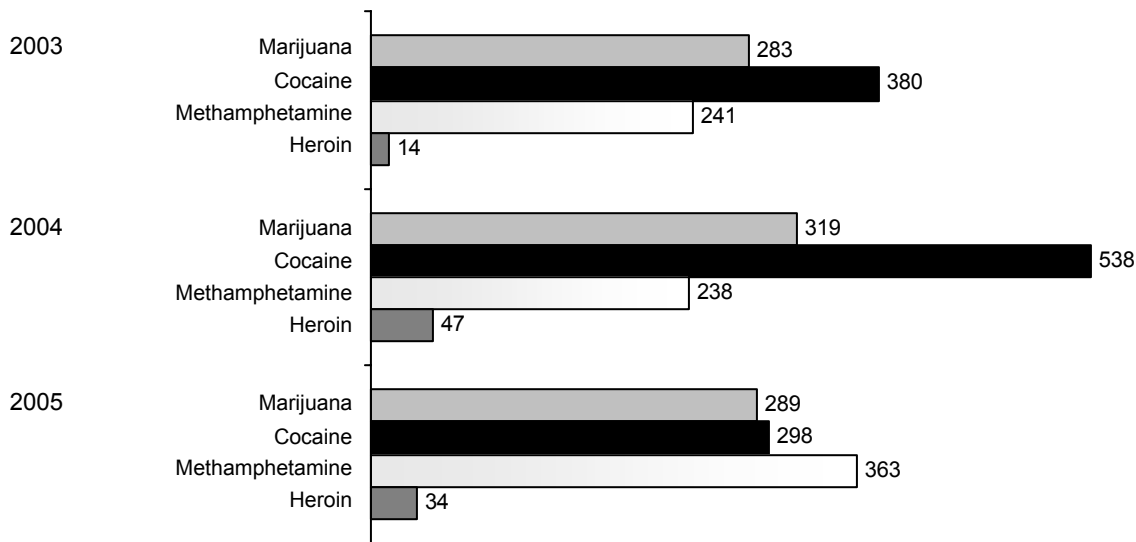
- Pseudoephedrine and ephedrine products be removed from store shelves
- Pseudoephedrine and ephedrine only be accessible through pharmacies
- Logs, containing the names and addresses of people who purchase these substances, be delivered to the Police Chief for compliance

Marijuana. Marijuana indicators were stable, but this drug is widely available throughout the metropolitan and surrounding area. Marijuana seizures increased from 9,223 kilograms in 2003 to 24,667 kilograms in 2004 and remained at a high level in 2005 (22,549 kilograms). In 2005, the Phoenix Police Department made 3,594 arrests and 4,308 adult bookings for the possession and/or use of marijuana.

Cocaine. While the amounts of marijuana and methamphetamine seized were increasing in Phoenix, the amounts of cocaine seized were decreasing dramatically, from 398 kilograms in 2003 to 27 kilograms in 2004. Ninety kilograms of cocaine were seized in 2005. DEB arrests for cocaine offenses decreased from 538 in 2004 to 298 in 2005 (see exhibit 1).

Heroin. The amounts of heroin seized were much smaller than those for other illicit drugs (e.g., marijuana, methamphetamine, and cocaine), ranging from 0.85 kilograms in 2003 to 4.25 in 2004 and 4.85 in 2005. One factor associated with the reduced demand for heroin and the relatively small amount of heroin seized in 2003 was the increased use of narcotic prescription drugs such as OxyContin. However, the price of black tar heroin decreased, and the drug became more available in 2004 and 2005. In a commercial interdiction at the Sky Harbor International Airport in 2005, 3,739 grams of heroin were confiscated, compared with 112 grams in 2004 and only 4 grams in 2003.

Exhibit 1. Number of Drug Arrests Made by the Drug Enforcement Bureau¹



¹These numbers do not include arrests made by patrol precincts or other bureaus.

SOURCE: Phoenix Police Department

Drug Abuse Patterns and Trends in Maricopa County

Captain George Hawthorne

Introduction. The Special Investigations Division (SID) of the Maricopa County Sheriff’s Office addresses the county’s drug problems through a number of units and activities, including the following:

- HIDTA Clandestine Lab Task Force
- Parcels Interdiction Squad
- Neighborhood Narcotic Team
- East Side Street Team

Outcomes. Through these initiatives, SID became much more proactive in following up on leads (e.g., phone tips) and “working informants,” resulting in more search warrants and more arrests. As a result, SID made 543 drug arrests in 2005, compared with 448 in 2004. In 2005, 265 arrests were associated with clandestine labs; 27 children were identified at the lab sites, compared with 11 in 2004. Fifty-three labs were reported to the DEA for cleanup in 2005, fewer than the 97 reported in 2004. There were 362 “drug activity” reports based on calls for services and 1,678 for “on view activity.”

Methamphetamine was the drug most often encountered by SID in 2005. The amount of methamphetamine seized more than doubled from 2003 (7,148 grams) to 2005 (25,395 grams).

Powder and crack cocaine indicators tend to fluctuate. When methamphetamine seizures decrease, cocaine indicators generally rise. In 2005, there was a sharp increase in the amount of cocaine seized (20,141 grams) compared with 2004, when 3,052 grams were seized.

Heroin seizures spiked in 2004, when the number of heroin grams seized totaled 3,642; however, the number declined to 117 grams in 2005. Prior to 2005, most of the heroin was seized coming into jails. Currently, heroin is rarely found on persons contacted or arrested on the street by detectives or deputies.

Marijuana seizures are high. In 2005, 15,000 pounds of marijuana were seized by the SID, a dramatic increase from the 6,285 pounds seized in 2003. This is attributed to the large amounts of marijuana coming into the county and the better detection methods (e.g., canines, informants, and training) and more proactive measures (“Desert Operation” and “Highway Interdiction”) initiated by SID.

Distribution Patterns and Shipper Characteristics.

Phoenix is one of the primary distribution centers for illicit drugs smuggled across the Mexican border and destined for other areas in the United States. The shippers and destination points tend to differ by type of drug. Of the marijuana parcel shipments seized, 70 percent of the shippers were Jamaicans, and 10 percent were African-Americans with no Jamaican ties. The most common shipment destinations included Philadelphia; New York City (Bronx and Brooklyn); Columbus, Ohio; St. Louis; Camden, New Jersey; and College Park, Georgia.

Most (70 percent) of the methamphetamine shippers were White, and 30 percent were Hispanic. The most common destination points for methamphetamine being shipped from Maricopa County were St. Paul, Minnesota; Honolulu, Hawaii; and Covington, Kentucky.

Eighty percent of the cocaine shippers were African-American, and 20 percent were White or Hispanic. The shipping destinations for cocaine were similar to the destinations for marijuana.

INTERNATIONAL
PAPER:
MEXICO

Update of the Epidemiologic Surveillance System of Addictions (SISVEA) in Mexico: First Half of 2005

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ABSTRACT

Initiated in 1990, the Epidemiologic Surveillance System of Addictions (SISVEA) currently collects and analyzes drug abuse indicator data from 31 States and 51 cities located throughout the country. In the first half of 2005, 21.9 percent of the patients in nongovernment treatment centers (NGCs) reported crystal methamphetamine as their main current substance of abuse. This was higher than the proportions reporting alcohol (21.8 percent), heroin (15.3 percent), cocaine (12.2 percent) marijuana (9.1 percent), and inhalants (7.1 percent) as their primary substance of abuse. The proportions of NGC patients reporting crystal methamphetamine as their primary substance of abuse increased from 2002, when the proportion was 16.3 percent. The percentages of NGC patients reporting cocaine or heroin as their primary substances of abuse trended down from 2002 to 2005. The substances most likely to be reported by NGC patients as their first substance of abuse were alcohol (32.7 percent), marijuana (25.2 percent), and tobacco (19.0 percent). Of the 5,157 drug-using juveniles arrested in the first half of 2005, 33.8 percent had used marijuana, 14.0 percent had used cocaine, and 0.05 percent had used heroin. Most of the deaths associated with drug intoxication (n=891) involved alcohol (79.1 percent), while only small proportions involved marijuana (5.4 percent) or opioids (4.6 percent).

INTRODUCTION

The Epidemiological Surveillance System of Addictions (SISVEA) is a permanent monitoring system on the use and abuse of tobacco, alcohol, and medical or illegal drugs, as well as their effects on abusers and service systems; on drug-related morbidity and mortality; and on drug use among juvenile arrestees. SISVEA was created in 1990 by the General Directorate of Epidemiology, and at the beginning it operated in eight cities located at Mexico's northern border. Since then, it has con-

tinually updated the patterns of drug use in the country. As of 2005, SISVEA provides information within the 31 States of Mexico.

At the beginning, SISVEA was based conceptually and operatively on three strategies: measuring the effects of tobacco, alcohol, and drug use on abusers, mortality trends, and juvenile arrestees. These have evolved and are sustained in four main indicators to give continuity to the original model:

Consumption of tobacco, alcohol and medical or illegal drugs	→	Treatment centers
Diseases and accidental mortality	→	Emergency rooms
Mortality in drug users	→	Coroner's office
Crimes against health	→	Law enforcement

Data Sources

The sources of data used to construct the different indicators are described below:

- **Treatment data** cover the characteristics and consumption patterns related to the first drug of use and primary drug of use. The data are obtained from the nongovernment treatment centers (NGCs) that participate in SISVEA. Data are for the first half of 2005.
- **Drug consumption data** are collected for the general population and the groups of the specific target, such as the juvenile arrests. The Juvenile Detention Centers provided data on drug use and types of crimes committed by drug-using individuals arrested in the first half of 2005.
- **Medical examiners' (ME) data** cover drug-related deaths, including accidental or violent deaths (homicides or suicides) in cases in which drug abuse may be the direct cause of death or a contributing factor. Drug-related mortality data in this report are for the first half of 2005.

DRUG ABUSE PATTERNS AND TRENDS

Crystal Methamphetamine

In the first half of 2005, 21.9 percent of the NGC patients reported crystal methamphetamine as their main current substance of abuse; this drug ranked first as the main current drug (exhibit 1). As shown in exhibit 1, the proportion of NGC patients reporting crystal methamphetamine as their current main

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drug in the first half of 2005 increased from 2002, when the proportion was 16.3 percent. Few patients reported crystal methamphetamine as their first drug of use.

Marijuana

Marijuana ranked second as the drug of first use among NGC patients in the first half of 2005, representing 25.2 percent of treatment admissions (exhibit 1). As a primary (main current) drug, marijuana ranked fifth (9.1 percent).

According to data gathered from NGCs in the first half of 2005, marijuana was abused mostly by male patients (95.2 percent); 27.1 percent of the patients were age 35 and older (exhibit 2). Two-fifths (41.1 percent) had a middle school education, and 59.6 percent were single. The most common age of onset for marijuana use among these patients was between 10 and 14 (48.5 percent), and 86.8 percent reported daily use.

The natural history of marijuana consumption reported by NGCs during the first half of 2005 showed that 11.1 percent were still monodrug users at treatment entry, while the remaining 88.9 percent had progressed to a second drug, primarily cocaine (25.8 percent) and alcohol (17.6 percent) (exhibit 3). Of this group, 70.3 percent were already using a third drug, mainly cocaine (21.8 percent), crystal methamphetamine (19.1 percent), and heroin (16.4 percent).

Information from the Juvenile Detention Centers shows that 33.8 percent of the 5,157 juveniles arrested during first half of 2005 used marijuana (exhibit 4). Most were male (94.4 percent). One-half (51.0 percent) had an elementary school education, and 40.7 percent were subemployed. More than one-third (35.9 percent) had a tattoo, and 26.7 percent were gang members. Twenty-eight percent of the offenses were committed under intoxication, and 43.2 percent of the offenses were robberies.

Medical examiner data indicated that 5.4 percent of the drug-related deaths reported were associated with marijuana. The decedent group was primarily male (97.8 percent), and one-fourth were age 25–29 (exhibit 5). The main cause of death in these cases was asphyxia (25.5 percent), followed by use of a fire arm (17.0 percent). These deaths were most likely to occur on the street (43.8 percent) or at home (39.6 percent).

Inhalants

Inhalants ranked third (9.8 percent) as drug of onset and sixth (7.1 percent) as a primary drug of abuse among NGC patients in the first half of 2005 (exhibit 1).

NGCs reported that of the 2,509 patients who used inhalants, most were male (92.1 percent); 35.8 percent were age 15–19 (exhibit 2). Some 58.1 percent had an elementary school education, and 72.9 percent were single. More than one-half began to use inhalants between the ages of 10 and 14 (60.3 percent), and 91.0 percent reported daily use.

Natural history data on inhalants-abusing patients show that 58.3 percent had progressed to a second drug upon treatment entry, mainly marijuana (50.2 percent), alcohol (16.6 percent), or another inhalant (7.3 percent) (exhibit 6). Of these patients, 71.9 percent used a third drug, usually cocaine (25.5 percent), marijuana (20.2 percent), alcohol (13.5 percent), tranquilizers (10.4 percent), or heroin (7.6 percent).

According to Juvenile Detention Centers, 13.1 percent of juvenile arrestees used inhalants (exhibit 4). Most were male (94.5 percent), had an elementary school education (60.1 percent), and were subemployed (43.0 percent). Some 34.0 percent had tattoos, and 34.4 percent belonged to a gang. More than one-third (37.9 percent) committed the offense while intoxicated, and robbery was the most common offense (43.5 percent).

Alcohol

Alcohol ranked first as the drug of first use (32.7 percent) and second as a current drug of abuse (21.8 percent) among NGC patients in the first half of 2005 (exhibit 1).

Nongovernment treatment centers reported that most of the 8,357 patients who abused alcohol during the first 6 months of 2005 were male (91.4 percent) (exhibit 1); 44.9 percent were age 35 or older. One-third had only an elementary school education, 41.8 percent were single, and 45.6 percent started to use alcohol between ages 15 and 19. Nearly 70.0 percent reported daily use, and 23.1 percent used once a week.

The natural history of alcohol abuse provided by NGCs during the first half of 2005 shows that 29.8 percent of alcohol admissions were monodrug users upon treatment entry, while the remaining 70.2 percent had progressed to a second drug, typically marijuana (32.8 percent), cocaine (23.2 percent), or tobacco (14.2 percent). Some 62.1 percent progressed to a third drug, usually cocaine (29.6 percent), marijuana (18.3 percent), or crystal methamphetamine (13.5 percent) (exhibit 6).

Among juvenile arrestees, 13.5 percent reported alcohol use (exhibit 4). This group was mostly male (91.5 percent), and 44.3 percent had an elementary school education. More than one-third (34.3 percent) were subemployed; 28.2 percent had

tattoos; and 22.5 percent were gang members. More than one-third of these juveniles (37.3 percent) committed the offense while intoxicated, and robbery (43.6 percent) was the most common offense.

According to medical examiners, the abuse of alcohol was associated in 79.1 percent of the drug-related deaths reported. Most decedents were male (92.3 percent), and 42.1 percent were age 40 or older (exhibit 5). The main cause of death was asphyxia (19.2 percent), followed by traffic accident (17.0 percent); the most common places where these deaths occurred were on the street (38.6 percent) or at home (32.8 percent).

Cocaine

Among patients at NGCs, cocaine ranked fourth as the drug of onset (5.5 percent of the cases) and fourth as current drug (12.2 percent) in the first half of 2005 (exhibit 1).

Among cocaine abusers who attended nongovernment treatment centers in the first half of 2005, 91.6 percent were male (exhibit 2). Nearly one-fourth were age 20–24; 40.0 percent had a middle school education; and 26.9 percent had a high school education. Approximately one-half (48.8 percent) were single, and 43.1 percent started to use cocaine between the ages of 15 and 19. Seventy-two percent reported daily use, and 21.8 percent reported using alcohol weekly.

The natural history data on cocaine abuse reported by NGCs during first half of 2005 show that 32.9 percent were still monodrug users upon treatment entry, and that 67.1 percent used a second drug, usually marijuana (26.1 percent), crystal methamphetamine (27.3 percent), alcohol (15.0 percent), or crack (10.6 percent). Of the multiple drug users, 46.4 percent started to use a third drug before treatment entry, primarily crystal methamphetamine (25.4 percent), marijuana (18.1 percent), or alcohol (15.8 percent) (exhibit 8).

Juvenile Detention Centers reported cocaine use among 14.0 percent of juvenile arrestees in the first half of 2005 (exhibit 4). Most were male (94.2 percent); more than one-half had an elementary school education (55.0 percent); and nearly one-half were subemployed (45.8 percent). More than one-third (37.9 percent) had tattoos, and 29.0 percent were gang members. Nearly one-fourth of the juvenile arrestees (24.1 percent) committed the offense while intoxicated, and robbery was the most common offense (52.4 percent).

Heroin

Among NGC patients in the first half of 2005, heroin ranked fifth as a drug of first use (1.6 percent) and third as a drug of current use (15.3 percent) (exhibit 1). As a current drug of use, the proportion for heroin has been declining since its peak in 1998, when 43.9 percent of NGC patients reported such drug use.

NGC data show that heroin abuse was primarily among male patients (92.5 percent); 48.9 percent were age 35 and older (exhibit 2). More than one-third (36.0 percent) of these patients had an elementary school education, and 54.1 percent were single. The age of first use of heroin among many of these patients was between 15 and 19 (38.1 percent), and 96.0 percent reported daily use.

Information from the Juvenile Detention Centers shows that (0.5 percent) of the juveniles arrested during first half of 2005 used heroin (exhibit 4). Most of this group were male (89.3 percent), and 39.3 percent had an elementary school education. Approximately one-third (32.1 percent) were subemployed; 21.4 percent had tattoos; and 25.0 percent were gang members. Thirty-seven percent of the offenses were committed under intoxication, and robbery was the most common offense (39.3 percent).

Conclusions

The type of illicit drug mentions varied by data and information sources...

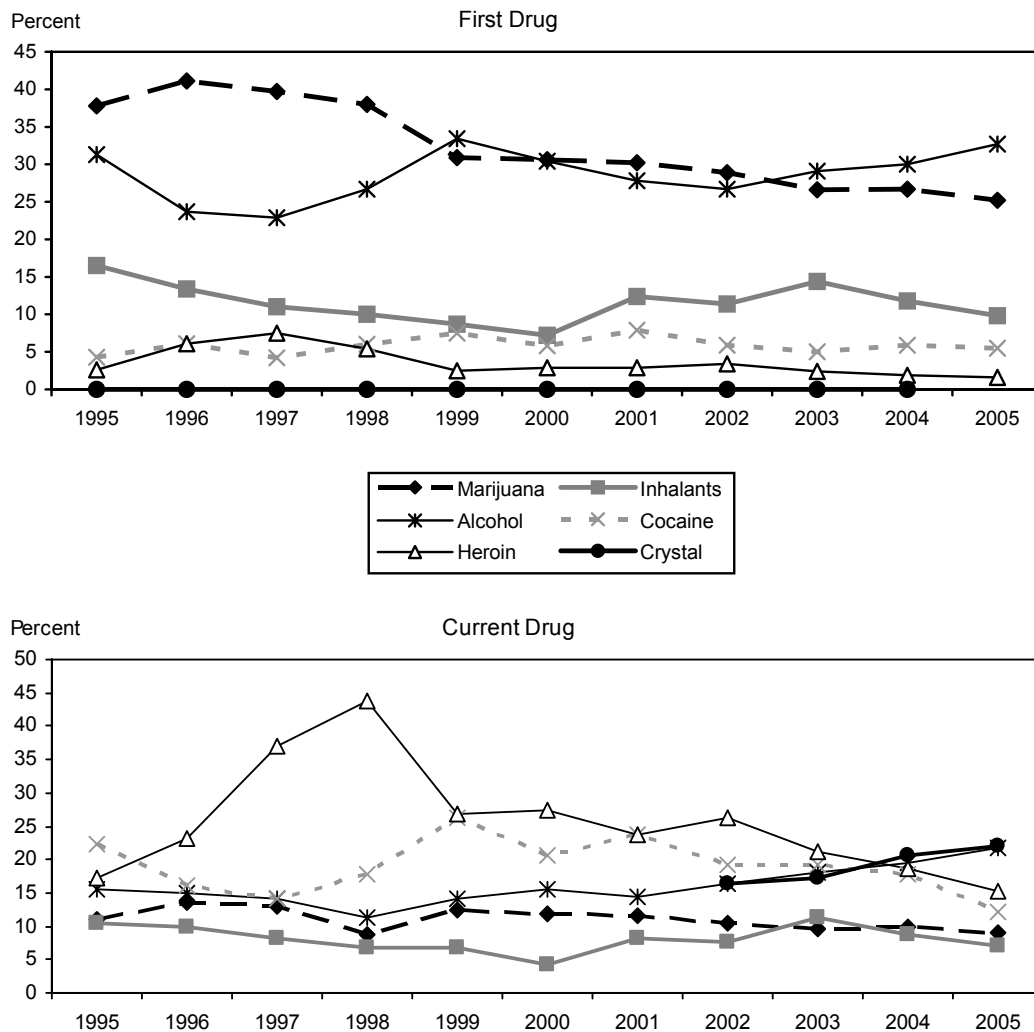
- Alcohol continues to be the most frequent drug of onset among NGC patients, although the frequency varies in the different regions of the country. Alcohol is also the most frequently detected drug in emergency rooms and medical examiners' offices.
- In the first half of 2005, more NGC patients reported crystal methamphetamine as their main current substance of abuse (21.9 percent) than alcohol (21.8 percent), heroin (15.3 percent), cocaine (12.2 percent), marijuana (9.1 percent), and inhalants (7.1 percent).
- Prior to 1998, marijuana was the most frequent drug of onset in NGCs. However, at the beginning of 1999, there was a slight decrease in the percentage of NGC patients reporting this drug as the drug of onset, and that decrease continued through the first half of 2005.

- The presence and growth of crack in the natural history of drug use was not notable in previous years and requires close monitoring.
- Marijuana has prevailed in Juvenile Detention Centers as one of the drugs most frequently used by juvenile arrestees.

Objective: The surveillance system needs to be strengthened and expanded to include the rest of Mexico.

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Exhibit 1. Comparison Between First Drug of Use and Current Drug of Use Among Patients at Mexico's Nongovernment Treatment Centers, by Percent: 1995–First Half 2005



SOURCE: SISVEA—Nongovernment treatment centers

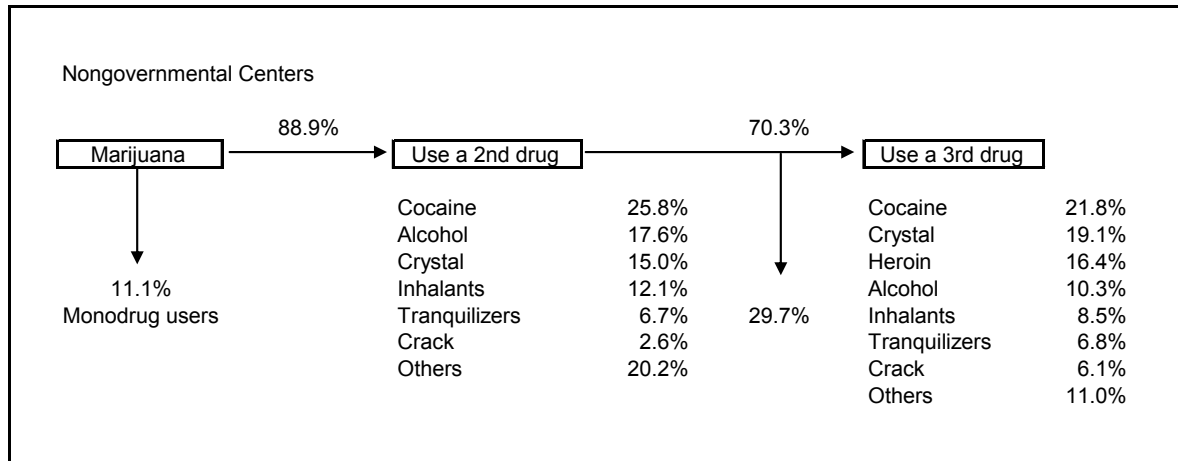
Exhibit 2. Demographic Characteristics of Nongovernment Treatment Center Patients, by First Drug of Use and Percent: January–June 2005

Demographic Characteristic	Total N=25,557	Marijuana n=6,440	Inhalants n=2,509	Alcohol n=8,357	Cocaine ¹ n=1,628	Heroin n=403	Tobacco n=4,868
Gender							
Male	91.3	95.2	92.1	91.4	91.6	92.5	88.7
Female	8.5	4.8	7.9	8.6	8.4	7.5	11.3
Age							
5–14	1.9	1.4	6.7	1.0	1.1	0.2	2.0
15–19	15.3	16.2	35.8	9.3	14.2	2.5	15.1
20–24	18.4	20.6	20.1	13.9	24.9	13.2	19.0
25–29	17.7	18.6	15.8	15.3	23.7	17.9	18.5
30–34	15.1	16.1	9.5	15.6	16.9	17.4	15.2
35 and older	31.6	27.1	12.0	44.9	19.2	48.9	30.3
Education							
Elementary school	36	36.0	58.1	33.3	25.3	36.0	32.9
Middle school	36.4	41.1	29.4	31.3	40.0	35.0	39.9
High school	17.9	17.3	5.7	20.1	26.9	21.0	18.3
College studies	4.8	2.2	0.2	8.1	5.4	3.5	5.2
No formal education	4.5	3.1	6.4	6.3	2.1	4.3	3.3
Other	0.4	0.2	0.1	0.8	0.4	0.3	0.3
Marital Status							
Single	53.1	59.6	72.9	41.8	48.8	54.1	53.7
Married	23.4	17.8	9.5	32.1	30.7	19.7	21.7
Divorced	4.2	3.7	2.2	5.6	3.4	7.5	3.9
Widowed	6.7	6.2	4.9	8.4	5.4	5.0	6.9
Living together	11.6	12.1	9.9	10.4	11.4	13.0	13.0
Others	1.0	0.6	0.6	1.7	0.4	0.7	0.8
Age of Onset							
Younger than 9	5.2	5.2	8.0	4.4	1.5	1.0	8.0
10–14	42.2	48.5	60.3	36.1	21.2	16.4	49.2
15–19	40.3	39.4	28.6	45.6	43.1	38.1	37.3
20–24	7.4	4.8	2.1	9.0	18.8	21.9	4.0
25–29	2.6	1.4	0.6	2.7	8.1	10.7	0.9
30–34	1.2	0.5	0.2	1.2	4.1	5.5	0.3
35 and older	1.0	0.3	0.2	1.0	3.3	6.5	0.3
Frequency							
Daily	71.8	86.8	91.0	69.8	72.0	96.0	82.1
Once a week	20.2	10.6	7.1	23.1	21.8	3.7	14.8
1–3 times per month	5.7	1.8	1.3	5.6	4.1	0.2	2.5
1–11 times per year	2.3	0.8	0.6	1.4	2.0	0.0	0.6

¹Cocaine, basuco, crack.

SOURCE: Nongovernment treatment centers

Exhibit 3. Natural History of Marijuana Use Among Mexico's Nongovernment Treatment Center Patients: January–June 2005



SOURCE: SISVEA—Nongovernmental treatment centers

Exhibit 4. Social Characteristics and Type of Offense Committed by Juvenile Drug-Using Arrestees, by Percent: January–June 2005

Total n=5,157	Marijuana n=1,742	Inhalants n=678	Alcohol n=697	Cocaine n=723	Heroin n=28
Male 90.7	Male 94.4	Male 94.5	Male 91.5	Male 94.2	Male 89.3
Elementary school 45.6	Elementary school 51.0	Elementary school 60.1	Elementary school 44.3	Elementary school 55.0	Elementary school 39.3
Subemployed 30.1	Subemployed 40.7	Subemployed 43.0	Subemployed 34.3	Subemployed 45.8	Subemployed 32.1
Tattoo 20.6	Tattoo 35.9	Tattoo 34.0	Tattoo 28.2	Tattoo 37.9	Tattoo 21.4
Belong to a gang 17.0	Belong to a gang 26.7	Belong to a gang 34.4	Belong to a gang 22.5	Belong to a gang 29.0	Belong to a gang 25.0
Offense under intoxication 15.8	Offense under intoxication 28.4	Offense under intoxication 37.9	Offense under intoxication 37.3	Offense under intoxication 24.1	Offense under intoxication 37.0
Frequent Offenses					
Robbery 42.4	Robbery 43.2	Robbery 43.5	Robbery 43.6	Robbery 52.4	Robbery 39.3
Against health 13.1	Against health 26.4	Against health 18.9	Injuries 12.5	Against health 27.7	Against health 21.4
Damages 10.3	Drug 9.3	Drug 16.7	Against health 8.5	Drug 4.0	Damages 14.3
Injuries 8.2	Consumption 5.1	Consumption 5.5	Damages 11.0	Consumption 4.0	Drug 10.7
Other 26.0	Arms bearing 16.0	Damages 15.4	Other 24.4	Arms bearing 11.9	Consumption 14.3

SOURCE: SISVEA—Juvenile detention centers

Exhibit 5. Type of Death Under Intoxication of Drugs¹ in Mexico, by Drug and Percent: January–June 2005

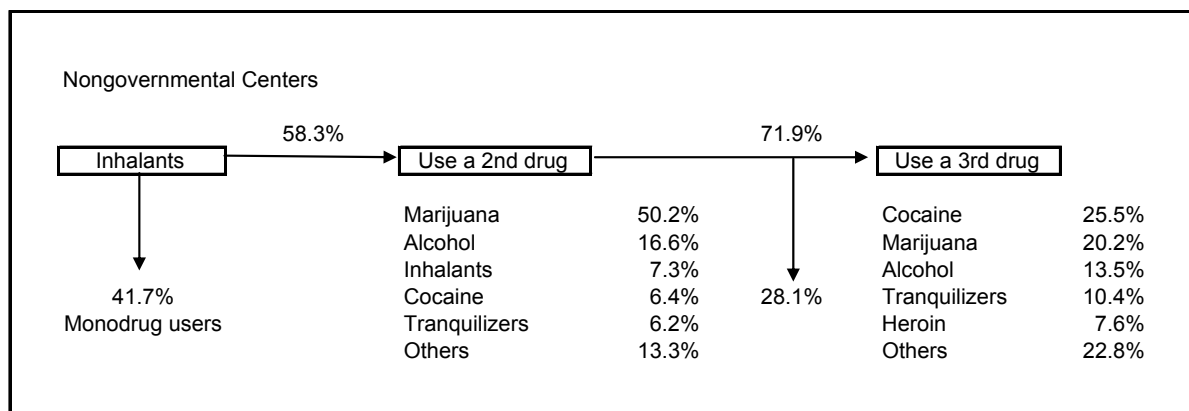
Type of Death	Total N=891	Alcohol n=705	Marijuana n=48	Opioids ² n=41
Gender				
Male	90.5	92.3	97.8	92.7
Female	9.5	7.7	2.2	7.3
Age Group				
10–14	0.6	0.1	0.0	0.0
15–19	6.5	6.7	10.4	7.3
20–24	12.7	12.7	18.8	14.6
25–29	14.8	14.6	25.0	14.6
30–34	13.5	12.7	14.6	29.3
35–39	10.9	11.0	14.6	12.2
40 and older	40.9	42.1	16.7	22.0
Cause of Death				
Run over	12.8	13.9	6.4	0.0
Traffic accident	15.7	17.9	4.3	0.0
Fall	5.3	5.3	6.4	0.0
Electrocuted	0.1	0.1	0.0	0.0
Burned	1.2	0.4	2.1	0.0
Beaten	3.5	4.0	10.6	0.0
Asphyxia	17.5	19.2	25.5	2.4
Crushed	0.3	0.4	0.0	0.0
Fire arm	9.0	8.7	17.0	4.9
Steel knife	5.5	6.8	0.0	2.4
Violation	0.3	0.0	0.0	0.0
Intoxicated	10.4	5.5	12.8	80.5
Poisoned	0.2	0.3	0.0	0.0
Other	18.1	17.5	14.9	9.8
Place of Death				
Traffic	16.0	17.0	4.2	0.0
Home	31.5	32.8	39.6	24.4
Street	35.2	38.6	43.8	41.5
Public baths	0.1	0.1	0.0	0.0
Recreational areas	2.7	3.4	4.2	0.0
At work	1.5	1.0	2.1	0.0
Service areas	7.3	4.0	4.2	24.4
School areas	0.0	0.0	0.0	2.4
Other	5.3	3.1	2.1	7.3

¹Deaths from all causes totaled 891.

²Includes opium, morphine, and heroin.

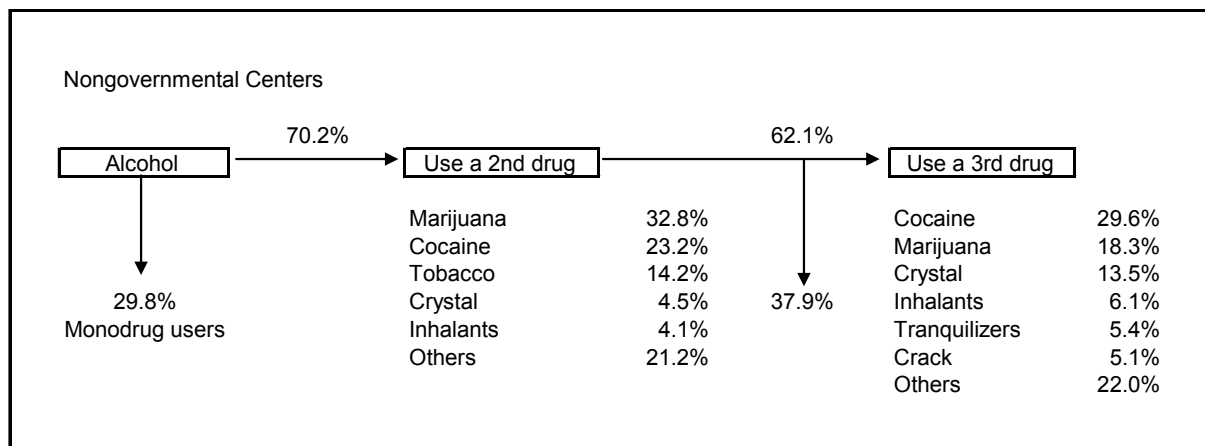
SOURCE: SISVEA

Exhibit 6. Natural History of Inhalants Use Among Mexico’s Nongovernment Treatment Center Patients: January–June 2005



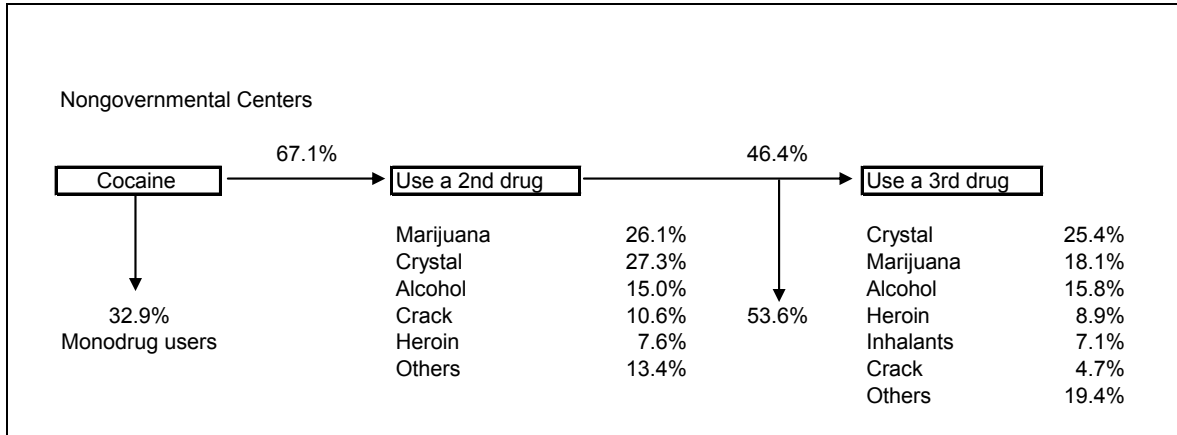
SOURCE: SISVEA—Nongovernment treatment centers

Exhibit 7. Natural History of Alcohol Use Among Mexico’s Nongovernment Treatment Center Patients: January–June 2005



SOURCE: SISVEA—Nongovernment treatment centers

Exhibit 8. Natural History of Cocaine Use Among Mexico's Nongovernment Treatment Center Patients: January–June 2005



SOURCE: SISVEA—Nongovernmental treatment centers

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