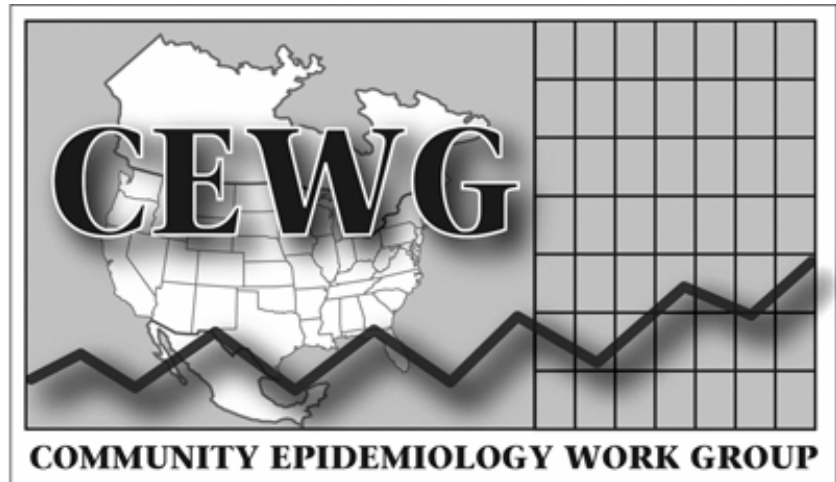


NATIONAL INSTITUTE ON DRUG ABUSE



EPIDEMIOLOGIC TRENDS IN DRUG ABUSE

Volume II

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This publication, *Epidemiologic Trends in Drug Abuse, Volume II*, contains papers presented and data reported

at the January 2005 CEWG meeting by CEWG representatives from 20 areas. A paper was also submitted by Mexico. In addition, Volume II contains papers by experts on a panel on methamphetamine abuse.

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Foreword

This publication includes papers presented at the 57th semiannual meeting of the Community Epidemiology Work Group (CEWG) held in Long Beach, California, on January 26–28, 2005, under the sponsorship of the National Institutes of Health, National Institute on Drug Abuse (NIDA). The CEWG is composed of researchers from 21 sentinel areas in the Nation who meet semiannually to present data on drug abuse patterns and trends in their areas. CEWG members have extensive knowledge and experience in community research and their local communities. Members are also informed and have extensive knowledge about the drug literature, drugs of abuse, drug-abusing populations, the social and health consequences of drug abuse, drug trafficking patterns, and emerging drug problems within and across communities.

As part of the CEWG's monitoring role, members continue their research between meetings, using the Internet, conference calls, and mailings to alert one another to new issues and to follow up on issues and emerging drug patterns identified at meetings. Issues identified are often added to the agenda of the subsequent CEWG meeting.

At the January 2005 meeting, CEWG members presented recent findings on the abuse of stimulants and

other drugs. Four other researchers presented data from NIDA-supported studies in a panel on methamphetamine abuse.

Three technical experts participated in a panel focused on *Exploring the Internet as a Potential Tool for Monitoring Drug Abuse Trends*.

Also at the meeting, a Canadian researcher reported recent survey data from Canada's drug abuse surveillance system. In addition, an official from the Mexican Ministry of Health provided an update on drug abuse patterns and trends in Mexico, based on data produced by Mexico's drug abuse surveillance system.

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.

Moira P. O'Brien
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Department of Health and Human Services

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Introduction

Moira P. O'Brien, NIDA

This publication includes papers based on information and findings on drug abuse that were presented at the January 2005 Community Epidemiology Work Group meeting in Long Beach, California.

The papers of the CEWG representatives provide the most recent indicator data on a range of abused drugs from 20 geographically dispersed areas in the Nation, with special attention devoted to the major theme of the January meeting—stimulant abuse.

Over several years, CEWG monitoring efforts led to concern about two central nervous system (CNS) stimulants—cocaine and methamphetamine. There were continued reports of increases in methamphetamine abuse in some areas and high levels of cocaine abuse in many CEWG areas. From indicator trends, it was clear that methamphetamine abuse had been prominent in the West and Southwest for many years; from the more recent trends, there appeared to be a gradual spread of methamphetamine abuse into the Midwest and areas further east and south in the United States. Cocaine persisted as a major abused drug, maintaining a prominent position in the drug abuse indicators, including treatment admissions data. Indicators of methylphenidate (Ritalin) appeared infrequently over time. Methylenedioxymethamphetamine (or ecstasy), which may be classified as a hallucinogen, also acts as a CNS stimulant. Indicator data, however, suggest the use of this drug has been declining in most CEWG areas.

Given the concern regarding the higher abuse levels of cocaine and methamphetamine compared to other stimulant drugs, CEWG representatives devoted much of their preparation for meeting presentations and papers to data on these two stimulant drugs. In addition, colleagues from Mexico provided a comparative perspective on the problems of cocaine and methamphetamine abuse in Mexico. The contributions of the CEWG members and Mexican researchers on cocaine and methamphetamine abuse are reflected in their papers in this publication.

Also in this publication are papers summarizing findings from a special panel on methamphetamine abuse.

These papers focus on the natural history of methamphetamine abuse, long-term consequences, effects of prenatal exposure, and issues associated with the treatment of methamphetamine abuse. This panel continued a precedent begun in June 2003, in which a particular emerging/current drug abuse trend is examined in greater depth than is possible through CEWG area reports. The approach draws on NIDA-supported research and complements CEWG findings.

Of note to readers is the fact that 15 CEWG members reported emergency room data for the first time from the redesigned Drug Abuse Warning Network (DAWN). Since the inception of the CEWG, DAWN has been an important source of data. The major changes were instituted in DAWN at the beginning of 2003 and altered virtually every feature of DAWN except its name. As a result of the redesign, new DAWN data cannot be compared with DAWN ED data from 2002 and before. Interim national estimates of drug-related emergency department visits from the new DAWN for 2003 have been published (<<http://DAWNinfo.samhsa.gov>>). There are, however, no metropolitan area estimates available for 2003 or 2004. For the papers presented in this publication, CEWG representatives accessed preliminary raw data from the online real-time query system called DAWN *Live!*, which is limited to authorized users.

Accessing DAWN *Live!* data, CEWG members reported raw and unweighted reports of individual cases from participating hospitals, not population-based estimates as have been presented in previous CEWG reports. CEWG area representatives have been granted access to DAWN *Live!* and have been trained in its use. A session during the January 2005 meeting was devoted to a discussion of the potential for meaningfully incorporating data from this real-time, raw data into the CEWG. A brief description of the new DAWN ED system and DAWN *Live!* is included in *Appendix A*.

In the next section, the roles and functions of the CEWG are described briefly. Papers of the CEWG representatives, the Mexican researchers, and the methamphetamine panel members follow.

CEWG Roles, Functions, and Attributes

Role of the CEWG

At semiannual meetings and through ongoing communication via e-mail, conference calls, and mailings of relevant data, the CEWG serves as a unique epidemiologic surveillance network to inform drug abuse prevention and treatment agencies, public health officials, policymakers, researchers, and the general public about current and emerging drug abuse patterns. The informa-

tion is disseminated quickly to alert authorities at the local, State, regional, and national levels to current and emerging drug problems so that appropriate action can be taken. Researchers use the information to develop research hypotheses that might explain social, behavioral, and biological issues related to drug abuse.

The 21 areas currently represented by the CEWG are depicted in the map below.



The Functions of the CEWG Meetings

The interactive semiannual meetings are a major and distinguishing feature of the CEWG. The meetings provide a foundation for continuity in the monitoring and surveillance of current and emerging drug problems and related health consequences. Through the interactive sessions, 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 patterns

Presentations by each CEWG member include a compilation of quantitative drug abuse indicator data. Members go beyond publicly accessible data and provide a unique local perspective gained from both public records and qualitative research. This information is typically obtained from local substance abuse treatment providers and administrators, personnel of other health-related agencies, law enforcement officials, and drug abusers. Time at each meeting is devoted to presentations by invited speakers.

Identification of changing drug abuse patterns is part of the interactive discussions at each CEWG meeting. Through this process, members alert one another to the emergence of a potentially new drug of abuse that may spread from one area to another. In this role, the CEWG has pioneered in identifying the emergence of drug epidemics and patterns of abuse, such as those involving abuse of methaqualone (1979), crack (1983), methamphetamine (1983), and

“blunts” (1993). MDMA abuse indicators were first reported by CEWG members in December 1985.

Planning for followup on issues and problems identified at a meeting is initiated during discussion sessions, with post-meeting planning continuing through e-mails and conference calls. Post-meeting communications assist in formulating agenda items for a subsequent meeting, and they also raise new issues for exploration at the following meeting.

Attributes of the CEWG

CEWG members bring the following attributes to the network:

- Extensive experience in community research, which over many years has fostered information sharing between members and local agencies
- Knowledge about their local communities, drugs, and drug-abusing populations; the social and

health consequences of drug abuse; drug trafficking and other law enforcement patterns; and emerging drugs within and across communities

- Ongoing collaborative relationships with one another and other researchers and experts in the field, which allows for both learning about new issues and sharing information
- The capability to access relevant drug-related data from the literature, media, and Federal, State, community, and neighborhood sources
- An understanding of the strengths and limitations of each data source
- The skills required to systematically analyze and synthesize multiple sources of information, and interpret findings within the community context

Major indicators and primary quantitative data sources used by CEWG members are cited in their reports.

Epidemiology
of
Drug
Abuse:

CEWG
Area
Papers

Drug Trends in Metropolitan Atlanta

Brian J. Dew, Ph.D., Kathy S. Newton, M.S., Kirk Elifson, Ph.D.,¹ and Claire Sterk, Ph.D.²

ABSTRACT

Drug abuse indicators showed that cocaine/crack remained a primary drug of abuse in Atlanta during 2004, with the drug dominant in (unweighted) ED reports, treatment admissions, and seized items analyzed by NFLIS. Marijuana use was widespread as well, with the drug accounting for 22 percent of public treatment admissions. This proportion, however, was lower than in previous years. Methamphetamine abuse appeared to be increasing, with treatment admissions continuing to rise faster than for any other classification of drug. Admissions for methamphetamine remained low, at 8 percent, however, compared to admissions for other drugs. Heroin indicators continued to reflect low levels of use of this drug in the metropolitan Atlanta area.

INTRODUCTION

Area Description

The metropolitan Atlanta area is located in the northwest corner 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, ranking fourth among all States.

With an estimated 4.4 million residents, the metropolitan Atlanta area includes nearly 52 percent of the State's total 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). When examining 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 are as follows:

- 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 networks, 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.

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²Claire Sterk is affiliated with Emory University in Atlanta, Georgia.

- 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** for January through October 2004 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 Services Administration (SAMHSA). Thirty of the 33 eligible hospitals in the Atlanta metropolitan area are in the DAWN sample. There are 3 more EDs than hospitals in the sample, bringing the total number of EDs to 33. The data reported in this paper were not complete. During the 10-month period, between 18 and 19 EDs reported data to DAWN each month. The data in this paper were updated by OAS on January 17, 2005; they are unweighted and are not estimates for the Atlanta 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!* represent 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). 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.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 2004. Data for non-metropolitan 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 2004 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 2003 through September 2004.
- **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 and represent AIDS cases in Georgia and a 20-county Atlanta metropolitan from January 1981 through August 2004. Additional information was provided by the Centers for Disease Control and Prevention (CDC).

DRUG ABUSE PATTERNS AND TRENDS

Cocaine/Crack

With 4,582 unweighted ED reports accessed from DAWN *Live!* for January through October 2004, cocaine was the most frequent illicit drug reported in the metropolitan Atlanta area (exhibit 1). Cocaine ED reports were higher among men than women (exhibit 2), with a ratio of 2.4:1. The cocaine ED reports involved 765 White patients, 2,804 African-Americans, 55 Hispanics, and 958 patients of unknown race/ethnicity. Cocaine ED reports representing patients between the ages of 35 and 54 totaled 3,041 (67 percent

of all ED reports). Exhibit 3 shows the unweighted number of DAWN cocaine reports in 2004 by month.

From January through June 2004, cocaine continued to be the primary drug of choice for individuals seeking assistance at publicly funded treatment centers in metropolitan Atlanta. However, the number of primary admissions in metropolitan Atlanta for cocaine ($n=1,756$) in this period reflects a leveling off of a 2-year trend that represented a lower percentage of cocaine-related admissions. From 2000 to 2002, approximately one-half of all treatment admissions in metropolitan Atlanta were cocaine related. In 2003, this percentage decreased to 40 percent, and in the first 6 months of 2004, cocaine-related admissions remained at 40 percent of all admissions. The ratio of men to women in treatment for cocaine was 1.37:1, a proportion that was considerably lower than the 1.65:1 found in 2003. Approximately three-fourths of cocaine admissions in metropolitan Atlanta were African-Americans. The other fourth were mainly Whites, with Hispanics representing nearly 1 percent. This distribution across racial/ethnic groups in 2004 was nearly identical to the demographics of admissions for cocaine in metropolitan Atlanta from the previous year. Whites accounted for a larger proportion of statewide cocaine treatment admissions outside metropolitan Atlanta. Whites represented 45 percent of the treatment population outside the Atlanta area, and African-Americans represented 55 percent. Non-metropolitan Atlanta cocaine admissions, however, increased by 26.4 percent in the first 6 months of 2004. In this same period, those older than 35 accounted for the largest number of non-metropolitan cocaine admissions ($n=3,677$). In Atlanta, there was a 31-percent increase in admissions among those age 18–25 and an 18-percent increase in admissions among those age 26–34 from January to June 2004. In the first half of 2004, fewer Atlanta cocaine admissions used the drug orally, and there was an 11-percent increase in injection as a preferred route of cocaine administration. Smoking continued to be the most preferred route; it was reported by nearly 76 percent of those admitted for cocaine treatment.

According to the DEA and Atlanta HIDTA, 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, prices remain relatively stable in Atlanta. Powdered cocaine typically sells for \$75–\$100 per gram. Crack rocks sell for as little as \$3. In 2003, members of the Atlanta HIDTA Task Force seized 186.69 kilograms of powdered cocaine and 7.56 kilograms of crack cocaine. Both quantities were similar to what was seized in 2002.

The Georgia Threat Assessment (DEA 2003) reports that other than marijuana, crack is the most widely available drug in the city. Officials estimate that 75 percent of all drug-related arrests involve crack cocaine. However, crack has become more difficult for undercover officers to purchase, and it seems to have decreased somewhat in popularity. Powder cocaine availability at the retail level in Georgia is limited, except in large cities such as Atlanta. NFLIS reported that cocaine accounted for approximately 40 percent of confiscated substances in suspected drug cases that were tested in forensic laboratories between October 2003 and September 2004 (exhibit 4).

Heroin

The indicators of heroin use in Atlanta are mixed. However, ethnographic data obtained through corroboration with local street outreach workers suggests that heroin use is increasing.

The preliminary unweighted data accessed through DAWN *Live!* show that the number of ED reports of heroin from January through October 2004 ($n=413$) was less than the number of reports for cocaine, marijuana, methamphetamine, and benzodiazepines (exhibit 1). A sizeable majority of the heroin ED reports involved males (exhibit 2), with a 3.6:1 male-to-female ratio. Heroin ED reports involving African-Americans exceeded those for Whites (1.6:4). The ED heroin reports involving Hispanics hovered around 1 percent ($n=5$). More than one-half of all the heroin reports represented patients between 35 and 54 years of age ($n=230$). Twelve percent of reports involved patients age 18–24. The reasons for contact with the emergency departments tended to be seeking detoxification or mental status concerns. Data on visit characteristics show that 21 percent of Atlanta heroin-involved ED patients were referred to detox/treatment (compared with 13 percent nationally), and 19 percent were admitted to psychiatric or other inpatient units (similar to the national percentage). Although injection was by far the most frequent route of heroin administration, approximately 10 percent of heroin-involved patients with a documented route of administration reported inhaling, sniffing, or snorting their heroin. As shown in exhibit 3, heroin ED reports peaked in July 2004 at 57.

In the first 6 months of 2004, treatment admissions for individuals who reported heroin as their primary drug of choice accounted for 2.5 percent of all treatment admissions in the State of Georgia; these admissions were mostly concentrated in metropolitan regions. Nearly 6 percent of metropolitan Atlanta admissions were for heroin, as compared to 1.4 percent in non-metropolitan areas. Admission rates for men were double those of women in metropolitan regions, with a non-metropolitan male-to-female ratio of 1.9:1. Whites outnumbered African-Americans (126 to 118) in metropolitan Atlanta treatment admissions, continuing an 18-month trend that began in January 2003. Outside of metropolitan Atlanta, Whites accounted for an overwhelmingly high percentage (87 percent) of heroin-related treatment admissions, followed by African-Americans (9 percent) and Hispanics (1.6 percent). A significant majority of heroin treatment admissions in both metropolitan (79 percent) and non-metropolitan (75 percent) Atlanta were age 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 9 percent of heroin treatment admissions are for individuals younger than 17, almost double the proportion of treatment admissions for those age 18–25.

Treatment data suggest that oral and inhalation routes of administration may be on the rise in both metropolitan and non-metropolitan regions and that injection use of heroin may be declining. Approximately 34 percent of all individuals admitted for heroin treatment report smoking, oral, or inhalation as their primary method of administration. Nevertheless, anecdotal reports from nonprofit street outreach workers suggest that rates of heroin injection, particularly in metropolitan Atlanta, may be on the rise and are likely underreported. Most heroin users admitted to treatment did not report having a secondary drug of choice, although metropolitan users were overall more likely than non-metropolitan users to report a secondary drug of choice. Among heroin users in metropolitan Atlanta, 32 percent reported cocaine as a secondary drug of choice, compared with 9 percent for non-metropolitan users. The Georgia Department of Public Health estimates the rate of heroin addicts in Atlanta to be 159 per 100,000 population ($n \approx 7,000$).

The NDIC's *Georgia Threat Assessment* (April 2003) reports that heroin is readily available in metropolitan Atlanta and that the city is a high-traffic area for heroin distribution. The majority of heroin available in Atlanta is South American, and wholesale quantities of heroin are generally 75–85 percent pure. The DEA reported that local purity ranges from 52 to 65 per-

cent. According to the ONDCP, in the first half of 2003 heroin sold for \$10–\$20 per bag, \$462 per gram, \$6,160 per ounce, and \$112,000 per kilogram in Atlanta. 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 ($n=187$) of NFLIS-tested seized drug items tested positive for heroin in the October 2003–September 2004 period (exhibit 4).

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 and some is shipped elsewhere.

Other Opiates/Narcotics

Most indicators suggest that narcotic pain relievers are growing in popularity in metropolitan Atlanta. There were 241 ED oxycodone/combinations reports and 317 hydrocodone/combinations reports from January through October 2004 in the unweighted data accessed from DAWN *Live!* (exhibit 5). A greater percentage of these ED reports involved women (57 percent) and Whites (47 percent) than other groups. African-Americans represented 25 percent of all opiate/opioid ED reports.

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 about 1.5 percent of tertiary drugs abused from January through June 2004. The use of opiates as a secondary abuse category was cited more often in non-metropolitan areas (2.5 percent) than in metropolitan Atlanta (0.8 percent).

According to NFLIS data, oxycodone and hydrocodone each accounted for about 1–2 percent of lab identifications of drugs seized by law enforcement from October 2003 through September 2004 (exhibit 4). 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 \$20 in 2003. Hydrocodone (Vicodin) and hydromorphone (Dilaudid) are also abused in Atlanta. These drugs are obtained by “doctor-shopping” or by purchasing from dealers. Some dealers steal prescription pads or rob pharmacies. Several such incidents were reported in Georgia in 2004.

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, particularly among individuals younger than 17.

The unweighted data accessed from DAWN *Live!* show 1,565 marijuana ED reports from January through October 2004 (exhibit 1). There were more than twice as many marijuana reports for men as for women (exhibit 2). Marijuana ED reports involving African-Americans were almost level to those involving Whites (1.3:1). Fifty-three percent of all ED reports for marijuana were distributed evenly among individuals younger than 35, with 35–44-year-olds representing the largest percentage by age group (28 percent of all ED reports). Eight percent of the marijuana ED reports represented patients age 12–17, and there were no reports among patients younger than 12.

Nearly 22 percent of public treatment admissions in January through June 2004 in metropolitan Atlanta were for those who considered marijuana to be their primary drug of choice, reflecting a smaller percentage than in previous years. Male admissions were just slightly less than double those of females in metropolitan Atlanta, with the gap narrowing in non-metropolitan regions (1.6:1). The proportion of African-Americans who identified marijuana as their primary drug of choice increased both in metropolitan (55.8 percent vs. 46 percent in 2003) and non-metropolitan Atlanta (23 percent vs. 39 percent in 2003) in the first 6 months of 2004. All other ethnicities accounted for less than 4 percent of those admitted who stated marijuana was their primary drug of choice. Similar to 2003, the vast majority of users (80 percent) in 2004 were at least 35 years old. In metropolitan Atlanta, treatment admissions of individuals 17 and younger ($n=53$) were less frequent than those among users age 18–25 (73). However, this trend was reversed in non-metropolitan public treatment facilities, where individuals 17 and younger ($n=221$) were more likely to enter treatment than individuals age 18–25 (190). Alcohol was the most popular secondary drug of choice for marijuana users, followed by cocaine and methamphetamine for both metropolitan and non-metropolitan 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 are 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.

Marijuana seizures increased 150 percent between 2002 and 2003, with HIDTA Task Force officers confiscating 1,741.17 kilograms of bulk marijuana and 210 cannabis plants. The NFLIS report for FY 2004 indicates that 23 percent of all drug-related items confiscated test positive for marijuana (exhibit 4). 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 consistently 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 due in part to the DEA's eradication program.

Stimulants

Methamphetamine is the most abused stimulant in Atlanta, and its use is increasing. 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 448 unweighted ED reports of methamphetamine in the Atlanta metropolitan area from January through October 2004 (exhibit 1). During this same period, the ratio of men to women in the methamphetamine ED reports was nearly 2:1. Whites accounted for 68 percent of methamphetamine ED

reports (exhibit 2), while African-Americans accounted for 5.1 percent. Methamphetamine reports among patients between the ages of 25 and 54 totaled 267 (60 percent of all methamphetamine ED reports); ED reports were the highest among individuals between 35 and 44 years old.

There were 279 unweighted ED amphetamine reports in the Atlanta metropolitan area from January through October 2004 (exhibit 1). The gap between male and female ED reports for amphetamines was narrow (exhibit 2), with a male-to-female ratio of 1.2:1. Nearly three out of four ED reports involved Whites, while African-Americans represented 7 percent of ED amphetamine reports.

The proportion of treatment admissions in metropolitan and non-metropolitan areas for methamphetamine continues to rise faster than for any other classification of drug. For the first 6 months of 2004, more than 8 percent of public treatment admissions reported methamphetamine as the primary drug of choice, compared to 5.1 percent in 2003 and 3.1 percent in 2002. The proportion of admissions for methamphetamine in non-metropolitan Atlanta was nearly 14 percent, the highest percentage ever reported. The number of women in metropolitan Atlanta who reported to treatment for methamphetamine-related causes increased significantly in 2004 and represented more than 55 percent of all admissions. In treatment centers outside of metropolitan Atlanta, the proportion of women entering treatment (56 percent) remained nearly identical to 2003. Most users were White; in fact, Whites accounted for more than 95 percent of treatment admissions in metropolitan Atlanta during the first 6 months of 2004. Nevertheless, the proportions of African-American and Hispanic users are growing. Regardless of demographic area, more than 77 percent of statewide treatment admissions were individuals older than 35. Metropolitan Atlanta treatment admissions were more likely than non-metropolitan admissions (24 vs. 13 percent) to choose inhaling as the preferred route of administration. Non-metropolitan Atlanta treatment admissions were more likely to smoke (53 vs. 45 percent) or inject (15 vs. 13 percent) than metropolitan Atlanta treatment admissions.

According to the DEA and HIDTA, methamphetamine popularity continues to rise, in part because of its low price and availability. In July 2004, 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 more than 27 percent of NFLIS tests of seized drugs from October 2003 through September 2004, ranking second after cocaine (exhibit 4). Methamphetamine had accounted for about 23 percent of NFLIS tests of seized drugs in 2003, ranking third after cocaine and marijuana. The HIDTA task force seized more methamphetamine in 2003 than in previous years. These seizures in 2003 included 11.3 kilograms of methamphetamine and 8.5 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 18–25-year-olds support this trend.

Depressants

The use of depressants, especially benzodiazepines, is on the rise in Atlanta. The most commonly abused benzodiazepine is alprazolam (Xanax). Only a few people admitted for drug treatment chose benzodiazepines as their secondary or tertiary drug of choice, but ME mentions for these drugs continued to increase.

The preliminary numbers of unweighted ED reports involving depressants in metropolitan Atlanta in the first 10 months of 2004 were as follows: (a) barbiturates ($n=79$); (b) benzodiazepines (878); and (c) miscellaneous other depressants (828). These ED reports in 2004 averaged nearly 88 per month, compared with an average of 67 unweighted ED reports for the last 6 months of 2003.

The treatment data from publicly funded programs included depressants such as barbiturates and benzodiazepines only as secondary and tertiary drug choices for the first 6 months of 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 3 years.

The DEA considers benzodiazepines and other prescription depressants to be a minor threat in Georgia. The pills are widely available on the street, but their abuse does not seem to have reached the levels of oxycodone and hydrocodone abuse. According to the NDIC and DEA *Georgia Threat Assessment* (April 2003), 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 mentions of PCP in the past 12 months.

Unweighted data accessed from DAWN *Live!* for the first 10 months of 2004 show 19 total ED reports for lysergic acid diethylamide (LSD). Most of the 2004 ED reports involved men rather than women, with a ratio of 6:1. Whites ($n=10$) represented more ED reports for LSD than did African-Americans (6). The majority of these LSD reports represented 18–29-year-olds ($n=15$). The total number of ED reports for phencyclidine (PCP) from January through October 2004 was 40. PCP reports were highest among White males between the ages of 35 and 44 and 12 and 17.

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 2004, hallucinogens were listed five times as a secondary or tertiary drug of choice in metropolitan areas. These numbers were consistent with those in 2003. “Other hallucinogens” were listed 16 times as a secondary drug of abuse and 31 times as a tertiary drug in non-metropolitan areas, also consistent with previous years.

LSD accounted for only 0.04 percent of drugs analyzed by NFLIS from October 2003 through September 2004. The DEA reports 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 2004.

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 use, particularly among metropolitan Atlanta’s young adult population.

There were 64 ED MDMA reports from January through October 2004 in the preliminary unweighted data accessed from DAWN *Live!*. MDMA reports among males exceeded those among females by almost double (1.7:1 ratio) (exhibit 2). There was an

approximately even ratio (1:1.2) of reports involving Whites and African-Americans; there were no Hispanic reports. Young adults (21–29) represented 49 percent of ED MDMA reports. The reported route of administration for MDMA was almost exclusively oral. More than one-half of ED MDMA cases were referred to other treatment or admitted for detoxification or psychiatric treatment.

Atlanta serves as a distribution point for MDMA to other U.S. cities. 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 2004, MDMA accounted for 1.6 percent of substances tested in suspected drug cases (exhibit 4); methylenedioxyamphetamine (MDA) accounted for another 0.4 percent. The April 2003 NDIC and DEA *Georgia Threat Assessment* indicated that most dealers are White middle and upper class high school and college students between the ages of 18 and 25. The drug retails for \$25–\$30 per tablet, according to a July 2003 report by the NDIC, 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 44 unweighted GHB ED reports from January through October 2004. GHB reports for males exceeded those for females (exhibit 2), at a ratio of 5.6:1. ED GHB reports also predominantly involved Whites (6.7 to 1 African-American, with only 1 Hispanic report in this time period). Seventy-five percent of GHB reports involved patients 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 of GHB was almost exclusively oral.

The NDIC reports that the primary distributors and abusers of GHB are White young adults. The DEA Atlanta Division reports that in 2001, 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).

There were two reported ED ketamine reports.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

At the end of 2003, Georgia ranked eighth in the Nation for cumulative AIDS cases. At the end of 2001, the State was ninth. The rate of overall AIDS cases was significantly higher in 2003 (22 per 100,000

population) than in 2002 (17.2 per 100,000 population). Approximately 1,907 new AIDS cases were reported in the State in 2003, for a cumulative total of 14,023 persons living with AIDS. Human immunodeficiency virus (HIV) surveillance nationwide indicates a consistent increase in new infections.

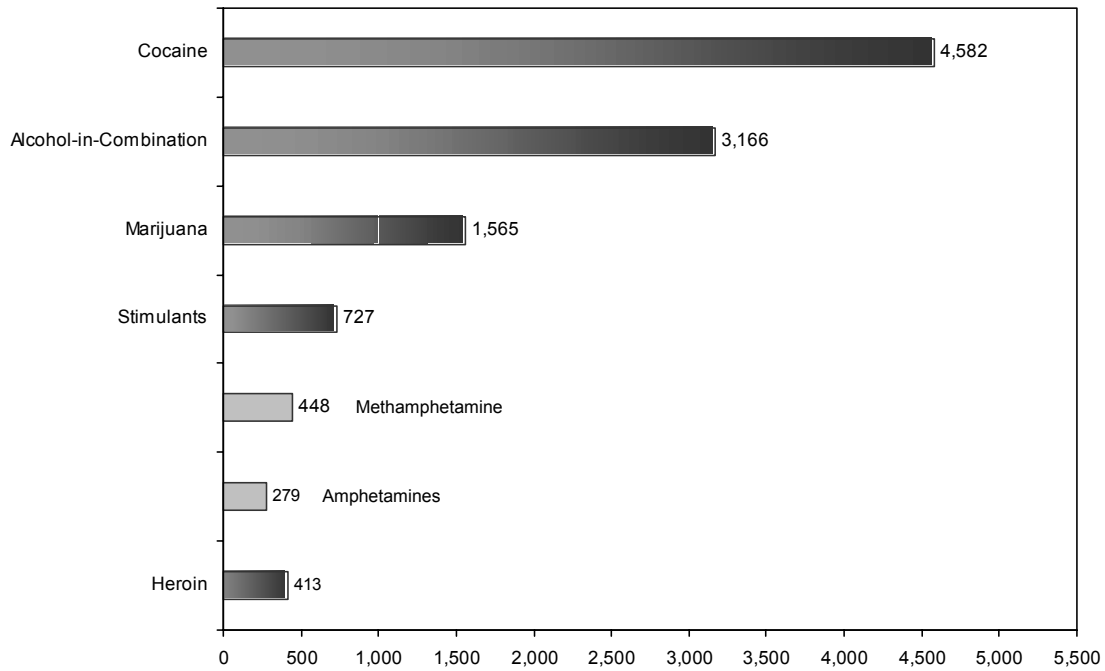
In 2003, nearly 73 percent of all new AIDS diagnoses were male; African-Americans accounted for 74 percent of these total cases. In Georgia, nearly 73 percent of the new HIV/AIDS cases were older than 25,

with the highest prevalence occurring among 35–44-year-olds. The majority of new AIDS cases in Georgia continue to come from Atlanta's Fulton and DeKalb Counties.

New cases of sexually transmitted diseases identified in Georgia in 2003 included chlamydia ($n=35,686$), gonorrhea ($n=17,686$), and syphilis ($n=585$). In 2003, there were 484 statewide total cases of hepatitis B and 64 statewide reports of hepatitis C; the majority of cases originated in the Atlanta metropolitan area.

For inquiries concerning this report, please contact Brian J. Dew, Ph.D., LPC, Assistant Professor, Georgia State University, Department of Counseling and Psychological Services, P.O. Box 3980, Atlanta, GA 30302-3980, Phone: (404)651-3409, Email: <bdew@gsu.edu>.

Exhibit 1. Number of DAWN ED Reports in Atlanta, by Drug (Unweighted¹): January–October 2004



¹The unweighted data are from 18–19 Atlanta 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.
 SOURCE: DAWN Live!, OAS, SAMHSA, updated 1/17/2005

Exhibit 2. Demographic Characteristics of DAWN ED Mentions, by Drug and Percent (Unweighted¹): January–October 2004

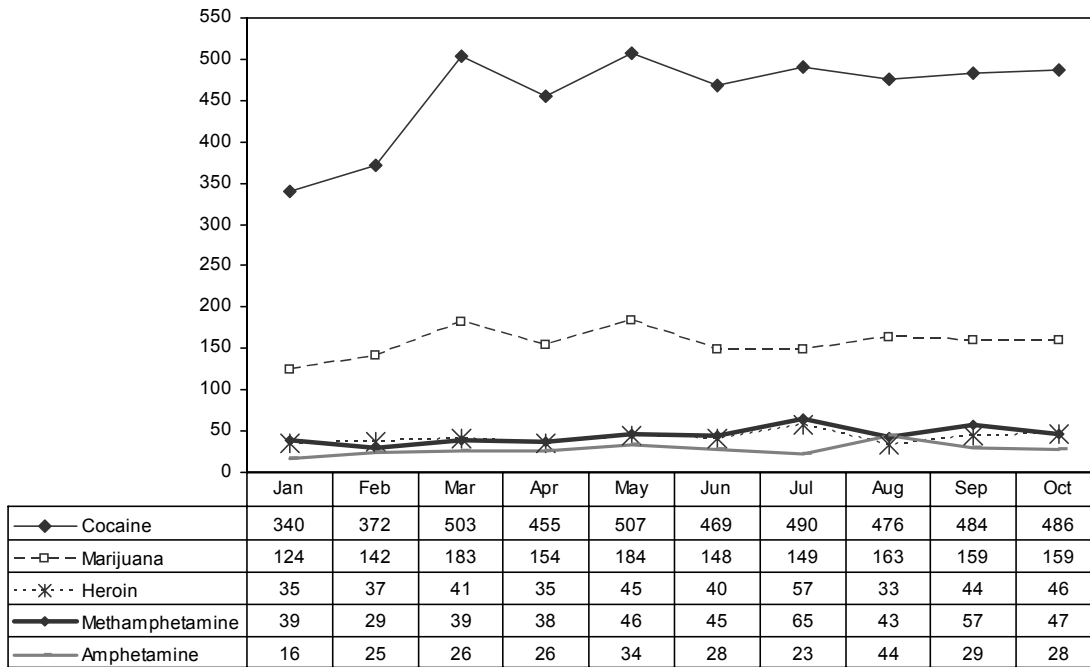
Demographic Characteristic	Cocaine (n=4,582)	Methamphetamine (n=448)	Marijuana (n=1,565)	Heroin (n=413)	Benzodiazepines (n=878)	Hydrocodone/Combinations (n=317)	Oxycodone/Combinations (n=241)	Amphetamines (n=279)	GHB (n=44)	Ecstasy (n=64)
Gender										
Male	70.6	65.4	71.1	78.0	47.7	43.5	53.9	53.4	84.1	62.5
Female	29.4	34.6	28.8	21.8	51.9	56.5	46.1	46.2	15.9	37.5
Not documented	0.0	0.0	0.2	0.2	0.3	0.0	0.0	0.4	0.0	0.0
Race/Ethnicity										
White	16.7	68.1	36.2	24.7	68.9	51.7	60.6	74.6	61.4	34.4
African-Amer.	61.2	5.1	46.7	40.7	9.2	20.8	15.8	6.8	9.1	40.6
Hispanic	1.2	4.5	1.8	1.2	1.7	2.5	2.1	1.8	2.3	0.0
NTA ²	0.4	0.4	0.4	0.2	0.8	1.6	0.8	0.4	0.0	3.1
Not documented	20.5	21.9	14.8	33.2	19.4	23.3	20.7	16.5	27.3	21.9
Age Group										
11 and younger	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.7	0.0	0.0
12–17	0.8	5.6	8.4	0.5	5.1	4.7	2.9	16.5	0.0	3.1
18–24	7.4	25.0	26.1	12.1	14.2	15.5	13.7	23.3	22.7	40.6
25–34	21.6	38.2	26.8	25.7	20.8	22.4	22.0	25.1	50.0	42.2
35–44	44.5	21.4	27.1	25.7	31.4	29.7	25.7	24.4	25.0	12.5
45–54	21.9	8.9	10.3	30.0	19.7	18.0	15.8	6.5	2.3	1.6
55 and older	3.7	0.9	1.2	6.1	8.2	9.8	19.5	3.6	0.0	0.0
Not documented	0.0	0.0	0.1	0.0	0.3	0.0	0.4	0.0	0.0	0.0

¹The unweighted data are from 18–19 Atlanta 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.

²NTA=Not tabulated above.

SOURCE: DAWN Live!, OAS, SAMHSA, updated 1/17/2005

Exhibit 3. Number of DAWN ED Mentions for Selected Drugs by Month (Unweighted¹): January–October 2004



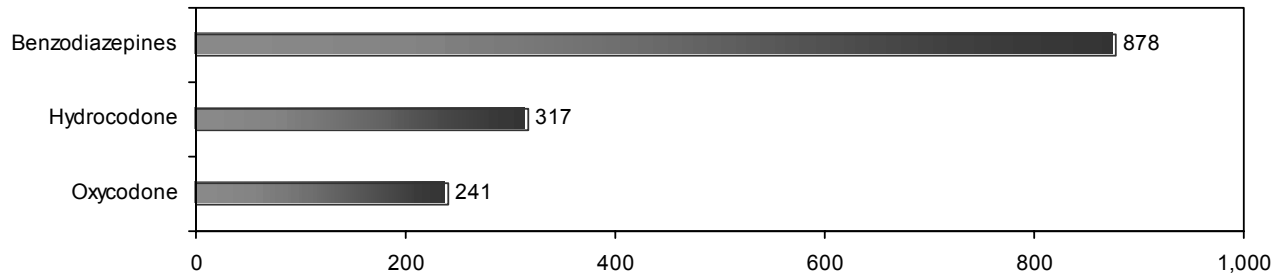
¹The unweighted data are from 18–19 Atlanta EDs reporting to DAWN. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted, and, therefore, are subject to change.
SOURCE: DAWN Live!, OAS, SAMHSA, updated 1/17/2005

Exhibit 4. Number of Analyzed Items and Percentage of All Items Tested in Atlanta: October 2003–September 2004

Drug	Number	Percent
Cocaine	6,585	39.7
Methamphetamine	4,510	27.2
Cannabis	3,761	22.7
Alprazolam	326	2.0
MDMA/MDA	332	2.0
Hydrocodone	269	1.6
Heroin	187	1.1
Oxycodone	144	0.9
Methadone	78	0.5
Diazepam	62	0.4
Other ¹	301	1.8
Total	16,555	99.8

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

Exhibit 5. Number DAWN ED Prescription Drug Misuse Cases in Atlanta, by Selected Drug (Unweighted¹): January–October 2004



¹The unweighted data are from 18–19 Atlanta 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.

SOURCE: DAWN *Live!*, OAS, SAMHSA, updated 1/17/2005

Drug Use in the Baltimore Metropolitan Area: Epidemiology and Trends, 2000–2004 (First Half)

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

ABSTRACT

Heroin indicators for the Baltimore metropolitan area as a whole generally indicated an increase over 2001 levels. 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. Baltimore has a core of older African-American heroin users, both injectors and intranasal users. White users entering treatment for heroin were younger and were predominantly injectors. Cocaine indicators also began to increase in 2001. Cocaine use was reported by 51 percent of drug-related treatment admissions in the Baltimore PMSA, with 14 percent reporting primary use and 37 percent reporting use secondary to use of alcohol or another drug. Cocaine smoking was the most prevalent route of administration among both primary and secondary users, followed by injection and intranasal use. Cocaine smokers were likely to use heroin intranasally. Cocaine injection was strongly linked to heroin injection. Intranasal cocaine users were likely to use heroin intranasally. Indicators of marijuana use have tended to increase since 2000. More often than not, marijuana use in the indicator data sets was associated with the use of alcohol or other drugs—61 percent of marijuana treatment admissions reported use of additional substances. One-third (33 percent) of drug-related treatment admissions used marijuana, 15 percent as a primary substance and 18 percent as a secondary substance. Persons entering treatment for primary marijuana use were young: 43 percent were younger than 18. A large proportion of marijuana treatment admissions (62 percent) represented referrals through the criminal justice system. Indicators for opiates and narcotics other than heroin have increased over the past several years. Stimulants other than cocaine are rarely mentioned as the primary substance of abuse by 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 603,000 in 2003. The population of the surrounding counties has grown from approximately 1.7 million in 1990 to 2.0 million in 2004.

The city and the suburban counties represent distinctly different socioeconomic groups. In 2000, median household income in the city was \$30,000, and 23 percent of the population lived in poverty. In the suburban counties, however, median household income ranged from \$51,000 to \$74,000, and the poverty rate averaged 5 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 2000 population composition of the city differed markedly from that of the surrounding counties: 32 percent White and 64 percent African-American, versus 80 percent White and 15 percent African-American, respectively. Two percent of the population in the city and 3 percent of the population in the suburban counties were Asian. Two percent of the population in both the city and the suburban counties were Hispanic.

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

NOTE: This report has historically used **emergency department (ED) drug mention data** and **mortality**

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

data from the Drug Abuse Warning Network (DAWN), Office of Applied Studies (OAS), Substance Abuse and Mental Health Services Administration (SAMHSA). Because of a redesign of DAWN, the most recent estimates available are from 2002. Limited unweighted data on ED reports for 2004 were available for this report, but because of data collection differences, these cannot be used in conjunction with the older data to measure trends.

Data sources for this report are detailed below:

- **Population and demographic data**, including population estimates for 1990–2003 and income and poverty estimates for 2000 for Maryland counties, were derived from U.S. Bureau of the Census data (electronic access: <<http://factfinder.census.gov>> last accessed June 13, 2004).
- **Treatment admissions data** were provided by the Maryland Alcohol and Drug Abuse Administration, Department of Health and Mental Hygiene, for 1994 through the first half of 2004. 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 16 percent of all treatment admissions). Admissions with primary abuse of alcohol and secondary/tertiary abuse of drugs (about 12 percent of all admissions) are included.
- **Emergency department (ED) drug mentions data** were provided by DAWN, OAS, SAMHSA, for the Baltimore PMSA for 1994 through 2002. The 1994–2002 data provided weighted estimates and rates per 100,000 population, which are reported in this paper. In addition, unweighted data on selected drugs were derived from DAWN *Live!*, a restricted-access online query system administered by OAS. The data for the first half of 2004 are, as noted above, not comparable to DAWN data for 2002 and prior years, and cannot be used for comparison with future data. The new DAWN sample includes all 21 eligible hospitals in the Baltimore metropolitan area, with 24 EDs in the sample. (Some hospitals have more than one ED.) The data accessed from DAWN *Live!* (updated by OAS on December 13, 2004) were incomplete. Over the 6-month period, between 21

and 23 of the EDs reported to DAWN each month, with most reporting data that were basically complete (90 percent or greater). This paper includes drug reports on drug-related visits involving stimulants and the so-called “club drugs.” Drug reports exceed the number of visits since a patient may report use of multiple drugs (up to six plus alcohol). The unweighted data from DAWN *Live!* Cannot be used as estimates for the Baltimore area, nor can they 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>>.

- **Mortality data** were provided by DAWN, OAS, SAMHSA, for the Baltimore PMSA for 1997 through 2002.
- **Illicit drug prices** were provided by the National Drug Intelligence Center, *Narcotics Digest Weekly* 3(52), December 28, 2004, for July–December 2004.
- **Data on drug seizures** were provided by the National Forensic Laboratory Information System (NFLIS).

DRUG ABUSE PATTERNS AND TRENDS

Polydrug use in general appears to be the norm in the Baltimore PMSA. Three-quarters of drug-related treatment admissions in the first half of 2004 reported problems with at least one substance other than their primary substance. In 2002, the average ED episode involved 1.8 substances, and the average drug-related death involved 3.1 substances; 89 percent of the drug-related deaths involved multiple substances.

Cocaine/Crack

Cocaine indicators (treatment admission rates, rates of ED mentions, and cocaine-involved deaths) all began to increase in 2001 (exhibit 1). The rate of cocaine-related ED mentions (257 per 100,000 population for 2002) represented a significant increase over the previous year. Deaths associated with cocaine increased from 248 in 2001 to 299 in 2002. The cocaine treatment admission rate increased from 164 per 100,000 population age 12 and older in 2001 to 221 per 100,000 in 2003 (exhibit 2). The rate is projected to decline slightly, to 217 per 100,000 in 2004.

Smoked cocaine (crack) represented 73 percent of the treatment admissions for primary cocaine use in the Baltimore PMSA in the first half of 2004 (exhibit 2).

The population in treatment for cocaine smoking has aged (exhibit 3). About three-quarters (74 percent) were age 35 or older in the first half of 2004, an increase from 59 percent in 2000. The median age at admission to treatment was 39, compared with 36 in 2000. Almost one-half (45 percent) of those in treatment for smoking cocaine were women, and more than two-thirds (69 percent) were African-American. The majority (63 percent) of the crack smokers had been in treatment before, and most (70 percent) were referred through sources other than the criminal justice system. Daily crack use was reported by 45 percent, and use of other drugs in addition to crack was reported by more than two-thirds (69 percent). Alcohol was the most common secondary drug (used by 45 percent), followed by marijuana (22 percent) and heroin used intranasally (15 percent). Only 4 percent of crack smokers reported heroin injection.

Primary use of cocaine represented 14 percent of treatment admissions in the first half of 2004, well behind the 51 percent of admissions represented by primary use of heroin (exhibit 2). Despite the apparent dominance of heroin in the Baltimore PMSA, testing of some 40,000 items in fiscal year (FY) 2004 by the National Forensics Laboratory found that 43 percent were cocaine and 27 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 37 percent of treatment admissions in the first half of 2004 (exhibit 2), meaning that 51 percent of treatment admissions reported cocaine abuse as a primary or secondary problem.

Exhibit 4 compares the characteristics of treatment admissions for primary and secondary cocaine use according to the route of administration of cocaine. Cocaine smoking was the most prevalent among both primary and secondary users, followed by injection and intranasal use. Differences between primary and secondary users were generally small, although secondary users were consistently less likely to be entering treatment for the first time than primary users. User characteristics were more pronounced between routes of administration. Cocaine smokers were more likely to be female (50 percent of cocaine smokers, compared to 38 percent of injectors and 31 percent of intranasal users), African-American (70 percent, 55 percent, and 47 percent, respectively), and age 35 and older (72 percent, 64 percent, and 56 percent, respectively). Cocaine smokers were less likely to be age 25 and younger (7 percent, compared with 15 percent of injectors and 22 percent of intranasal users). Cocaine smokers and injectors were more likely to be treated in the city (69 percent and 72 percent, respectively, compared to 48 percent of the intranasal users).

Exhibit 5 compares the number of cocaine treatment admissions (primary, secondary, or tertiary use) in the first half of 2004 by route of administration, age, and race. For all three routes of administration, the younger users tended to be White rather than African-American.

Thirty-eight percent of the cocaine smokers reported cocaine smoking as their primary problem (exhibit 4). Secondary cocaine smokers generally shared the characteristics of primary smokers (see above and exhibit 3). They were somewhat more likely to be female (54 percent of secondary smokers, compared to 45 percent of primary smokers), and more likely to be treated in Baltimore City (71 percent and 67 percent, respectively). Cocaine smokers were likely to use heroin intranasally. Fifty-two percent of the secondary cocaine smokers reported intranasal heroin use as their primary substance problem, while 15 percent of the primary cocaine smokers reported intranasal heroin use as a secondary problem. Other primary problems reported by secondary cocaine smokers were alcohol (21 percent) and heroin injection (20 percent).

Cocaine injection was strongly linked to heroin injection (exhibit 4). Only 7 percent of the cocaine injectors reported cocaine injection as their primary substance problem, and 59 percent of these reported secondary heroin injection. Among the secondary cocaine injectors, 92 percent reported that their use was secondary to heroin injection. Secondary cocaine injectors were less likely to report daily use than primary cocaine injectors (51 percent and 63 percent, respectively). Cocaine injectors were likely to be male (62 percent), African-American (55 percent), older (64 percent were age 35 and older), and treated in Baltimore City (72 percent).

Twenty-three percent of the primary intranasal cocaine users reported intranasal cocaine as their primary substance problem (exhibit 4). Intranasal cocaine users were likely to use heroin intranasally. Forty-two percent of the secondary intranasal cocaine users reported intranasal heroin use as their primary substance problem, while 11 percent of the primary intranasal cocaine users reported intranasal heroin use as a secondary problem. Other primary problems reported by secondary intranasal cocaine users were alcohol (27 percent) and heroin injection (14 percent). Intranasal cocaine users were likely to be male (69 percent), White (51 percent), older (56 percent were age 35 and older), and treated in the suburban counties (52 percent). Primary intranasal cocaine users were more likely than secondary users to be White (55 percent and 49 percent, respectively) and younger (8 percent were younger

than age 18, compared to 4 percent of secondary intranasal cocaine users).

Prices for powdered 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 midlevel, 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. For powdered cocaine, the price range at the wholesale kilogram level was unchanged from the second half of 2003, while the lower limit for a retail-level gram was less. For crack cocaine, the lower limit for a wholesale kilogram was unchanged from the second half of 2003, while the lower limit for a retail-level gram was less.

Heroin

Heroin indicators for the Baltimore metropolitan area as a whole generally indicated an increase over 2001 levels (exhibit 1). The rate of heroin ED mentions (203 per 100,000 population in 2002) represented a significant 4-percent increase from 195 per 100,000 in 2001. The heroin treatment admission rate increased from 652 per 100,000 population age 12 and older in 2001 to 875 per 100,000 in 2003 (exhibit 2). However, it was projected to decline slightly to 858 per 100,000 in 2004.

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 2004, the heroin treatment admission rate was about seven times higher in Baltimore City than in the suburban counties (exhibit 2).

In Baltimore City, intranasal use was the preferred route of administration among treatment admissions (exhibit 2), and the admission rate for intranasal use was 29 percent higher than for injection. In the suburban counties, however, the rate for heroin injection was 63 percent higher than for inhalation.

Exhibit 6 compares the number of treatment admissions in the first half of 2004 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 were younger and were predominantly injectors.

African-American heroin intranasal users made up 40 percent of the heroin-using treatment admissions in the Baltimore PMSA in the first half of 2004. Most (85 percent) were treated in Baltimore City. Among

heroin intranasal users in the city (exhibit 7), most admissions were African-American (91 percent) and were age 35 and older (74 percent). The proportion of intranasal users age 25 and younger decreased from 5 percent in 2000 to 3 percent in the first half of 2004. Almost one-half (47 percent) of the intranasal heroin users in the city were women. The median age at admission was 39, and the median duration of use before first entering treatment was 14 years. Almost three-quarters (73 percent) reported daily heroin use. One-third (33 percent) entered treatment through the criminal justice system, and less than one-third (29 percent) were receiving treatment for the first time. Almost three-quarters (72 percent) reported use of other drugs—45 percent smoked cocaine, 11 percent used cocaine intranasally, 26 percent used alcohol, 10 percent used marijuana, and 2 percent used opiates other than heroin.

White heroin injectors made up 26 percent of the heroin-using treatment admissions in the Baltimore PMSA in the first half of 2004. More than one-half (61 percent) were treated in the suburban counties. Among heroin injectors in the suburban counties (exhibit 8), most admissions were White (81 percent). About one-third (34 percent) of suburban injectors were age 25 and younger. Sixty percent of the suburban heroin injectors were male. The median age at admission was 30, and the median duration of use before first entering treatment was 7 years. Almost three-quarters (74 percent) reported daily heroin use. Less than one in five (19 percent) entered treatment through the criminal justice system, and one-third (33 percent) were receiving treatment for the first time. Two-thirds (67 percent) reported use of other drugs—14 percent smoked cocaine, 29 percent injected cocaine, 20 percent used alcohol, 17 percent used marijuana, and 8 percent used opiates other than heroin.

African-American heroin injectors made up 21 percent of the heroin-using treatment admissions in the Baltimore PMSA in the first half of 2004. Most (85 percent) were treated in Baltimore City. Among heroin injectors in the city (exhibit 8), the majority of admissions (64 percent) were African-American and were age 35 and older (70 percent), although the proportion of intranasal users age 25 and younger increased slightly from 9 percent in 2000 to 11 percent in the first half of 2004. Some 44 percent of the city's heroin injectors were women. The median age at admission was 40, and the median duration of use before first entering treatment was 17 years. Most (77 percent) reported daily heroin use. Less than one-quarter (23 percent) entered treatment through the criminal justice system, and less than one in five (22 percent) were receiving treatment for the first time.

Most (80 percent) reported use of other drugs—16 percent smoked cocaine, 50 percent injected cocaine, 25 percent used alcohol, 7 percent used marijuana, and 2 percent used opiates other than heroin.

White heroin intranasal users made up 8 percent of the heroin-using treatment admissions in the Baltimore PMSA in the first half of 2004. Two-thirds (66 percent) were treated in the suburban counties. Among heroin intranasal users in the suburban counties (exhibit 7), about one-half (48 percent) were White. Fifty-six percent were age 35 and older, although the proportion of intranasal users age 25 and younger was 18 percent in the first half of 2004. Some 39 percent of the suburban intranasal users were women. The median age at admission was 35, and the median duration of use before first entering treatment was 9 years. Most (70 percent) reported daily heroin use. Less than one-quarter (23 percent) entered treatment through the criminal justice system, and almost one-half (47 percent) were receiving treatment for the first time. A majority (57 percent) reported use of other drugs—19 percent smoked cocaine, 13 percent used cocaine intranasally, 17 percent used alcohol, 17 percent used marijuana, and 9 percent used opiates other than heroin.

Of the 40,000 items from Baltimore tested by the National Forensic Laboratory in FY 2004, 27 percent were heroin.

Prices for heroin for the second half of 2004 were reported as \$70,000–\$125,000 per kilogram at the wholesale level, \$2,000–\$3,250 per ounce at mid-level, and \$90–\$165 per gram or \$10–\$20 per bag at the retail level. The lower limits reported for the wholesale-level kilogram and retail-level gram were higher than reported for the second half of 2003, but the retail-level bag price was unchanged.

Other Opiates and Narcotics

For opiates and narcotics other than heroin, indicators have increased over the past several years (exhibit 1). Treatment admission rates for opiates other than heroin more than doubled between 2000 and 2003, from 23 per 100,000 population age 12 and older to 55 per 100,000 in 2003 (exhibit 2). They were projected to reach 57 per 100,000 in 2004. Narcotic analgesics and narcotic analgesic combinations were mentioned with increasing frequency in drug-related ED episodes. In 2002, they were mentioned at a rate of 165 per 100,000 population, significantly more than the 114 mentions per 100,000 reported in 2001. Narcotic analgesics and narcotic analgesic combinations made

up 16 percent of all drugs mentioned in 2002, and they were reported in 30 percent of all drug-related ED episodes.

Opiates other than heroin were reported by 4 percent of admissions as the primary substance of abuse, and they were reported by an additional 4 percent as a secondary or tertiary substance (exhibit 2). Exhibit 9 combines all admissions reporting opiates other than heroin as primary, secondary, or tertiary substances. Treatment admissions involving opiates other than heroin were primarily White (88 percent). Just over one-half (56 percent) were male. Almost one-half (47 percent) were age 35 or older, although the proportion age 25 and younger increased from 21 percent in 2000 to 30 percent in the first half of 2004. The median age at admission was 33, and the median duration of use of opiates other than heroin before first entering treatment was 4 years. Daily use of opiates other than heroin was reported by 68 percent. Only a small proportion (12 percent) entered treatment through the criminal justice system, and 42 percent were entering treatment for the first time.

Marijuana

Indicators of marijuana use have tended to increase since 2000 (exhibit 1). The rates of marijuana ED mentions increased significantly in 2002 over 2001. The annual marijuana treatment admission rate increased from 200 per 100,000 population age 12 and over in 2000 to 246 per 100,000 in 2003 (exhibit 2). It is projected to remain at that level in 2004. The proportion of marijuana treatment admissions in the first half of 2004 was higher in the suburban counties (19 percent) than in Baltimore City (11 percent), but the admission rate for the first half of 2003 was higher in the city (191 per 100,000 population age 12 and over, compared with 74 per 100,000 in the counties).

Despite increases in indicators for the Baltimore PMSA, marijuana use by Maryland high school seniors declined between 1996 and 2002 (CESAR 2004). According to the 2002 Maryland School Survey, 21 percent of high school seniors reported past-month use of marijuana in 2002, compared to 27 percent in 1996. Almost one-half (43 percent) of high school seniors had tried marijuana at least once, and 20 percent of those who had tried it had first used it before age 15 (CESAR 2003). Marijuana use before age 15 was associated with use of cigarettes and/or alcohol before age 15, and (in 12th grade) high absenteeism, arrests because of drugs or alcohol, attitudes that marijuana and/or cigarettes were safe, and reported parental attitudes that marijuana and/or cigarettes were safe.

More often than not, marijuana use in the indicator data sets was associated with the use of alcohol or other drugs. Marijuana was more frequently reported as a secondary substance than as a primary substance by treatment admissions in the total PMSA in the first half of 2003, at 15 and 18 percent, respectively (exhibit 2). Among treatment admissions for primary marijuana use in the total PMSA, 61 percent reported using additional substances (exhibit 10). More than one-half (52 percent) reported alcohol abuse, 8 percent reported cocaine use, 3 percent reported use of heroin, and 3 percent reported use of opiates other than heroin. Some 8 percent of admissions used other secondary substances, primarily hallucinogens, phen-cyclidine (PCP), and stimulants.

Persons entering treatment for marijuana use were young: 43 percent were younger than age 18, and the median age at admission to treatment was 19 (exhibit 10). Marijuana admissions were primarily male (83 percent) and increasingly likely to be African-American (53 percent in the first half of 2004, compared with 46 percent in 2000). A large proportion of marijuana treatment admissions (62 percent) represented referrals through the criminal justice system. Admissions were likely to be experiencing their first treatment episode (65 percent), and more than one-third (35 percent) reported daily marijuana use.

Of the 40,000 items from Baltimore tested by the National Forensic Laboratory in FY 2004, 29 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. The price range for hydroponic marijuana was slightly more for the wholesale-level kilogram than in the second half of 2003. The lower limit for commercial-grade marijuana at the wholesale-level kilogram was more than in the second half of 2003, but the upper limit was unchanged. The price range was unchanged for a retail-level quantity of one-quarter ounce or a bag.

Stimulants

Stimulants other than cocaine were rarely mentioned as the primary substance of abuse by treatment admissions (exhibit 2). Nevertheless, the numbers, although small, increased from 42 admissions in 2000 to 73 in 2003; there were 41 admissions for the first half of

2004. The majority (63 percent) of the first-half 2004 admissions were for methamphetamine, and 29 percent were for amphetamine. Treatment admissions for stimulants increased from 2.0 per 100,000 in 2000 to 3.4 per 100,000 in 2003. Projections for 2004 suggest that the rate may reach 5.2 per 100,000 in 2004.

Preliminary unweighted data accessed from DAWN *Live!* indicated 49 ED reports of amphetamine and four reports of methamphetamine in the first half of 2004.

Other Drugs

Drugs other than alcohol, cocaine, heroin, opiates (other than heroin), marijuana, and stimulants were responsible for less than 2 percent of treatment admissions in the first half of 2004 (exhibit 2). Preliminary unweighted data for the first half of 2004, accessed from DAWN *Live!*, indicated 32 ED reports of methylenedioxymethamphetamine (MDMA), 21 of PCP, 10 of inhalants, 8 of lysergic acid diethylamide (LSD), 3 of ketamine, and 2 of gamma hydroxybutyrate (GHB).

Treatment admissions for benzodiazepines and other tranquilizers declined slightly, from 5.0 per 100,000 population age 12 and older to 3.9 per 100,000 in 2003. Benzodiazepines were mentioned in 11 percent of drug-related ED episodes in 2002, representing a small (2 percent) increase from 59 mentions per 100,000 population in 2001 to 60 per 100,000 in 2002.

Treatment admissions for barbiturates and other sedatives increased slightly, from 2.5 per 100,000 population age 12 and older in 2001 to 4.2 per 100,000 in 2003. Barbiturate mentions also increased significantly in drug-related ED episodes, from 13 per 100,000 population in 2001 to 14 per 100,000 in 2002.

Treatment admissions for LSD remained relatively stable, at about 2.5 per 100,000 population age 12 and over. Treatment admissions for PCP were erratic, but they were between 2.5 and 5.0 per 100,000 population age 12 and older from 2001 through 2003. Between 2001 and 2003, treatment admissions for inhalants declined from 0.9 per 100,000 population age 12 and older to 0.7 per 100,000, while treatment admissions for over-the-counter drugs rose from 0.3 per 100,000 to 0.5 per 100,000.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

The annual AIDS case report rate for 2003 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 by itself 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 about 62 percent male and 81 percent African-American (AIDS Administration 2004). Forty-four percent were aged 40–49, and another 24 percent were aged 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 aged 40–49, and another 29 percent were aged 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 they 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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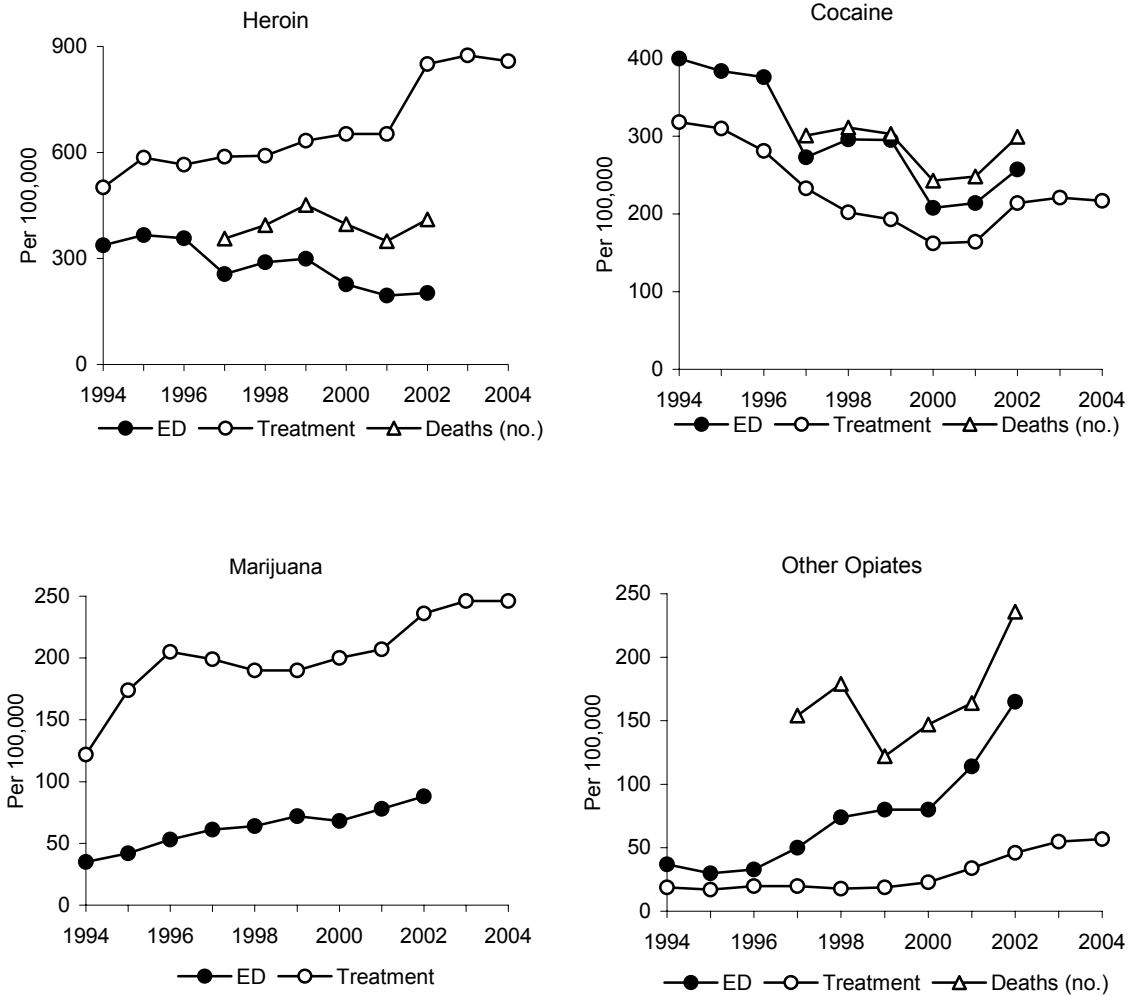
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Exhibit 1. Annual Rates of Drug-Related Treatment Admissions and ED Mentions per 100,000 Population, and Numbers of Drug-Related Deaths in Baltimore: 1994–2004¹



¹Treatment admission rates for 2004 are projected based on data for January–June 2004.
 SOURCES: DAWN, OAS, SAMHSA, and Alcohol and Drug Abuse Administration, Maryland Department of Health and Mental Hygiene

Exhibit 2. Characteristics of Drug-Related Treatment Admissions in Baltimore: 2000–1H 2004

Characteristic	Total PMSA				Baltimore City				PMSA excluding Baltimore City						
	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
(Number of Admissions)	(27,145)	(28,043)	(34,462)	(35,721)	(15,278)	(13,386)	(12,874)	(17,685)	(18,799)	(8,673)	(13,759)	(15,169)	(16,777)	(16,922)	(6,605)
Primary Substance (%)															
Alcohol with Secondary Drug	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
Cocaine	17.9	17.5	14.4	13.5	14.4	8.9	8.5	7.9	7.2	8.0	26.6	25.1	21.3	20.4	22.7
Smoked	12.7	12.5	13.4	13.4	14.4	12.5	13.1	14.4	13.9	16.3	12.9	11.9	12.3	12.9	12.0
Intranasal	9.5	9.3	10.2	10.1	11.4	9.6	10.2	11.7	11.3	13.5	9.4	8.6	8.6	8.7	8.7
Injected	1.8	2.0	1.8	2.1	1.9	1.5	1.6	1.2	1.3	1.4	2.2	2.3	2.4	3.1	2.5
Other	1.0	0.9	1.2	1.0	0.9	1.1	1.0	1.3	1.1	1.1	0.8	0.8	1.0	0.9	0.6
Marijuana/Hashish	0.4	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.5	0.3	0.3	0.3	0.2
Heroin	15.6	15.8	14.8	15.0	14.6	11.6	12.3	12.2	12.5	11.3	19.6	18.7	17.5	17.8	18.8
Intranasal	51.0	49.8	53.2	53.2	51.2	65.9	64.3	63.5	63.5	61.0	36.5	37.4	42.4	41.7	38.3
Injected	24.6	24.8	25.6	24.6	24.9	35.0	35.6	33.5	33.1	33.2	14.5	15.6	17.2	15.3	13.9
Other	23.7	22.3	24.7	25.3	24.5	27.7	25.7	26.1	26.9	25.8	19.8	19.3	23.1	23.5	22.8
Other Opiates	2.7	2.7	3.0	3.2	1.8	3.1	3.0	3.9	3.5	2.0	2.2	2.4	2.1	2.9	1.6
Stimulants	1.8	2.6	2.9	3.3	3.7	0.7	1.1	1.4	1.6	2.0	2.8	3.9	4.4	5.3	6.1
All Other	0.2	0.2	0.2	0.2	0.3	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.3	0.3	0.4
	0.9	1.7	1.1	1.4	1.4	0.4	0.5	0.5	1.2	1.2	1.4	2.7	1.8	1.6	1.8
Primary Substance (annual admissions per 100,000 population aged 12+)¹															
Alcohol with Secondary Drug	228	229	231	222	100	221	204	266	261	135	231	237	219	209	90
Cocaine	162	164	214	221	101	311	316	482	501	275	112	113	127	132	47
Smoked	122	122	163	166	80	239	246	393	408	227	82	81	89	89	34
Injected	12	12	18	16	6	28	25	42	41	19	7	8	11	9	2
Other	5	4	4	4	2	7	6	6	6	4	4	3	3	3	1
Marijuana/Hashish	200	207	236	246	102	288	296	408	449	191	170	177	180	182	74
Heroin	652	652	850	875	358	1,638	1,547	2,124	2,288	1,027	317	353	437	428	151
Injected	303	292	394	416	171	690	618	875	970	434	172	183	238	241	90
Snorted	315	325	408	405	174	871	857	1,120	1,191	559	126	148	178	157	55
Other	34	35	48	53	13	78	72	129	127	34	19	23	21	30	6
Other Opiates	23	34	46	55	26	17	27	48	57	33	24	37	45	54	24
Stimulants	2	2	3	3	2	1	2	2	4	3	2	2	3	3	1
All Other	12	22	18	23	10	10	12	17	44	20	12	26	18	17	7
Secondary substance (%)²															
None	25.6	24.9	24.8	26.4	26.5	28.6	28.4	26.1	27.2	25.9	22.6	21.9	23.4	25.6	27.4
Alcohol	28.7	30.1	29.2	28.6	27.5	28.3	31.0	29.7	29.3	28.7	29.1	29.4	28.7	27.7	25.9
Cocaine	36.0	35.5	38.3	37.3	36.5	42.9	42.2	44.1	44.4	43.9	29.3	29.8	32.2	29.3	26.8
Marijuana/Hashish	23.2	21.8	20.4	18.1	17.7	15.1	14.6	14.2	11.8	11.9	31.1	27.9	26.9	25.0	25.3
Heroin	6.1	5.7	6.6	6.3	6.2	7.1	6.3	7.7	7.3	7.8	5.1	5.3	5.5	5.3	4.1
Other Opiates	2.4	3.0	3.3	3.5	4.2	1.3	1.5	1.6	1.7	2.1	3.4	4.4	5.2	5.6	6.9
All Other	5.8	8.2	5.9	6.1	7.4	2.4	2.9	3.0	3.1	5.8	9.2	12.7	8.9	9.4	9.4

¹Rates for 2004 are not annual; they are for January-June only.
²Secondary substance totals equal more than 100 percent because they include secondary and tertiary substances.
 SOURCE: Alcohol and Drug Abuse Administration, Maryland Department of Health and Mental Hygiene.

Exhibit 3. Characteristics of Primary Smoked Cocaine (Crack) Treatment Admissions in Baltimore, by Percent: 2000–1H 2004

	Total PMSA				Baltimore City				PMSA excluding Baltimore City						
	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
(Number of Admissions)	(2,585)	(2,616)	(3,519)	(3,595)	(1,745)	(1,289)	(1,318)	(2,077)	(2,131)	(1,171)	(1,296)	(1,298)	(1,442)	(1,464)	(574)
Primary Use of Substance	9.5	9.3	10.2	10.1	11.4	9.6	10.2	11.7	11.3	13.5	9.4	8.6	8.6	8.7	8.7
Sex															
Male	55.4	52.7	52.6	56.8	54.7	48.0	46.6	47.7	52.1	50.4	62.7	58.9	59.7	63.7	63.6
Female	44.6	47.3	47.4	43.2	45.3	52.0	53.4	52.3	47.9	49.6	37.3	41.1	40.3	36.3	36.4
Race/Ethnicity															
White	31.6	32.5	29.3	31.0	29.9	12.6	11.6	11.5	11.8	15.0	50.5	53.7	54.9	58.9	60.3
African-American	67.0	66.2	69.0	67.3	68.6	86.7	87.3	87.6	87.1	84.1	47.5	44.8	42.4	38.5	37.1
Hispanic	0.7	0.5	0.9	1.1	0.8	0.3	0.3	0.6	0.8	0.5	1.2	0.8	1.4	1.6	1.4
Other	0.7	0.8	0.7	0.6	0.7	0.5	0.8	0.3	0.3	0.4	0.8	0.8	1.2	1.0	1.2
Age at Admission															
Younger than 18	0.5	0.8	0.6	0.6	1.1	0.3	0.9	0.5	0.6	1.0	0.7	0.7	0.8	0.7	1.2
18-25	6.6	7.2	5.2	5.7	5.1	4.3	4.3	2.5	3.7	3.4	8.8	10.3	9.0	8.6	8.6
26-34	33.9	25.6	24.3	21.3	19.8	31.4	22.3	20.6	16.7	17.3	36.4	29.0	29.6	28.0	25.0
35 and older	59.0	66.3	69.9	72.3	74.0	63.9	72.5	76.4	78.9	78.2	54.2	60.0	60.7	62.7	65.3
(Median Age at Admission)	(36 yrs)	(37 yrs)	(38 yrs)	(39 yrs)	(39 yrs)	(37 yrs)	(38 yrs)	(39 yrs)	(40 yrs)	(40 yrs)	(35 yrs)	(36 yrs)	(37 yrs)	(37 yrs)	(38 yrs)
Daily Use	35.1	36.5	40.8	40.9	45.1	44.3	43.0	50.1	48.8	48.3	26.0	30.0	27.3	29.4	38.5
First Treatment Episode	42.4	40.0	42.0	38.9	37.4	39.1	39.6	40.6	38.8	35.2	45.6	40.3	43.9	39.1	41.8
(Median Duration of Use) ¹	(10 yrs)	(11 yrs)	(12 yrs)	(12 yrs)	(12 yrs)	(10 yrs)	(10 yrs)	(12 yrs)	(12 yrs)	(13 yrs)	(10 yrs)	(11 yrs)	(12 yrs)	(13 yrs)	(11 yrs)
Criminal Justice Referral	40.5	36.5	31.7	31.7	30.2	31.3	29.4	25.4	26.8	28.3	49.7	43.8	40.7	38.9	34.1
Secondary Substance ²															
None	31.0	31.0	30.2	32.3	31.3	34.6	35.7	30.9	35.1	31.4	27.4	26.2	29.1	28.1	31.2
Alcohol	47.8	48.5	47.9	46.4	45.0	41.7	43.2	45.2	42.4	42.2	53.9	53.9	51.7	52.3	50.7
Cocaine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Smoked	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Injected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Intranasal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Marijuana/hashish/THC	28.5	26.2	23.5	21.2	21.7	23.5	20.6	20.2	17.6	18.8	33.6	31.9	28.4	26.4	27.7
Heroin	17.7	18.3	22.5	21.1	20.1	23.8	24.1	28.1	25.2	25.0	11.6	12.5	14.5	15.1	10.1
Injected	2.0	2.9	2.9	3.7	3.5	2.0	2.6	2.9	3.4	3.7	2.0	3.2	2.8	4.2	3.1
Intranasal	13.2	13.6	17.7	15.5	15.2	19.6	20.0	23.3	19.5	20.0	6.9	7.2	9.7	9.6	5.6
Other opiates	0.9	1.5	1.6	2.0	2.6	0.2	0.7	1.0	0.8	1.0	1.5	2.4	2.5	3.8	5.7
All other	3.1	3.9	2.6	2.5	4.7	1.0	0.9	1.0	0.9	5.2	5.1	6.9	4.9	4.8	3.7

¹ For first-time treatment admissions.

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

- Quantity is zero

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

Exhibit 4. Characteristics of Primary and Secondary Cocaine Treatment Admissions, by Route of Administration, in Baltimore, by Percent: 1H 2004

Characteristic	Smoked Cocaine		Injected Cocaine		Intranasal Cocaine	
	Total	Primary / Tertiary	Total	Primary / Tertiary	Total	Primary / Tertiary
(Number of Admissions)	(4,579)	(1,745)	(1,836)	(137)	(1,247)	(285)
Sex						(962)
Male	49.6	54.7	61.6	63.5	69.0	68.4
Female	50.4	45.3	38.4	36.5	31.0	31.6
Race/Ethnicity						
White	28.0	29.9	42.8	46.0	50.5	54.7
African-American	70.4	68.6	55.4	53.3	46.5	41.8
Hispanic	0.9	0.8	1.0	-	1.4	3.2
Other	0.7	0.7	0.9	0.7	1.5	0.4
Age at Admission						
Younger than 18	0.9	1.1	0.2	0.7	4.8	8.4
18-25	6.2	5.1	15.2	16.1	17.6	15.1
26-34	21.5	19.8	20.4	18.2	21.8	19.3
35 and older	71.5	74.0	64.2	65.0	55.8	57.2
Daily Use	45.8	45.1	51.8	62.8	30.5	30.9
First Treatment Episode	31.3	37.4	25.2	39.4	42.4	46.7
Criminal Justice Referral	30.5	30.2	25.2	25.5	38.1	39.6
Urbanicity						
Baltimore City	69.4	67.1	71.8	71.5	47.9	43.2
Suburban Counties	29.5	32.9	28.2	28.5	52.1	56.8
Primary or Secondary Substance ²		Secondary Substance ²		Secondary Substance ²		Secondary Substance ²
None		31.3		13.9		23.5
Alcohol		45.0		30.7		54.7
Marijuana/hashish/THC		21.7		12.4		27.4
Heroin		20.1		64.2		15.1
Injected		3.5		59.1		2.1
Snorted		15.2		2.9		11.2
Other		1.4		2.2		1.8
Other opiates		2.6		1.5		3.5
All other		4.7		5.8		9.5
Primary Substance		Primary Substance		Primary Substance		Primary Substance
None		n/a		n/a		n/a
Alcohol		21.0		3.4		26.9
Marijuana/hashish/THC		3.0		0.4		7.7
Heroin		-		-		-
Injected		19.6		91.8		14.4
Snorted		51.8		2.0		42.4
Other		2.4		0.7		3.5
Other opiates		1.6		0.8		3.3
All other		0.6		0.9		1.6

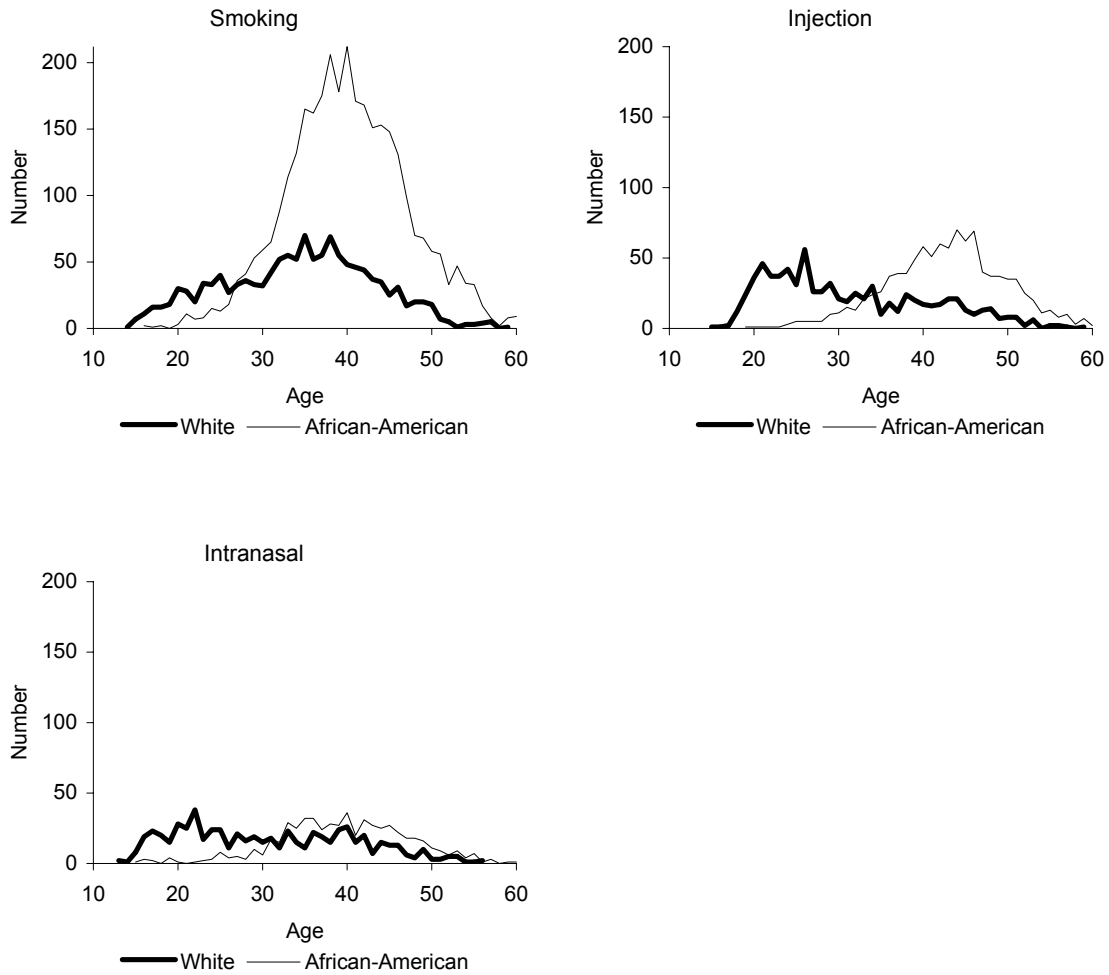
¹For first-time treatment admissions.

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

- Quantity is zero

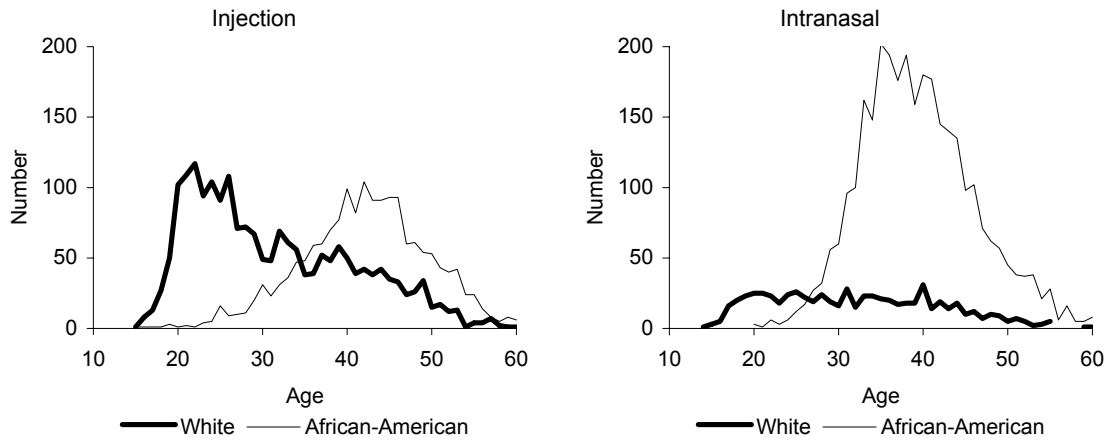
SOURCE: Based on data from Alcohol and Drug Abuse Administration, Maryland Department of Health and Mental Hygiene.

Exhibit 5. Numbers of Primary, Secondary, and Tertiary Cocaine Treatment Admissions in Baltimore, by Route of Administration, Age, and Race: First Half of 2004



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

Exhibit 6. Numbers of Primary Heroin Treatment Admissions in Baltimore, by Route of Administration, Age, and Race: First Half of 2004



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

Exhibit 7. Characteristics of Primary Intranasal Heroin Treatment Admissions in Baltimore, by Percent: 2000–1H 2004

Characteristic	Total PMSA				Baltimore City				PMSA excluding Baltimore City						
	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
(Number of Admissions)	(6,679)	(6,961)	(8,810)	(8,803)	(3,803)	(4,686)	(4,588)	(5,917)	(6,215)	(2,883)	(1,993)	(2,373)	(2,893)	(2,588)	(920)
Primary Use of Substance	24.6	24.8	25.6	24.6	24.9	35.0	35.6	33.5	33.1	33.2	14.5	15.6	17.2	15.3	13.9
Sex															
Male	52.9	52.4	55.8	54.0	54.7	48.0	48.7	53.3	52.0	52.7	64.4	59.6	60.9	58.7	61.3
Female	47.1	47.6	44.2	46.0	45.3	52.0	51.3	46.7	48.0	47.3	35.6	40.4	39.1	41.3	38.7
Race/Ethnicity															
White	16.8	17.1	17.7	16.9	17.4	6.8	6.8	7.5	8.1	7.8	40.3	37.0	38.6	38.2	47.5
African-American	82.2	81.8	81.1	81.9	81.4	92.5	92.7	91.7	91.0	91.1	58.1	60.7	59.6	60.1	50.9
Hispanic	0.4	0.5	0.6	0.7	0.7	0.3	0.2	0.4	0.6	0.6	0.8	1.2	1.0	0.9	0.8
Other	0.5	0.6	0.5	0.5	0.6	0.4	0.3	0.4	0.3	0.5	0.9	1.1	0.8	0.9	0.9
Age at Admission															
Younger than 18	0.4	0.4	0.7	0.6	0.7	0.1	0.2	0.4	0.2	0.4	1.1	0.9	1.4	1.5	1.6
18-25	8.6	8.2	7.4	6.2	5.7	4.8	4.5	3.8	2.9	2.4	17.5	15.3	14.8	14.1	16.2
26-34	41.7	38.2	32.0	26.8	23.7	41.5	38.1	32.2	26.1	22.9	42.2	38.5	31.5	28.4	26.3
35 and older	49.3	53.2	59.9	66.4	69.9	53.6	57.3	63.6	70.8	74.4	39.2	45.3	52.3	56.0	55.9
(Median Age at Admission)	(34 yrs)	(35 yrs)	(37 yrs)	(37 yrs)	(38 yrs)	(35 yrs)	(36 yrs)	(37 yrs)	(38 yrs)	(39 yrs)	(32 yrs)	(34 yrs)	(35 yrs)	(36 yrs)	(35 yrs)
Daily Use	71.0	70.4	70.4	70.8	72.4	76.7	73.7	73.8	73.1	73.2	57.7	64.0	63.4	65.5	69.9
First Treatment Episode	38.6	37.5	37.5	33.1	33.5	34.8	35.9	37.9	30.2	29.3	47.4	40.6	36.7	39.8	46.6
(Median Duration of Use) ¹	(9 yrs)	(10 yrs)	(11 yrs)	(12 yrs)	(13 yrs)	(10 yrs)	(11 yrs)	(12 yrs)	(13 yrs)	(14 yrs)	(8 yrs)	(9 yrs)	(9 yrs)	(10 yrs)	(9 yrs)
Criminal Justice Referral	31.6	31.3	29.2	28.9	30.9	29.0	31.7	32.0	31.8	33.4	37.7	30.5	23.6	21.9	22.9
Secondary Substance ²															
None	35.5	33.5	29.5	31.8	31.6	35.5	35.4	30.6	29.6	28.0	35.7	29.8	27.4	37.1	42.6
Alcohol	24.5	27.2	27.1	25.1	24.0	24.2	26.2	26.0	26.5	26.2	25.1	29.0	29.2	21.8	17.1
Cocaine	45.8	47.4	51.0	51.2	50.8	48.4	49.3	53.5	56.3	56.6	39.5	43.8	45.9	38.8	32.6
Smoked	29.3	32.7	36.1	37.7	38.6	33.6	36.9	40.3	42.8	44.8	19.2	24.6	27.4	25.2	19.0
Injected	0.6	0.5	0.5	1.0	0.9	0.5	0.5	0.5	1.1	1.1	1.0	0.5	0.6	0.7	0.2
Intranasal	15.5	13.7	14.1	12.1	10.7	14.0	11.4	12.4	11.9	10.1	19.2	18.0	17.6	12.4	12.6
Marijuana/hashish/THC	17.1	15.8	16.7	13.3	11.6	14.3	12.6	14.5	11.5	9.9	23.8	21.8	21.3	17.6	17.0
Heroin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Injected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Intranasal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other opiates	2.2	2.9	3.3	3.0	3.5	1.2	1.3	1.3	1.3	1.7	4.6	6.1	7.5	7.1	9.2
All other	2.0	2.4	2.6	2.2	4.7	1.3	1.1	1.3	1.4	5.1	3.6	4.9	5.2	4.3	3.7

¹ For first-time treatment admissions.

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

- Quantity is zero

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

Exhibit 8. Characteristics of Primary Injected Heroin Treatment Admissions in Baltimore, by Percent: 2000–1H 2004

Characteristic	Total PMSA				Baltimore City				PMSA excluding Baltimore City						
	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
(Number of Admissions)	(6,436)	(6,244)	(8,503)	(9,040)	(3,739)	(3,713)	(3,311)	(4,624)	(5,064)	(2,235)	(2,723)	(2,933)	(3,879)	(3,976)	(1,504)
Primary Use of Substance	23.7	22.3	24.7	25.3	24.5	27.7	25.7	26.1	26.9	25.8	19.8	19.3	23.1	23.5	22.8
Sex															
Male	58.0	60.7	58.6	58.0	57.8	55.2	58.2	55.6	55.7	56.4	61.9	63.4	62.1	60.9	59.8
Female	42.0	39.3	41.4	42.0	42.2	44.8	41.8	44.4	44.3	43.6	38.1	36.6	37.9	39.1	40.2
Race/Ethnicity															
White	44.9	48.7	50.3	50.2	53.4	24.8	27.2	30.7	31.6	34.6	72.2	72.9	73.6	74.0	81.4
African-American	53.7	49.3	47.8	47.7	44.8	74.3	71.8	67.8	66.4	63.7	25.6	23.9	23.9	23.8	16.6
Hispanic	0.8	1.0	0.9	1.1	1.1	0.5	0.5	0.6	1.1	1.1	1.2	1.5	1.3	1.2	1.1
Other	0.7	1.1	1.0	1.0	0.7	0.5	0.5	0.8	0.9	0.6	1.0	1.7	1.2	1.1	0.9
Age at Admission															
Younger than 18	1.0	1.0	1.0	0.7	0.7	0.5	0.5	0.8	0.4	0.5	1.5	1.6	1.2	1.2	0.9
18-25	17.9	19.6	20.6	20.2	19.8	8.4	10.0	10.7	10.5	10.9	30.8	30.4	32.5	32.5	33.0
26-34	23.4	23.4	23.0	22.0	22.5	21.8	21.0	20.8	19.5	18.9	25.5	26.2	25.6	25.1	27.8
35 and older	57.8	56.0	56.4	57.1	57.0	69.2	68.6	67.7	69.6	69.6	42.1	41.8	40.6	41.2	38.3
(Median Age at Admission)	(37 yrs)	(36 yrs)	(36 yrs)	(37 yrs)	(37 yrs)	(39 yrs)	(39 yrs)	(39 yrs)	(40 yrs)	(40 yrs)	(32 yrs)	(32 yrs)	(31 yrs)	(31 yrs)	(30 yrs)
Daily Use	74.9	74.4	75.3	75.9	75.7	80.3	77.8	80.2	79.1	76.6	67.4	70.5	69.4	71.7	74.2
First Treatment Episode	32.6	31.3	30.9	26.6	26.3	30.9	31.5	30.5	24.3	21.9	35.1	31.1	31.3	29.5	32.8
(Median Duration of Use) ¹	(12 yrs)	(10 yrs)	(10 yrs)	(12 yrs)	(11 yrs)	(16 yrs)	(15 yrs)	(15 yrs)	(17 yrs)	(17 yrs)	(7 yrs)	(7 yrs)	(6 yrs)	(7 yrs)	(7 yrs)
Criminal Justice Referral	24.2	23.3	18.8	19.2	21.3	21.4	24.4	20.6	20.4	23.3	28.0	22.1	16.7	17.7	18.5
Secondary Substance ²															
None	28.1	24.6	23.7	25.0	24.8	25.7	22.3	21.1	21.9	19.6	31.3	27.2	26.8	29.0	32.7
Alcohol	23.0	26.5	24.0	23.5	23.1	24.5	29.2	24.7	25.7	25.4	21.0	23.5	23.2	20.7	19.5
Cocaine	58.7	61.3	63.1	61.0	60.7	64.9	67.7	69.5	68.2	69.3	50.2	54.0	55.6	51.9	47.9
Smoked	9.0	10.0	11.2	12.6	14.8	9.0	10.1	12.2	13.7	15.5	8.9	9.8	10.0	11.3	13.8
Injected	46.1	47.5	47.9	44.4	41.7	53.2	54.6	54.5	51.6	50.2	36.4	39.4	40.0	35.3	29.1
Intranasal	2.9	3.3	3.5	3.4	3.7	2.0	2.3	2.3	2.3	3.1	4.2	4.4	4.8	4.8	4.7
Marijuana/hashish/THC	12.2	12.2	12.2	10.6	11.2	7.9	7.8	7.6	6.0	7.2	18.1	17.1	17.8	16.5	17.1
Heroin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Injected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Intranasal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other opiates	3.2	3.8	3.8	4.0	4.8	1.6	1.7	2.1	2.2	2.3	5.5	6.2	5.7	6.2	8.4
All other	4.1	4.9	4.9	5.0	6.0	2.4	3.0	3.0	3.5	6.0	6.4	7.1	7.1	6.8	6.1

¹ For first-time treatment admissions.

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

- Quantity is zero

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

Exhibit 9. Characteristics of Narcotic Painkiller (Primary, Secondary, or Tertiary) Admissions in Baltimore, by Percent: 2000–1H 2004

Characteristic	Total PMSA				Baltimore City				PMSA excluding Baltimore City						
	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
(Number of Admissions)	(960)	(1,413)	(1,907)	(2,180)	(1,056)	(190)	(264)	(451)	(482)	(267)	(770)	(1,149)	(1,456)	(1,698)	(789)
Primary Use of Substance															
Sex															
Male	55.0	56.5	54.6	56.5	55.7	45.3	51.5	45.5	50.6	53.6	57.4	57.7	57.5	58.2	56.4
Female	45.0	43.5	45.4	43.5	44.3	54.7	48.5	54.5	49.4	46.4	42.6	42.3	42.5	41.8	43.6
Race/Ethnicity															
White	87.3	88.8	86.6	87.2	88.3	62.6	73.5	68.7	65.1	72.3	93.4	92.3	92.1	93.5	93.7
African-American	10.6	8.6	10.9	9.9	9.9	34.2	24.6	29.7	30.7	24.0	4.8	5.0	5.0	4.0	5.2
Hispanic	0.6	1.3	1.5	1.6	1.1	-	1.5	-	2.7	2.6	0.8	1.3	2.0	1.2	0.6
Other	1.5	1.2	1.0	1.3	0.7	3.2	0.4	1.6	1.5	1.1	1.0	1.4	0.9	1.2	0.5
Age at Admission															
Younger than 18	5.3	6.3	6.1	6.4	6.3	13.3	15.2	8.0	9.4	6.7	3.3	4.3	5.4	5.6	6.1
18-25	16.0	20.4	23.7	27.5	23.4	17.6	17.9	22.5	20.3	23.2	15.6	20.9	24.1	29.5	23.4
26-34	25.3	24.1	23.4	21.7	23.6	22.3	20.5	27.8	21.3	22.8	26.1	24.9	22.0	21.8	23.8
35 and older	53.4	49.3	46.8	44.4	46.8	46.8	46.4	41.6	49.0	47.2	55.0	49.9	48.4	43.1	46.6
(Median Age at Admission)	(35 yrs)	(34 yrs)	(33 yrs)	(32 yrs)	(33 yrs)	(33 yrs)	(33 yrs)	(32 yrs)	(34 yrs)	(33 yrs)	(36 yrs)	(34 yrs)	(34 yrs)	(32 yrs)	(33 yrs)
Daily Use	51.4	71.1	65.0	66.6	68.2	59.1	73.5	72.5	75.2	76.5	64.4	70.6	62.8	64.2	65.4
First Treatment Episode	42.1	42.8	40.6	40.6	41.8	47.9	50.0	32.8	36.7	35.6	40.6	41.2	43.0	41.7	43.9
(Median Duration of Use) ¹	(5 yrs)	(3 yrs)	(3 yrs)	(4 yrs)	(4 yrs)	(5 yrs)	(3 yrs)	(3 yrs)	(3 yrs)	(4 yrs)	(5 yrs)	(3 yrs)	(4 yrs)	(4 yrs)	(4 yrs)
Criminal Justice Referral	14.6	16.0	13.0	13.8	11.7	18.4	19.7	10.0	13.1	6.7	13.7	15.2	13.9	14.0	13.4

¹ For first-time treatment admissions.

- Quantity is zero

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

Exhibit 10. Characteristics of Primary Marijuana Treatment Admissions in Baltimore, by Percent: 2000–1H 2004

Characteristic	Total PMSA				Baltimore City				PMSA Excluding Baltimore City						
	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
(Number of Admissions)	(4,240)	(4,422)	(5,094)	(5,349)	(2,225)	(1,550)	(1,588)	(2,157)	(2,342)	(982)	(2,690)	(2,834)	(2,937)	(3,007)	(1,243)
Primary Use of Substance	15.6	15.8	14.8	15.0	14.6	11.6	12.3	12.2	12.5	11.3	19.6	18.7	17.5	17.8	18.8
Sex															
Male	81.9	82.2	81.2	82.3	82.6	79.5	80.1	78.6	80.9	81.8	83.3	83.3	83.0	83.4	83.3
Female	18.1	17.8	18.8	17.7	17.4	20.5	19.9	21.4	19.1	18.2	16.7	16.7	17.0	16.6	16.7
Race/Ethnicity															
White	50.6	49.3	45.3	43.3	43.5	29.2	23.3	22.3	19.1	17.5	62.8	63.9	62.3	62.1	64.0
African-American	46.2	47.6	51.4	53.4	52.5	68.7	75.1	75.9	78.6	80.2	33.2	32.2	33.4	33.8	30.7
Hispanic	1.6	1.5	1.6	1.7	2.0	1.0	0.8	0.8	1.4	1.7	1.9	1.9	2.2	2.0	2.3
Other	1.7	1.5	1.7	1.6	1.9	1.0	0.8	1.1	0.9	0.5	2.1	1.9	2.1	2.0	3.1
Age at Admission															
Younger than 18	47.9	47.9	46.9	44.0	42.8	56.9	56.4	58.4	51.5	48.4	42.8	43.1	38.5	38.1	38.5
18-25	30.9	31.8	33.6	36.4	36.0	23.3	25.2	24.5	29.8	31.7	35.3	35.5	40.3	41.5	39.3
26-34	11.6	11.1	10.7	11.2	12.4	10.7	9.5	9.3	11.0	12.9	12.1	12.0	11.8	11.3	11.9
35 and older	9.6	9.2	8.7	8.5	8.9	9.2	9.0	7.9	7.7	7.0	9.8	9.4	9.4	9.1	10.3
(Median Age at Admission)	(18 yrs)	(18 yrs)	(18 yrs)	(18 yrs)	(19 yrs)	(17 yrs)	(17 yrs)	(17 yrs)	(17 yrs)	(18 yrs)	(18 yrs)	(18 yrs)	(19 yrs)	(19 yrs)	(19 yrs)
Daily Use	29.3	36.4	37.9	36.4	35.3	44.1	49.5	48.7	47.8	47.1	20.7	29.0	30.0	27.6	25.9
First Treatment Episode	71.0	71.2	69.6	66.9	65.0	72.6	76.8	72.3	67.5	61.8	70.0	68.1	67.7	66.4	67.5
(Median Duration of Use) ¹	(4 yrs)	(4 yrs)	(4 yrs)	(4 yrs)	(4 yrs)	(4 yrs)	(4 yrs)	(4 yrs)	(4 yrs)	(5 yrs)	(4 yrs)	(4 yrs)	(4 yrs)	(4 yrs)	(4 yrs)
Criminal Justice Referral	64.9	64.4	64.2	63.1	61.9	62.8	61.8	60.5	59.3	60.8	66.2	65.9	67.0	66.1	62.8
Secondary Substance ²															
None	28.8	32.3	34.2	36.5	39.1	29.2	32.6	35.6	39.6	44.0	28.6	32.1	33.2	34.1	35.3
Alcohol	62.4	58.7	56.2	55.2	52.4	60.1	58.7	55.3	53.1	47.3	63.7	58.6	57.0	56.8	56.4
Cocaine	11.0	8.9	9.3	7.9	7.9	12.3	9.3	8.4	6.9	7.6	10.3	8.8	9.9	8.7	8.0
Smoked	4.8	3.9	3.9	3.6	3.8	5.5	3.6	3.3	3.2	4.3	4.4	4.1	4.4	3.8	3.5
Injected	0.6	0.5	0.6	0.7	0.3	0.9	0.2	0.8	0.6	0.3	0.4	0.7	0.4	0.7	0.3
Intranasal	4.9	3.8	4.0	3.3	3.3	4.8	4.5	2.9	2.2	2.3	5.0	3.5	4.9	4.1	4.1
Marijuana/hashish/THC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heroin	5.2	4.2	4.6	3.6	3.3	7.5	4.7	4.7	3.6	3.7	3.9	3.9	4.5	3.6	3.0
Injected	1.2	1.0	1.0	1.1	1.1	1.6	0.6	1.0	1.0	1.3	0.9	1.2	1.1	1.2	1.0
Intranasal	3.2	2.7	2.9	2.0	1.7	4.8	3.3	2.9	2.0	1.7	2.3	2.3	2.9	2.0	1.7
Other opiates	1.3	2.0	2.1	2.2	2.8	1.6	2.1	1.4	1.6	2.0	1.1	2.0	2.6	2.7	3.4
All other	8.2	11.2	8.8	8.9	7.5	4.8	6.9	7.5	7.8	6.9	10.1	13.7	9.8	9.7	8.0

¹For first-time treatment admissions.

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

- Quantity is zero

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

Patterns and Trends in Drug Abuse: Greater Boston

Daniel P. Dooley¹

ABSTRACT

Heroin, cocaine, marijuana, and certain narcotic analgesics are the dominant drugs of abuse in the greater Boston area. Though indicators show continued high levels of abuse of these drugs, budget cut-backs have contributed to an 18-percent reduction in overall treatment admissions in the past year (FY 2003 to FY 2004) and a 22-percent reduction over the past 2 years. After years of continued growth, the most recent heroin indicators show some signs of stabilization at very high levels. Heroin was indicated more than any other drug (excluding alcohol) in preliminary unweighted ED data for the first half of 2004, totaling 1,491 reports. In 2002, heroin/morphine was indicated in 46 percent of the 419 drug abuse deaths. Heroin treatment admissions have steadily increased during the past 8 years, accounting for close to one-half of all primary drug admissions in FY 2004. Cocaine was indicated in 29 percent of the drug abuse deaths (second only to heroin/morphine) in 2002. Preliminary unweighted first-half 2004 ED data show cocaine as the second most indicated drug (excluding alcohol), at 1,338 reports. Cocaine treatment percentages remained fairly stable, with 23 percent of those seeking treatment reporting current (past-month) cocaine use in FY 2004. Marijuana treatment percentages were stable, with 10 percent of those seeking treatment reporting current (past-month) marijuana use in FY 2004. Boston's drug abuse indicators continue to show growing levels of narcotic analgesic abuse fueled primarily by oxycodone (including derivatives such as OxyContin) and hydrocodone. Narcotic analgesics accounted for nearly one in four (24 percent) single-drug deaths in 2002, up 100 percent from 2000. The Other Opiate category of primary treatment admissions reached the same proportion as marijuana by increasing tenfold from FY 1997 to FY 2004. Samples of oxycodone seized during drug arrests and oxycodone Helpline call mentions continued to show dramatic increases. Though the numbers are small, indicators suggest a growing level of methamphetamine abuse in Boston. Methamphetamine primary treatment admissions increased tenfold from FY 2001 to FY 2004, as did the number of seized amphetamine (including methamphetamine) samples from 2000 to 2003. In 2003, 263 HIV and AIDS

cases were diagnosed in Boston. Primary transmission risk of these cases included 12 percent who were IDUs, 5 percent who had sex with IDUs, and 35 percent with an unknown/undetermined transmission status.

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 589,141 residents of the city of Boston. The racial composition is 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
- Declining State revenues producing social service cutbacks
- A high number of homeless individuals seeking shelter

Data Sources

Data sources for this report include the following:

- **Emergency department (ED) drug mentions 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. DAWN weighted estimates for 2002 are presented in this paper and are the most recent final estimates. In 2003, OAS instituted a redesigned ED system. The data from the new system cannot be compared with those for 2002 and before. In the Boston metropolitan area, 29 of the 41 eligible hospitals are in the new DAWN sample. The EDs in the new sample total 34. (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 2004, updated on December 12–13, 2004. The 2004 data are unweighted. They are not estimates for the Boston area and cannot be used for comparison with future data. Only weighted data released by SAMHSA can be used in trend analysis. The data reported here are incomplete. Between 18 and 20 EDs reported each month over the 6-month period. Since all DAWN cases are reviewed for quality control, and cases may be corrected or deleted based on the review, the data are subject to change. Data presented in this paper represent drug reports in drug-related visits in the first 6 months of 2004. 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 2002 for a Boston metropolitan area consisting of five Massachusetts counties: Essex, Middlesex, Norfolk, Plymouth, and Suffolk.
- **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) 1997 through FY 2004 (July 1, 1996, through June 30, 2004) were provided by the Massachusetts Department of Public Health (DPH), Bureau of Substance Abuse Services.

- **Analysis of seized drug samples** for a Boston region comprising the cities of Boston, Brookline, Chelsea, Revere, and Winthrop (CHNA 19), for January 1, 1997, through June 30, 2003, was provided by the DPH Drug Analysis Laboratory.
- **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 2004 were provided by the Massachusetts Substance Abuse Information and Education Helpline.
- **Drug arrests data** for the city of Boston for 1997–2003 were provided by the Boston Police Department Drug Control Unit and Office of Research and Evaluation.
- **Drug price, purity, and availability data** for New England as of November 2003 were provided by the Drug Enforcement Administration (DEA), New England Field Division Intelligence Group.
- **Heroin overdose calls** to Boston Emergency Medical Services (BEMS) were reported for the city of Boston for 2003. Overdose calls require at least two of the following: pinpoint pupils, nodding off, track marks, drug paraphernalia, patient admission, depressed respiratory effort, witness report, effective administration of Narcan.
- **Youth Risk Behavior Survey data** were provided by the Boston Public School Department and included self-reported drug use prevalence among Boston public high school students in 2003.
- **Data on Massachusetts pharmacy OxyContin thefts** for 2000 through 2004 were provided by the Massachusetts Pharmacy Board of Registration.
- **Acquired immunodeficiency syndrome (AIDS) and human immunodeficiency virus (HIV) data** by year between 1993 and 2003, and cumulative data through January 1, 2005, were provided by the DPH AIDS Surveillance Program.

DRUG ABUSE PATTERNS AND TRENDS

Cocaine/Crack

Cocaine and crack are heavily abused drugs in Boston. The most recent cocaine/crack indicators are fairly stable and show continued levels of high use and abuse. There are signs that the primary using population is aging.

In 2002, cocaine was indicated in 121 of the 419 drug abuse deaths in Boston (28.9 percent)—second only to heroin/morphine. Thirty-three of those were single-drug deaths.

The cocaine/crack ED mentions rate of 156 per 100,000 population in 2002 was similar to that of the 2 previous years. Exhibit 1 shows 5,611 cocaine ED mentions in 2002.

The 2002 ED rates by gender show that the cocaine/crack rate for males was almost 1.8 times the rate for females (200 vs. 113 per 100,000 population). The highest rate by an age group (358 per 100,000 population) occurred among those age 26–34. Within that group, those age 26–29 experienced a rate of 403 per 100,000 population. A 2-year rate increase of 76 percent was reported among those age 18–25. Similarly, a 2-year rate increase of 70 percent occurred among those age 45–54.

In the unweighted data accessed from DAWN *Live!* for the first half of 2004, cocaine reports totaled 1,338.

Greater Boston cocaine/crack admissions to State-funded treatment programs continue to decline. In FY 2004, there were 1,470 treatment admissions (7 percent of all admissions) with clients reporting cocaine or crack as their primary drug and 4,540 mentions (23 percent of all admissions) of current cocaine or crack use (exhibit 2). The percent reporting cocaine/crack as their primary drug decreased 10 percent from FY 2003, 16 percent from FY 2002, and 62 percent from FY 1997. The percent of mentions of current (past-month) cocaine/crack use decreased 6 percent from FY 2003 and 33 percent from FY 1997.

Exhibit 3 shows the demographic characteristics of admissions to Greater Boston treatment programs in FY 1997–FY 2004. The gender distribution of cocaine/crack primary drug treatment admissions in FY 2004 (57 percent male and 43 percent female) remained stable from FY 2003 (exhibit 4a).

The cocaine primary treatment population continues to age. The mean age of those admitted to co-

caine/crack treatment in FY 2004 was 38.0 years, compared to 32.8 in FY 1997. By FY 2004, 42 percent of cocaine/crack treatment admissions were age 40 and older, compared to 15 percent in FY 1997. This shift is seen across all age groups, with decreasing percentages among those younger than 40 and increasing percentages among those older than 40.

The racial distribution of primary cocaine admissions remained stable from FY 2003 to FY 2004, with 58 percent Black, 27 percent White, and 12 percent Latino.

There were 1,736 Class B (mainly cocaine and crack) drug arrests in 2003 (exhibit 5). Class B arrests accounted for the largest proportion of drug arrests (42 percent) in the city of Boston in 2003, similar to 2002. However, the proportion of Class B arrests decreased 12 percent from 1997 to 2003.

The proportion of Hispanic Class B arrests (17 percent) decreased 26 percent from 2001 to 2003. The proportion of Black Class B arrests (67 percent) increased 10 percent, while the proportion of White Class B arrests (32 percent) decreased 16 percent from 1997. The proportion of Class B arrests of those age 40 and older (26 percent) increased 60 percent from 1997, while arrests for those age 25–39 (44 percent) decreased 16 percent. Arrests for those younger than 20 decreased 24 percent during the same period.

In 2003, 2,739 seized samples of cocaine/crack were analyzed. The proportion of cocaine/crack samples among all drug samples analyzed (30 percent) did not change from 2002, but it has decreased 14 percent from 1997.

Cocaine/crack was self-identified as a substance of abuse in 1,017 calls to the Helpline in FY 2004. The proportion of Helpline calls with mentions of cocaine/crack (18 percent) decreased 9 percent from FY 2003 to FY 2004.

The DEA reports that street cocaine costs \$50–\$90 per gram in Boston (exhibit 6). A rock of crack costs \$10–\$20. Cocaine purity has been decreasing, but availability is “steady” throughout Massachusetts, “especially in inner cities.”

Heroin

Heroin is arguably Boston’s most abused drug. Heroin/morphine was indicated most often among drug abuse deaths, preliminary emergency department data, and treatment admissions. After years of continued growth, some indicators show heroin abuse stabilizing at very high levels.

In 2002, heroin/morphine was indicated in 192 drug abuse deaths—more than any other drug among the 419 total drug abuse deaths (45.8 percent). Sixty of those mentions were single-drug (heroin/morphine only) deaths.

In 2002, the heroin ED mentions rate of 111 per 100,000 population was similar to that of the 2 previous years.

The 2002 ED rates by gender show that the heroin rate for males was more than two times the rate for females (152 vs. 72 per 100,000 population). The highest rate by an age group (311 per 100,000 population) occurred among those age 26–29. A 2-year rate increase of 215 percent was seen among those age 18–19.

In the unweighted data accessed from DAWN *Live!* for the first half of 2004, there were 1,491 heroin reports.

BEMS data reveal 716 heroin overdose calls for medical services in the city during 2003. Of these, 72 percent were for males and 28 percent were for females. Narcan was administered to 41 percent of the patients, and of these, more than 90 percent responded.

In Greater Boston in FY 2004, there were 9,621 treatment admissions (48 percent of all admissions) with clients reporting heroin as their primary drug, and 9,109 mentions (46 percent of all admissions) of current (past-month) heroin use among those admitted to State-funded treatment programs (exhibit 2).

The percent reporting heroin as their primary drug in FY 2004 was stable from FY 2003 but reflected increases of 11 percent from FY 2002 and 68 percent from FY 1997. Similarly, the percent of mentions of current (past-month) heroin use in FY 2004 was stable from FY 2003, but this reflected increases of 7 percent from FY 2002 and 62 percent from FY 1997.

The gender distribution of heroin primary drug treatment admissions in FY 2004 (73 percent male and 27 percent female) represent a slight shift from FY 2003, with a 3-percent decrease in the male proportion and an 8-percent increase in the female proportion (exhibit 4b).

While one heroin treatment cohort is aging, a younger cohort is emerging. As a result, the mean age of those admitted to heroin treatment in FY 2004 was stable at 35.5 years. The percentage of admissions aged 30–39 (32 percent) decreased 10 percent from

FY 2003 and 28 percent from FY 1997. During the same time periods, the percentages of admissions younger than 30 increased 8 percent and 14 percent, and admissions age 40 and older increased 4 percent and 34 percent, respectively.

The FY 2004 racial distribution for heroin admissions (58 percent White, 16 percent Black, and 23 percent Hispanic) continued to reflect a trend of increasing White percentages (up 20 percent from FY 1997) and decreasing Black percentages (down 38 percent from FY 1997) (exhibit 4b). The percentage of heroin admissions reporting being homeless (41 percent) increased 42 percent from FY 1997. Seventy-three percent of those in treatment for heroin as their primary drug of abuse reported needle use in the past year.

There were 939 Class A (mainly heroin and other opiates) drug arrests in 2003 (exhibit 5). The proportion of Class A drug arrests among all drug arrests in the city of Boston in 2003 (23 percent) was stable from 2002 but a decrease of 15 percent from 2001. The proportion of Class A male arrests in 2003 (87 percent) reflected a 4-percent increase from 2002 and an 8-percent increase from 1997. The proportion of Class A arrests among those age 20–24 in 2003 (15 percent) reflected a 63-percent increase from 1997.

In 2003, 1,419 seized samples of heroin (15 percent of all drug samples) were analyzed. The proportion of heroin samples among all drug samples analyzed did not change from 2002 to 2003, but it decreased 19 percent from 2001 to 2003.

Heroin was self-identified as a substance of abuse in 2,230 calls to the Helpline in FY 2004 (representing 40 percent of all calls). The proportion of heroin Helpline call mentions increased 9 percent from FY 2003 to FY 2004.

The DEA reports that in Boston, street heroin costs \$6–\$20 per bag, with an average purity of 40 percent and is “readily available” throughout the New England area (exhibit 6).

Narcotic Analgesics

Narcotic analgesics, including oxycodone and other opiates, are continuing to show alarming increases among the various indicators.

Narcotic analgesics were mentioned 176 times among 419 drug abuse deaths in 2002. Forty-two of those mentions were single-drug deaths, representing 24 percent of all single-drug deaths.

The 2002 narcotic analgesics/combinations rate of 97 ED mentions per 100,000 population was twice the national rate of 46 and fourth highest among all 21 DAWN sites.

In 2002, Boston had the highest oxycodone/combinations ED rate (a subset of the narcotic analgesics/combinations category) among all 21 DAWN sites. Boston's rate of 34 was 3.8 times the national rate of 9 and an increase of 118 percent from 2000.

Preliminary unweighted data from DAWN *Live!* show 1,018 reports of opiates/opioids in the first half of 2004. There were 609 oxycodone reports and 53 reports for hydrocodone.

In FY 2004, there were 781 admissions (4 percent of all admissions) to treatment who identified other opiates/synthetics as the primary drug, and there were 1,529 mentions (8 percent of all admissions) of current other opiate use among those admitted to State-funded treatment programs (exhibit 2).

The percent reporting other opiates/synthetics as their primary drug in FY 2004 reflected a 22-percent increase from FY 2003, a 31-percent increase from FY 2002, and a 1,082-percent increase from FY 1997. Similarly, the percent of mentions of current (past-month) other opiate/synthetic use in FY 2004 reflected increases of 17 percent from FY 2003, 22 percent from FY 2002, and 239 percent from FY 1997.

Drug lab submissions show a 30-percent increase in the number of oxycodone samples from 2002 ($n=212$) to 2003 (275) and a 99-percent increase from 2001 (138) to 2003.

In FY 2004, there were 1,025 calls to the Helpline during which opiates were mentioned (18 percent of all calls). Oxycodone (including OxyContin) was mentioned in 691 calls. Helpline calls with oxycodone mentions in FY 2004 (12 percent of total) reflected increases of 25 percent from FY 2003, 52 percent from FY 2002, and 261 percent from FY 2001. Other narcotic analgesics including methadone, codeine, morphine, Percocet, Vicodin, and Roxicet were mentioned among 401 calls (7 percent of total calls).

Unlike the other opiate indicators, statewide OxyContin thefts continue to decrease in number. There were 33 statewide OxyContin thefts reported by pharmacies during 2004, compared with 62 in 2003, 93 in 2002, and the peak of 139 thefts in 2001. This continued downward trend in the number of thefts most likely does not reflect a real drop in OxyContin demand, but changes in pharmacy supply procedures.

The most recent DEA data reports OxyContin's price at \$1 per milligram on the street (exhibit 6).

Marijuana

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

In Massachusetts, marijuana is not routinely tested and reported among drug abuse death surveillance.

The 2002 marijuana ED rate of 119 per 100,000 population was similar to that of the 2 previous years.

The 2002 marijuana ED rate for males was almost two times the rate for females (156 vs. 83 per 100,000 population). The highest rate by an age group (321 per 100,000 population) occurred among those age 18–25. Within that group, those age 18–19 experienced a rate of 630 per 100,000 population.

The unweighted data from DAWN *Live!* indicate there were 783 reports for marijuana in the first half of 2004.

In FY 2004, there were 857 treatment admissions (4 percent of all admissions) with clients reporting marijuana as their primary drug and 2,056 mentions (10 percent of all admissions) of current (past-month) marijuana use among those admitted to State-funded treatment programs (exhibit 2).

The proportion reporting marijuana as their primary drug in FY 2004 was similar to the proportions in FY 2003, FY 2002, and FY 1997. The percent of mentions of current marijuana use decreased 10 percent from FY 2003 to FY 2004 and 34 percent from FY 1997 to FY 2004.

Though the number of female admissions for marijuana did not change from FY 2003, the proportion of female marijuana primary drug treatment admissions increased 26 percent (from 23 percent to 29 percent) (exhibit 4c). This resulted from a drop in the number of male admissions (from 803 to 608).

The mean age of those admitted to marijuana treatment in FY 2004 was 26.3 years. Sixty-nine percent of admissions to treatment for primary marijuana use were younger than 30. Within this group, there has been a shift since FY 1997 to higher percentages of those aged 19–29 and lower percentage of those aged 18 and younger. The percentage of admissions of those aged 19–29 (52 percent) increased 22 percent from FY 1997 to FY 2004. During the same time-frame, the percentage of those aged 18 and younger (17 percent) decreased 48 percent.

The FY 2004 racial distribution for marijuana admissions (29 percent White, 47 percent Black, and 20 percent Hispanic/Latino) was relatively stable from FY 2003.

Eleven percent of marijuana primary drug admissions reported being homeless in FY 2004.

There were 1,366 Class D (mainly marijuana) drug arrests in 2003 (exhibit 5). The proportion of Class D arrests among all drug arrests (32.7 percent) in the city of Boston in 2003 was stable from 2002, but it reflected a 14-percent increase from 2001.

The proportion of White Class D arrests (32 percent) in 2003 reflected a 12-percent decrease from 2002, a 15-percent decrease from 2001, and a 25-percent decrease from 1997. The proportion of Black Class D arrests (66 percent) increased 7, 9, and 19 percent, respectively, during the same periods.

There were 3,348 seized samples of marijuana, more than any other drug analyzed by the drug lab in 2003. The proportion of marijuana samples analyzed in 2003 (36 percent of all drug samples) was similar to 2002.

Marijuana was self-identified as a substance of abuse in 253 calls to the Helpline in FY 2004 (representing 5 percent of all calls).

The DEA's most recent data reports that marijuana is readily available in Massachusetts and sells for \$800–\$1,500 per pound for “commercial grade.” A marijuana cigarette or joint typically costs \$5 (exhibit 6).

Benzodiazepines

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

Benzodiazepines were mentioned 52 times among the 419 drug abuse deaths in 2002. This number is down considerably from the 136 mentions among 374 drug abuse deaths in 2001.

Boston's 2002 rate of 102 benzodiazepines ED mentions per 100,000 population was highest among all 21 DAWN sites and nearly 2½ times the national rate of 42.

In the unweighted DAWN *Live!* data for the first half of 2004, there were 755 benzodiazepine reports. Clonazepam, alprazolam, lorazepam, and diazepam were the most often indicated benzodiazepines in preliminary ED data for the first half of 2004.

Treatment, arrest, and drug lab data are currently unavailable for benzodiazepines.

In FY 2004, there were 175 calls to the Helpline during which benzodiazepines (including Ativan, Valium, Xanax, Klonopin, Rohypnol, Halcion, and others) were self-identified as substances of abuse (representing 3 percent of all calls). The number and proportion of Helpline call mentions attributable to benzodiazepines remained fairly stable from FY 2000 to FY 2004.

Methylenedioxymethamphetamine (MDMA)

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

In 2002, there were an estimated 116 MDMA ED mentions (down slightly from 140 in 2001) (exhibit 1). Of these, 59 percent were among males and 79 percent were among those younger than 26.

The unweighted data from DAWN *Live!* for the first half of 2004 show only 40 MDMA reports.

Drug lab submissions show the number of MDMA samples peaked at 106 in 2000 then dropped to 56 (fewer than 1 percent of the 9,219 total samples) in 2003.

In FY 2004, there were 24 calls to the Helpline during which MDMA was self-identified as a substance of abuse (representing less than 1 percent of all mentions). The number of Helpline MDMA calls decreased 44 percent from FY 2000 to FY 2004.

The most recent DEA data show that one MDMA tablet costs between \$20 and \$25 retail (exhibit 6). Distributed at clubs and on college campuses, MDMA has remained widely available “in spite of law enforcement seizures.”

Other Drugs

Amphetamines

The 2002 rate of 15 mentions per 100,000 population was the highest amphetamines ED mentions rate that Boston experienced in 8 years of DAWN reporting.

Unweighted DAWN data for the first half of 2004 show 84 amphetamine reports.

The numbers of amphetamine lab samples (methamphetamine included) increased from 2000 to 2002 (totaling 4, 25, and 42, respectively), but they remained

stable at 47 in 2003. The number of Helpline calls with stimulant mentions remained stable from 60 in FY 2003 to 49 in FY 2004.

Methamphetamine

Though still relatively small in number, methamphetamine treatment admissions increased from 5 in FY 2001 to 66 in FY 2003 and 53 in FY 2004.

There were only 13 estimated ED mentions of methamphetamine in 2002 (exhibit 1). This number is similar to each of the 2 previous years.

In the unweighted data for the first half of 2004, there were 14 methamphetamine ED reports.

In FY 2004, there were 14 methamphetamine-related calls to the Helpline, compared to 2 methamphetamine-related calls in FY 2000.

The DEA's most recent data reports that methamphetamine costs \$250 per gram and is available "in limited (user-level) quantities" in New England (exhibit 6). The purity level is unknown.

Ketamine

There were an estimated 13 ketamine ED mentions in 2002. This number is similar to each of the 2 previous years (2000–2001). Only two ketamine ED reports appear in the unweighted DAWN *Live!* data for the first half of 2004. In past years, lab samples for ketamine had shown small but increasing numbers

(20, 18, and 43 samples for 2000–2002, respectively), but they dropped off during 2003 (11 samples). The most recent DEA data show that a vial of ketamine costs \$50 to \$70 (exhibit 6).

Barbiturates

There were an estimated 637 barbiturates ED mentions in 2002. Boston's ED rate of 18 barbiturates mentions per 100,000 population was the highest barbiturates rate among the 8 years of DAWN reporting and 4½ times the national rate of 4.

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

There were few estimated LSD, PCP, or GHB ED mentions in Boston during 2002 (19, 20, and 27, respectively) (exhibit 1). The DEA reports that LSD costs \$5 per dose (exhibit 6). Similarly, a capful of GHB costs \$5.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

In 2003, there were 263 HIV and AIDS cases diagnosed in Boston. The primary risk factor for these cases included 12 percent who were injection drug users (IDUs), 5 percent who had sex with IDUs, and 35 percent with an unknown/undetermined risk factor. As of January 1, 2005, cumulative AIDS cases numbered 6,031. By primary risk factor, these include 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. Estimated Emergency Department Mentions for Selected Drugs as a Percentage of Total Drug Episodes¹: 1995–2002

Drug	1995		1996		1997		1998		1999		2000		2001		2002	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Alcohol-in-comb.	6,297	(39)	5,351	(40)	4,890	(40)	5,130	(38)	4,438	(38)	4,975	(33)	5,818	(35)	5,916	(33)
Cocaine/ Crack	5,267	(33)	4,106	(30)	3,332	(27)	4,526	(33)	3,560	(31)	4,099	(28)	4,933	(29)	5,611	(31)
Marijuana/ Hashish	2,401	(15)	2,127	(16)	1,768	(15)	2,907	(21)	1,960	(17)	2,945	(20)	3,423	(20)	4,273	(24)
Heroin/ Morphine	2,956	(18)	2,729	(20)	2,500	(21)	2,738	(20)	2,861	(25)	3,867	(26)	4,358	(26)	3,999	(22)
Oxycodone/ comb.	276	(2)	241	(2)	231	(2)	247	(2)	294	(3)	598	(4)	948	(6)	1,239	(7)
Hydrocodone/ comb.	85	(<1)	74	(<1)	93	(<1)	97	(<1)	106	(<1)	201	(1)	208	(1)	288	(2)
PCP	81	(<1)	18	(<1)	22	(<1)	21	(<1)	7	(<1)	11	(<1)	23	(<1)	20	(<1)
LSD	184	(1)	82	(<1)	37	(<1)	53	(<1)	44	(<1)	41	(<1)	33	(<1)	19	(<1)
Methampheta- mine	7	(<1)	— ²	— ²	6	(<1)	12	(<1)	14	(<1)	14	(<1)	13	(<1)
MDMA	7	(<1)	9	(<1)	16	(<1)	39	(<1)	87	(<1)	125	(<1)	140	(<1)	116	(<1)
Total drug Episodes	16,065		13,530		12,224		13,656		11,668		14,901		16,853		17,965	
Total drug Mentions	30,026		24,904		22,383		24,875		21,217		25,854		29,795		32,488	

¹Percentage of episodes for which each drug was mentioned (mentions/total drug episodes) rounded to the nearest whole number, except when <1 percent.

²Estimate does not meet standard of precision.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, 2002 (03/2003 update); prepared by the Boston Public Health Commission, Research Office

Exhibit 2. Percentages of Admissions to State-Funded Substance Abuse Treatment Programs by Drug Used in the Past Month in Greater Boston and the Remainder of Massachusetts¹: FY 1997–FY 2004²

Drug Used Past Month	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Greater Boston								
Alcohol	60	59	59	58	56	53	50	47
Heroin and/or Other Opiates	29	34	35	37	42	45	48	49
Heroin	28	33	34	35	39	42	45	46
Other Opiates/Synthetics	2	3	3	4	5	6	7	8
Cocaine and/or Crack	34	30	30	28	25	24	24	23
Cocaine (powder)	22	21	21	20	18	17	18	16
Crack	19	16	15	13	12	11	11	11
Marijuana	16	14	14	13	13	11	11	10
Other ³	8	9	9	10	10	10	11	12
Total (N)	(25,470)	(23,008)	(24,653)	(24,478)	(25,334)	(25,586)	(24,440)	(20,041)
Remainder of Massachusetts								
Alcohol	59	57	56	54	51	50	47	46
Heroin and/or Other Opiates	26	32	32	35	37	38	39	39
Heroin	25	30	31	33	34	34	35	34
Other Opiates/Synthetics	3	4	5	5	6	8	9	11
Cocaine and/or Crack	22	21	21	20	19	19	20	20
Cocaine (powder)	16	16	16	16	15	14	15	15
Crack	12	10	10	10	9	8	9	9
Marijuana	17	18	18	17	16	15	15	15
Other ³	10	10	10	11	11	11	11	14
Total (N)	(77,673)	(76,891)	(87,205)	(90,919)	(92,638)	(95,249)	(88,349)	(79,170)

¹Excluding prisoners and out-of-State admissions.

²Fiscal years (FYs) 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 3. Demographic Characteristics of Admissions to Greater Boston State-Funded Substance Abuse Treatment Programs,¹ by Percent: FY 1997–FY 2004²

Characteristic	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gender								
Male	72	75	74	76	77	77	74	73
Female	28	25	26	24	23	23	26	27
Race								
White	47	49	48	49	48	49	50	54
Black	35	32	33	32	30	29	28	26
Hispanic	14	15	16	16	18	18	18	17
Other	3	4	4	4	4	4	4	3
Age at Admission								
(Average age)	(35.1)	(35.6)	(36.5)	(36.7)	(36.5)	(36.5)	(36.7)	(36.9)
18 and younger	3	3	2	2	2	2	2	2
19–29	25	24	22	21	22	24	24	26
30–39	43	42	41	40	38	37	34	31
40–49	22	23	27	29	29	28	30	30
50 and older	7	8	9	9	9	10	10	11
Marital Status								
Married	10	10	10	10	10	10	10	9
Separated/divorced	22	22	21	19	18	18	18	17
Never married	68	68	69	71	72	72	72	74
Annual Income								
None	56	56	54	59	61	69	68	63
\$1–\$1,000	3	3	4	3	2	2	2	3
\$1,000–\$9,999	26	24	26	21	19	14	14	18
\$10,000 and higher	15	16	16	17	18	16	16	16
Homeless	32	31	31	30	34	37	37	36
Criminal Justice System Involvement	26	26	28	27	26	27	24	23
Mental Health								
No prior treatment	82	80	79	80	81	80	80	78
Prior treatment (counseling or hospitalization)	18	20	21	20	19	20	20	22
Needle Use in Past Year	22	25	26	26	27	32	37	38
Total (N)	(25,470)	(23,008)	(24,653)	(24,478)	(25,334)	(25,586)	(24,440)	(20,041)

¹Excludes prisoners and out-of-State admissions.

²Fiscal years (FYs) 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 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 2004²

Characteristic	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gender								
Male	60	61	59	59	62	63	56	57
Female	40	39	41	41	38	37	44	43
Race								
White	25	24	23	23	26	25	27	27
Black	63	64	63	65	60	61	58	58
Latino	10	10	11	10	12	11	11	12
Other	2	3	3	3	3	3	4	3
Age at Admission (Average age)	(32.8)	(33.6)	(35.2)	(35.5)	(36.0)	(36.7)	(37.1)	(38.0)
18 and younger	1	1	1	<1	1	<1	1	1
19–29	31	28	19	18	15	15	15	13
30–39	53	53	56	55	55	51	49	45
40–49	13	16	21	23	26	29	31	35
50 and older	2	2	4	4	4	5	5	7
Marital Status								
Married	9	10	11	10	11	12	12	10
Separated/divorced	17	19	19	16	17	19	19	21
Never married	75	71	71	74	72	69	70	69
Annual Income								
\$0–\$999	59	57	56	59	58	60	56	54
\$1,000–\$9,999	28	27	29	24	22	23	26	29
\$10,000 and higher	13	17	16	17	21	18	18	17
Homeless	28	26	23	21	23	28	24	24
Criminal Justice System Involvement	20	25	30	29	30	33	31	31
Mental Health Problem	21	22	27	28	29	31	36	36
Needle Use in Past Year	5	6	6	5	7	7	9	8
Total (N)	(4,920)	(3,266)	(3,165)	(2,837)	(2,291)	(2,230)	(1,985)	(1,470)

¹Excludes prisoners and out-of-State admissions.

²Fiscal years (FYs) 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 2004²

Characteristic	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gender								
Male	69	72	72	75	76	77	74	72
Female	31	28	28	25	24	23	26	28
Race								
White	49	48	49	51	50	53	56	61
Black	26	24	24	22	21	19	18	15
Latino	21	22	22	23	25	25	22	21
Other	4	6	5	5	5	4	5	3
Age at Admission								
(Average age)	(34.5)	(34.6)	(35.2)	(35.3)	(35.1)	(34.6)	(35.2)	(35.1)
18 and younger	1	1	1	1	1	1	1	1
19–29	28	29	27	27	29	32	31	33
30–39	45	42	42	40	39	37	35	32
40–49	24	24	25	27	26	24	26	26
50 and older	3	4	6	5	6	6	7	8
Marital Status								
Married	11	11	10	11	10	10	9	7
Separated/divorced	22	21	20	19	17	15	16	16
Never married	68	68	70	71	73	75	75	77
Annual Income								
\$0–\$999	67	69	67	72	73	78	78	74
\$1,000–\$9,999	23	21	23	16	15	11	12	16
\$10,000 and higher	10	10	10	12	12	11	10	10
Homeless	28	25	26	22	29	35	40	39
Criminal Justice System Involvement	16	18	20	19	19	19	16	16
Mental Health Problem	17	17	18	16	16	16	16	18
Needle Use in Past Year	64	63	63	63	58	62	68	68
Total (N)	(7,372)	(8,145)	(8,932)	(9,151)	(10,613)	(11,850)	(12,210)	(10,402)

¹Excludes prisoners and out-of-State admissions.

²Fiscal years (FYs) 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 2004²

Characteristic	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Gender								
Male	76	78	76	73	78	77	77	71
Female	24	22	24	27	22	23	23	29
Race								
White	37	32	28	28	29	27	26	29
Black	39	42	44	47	47	48	49	47
Latino	20	22	23	21	22	20	22	20
Other	4	4	4	4	3	5	4	3
Age at Admission								
(Average age)	(24.0)	(24.2)	(25.1)	(25.4)	(24.3)	(24.8)	(25.2)	(26.3)
18 and younger	33	29	24	19	27	24	22	17
19–29	43	48	50	56	51	50	52	52
30–39	18	18	17	18	16	19	18	21
40–49	5	5	6	5	6	6	7	7
50 and older	1	1	2	2	1	1	2	2
Marital Status								
Married	6	6	4	5	5	6	6	6
Separated/divorced	5	6	6	7	6	7	6	6
Never married	89	89	90	88	90	88	89	88
Annual Income								
\$0–\$999	58	50	59	55	57	60	64	53
\$1,000–\$9,999	28	31	27	27	22	21	21	28
\$10,000 and higher	15	19	14	18	21	19	16	19
Homeless	8	8	9	10	11	12	9	11
Criminal Justice System Involvement	38	47	53	48	48	50	43	44
Mental Health Problem	25	31	23	27	25	29	31	35
Needle Use in Past Year	1	2	2	2	2	2	2	2
Total (N)	(1,119)	(928)	(1,125)	(1,109)	(1,100)	(1,054)	(1,046)	(857)

¹Excludes prisoners and out-of-State admissions.

²Fiscal years (FYs) 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. Boston Police Department Arrests by Substance,¹ by Number and Percent: 1997–2003

Drug Class	1997	1998	1999	2000	2001	2002	2003
	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)
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)
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)
Other	216 (3.5)	226 (4.8)	133 (3.3)	123 (3.3)	111 (3.2)	125 (3.0)	133 (3.2)
Total Drug Arrests	6,143	4,723	4,097	3,770	3,426	4,209	4,174
Total Arrests	27,843	25,481	23,592	22,216	20,470	21,025	20,686
Drug Percentage of Total Arrests	(23.7)	(18.5)	(17.4)	(17.0)	(16.7)	(20.0)	(20.2)

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

Drug	Price	Purity	Availability
Heroin	\$75–\$100 per gram \$60–\$100 per bundle \$6–\$20 per bag	High	Readily
Cocaine (powder)	\$50–\$90 per gram retail	Decreasing	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	\$50–\$70 per vial		
GHB	\$5 per capful		

SOURCES: Price data: *Narcotics Digest Weekly*, Volume 3, Number 52. National Drug Intelligence Center, Department of Justice, December 28, 2004; Purity data: New England Field Division, Drug Enforcement Administration (DEA) as of December 2003. Prepared by the Boston Public Health Commission, Research Office

Patterns and Trends of Drug Abuse in Chicago

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ABSTRACT

Most indicators suggest that heroin and cocaine continue to pose a serious problem for Chicago and Illinois. The rate for heroin ED mentions and the number of heroin-related deaths in 2002 were the highest among the 21 DAWN metropolitan areas. Treatment episodes increased between 2000 and 2003, indicating continued high levels of heroin use. The purity of street-level heroin decreased between 2001 and 2003 from about 24 percent to 16 percent, though ethnographic reports suggest a recent increase. Many cocaine indicators remain the highest for all substances except alcohol. Cocaine-related treatment episodes increased between FYs 2002 and 2003 by 20 percent, and increases in use among students enrolled in the Chicago public schools, especially among eighth graders, were observed in 2002 and 2003. 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. MDMA (ecstasy) ED mentions decreased 60 percent between 2000 and 2002, but increases in use have recently been reported among young African-Americans. LSD and PCP indicators suggest a downward trend in use. The proportion of new AIDS cases attributed to injection drug use peaked at 33 percent in 1996 and then steadily decreased to 24 percent as of 2002. Prospective studies of young heroin users in Chicago conducted by the authors of this report suggest a low HIV and HCV seroprevalence, but many engage in receptive sharing of injecting and snorting equipment, placing them at high risk for acquiring these infections.

INTRODUCTION

Area Description

The 2000 U.S. census estimated the population of Chicago at 2.9 million, Cook County (which includes Chicago) at 5.4 million, and the metropolitan statistical area (MSA) at slightly more than 8 million (ranking third in the Nation). The city population

declined 4 percent between 1970 and 1980 and another 7 percent in the 1980s. Based on 2000 census data, the city population increased about 4 percent between 1990 and 2000. The number of Hispanics living in Chicago increased 38 percent during this period, while the number of Whites and African-Americans declined by 14 and 2 percent, respectively.

According to 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 below the poverty level with children younger than 18 years is 11.4 percent.

Data Sources

During this reporting period, the majority of local and national datasets traditionally used in this report had not been updated. In addition, the Drug Abuse Warning Network (DAWN) recently restructured its data collection methods, and, as a result, estimates produced as of 2003 are not comparable to previous years. Given these limitations, this paper attempts to provide a meaningful summary of previously reported trends and introduces more recent data primarily collected from analytical and ethnographic studies conducted by the authors. Below is a detailed review of the various data sources:

- **Drug-related mortality data** were derived from the DAWN, Office of Applied Studies (OAS), Substance Abuse and Mental Health Services Administration (SAMHSA), mortality system for 1998–2002. The DAWN system covered 56 percent of the MSA jurisdictions and 92 percent of the MSA population in 2000. Data on pediatric toxicity were available from the Illinois Department of Public Health (IDPH) Adverse Pregnancy Outcome Reporting System (APORS) reports through 2002. Data on deaths related to accidental drug poisonings were provided by the Chicago Department of Public Health (1980–2002).

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- **Emergency department (ED) drug mentions data** were provided by DAWN, OAS, SAMHSA, for 1994 through 2002. The 2000 ED data were unavailable for methamphetamine. Also presented in this paper are preliminary unweighted data from the DAWN *Live!* restricted-access online query system administered by OAS, beginning in 2003. The 2003–2004 data represent a redesign of DAWN, and the data are not comparable to those from 2002 and before. The redesigned system has 74 of the 88 eligible hospitals in the Chicago sample, with 76 EDs in the sample. (Some hospitals have more than one ED.) Datasets for the 2 years have similar completeness ratings, though the 2004 sample size is more than three times larger than the 2003 sample. This may be related to several reasons, including limitations associated with implementing a new system in 2003. The 2003–2004 data are incomplete (not all EDs reported each month) and unweighted; they cannot be used as estimates, nor can they be used for comparison with future data. Only weighted data released by SAMHSA can be used for trend analysis. All DAWN cases are reviewed for quality control; based on the review, cases may be corrected or deleted. Therefore, the data presented in this paper are subject to change. The 2003–2004 data were accessed from the DAWN *Live!* update on January 17, 2005, and represent drug reports. 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 on the DAWN Web site <<http://dawninfo.samhsa.gov>>.
- **Treatment data** for the State of Illinois for fiscal years (FYs) 1999–2003 (July 1–June 30) were provided by the Illinois Division of Alcoholism and Substance Abuse (DASA). National and State-specific treatment admissions data for 1992–2002 were provided by the Treatment Episode Data Set (TEDS) maintained by SAMHSA.
- **Arrestee drug testing data** were provided by the Arrestee Drug Abuse Monitoring (ADAM) program, National Institute of Justice (NIJ), and are described in the June 2004 Chicago CEWG report.
- **Incidence data on drug-related calls were provided by** the Illinois Poison Center (IPC) in Chicago for Cook County for 2001 through 2003. The IPC answered more than 93,000 calls in 2003 on household products, herbal products, medication overdoses, adverse reactions to medications, alcohol or drug misuse, occupational accidents, chemical spills, and other poisonings.
- **Price and purity data** were provided by the Drug Enforcement Administration (DEA), Domestic Monitor Program (DMP), for heroin for 1991–2003; the data are preliminary and subject to updating. Price and purity data on drug samples analyzed through November 2004 were provided by the Illinois State Police (ISP), Division of Forensic Science. The Illinois State Police and DEA analysis of methamphetamine lab seizures in Illinois between 2001 and 2003 reported to the Illinois Attorney General were reviewed. The Illinois Criminal Justice Information Authority (ICJIA) provided data on methamphetamine-related arrests. National and Illinois data on drug availability, demand, production, cultivation, and distribution were available from the National Drug Threat Assessment June 2004 and the Illinois Drug Threat Assessment May 2002 reports, National Drug Intelligence Center, U.S. Department of Justice. The Office of National Drug Control Policy (ONDCP) report on Profile of Drug Indicators, Chicago, Illinois, published in April 2004, as well as the National Drug Intelligence Center 2003 Illicit Drug Prices: July 2003–December 2003 report, were reviewed. Data from the National Forensic Laboratory Information System (NFLIS) for FY 2003 and FY 2004 were used to report differences between different drugs in the relative amounts submitted for testing in Illinois and 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 national Monitoring the Future (MTF) Study, the Youth Risk Behavior Surveillance System (YRBSS) survey, and the Illinois Youth Survey and are described in the June 2004 Chicago CEWG report. National data on substance use and abuse were provided by SAMHSA's 2002 National Survey on Drug Use and Health.
- **Most recent drug use estimates** were derived from two currently ongoing studies of young heroin users in metropolitan Chicago conducted by COIP at 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 aged 18–25 and have injected in the last 6 months ($n=547$ as of December 2004). All data from the Family 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 ($n=618$ as of June 2004).

- **Acquired immunodeficiency syndrome (AIDS) and HIV data** were derived from both agency sources and UIC studies. IDPH and CDPH surveys provided statistics on AIDS and HIV through October 2004 and December 2003, respectively. The CDPH Office of HIV/AIDS Surveillance provided data through 2003 (2003 data are preliminary). CDC’s “HIV/AIDS Surveillance Report,” December 2001, provided additional data on HIV and AIDS. 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). Most sources have not been updated since the Chicago CEWG December 2002 report.

As noted above, many 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. The latest DAWN data show that 18 percent of all reported ED drug mentions in Chicago

between July and December 2002 were alcohol-in-combination mentions, similar to previous reporting periods for Chicago and comparable to proportions in nationwide reports.

According to DAWN ED data, Chicago was reporting the highest ED drug mentions among the 21 DAWN sites between 2000 and 2002. Both DAWN mortality cases and CDPH death certificates suggest that total drug-related deaths have remained stable at high numbers between 2000 and 2002. According to APORS, 718 children in Chicago were exposed to some drug at birth in 2002, which corresponds to an annual rate of 150 exposures per 10,000 live births.

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 and Illinois.

In 2002, 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 65 percent of these cases.

In 2002, ED mentions for cocaine remained at high levels, and they represented a 52-percent increase over 10,702 mentions in 1995. Chicago continued to have the most cocaine ED mentions among DAWN sites in 2002 (16,227 mentions) and the highest rate of mentions (275 per 100,000 population) (exhibit 1). Preliminary data accessed from DAWN *Live!* for 2003 and 2004 show that slightly more than one-third of total ED reports were cocaine related (34 and 36 percent, respectively). In 2004, the majority of the cocaine reports involved males (66 percent), African-Americans (57 percent), and those between 30 and 54 years of age.

According to the Illinois Poison Center, approximately 120 cocaine-related calls have been received annually in Chicago for the past 3 years (2001–2003). During this period, cocaine generated more calls than any other “street drug” (approximately 25 percent of all “street drugs”).

The FY 2003 Illinois drug treatment report indicates that cocaine abuse remained one of the most frequent reasons for entering treatment (excluding primary alcohol-only abuse) (exhibit 2). A total of 33,882 persons were treated for cocaine-related problems in Illinois during FY 2003, of which nearly one-half occurred in Chicago. Cocaine was the most com-

monly mentioned secondary drug among persons treated for primary heroin-related problems. In FY 2003, African-Americans remained the largest proportion of total persons treated (62 percent) for cocaine abuse. Males accounted for more services rendered (58 percent) than females. Smoking continued to be the most common route of cocaine administration (85 percent) in FY 2003.

According to the 2003 ADAM report, 51 percent of adult male arrestees (exhibit 3) and 33 percent of adult female arrestees tested cocaine positive.

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 35 percent used it in the past 6 months. Crack cocaine use was reported by 68 percent of the study participants, and 53 percent reported using crack in the past 6 months. Among injecting drug users (Family Process study), 86 percent reported ever using powder cocaine, and 51 percent used it in the past 12 months. Somewhat fewer participants had ever used crack cocaine (76 percent), but 58 percent reported using it in the past 12 months.

According to IDPH's Adverse Pregnancy Outcome Reporting System, cocaine exposure among children at birth in Chicago has been decreasing since 1999. In 2002, 354 children were exposed to cocaine at birth, which corresponds to a rate of 73.8 per 10,000 live births in Chicago, a 29-percent decrease from 1999. Although steadily decreasing, cocaine continues to be the most often cited drug exposure among children in Chicago. The highest proportion of such births occurred among African-American mothers (approximately 78 percent) and to mothers between 25 and 34 years of age.

State (ISP) and Federal (NFLIS) labs reported that cocaine was the drug most often received for testing after cannabis. Cocaine purity for samples weighing 2–25 grams tested by the ISP was 81 percent in 2003 and 77 percent in 2004, but analyses were conducted on only a few samples, and 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–\$20,000 for powdered cocaine and \$22,000–\$24,000 for crack. The June 2003 report contains more detailed information about drug prices in Chicago.

According to the 2003 YRBSS study, the proportion of lifetime cocaine/crack use among Chicago-area 9th through 12th grade students remained level at about 5 percent between 1995 and 2003. Male students reported cocaine/crack use nearly twice as often as their female counterparts during this period. The 2002 Illinois Youth Survey of Chicago-area 8th through 12th grade students reported a similar level of use (about 5 percent) between 1998 and 2002. The June 2004 Chicago CEWG report provides a more complete discussion of the 2002 Illinois Youth Survey.

Heroin

Heroin abuse indicators in this reporting period reveal that heroin continues to be a significant problem in Chicago.

Of the 711 total drug-induced or drug-related deaths reported by the DAWN ME for Cook County in 2002, 48 percent (339) had a mention of heroin/morphine. After reporting 1 death per year in 2000 and 2001 caused by accidental heroin exposure, CDPH reported 18 deaths in 2002.

The rate of heroin ED mentions in Chicago increased significantly from 83 per 100,000 population in 1995 to 220 in 2002 (exhibit 1), an increase of 167 percent. This rate was the highest in the contiguous United States. Preliminary unweighted DAWN *Live!* ED data for 2003 and 2004 indicate that heroin is the second most frequently reported drug, following only cocaine. In the DAWN *Live!* 2004 data, the majority of heroin ED reports involved males (63 percent), African-Americans (52 percent), and those between 35 and 54 years old (58 percent).

The number of persons treated for heroin use in State-supported programs in FY 2003 was 34,615, an increase of 58 percent from FY 2002 (exhibit 2). Seventy percent of the total heroin treatment episodes reported in FY 2003 occurred in Chicago alone, supporting other indicators of high heroin use in the city. The proportion of persons treated for heroin use who reported intranasal "snorting" as their primary route of administration remained high at 73 percent in FY 2003. Pronounced differences exist between African-Americans, Hispanics, and Whites treated for heroin use in 2003 in the primary route of heroin administration. In FY 2003, injection was the primary means for administering heroin for 10 percent of African-

Americans, 29 percent of Hispanics, and 50 percent of Whites. Sniffing was the primary means for 83 percent of African-Americans, 62 percent of Hispanics, and 43 percent of Whites.

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).

According to the 2003 ADAM report, 25 percent of adult male arrestees tested opiate positive (exhibit 3). The proportion of adult female arrestees testing opiate positive decreased significantly between 2000 and 2003, from 40 to 22 percent, respectively. The June 2004 Chicago CEWG report provides a more complete discussion of the ADAM data.

According to the 2003 DMP report, availability of heroin in Chicago, especially South Asian heroin, continued (exhibit 4). Heroin from other geographic source areas, including South America and Mexico, was also available. The purity of street-level heroin peaked in 1997 at about 31 percent and has since declined. In 2003, South American heroin exhibits purchased by DMP in Chicago averaged 15.8 percent pure, a 23-percent decrease from 2002. However, the average price per milligram pure remained low for South American heroin in 2003 at \$0.46. Recent ethnographic reports suggest a new source of heroin on the south side of Chicago that is thought to offer a higher purity level. On the street, this heroin has been referred to as “tornado” for its strength or “retro-dope,” as it reminds older users of “better” heroin from years ago.

According to ISP, the amount of heroin analyzed in Cook County decreased slightly from 21 kilograms in 2003 to 18 kilograms in 2004.

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 (82 percent) paid \$10 per bag in the 30 days prior to interview. Regarding heroin quality in the past 30 days, only 11 percent gave the highest quality rating (“very good”); 31 percent thought the quality was “good” and 49 percent perceived the heroin quality as “fair.”

Heroin prices have not changed since the June 2003 report. On the street, heroin is commonly sold in \$10 and \$20 units (bags), though bags for as little as \$5

were 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”). Sunday sales of two bags for the price of one were also reported. More detailed price information is available in the June 2003 Chicago CEWG report.

Among Illinois high school students, increases in heroin use have not yet been evidenced in periodic representative surveys. The Illinois Youth Survey indicates that heroin use among Chicago-area students is still relatively rare. In 2003, 3.7 percent of students reported lifetime use of heroin, compared with 2.5 percent in 2001 and 3.1 percent in 1999. The gender gap among students who have tried heroin appears to be closing. In both 1999 and 2001, male students were on average five times as likely to have used heroin in their lifetime as females. In 2003, the gap between males and females was nearly threefold.

APORS data indicated that opioid toxicity was decreasing between 2000 and 2002 among infants tested for controlled substances, from 22.4 per 10,000 live births to 16.1 per 10,000 live births, respectively. In 2002, and similarly in 2000 and 2001, most infants who tested positive to heroin exposure at birth were born to African-American mothers (69 percent) and to mothers age 25–34.

Other Opiates

Hydromorphone (Dilaudid), the pharmaceutical opiate once preferred by many Chicago IDUs, continued to be available, although in limited quantities (typical sources are said to be cancer patients). There were only 10 hydromorphone ED mentions in Chicago in 2002. The drug sells for approximately \$25 per tablet. Street sales of methadone are more common, with the drug typically costing \$0.75–\$1.00 per milligram.

Codeine ED mentions steadily increased after 1995 and peaked in 2000 (83), but they decreased in 2002 to 51 mentions; these changes were not statistically significant. After a 51-percent decrease in codeine-related deaths reported from sentinel DAWN ME sites in the 6-county Chicago area between 2000 and 2001, codeine-related deaths remained level in 2003, with 41 cases reported. Codeine syrup is reported to sell for about \$30 for 4 ounces. Codeine is often used by heroin users to moderate withdrawal symptoms or to help kick a drug habit.

Between 2001 and 2003, the Illinois Poison Center reported a 55-percent increase in calls involving recreational abuse of Coricidin HBP[®], which contains 30 milligrams of dextromethorphan HBr (DXM) per tablet. DXM is a synthetically produced substance that is chemically related to codeine, though it is not an opiate. The majority of the cases involving DXM (approximately 90 percent) were among those age 13–19.

Acetaminophen-codeine ED mentions decreased significantly from 159 in 1995 to 76 in 2002, a 52-percent decrease. On the street, acetaminophen-codeine pills sell for \$1.00–\$3.50 each, although the price is lower if pills are bought in quantities of 10 or more. Hydrocodone/combination ED mentions increased between 1995 (152) and 2002 (330), a change of 117 percent. Methadone ED mentions also increased significantly between 1995 (90) and 2002 (335). According to the CDPH, methadone was mentioned on 25 death certificates as the cause of death in 2002.

Oxycodone and oxycodone/combinations ED mentions increased significantly between 2000 and 2002, but they remained relatively low, with 72 and 80 mentions, respectively. Oxycodone ED mentions also increased significantly between 2001 and 2002, from 37 to 72 mentions, a change of 95 percent. Reports of OxyContin use remain uncommon.

The occasional use of other opiates is common among young non-injecting heroin users in Chicago. Fifty-eight percent of NIHU Study participants reported ever trying codeine, Tylenol 3 and 4, Dilaudid, Demerol, morphine, or methadone without a legal prescription.

Because of a change in the reporting of other opioids in FY 2003, treatment data cannot be compared to the previous years. Treatment services rendered related to the use of other opioids, tranquilizers, or sedatives accounted for 2 percent of total treatment episodes (excluding alcohol). Readers are referred to the June 2004 Chicago CEWG report for more details regarding other opioids, tranquilizers, or sedatives treatment data.

Marijuana

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

In DAWN mortality data, marijuana was mentioned in one drug-related death reported in 2002.

The number of marijuana ED mentions decreased between 2001 (5,186) and 2002 by 12 percent. The

rate of marijuana ED mentions per 100,000 population was 89 for both 2000 and 2001 and decreased to 78 per 100,000 in 2002 (exhibit 1), a change of nearly 12 percent from 2001.

Preliminary unweighted data accessed from DAWN *Live!* show that ED reports of marijuana in 2003 and 2004 represented 10 percent and 13 percent of all drug-related reports, respectively. In 2004, marijuana involved patients most often were African-Americans (49 percent), followed by Whites (25 percent); males (67 percent); and younger than 30 (56 percent).

Marijuana users represented 19 percent of all treatment episodes in Illinois in FY 2003 and 27 percent of episodes when those for primary alcohol abuse were excluded. The number of treatment episodes for marijuana increased from 20,773 in FY 2000, to 32,077 in FY 2003 (exhibit 2). Marijuana was the most commonly reported secondary drug among persons receiving treatment for alcohol. During FY 2003, treatment episodes for marijuana were highest for males (77 percent) and for Whites (47 percent).

According to 2003 ADAM data, 53 percent of adult male arrestees tested positive for marijuana (exhibit 3), a level close to proportions in 2002 and 2001. The proportion of adult female arrestees who tested positive for marijuana increased from 25 percent in 2000 to 39 percent in 2003.

According to APORS, cannabis toxicity in children at birth increased sharply from 28 cases in 1999 to 112 in 2001, but decreased in 2002 to 78, which corresponds to a rate of 16 per 10,000 live births. The majority of these infants were born to African-American mothers (74 percent) and to mothers between the ages of 20 and 24.

Marijuana use was common among the young heroin users participating in NIHU studies. Sixty-seven percent of non-injecting heroin users and 72 percent of young injectors smoked marijuana in the 3–12 months prior to their interview.

According to the 2003 YRBSS data, the proportion of 9th through 12th grade students in Chicago who reported lifetime and past-30-day marijuana use decreased slightly between 2001 and 2003. The proportion of male and female students reporting past use was nearly equal, but male students more often reported first use before age 13. The 2002 Illinois Youth Survey also indicated that lifetime use of marijuana among 8th through 12th grade students decreased among all grades and in both male and female students.

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 2003: \$900–\$1,200 per pound, \$50–\$75 per ounce, and \$3–\$5 per gram.

Street-level reports indicate that some marijuana users believe that hydroponic marijuana grown to contain other drugs, including heroin, cocaine, and phenylclidine (PCP), is available.

Both ISP and NFLIS laboratories analyzed more marijuana samples than any other drug. Forty-seven percent of drug samples analyzed by the NFLIS for Chicago were identified as cannabis.

Stimulants

Methamphetamine (“speed”) use in Chicago remains low, but it may be increasing in some areas of the city.

The number of methamphetamine ED mentions had been slowly increasing during the 1990s, but such mentions remained stable between 2001 and 2002, when they totaled 45 and 42, respectively. Preliminary unweighted data accessed from *DAWN Live!* show 21 methamphetamine reports in 2003 and 45 reports in 2004. The majority of the 2004 reports involved males (82 percent), Whites (53 percent), and those age 25–45.

Methamphetamine calls to the Illinois Poison Center in Chicago are infrequent: 8 calls in 2001, 14 in 2002, and 7 in 2003.

Amphetamine ED mentions increased significantly between 1995 (144) and 2002 (415). In 2002, the rate of amphetamine ED mentions per 100,000 population (7) was higher than for methamphetamine (1), as has been observed in previous years (exhibit 1).

Stimulants accounted for nearly 4 percent of all State treatment episodes (excluding primary abuse of alcohol only) in FYs 2001 and 2002, up from 2 percent in FY 2000. In FY 2003, DASA began reporting methamphetamine and amphetamine treatment episodes separately. Methamphetamine treatment episodes (3,582) outnumbered those for amphetamines (476). Of the 3,582 statewide methamphetamine treatment episodes,

only 35 were reported for Chicago, supporting current reports of low use in Chicago compared to the rest of the State. Most treatment episodes for methamphetamine involved Whites (97 percent) and males (58 percent); a similar trend was observed for amphetamine patients (87 and 56 percent, respectively).

According to 2002 ADAM data, only 0.3 percent of male arrestees in Chicago tested positive for methamphetamine, but 1.0 percent tested positive during the first quarter of 2003, suggesting an increase in use.

The 2003 YRBSS data indicated that 3.7 percent of high school students in Chicago used methamphetamine one or more times during their life. Male students were nearly six times more likely to have tried methamphetamine than female students. The YRBSS began to report methamphetamine use in 1999, when 4.2 percent of students admitted lifetime use. The percentage of methamphetamine use among students decreased in 2001 to 2.8 percent, before increasing slightly in 2003.

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 at about 24 kilograms, similar to the previous year. According to the NFLIS 2004 report, 0.36 percent of the items analyzed in Chicago were methamphetamine, which is a slight increase from 0.21 percent reported the year before.

According to ICJIA, the number of methamphetamine-related arrests in Illinois increased significantly between 1997 (3 arrests) and 2003 (1,112 arrests). While methamphetamine arrests increased across all regions during this period, rural task force units experienced the greatest increase in arrests (from 0 to 514 arrests), followed by mixed urban/rural units (from 3 to 373 arrests) and by mostly urban units (from 0 to 225 arrests).

Within Chicago, a low but stable prevalence of methamphetamine use has been reported in some areas of the city in the past 5 years, especially on the North Side, where young gay men, homeless youth, and White clubgoers congregate. Of note, ethnographic data suggest that methamphetamine availability has increased substantially since June 2001 among at least some networks of gay White men on the North Side, who may use the drug to enhance sexual experiences. There were also reports from persons who said they began using methamphetamine to lose weight but became addicted to the drug.

In the NIHU Study, 20 percent of participants reported ever trying amphetamine or methamphetamine, and only 6 percent reported using it in the 6 months prior to the interview. Among injectors in the Family Process study, 19 percent of participants reported amphetamine use, and 9 percent used it in the previous 12 months.

Methylphenidate (Ritalin) remained readily available in some South Side neighborhoods, where it could be purchased for injection, either alone or in combination with heroin. Pills, often referred to as “beans” in these areas, are sold for \$1.50 to \$5.00 each, depending on the quantity being purchased. The cost of Ritalin on the West Side of Chicago was reported to be \$10 per pill. Some study participants report that Ritalin was readily available in their schools and that students knew which students had been prescribed Ritalin and often requested the drug from them.

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. There was one street report of methamphetamine being sold at a South Side drug market. According to the NDIC 2003 report, methamphetamine cost \$1,000–\$1,300 per ounce and \$80–\$100 per gram.

Depressants

Three patterns of depressant-in-combination use have been common in Chicago and throughout Illinois:

- Depressants are taken with narcotics to potentiate the effect of opiates. Pharmaceutical depressants are frequently combined with heroin.
- Depressants are 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).
- Alcohol, also a central nervous system depressant, is taken with pharmaceutical depressants (such as hypnotics or tranquilizers). The practice of mixing alcohol with other depressants may indicate illicit pharmaceutical depressant use.

The number of barbiturate ED mentions totaled 404 in 2002, compared with the peak of 525 mentions in 1997.

Benzodiazepine ED mentions increased significantly between 1995 ($n=1,959$) and 2002 (2,776), a 42-percent change. Both ED mentions and ethnographic reports indicate that alprazolam appears to be the benzodiazepine most readily available on the street, closely followed by clonazepam and lorazepam, with variations in different areas of the city.

Benzodiazepine-related calls to the Illinois Poison Center in Chicago have repeatedly represented nearly one-half of all substance misuse calls between 2001 and 2003. On average, approximately 500 calls annually were reported during this time period.

Treatment data for other opioids, tranquilizers, and sedatives/hypnotics indicate that depressants are not the primary drugs of choice for most users. According to DASA, there were 2,399 treatment episodes in publicly funded programs in Illinois in FY 2003. Primary opioid, tranquilizer, and sedative/hypnotics users represented only about 2 percent of all treatment episodes, excluding alcohol.

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

The 2002 APORS data indicate that the rate of infants testing positive for barbiturates has been decreasing since 2000. In 2002, the rate of children exposed to barbiturates at birth was 0.4 per 10,000 live births, compared with 0.8 per 10,000 in 2001 and 1.4 per 10,000 in 2000.

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.

Hallucinogens

Recent declines in lysergic acid diethylamide (LSD) ED mentions suggest a downward trend in LSD use in Chicago. Between 1995 and 2002, LSD ED mentions declined by 92 percent. The rate of LSD ED mentions per 100,000 population was less than 1 in 2002 for the first time in the prior 7 years

As observed with LSD, PCP ED data showed declines in Chicago. After a peak in 2000, when 1,003 ED mentions were reported, PCP ED mentions decreased to 874 in 2001 and to 459 in 2002. Similarly, ED rates declined between 2001 and 2002 from 15 to 8 (per 100,000), a 48-percent change.

Recent trends in hallucinogen treatment have varied, but overall the number of episodes in publicly funded treatment programs in Illinois has been relatively high, compared with trends in the 1990s. In FY 2003, 472 treatment episodes were reported (exhibit 2).

According to the 2003 ADAM report, the percentage of adult male arrestees testing positive for PCP decreased between 2002 and 2003, from 2.2 percent to 1.3 percent. PCP use appears to be more common among adult female arrestees; 5.6 percent of female arrestees tested positive for PCP in 2003.

In the study of young non-injecting heroin users, 37 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, 75 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 PCP use may be more common in this population. Fifty percent of study participants reported ever trying PCP, and 14 percent admitted use within 6 months prior to their interview.

According to the 2002 Illinois Youth Survey, 5 percent of students in grades 8 through 12 reported lifetime use of “any hallucinogen” (including LSD and PCP). This is a considerable decrease in use from 2000 (7 percent) and 1998 (8.5 percent). Further discussion of the Illinois Youth Survey is provided in the December 2003 CEWG report.

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.

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.

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

Club Drugs

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.

Of all the CEWG sites, Chicago had the most MDMA ED mentions in 2000 (215), but it ranked 10th in 2002 (87). The preliminary unweighted data extracted from DAWN *Live!* show 25 reports in 2003 and 56 reports in 2004. ED reports in 2004 were more common among male patients (77 percent) and those younger than 30 (84 percent). ED reports by race/ethnicity were fairly evenly distributed between African-Americans (38 percent) and Whites (29 percent), but race/ethnicity for 23 percent of reports was unknown.

Illinois DASA began reporting treatment data related to “club drugs” for the first time in FY 2002, when 50 such episodes were reported. In FY 2003, 79 episodes were reported, of which 63 percent were among males and 54 percent were among Whites. Treatment episodes for Chicago alone totaled 23 during FY 2003, of which 16 (70 percent) were among African-Americans.

In 2002, the Illinois Youth Survey for the first time included separate questions regarding MDMA use. Lifetime and past-year ecstasy use appears to be low among 8th through 12th grade students (0.6 percent and 0.4 percent, respectively).

MDMA samples sent to ISP from Cook County have been decreasing since 2000, when 6.7 kilograms were analyzed in the State laboratory. However, a recent increase in MDMA samples sent to the lab was observed between 2003 and 2004, from 0.8 kilograms to 3.1 kilograms. Similarly, the NFLIS reported that 0.16 percent of all items analyzed for Chicago were MDMA in FY 2003. In FY 2004, MDMA accounted for 0.29 percent of all items sent to the lab.

Ecstasy remained available in most mainstream dance clubs and at many house parties. Recent ethnographic reports also suggest that ecstasy may be purchased in some “open air” street markets on the west 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. These prices parallel the 2003 NDIC report: wholesale prices ranged between \$10 and \$12 per tablet and the retail price was \$25–\$35 per dosage unit. Along with other club drugs, ecstasy may continue to be used predominantly by White youth, but there have been increasing reports of ecstasy use from African-Americans in their twenties and thirties who have been involved in club scenes. Among participants in the NIHU Study, 36 percent reported MDMA use.

Street-level reports suggest that a pill may be purchased in some clubs that contains a combination of MDMA, cocaine, and heroin. A user may choose a different mixture of the three drugs depending on the type of “high” he or she seeks. Names for different brands of this pill include “Papay,” “Batman,” and “Spiderman.”

Gamma hydroxybutyrate (GHB), a central nervous system depressant with hallucinogenic effects, is used infrequently in Chicago, mainly by young White males. ED mentions for GHB decreased 43 percent, from 139 in 2000 to 79 in 2002. According to preliminary unweighted data accessed from DAWN *Live!*, there were only 5 GHB ED reports in 2003 and 38 reports in 2004.

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.” Ketamine ED mentions totaled 10 in 2002, compared with 14 in 2001. The rate of ketamine ED mentions per 100,000 population (0.1) also remained unchanged. DASA reported only two patients served for ketamine use in FY 2003 in publicly funded treatment programs in Illinois. 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.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

Through October 2004, 30,865 diagnosed AIDS cases were reported to the State. More than one-quarter of adult AIDS cases occurred among IDUs, while an additional 6.5 percent involved male IDUs who had sex with other men. Within Illinois, 79 percent of the cumulative AIDS cases reported originate in the Chicago metropolitan area.

HIV cases may represent more recent trends in risk behaviors. From January to October 2004, 2,193 HIV cases and 1,095 AIDS cases were reported to the State. Of newly reported HIV cases, 82 percent were in Cook County. Overall, IDUs accounted for 17 percent of cases in Illinois, while 3.5 percent occurred among male IDUs who had sex with other men.

The most recent report on HIV/AIDS cases in Chicago indicated that by the end of 2003, 7,590 HIV cases and 21,420 AIDS cases were reported. An estimated 17,169 individuals are living with HIV and AIDS in Chicago. Gender and demographic data on these AIDS cases are available in the June 2003 Chicago CEWG report.

In Chicago, between 1990 and 2002, IDUs as a proportion of AIDS cases peaked at 33 percent in 1996 and then steadily decreased to 24 percent as of 2002. Only 19 percent of HIV cases reported in 2003 were attributed to injection drug use. In Illinois, 15 percent of the 477 diagnosed AIDS cases from January to September 2004 were attributed to injection drug use. Although the proportion of cases among men who have sex with men (MSM) had declined, male-to-male sex remained the predominant mode of transmission for males and increased between 2002 and 2004, from 43 percent to 60 percent of diagnosed cases. Heterosexual transmission of HIV/AIDS has increased by 1 percent each year since 1998, reaching 18 percent in 2002. Among African-American and Hispanic women, heterosexual contact remains the leading mode of HIV transmission, while among White women, injection drug use was the principal mode of transmission.

In 2002, the number of deaths from AIDS declined 5 percent in Illinois and 9 percent in Chicago compared to 2001, a level approximately equal to the number of deaths in 2000. Given the long latency between HIV infection and AIDS diagnosis, these figures do not reflect the full scope of the epidemic. Data from the authors’ studies provide additional information on the

extent of HIV infection among IDUs. In studies of IDUs cited in previous CEWG reports, HIV prevalence ranged from 18 to 25 percent at baseline, with reported incidence rates of 1 to 2 percent per person-year. Recent studies of young IDUs 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. More information on HIV and HCV seroprevalence among participants in a 1997–1999 study of 700 young IDUs in Chicago is available in the June 2003 Chicago CEWG report. Analysis of the NIHU Study ($n=581$) found an HIV and HCV seroprevalence of 4 and 2 percent, respectively. During the 12-month followup period, no HIV seroconversions and three HCV seroconversions were observed.

As reported in the June 2003 report, findings suggest that HIV prevalence and the rate of new HIV infections have declined among IDUs in Chicago since peaking in the late 1980s.

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Exhibit 1. Estimated Rates of ED Mentions Per 100,000 Population in Chicago for Selected Drugs: 1995–2002

Year	Cocaine	Heroin	Marijuana	Methamphetamine	Amphetamines
1995	188	83	51	1	3
1996	220	109	61	0	3
1997	247	148	76	0	4
1998	232	158	85	1	3
1999	225	162	77	0	3
2000	246	206	89	... ¹	6
2001	277	203	89	1	7
2002	275	220	78	1	7

¹Dots (...) indicate that an estimate with a relative standard of error greater than 50 percent has been suppressed.
SOURCE: DAWN, OAS, SAMHSA

Exhibit 2. Illinois Patients Served in Publicly Funded Treatment Programs by Primary Drug of Abuse: FY 2000–FY 2003

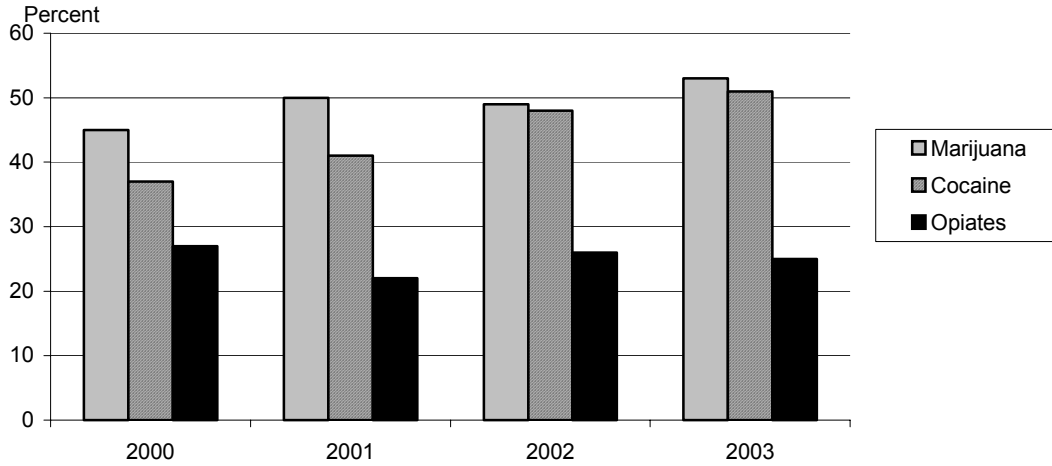
Primary Drug	FY 2000			FY 2001			FY 2002			FY 2003 ¹
	Dec. 1999	June 2000	Total	Dec. 2000	June 2001	Total	Dec. 2001	June 2002	Total	Total
Cocaine	18,531	12,937	31,468	16,967	14,354	31,321	14,581	13,550	28,131	33,882
Heroin	11,733	8,121	19,854	13,745	10,718	24,463	10,747	11,162	21,909	34,615
Cannabinoids	12,484	8,289	20,773	14,253	11,373	25,626	11,811	14,560	26,371	32,077
Hallucinogens	290	227	517	323	221	544	237	242	479	472
Stimulants ²	577	693	1,270	1,969	1,802	3,771	1,517	1,673	3,190	4,508

¹Data by half-year not available in FY 2003.

²Stimulants include amphetamine and methamphetamine.

SOURCE: Illinois Office of Alcoholism and Substance Abuse

Exhibit 3. Percentages of ADAM Adult Male Arrestees Testing Positive in Chicago for Selected Drugs by Year: 2000–2003¹



¹Data for 2000 are for the first through third quarters; data for 2001 are for the fourth quarter only; and data for 2003 are for the first three quarters.

SOURCE: ADAM, NIJ

Exhibit 4. Heroin Price and Purity Trends in Chicago, by Geographic Origin: 2000–2003

Trend	2000			2001			2002			2003 ⁴	
	SEA ¹	SWA ²	SA ³	SEA	SWA	SA	SEA	SWA	SA	SWA	SA
Purity (%)	16.9	20.2	23.8	20.7	20.8	19.5	20.8	19.8	20.4	18.4	15.8
Price Per Milligram Pure	\$1.16	\$0.32	\$0.48	\$0.45	\$0.41	\$0.71	\$0.71	\$0.39	\$0.43	\$0.52	\$0.46

¹Southeast Asia.

²Southwest Asia.

³South America.

⁴SEA data are not available for 2003.

SOURCE: DMP, DEA

Patterns and Trends in Drug Abuse: Denver and Colorado

Nancy E. Brace, R.N., M.A.¹

ABSTRACT

Alcohol remains Colorado's most frequently abused substance, and tobacco is responsible for 4,200 deaths in Colorado annually. Excluding alcohol and tobacco, the use and trafficking of illegal drugs continues to be an expanding problem in Colorado, with much of the transporting, distribution, and selling of illegal substances supported by organized crime entities. Cocaine accounted for more than 41 percent of (unweighted) emergency department illicit drug reports (excluding alcohol) in the first half of 2004, for the highest rate of drug-related hospital discharges from 1997 to 2003, and for the largest number of drug-involved deaths from 1996 through 2002. Cocaine also accounted for the highest number of drug-related calls to the Rocky Mountain Poison and Drug Center from 2001 to 2003. In the first half of 2004, methamphetamine exceeded cocaine in the number of these calls; it had surpassed cocaine in the number of treatment admissions in the State in 2003. Drug enforcement officials and treatment providers have corroborated this increase in methamphetamine use and trafficking in Colorado. Since 1997, marijuana has resulted in the highest number of treatment admissions annually across the State and in the highest percentage of users entering treatment within 3 years of initial use. Methamphetamine takes second place in the latter category, surpassing both cocaine and heroin. Most indicators for heroin are decreasing, but experts in the field report an increase in Oxy-Contin use, especially among adolescents. Initial use for most of these illegal substances seems to be occurring at a younger age.

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 large suburban counties and one smaller county: Arapahoe on the southeast, Adams on the northeast, Jefferson on the west, Broomfield (the smallest county) on the northwest, and Douglas on the south. These areas make up the Denver Primary Metropoli-

tan Statistical Area (PMSA). In recent years, Denver and the surrounding counties have experienced rapid population growth. According to the 2000 census, the Denver PMSA population was 2,143,981. By the end of 2004, this was expected to increase by 7.0 percent to 2,292,834, followed by an 8.0-percent increase to 2,320,287 in 2005. Colorado is third among the top five fastest growing States in the country. Statewide, the population is expected to increase from the 2000 census figure of 4,339,549 to 4,706,754 by the end of 2005 (an 8.5-percent increase). The Denver metropolitan area accounts for 12 percent of Colorado's total population. The Denver PMSA accounts for 50 percent of the total State population. The median age in the Denver area is 33.1. Males represent 50.5 and females 49.5 percent of the population. Ethnic and racial characteristics of the area are as follows: 65 percent White, 11 percent Black or African-American, 1 percent American Indian, 3 percent Asian, and 0.1 percent Native Hawaiian and Other Pacific Islander. Hispanics or Latinos of any race account for 32 percent of the area's population.

The average household size is 2.27, and the average family size is 3.14. For the population age 25 and older, 79 percent are high school graduates or higher, and 35 percent have bachelor's degrees or higher.

The median household income is \$39,500, and the median family income is \$48,185. Eleven percent of families and 14 percent of individuals in the area live below the poverty level.

Several considerations may influence drug use in Denver and Colorado:

- Two major interstate highways intersect in Denver.
- The area's major international airport is nearly at the midpoint of the continental United States.
- There is rapid population growth.
- Remote rural areas are ideal for the undetected manufacture, cultivation, and transport of illicit drugs.

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

- A young citizenry is drawn to the recreational lifestyle available in Colorado.
- The large tourism industry draws millions of people to the State each year.
- Several major universities and small colleges are in the area.
- The preliminary Colorado unemployment rate was 5.0 percent as of November 2004, which is down slightly from 5.8 percent in November 2003. As for the Denver PMSA, the unemployment rate was 5.0 percent as of November 2004, a decrease of 1 percent from a year earlier.

Data Sources

Data presented in this report were collected and analyzed in December 2004 and January 2005. Although these indicators reflect trends throughout Colorado, they are dominated by the Denver metropolitan area.

- **Drug-related emergency department (ED) reports** for the Denver metropolitan area for the first half of 2004 were accessed 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). All 14 eligible hospitals in the Denver area are in the DAWN sample, which includes 14 emergency departments. These data, which were updated December 13, 2004, are unweighted and incomplete, with between five and six EDs reporting each month over the 6-month period. All DAWN cases are reviewed for quality control. Based on the review, cases may be corrected or deleted; thus, the data presented in this paper are subject to change. Data accessed from DAWN *Live!* represent drug reports in drug-related ED visits; reports may exceed the number of visits since a patient may report use of multiple drugs (up to six drugs and alcohol). As noted earlier, the data are unweighted and, thus, are not estimates for the Denver area. The data cannot be compared with DAWN data from 2002 and before, nor can they be used for comparison with future data. Only weighted data released by SAMHSA can be used for trend analysis. A full description of DAWN can be found at <<http://dawninfo.samhsa.gov>>.
- **Drug-related mortality data** for the Denver metropolitan area for 1996 through 2002 were provided by SAMHSA's Drug Abuse Warning Network (DAWN) data. Statewide data were

provided by the Colorado Department of Public Health and Environment (CDPHE).

- **Hospital discharge data** statewide for 1997–2003 were provided by the Colorado Hospital Association through CDPHE, Health Statistics Section. Data included are diagnoses (ICD-9-CM codes) for inpatient clients at discharge from all acute care hospitals and some rehabilitation and psychiatric hospitals. These data do not include ED care.
- **Drug/Alcohol Coordinated Data System (DACODS) reports** are completed on clients at admission and discharge from all Colorado alcohol and drug treatment agencies licensed by the Alcohol and Drug Abuse Division (ADAD), Colorado Department of Human Services. Annual figures are given for 1997 through the first half of calendar year 2004 (annualized unless otherwise noted). DACODS data are collected and analyzed by ADAD. Some State fiscal year (FY) data have been taken from ADAD's annual report to the legislature, "The Costs and Effectiveness of Alcohol and Drug Abuse Programs in the State of Colorado, October 29, 2004."
- **School survey findings** are from the Colorado Youth Survey (CYS) of 6th through 12th graders in 2003.
- **Availability, price, and distribution data** were collected from local Drug Enforcement Administration (DEA) Denver Field Division (DFD) officials in their fourth quarter FY 2004 report; the Office of National Drug Control Policy (ONDCP), Drug Policy Information Clearinghouse, "Denver, Colorado, Profile of Drug Indicators, June 2004;" and from the December 28, 2004, issue of *Narcotics Digest Weekly*, Volume 3, Number 52. Additional information was obtained from the National Drug Intelligence Center, *Colorado Threat Assessment*, May 2003.
- **Communicable disease data** were obtained from CDPHE. Data are presented for 1997–2003.
- **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 2003.
- **Arrestee Drug Abuse Monitoring (ADAM) program reports** on arrestee urinalysis results are based on quarterly studies conducted under the auspices of the National Institute of Justice (NIJ). ADAM data in Colorado were collected

and analyzed by the Division of Criminal Justice. In 2000, NIJ changed its procedures from a convenience to a probability sample. Thus, no ADAM data trend analysis is presented. Rather, 2001, 2002, and 2003 use percentages by drug type are indicated.

- **Sentencing data** on Federal drug convictions in the State of Colorado for Federal FY 2002 were compiled by the United States Sentencing Commission, Office of Policy Analysis.
- **Information about offenders in the Colorado correctional system** for substance abuse-related crimes was supplied by *The Colorado Department of Corrections, Overview of Substance Abuse Treatment Services Fiscal Year 2003* and by *The Colorado Department of Corrections Statistical Report, Fiscal Year 2003*.
- **Statistics on seized and forensically analyzed drug items** were provided by the Drug Enforcement Administration, Office of Diversion Control, National Forensic Laboratory Information System (NFLIS) Year 2003 Annual Report, from information reported by the Denver Police Department Crime Laboratory.
- **Alcohol data** were taken from the “U.S. Apparent Consumption of Alcoholic Beverages Based on State Sales” by the U.S. Department of Health and Human Services, June 2004, the Rocky Mountain Insurance Information Association (RMIIA), the Department of Transportation Fatality Analysis Reporting System (FARS), and Colorado State Patrol statistics.
- **Tobacco statistics** for 2003 were provided by “Colorado Health Watch 2004,” a publication of the CDPHE.
- **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 mainly from clinicians from treatment programs across the State, local researchers, and street outreach workers.

DRUG ABUSE PATTERNS AND TRENDS

Cocaine/Crack

Cocaine indicators remained mixed, with some increasing and some decreasing.

Unweighted data accessed from DAWN *Live!* on Denver ED reports for cocaine showed 699 such reports in the first half of 2004, representing 41.4 percent of all illicit drug reports (exhibit 1).

Statewide hospital discharges showed that cocaine mentions per 100,000 population rose steadily from 1997 (56 per 100,000) through 2003 (80 per 100,000) (exhibit 2).

The number of cocaine-related calls to the RMPDC rose statewide from 2001 (59) through 2003 (68), and during that time period cocaine was the most frequent drug of concern (second only to alcohol) (exhibit 3). In 2004, however, the number of calls regarding methamphetamine (66) exceeded those for cocaine (59).

Cocaine-related mortality data for the Denver PMSA showed an increase from 68 such deaths in 1996 to 126 in 2001 (exhibit 4). Cocaine-related deaths then declined slightly in 2002 to 108. Throughout this entire time period, cocaine-related mortality was higher than the mortality for any other drug in the area.

Statewide, cocaine 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) and to 153 in 2002 (34.1 per million). Data from 2003 show 179 cocaine deaths (39.2 per million), the highest number and rate in the time period indicated.

Reports from clinicians, researchers, and street outreach workers around the State corroborate the continuing cocaine problems reflected in the indicator data. However, qualitative reports indicate a shift to methamphetamine among some stimulant users.

Cocaine was the primary drug for 20 percent of all treatment admissions (excluding alcohol) for the first 6 months of calendar year 2004 (annualized) (exhibit 5). Marijuana and methamphetamine exceeded cocaine as the primary drug during this time period, representing 39 and 26 percent of admissions, respectively. In 2002, cocaine as a primary drug accounted for 20 percent of all drug admissions, exceeding methamphetamine (19 percent). In 2003, admissions with methamphetamine as primary drug (23 percent) overtook those reporting cocaine (20 percent).

The majority of cocaine clients in treatment had been using this drug for longer than 3 years. The proportion of “new” cocaine users entering treatment, defined as those admitted to treatment within 3 years of initial cocaine use, remained stable from 1997 (17 percent) through 2004 (18 percent) (exhibit 6). It

takes an average of 10 years after first use for the majority of those users with cocaine as their primary drug to seek treatment (exhibit 7).

The percentages of clients who smoke cocaine declined steadily from 65 percent in 1997 to 58 percent in 2001, but they rebounded in 2003 and in 2004, when smoking represented 63 percent of cocaine admissions statewide (exhibit 8). The percentages of clients who inhale cocaine have been steadily increasing from 19 percent in 1997 to 26 percent in 2001 and 28 percent in 2004.

Demographic data on cocaine admissions, statewide, for FY 2004 are shown in exhibit 8. Whites accounted for the largest percentage of cocaine admissions in 2004 (46 percent) and 2003 (45 percent), representing a small decline from 2000 (48 percent). Hispanic cocaine admissions increased dramatically from 19 percent in 1997 to 29 percent in 2000 and 30 percent in 2004. African-American cocaine admissions dropped sharply from 33 percent in 1997 to 20 percent in 2001; they then mildly increased in 2003 (24 percent) and then declined in 2004 to 21 percent. Crack cocaine, however, is fairly well entrenched in the African-American urban communities. African-American percentages for all other drugs remain in single digits, with the exception of marijuana (13 percent).

In 1997, 56 percent of cocaine admissions were younger than 35; this decreased to 50 percent in 2003 and rebounded to 57 percent in 2004. The majority (69 percent) of 2004 cocaine admissions were between the ages of 26 and 45. Nineteen percent of cocaine admissions in 2004 were younger than 18, and only 12 percent were older than 45.

Cocaine admissions remain predominately male, with their proportion growing slightly from 1997 (57 percent male) to FY 2004 (61 percent). Sixty-nine percent were admitted to treatment for cocaine dependence, and 26 percent were admitted for abuse. Thirty-five percent of cocaine users indicated they used alcohol as a secondary drug, and 24 percent used marijuana. Treatment providers indicated that marijuana is commonly used with cocaine to decrease the effects of withdrawal and to increase the effects of the cocaine.

In Federal FY 2002, 34 percent of those sentenced to Federal correctional systems in Colorado had drugs as their primary offense category, compared with 41 percent nationally. Of the 34 percent, powder and crack cocaine were each involved in 18 percent. Thirty-one percent were sentenced because of drug trafficking.

According to the most recent ADAM data for a sample of Denver arrestees, 35.4 percent of males and 46.5 percent of females had cocaine-positive urine samples in 2001. These numbers were down slightly in 2002, with 32.7 percent of males and 43.6 percent of females testing positive. However, in 2003, 38.3 percent of males and 52.5 percent of females tested positive for cocaine.

NFLIS data show that cocaine accounted for 49 percent of all drugs seized by law enforcement and submitted to a forensic laboratory for analysis in Colorado in 2003.

According to the National Drug Intelligence Center, powder cocaine is readily available throughout the State, and crack cocaine is more available in urban population centers. In general, Whites prefer powder cocaine and African-Americans prefer crack. Cocaine is the drug most often associated with violent crime in Colorado.

The ONDCP reported that the Denver police made 1,234 cocaine arrests per 100,000 city residents between 1996 and 2000. This was more than twice the national average, and 93 percent of these arrests were for possession.

The majority of cocaine is Mexican, and it is imported into Colorado by organized Mexican nationals or family groups who have connections to gangs on the west coast. In the last year, two significant drug organizations began to compete to control the wholesale supply. They transport cocaine from the Mexican border or from western States such as California and Arizona to Denver, using automobiles with hidden compartments, commercial and cargo airlines, delivery services, and other mail carriers. Denver serves as a major distribution center for cocaine for the entire country, especially the Midwest and east coast States. Proceeds from cocaine sales are transported to Mexico or the western States via the same means.

In Colorado, street distribution is controlled by gangs. There are more than 10,000 gang members in the Denver area, with an average of 1,500 new members added each year. According to the Denver DEA and treatment providers, gangs also control the market for distribution of cocaine in the southern, northern, and western slope areas of the State. Gangs are ubiquitous throughout Colorado, but they are less dominant in the eastern region, where the population is much less dense.

In the third quarter of Federal FY 2003 and in the second quarter of 2004, powder cocaine sold for \$16,000–\$19,000 per kilogram and \$700–\$1,000 per

ounce in the Denver metropolitan area. Crack cocaine prices have remained relatively stable at \$650–\$1,000 per ounce, while “rock” prices on the street are \$20–\$50 in Denver. Prices are slightly higher outside of the Denver metropolitan area. Purity is approximately 66 percent throughout the front range and between 41 and 91 percent on the western slope. Treatment providers stated that crack is fairly rare on the western slope, and its use remains entrenched in the African-American communities in southern Colorado.

Overall, Colorado has experienced a decrease in the wholesale price of powder cocaine because these users have switched to methamphetamine. Treatment providers indicate this switch is related to cheaper prices and a longer lasting “high.” Both drugs are equally available throughout the State.

Heroin and Other Opiates

Heroin and other opiate use poses a considerable threat to Colorado, although indicators for both were mixed. Unweighted data accessed from DAWN *Live!* show that heroin ED reports in the first half of 2004 totaled 292, representing 17 percent of illicit drug reports (exhibit 1).

Opiates other than heroin include hydrocodone, hydromorphone, codeine, and oxycodone. Unweighted ED reports of opiates/opioids for Denver in the first half of 2004 totaled 271; of these, 72 (26.6 percent) were oxycodone reports and 67 (24.7 percent) involved hydrocodone.

Hospital discharge data for 1997–2003 combined all narcotic analgesics, including heroin. These discharges have been steadily increasing, with the rate almost doubling in 7 years, from 37 per 100,000 in 1997 to 73 per 100,000 in 2003 (exhibit 2). Treatment providers indicated a rapid rise in the popularity of abuse of prescription narcotics such as OxyContin and hydrocodone, and these data may reflect that.

Heroin/morphine-related mortalities for the Denver PMSA fluctuated from 34 in 1996, to 79 in 1999, to 66 in 2000, to 77 in 2001, and to 64 in 2002 (exhibit 4).

Statewide, opiate-related deaths increased from 141 (36.2 per million population) in 1997 to 182 (45.9 per million) in 1998. From this peak, such deaths declined to 142 (35.2 per million) and 147 (34 per million) in 1999 and 2000, respectively. However, opiate-related deaths climbed to 160 (36.3 per million) in 2001 and 164 (36.5 per million) in 2002. Data for 2003 show that opiate-related deaths decreased slightly to 152, or 33.3 per million population.

Heroin and other narcotic analgesic-related calls to the RMPDC peaked in 2003 at 22 and declined slightly to 18 in 2004 (exhibit 3).

According to recent ADAM data for a sample of Denver arrestees, in 2001, 5.2 percent of males and 2.4 percent of females tested positive for opiates. However, in 2002 5.3 percent of females and 4 percent of males tested positive for opiates. In 2003, male arrestees again showed a slightly higher percentage of positive heroin urines (6.8 percent) than female arrestees (6.1 percent).

Among Colorado treatment admissions (excluding alcohol), the proportion of clients with heroin as their primary drug of choice has steadily declined (exhibit 5). In 1997, 16 percent of all drug treatment admissions identified heroin as their primary substance, while in 2004 only 8.5 percent did so. It should be noted that while in 2004 the ADAD expanded the number of DACODS reports by adding driving under the influence (DUI) clients into the DACODS database, figures used in this report exclude DUI clients.

Treatment admissions for clients who stated other opiates as their primary drug have been consistent at 3–4 percent from 1997 to 2004 (exhibit 5).

The proportion of “new” heroin and other opiate users who entered treatment within 3 years of initial use rose from 1997 (18 percent) to 2000 (22 percent) and then declined to 16 percent in 2003 (exhibit 6). There was a very slight increase in 2004 to 17 percent. The majority of heroin users in treatment are long-time users. According to ADAD’s State FY 2004 data, it takes heroin clients an average of 13 years from first use before they enter treatment (exhibit 7).

Opiates (heroin and other opiates combined) ranked low among all four generations of users, from 2 percent for the Y generation, to 8 percent for the X generation and seniors, and 12 percent for the Baby Boomers (exhibit 9).

In FY 2004, all heroin/other opiate users were older than 18 at the time of admission; 61 percent were male; and 71 percent lived in urban settings (exhibit 8). Sixty-nine percent of heroin and other opiate users were White, 19 percent were Hispanic, and 8 percent were African-American in FY 2004. Forty-two percent had achieved a 12th grade education, and 34 percent had attended college. Wages were the primary source of income for 45 percent. Twenty-eight percent had no prior treatment, while 31 percent had three or more treatment episodes before this admission.

Fifty-three percent of the heroin/other opiate clients self-referred into treatment in FY 2004. Eighty-six percent were dependent upon heroin or other opiates, and 12 percent received the diagnostic impression of abuse. Thirty percent reported no use of heroin or other opiates in the 30 days prior to treatment, while 42 percent used daily. Sixty-two percent injected the drug, and 29 percent took it orally. Twenty-six percent of these clients were younger than 18 when they first tried heroin or other opiates, and 48 percent were 21 or older. Forty-two percent had no secondary drug, while 25 percent used cocaine as their secondary drug. Forty-nine percent of clients with a secondary drug began to use it before the age of 18, and 34 percent began at or after the age of 21.

Treatment providers have reported an increasingly young population in their early teens who used OxyContin and any other drug they can obtain, usually stolen from their parents. Providers also state they are seeing more polysubstance abuse among clients.

Seven percent of those in Colorado who were sentenced to Federal facilities were heroin or other opiate users, and this percentage mirrors the national percentage for Federal FY 2002. Heroin accounted for only 6 percent of all items seized by law enforcement in Colorado and submitted to forensic laboratories for analysis in 2003.

Mexican black tar and brown powdered heroin are the most common types available in Colorado. Most new users are young adults who smoke or snort it. Mexican drug trafficking organizations transport heroin into Colorado and serve as the primary wholesale distributors and frequently as retail sellers who control the street-level market for heroin. Gang-related crimes are frequently associated with the sale of heroin. It is widely available in both urban and rural settings. While the predominant users are older White males who live in the lower downtown Denver area, new suburban users are emerging.

One ounce of Mexican heroin at 40 percent purity costs \$1,000–\$3,000. One gram of heroin that is 8–64 percent pure costs \$100–\$150. Costs in Denver are slightly lower than in the rest of the State. Heroin can be obtained in Denver for \$440 per one-quarter ounce. Purity is approximately 53 percent in the Denver area.

Pharmaceutical diversions of OxyContin and other narcotic analgesics are increasing, as they provide the abuser with reliable strength and dosage levels. A \$4 prescription dose of OxyContin sells on the street for \$40 or \$1 per milligram, 10 times the legal prescription price. More abusers are using the Internet to

obtain prescription medications. Officials recently intervened when a physician from southern Colorado authorized 2,450 prescriptions on the Internet within a 3-month period without establishing any doctor-patient relationship. Drug enforcement officials have found a severe, systemic failure to keep proper records, report thefts, and maintain controlled substances in Colorado.

Marijuana

Marijuana indicators are mixed but suggest a high level of abuse. Marijuana is second to alcohol in the number of users in Colorado. Unweighted data accessed from DAWN *Live!* show that ED reports involving marijuana totaled nearly 20 percent of illicit drug reports in the first half of 2004, far below those for cocaine (exhibit 1). Marijuana-related hospital discharges increased steadily from 1997 (53 per 100,000) to 2003 (71 per 100,000) (exhibit 2), while marijuana-related calls to the RMPDC declined from 34 in 2001 to 29 in 2004 (exhibit 3).

Marijuana-related deaths for the Denver PMSA have been quite small, ranging from 1 in 1996 to a peak of 31 in 2001. Such deaths totaled 5 in 2002.

According to 2001 ADAM data, 40 percent of the male arrestee sample and 33 percent of the female arrestee sample had positive marijuana urine screens. These percentages remained stable in 2002, with 40.3 percent of males and 32.6 percent of females testing positive, but the proportions increased slightly in 2003 (42.3 percent positives for males and 34.3 percent positives for females).

Colorado has more treatment admissions for marijuana (excluding alcohol) than for any other drug (exhibit 5). The proportions of clients admitted to treatment with marijuana as their primary drug have been holding fairly steady since 1997. In 1997, 41 percent of clients were in treatment for primary marijuana abuse, compared with 39 percent in 2004.

More “new” marijuana users seek treatment within 3 years of first use than for any other drug (exhibit 6). This finding remained consistent from 1997 (42 percent) through 2004 (33 percent). Marijuana users take an average of 7 years from time of first use to first treatment. This is a shorter timeframe than for any other drug.

Demographic data show that males accounted for 73 percent of treatment admissions in FY 2004 (exhibit 8), maintaining the historical male-to-female ratio of approximately 3 to 1 since 1997. Forty-two percent of marijuana treatment admissions were younger than

18 at the time of admission to treatment. This figure has been fluctuating between 35 and 45 percent since 1997. Seventy percent of treatment admissions with marijuana as their primary drug were living in urban settings. Race proportions remain relatively stable. In 2004, 53 percent were White, 29 percent were Hispanic, and 13 percent were African-American. Whites represented 56 percent in 2003, Hispanics accounted for 27 percent, and African-Americans represented 11 percent. Sixty-four percent used tobacco products daily. Fifty-five percent had no prior treatment episodes, while 27 percent had one. Sixty-seven percent were unemployed, and 62 percent were living in a dependent setting; the majority were living with their parents. Only 9 percent self-referred to treatment, while 21 percent were referred by social services and 49 percent were referred by the non-DUI criminal justice system.

Forty-seven percent of the marijuana admissions were considered abusers, as shown in exhibit 8, while 40 percent were dependent on marijuana. The route of administration for 96 percent was smoking. Ninety percent of all clients stated they started using marijuana before the age of 18. Thirty-three percent had no secondary drug, while 45 percent used alcohol and 11 percent used methamphetamine as their secondary drug of choice. Of those with a secondary drug, 78 percent started using it before the age of 18.

Of those individuals sentenced to Federal facilities in Colorado, 17 percent had use of marijuana as their primary offense, which is lower than the national percentage of 29.

Cannabis represented 16 percent of all items seized by law enforcement and submitted to forensic laboratories for analysis in 2003. Both Mexican imported and locally grown marijuana is readily available statewide.

The marijuana used in Colorado is primarily produced in and imported from Mexico. A small portion is grown in Colorado or other western States, particularly California. It is distributed primarily by Mexican drug trafficking organizations and criminal groups at the wholesale level and by Hispanic and African-American street gangs at the retail level. Caucasian criminal groups and local independent dealers are the primary distributors of the marijuana and sinsemilla produced in Colorado.

BC Bud, a Canadian import with a high level of tetrahydrocannabinol (THC), was available only in limited quantities and relatively hard to obtain in Colorado until 2003. Since then, an increase in the availability of BC Bud has contributed to an increased

THC level in both the Denver and Boulder areas. BC Bud sells for \$700–\$1,000 per ounce and \$3,200–\$4,500 per pound. On the street, BC Bud costs \$10 per joint.

Locally produced sinsemilla sold for \$1,000–\$3,000 per ounce and \$50–\$200 per gram in 2002. Domestic marijuana grown indoors is preferred over Mexican grown marijuana and sells for \$1,000–\$3,000 per pound and \$200–\$300 per ounce. DEA officials report grow operations are becoming increasingly sophisticated and technical. Outdoor marijuana is most likely a product of eastern Colorado.

Prices of marijuana are slightly cheaper in Colorado than in surrounding states. Trafficking on the western slope is dominated by Hispanics importing it into Colorado from Mexico. Officials are noticing more individual Mexican nationals independent of the large drug organizations trafficking marijuana statewide.

Treatment providers almost uniformly indicated that marijuana use is socially accepted in their areas and that the perception of risk associated with marijuana use is declining. Treatment providers felt this decline is related to national media coverage of marijuana as a medicinal drug and to a high frequency of parental use of marijuana.

Methamphetamine

Most indicators for methamphetamine have increased over the past few years, and this drug is a rapidly expanding social problem for Colorado.

The unweighted data accessed from *DAWN Live!* show that reports involving methamphetamine totaled 155 in the first half of 2004, representing 9.2 percent of the illicit drug reports (exhibit 1).

Methamphetamine was not broken out from other stimulants for hospital discharge data, but overall amphetamine-related hospital discharges have increased since 1999 from 16 per 100,000 to 40 per 100,000 in 2003 (exhibit 2).

Statewide, the number of methamphetamine-related calls to the RMPDC has tripled from 20 in 2001 to 66 in 2004 (exhibit 3).

Methamphetamine steadily increased in mortality mentions from 1996 ($n=3$) to 2002 (exhibit 4). In 1999, there were 8 mentions, compared with 10 in 2000, 19 in 2001, and 17 in 2002. However, amphetamine death mentions increased only slightly from five in 1997 to eight in 2001. Though amphetamine-related deaths in Colorado are far fewer

than those for opiates or cocaine, the number has increased sharply from only 20 between 1996 and 1999 to 37 between 2000 and 2003 (an 85-percent increase).

Colorado treatment providers report that methamphetamine is the most popular illegal drug of choice, and it is frequently used in combination with alcohol, marijuana, and cocaine. It is readily available, inexpensive, and, at times, free. Potency is reported to be good. Providers are seeing an increasing problem with methamphetamine use statewide, and other amphetamine use has dropped in popularity.

According to ADAM data, only a small percentage of positive methamphetamine urine screens were reported in 2001: 3.4 percent of the male arrestee sample and 4.3 percent of the female arrestee sample tested positive for the drug. These figures increased slightly for males in 2002 (3.8 percent) and slightly more for females (6.6 percent). Again, only small changes were noted in 2003, with 4.7 percent of males and 5 percent of females testing positive for methamphetamine.

In Colorado, treatment admissions for clients using methamphetamine as their primary drug have risen dramatically. In 2004, methamphetamine was second only to marijuana in the number of treatment admissions (excluding alcohol) (exhibit 5). In 1997, there were 1,081 admissions for methamphetamine. This number has consistently increased each year since then to 3,300 in 2004.

The percentage of “new” users who seek treatment for methamphetamine within 3 years of initial use does not reflect this steady rise in methamphetamine treatment admissions. “New” users represented 34 percent in 1997, 22 percent in 2001, and 24 percent in 2004 (exhibit 6). According to State FY 2004 data, methamphetamine users take an average of 8.5 years from first use to first treatment (exhibit 7).

A comparison of 2002 “new” methamphetamine users (i.e., entering treatment within the first 3 years of use, $n=531$) to “old” methamphetamine users (i.e., entering treatment after 4 or more years of use, $n=2,022$) shows dramatic differences between these two groups. Demographically, the new users are more often female (53.3 percent) than old users (44.6 percent) and less often White/non-Hispanic (77 percent) than old users (83.2 percent). Also, somewhat expectedly, new users have a higher proportion of those 25 and younger (58.2 percent) as compared to old users (only 27.3 percent). Accordingly, new users are much more likely to have never been married (63.3 percent) than old users (44.7 percent). As to

employment, old users are somewhat more likely to be employed full or part-time (36.6 percent) than new users (30.1 percent).

Looking at “severity” data, old users are much more likely to be methamphetamine injectors (33.7 percent) than new users (15.4 percent), while new users report a higher proportion of smokers (67 percent) than the old user group (48.1 percent). Also, old users are more likely to have a diagnosis of drug dependence (28.6 percent) than new users (23.2 percent). Interestingly, however, new users report a higher proportion of concurrent mental health problems (31.1 percent) than their old user counterparts (27.4 percent). Both new and old users averaged one arrest in the 2 years prior to treatment admission, while old users averaged seven prior lifetime treatment episodes compared with two among new users. Also, about the same proportion of old and new users (23 percent and 20 percent, respectively) reside in the Denver metropolitan area. Similarly, a like proportion of old and new users live on the western slope of Colorado (16 percent and 15 percent, respectively).

Methamphetamine was combined with all other stimulants in the generational snapshot of treatment. Both the X generation and the Baby Boomers use stimulants more than the Y generation or seniors, at 37 percent and 27 percent, respectively (exhibit 9).

During the first 6 months of 2004, few adolescents (5 percent) younger than 18 were in treatment for methamphetamine as their primary drug (exhibit 8). The majority of those in treatment were between 18 and 35 years of age.

In methamphetamine treatment admission data for both 2003 and 2004, there is little gender differentiation, with female users being equal in number to male users. Similarly, methamphetamine use is found in both urban (61 percent) and rural (39 percent) areas of Colorado. Treatment providers stated they are seeing an increase in methamphetamine use in both rural and urban areas and an increase in the social and community problems related to this use.

Whites dominated among methamphetamine admissions in 2004 (83 percent) in Colorado (exhibit 8). Few Hispanics (12 percent) and even fewer African-Americans (2 percent) use methamphetamine as their primary drug. However, treatment providers have indicated that Hispanics, who have traditionally been involved in the trafficking of methamphetamine, are beginning to use it in greater numbers. Fifty percent of methamphetamine users were referred to treatment by the non-DUI criminal justice system, and 21 percent were referred by social services.

Injecting had been the most common route of administration for methamphetamine. However, among treatment admissions, the injection drug user (IDU) proportion declined from 1997 (32.6 percent) to 2003 (23 percent), while smoking became increasingly common in the last 7 years. In 2003, nearly 61 percent of methamphetamine treatment admissions smoked the drug, compared with only 29.1 percent in 1997. Sixty-three percent smoked it, while, as shown in exhibit 8, 22 percent injected it in 2004. In 2004, 41 percent of clients began to use methamphetamine before the age of 18. Most (72 percent) use a secondary drug in addition to methamphetamine, usually marijuana (36 percent), alcohol (21 percent), or cocaine (10 percent). Seventy-two percent of those using a secondary drug initiated use of this secondary drug before the age of 18.

Federal sentencing data for Federal FY 2002 show that methamphetamine was the primary substance for 34 percent of the drug convictions. This is almost double the percentages of offenders sentenced because of cocaine (powder and crack) and marijuana and four times greater than those sentenced for heroin.

The DEA describes widespread methamphetamine availability, with a majority of the drug originating from Mexico or from large-scale laboratories in California. However, methamphetamine lab seizures in Colorado increased significantly from around 25 in 1997 to 464 in 2002. These laboratories, generally capable of manufacturing an ounce or less per “cook,” varied from being primitive to quite sophisticated. The ephedrine reduction method remains the primary means of manufacturing methamphetamine in the area. In spite of law enforcement pressure, there has been an increase in the number of small, local methamphetamine labs with the occasional use of trucks for mobile labs.

Most lab operators are able to get the precursor chemicals from legitimate businesses (e.g., discount stores, drug stores, chemical supply companies, etc.). Treatment providers report that the current practice is for separate individuals or groups to each acquire one of the key ingredients and then deliver it to the “cook,” thereby decreasing the risk involved when one party obtains all the ingredients.

The DEA also reports an increase in the number of Hispanic males marrying Native American women on reservations, with the intent of establishing their kitchens and supply depots with immunity from law enforcement.

A cocaine and methamphetamine trafficking organization has been transporting drugs from Phoenix to

Denver. Methamphetamine from this organization has purity levels of 95 percent. An organization on the western slope employs a number of drivers who transport anywhere from 2–10 pounds from Sinaloa, Mexico, or California. Methamphetamine can be obtained for \$500–\$1,500 per ounce, \$5,500–\$5,600 per one-half pound, and \$13,500 per pound in the Denver area. In southern Colorado, prices are \$600 per ounce and \$13,000 per pound. On the western slope, it sells for \$1,000–\$1,200 per ounce. Purity ranges from 11 to 92 percent. In Denver “ice,” a smokeable form of methamphetamine that looks like rock candy or rock salt, is nearly 100 percent pure and widely available. Street prices for methamphetamine in Denver are relatively stable at \$80–\$125 per gram.

Other Amphetamines and Stimulants

Indicators for these drugs in Colorado are scant. Reported use of other amphetamines and stimulants (excluding cocaine and methamphetamine) is only a fraction of reported use of cocaine or methamphetamine.

The unweighted data accessed from *DAWN Live!* for the first half of 2004 show 115 emergency department reports involving amphetamines (exhibit 1). There were four calls to the RMPDC for amphetamines in 2004 (exhibit 3).

In 1997, there were 52 clients (0.7 percent of admissions excluding alcohol) in treatment for using some other amphetamine or stimulant as their primary drug, the same number as in 2004, when these clients accounted for 0.4 percent of illicit drug admissions (exhibit 5).

In 2000 there were 9 fatalities related to other amphetamines or stimulants, compared with 8 in 2001 and 13 in 2002 (exhibit 4).

Barbiturates, Sedatives, and Tranquilizers

There are few indicators for the use of these drugs in Colorado. There were 145 emergency department reports involving benzodiazepines in the first half of 2004, according to the unweighted data accessed from *DAWN Live!*.

Statewide in 2004, there were 76 admissions to treatment for clients indicating barbiturates, sedatives, or tranquilizers as their primary drug of choice (exhibit 5). Sixty-three percent were female, and 85 percent were adults (older than 18) (exhibit 8). Fifty-five percent were urban, and 85 percent were White. When comparing this group to all other clients who reported other primary drugs, this group used daily tobacco the least and had the highest percentage of

married clients, unemployment (the category “unemployment” includes those out of the workforce, such as students, homemakers, persons with disabilities, etc.), slight to moderate socialization issues or concerns, mental health problems, and visits to medical and psychiatric emergency rooms.

As shown in exhibit 8, 68 percent administered their drug orally, 21 percent smoked it, 3 percent inhaled it, and 3 percent injected it. Fifty percent were younger than 18 when they began to use this category of drugs, and 45 percent were 21 or older. Sixty-six percent used a secondary drug, such as alcohol (26 percent), opiates (13 percent), and marijuana (11 percent), and 72 percent of those with a secondary drug were younger than 18 when they first used it.

These drugs are frequently obtained as prescription medications and fall into the diverted pharmaceutical class as well. Local independent dealers and Internet services are the principal distributors of diverted pharmaceuticals.

Club Drugs

Club drugs are a group of synthetic drugs commonly associated with all night dance clubs called “raves.” These drugs include methylenedioxymethamphetamine (MDMA, or ecstasy), gamma hydroxybutyrate (GHB), Rohypnol (“roofies”), and ketamine (“Special K”).

Information on use of these drugs in Colorado, while still limited, is expanding. ADAD added club drugs to the enhanced DACODS data set in July 2002. Also, there are currently two sources of institutional indicator data that include the club drugs (DAWN and RMPDC). In addition, ADAD has worked with OMNI Research and Training, a Denver-based firm, to add club drug questions to the Colorado Youth Survey.

MDMA, originally developed as an appetite suppressant, is chemically similar to the stimulant amphetamine and the hallucinogen mescaline and thus produces both stimulant and psychedelic effects. MDMA is readily obtainable at raves, nightclubs, strip clubs, or private parties. The traffickers are typically White and in their twenties or early thirties. They obtain their MDMA from Nevada or California, with source connections in Europe, and target young adults and adolescents as users. Mexican trafficking organizations are making inroads in the Colorado MDMA market. The DEA reports one tablet or capsule costs \$15 to \$25, with larger quantities selling for \$8 to \$16 per tablet.

GHB is a central nervous system depressant that can sedate the body, and at higher doses it can slow

breathing and heart rate dangerously. It can be produced in clear liquid, white powder, tablet, and capsule forms, and is often used in combination with alcohol, making it even more dangerous. The DEA reports that the majority of GHB customers are White and in their twenties or thirties. Past DEA reports have placed the GHB price at \$5–\$10 per dosage unit (i.e., one bottle capful).

Rohypnol (“roofies”) is a benzodiazepine sedative approved as a treatment for insomnia in more than 60 countries, but not in the United States. Rohypnol is tasteless, odorless, and dissolves easily in carbonated beverages, and its effects are aggravated by alcohol use. There does not appear to be widespread use of Rohypnol among either the general population or the rave scene in Colorado. What use there is occurs in the adolescent to mid-thirties age range.

Ketamine, often called Special K on the street, is an injectable anesthetic that has been approved for both human and animal use in medical settings. However, about 90 percent of the ketamine legally sold today is intended for veterinary use. Produced in liquid form or white powder, it can be injected, inhaled, or swallowed. Similar to phencyclidine (PCP) in its effects, it can bring about dream-like states and hallucinations.

Club drugs are primarily used by young adults and adolescents, and either these clients are not coming to the attention of indicator organizations or the number of users is still quite small. Certain club drugs are also used as “date rape” drugs, and their use in this manner may be underreported.

Unweighted emergency department data for club drugs, accessed from DAWN *Live!*, show that 31 reports in the first half of 2004 involved MDMA, accounting for 1.8 percent of illicit drug reports (exhibit 1). There were two reports involving GHB. In 2003, there were 37 treatment admissions for clients with club drugs as their primary substance; in 2004, there were 52 treatment admissions statewide (exhibit 5). For 2004 in its entirety, there were 39 calls to the RMPDC related to club drugs (exhibit 4).

Alcohol

Alcohol continues to be the most abused substance in the State. Colorado ranks 19 percent higher than the national average and fifth in the Nation in per capita consumption of beverage alcohol. Alcohol use disorders are medically based disorders related to abuse of or dependence on alcohol.

Unweighted data accessed from DAWN *Live!* for the first half of 2004 show 954 ED reports involving

alcohol; 651 involved alcohol-in-combination reports and 303 represented alcohol-only reports for patients younger than 21.

During the first half of calendar year 2004, 40 percent of all clients admitted to treatment in Colorado stated their primary drug of abuse was alcohol (exhibit 10). Seven percent of these clients were younger than 18. Of those age 18 or older, 64 percent began to use alcohol before age 18. During State FY 2004 (July 1, 2003, through June 30, 2004), ADAD reported 44,514 detoxification discharges and 22,372 discharges from the Drinking Driver education and therapy program. Untreated alcoholism accounts for some of Colorado's greatest concerns, such as poverty, violent crimes, homelessness, domestic violence, vehicular crashes, overcrowded jails, and overcrowded emergency and foster care systems. Each year, Colorado spends \$4.4 billion in costs related to untreated substance abuse, adding a substantial financial burden to taxes and already stressed governmental resources.

Even though laws exist that prohibit selling alcoholic beverages to minors, alcohol is the primary drug of choice for adolescents in Colorado. It is readily available and inexpensive. Purveyors apparently target younger age groups. Two recent marketing trends are "jello shots," a mixture of alcohol with fruit-flavored gelatin, and sweet soda-pop flavored alcoholic beverages.

Colorado's Youth Survey noted that almost 50 percent of students in grades 9–12 during 2003 currently were using alcohol, and 80 percent had one or more drinks of alcohol in their lifetime.

Abuse of alcohol at an early age is frequently a precursor to use and abuse of illegal substances. Recently, deaths related to binge drinking on college campuses have brought national notoriety to Colorado, with five confirmed deaths of college-age individuals from alcohol poisoning.

Moderate use of alcohol among adults is culturally acceptable, and denial of abuse is particularly difficult to overcome. The average treatment client in Colorado with alcohol as a primary drug uses or abuses it for 16 years before seeking treatment. For detoxification clients, that time period expands to 20 years.

In 2003, the Colorado State Patrol, which deals with approximately 30 percent of all vehicular crashes in the State, reported 2,161 vehicular crashes directly caused by individuals driving under the influence of alcohol. FARS data indicated in 2003 that 39 percent

(246) of the 632 individuals killed in Colorado in vehicular crashes involved alcohol.

The CDPHE reported 511 alcohol-induced deaths unrelated to motor vehicular accidents.

The number of alcohol-related calls statewide to the RMPDC increased markedly from 110 in 2001 to 223 in 2004 (exhibit 3).

Alcohol-related mortality data for the Denver PMSA also increased steadily from 47 in 1996 to 86 in 2002 (exhibit 4).

Of the four "generations" of Colorado citizens (the Y generation, the X generation, Baby Boomers, and Seniors), sedatives and tranquilizers (including alcohol and marijuana) are the drugs of choice for Baby Boomers (exhibit 9). The X generation is equally split between sedatives and tranquilizers and stimulants as their drugs of choice.

Tobacco

Tobacco use is the leading cause of preventable death and disability in the State, and it is one of Colorado's most serious public health problems. Tobacco use is responsible for more than 4,200 deaths and development of 130,000 tobacco-related illnesses in adults annually. Smoking tobacco causes 30 percent of all cancer deaths, 21 percent of coronary heart disease-related deaths, and 18 percent of stroke deaths. In Colorado, 193,000 children are exposed to second-hand smoke at home, resulting in asthma and respiratory illnesses.

Annual health care costs directly related to smoking exceed \$1 billion (or \$259 per capita) in the State. Every Colorado household incurs more than \$511 per year in State and Federal taxes to pay for smoking-related health care costs.

Approximately 630,000 (19 percent) of all Colorado adults use tobacco products, compared to the 23 percent nationwide average. Sixty-eight percent of clients who received substance abuse treatment and/or detoxification services in State FY 2004 used tobacco products daily.

Laws enacted in Colorado prohibit the sale of tobacco products to adolescents (those younger than 18). In spite of that, the Youth Risk Behavior Survey identified 27 percent of students in grades 9–12 as current cigarette smokers. Adolescents who smoke are more likely to smoke as adults and be at risk for tobacco-related illnesses.

The sale of tobacco products is monitored by Colorado's Department of Revenue, Tobacco Enforcement Division, and tobacco prevention efforts fall primarily under the purview of the Department of Public Health and Environment.

INFECTIOUS DISEASES RELATED TO SUBSTANCE ABUSE

Of the 8,270 AIDS cases reported in Colorado through September 30, 2004, 9.3 percent were classified as IDUs, and 10.9 percent were classified as homosexual or bisexual males and IDUs (exhibit 11).

CORRECTIONS: THE HIDDEN POPULATION

The Colorado Department of Corrections reports annually on new court commitments and parole populations. Unfortunately, data for substance abusers are not broken out by primary drug of choice. However, this population is large enough (20,144 for the adult population as of December 2004) that to exclude it would mean giving a skewed picture of Colorado's substance abuse problem. Seventy-seven percent of the prison population on June 30, 2003, were substance abusers. The total inmate population at that time was 15,365, so 11,831 were substance abusers.

There were 5,276 new court commitments during State FY 2003. Eighty-two percent of new court commitments were identified as substance abusers.

Ninety percent of the general adult inmate population were male. Demographic characteristics for sub-

stance abusers and non-abusers were compared. This comparison indicated that substance abusers were less likely to be formally married, and more likely to be Latino, common-law married, and younger.

Substance abusers had significantly more crimes on their current incarceration than non-abusers, and they averaged six times as many drug crimes as non-abusers. Substance abusers were more likely to have had a prior correctional incarceration, and they had more serious criminal histories than non-abusers. Substance abusers were less likely to be identified as sex offenders, and they were less likely to have medical needs than non-abusers. Female offenders were identified as having higher treatment needs overall than males. Substance abusers had 3 times as many drug-related crimes as non-abusers.

Substance abusers represented 85 percent of the parole returns during State FY 2003. Parolees are returned to the correctional system either for a parole revocation or a new crime. Twenty-two percent of the returned substance abusers had committed a new crime while on parole.

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Exhibit 1. Illicit Drug Reports (Excluding Alcohol) in Denver EDs by Number and Percent (Unweighted¹): January–June 2004

Drug	Number	Percent
Cocaine	699	41.4
Heroin	292	17.3
Marijuana	334	19.8
Amphetamine	115	6.8
Methamphetamine	155	9.2
MDMA	31	1.8
Inhalants	29	1.7
Other ²	32	1.9
Total	1,687	99.9

¹The unweighted data are from 8–9 Denver 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.

²Includes GHB (2), LSD (1), PCP (5), miscellaneous hallucinogens (17), and drug combinations (11).

SOURCE: DAWN *Live!*, OAS, SAMHSA, updated 12/13/2004

Exhibit 2. Drug-Related Hospital Discharges Per 100,000 Population in Colorado for Selected Drugs: 1997–2003

Drug	1997	1998	1999	2000	2001	2002	2003
Alcohol	NA ¹	17,154	18,577	18,744	20,644	21,433	23,750
Rate/100K		418.0	440.6	432.3	464.3	474.02	518.0
Amphetamines	959	815	682	942	1,161	1,463	1,814
Rate/100K	24.0	20.0	16.2	21.7	26.1	32.3	39.6
Cocaine	2,245	2,492	2,517	2,732	2,787	3,305	3,658
Rate/100K	56.1	60.7	59.7	63.0	63.0	73.1	80.3
Marijuana	2,118	2,227	2,204	2,455	2,755	3,016	3,246
Rate/100K	53.0	54.3	52.3	56.6	62.0	66.7	71.0
Narcotic Analgesics	1,458	1,566	1,639	2,053	2,237	2,605	3,368
Rate/100K	36.5	38.2	39.0	47.3	50.3	57.6	73.4
Population	3,995,923	4,102,491	4,215,984	4,335,540	4,446,529	4,521,484	4,586,455

¹NA=Data not available.

SOURCE: CDPHE

Exhibit 3. Number of Drug-Related Calls to the Rocky Mountain Poison Control Center: 2001–2004

Drug	2001 ¹	2002	2003	2004
Alcohol	110	149	150	223
Cocaine/crack	59	66	68	59
Heroin/morphine	19	16	22	18
Marijuana	34	37	36	29
Methamphetamine	20	39	39	66
Other Stimulants Amphetamines	3	3	6	4
Club Drugs	30	55	40	39
Inhalants	4	16	10	4

¹Data for years prior to 2001 were unavailable.

SOURCE: RMPDC

Exhibit 4. Drug-Related Mortality Data for the Denver PMSA: 1996–2002¹

Drug	1996	1997	1998	1999	2000	2001	2002
Alcohol	47	49	61	74	75	99	86
Cocaine/Crack	68	56	66	82	80	126	108
Heroin/Morphine	34	53	51	79	66	77	64
Marijuana	1	4	3	20	20	31	5
Methamphetamine	3	6	3	8	10	19	17
Other Stimulants/ Amphetamines	2	5	3	5	9	8	13
Club Drugs	–	–	–	–	2	4	2
Inhalants	–	1	2	–	1	–	1

¹Data for 2003 and 2004 were not available.
SOURCE: DAWN, OAS, SAMHSA

Exhibit 5. Numbers and Percentages of Treatment Admissions by Drug Type, Excluding Alcohol: 1997–2004

Drug		1997	1998	1999	2000	2001	2002	2003	2004 ¹
Heroin	<i>N</i> (%)	1,200 (15.7)	1,418 (14.4)	1,585 (16.3)	1,577 (16.3)	1,482 (14.7)	1,415 (13.1)	1,640 (14.0)	1,090 (8.5)
Non-Rx Methadone	<i>N</i> (%)	4 (0.1)	15 (0.2)	15 (0.2)	16 (0.2)	9 (0.1)	17 (0.2)	15 (0.1)	28 (0.2)
Other Opiates	<i>N</i> (%)	195 (2.6)	230 (2.3)	274 (2.8)	304 (3.1)	386 (3.8)	394 (3.6)	519 (4.4)	510 (4.0)
Methamphetamine	<i>N</i> (%)	1,081 (14.2)	1,436 (14.6)	1,214 (12.5)	1,314 (13.6)	1,659 (16.5)	2,070 (19.2)	2,744 (23.3)	3,300 (25.7)
Other Amphetamines, Stimulants	<i>N</i> (%)	52 (0.7)	61 (0.6)	89 (0.9)	107 (1.1)	91 (0.9)	104 (1.0)	78 (0.7)	52 (0.4)
Cocaine	<i>N</i> (%)	1,797 (23.6)	2,309 (23.5)	2,099 (21.6)	1,916 (19.8)	1,888 (18.8)	2,193 (20.3)	2,330 (19.8)	2,614 (20.4)
Marijuana	<i>N</i> (%)	3,152 (41.3)	4,126 (42.0)	4,061 (41.8)	4,135 (42.8)	4,248 (42.3)	4,343 (40.2)	4,159 (35.4)	4,988 (38.9)
Hallucinogen	<i>N</i> (%)	40 (0.5)	56 (0.6)	68 (0.7)	72 (0.7)	71 (0.7)	38 (0.4)	23 (0.2)	22 (0.2)
PCP	<i>N</i> (%)	0 (0.0)	0 (0.0)	4 (0.0)	5 (0.1)	2 (0.0)	5 (0.0)	8 (0.1)	6 (0.0)
Barbiturates	<i>N</i> (%)	7 (0.1)	11 (0.1)	15 (0.2)	5 (0.1)	6 (0.1)	20 (0.2)	14 (0.1)	14 (0.1)
Sedatives	<i>N</i> (%)	4 (0.1)	17 (0.2)	16 (0.2)	21 (0.2)	13 (0.1)	89 (0.8)	63 (0.5)	16 (0.1)
Tranquilizers	<i>N</i> (%)	37 (0.5)	40 (0.4)	40 (0.4)	38 (0.4)	44 (0.4)	49 (0.5)	52 (0.4)	46 (0.4)
Inhalants	<i>N</i> (%)	28 (0.4)	50 (0.5)	28 (0.3)	26 (0.3)	31 (0.3)	21 (0.2)	20 (0.2)	28 (0.2)
Club Drugs	<i>N</i> (%)	NA (NA)	NA (NA)	NA (NA)	NA (NA)	NA (NA)	12 (0.1)	37 (0.3)	52 (0.4)
Other	<i>N</i> (%)	31 (0.4)	51 (0.5)	218 (2.2)	123 (1.3)	119 (1.2)	37 (0.3)	54 (0.5)	58 (0.5)
Total <i>N</i>		7,628	9,820	9,726	9,659	10,049	10,807	11,756	12,824

¹First 6 months annualized.
SOURCE: DACODS, ADAD

Exhibit 6 Annual Percentages of Heroin, Methamphetamine, Cocaine, and Marijuana Users Entering Treatment Within 3 Years of Initial Use: 1997–2004

Drug		1997	1998	1999	2000	2001	2002	2003	2004¹
Heroin/Other Opiates	<i>N</i>	214	314	342	340	283	267	255	188
	(%)	(17.9)	(22.3)	(21.7)	(21.6)	(19.1)	(18.9)	(15.5)	(17.2)
Methamphetamine	<i>N</i>	362	472	308	311	367	475	676	790
	(%)	(33.6)	(33.0)	(25.5)	(23.7)	(22.1)	(23.0)	(24.6)	(23.9)
Cocaine	<i>N</i>	310	423	390	374	348	394	438	472
	(%)	(17.3)	(18.4)	(18.6)	(19.5)	(18.4)	(18.0)	(18.8)	(18.1)
Marijuana	<i>N</i>	1,326	1,584	1,434	1,552	1,505	1,403	1,464	1,654
	(%)	(42.4)	(39.1)	(35.9)	(37.7)	(35.7)	(32.3)	(35.2)	(33.2)
Total New Users in Treatment in 3 Years	<i>N</i>	2,212	2,793	2,474	2,577	2,503	2,539	2,833	3,104
	(%)	(30.8)	(30.4)	(27.9)	(28.9)	(27.1)	(25.3)	(26.1)	(25.9)
Total Users	<i>N</i>	7,190	9,188	8,880	8,915	9,241	10,016	10,871	11,992

¹First 6 months annualized.
SOURCE: DACODS, ADAD

Exhibit 7. Average Number of Years Between First Use of Selected Drugs and Treatment Entry: FY 2004

Drug	Years
Marijuana	7.0
Methamphetamine	8.5
Cocaine/Crack	10.0
Other Opiates	11.0
Heroin	13.0
Alcohol	16.0

SOURCE: DACODS, ADAD

Exhibit 8. Profile of Colorado Treatment¹ Admissions by Primary Drug of Abuse: FY 2004

Profile	Alcohol (State FY 2003)	Cocaine	Heroin/ Other Opi- ates	Marijuana	Metham- phetamine	Barbiturates, Tranquilizers, Sedatives
Age	7% < 18 17% 18–25 27% 26–35 31% 36–45	69% 26–45	100% 18+	42% <18 58% 18+	5% <18 33% 18–25 35% 26–35 23% 36–45	15% <18 85% 18+
Gender	70% male	61% male	61% male	73% male	53% male	37% male
Urban/Rural	51% urban	69% urban	71% urban	70% urban	61% urban	55% urban
Race/Ethnicity	64% White 26% Hispanic 6% Black	46% White 30% Hispanic 21% Black	69% White 19% His- panic 8% Black	53% White 29% Hispanic 13% Black	83% White 12% Hispanic 2% Black	82% White 9% Hispanic 3% Black
Tobacco Use	63% use daily	73% use daily	78% use daily	64% use daily	81% use daily	56% use daily
Highest School Grade	22% 9–11 44% 12 th 25% college	24% 9–11 45% 12 th 25% college	18% 9–11 42% 12 th 34% col- lege	42% 9–11 29% 12 th 9% college	28% 9–11 49% 12 th 17% college	26% 9–11 40% 12 th 27% college
Source of Legal Income	54% wages	45% wages	45% wages	50% wages	39% wages	27% wages 15% disability 48% none or other
Health Insurance	84% none	71% none	48% none	60% none	74% none	56% none
Marital Status	45% never married 22% married 23% divorced	43% never married 24% married 22% divorced	41% never married 28% mar- ried 22% di- vorced	79% never married 11% married 6% divorced	49% never married 20% married 19% divorced	33% never mar- ried 33% married 21% divorced
Prior Treatment Episodes	38% none 28% 1 14% 2 20% 3+	32% none 31% 1 18% 2 20% 3+	28% none 23% 1 19% 2 31% 3+	55% none 27% 1 9% 2 9% 3+	37% none 32% 1 16% 2 16% 3+	50% none 29% 1 5% 2 16% 3+
Source of Pay- ment	46% self-pay 26% TANF	33% self-pay 42% TANF	NA	NA	30% self-pay 39% TANF	NA
# of Persons Living on Client's In- come	60% 1 (client) 15% 2 11% 3	58% 1 (client) 14% 2 12% 3	63% 1 (client) 18% 2 10% 3	68% 1 (client) 11% 2 10% 3	58% 1 (client) 16% 2 12% 3	61% 1 (client) 18% 2 21% 3
Dependent Chil- dren	60% none 29% 1-2	52% none 32% 1-2	69% none 25% 1-2	71% none 23% 1-2	54% none 34% 1-2	61% none 34% 1-2
DUI/DWAI Ar- rests in Last 24 Months	71% none 23% 1 6% 2+	91% none	95% none	92% none	92% none	84% none 16% 1
All Other Arrests	65% none 23% 1 12% 2+	56% none 27% 1 14% 2+	65% none 18% 1 18% 2+	49% none 31% 1 21% 2+	47% none 30% 1 22% 2+	68% none 18% 1 13% 2+
Employment	35% full time 10% part time 30% unem- ployed	26% full time 9% part time 49% unemployed	26% full time 9% part time 65% un- employed	22% full time 11% part time 67% unem- ployed	26% full time 10% part time 47% unem- ployed	16% full time 8% part time 76% unem- ployed
Monthly Legal Income	37% none 12% <\$499 38% \$500– \$1,999	45% none 12% <\$499 32% \$500–\$1,999	40% none 11% <\$499 36% \$500– \$1,999	55% none 10% <\$499 38% \$500– \$1,999	51% none 10% <\$499 31% \$500– \$1,999	58% none 8% <\$499 20% \$500– \$1,999
Living Situation	63% inde- pendent 29% depend- ent	61% independent 31% dependent	73% inde- pendent 18% de- pendent	35% inde- pendent 62% depend	52% independ- ent 42% depend	50% independ- ent 34% dependent

¹“Treatment” excludes detoxification and DUI data.

Exhibit 8. Profile of Colorado Treatment¹ Admissions by Primary Drug of Abuse: FY 2004 (Cont'd.)

Profile	Alcohol (State FY 2003)	Cocaine	Heroin/ Other Opiates	Marijuana	Metham- phetamine	Barbiturates, Tranquilizers, Sedatives
Family Issues	25% none 61% slight- moderate 14% severe	20% none 60% slight- moderate 20% severe	29% none 56% slight- moderate 15% severe	25% none 61% slight- moderate 14% severe	17% none 62% slight- moderate 21% severe	24% none 61% slight- moderate 16% severe
Socialization Issues	34% none 60% slight- moderate 6% severe	28% none 62% slight- moderate 10% severe	34% none 57% slight- moderate 9% severe	38% none 56% slight- moderate 6% severe	25% none 65% slight- moderate 11% severe	24% none 71% slight- moderate 5% severe
Education or Employment Issues	40% none 51% slight- moderate 9% severe	29% none 57% slight- moderate 14% severe	38% none 49% slight- moderate 13% severe	31% none 58% slight- moderate 11% severe	29% none 58% slight- moderate 13% severe	34% none 52% slight- moderate 13% severe
Medical or Physical Issues	63% none 33% slight- moderate 4% severe	59% none 37% slight- moderate 4% severe	40% none 52% slight- moderate 8% severe	75% none 23% slight- moderate 2% severe	60% none 38% slight- moderate 3% severe	42% none 50% slight- moderate 8% severe
Mental Health Problems	31% yes	28% yes	30% yes	32% yes	31% yes	45% yes
Medical ER Visit in Last 6 Months	77% none 14% 1	79% none 14% 1	68% none 15% 1	84% none 12% 1	82% none 12% 1	67% none 19% 1
Medical Hospi- tal Admission in Last 6 Months	86% none 8% 1	89% none 8% 1	79% none 13% 1	94% none 5% 1	94% none 6% 1	72% none 17% 1
Psychiatric ER Visit in Last 6 Months	95% none 4% 1	95% none 4% 1	93% none 5% 1	97% none 3% 1	96% none 3% 1	84% none 13% 1
Psychiatric Hospital Admission in Last 6 Months	95% none 4% 1	94% none 4% 1	93% none 5% 1	96% none 3% 1	96% none 4% 1	87% none 14% 1
Referral to Treatment Source	17% self 12% AOD provider 12% Soc Ser 34% Non-DUI CJ	17% self 10% AOD pro- vider 16% Soc Ser 48% Non-DUI CJ	53% self 11% AOD pro- vider 4% Soc Ser 16% Non-DUI CJ	9% self 3% AOD provider 21% Soc Ser 49% Non-DUI CJ	11% self 10% AOD provider 21% Soc Ser 50% Non-DUI CJ	18% self 13% AOD pro- vider 21% Soc Ser 29% Non-DUI CJ
Diagnostic Impression	33% abuse 52% depend- ence	26% abuse 69% dependence	12% abuse 86% depend- ence	47% abuse 40% dependence	28% abuse 68% depend- ence	26% abuse 55% depend- ence
# Days Used in Last 30 Days	49% none 17% 1-3 13% 4-12 17% 13-29 4% daily	49% none 20% 1-3 14% 4-12 15% 13-29 3% daily	30% none 5% 1-3 7% 4-12 17% 13-29 42% daily	49% none 20% 1-3 13% 4-12 12% 13-29 7% daily	61% none 14% 1-3 11% 4-12 11% 13-29 3% daily	45% none 13% 1-3 11% 4-12 18% 13-29 13% daily
Route of Administration	99% oral <1% smoking <1% inhale <1% injection	2% oral 63% smoking 28% inhale 8% injection	29% oral 5% smoking 5% inhale 62% injection	2% oral 96% smoking 3% inhale 0% injection	3% oral 63% smoking 12% inhale 22% injection	68% oral 21% smoking 3% inhale 3% injection
Age of First Use	76% under 18 16% 18-20 8% 21+	27% under 18 21% 18-20 52% 21+	26% under 18 26% 18-20 48% 21+	90% under 18 7% 18-20 3% 21+	41% under 18 20% 18-20 39% 21+	50% under 18 5% 18-20 45% 21+
Secondary Drug	58% none 10% cocaine 25% mari- juana	30% none 35% alcohol 24% marijuana	42% none 9% alcohol 25% cocaine	33% none 45% alcohol 11% metham- phetamine	28% none 21% alcohol 10% cocaine 36% mari- juana	34% none 26% alcohol 13% opiates 11% marijuana
Age of First Use of Secondary Drug	59% under 18 17% 18-20 24% 21+	69% under 18 16% 18-20 15% 21+	49% under 18 17% 18-20 34% 21+	78% under 18 12% 18-20 11% 21+	79% under 18 12% 18-20 9% 21+	72% under 18 8% 18-20 20% 21+

¹"Treatment" excludes detoxification and DUI data.

SOURCE: DACODS, ADAD

Exhibit 9. Numbers and Percentages, Generational Drug Use Among Treatment Clients in Colorado: FY 2004

Age Ranges		Sedatives Tranquilizers ¹	Stimulants	Opiates	Marijuana	Hallucin- ogens	Club Drugs	Total
Y Generation ²	<i>N</i> (%)	1,079 (26)	751 (18)	90 (2)	2,241 (54)	5 (<1)	20 (1)	4,186 (28)
X Generation ³	<i>N</i> (%)	2,673 (39)	2,519 (37)	537 (8)	1,062 (16)	12 (<1)	6 (<1)	6,809 (46)
Baby Boomers ⁴	<i>N</i> (%)	2,017 (54)	1,004 (27)	462 (12)	229 (6)	1 (<1)	4 (<1)	3,717 (25)
Seniors ⁵	<i>N</i> (%)	123 (84)	6 (4)	11 (8)	7 (5)	0 (-)	0 (-)	147 (1)
Total	<i>N</i> (%)	5,892 (40)	4,280 (29)	1,100 (7)	3,539 (24)	18 (<1)	30 (<1)	14,859 (100)

¹Sedatives Tranquilizers include alcohol.

²Y Generation includes anyone born after 1981.

³X Generation includes anyone born between 1965 and 1981.

⁴Baby Boomers include anyone born between 1946 and 1964.

⁵Seniors include anyone born before 1946.

SOURCE: DACODS, ADAD

Exhibit 10. Numbers and Percentages of Treatment Admissions by Drug Type, Including Alcohol: 1997–2004

Drug		1997	1998	1999	2000	2001	2002	2003	2004 ¹
Alcohol	<i>N</i> (%)	6,353 (45.4)	7,833 (44.4)	6,573 (40.3)	6,577 (40.5)	6,311 (38.6)	6,839 (38.8)	7,044 (37.5)	8,580 (40.1)
Heroin	<i>N</i> (%)	1,200 (8.6)	1,418 (8.0)	1,585 (9.7)	1,577 (9.7)	1,482 (9.1)	1,415 (8.0)	1,640 (8.7)	1,090 (5.1)
Non-Rx Methadone	<i>N</i> (%)	4 (0.0)	15 (0.1)	15 (0.1)	16 (0.1)	9 (0.1)	17 (0.1)	15 (0.1)	28 (0.1)
Other Opiates	<i>N</i> (%)	195 (1.4)	230 (1.3)	274 (1.7)	304 (1.9)	386 (2.4)	394 (2.2)	519 (2.8)	510 (2.4)
Methamphetamine	<i>N</i> (%)	1,081 (7.7)	1,436 (8.1)	1,214 (7.4)	1,314 (8.1)	1,659 (10.1)	2,070 (11.7)	2,744 (14.6)	3,300 (15.4)
Other Amphetamines, Stimulants	<i>N</i> (%)	52 (0.4)	61 (0.3)	89 (0.5)	107 (0.7)	91 (0.6)	104 (0.6)	78 (0.4)	52 (0.2)
Cocaine	<i>N</i> (%)	1,797 (12.9)	2,309 (13.1)	2,099 (12.9)	1,916 (11.8)	1,888 (11.5)	2,193 (12.4)	2,330 (12.4)	2,614 (12.2)
Marijuana	<i>N</i> (%)	3,152 (22.5)	4,126 (23.4)	4,061 (24.9)	4,135 (25.5)	4,248 (26.0)	4,343 (24.6)	4,159 (22.1)	4,988 (23.3)
Hallucinogen	<i>N</i> (%)	40 (0.3)	56 (0.3)	68 (0.4)	72 (0.4)	71 (0.4)	38 (0.2)	23 (0.1)	22 (0.1)
PCP	<i>N</i> (%)	0 (0.0)	0 (0.0)	4 (0.0)	5 (0.0)	2 (0.0)	5 (0.0)	8 (0.0)	6 (0.0)
Barbiturates	<i>N</i> (%)	7 (0.1)	11 (0.1)	15 (0.1)	5 (0.0)	6 (0.0)	20 (0.1)	14 (0.1)	14 (0.1)
Sedatives	<i>N</i> (%)	4 (0.0)	17 (0.1)	16 (0.1)	21 (0.1)	13 (0.1)	89 (0.5)	63 (0.3)	16 (0.1)
Tranquilizers	<i>N</i> (%)	37 (0.3)	40 (0.2)	40 (0.2)	38 (0.2)	44 (0.3)	49 (0.3)	52 (0.3)	46 (0.2)
Inhalants	<i>N</i> (%)	28 (0.2)	50 (0.3)	28 (0.2)	26 (0.2)	31 (0.2)	21 (0.1)	20 (0.1)	28 (0.1)
Club Drugs	<i>N</i> (%)	NA (NA)	NA (NA)	NA (NA)	NA (NA)	NA (NA)	12 (0.1)	37 (0.2)	52 (0.2)
Other	<i>N</i> (%)	31 (0.2)	51 (0.3)	218 (1.3)	123 (0.8)	119 (0.7)	37 (0.2)	54 (0.3)	58 (0.3)
Total <i>N</i>		13,981	17,653	16,299	16,236	16,360	17,646	18,800	21,404

¹First 6 months annualized.

SOURCE: DACODS, ADAD

Exhibit 11. Colorado Cumulative AIDS Cases by Gender and Exposure Category Through September 30, 2004

Gender/Exposure Category	AIDS Cases		Individuals with HIV Who Have Not Progressed to AIDS	
	Number	Percent of Total	Number	Percent of Total
Total Cases (N)	8,270	100	3,772	100
Gender				
Male	7,618	92.1	3,403	90.2
Female	652	7.9	369	9.8
Exposure Category				
Men/sex/men	5,558	67.2	2,402	63.7
Injecting drug user (IDU)	768	9.3	405	10.7
MSM and IDU	900	10.9	357	9.5
Heterosexual contact	497	6.0	317	8.4
Other	186	2.2	50	1.3
Risk not identified	361	4.4	241	6.4

SOURCE: CDPHE

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

D. William Wood, M.P.H., Ph.D.¹

ABSTRACT

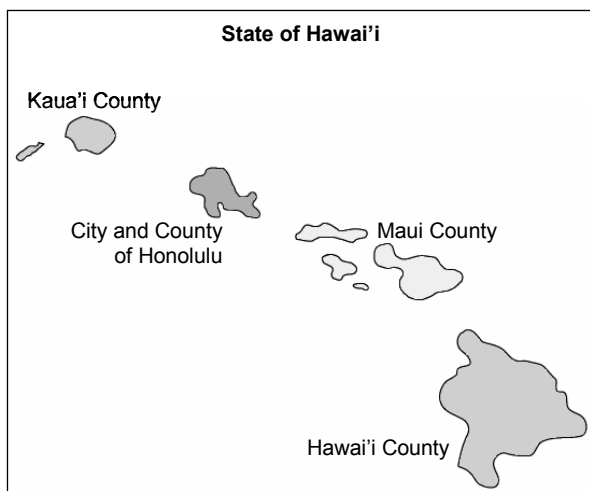
Methamphetamine abuse indicators were variable in 2004. Numbers of deaths were higher, treatment admissions were down a little, and police cases were also slightly lower. This period also saw variation for the indicators of cocaine use. The numbers of deaths and treatment admissions were down, while police cases increased slightly. Heroin use was down across all indicators, with the number of deaths and treatment admissions lower. Marijuana use was also down across all indicators. Oxycodone use appeared to have increased, with deaths up dramatically and drug seizures totaling an increase from previous periods. Oxycodone treatment admissions are now being reported and are thought to be higher than during previous periods. The Medical Examiner's office reported 25 decedents with positive methadone toxicology in 2004.

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.

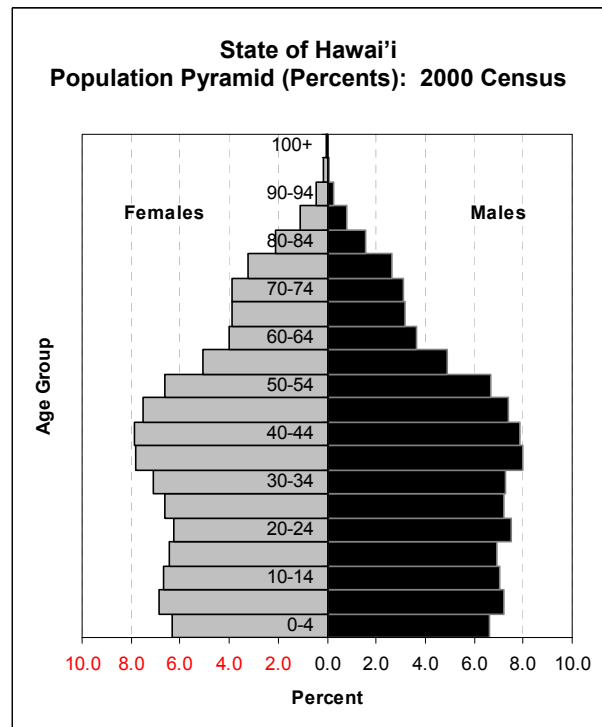
Area Description

Hawai'i, the Aloha State, had a population of 1,211,537 as of April 1, 2000, and by July 1, 2003, the population was estimated to be 3.8 percent higher, at 1,257,608.



The State's population is differentially distributed across the seven major islands of the Hawaiian chain, shown in the figure above. There are 26 islands within the State's boundaries, which extend from South Point on the Big Island of Hawai'i (the most southerly point in the United States) to Kure atoll, near Midway Island. The chain spans a total of 1,200 miles from one end to the other. The City and County of Honolulu has 72.3 percent of the State population. Hawai'i, the Big Island, has 12.3 percent of the population, followed by Maui County (10.6 percent) and Kaua'i County (4.4 percent). The landmass of the State is 6,423 square miles, with a population density of 188.6 persons per square mile.

The age and gender makeup of the State are shown in the following population pyramid, which reflects that males and females are about equally represented (sex ratio [males/100 females] = 100.96) and the median age is 36.2. While there is some variation by county, it is not significant. The dependency ratio (the number of other persons people of employment age must support) is 0.51, meaning that for every 10 persons of working age in Hawai'i (15–64 years of age), they must support, in addition to themselves, 5.1 other people.



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

The economy in Hawai'i, after a decade of stagnation, has rebounded. The mean income is now \$49,820, and the median income is \$56,961, suggesting that there are some very low incomes in the State as well as some extremely high incomes. The per capita money income is \$21,525, and 10.7 percent of the population are below the Federal Poverty Level.² As an index of the extent to which life in Hawai'i compares to that on the mainland of the United States, the COLA (Cost of Living Adjustment) to Federal paychecks is often used. Currently, COLA in Hawai'i is 25 percent, having risen recently from the 1998 rate of 22.5 percent. While the median value of a single family dwelling in 2000 was \$272,700, by 2005 it had appreciated to \$525,000 for a three-bedroom, one-bathroom, single wall construction property on 8,000 square feet of land. As of the writing of this report, the Hawai'i gasoline price is \$2.31 per gallon. Approximately 10 percent of the population is without health insurance.

Seventeen percent of the population are foreign born, with 73.2 percent speaking English as the primary language in the home. Using U.S. Census categories, the ethnic distribution of the population is 24.3 percent White, 1.8 percent Black, 0.3 percent American Indian and Alaska Native, 9.4 percent Native Hawaiian and Other Pacific Islander, 41.6 percent Asian, and 1.3 percent Others. Single-race-only described 79.6 percent of the population.

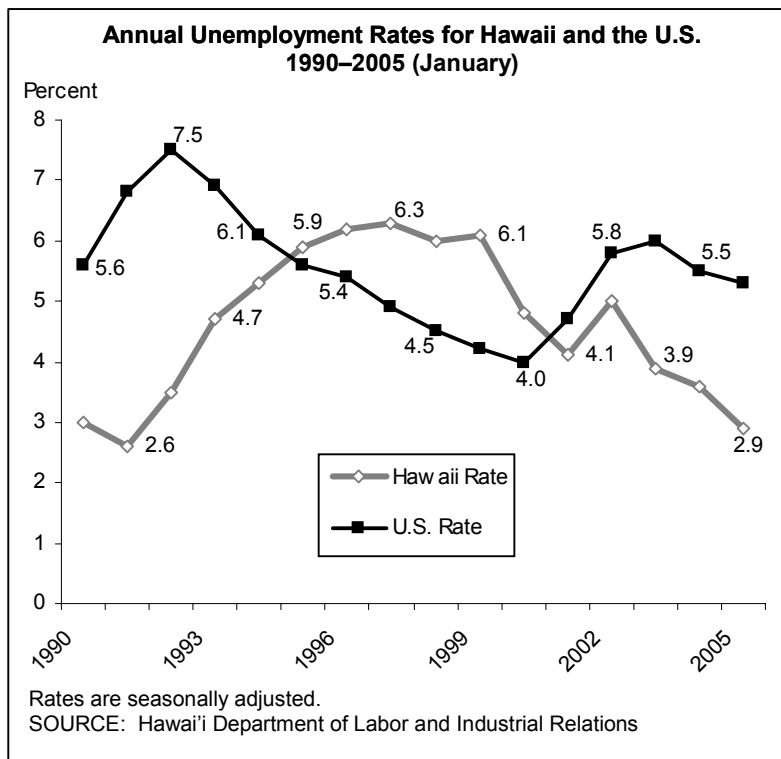
The economy has rebounded from the slump resulting from the Asian economic crisis and the mainland 9-11 event, both of which seriously negatively impacted the number of visitors coming to Hawai'i for vacations. As shown in the figure, unemployment is among the lowest in the United States, at about 3.3 percent, and contractors are extremely busy working

on delayed projects that accumulated during the recent recession in Hawai'i.

A unique feature of the population of the State is that a very high number of residents are members of the armed forces, with Pearl Harbor Navy and Schofield Army Bases being home to the majority of them. In total, as of 2003, there were 101,030 armed forces members and military dependents in the State. This does not count the numbers of National Guard members (5,334) and military reserves (9,108). In total, this represents 9.2 percent of the population. The presence of the armed forces provides major financial inputs to the economy in terms of support service contracts and Federal impact moneys for the State school system. It also skews the State population profile by adding younger, male residents.

With the Afghanistan and Iraq conflicts, Hawai'i has had a number of large deployments of active duty and

reserve and guard units. The exact numbers deployed are not clear, but the short-term impact is certain. When the soldiers are away, especially for what has become an indeterminate deployment period, families return to their roots. With the departure of Hawai'i-based troops, families have returned to the mainland to be with their own core families. Military deployment also means a decreased need for civilian support staff, so many civilian base



workers have lost their jobs. Fortunately, with the unemployment rate as low as it is, finding new jobs has not been a problem. Finally, the deployment has had an impact on store owners who traditionally supply both the troops and their families with everything from "shave ice" to "Manapua."

In summary, after some tough economic times, the State is on the rebound and the economy seems to be doing well. The people are still frustrated with the continual reports and personal experiences with drugs

² Upwardly adjusted for Hawai'i.

in their midst, especially crystal methamphetamine, and the apparent lack of success in State prevention and treatment efforts.

Data Sources

Much of the data presented in this report are from the Honolulu CEWG, which met on January 14, 2005. The meeting was hosted by the Hawai'i High Intensity Drug Trafficking Area program office, whose staff facilitated the attendance of the Drug Enforcement Administration 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. Several neighbor island police departments, as well as the Honolulu Police Department, submitted data, but they were not able to attend the CEWG meeting because of deployment commitments at the State level. Neighbor island data, however, remain inconsistent and are not reported in this report, since problems with the respective narcotics-vice information systems have not been resolved. For these reasons, this report is focused primarily on drug activities in O'ahu for the calendar year 2004, with the exception of State treatment data, which were available for only the first 6 months of 2004. 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). 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 was 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. These data are based on toxicology screens performed by the ME Office on bodies brought to them for examination. The sorts 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 ac-

count 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 on the exhibits have been multiplied by 10.

- **Law enforcement case data** for 2004 were received from the Honolulu Police Department, Narcotics/Vice Division only. Data for 2003 and earlier were received from the Kona Police Department.
- **Arrestee drug testing data** were provided by the Arrestee Drug Abuse Monitoring (ADAM) program of the National Institute of Justice (NIJ). The ADAM program has reported its data regularly to the CEWG, but NIJ closed the ADAM program effective December 2003. Thus, the current data are all that will exist for this sentinel data source. The ADAM project collected its data at the Central Receiving Unit of the Honolulu Police Department. Data on the urine testing component, as well as the questionnaire findings, were presented. This will be the last report to include these final data.
- **Drug price data** were provided by the Honolulu Police Department (HPD), Narcotics/Vice Division, for 2003.
- **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. Given the added burden of the cost of care of ice users and the general concern expressed at the community level, it is hoped that a meeting can be arranged between the DAWN program and the association during the coming months.

DRUG ABUSE PATTERNS AND TRENDS

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 2004, 47.7 percent and 19.9 percent of the admissions were Hawaiians/Part Hawaiians or Whites, respectively. All other groups represented significantly lower proportions of admissions.

Methamphetamine remains the leading primary substance of abuse for those admitted to treatment, accounting for 45.2 percent of admissions. Marijuana remained the third most frequently reported primary substance for treatment admissions (22.2 percent) behind alcohol (22.4 percent). It is important to point out, however, that almost all polydrug treatment admissions list alcohol as a substance of abuse. The 25–44 age group had the highest representation among treatment admissions, with 26.2 percent of admissions being age 25–34; 35–44-year-olds accounted for 25.0 percent. 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.

During this reporting period, drug prices have been stable, except for some minor upward price adjustments for crystal methamphetamine in smaller amounts (exhibit 1). The size of the drug supply appears to make for a relatively stable drug market, with only a few market adjustments caused by seizures of specific drugs or oversupply of others.

Ice continues to dominate the Hawaiian drug market. Prices have increased slightly during the reporting period, and this is likely reflective of several seizures. It is now easier to purchase larger quantities than in the past. The final police evidence of increased ice availability is that of clandestine labs, almost exclusively reprocessing labs that continue to be closed at a regular pace.

Marijuana remains a drug for which arrest results from circumstance, bad luck, or stupidity. The Big Island Police Department continues “Operation Green Harvest” in collaboration with Federal agencies. More than 100,000 plants are seized per half-year on the Hilo (east) side of the island, and about an additional 30,000 plants are seized on the Kona (west) side of the island. Officials in Maui seize approximately 14,000 plants per half-year. Efforts in O'ahu during the 2004 reporting period resulted in seizures of only 1,045 plants and 24,714 grams of dried marijuana, compared with 8,472 plants and 45,074 grams seized in 2003 and 41,996 plants and 52,269 grams of dried marijuana seized in 2002.

The Hawai'i DEA continues its efforts with the Honolulu Police Department to deal with crystal methamphetamine and, in particular, to break the supply route from California for the chemicals necessary to operate Hawai'i's ice labs. During this period, the HPD seized and closed 24 clandestine metham-

phetamine laboratories. In 2000, 8 labs were closed, compared with 7 in 2001, 15 in 2002, and 10 in 2003.

In this paper, the police data exhibits show all neighbor island data combined and titled “neighbor island.” As noted earlier, these data could not be uniformly updated for this report, and therefore they are not considered reliable. The Honolulu data represent regular administrative reports from the HPD.

Cocaine/Crack

Powder cocaine and crack treatment admissions declined somewhat during the current period. There were 172 primary cocaine treatment admissions in the first half of 2004, suggesting a year-end total of about 340 admissions, compared with 355 in 2003, 428 in 2002, and 433 in 2001 (exhibit 2). 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 continues into 2004. Powder cocaine/crack now ranks fourth among primary drugs of treatment admissions, after methamphetamine, alcohol, and marijuana.

The Honolulu ME reported 22 deaths with cocaine-positive toxicology screens in 2004, compared to 26 in 2003 and 22–24 deaths in 1999–2002 (exhibit 2). 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 currently sells for \$25–\$30, and the same amount of cocaine powder costs \$25–\$35 (exhibit 1). Police cases increased slightly in 2004 to 239 (exhibit 3). Over the past 6 years, the number of HPD cocaine cases plummeted from more than 1,200 cases in 1996 to 202 in 2003.

Heroin and Other Opiates

Black tar heroin monopolizes the heroin market of Hawai'i, and it is readily available in all areas of the State. China white heroin has been uncommon in Hawai'i for several years, but it is occasionally available for a premium price. HPD data show 1,251 grams of black tar and 1.699 grams of China white were seized in 2004. This is lower than the 3,502 grams of black tar seized in 2003 but higher than 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. Accord-

ing to the HPD, black tar heroin prices remained stable in Honolulu at \$50–\$75 per one-quarter gram, \$150–\$200 per gram, and \$2,500–\$3,500 per ounce (exhibit 1).

Heroin treatment admissions continued the decline begun in 1998 (exhibit 4). In 1998, record levels of treatment admissions were recorded, with more than 500 individual admissions that year. In the first half of 2004, however, heroin ranked fifth among treatment admissions at 2.1 percent ($n=72$).

The Honolulu ME reported that deaths in which opiates were detected may remain constant in 2004, once the toxicology results are obtained on the 18 decedents currently listed as “suspected” but not confirmed. However, for now, only seven opiate deaths are confirmed for 2004 (exhibit 4). Decedents with a positive toxicological result for opiates were primarily comprised of those in whom oxycodone was detected. The exact medication (OxyContin® or another) used was not specified. However, the 15 decedents with oxycodone in their toxicology screens is a death rate for the City and County of Honolulu of 17.2 per 1,000,000 persons. An additional concern was expressed by the Medical Examiner’s office this year, and that was with respect to methadone. Previously, the ME had been asked to review its records and to monitor the appearance of methadone among decedents. In 2004, there were 25 decedents with a positive toxicology screen for methadone. There were 22 decedents with methadone in their toxicology results in 2003 and 28 in 2002.

The HPD reported 25 heroin cases in 2001, 44 in 2002, 30 in 2003, and 33 in 2004 (exhibit 5). No specific explanation of either the “spike” or “trough” in the data was provided.

Marijuana

Statewide, marijuana treatment admissions may have decreased a bit in 2004, with only 708 reported in the first half of the year (exhibit 6). There had been an increase in 2003, following the slight decline in admissions in 2002. The 2004 admissions remain focused on younger persons who were often referred by the courts. In examining these treatment data, it is important to remember that the number of persons in treatment for marijuana use is 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 of these clients also used other substances.

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. 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).

As shown in exhibit 1, marijuana costs \$5–\$20 per joint, \$25 per gram, and \$6,000–\$9,000 per pound in 2004.

Methamphetamine

It is with little pride that Honolulu and the State of Hawai’i retain the title as the crystal methamphetamine capital of the United States. Methamphetamine remains the drug of choice in the island chain. California-based Mexican sources use Hawai’i’s cultural diversity to facilitate smuggling and distribution to and within the islands. Analysis of confiscated methamphetamine reveals that the product is still a high-quality *d*-methamphetamine hydrochloride in the 90–100-percent purity range, which makes it ideal for smoking (the route of admission of choice).

Methamphetamine treatment admissions remained extremely high (accounting for 44 percent of admissions in the first half of 2004), but they will dip slightly if the total in the initial 6 months of 2004 (1,516 admissions) prevails for the balance of the year (exhibit 8). In 2003, there were 3,182 such admissions, up from 2,677 in 2002. An examination of exhibit 8 shows the trend over the past 13 years. The rate of increase in demand for treatment space for methamphetamine abusers has been nearly 2000 percent since 1991. This situation has so far outstripped the treatment system’s capacity, that even people who might want treatment would not be likely to 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 toxicologies was 56. For 2004, there were 67 deaths with positive toxicology results for

methamphetamine, representing 76.5 deaths per 1,000,000 for the island of O'ahu.

Crystal methamphetamine prices remained stable in 2004. The drug is sold in the islands as "clear" (a clear, white form) or "wash" (a brownish, less processed form). Prices for ice vary widely according to these two categories and availability, as illustrated by prices on O'ahu: \$50 (wash) or \$75 (clear) per 0.25 gram; \$200–\$300 (wash) or \$600–\$900 (clear) per gram; \$450–\$600 (wash) or \$1,000–\$2,000 (clear) per one-quarter ounce; and \$2,200–\$3,000 (wash) per ounce.

HPD methamphetamine case data peaked at 984 in 1995 (exhibit 9). The annual number of cases subsequently declined annually, and they totaled 616 in 2002 and 964 in 2003. However, in 2004, a total of 8,083 cases were reported. 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 59 percent of the FY 2004 samples testing positive for methamphetamine. The final piece of information on Hawai'i's leading drug is from the ADAM site. Weighted data on adult male arrestees for 2001, 2002, and 2003 show that the drug most frequently found in the urines of these arrestees was amphetamines, almost entirely methamphetamine (exhibit 10). The weighted 2003 data show that 46.3 percent tested positive for amphetamines/methamphetamine in the first quarter, 38.0 percent were positive in the second quarter, and 46.0 percent were positive for amphetamines in the third quarter.

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 system. Annually, the numbers admitted to treatment for these drugs total less than 10.

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

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

Prices remain stable at \$3–\$20 per unit for barbiturates and \$2–\$3 per pill for secobarbital (Seconal or "reds").

Hallucinogens

Hallucinogen treatment admissions total less than five per year. 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 this reporting period.

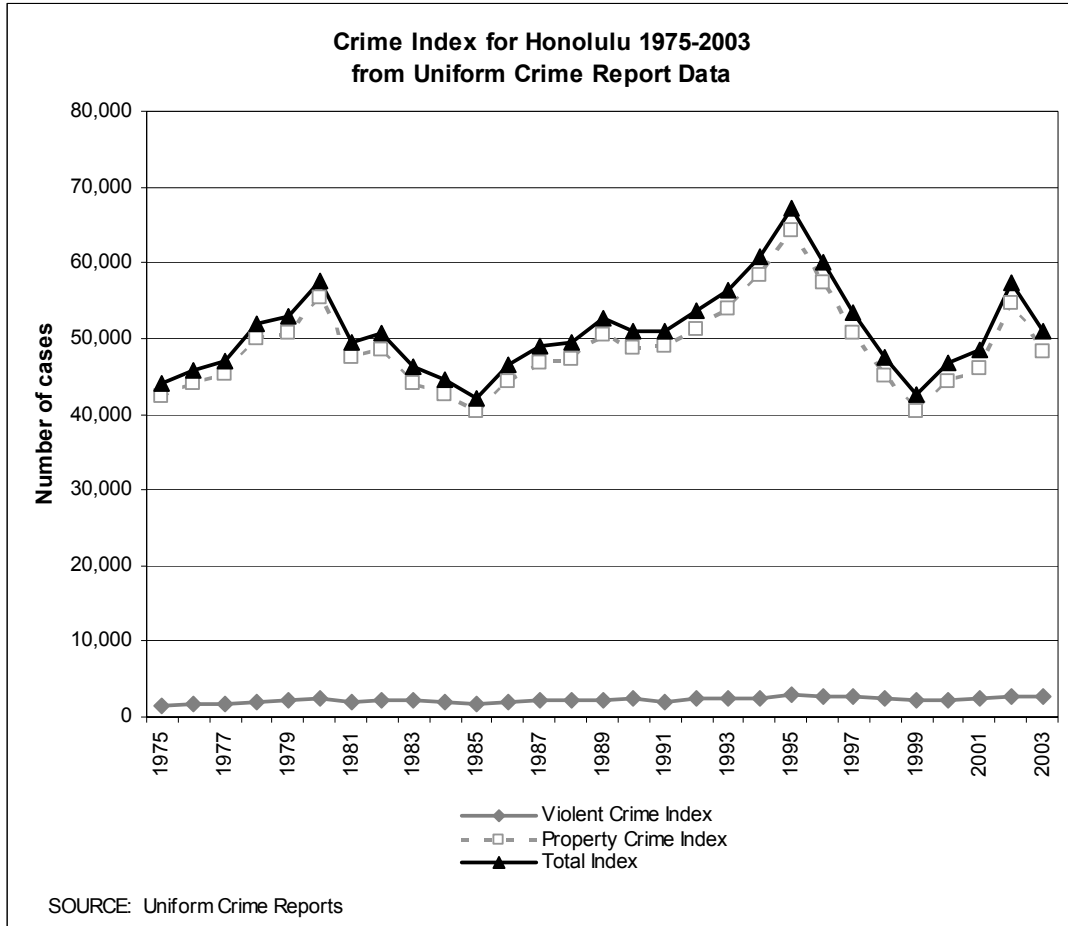
No hallucinogen case data were generated for 2002.

UCR Data

The Uniform Crime Report has often been described as the most reliable database in the criminal justice area. Unfortunately, it has also been described as being none too valid in terms of the definitions used to collect the data. For Community Epidemiology Work Groups, it is yet another data set that is routinely collected by others and is in the public domain.

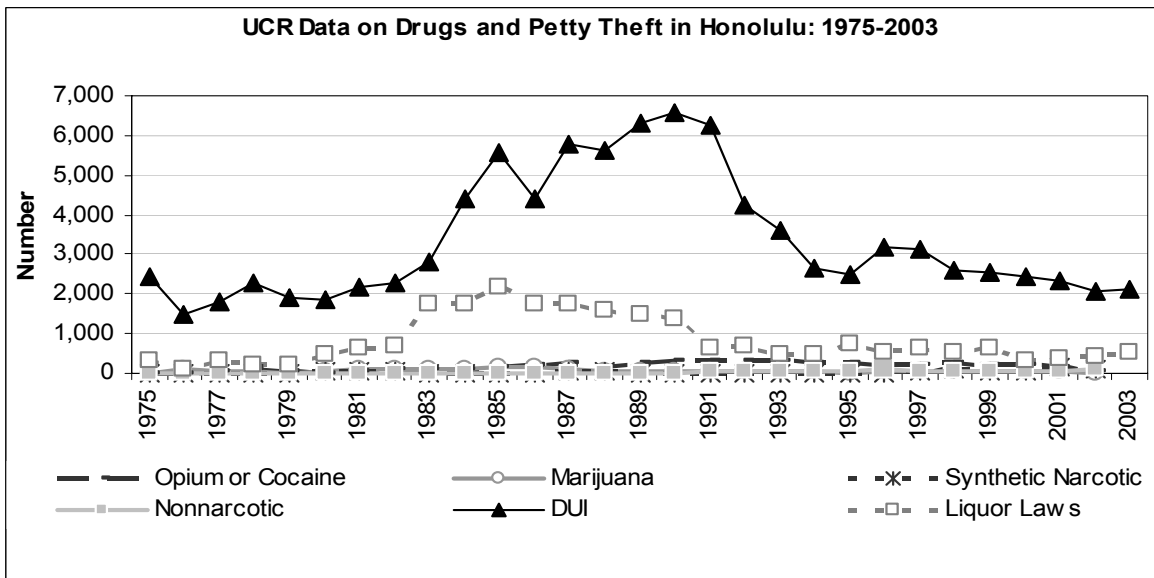
Hawai'i produces data from the UCR via an Attorney General's Web site, with data from 1975 to the present easily accessible to outside users. This short analysis uses the UCR data to suggest that even greater utility might be made with them if the researchers were given access to the full data set, which contains the arrest-specific information, as well as more demographic and criminal justice information on the subjects reported on in the UCR.

For Honolulu, the following chart shows that violent crimes are not and have never been much of a problem. It also shows that while having several peaks and troughs, property crime is lower now than it was in the mid-1990s and early 1980s. The data included in these indexes are murders, rapes, robberies, assaults, burglaries, larceny thefts, motor vehicle thefts, and arson.



The UCR collects data on several categories of drug crime as well as associated crimes. The next analysis will include data from 1975 through 2003 that focuses on specific drug manufacture and drug trafficking data, as well as that related to driving under the influence (DUI) and other liquor offenses. To under-

stand the following chart, it is important to note that methamphetamine is included in the non-narcotic data both for manufacture and possession. The possession data are, as would be expected, always higher than the manufacture and distribution data.



Of interest in this chart is the aggregation of data points in the lower portion, with the lowest points representing drug manufacture and distribution cases and the line above them the liquor offense cases. DUI data clearly eclipse all others on the chart. While

much more could be done with these data, this brief analysis suggests that when examining criminal justice data, there is a need to look at alcohol use as a much more prevalent problem than many of the other drug abuse categories.

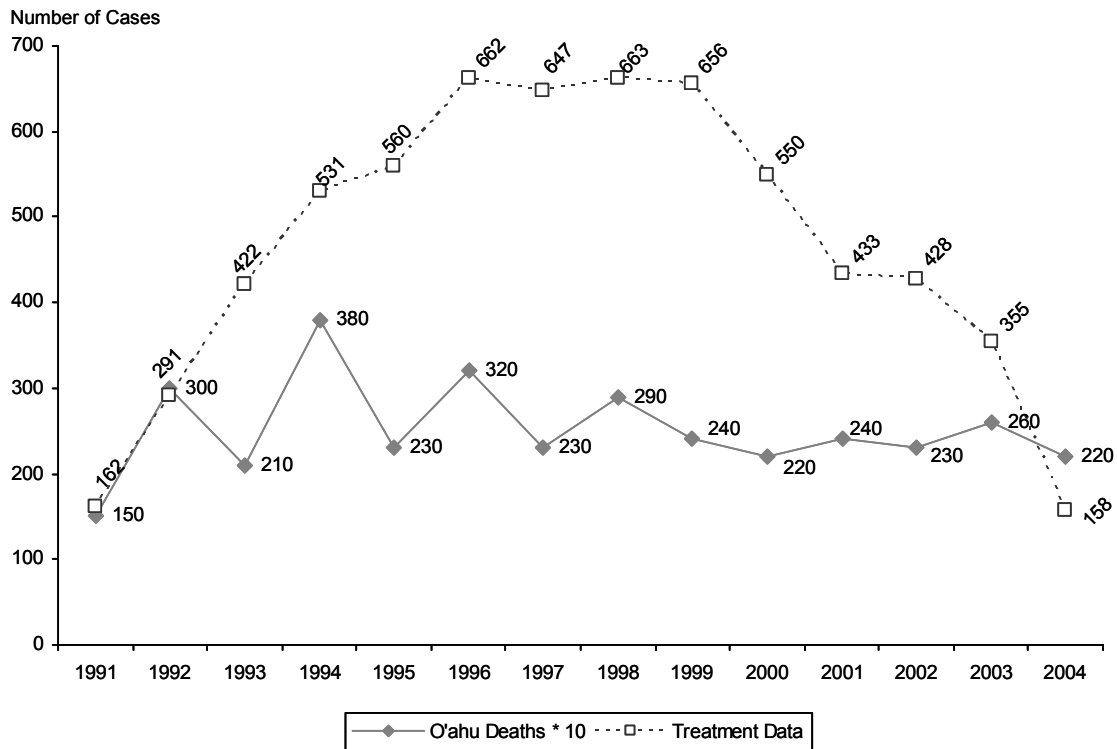
For inquiries concerning this report, please contact D. William Wood, Ph.D., Department of Sociology, University of Hawai'i at Manoa, 265 North Kalaheo Avenue, Honolulu, HI 96822, Phone: 250-384-3748, Fax: 808-965-3707, E-mail: dwwood@shaw.ca.

Exhibit 1. Drug Prices in Honolulu: 2003

Drug	Paper 1/4 Gram	Gram	Quarter 1/4 Oz.	"O" 1 Oz.	"LBs" 1 Pound	"Kilo" 1 Kilogram
Heroin (White)	\$50	\$200–\$300	\$2,000–\$3,000	\$5,000	\$50,000	\$100,000
Heroin (Black Tar)	\$50–\$75	\$150–\$200	\$750	\$2,500–\$3,500	N/A ¹	N/A
Cocaine	\$25–\$35	\$100–\$120	\$500–\$600 \$250–\$350 (8 ball)	\$1,100–\$1,500	\$13,500– \$25,000	\$26,000– \$52,000
Crack	\$25–\$30	\$100–\$250		\$1,000–\$1,500	\$24,000	N/A
Crystal Methamphetamine	\$50	\$200–\$300	\$450–\$600 (8 ball)	\$2,200–\$3,000	\$30,000	\$50,000– \$70,000
LSD	\$4–\$6 per hit		\$225–\$275 per 100 hits			
Marijuana	\$5–\$20 per joint	\$25	\$100–\$200 (8 ball)	\$400–\$800	\$6,000–\$9,000	N/A
Hashish	N/A	\$10	\$40–\$60	\$150–\$300		\$1,400–\$1,800
Dilaudids	\$40–\$80 per capsule					
MDMA	\$25–\$40 each					
Phencyclidine (PCP)	\$10–\$20	\$100	\$350–\$550	\$900–\$1,200	N/A	N/A

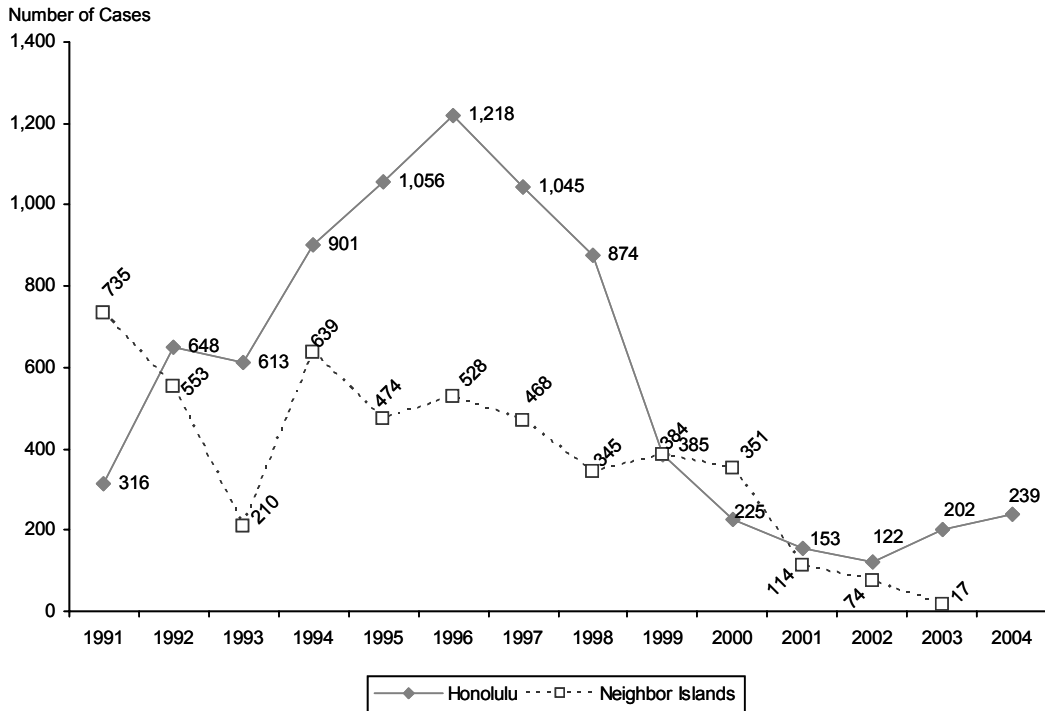
¹N/A= Not available.
SOURCE: Honolulu Police Department

Exhibit 2. Cocaine-Related Death¹ and Treatment Data in Hawaii: 1991–2004²



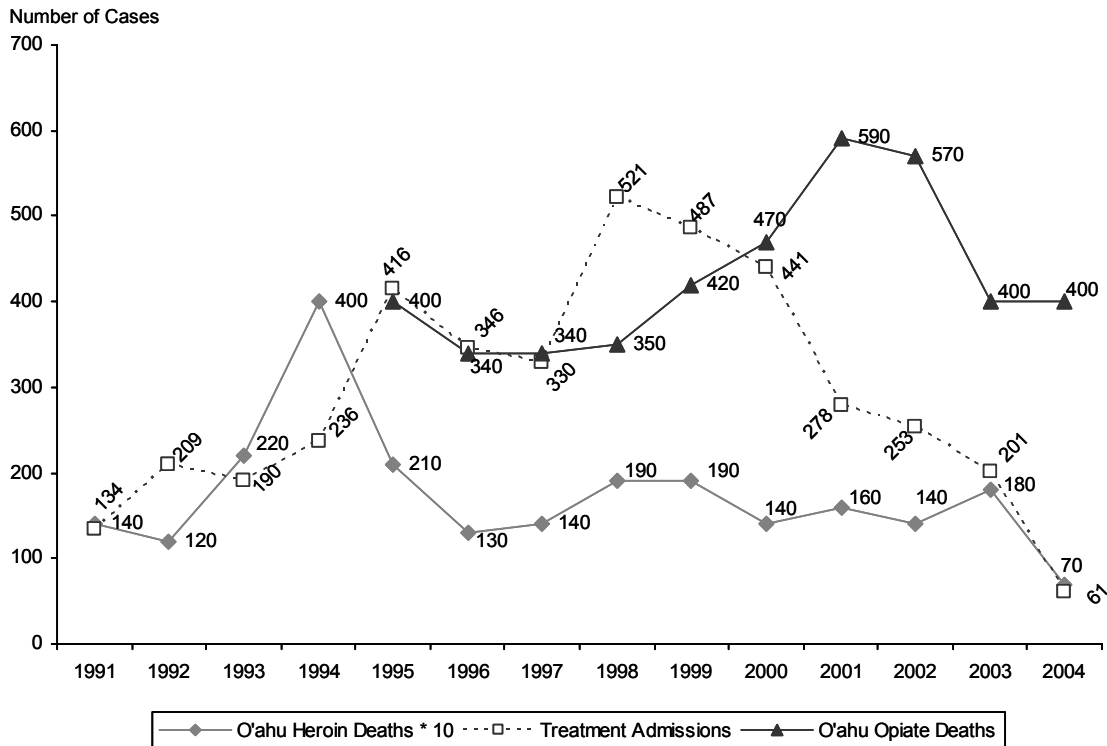
¹To allow direct comparison between ME data and treatment data, the ME data have been multiplied by 10.
²Treatment data for 2004 are for the first half only.
SOURCES: Hawai'i State Department of Health, Alcohol and Drug Abuse Division; Honolulu City and County Medical Examiner Office

Exhibit 3. Cocaine-Related Police Cases in Hawaii and Neighboring Islands: 1991–2004



SOURCES: Honolulu and Kona Police Departments

Exhibit 4. Heroin Deaths¹ and Treatment Admissions in Hawaii: 1991–2004²

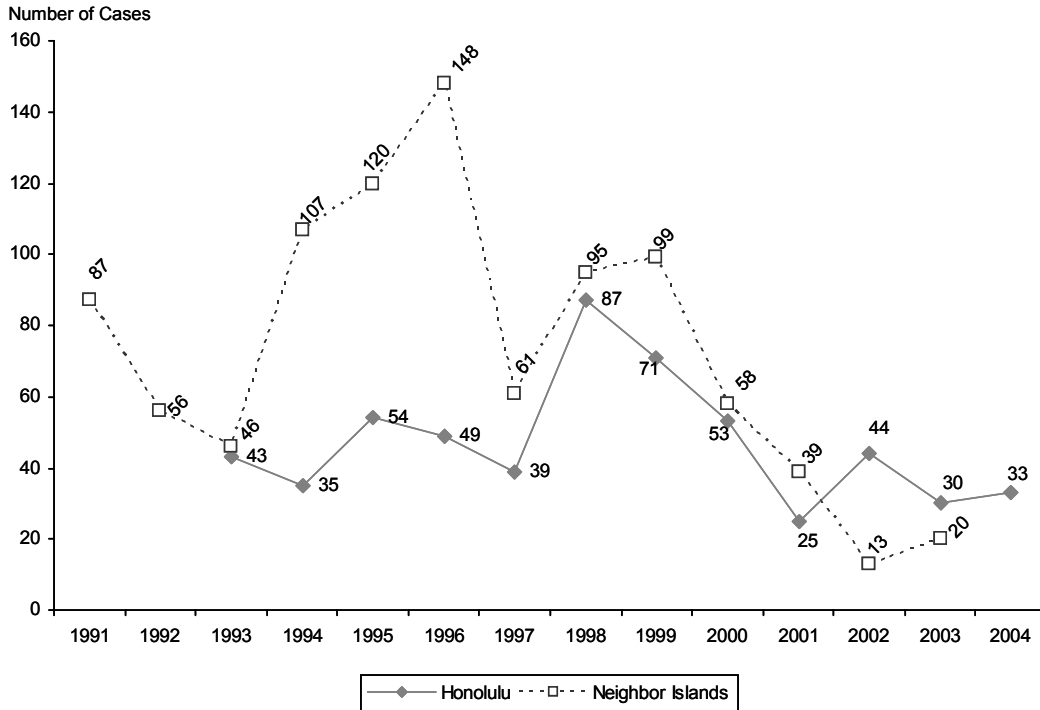


¹To allow direct comparison between O'ahu ME data and treatment data, the O'ahu ME data have been multiplied by 10.

²Treatment data for 2004 are for the first half only.

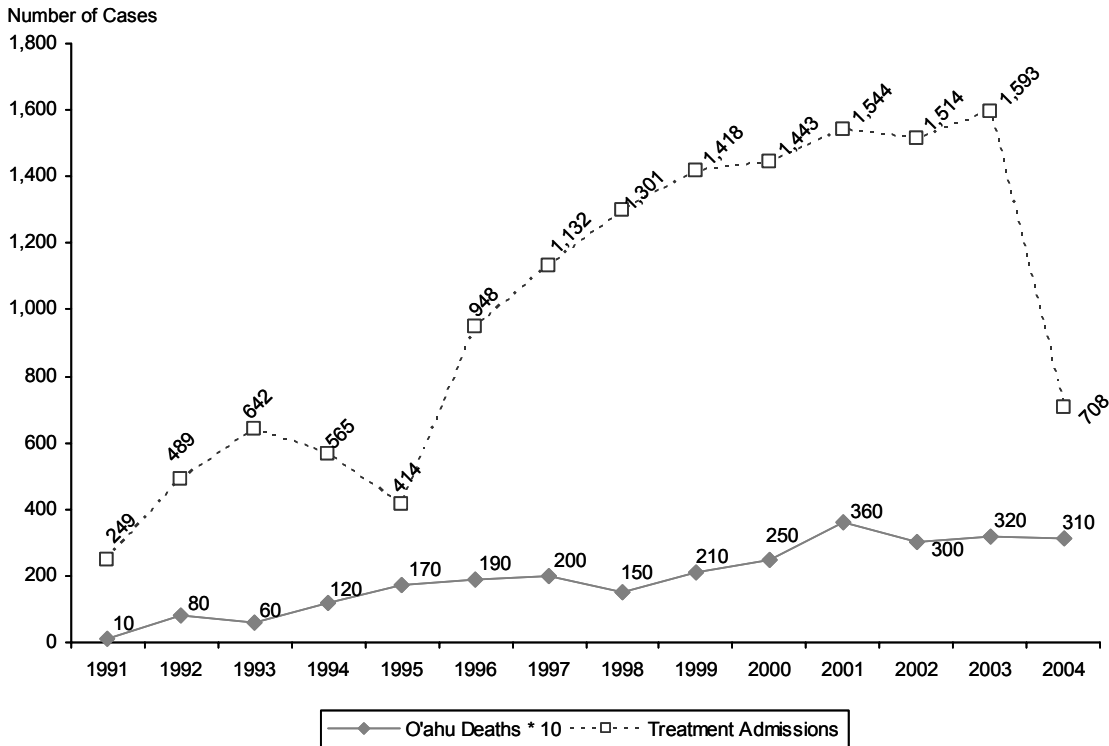
SOURCES: Hawai'i State Department of Health, Alcohol and Drug Abuse Division; Honolulu City and County Medical Examiner Office

Exhibit 5. Heroin-Related Police Case Data: 1991–2004



SOURCES: Honolulu and Kona Police Departments

Exhibit 6. Marijuana-Related Deaths¹ and Treatment Admissions² in Hawaii: 1991–2004²

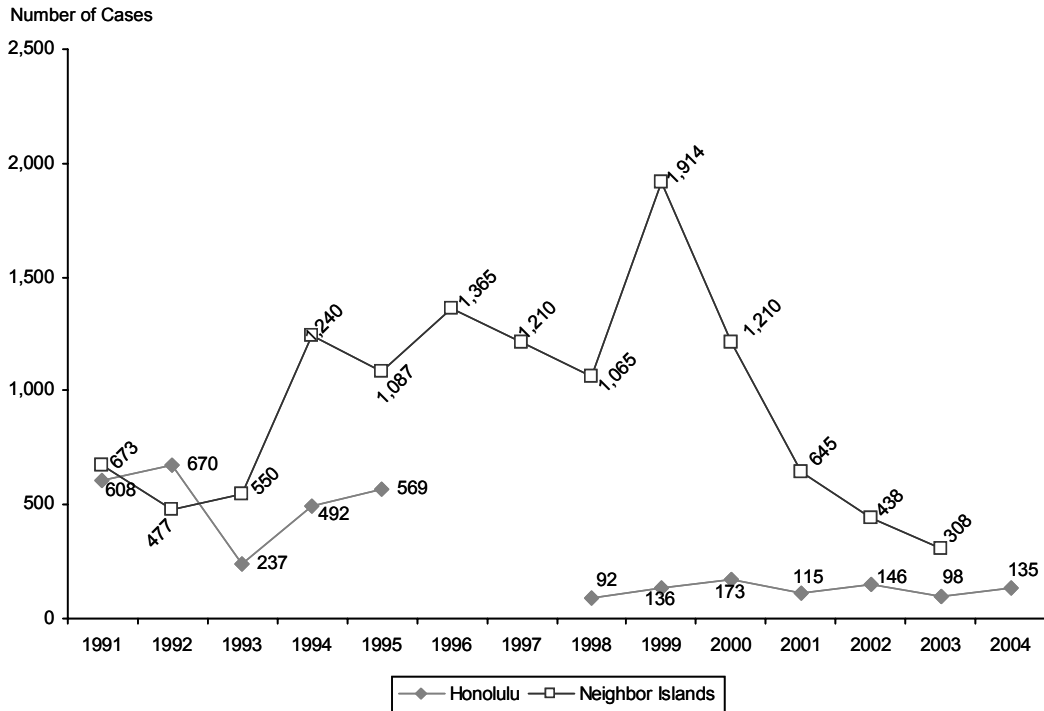


¹To allow direct comparison between O'ahu ME data and treatment data, the O'ahu ME data have been multiplied by 10.

²Treatment data for 2004 are for the first half only.

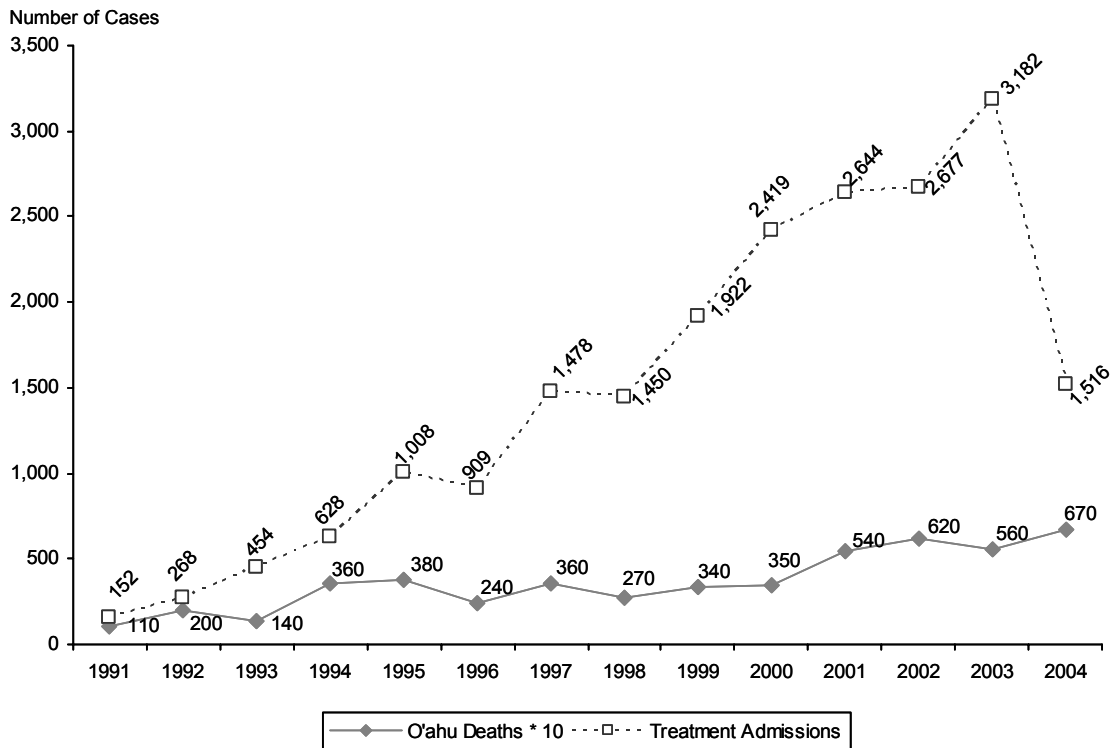
SOURCES: Hawai'i State Department of Health, Alcohol and Drug Abuse Division; Honolulu City and County Medical Examiner Office

Exhibit 7. Marijuana-Related Police Case Data: 1991–2004



SOURCES: Honolulu and Kona Police Departments

Exhibit 8. Methamphetamine-Related Deaths¹ and Treatment Admissions in Hawaii: 1991–2004²

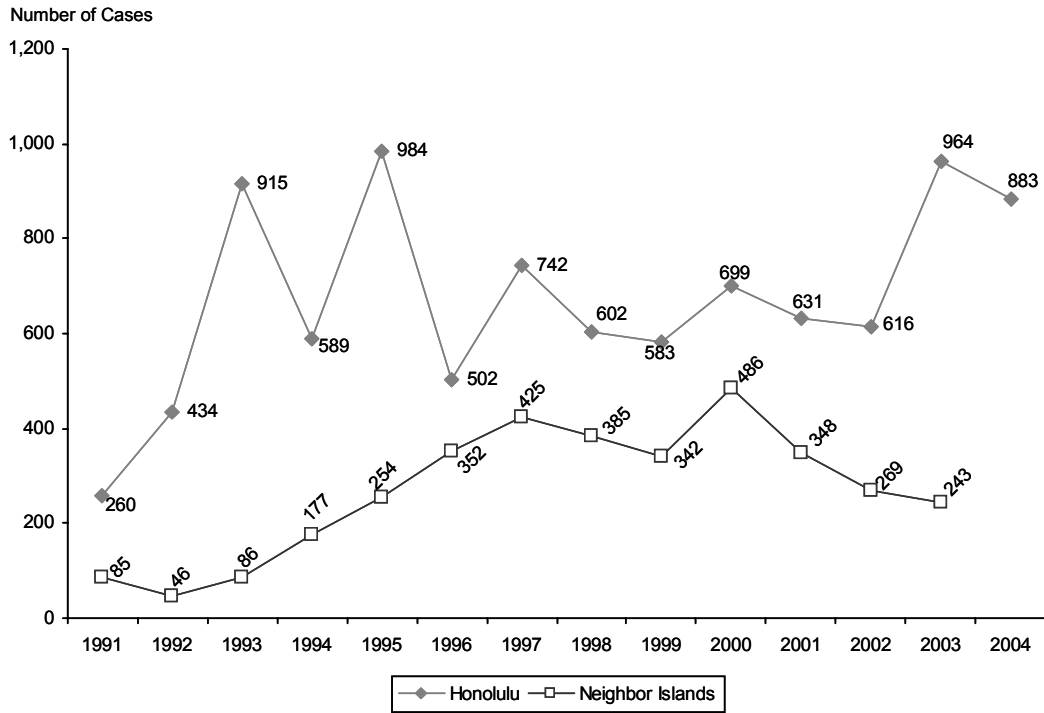


¹To allow direct comparison between O'ahu ME data and treatment data, the O'ahu ME data have been multiplied by 10.

²Treatment data for 2004 are for the first half only.

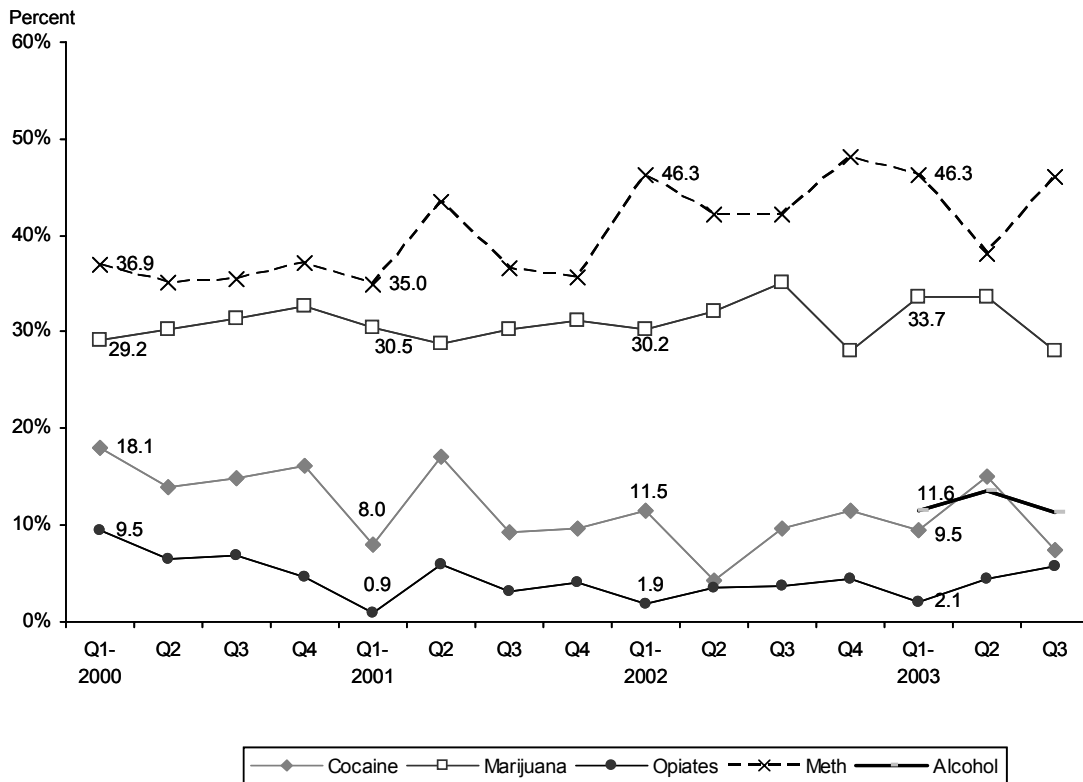
SOURCES: Hawai'i State Department of Health, Alcohol and Drug Abuse Division; Honolulu City and County Medical Examiner Office

Exhibit 9. Methamphetamine-Related Police Case Data: 1991–2004



SOURCES: Honolulu and Kona Police Departments

Exhibit 10. ADAM Project Data: 2000–2003



SOURCE: ADAM, NIJ

A Semiannual Update of Drug Abuse Patterns and Trends in Los Angeles County, California

Beth Finnerty, M.P.H.¹

ABSTRACT

Two main themes continue to characterize the Los Angeles County-level substance abuse situation in the current reporting period (through June 2004): (1) a relatively stable or mixed pattern for many drugs and (2) increasing patterns for a few drugs, specifically methamphetamine. Despite the facts that Los Angeles is a distribution hub, transshipment area, and final destination for most, if not all, major drugs of abuse and local residents have ready access to most, if not all, illicit drugs and many diverted pharmaceuticals, heroin, crack cocaine, methamphetamine, and marijuana continue to dominate substance use/abuse indicator data in Los Angeles. With regards to treatment admissions, slightly less than one in four individuals entering a substance abuse treatment and recovery program in Los Angeles County self-report a primary heroin problem. Although primary heroin admissions constitute the largest percentage of all treatment and recovery admissions, their lead over the other major substances, such as alcohol, cocaine, and methamphetamine, remains marginal. The proportion of cocaine/crack admissions remained stable at 18 percent, while admissions for primary methamphetamine problems climbed higher in early 2004 to 21 percent of all admissions. Once again, the Los Angeles HIDTA led all California HIDTAs in terms of clandestine methamphetamine laboratory seizures, accounting for more than one-half of the 331 seizures made in California in the first half of 2004. Despite the steady decline in the number of methamphetamine laboratories in Los Angeles County specifically and the Los Angeles HIDTA in general, California is home of the domestic methamphetamine 'superlab.' Eighty-three percent of the 30 superlabs seized within the United States in the first half of 2004 were located in California; 56 percent of those were located in four Southern California counties: Los Angeles, San Bernardino, Orange, and Riverside. Drug prices and purities were relatively stable in the first half of 2004, 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 2004 were dominated by cocaine/crack, methamphetamine/ampheta-

mine, ecstasy, and heroin. Furthermore, among prescription and over-the-counter medication-related exposure calls, benzodiazepines were the most frequently mentioned category, followed by opiates/analgesics 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 (ecstasy), 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 (9,871,506, 2003 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; 10 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

¹The author is affiliated with UCLA Integrated Substance Abuse Programs, Los Angeles, California.

race, just under one-half identify as White (47.8 percent), followed by Asians (11.9 percent), Blacks/African-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.

According to an April 2004 Policy Brief from United American Indian Involvement and the UCLA Ralph and Goldy Lewis Center for Regional Policy Studies, 3 percent of the Nation's 3.7 million American Indians/Alaska Natives (AIs/ANs) reside in the Los Angeles area. The largest concentration of urbanized AIs/ANs is located in the county. Further, the local AI/AN population grew 35 percent from the 1990 to the 2000 U.S. Census, compared to the overall county growth of 7 percent.

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 key 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 roadways.

The National Drug Threat Assessment 2004 identified 14 primary drug market areas throughout the United States that serve as major consumption and distribution centers of cocaine, marijuana, methamphetamine, heroin, and methylenedioxyamphetamine (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 2004).

Data Sources

This report describes drug abuse trends in Los Angeles County from January 1997 to June 2004. 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 (CADDs), and correspond to Los Angeles County alcohol and other drug treatment and recovery program admissions for July 2001 to June 2004. 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 of the Los Angeles metropolitan area were accessed from SAMHSA's restricted-access database—DAWN *Live!*—for the first 6 months of 2004 (based on an update, January 18, 2005). Thirty-four of the 79 eligible hospitals in the Los Angeles area are in the DAWN sample. The sample includes 37 emergency departments (some hospitals have more than 1 ED). The data are incomplete, based on 23 to 26 EDs reporting each month over the 6-month period. 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 the first half of 2004 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 [<21], adverse reaction, overmedication, malicious poisoning, accidental ingestion, and other) (exhibit 2). 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 2000 through June 2004. 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, etc.), 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 semi-annual 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, 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,

2003, and September 30, 2004. It is important to note that data from the Los Angeles County Sheriff's Department laboratory are complete, but data from the LAPD laboratory are not complete for some months.

- **Demographic and geographic data** were provided by the United Way of Greater Los Angeles, Los Angeles County Online, United American Indian Involvement and the UCLA Ralph & Goldy Lewis Center for Regional Policy Studies, and the U.S. Census Bureau (*State and County QuickFacts*).
- **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.
- **Acquired immunodeficiency syndrome (AIDS) and human immunodeficiency virus (HIV) data** (cumulative through June 2004) were provided by the Los Angeles County Department of Health Services, HIV Epidemiology Program, Advanced HIV (AIDS) Quarterly Surveillance Summary, July 2004.

DRUG ABUSE PATTERNS AND TRENDS

Cocaine/Crack

Approximately 18 percent of all Los Angeles County treatment and recovery program admissions in January–June 2004 reported a primary crack or powder cocaine problem (exhibit 3). The total number of primary cocaine/crack admissions increased 7 percent from the second half of 2003 to the first half of 2004.

As a percentage of the total, cocaine admissions have remained quite stable at 18 to 20 percent for several CEWG reporting periods (exhibit 4). Alcohol was the most commonly reported secondary drug problem among primary cocaine admissions (38 percent) (exhibit 5), followed by marijuana (19 percent). Smoking is the reported route of administration for 86 percent of all cocaine admissions, followed by inhalation (10 percent). When asked whether they had used any drug intravenously in the year prior to admission, approximately 5 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-seven percent of the primary cocaine admissions reported in the first half of 2004 were male, identical to the gender breakdown seen in the second half of 2003. Black non-Hispanics continued to dominate cocaine admissions (at 57 percent), followed by Hispanics (21 percent) and White non-Hispanics (15 percent). In terms of age at admission, nearly 40 percent were concentrated in the 36–45 year age group; an additional 23 percent of all primary cocaine admissions were between the ages of 26 and 35.

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 proportion of cocaine admissions referred to treatment through the criminal justice system in the first half of 2004 continued to decrease slightly to 20 percent of all admissions. More frequently mentioned referral sources included self-referral (33 percent) or referral through Proposition 36 (a.k.a. SACPA) court/probation (29 percent). Although one-third of primary cocaine admissions had never been admitted to treatment for a primary cocaine problem, approximately one-half (47 percent) had one or two prior treatment episodes. Forty-six percent earned a high school diploma or GED. At the time of admission, approximately 15 percent were employed either full- or part-time.

Preliminary unweighted data accessed from DAWN *Live!* for the first half of 2004 indicate that of the 4,688 major substances of abuse reported in the Los Angeles division, 1,263 (27 percent) were cocaine/crack (exhibit 7). Cocaine was the second most likely major substance to be reported, following alcohol. Seventy percent of the patients reporting cocaine use were male; 40 percent were Black (followed by 31 percent Hispanic and 24 percent White); 35 percent were age 35–44; and 60 percent reported smoking crack. A total of 2,846 chief complaints

were logged for patients reporting cocaine. The top three complaints were psychiatric condition (694 complaints), altered mental status (691 complaints), and intoxication (592 complaints). Cocaine-using patients were most likely to be discharged home (39 percent) or admitted to a psychiatric inpatient ward (33 percent).

California Poison Control System calls involving the use of cocaine/crack by Los Angeles County residents increased from 69 in 2000 to a high of 97 in 2003. In the first 6 months of 2004 alone, 41 calls involving cocaine/crack were received (exhibit 8a). Between January 2003 and June 2004, 68 percent of the cocaine-exposed callers were male, and 51 percent were between the ages of 26 and 44 (exhibit 9). An additional 20 percent were between the ages of 18 and 25.

According to CHKS data for the 2003–2004 school year (exhibit 10), 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 11).

According to long-term trends calculated from CHKS data spanning over the most recent 5 school years (exhibit 12), 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.

A total of 5,425 cocaine arrests was made within the city of Los Angeles in the first half of 2004. This represented a 5-percent increase from the number of cocaine arrests made during the same time period in 2003. Cocaine arrests accounted for 30.4 percent of all narcotics arrests made between January 1 and June 30, 2004. Citywide cocaine (including crack and powder) seizures increased 120 percent, from 546.6 pounds seized in the first half of 2003 to 1,204.1 pounds seized in the first half of 2004. The street value of the seized cocaine accounted for 29 percent of the total street value of all drugs seized in the first half of 2004.

Data from NFLIS for October 2003 to September 2004 showed that out of 54,240 analyzed items reported by participating laboratories within Los Angeles County, 37.9 percent (20,564) of all items analyzed 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.

Los Angeles remains one of the primary markets for cocaine (in addition to Houston, Chicago, New York, Atlanta, and Miami; NDIC 2004). 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. All substance use and abuse indicators are higher for crack than for powder cocaine. Despite this, powder cocaine availability and use is reported in the area. Current midlevel prices of crack cocaine remained level (as compared to the June 2004 report) at \$500–\$1,200 per ounce (exhibit 13), 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 is approximately 78 percent, similar to the purity cited in the last few CEWG reports.

Heroin

From January to June 2004, just under 7,000 Los Angeles County treatment and recovery program admissions were attributable to primary heroin abuse, compared with 6,704 admissions reported in the county in the second half of 2003 (exhibit 3). In 2003, it was thought that heroin admissions were leveling off at roughly 25.4 percent of all admissions, after several half-year decreases. In the first half of 2004, however, the proportion of primary heroin admissions among all Los Angeles County treatment and recovery programs decreased slightly to 24.5 percent of all admissions. It will be interesting to see

whether heroin admissions continue to decrease in the remainder of 2004 and into 2005. Despite the consistent decline over recent years, heroin admissions continue to marginally account for the highest percentage of all treatment and recovery program admissions in the county.

Demographics of heroin admissions have remained stable over recent reporting periods. In the first half of 2004, primary heroin admissions were predominantly male (71.7 percent), more likely to be age 45–50 (21.0 percent), and somewhat more likely to be Hispanic (40.2 percent) than White non-Hispanic (40.0 percent) or Black non-Hispanic (11.9 percent) (exhibit 5). Compared with other major types of illicit drug admissions, primary heroin admissions in the first half of 2004 had the largest proportion of users age 36 and older (72 percent). Just over one-third (34 percent) of all primary heroin admissions initiated their heroin use prior to age 18, which is quite low compared to 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 (21 percent), followed by alcohol (12 percent).

Heroin administration patterns remained stable in the first half of 2004, with injectors accounting for 86 percent, smokers accounting for 9 percent, and inhalers (snorters) accounting for 4 percent. When asked whether they had used any drug intravenously in the year prior to admission, 88 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 (exhibit 6).

Sixteen percent of all primary heroin admissions were homeless at time of admission, and only 4 percent were referred by the court or criminal justice system (exhibit 5). Primary heroin users were most likely to have self-referred themselves for the current treatment episode (72 percent of all heroin admissions). In a measure of current legal status, the majority (75 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. Fifteen percent indicated that they had never received treatment for their heroin problem, whereas 50 percent reported three or more primary heroin treatment episodes. Forty-nine percent of all primary heroin admissions graduated from high school, and, at the time of admission, 20 percent were employed full- or part-time.

Preliminary unweighted data accessed from DAWN *Live!* for the first half of 2004 indicate that of the

4,688 major substances of abuse reported in the Los Angeles division, 289 (6 percent) were heroin (exhibit 7). Heroin was the fifth most likely major substance to be reported, following alcohol, cocaine, stimulants (amphetamines and methamphetamine), and marijuana. Seventy percent of the patients reporting heroin use were male; 42 percent were Hispanic (followed by 40 percent White and 16 percent Black); 34 percent were age 45–54; and 82 percent reported injecting heroin. A total of 615 chief complaints were logged for individuals reporting heroin. The top three complaints were psychiatric condition (103 complaints); intoxication (101 complaints); and abscesses, cellulitis, and skin/tissue problems (69 complaints). Heroin-using patients were most likely to be discharged home (36 percent) or admitted to a psychiatric inpatient ward (28 percent).

Los Angeles County-based California Poison Control System calls involving exposure to heroin fluctuated between 15 and 20 from 2000 to 2003 (exhibit 8a). In the first half of 2004 alone, 11 heroin exposure calls were reported, which may indicate a shifting upward trend. Between January 2003 and June 2004, 79 percent of the heroin-exposed callers were male, and 67 percent were between the ages of 26 and 54. An additional 11 percent of the callers were between the ages of 18 and 25.

According to CHKS data for the 2003–2004 school year (exhibit 10), 3.3 percent of all Los Angeles County secondary school students (including 7th, 9th, and 11th graders, and a small sample of non-traditional 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 11).

A total of 441 heroin arrests were made within the city of Los Angeles from January 1 to June 30, 2004. This represented a 30-percent increase from the number of heroin arrests made in the first half of 2003. Heroin arrests accounted for approximately 2.5 percent of all narcotics arrests made from January 1 to June 30, 2004.

Eight and one-half pounds of black tar heroin were seized within the city of Los Angeles in the first half of 2004, a decline of 4 percent from the amount seized during the same time in 2003. Similarly, seizures of other types of heroin decreased by 15 percent, from 8.9 pounds seized in the first half of 2003 to 7.6 pounds seized during the first half of 2004. The street value of

all seized heroin accounted for 5 percent of the total street value of all drugs seized in the first half of 2004.

According to NFLIS data based on 54,240 analyzed items reported by participating laboratories within Los Angeles County between October 1, 2003, and September 30, 2004, only 3.9 percent (2,131) of all items analyzed were found to be heroin. This small proportion corresponds to the small proportion of heroin (black tar and other forms) reported among Los Angeles City seizures.

As in the past, Los Angeles is the primary market for Mexican black tar heroin, and to a lesser extent, brown powder heroin distributed to other Western States (NDIC 2004). 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, mid-level, and retail activity (NDIC 2004). 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 13). The current mid-level and retail prices are \$500–\$800 per “pedazo” (Mexican ounce) and \$90–\$100 per gram, which are stable since the last report. A regular ounce is 28.5 grams, whereas a pedazo is 25.0 grams.

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 \$35,000–\$40,000 for a 300–350-gram unit and \$70,000–\$80,000 for a 700–750-gram unit. 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–\$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.

Other Opiates/Narcotics

Other opiates/synthetics continue to constitute a marginal proportion of all Los Angeles County treatment admissions. Their representation as a primary drug of abuse has increased slightly in the local treatment

data, however, rising from 1.5 percent of all admissions in 1999 to 2.1 percent (583 admissions) in the first half of 2004. The number of other opiate/synthetic admissions reported in the first half of 2004 was 10 percent lower than the number of primary other opiates/synthetic admissions reported in the second half of 2003, but nearly identical to the number of other opiate/synthetic admissions reported in the first half of 2003 ($n=582$). 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 (60 percent), White non-Hispanic (74 percent), and age 36–50 (52 percent). Only 1 percent of the primary other opiate/synthetic admissions were younger than 18. Interestingly, 80 percent administered other opiates/synthetics orally, but an additional 16 percent reported smoking. Sixty-one percent of primary other opiate/synthetic admissions reported no secondary or tertiary substance use. An additional 12 percent reported secondary alcohol use, and 7.5 percent reported secondary cocaine/crack use. Reports of primary non-prescription methadone admissions continued to be minimal among Los Angeles County treatment admissions (47 admissions, 0.2 percent of all admissions).

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 1,318 pharmaceuticals falling within these three case types in the first half of 2004 in the Los Angeles division, 164 (12 percent) were opiates/opioids and an additional 169 (13 percent) were other analgesics (exhibit 14). For the opiates/opioids, overmedication was the most frequently stated case type (43 percent of opiates/opioids), followed closely by “other” (41 percent) and more distantly by seeking detoxification (16 percent). Among other analgesics, 82 percent (139) 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 25 in 2000 to a high of 67 in 2003 (exhibit 8b). In the first half of 2004 alone, 31 opiate/analgesic exposure calls were reported, which

may indicate a stabilizing of the trend line. Between January 2003 and June 2004, calls involving an exposure to hydrocodone were more likely than calls involving an exposure to oxycodone (58 calls vs. 11 calls, respectively).

Approximately 688 of the 54,240 items analyzed and reported to NFLIS between October 1, 2003, and September 30, 2004, were identified as pharmaceuticals/prescription/non-controlled non-narcotic medications (as opposed to illicit substances). Of those, more than one-half (361 items; 52.5 percent) were found to be narcotic/other analgesics. The most frequently cited analgesics were hydrocodone (204 items; 57 percent) and codeine (62 items; 17 percent). Other analgesics identified included methadone (35 items), oxycodone (21 items), and propoxyphene (10 items). To put these numbers/percentages into perspective, analgesics accounted for 0.7 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/analgesics. According to LA CLEAR, Vicodin, a member of the hydrocodone family of opiate pain relievers, continues to retail for \$5 per 5-milligram tablet in Los Angeles County (exhibit 13). OxyContin, the trade name for the powerful analgesic oxycodone hydrochloride, sells on the streets for \$1 per milligram. LA CLEAR reports reveal that OxyContin is “readily available” in the LA HIDTA. Percocet sells for \$5–\$10 per 5-milligram tablet; MS Contin sells for \$20 per 60-milligram tablet; codeine sells for \$5 per tablet; Dilaudid (hydromorphone) sells for \$100 per 4-milligram tablet; fentanyl patches sell for \$25–\$100 each; and methadone sells for \$10 per tablet.

Marijuana

From the first to second half of 2003, the number of primary marijuana treatment admissions decreased 6 percent (exhibit 3). A reversal of this decreasing trend was observed in early 2004. From the second half of 2003 to the first half of 2004, primary marijuana admissions increased 10 percent (from 3,452 admissions to 3,812 admissions). As a percentage of the total, marijuana accounted for 13.4 percent of all admissions reported in January–June 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 2004. Three out of four primary marijuana admissions were male, and individuals younger than 18 constituted 48 percent of these admissions (exhibit 5). Primary marijuana admissions were most likely to be Hispanic (48 percent), followed by Black

non-Hispanics (27 percent) and White non-Hispanics (17 percent).

Alcohol was identified as a secondary drug problem for 41 percent of the primary marijuana admissions in the second half of 2003. An additional 14 percent reported methamphetamine, and 8 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 (75 percent) and users age 17 and younger (48 percent). When asked whether they had used any drug intravenously in the year prior to admission, less than 2 percent of all primary marijuana admissions answered affirmatively (exhibit 6).

Approximately 7 percent of the primary marijuana treatment admissions in the first half of 2004 were homeless at the time of admission, and 32 percent were referred to treatment by the court or criminal justice system (most likely by the juvenile justice system, given the large proportion of adolescents represented among primary marijuana admissions). Sixty-seven percent were entering treatment for the first time. Twenty-six percent had graduated from high school, and, at the time of admission, 14 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 the first half of 2004 indicate that of the 4,688 major substances of abuse reported in the Los Angeles division, 516 (11 percent) were marijuana reports (exhibit 7). Marijuana was the fourth most likely major substance to be reported, following alcohol, cocaine, and stimulants. Sixty-seven percent of the patients reporting marijuana use were male; 40 percent were Hispanic (followed by 24 percent Black and 22 percent White); and 61 percent were age 12–29. A total of 1,094 chief complaints were logged for individuals reporting marijuana. The top three complaints were intoxication (298 complaints), altered mental status (231 complaints), and psychiatric condition (197 complaints). Marijuana-using patients were most likely to be discharged home (54 percent) or admitted to a psychiatric inpatient ward (21 percent).

California Poison Control System calls involving exposure to marijuana among Los Angeles County residents were stable at 35–39 calls between 2000 and 2003 (exhibit 8a). In the first half of 2004, marijuana-related exposure calls plummeted to eight calls. Between January 2003 and June 2004, 74 percent of

the marijuana-exposed callers were male, and 81 percent were age 25 or younger.

According to CHKS data for the 2003–2004 school year (exhibit 10), 19.8 percent of all Los Angeles County secondary school students (including 7th, 9th, and 11th graders, and a small sample of non-traditional 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 current 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 11).

According to long-term trends calculated from CHKS data spanning over the most recent 5 school years (exhibit 12), 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.

According to NFLIS data based on 54,240 analyzed items reported by participating laboratories within Los Angeles County between October 2003 and September 2004, 23 percent (12,210) of all items analyzed were found to be cannabis. Cannabis was the third most frequently identified substance in Los Angeles County.

A total of 3,151 marijuana arrests were made within the city of Los Angeles in the first half of 2004; this represents a 15-percent increase over the number of marijuana arrests made during the same time period in 2003 (2,738). Marijuana arrests accounted for approximately 18 percent of all narcotics arrests made between January 1 and June 30, 2004.

Marijuana continues to dominate drug seizures in the city of Los Angeles. The amount of marijuana seized increased nearly 200 percent, from 9,285.5 pounds in the first half of 2003 to 27,691 pounds in the first half of 2004. Between January and June 2004, the amount of marijuana seized accounted for more than 95 percent of the total weight of drugs (in pounds) seized. Cocaine was a very distant second, accounting for an additional 4 percent of the total weight. The street value of the seized marijuana accounted for approximately 56 percent of the total street value of all drugs seized in the first half of 2004.

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 2004). The wholesale price of Mexican-grade marijuana ranges from \$300 to \$400 per pound (exhibit 13). The midlevel and retail prices of commercial grade marijuana are \$60–\$80 per ounce and \$10 per gram. All prices have been stable since early 2003. The wholesale price of domestic mid-grade marijuana ranges from \$1,000 to \$1,200 per pound. Midlevel and retail prices are \$200–\$250 per ounce and \$25 per gram. The wholesale price of high-grade sinsemilla is \$2,500–\$6,000 per pound. An ounce of sinsemilla sells for \$300–\$600 per ounce, 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.

Stimulants

The proportion of primary methamphetamine admissions to Los Angeles County treatment and recovery programs increased further from the second half of 2003 to the first half of 2004, breaking the 20 percent mark for the first time ever (exhibit 3). The 5,840 primary methamphetamine admissions reported in January–June 2004 accounted for 20.6 percent of all admissions. Methamphetamine is the one illicit drug that has continually increased among treatment admissions over the past 4 years (exhibit 4). Compared with other major illicit drug admissions, primary methamphetamine admissions had the largest proportion of females (39.9 percent), White Non-Hispanics (41.4 percent), Asian/Pacific Islanders (3.4 percent), 18–25-year-olds (30.4 percent), and 26–35-year-olds (33.8 percent) (exhibit 5).

The closing of the racial/ethnic gap between White non-Hispanic and Hispanic methamphetamine treatment admissions continued in the first half of 2004. The proportion of White non-Hispanics decreased further to 41.4 percent, whereas the proportion of Hispanics increased to 41.9 percent.

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 the second half of 2003, the percentage of females among primary other amphetamine admissions plummeted to 36.8 percent. In early 2004, however, the proportion of females climbed back up a bit to 40 percent of all admissions. It is important to monitor this drug category to see if the gender distribution will return to equitable proportions, or if this is a one-time reporting issue.

In the second half of 2003, primary amphetamine admissions were most likely to fall within the 31–35 age group (23.6 percent), which was the modal age group in the second half of 2002. Between January and June 2004, however, primary amphetamine admissions were most likely to fall within the 26–30 age group (20.6 percent). Primary amphetamine admissions were more likely to be Hispanic (40.7 percent) than White non-Hispanic (31.0 percent). Primary methamphetamine and other amphetamine admissions tended to most frequently report secondary abuse of alcohol or marijuana.

As shown in exhibit 5, 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 2004, 67.9 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 7.1 and 20.4 percent, respectively, in the first half of 2004.

Like primary methamphetamine admissions, the mode of other amphetamine administration has shifted in recent years, as well. Nearly three out of five of all other amphetamine admissions in the first half of 2004 smoked amphetamines (59.3 percent), followed by 22.8 percent who inhaled, 11.7 percent who ingested orally, and 2.8 percent who injected. In 1999, a lower percentage smoked, and higher percentages injected, inhaled, and used other amphetamines orally.

Twelve percent of all primary methamphetamine admissions reported past-year intravenous use of one or more drugs (exhibit 6). Approximately one-fifth of the primary methamphetamine treatment admissions were homeless (20.1 percent) and referred by the court or criminal justice system (20.0 percent). Forty-six percent were entering treatment for the first time. Forty-two percent had graduated from high school, and, at the time of admission, 18.3 percent were employed full- or part-time.

Preliminary unweighted data accessed from DAWN *Live!* for the first half of 2004 indicate that of the 4,688 major substances reported in the Los Angeles division, 658 (14 percent) were stimulants (exhibit 7). The stimulant category encompasses amphetamines and methamphetamine. 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 down into amphetamines and methamphetamine.

According to the unweighted DAWN data, 75 percent of the patients reporting methamphetamine use were male and 52 percent were Hispanic (followed by 33 percent White and 3 percent Black). More than one-half (55 percent) were age 25–44, and an additional 30 percent were 18–24. The three most frequently reported complaints were intoxication (269 complaints), altered mental status (258 complaints), and psychiatric condition (254 complaints). Methamphetamine-using patients were most likely to be discharged home (41 percent) or admitted to a psychiatric inpatient ward (38 percent).

Fifty-five percent of the ED patients reporting amphetamines were male, and 56 percent were Hispanic (followed by 24 percent White and 8 percent Black). Fifty-six percent were age 25–44, and an additional 28 percent were 18–24. The top three complaints were intoxication (88 complaints), altered mental status (86 complaints), and withdrawal (76 complaints). Amphetamine-using patients were most likely to be discharged home (43 percent) or admitted to a psychiatric inpatient ward (25 percent).

California Poison Control System calls involving exposure to methamphetamine/amphetamine among Los Angeles County residents have fluctuated over the years, with 48 calls logged for 2000, a high of 63 calls in 2001, and approximately 55 calls in 2002 and 2003 (exhibit 8a). In the first half of 2004 alone, 33 methamphetamine/amphetamine-related exposure calls were made to the system. If an equal number of calls are made in the second half of 2004, the overall number will exceed the peak level seen in 2001. Between January 2003 and June 2004, slightly more callers

reporting exposure to methamphetamine or other amphetamines were male (53 percent) than female (47 percent), and 64 percent were between the ages of 18 and 34 (exhibit 9). In addition to calls relating to methamphetamine and amphetamine exposure, a total of 37 Ritalin/Adderall exposure calls were recorded between January 2000 and June 2004.

According to CHKS data for the 2003–2004 school year (exhibit 10), 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 current 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 11).

According to long-term trends calculated from CHKS data spanning over the most recent 5 school years (exhibit 12), the pattern of past-30-day methamphetamine use among responding secondary school students was similar to those 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.

According to NFLIS data based on 54,240 analyzed items reported by participating laboratories within Los Angeles County between October 2003 and September 2004, 33 percent (17,727) 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 22 items were identified as amphetamine,

and 15 items were identified as pseudoephedrine (each accounting for less than one-tenth of a percent).

Throughout the first half of calendar year 2004, 221 amphetamine arrests were made within the city of Los Angeles, exceeding the number of arrests made during the same period in 2003 (135 arrests) by 64 percent. Despite this large increase in the overall number of amphetamine arrests, as a class, they continued to account for slightly more than 1 percent of the total. Arrests for methamphetamine are included in the category “other narcotics.” In early 2004, 8,497 arrests for other narcotics were made, accounting for 48 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 101 percent, from 84.9 pounds seized in the first half of 2003 to 171 pounds seized in the first half of 2004. The street value of the seized methamphetamine accounted for approximately 8 percent of the total street value of all drugs seized in early 2004.

Los Angeles is considered by NDIC to be one of the largest methamphetamine markets in the United States. 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.

The wholesale price per pound of methamphetamine ranged from \$5,000 to \$7,000 (exhibit 13), which is similar to the range reported in June 2004, but higher than the wholesale price reported in 2002–2003 (\$3,700 to \$5,000). The midlevel and retail prices are \$450–\$550 per ounce, \$20 per one-quarter gram, \$40–\$100 per gram, \$60 per one-sixteenth ounce (“teener”), and \$100–\$120 per one-eighth ounce. 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 \$8,000–\$11,000 per pound in Los Angeles. The mid-level price for an ounce of crystal methamphetamine is \$600–\$800. 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 2003, only 831 labs were seized statewide (452 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 fourth highest number of laboratory-only seizures in the first half of 2004 (243), following Tennessee (353), Arkansas (300), and Illinois (244). Within California, the Los Angeles HIDTA once again led the State in the overall number of methamphetamine seizures (including laboratories, dumpsites, and chemicals/glass/equipment) made in the first half of 2004, accounting for 49 percent of all seizures made in California (138 of 331 total incidents). Of the 4 counties in the LA HIDTA, Los Angeles County had the second highest number of seizures during that time period (37), lagging behind San Bernardino County (60), but followed very closely by Riverside County (36). Orange County rounded out the HIDTA with just five seizures.

Even though three States exceed California in terms of laboratory seizures, California leads the country in the number of domestic “superlabs.” Twenty-five of 30 U.S. superlabs (83 percent) seized in the first half

of 2004 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 proportion of superlabs seized throughout California (14 out of 25 superlabs seized between January 1 and July 1, 2004, or 56 percent). This proportion is a slight decrease over LA HIDTA's contribution in 2003. Within the LA HIDTA, Los Angeles County led with six superlab seizures, followed by Riverside County (four), San Bernardino County (three), and Orange County (one). Furthermore, totals reported in the LA HIDTA exceeded totals reported by all States outside of California.

The cost to clean up labs located in the LA HIDTA in the first half of 2004 totaled \$466,003. One-third of this total corresponds to the cost of cleaning up Los Angeles County laboratories, second only to Riverside County (36 percent of the cleanup costs). It is important to note that these clean-up 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 affect 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 2004, 2,016 children were "affected" by methamphetamine laboratories. Nine percent of the children affected resided in California. Within California, 109 of the 174 affected children resided in the 4 LA HIDTA counties. The highest proportion were reported in Riverside County (73 of the 109 children), followed by San Bernardino County (22), Los Angeles County (9), and Orange County (5). It is important to note that these numbers are underreported, due to differences in county- and State-level reporting procedures.

Depressants

In the first half of 2004, 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 1,318 pharmaceuticals reported among those seeking detoxification, overmedication, and other

cases accessed from DAWN *Live!* for the first half of 2004 in the Los Angeles division, 192 (15 percent) were antidepressants, 218 were antipsychotics (17 percent), 25 were barbiturates (2 percent), and 266 were benzodiazepines (21 percent) (exhibit 14). For all of the above categories except for barbiturates, overmedication was the most frequently stated reason for visiting the emergency department. The proportion of overmedication cases ranged from a low of 70 percent (for benzodiazepines) to a high of 88 percent (antipsychotics).

Los Angeles County-based California Poison Control System calls involving exposure to benzodiazepines fluctuated. From 2000 to 2001, benzodiazepine-related exposure calls increased from 64 to 83 calls (exhibit 8b). In 2002, the number of calls decreased to 52, and such calls then increased to 70 in 2003. In the first half of 2004 alone, 52 benzodiazepine exposure calls were reported, which may indicate a further increase from the number of calls seen in 2003. Between January 2003 and June 2004, 19 of the benzodiazepine-related exposure calls were for alprazolam, 29 were for clonazepam, and 20 were for diazepam. In addition to calls for benzodiazepine exposures, a total of 52 antidepressant exposure calls and 25 antipsychotic calls were reported between January 2000 and June 2004.

Approximately 688 of the 54,240 items analyzed and reported to the NFLIS system in calendar year 2003 were identified as pharmaceuticals/prescription/non-controlled non-narcotic medications (as opposed to illicit substances). Of those, roughly 24 percent (163 items) were found to be benzodiazepines. The most frequently cited benzodiazepines were diazepam (75 items; 46 percent) and clonazepam (48 items; 29 percent).

According to LA CLEAR, Valium retails for \$2 per tablet (exhibit 13), which is one-half the cost reported in the June 2004 report.

Phencyclidine (PCP) and Hallucinogens

Primary PCP treatment admissions accounted for approximately 1.0 percent of all admissions in the first half of 2004 (exhibit 3). 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 they continued to decrease further (12 percent) in the first half of 2004 to 230 admissions. Alcohol (23 percent), cocaine/crack (22 percent), and marijuana (18 percent) were the three

most frequently reported secondary drugs among primary PCP admissions. A vast majority (96 percent) of the primary PCP admissions smoked the drug. 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 the first half of 2004 indicate that of the 4,688 major substances of abuse reported in the Los Angeles division, 75 (2 percent) were PCP (exhibit 7). Seventy-five percent of the patients reporting PCP use were male and 35 percent were White (followed by 33 percent Black and 27 percent Hispanic). Sixty-five percent were age 30–54, and an additional 16 percent were between 18 and 25. A total of 161 chief complaints were logged for patients reporting PCP. The top three complaints were altered mental status (38 complaints), intoxication (33 complaints), and psychiatric condition (23 complaints). User patients were more likely to smoke PCP (45 percent) than inject (16 percent). PCP-using patients were most likely to be discharged home (44 percent) or admitted to a psychiatric inpatient ward (21 percent).

California Poison Control System calls involving exposure to PCP among Los Angeles County residents fluctuated between 10 and 20 calls from 2000 to 2003 (exhibit 8a). In the first half of 2004, there were five PCP-related exposure calls.

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 10). A breakdown of the data by grade level illustrated that among responding ninth 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 12), the pattern of past-30-day LSD/other psychedelics 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.

According to NFLIS data based on 54,240 analyzed items reported by participating laboratories within Los Angeles County between October 2003 and September 2004, 0.7 percent ($n=345$) of all items analyzed were found to be PCP.

Nearly 100 PCP arrests were made within the city of Los Angeles in the first half of 2004, identical to the number of arrests made during the same time period in 2003. 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 June 2004 represented approximately 1.5 percent of the total street value of all drugs seized during that period. The total amount of PCP seized in the early part of 2004 (26.3 pounds) was 218 percent higher than the amount seized during the same period in 2003 (8.3 pounds).

The wholesale price for a gallon of PCP remains at the high level reported in June 2004, ranging from \$15,000 to \$20,000 (exhibit 13). The ounce price, however, decreased recently, from \$600 to \$300–\$350. A sherm cigarette dipped in liquid PCP continues to sell for \$20–\$30. 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.

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 MDMA (ecstasy) and gamma hydroxybutyrate (GHB).

Collectively, club drugs played a limited role in preliminary unweighted data accessed from DAWN *Live!* for the first half of 2004. Fifty of the 4,688 major substances of abuse reported in the Los Angeles division were MDMA (ecstasy), and 2 were GHB (exhibit 7).

Ketamine and Rohypnol did not have a presence at all. Fifty-six percent of the patients reporting MDMA use were male, and 38 percent were Hispanic (followed by 22 percent White and Black). More than one-half of the MDMA users (56 percent) were between 12 and 24 years of age. Of the 122 complaints, the three most frequently reported complaints were altered mental status (40 complaints), intoxication (36 complaints), and psychiatric condition (31 complaints). Methamphetamine-using patients were most likely to be admitted to a psychiatric inpatient ward (50 percent) or discharged (20 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 56 in 2000 to a low of 16 in 2003 (exhibit 8a). In the first half of 2004 alone, however, 12 calls relating to ecstasy exposure were reported. If an equal number of calls are made in the second half of 2004, the overall number will exceed the 2003 level. Between January 2003 and June 2004, slightly more callers reporting exposure to ecstasy were male (57 percent) than female (43 percent), and 64 percent were between the ages of 13 and 25 (exhibit 9). In addition to calls relating to ecstasy exposure, a total of 14 GHB exposure calls, 4 ketamine calls, and 3 Rohypnol calls were recorded between January 2000 and June 2004.

The California Poison Control System also kept track of calls relating to Coricidin HBP and dextromethorphan (DXM) exposures. Between January 2003 and June 2004, 50 Coricidin HBP calls and 17 DXM calls were logged in the system (exhibit 9). Fifty-two percent of Coricidin HBP calls and 58 percent of DXM calls were male. Furthermore, 84 percent of the Coricidin HBP calls and 58 percent of the DXM calls were made because of exposure to individuals younger than 18. Eighteen to 24-year-olds represented an additional 16 percent of the Coricidin HBP calls and 21 percent of the DXM calls.

According to CHKS data for the 2003–2004 school year (exhibit 10), 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 11). By grade, 6 percent of 9th graders and 5 percent of 11th graders answered in the affirmative.

According to NFLIS data based on 54,240 analyzed items reported by participating laboratories within Los Angeles County between October 2003 and September 2004, less than 1 percent (288) 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 81 percent of the club drug samples analyzed by NFLIS. GHB represented an additional 12 percent of the samples, and ketamine accounted for 7 percent.

According to NDIC, the majority of MDMA available in Los Angeles is transported directly from Western Europe. Los Angeles is a source of both wholesale and midlevel amounts of MDMA, which is destined for markets around the United States, including Pacific, Southwest, and West Central States (NDIC 2004). Israeli and Russian criminal groups control the wholesale distribution, and independent dealers (usually White males) are responsible for retail marketing and distribution. Mail service and air travel are the two most likely ways to transport the product into Los Angeles. Within Los Angeles, Israeli and Russian traffickers control the distribution at the wholesale level.

With the exception of GHB, wholesale and retail prices for club drugs remained stable since the June 2004 report. In multiple quantities, MDMA has a wholesale price of \$12 per pill or capsule (exhibit 13). At the retail level, ecstasy usually sells for \$20–\$40 per pill. A standard dose of ecstasy is 60–150 milligrams, which is equivalent to one or two pills. In Los Angeles, ecstasy “boats” continue to be mentioned. A boat contains 1,000 MDMA pills and sells for \$8,000. 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 grams of powder. The wholesale price for GHB increased since the last report. A gallon sells for \$275–\$300, 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.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

A cumulative total of 48,510 adult/adolescent AIDS cases were reported in Los Angeles County through June 30, 2004. Of those cases, 996 were reported between January 1, 2004, and June 30, 2004. Currently, approximately 19,700 Los Angeles County

residents are living with advanced HIV disease. Los Angeles County cumulative cases represent approximately 36 percent of the 135,982 cumulative cases in California and approximately 6 percent of the 886,575 cumulative cases nationwide. Of the cumulative cases reported in Los Angeles County, 47 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 5 and 7 percent from 1997 to 2003 (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 1997. The proportion of men exposed to AIDS through male-to-male sexual contact has decreased steadily, from 66 percent in 1997 to 64 percent in 2003. The proportion of male cases with an “other” or “undetermined” exposure category continues to rise steadily, and in 2003, it accounted for 21 percent of all male cases diagnosed that year.

The modal exposure category for females diagnosed with AIDS in 1997 was heterosexual contact (46 percent). This exposure category has been associated with a lower proportion of female AIDS cases since then; in 2003, it was associated with 34 percent of all newly diagnosed female AIDS cases. Female cases attributable to injection drug use, which were stable at 16–17 percent of all female cases from 2000 to 2002, decreased to 11 percent in 2003. The proportion of female cases with an “other” or “undetermined” exposure category continued to increase, accounting for 54 percent of all female cases diagnosed in 2003.

In Los Angeles County, approximately 7 percent of all AIDS cases have involved injection drug use (alone) as the primary route of exposure. Among the 3,403 cumulative cases primarily attributable to injection drug use, 73 percent occurred among males. African-Americans are the modal group of male injection drug users (IDUs) (accounting for 38 percent), followed by equal percentages of Whites and Hispanics (each accounting for 31 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-two 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 U.S. Census**

Population Characteristics	Los Angeles County	California
Population, 2003 estimate (<i>N</i>)	(9,871,506)	(35,484, 453)
Population, percent change, April 1, 2000, to July 1, 2003	3.7	4.8
Population, year 2000 (<i>N</i>)	(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. Number of ED Visits, by Case Type, in the Los Angeles County Division (Unweighted¹):
January–June 2004**

Case Type	Number of ED Visits¹
Suicide Attempt	313
Seeking detoxification	115
Alcohol only (age <21)	252
Adverse reaction	582
Overmedication	570
Malicious poisoning	13
Accidental ingestion	56
Other	2,367
Total	4,268

¹The unweighted data are from 23 to 26 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 1/18/05

Exhibit 3. Number and Proportion of Semiannual Treatment Admissions in Los Angeles County, by Primary Illicit Drug of Abuse: July 2001–June 2004

Primary Drug	07/01–12/01 Number (%)	01/02–06/02 Number (%)	07/02–12/02 Number (%)	01/03–06/03 Number (%)	07/03–12/03 Number (%)	01/04–06/04 Number (%)
Cocaine/Crack	4,354 (19.4)	4,655 (19.6)	4,354 (19.0)	5,242 (19.3)	4,815 (18.2)	5,137 (18.1)
Heroin	8,033 (35.8)	7,767 (32.8)	7,096 (30.9)	6,891 (25.4)	6,704 (25.4)	6,942 (24.5)
Marijuana	2,028 (9.0)	2,686 (11.3)	2,816 (12.3)	3,669 (13.5)	3,452 (13.1)	3,812 (13.4)
Methamphetamine	3,015 (13.4)	3,453 (14.6)	3,692 (16.1)	4,961 (18.3)	5,095 (19.3)	5,840 (20.6)
PCP	207 (0.9)	196 (0.8)	219 (0.9)	314 (1.2)	262 (1.0)	230 (0.8)
Total Admissions	22,430	23,695	22,934	27,110	26,393	28,371

SOURCE: California Alcohol and Drug Data System (CADDs)

Exhibit 4. Number and Proportion of Annual/Semiannual Treatment Admissions in Los Angeles County, by Primary Illicit Drug of Abuse: January 2001–June 2004

Primary Drug	2001		2002		2003		1H 2004	
	Number	(%)	Number	(%)	Number	(%)	Number	(%)
Cocaine/Crack	8,703	(18.9)	9,009	(19.3)	10,057	(18.8)	5,137	(18.1)
Heroin	17,560	(38.1)	14,863	(31.9)	13,595	(25.4)	6,942	(24.5)
Marijuana	4,286	(9.3)	5,502	(11.8)	7,121	(13.3)	3,812	(13.4)
Methamphetamine	5,418	(11.7)	7,145	(15.3)	10,056	(18.8)	5,840	(20.6)
PCP	405	(0.9)	415	(0.9)	576	(1.1)	230	(0.8)
Total Admissions	46,127		46,629		53,503		28,371	

SOURCE: California Alcohol and Drug Data System (CADDs)

Exhibit 5. Characteristics of Treatment Admissions in Los Angeles County, by Primary Illicit Drug of Abuse and Percent: January–June 2004

Characteristics	Cocaine/Crack	Heroin	Marijuana	Methamphetamine	All Admissions
Gender					
Male	67.0	71.7	74.7	60.1	67.3
Female	33.0	28.3	25.3	39.9	32.7
Race/Ethnicity					
White non-Hispanic	14.9	40.0	16.6	41.4	31.7
Black non-Hispanic	56.5	11.9	26.8	3.9	23.2
Hispanic	21.0	40.2	47.6	41.9	36.0
American Indian	0.4	0.7	0.6	1.0	0.8
Asian/Pacific Islander	1.5	1.2	2.1	3.4	2.0
Other	5.7	6.1	6.3	8.4	6.3
Age					
17 and younger	1.5	0.2	48.4	8.5	11.8
18–25	9.2	8.1	24.4	30.4	15.8
26–35	23.4	19.9	14.6	33.8	22.8
36 and older	65.9	71.8	12.6	27.3	49.6
Route of Administration					
Oral	1.6	1.4	3.7	3.5	23.2
Smoking	86.4	8.6	95.8	67.9	46.2
Inhalation	10.0	3.5	0.5	20.4	7.2
Injection	0.9	85.6	0.0	7.1	22.7
Unknown/other	0.6	0.8	0.1	1.1	0.8
Secondary Drug	Alcohol	Cocaine/ Crack	Alcohol	Marijuana	Alcohol
Total Admissions (N)	(5,137)	(6,942)	(3,812)	(3,812)	(28,371)

SOURCE: California Alcohol and Drug Data System (CADDs)

Exhibit 6. Additional Characteristics of Treatment Admissions in Los Angeles County, by Primary Illicit Drug of Abuse and Percent: January–June 2004

Characteristics	Cocaine/ Crack	Heroin	Marijuana	Methamphetamine	All Admissions
Positive for Intravenous Drug Use in Past Year	4.5	88.4	1.5	12.0	26.4
Homeless	28.2	16.0	6.7	20.1	18.8
Employed Full- or Part-Time	14.5	19.6	13.5	18.3	17.1
Graduated from High School	46.0	49.4	25.9	42.1	43.0
Referred by Court/Criminal Justice System (Not Including SACPA ¹ Referrals)	19.6	3.9	32.2	20.0	16.4
First Treatment Episode	32.6	15.0	66.8	45.5	40.3
Total Admissions (N)	(5,137)	(6,942)	(3,812)	(5,840)	(28,371)

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 ED Reports, by Drug and Drug Category (Major Substances of Abuse), in the Los Angeles County Division (Unweighted¹): January–June 2004

Major Substance of Abuse	Number of ED Reports ¹
Alcohol	1,812
<i>Alcohol only (age <21)</i>	252
Cocaine	1,263
Heroin	289
Marijuana	516
Stimulants	658
Amphetamines	173
Methamphetamine	485
MDMA (Ecstasy)	50
GHB	2
Ketamine	0
LSD	2
PCP	75
Miscellaneous hallucinogens	1
Inhalants	19
Combinations NTA	1
Total	4,688

¹The unweighted data are from 23 to 26 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 1/18/05

Exhibit 8a. Los Angeles County Poison Control Center Exposure Calls for Major Substances of Abuse: January 2000–June 2004

Major Substance	2000 Number	2001 Number	2002 Number	2003 Number	1H2004 Number	Total Number
Cocaine/Crack ¹	69	66	77	97	41	350
Heroin ¹	20	15	20	17	11	83
Marijuana ¹	35	35	39	39	8	156
Ecstasy (MDMA) ¹	56	50	33	16	12	167
Rohypnol/flunitrazepam ¹	7	4	4	1	2	18
GHB ¹	57	35	25	10	4	131
PCP ¹	10	17	13	16	5	61
LSD ¹	18	2	6	1	1	28
Mushrooms	2	1	0	2	0	5
Other hallucinogens	2	0	2	2	1	7
Other Illicit ¹	2	1	2	0	0	5
Inhalants ²	1	0	3	2	2	8
Methamphetamine/ Amphetamine ²	48	63	51	54	33	249
Ketamine ²	3	2	3	1	3	12

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 Center Exposure Calls for Prescription and Over-the-Counter Medications and Common Household Substances: January 2000–June 2004

Substance ¹	2000 Number	2001 Number	2002 Number	2003 Number	1H2004 Number	Total Number
Antidepressants	10	8	12	15	7	52
Antipsychotics	4	5	5	4	7	25
Benzodiazepines						
Alprazolam	10	14	8	12	7	51
Clonazepam	14	23	10	15	14	76
Diazepam	16	17	8	16	4	61
Other	24	29	26	27	27	133
Barbiturates	0	1	0	2	1	4
Opiates/Analgesics						
Codeine	2	6	2	4	1	15
Hydrocodone	5	10	32	39	19	105
Methadone	3	4	5	3	1	16
Oxycodone	1	4	7	9	2	23
Narcotic analgesics	5	6	6	8	3	28
Other (non-narcotic)	9	14	10	4	5	42
Fentanyl	1	1	2	0	1	5
Dextromethorphan	8	10	10	12	5	45
Coricidin HBP	4	13	26	28	22	93
Miscellaneous anxiolytics	1	4	2	8	1	16
Muscle relaxants	7	6	8	13	8	42
Ritalin/Adderall	5	10	11	9	2	37
Other stimulants	2	4	2	1	0	9
Other	13	20	23	16	12	84
Unknown	2	2	3	4	2	13

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 Center Exposure Calls for Select Substances, by Gender and Age: January 2003–June 2004

	Cocaine/ Crack	Meth/ Ampheta- mine	Ritalin/ Adderall	Ecstasy	Coricidin HBP	Dextro- methorphan
Gender						
Male	68%	53%	64%	57%	52%	59%
Female	32%	44%	36%	43%	48%	35%
Unknown	0%	3%	0%	0%	0%	6%
Age Group						
Younger than 13	9%	14%	18%	7%	6%	12%
13–17	7%	10%	36%	14%	78%	53%
18–25	21%	39%	28%	50%	16%	23%
26–34	25%	25%	18%	18%	0%	6%
35–44	26%	7%	0%	11%	0%	6%
45–54	12%	4%	0%	0%	0%	0%
55 and older	<1%	1%	0%	0%	0%	0%
Total Number of Calls	138	87	11	28	50	17

SOURCE: California Poison Control System

Exhibit 10. 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 11. 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 12. 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				
	1999-00	2000-01	2001-02	2002-03	2003-04
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 13. Illicit and Prescription Drug Prices in Los Angeles: January–June 2004

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 Mexican Brown Powder Southeast Asian Southwest Asian Opium South American	\$20,000 per kilogram \$25,000 per kilogram \$35,000–\$40,000 per 300–350-gram unit \$70,000–\$80,000 per 700–750-gram unit \$30,000 per kilogram \$650–\$800 per 18-gram stick \$86,000–\$100,000 per kilogram	\$500–\$800 per 25 grams N/R N/R N/R N/R N/R	\$90–\$100 per gram N/R N/R N/R N/R N/R
Marijuana Mexico-produced Domestic Sinsemilla BC Bud	\$300–\$400 per pound \$1,000–\$1,200 per pound \$2,500–6,000 per pound \$6,000 per pound	\$60–\$80 per ounce \$200–\$250 per ounce \$300–\$600 per ounce N/R	\$10 per gram \$25 per gram \$60–\$80 per 1/8 ounce N/R
Hashish	\$8,000 per pound	N/R	N/R
Methamphetamine Crystal Methamphetamine	\$5,000–\$7,000 per pound \$8,000–\$11,000 per pound	\$450–\$550 per ounce \$600–\$800 per ounce	\$20 per 1/4 gram \$40–\$100 per gram \$60 per 1/16 ounce \$100–\$120 per 1/8 ounce N/R
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	\$20–\$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)	\$8,000 per boat (1,000 tablets)	\$12 per tablet (multiple quantities)	\$20–\$40 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	\$2 per tablet
Vicodin (hydrocodone)	N/R	N/R	\$5 per 5-mg tablet
OxyContin (oxycodone)	N/R	N/R	\$1 per mg
MS Contin	N/R	N/R	\$20 per 60-mg tablet
Percocet/Percodan	N/R	N/R	\$5–10 per 5-mg tablet
Dilaudid (hydromorphone)	N/R	N/R	\$100 per 4-mg tablet
Methodone	N/R	N/R	\$10 per tablet
Codeine	N/R	N/R	\$5 per tablet
Fentanyl Patch	N/R	N/R	\$25–\$100 per patch

¹N/R=Not reported.

SOURCE: NDIC and LA CLEAR

Exhibit 14. Number of ED Reports, by Drug Category and Case Type (Selected Drugs) in the Los Angeles County Division (Unweighted¹): January–June 2004

Selected Drug Categories, by Case Type	Number of ED Reports¹
Antidepressants	192
Seeking detoxification	2
Overmedication	162
Other	28
Antipsychotics	218
Seeking detoxification	0
Overmedication	191
Other	27
Barbiturates	25
Seeking detoxification	1
Overmedication	3
Other	21
Benzodiazepines	266
Seeking detoxification	16
Overmedication	186
Other	64
Opiates/Opioids	164
Seeking detoxification	26
Overmedication	70
Other	68
Other Analgesics	169
Seeking detoxification	1
Overmedication	139
Other	29

¹The unweighted data are from 23 to 26 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 1/18/05

Exhibit 15. Annual Adult/Adolescent AIDS Cases by Gender, Year of Diagnosis, and Exposure Category: 1997–2003

Adult/Adolescent Exposure Category ¹	1997 Number (%)	1998 Number (%)	1999 Number (%)	2000 Number (%)	2001 Number (%)	2002 ² Number (%)	2003 ² Number (%)
Males							
Male-to-Male Sexual Contact	1,250 (66)	1,105 (65)	1,007 (64)	886 (62)	847 (61)	866 (61)	746 (64)
Injection Drug Use	138 (7)	104 (6)	79 (5)	92 (6)	98 (7)	77 (5)	58 (5)
Male-to-Male Sexual Contact/Injection Drug Use	119 (6)	106 (6)	92 (6)	94 (7)	87 (6)	87 (6)	63 (5)
Hemophilia or Coagulation Disorder	9 (<1)	<5 (-)	<5 (-)	<5 (<1)	5 (<1)	<5 (-)	<5 (-)
Heterosexual Contact	62 (3)	59 (3)	53 (3)	52 (4)	67 (5)	47 (3)	44 (4)
Transfusion Recipient	7 (<1)	6 (<1)	<5 (-)	<5 (-)	<5 (-)	7 (<1)	<5 (-)
Mother with/at Risk for HIV	<5 (-)	<5 (-)	<5 (-)	<5 (-)	<5 (-)	<5 (-)	<5 (-)
Other/Undetermined	313 (16)	327 (20)	329 (21)	303 (21)	273 (20)	337 (25)	248 (21)
Male Subtotal	1,898	1,711	1,565	1,435	1,381	1,422	1,165
Females							
Injection Drug Use	76 (28)	48 (22)	42 (20)	37 (17)	36 (16)	37 (17)	17 (11)
Hemophilia or Coagulation Disorder	<5 (-)	<5 (-)	<5 (-)	<5 (-)	<5 (-)	<5 (-)	<5 (-)
Heterosexual Contact	127 (46)	98 (46)	97 (46)	97 (44)	9 (36)	71 (33)	52 (34)
Transfusion Recipient	8 (3)	<5 (-)	<5 (-)	<5 (-)	7 (3)	9 (4)	<5 (-)
Mother with/at Risk for HIV	<5 (-)	<5 (-)	<5 (-)	<5 (-)	<5 (-)	<5 (-)	<5 (-)
Other/Undetermined	63 (23)	64 (30)	68 (32)	87 (39)	99 (45)	95 (45)	82 (54)
Female Subtotal	275	214	211	222	221	213	152
Total	2,173	1,925	1,776	1,657	1,602	1,635	1,317

¹Exposure categories are ordered hierarchically. Cases with multiple exposure categories are included in the category listed first.

²Data are provisional due to reporting delay.

SOURCE: Los Angeles County Department of Health Services, HIV Epidemiology Program

Drug Abuse in South Florida: January–June 2004

James N. Hall¹ and Madeline Camejo, Pharm.D.²

ABSTRACT

Indicators of cocaine abuse remain stable at high levels, with cocaine's consequences accounting for one-half of drug deaths, medical emergencies, and addiction treatment admissions. Illicit street drugs dominate problems in Miami-Dade County, while rates of prescription medication abuse are higher in Broward and Palm Beach Counties. Heroin and narcotic prescription analgesics are fueling a major problem with opiate abuse. Broward and Palm Beach Counties lead the State in the number of heroin-related deaths, and both the wholesale and retail prices of heroin have declined over the past year. Methadone-related deaths are increasing. Marijuana is still the most commonly abused drug among young emergency department patients in local hospitals. More than one-third of addiction treatment admissions were for marijuana. The club drugs, MDMA (or ecstasy) and GHB, continue to decline in measures of their use and consequences. New sources and trafficking patterns have increased the flow of methamphetamine into South Florida, where the drug commands some of the highest street prices in the Nation. Prescription benzodiazepines are second only to alcohol in the number of substance-related deaths across Florida.

INTRODUCTION

This report addresses drug abuse in Miami-Dade and Broward Counties, Florida, during the first half of 2004. It includes data on 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), methylendioxyamphetamine (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 the Nation. Previously, the MSA was only Miami-Dade County. This means that Broward County 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

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(DAWN) that monitors emergency department (ED) mentions 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 remains a major link with 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. Millions of MDMA ("ecstasy," or "XTC") tablets originate in the Benelux countries and often—more recently—are flown to the Caribbean before entering the United States in South Florida.
- 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 2004 Interim Report of Drugs Identified in Deceased

Persons by the Florida Medical Examiners' Commission.

- **Emergency department data** for Miami-Dade County and Broward County, Florida, were accessed primarily 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 Services Administration (SAMHSA). In Miami-Dade County, 17 of the 21 eligible hospitals were in the DAWN sample in 2004; there were 17 EDs in the sample. In Broward County, the number of eligible hospitals totaled 27; 22 were in the DAWN sample, with a total of 22 EDs in the sample. The data in this paper are for the first half of 2004, with the exception of methamphetamine reports, which are for the full 12 months of 2004. All data were accessed from DAWN *Live!* on December 7, 2004, with the exception of the data from the two Broward County EDs for the first half of 2004. Data for the first 6 months from Broward County EDs were accessed by the CEWG representative directly from the two participating hospitals, since at least four EDs in an area must report before the data are accessible through DAWN *Live!*. The unweighted data reported in this paper were not complete. During the first 6 months of 2004, between 8 and 10 EDs in Miami-Dade County reported data to DAWN; in the last 6 months, 5–10 reported each month. In Broward County, between two and three EDs reported in the first 6 months, and between four and seven reported over the last 6 months. Since all DAWN cases are reviewed for quality control, and may be corrected or deleted based on the review, the data reported here are subject to change. The information derived from DAWN *Live!* for this paper represents some case-type data but primarily 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). 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.samhsa.gov>>.

- **Drug treatment data** for the first half of 2004 were provided by the Spectrum Programs, Inc., and 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) 2004 Annual Report for Miami-Dade County (October 1, 2003, to September 30, 2004) and by the Broward Sheriff's Office (BSO) Crime Lab in the first half of 2004 for 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 Domestic Monitoring Program 2003 Report.
- **Survey data** on prevalence of drug use are from the Centers for Disease Control and Prevention's (CDC's) 2003 Youth Risk Behavior Survey and the National Institute on Drug Abuse's (NIDA's) 2004 Monitoring the Future Survey of students in grades 8–12 nationally.

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

Cocaine abuse indicators remain stable at high levels. Cocaine abuse rates in South Florida rank among the highest in the Nation, as indicated by drug deaths, hospital ED visits, crime lab data, and drug treatment admissions. Many of these indicators reflect cocaine use in combination with other drugs, including opiates and benzodiazepines.

Throughout Florida, the number of cocaine-related deaths stabilized in the first half of 2004 after steadily increasing since 2001. There were 820 cocaine-related fatalities during the first half of 2004 across Florida, a 3-percent increase from the 799 deaths in the second half of 2003. There were 1,614 cocaine-related fatalities during all of 2003, representing a 23-percent increase over the 1,307 cocaine-related fatalities in 2002 and a 46-percent increase from the total for 2001. Among the 2004 cases, 75 percent involved the use of another drug, thus reflecting prevalent polydrug abuse patterns with cocaine (exhibit 1). A

large proportion of cocaine ED episodes also involved at least one other substance.

There were 96 deaths related to cocaine abuse in Miami-Dade County during the first half of 2004 (exhibit 2), representing a 1-percent increase over the total from 2003. One of the 2004 cocaine-related fatalities was younger than 18; 16 percent were age 18–25, 17 percent were 26–34, 40 percent were 35–50, and 26 percent were older than 50. Cocaine-related deaths in Miami-Dade County totaled 189 in 2003, 151 in 2002, 149 in 2001, 144 in 2000, 226 in 1999, and 273 in 1998.

There were 61 deaths related to cocaine abuse in Broward County during the first half of 2004 (exhibit 3), representing a 23-percent decrease over the 79 cases from the second half of 2003 and a small increase from the 59 cases during the first half of 2003. None of the 2004 cocaine-related fatalities was younger than 18; 11 percent were age 18–25, 18 percent were 26–34, 49 percent were 35–50, and 21 percent were older than 50. Cocaine-related deaths in Broward County totaled 138 in 2003, 121 in 2002, 94 in 2001, 80 in 2000, and a record high 139 in 1999.

In Florida, a drug is considered to be a cause of death if it is detected in an amount considered to be a lethal dose by the local medical examiner (ME). Statewide, the number of lethal cocaine-induced death cases declined slightly from 275 in the first half of 2003, to 266 in the second half of that year, to 264 in the first 6 months of 2004. Among the Miami-Dade cocaine deaths in the first half of 2004, the drug was detected at a lethal dose in 36 deaths or 38 percent of the cocaine-related deaths, up from 25 percent of the 2003 cases and 21 percent of the 2002 cocaine-related deaths. Among the Broward County cocaine death cases in the first half of 2004, the drug was detected at a lethal dose level in 17 deaths or 28 percent of cocaine-related deaths, a proportion that is down from 45 percent of 2003 cases and 53 percent of the 2002 cases. Nonspecific, polydrug mixtures were detected in 75 percent of cocaine deaths statewide during the first half of 2004 (exhibit 1), 56 percent of the 96 such deaths in Miami-Dade County (exhibit 2), and 89 percent of the 61 cocaine-related deaths in Broward County (exhibit 3).

Miami-Dade County had the highest number of cocaine-related deaths in the State during the first half of 2004, with 96 cases, followed by Jacksonville with 90, St. Petersburg with 78, West Palm Beach with 72, Orlando with 69, and Broward County with 61. Miami reported the highest number of lethal cocaine deaths with 36, followed by West Palm Beach with 34.

Beginning in 2003, SAMHSA's national DAWN *Live!* increased the number of hospitals reporting to the national system and enhanced the surveillance of drug-related hospital ED mentions to provide expanded and more rapid local reporting on such activity. In South Florida, DAWN is currently recruiting new hospitals for the system in Broward and Palm Beach Counties to complete coverage for the region's newly expanded national MSA. The new area is named the Miami-Ft. Lauderdale MSA. DAWN will also expand to the Tampa/St. Petersburg MSA in Florida as well.

Unweighted data on ED cocaine reports in Miami-Dade County were accessed from DAWN *Live!* for the first 6 months of 2004. Cocaine was clearly the most commonly involved illicit drug in local emergency department visits, accounting for 50 percent of the 5,163 Miami-Dade drug abuse reports in the first half of 2004 (exhibit 4).

Most (72 percent) of the 2,594 Miami-Dade cocaine-involved ED patients were male. Thirty percent were non-Hispanic Whites, 48 percent were non-Hispanic Blacks, and 18 percent were Hispanic/other. Cocaine-involved ED patients were 30 years of age or older in 77 percent of the reports, which continues a pattern of older cocaine ED patients. The patients' ages were as follows: less than 1 percent (14) were age 12–17, 11 percent were 18–24, 25 percent were 25–34, and 63 percent were age 35 or older. Crack cocaine was specifically mentioned in 58 percent of the cocaine reports in which the route of administration was noted in the medical record during the first half of 2004.

Broward County drug-related ED episodes are based on a review of two Broward County hospitals participating in DAWN during the first 6 months of 2004. The network is expanding, and data from more hospitals will be included in future reports. Cocaine was clearly the most commonly reported illicit drug in local emergency department visits, accounting for 44 percent of the 1,198 Broward drug abuse reports in the first half of 2004 (exhibit 5).

Most (71 percent) of the 523 Broward cocaine ED patients were male. Fifty-four percent were non-Hispanic Whites, 38 percent were non-Hispanic Blacks, and 7 percent were Hispanic/other. Cocaine-involved ED patients were 30 years of age or older in 74 percent of these cases, which continues a pattern of older cocaine ED patients. The patients' ages were as follows: less than 1 percent were in their teens, 10 percent were age 18–24, 54 percent were 25–34, and 32 percent were age 35 or older. Crack cocaine was

specifically mentioned in 17 percent of the cases in the first half of 2004.

Addiction treatment profiles showed 1,674 BARC clients in treatment for cocaine in the first half of 2004, representing 49 percent of BARC's 3,416 clients. For Spectrum, 38 percent of its 641 clients, or 244 patients, in the first half of 2004 were seeking treatment for cocaine addiction. Combined, the programs reported 1,919 cocaine treatment cases, or 47 percent of the 4,057 total cases in the first half of 2004. Most clients were older than 35, and most were non-Hispanic Whites.

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 10,496 cases in Miami-Dade for the 12-month period from October 2003 to September 2004 and for 2,839 items analyzed in Broward County in the shorter period from January to June 2004. The second most commonly analyzed substance was marijuana in both counties. The number of cocaine cases analyzed in Miami-Dade is up 12 percent from last year, and the total in Broward is down 9 percent from the 3,136 cases in the first 6 months of 2003. However, beginning in 2001, the Broward Crime Lab began to work only those cases submitted by the State Attorney's Office, and of those cases only the items requested. This has resulted in about a 20-percent decrease in the number of items tested.

According to the National Drug Intelligence Center, 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.

In 2003, current cocaine use was reported in results of the CDC's Youth Risk Behavior Survey by 2.2 percent of Broward County high school students (down from 2.6 percent in 2001) (exhibit 6). This was the lowest proportion in the State. Among Miami-Dade County high school students, 3.2 percent reported current cocaine use in 2003 (down from 4.0 percent in 2001). In Palm Beach County, 4.6 percent of high school students reported current cocaine use in the same survey. The proportion for the high school students in all of Florida was 4.0 percent, compared with 4.1 percent for students nationwide.

Nationally, the 2004 Monitoring the Future Survey reported that current cocaine use (defined as any use

within the past 30 days) was reported by 0.9 percent of 8th graders, 1.7 percent of 10th graders, and 2.3 percent of 12th graders. These percentages reflected no change for 8th graders from the same survey in 2003, a 0.4-percent increase for 10th graders, and a 0.3-percent increase for 12th graders.

Heroin

The wholesale and retail prices of heroin have declined locally over the past year as the area has experienced a diversification of opioid abuse to include oxycodone, methadone, hydrocodone, heroin, and other opioids. Frequently, benzodiazepines are involved as well. Most deaths, ED visits, and addiction treatment admissions continue to be among older, White males.

Broward County, along with Palm Beach County, led the State in the number of heroin-related deaths in the first half of 2004. 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 opioid drugs, including heroin.

Throughout Florida, there were 110 heroin-related deaths in the first half of 2004, representing a 6-percent decline from the 117 such deaths in the previous 6 months. Heroin was found to be the most lethal drug, with 82 percent ($n=90$) of heroin-related deaths being caused by the drug in the first 6 months of 2004, a 10-percent decline from the second half of 2003. Yet deaths from narcotic opiates increased 13 percent over the same period. Polysubstance abuse was noted in 82 percent of the heroin-related deaths statewide (exhibit 1). Across Florida, there were 261 heroin-related deaths in 2003, which represented a 20-percent decline from the previous year. During all of 2002, there were 326 heroin-related deaths, a slight decline of only 2 cases from 328 such deaths in 2001.

In the first half of 2004, Broward County and Palm Beach County had the greatest number of heroin-related deaths in the State, with 16 cases each. They were followed by Orlando (15 cases), Miami-Dade County (12 cases), Sarasota (11 cases), Tampa (11 cases), and St. Petersburg (9 cases).

In Miami-Dade County, heroin was found at a lethal dose level in all of the 12 deaths in which heroin was detected. Other drugs were detected in seven (58 percent) of the cases (exhibit 2). None of the heroin-related fatalities was younger than 26; 33 percent were age 26–34, 50 percent were 35–50, and 17 percent were older than 50.

The 12 heroin-related deaths in Miami-Dade during the first half of 2004 reflected a 25-percent decrease over the number in 2003. In all of 2003, there were 32 heroin-related deaths, compared to the 36 heroin-related deaths in 2002 and 32 in 2001. Heroin deaths peaked in Miami-Dade County in 2000 with 61 deaths.

In Broward County, the 16 deaths in which heroin was detected included 9 cases (56 percent) in which it was found at a lethal dose level. Other drugs were detected in 15 (94 percent) of the cases (exhibit 3). None of the heroin-related fatalities was younger than 18; 13 percent were age 18–25, 38 percent were 26–34, 19 percent were 35–50, and 31 percent were older than 50.

The 16 heroin-related deaths during the first half of 2004 in Broward County reflected a 33-percent decrease over the 24 such deaths in the previous 6 months. In all of 2003, there were 49 heroin-related deaths, compared to the 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 at that time. The increase in heroin-related deaths over the past 8 years rose from 9 in 1995 to 49 in 2003.

Based on unweighted data accessed from DAWN *Live!* from Miami-Dade County emergency departments during the first half of 2004, there were a total of 661 heroin reports, representing 13 percent of all illicit substance reports (exhibit 4). Males accounted for 81 percent of these patients, and 49 percent were non-Hispanic Whites. Blacks represented 27 percent of the heroin ED patients, and Hispanics accounted for 25 percent of the patients. There were two patients younger than 15 and two age 12–17, while 11 percent were age 18–24, 34 percent were 25–34, and 54 percent were older than 34. Among the 218 heroin patients for whom the route of administration was included in the medical record, 78 percent injected the heroin, 21 percent reported snorting, and 1 percent cited smoking heroin.

Unweighted data for the first half of 2004 from the Broward emergency departments identified a total of 54 heroin reports, representing 5 percent of all illicit substance abuse ED reports (exhibit 5). The heroin ED patients were predominantly older White males experiencing withdrawal and/or seeking detoxification. Males accounted for 76 percent of the patients, and 80 percent were non-Hispanic Whites. Hispanics accounted for 11 percent of the heroin ED patients, and Blacks represented 9 percent of the patients. There were no patients younger than 18, while 7 percent were age 18–24, 28 percent were age 25–34, and

65 percent were older than 34. The most common reason for a heroin patient to visit the ED was dependence and withdrawal or seeking detoxification in 51 percent of the cases.

BARC reported that 15 percent ($n=506$) of its 3,416 clients in the first half of 2004 were admitted for heroin addiction. Spectrum Programs reported 3 percent (22) of the 641 addiction clients served in the first half of 2004 sought treatment for heroin. Combined, the two programs had 528 heroin clients or 13 percent of their 4,057 patients during the first 6 months of 2004. A majority of clients were older than 35 and non-Hispanic White.

Heroin accounted for 608 crime lab cases in Miami-Dade for the 12-month period from October 2003 to September 2004 according to the NFLIS, representing 4 percent of all drugs tested and a 2-percent increase over the total for the previous year. There were 87 heroin cases worked by the Broward Sheriff's Office Crime Lab in the first half of 2004, a 51-percent decrease from the 171 heroin cases in the second half of 2003 and a slight increase from the 85 cases reported in the first half of 2003. The U.S. DEA Domestic Monitoring Program analyzed 39 street-level samples of heroin in South Florida in 2003. All of the samples were of South American heroin, and they averaged 25.6 percent pure heroin. The average price per milligram pure was \$0.90. Nationally, there were 468 South American heroin samples tested by the program in 2003. The average purity was 41.8 percent heroin, and the average price was \$0.89 per milligram pure.

Colombian heroin is widely 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 top price for heroin has dropped 19 percent at the kilogram level and 25 percent at the gram level in the past 12 months. The most common street unit of heroin is a bag of heroin (roughly 20 percent purity) weighing about one-tenth of a gram that sells for \$10.

In 2003, any lifetime heroin use was reported in results of the CDC's Youth Risk Behavior Survey by 2.3 percent of high school students in Broward County (exhibit 6). This was the lowest proportion in the region and represented a 30-percent decline from the 2001 rate of 3.3 percent. Among high school students in Miami-Dade County, 2.5 percent reported lifetime heroin use. In Palm Beach County, 3.7 percent of high school students reported lifetime heroin use in the same survey. The proportion for the high

school students in all of Florida and nationwide as well was 3.3 percent.

Nationally, the 2004 Monitoring the Future Survey reported that current use of heroin (defined as any use within the past 30 days) was reported by 0.5 percent of 8th, 10th, and 12th graders. These percentages reflected no change for 8th graders from the same survey in 2003 and a 0.1-percent increase for 10th and 12th graders.

Other Opiates

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.

Methadone-related deaths statewide increased 32 percent between the last 6 months of 2003 and the first half of 2004, when they reached 392. This continues a steady increase of methadone-related deaths since 2001. Methadone was the cause of death in 67 percent of the methadone cases during the first half of 2004, causing a 50-percent increase in methadone-induced deaths compared to the last half of 2003.

The number of oxycodone-related deaths increased 9 percent statewide between the last 6 months of 2003 and the first half of 2004, when they reached 333. Oxycodone was the cause of death in 50 percent of the oxycodone cases during the first half of 2004, causing an 18-percent increase in oxycodone-induced deaths compared to the last half of 2003.

The number of hydrocodone deaths increased 6 percent statewide between the last 6 months of 2003 and the first half of 2004, when they reached 293. Hydrocodone was the cause of death in 36 percent of the hydrocodone-related deaths during the first half of 2004, causing a 25-percent increase in hydrocodone-induced deaths compared to the last half of 2003.

Additional opiate-related analgesic deaths statewide in the first half of 2004 included morphine (307), propoxyphene (184), fentanyl (93), hydromorphone (42), meperidine (17), and other opioids (106). When the ME mentions for all opiate analgesics are added to those for heroin, these opioid-related ME mentions in Florida during the first half of 2004 total 1,877 cases. This total is even greater than the 1,720 alcohol-related deaths during the same 6 month period. Most of the statewide opioid cases were polydrug episodes, including 88 percent of the oxycodone ME

cases, 87 percent of the methadone ME cases, 85 percent of the hydrocodone ME cases, 82 percent of the heroin deaths, 79 percent of propoxyphene deaths, and 75 percent of morphine ME cases (exhibit 1).

Miami-Dade County recorded 16 oxycodone-related deaths during the first half of 2004, of which 6 (38 percent) were oxycodone induced. Fourteen of these deaths (88 percent) involved oxycodone found in combination with at least one other drug (exhibit 2). Miami-Dade County recorded 10 hydrocodone-related deaths during the first half of 2004, and 3 (30 percent) were hydrocodone induced. Miami-Dade County recorded six methadone-related deaths during the first half of 2004, with four (67 percent) considered methadone induced. Miami-Dade recorded 22 morphine-related deaths during the first half of 2004, of which 6 (27 percent) were morphine induced. There were seven propoxyphene-related deaths in Miami-Dade County during the first half of 2004, of which two (29 percent) were propoxyphene induced.

Broward County recorded 37 oxycodone-related deaths during the first half of 2004, of which 25 (68 percent) were oxycodone induced. All of these deaths involved oxycodone found in combination with at least one other drug (exhibit 3). Broward County recorded 18 hydrocodone-related deaths during the first half of 2004, and 10 (56 percent) were hydrocodone induced. Broward County recorded 39 methadone-related deaths during the first half of 2004, with 22 (56 percent) considered methadone induced. Broward County recorded 23 morphine-related deaths during the first half of 2004, of which 6 (26 percent) were morphine induced. Broward County recorded 13 propoxyphene-related deaths during the first half of 2004, of which 4 (31 percent) were propoxyphene induced. The two drugs from this category for which there were increases in related deaths between 2003 and the first half of 2004 in Broward County are methadone and morphine.

Unweighted data accessed from DAWN *Live!* for Miami-Dade County EDs for the first half of 2004 show 101 oxycodone ED reports. There were also 33 hydrocodone ED reports, 20 methadone reports, and 44 ED reports from 9 other narcotic analgesics. Of the total 198 narcotic analgesic ED reports, males accounted for 56 percent of the patients. White, non-Hispanics represented 60 percent of the patients; 15 percent were Black non-Hispanics; and 24 percent were Hispanic/other. There were two patients younger than 18, while 9 percent of the narcotic analgesic ED patients were age 18–24, 18 percent were 25–34, and 72 percent were older than 34.

Unweighted data from the Broward County EDs for the first half of 2004 show 42 oxycodone ED reports. Males accounted for 66 percent of these patients. White, non-Hispanics represented 85 percent of the patients; 7 percent were Black, non-Hispanics; and 5 percent were Hispanic/other. There were no patients younger than 18, while 21 percent of the oxycodone ED patients were age 18–24, 26 percent were 25–34, and 52 percent were older than 34. The most common reasons or chief complaints for the oxycodone ED patients to visit the ED were overdose and altered mental status.

The NFLIS reported 51 oxycodone crime lab cases, 31 hydrocodone cases, and 9 methadone cases in the 12-month period from October 2003 to September 2004 in Miami-Dade County. The Broward Sheriff's Office Crime Lab worked 139 oxycodone cases in the first 6 months of 2004. That is a 15-percent increase from the 120 oxycodone cases in the second half of 2003. There were also 96 hydrocodone cases in the first 6 months of 2004, compared to 73 cases in the last half of 2003.

Nationally, the 2004 Monitoring the Future Survey reported that current use of opiates other than heroin (defined as any use within the past 30 days) was reported by 4.3 percent of 12th graders, representing a 0.2-percent increase from the same survey in 2003.

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 460 deaths statewide in Florida during the first half of 2004, representing an increase of 40 percent from the 328 such cases during the previous 6 months.

Unweighted data accessed from DAWN *Live!* for the Miami-Dade hospital emergency departments show that marijuana was involved in 21 percent or 1,109 of the 5,163 drug abuse ED reports in the first half of 2004 (exhibit 4). Seventy-eight percent of the marijuana ED patients were male. Non-Hispanic Blacks accounted for 47 percent of these patients; non-Hispanic Whites accounted for 30 percent; and Hispanic/others accounted for 23 percent. There were 40 patients (4 percent) younger than 18, while 28 percent of the patients were age 18–24, 30 percent were 25–34, and 38 percent were older than 34.

Unweighted ED data from Broward County show that marijuana was involved in 19 percent or 231 of

the 1,198 drug abuse ED reports in the first half of 2004 (exhibit 5). Sixty-four percent of the marijuana ED patients were male. Non-Hispanic Whites accounted for 76 percent of these patients, non-Hispanic Blacks for 16 percent, and Hispanics/other for 7 percent. Marijuana is still the most commonly abused illicit drug among young people visiting the emergency department. Roughly 67 percent of all illicit substance abuse patients in the 12–34 age group involved marijuana. There were 17 patients (7 percent) younger than 18, while 27 percent of patients were age 18–24, 34 percent were 25–34, and 32 percent were older than 34.

BARC reported that 32 percent ($n=1,080$) of its 3,416 clients in the first half of 2004 were admitted for marijuana addiction. Spectrum Programs reported 57 percent (370) of the 641 addiction clients served in the first half of 2004 sought treatment for marijuana. Combined, the two programs had 1,450 marijuana clients (36 percent) among their 4,057 patients during the first 6 months of 2004. Approximately one-half of marijuana clients from both programs were non-Hispanic Whites, one-third were non-Hispanic Blacks, and the remainder were Hispanics/other. Most (45 percent) of Spectrum Programs marijuana clients were younger than 18, and most (43 percent) of the BARC clients were age 35 or older.

The NFLIS reported 3,111 marijuana crime lab cases in Miami-Dade County in the 12-month period from October 2003 to September 2004, representing 20 percent of all exhibits analyzed. There were 461 marijuana cases worked by the BSO Crime Lab in the first half of 2004. 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.

In 2003, current marijuana use was reported in results of the CDC's Youth Risk Behavior Survey by 17.9 percent of high school students in Broward County (down from 21.8 percent in 2001) and by 15.8 percent of high school students in Miami-Dade County (down from 17 percent in 2001) (exhibit 6). In Palm Beach County, 22.6 percent of high school students reported current marijuana use in the same survey. The proportion for the high school students in all of Florida was 21.4 percent, compared with 22.4 percent for students nationwide.

Nationally, the 2004 Monitoring the Future Survey reported that current marijuana use (defined as any use within the past 30 days) was reported by 6.4 percent of 8th graders, 15.9 percent of 10th graders, and 19.9 percent of 12th graders. These percentages reflected a 1.2-percent decrease for 8th and 10th graders from the same survey in 2003 and a 1.3-percent decrease for 12th graders.

Gamma Hydroxybutyrate (GHB)

GHB, an anesthetic, has been a commonly abused substance in South Florida for the past 8 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 stimulant effects of methamphetamine.

There were four GHB-related deaths statewide during the first half of 2004. The drug was considered the cause of death in three (75 percent) of these cases. There were 5 GHB-related deaths reported statewide during the second half of 2003 and 11 GHB-related deaths in all of 2003, 3 (27 percent) of which were considered to have been caused by the drug. In all of Florida, GHB-related deaths increased from 23 in 2000 to 28 in 2001 and then declined to 19 in 2002 and again in 2003 to 11.

Unweighted data accessed from DAWN *Live!* for Miami-Dade County show 12 GHB-related ED reports in the first half of 2004. One-half of the patients were male, 80 percent were White, non-Hispanic, and 20 percent were Hispanic. Five of the patients (42 percent) were age 21–24; 33 percent were age 25–34, and 25 percent were older than 35.

From the previous tracking system for drug-related hospital ED episodes in Broward County, there had been a dramatic decrease in the number of GHB emergency department cases treated in emergency departments from 2000 to 2003. The Broward General Medical Center Emergency Department treated three people with GHB or GHB precursor overdose in 1996. The number of these cases increased to 48 in 1999 and peaked at 77 in 2000. There were 71 GHB cases in 2001 and 34 cases in 2002. In 2003, there

were 30 GHB ED cases at BGMC. This downward trend reflects the national pattern with GHB since 2000, when the drug was banned by Federal legislation. In the unweighted DAWN data, there was only one GHB-related ED report for Broward County in the first half of 2004; this may change as more hospitals join the network. The one patient was a White, non-Hispanic, female age 21–24.

The NFLIS reported there were 18 1,4 butanediol (1,4 BD) crime lab cases in Miami-Dade County in the 12-month period from October 2003 to September 2004, and there were no GHB cases.

Methylenedioxyamphetamine (MDMA, or “Ecstasy”)

MDMA’s popularity appears to be declining. Measures of MDMA abuse suggest problems may have peaked in 2001.

Ecstasy pills generally contain 75–125 milligrams of MDMA, although pills are often adulterated and may contain other drugs being sold as “ecstasy.” The major sources of the designer logo-emblazoned pills seem to be clandestine labs in Western Europe, especially the Netherlands and Belgium (and more recently Spain). The pills enter South Florida from the Caribbean because of post 9-11 airline security.

There were 17 MDMA-related deaths statewide in Florida during the first half of 2004, with the drug being cited as the cause of death in 1 of these cases. There were also 13 methylenedioxyamphetamine (MDA)-related deaths statewide in Florida during the first half of 2004, with that drug being cited as the cause of death in 1 of the cases. There were 13 MDMA-related deaths and 9 MDA-related deaths during the last half of 2003, down from the 23 MDMA deaths and 12 MDA deaths in the first half of that year.

Unweighted DAWN data show 48 MDMA ED reports from Miami-Dade County during the first half of 2004. Males accounted for 74 percent of these patients. White, non-Hispanics accounted for 43 percent of the patients; Hispanics accounted for 34 percent; and Black, non-Hispanics accounted for 23 percent. Two (4 percent) of the patients were younger than 18, 54 percent were age 18–24, 27 percent were age 25–34, and 15 percent were older than 35.

In the unweighted DAWN data for Broward County in the first half of 2004, there were four MDMA-related ED reports. Two of the patients were males and two were females; two were non-Hispanic

Whites and two were non-Hispanic Blacks. One was age 12–17, two were 18–20, and one was 25–29.

The NFLIS reported the Miami-Dade Crime Lab analyzed 266 MDMA exhibits and 28 MDA exhibits in the 12-month period from October 2003 to September 2004, representing 2 percent of all substances analyzed. In the first half of 2004, MDMA was the sixth most common case worked at the Broward Sheriff’s Office Crime Lab, behind cocaine, alprazolam, marijuana, oxycodone, and hydrocodone. In the first half of 2004, there were 57 BSO MDMA cases analyzed and 9 MDA cases. In the last half of 2003, the Crime Lab analyzed 58 MDMA cases and 10 MDA cases. The number of MDMA cases peaked in the first half of 2001 with 132 cases and declined 67 percent in the first half of 2004 (exhibit 7).

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.

In 2003, any lifetime ecstasy use was reported in results of the CDC’s Youth Risk Behavior Survey by 7.8 percent of high school students in Broward County and by 8.2 percent of high school students in Miami-Dade County (exhibit 6). In Palm Beach County, 12.1 percent of high school students reported lifetime ecstasy use in the same survey. The proportion for the high school students in Florida was 9.7 percent, compared with 11.1 percent by high school students nationwide.

Nationally, the 2004 Monitoring the Future Survey reported that current MDMA (ecstasy) use (defined as any use within the past 30 days) was reported by 0.8 percent of 8th and 10th graders and 1.2 percent of 12th graders. These proportions reflected a 0.1-percent increase for 8th graders from the same survey in 2003, a 0.4-percent decrease for 10th graders, and no change for 12th graders.

Other Stimulants

Methamphetamine abuse continues to be a local problem. Law enforcement sources confirm increased trafficking from Atlanta and North Carolina of high grade Mexican-manufactured methamphetamine. There have also been several seizures of relatively small local methamphetamine labs. Signs of methamphetamine abuse spreading to new populations indicate the local epidemic has progressed from the incubation period of the past 3 years to an expansion phase with growing numbers of users.

“Crystal” or smokeable methamphetamine has been shipped by overnight delivery from California for several years. Mexican drug trafficking organizations were also mentioned as a source of powdered methamphetamine in 2003. More recently, active trafficking from Georgia and North Carolina of high-grade Mexican-produced crystal methamphetamine has been observed.

Methamphetamine-related deaths totaled 47 in the first half of 2004 statewide in Florida, representing a 38-percent increase from the 34 such deaths in the previous 6 months. Methamphetamine was considered the cause of death in 10 of the 47 cases in the first half of 2004. There were also 43 amphetamine-related deaths in the first 6 months of 2004 in Florida, a 26-percent increase over the last half of 2003. Amphetamine was considered the cause of death in 3 of the 43 cases in the first half of 2004.

Unweighted data accessed from DAWN *Live!* show 15 methamphetamine-related ED reports during the first half of 2004 in Miami-Dade County. There was only one methamphetamine-related DAWN ED report for Broward County in the first half of 2004. In the second half of 2004 as more hospitals joined the network, there were 13 methamphetamine-related ED reports in Broward County, and there were 26 such reports from Miami-Dade County. From January 2003 to December 2004, the unweighted DAWN data show 95 methamphetamine-related ED reports in these South Florida EDs; 87 percent of these patients were males. White, non-Hispanics accounted for 58 percent of the ED patients, Hispanics for 28 percent, and Blacks for 13 percent. No methamphetamine ED patients were younger than 18; 29 percent were age 18–24, 48 percent were age 25–34, and 22 percent were older than 34.

The NFLIS reported the Miami-Dade Crime Lab analyzed 150 methamphetamine exhibits in the 12-month period from October 2003 to September 2004, representing 1 percent of all substances analyzed. In the first half of 2004, there were 55 Broward Sheriff’s Office Crime Lab methamphetamine cases analyzed. In the last half of 2003, there were 54 such cases, compared to 36 cases in the first 6 months of 2003. The number of cases has more than doubled since 2001.

Statewide, the number of clandestine methamphetamine labs or equipment seizures has risen from 30 cases in fiscal year 2000 (October 1999 to September 2000) to 332 in the fiscal year ending September 30, 2004 (exhibit 8).

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 quarter gram.

In 2003, any lifetime methamphetamine use was reported in results of the CDC’s Youth Risk Behavior Survey by 4.5 percent of high school students in Broward County (down from 5.6 percent in 2001) and by 3.8 percent of high school students in Miami-Dade County (down from 4.8 percent in 2001) (exhibit 6). In Palm Beach County, 7.1 percent of high school students reported lifetime methamphetamine use in the same survey. The proportion for the high school students in all of Florida was 6.4 percent, compared with 7.6 percent for high school students nationwide (exhibit 6).

Nationally, the 2004 Monitoring the Future Survey reported that current methamphetamine use (defined as any use within the past 30 days) was reported by 0.6 percent of 8th graders, 1.3 percent of 10th graders, and 2.3 percent of 12th graders. These figures reflected a 0.6-percent decrease for 8th graders from the same survey in 2003, a 0.1-percent decrease for 10th graders, and a 0.3-percent decrease for 12th graders.

Methylphenidate (Ritalin) has also received local and national media attention as being abused by college students either orally or crushed and used intranasally. Hotline calls and student personnel administrators at local universities confirm the suspected abuse of methylphenidate.

Benzodiazepines

Benzodiazepines in general and alprazolam (Xanax) in particular are a substantial problem. Benzodiazepines were second only to alcohol in their involvement in drug-related deaths throughout Florida for the past several years, and this continued in the first half of 2004. There were 994 benzodiazepine-related deaths across Florida in the first 6 months of 2004, representing a 15-percent increase over the 866 such deaths in the previous 6 months. Of the related deaths in the first half of 2004, a benzodiazepine was identified as the cause of death in 233 cases (or 31 percent).

In Miami-Dade County, there were 37 alprazolam-related deaths during the first half of 2004, of which 9 (33 percent) were alprazolam induced. Seventy-three percent of the deaths involved at least one other drug (exhibit 2). There were also 15 diazepam-related deaths in Miami-Dade County, of which 2 (13 percent)

were caused by the drug; 87 percent of these deaths involved at least one other drug.

Broward County recorded 57 alprazolam-related deaths during the first half of 2004, of which 18 (32 percent) were induced by the drug. Only three of the deaths involved alprazolam alone (exhibit 3). In the same period, Broward County recorded 60 diazepam-related (Valium) deaths, of which 11 (18 percent) were diazepam induced. All of these cases involved at least one other drug.

The unweighted DAWN data show that benzodiazepines accounted for 17 percent of Broward County ED reports in the first half of 2004 and for 8 percent of the Miami-Dade County ED reports. In Miami, alprazolam was involved in 238 (55 percent) of the 431 benzodiazepine reports, clonazepam represented 10 percent of the reports, lorazepam accounted for 6 percent, and diazepam was involved in 4 percent. Five other benzodiazepines were involved in the other re-

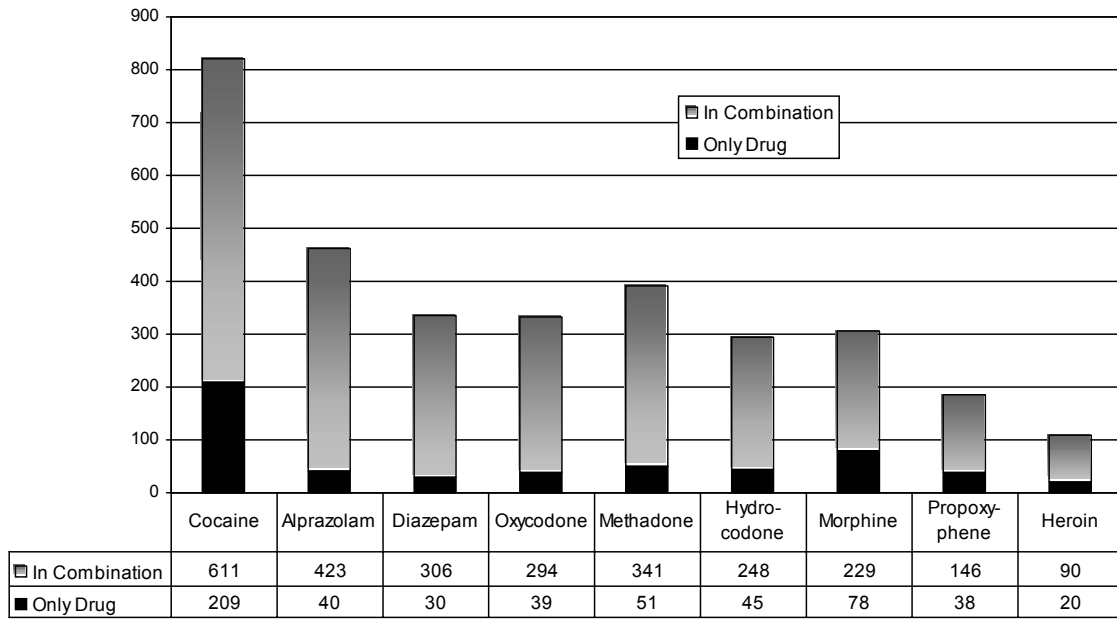
ports in this category. Thirty-two percent of the patients were seeking detoxification; 30 percent of the cases were classified as overmedication; and 38 percent were related to intentional misuse or abuse of the medications.

The NFLIS reported that the Miami-Dade Crime lab analyzed 259 alprazolam exhibits in the 12 months from October 2003 to September 2004 as well as 14 diazepam exhibits and 6 clonazepam cases.

Nationally, the 2004 Monitoring the Future Survey reported that current past-30-day use of “tranquilizers” (which has included “Xanax” as an example since 2001) was reported by 1.2 percent of 8th graders, 2.3 percent of 10th graders, and 3.1 percent of 12th graders. These percentages reflected a 0.2-percent decrease for 8th graders from the same survey in 2003, a 0.1-percent decrease for 10th graders, and a 0.4-percent increase for 12th graders.

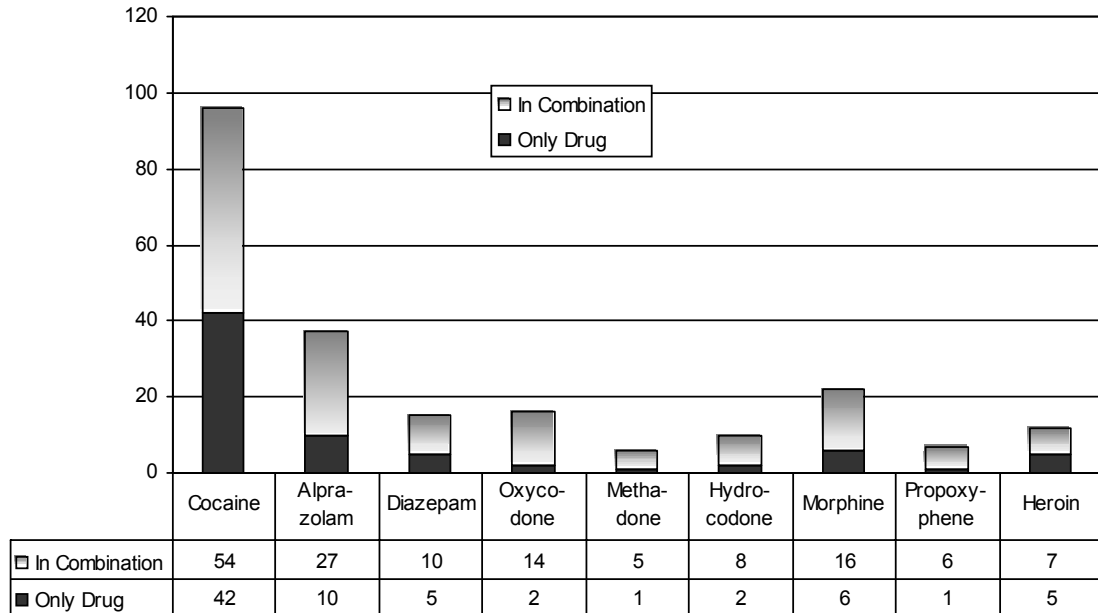
For inquiries regarding this report, please contact James N. Hall, Center for the Study and Prevention of Substance Abuse, Up Front Drug Information Center, Nova Southeastern University, Suite 215, 12360 Southwest 132nd Court, Miami, FL 33186, Phone: (954) 262-3446 or (786) 242-8222, E-mail: upfrontin@aol.com.

Exhibit 1. Numbers of Drug-Related Deaths in Florida, by Single Drug or In Combination: January–June 2004



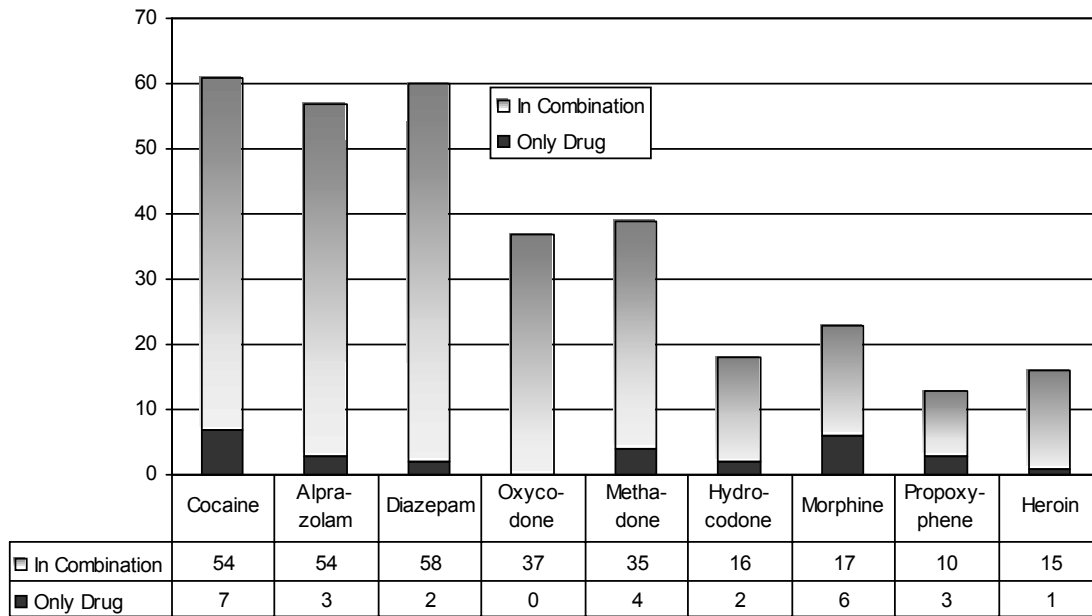
SOURCE: FDLE, Florida Medical Examiners Commission

Exhibit 2. Numbers of Drug-Related Deaths in Miami-Dade County, by Single Drug or In Combination: January–June 2004



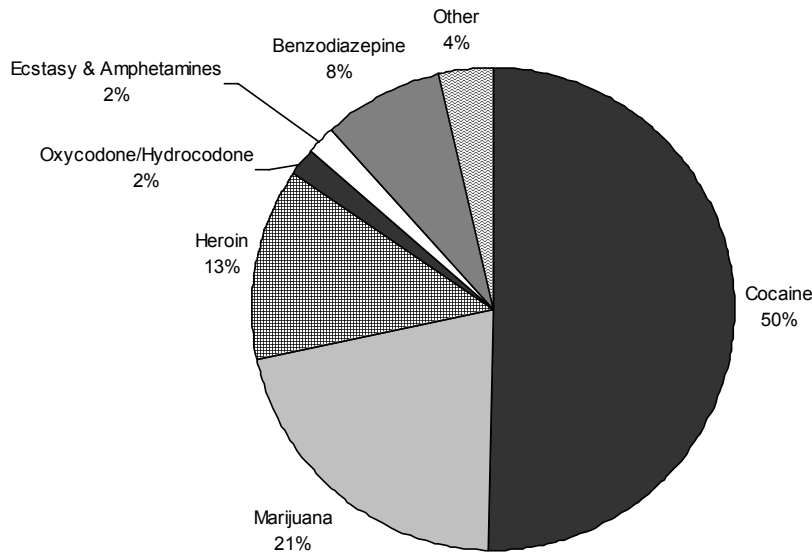
SOURCE: FDLE, Medical Examiners Commission

Exhibit 3. Numbers of Drug-Related Deaths in Broward County, by Single Drug or In Combination: January–June 2004



SOURCE: FDLE, Florida Medical Examiners Commission

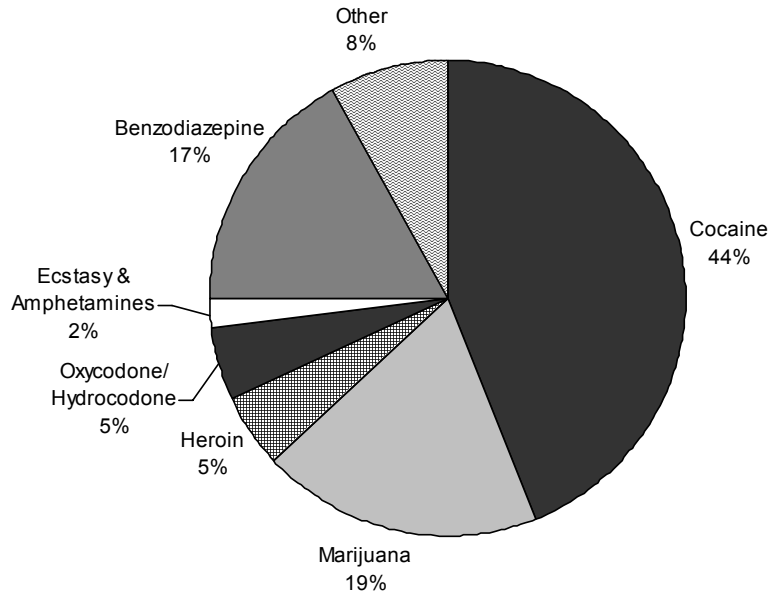
Exhibit 4. ED Drug Abuse Reports in Miami-Dade County, by Percent (Unweighted¹): January–June 2004



¹The unweighted data are from 8–10 Miami-Dade County 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.

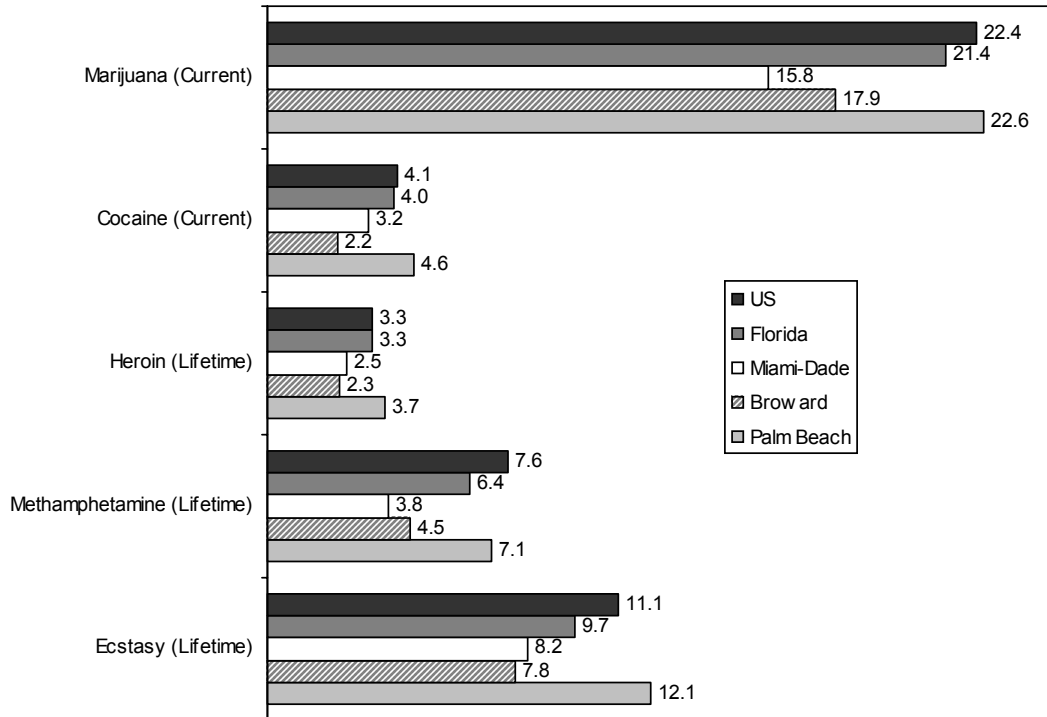
SOURCE: DAWN Live!, OAS, SAMHSA, Updated 12/07/2004

Exhibit 5. ED Drug Abuse Reports in Broward County, by Percent (Unweighted¹): January–June 2004



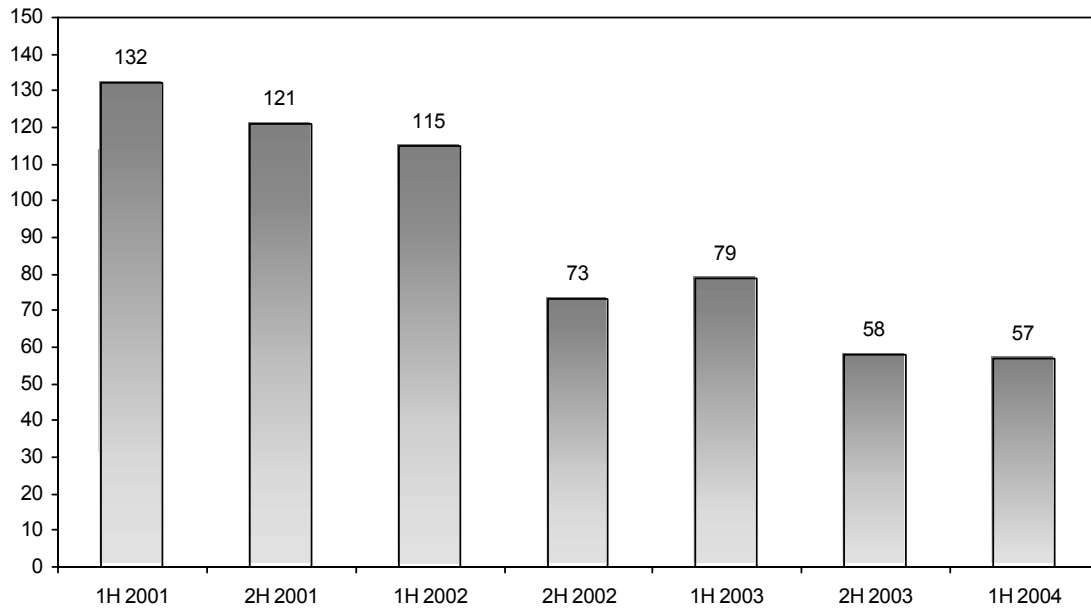
¹The unweighted data are from 2 Broward County EDs reporting to DAWN. All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted, and, therefore, are subject to change.
 SOURCE: DAWN *Live!*, OAS, SAMHSA, Updated 12/07/2004

Exhibit 6. Drug Use¹ Among High School Students in Grades 9–12, by Site and Percent: 2003



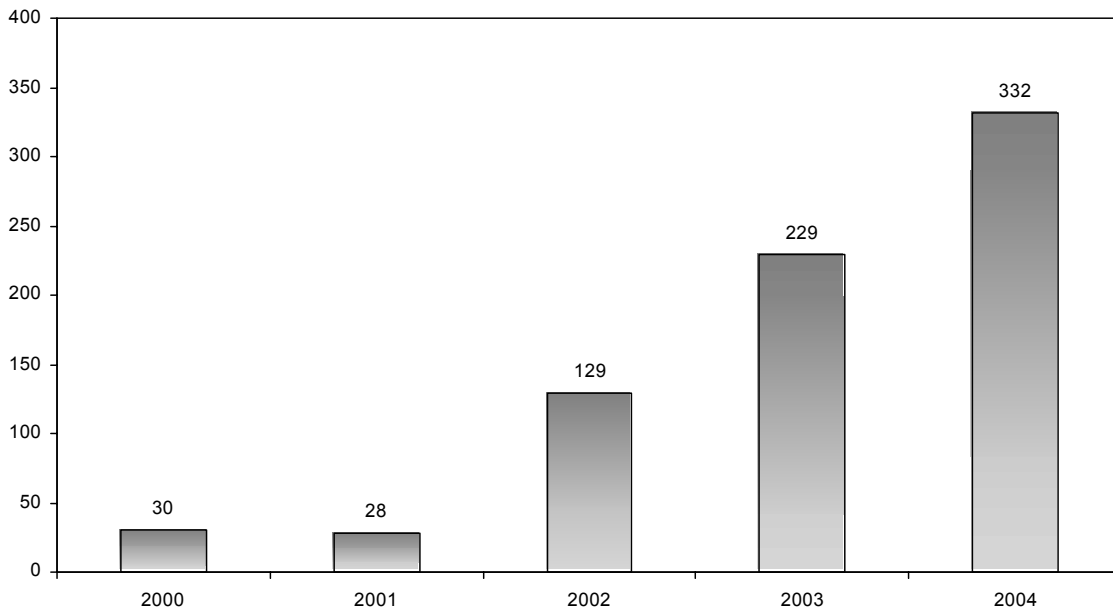
¹Current=past-30-day use; lifetime=ever used.
 SOURCE: YRBS, CDC

Exhibit 7. Numbers of Items Analyzed by the Broward County Crime Lab Found to be Ecstasy: 2001–2004



SOURCE: Broward County Sheriff's Office Crime Lab

Exhibit 8. Numbers of Clandestine Methamphetamine Lab Seizures in Florida: FY 2000–FY 2004



SOURCE: South Florida Methamphetamine Task Force

Drug Abuse Trends in Minneapolis/St. Paul

Carol Falkowski¹

ABSTRACT

Drug abuse-related mortality in the Twin Cities metropolitan area remained stable in 2004. Most accidental overdose deaths involved opiates or cocaine. In hospital emergency departments, (unweighted) reports involving cocaine outnumbered those involving any other illicit drug. Methamphetamine remained a major focus of law enforcement. For the first time, methamphetamine addicts accounted for almost 10 percent of patients entering metropolitan area addiction treatment programs. More patients sought treatment for marijuana than for any other illicit drug (21.3 percent of total admissions), and one-half were younger than 18. The abuse of alcohol, tobacco, and MDMA (ecstasy) among metropolitan area high school seniors declined from 2001 to 2004, according to the Minnesota Student Survey. Still, alcohol remained the number one drug of abuse among adolescents, with 60 percent of high school seniors reporting drinking in the past year. At area hospital emergency departments, 623 reports (unweighted) involved underage drinking in 2004, and one-half of all admissions to addiction treatment programs were for alcohol.

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 trends in drug abuse, using the most recent data from multiple sources.

Area Description

The Minneapolis/St. Paul, “Twin Cities,” metropolitan area includes the city of Minneapolis (Hennepin County), the capital city of St. Paul (Ramsey County), and the surrounding counties of Anoka, Dakota, and Washington. According to the 2000 census, the population of the metropolitan area is 2,482,353, roughly one-half of the Minnesota State population. More than one-half (56 percent) of the Ramsey County population live in the city of St. Paul, and one-third (34.2 percent) of the Hennepin County population live in the city of Minneapolis.

In the five-county metropolitan area, 84 percent of the population is White. African-Americans constitute the largest minority group in Hennepin County, while Asians are the largest minority group in Ramsey, Anoka, Dakota, and Washington Counties.

The remainder of the State is less densely populated and predominantly rural in character. To the north, Minnesota shares an international border with Canada, and to the west it borders 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.

Data Sources

Data for this report were drawn from the following sources:

- **Mortality data on drug-related deaths** are from the Hennepin County Medical Examiner and the Ramsey County Medical Examiner (through September 2004). 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.
- **Hospital emergency department (ED) data** were accessed from the Drug Abuse Warning Network (DAWN) *Live!*, a restricted-access online system administered by the Office of Applied Studies (OAS) of the Substance Abuse and Mental Health Services Administration (SAMHSA). The unweighted data are from participating hospital emergency departments in the Minneapolis and St. Paul Standard Metropolitan Statistical Area from January 1, 2004, through December 13, 2004; the data were updated 12/13/2004. 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. Over the approximately 12-month period, between 7 and 13 EDs reported data, with almost

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all reporting basically complete data (90 percent or greater). 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. 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. These data cannot be compared with data from 2002 and before, and they cannot be used for comparison with future DAWN 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>>.

- **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 2004.
- **Drug price data** are from the National Drug Intelligence Center, *Narcotics Digest Weekly*, Vol. 3, No. 52, December 28, 2004.
- **Crime lab data** for St. Paul are from the National Forensic Laboratory Information System (NFLIS). This system, which began in 1997, is sponsored by the U.S. Drug Enforcement Administration and collects solid dosage drug analyses conducted by State and local forensic laboratories across the country on drugs seized by law enforcement. Minnesota data on methamphetamine labs are from the El Paso Intelligence Center (EPIC), U.S. Drug Enforcement Administration.
- **Student survey data** on selected drugs of abuse are from the 2001 and the 2004 Minnesota Student Survey. Responses concerning drug use in the past year are presented for high school seniors in the 5-county metropolitan area, representing 14,140 respondents in 2001 and 16,156 in 2004.
- **Acquired immunodeficiency syndrome (AIDS) and hepatitis C (HCV) data** for 2003 were provided by the Minnesota Department of Health.

DRUG ABUSE PATTERNS AND TRENDS

Cocaine/Crack

Accidental overdose deaths involving cocaine appear stable, with 32 in Hennepin and 10 in Ramsey

County through September 2004. These increased from 2002 to 2003 in Hennepin County (from 34 to 44). In Ramsey County, there were 10 such deaths in 2003 and 11 in 2002.

The unweighted data accessed through DAWN *Live!* show that cocaine maintained a strong presence in hospital emergency department data, outnumbering reports involving any other illicit drug in 2004 (exhibit 1).

Admissions to addiction treatment programs with cocaine as the primary substance problem declined slightly. In 2004, 12.5 percent of treatment admissions reported cocaine as the primary substance problem, compared with 13.3 percent in 2003. Most cocaine admissions were for crack cocaine; nearly one-third were women; and 48.4 percent were African-American. Additional patient characteristics appear in exhibit 2.

Cocaine generally sold for \$70–\$150 per gram, \$200 per “eight-ball” (one-eighth ounce), \$700–\$2,000 per ounce, and \$18,000–\$28,000 per kilogram (exhibit 3). The price of a rock of crack was \$15–\$25. Upward variations in price were attributed to higher purity products. The street-level, retail distribution of crack cocaine remained gang-involved in 2004. Cocaine accounted for 22 percent of the drug seizures reported to NFLIS in St. Paul (exhibit 4).

Cocaine use among metropolitan area students was relatively unchanged from 2001 to 2004 according to the Minnesota Student Survey data. Past-year cocaine use was reported by 6.1 percent of high school seniors in 2004, compared with 5.5 percent in 2001 (exhibit 5).

Heroin

Opiate-related deaths, mostly accidental heroin overdoses, continued at heightened levels, and outnumbered cocaine-related deaths in both counties since 2001. Hennepin County reported 50 opiate-related deaths in 2003 and 41 in 2004 through September. In Ramsey County, 19 such deaths were reported in 2003 and 16 were reported through September 2004.

Hospital ED reports of heroin nearly doubled from 2000 to 2002. In the preliminary unweighted data accessed through DAWN *Live!* for 2004, there were 647 heroin-related ED reports, ranking fourth among illicit drug cases (exhibit 1).

Patients in treatment for heroin tended to be older than in the past. None was younger than 18 in 2004 (exhibit 2). The most common route of administra-

tion was injection (62.9 percent), followed by sniffing (31.2 percent), and smoking, also known as “foiling” (5.9 percent) (exhibit 2). Whites accounted for 59.5 percent in 2004, compared with 51.8 percent in 2003. African-Americans accounted for 32.3 percent in 2004, compared with 42.9 percent in 2003, and Hispanics represented 5.6 percent in 2004, compared with 2.8 percent in 2003.

Five methadone maintenance programs served roughly 1,500 clients in the metropolitan area. Patients who were newly enrolled in some of these programs may be reflected in the treatment data, however, the private for-profit programs do not report to DAANES.

Retail heroin prices remained at low levels: \$20–\$40 per dosage unit or “paper,” and \$150–\$200 per gram (exhibit 3). In April 2004, four Nigerians were apprehended at the Minneapolis/St. Paul International Airport on a flight from Amsterdam carrying suitcases filled with 25 pounds of heroin valued at \$25 million.

Other Opiates/Narcotics

Prescription narcotic analgesics, used medically in the treatment of pain, were increasingly used non-medically as drugs of abuse for the strong, euphoric, heroin-like effects. Of particular concern were drugs containing oxycodone—Percodan, Percocet (oxycodone combined with aspirin or acetaminophen), and the long-acting OxyContin.

According to DAWN *Live!* data, 1,122 reports involved opioid prescription misuse at emergency departments in 2004. Of these, 389 (34.6 percent) involved oxycodone, and 238 (21.2 percent) involved hydrocodone.

Marijuana

Marijuana indicators continued upward trends that began more than a decade ago. In the unweighted data accessed from DAWN *Live!*, there were 2,058 marijuana-involved reports at emergency departments in 2004, ranking second only to cocaine (exhibit 1).

Marijuana-related treatment admissions outnumbered those for any other illicit drug (exhibit 2). One out of five (21.3 percent) people entering addiction treatment programs in 2004 reported marijuana as the primary substance problem, compared with only 8 percent in 1991. More than one-half (51.8 percent) were age 17 or younger. The average age of first marijuana use was 13.9 years.

Marijuana, readily available according to multiple sources, sold for \$5 per joint. Standard, commercial grade marijuana sold for \$50 per quarter ounce. Prices varied considerably depending on alleged potency, from \$80 to \$600 per ounce and \$600–\$2,400 per pound (exhibit 3). Marijuana joints that are dipped in formaldehyde, which is often mixed with phencyclidine (PCP), are known as “wets,” “wet sticks,” or “water.” Marijuana joints containing crack cocaine are known as “primos.”

Marijuana use declined among metropolitan area students in 2004, according to the Minnesota Student Survey data. Past-year marijuana use was reported by 30.2 percent of high school seniors in 2004, compared with 33.9 percent in 2001 (exhibit 5).

Methamphetamine/Other Stimulants

Methamphetamine is also known as “meth,” “crystal,” or “crank,” and amphetamine is known as “speed” or “crank.” These are long-acting stimulants of abuse. Prolonged abuse of these long-acting stimulants can result in addiction, which is often accompanied by long periods of sleep and food deprivation, agitated behavior, and pronounced paranoid delusions.

From 2002 to 2003, accidental deaths related to methamphetamine abuse increased from 3 to 10 in Ramsey County, with 5 reported in 2004 (through September). Methamphetamine-related deaths increased from 11 in 2002 to 15 in 2003 in Hennepin County, with 13 reported in 2004 (through September).

Hospital ED reports involving methamphetamine increased steadily over the past few years. In the preliminary unweighted data for 2004, there were 705 reports involving methamphetamine (exhibit 1). An additional 143 reports involved amphetamines.

In 2004 (through June), patients addicted to methamphetamine accounted for an unprecedented 9.5 percent of total treatment admissions, compared with 7.5 percent in 2003 and only 2.9 percent in 1998. Women accounted for 37.5 percent, and most were White (92.1 percent) (exhibit 2). Smoking was the most common route of methamphetamine use (62.0 percent) followed by sniffing (21.3 percent).

Methamphetamine abuse among metropolitan-area students was relatively stable from 2001 to 2004, according to the Minnesota Student Survey. Past-year methamphetamine use was reported by 5.0 percent of high school seniors in 2004, compared with 5.7 percent in 2001 (exhibit 5). Still, since the beginning of 2004, most onsite, high school-based drug abuse

counselors reported growing problems related to methamphetamine abuse by students.

Methamphetamine prices were as low as \$70 per gram, \$600 per ounce, and \$6,000 per pound (exhibit 3). “Glass,” or “ice,” the high-purity form that is smoked, typically costs twice as much.

Methamphetamine remained a major focus of law enforcement at all levels. There were 193 clandestine, makeshift methamphetamine labs dismantled with the assistance of the Drug Enforcement Administration in Minnesota in fiscal year (FY) 2004, compared with 319 in FY 2003. Seizures of methamphetamine by law enforcement continued upward trends and accounted for 61 percent of the total samples reported to NFLIS from October 2003 through September 2004 (exhibit 4).

Abuse of 3,4 methylenedioxymethamphetamine (MDMA), known as “ecstasy,” “X,” or “e,” contributed to the deaths of four young males in Hennepin County in 2004. In 2004, the preliminary unweighted DAWN data show that 87 ED reports were for MDMA (exhibit 1).

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, compared with 9.1 percent in 2001 (exhibit 5).

Khat, a plant with stimulant effects that is chewed or brewed in tea in East Africa and Middle Eastern cultures, remained a drug of abuse within the Somali communities of the Twin Cities and Rochester, Minnesota. Its active ingredients, cathinone and cathine, are controlled substances in the United States.

Methylphenidate (Ritalin), a prescription drug used in the treatment of attention deficit hyperactive disorder, is also used nonmedically as a drug of abuse to increase alertness and concentration and to suppress appetite. The pills, sometimes known as “hyper pills,” or “homework pills,” are crushed and snorted or ingested orally. They sold for \$5 per pill or were simply shared with fellow students.

Hallucinogens

Salvia Divinorum, a sage plant that is 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 reported at the University of Minnesota and some metropolitan area high schools in 2004.

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 used as drugs of abuse by ingesting doses many times in excess of the recommended amount. 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. In the unweighted data accessed from DAWN *Live!*, there were 19 hospital ED reports involving LSD in 2004 (exhibit 1). An additional 53 involved “miscellaneous hallucinogens.”

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; it rarely appears in ED data. There were three ED reports of ketamine in the 2004 unweighted data. It is snorted, injected, or put into capsules or pills.

PCP, a dissociative anesthetic, is most often used in combination with marijuana, but it can also be injected or snorted. In the 2004 unweighted data, there were 17 ED reports involving PCP at area hospital emergency departments.

Sedative/Hypnotics

Gamma hydroxybutyrate (GHB), known as “G,” “Liquid E,” or “Liquid X,” is a concentrated liquid abused for its stupor-like, depressant effects and as a predatory knock-out, drug-facilitated rape drug. It sells for \$10 by the capful. GHB hospital ED episodes declined significantly in recent years. There were 18 in 2004 (exhibit 1).

According to hospital ED data, 463 reports in 2004 involved benzodiazepines, and 83 involved muscle relaxants.

Other Drugs

Alcohol remained the most widely used mood-altering substance. For the first time, DAWN *Live!*

included reports of ED cases involving underage drinking—623 in 2004 (exhibit 1).

One-half of all admissions to addiction treatment programs (49.3 percent) were attributable to alcohol (exhibit 2). The average age of first use was 16.

While still the number one drug of abuse among high school students, alcohol use declined in 2004, according to the Minnesota Student Survey. Past-year alcohol use was reported by 60.4 percent of high school seniors in 2004, compared with 65.0 percent in 2001 (exhibit 5).

Similarly, tobacco use declined 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 (exhibit 5).

Daily tobacco use remained widespread among patients in addiction treatment programs (exhibit 2).

Prescription drug abuse, a category that includes the nonmedical abuse of a wide range of prescription

drugs, increased somewhat in 2004 among students in the Twin Cities area. According to the Minnesota Student Survey, past-year prescription drug abuse was reported by 11.0 percent of high school seniors in 2004, compared with 9.4 percent in 2001 (exhibit 5).

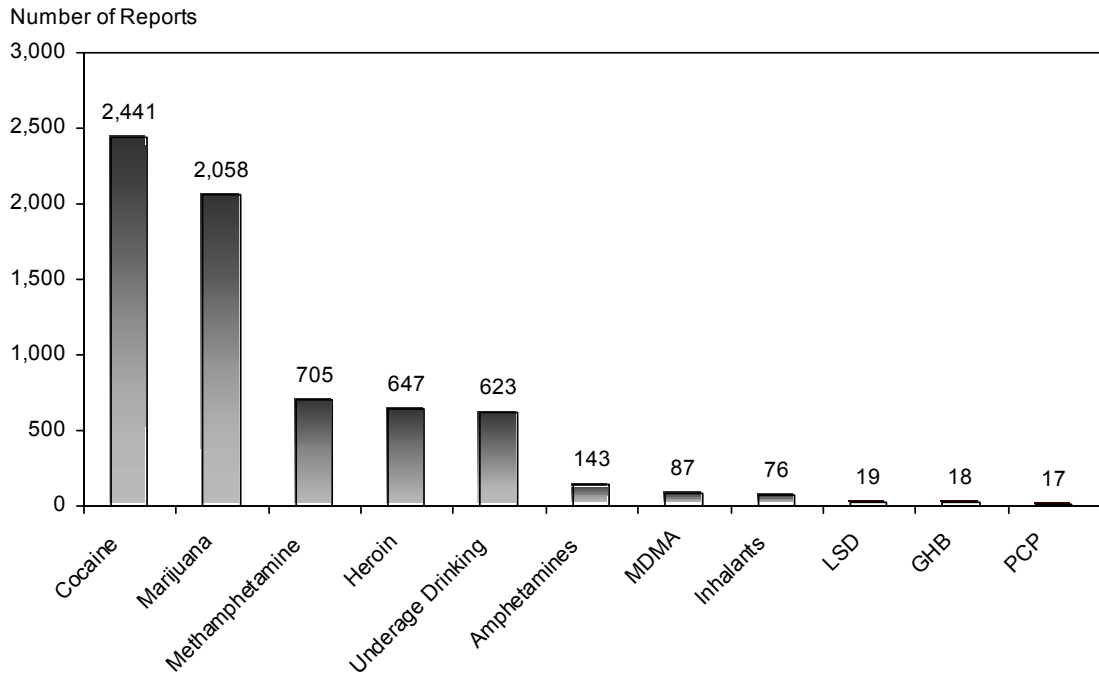
INFECTIOUS DISEASES RELATED TO SUBSTANCE ABUSE

Most AIDS cases in Minnesota were in the Minneapolis/St. Paul area in 2003. Of the 1,642 people living with AIDS, the exposure categories were as follows: men who have sex with men (54 percent); injection drug use (8 percent); men who have sex with men and injection drug use (5 percent); heterosexual contact (12 percent); perinatal/other (2 percent); unspecified (8 percent); and no interview (11 percent).

The Minnesota Department of Health reported 2,400 newly identified hepatitis C virus cases in 2003, 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. Reports of Major Substances of Abuse in Twin Cities Hospital Emergency Departments (Un-weighted¹): 2004



¹The unweighted data are from 7–12 EDs reporting to DAWN from 1/1/04 through 12/13/04.
SOURCE: DAWN *Live!*, OAS, SAMHSA, updated 12/13/2004

Exhibit 2. Characteristics of Persons Admitted to Twin Cities Area Addiction Treatment Programs by Primary Substance Problem and Percent: January–June 2004

Characteristic (N=9,366)	Alcohol (n=4,614) 49.3%	Marijuana (n=1,999) 21.3%	Cocaine (n=1,173) 12.5%	Metham- phetamine (n=887) 9.5%	Heroin (n=268) 2.9%
Gender					
Male	72.2	76.7	69.4	62.5	72.0
Female	27.8	23.3	30.6	37.5	28.0
Race/Ethnicity					
White	79.7	66.5	43.6	92.1	59.5
African-American	10.5	20.3	48.4	0.8	32.3
Hispanic	5.3	5.6	4.5	2.8	5.6
American Indian	3.1	3.2	2.2	1.6	2.1
Asian	0.6	1.4	0.5	1.6	0.0
Age					
17 and younger	3.4	51.8	2.8	18.3	0.0
18–25	15.3	27.2	9.8	35.7	22.5
26–34	20.2	12.4	25.6	25.3	23.6
35 and older	61.1	8.6	61.8	20.8	53.9
Route of Administration					
Smoking			81.9	62.0	5.9
Sniffing			17.0	21.3	31.2
Injecting			1.1	11.8	62.9
Other			–	Oral 4.9	–
Secondary Drug	Marijuana 58.5	Alcohol 71.2	Alcohol 52.5	Marijuana 53.9	Cocaine 36.2
Tertiary Drug	Cocaine 32.5	Alcohol 33.1	Alcohol 41.2	Alcohol 48.8	Alcohol 29.7
No Prior Treatment	29.0	44.9	18.4	34.9	14.7
Average Age First Use (in Years)	(16.0)	(13.9)	(25.6)	(20.2)	(22.8)
Daily Nicotine Use	59.4	56.3	67.9	76.2	68.3

SOURCE: Drug and Alcohol Abuse Normative Evaluation System (DAANES), Minnesota Department of Human Services, 2004

Exhibit 3. Illicit Drug Prices in Minneapolis: July–December 2004

Drug	Wholesale Price	Midlevel Price	Retail Price
Cocaine powder	\$18,000–\$28,000 per kilogram	\$700–\$2,000 per ounce	\$70–\$150 per gram
Crack cocaine	NA	\$600–\$1,750 per ounce	\$15–\$25 per rock
Heroin	NA	\$4,500–\$5,000 per ounce	\$150–\$200 per gram
Marijuana	\$600–\$2,400 per pound	\$80–\$600 per ounce	\$5–\$20 per gram
Methamphetamine	\$6,000–\$14,000 per pound	\$600–\$2,000 per ounce	\$70–\$150 per gram
MDMA	\$8 per dosage unit	NA	\$45 per dosage unit

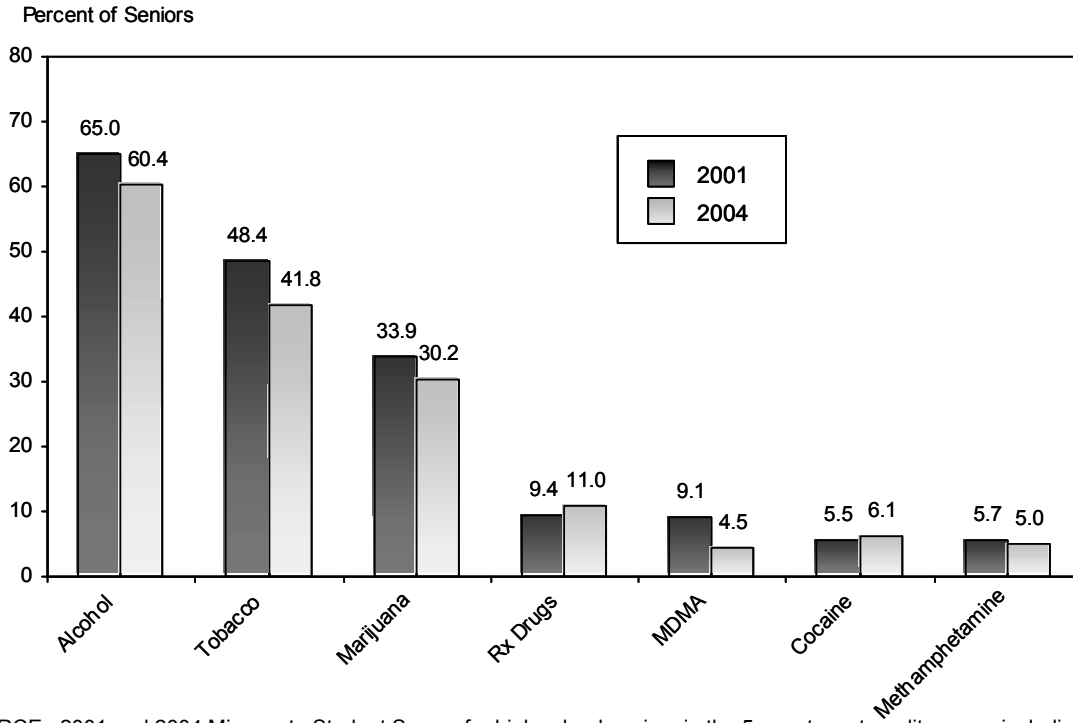
SOURCE: National Drug Intelligence Center, *Narcotics Digest Weekly*, Vol. 3, No. 52, December 28, 2004 (Product No. 2004-R0485-052)

Exhibit 4. Drug Seizures in St. Paul, Minnesota: October 2003 through September 2004

Substance	Count	Percent
Methamphetamine	1,922	61.43
Cocaine	682	21.8
Cannabis	193	6.17
3,4-Methylenedioxymethamphetamine	45	1.44
Psilocin	42	1.34
Acetaminophen	41	1.31
Heroin	30	0.96
Hydrocodone	29	0.93
Oxycodone	23	0.74
Amphetamine	21	0.67
Non-controlled Non-narcotic drug	19	0.61
Diazepam	7	0.22
Alprazolam	6	0.19
Methylphenidate	6	0.19
Lysergic Acid Diethylamide	4	0.13
Ibuprofen	4	0.13
Caffeine	4	0.13
Propoxyphene	4	0.13
Pseudoephedrine	4	0.13
Clonazepam	3	0.10
Guaifenesin	3	0.10
Methadone	3	0.10
Methocarbamol	3	0.10
Morphine	2	0.06
Nitroglycerine	2	0.06
Total	3,102	99.14
Total Items Reported	3,129	

SOURCE: NFLIS, DEA

Exhibit 5. Past-Year Use of Selected Drugs by High School Seniors in the Twin Cities Metropolitan Area: 2001 and 2004



SOURCE: 2001 and 2004 Minnesota Student Survey for high school seniors in the 5-county metropolitan area including the counties of Hennepin, Ramsey, Anoka, Dakota, and Washington. There were 14,140 respondents in 2001 and 16,156 in 2004. Past-year use refers to any use in the past year.

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, emergency department data, medical examiner cases, and other information. Most primary admissions (72.6 percent) in the first half of 2004 were for illicit drugs. Heroin accounted for 73.9 percent of all primary admissions for illicit drugs in the Newark PMSA, compared with 10.9 percent for primary crack/cocaine and 11.3 percent for primary marijuana use. Consistent with the treatment data, emergency department reports of heroin in the Newark PMSA accounted for the largest proportion of drug reports. Heroin purity remained high, at 61.3 percent in 2003. Between October 2003 and September 2004, cocaine accounted for 45.6 percent of items analyzed by NFLIS, followed by heroin (34.7 percent) and marijuana (10.2 percent).

INTRODUCTION

Area Description

The Newark primary metropolitan statistical area (PMSA) consists of five counties: Essex, Morris, Sussex, Union, and Warren. In 2003, there were an estimated 2,069,188 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 in respect to race: 66 percent are White, 22 percent are Black, and 4 percent are Asian. Hispanics account for 13 percent of the PMSA population. 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 account for 15 percent of the population in Essex, 8 percent in Morris, 3 percent in Sussex, 20 percent in Union, 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, 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 (oxycodone), both in Newark and South Jersey, where it has become a particular problem among teenagers and young adults.

¹The author is affiliated with the New Jersey Division of Addiction Services, Department of Human Services, Trenton, New Jersey.

²DEA Briefs and Background State Fact Sheets. New Jersey 2004. <<http://www.usdoj.gov/dea/pubs/states/newjersey.html>>.

From November 10 to 16, 2004, 18 members of an OxyContin distribution group were arrested as part of Operation Doctor Feelgood. DEA agents, in cooperation with State and local law enforcement agencies, arrested 14 suspects in New Jersey. During the course of the arrests, agents and law enforcement officers seized tens of thousands of prescription drug tablets (mostly OxyContin). A member of the group in New Jersey was the primary supplier of prescription drugs. She frequently obtained OxyContin and other prescription drugs by forging stolen prescription forms. Most of the drugs were obtained at two pharmacies. She also obtained prescription drugs from retail-level distributors. The suspect then sold the drugs to the distribution group leader. Some of the drugs were distributed locally, but most were transported by vehicle and train to Massachusetts. The distribution group leaders hired New Jersey-based couriers to transport the prescription drugs destined for Massachusetts to Connecticut and Rhode Island, where the drugs were handed off to retail-level distributors. The distributors sold the OxyContin tablets primarily to college students in the Brockton, Massachusetts, area for prices ranging from \$80 to \$100 per tablet.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 the first half of 2004 include profiles by primary drug of abuse in Newark City, the Newark PMSA, and statewide programs. Additional data used to analyze characteristics of clients seeking treatment for stimulant use were collected for calendar year 2003 (January through December) to allow for a larger sample. The 2003 Treatment Episode Data Set (TEDS), Office of Applied Studies (OAS), was used to depict demographic characteristics of statewide admissions.
- **Emergency department (ED) drug reports data** were obtained from the Drug Abuse Warning Network (DAWN) and DAWN *Live!*, a restricted-access online query system administered by the Office of Applied Studies (OAS), Substance Abuse and Mental Health Services Administration (SAMHSA), for January through

June 2004 (updated 1/13/2005). The DAWN systems collected data on ED cases in the Newark PMSA (i.e., in Essex, Morris, Sussex, Union, and Warren Counties). Thirty-nine of the 47 eligible hospitals in the area are in the DAWN sample. The number of EDs in the DAWN sample totals 43. (Some hospitals have more than one ED). The unweighted data presented in this paper are incomplete. Over the 12-month period, between 10 and 12 EDs reported each month; however, most reported data that were 90–100 percent complete. 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 data presented represent drug reports in drug-related ED visits. The number of reports exceed the number of visits, since a patient may report use of multiple drugs (up to six drugs plus alcohol). Drug reports via DAWN *Live!* do not indicate single drug or multidrug visits; therefore, in analyzing specific drug reports, one cannot conclude if the drug was used alone or in concert with other substances. Because the data are unweighted, they cannot be used as estimates for the Newark area. These data cannot be compared with DAWN data from 2002 and before, nor can they 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 may be found at <<http://dawninfo.samhsa.gov>>.

- **Forensic analysis data** on specific drugs were provided by the Drug Enforcement Administration's National Forensic Laboratory Information System (NFLIS) for October 2003 through September 2004.
- **Mortality data** were obtained from the SAMHSA January 2004 report entitled "Mortality Data From the Drug Abuse Warning Network 2002." The DAWN system compiled data for counties in the Newark PMSA. The DAWN system covered 88 percent of the metropolitan statistical area (MSA) population in 2002.
- **Illicit drug price data** were obtained from the Current Intelligence Unit at the National Drug Intelligence Center. The data for July through December 2004 were reported in the December 28, 2004, edition of Narcotics Digest Weekly.
- **Human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS) data** were obtained from the statewide AIDS Registry maintained by the New Jersey Depart-

³ Narcotics Digest Weekly, Dec 7, 2004.

ment of Health and Senior Services, Division of AIDS Prevention and Control, HIV/AIDS Surveillance Program. Data on the State, Newark PMSA, and Newark City compiled as of June 30, 2004, are used in this report.

DRUG ABUSE PATTERNS AND TRENDS

Cocaine/Crack

In preliminary data for January through June 2004, primary cocaine/crack treatment admissions accounted for 6.8 percent of all admissions in Newark City (compared to 6.1 percent in 2003) and for 7.4 percent of admissions for illicit drugs (i.e., excluding alcohol, compared to 6.6 percent in 2003) (exhibits 1 and 2). Approximately 74 percent of the cocaine admissions in the first half of 2004 were for abuse of crack cocaine.

In the Newark PMSA, the proportion of primary crack/cocaine admissions (excluding alcohol) was somewhat higher than in the city—10.9 percent in the first half of 2004, up slightly from 9.8 percent in 2003. The proportion of crack/cocaine admissions among all admissions was higher in the PMSA as well: 7.8 percent in 2003 and 8.8 percent in 2004. In the first half of 2004, crack accounted for 63.7 percent of cocaine admissions in the PMSA, up slightly from 62.3 percent in 2003.

The proportion of primary cocaine/crack admissions (excluding alcohol) statewide decreased slightly from 15.6 percent in 2003 to 14.7 percent in the first half of 2004. In 2004, the proportion of statewide primary crack/cocaine admissions was much higher than the proportion for such admissions reported in Newark City and almost 4 percentage points higher than in the PMSA (exhibit 1). Admissions for crack abuse accounted for more than 62 percent of the primary cocaine admissions statewide. TEDS data for the State for 2003 show crack admissions were somewhat more likely to be Black than White (50 vs. 47 percent) and male rather than female (60 vs. 40 percent) (exhibit 3). Admissions for primary abuse of powder cocaine, however, were substantially more likely to be White than Black (71 vs. 25 percent) and male rather than female (72 versus 28 percent).

In January through June 2004, cocaine ranked second to heroin in the number of ED reports in the Newark PMSA (exhibit 4). The preliminary unweighted data for 2004 accessed from the DAWN *Live!* system on January 13, 2005, indicate 662 cocaine ED reports for all causes. Approximately 71 percent of the cocaine ED reports were for patients who were Black (exhibit 5), and 84 percent represented clients age 30

and older. Psychiatric conditions were the most frequently cited reason for visiting the ED (45 percent), followed by other reasons (22 percent) and altered mental status (16 percent).

The most recently available mortality data indicated 127 cocaine/crack-related deaths in 2002.

Between October 2003 and September 2004, cocaine/crack accounted for 45.6 percent of the 2,760 items analyzed by NFLIS, the highest proportion for any drug (exhibit 6).

Between July and December 2004, the retail price for powder cocaine in Newark was \$9–\$100 per gram; crack sold for \$20–\$100 per gram (exhibit 7).

Heroin

As a proportion of illicit drug treatment admissions, primary heroin accounted for 82.6 percent in Newark City in the first half of 2004, which was lower than the 85.4 percent in 2003 (exhibits 1 and 2). In the Newark PMSA, primary heroin admissions accounted for 73.9 percent of illicit drug admissions in the first half of 2004, slightly lower than the 77.1 percent in 2003, and for 59.2 percent of all treatment admissions (including alcohol).

Primary heroin admissions predominated across the State in the first half of 2004, accounting for 60.8 percent of all admissions for drugs other than alcohol (exhibit 1). This is down from 64.2 percent in 2003 (exhibit 2) and represents the second decrease in the proportion of primary heroin admissions statewide since 1996. TEDS data for 2003 indicate that, statewide, 54.6 percent of primary heroin admissions were White and 39.2 percent were Black (exhibit 3). About 17.3 percent were Hispanic. Primary heroin users were also predominately male (65.7 percent).

The unweighted data accessed from DAWN *Live!* show that the number of ED reports for heroin in 2004 continued to be higher than the number of reports for other single drugs, at 803 reports between January and June 2004. Of the 803 heroin ED reports, 51 percent were for male patients, 65 percent were for patients who were Black (exhibit 5), and 83 percent were for patients age 30 and older. A psychiatric condition was the most frequently cited reason for contacting the ED (36 percent), followed by other reasons (23 percent) and seeking detoxification (22 percent).

Although heroin is the leading drug among treatment admissions and ED reports in Newark, it accounted for only 34.7 percent of the 2,760 items analyzed by

NFLIS between October 2003 and September 2004 (exhibit 6).

The most recently available mortality data indicate 149 heroin death mentions in 2002. The number of death mentions was down from 177 reported in 2001, however, and 179 reported in 2000. The slight downward trend in death mentions in 2002 is consistent with recent patterns in both treatment and ED data.

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 price per gram between July and December 2004 was \$25–\$320 (exhibit 7). In 2003, despite the drop in heroin purity, the Newark PMSA had the highest heroin purity coupled with the lowest price among the 21 DAWN cities. According to the DEA, almost all the heroin sold in the Newark PMSA is South American.

Opiates Other Than Heroin

In the first half of 2004, primary treatment admissions for “other opiates or synthetics” in Newark City totaled six (0.3 percent of the admissions, excluding alcohol admissions). The number was higher in the PMSA—86 (1.4 percent of the admissions, excluding alcohol). In 2003, figures for the city and PMSA, respectively, were 0.2 and 1.3 percent. In the State as a whole, primary admissions for other opiates in the first half of 2004 totaled 679, or 3.4 percent of all admissions, excluding alcohol. In 2003, the number of primary admissions for other opiates totaled 1,049, representing more than double the admissions reported in 1997 (513). The biggest increase in the number of other opiate admissions occurred between 2000 (592) and 2002 (1,124). In 2003, the last year of full data for New Jersey, admissions reporting other opiates as a primary, secondary, or tertiary drug of abuse numbered 2,303 and accounted for nearly 6 percent of all drug admissions statewide. In the TEDS data for 2003, 92 percent of the primary “other opiate” admissions were White and 6 percent were Black (exhibit 3). Only 5.5 percent of the primary “other opiate” admissions were Hispanic. About 63 percent were male.

ED data show 153 reports of narcotic analgesics/combinations between January and June 2004. Reports of methadone account for a substantial proportion of the total reports: 36.7 percent ($n=56$).

In 2002, there were 151 ME death mentions for narcotic analgesic/combinations, representing the largest number of death mentions for any drug. Although the

number of mentions was down from 190 in 2001, the number of mentions was more than twice that reported in 2000 (75) and more than 3 times the number in 1999 (44).

Marijuana

Primary marijuana treatment admissions represented 7.2 percent of all treatment admissions in Newark City in the first half of 2004, compared with 9.1 percent in the Newark PMSA and 12.1 percent in the State as a whole. As a proportion of illicit drug treatment admissions, marijuana accounted for 7.9 percent in Newark City and 11.3 percent in the Newark PMSA (exhibit 1) in the first half of 2004, both approximately 1 percentage point higher than in 2003 (exhibit 2).

Statewide primary marijuana admissions (excluding alcohol) were more than twice the proportion of those in Newark City (16.6 vs. 7.9 percent) and more than 5 percentage points higher than those in the Newark PMSA (16.6 percent and 11.3 percent, respectively) (exhibit 1). Statewide TEDS data for 2003 indicate that 82 percent of primary marijuana admissions were male, 55 percent were White, and 40 percent were Black (exhibit 3). About 18 percent of primary marijuana admissions statewide were Hispanic. Across the State, approximately 50 percent of primary marijuana admissions were younger than 21, and about 73 percent were younger than 26.

The number of marijuana ED reports between January and June 2004 for all causes was 257. Approximately 58 percent of the marijuana reports were made by individuals younger than 30. The three most frequent chief complaints when presenting with a marijuana report were other reasons (38 percent), psychiatric condition (33 percent), and altered mental status (21 percent).

Among the 2,760 items analyzed by NFLIS between October 2003 and September 2004, marijuana accounted for 10.2 percent (281 items) (exhibit 6).

Between July and December 2004, locally produced marijuana sold in Newark for \$5–\$30 per bag (exhibit 7).

Benzodiazepines and Barbiturates

In an analysis run January 13, 2005, the DAWN *Live!* system recorded 208 benzodiazepine ED reports for all causes between January and June 2004 (exhibit 4). There were also 20 barbiturates ED reports for all causes.

The 2002 DAWN mortality data show only 54 benzodiazepine mentions in the Newark PMSA. However, this represents an increase from 33 mentions in 2001 and 35 mentions in 2000. Benzodiazepines accounted for approximately 7.8 percent of all ME death mentions in 2002, up from 4.2 percent in 2001.

Methamphetamine and Amphetamines

In the first half of 2004, only 17 primary amphetamine treatment admissions, including 4 primary methamphetamine admissions, were reported in the Newark PMSA. As a primary drug of abuse, amphetamines were also rare in the State. There were 87 primary amphetamine admissions in the first half of 2004, including 41 admissions for methamphetamine. If the measured rate of admissions between January and June 2004 continued through the rest of the calendar year, the number of total admissions for primary amphetamine abuse will increase from the 112 admissions reported in 2003.

To analyze the characteristics of cases presenting for treatment in New Jersey for a drug in the stimulant category (including methylenedioxymethamphetamine [MDMA], methamphetamines, other amphetamines, and other stimulants), data from calendar year 2003 were used. There were 554 statewide admissions for stimulants as primary, secondary, or tertiary drug of abuse in 2003 (exhibit 8). These cases presented with another primary drug 100 percent of the time—28 percent of the cases were for the treatment of a primary “other drug,” followed by 25 percent for marijuana, 18.6 percent for alcohol, 17.9 percent for heroin, and 10.4 percent for cocaine. The clients were more than twice as likely to be male than female (68.5 vs. 31.5 percent, respectively). Stimulant users seeking treatment were most likely White (68.2 percent), although 14.7 percent in 2003 were Black and 10.8 percent reported Hispanic ethnicity. The clients were young: 14.4 percent were younger than 18 and 32.7 percent were between the ages of 18 and 24. Approximately 62 percent had prior treatment experiences.

In the Newark PMSA, there were 133 cases of treatment for stimulants in 2003 (exhibit 8). Marijuana was the most likely primary drug at admission (37.9 percent), followed by other drugs (22.9 percent), alcohol (17.9 percent), heroin (14.3 percent), and cocaine (7.1 percent). The clients are similar to the State in gender breakdown—67.9 percent male vs. 32.1 percent female. The racial and ethnic breakdown was less dramatic in the PMSA. White clients accounted for 46.4 percent of the population, while Blacks constituted 29.3 percent. The clients were also

young, with 10.7 percent younger than 18 and 40 percent between the ages of 18 and 24.

Preliminary unweighted data accessed through DAWN *Live!* for January through June 2004 show only two methamphetamine ED reports for all causes. ED reports for amphetamines, however, were higher, with 20 reports (exhibit 4). Approximately 50 percent of stimulant reports were made by those younger than 25. The three chief complaints when presenting included altered mental status (50 percent), other reasons (36 percent), and overdose (36 percent).

Wholesale and midlevel methamphetamine prices 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, but between July and December 2004, methamphetamine sold for \$15,000–\$25,000 per kilogram and \$800–\$1,500 per ounce (exhibit 7). On the retail level, methamphetamine sold for between \$20 and \$180 per gram.

Methylenedioxymethamphetamine (MDMA or Ecstasy)

The number of MDMA ED reports between January and June 2004 in the DAWN *Live!* system was seven (exhibit 4). Approximately 86 percent of those mentioning MDMA were male. More than 70 percent of the MDMA reports were made by individuals younger than 30, including 57 percent younger than 25. Altered mental status (57 percent) was the chief single complaint registered when mentioning MDMA in the ED.

Between July and December 2004, MDMA sold for \$20–\$30 per tablet (exhibit 7).

Phencyclidine (PCP)

The unweighted number of PCP ED reports between January and June 2004 accessed from DAWN *Live!* was nine (exhibit 4). Approximately 78 percent of those reporting PCP were male. Almost 44 percent of the PCP reports were made by individuals younger than 30. Altered mental status (33 percent) and psychiatric condition (33 percent) were the top complaints given when mentioning PCP in the ED.

Alcohol

In the Newark PMSA, alcohol-only treatment admissions as a proportion of all admissions decreased

from 12.2 percent in the first half of 2003 to 10.4 percent in the first half of 2004, while alcohol-in-combination admissions increased slightly from 8.6 percent to 10.4 percent during the same time period.

Unweighted data from *DAWN Live!* show that alcohol-in-combination with other drugs or alcohol alone for those younger than 21 accounted for 574 ED reports in the Newark PMSA between January and June 2004, as indicated by data received January 13, 2005.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

In 2003, New Jersey ranked fifth nationally in cumulative AIDS cases, third in cumulative pediatric AIDS cases, and ninth in cases reported in 2003. As of June 30, 2004, there were 64,219 cumulative HIV/AIDS cases reported in New Jersey, about 464 of which were reported in the first half of 2004. Of the cumulative cases, 25,452 (39.6 percent of the State total) were in the Newark PMSA, and 12,329 (19.2 percent of the State total) were in Newark City. A total of 62,993 cumulative HIV/AIDS cases statewide, and 12,045 in Newark City, were adults/adolescents age 13 or older.

Statewide, the proportion of HIV/AIDS cases involving injection drug use has declined substantially. Thus, approximately 42 percent of cumulative HIV/AIDS cases statewide involved injection drug use alone, compared to 17 percent of cases diagnosed between July 2003 and June 2004. 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 28 percent of cumulative cases and 48 percent of cases reported between July 2003 and June 2004 can be attributable to heterosexual transmission. The majority of this difference is found in the “partners of unknown HIV risk” category. There has been a slight increase in the number of transmission cases related to men who have sex with men (MSM). The cumulative proportion for this risk category is 19 percent, while the proportion for cases reported be-

tween July 2003 and June 2004 is 20 percent. Additionally, 15 percent of cases reported between July 2003 and June 2004 are still recording in the “other or unknown” transmission mode category.

In Newark City, 9 percent of cumulative HIV/AIDS cases involved MSM transmission, 20 percent involved heterosexual contact, and 18 percent involved “other or unknown” transmission. A larger proportion of females (34 percent of cumulative cases in Newark and 36 percent in the State) were infected through heterosexual contact than males (11 percent and 8 percent in Newark and the State, respectively).

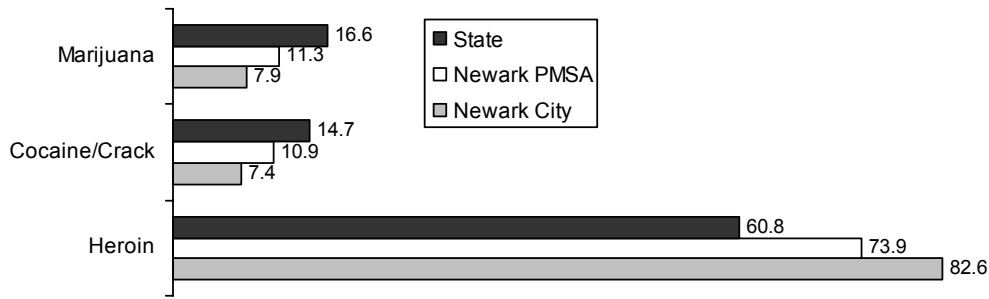
There has been a steady increase in the number of persons living with HIV/AIDS in Newark and in the State as a whole. The total number statewide has increased from 25,343 in 1997 32,401 as of June 30, 2004.

Among people living with HIV/AIDS as of June 30, 2004, about 35 percent statewide and 41 percent in Newark City are female. Compared to the State as a whole, a substantially higher proportion of people living with HIV/AIDS in Newark are non-Hispanic Black (79 vs. 55 percent) (exhibits 9 and 10). About 17 percent among those living with HIV/AIDS in Newark and 21 percent statewide are Hispanic, and about 3 percent in Newark 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 32 percent of cases statewide and 39 percent in Newark (exhibits 9 and 11). Heterosexual contact accounted for 21 percent of cases statewide and 25 percent in Newark. MSM contact alone accounted for 19 percent statewide 10 percent in Newark, while MSM and injection drug user (IDU) combined were involved in 3 percent of cases statewide and 3 percent of cases in Newark. The continued increase in heroin injection by the young (aged 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.

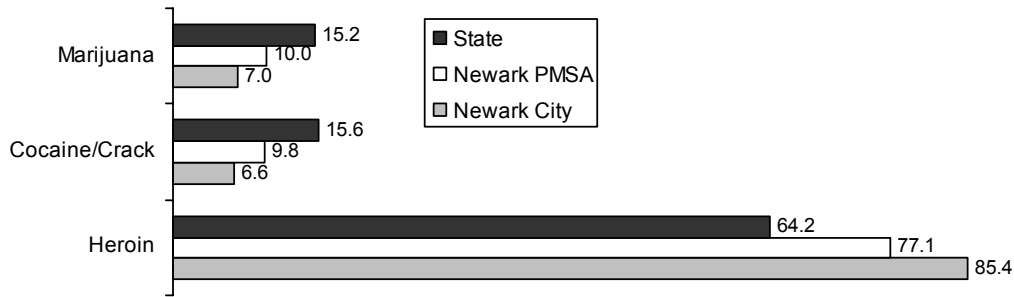
For inquiries concerning this report, please contact Allison S. Gertel-Rosenberg, M.S., Program Manager, Division of Addiction Services, Office of Policy Development, New Jersey Department of Human Services, 120 South Stockton Street, 3rd Floor, P.O. Box 362, Trenton, NJ 08625, Phone: 609-984-4050, Fax: 609-292-1045, E-mail: allison.gertel@dhs.state.nj.us.

Exhibit 1. Percentages of Primary Treatment Admissions (Excluding Alcohol) for Selected Drugs in Newark City, Newark PMSA, and New Jersey: January–June 2004



SOURCE: ADADS, NJSAMS, Division of Addiction Services, NJ Department of Human Services

Exhibit 2. Percentages of Primary Treatment Admissions (Excluding Alcohol) for Selected Drugs in Newark City, Newark PMSA, and New Jersey: January–December 2003



SOURCE: ADADS, NJSAMS, Division of Addiction Services, NJ Department of Human Services

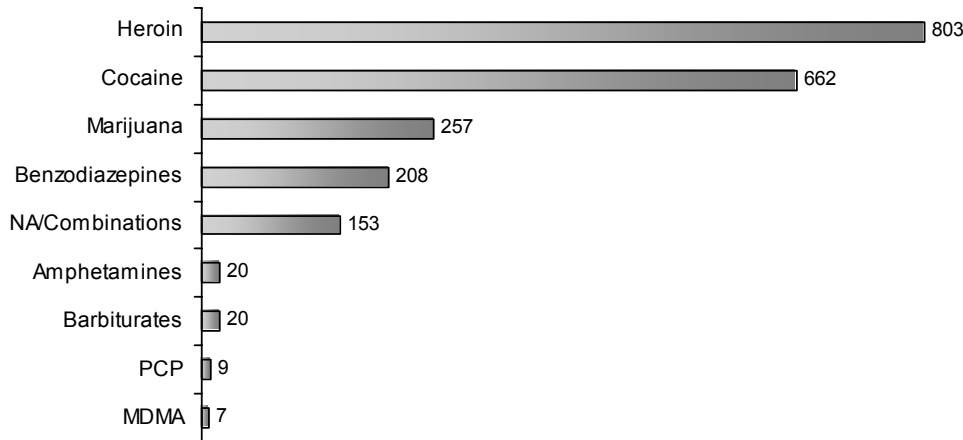
Exhibit 3. Characteristics of Primary Substance Abuse Treatment Admissions in the State, by Percent: January–December 2003¹

Characteristic	Alcohol Only	Alcohol-in-Combination	Crack	Cocaine	Marijuana	Heroin	Other Opiates
Gender							
Male	72.9	74.7	59.5	72.0	82.5	65.7	62.9
Female	26.9	25.2	40.4	27.8	17.5	34.2	36.9
Race/Ethnicity							
White	83.3	70.6	47.4	70.8	55.1	54.6	92.1
Black	12.9	26.6	49.8	25.4	40.1	39.2	6.1
Hispanic	12.1	11.0	8.8	18.9	17.8	17.3	5.5
Age at Admission							
17 and younger	1.3	6.1	0.9	3.0	32.7	0.4	1.8
18–25	9.8	21.6	12.6	19.2	40.3	17.4	18.4
26–35	18.0	25.4	33.4	33.6	18.9	31.7	31.0
36 and older	70.9	46.8	53.2	44.1	8.0	50.3	48.8

¹Percentages may not add to 100 due to rounding or missing values.

SOURCE: TEDS, OAS, SAMHSA

Exhibit 4. Number of ED Reports for Selected Drugs in the Newark PMSA (Unweighted¹): January–June 2004



¹The unweighted data are from 10–12 Newark 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.
SOURCE: DAWN *Live!*, OAS, SAMHSA, updated 1/13/2005

Exhibit 5. Race/Ethnicity of ED Reports for Selected Drugs (Unweighted¹): January–June 2004

Race/Ethnicity	Cocaine		Heroin	
	N	(%)	N	(%)
White	113	17.1	165	20.5
Black	467	70.5	520	64.8
Hispanic	47	7.1	77	9.6
Race/Ethnicity NTA	1	0.2	0	0
Not Documented	34	5.1	41	5.1
TOTAL	662	100	803	100

¹The unweighted data are from 10–12 Newark 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.
SOURCE: DAWN *Live!*, OAS, SAMHSA, updated 1/13/2005

Exhibit 6. Number of Items Analyzed for Specific Drugs in Newark and Percentage of Total Items: October 2003–September 2004¹

Substance	Number	Percent (%)
Cocaine	1,256	45.57
Heroin	958	34.69
Marijuana	281	10.17

¹N = 2,760.
SOURCE: NFLIS, DEA

Exhibit 7. Illicit Drug Prices for Newark City: July 2004–December 2004

Drug	Price in Dollars (\$)		
	Wholesale	Midlevel	Retail
Powdered Cocaine	\$15,000–\$34,000 per kilogram	\$600–\$1,800 per ounce	\$9–\$100 per gram
Crack Cocaine	\$20,000–\$35,000 per kilogram	\$644–\$2,000 per ounce	\$20–\$100 per gram \$150–\$200 per 1/8 ounce
Heroin	\$52,000–\$120,000 per kilogram	\$1,600–\$3,360 per ounce	\$25–\$320 per gram
Marijuana	\$500–\$1,700 per pound boogie \$3,500–\$6,500 per pound HY ¹ \$6,000–\$7,000 per pound purple haze	\$50–\$600 per ounce \$100–\$400 per ounce HY \$400–\$1,100 per 1/4 pound \$250–\$750 per 1/4 pound HY \$400–\$2,000 per 1/2 pound \$500–\$2,500 per 1/2 pound HY	\$2–\$5 per joint \$5–\$20 per blunt \$5–\$30 per bag \$10–\$30 per bag HY \$20–\$50 per gram
Methamphetamine	\$8,000–\$20,000 per pound \$15,000–\$25,000 per kilogram	\$800–\$1,500 per ounce	\$20–\$180 per gram \$9–\$180 per gram crystal methamphetamine \$140–\$300 per 1/8 ounce \$400–\$1,200 per 1/2 ounce
MDMA	7-12 per tablet	NA	20-30 per tablet

¹HY=Hydroponic.

SOURCE: Narcotics Digest Weekly (Dec 28, 2004), National Drug Intelligence Center

Exhibit 8. Number of Primary, Secondary, or Tertiary Treatment Admissions for Stimulants in Newark City, Newark PMSA, and New Jersey: January–December 2003

Substance	State	PMSA	City
Ecstasy	184	65	12
Methamphetamine	136	47	10
Other Amphetamine	234	21	3
Total Stimulants	554	133	25

SOURCE: ADADS, NJSAMS, Division of Addiction Services, NJ Department of Human Services

Exhibit 9. Numbers¹ and Percentages of Adult/Adolescent Cases Living with HIV/AIDS in New Jersey by Exposure Category, Race/Ethnicity and Gender as of June 30, 2004

Adult/Adolescent AIDS Cases	Males		Females		Total	
	N	(%)	N	(%)	N	(%)
Exposure Category						
Men/sex/men (MSM)	6,035	29	0	0	6,035	19
Injection drug user (IDU)	6,661	32	3,605	32	10,266	32
IDU/MSM	875	4	0	0	875	3
Heterosexual Contact	2,314	11	4,394	39	6,708	21
Other/Unknown	4,673	23	3,134	28	7,807	25
TOTAL	20,558	100	11,133	100	31,691	100
Race/Ethnicity						
White	5,178	25	1,948	17	7,126	22
Black	10,633	51	7,279	63	17,912	55
Hispanic	4,723	23	2,069	18	6,792	21
Asian/Pacific Islander	151	1	59	1	210	1
Other/Unknown	222	1	139	1	361	1
TOTAL	20,907	100	11,494	100	32,401	100

¹Total number of cases for race/ethnicity includes pediatric cases, exposure category does not.
SOURCE: New Jersey Department of Health and Senior Services, Division of AIDS Prevention and Control

Exhibit 10. Race/Ethnicity of Cases Living with HIV/AIDS as of June 30, 2004: Newark City

Race/Ethnicity	Adult/Adolescent		Pediatric		Total	
	N	(%)	N	(%)	N	(%)
White, Non-Hispanic	#	#	#	#	193	3
Black, Non-Hispanic	4,476	79	86	89	4,562	79
Hispanic	971	17	8	8	979	17
Other	#	#	#	#	53	1
TOTAL	5,690	100	97	100	5,787	100

Indicates that number is not shown due to small cell size, in accordance with NJDHSS security and confidentiality policies.
SOURCE: New Jersey Department of Health and Senior Services, Division of AIDS Prevention and Control

Exhibit 11. Adult/Adolescent Cases Living with HIV/AIDS in Newark City by Exposure Category and Gender as of June 30, 2004

Exposure Category	Males		Females		Total	
	N	(%)	N	(%)	N	(%)
Men/sex/men (MSM)	559	17	0	0	559	10
Injection drug user (IDU)	1,317	40	849	37	2,166	39
IDU/MSM	161	5	0	0	161	3
Heterosexual Contact	493	15	888	39	1,381	25
Other/Unknown	801	24	552	24	1,353	24
TOTAL	3,331	100	2,289	100	5,620	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

Cocaine, especially crack, remains a major problem in New Orleans, although indicators suggest some decline in abuse of this drug. Heroin indicators are also declining. A growing problem is the abuse of narcotic analgesics. Admissions for opiates other than heroin accounted for 11–21 percent of all admissions in four parishes and between 5 and 9 percent in the other four. Marijuana continues to be a major drug of abuse, accounting for a large proportion of drug arrests in 2003 and for nearly 53 percent of the items analyzed by NFLIS in FY 2004. Also, admissions for primary marijuana abuse exceeded those for all other substances for the first time in fiscal year 2004. Treatment admissions data from eight other parishes for FY 2004 show that alcohol, cocaine, and marijuana accounted for large proportions of primary admissions.

INTRODUCTION

Area Description

New Orleans is located in southern Louisiana. The city covers 366 square miles, of which 164 are water. About one-half of the metropolitan area's 1.3 million inhabitants live in Orleans Parish, the largest of Louisiana's 64 parishes. The State has a total population of about 4.5 million people.

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. Exhibit 1 shows the race/ethnicity breakdown for both New Orleans and the State of Louisiana in 2000 and estimates for 2003. As shown, New Orleans had a much higher percentage of African-Americans (67.3 vs. 32.5 percent) and a much lower percentage of Whites (28.1 vs. 63.9 percent) than the State in 2000.

Data Sources

Information for this report was collected from the sources described below:

- **Emergency department (ED) data** for January–June 2004 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 Services Administration (SAMHSA). Nineteen of the 21 eligible hospitals in the New Orleans metropolitan area are in the DAWN sample, with a total of 21 EDs in the sample. (Some hospitals have more than one ED.) The data reported in this paper were not complete. During the 6-month period, between 8 and 11 of the 19 EDs in the DAWN sample reported data each month. The data in this paper were updated by OAS on December 13, 2004; 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!* represent 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 “Illicit Drugs of Abuse” (excluding “Alcohol Only” for patients under 21) and nonmedical use of two prescription-type drugs. 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.samhsa.gov>>.
- **Drug treatment data** were provided by the Louisiana State Office for Addictive Disorders and by not-for-profit treatment facilities for Orleans Parish for fiscal year (FY) 1995 through FY 2004, when 2,306 persons were treated in New Orleans Parish. (Fiscal years run July through June.) Data for FY 2004 in eight of the largest parishes in the State are also reported.
- **Drug arrest data** were provided by the New Orleans Police Department (NOPD) for 2002–

¹The author is affiliated with the New Orleans Health Department, New Orleans, Louisiana.

2003. Anecdotal information on arrests in 2004 was also provided by NOPD.

- **Forensic laboratory testing data** were provided by the Drug Enforcement Administration for FY 2004 (October 2003–September 2004), as reported to the National Forensic Laboratory Information System (NFLIS).
- **Drug price, purity, and seizure information** was extracted from *Narcotics Digest Weekly*, Volume 3, Number 52, December 28, 2004, National Drug Intelligence Center (NDIC), and the Drug Enforcement Administration (DEA) for the last quarter of 2004. Data for heroin purity were derived from the DEA’s Domestic Monitor Program (DMP) for 2003.
- **Acquired immunodeficiency syndrome (AIDS) and human immunodeficiency virus (HIV) data** were provided by the Louisiana HIV/AIDS Surveillance Program and represent cases reported in the third quarter of 2004.

No recent mortality, survey, or drug-related mortality data were available for this reporting period. Trends in drug-related mortality data (DAWN); the Youth Risk Behavior Surveillance (YRBS) survey, Centers for Disease Control and Prevention; and drug-related mortality data can be found in “Overview of Drug Abuse Indicators in New Orleans,” *Epidemiologic Trends in Drug Abuse, Proceedings Vol. II*, 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. The DEA reports that, in 2004, crack and cocaine hydrochloride (HCl) were widely available in New Orleans in quantities from kilograms to grams.

Surprisingly, despite the impact and availability of cocaine/crack, primary treatment admissions for the drug have been decreasing since 1993. Exhibit 2 shows the percentages of treatment admissions for the most commonly abused substances in Orleans Parish—cocaine/crack, alcohol-in-combination, marijuana, and heroin. Cocaine/crack treatment admissions in the parish decreased from 40.4 percent of all admissions in FY 1995 to 31.6 percent in FY 2004. There were many possible reasons for the decreases in cocaine admissions, including increases in referrals of marijuana abusers to treatment by the courts. A

relatively high proportion (39.8 percent) of primary cocaine/crack treatment admissions in 2004 were female. Most (80.3 percent) of the male and female primary cocaine/crack admissions were African-American. A relatively large percentage (41.4 percent) of the African-American female cocaine/crack admissions were in the 35–44-year-old age category.

Among eight other Louisiana parishes, primary cocaine admissions in 2004 were highest in East Baton Rouge Parish (45.5 percent) and lowest in Calcasieu Parish (15.8 percent) (exhibit 3).

Other cocaine/crack indicators remained high in New Orleans, including hospital emergency department cases, items identified by police forensic labs, and arrests for cocaine possession and distribution.

Preliminary unweighted data accessed from DAWN *Live!* show cocaine ED reports totaled 494 from January 1 through June 2004 (exhibit 4), another indicator of the cocaine problem in New Orleans.

Approximately 38 percent of all items analyzed by NFLIS labs in New Orleans in FY 2004 were cocaine (see exhibit 5). This was lower than the percentage of cannabis items identified (53 percent), but much higher than the percentages for other drugs identified.

In 2003, there were lower numbers of arrests for cocaine possession ($n=2,941$) and distribution (1,262) than in 2002 (3,649 for possession and 1,434 for distribution) (exhibit 6).

In New Orleans, Mexican and Caribbean drug trafficking organizations (DTOs) are the primary distributors of cocaine HCl at the wholesale level. They generally do not sell cocaine in the crack form because of the more severe Federal sentencing guidelines for the distribution of cocaine in this form. So, 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. The DEA reported that, in the last half of 2004, purity levels for crack ranged from 40 to 90 percent, while purity levels for HCl were more variable in the 17 to 90 percent range.

Cocaine HCl is commonly sold in one-quarter, one-half, and 1 ounce quantities. Prices range from \$800 to \$1,200 per ounce and approximately \$18,000 to

\$25,000 per kilogram. When cut/mixed with adulterants, and less potent, cocaine HCl 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.

Methamphetamine/Amphetamines

Methamphetamine indicators remained at low levels in New Orleans in 2003–2004. The DEA New Orleans Field Division (NOFD), however, reports that methamphetamine may be gaining popularity in some small towns and communities in the State. An increase in small clandestine methamphetamine labs has been reported in some rural areas. Most of the methamphetamine seized in Louisiana came from Mexico and was transported into the State from California or Texas in private and commercial vehicles.

In FY 2004, only five primary methamphetamine abusers entered treatment programs in Orleans Parish, representing only 0.2 percent of all admissions during the 1-year period. Primary methamphetamine admissions are higher in eight other parishes, based on the assessment of the Louisiana State Epidemiology Work Group. As shown in exhibit 3, the parishes in Louisiana with the highest numbers and percentages of primary methamphetamine admissions in 2004 include Rapides (6.7 percent), Bossier (6.2 percent), Calcasieu (4.2 percent), and Ouachita (3.8 percent). Rapides is located near the Texas border, through which most of the methamphetamine in Louisiana was transported.

Of the unweighted drug reports accessed from DAWN *Live!* in New Orleans during the first half of 2004, 10 involved amphetamines (exhibit 4); there were no reports of methamphetamine.

Of the items analyzed by NFLIS labs in FY 2004, only eight (0.2 percent of all items analyzed) contained methamphetamine (exhibit 5).

Heroin

In New Orleans, heroin indicators have remained relatively stable from 2001 to 2004. After increasing from 8.4 percent of all treatment admissions in 1998 to 14.8 percent in 2001, heroin treatment admissions remained level, at about 11.0 percent from 2002 to 2004. As in the prior 3 years, most of the heroin admissions were male (74.5 percent). Of the males, 80.5 percent were African-Americans and 52.6 percent were in the 25–34 age category. Slightly more than one-half (53.8 percent) of the female heroin admissions were African-American. St. Tammany (3.3

percent) was the only other parish in which more than 1 percent of admissions were primary heroin abusers (exhibit 3).

Other heroin indicators were relatively low compared to indicators for other illicit drugs. In the period from October 2003 through February 2004, only 6.6 percent of all drug items ($n=260$) analyzed by forensic labs in New Orleans included heroin (exhibit 5). In the first half of 2004, unweighted data accessed from DAWN *Live!* show that ED reports involving heroin totaled 185, accounting for nearly 17 percent of illicit drug reports (exhibit 4). This was a much smaller number than the numbers of cases reported for other illicit drugs, including cocaine and marijuana.

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 has a major impact on the homicide and robbery rates in New Orleans. The NOPD reported that a relatively high percentage of individuals arrested for robbery in 2004 were African-Americans in the 25–36 year age category. The 2003 arrest data show that African-Americans predominated in arrests involving heroin (exhibit 6). African-American trafficking organizations have been distributing 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 to 0.5 grams are wrapped in small foil packages that are placed in plastic sandwich bags for multiple sales. Bags or papers are sold for \$20 to \$25 each at the retail level, but it is possible to buy a bundle (25) bags for about \$300.

In 2003, most of the DMP heroin street buys in New Orleans were of South American origin. The purity of the heroin averaged 31.8 percent and sold for \$1.62 per milligram pure

Marijuana

Marijuana indicators were stable in 2004, but this drug is still 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.

According to the NDIC, the price of marijuana was stable in 2004. Joints sold for as low as \$2, and grams could be purchased for \$10. Marijuana was sold retail by the ounce for \$125–\$160 and wholesale by the pound for \$800–\$1,000.

In FY 2004, nearly one-third (32.1 percent, $n=740$) of the 2,306 drug abuse treatment admissions in Orleans Parish were primary marijuana/hashish abusers (exhibit 2). Most (80.5 percent) were male. Marijuana treatment admissions increased sharply from 11.5 percent in 1993 to 16.5 percent in 1994 to 28.2 percent in 1995. However, from 1995 to 2004, the percentage of marijuana treatment admissions remained relatively stable.

More than one-half (52.8 percent) of the items analyzed in NFLIS labs in the first half of 2004 contained cannabis (exhibit 5). This was, by far, the drug most often identified by the police labs.

In the unweighted data accessed from DAWN *Live!*, there were 306 marijuana ED reports in the first half of 2004, accounting for 27.5 percent of illicit drug reports (exhibit 4).

Other Opiates/Narcotics

Indicators for opiates other than heroin remained low over the last 7 years. 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.

Unweighted DAWN ED data for the first half of 2004 show 492 reports of opiates/opioids. Of the opiate/opioid reports, 41.9 percent were hydrocodone reports and 6.2 percent were oxycodone reports.

Among treatment admissions in Orleans Parish in FY 2004, 82 (3.6 percent) were for primary abuse of “other opiates or synthetic opioids” or nonprescription methadone. All but seven were White; 57 percent were White females and 35 percent were White males. Whites also dominated among these other opiate admissions in other parishes. The proportions of these admissions in East Baton Rouge and Ouachita Parishes (ranging from 4.7 to 5.0 percent) were similar to that in

Orleans Parish, while those in the other parishes were higher, ranging from approximately 7 to 21 percent. In St. Tammany Parish, 21 of the 216 other opiate admissions were for nonprescribed methadone, the highest number in any of the 9 parishes represented in exhibits 2 and 3. Across the other eight parishes as shown in exhibit 3, other opiates admissions were highest in St. Tammany Parish (21.1 percent) and Lafayette Parish (11.5 percent).

According to news reports, a large number of persons abusing methadone were from pain management clinics. Because of the large number of deaths, many of which involved methadone and other opiates, the State of Louisiana asked for an investigation of pain clinics in the New Orleans area. The Legislative Branch has closed down many of these clinics and placed stricter guidelines on others.

Of the 3,964 items analyzed by NFLIS in FY 2004, 30 (0.8 percent) were “other opiates/narcotics” (exhibit 5); 21 (70 percent) of these were hydrocodone.

Club Drugs

Use of club drugs continues to be reported in clubs and bars around the French Quarter area of the city. Drugs such as methylenedioxymethamphetamine (MDMA or ecstasy) and gamma hydroxybutyrate (GHB) are particularly abused near large metropolitan areas of the State where college populations are large. 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.

Unweighted data accessed from DAWN *Live!* for the first half of 2004 show 35 MDMA reports, representing 3.1 percent of illicit drug reports (exhibit 4). ED reports for other drugs used in the “club scene” were few in number: nine phencyclidine (PCP) reports, six gamma hydroxybutyrate (GHB) reports, and two lysergic acid diethylamide (LSD) reports.

Of the 3,964 items analyzed by NFLIS in FY 2004, only 17 were MDMA or methylenedioxymethamphetamine (MDA) (exhibit 5). Another two were ketamine and one was LSD.

The retail cost of MDMA in the second half of 2004 was \$15–\$20 per tablet (exhibit 7).

Benzodiazepines

The unweighted data from DAWN *Live!* show that ED reports of benzodiazepines totaled 413 in the first half of 2004.

Benzodiazepines accounted for 1 percent of the items analyzed by NFLIS in FY 2004 (exhibit 5). Of the 39 benzodiazepine-type items, 24 (61.5 percent) were alprazolam.

Alcohol

Alcohol abuse is a serious problem in New Orleans, as it is in many cities and towns in the United States. Alcohol and drugs are often used together, also a common pattern across the Nation.

In Orleans Parish, primary alcohol admissions accounted for nearly 19 percent of all admissions in FY 2004 (exhibit 2). Primary alcohol admissions in eight other parishes in 2004 ranged from a low of 25 per-

cent in St. Tammany Parish to a high of 41 percent in Bossier Parish (exhibit 3).

Deaths

There were 147 homicides in the city of New Orleans from July 2004 to December 2004; 110 (75 percent) were drug-related. Methadone and cocaine were the drugs most frequently cited.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

In the third quarter of 2004, there were 7,393 persons living with HIV or AIDS in the New Orleans metropolitan area. Of the 4,761 for whom exposure risk was known, 16.4 percent—502 men and 277 women—were exposed through injection drug use. Another 8.2 percent of the exposed cases were men who have sex with men and inject drugs. In addition, approximately 18 percent of the cases (634 women and 238 men) were exposed through heterosexual contact.

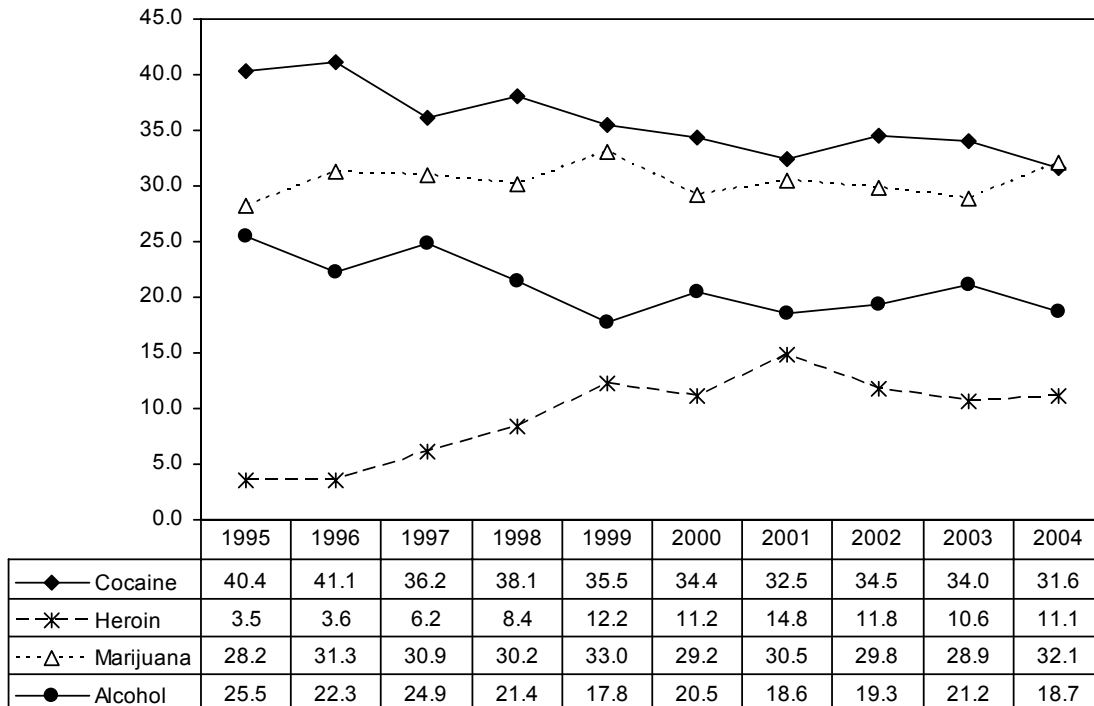
For inquiries concerning this report, please contact Gail Thornton-Collins, New Orleans Health Department, 2025 Canal Street, Suite 200, New Orleans, LA 70112, Phone:(504) 528-1912, E-mail <gaily47@hotmail.com>.

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)	
	New Orleans	Louisiana	New Orleans	Louisiana
Total Population (N)	(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 (n)	(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

SOURCE: U.S. Census Bureau

Exhibit 2. Percentages of Treatment Admissions in Orleans Parish, by Selected Drug: FYs 1995–2004



SOURCE: Louisiana State Office of Alcohol and Drug Abuse

Exhibit 3. Treatment Admissions for Selected Drugs in Eight Parishes Outside Orleans Parish, by Percent: 2004

Drug	Parish							
	Bossier	Calcasieu	East Baton Rouge	Lafayette	Ouachita	Rapides	St. Tammany	Terrebonne
Cocaine	26.7	15.8	45.5	32.3	24.8	26.5	28.4	17.3
Heroin	0.0	0.3	0.8	0.9	0.3	0.7	3.3	0.3
Other Opiates	8.9	11.4	5.0	11.5	4.7	11.4	21.1	7.5
Marijuana	15.4	30.0	13.2	13.3	26.6	17.5	17.3	37.3
Methamphetamine	6.2	4.2	2.1	1.0	3.8	6.7	1.6	1.0
Alcohol	40.8	30.7	32.6	37.8	36.1	32.9	24.7	34.2
Other Drugs	2.0	7.6	0.8	3.2	3.7	4.3	3.6	2.4
Total (N=) ¹	(292)	(983)	(3,432)	(885)	(914)	(1,295)	(1,026)	(986)

¹Excludes a few admissions for whom a primary drug was not reported.
SOURCE: Louisiana State Office of Alcohol and Drug Abuse

Exhibit 4. Numbers and Percentages of Selected Illicit¹ ED Drug Reports (Unweighted²): January–June 2004

Drug	Number	Percent
Cocaine	494	44.3
Amphetamines	10	4.5
Heroin	185	16.6
Marijuana	306	27.5
MDMA	35	3.1
Other Illicit Drugs	44	3.9

¹Excludes “Alcohol Only” reports for patients younger than age 21.

²The unweighted 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.

SOURCE: DAWN Live!, OAS, SAMHSA, Updated 12/13/2004

Exhibit 5. Numbers of Analyzed Items and Percentages of All Items Tested¹ in New Orleans, by Drug: FY 2004

Drug	Number	Percent
Cannabis	2,094	52.8
Cocaine	1,512	38.1
Heroin	260	6.6
Other Opiates	30	0.8
Benzodiazepines	39	1.0
MDMA/MDA	17	0.4
Methamphetamine/Amphetamine	8	0.2

¹A total of 3,964 items were reported.
SOURCE: NFLIS, DEA

Exhibit 6. Drug Arrests in Orleans Parish by Race/Ethnicity, Gender, and Offense: 2002–2003

Drug/ Offense	Males						Females						Total	
	Black		White		Other		Black		White		Other			
	2002	2003	2002	2003	2002	2003	2002	2003	2002	2003	2002	2003	2002	2003
Cocaine Possession	2,430	2,134	430	306	10	14	646	385	129	101	4	1	3,649	2,941
Cocaine Distribution	1,223	1,086	46	38	6	6	148	120	10	11	1	1	1,434	1,262
Heroin Possession	204	230	53	66	1	0	18	24	25	38	0	0	301	358
Heroin Distribution	177	155	3	5	0	0	13	16	3	0	0	0	196	176
Marijuana Possession	4,345	4,389	1,018	1,034	16	18	384	447	196	182	0	0	5,959	6,070
Marijuana Distribution	808	832	51	80	2	1	107	119	13	23	0	2	981	1,057
Other Drugs	299	197	81	51	2	1	40	24	117	25	0	0	539	298
Drug Paraphernalia	1,340	1,404	636	631	11	18	447	402	204	195	2	2	2,640	2,652

SOURCE: NOPD

Exhibit 7. 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 kilogram	\$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

Drug Use Trends in New York City

Rozanne Marel, Ph.D., John Galea, M.A., and Robinson B. Smith, M.A.¹

ABSTRACT

Drug use trends were again mixed for this reporting period. Cocaine indicators in New York City appeared to be stable in this reporting period. Although both cocaine powder and crack remain of good quality, many crack locations are seeing a decline in buyers and sellers. Heroin indicators also remained stable. Heroin remains widely available, although the purity levels have fallen below the recently reported 60-percent level. Marijuana indicators, which had been reaching new peaks, seem to have stabilized. Marijuana continues to be available in a wide variety of flavors and colors. Although the numbers remain small, methamphetamine indicators are showing an increase. Both New York City and upstate areas have experienced an increase in treatment admissions. 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. Among the 88,479 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 race/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 2004 was 6.1 percent, compared with 5.2 percent in New York State and 5.5 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, as compared to \$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 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.

New York City is also believed to be an economic hub for the underground economy. Defined as all off-the-books and unregulated activity, the underground economy is believed to be growing in the United States, especially in cities with large immigrant populations like Los Angeles, Miami, and New York. For example, in a November 2004 report by the New York City Comptroller dealing with just one sector of the under-

¹The authors are affiliated with the New York State Office of Alcoholism and Substance Abuse Services, New York, New York.

ground economy, it was estimated that New York City is home to a \$23 billion annual illegal counterfeiting industry, causing the city to lose more than \$1 billion in tax revenues each year.

Data Sources

This report describes current drug abuse trends in New York City from 1995 to 2004, using the data sources summarized below:

- **Emergency department (ED) drug mentions data** were derived from the Drug Abuse Warning Network (DAWN), Office of Applied Studies (OAS), Substance Abuse and Mental Health Services Administrative (SAMHSA), for 1995 through 2002. The 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 1995 covered New York City, Long Island, and Putnam County and included heroin/morphine and unspecified types of opiates. Beginning in 1996, DAWN covered only New York City, and the category for heroin/morphine no longer included 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 were not presented for 2001.
- **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 2004 and included both State-funded and nonfunded admissions. Demographic data are for the first half of 2004.
- **Arrestee drug testing data** were provided by the Arrestee Drug Abuse Monitoring (ADAM) program, National Institute of Justice (NIJ), for 2003. Adult males were sampled representatively, and data are weighted. Female data are unweighted.
- **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) 2004 (from October 1, 2003, through September 2004).

- **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. Data on methamphetamine laboratories were provided by the New York State Police.
- **Cocaine use during pregnancy data** were provided by the New York City Department of Health for 1995–2003.
- **Acquired immunodeficiency syndrome (AIDS) and human immunodeficiency virus (HIV) data** were provided by the New York City Department of Health for 1984–2003.

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 1).

For the New York City metropolitan area, DAWN estimates for cocaine ED mentions remained essentially the same in 2001 and 2002 (13,898 and 13,961, respectively). There was a significant decline, however, between 1995, when there were 19,715 mentions, and 2002—a decrease of 29 percent. The rate of cocaine ED mentions per 100,000 population in the New York City metropolitan area for 2002 was 166, the same as the previous 2 years, but a decline of 32 percent since 1995. The comparable national rate for 2002 was 78. While the national rate had been relatively stable, there was a 33-percent increase in this rate since 1995.

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 16,114 in 2003. In the first half of 2004, primary cocaine admissions remained essentially the same as in the first half of 2003, with 8,208 admissions. 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 2004, cocaine admissions constituted 24 percent of all New York City's 34,676 drug and alcohol treatment admissions (excluding alcohol-only).

Exhibit 2 shows demographic characteristics of cocaine treatment admissions for the first half of 2004 by the two primary modes of use: smoking crack (representing 61 percent of cocaine admissions) and using cocaine

intranasally (representing 36 percent). Those who smoke crack are more likely than intranasal users to be female (37 vs. 25 percent), Black (68 vs. 43 percent), readmissions to treatment (81 vs. 70 percent), and without income (34 vs. 26 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.

ADAM urinalysis data for 2003 showed different patterns for males and females. Findings show cocaine positives for 35.7 percent of males and 50.0 percent of females. More female arrestees tested positive for cocaine than for any other drug. For males, there were more positives for cocaine than for opiates, but fewer than for marijuana. Moreover, the percentage of cocaine positives for males was considerably lower than in recent years.

Another data source, the DEA's National Forensic Laboratory Information System, showed that of the 64,878 items reported for New York City in 2003, 36,807 (57 percent) were cocaine.

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, 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. Typically, cocaine is sold in \$20, \$30, and \$50 packages. The most common price on the street is the \$20 packet, which contains approximately 0.25 ounces of cocaine powder. While most users interviewed reported that the quality of the cocaine currently available remains high, they also indicated that a number of sellers are attempting to extend their product by adulterating it with manitol, baking soda, or Diamond Crystal salt.

Two methods have traditionally been used in the packaging of cocaine—plastic bags and aluminum foil. Many users prefer the malleability of aluminum, but dislike the fact that the cocaine can “cook-up” (melt) in the foil from simple body heat, which may happen in the club setting. The use of brand names in association with the sale of cocaine is becoming increasingly rare, since brand names may attract attention from law enforcement and may be easily duplicated by competitors.

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, blood relatives, and enduring friendship ties. At the street level, most sellers are of the same ethnic identity as the largest ethnic group in the community. Most street sellers abuse the very drug they sell. Cocaine HCL sellers appear to have a relatively less severe addiction problem than crack sellers. If their habit becomes worse, though, they may be relegated to selling crack on the street.

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) and places an order and a delivery is arranged. 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. Compared to crack sellers, cocaine sellers have a smaller, more disciplined set of clients, which enables sellers to manage access by requiring buyers to make appointments that are appropriately spaced to obscure traffic in and out of the apartment. 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, who is better able to tailor an ideal product/price package. The selling of cocaine on the street for personal use is typically found in black and Hispanic low-income communities. Normally, individuals selling cocaine do not sell other drugs. In the Bronx, a field researcher recently was informed that a local bodega was selling cocaine laced with phencyclidine (PCP). According to the report, this combination can be snorted or smoked in a cigarette or with marijuana. This combination is unusual, and the SSU is continuing to investigate.

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 social-economic 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.

According to street interviews, most cocaine HCl users report that they “only” snort the drug. Most users report that they use cocaine solely for recreational purposes; typically in group settings; at special events, such as parties or at clubs; and only on weekends.

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 quality of street crack remains stable. According to users, the quality of crack is good, and the amount provided seems satisfactory, but there are some complaints about the current selling atmosphere. Buyers have to contend with constant police harassment and potential arrest.

Field researchers report that street-level crack in New York City continues to be sold in \$5 and \$10 packages. The most common price/package combination is the \$10 packet. Two years ago, there was a substantial decline in the number of selling locations offering crack in \$5 amounts. During that period, there was an attempt to make the \$20 (2-milligram) package the industry standard. The larger package would have reduced the number of total sales for a seller in a day and would have limited his exposure to arrest.

Today, many crack locations are experiencing a substantial decline in buyers and sales. Some sellers are complaining about the frequency of having to sell “shorts” (below-price sales). Although the \$10 amount continues to be the dominant price and package size around the city, some sellers have revived the \$5 package in an attempt to stimulate sales and avoid shorts.

Most street sellers buy their supply in grams. The price of a gram varies from \$24 to \$40. If the street seller gets his supply from a low-level dealer, he may pay as much as \$40 dollars for a gram. When this individual attempts to sell his product on the street, his profit margin will be relatively small. These low-level dealers sell at a higher price, and their product is more likely to be adulterated.

If the street seller makes contact with a higher level dealer and is able to purchase an eighth of a key, he is likely to obtain a near pure product at or near \$24 per gram. The price for a gram will range from \$26 to \$30. These dealers usually have three levels of quality of cocaine for sale (bad, good, and pure). The final price and the quality of the product will depend on the relationship between the dealer and buyer and the buyer’s knowledge and experience. Interestingly, the \$30 per gram price is usually more profitable, because the product is of a higher level of purity. As a result, there

is less weight lost in the cocaine to crack conversion. The lower priced products (\$26 or \$27) usually have been adulterated to some degree, and the street seller is going to lose a greater proportion of the original weight of the cocaine when it is converted (cooked) into crack. Another factor related to profit is the street seller’s ability as a “cook” in the preparation of crack. Some sellers maintain that a good cook, with a near pure product, can convert \$1,000 worth of cocaine into \$2,000 or even \$2,500 worth of crack.

There are three basic packaging methods associated with crack in New York City. They are thumbnail-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.

In Harlem, street sellers are selling crack rocks unpackaged. It is not clear whether this is being done to save the expense of having the crack packaged, as the result of some difficulty obtaining packing material, or as a strategy intended to hamper police efforts, since unpacked crack may be easier to hide or throw away.

What typically serves as a brand name in the selling of crack on the street is the color of the package or top—(“blue bag” or “green tops,” etc.). However, the use of brand names, in general, is becoming increasingly rare.

Currently, most of the street crack sellers are small-time independent entrepreneurs or small, limited partnerships of two or three individuals. According to some street sellers, money is tight and crack is not as profitable as it once was. A crack street seller was complaining to a street observer that he was putting in more hours, and that last month he had trouble paying the rent. At one point, a seller could establish credit with a dealer and be “fronted” a gram of cocaine. Today, no one is giving credit, and all transactions are cash up front. The only form of credit that is still available on the street involves low-level crack dealers. The dealer may give a street seller a supply of 15 packets of crack (worth \$150 on street). The stipulation is that the seller must return \$120 to the dealer before he can obtain a new supply of crack. (Two years ago, the same arrangement would only have required that the seller return \$100 to the dealer.) Most sellers avoid this arrangement, because the profit margin is so small and the arrangement is potentially dangerous. In these arrangements, the dealer expects his money, regardless of arrest, lost, “shorts,” paying below price, or rip-offs. The seller who fails to pay back the dealer chances serious injury or death.

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. In the upper west side, however, there has been a recent shift in the ethnic composition of street sellers. The growing majority of the street sellers in this area are young (16–27 years old) Black males. The diminishing number of Dominican street sellers seems to be related directly to pressure from law enforcement. Many of the old-time Hispanic sellers have been arrested, have retired, or have switched to selling marijuana, which they perceive to be less dangerous.

Large open-air markets no longer exist. Their disappearance is attributed to police efforts aimed at the suppression of street-selling operations. Selling crack from indoor locations has proven to be impractical as well. The impulsive nature of crack users and their constant in-and-out traffic from an indoor selling location (e.g., an apartment) serves to quickly generate complaints from neighbors, elicit unwanted police attention, and eventually lead to either an eviction or arrest. Due to current police tactics, crack sellers are also unable to work from lobbies, vestibules, or hallways of buildings. If a seller or buyer is caught in a building and is unable to prove that he has a legitimate reason for being there, he will be arrested and receive a 5-day jail sentence. The trespassing sentence will increase by 5 days for each subsequent trespassing charge. As a result, many crack sellers remain on the street. Operating in the open is also becoming more difficult, because the police are employing special surveillance camera setups to monitor heavy selling locations, particularly those in or around housing projects. These cameras are suspended from buildings and street lights. Initially, the police target the buyers, who are allowed to leave the immediate area before they are picked-up, searched, and arrested. After a number of buyers are arrested, the police will then arrest the seller. One of the biggest complaints crack sellers have is that, “Today everyone (buyer) is a snitch.” To counteract police camera surveillance, sellers and buyers are using dark, oversize clothing, hoods, and hats to prevent identification. Fearing arrest, sellers do not carry more than 2 milligrams of crack at any time. A larger amount would automatically bump-up a simple possession charge to felony possession with intent to sell. After a buy, a crack user may hide his drugs between the cheeks of his buttocks. Many buyers believe that a quick patting down by the police is likely to miss something hidden there and that a more thorough body search requires a warrant. The heavy surveillance has also created opportunities for the brave and desperate. For example, some crack users utilize intermediary buyers to purchase their drug supplies. Those using intermediaries are individu-

als who might normally stand out (e.g., White), feel vulnerable (e.g., female, older person), or have sensitive jobs (e.g., teacher). The intermediary charges the client \$10 to obtain and deliver five packets of crack (street value \$50). To ensure repeated visits from the intermediary, the seller provides the five packets at \$40. The intermediary makes a net profit of \$20. In addition, the more unscrupulous intermediaries will occasionally substitute a packet of fake crack for one of the real packets.

Most crack buyers on the street are Black or Hispanic males. According to some street contacts, the majority of the crack users are females. Originally, crack had a strong appeal among young adults (mean age of 20), but it appears that crack users are getting older. Field researchers report that most buyers appear to be in their thirties. They estimate the mean age of crack users to be about 35. They report few very young users (below 21); most buyers appear to be veteran users.

Many female crack users supported themselves through prostitution. It was not uncommon to see hordes of females trying to sell themselves. Street observations indicate that this phenomenon has been greatly reduced because of police intervention.

Every crack user interviewed reports smoking crack, typically using a glass stem. The stem pipe is an important artifact for a crack user. The Pyrex pipe can last several months, as long as it is not dropped. Crack users report that there is a shortage of genuine Pyrex crack pipes. What is currently available at some bodegas and smoke shops are the plain glass look-a-likes, often sold with a miniature paper flower inside. These fakes are known on the street as “mouth pieces.” (A mouth piece is an extension of a larger pipe that conducts the smoke from the bowl to the mouth; since this part is not directly exposed to the flame, it does not have to be heat resistant.) Many crack users are upset because these look-a-like stems usually have a 1-day lifespan. Replacing the fake pipes can be expensive. The mouth pieces originally sold for \$1. At some locations, these fake pipes sell for as much as \$3. At the higher price, the store may provide free screens or a liter. (From a manufacturing perspective, it is the ideal product; the item is cheap to produce, has a short lifespan, and requires repeated replacement.) Stores that carry the fake pipes usually do not openly display them, and most shopkeepers will not sell one to a stranger. The buyer needs to refer to the stem as a “Demo” or ask for a “red” or “green,” referring to the color of the flower, in order to let the storekeeper know that he or she wants to buy a stem.

The DEA reports that prices for cocaine powder for July to December 2003 were \$22,000–\$26,000 per kilogram and \$800–\$1,600 per ounce. The DEA reports

that crack sells for about \$28,000–\$30,000 per kilogram, \$800–\$1,600 per ounce, \$27–\$45 per gram, and \$7–\$10 per rock.

DAWN figures for cocaine-involved deaths, which declined steadily from 1995 to 1999, showed a 26-percent increase in 2000 (to 492 from 394 in 1999) (exhibit 1). For the cocaine drug-related deaths in 2000, 40 percent involved one drug, 36 percent involved two drugs, 16 percent involved three drugs, and 8 percent involved four or more drugs. No DAWN mortality data were available for 2001, but in 2002, there were 421 deaths, more than for any other drug in New York City DAWN data.

The NYPD reports a decline in cocaine arrests since 1995 ($n=40,846$) (exhibit 1). 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.

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 354 in 2003—an 89-percent decline over 14 years (exhibit 1). It should be noted, however, that the change between 2002 and 2003, 2 percent, is the smallest decline in recent years.

Heroin

Heroin indicators generally increased during this reporting period (exhibit 3). The number of heroin ED mentions in the New York metropolitan area remained relatively stable between 1995 ($n=10,706$) and 2002 (10,397). The New York metropolitan area recorded a rate of 123 heroin mentions per 100,000 population for 2002, almost the same as the rate for 2001 (127). The estimated national rate was 36 heroin mentions per 100,000 population.

Primary heroin admissions to treatment programs in New York City gradually increased between 1995 and 2003, from 18,287 to 23,563, a 23-percent increase (exhibit 3). In the first half of 2004, primary heroin admissions remained at the same level as in the previous year, 11,878, and constituted 34 percent of New York City's 34,676 drug and alcohol treatment admissions (excluding alcohol-only).

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, to 60 percent in 1999 through 2002, 59 percent in 2003, and 61 percent in the first half of 2004. Meanwhile, heroin injection increased among heroin admissions, from 32 percent in the second half of 1998 to 37 percent in 2003, and 36 percent in the first half of 2004.

Exhibit 4 highlights general demographic characteristics of heroin abusers admitted to all New York City treatment programs in the first half of 2004 by mode of use. In general, primary heroin admissions were overwhelmingly male (75 percent), older than 35 (71 percent), more likely to be Hispanic (53 percent) than Black (26 percent) or White (18 percent), usually re-admissions to treatment (88 percent), and likely to report cocaine as a secondary drug of abuse (38 percent). Compared with heroin injectors, intranasal users were more likely to be Black (32 vs. 16 percent) and have some criminal justice status (36 vs. 26 percent). In contrast, primary heroin injectors were more likely than intranasal users to be White (30 vs. 11 percent), to report cocaine as a secondary drug of abuse (45 vs. 35 percent), and to have started use before reaching age 20 (56 vs. 41 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 2003 that figure increased to 16,058, essentially the same as in 2002 (16,083). In the first half of 2004, the number of admissions to crisis services for heroin was 8,350.

DAWN medical examiner (ME) figures for heroin-involved deaths in the New York City metropolitan area show a pattern of steady increases since 1999 (exhibit 3). In 1999, there were 174 such deaths, and in 2000, there were 194 heroin-involved deaths. No DAWN mortality data were available for 2001, but in 2002, there were 224 heroin-involved deaths.

ADAM urinalysis data show fewer adult arrestees testing positive for opiates than for marijuana or cocaine. In 2003, 23.3 percent of females tested opiate-positive, as did 15.0 percent of males. The percentage for New York City females was the highest for the 10 CEWG areas where adult females were tested in 2003.

NFLIS data show that 14 percent of the cases for New York City in 2004 (9,071) were related to heroin.

From 1992 to 2000, the DMP found average heroin purities to be generally above 60 percent. Findings for 2003, however, show an average purity of 53.5 percent, down from 61.4 percent in 2002. The associated price is \$0.48 per milligram pure, an increase from \$0.36 per milligram pure in 2002. According to the DEA, kilogram prices for January to June 2004 were \$60,000–\$70,000 for South American heroin and \$60,000–\$90,000 for Southwest Asian heroin.

According to the SSU field staff, heroin in New York City continues to be highly available and accessible. However, street observers indicate that during the year, there were brief periods of sporadic shortages of heroin. Street sources reported some dealers from New York City were traveling to Newark, New Jersey, for their heroin. The DEA Drug Monitoring Program lists Newark as having the highest purity levels in their recent sampling.

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 continues 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. Many heroin users maintain that in Manhattan, the South Bronx, and Brooklyn, they are never more than five or six blocks away from a heroin connection. Although the use (i.e., injecting or sniffing) of heroin is not a common public spectacle, field observers have reported a slight increase in the number of people seen nodding in public. This symptom is typically the result of a drug abuser combining heroin and pharmaceuticals, such as Xanax.

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.

Several street sources indicate that Dominicans are starting to pull out of the low-level heroin dealing and street sales. In many instances, they are being replaced by Blacks or Mexicans. Recently, Mexican immigrants have been attempting to get a foothold in the street distribution of heroin. This phenomenon began in Queens and has spread to other parts of the city, as the Mexican population has grown and spread across the city. Ac-

ording to some informants, the Mexican heroin street sellers are working directly or indirectly for Dominican mid-level distributors, and, as time goes on, Mexican sellers may seek to establish their own direct importation connection.

According to various street contacts, the most common form of heroin in the city appears to be associated with Colombian drug gangs. In general, quality throughout the city is reported to be good to very good for snorting. One exception is midtown Manhattan, where poor quality heroin, brownish in color and often sold under the brand name “the Cure” (the packet is stamped with a decal of a hypodermic), has appeared.

Individuals from out-of-town continue to come into the city to take advantage of the better quality heroin. Once in their hometown, they often sell part of their drug supply at a higher price in order to defer the cost of their own habit. Recently, the DEA reported that Newark, New Jersey, has the highest heroin purity in the metropolitan area and that some New Yorker heroin users are traveling to Newark to purchase heroin.

Heroin demonstrates far less price variation than other drugs sold on the streets of New York, and over the last 6 months, heroin prices have been described as stable. The street seller usually sells one-sized packets. The predominant price for street-bought heroin is \$10 per packet, and each packet contains approximately 0.10 milligrams of powder. Recently, the \$5 (0.5-milligram) bag appeared to be undergoing a limited resurgence. Last year, \$5 bags were only found in North Manhattan, but now \$5 bags are also being reported in other parts of the city as well. This appears to be an attempt to make the price of heroin more affordable, and it may be a consequence of increased competition among street sellers. There are some local sellers who are selling their product at slightly higher prices. For example, a street seller operating in Downtown Brooklyn sold his product for \$13, claiming that his higher price reflected the better quality of his product. Out-of-town users/sellers usually resell part of their supply of \$10 packets for \$15 in their home-town.

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.

At one point, the use of brand names was losing favor. Although most sellers do not use brand names, the use of brand names has recently experienced a resurgence. This new trend is probably a consequence of competition and a need to differentiate one’s product from a host of others selling essentially the same product. The following brand names are popular—Cross Over,

Benlton, X-man, 911, Lean Back, Set Back, The Cure, Tuna, First Class, Tyson, and Purple Passion. In some locations, instead of using a brand name, the seller wears a distinctive article of clothing (e.g., red, white, and blue cap) or some other prop (bicycle) to distinguish himself from other sellers.

The majority of the individuals buying heroin on the street are chronic users; they are usually male, Black and/or Hispanic, and tend to be between 35 and 50 years old. Street observers, nevertheless, have seen buyers in their twenties frequenting heroin selling locations. These individuals have a robust appearance not normally associated with chronic users. These observations suggest that heroin continues to attract new users. Chronic heroin users tend to demonstrate more social interdependence and stronger emotional bonds with “running buddies” than other drug users. By contrast, the crack user seems to be the most independent and least trusting. Most heroin buyers claim that they only snort and do not inject heroin. This suggests that the heroin on the street continues to have a relatively high purity level in New York City. However, observations at needle exchange programs would suggest that at least some individuals continue to inject heroin.

According to some street sources, heroin dealers are using sleep medication to cut heroin. Some street contacts report that dealers are also using 80-milligram OxyContin tablets as an adulterant for heroin. As a rule, street heroin sellers offer only one drug, heroin, and in only one size packet (e.g., \$10 bag). Street observers report, however, that in some sections of the city, heroin street sellers are also selling crack. According to one street contact, this is temporary, and it is attributed to a slowdown in heroin sales. Researchers also report that some dealers in Harlem who cater to individuals that “speedball” (take heroin and cocaine simultaneously) sell eight-balls of heroin and cocaine. These sales are usually not conducted on the street; instead, such transactions occur indoors.

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 3). 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.

Other Opiates/Narcotics

Although the numbers are small, ED mentions of hydrocodone/combinations and oxycodone/combinations have shown increases. According to DAWN data, hydrocodone/combinations ED mentions increased from 34 in 1995 to 88 in 2002, an increase of 159 percent. Between 2001 and 2002, however, the number of men-

tions went from 98 to 88. Oxycodone/combinations ED mentions also showed a tremendous increase, from 56 in 2000 to 135 in 2002, an increase of 141 percent. In addition, between 1995 and 2002, oxycodone mentions increased 297 percent (from 34 to 135). Methadone mentions remained stable, with 1,304 ED mentions in 2002 and 1,237 in 2001.

Although street researchers have not observed people hawking OxyContin, they have encountered a number of street buyers asking for OxyContin and claiming that the tablets are selling for \$10 per pill. OxyContin tablets are sometimes said to be crushed and snorted.

Among ME deaths reported by DAWN, the category of narcotic analgesics, which includes all legal and illegal narcotic analgesics and combinations (excluding heroin/morphine), showed a large increase in New York City from 252 in 1998 and 271 in 1999 to 590 in 2000. It should be noted, however, that in 1996 there were 511 such deaths. In 2002, the total increased to 641. (No DAWN mortality data were available for New York City for 2001.) For specific narcotic-type drugs in DAWN ME reports, methadone accounted for 169 deaths in the New York metropolitan area.

According to the SSU, OxyContin sold for \$10 for an 80-milligram tablet.

Marijuana

In New York City, marijuana indicators, which had recently increased steadily and dramatically, appear to be stabilizing (exhibit 5). The total number of marijuana ED mentions increased insignificantly from 2,974 in 1995 to 3,924 in 2002. The rate of marijuana ED mentions in 2002 for the New York City metropolitan area was 47 per 100,000 population, the highest rate in recent years. It equaled the national estimate of 47 per 100,000 population for that year.

Primary marijuana admissions to all treatment programs had been increasing steadily over the past several years. The number increased more than ninefold between 1991 and 2002, from 1,374 to 14,310, the highest annual number (exhibit 5). Although the number fell to 13,471 in 2003, that is still the second highest yearly total for primary marijuana admissions. In the first half of 2004, that number remained stable at 6,746. In 1991, primary marijuana admissions represented less than 5 percent of all treatment admissions; by the first half of 2004, these admissions represented 20 percent of admissions (excluding alcohol-only) to all New York City treatment programs.

Exhibit 6 shows demographic characteristics of primary marijuana admissions to all New York City treatment

programs in the first half of 2004. The vast majority were male (78 percent), and 30 percent were younger than 21. More than one-half (56 percent) were Black, about one-third (32 percent) were Hispanic, and 9 percent were White. Alcohol was the secondary drug of abuse for 38 percent of the marijuana admissions, and almost two-thirds had some criminal justice status (64 percent).

Marijuana is the most abused illicit substance in New York City. 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 Purple Haze, Hydro, and Chocolate. Of these, Purple 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. The generally good quality of the marijuana tends to attract out-of-town buyers/users. A young Hispanic female from New Jersey indicated that she and her friends regularly pool some money together and come into the Washington Heights area or nearby South Bronx to buy 5–8 \$20 bags of marijuana.

Street-level marijuana is sold in \$10 and \$20 amounts, although the \$10 package seems to be on a decline. Although individuals can buy multiple \$20 packets, an individual desiring larger quantities at a discount must go through a house-connection, which requires an introduction from a regular, “trusted” buyer.

According to the SSU, in the Bronx, an ounce of chocolate marijuana sells for \$250–\$300. Purple Haze and Hydro are slightly more expensive, selling for \$325–\$400 per ounce. In Manhattan, Purple Haze and Hydro are more expensive and sell for about \$450–\$480 an ounce. A pound of Purple Haze or Hydro can cost about \$6,000.

The most commonly used packaging method for the sale of marijuana in New York City is the plastic bag. The thumbnail size sells for \$10. There is also a slightly larger size bag that sells for \$20. Previous packaging methods, such as the manila envelope, aluminum foil, and glassine bags, are no longer commonly used because customers are unable to see the product clearly through the package. A recent marketing ploy involved the use of colorful plastic rectangular boxes with covers (size 2”x 1”x 0.75”). These boxes are called “coffins” on the street. A coffin, which contains a mixture of three types of marijuana—Hydro, Purple Haze, and Chocolate—sells for \$20.

Brand names are not typically used in the marketing of marijuana on the street. Customers depend more on the type of marijuana and the face-recognition, i.e., reputation, of the seller.

The majority of marijuana sellers are adolescents and young adults, typically between 16 and 30 years old. The sellers tend to reflect the ethnic makeup of their community. The majority of the street-level sellers tend to be Black or Hispanic males. In more affluent communities, however, the seller is usually White and operates from his home rather than the street. Most of the marijuana sellers are independent sellers. As a result of police pressure, a number of former crack sellers have switched to selling marijuana, which they perceive as a safer activity.

Although the use of marijuana cuts across all social groups, the drug seems to be most popular among adolescents and young adults. According to street observations, the majority of marijuana buyers are Hispanic and Black. This drug, however, also has the greatest number of White buyers, who are also utilizing the same street-selling locations.

Based on field observations, researchers estimate that the mean age of marijuana buyers is 23. Compared to heroin, crack, or cocaine, marijuana users probably have the highest proportion of high school and college students. According to observations by field staff, the majority of buyers are male, but researchers noted a substantial number of lone female buyers. Based on street interviews, the use of marijuana varies from the occasional weekend-only user to the chronic user. A 22-year-old, working, Black female indicated that she smokes one cigar loaded with marijuana a day, each day of the week. She estimates that she spends about \$120–\$140 a week on marijuana. A Hispanic male, chronic smoker claims that he smokes about 10 times a day, everyday of the week. This individual is able to afford his habit because he deals marijuana. The marijuana seller said, “most people would be surprised as to how many people smoke marijuana and how often.”

Currently, the most popular method of smoking marijuana involves the use of a blunt, a hollowed-out cigar, or wrapping the marijuana in cigar leaves and smoking the combined substance. One of the most popular cigars is the vanilla-favored Dutch Master cigar. According to field researchers, a number of marijuana smokers say they prefer the Dutch Master because it is smoother and burns more slowly than either the White Owl or Phillies cigars. It seems the cigar industry is extremely involved in the development of products directly catering to and encouraging young marijuana smoking (for example, grape-flavored cigars).

DAWN ME mentions for marijuana-involved deaths in the New York City metropolitan area numbered 55 in 2002, which was the second highest among CEWG areas. This number represents an increase of 189 percent since 1999.

Adult male arrestees in the ADAM samples for 2003 were much more likely to test positive for marijuana than for any of the other drugs, including cocaine—a change from previous years. Approximately 43.1 percent of male arrestees tested positive for marijuana. Female arrestees were more likely to test positive for marijuana than for opiates, with 36.7 percent of females testing positive for marijuana.

According to National Forensic Laboratory Information System data, 20 percent of the cases for New York City in 2003 (13,266) were related to cannabis.

According to the DEA, marijuana prices can range from \$1,000 to \$2,000 per pound wholesale and from \$3,000 to \$5,000 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.

Stimulants

Although methamphetamine is popular in other parts of the Nation, there were relatively few arrests, ED mentions, deaths, ADAM arrestee positives, or treatment admissions related to the drug in New York City. For example, in 2000, only three methamphetamine deaths were reported in the five boroughs of New York City. No adult arrestees in the 2003 ADAM sample tested positive for the drug. According to a November 2003 report by the Drug Enforcement Administration, 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.” For example, while the total number of methamphetamine ED mentions in 2002 was small (63), it reflected a

174-percent increase from 1995 (23 mentions). Similarly, although methamphetamine treatment admissions have typically represented less than 0.2 percent of all admissions to treatment in New York State, they increased from 336 statewide in 1995 to 807 in 2003. Moreover, the New York State Police reported an increase in clandestine lab incidents in the State, from 2 in 1999 to 73 in 2003. Interestingly, an analysis of lab seizures and treatment admissions shows that there appears to be a strong relationship between methamphetamine treatment admissions and counties where the State Police have shut down methamphetamine labs.

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. There are also indications that the use of methamphetamine has spread and is increasing among the “non gay” club-going crowd and college students. Methamphetamine is also known as Crystal, Tina, Christina, Crank, Ice, speed, and chalk.

Depressants

While some indicators of the nonmedical use of psychoactive prescription drugs (e.g., hospital emergencies, deaths, and treatment admissions) have not been increasing, the SSU continues to report a variety of drugs readily available on the street for \$1 or more per pill.

Alprazolam (Xanax) and clonazepam (Klonopin) ED mentions have been increasing since the mid-1990s, while diazepam (Valium) mentions have been declining. Alprazolam mentions increased 92 percent, from 333 in 1995 to 638 in 2002. Clonazepam mentions increased 182 percent, from 117 in 1995 to 330 in 2002. Moreover, clonazepam mentions increased 48 percent from 2000 to 2002 (from 223 to 330). Conversely, diazepam mentions decreased 58 percent, from 450 in 1995 to 189 in 2002. Diazepam mentions also exhibited recent declines, falling 43 percent between 2000 and 2002 and 32 percent between 2001 and 2002. Lorazepam mentions remained stable, with 143 mentions in 2002. In addition to these specific benzodiazepines, mentions of benzodiazepines not otherwise specified (NOS) increased 620 percent from 73 in 1995 to 526 in 2002. There continue to be few (about 1 percent) treatment admissions with a psychoactive prescription drug as a primary drug of abuse.

Among ME deaths reported by DAWN, benzodiazepine-involved deaths numbered 115 in 2002, a dramatic 858-percent increase from the 12 reported in 1999.

According to the SSU, the three most popular or commonly sold pharmaceuticals on the street in this category are Xanax, Elavil, and Catapres. 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: Xanax, 1-milligram (\$3) and 2-milligram (\$5) tablets; Elavil, 1-milligram (\$1) tablets; and Catapres, 2-milligram (\$1) and 3-milligram (\$2) tablets.

These medications usually come in their original package, typically bottles. The pill sellers generally 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 out the prescription and charges Medicaid. On the street, these pills are sold individually, and no packaging is necessary.

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; some appear to currently be in treatment. 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.

Most of the medications in this category are sold in pill form and taken orally.

Hallucinogens

Overall, the number of PCP ED mentions declined insignificantly from 697 in 1995 to 341 in 2002. The number of mentions in 2001 was 203. Lysergic acid diethylamide (LSD) ED mentions declined significantly from 188 mentions in 1995 to 49 in 2002, a decrease of 74 percent.

In the past few years, PCP-involved deaths have averaged about 6 per year, except for 1995, when 16 such deaths were reported by DAWN. Between 1998 and 1999, PCP-involved deaths increased from 2 to 11.

With regard to ADAM data, 3.9 percent of male arrestees and no female arrestees in New York tested positive for PCP in 2003. The male figure was more than twice that reported for 2002 (1.6 percent).

Some street sources claim that PCP is becoming more readily available in the city. Recently, one street observer was informed that a bodega in the Bronx was selling cocaine laced with PCP. PCP is available in liquid and powdered form. It is also known as angel dust, ozone, wack, and rocket fuel. A cigarette dipped in PCP costs between \$5 and \$20.

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, “raves,” and other special events. Club drugs include methylenedioxymethamphetamine (MDMA), methamphetamine, gamma hydroxybutyrate (GHB), and ketamine. Raves and other 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 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 laboratory conditions used to manufacture these substances are uncertain and potentially dangerous.

According to the SSU, street sources report that MDMA, a stimulant with hallucinogenic properties, is easy to obtain in many areas of the city. Given that ecstasy is beginning to be available to a limited extent in communities of color, the appeal of this drug may be expanding across racial, ethnic, and social class boundaries. MDMA is often called “ecstasy,” “XTC,” Adam, or X, although other substances are often sold as

ecstasy. MDMA ED mentions may be stabilizing. Although ED mentions totaled 24 in 1996 and 172 in 2001, the number of mentions declined insignificantly to 143 in 2002. MDMA is available in tablet, capsule, and powdered form. A dose sells for about \$13 wholesale and \$30 retail.

The number of DAWN deaths involving the category of club drugs (including MDMA, ketamine, GHB, gamma butyrolactone [GBL], and Rohypnol) totaled 19 in 2002. Although this number is small, it shows a large increase from previous years: four in 1999 and five in 2002.

Available as a club drug in New York City, the veterinary anesthetic ketamine produces hallucinogenic effects similar to PCP and visual effects similar to 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. The number of ketamine ED mentions has remained relatively stable for the last few years, numbering 36 in 2002. It is available in club settings and has not been reported on the “street.”

Another club drug of concern is GHB. GHB ED mentions in New York City remain very low. Although not generally available on the street, GHB and the analogs (GBL, BD, GHV, and 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 bottle cap full. A single dose costs about \$20.

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.

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.

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. Sixteen percent of AIDS cases nationwide have been diagnosed in New York City, and 17 percent of AIDS deaths in the United States have occurred in New York City.

According to the New York City Department of Health, a cumulative total of 142,085 adult and pediatric AIDS cases were reported in New York City as of December 31, 2003. Overall, reports show that 84,808 New Yorkers have died of AIDS, representing 60 percent of those who have contracted the disease.

As of December 31, 2003, 88,479 New Yorkers were diagnosed with HIV or AIDS; 31,163 were living with HIV (non-AIDS), and 57,316 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 25 percent 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 2003, 2,394 people with HIV or AIDS died of all causes, and approximately 1,700 deaths were due to HIV/AIDS. In 2002, HIV/AIDS was the leading cause of death in New Yorkers aged 35–44 and the third leading cause in those aged 25–34.

Of the 88,479 PLWHA in New York City as of December 31, 2003, 65 percent were diagnosed with AIDS, and 35 percent were diagnosed with non-AIDS HIV. Sixty-nine percent were male, and 31 percent were female. In terms of race/ethnicity, 44 percent were Black, 32 percent were Hispanic, and 22 percent were White. For transmission risk factors, 27 percent (23,670) were men who have sex with men, 24 percent (21,453) had an injection drug use history, 18 percent reported a heterosexual transmission factor, 3 percent had a perinatal transmission risk factor, 1 percent had a transfusion history, and 28 percent had an unknown risk factor or were under investigation.

In 2003, 4,086 New Yorkers were diagnosed with HIV; 1,029 (25 percent) first learned they were HIV-positive at the time they learned they had already progressed to AIDS.

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 2004,

there were 15,129 newly reported individuals with a diagnosis date (or specimen collection date) in 2003. For 2002, that figure was 13,940.

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Exhibit 1. Semiannual Cocaine Trends for Selected Indicator Data in New York City: 1995–2004

Year	Semiannual/ Annual Periods	Deaths In- volving Cocaine ¹	Cocaine ED Mentions 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			16,114		354
2004	1H			8,208		
	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

²DAWN, OAS, SAMHSA, weighted data, based on a representative sample of hospitals for New York City and Westchester, Rockland, and Putnam Counties

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

Exhibit 2. 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 2004

Demographic Characteristic	Percent Total (N=8,208)	Percent Smoking Crack (n=4,997)	Percent Using Cocaine Intranasally (n=2,914)
Gender			
Male	68	63	75
Female	32	37	25
Age at admission			
25 and younger	6	4	10
26–35	23	20	27
36 and older	71	76	63
(Average age)	(39.3 years)	(40.0 years)	(38.2 years)
Race			
Black	58	68	43
Hispanic	26	19	36
White	14	11	18
No Source of Income ⁴	31	34	26
Some Criminal Justice Status	42	38	48
Readmissions	77	81	70
Age of First Use			
14 and younger	6	4	8
15–19	29	24	35
20–29	43	46	38
30 and older	23	25	19
Secondary Drug of Abuse			
Alcohol	40	42	38
Marijuana	21	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 3. Semiannual Heroin Trends for Selected Indicator Data in New York City: 1995–2004

Year	Semiannual/ Annual Period	Deaths Involving Heroin ¹	Heroin/ Morphine ED Men- tions 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			23,563		(53.5)
2004	1H			11,878		
	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. Prior to 1996, the data include heroin/morphine deaths as well as opiates not specified by type. Beginning with 1996, the data include only heroin/morphine deaths.)

²DAWN, OAS, SAMHSA, weighted data, based on a representative sample of hospitals for New York City and Westchester, Rockland, and Putnam Counties

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 4. 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 2004

Demographic Characteristic	Percent Total (N=11,878)	Percent Using Heroin Intranasally (n=7,192)	Percent Injecting Heroin (n=4,272)
Gender			
Male	75	75	75
Female	25	25	25
Age at Admission			
25 and younger	7	5	10
26–35	22	21	25
36 and older	71	75	65
(Average age)	(40.1 years)	(40.8 years)	(39.1 years)
Race			
Black	26	32	16
Hispanic	53	55	51
White	18	11	30
No Source of Income ⁴	27	28	25
Some Criminal Justice Status	33	36	26
Readmissions	88	87	92
Age of First Use			
14 and younger	12	10	16
15–19	34	31	40
20–29	34	36	32
30 and older	19	23	12
Secondary Drug of Abuse			
Alcohol	13	13	12
Marijuana	8	9	6
Cocaine	38	35	45

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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 5. Semiannual Marijuana Trends for Selected Indicator Data in New York City: 1995–2004

Year	Semiannual/ Annual Period	Marijuana ED Mentions 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		6,746	
	2H			
	Total			

SOURCES: ¹DAWN, OAS, SAMHSA, weighted data, based on a representative sample of hospitals for New York City and Westchester, Rockland, and Putnam Counties

²New York State Office of Alcoholism and Substance Abuse Services (OASAS)-funded and nonfunded treatment admissions

³New York City Police Department

Exhibit 6. Characteristics of Primary Marijuana Admissions¹ to State-Funded² and Nonfunded³ Treatment Programs in New York City, by Percent: 2003

Demographic Characteristic	Percent of Total (N=6,746)
Gender	
Male	78
Female	22
Age at Admission	
20 and younger	30
21–25	26
26–35	27
36 and older	17
(Average Age)	(26.5 years)
Race	
Black	56
Hispanic	32
White	9
No Source of Income ⁴	22
Some Criminal Justice Status	64
Readmissions	54
Age of First Use	
14 and younger	49
15–19	41
20–29	8
30 and older	2
Secondary Drug of Abuse	
Alcohol	38
Cocaine	13

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

Samuel J. Cutler and Marvin F. Levine, M.S.W.¹

ABSTRACT

Indicators remain high for the four major drugs of abuse—cocaine, heroin, alcohol, and marijuana. At the same time, there has been an increase in the number of drugs used in combination and an expansion in the number of different drugs being used. During 2002, 2003, and the first half of 2004, the average number of drugs detected in decedents increased from 2.68 to 3.18 to 3.72 per case. In the first half of 2004, 47 percent of decedents testing positive for heroin also tested positive for cocaine. Also during that period, 75 percent of male cocaine treatment admissions and 87 percent of female cocaine treatment admissions were crack smokers. From 2003 through the first half of 2004, heroin ranked first among primary drug of abuse at admission to treatment. The practice of smoking marijuana and PCP together in a blunt remained popular. PCP has been the fifth most frequently detected drug in decedents over the last 10½ years.

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 represents 12.4 percent of the State's population and a 7-percent increase from the 1990 census count. The 2000 Philadelphia population was 45.0 percent White, 43.2 percent African-American, 4.5 percent Asian, 0.3 percent American Indian and Alaska Native, 4.8 percent other race, and 2.2 percent two or more races. Hispanics (of various races) accounted for an estimated 8.5 percent of the population, and persons age 18 and older accounted for 74.7 percent. The unemployment rate was 6.1 percent for persons age 16 or older, and 49.8 percent of the population was employed.

Data Sources

This report focuses primarily on the city/county of Philadelphia and includes data from the sources shown below. For the purposes of this report, fiscal year (FY) refers to a year starting July 1 and ending the following June 30.

- **Emergency department (ED) drug data** were accessed from the Drug Abuse Warning Network (DAWN) *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 the period January 1, 2004, through June 30, 2004. Thirty-three of the 56 eligible hospitals in the Philadelphia metropolitan area are in the DAWN sample. The number of emergency departments in the sample totals 40. (Some hospitals have more than one ED.) The data are incomplete. Over the 6-month period, between 25 and 27 EDs reported to DAWN each month. All DAWN cases are reviewed for quality control. Based on the review, cases may be corrected or deleted. Therefore, data presented in this paper are subject to change. The data were generated on January 14, 2005, and only include cases classified as *Seeking Detox, Overmedication, or 'Other'* (which includes cases related to recreational use, drug abuse, drug dependence, withdrawal, and misuse). The data 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 unweighted data cannot be used as estimates for the Philadelphia area. They cannot be compared with data from 2002 or before, nor can these 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 DAWN can be found at the DAWN Web site <<http://dawninfo.samhsa.gov>>.

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- **Treatment admissions data** for programs in Philadelphia County were provided by the Pennsylvania Department of Health, Client Information System, for January 1, 1998, through June 30, 2004. Data for FY 2004 are preliminary and subject to revision because of the treatment-reporting schedule, which results in frequent delays between a treatment admission and the reporting of that event.
- **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, 2004. (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.) Mortality cases with positive toxicology reports for alcohol are only reported in combination with one or more other drugs.
- **Arrestee urinalysis data** for booked adults were derived from reports from the First Judicial District of Pennsylvania, Adult Probation/Parole Department, for the period January 1, 2004, through June 30, 2004.
- **Drug price** information was provided by the National Drug Intelligence Center for the period January 1, 2004, through June 30, 2004.
- **Heroin purity data** were provided by the Drug Enforcement Administration (DEA), Domestic Monitor Program (DMP), through the first half of 2004.
- **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 June 30, 2004.
- **Population and demographic data** describing the City of Philadelphia emanated from the U.S. Census Bureau.

In addition to these sources, this report draws on focus group and key informant discussions with former drug users currently enrolled in treatment programs, as well as outreach workers assigned to homeless populations, substance abusers, persons with human immunodeficiency virus (HIV) infection, and law enforcement officials.

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 2003 and in the first half of 2004, 92 percent of people entering treatment identified one of these drugs as their primary drug of abuse.

Preliminary unweighted data accessed from DAWN *Live!* for the first half of 2004 showed 11,251 total drug reports and 6,538 total cases. Of these, 75 percent of drug reports ($n=8,428$) and 72 percent of the cases ($n=4,675$) were categorized as "seeking detox," "overmedication," or "other" as the reason for the hospital emergency department visit. Within these three case types, the average number of drug reports was 1.80 per hospital ED episode. Of the 8,428 drug reports, 66 percent ($n=5,555$) were classified as "major substances of abuse. A subset ($n=5,270$) included the total reports of the four major drugs of abuse in Philadelphia: cocaine ($n=2,034$), alcohol ($n=1,468$), heroin ($n=1,030$), and marijuana ($n=738$) (exhibit 1).

In the first half of 2004, the average number of drugs detected in decedents by the ME (3.72) was the highest on record (exhibit 2). The average over the previous 10-year period (1994 to 2003) was 2.43 drugs per case. The number of mortality cases with positive toxicology reports in 2003 (841) was the highest on record, going back to at least 1970. With the number of mortality cases totaling 469 in the first half of 2004, the number of cases in 2004 might exceed the 2003 record. Of the 469 deaths in the first half of 2004, adverse reaction to drugs accounted for 32.4 percent, overdose represented 8.5 percent, violence accounted for 24.1 percent, and "other causes" constituted 35.0 percent (exhibit 3).

In the first half of 2004, African-American male decedents ($n=154$) outnumbered White male decedents (149), while White females (63) outnumbered African-American females (61). The remaining 42 deaths were among Hispanics and Asian Americans. Overall, African-Americans accounted for 45.8 percent of

the deaths, while Whites constituted 45.2 percent, Hispanics represented 8.1 percent, and Asians accounted for 0.9 percent.

Urinalysis data of booked arrestees from Philadelphia's Adult Probation/Parole Department (APPD) in the first half of 2004 showed that 39.8 percent ($n=10,025$) of the 25,178 tested arrestees in the sample were positive for at least 1 drug.

The Pennsylvania Client Information System is limited to the identification of a maximum of three substances as drugs of abuse at treatment intake. The highest average number of drugs of abuse identified at admission to treatment occurred in the first half of 1999 (2.06). In 2002, the average was 1.45 drugs of abuse, compared with 1.74 in 2003 and 1.69 in the first half of 2004.

Cocaine/Crack

Cocaine/crack remains the major drug of abuse in Philadelphia. Cocaine mentions in hospital emergency departments ranked first among all drugs in cases categorized as "seeking detox," "overmedication," or "other" in the unweighted data accessed from DAWN *Live!* in the first half of 2004 ($n=2,034$) (exhibit 1). Among these patients, 65 percent were male, 58 percent were African-American, 35 percent were White, 5 percent were Hispanic, and 2 percent were not specified. Thirty-five to 44-year-olds represented the plurality of patients at 38 percent. The second largest group was 45–54-year-olds, accounting for 18 percent. An aging cocaine-using population continues to appear in the consequence data.

ME data show that the proportion of cases with cocaine present was 46 percent in 2002, 39 percent in 2003, and 44 percent in the first half of 2004 (exhibit 2). Cocaine was detected in 3,163 decedents from January 1994 through June 2004, more than any other drug appearing in the toxicology reports. The average age of mortality cases with positive toxicology reports for cocaine was 39 years.

At least one other drug was detected in 83 percent of cocaine-positive cases in 2001 and 2002 and 85 percent in 2003 and in the first half of 2004.

The preliminary treatment data for 2003 show that cocaine, as a primary drug, accounted for 25.8 percent of all treatment admissions, the same as in 2001 (exhibit 4). In 2003, cocaine was mentioned by an additional 15.9 percent as a secondary drug and by 2.8 percent as a tertiary drug. In the first half of 2004, cocaine accounted for 25.3 percent of all primary drug mentions and was mentioned by an additional 13.8 percent as a secondary drug and 2.7 percent as a

tertiary drug. Cocaine treatment admissions peaked in 1991, at 63 percent of all primary drugs mentioned at admission to treatment.

In 2003 and in the first half of 2004, males accounted for 59 percent and 63 percent of primary cocaine drug treatment admissions, respectively (exhibit 5). During these time periods, African-Americans accounted for 79 and 80 percent of primary cocaine treatment admissions, respectively, followed by Whites (16 and 15 percent), Hispanics (4 and 4 percent), and Asians and others (1 and 1 percent). Among primary cocaine treatment admissions in 2003, the average number of drugs of abuse noted upon entering treatment was 1.85; in the first half of 2004, the average was 1.81.

Since 2000, an average of 82 percent of the primary cocaine admissions reported smoking the drug, 15.1 percent reported intranasal use, 1.5 percent reported injecting, and 1.2 percent reported administering the drug through other/unknown routes (exhibit 5). Since the first half of 1990, at least 79 percent of cocaine treatment admissions have reported smoking the drug. Of all male cocaine admissions in 2003 and the first half of 2004, 77 and 75 percent, respectively, reported smoking the drug; the comparable figures for females were 86 and 87 percent.

Urinalysis data of booked arrestees from Philadelphia's APPD in the first half of 2004 showed that 13.5 percent ($n=3,408$) of the 25,178 tested arrestees in the sample were positive for cocaine or cocaine metabolites. Cocaine was the second most frequently detected drug behind marijuana.

The predominant form of crack sold in Philadelphia is the "rock," which costs \$5. The \$5 rock ranged in size from 6 to 9 millimeters from 1996 until 2002. Since then, the size of the \$5 rock was reduced to 5–6 millimeters. Treys (\$3 rocks) ranged in size from 3 to 5 millimeters since 1996, but they were reduced to 3 to 4 millimeters from the latter half of 2002 through the autumn of 2004. 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. According to the National Drug Intelligence Center, the retail/street-level cocaine prices ranged from \$3 to \$20 per rock of crack and from \$28 to \$125 per gram of powdered cocaine in the first half of 2004.

Focus group participants from the spring of 2003 through the autumn of 2004 estimated that about 62 percent of powder cocaine buys are for intranasal use, 19 percent are injected straight, and 19 percent are

injected in a “speedball.” These estimates were very similar to the focus group responses throughout 2002.

In the autumn of 2004, crack users continued to report frequent use in combination with 40-ounce bottles of malt liquor, beer, wine, or other drugs, including alprazolam (Xanax), marijuana, or heroin. Powder cocaine, cigarettes, and methamphetamine were less frequently mentioned as drugs used with crack.

Heroin/Morphine

According to the Drug Enforcement Administration’s Domestic Monitor Program, the average street-level purity of heroin in Philadelphia was 71.0 percent in 2001, 66.3 percent in 2002, 59.6 percent in 2003, and 53.0 percent in the first half of 2004 (based on only 70 percent of the samples analyzed). The authors pose that a possible explanation for the aforementioned increase in the average number of drugs in mortality and hospital emergency departments since 2001 is the decreasing potency of the heroin available at the retail/street level. With lower heroin purity, users may perceive a need for more drugs to achieve the desired effect.

Unweighted data accessed from DAWN *Live!* show that heroin reports in hospital emergency departments ranked third (behind cocaine and alcohol) among all drugs in cases categorized as “seeking detox,” “over-medication,” or “other” in the first half of 2004 ($n=1,030$) (exhibit 1). Among these patients, 65 percent were male, 65 percent were White, 23 percent were African-American, 9 percent were Hispanic, and 3 percent were not specified. Thirty-five to 44-year-olds represented the plurality of these patients with 24 percent. The second largest group was 25–29-year-olds, accounting for 19 percent.

Heroin was detected in 2,947 decedents from 1994 through June 2004, making it the second most commonly detected drug in decedents (exhibit 2). For the 4-year period 1999 through 2002, positive heroin toxicology reports occurred in 47 percent of all deaths with the presence of drugs. In 2003 and the first half of 2004, heroin was detected in only 25 and 27 percent, respectively, of all decedents with drug-positive toxicology reports.

From 2000 through 2002, heroin alone was identified in 14, 11, and 10 percent of the respective heroin toxicology reports. In 2003 and the first half of 2004, heroin alone was identified in 7 and 2 percent, respectively, of the heroin toxicology reports. The combination of heroin and cocaine was detected in 20, 19, and 17 percent of all decedents, respectively, from 2000

through 2002, and only 10 percent of drug-positive toxicology reports in 2003. Cocaine was detected in 47 percent of heroin toxicology reports in the first half of 2004.

In 2003 and the first half of 2004, heroin treatment admissions ranked highest of all drugs mentioned as a primary drug of abuse (exhibit 4). Heroin admissions accounted for 22 percent of all admissions in 2002, 27 percent in 2003, and 28 percent in the first half of 2004. During 2003, 66 percent of all treatment admissions for heroin, illegal methadone, and other opiates were male; in the first half of 2004, 65 percent were male (exhibit 6). In the first half of 2004, 62 percent were White, 25 percent were African-American, 11 percent were Hispanic, and 2 percent were Asian/other. Individuals who identified heroin as the primary drug of abuse in 2003 used an average of 1.63 drugs; in the first half of 2004, the average was 1.61.

As depicted in exhibit 6, the preferred routes of administration for heroin, illegal methadone, and other opiates have been relatively stable among treatment admissions. Within the “swallowed” route, the increasing numbers that began in 2001 reveal that users of pharmaceutically produced synthetic opiates entered treatment.

Heroin treatment admissions data from the second half of 1997 through the first half of 2004 revealed that there was a slow, but steady decline in the percent of heroin injectors entering treatment. It was determined that the injection percentages were influenced by an influx of relatively new users who entered treatment for the first time prior to converting to injection from intranasal use, which is characteristic of new users. However, most heroin users make the conversion to injecting prior to entering treatment for the first time.

Urinalysis data of booked arrestees from Philadelphia’s APPD in the first half of 2004 showed that 6.6 percent ($n=1,655$) of the 25,178 tested arrestees in the sample were positive for opiates. Opiates were the third most frequently detected drugs behind marijuana and cocaine.

Key informants continued to report that the \$10 bag of heroin remained the standard unit of purchase. The \$10 bag usually yields one hit; \$5 and \$20 bags reportedly remain available. According to the National Drug Intelligence Center, the retail/street-level price for heroin was \$10–\$20 per bag, \$180–\$250 per bundle, and \$65–\$300 per gram in the first half of 2004.

Focus group participants in 2004 reported that the average age of new users is 20. All groups since autumn

2000 reported that the average heroin user injects the drug four or five times per day.

Narcotic Analgesics

Oxycodone

The use of oxycodone products, including OxyContin, Percocet/Percodan, Roxicet, and Tylox, continues to appear problematic in Philadelphia.

Oxycodone reports in hospital emergency departments ranked first among all narcotic analgesics in the unweighted data accessed from DAWN *Live!* for the first half of 2004 ($n=400$). Among these cases, the plurality of cases were classified as “overmedication.”

Oxycodone was detected in 369 decedents from 1994 through the first half of 2004 (the ninth most frequently detected drug during that time period) (exhibit 2). Detections of oxycodone have been rapidly increasing since 2000. In 2003, oxycodone was present in 9.6 percent of all drug-positive deaths; in the first half of 2004, oxycodone was present in 10.9 percent of drug-positive mortality cases.

Focus group participants since spring 2002 reported the spread of oxycodone use to all racial/ethnic groups, with an age range of mid-teens to 40, with the largest user group being people in their twenties.

Hydrocodone

In the unweighted data accessed from DAWN *Live!*, hydrocodone ED reports ranked second among all narcotic analgesics in the first half of 2004 ($n=69$). Among these cases, the plurality of cases were classified as “seeking detox.”

The presence of hydrocodone in mortality cases has also increased. There were 40 positive toxicology ME reports for hydrocodone in 2003, 23 reports in the first half of 2004, and a total of 211 cases in the 10½ -year period from 1994 through June 2004. Hydrocodone detections now rank 14th among all deaths with positive toxicology reports.

Opioid Analgesics

Fentanyl

In the spring of 2004, the Pennsylvania State Attorney General’s Office issued information about the diversion and nonmedical use of fentanyl citrate. In particular, Actiq lozenges were cited as being sold on the streets of Philadelphia for \$20 each. Actiq contains fentanyl citrate and is indicated for patients who

continue to experience pain while being treated with synthetic opiates. Actiq resembles a lollipop, as the medication lozenge is at the end of a small stick and it is used by rubbing against the inside soft tissue of the mouth. Locally, users call it “Perca-pop” or “Narco-pop.” From 1994 through 2003, the ME recorded 35 deaths with the presence of fentanyl. Of these, seven occurred in the first half of 2003, and nine occurred in the second half of 2003. There were 14 additional mortality cases with positive toxicology reports for fentanyl in the spring of 2004, the period of the State Attorney General’s announcement.

Marijuana

Marijuana continued to be readily available and widely used in Philadelphia in the first half of 2004. Unweighted data from DAWN *Live!* show that marijuana reports in hospital emergency departments ranked fourth (behind cocaine, alcohol, and heroin) among all drugs in cases categorized as “seeking detox,” “overmedication,” or “other” in the first half of 2004 ($n=738$) (exhibit 1). Among these patients, 64 percent were male, 47 percent were African-American, 45 percent were White, 4 percent were Hispanic, and 4 percent were not specified. Twenty-one to 24-year-olds accounted for the plurality of patients with 18 percent. The second largest group was 35–44-year-olds, representing 17 percent.

The proportion of clients who cited marijuana as the primary drug of abuse upon entering treatment was 17 percent in 2003 and the first half of 2004 (exhibit 4). Among all admissions in 2003 and the first half of 2004, marijuana was mentioned by an additional 10 percent as a secondary drug. During the same time periods, marijuana was mentioned as a tertiary drug by 7 percent and 6 percent, respectively. In 2003, among primary marijuana admissions, males accounted for 78 percent; African-Americans accounted for 63 percent, Whites accounted for 21 percent, Hispanics accounted for 13 percent, and Asians and others accounted for 3 percent. In the first half of 2004, the comparable figures were 78 percent male, 63 percent African-American, 24 percent White, 10 percent Hispanic, and 2 percent Asian and other. Among primary marijuana treatment admissions in 2003, the average number of drugs of abuse noted upon entering treatment was 1.63. The average in the first half of 2004 was 1.65.

Urinalysis data of booked arrestees from Philadelphia’s APPD in the first half of 2004 showed that 18.3 percent ($n=4,610$) of the 25,178 tested arrestees in the sample were positive for marijuana or marijuana metabolites. Marijuana was the most frequently detected drug by APPD.

Key informants continue to report the widespread and increasing use of blunts, especially utilizing flavored cigars. The combination of marijuana and PCP continues to be frequently reported. Blunts laced with crack (called “Turbo”) are still common, but less so than the marijuana/PCP combination. 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.

According to the National Drug Intelligence Center, the retail/street-level prices per bag of marijuana ranged from \$5 to \$35 in the first half of 2004.

Phencyclidine (PCP)

PCP began to gain popularity as an additive to blunts in 1994, and its use has increased since 2000. Users describe its effects as making them hallucinate and feel “invincible,” “crazy,” “numb,” or “violent.”

In the unweighted data from *DAWN Live!*, there were 129 reports of PCP among cases categorized as “seeking detox” ($n=14$), “suicide attempt” ($n=9$), or “other” ($n=115$) in the first half of 2004 (exhibit 1).

PCP was detected in 441 decedents from 1994 through the first half of 2004, making it the fifth most frequently detected drug during that time period, behind cocaine, heroin/morphine, alcohol-in-combination, and diazepam (exhibit 2).

In 2003, PCP was mentioned as a primary, secondary, or tertiary drug by 4.3 percent of all treatment admissions. The average number of drugs of abuse mentioned by primary PCP treatment admissions was 1.92. In the first half of 2004, PCP was mentioned as primary, secondary, or tertiary drug in 4.6 percent of all admissions, and the average number of drugs of abuse mentioned by primary PCP treatment admissions was 1.89.

Urinalysis data of booked arrestees from Philadelphia’s APPD in the first half of 2004 showed that 4.1 percent ($n=1,023$) of the 25,178 tested arrestees in the sample were positive for PCP, making this drug the sixth most frequently detected drug by APPD.

PCP remains readily available. It is more commonly found on mint leaves for use in lacing blunts or for rolling and smoking. Additionally, some users prefer PCP in liquid form that is used by applying the drug

to cigarettes. This method is referred to as “sherm” or “dip sticks.”

Benzodiazepines

Benzodiazepines, particularly alprazolam (Xanax) and diazepam (Valium), continue to be used in combination with other drugs.

There were 1,015 reports of benzodiazepines in the unweighted data from *DAWN Live!* for the first half of 2004. The leading case types for this class of drugs were “overmedication” ($n=361$), “other” ($n=350$), “suicide attempt” ($n=138$), and “seeking detox” ($n=135$).

Diazepam, having been detected by the ME in 559 decedents from 1994 through the first half of 2004, ranks fourth among drugs present in mortality cases in Philadelphia (exhibit 2). While users new to treatment report that diazepam has become less popular in recent years, alprazolam use has increased. Alprazolam tied for the 12th most frequently detected drug among decedents by the Philadelphia ME ($n=244$) from 1994 through the first half of 2004, including 31 cases in the lattermost half-year.

Treatment admission reports for 2003 and the first half of 2004 show benzodiazepines as primary drugs of abuse in 67 and 19 cases, respectively (exhibit 4); these drugs were reported as secondary or tertiary drugs of abuse in 382 additional cases in 2003 and 172 additional cases in the first half of 2004. Most of the reports of benzodiazepines as secondary or tertiary drugs of choice indicated that heroin was the primary drug. Those who reported using benzodiazepines as their primary drugs of abuse used an average of 2.0 drugs in 2003 and 1.63 drugs in the first half of 2004. 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.

Deaths with the presence of oxazepam (Serax) have been increasing. There were 16 positive toxicology reports for oxazepam in 2003 and 24 in the first half of 2004 (exhibit 2). In the 10½-year period, 1994 through mid-2004, 153 mortality cases tested positive for this drug, making oxazepam the 19th most frequently detected drug.

Deaths with the presence of olanzapine (Zyprexa) have been increasing. In 2003, there were 43 positive toxicology reports for olanzapine, and there were 18 in the first half of 2004. In the 10½-year period, 1994 through mid-2004, 137 mortality cases tested positive

for this drug, making olanzapine the 22nd most frequently detected drug.

Urinalysis data of booked arrestees from Philadelphia's APPD in the first half of 2004 showed that 6 percent ($n=1,507$) of the 25,178 tested arrestees in the sample were positive for benzodiazepines, making this class of drugs the fourth most frequently detected drug by APPD.

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 in the first half of 2004 (not already discussed) included diphenhydramine ($n=74$), codeine ($n=62$), and methadone ($n=57$) (exhibit 2). With 435 detections from 1994 through the first half of 2004, codeine ranked as the sixth most frequently detected drug during that period. Methadone ranked seventh ($n=404$) and diphenhydramine ranked eighth ($n=392$). Regarding codeine and diphenhydramine, each of which 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.

Deaths with the presence of fluoxetine (Prozac) began to increase in the late 1990s. With 171 positive toxicology reports for fluoxetine from 1994 through the first half of 2004, fluoxetine ranked as the 17th most frequently detected drug.

Dextromethorphan is a common ingredient in numerous cough and cold medications. Key informants indicated that its use is increasing among people age 30–40, particularly in combination with alprazolam and diazepam. The Philadelphia ME detected dextromethorphan in 40 cases in 2003 and in an additional 35 cases in the first half of 2004. There were a total of 122 dextromethorphan-positive cases from 1994 through mid-2004, thus ranking dextromethorphan as the 25th most frequently detected drug.

Quetiapine (Seroquel), an antipsychotic, has only been on the market for 3–4 years. Twenty of the total 46 quetiapine detections by the ME occurred in 2003, and an additional 13 detections were made in the first half of 2004.

Methamphetamine/Amphetamines

Methamphetamine and amphetamines remain a relatively minor problem in Philadelphia. The prelimi-

nary unweighted data accessed from DAWN *Live!* for the first half of 2004 reveal only 19 methamphetamine reports; 16 were categorized as “other” and 3 as “seeking detox” (exhibit 1). Amphetamine reports totaled 52, of which 38 were in the “other” category, 5 were “overmedication,” 4 each were “suicide attempt” and “seeking detox,” and one was in the “malicious poisoning” case type.

There were 90 deaths with the presence of methamphetamine (ranked 31st) from 1994 through mid-2004 and 81 deaths with the presence of amphetamine (ranked 34th) during that same period.

Annual treatment admissions for methamphetamine/amphetamines as the primary drug of abuse from 1998 to 2003 were 31, 33, 27, 83, 67, and 33, respectively (exhibit 4). There were 33 such admissions in the first half of 2004. Methamphetamine/amphetamines are rarely identified as a secondary or tertiary drug of choice among treatment admissions in Philadelphia.

Urinalysis data of booked arrestees from Philadelphia's APPD in the first half of 2004 showed that 0.2 percent ($n=53$) of the 25,178 tested arrestees in the sample were positive for methamphetamines or amphetamines. This was the lowest result in the APPD data.

According to the National Drug Intelligence Center, the retail/street-level price of methamphetamine was \$100 per gram in the first half of 2004.

Key informants, for the first time, indicated a growing popularity of methamphetamine among men who have sex with men. Methamphetamine continues to be reported as difficult to obtain, not usually sold outdoors, and requiring a connection; reportedly, however, use has increased since 2001.

Club Drugs

There has been relatively little consequence data for methylenedioxymethamphetamine (MDMA). The preliminary unweighted DAWN *Live!* data for the first half of 2004 revealed only 40 reports for MDMA in cases categorized as “seeking detox,” “overmedication,” or “other.”

MDMA was present in 6 mortality cases in 1999 (the first year this drug was detected by the ME) and in a total of 42 from 1999 through the first half of 2004.

MDMA is reportedly used in combination with marijuana and lysergic acid diethylamide (LSD), which, along with its users generally ranging in age from

teens to persons in their early twenties, helps describe its use among club-goers.

According to the National Drug Intelligence Center, the retail/street-level price per MDMA tablet ranged from \$9 to \$35 in the first half of 2004.

The Philadelphia ME first detected methylenedioxy-amphetamine (MDA) in the second half of 1999. There have been 30 positive toxicology reports for MDA through the first half of 2004, including 6 cases in the first half of 2004.

Ketamine was first detected in decedents in Philadelphia in 1996; it was detected in four decedents in 2000, four in 2001, two in 2002, three in 2003, and in only one decedent in the first half of 2004. It is not reported as widely available, and it is difficult to obtain.

Gamma hydroxybutyrate (GHB) reports totaled only nine in the unweighted DAWN *Live!* data in the first half of 2004. There is almost no familiarity of GHB reported by focus group participants. The Philadelphia ME does not test for GHB because it is produced naturally as the body decomposes.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

As of June 30, 2004, Philadelphia recorded 17,028 cumulative AIDS cases among adults (exhibit 7). Among those cases, 6,121 involved injection drug users (IDUs) (needle-sharers). Another 885 were in the dual exposure category of IDUs who were also men who had (unprotected) sex with other men (MSM).

Cases reported with (unprotected) heterosexual contact as a risk factor continued to exceed the historical average. Heterosexual contact was the identified exposure category in 19.3 percent of all AIDS cases reported through June 30, 2004. In the year ending June 30, 2004, heterosexual contact accounted for the plurality of cases (42.7 percent) for the fourth consecutive time.

The mortality of AIDS cases as of June 30, 2004, was as follows:

- United States—57.3 percent
- Pennsylvania—51.4 percent
- Philadelphia County—48.9 percent

For inquiries concerning this report, please contact Samuel Cutler, City of Philadelphia, Office of Behavioral Health/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) 685-5427, E-mail: <sam.cutler@phila.gov>.

Exhibit 1. DAWN Hospital Emergency Department Cases, Seeking Detox, Overmedication, or Other¹ (Unweighted²): January through June 2004

Major Drugs of Abuse (N=)	Jan. (887)	Feb. (810)	Mar. (1,015)	Apr. (978)	May (1,059)	June (806)	Total (5,555)
Cocaine	323	284	375	327	409	316	2,034
Alcohol	244	205	262	239	297	221	1,468
Heroin	153	156	187	218	172	144	1,030
Marijuana	121	116	121	136	137	107	738
PCP	17	29	34	19	20	10	129
Amphetamines	8	7	11	8	11	2	47
MDMA	8	7	7	11	5	2	40
Methamphetamine	4	3	8	3	1	0	19
GHB	2	0	2	3	2	0	9
LSD	2	0	2	2	1	0	7
Miscellaneous Hallucinogens	2	1	0	8	1	1	13
Inhalants	0	1	2	1	1	0	5
Combinations NTA ³	3	1	4	3	2	3	16

¹Includes cases related to recreational use, abuse, dependence, withdrawal, and misuse. These data represent 74.9 percent of all cases.

²The unweighted data are from 25–27 Philadelphia 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.

³NTA=Not tabulated above.

SOURCE: *DAWN LIVE!*, OAS, SAMHSA, updated 1/14/2005

Exhibit 2. Annual Mortality Cases in Philadelphia with the Presence of the 20 Most Frequently Detected Drugs by the Medical Examiner: 1994–First Half 2004

ME-Identified Drugs	Year											Total
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	1H 2004	
1. Cocaine	368	336	277	304	218	238	321	300	270	326	205	3,163
2. Heroin/Morphine	262	318	290	336	249	236	332	316	275	208	125	2,947
3. Alcohol-in-Combination	253	254	182	214	157	179	197	185	153	290	88	2,152
4. Diazepam	69	44	35	58	39	67	46	56	28	66	51	559
5. Phencyclidine (PCP)	46	44	29	46	19	35	48	45	51	58	20	441
6. Codeine	34	39	19	20	3	15	19	45	57	120	62	435
7. Methadone	23	12	26	24	10	36	36	46	55	79	57	404
8. Diphenhydramine	19	13	5	4	9	25	33	53	42	116	74	392
9. Oxycodone	4	2	1	14	29	17	49	53	68	81	51	369
10. Propoxyphene	30	30	27	32	21	22	40	43	31	41	17	334
11. Nortriptylene	14	11	15	18	24	29	20	32	32	50	20	265
(tie) 12. Alprazolam	24	8	17	18	19	8	16	31	27	45	31	244
(tie) 12. Amitriptylene	11	14	13	16	21	23	20	24	35	48	19	244
14. Hydrocodone	6	1	9	8	15	13	27	38	31	40	23	211
15. Temazepam	10	4	21	30	20	18	18	23	11	30	22	207
16. Doxepin	23	8	16	6	16	29	19	18	19	21	14	189
17. Fluoxetine	4	7	9	10	24	14	23	27	13	28	12	171
18. Phenobarbital	18	17	15	4	10	10	18	26	5	18	19	160
19. Oxazepam	5	3	9	26	19	11	12	17	11	16	24	153
20. Ibuprofen	2	1	0	2	1	7	8	18	10	53	41	143
Total Drugs Mentioned	1,346	1,245	1,121	1,282	1,039	1,232	1,637	1,857	1,589	2,672	1,746	16,766
Total Mortality Cases	617	632	565	592	484	533	675	660	593	841	469	6,661
Average Number of Drugs Per Death	2.18	1.97	1.98	2.17	2.15	2.31	2.43	2.81	2.68	3.18	3.72	2.52

SOURCE: Philadelphia Medical Examiner's Office

Exhibit 3. Causes of Annual Mortality Cases in Philadelphia, as Determined by the Medical Examiner, by Percent: 1998–First Half 2004

ME-Identified Cause	1998	1999	2000	2001	2002	2003	1H 2004
Adverse Effect of Drugs	60.6	55.7	56.6	56.4	57.7	30.4	32.4
Overdose	3.7	3.8	2.1	3.8	2.5	6.3	8.5
Violence by Another Person	10.7	9.6	13.0	10.0	11.6	17.2	15.8
Violence to Oneself	7.2	6.6	5.6	6.2	5.6	10.5	8.3
Other Causes ¹	17.8	24.3	22.7	23.6	22.6	35.6	35.0

¹Other Causes include 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. Treatment Admissions by Primary Drug of Abuse in Philadelphia: 1998–First Half 2004

Primary Drug	1998	1999	2000	2001	2002	2003 ¹	1H 2004 ¹
Cocaine	1,942	2,232	2,497	2,996	3,649	2,223	980
Alcohol	1,477	1,943	1,826	2,366	3,425	1,893	809
Heroin	872	2,272	2,041	4,279	2,679	2,345	1,105
Other Opiates	48	46	73	92	187	174	78
Marijuana	791	862	910	1,428	2,025	1,445	663
PCP	32	49	43	74	188	141	70
Other Hallucinogens	9	9	7	12	12	7	5
Methamphetamine/ Amphetamines	31	33	27	83	67	33	19
Benzodiazepines	32	46	37	89	66	67	19
Other Tranquilizers	6	4	8	1	3	3	2
Barbiturates	13	8	3	8	23	13	11
Other Sedatives/Hypnotics	13	18	16	36	19	20	6
Inhalants	2	0	4	1	0	0	0
Over-the-Counter	7	24	5	2	2	4	3
Other (Not Listed)	17	1	60	154	111	253	110
Total	5,292	7,547	7,557	11,621	12,456	8,621	3,880

¹Data for these time periods are preliminary and subject to revision.
SOURCE: Pennsylvania Department of Health, Client Information System

Exhibit 5. Cocaine Treatment Admissions in Philadelphia by Route of Administration and Gender: 2000–First Half 2004

Route of Administration and Gender	2000		2001		2002		2003 ¹		1H 2004 ¹	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Smoked										
Male	1,112	(44.5)	1,377	(46.0)	1,802	(49.4)	1,014	(45.6)	459	(46.8)
Female	1,002	(40.1)	1,039	(34.7)	1,212	(33.2)	785	(35.3)	321	(32.8)
Intranasal										
Male	198	(7.9)	371	(12.4)	384	(10.5)	256	(11.5)	135	(13.8)
Female	104	(4.2)	140	(4.7)	139	(3.8)	105	(4.7)	37	(3.8)
Injected										
Male	38	(1.5)	30	(1.0)	28	(0.8)	37	(1.7)	12	(1.2)
Female	12	(0.5)	14	(0.5)	8	(0.2)	8	(0.4)	4	(0.4)
Other/Unknown										
Male	16	(0.6)	18	(0.6)	71	(1.9)	8	(0.4)	7	(0.7)
Female	15	(0.6)	7	(0.2)	5	(0.1)	10	(0.4)	5	(0.5)
Total Male	1,364	(54.6)	1,796	(59.9)	2,285	(62.6)	1,316	(59.2)	613	(62.6)
Total Female	1,133	(45.4)	1,200	(40.1)	1,364	(37.4)	908	(40.8)	367	(37.4)
Total	2,497		2,996		3,649		2,223		980	

¹Data for these time periods are preliminary and subject to revision.
SOURCE: Pennsylvania Department of Health, Client Information System

Exhibit 6. Heroin, Illegal Methadone, and Other Opiate Treatment Admissions in Philadelphia by Route of Administration and Gender: 2000–First Half 2004

Route of Administration and Gender	2000		2001		2002		2003 ¹		1H 2004 ¹	
	No.	(%)	No.	(%)	No.	No.	No.	(%)	No.	(%)
Injected										
Male	870	(41.2)	1,917	(43.9)	1,219	(42.5)	974	(38.7)	431	(36.4)
Female	408	(19.3)	805	(18.4)	541	(18.9)	519	(20.6)	228	(19.3)
Intranasal										
Male	411	(19.4)	733	(16.8)	564	(19.7)	479	(19.0)	225	(19.0)
Female	266	(12.6)	577	(13.2)	260	(9.1)	247	(9.8)	113	(9.6)
Swallowed										
Male	45	(2.1)	99	(2.3)	114	(4.0)	113	(4.5)	40	(3.4)
Female	42	(2.0)	55	(1.3)	66	(2.3)	64	(2.5)	31	(2.6)
Smoked										
Male	37	(1.8)	63	(1.4)	44	(1.5)	35	(1.4)	12	(1.0)
Female	11	(0.5)	40	(0.9)	17	(0.6)	15	(0.6)	7	(0.6)
Other/Unknown										
Male	13	(0.6)	49	(1.1)	32	(1.1)	48	(1.9)	59	(5.0)
Female	11	(0.5)	33	(0.8)	9	(0.3)	25	(1.0)	37	(3.1)
Total Male	1,376	(65.1)	2,861	(65.5)	1,973	(68.8)	1,649	(65.5)	767	(64.8)
Total Female	738	(34.9)	1,510	(34.5)	893	(31.2)	870	(34.5)	416	(35.2)
Total	2,114		4,371		2,866		2,519		1,183	

¹Data for these time periods are preliminary and subject to revision.
SOURCE: Pennsylvania Department of Health, Client Information System

Exhibit 7. Adult AIDS Cases in Philadelphia by Exposure Category: Fiscal Year 2004 and Cumulative Totals Through June 30, 2004

Exposure Category	July 1, 2003, to June 30, 2004		November 1, 1981, to June 30, 2004	
	Number	Percent	Number	Percent
IDU	294	(29.5)	6,121	(35.9)
MSM and IDU	21	(2.1)	885	(5.2)
MSM	252	(25.3)	6,435	(37.8)
Heterosexual Contact	426	(42.7)	3,282	(19.3)
Blood Products	3	(0.3)	92	(0.5)
No Identified Risk Factor	1	(0.1)	213	(1.3)
Total Adult Cases	997	(100.0)	17,028	(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

During fiscal year 2004, 36,375 adults and children received treatment in the Arizona Department of Health Services behavioral health system for substance use, abuse, or dependence. Of this total, 66 percent were served through the AHCCCS (Medicaid) program. Cocaine/crack cocaine continues to be readily available in Phoenix. A new strain of coca plant has reportedly been developed that will yield up to four times more cocaine. Law enforcement agencies report an increase in the demand for heroin the last two quarters. Heroin purity ranged from 42 to 85 percent. With higher purities, some users may now snort or smoke the purer form of heroin. Prices for most quantities of heroin decreased during the last two quarters. Law enforcement continues to investigate Internet pharmacies and physicians. Marijuana continues to be widely available throughout Arizona. In FY 2004, 21 percent of Arizona treatment admissions were for methamphetamine use/abuse, compared to 11 percent in FY 2002. 'Quick Zip' is unwashed, or not fully processed, methamphetamine.

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 to 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 "other." Hispanic/Latinos represent 28.1 percent of the total for two or more races.

Author Lawrence Clark Powell captured the essence of the Nation's sixth-largest State when he said, "One has only to look down from above to see that Arizona is a deeply wrinkled old land of interminable mountains, river valleys and desert plains. The sight of running water is rare. Dryness is obvious." In addition to its aridness, the land is also characterized by the dominance of public land ownership. Federal,

State, and tribal governments own more than 80 percent of Arizona.

Arizona ranks 18th in population (5,743,834) according to 2003 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. The median price for an existing home in 2003 was \$152,800, compared to \$574,300 in San Francisco. The U.S. median price was \$172,200. Arizona (54.3 percent) ranked second behind Nevada (75.1 percent) for job growth for 1990–2003 according to the U.S. Bureau of Labor Statistics.

Crime is a critical issue for metropolitan Phoenix and Tucson, compared with the other 300 U.S. metropolitan areas ranked by the Federal Bureau of Investigation (FBI). According to the FBI, Arizona had the highest rate of serious crime of any State. Tucson had a rate of 7,699.9 crimes per 100,000 population, ranking second in total crime in 2003.

In 2003, Arizona ranked 10th among States in the percentage of residents without health insurance and 4th in the number of low-income children without health insurance. Just over 17 percent of Arizonans lack insurance.

Data Sources

This report is based on the most recent available data obtained from the following sources:

- **Drug-induced and drug-related death data** were provided by the Maricopa County Medical Examiner (ME) Office for January 1993–October 2003. All 2003 data are estimated because ME data for July and August 2003 were not available.
- **Emergency department (ED) drug 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), for 2003 and 2004. The 2003 data were accessed on December 31, 2004; the 2004 data were accessed on January 18, 2005. In the Phoenix metropolitan

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area, all 25 eligible hospitals are in the DAWN sample: 26 EDs are in the sample. (One hospital has more than one ED.) The data are incomplete. In 2004, between 11 and 14 EDs reported each month. All DAWN cases are reviewed for quality control, and, based on the review, cases may be corrected or deleted; therefore, the data reported in this paper are subject to change. The data are unweighted and are not estimates for the Phoenix area. Data are presented in exhibit 2 for ED cases, with both demographic and visit characteristics described. Most data presented focus on drug reports in 2004. Drug reports exceed the number of visits, since a patient may report use of multiple drugs (up to six drugs plus alcohol). These data cannot be compared with DAWN ED data for 2002 and before, nor can they be used for comparison with future data accessed through DAWN *Live!*. Only weighted data released by SAMHSA can be used in trend analysis. A full description of DAWN can be found at <<http://dawninfo.samhsa.gov>>.

- **Drug treatment data** for the State overall were provided by the Arizona Department of Health Services (ADHS), Division of Behavioral Health Services (DBHS), Bureau of Substance Abuse Treatment and Prevention Services, through fiscal year (FY) 2004; treatment admissions of adults and juveniles to the Treatment and Assessment Screening Center (TASC) programs in Phoenix were derived from the Maricopa County Juvenile Probation Program's report and the Adult Deferred Prosecution Program's Cumulative Statistical Report through 2004; and data on admissions to detoxification treatment from July 2003 to December 2004 were provided by Community Bridges—East Valley Addiction Council.
- **Law enforcement data** were provided by the Drug Enforcement Administration (DEA), Phoenix Office, in their report "Trends in Traffic," Fourth Quarter FY 2004. Additional information was obtained from the U.S. Customs Service; the Arizona High Intensity Drug Trafficking Area (HIDTA) Task Force; the FBI, Uniform Crime Reports, *Crime in the United States*, 2002; and the Maricopa County Methamphetamine Task Force.
- **Drug price and purity data** were provided by the DEA Phoenix Division Offices; the U.S. Customs Service; Arizona Department of Public Safety; Phoenix Police Department; the Maricopa County Sheriff's Department; and *Narcotics Digest Weekly, Special Issue, Illicit Drug Prices January–June 2004*, July 20, 2004.

- **Data on drug-endangered children** were obtained from the Arizona Office of the Attorney General for 2004.
- **Human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS) data** were obtained from the Arizona DHS, Division of Public Health Services, Bureau of Epidemiology and Disease Control, Office of HIV/STD Services, Annual Report, March 2004.
- **General information on the Phoenix area** was obtained from the National Association of Realtors, Fourth Quarter Report for Existing Homes, 2003, and the U.S. Census Bureau, Fact Sheet 2003, American Community Survey.

DRUG ABUSE PATTERNS AND TRENDS

Special Considerations: DAWN ED Data

Unweighted data accessed from DAWN *Live!* reveal drug cases by type, as follows: malicious poisoning (0.4 percent), overmedication (21.0 percent), underage drinking (4.0 percent), adverse reaction (20.0 percent), accidental ingestion (2.0 percent), suicide attempt (6.0 percent), seeking detoxification (5.0 percent), and other (42.0 percent) (exhibit 1).

The unweighted data from DAWN *Live!* presented patient and visit characteristics for 2003 and 2004. A comparison of cases for 2003 and 2004 revealed 43 percent more identified cases for 2004—6,103 versus 10,709 (exhibit 2).

Special Considerations: Treatment Data

During State FY 2004, 36,375 adults and children received treatment in the ADHS/DBHS behavioral health system for substance use, abuse, or dependence. The ADHS/DBHS behavioral health system reported that an increasing number of individuals who received substance abuse treatment were eligible for treatment services through Arizona's Title XIX/XXI (AHCCCS – Arizona Health Care Cost Containment System – Medicaid) program. Eligibility was expanded in October 2001. Since October 2001, the proportion of AHCCCS-eligible substance abuse treatment participants increased from 29 percent in FY 2001 to 66 percent in FY 2004 (exhibit 3).

ADHS/DBHS data reveal 76.2 percent (27,619) of adults and 25.2 percent of youth in treatment were White in FY 2004. An additional 11.8 percent (4,289) of adults and 10.7 percent of youth were Hispanic/Latino in cases in which race/ethnicity was specified.

ADHS/DBHS reported that more than one-half (59 percent) of all clients who received substance abuse treatment services were between the ages of 25 and 44 (21,420) in FY 2004 (exhibit 4). Males continued to represent the largest gender group entering substance abuse treatment. Males accounted for 80.2 percent of youth and 67.1 percent of adult treatment participants during FY 2004. DBHS reported that women with children represent a growing segment of the treatment caseload. In FY 2004, approximately 20 percent of women who received substance abuse treatment had young children with them at admission.

During State FY 2004, the ADHS/DBHS Bureau for Substance Abuse Treatment and Prevention treatment services reported that individual, family, and group counseling represented the largest category of expenditures for substance abuse services (29 percent), followed by expenditures for support services that include case management, peer support, and transportation (18 percent); crisis and detoxification services (17 percent); and medical pharmacy costs (17 percent) (exhibit 5).

Self-referral was identified by 63 percent of treatment participants in the ADHS/DBHS public behavioral health system. Twelve percent were referred by a Federal agency, such as the Veterans Administration or Indian Health Service, and 11.5 percent were referred by a criminal justice agency. Criminal justice referrals accounted for a far larger proportion of total referrals to the Regional Behavioral Health Authorities serving rural regions of the State compared with the more urban areas.

During FY 2004, more than one-half of individuals admitted to substance abuse treatment were identified with a primary diagnosis of drug or alcohol abuse/dependence (59.7 percent). Approximately 13 percent of participants were identified with a co-occurring mental health issue in addition to a substance use disorder, including depression (7.7 percent), anxiety (2 percent), suicide risk (2 percent), or psychosis (1.2 percent) (exhibit 6).

Cocaine/Crack

The peak year for cocaine-related deaths was 1999 ($n=215$), but deaths have declined each year to a projected low of 63 deaths for 2003.

Unweighted data accessed from DAWN *Live!* reflect the major substances of abuse and misuse for 2004. There were 1,560 cocaine DAWN reports that year (exhibit 7).

Of those who presented for treatment to the ADHS/DBSH system in FY 2004, 9 percent reported cocaine as their primary drug (exhibit 8).

During FY 2004, Community Bridges detoxification and recovery clinics served a total of 13,337 individuals. Of this total, 1 percent reported cocaine use and 4 percent reported crack use. Between July 1 and December 31, 2004, 6,586 clients were served, and cocaine and crack use combined represented 9.2 percent of this total. Crack use was twice as common as reported cocaine use.

The TASC Adult Deferred Prosecution Program cumulative data do not reflect any change in the percentage of admissions for cocaine treatment. Through December 31, 2004, 28.7 percent (4,576) of admissions were for cocaine treatment (exhibit 9a). Six percent of juveniles tested positive for cocaine during October–December 2004 (exhibit 9b).

During FY 2004, the DEA laboratory analyzed approximately 75 samples from cocaine seizures. Purities ranged from 31 to 96 percent, with an average purity of 74 percent. Prices for an ounce of cocaine powder dropped slightly in FY 2004 from the previous reporting period (FY 2001). In Phoenix, the ounce price dropped from \$500–\$800 to \$450–\$650 (exhibit 10). The price for a kilogram dipped slightly from \$15,000–\$17,000 to \$13,500–\$15,000.

Crack cocaine continues to be readily available in the Phoenix metropolitan area. A rock continues to sell for \$20. The National Drug Intelligence Center reported a wholesale price of \$7,500 for a pound.

The DEA reports the possibility of an increase in the availability and purity of cocaine in the next few months because of the introduction of a new strain of coca plant that has been reported to yield up to four times more cocaine. The Colombian drug cartels reportedly have spent approximately \$106,000,000 in research and development to bring the new product to the market. Through crossbreeding strains from Peru with potent Colombian varieties and using genetic engineering, the new strain grows to more than 10 feet tall and maintains a higher purity.

Most of the crack cocaine in Phoenix is off-white to light yellowish color and has been “cooked” in a Tupperware-style bowl in a microwave. Once cooked, it is broken up into chunks, put into baggies, and sold in quantities ranging from “rocks” to ounces. In the African-American community, half-ounce quantities are referred to as “half birds,” and ounce quantities are called “full birds.”

Heroin and Morphine

After 2 years of morphine-related deaths declining, an increase of 18.4 percent was projected for 2003.

In *DAWN Live!* unweighted data, there were 732 reports in which heroin was the major substance of abuse in 2004 (exhibit 7).

Heroin and other opiates were identified by 11 percent of individuals in Arizona who sought treatment through the Division of Behavioral Health Services in 2004 (exhibit 8). The Community Bridges data consistently show that 10 percent of individuals who seek services at the clinics report use of heroin and other opiates.

Law enforcement agencies report an increase in the demand for heroin during the last two quarters. Black tar and Mexican brown powder heroin are readily available. Purity levels remained relatively constant throughout FY 2004. Purity levels ranged between 42 and 85 percent, with an average purity of 55 to 58 percent. It has been speculated that users may now snort or smoke the purer form of heroin.

Phoenix and Tucson continue to serve as transshipment and distribution points for Mexican-produced heroin smuggled into Arizona. According to the Phoenix DEA, raw opium gum is being purchased from ranchers in mountain areas of Mexico. The drug organizations are then processing the raw opium gum into a heroin base that is stored in jars. Reportedly, 1 kilogram of raw opium gum sells for \$1,000–\$1,500. It takes approximately 8 kilograms of opium gum to process into 1 kilogram of brown powder heroin.

Between FY 2001 and FY 2004, prices for heroin in Phoenix decreased for all quantities, except for a “20” or “BB,” which sold for \$20 in both periods. The Phoenix DEA, U.S. Customs, Arizona Department of Public Safety, Phoenix Police Department, and the Maricopa County Sheriff Department reported an ounce selling for \$750–\$900 during the fourth quarter of FY 2004 (exhibit 10). It had sold for \$950–\$1,000 in June 2003. Wholesale prices for a kilogram dropped from \$42,000–\$50,000 in June 2003 to \$28,000–\$35,000.

The Phoenix DEA office reported the cost of 1 kilogram of South American heroin to be \$52,000.

Other Opiates

In the unweighted *DAWN Live!* data for 2004, there were 1,055 reports of drug misuse for opiates/opi-

oids, 207 cases for hydrocodone, and 298 cases for oxycodone (exhibit 11).

ADHS/DBHS reported 3 percent of Arizona admissions for primary substances abuse were for “all other” drugs during FY 2004 (exhibit 8). The TASC Adult Deferred Prosecution Program reported 5.1 percent of admissions were for other opiates (exhibit 9a). The Community Bridges program reported 4.8 percent of admissions for the first half of FY 2005 (July–December 2004) were for other opiates.

Law enforcement continues to investigate Internet pharmacies and physicians. To date, one pharmacy and three physicians have been involved with seven Internet Web sites. Seizures of assets (mostly cash) total more than \$1,200,000. Federal indictments are being sought against the Web site operators, owners of the participating pharmacies, and the physicians.

A naturopathic physician was convicted on 185 counts of illegal distribution of controlled substances. The physician was ordered to surrender his DEA Registration. The physician issued controlled substances without conducting physical examinations, diagnostic tests, or patient histories. The patients paid \$60 per prescription for OxyContin, Dilaudid, morphine, and hydrocodone in quantities ranging from 80 to 120 tablets for each prescription. The patients returned several times a week for additional prescriptions in the same quantities.

Law enforcement agencies report OxyContin selling for \$20–\$25 per 40-milligram tablet and \$20–\$80 per 80-milligram tablet. The price for one tablet of Percocet was \$5, and one tablet of Vicodin ES sold for \$5 (exhibit 10).

Marijuana

Unweighted data accessed from *DAWN Live!* show that there were 1,089 reports of marijuana in 2004 (exhibit 7).

ADHS/DBHS data revealed 12 percent of individuals who sought treatment during FY 2004 were for marijuana use/abuse (exhibit 8). The TASC Adult Deferred Prosecution Program reported 23.3 percent of admissions reported marijuana use/abuse from March 1989 to December 2004 (exhibit 9a).

The TASC Client Drug Test Results Summary for Maricopa County Juvenile Probation for October through December 2004 reported 73 percent ($n=3,064$ of 4,214) tested positive for tetrahydrocannabinol (THC) (exhibit 9b).

Marijuana is widely available in Arizona in quantities up to hundreds of kilograms, unchanged from the previous reporting period. Prices were unchanged from the previous reporting period, as well, according to the Arizona HIDTA, the Arizona Department of Public Safety, Southwest Border Alliance, and the Arizona Drug Enforcement Administration (exhibit 10).

Adolescent males, age 15–17, from the communities along the southern border of Arizona are recruited as drivers by trafficking organizations to move marijuana loads. Most are Hispanic males who are U.S. citizens with and without driver's permits or licenses.

Stimulants

The drug-related death data revealed a 17-percent decrease in 2002 for methamphetamine-related deaths ($n=132$) over such deaths in 2001. The downward trend would appear to be continuing during 2003. Methamphetamine/combination deaths totaled 35 in 2001, rose to 44 in 2002, and were projected to increase to 71 for 2003 for a 103-percent increase over 2001.

In the 2004 unweighted data from DAWN *Live!*, there were 1,293 reports of methamphetamine and 774 of amphetamines (exhibit 7).

The ADHS/DBHS Bureau for Substance Abuse Treatment and Prevention data revealed 21 percent of Arizona treatment admissions were for methamphetamine use/abuse in FY 2004 (exhibit 8). The growth of methamphetamine as the presenting primary problem in the public behavioral health system is striking. During FY 2002, methamphetamine accounted for just 11 percent of substances identified at admission to treatment, compared with 21 percent in FY 2004. Little variation exists between urban and rural areas, with the exception of Pima County (Tucson), where 11.1 percent of treatment admissions reported methamphetamine as the primary presenting problem.

A statistical summary of the TASC Adult Deferred Prosecution Program revealed that 26.9 percent ($n=4,298$) of the March 1989 through December 2004 treatment admissions were for methamphetamine use/abuse (exhibit 9a). During October–December 2004, 19.5 percent of the juveniles ($n=819$) who submitted for drug testing at TASC tested positive for methamphetamine/amphetamine (exhibit 9b).

Community Bridges detoxification and recovery centers serve the homeless, indigent, and working poor individuals and families in Maricopa County. Thirteen percent of admissions to Community Bridges

during FY 2004 reported methamphetamine as the drug of choice.

The DEA reported two types of methamphetamine are available throughout Arizona. Mexican methamphetamine is most predominant. It is produced in large volume (kilogram and pound quantities) at super labs located in Mexico and is transported primarily through Sonora, Mexico, into Arizona. Mexico has surpassed California as the major source of methamphetamine moving into Arizona. While small independent labs generate gram and ounce quantities, they are considered a viable threat to Arizona.

An Arizona HIDTA summary of methamphetamine and drug-endangered children statistics for calendar years 2000–2004 indicate 1,263 methamphetamine lab-related seizures and 793 methamphetamine lab seizures for reported disposal costs of \$3,841,069. There were 250 children in Maricopa County and 362 statewide who were removed from clandestine laboratory locations during the report years.

The most significant change in price for methamphetamine was for a pound of crystal methamphetamine (ice) in Tucson. The previous price had been \$13,000 for ice, compared to \$7,000–\$7,500 during FY 2004 (exhibit 10).

The drug of choice in Yuma County (in the southwestern region of State, on the border with Mexico) is crystal methamphetamine. It is relatively low cost, and availability is plentiful. The Regional Behavioral Health Authority in this region of the State receives the greatest number of criminal justice referrals for treatment (58 percent).

The Maricopa County Sheriff's Office reports that the packaging of methamphetamine has changed dramatically the past year. Officers report it is nearly impossible to identify the type of methamphetamine that is seized. Laboratory analysis is needed to determine whether it is Mexican or U.S. made. Wrapping of Mexican methamphetamine previously was professional, with markings or insignias of ownership. It is now reported to be sloppily packaged in unmarked plastic bags. Conversely, the locally produced methamphetamine is now packaged using professional wrapping methods.

A new slang name for methamphetamine surfaced in the DEA fourth quarter report. "Quick Zip" is unwashed, or not fully processed, methamphetamine. It was first identified by sources within the prison population. The drug allegedly causes increased psychosis when consumed.

Glottell, a new product in the agricultural market, can be added to tanks of anhydrous ammonia, a precursor chemical for methamphetamine production. Glottell is intended to deter thieves and methamphetamine cooks from stealing the ammonia because it produces a visible pink stain when mixed. When used to make methamphetamine, it produces a highly undesirable effect.

Locally, an experienced methamphetamine cook became an entrepreneur and earned \$25,000 to teach methamphetamine processing methods to interested traffickers. Additionally, the cook charged \$10,000 for every 10 pounds of finished product manufactured.

Other Drugs

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; Demerol; codeine products; and anabolic steroids. Soma in combination with other analgesic controlled substances, Ultram (Tramadol), and Nubain continue to be highly abused prescription-only substances. Soma sells for \$2–\$5 per tablet.

The unweighted data from DAWN *Live!* reflect 843 benzodiazepine reports and 243 muscle relaxant reports for pharmaceutical drug misuse in 2004 (exhibit 11).

Treatment programs that serve adolescents report anecdotally that gamma hydroxybutyrate (GHB), methylenedioxymethamphetamine (MDMA or ecstasy), lysergic acid diethylamide (LSD), Coricidin HBP, and Soma are still party drugs.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

The Arizona Department of Health Services, Division of Public Health Services, Bureau of Epidemiology and Disease Control, Office of HIV/STD Services began to emphasize capacity building measures within the State HIV/AIDS epidemiology programs and to focus on incidence and prevalence estimates. The March 2004 Annual Report is the most recent report and was reported on in the June 2004 CEWG report (exhibits 12a and 12b).

According to the March 2004 report, Arizona had 9,652 persons known to be living with HIV disease, of whom 4,402 had a diagnosis of AIDS. The State has an HIV disease prevalence rate of 184.1 per

100,000 persons. Pima County, the State's second most populous urban county, has the highest prevalence rate of reported HIV disease (212 per 100,000). Pima County, with 16.4 percent of the State's population, has 19.7 percent of known AIDS prevalence and 18.1 percent of known HIV prevalence. Maricopa County, the State's most populous urban county, has the second highest prevalence rate of reported HIV Disease (207 per 100,000). With 60 percent of the State's population, it has 67.8 percent of known AIDS prevalence and 66.7 percent of known HIV prevalence.

The predominant reported mode of transmission of HIV in Arizona continues to be men having sex with men, which accounted 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 male-to-male sex, injection drug use, with or without male-to-male sex, accounted for 20.1 percent, and heterosexual exposure accounted for 11.1 percent of reported new cases of HIV disease during 2003.

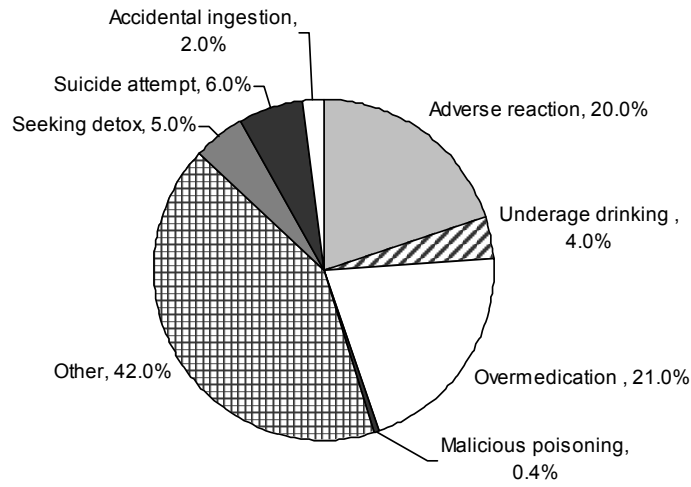
SPECIAL REPORT

The Correctional Officer/Offender Liaison (COOL) program was established in 1998 to better serve the substance abuse and behavioral health service needs of high-risk offenders on parole. Funding is provided through an Interagency Services Agreement between the Arizona Department of Corrections (ADOC) and Arizona Department of Health Services to ensure rapid access to treatment and recovery support services. In FY 2004, the COOL report revealed referrals and intakes approached but did not surpass FY 2003 figures (exhibit 13).

The COOL Program expedites eligibility screening for AHCCCS and provides rapid connections to treatment and other re-entry services. During FY 2004, parole officers referred 5,953 persons leaving prison to the COOL program through 1 of the 5 Regional Behavioral Health Authorities. Seventy-three percent ($n= 4,330$) of those referred were subsequently enrolled in substance abuse treatment. The ADOC/ADHS collaboration also operates 20 transitional housing beds for homeless offenders in the COOL program in Maricopa County. The housing program also coordinates community services, employment support, substance abuse treatment, and temporary housing to assist in the reintegration of offenders.

For inquiries concerning this report, please contact Ilene L. Dode, Ph.D., EMPACT—Suicide Prevention Center, Inc., 1232 East Broadway, Suite 120, Tempe, Arizona 85282, Phone (480) 784-1514, Fax: (480) 967-3528, E-mail: idode@aol.com.

Exhibit 1. Percentages¹ of DAWN ED Cases in Phoenix, by Type (Unweighted²): 2004



¹Percentages rounded.

²The unweighted data are from 11–14 Phoenix 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 January 18, 2005

Exhibit 2. DAWN ED Cases in Phoenix, by Patient and Visit Characteristics (Unweighted¹): 2003 and 2004

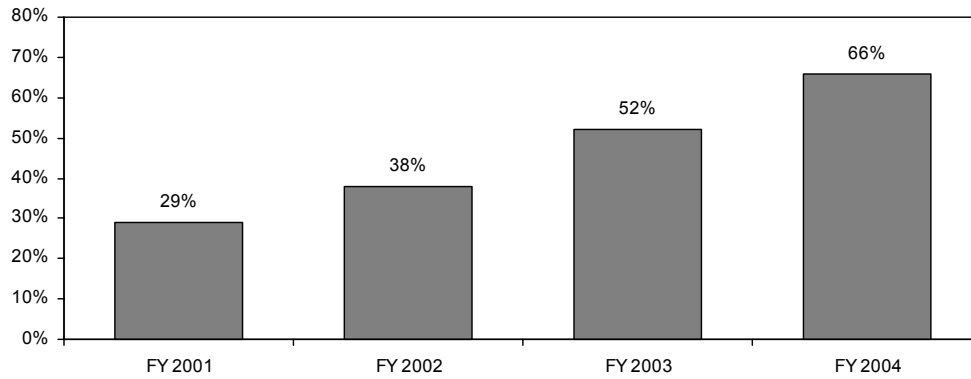
Characteristic	2003	2004
Gender		
Male	3,167	5,394
Female	2,933	5,313
Not Documented	3	2
Total:	6,103	10,709
Race/Ethnicity		
White	3,657	5,824
Black	364	638
Hispanic	1,083	1,963
NTA ²	116	250
Not Documented	883	2,034
Total:	6,103	10,709
Chief Complaint		
Overdose	2,438	3,129
Intoxication	813	1,001
Seizures	107	197
Altered mental status	1,135	1,666
Psychiatric condition	340	1,020
Withdrawal	219	391
Seeking detox	313	480
Accident/injury/assault	85	230
Abscess/cellulitis/skin/tissue	522	1,448
Chest pain	336	861
Respiratory problems	171	529
Digestive problems	237	983
Other	1,151	3,552
Total:	7,867	15,487
Total Cases:	6,103	10,709
Age Group		
5 and younger	176	424
6–11	43	88
12–17	713	992
18–20	662	1,011
21–24	649	1,110
25–29	648	1,255
30–34	732	1,168
35–44	1,352	2,299
45–54	786	1,447
55–64	190	489
65 and older	147	420
Not documented	5	6
Total	6,103	10,709

¹The unweighted data in 2004 are from 11–14 Phoenix 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.

²NTA=Not tabulated above.

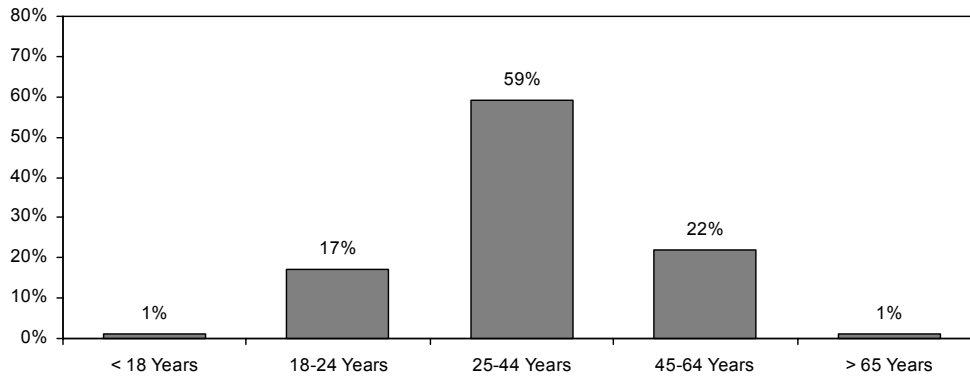
SOURCE: DAWN Live!, OAS, SAMHSA, updated December 31, 2004 (2003 data) and January 18, 2005 (2004 data)

Exhibit 3. Proportions of AHCCCS (Medicaid)-Eligible Substance Abuse Treatment Participants in Arizona: FY 2001–FY 2004



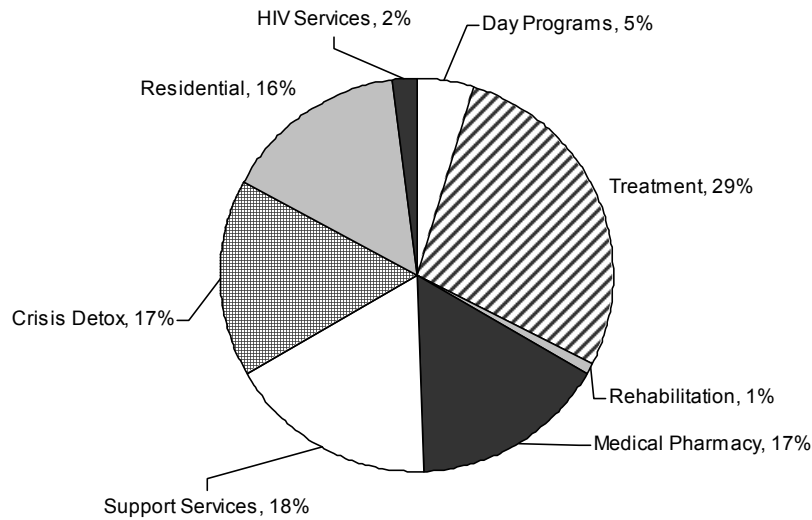
SOURCE: Arizona Department of Health Services, Division of Behavioral Health Services, Bureau for Substance Abuse Treatment and Prevention

Exhibit 4. Substance Abuse Treatment Admissions in Arizona, by Age Group: FY 2004



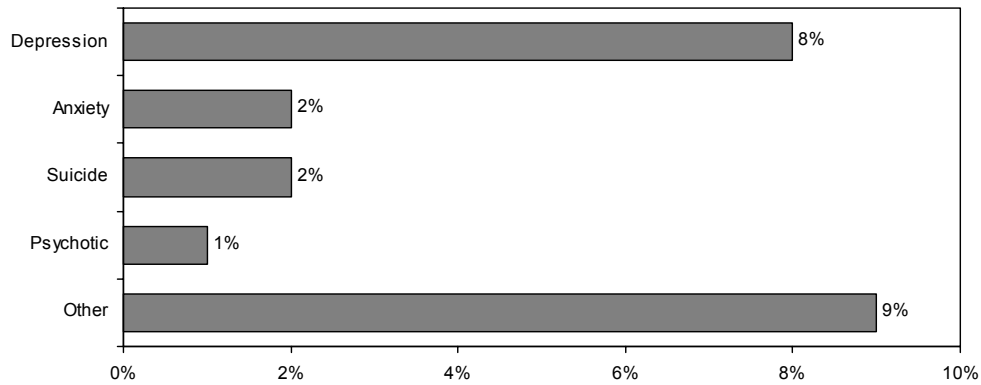
SOURCE: Arizona Department of Health Services, Division of Behavioral Health Services, Bureau for Substance Abuse Treatment and Prevention

Exhibit 5. Substance Abuse Treatment Expenditures in Arizona, by Percent: FY 2004



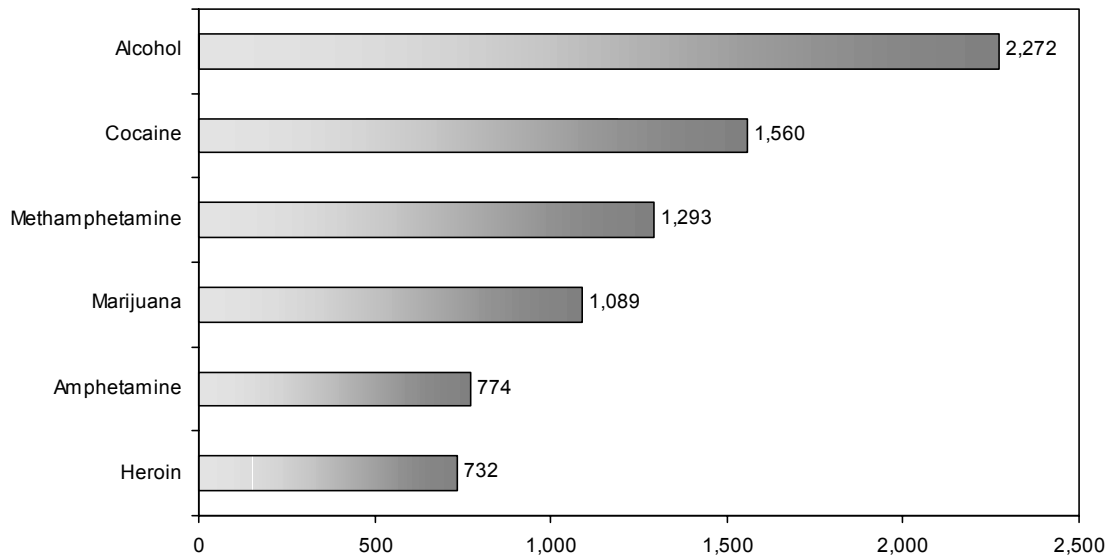
SOURCE: Arizona Department of Health Services, Division of Behavioral Health Services, Bureau for Substance Abuse Treatment and Prevention

Exhibit 6. Co-Occurring Presenting Problems in Substance Abuse Treatment Admissions in Arizona: FY 2004



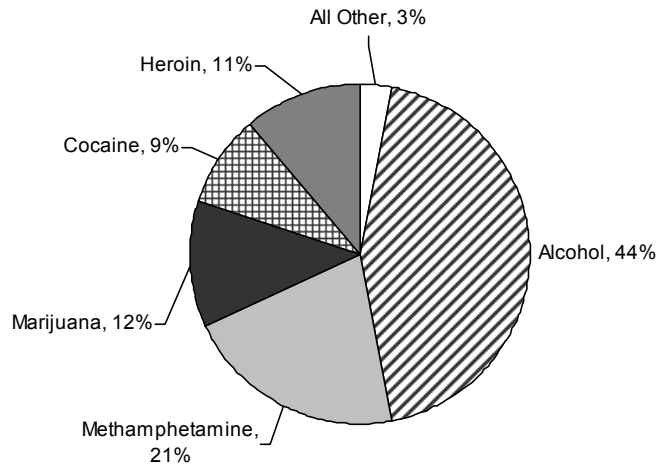
SOURCE: Arizona Department of Health Services, Division of Behavioral Health Services, Bureau for Substance Abuse Treatment and Prevention

Exhibit 7. Numbers of DAWN ED Reports of Major Substances of Abuse in Phoenix (Unweighted¹) : 2004



¹The unweighted data are from 11–14 Phoenix 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.
 SOURCE: DAWN *Live!*, OAS, SAMHSA, updated January 18, 2005

Exhibit 8. Primary Substances Used Among Treatment Admissions in Arizona, by Percent: FY 2004



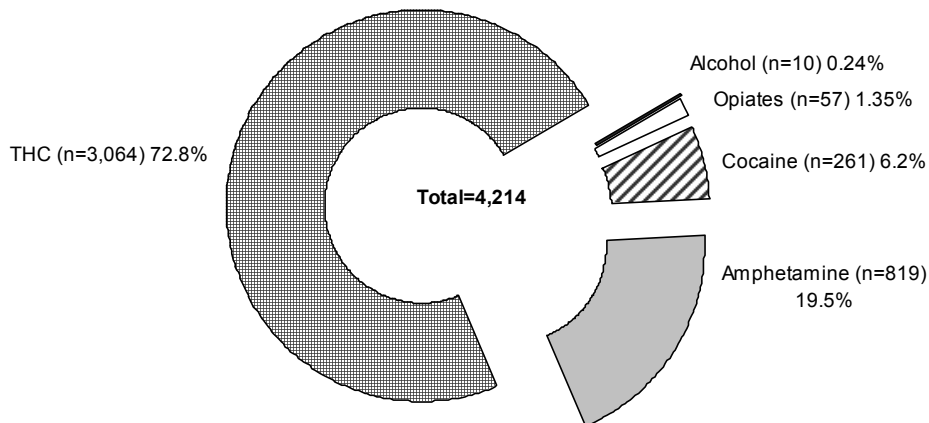
SOURCE: Arizona Department of Health Services, Division of Behavioral Health Services, Bureau for Substance Abuse Treatment and Prevention

Exhibit 9a. Adult Deferred Prosecution Program Admissions for Selected Drugs in Phoenix, by Characteristic and Percent: March 1, 1989–December 31, 2004

Characteristic	Percent	Number
Primary Drug Problem (May include more than one drug)		
Cocaine	28.7	4,576
Methamphetamine	26.9	4,298
Marijuana	23.3	3,722
Polydrug	11.5	1,830
Opiate	5.1	818
Denies Drug Problem	4.5	715
Total (N=)		15,959
Gender		
Male	70.4	7,004
Female	29.6	2,950
Total (N=)		9,954
Ethnicity		
Caucasian	61.4	6,110
Hispanic	29.3	2,915
African American	6.1	608
Native American	2.1	207
Other	1.1	114
Total (N=)		9,954
Employment		
Unemployed	31.2	3,103
Part-Time	11.6	1,158
Full-Time	53.4	5,314
Disabled	3.8	379
Total (N=)		9,954
Marital Status		
Single	53.9	5,369
Married	23.9	2,376
Divorced	7.4	735
Separated	14.8	1,474
Total (N=)		9,954

SOURCE: Adult Treatment and Assessment Screening Center (TASC)—Deferred Prosecution Program Cumulative Statistical Report

Exhibit 9b. TASC Juvenile Client Drug Test Positive Results by Drug and Percent in Phoenix: October 1–December 31, 2004



SOURCE: Treatment and Assessment Screening Center (TASC) Client Drug Test Results Summary, Maricopa County Juvenile Probation

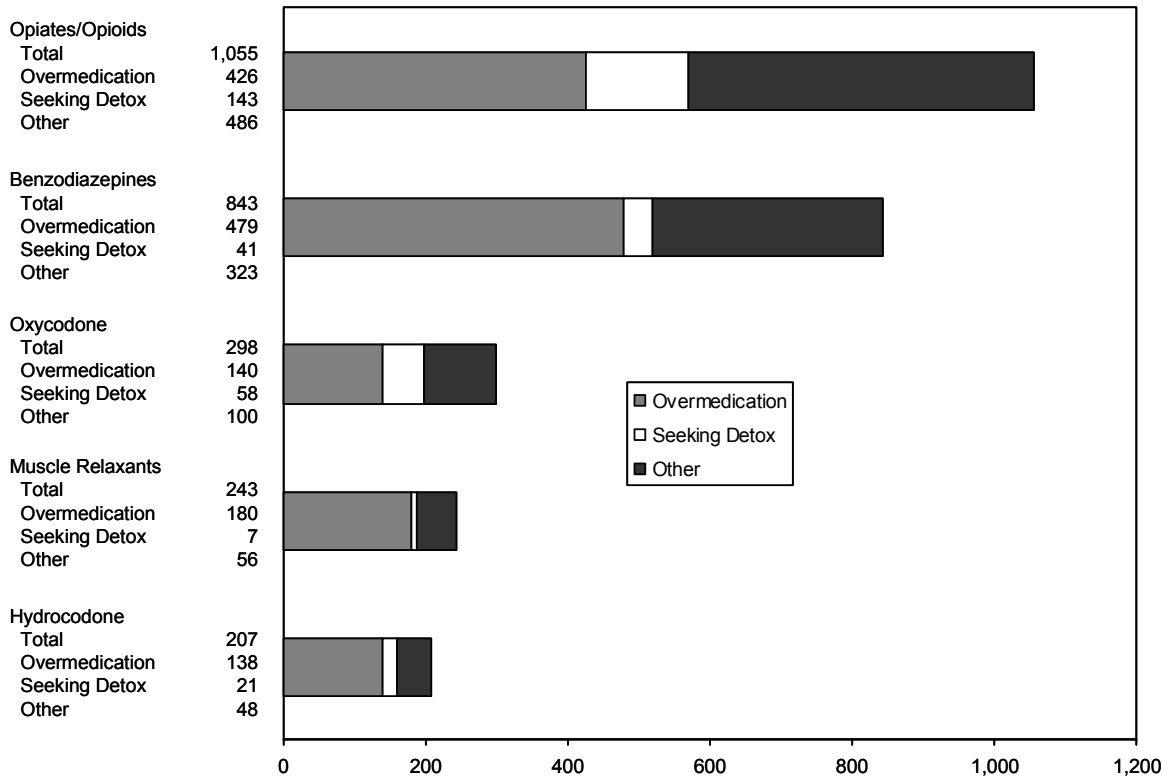
Exhibit 10. Drug Prices in Phoenix and Tucson: FYs 2001 vs. 2004

Drug	2001		2004	
	Phoenix	Tucson	Phoenix	Tucson
Marijuana				
Grams			\$10–\$25	\$5–\$10
Ounce	\$75–\$150	\$65–\$105	\$75–\$150	\$65–\$105
Pound	\$500–\$750	\$400–\$600	\$500–\$750	\$400–\$600
Methamphetamine				
1/8 ounce			\$150 (ice) \$120–\$150	\$120–\$220
1/2 teener	N/A	N/A	\$40	\$80–\$135
1/4 ounce	\$125	\$275	\$250 (ice)	\$120–\$300
Ounce	\$300–\$600	\$500–\$900	\$500–\$600	Not reported
Pound	\$3,500–\$12,000 (higher price for ice)	\$3,800–\$6,000 \$13,000 (ice)	\$5,000–\$8,600	\$7,000–\$7,500 (ice)
Cocaine				
Rock—1/3 gram crack	N/A	N/A	\$20	\$20
Eightball	\$100–\$140	\$80–\$130	\$80–\$100	\$80–\$130
Ounce	\$500–\$800	\$500–\$650	\$450–\$650	\$500–\$650
Ounce crack	N/A	N/A	\$540–\$600	\$550–\$700
Kilogram	\$15,000–\$17,000	\$15,000–\$18,000	\$13,500–\$15,000	\$15,000–\$16,000
Heroin				
A "20" "bb" (80–100 milligrams)	\$20	\$20–\$25	\$20	\$20–\$25
A "paper" (.25 gram)	\$20–\$30	\$20–\$25	\$10–\$15	\$20–\$25
Gram	\$70–\$100	\$60–\$110	\$40–\$47	\$60–\$110
Ounce ("piece," 28 grams)	\$1,100–\$1,500	\$1,075–\$1,300	\$750–\$900	\$1,075–\$1,300
Kilogram	\$32,000–\$40,000	N/A	\$28,000–\$35,000	\$43,000

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

SOURCES: DEA Phoenix Division Offices, U.S. Customs, Arizona Department of Public Safety, Phoenix Police Department, Maricopa County Sheriff Department

Exhibit 11. Numbers of DAWN ED Prescription Drug Misuse Reports in Phoenix, by Case Type (Unweighted¹): 2004



¹The unweighted data are from 11–14 Phoenix 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.
 SOURCE: DAWN *Live!*, OAS, SAMHSA, updated January 18, 2005

Exhibit 12a. Current Estimated Prevalence of HIV/AIDS in Arizona as Reported in March 2004

	CURRENT HIV			CURRENT AIDS			TOTAL CURRENT HIV/AIDS		
	Cases	% State Total	Rate Per 100,000	Cases	% State Total	Rate Per 100,000	Cases	% State Total	Rate Per 100,000
Gender									
Male	4,547	85.8%	166.81	3,897	88.3%	142.96	844	40.0%	309.77
Female	752	14.2%	27.54	514	11.7%	18.82	1,266	60.0%	46.36
Total	5,299	100.0%	97.11	4,411	100.0%	80.84	2,110	100.0%	177.95
Age Group									
12 and younger	67	1.3%	6.20	5	0.1%	0.46	72	0.7%	6.66
13–19	30	0.6%	5.50	15	0.3%	2.75	45	0.5%	8.24
20–24	123	2.3%	31.51	25	0.6%	6.40	148	1.5%	37.92
25–29	346	6.5%	90.57	138	3.1%	36.12	484	5.0%	126.69
30–34	625	11.8%	158.33	403	9.1%	102.09	1,028	10.6%	260.42
34–39	1,018	19.2%	262.62	860	19.5%	221.86	1,878	19.3%	484.49
40–44	1,263	23.8%	316.04	1,140	25.8%	285.26	2,403	24.7%	601.30
45–49	852	16.1%	235.88	838	19.0%	232.01	1,690	17.4%	467.89
50–54	485	9.2%	150.45	499	11.3%	154.79	984	10.1%	305.25
55–59	272	5.1%	101.66	260	5.9%	97.17	532	5.5%	198.83
60 and older	218	4.1%	23.58	228	5.2%	24.66	446	4.6%	48.25
Total	5,299	100%	97.11	4,411	100%	80.84	9,710	100%	177.95
Race/Ethnicity									
White Non-Hispanic	3,339	63.0%	97.53	2,813	63.8%	82.16	6,152	63.4%	179.69
Black Non-Hispanic	567	10.7%	324.27	439	10.0%	251.07	1,006	10.4%	575.34
Hispanic A/PI/H ¹ Non-Hispanic AI/AN ² Non-Hispanic MR ³ /Non-Hispanic Other	1,048	19.8%	70.97	965	21.9%	65.35	2,013	20.7%	136.31
	41	0.8%	34.63	32	0.7%	27.02	73	0.8%	61.65
	164	3.1%	62.41	157	3.6%	59.75	321	3.3%	122.16
	140	2.6%	N/A	5	0.1%	N/A	145	1.5%	N/A
Total	5,299	100.0%	97.11	4,411	100.0%	485.35	9,710	100.0%	177.95
Mode of Transmission									
MSM ⁴	2,885	54.4%	N/A	2,694	61.1%	N/A	5,579	57.5%	N/A
IDU ⁵	683	12.9%	N/A	593	13.4%	N/A	1,276	13.1%	N/A
MSM/IDU	411	7.8%	N/A	469	10.6%	N/A	880	9.1%	N/A
Heterosexual	525	9.9%	N/A	412	9.3%	N/A	937	9.6%	N/A
O/H/TF/TPR ⁶	99	1.9%	N/A	85	1.9%	N/A	184	1.9%	N/A
NRR/UR ⁷	696	13.1%	N/A	158	3.6%	N/A	854	8.8%	N/A
Total	5,299	100.0%	97.11	4,411	100.0%	80.84	9,710	100%	177.95

¹Asian/Pacific Islander/Hawaiian

²American Indian/Alaskan Native

³Multiple race

⁴Men having sex with men

⁵Injection drug use

⁶Other/hemophilia/transfusion and blood products/transplant recipient

⁷No reported risk/unknown risk

SOURCE: Arizona Department of Health Services, Division of Public Health Services, Bureau of Epidemiology and Disease Control, Office of HIV/STD Services

Exhibit 12b. HIV/AIDS Annual Report of Arizona Incidence: 1998–2002

	NEW HIV			NEW AIDS			TOTAL NEW HIV/AIDS		
	Cases	% State Total	Rate Per 100,000	Cases	% State Total	Rate Per 100,000	Cases	% State Total	Rate Per 100,000
Gender									
Male	1,738	84.4%	13.48	1,204	87.7%	9.34	2,942	85.7%	22.82
Female	321	15.6%	2.48	169	12.3%	1.31	490	14.3%	3.79
Total	2,059	100.0%	7.97	1,373	100.0%	5.31	3,432	100.0%	13.28
Age Group									
12 and younger	14	0.7%	0.27	7	0.5%	0.14	21	0.6%	0.41
13–19	45	2.2%	1.73	7	0.5%	0.27	52	1.5%	2.00
20–24	212	10.3%	11.67	41	3.0%	2.26	253	7.4%	13.93
25–29	338	16.4%	18.11	128	9.3%	6.86	466	13.6%	24.97
30–34	415	20.2%	22.06	255	18.6%	13.56	670	19.5%	35.62
34–39	420	20.4%	21.57	314	22.9%	16.13	734	21.4%	37.69
40–44	288	14.0%	15.26	264	19.2%	13.98	552	16.1%	29.24
45–49	170	8.3%	10.16	163	11.9%	9.75	333	9.7%	16.91
50–54	86	4.2%	5.81	104	7.6%	7.03	190	5.5%	12.84
55–59	37	1.8%	3.07	55	4.0%	4.57	92	2.7%	7.64
60 and older	34	1.7%	0.77	35	2.5%	0.80	69	2.0%	1.57
Total	2,059	100%	7.97	1,373	100%	5.31	3,432	100%	13.28
Race/Ethnicity									
White Non-Hispanic	1,204	58.5%	7.23	735	53.5%	4.41	1,939	56.5%	11.64
Black Non-Hispanic	236	11.5%	28.64	150	10.9%	18.20	386	11.2%	46.84
Hispanic A/PI/H ¹ Non-Hispanic AI/AN ² Non-Hispanic MR ³ /Non-Hispanic Other	514	25.0%	7.80	399	29.1%	6.06	913	26.6%	13.86
	18	0.9%	3.39	11	0.8%	2.07	29	0.8%	5.46
	81	3.9%	6.50	77	5.6%	6.18	158	4.6%	12.69
	6	0.3%	N/A	1	0.1%	N/A	7	0.2%	N/A
Total	2,059	100.0%	7.97	1,373	100.0%	5.31	3,432	100.0%	13.28
Mode of Transmission									
MSM ⁴	1,151	55.9%	N/A	827	60.2%	N/A	1,978	57.6%	N/A
IDU ⁵	291	14.1%	N/A	209	15.2%	N/A	500	14.6%	N/A
MSM/IDU	172	8.4%	N/A	87	6.3%	N/A	259	7.5%	N/A
Heterosexual	275	13.4%	N/A	171	12.5%	N/A	446	13.0%	N/A
O/H/TF/TPR ⁶	28	1.4%	N/A	29	2.1%	N/A	57	1.7%	N/A
NRR/UR ⁷	142	6.9%	N/A	50	3.6%	N/A	192	5.6%	N/A
Total	2,059	100.0%	7.97	1,373	100.0%	5.31	3,432	100%	13.28

¹Asian/Pacific Islander/Hawaiian

²American Indian/Alaskan Native

³Multiple race

⁴Men having sex with men

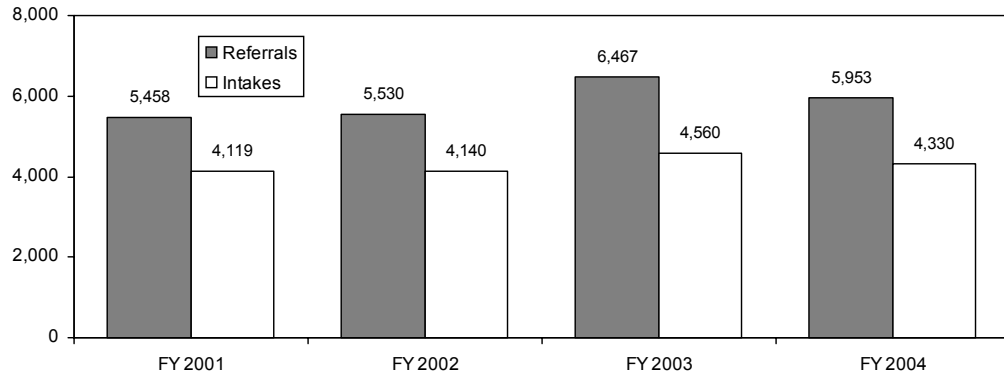
⁵Injection drug use

⁶Other/hemophilia/transfusion and blood products/transplant recipient

⁷No reported risk/unknown risk

SOURCE: Arizona Department of Health Services, Division of Public Health Services, Bureau of Epidemiology and Disease Control, Office of HIV/STD Services

Exhibit 13. Correctional Officer Offender Liaison (COOL) Program Referrals in Phoenix: FY 2001–FY 2004



SOURCE: Arizona Department of Health Services, Division of Behavioral Health Services, Bureau for Substance Abuse Treatment and Prevention

Patterns and Trends in Drug Abuse in St. Louis

Heidi Israel, Ph.D., R.N., L.C.S.W.,¹ and Jim Topolski, Ph.D.²

ABSTRACT

Heroin and cocaine indicators remained mixed, while methamphetamine has increased in St. Louis indicators. St. Louis and St. Louis County law enforcement personnel continue to devote many resources to methamphetamine, and labs in rural areas continued to be a problem. Club drug use/abuse continued to be sparse and decreasing. Marijuana indicators have been trending up in St. Louis for some time. Primary marijuana treatment admissions more than doubled between 1997 and 2001 and remained at this elevated level. 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.

INTRODUCTION

Area Description

The St. Louis metropolitan statistical area (MSA) includes approximately 2.6 million people living in the city of St. Louis; St. Louis County; the surrounding rural Missouri counties of Franklin, Jefferson, Lincoln, St. Charles, and Warren; in Illinois, East St. Louis; and St. Clair County. St. Louis City's population has continued to decrease to approximately 350,000, many of whom are indigent and minorities. Although violent crime has generally decreased, 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 of the city. 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 also available for other parts of Missouri 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 down local producers, it does not address the major source of methamphetamine in the Midwest—a fact that gets lost in the local problem of small “mom and pop” lab seizures.

Missouri has been in a budget crisis for years, and St. Louis County has more recently reported budget deficits and resulting cuts in services. The areas that suffer first are psychiatric services and treatment services. Limited treatment continues to be available for drug abusers. 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 not offer these services. The result is that some of these indicators cannot fully reflect the degree of use or abuse of the substances tracked.

Data Sources

The sources used in this report are indicated below:

- **Emergency department (ED) data** were accessed from the Drug Abuse Warning Network (DAWN) *Live!*, a restricted-access online system administered by the Office of Applied Studies (OAS), Substance Abuse and Mental Health Services Administration (SAMHSA). The unweighted data are for 2004, updated in December

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2004. Data from 2000–2002 DAWN are also reported. The data accessed from DAWN *Live!* cannot be compared with the DAWN data from 2002 and before because of changes in the DAWN system. In the “new” DAWN system, 36 of the 37 eligible hospitals in the St. Louis area are in the DAWN sample. There are 38 EDs in the sample, since some hospitals have more than 1 emergency department. The unweighted data for 2004 are incomplete. Over the 12-month period, between 15 and 18 hospitals reported each month, with most or all of these EDs reporting data that were 90–100 percent complete. 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. Data 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). Since the DAWN *Live!* data are unweighted, they are not estimates for the St. Louis area, nor can they be used for comparison with future data. Only weighted data released by SAMHSA can be used for trend analysis (as in the 2000–2002 data cited in this paper). A full description of DAWN can be found at <<http://dawninfo.samhsa.gov>>.

- **Drug treatment data** were derived from the Treatment Episode Data Set (TEDS) database through the first half of 2004. 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 2003.
- **Intelligence data** were provided by the Missouri Highway Patrol and the DEA.
- **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.

Linda Cottler, Ph.D., of Washington University, who has multiple behavioral research grants, provided additional data.

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 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, 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 is now reported in some of the surrounding rural areas, 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 through programs such as Drug Abuse Resistance Education (DARE) and collaborative arrangements between communities and the police. The National Council on Alcoholism and Drug Abuse (NCADA) and other local education programs target prevention of drug use in the area. 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, and increased treatment admissions may be a reflection of a high number of court referrals. 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.

Cocaine/Crack

The St. Louis City/County Medical Examiner (ME) reported that cocaine-related deaths trended downward from 128 in 1994 to 78 in 2003 (exhibit 1a). Many of the recent deaths involved alcohol and other drugs.

According to DAWN, the number of cocaine mentions increased significantly between 2000 ($n=2,403$) and 2002 (3,536). The numbers of mentions among those age 45–54 and 55 and older increased significantly. According to unweighted data accessed from DAWN *Live!* for 2004, ED reports for cocaine had

the following characteristics: more than one-half of the patients were Caucasian, and nearly 60 percent of the patients were older than 35. The top two reasons for the ED visit were seeking detox or psychiatric condition. The dispositions for most of the cases included referral to treatment, admission to the psychiatric unit, or discharge to home. Only three of the cases reported resulted in immediate death.

Among treatment admissions for illicit drug abuse in the first half of 2004, the proportion for primary cocaine abuse reflected a slight decrease compared with all of 2003 (exhibit 1a). Cocaine remained the most common primary drug of abuse among all admissions (33.6 percent), followed by marijuana (29.6 percent) and heroin (10.8 percent). In the first half of 2004, the typical cocaine admission was an African-American male age 35 or older who smoked the drug.

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. Powder cocaine grams sold for \$100–\$125; purity averaged 70 percent (exhibit 1b). Crack prices remain 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.

The continued use of cocaine has potentially severe long-term consequences by contributing to the spread of sexually transmitted diseases (STDs) through multiple partners. Drug and alcohol use continues to contribute to unsafe sex and 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 injection drug users (IDUs) who combine cocaine and heroin (“speed-ball”) use cocaine intravenously. Younger users tend to smoke cocaine. Polydrug 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 2003,

there were 61 heroin-related deaths (exhibit 1a). 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 and heroin is available primarily in the St. Louis and Kansas City areas. More heroin deaths occurred in St. Louis County than in the inner city in 2000–2002; these deaths support other reports that heroin use is increasing in the suburbs.

Heroin consistently appears in all indicators. In the unweighted data accessed from *DAWN Live!*, heroin ED reports for 2004 indicated that almost 61 percent of the patients were Caucasian, 22.5 percent were between the ages of 18 and 24, and 50 percent of the 560 ED reports were for detoxification or withdrawal. Heroin ED mentions had risen steadily from 1995 to 2002, when mentions totaled 1,167. The increase in heroin mentions among many age groups over the 7 year-period (1995–2002) indicates the wide availability of this drug in this MSA. Among those who made ED mentions of heroin in 2002, the three top reasons for seeking medical intervention were overdose, withdrawal, and seeking detoxification.

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 2004, this trend appeared to continue. There are limited slots for admissions to State-funded methadone or modified medical detoxification in Missouri, which may influence these data. While heroin availability increased throughout the region, the decrease in admissions may in fact be a result of lack of adequate treatment resources; alternatively, the new users of heroin have not yet been driven to treatment. 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 37 percent of heroin admissions were younger than 25 in the first half of 2004. 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.

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 14.4 percent in 2003 and averaged 10–14 percent in 2004. South American (Colombian) heroin, which is also white, is of poorer quality. 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 1b).

Heroin costs range from \$1.00 per milligram to \$1.93 per milligram for Mexican heroin in the recent DMP analysis. 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. Thus, the risk of being arrested has declined. In St. Louis and other smaller urban areas, small distribution networks sell heroin.

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. 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

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 1b).

Other opiates continue to represent less than 1 percent of all treatment admissions. Methadone remains available, which is probably a result of prescription abuse as well as patient diversion.

The use of hydromorphone (Dilaudid) remained common among a small population of White chronic addicts. The drug costs \$30–\$75 per 4-milligram pill. Abuse of oxycodone (Percocet and Percodan) by prescription has been noted anecdotally.

Marijuana

In the unweighted data from DAWN *Live!*, marijuana ED reports in 2004 represented 23 percent of the total ED reports for drugs of abuse. In 2002, ED marijuana mentions were high at 2,866 (exhibit 1a), a significant 62.6-percent increase over 2000. More than 44 percent of the patients 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 the first half of 2004, when they represented 27.2 percent and 29.6 percent of all admissions, respectively (exhibit 1a). Marijuana, viewed by young adults as acceptable to use, is often combined with alcohol. The 25-and-younger age group accounted for 65.6 percent of primary marijuana treatment admissions in the first half of 2004. Some of the prevention organizations report a resurgence in marijuana popularity and a belief by users that it is not harmful.

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.

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.

In 2004, 1 pound of sinsemilla sold for \$700–\$1,800 in St. Louis (exhibit 1b).

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.

In the unweighted 2004 DAWN *Live!* data, methamphetamine ED reports totaled 150. Ninety-one percent were Caucasian, with no predominant age group. ED methamphetamine mentions in St. Louis increased in the late 1990s and totaled 150 in 2002 (exhibit 1a).

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 amphetamine 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. An increase in treatment admissions may signal this change. Cocaine and methamphetamine use have been split along racial lines in the State. While the number of methamphetamine treatment admissions was still relatively low in St. Louis (752 in 2003), in rural treatment programs, methamphetamine was the drug of choice after alcohol.

The Midwest Field Division of the DEA decreased its cleanup of clandestine methamphetamine labs after training local enforcement groups; 2,860 labs were reported for 2003. 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 new 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. Purity of the drugs produced by these labs and percent of finished product depends on the experience/attentiveness of the “cooker.” Most of the available methamphetamine is produced in Mexico and trafficked through these Hispanic traffickers. While much of the resources and personnel are directed at the local production, the actual quantity of methamphetamine that is available is through these Hispanic organizations. As the purity increases through these groups, less priority may be placed on local production. Some crystallized methamphetamine has been noted in the local market, usually indicating increased purity in the product.

Locally produced methamphetamine purity fluctuated between 70 and 80 percent, while methamphetamine from Mexico has historically been only 20–30 percent pure (exhibit 1b). Increased crystalline product indicates higher purity, and the term “ice” has been applied

to all methamphetamine with this 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, reflecting a slight increase in price over the past year.

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

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 1b). Much of this LSD is imported from the Pacific coast. DAWN data in 2004 showed a small number of cases: 19.

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 mentions, police exhibits, and as a secondary drug in ME data. Most of the users of this drug in the inner city are African-American. The unweighted PCP ED reports in 2004 totaled 23.

Club Drugs

Unweighted DAWN ED data for 2004 show few reports of methylenedioxymethamphetamine (MDMA)—only 24. Reports of other club drugs were almost non-existent; two ketamine and two gamma hydroxybutyrate (GHB) reports were cited in 2004. While MDMA remained available at dance parties and cost \$20–\$30 per tablet, the popularity of the drug seems to be declining. 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. The private treatment programs that were queried reported MDMA as part of a polydrug abuser’s history in less than 10 percent of their treatment admissions.

No recent GHB incidents or deaths were reported. GHB education efforts are directed towards ED personnel, who often see the users initially. Ketamine (“Special K”), a veterinary anesthetic, is known for its hallucinogenic effects. Use of ketamine has been not been seen recently.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

HIV

HIV seropositivity among IDUs remained low in St. Louis. While the predominant number of cases is 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 6,646 persons living with HIV disease identified through May 2004, 5 percent were IDUs and 5 percent involved men who have sex with men and are also IDUs (MSM/IDUs) (exhibit 2). 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 new DNA vaccines and adjuvants are being studied.

Two Phase II trials are being implemented within the next year.

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. The increase in heterosexual transmission is a concern for public health officials. Further research is needed on ways to effect sustained behavior change.

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. This may limit the cross-spread of these illnesses within a neighborhood or Zip Code. Hepatitis C is a concern in these populations, but inconsistent reporting has made estimation of the problem and tracking of hepatitis C cases difficult

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Exhibit 1a. Combined Indicators for Cocaine, Heroin, Marijuana, and Methamphetamine in St. Louis: 1996–June 2004

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	--- ²
DAWN ED Data—Weighted Data				
Number of Mentions (2002)	3,536	1,167	2,866	150
Number of Mentions (2001)	3,080	1,309	2,311	115
Rate per 100,000 Population (2002)	153	51	124	7
Gender of Mentions (%) (2002)				
Male	63.3	63.8	63.4	63.3
Female	36.1	36.2	35.8	36.0
Age (%) (2002)				
12–17	1.5	1.4	8.4	15.3
18–34	36.9	56.0	52.2	53.3
35 and older	61.5	42.4	39.5	31.3
Race (%) (2002)				
White	39.1	55.6	54.9	91.0
African-American	56.3	39.9	40.7	---
Hispanic	0.6	... ³	0.4	0.7
Other/unknown	2.9	3.1	2.7	4.7
Route of Administration (%) (Last update-2000)			NA	
Smoking	62.3	6.4		18.8
Intranasal	25.9	22.2		15.6
Injection	7.0	71.5		46.9
Unknown/other	4.8	—		18.8
DAWN <i>Live!</i> ED Data—Unweighted Data ⁴				
Number of Reports (2004)	1,551	560	2,866	150
Gender of Reports (%) (2004)				
Male	64.0	69.2	63.4	63.3
Female	36.0	30.8	35.8	36.0
Age (%) (2004)				
12–17	1.5	<1	8.4	15.3
18–34	40.0	60.0	52.2	53.3
35 and older	58.5	39.0	39.5	31.3
Race (%) (2004)				
White	51.5	60.7	54.9	85.3
African-American	49.5	39.3	40.7	---
Hispanic	0.0	...	0.4	0.7
Other/unknown	0.0	---	2.7	4.7
Route of Administration (%) (1H 2004)				
Smoking	93.0	3.9	96.7	49.8
Intranasal	4.0	40.9	--	16.2
Injection	1.5	52.4	--	29.7
Unknown/other	1.1	0.7	--	4.3

¹NA=Not applicable.

²Dashes (---) indicate that an estimate has been suppressed because of incomplete data.

³Dots (...) indicate that an estimate with a relative standard error greater than 50 percent has been suppressed.

⁴The unweighted data are from 15 to 18 St. Louis 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.

Exhibit 1a. Combined Indicators for Cocaine, Heroin, Marijuana, and Methamphetamine in St. Louis: 1996–June 2004 (Cont'd)

Indicator	Cocaine	Heroin	Marijuana	Methamphetamine
Treatment Admissions Data				
Illicit Drug Admissions (%) (2003)	34.6	10.1	27.2	4.7
Illicit Drug Admissions (%) (1H2004)	33.6	10.8	29.6	4.2
Gender (%) (1H2004)				
Male	54.9	62.5	74.0	54.2
Female	45.1	37.5	26.0	45.8
Age (%) (1H2004)				
12–17	0.6	0.8	25.5	4.4
18–25	8.0	34.9	40.1	32.6
26–34	24.0	25.6	20.3	36.5
35 and older	67.4	38.6	14.1	26.5
Race/Ethnicity (%) (1H2004)				
White	26.1	40.1	41.1	98.9
African-American	73.3	59.0	57.9	0.2
Hispanic	1.1	0.9	1.0	0.0
Route of Administration (%) (1H2004)				
Smoking	90.7	4.1	95.8	47.0
Intranasal	5.1	37.3	0.3	14.9
Injecting	1.7	52.9	0.1	33.3
Oral	1.6	1.0	1.6	4.0

SOURCES: DAWN, OAS, SAMHSA; DAWN *Live!*, OAS, SAMHSA, updated 12/2004; TEDS database

Exhibit 1b. Other Combined Indicators for Cocaine, Heroin, Marijuana, and Methamphetamine in St. Louis: 2002–2004

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
Market Data (2002–2003)	Powder \$100–\$125/g, 70% pure; Crack \$20/rock, 50–90% pure; eightball \$300	\$20/cap or foil; \$10 per number-5 gel capsule; \$1.00–\$1.93/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–\$75/4-mg pill; LSD blot- ters \$2–\$7/35 microgram, OxyContin \$40/80 mg
Qualitative Data	Readily available, urban choice	Younger users, 1/3 younger than 25	Readily available, 2/3 in treatment younger than 25	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; major producers are super-labs—controlled by Hispanic groups

¹N/R=Not reported.

SOURCES: DEA; client ethnographic information

Exhibit 2. 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 May 2004

Category	HIV-Positive Test Results			
	Jan 2004–May 2004		Cumulative Through May 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)	267	(4.0)
Total	123		6,523	
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)	59	(1.0)
Female				
White	4	(3.0)	170	(3.0)
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)	13	(0.0)
Total	123		6,523	

SOURCE: St. Louis Metropolitan AIDS Program

Drug Abuse Patterns and Trends in San Diego County, California

Michael Ann Haight, M.A.¹

ABSTRACT

San Diego continues to be one of the epicenters for methamphetamine abuse in the Nation. Fifty-one percent of the 2004 treatment admissions (excluding alcohol) were for primary methamphetamine abuse, up from 47 percent in 2001. Male methamphetamine admissions have increased with the passage of Proposition 36, which mandates treatment for persons arrested on drug charges. Cocaine/crack indicators remained relatively stable in 2004 over the prior 9 years; however, this stimulant remains a serious problem in San Diego. Marijuana also continues to be a serious problem, accounting for nearly 51 percent of drug items analyzed by forensic labs in FY 2004 and for nearly one-quarter of the primary illicit drug admissions in 2004.

INTRODUCTION

Area Description

In 2000, more than 2.8 million persons resided in San Diego County (exhibit 1). More than one-half (55 percent) were White and 27 percent were Hispanic. Projections in 2004 show an increase in the county population to slightly more than 3.0 million, a decrease in the White population (to 52 percent) and a slight increase (1 percent) in the Asian and Hispanic/Latino populations. Median household income was nearly \$46,000 in 2000 and was projected at \$50,543 in 2004.

A major drug problem in the area is methamphetamine. There are several geographic and social factors that foster the manufacture, trafficking, and abuse of methamphetamine in San Diego County. Geographically, the county is isolated from the rest of California. There are 80 miles of border to the south, 70 miles of ocean to the west, mountain ranges to the east and northeast, and a military base to the north. There are three border crossings, including the Tijuana crossing, which is one of the busiest in the world. The border and the coastline represent a particular challenge in attempting to control the import of methamphetamine. In addition, isolated rural areas

are ideal for the establishment of small methamphetamine clandestine labs. Issues related to methamphetamine are discussed in greater detail in the section on *Drug Abuse Patterns and Trends*.

Data Sources

Data for this paper were provided by the following sources:

- **Treatment data** were provided by the San Diego County Alcohol and Drug Data System for 1987–2004. The 2004 data are annualized, based on the first 9 months of 2004.
- **Drug Abuse Warning Network (DAWN) emergency department (ED) data** are from the DAWN *Live!* System, Office of Applied Studies (OAS), Substance Abuse and Mental Health Services Administration (SAMHSA). The unweighted data are for the first 6 months of 2004 and represent between 6 and 9 of the 17 eligible hospitals reporting during that period. All DAWN cases are reviewed for quality control, and, based on the review, cases may be corrected or deleted; therefore, the data reported in this paper are subject to change. The data are unweighted and are not estimates for the San Diego area. These data cannot be compared with DAWN ED data for 2002 and before, nor can they be used for comparison with future data accessed through DAWN *Live!*. Only weighted data released by SAMHSA can be used in trend analysis. A full description of DAWN can be found at <<http://dawninfo.samhsa.gov>>.
- **Forensic laboratory data** were provided by the National Forensic Laboratory Information System (NFLIS), Drug Enforcement Administration (DEA), for fiscal year (FY) 2004 (October 2003–September 2004).
- **Drug price information** is from the National Drug Intelligence Center (NDIC) for July through December 2004.
- **Seizure data** on methamphetamine were provided by the DEA.

¹The author is affiliated with The Silvergate Group, San Diego, California.

- **Acquired immunodeficiency syndrome (AIDS) data** were taken from the San Diego County Health and Human Services Agency, “Human Immunodeficiency Virus (HIV) Surveillance Report.”

In addition, findings from the 2003 Arrestee Drug Abuse Monitoring (ADAM) program and the 2002 DAWN medical examiner/coroner system are presented in the discussion below on methamphetamine.

DRUG ABUSE PATTERNS AND TRENDS

At the January 2005 CEWG meeting, members focused on the abuse of stimulants, primarily methamphetamine and cocaine. The primary focus of this paper is methamphetamine abuse, a major problem in San Diego County.

Methamphetamine

San Diego continues to be one of the epicenters for methamphetamine abuse in the United States. While abuse indicators are mixed, they clearly show that methamphetamine is a major problem in the county.

As noted earlier, the manufacture of methamphetamine continues to be a problem.

Prior to 1989, there were many small methamphetamine labs in San Diego, operated by local “cookers” and outlaw motorcycle clubs. Over the years, however, the production and abuse of methamphetamine “waxed and waned.” The Chemical Diversion and Trafficking Act of 1988 and the Chemical Control Diversion Act of 1993 helped to curtail access to the precursors used to make methamphetamine. In addition, a DEA sting effort, Operation Triple Neck, resulted in arrests and the closing of stores that supplied equipment and chemicals to the methamphetamine cooks. Most methamphetamine indicators declined for a time, but new sources and distribution networks emerged so that...

- Mexican nationals and Mexican-Americans, operating on both sides of the border, began to produce large quantities of high-purity methamphetamine.
- The already established networks used to distribute other illicit drugs were used to distribute methamphetamine.
- The profits from these operations were large.

In FY 2004, methamphetamine accounted for 26.7 percent of all drug items reported by NFLIS; amphetamines accounted for less than 1 percent (exhibit 2).

Slightly more than one-half (51 percent) of primary illicit drug admissions in 2004 were for primary abuse of methamphetamine (exhibit 3). Trend data from 1987 through 2004 show that methamphetamine treatment admissions ($n=6,973$) and total treatment admissions (18,009) peaked in San Diego in 2002.

The 2003 data provide more detailed information on primary methamphetamine treatment admissions. Also, as shown below, major changes have occurred in the referral patterns and in the demographic composition of methamphetamine treatment admissions...

- Nearly three-fourths (72.3 percent) of the 6,365 primary methamphetamine abuse treatment admissions in San Diego County were referred by the criminal justice system, compared with only 14 percent in 1987.
- The proportion of male methamphetamine treatment admissions increased, reaching 58 percent in 2003.
- The median age of methamphetamine admissions increased, reaching 33 in 2003.
- The percentage of Hispanic methamphetamine admissions increased from 12 percent in 1991 to 28 percent in 2003. At the same time, White admissions decreased from 79 percent in 1991 to 55 percent in 2003.

Over the years, a number of factors were associated with increases in total admissions and those for methamphetamine, including the following:

- Law enforcement actions in the late 1980s and early 1990s, such as Operation Triple Neck
- The establishment of the Methamphetamine Strike Force (MSF)
- The establishment of and increase in the number of drug courts
- The passage of Proposition 36 in 2000, which mandated treatment of drug users involved in the criminal justice system.

Some of these external factors are graphically depicted in exhibit 4, together with treatment admissions data. Note that “budget problems” in the State

correspond to decreases in total admissions, including primary methamphetamine admissions in 2003.

DAWN unweighted emergency department (ED) reports of methamphetamine totaled 335 in the first half of 2004, representing 61 percent of the 549 “Stimulant” reports (which also include amphetamines) (exhibit 5).

Price data from NDIC show that methamphetamine cost \$60 per gram in the last half of 2004 (exhibit 6).

Other indicator data in San Diego County show the following patterns and trends in methamphetamine abuse:

- Methamphetamine overdose deaths peaked in 1997 (62), decreased in 1999 (37), increased again in 2001 (61), and declined in 2003 (48).
- Methamphetamine-positive toxicology tests among adult male arrestees increased from 32 to 36 percent from 2002 to 2003. Methamphetamine-positive tests among adult female arrestees increased from 37 to 47 percent over the same time period, while those among juvenile arrestees increased from 9 to 15 percent.

Over many years, San Diego County has had considerable experience in assessing and addressing problems associated with methamphetamine production and abuse. One of the first questions that had to be addressed was, “What are we going to do about the problem?” In response, the County Board of Supervisors established the Methamphetamine Strike Force in March 1996, a collaborative “assessment and action” effort involving more than 60 members. The MSF makes use of 10 data sources to guide the Force in assessing the problem at the community level, determining what actions to take, and evaluating results. It was recognized from the beginning that addressing the problems associated with methamphetamine required a long-term commitment; thus, attention was focused on many different aspects of the problem, including the following:

- Developing effective plans and policies
- Controlling the availability of precursor chemicals
- Taking steps to protect endangered children
- Making effective use of the media
- Developing and making use of training at all levels

The two newest initiatives include a focus on women and the border.

The Strike Force Web site is: <www.no2meth.org>.

Cocaine/Crack

Cocaine indicators remained relatively stable over the past 9 years. This stimulant is still a serious problem in San Diego. Cocaine hydrochloride (HCl) and crack are readily available in San Diego.

Nearly 14 percent of the drug items analyzed by forensic labs in FY 2004 were cocaine items (exhibit 2).

Treatment admissions for primary cocaine abuse, excluding alcohol, accounted for 10.4 percent of admissions in 2004, down slightly from 2001 (exhibit 3). Eighty-two percent of the cocaine admissions in 2004 were for crack abuse.

Unweighted ED reports of cocaine totaled 245 in the first half of 2004 and accounted for 17.3 percent of the illicit drug reports (excluding Alcohol Only for persons younger than 21).

Heroin

A small percentage (1.5 percent) of the 15,018 drug items analyzed in FY 2004 was heroin items (exhibit 2).

Treatment admissions for primary heroin abuse (excluding alcohol) represented 10.4 percent of the illicit drug admissions in 2004.

NDIC reports that Mexican brown powder costs \$60–\$100 per gram while Mexican black tar costs \$50–\$100 per gram.

Other Opiates

Opiates other than heroin accounted for 2.6 percent ($n=389$) of the drug items analyzed by forensic labs in FY 2004 (exhibit 2). Of the other opiate items, 39.3 percent were hydrocodone items, 9.5 percent were oxycodone, and 8.7 percent were codeine items.

During the first half of 2004, there were 297 unweighted ED reports of opiates/opioids. These accounted for 45 percent of the “Drugs of Misuse” reports. Of the 297 opiate/opioid reports, 110 (37 percent) were hydrocodone reports and 42 (14 percent) were oxycodone reports.

Marijuana

Marijuana continues to be a serious problem in San Diego. Slightly more than one-half (50.8 percent) of the items analyzed by forensic labs in FY 2004 were

cannabis, nearly double the proportion of methamphetamine items (exhibit 2).

Primary marijuana abuse accounted for nearly one-fourth (23.8 percent) of treatment admissions (excluding alcohol) in 2004, changing only slightly from the previous 3 years (exhibit 2).

In the DAWN *Live!* System, there were 313 unweighted marijuana reports in the first half of 2004; these represented 22.1 percent of the illicit drug reports.

In the last 6 months of 2004, an ounce of marijuana cost \$60–\$100 retail (exhibit 6).

Club Drugs

There were few indicators of club drugs in recent data sources. In FY 2004, 61 methylenedioxymethamphetamine (MDMA) and methylenedioxyamphetamine (MDA) items were reported by police forensic labs, accounting for 0.4 percent of all drug items analyzed (exhibit 2). Twenty phencyclidine (PCP) items were reported, representing 0.1 percent of the total items. The retail price of MDMA per tablet was \$15–\$30 in the last half of 2004 (exhibit 6).

Benzodiazepines

Benzodiazepine-type drugs accounted for 1.6 percent ($n=249$) of the drug items analyzed by forensic labs in 2004 (exhibit 2). Of the 249 items, 36.5 percent were diazepam items, 20.1 percent were alprazolam, and 8.8 percent were lorazepam.

Forty-one percent of the drugs of misuse in ED unweighted reports in the first half of 2004 were benzodiazepine reports.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

HIV/AIDS

Since 1981 when the first AIDS cases in San Diego County were diagnosed, there have been 12,034 AIDS cases reported for the county. Since 1999, the number of annual AIDS cases reported in San Diego has been in the mid-400 range. There were 538 cases

reported in 2003. In 2003, AIDS cases were 43 percent White, 17 percent were African-American, and 37 percent were Hispanic. Eighty percent of male San Diego AIDS cases were infected through male-to-male sex. For San Diego females, heterosexual contact was the most common mode of transmission.

From July 1, 2002, to December 31, 2003, a total of 4,155 HIV cases were reported for San Diego County. Of these, 89 percent were male, 62 percent were White, 43 percent were age 30–39, and 72 percent were infected by male-to-male sex.

Hepatitis B and C Virus

In San Diego, 849 cases of chronic hepatitis B and 18 cases of acute hepatitis B (HBV) were reported in 2003. The rates per 100,000 population for chronic and acute HBV were 28.7 and 0.6, respectively, down significantly from the respective 1995 rates of 35.9 and 2.1.

Hepatitis C virus (HCV), however, has shown different trends in San Diego. In 2003, there were 2,725 reported HCV cases in San Diego, more than double the 1,101 cases reported in 1995. The respective rates per 100,000 were 92.0 in 2003 as compared with 40.5 in 1995.

Other Sexually Transmitted Diseases

In 2003, there were 109 infectious syphilis cases and 8 congenital syphilis cases, compared with 106 and 36, respectively in 1993. Forty-four percent of the 2003 syphilis cases were age 35–44, 96 percent were male, 69 percent were White, and 72 percent resided in the central region of San Diego County.

The number of cases of gonorrhea declined from 3,579 in 1993 to 1,972 in 2003, while the number of chlamydia cases increased from 1993 to 2001 (from 7,720 to 10,249 cases). Twenty-six percent of the gonorrhea cases were age 20–24, 63 percent were male, 40 percent were White, and 41 percent lived in the central region of San Diego County. Of the 2003 chlamydia cases, 39 percent were age 20–24, 74 percent were female, 44 percent were Hispanic, and 28 percent lived in the central region of San Diego County.

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Exhibit 1. Total Population and Population by Race/Ethnicity for San Diego County, by Percent: 2000, 2004

Race/Ethnicity	2000 (N=2,813,833)	2004 (N=3,017,204)
White	55	52
Black or African-American	5	5
Asian	9	10
Other Race	4	4
Hispanic/Latino (of Any Race)	27	28
Median Household Income	\$45,871	\$50,543
Single Family Home Median Price		\$525,000

SOURCE: San Diego Association of Governments Census Publications

Exhibit 2. Number and Percentage of Selected Items Analyzed by Forensic Laboratories in San Diego: FY 2004

Drug	Number	Percent
Methamphetamine	4,054	26.7
Amphetamine	14	0.1
Cocaine	2,118	13.9
Heroin	233	1.5
Cannabis	7,716	50.8
Other Opiates	389	2.6
Benzodiazepines	249	1.6
MDMA/MDA	61	0.4
PCP	20	0.1

N=15,018 items analyzed.

SOURCE: NFLIS, DEA

Exhibit 3. Percentages of Primary Treatment Admissions (Excluding Alcohol) for Selected Drugs in San Diego County: 2001–2004

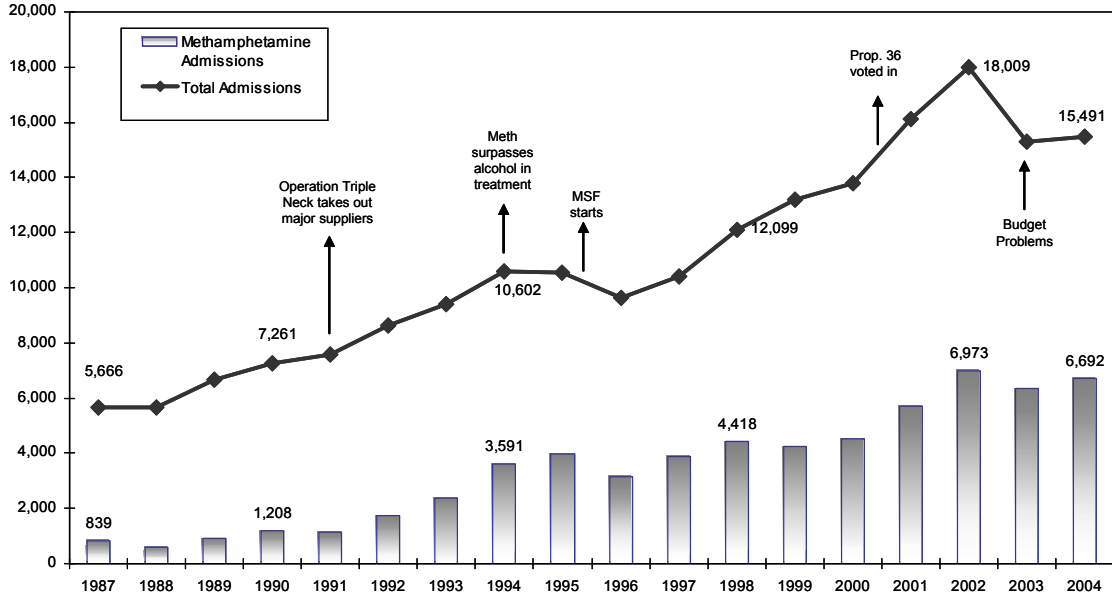
Drug	2001	2002	2003	2004 ¹
Methamphetamine	47.3	49.7	52.8	50.6
Amphetamine	0.6	0.6	0.5	NR ²
Cocaine	12.1	10.2	9.6	10.4
Heroin	12.3	11.7	10.9	10.4
Marijuana	25.9	25.4	24.5	23.8

¹ Data are annualized based on the first 9 months of 2004.

² NR=Not reported.

SOURCE: San Diego County Alcohol and Drug Data System

Exhibit 4. Changes in Treatment Admissions in Relation to Law Enforcement and Other Societal Changes: 1987–2004



SOURCES: San Diego County Alcohol and Drug Data System and other archival data

Exhibit 5. Numbers and Percentages¹ of ED Reports for Selected Illicit Drugs of Abuse (Unweighted²): January–June 2004

Drug	Number	Percent
Cocaine	245	17.3
Heroin	243	17.2
Marijuana	313	22.1
Stimulants	549	38.8
MDMA	12	0.8
PCP	12	0.8
GHB	10	0.8

¹Represents the percentage of all illicit drugs, excluding Alcohol Only cases for persons younger than 21.

²The unweighted data are from 6–9 San Diego 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.

SOURCE: DAWN Live!, OAS, SAMHSA, updated January 18, 2005

Exhibit 6. Retail Prices for Selected Drugs in San Diego: July–December 2004

Drug	Price	Unit and Type
Powdered Cocaine	\$60–\$80	Gram
	\$25–\$35	One-quarter gram
Crack	\$10–\$20	Rock
Heroin	\$60–\$100	Gram (Mexican brown powder)
	\$10–\$15	One-tenth gram (Mexican brown powder)
	\$50–\$100	Gram (Mexican black tar)
Marijuana	\$60–\$100	Ounce
Methamphetamine	\$60	Gram
	\$20–\$25	One-quarter gram
	\$150–\$300	One-quarter ounce
MDMA	\$15–\$30	Tablet

SOURCE: NDIC

Patterns and Trends of Drug Use in the San Francisco Bay Area

John A. Newmeyer, Ph.D.¹

ABSTRACT

In January 2005, the author conducted a comprehensive review of indicators of use of illicit substances in the San Francisco Bay area. Cocaine use remains low compared with use in the rest of the United States. Indicators show no clear upward or downward trend over the past 3 years. Heroin use indicators consistently point to a decline in use from the 1999 peak. Injection remains by far the predominant mode of usage. There are strong indications of an upsurge in use of oxycodone and hydrocodone. Methamphetamine use in the bay area is high compared to use in other metropolitan areas; most indicators point to a further increase in usage levels during the past 3 years. Indicators of use of 'club drugs' reached peaks in 2001 and then declined in 2002; ED reports and medical examiner mentions remain few compared to those for cocaine, heroin, or 'speed.' The prevalence of HIV among heterosexual drug injectors appears to have stabilized at a low level (6 to 10 percent), but HCV appears to be close to full saturation among that population. A recent legislative bill (SB 1159) enables California pharmacies to sell hypodermic equipment without prescriptions. This may have a significant impact upon disease transmission. A recently approved initiative (Oakland's Measure Z) directs local authorities to create systems for the regulation and taxation of adult marijuana use.

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 4,160,000 as of July 2003. 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.

Since 1994, there has been a steep rise in the cost of rental housing in the bay area, especially in San Francisco, Marin, and San Mateo Counties. This has caused significant out-migration of lower income people, which may be exerting downward pressure on local drug-use prevalence. Reverses in high-technology industries mitigated this pressure during 2001–2003, with unemployment rising from 2 to 6 percent and the overall population slightly declining. In the past year, unemployment rates have decreased and population is once again slowly increasing.

Data Sources

The sources of data for the drug abuse indicators within this report are described below:

- **Emergency department (ED) drug 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 2004. 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 one ED.) The data for 2004 were incomplete. Over the 12-month period, between 8 and 11 EDs reported data each month, with most reporting data that were basically complete (90 percent or greater). Data are preliminary and are not estimates for the San Francisco area. The DAWN *Live!* data were accessed 1/10/2005. 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!* represent drug

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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 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>>.

- **Treatment admissions data** were available for all five bay area counties for 1999 through the first half of 2004. 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 2004.
- **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.
- **Reports of arrests for drug law violations and counts of reported burglaries** were provided by the San Francisco Police Department (SFPD) for 2001 through 2004.
- **Arrestee drug testing data** are from the Arrestee Drug Abuse Monitoring (ADAM) program, National Institute of Justice, for San Jose and Sacramento for 2003 for adult males and for San Jose for adult females.
- **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. Preliminary data for 2003 were compared with those for 1994–2002. 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 2004* publication of the NDIC.

- **Ethnographic information** was obtained through interviews with treatment program staff and outreach workers in January 2005. Their observations were compared with those they made in December 2003 and May 2004 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, 2004.
- **Hepatitis B (HBV) data** for San Francisco County were available for 1996 through the first half of 2004 and were provided by the SFDPH.
- **Hepatitis C (HBC) virus prevalence** estimates were provided by the Urban Health Study (UHS) for 2003.

DRUG ABUSE PATTERNS AND TRENDS

Cocaine/Crack

Local observers note two interesting developments: youths are injecting crack which they “break down” with vitamin C powder and African-Americans have shifted somewhat away from smoking crack and toward snorting powder.

Unweighted data accessed from DAWN *Live!* show that reports of cocaine in 2004 represented patient who were predominantly Black; 65 percent were male. There were twice as many reports involving those older than 45 (36 percent) than younger than 30 (18 percent). Smoking was the preferred route of use for three-fifths of these patients.

In the five-county bay area, the overall number of admissions for drug treatment, other than alcohol, declined steadily between 1999 and 2002 and then rose slightly to a new level in 2003 and 2004 (exhibit 1). The proportion of cocaine/crack admissions among these admissions rose from 24 to 26 percent between 2001 and 2003. Among these admissions, more than 87 percent cited smoking—presumably of crack—as the preferred route of use. During FYs 2000 to 2004, San Francisco County cocaine admissions fluctuated narrowly, with no particular trend, in the range of 2,250 to 2,600 (exhibit 2).

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 3). In 2002, however, total mentions were 39 percent below the 1997–2000 average.

Cocaine-positive tests among arrestees in San Jose and Sacramento, nearby metropolises which are ADAM sites, may give some indication of cocaine use prevalence in San Francisco. During 2003, 13 percent of adult male arrestees in San Jose and 22 percent of those in Sacramento tested positive for cocaine. The two areas had, respectively, the fourth and ninth lowest proportions of cocaine-positive arrestees among all 39 ADAM sites. For adult female arrestees in San Jose, 10 percent tested positive—the second lowest proportion among 25 ADAM sites.

There were nearly 3,800 arrests on cocaine-related charges in San Francisco in 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 quarter gram. Crack prices were around \$600 per ounce and \$20–\$50 per “rock.” These prices were up slightly from 2002.

To summarize, cocaine use in the bay area is low compared with use in the rest of the United States. The indicators do not reflect any consistent upward or downward trend in the past 3 years.

Heroin

According to the unweighted DAWN *Live!* data, reports of heroin during 2004 involved patients who were two-thirds male and nearly two-thirds White. Thirty-nine percent were older than 45, and only 19 percent were younger than 30. Injection is the overwhelming preference (93 percent) as the route of use.

The number of treatment admissions for primary heroin problems in the five-county bay area fell by more than half between 1999 and 2004 (exhibit 1). As a proportion of all primary drug admissions excluding alcohol, heroin constituted 64 percent in 1994, 55 percent in 1999, and only 36 percent in 2003. Injection remains by far the predominant route of use: 80 percent reported that route, as compared with 14 percent who reported inhalation as the preferred route. San Francisco County heroin admissions fell by 9 percent between FYs 2002 and 2004 (exhibit 2).

ME death mentions involving heroin in 2002 were at their lowest level in 6 years (exhibit 3). 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.

In the ADAM program in 2003, 3.1 percent of adult male arrestees in San Jose and 6.9 percent of those in

Sacramento tested opiate positive; the median across the 39 ADAM sites was 5.8 percent. Of female arrestees in San Jose, 3.4 percent tested positive, well below the 25-city median of 6.6 percent.

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.

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. 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 2003. The 27 buys were all of Mexican origin. The 2003 samples averaged 11 percent pure and \$0.98 per pure milligram (exhibit 4). Of the last 10 years, 2001, 2002, and 2003 were the 3 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.

In summary, most indicators point to a decline in heroin use in the period from 2000 to 2004.

Other Opiates

Local observers note a significant increase in oxycodone availability and usage. 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). The combined count of hydrocodone and oxycodone in the unweighted DAWN *Live!* ED reports in 2004 was less than 8 percent that of heroin. For hydrocodone, whose count was more than twice that of oxycodone, 57 percent of the reports represented male patients, 71 percent represented Whites, and 63 percent represented patients older than 35.

Marijuana

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.

Among adult male arrestees in the ADAM program in 2003, 35 percent of those in San Jose and 49 percent of those in Sacramento tested positive for marijuana. The median across the 39 ADAM sites was 44 percent. Among female arrestees in San Jose, 29 percent tested positive, near the 25-site median of 32 percent.

Marijuana treatment admissions in San Francisco County reached a peak in FY 2003; they then dropped by 14 percent in FY 2004 (exhibit 2).

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, in that Measure Z explicitly instructs the city of Oakland to create systems for the regulation and taxation of adult use of marijuana.

According to the NDIC, California remains a leading producer of domestic marijuana. The State accounted for more than one-third of outdoor plants eradicated in 2001 and 2002 and more than two-thirds of those eradicated from National Forest Service lands. Several bay area counties (Alameda, Contra Costa, Lake, Mendocino, Monterey, Napa, Santa Cruz, and Sonoma) were cited as areas where considerable cultivation has occurred in recent years.

The overall indications are that marijuana use peaked in 2001 and has declined significantly since then.

Stimulants

Ethnographic observations suggest an increase in “speed” use by youth, but no major changes of use patterns among older adults were reported. Gay males remain a very prominent portion of the user population.

Nearly as many methamphetamine reports as heroin reports appear in the unweighted DAWN *Live!* data for the San Francisco area in 2004. About four-fifths of the ED reports in 2004 involved patients who were male, about three-fourths involved Whites, and two-thirds involved those older than 30.

The number of treatment admissions for primary speed problems in the five-county bay area increased steadily between 1999 and 2004 (exhibit 1). The proportion of primary speed users among all nonalcohol drug admissions rose from 13 percent in 1999 to 23 percent in 2003. 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 steadily from FY 2001 to FY 2004, with the later year’s count 25 percent higher than the earlier year’s.

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 3). Of the methamphetamine-related death mentions in 2000, males accounted for 93 percent, and the median age was 40.

Two nearby metropolises that are ADAM sites may give some indication of the methamphetamine situation in San Francisco. In Sacramento and San Jose, respectively, 38 and 37 percent of male adult arrestees tested positive for methamphetamine in 2003. These were the third and fourth highest proportions of methamphetamine-positives among male adults in all the 39 ADAM sites. Among the female arrestees, 45 percent tested positive, the fourth highest among 25 ADAM sites.

According to the NDIC, in 2004 pounds of “crystal” methamphetamine sold in the \$10,000–\$13,000 range, ounces in the \$600–\$1,500 range, and grams in the \$80–\$100 range. In 1999, comparable price ranges were \$3,500 to \$10,000 for pounds and \$500 to \$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.

Methamphetamine use in the bay area is high as compared to other metropolitan areas of the United States. Most indicators point to an increase in usage during the past 3 years.

Depressants

The unweighted ED reports of benzodiazepines in 2004 involved mostly patients who were White (77 percent), male (63 percent), and older than 35 (69 percent). ME mentions dropped from a 1999–2001 average of 54 to 34 in 2002 (exhibit 3).

Hallucinogens

The unweighted data accessed from *DAWN Live!* show that ED reports for lysergic acid diethylamide (LSD) were rare during 2004. Reports of phencyclidine (PCP) were about five times more common. Of these PCP reports, most patients were male and most were Hispanic; two-thirds were older than 35.

Club Drugs

The NDIC reports that in 2004, street prices of methylenedioxymethamphetamine (MDMA or “X”) were in the range of \$15–\$40 per “tab.” Unweighted data accessed from *DAWN Live!* show that the ED reports of this drug were predominantly (69 percent) among people younger than 30. ED reports of gamma hydroxybutyrate (GHB) were on average older, with 64 percent older than 30. Ketamine ED reports were very rare. The actual number of club drug reports remains small compared with ED reports for cocaine or methamphetamine. The same is the case for ME mentions (exhibit 3).

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

AIDS

San Francisco County had a cumulative total of 29,508 AIDS cases through September 30, 2004, an increase of 678 (2.4 percent) from the total reported through September 30, 2003. Of these cases, 2,108 (7.1 percent) were heterosexual injection drug users (IDUs), an increase of 83 (4.1 percent) in a year. Another 3,725 AIDS cases (12.6 percent) were men who had sex with other men (MSM) and also injected drugs (MSM/IDUs); this number increased by 79 or 2.2 percent in a year. There were just 47 reported cases among lesbian IDUs, barely one-hundredth the number among MSM/IDUs. The rates of case reporting among all of these groups had been decelerating during the early 2000s, but during the past year those rates have begun to accelerate. A total of 330 AIDS cases have been reported for transgender San Franciscans, an increase of 9.6 percent in the past year.

Among San Franciscans diagnosed in 2003 and 2004, heterosexual IDUs accounted for 17 percent, up from 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 2003–2004 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 14 years. This caseload is 69 percent male, 50 percent Black, 35 percent White, 11 percent Hispanic, and 2 percent Asian/Pacific Islander. By contrast, the gay/bisexual IDU caseload is 72 percent White, 16 percent Black, 10 percent Hispanic, and 1.6 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 (c. 15 percent) of heterosexual HIV-positive IDUs reported being on drug treatment for their condition.

Passage of SB1159, which enables California pharmacies to sell hypodermic equipment without prescriptions, has the potential for significant effects upon disease transmission. Early in 2005, decisions will be made as to which pharmacies will opt into this activity.

Hepatitis B

From 1996 through 2001, reported cases of HBV in San Francisco County rarely deviated from a pace of about one per week. The pace dropped in 2002 and 2003 to about one every 9 days, then dropped further in 2004 to about one every 16 days.

Hepatitis C

UHS data from 2003 disclosed that fully two-thirds of all IDUs in the sample self-reported HCV sero-

positivity. 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 estimated at 18,700, 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. Admissions to Drug Treatment Programs in the San Francisco Bay Area by Primary Drug of Abuse: 1999–2004

Drug	1999	2000	2001	2002	2003	2004 ¹
Cocaine	8,727	7,718	7,428	6,746	7,111	7,126
Heroin	19,763	17,416	14,673	11,461	9,893	9,628
Amphetamine	4,595	4,469	5,073	5,636	6,435	6,882
All Drugs	36,069	32,034	30,920	28,329	27,607	27,748

¹Figures for 2004 are projected from data for the first half of the year.
SOURCE: California Department of Alcohol and Drug Programs (DADP)

Exhibit 2. Admissions to Drug Treatment Programs in San Francisco County by Primary Drug of Abuse: FYs 2000–2004

Drug	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Cocaine	2,600	2,306	2,440	2,274	2,527
Heroin	4,030	3,867	4,002	3,700	3,646
Amphetamine	1,008	991	1,053	1,144	1,235
Marijuana	915	867	1,067	1,110	950
Alcohol	3,987	3,581	3,147	3,153	2,680
All Drugs	8,690	8,191	8,764	8,406	8,520
All Drugs and Alcohol	12,677	11,772	11,911	11,559	11,200

SOURCE: San Francisco Department of Public Health

Exhibit 3. 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 4. Price and Purity of Heroin Samples: 1994–2003

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

SOURCE: DEA

Recent Drug Abuse Trends in the Seattle-King County Area

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ABSTRACT

Cocaine continues to be a major drug of abuse with high levels of mortality and treatment admissions, particularly among African-Americans. The number of heroin deaths continues to decline, as does the proportion of heroin deaths involving no other drugs. Deaths and treatment admissions for prescription opiates continue to rise. Methamphetamine indicators appear to be plateauing in King County; users are disproportionately Caucasian. Marijuana is widely used, particularly by youth. Prescription depressant medications are mostly used in combination with other drugs, often with deadly effects. MDMA ('ecstasy') indicators have declined in the past few years; adulteration continues and may be increasing. Hepatitis B and C infect the majority of IDUs. HIV among IDUs is generally low, with the exception of methamphetamine-injecting men who have sex with men.

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.

Data Sources

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

- **Emergency department (ED) drug reports data** were obtained from DAWN *Live!*, a restricted-access online 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 2004 are presented, and these data were accessed on January 14, 2005. All 22 eligible hospitals in the area are in the DAWN sample. There are 23 emergency departments in the sample, since one hospital has two EDs. During the 6-month period, between 10 and 13 EDs reported data each month. Data were incomplete, with less than 50 percent complete data for 1–4 of these EDs in 8 of the 12 months. These data are preliminary. All DAWN cases are reviewed for quality control and, based on the review, may be corrected or deleted. Therefore, the data may change. Data represent drug reports and

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are not estimates for the reporting area. Data are utilized for descriptive purposes only. Drug reports exceed the number of ED visits, since a patient may report use of multiple drugs (up to six drugs plus alcohol). 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 weighted data will be 2004, so reasonable trend analyses will not be possible for several years. Available data are for King and neighboring Snohomish Counties combined. ED race/ethnicity is not reported because 63 percent of drug abuse/other cases do not have race/ethnicity documented. 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 over-medication 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. Much of the discussion focuses on abuse of “illegal” drugs (e.g., cocaine, heroin, marijuana) as distinct from nonmedical use of prescription-type drugs and use of over-the-counter drugs and alcohol. A full description of the DAWN system can be found at the DAWN Web site <<http://dawninfo.samhsa.gov>>.

- **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 statewide alcohol/drug treatment activity database system. Data were compiled for King County residents from January 1, 1999, through June 30, 2004. Data are included for all treatment admissions that had any public funding. Department of corrections and private pay clients (primarily methadone) are also included, though they contribute only a small number of cases. Methadone waiting list data for those seen at syringe exchange sites are administered and provided by Public Health—Seattle & King County (PHSKC).
- **Drug-related mortality data** were provided by the King County Medical Examiner (ME). Data for the first half of 2004 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.

- **School drug use survey data** are available from the Seattle Public School’s Communities That Care Survey for 2002 and 2004. Response rates were 50 percent in 2002 and 60 percent in 2004. Trends cannot be determined from these data.
- **Syringe exchange data** on the number of syringes exchanged and the number of encounters with clients are provided by PHSKC’s HIV/AIDS program.
- **Prescription drug sales data** are extracted from the Drug Enforcement Administration’s Automation of Reports and Consolidated Orders System (ARCOS) reports. The data provide retail drug distribution data by Zip Code, covering primarily sales to hospitals and pharmacies. Data are unavailable for most drugs for year 2000. ARCOS data presented here are for the 3-digit Zip Code areas of 980 and 981, which roughly correspond with King County boundaries. The population in these two Zip Code areas is 1,969,348, compared with 1,737,034 for King County in 2000.
- **Illegal drug seizures data** from the U.S. Customs Service relating to the seizures for all illegal drugs are included for January 2001 to June 2004.
- **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.
- **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 and FY 2004. Data are presented for the Seattle-area lab in comparison to the rest of the State.

- **Data on infectious diseases related to drug use**, including the human immunodeficiency virus (HIV), acquired immunodeficiency syndrome (AIDS), and hepatitis, were provided by two 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, Washington State (2001 through 2003), and the United States (2000 through 2002) are provided by PHSKC, the Washington State Department of Health, and the Federal Centers for Disease Control and Prevention (CDC). HIV cases were reported to PHSKC or the Washington Department of Health between 2000 and 2004. The Sexually Transmitted Disease (STD) Clinic, PHSKC, provided data on clients’ drug use, health status, and health behaviors for October 2001 to September 2002.
- **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 2004 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, thus trend analyses are limited. The large number of unknown drugs in 2001 and 2002 may obscure some trends as well.
- **Key informant interview data** are obtained from discussions with treatment center staff, street outreach workers, and drug users.

DRUG ABUSE PATTERNS AND TRENDS

Cocaine/Crack

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) has declined slowly but steadily, from 45 percent of all admissions in 1999 to 37 percent in the first half of 2004 (exhibit 1). Cocaine use was uncommon among youth, accounting for approximately 3 percent of cocaine-involved treatment admissions from 1999 through the first half of 2004. Cocaine users appear to be an aging group, with the proportion of those age 45–54 increasing from 15 percent in 1999 to 24 percent in the first half of 2004. At the same time, the

age group with the greatest proportion of admissions, 30–44-year-olds, declined from 64 to 52 percent of admissions. For treatment admissions in which cocaine was not the primary, secondary, or tertiary drug of abuse, 29 percent were female, while cocaine-involved admissions were 39 percent female on average over this timeframe. No changes in the proportion of female cocaine admissions were seen over time.

African-Americans are disproportionately represented in the treatment data relative to their representation in the county, due largely to the fact that these data are almost entirely based upon publicly funded treatment admissions and African-Americans have a lower annual income on average in King County than Caucasians. Even accounting for this demographic fact, African-Americans entering treatment use cocaine at much higher levels than Caucasians. In the first half of 2004, 33 percent of cocaine-involved treatment admissions were African-American, compared to 15 percent among those admitted to treatment who did not use cocaine. The county is 5 percent African-American.

Unweighted data accessed from DAWN *Live!* show that cocaine emergency department drug reports for drug abuse/other case types represented the largest proportion of illegal drugs: 36 percent ($n=1,082$) in the first half of 2004 (exhibit 2). Additionally, there were 124 drug reports for cocaine for those seeking detoxification/treatment. Demographics for drug abuse/other case types were as follows. A similar proportion of cocaine drug reports were female, 35 percent, as for all drugs including alcohol, prescription, and over-the-counter drugs, 37 percent. Cocaine drug reports involved patients who were generally older than those seen for any drug. Only 4 percent of cocaine drug reports were for those age 12–20, compared to 10 percent for all drugs. For cocaine drug reports, 38 percent were 35–44, compared with 30 percent for all drugs.

DAWN unweighted data for presenting complaints are newly available. On average, for each person there were 1.47 complaints. Most common for cocaine were altered mental status (20 percent), identical to “all drugs” (exhibit 2), and psychiatric condition (24 percent), higher than the 18 percent for all drugs. Cocaine drug reports were less likely to involve abscess/cellulitis problems (7 percent) compared to all drugs (12 percent). Those with cocaine drug reports were more likely to be admitted to the psychiatric unit, 7 percent, than those with any other illicit drug type reported.

Information on the route of administration was not documented for 72 percent of the unweighted cocaine ED drug reports, much higher than the 52 percent of all drug types for DAWN ED data. Still, some differences

were evident. Excluding missing data, 41 percent of cocaine drug reports involved smoking, compared with 15 percent for all drugs. Injection was the second most common route among cocaine drug reports, accounting for 36 percent, less than the 41 percent for all drugs.

Cocaine was the most common drug mentioned by adults calling the ADHL between 2001 and June 2004 (exhibit 3). Between 27 and 37 percent of calls by adults were about cocaine; any changes over time were obscured by the high number of calls about unknown drugs in 2001 and 2002. For youth, cocaine was the third most commonly mentioned drug, representing between 8 and 14 percent of calls in each timeframe; again, the large number of unknown drug type calls obscured any trends.

Survey data showed that cocaine was not commonly used by high school seniors in the past 30 days (exhibit 4). Use levels were 1.7 percent in 2002 and 2.5 percent in 2004 (not significantly different).

Cocaine was the most common substance identified in the Seattle area according to NFLIS data on local law enforcement drug seizure testing (exhibit 5). Cocaine was the second most common drug detected in the laboratories for the rest of the State, with about one-half of the level found in the Seattle-area lab. Minimal change occurred in the proportion of cocaine-positive tests from FY 2003 to FY 2004.

Cocaine-involved deaths in the first half of 2004 represented 37 percent of deaths (exhibit 6a). The total number of cocaine-involved deaths ($n=43$) is the third highest number in a half-year period since 1997. African-Americans are involved in cocaine-related deaths at levels disproportionate to their representation in the local population. Over this 7½-year period, 20 percent of cocaine-involved decedents were African-Americans (exhibit 6c), compared to the 5 percent of the King County population that is African-American. Caucasians were involved in 73 percent of cocaine-related deaths, slightly lower than the 76 percent of the county population they represent. Females made up 21 percent of cocaine-involved deaths, compared to 29 percent for all drug-involved deaths. The median age for decedents with cocaine identified was 41, similar to the median age for all decedents (42). On average, one in five deaths involving cocaine involved no other drugs (exhibit 6b).

The number of cocaine seizures by the U.S. Customs Service remained steady, with 14 in the first half of 2004 totaling 199 pounds (exhibit 7). Cocaine is seized relatively infrequently by the U.S. Customs Service. In the first half of 2004, there were four fairly large seizures that ranged from 17 to 88 pounds.

Heroin

The proportion of treatment admissions involving any use of heroin declined from 26 to 20 percent from 1999 to June 2004 (exhibit 1). Heroin use was rare among youth entering treatment, with only 1 percent of youth mentioning heroin as a current drug of abuse. Similar to cocaine users, heroin users entering treatment appear to be an aging group, with the proportion of those age 45–54 increasing from 26 to 33 percent. At the same time, those age 30–44 declined from 54 to 45 percent.

Women represented approximately 39 percent of heroin-involved admissions, higher than the 31 percent for admissions not involving heroin. African-Americans represented about 17 percent of admissions involving heroin, lower than the proportion using other substances (23 percent) but still about three times the proportion living in the county. Four percent of people admitted to treatment who were using heroin were Native American, less than the 6 percent for other drugs, but much higher than the 1 percent of all county residents who are Native American.

Among those entering opiate substitution treatment, the proportion reporting heroin as their primary drug decreased from 95 to 84 percent from January 1999 to June 2004 (exhibit 8). Both treatment admissions and discharges peaked in 2000 and have steadily declined since. At the same time, the waiting list for methadone has remained long (exhibit 9). The volume of syringes exchanged increased in both 2003 and 2004 (exhibit 10). Together, these data point to a continued high level of treatment need and demand. It may be that treatment admissions and discharges have declined as lengths of stay have increased.

The proportion of all deaths involving heroin in the first half of 2004 was lower than anytime in the prior 7 years, 29 percent compared to 49 percent overall and a peak of 73 percent in the second half of 1998 (exhibit 6a). The proportion of heroin-involved deaths due solely to heroin plummeted to 9 percent in the first half of 2004, down from 52 percent in the first half of 1997 (exhibit 6b). Heroin-involved decedents had a median age of 41, similar to the age seen for all decedents, 42 (exhibit 6c). Females made up just 18.5 percent of deaths, the lowest proportion for any drug. Three percent of heroin-involved deaths were among Native Americans, higher than the 1 percent of the county population that is Native American.

The precipitous drop in heroin-involved deaths seen in the second half of 2000 and largely maintained

through the first half of 2004 coincides with an increase in local methadone treatment capacity. Purity of heroin locally decreased around this same general time as well. In 1998, the average purity of heroin purchased was 21 percent, according to the DEA Domestic Monitoring Program. In 2000, the purity was 13 percent, and it has since declined a bit further to 10 percent in 2003. In order to obtain a high from such low purity heroin, most users inject.

The primary 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 unweighted heroin drug reports, accessed through DAWN *Live!*, represented 31 percent of illegal drug abuse/other drug reports in the first half of 2004, second only to cocaine at 36 percent (exhibit 2). The number of drug abuse/other drug reports for heroin totaled 933, with another 91 drug reports for individuals seeking detox/treatment. A relatively large proportion of heroin drug abuse/other reports involved women, 43 percent, compared with 37 percent for all drug types.

Only 3 percent of heroin ED drug reports were for patients age 12–20, compared with 10 percent for all drugs. For heroin drug reports, 32 percent were 35–44, similar to the 30 percent for all drugs. The most common complaint among patients represented in the heroin drug abuse/other reports was abscess/cellulitis (42 percent), much higher than for any other substance and for all substances combined (12 percent).

In the unweighted DAWN data, admissions to any hospital unit were shown to be higher for heroin-involved drug abuse/other reports, 25 percent, than for any other major substance. Route of administration data were most complete for heroin, with only 31 percent of reports not documenting the route, compared with 52 percent overall. Injection was far more common among heroin-involved patients, 96 percent among reports with data, compared with 20 percent for all substances.

Between 2001 and June 2004, heroin mentions in calls to the ADHL represented 13–18 percent of adult calls and 2–3 percent of youth calls (exhibit 3). Trends over time are not measurable because of the large number of calls about “unknown” drugs.

NFLIS results for FY 2003 and FY 2004 show similar levels of law enforcement seizures for heroin in the Seattle area (5 percent) and the rest of the State (5–7

percent). Heroin was the fourth most common substance detected in each of these regions (exhibit 5).

Heroin seizures by the U.S. Customs Service are generally infrequent, with no seizures reported in the first half of 2004 (exhibit 7). The major trafficking route is believed to involve the interstate highway system from the southwestern United States once the product has crossed the Mexican border. It is believed there is not much heroin trafficking across the Washington-Canadian border in either direction.

Data for King County from the Northwest HIDTA for 2003 for Mexican black tar heroin indicate the following prices: \$30–\$150 per gram, \$400–\$900 per ounce, \$8,000–\$10,000 per pound, and \$16,000–\$25,000 per kilogram.

Other Opiates/Prescription Opiates

For the purposes of this report, “other opiates/prescription 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), meperidine (e.g., Demerol), pharmaceutical morphine, acetyl-methadol, and the “narcotic analgesics/combinations” reported in the DAWN ED data.

Treatment admissions for other opiates as the primary drug have increased from 0.8 to 2.3 percent of admissions to all treatment modalities from 1999 to the first half of 2004. Over this same timeframe, the proportion of 18–29-year-olds increased from 16 to 42 percent. More than one-half (55 percent) of the admissions were female, much higher than the 33 percent seen for all substances. Other opiate users were much more likely to be White (77 percent), compared to users of all substances (58 percent). The proportion of primary other opiate users who reported ever injecting drugs was nearly identical to all drug users, 35 vs. 34 percent, respectively.

Among those entering opiate substitution treatment, the proportion of prescription opiate users increased from 3 percent in 1999 to 14 percent in the first half of 2004 (exhibit 8).

Unweighted data accessed from DAWN *Live!* on drug abuse/other case type reports for other opiates in the first half of 2004 totaled 353, with 81 seeking detox/treatment and 246 reporting overmedication (exhibit 2). The total of 838 drug reports for other opiates for all 8 DAWN case types represented 10 percent of all substances.

The characteristics of other opiate ED drug reports for drug abuse/other include a much higher proportion of females (48 percent) than for all substances combined (37 percent). Use was more frequent among older groups, with 37 percent age 45 and older having drug reports involving other opiates, compared with 23 percent overall. The proportion presenting with a chief complaint of withdrawal was much higher (26 percent) than for all other drugs (5 percent). A slightly larger proportion of other opiate drug patients (10 percent) were referred to detox/treatment than for all substances (7 percent). Route of administration data were missing for 52 percent of other opiate ED drug reports; among those with data, 91 percent used orally, compared with 41 percent for all drugs.

In the unweighted ED data, specific types of other opiates were documented in 260 of the 353 drug reports for drug abuse/other reports. The most common types were methadone ($n=109$), oxycodone single drug formulation ($n=53$), hydrocodone-acetaminophen ($n=28$), morphine ($n=21$), and oxycodone-acetaminophen ($n=20$).

Calls to the ADHL about methadone represented 2 percent of calls in 2001 and 2002, 3 percent in 2003, and 5 percent in the first half of 2004. Other prescription opiates were common, but categorization of these substances changed over time, precluding trend comparisons. In the first half of 2004, there were 98 calls specifically about OxyContin and 198 about “prescription pain pills.” Combined, these calls for OxyContin and prescription pain pills represented 14 percent of all adult calls for illicit, over-the-counter, and prescription drugs. For youth, there were many fewer such calls, with eight total for methadone over the 3½-year period. There were 7 youth calls about OxyContin and 10 for prescription pain medications, representing just 5 percent of youth calls combined.

Three types of prescription opiates are among the top 25 substances reported in the NFLIS data: oxycodone, hydrocodone, and methadone (exhibit 5). For the Seattle area, these three substances totaled 2 percent in FY 2003 and 3 percent in FY 2004. For the rest of the State, about 3 percent of seizures tested positive for these substances in both years.

The number of deaths involving prescription opiates was at an all-time high (48) in the first half of 2004, up from 13 in the first half of 1997 (exhibit 6a). Decedents were more likely to be female (42 percent) than the average for all drugs (29 percent) (exhibit 6c). They were also slightly more likely to be Caucasian, 87 percent, compared to 84 percent for all

drugs. Additionally, the median age was older, 43 years, compared to 42 for all drugs.

Prescription opiates are infrequently the sole drug found in drug-involved deaths, with 13 percent of deaths involving prescription opiates ruled as single drug only deaths (exhibit 6b). From 1998 to 2000, other opiate only deaths were at higher levels, ranging from 17 to 33 percent of all deaths involving prescription opiates. Since 2002, the proportion of single-drug deaths involving prescription opiates has not exceeded 8 percent.

What constitutes a prescription opiate-related death is unclear, however, particularly among opiate-tolerant individuals. Issues of tolerance, potentiation with other drugs, and overlapping therapeutic and lethal dose levels complicate assigning causation in prescription opiate-involved fatalities. The source and form of prescription opiates involved in deaths are often undetermined.

DEA data on sales of prescription opiates to hospitals and pharmacies indicate that methadone sales have steadily increased each year, with a total increase of 480 percent from January 1997 to June 2004 (exhibit 11). Note that these data for methadone only include prescriptions for pain written by physicians; they do not include methadone provided in opiate treatment programs. Oxycodone sales have continued to increase in recent years, though the rate of increase slowed in the first half of 2004. Hydromorphone (80 percent), hydrocodone (99 percent), morphine (129 percent), and fentanyl (162 percent) sales have all increased as well. Codeine and meperidine sales have both steadily declined, decreasing 31 percent and 39 percent, respectively.

Several diverse factors may impact these prescribing patterns: (1) increased advertising and promotion of pharmaceuticals generally, (2) guidelines promoting adequate use of opiates for management of pain released in 1996 by the Washington State Medical Quality Assurance Commission, and (3) recent efforts to shift to methadone and morphine as less expensive alternatives to other opiates by Washington State agencies.

Marijuana

One-half of all people admitted to treatment reported current marijuana use from 1999 to June 2004 (exhibit 1). Among those entering treatment who reported current marijuana use, youth constituted 28 percent of admissions. However, youth only represented 2 percent of those entering treatment who did not report current marijuana use. A larger proportion

of marijuana users are male (71 percent) than non-users (63 percent).

Unweighted data accessed from DAWN *Live!* show that marijuana ED drug abuse/other reports represented 11 percent ($n=429$) of illicit drugs reported (exhibit 2). An additional 25 patients who were using marijuana (perhaps in combination with other drugs) sought detox/treatment. Marijuana drug abuse/other reports were much more common among those age 12–20 (30 percent) than for all substances (10 percent). Chief complaints for marijuana most commonly were for altered mental status (24 percent) and psychiatric condition (26 percent), higher than the averages for all drugs (20 and 18 percent, respectively).

Calls to the ADHL for marijuana constituted 20–24 percent of adult calls and 45–57 percent of youth calls between 2001 and June 2004 (exhibit 3). Marijuana was the most common substance identified by youth and the second most common for adults, tied with methamphetamine.

Marijuana was the most commonly identified illegal drug among high school seniors. Use in the prior 30 days was reported by 27.0 percent in 2002 and 25.4 percent in 2004 (exhibit 4).

Cannabis was the third most commonly identified substance in NFLIS data for both the Seattle area and the rest of Washington State in FYs 2003 and 2004 (exhibit 5). In the Seattle area, 17 and 15 percent of seizures tested positive for cannabis in FY 2003 and FY 2004, respectively. Similar levels were seen in the rest of the State (almost 16 percent for both years).

Marijuana seizures by the U.S. Customs Service continue to exceed seizures for all other substances, with 248 seizures totaling 9,750 pounds in the first half of 2004 (exhibit 7). In the second half of 2003, the greatest seizures in terms of weight occurred, though the number of seizures was very similar to the most recent time period. The average weight per seizure is up since increased scrutiny following the September 11, 2001, attacks.

HIDTA data collected from King County law enforcement in 2003 show the following prices for marijuana: \$10–\$40 per gram, \$250–\$500 per ounce, and \$2,200–\$4,000 per pound. Price depends on the quality and a variety of other factors, but “BC Bud” from British Columbia, Canada, is widely available and is the most expensive of the marijuana varieties available in King County.

Stimulants

The proportion of ADHL calls related to methamphetamine remained steady from January 2001 through June 2004 (exhibit 3). Approximately 20 percent of adult and 18 percent of youth calls about illicit drugs involved methamphetamine. Among youth, methamphetamine is the second most frequently mentioned illicit drug, following marijuana. Among adults, methamphetamine calls are less frequent than those for cocaine, similar to those for marijuana, and slightly more frequent than calls for heroin.

The proportion of treatment admissions for King County residents involving methamphetamine increased slightly in the first half of 2004 to 15 percent, similar to the 14 percent in each of the 3 years prior and a sizeable increase from 9 percent in 1999 (exhibit 1).

The characteristics of those entering treatment for methamphetamine use indicate that they are disproportionately White compared to the county as a whole and compared to those admitted to publicly funded drug treatment. Caucasians represented 76 percent of King County residents in the 2000 census, but they represented 82 percent of methamphetamine-related treatment admissions in the first half of 2004. This is a lower proportion of Caucasians entering treatment for methamphetamine than in 1999. An increasing number of people are being identified as “multiple race,” however, which makes the detection of trends difficult.

Treatment data indicate that methamphetamine users are much younger than other drug users, with 37 percent being between the ages of 18 and 29 and 48 percent being 30–44 in the first half of 2004. This compares with those who did not use methamphetamine, 23 percent of whom were between 18 and 29, and 40 percent of whom were age 30–44. The age at treatment admission has stayed fairly steady for methamphetamine users, with no discernable trend, since 1999.

A larger proportion of methamphetamine treatment admissions were female—39 percent of admissions between January and June 2004—than admissions for using other drugs (32 percent).

Deaths involving amphetamines appear to have leveled off (exhibit 6a). Almost all amphetamine deaths involved methamphetamine specifically. There were seven deaths in which methamphetamine was identified in the first half of 2004, compared to nine in each of the preceding three 6-month periods. Decedents with methamphetamine identified tend to be substantially younger than those with other drugs, with a median age 36.5 compared to 42.0 from January 1997 to

June 2004 (exhibit 6c). A minority of decedents were female, 22 percent over this timeframe, compared to 29 percent for all drugs. Caucasians were overrepresented, with involvement in 88 percent of methamphetamine-involved deaths, compared to 84 percent of all deaths through June 2004. On average, 31 percent of amphetamine deaths involved no other drugs; this is the second highest proportion for any of the drugs, following heroin (exhibit 6b).

Unweighted data from DAWN *Live!* for the first half of 2004 indicate amphetamine reports totaled 68 drug abuse/other, 5 seeking detox/treatment, and 8 overmedication. Among patients seen for drug abuse/other, 62 percent were male, 31 percent were age 18–29, 22 percent were 30–34, and 25 percent were 35–44. The most common chief complaints were altered mental status and psychiatric condition. Route of administration was documented for a minority of patients, with 8 of the 68 taking amphetamine orally and 11 injecting; for 48 people, route was not documented. The number of reports involving injecting amphetamines, not methamphetamine which is a separate category, seems high and may represent miscoding. The most common specific form of amphetamine was amphetamine-dextroamphetamine (e.g., Adderall).

In the unweighted ED data for the first half of 2004 for methamphetamine, there were 331 drug abuse/other reports and 33 seeking detox/treatment (exhibit 2). These drug abuse/other reports for methamphetamine represented slightly less than 10 percent of all illicit drug reports. Among those seen for other/drug abuse, 69 percent were male. One-half were age 18–29, a much larger proportion than the 28 percent for all drugs combined.

In the unweighted data, presenting complaints for methamphetamine ED drug reports included altered mental status (28 percent), psychiatric condition (22 percent), and abscess/cellulitis (10 percent); all were more frequent for methamphetamine than for other drugs. Data for route of administration were missing for two-thirds of methamphetamine drug reports. For the drug reports with route data, 63 percent injected, second only to heroin, and 21 percent ingested by smoking.

In 2004, PHSKC undertook a comprehensive review of local behavioral research studies and HIV/STD testing and reporting data to (1) determine the current prevalence of methamphetamine use among men who have sex with men (MSM), (2) identify associations between MSM methamphetamine use and HIV, and (3) assess findings specific to methamphetamine injection.

Findings regarding methamphetamine use include the following: roughly 1 out of 10 MSM has used methamphetamine at least once in the past year; recent use of methamphetamine may be up to two times higher (20 percent) among MSM younger than 30 than among older MSM; methamphetamine use is up to three times higher (about 30 percent) in MSM with HIV; and methamphetamine use is more prevalent among White MSM than MSM of color.

Only about 2 percent ($n=660-990$) of all MSM have injected methamphetamine at least once in the past year, and injectors make up an estimated 11 percent of current MSM methamphetamine users. The risk profile of MSM is distinct from other injecting populations in terms of HIV prevalence, with almost 30 percent HIV infection among MSM amphetamine injectors, 10 percent among MSM heroin injectors, and 2 percent among non-MSM male heroin injectors (exhibit 12). PHSKC believes that the high HIV prevalence in MSM amphetamine injectors is probably due to sexual transmission, rather than transmission via sharing of syringes or other drug injection equipment. (Note that “amphetamine” was the term used in some data collection, but it is believed that the findings relate specifically to methamphetamine.)

Data from PHSKC’s STD clinic indicate that among MSM, methamphetamine use is significantly associated with increased numbers of sexual partners, contracting gonorrhea, having a new HIV diagnosis, and having preexisting HIV. A significantly larger proportion of MSM methamphetamine users were potential HIV transmitters (67 percent) than non-methamphetamine users (38 percent); potential transmitters are defined as HIV-positive MSM with unprotected anal sex partners who are HIV negative or of unknown HIV status. MSM who used methamphetamine were also much more likely to be at risk for acquiring HIV (47 percent) compared to non-methamphetamine users (25 percent); risk of acquiring HIV is defined as having unprotected anal sex with a partner who is HIV positive or whose serostatus is unknown. Overall, lifetime methamphetamine use among those seen at the clinic was reported by 8.7 percent of MSM, compared with 1.7 percent of heterosexual men ($p<0.0001$). Use of methamphetamine by MSM injection drug users has been noted for more than a decade in the Seattle area.

Use of methamphetamine in the past 30 days is relatively low among high school seniors: 1.1 percent in 2002 and 2.0 percent in 2004 (exhibit 4).

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 or Mexican groups in California.

The DEA reports that crystal methamphetamine is increasingly available and that prices are slowly declining. Regarding purity, the DEA reports “The overall purity of exhibits collected in Washington for the first six months of FY 2004 has averaged 50 percent, up from the average purity of 45 percent seen during FY 2003 and surpassing the 30 percent seen during FY 2001 and FY 2002. Of the DEA offices in Washington, Seattle...exhibits have currently yielded the highest purity at nearly 66 percent.”

Methamphetamine incidents, a combination of active labs used for manufacturing and dump sites of lab equipment or inactive labs, decreased for Washington State as a whole in 2004 (exhibit 13). The peak in incidents for the State and the two most populated counties was in 2001. In King County, the number of incidents remained flat in 2003 and 2004, while Pierce County to the south experienced increases, Snohomish County to the north had a slight increase, and Kitsap County to the west experienced a bit of a decline. The rate of methamphetamine incidents per 100,000 population was 11 in King County, 77 in Pierce County, 17 in Snohomish County, 19 in Kitsap County, and 23 for Washington State in 2004.

It is important to note that these data do not indicate the manufacturing methods or the quantities manufactured at the site of individual incidents. Anecdotal 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.

The total number of methamphetamine seizures by the U.S. Customs Service has remained low and fairly steady (exhibit 7). Pseudoephedrine, an important precursor chemical, has been illegally imported from Canada. The supply from large pharmaceutical companies in Canada has apparently been dramatically reduced in the past year, however, with a concomitant decline in importation into the United States, according to the NW HIDTA.

NFLIS data indicate that methamphetamine is found in law enforcement seizures at a much lower level in the Seattle area compared with the rest of the State (exhibit 5). In FY 2004, 29 percent of Seattle-area drug tests and 52 percent of those in the rest of Washington were positive for methamphetamine. These data represent slight proportional increases from FY 2003.

Another stimulant is cathinone, the active ingredient in the botanical khat grown primarily in East Africa and

the Middle East. Cathinone is a DEA schedule 1 substance. Fresh khat leaves are chewed or brewed into a tea for their stimulating effect. Because it needs to be fresh to be potent, khat is commonly trafficked by air; occasional khat seizures at Seattle-Tacoma International Airport are reported by the NW HIDTA. Indicator data rarely reveal khat, but NFLIS data in FY 2003 did show 11 pieces of evidence tested positive for cathinone at the Seattle-area lab; none was seen in the rest of Washington State nor in 2004. Law enforcement reports that khat use is most common among East African immigrants. This pattern is similar to that seen in the Twin Cities, Minnesota, area.

Depressants

Barbiturates, benzodiazepines, and other sedative/depressant drugs in this analysis include alprazolam (Xanax), butalbital (Fioricet), chlordiazepoxide (Librium), diphenhydramine (Benadryl), diazepam (Valium), hydroxyzine pamoate (Vistaril), lorazepam (Ativan), meprobamate (Equanil), oxazepam (Serax), phenobarbital, promethazine (Phenergan), secobarbital (Seconal), temazepam (Restoril), triazolam (Halcion), and zolpidem (Ambien).

Depressants are rarely mentioned as a primary drug at intake to drug treatment. Less than 1 percent of admissions during the period of January 1999 to June 2004 were for depressants.

Unweighted data accessed from DAWN *Live!* on ED drug reports for depressants (barbiturates, benzodiazepines, and anxiolytics/sedatives/ hypnotics) totaled 145 for drug abuse/other case type reports, 21 for seeking detox/treatment, and 244 for overmedication (exhibit 2). The 145 drug abuse/other reports represented just 4 percent of all drug types in the DAWN data. Females represented a larger proportion of depressant drug reports (44 percent) than for all drugs combined (37 percent). The ages of those with drug reports for depressants tended to be older than those with reports for all drugs.

In the unweighted data, depressant drug reports in emergency departments were much more likely to have overdose as a complaint (17 percent) than reports for all other drugs (9 percent). Withdrawal was also a more common complaint, representing 12 percent of depressant drug reports, compared to 5 percent for all other drugs.

NFLIS data showed that less than 1 percent of exhibits from the Seattle-area lab and the rest of the State were benzodiazepines (i.e., diazepam and clonazepam), with no change between FY 2003 and FY 2004 (exhibit 5).

Deaths involving depressants were at the highest level in the year from July 2003 to June 2004, with 79 deaths, compared to 45 in 1997 (exhibit 6a). Those dying depressant-involved deaths were older (43 compared to 42), more likely to be Caucasian (89 compared to 84 percent), and more likely to be female (43 compared to 29 percent) than those involved in all drug-involved deaths (exhibit 6c). Few depressant-involved deaths were due solely to depressants, 7 percent overall, the second lowest proportion next to muscle relaxants (exhibit 6b).

Hallucinogens, Club Drugs, and Dextromethorphan

Hallucinogens include lysergic acid diethylamide (LSD), mescaline, peyote, psilocybin (mushrooms), phencyclidine (PCP), and inhalants. “Club drugs” is a general term used for drugs that are popular at nightclubs and raves, including the hallucinogens, methylenedioxyamphetamine (MDMA) (ecstasy), gamma hydroxybutyrate (GHB), gamma butyrolactone (GBL), ketamine, and nitrous oxide. Dextromethorphan (DXM), commonly found in over-the-counter cough medicines, can have dissociative effects at high dosages.

Treatment admissions in which hallucinogens or PCP are mentioned as primary are infrequent, representing well under 1 percent of admissions from 1999 to June 2004.

Unweighted data from DAWN *Live!* on ED drug abuse/other reports for these classes of drugs varied in frequency, with 51 PCP, 47 MDMA, 16 miscellaneous hallucinogens, 8 LSD, and 5 GHB (exhibit 2). Together these substances represented 4 percent of illicit drug reports. Because of the small numbers, detailed data are presented just for PCP and MDMA.

In these unweighted ED data, PCP drug abuse/other reports were overwhelmingly male, 96 percent, versus 63 percent for all drugs. PCP-involved patients were much younger than the average for all drugs; 62 percent were 18–29, compared with 28 percent for all drugs. Chief complaints also represented a unique pattern, with 43 percent altered mental status and 9 percent accident/injury/assault, compared with 20 percent and 3 percent for all drugs, in that order.

Route of administration data were missing in the unweighted ED data for 69 percent of PCP drug reports. Among the reports with data, 88 percent indicated smoking as the route. Of the 51 PCP drug abuse/other case types, 28 were specifically documented to be “sherm.” Sherm is generally accepted to be street terminology for a marijuana cigarette laced with PCP.

Some on the street believe it to be a marijuana cigarette dipped in embalming fluid, and while that may be the case, discussions with pharmacologists indicate that embalming fluid/formaldehyde is unlikely to have psychoactive effect. There are specific case reports from key informants of embalming fluid being used simply as the liquid in which PCP was dissolved, perhaps to give it a unique look and odor.

Of the 49 MDMA total drug reports in the unweighted emergency department data, 47 were of the drug abuse/other case type. The majority were male, 70 percent, and young; 68 percent were age 18–30 and 15 percent were younger than 18. The most common complaint was altered mental status, 25 percent, a bit higher than the average of 20 percent for all drugs. Intoxication was twice as prevalent as a complaint, 12 percent for MDMA compared with 6 percent overall. Conversely, psychiatric condition was less commonly listed as a chief complaint (9 percent compared with 18 percent overall). Route of administration data were absent for two-thirds of the drug reports; among the reports with data, 93 percent were via the oral route.

ADHL calls regarding PCP and LSD were infrequent, representing less than 1 percent of both youth and adult calls (exhibit 3). Calls involving MDMA have apparently declined in terms of number and proportion since 2001 for both adults and youth, though the large number of calls for unknown substances limits trend analysis. In 2001, there were 117 adult calls about MDMA (3 percent of illicit drug calls); such calls declined to 27 in the first half of 2004 (2 percent). A similar decline was seen for youth, from 101 calls in 2001 (9 percent) to 16 calls from January to June 2004 (6 percent). The more general term “hallucinogens” has remained small, but consistent, for adults, representing about 1 percent of calls over time. For youth, hallucinogen-related calls appear to have declined from 4 percent to 1 percent of calls from 2001 through June 2004.

School survey data show that hallucinogens and MDMA are the second most common illicit substances used in the past month, following marijuana (exhibit 4). Reported use of hallucinogens, broadly defined, decreased from 3.6 to 2.5 percent, and use of MDMA decreased from 3.4 to 2.8 percent from 2002 to 2004.

There was one MDMA-involved death in the first half of 2004. Since July 2002, there have been a total of eight MDMA-involved deaths; there were no MDMA-involved deaths from January 1997 to June 2002. GHB/GBL deaths totaled three in 2002; none have been seen since, and none were noted prior.

There was one dextromethorphan-involved death in the first half of 2004, a large decrease from the 10 seen in 2003. Between 1997 (when detailed data were first available) and 2002, DXM-involved deaths ranged from 0 to 4 per year.

According to the NFLIS, MDMA was detected at slightly higher levels in the Seattle-area lab than the rest of the State in FYs 2003 and 2004 (exhibit 5). The Seattle-area lab reported that 1.4 and 1.0 percent of evidence tested positive for MDMA in FY 2003 and FY 2004, respectively, while for the rest of the State, the levels were 0.5 percent in each year. Psilocin, the active ingredient in psychedelic mushrooms, was seen at similar levels for each region and in each year, between 0.5 and 0.7 percent. PCP was not among the top 25 drugs detected in Washington, not including Seattle, while in Seattle it represented a bit less than 1 percent of evidence in each year.

The U.S. Customs Service first provided data indicating seizures of MDMA in the first half of 2002 (exhibit 7). The number of seizures and amount of product seized has generally been low. However, the highest number of seizures (25) and the second highest total weight of those seizures (99 pounds) occurred in the first half of 2004. The data refer primarily to ecstasy tablets and pills, though data for one seizure specifically noted one-half pound of ecstasy powder.

A recent report from British Columbia, Canada, noted that about one-half of the MDMA had methamphetamine in it. Unfortunately, data on testing of Washington State law enforcement seizures do not capture what the drug was sold as, so these data cannot be used directly. However, State toxicology laboratory staff report that methamphetamine is increasingly seen in addition to MDMA in tablets.

Another source of data, www.ecstasydata.org, represents a convenience sample of drug tests on tablets purported to be MDMA. These data are based upon samples submitted by the general public that are suspected of being adulterated. The location of the purchase is noted. Data from 65 samples submitted from 2000 to 2003 for Seattle indicate that 52 percent of the pills contained MDMA, 24 percent contained caffeine, 21 percent contained methylenedioxyamphetamine (MDA), and 19 percent contained methamphetamine (exhibit 14). No trend is discernable due to the small numbers in each year.

According to sources “Adulterants are...there to fool naive users and make a quick buck.” The increase in methamphetamine in MDMA may simply be a matter of profit, with a bit of MDMA in each tablet to get

past the test kits and methamphetamine (which is much cheaper) to make sure the pill still has a kick.

Pill presses, necessary for tableting ecstasy, are still occasionally seized according to Federal law enforcement sources.

Other Drugs of Note—Muscle Relaxants and Tricyclic Antidepressants

Muscle Relaxants

Only 19 drug reports in the unweighted data accessed through DAWN *Live!* for muscle relaxants were classified as drug abuse/other out of the total 93 reports for all case types.

Carisoprodol was infrequently identified in NFLIS data for any region of the State in FYs 2003 and 2004, accounting for only 0.0–0.3 percent of evidence tested (exhibit 5). NW HIDTA reports that carisoprodol is the sixth most common substance identified in impaired drivers, according to the State Toxicology Lab in 2003.

Muscle relaxants are a category of drug that is often overlooked in the investigation of drug abuse trends. In past reports, these medications were categorized as “other drugs” and not discussed. These drugs can have potent sedating effects in addition to their impact on muscle tissue. Use of muscle relaxants in combination with other depressants such as alcohol or benzodiazepines is contraindicated.

Key informants continue to note that cyclobenzaprine (e.g., Flexeril) and carisoprodol (e.g., Soma) are purchased on the street with the intent of using them to get high.

Deaths involving muscle relaxants totaled four in the first half of 2004, similar to the prior 18 months, and slightly higher than the level seen in the previous 5½ years (exhibit 6a). Muscle relaxants were the only substance for which no deaths were due to a single drug (exhibit 6b). The demographics were equally striking, with all users being Caucasian and 62 percent being female (exhibit 6c).

Antidepressants

The term “antidepressant” indicates the original indication for prescribing the medication when it was introduced on the market, but current indications for use often are very different. Antidepressants are very diverse drugs in terms of their effects, ranging from heavily sedating to mildly stimulating. Tricyclic antidepressants (e.g., amitriptyline, doxepin, nortriptyline,

imipramine) are an older class of medications that are now most commonly used for treating insomnia or pain.

There were 11 tricyclic antidepressant-involved drug deaths in the first half of 2004. Tricyclics identified in polydrug deaths peaked in 2003 at 32 mentions, with an average of 18 per year in the preceding 6 years. All analyses for this report exclude deaths due only to antidepressants, the majority of which involve tricyclics, because the local work group determined these medications are rarely used exclusively as drugs of abuse.

The unweighted data accessed through DAWN *Live!* show a total of 58 drug reports for tricyclic antidepressants, with just 19 of the drug abuse/other case type.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

Available data are for people diagnosed with HIV infection between July 2001 and June 2004 and reported to PHSKC or the Washington Department of Health as of November 30, 2004. Injecting drug users (IDUs) make up 6 percent ($n=54$) of King County HIV cases and 14 percent ($n=74$) of HIV cases in the rest of the State. These levels are much lower than the national average of 26 percent. MSM who are also IDUs make up 7 percent ($n=64$) of the HIV cases in the county and 6 percent ($n=29$) in the rest of the State, higher than the national average of 5 percent.

Excepting male drug injectors who also have sex with men, the rate of HIV infection among the 15,000–18,000 IDUs 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 fewer 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 0.5 percent per year.

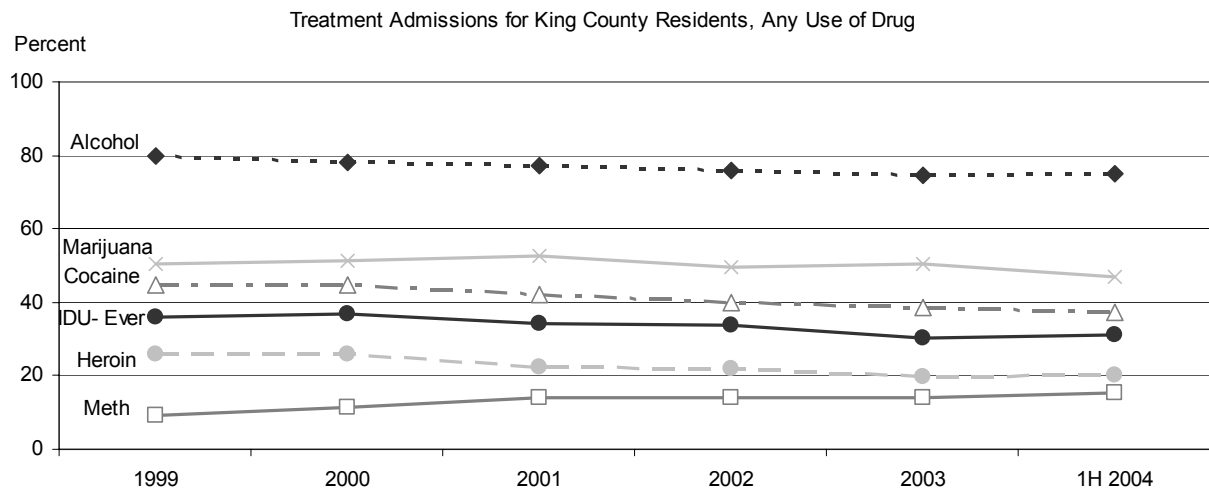
See the stimulant section of this report for findings related to methamphetamine use and HIV infection from local prevalence estimates and STD clinic patients.

Hepatitis B and C are endemic among Seattle-area injectors. Epidemiologic studies conducted among more than 4,000 IDUs by PHSKC's HIV-AIDS Epidemiology Program since 1994 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. Drug Treatment¹ Admissions for Primary, Secondary, or Tertiary Use of Selected Drugs by Youth and Adults Combined in King County, Washington: January 1999–June 2004

Drug	1999		2000		2001		2002		2003		1H 2004	
	(N)	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)	%
Any Alcohol Use	7,867	79.93	8,180	78.06	7,557	77.36	6,733	75.8	6,538	74.38	3,448	75.15
Any Methamphetamine Use	898	9.12	1,194	11.39	1,372	14.05	1,231	13.86	1,218	13.86	697	15.19
Any Cocaine Use	4,382	44.52	4,667	44.54	4,105	42.02	3,535	39.8	3,406	38.75	1,703	37.12
Any Marijuana Use	4,975	50.55	5,377	51.31	5,120	52.42	4,403	49.57	4,435	50.46	2,159	47.06
Any Heroin Use	2,533	25.74	2,719	25.95	2,190	22.42	1,944	21.89	1,735	19.74	928	20.23
IDU ² (Ever)	3,558	36.15	3,865	36.88	3,361	34.41	3,015	33.95	2,652	30.17	1,432	31.21
Total	9,842		10,479		9,768		8,882		8,790		4,588	



¹Data include all ages, all treatment modalities, department of corrections and private pay clients at opiate substitution treatment clinics.

²Injection drug use (ever).

SOURCE: Washington State TARGET data system—Structured Ad Hoc Reporting System

Exhibit 2. Characteristics of ED Drug Reports for Selected Drug Abuse/Other Case Types in King and Snohomish Counties, by Percent (Unweighted¹): January–June 2004

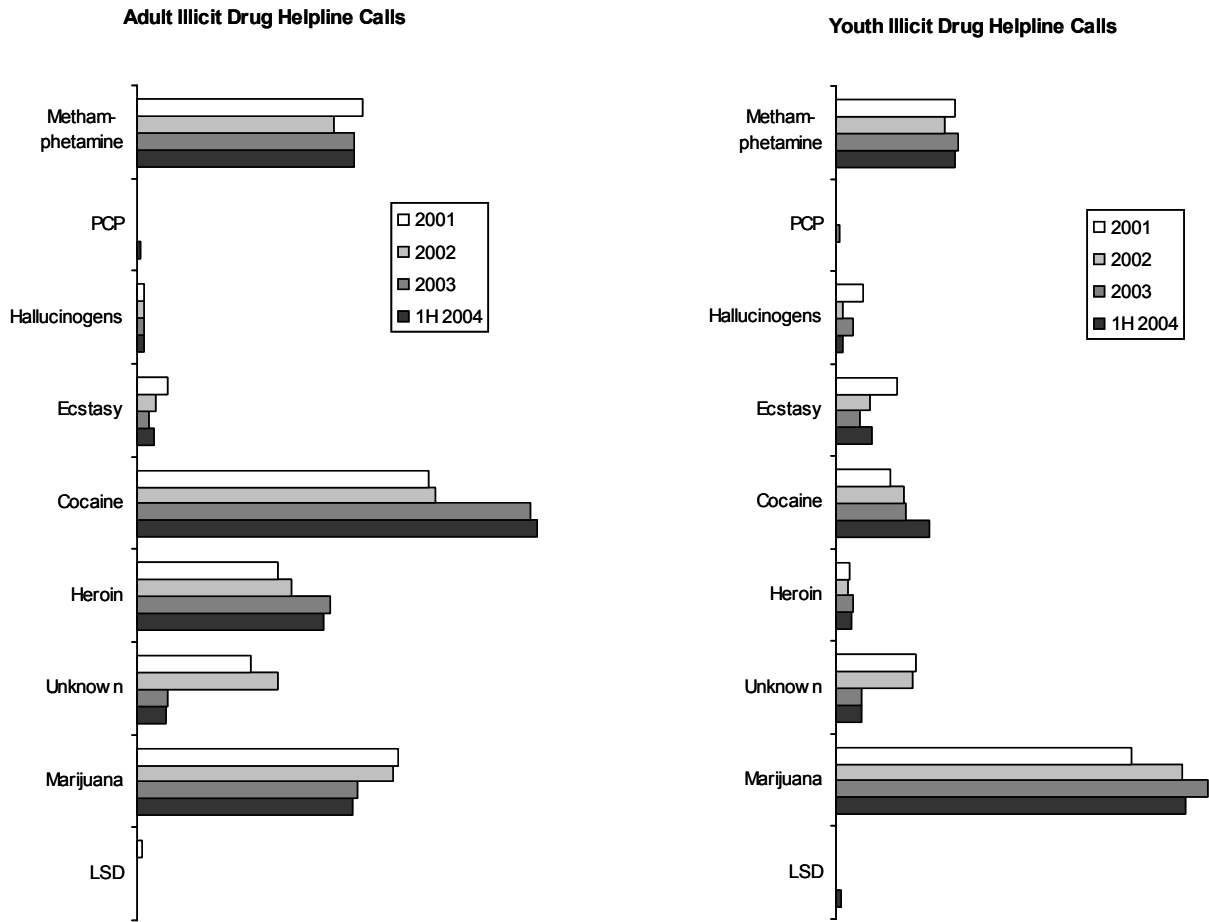
Characteristic	All Drugs	Cocaine	Methamphetamine	Other Opiates	Heroin	Marijuana	Depressants	MDMA	PCP
Number of Drug Reports	4,450	1,082	331	353	933	429	145	47	51
Gender									
Male	63%	65%	69%	52%	57%	68%	56%	70%	96%
Age									
11 years and younger	0%	0%	0%	0%	0%	0%	0%	0%	0%
12–17 years	3%	1%	1%	0%	0%	12%	4%	15%	2%
18–20 years	7%	3%	16%	4%	3%	18%	3%	23%	20%
21–24 years	9%	7%	17%	7%	6%	12%	10%	34%	24%
25–29 years	12%	11%	16%	11%	13%	13%	8%	11%	18%
30–34 years	15%	15%	14%	12%	17%	15%	13%	9%	25%
35–44 years	30%	38%	24%	30%	32%	19%	34%	6%	8%
45–54 years	20%	22%	9%	29%	27%	10%	21%	2%	4%
55–64 years	3%	4%	1%	7%	3%	1%	6%	0%	0%
65 years and older	0%	0%	0%	1%	0%	0%	1%	0%	0%
Complaint									
Overdose	9%	7%	4%	10%	12%	5%	17%	6%	4%
Intoxication	6%	5%	5%	3%	2%	8%	6%	12%	10%
Seizures	1%	2%	0%	1%	1%	1%	2%	1%	1%
Altered mental status	20%	20%	28%	17%	12%	24%	17%	25%	43%
Psychiatric condition	18%	24%	22%	13%	7%	26%	17%	9%	16%
Withdrawal	5%	2%	1%	26%	3%	2%	12%	1%	0%
Seeking detox	0%	0%	0%	0%	0%	0%	0%	0%	0%
Accident/injury/assault	3%	3%	3%	1%	2%	4%	1%	1%	9%
Abscess/cellulitis/skin/tissue	12%	7%	10%	3%	42%	2%	2%	0%	1%
Chest pain	4%	7%	5%	2%	2%	3%	3%	7%	0%
Respiratory problems	4%	5%	3%	3%	3%	3%	0%	9%	6%
Digestive problems	4%	3%	2%	6%	4%	3%	5%	8%	2%
Other	15%	16%	17%	15%	10%	19%	18%	20%	9%
Total Complaints (N)	6,522	1,582	493	387	1,242	630	220	85	82
Patient Disposition									
Discharged home	58%	56%	56%	63%	59%	64%	54%	62%	55%
Released to police/jail	3%	3%	5%	2%	3%	3%	6%	4%	2%
Referred to detox/treatment	7%	8%	9%	10%	4%	8%	8%	4%	10%
Admitted to ICU/Critical care	3%	3%	4%	4%	2%	2%	6%	2%	2%
Transferred	3%	3%	3%	2%	1%	3%	5%	0%	2%
Left against medical advice	2%	1%	2%	1%	3%	1%	1%	2%	2%
Died	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	1%	2%	2%	1%	1%	3%	2%	2%	0%
Not documented	3%	4%	3%	2%	3%	3%	3%	2%	6%
Admitted to surgery	2%	1%	2%	1%	7%	0%	0%	0%	0%
Admitted to chemical dependency/detox	1%	1%	2%	3%	2%	1%	1%	0%	0%
Admitted to psych. unit	5%	7%	6%	3%	2%	5%	6%	2%	8%
Admitted to other inpatient unit	10%	11%	7%	8%	12%	7%	9%	19%	14%
Admitted to any unit	22%	23%	20%	18%	25%	15%	22%	23%	24%

Exhibit 2. Characteristics of ED Drug Reports for Selected Drug Abuse/Other Case Types in King and Snohomish Counties (Unweighted¹): January–June 2004 (Continued)

Characteristic	All Drugs	Cocaine	Methamphetamine	Other Opiates	Heroin	Marijuana	Depressants	MDMA	PCP
Route of Administration as Proportion of Documented Reports									
Oral	41%	10%	10%	91%	2%	7%	95%	93%	13%
Injected	41%	36%	63%	7%	96%	2%	5%	0%	0%
Inhaled, sniffed, snorted	3%	12%	4%	0%	1%	1%	0%	0%	0%
Smoked	15%	41%	21%	0%	1%	88%	0%	7%	88%
Other	1%	1%	3%	2%	0%	1%	0%	0%	0%
Not documented	52%	72%	66%	52%	31%	64%	54%	68%	69%

¹The unweighted data are from 10–13 Seattle area 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.
SOURCE: DAWN *Live!*, OAS, SAMHSA, updated 1/14/2005

Exhibit 3. Illicit Drug Helpline Calls, King County Residents, by Drug and Percent: 2001–June 2004



Substance	Adult								Youth							
	2001		2002		2003		1H 2004		2001		2002		2003		1H 2004	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
LSD	22	0.5%	4	0.1%	4	0.1%	2	0.1%	-	0.0%	0	0.0%	0	0.0%	2	0.7%
Marijuana	972	24.2%	967	23.8%	637	20.4%	332	20.0%	491	45.5%	353	53.2%	302	57.3%	157	53.8%
Unknown	424	10.5%	531	13.1%	89	2.9%	45	2.7%	131	12.2%	78	11.7%	21	4.0%	11	3.8%
Heroin	521	13.0%	584	14.4%	561	18.0%	287	17.3%	22	2.0%	12	1.8%	14	2.7%	7	2.4%
Cocaine	1,088	27.1%	1,124	27.7%	1,142	36.6%	617	37.1%	91	8.4%	69	10.4%	56	10.6%	42	14.4%
Ecstasy	117	2.9%	69	1.7%	34	1.1%	27	1.6%	101	9.4%	35	5.3%	19	3.6%	16	5.5%
Hallucinogens	29	0.7%	30	0.7%	21	0.7%	12	0.7%	44	4.1%	7	1.1%	14	2.7%	3	1.0%
PCP	5	0.1%	5	0.1%	3	0.1%	5	0.3%	-	0.0%	0	0.0%	2	0.4%	1	0.3%
Methamphetamine	842	20.9%	743	18.3%	627	20.1%	335	20.2%	198	18.4%	110	16.6%	99	18.8%	53	18.2%
Total	4,020		4,057		3,118		1,662		1,078		664		527		292	

SOURCE: Washington State 24-Hour Alcohol and Drug Helpline

Exhibit 4. Drug Use in Prior 30 Days by 12th Graders in the Seattle Public School's Communities That Care Survey: 2002 and 2004

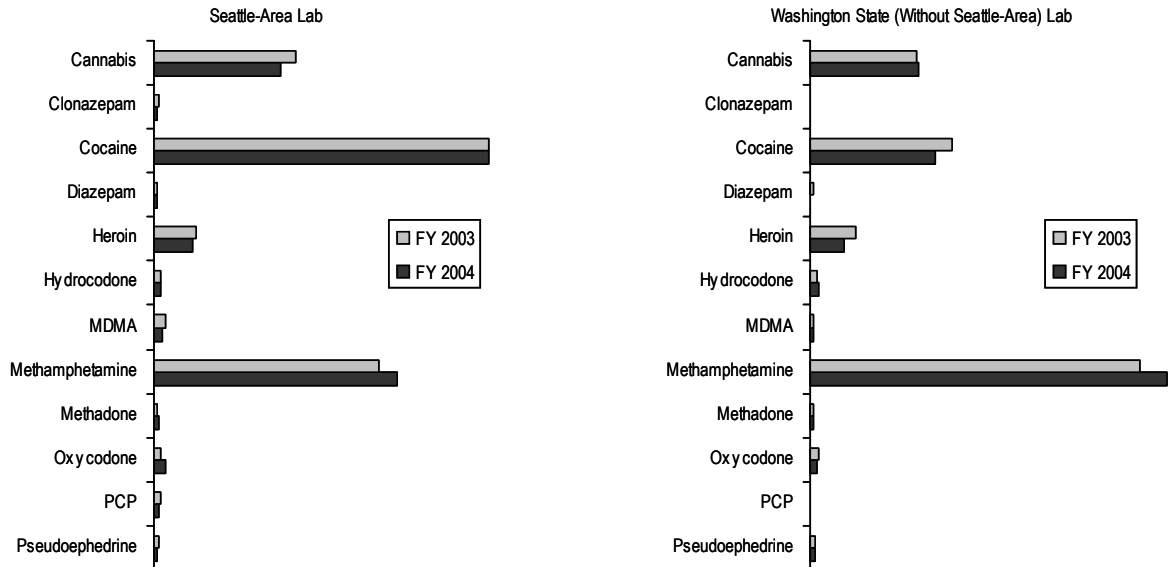
Substance	Prevalence		Response Rate			
			2002		2004	
	2002	2004	%	<i>N</i>	%	<i>N</i>
Alcohol	47.9%	51.1%	51.3%	1,287	61.0%	1,475
Cigarettes	22.8%	16.1%	52.0%	1,305	61.3%	1,481
Chewing Tobacco	3.9%	3.2%	51.8%	1,301	61.3%	1,481
Inhalants	2.1%	1.4%	50.0%	1,256	60.0%	1,451
Marijuana	27.0%	25.4%	50.7%	1,273	60.6%	1,464
Hallucinogens	3.6%	2.5%	50.4%	1,265	60.5%	1,462
Cocaine	1.7%	2.5%	50.4%	1,266	60.3%	1,457
MDMA (Ecstasy)	3.4%	2.8%	50.3%	1,263	60.4%	1,461
Stimulants (Amphetamines, Methamphetamine)	1.1%	2.0%	49.8%	1,250	59.8%	1,445
Alcohol	47.9%	51.1%	51.3%	1,287	61.0%	1,475

SOURCE: Communities That Care Survey, <http://www.seattleschools.org/area/ctc/survey/survey.xml>

Exhibit 5. National Forensic Lab Information System, Drug Test Results for Law Enforcement in Seizures in Seattle and the State of Washington: FY 2003–FY 2004

Substance	Seattle-Area Lab		Washington State (Without Seattle-Area Lab)	
	FY 2003	FY 2004	FY 2003	FY 2004
Acetaminophen	0.3	0.2	0.2	0.1
Alprazolam	0.3	0.1	0.2	0.2
Amphetamine	0.3	0.2	0.3	0.4
Caffeine	0.3	0.2	0.2	0.2
Cannabinol			0.2	
Cannabis	17.2	15.3	15.5	15.6
Carisoprodol	0.3		0.2	0.1
Cathinone	0.3			
Clonazepam	0.5	0.3	0.3	0.3
Cocaine	40.5	40.4	20.6	18.2
Codeine	0.2		0.2	0.1
Diazepam	0.4	0.3	0.4	0.3
Heroin	5.0	4.7	6.5	4.8
Hydrocodone	0.7	0.9	1.1	1.3
Hydromorphone		0.1		
Ibuprofen				0.1
Ketamine	0.1			
Lorazepam		0.1		
MDA	0.3	0.3	0.1	
MDMA	1.4	1.0	0.5	0.5
Methadone	0.4	0.7	0.4	0.6
Methamphetamine	27.2	29.4	47.8	51.7
Methandrostenedione (Methandienone)	0.1			
Methylphenidate		0.3	0.1	0.1
Morphine	0.2	0.3	0.3	0.4
Non-Controlled Non-Narcotic Drug	0.3	0.3	0.5	0.7
Oxycodone	0.9	1.4	1.2	1.1
PCP	0.9	0.6		
Propoxyphene		0.1		0.1
Pseudoephedrine	0.7	0.4	0.8	0.7
Psilocin	0.7	0.6	0.5	0.7
Psilocybine		0.3	0.3	0.2
Sodium Bicarbonate			0.2	0.2
Total of Top 25 (#)	99.3	98.8	98.6	98.6
Subtotals				
Other opiates	2.4	3.6	3.3	3.5
Benzodiazepines	1.2	0.9	0.9	0.8

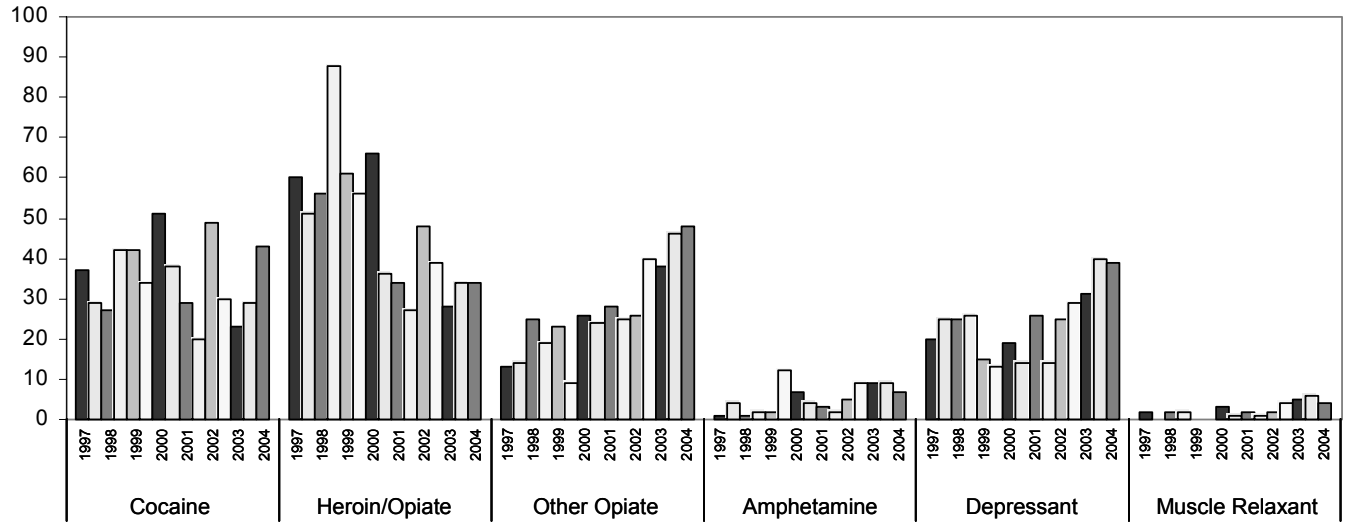
Law Enforcement Seizure Drug Test Results



SOURCE: NFLIS, DEA

Exhibit 6a. Drug-Involved Deaths in King County, Washington, Related to Illicit and Prescription Drugs: 1997–June 2004

Number of Drugs Identified



Drugs Identified (#)	Cocaine	Heroin/Opiate	Other Opiate	Amphetamine	Depressant	Muscle Relaxant	Total Deaths
1997 H1	37	60	13	1	20	2	103
1997 H2	29	51	14	4	25	0	76
1998 H1	27	56	25	1	25	2	102
1998 H2	42	88	19	2	26	2	120
1999 H1	42	61	23	2	15	0	103
1999 H2	34	56	9	12	13	0	102
2000 H1	51	66	26	7	19	3	130
2000 H2	38	36	24	4	14	1	90
2001 H1	29	34	28	3	26	2	85
2001 H2	20	27	25	2	14	1	67
2002 H1	49	48	26	5	25	2	102
2002 H2	30	39	40	9	29	4	93
2003 H1	23	28	38	9	31	5	82
2003 H2	29	34	46	9	40	6	104
2004 H1	43	34	48	7	39	4	116
Total Deaths	523	718	404	77	361	34	1,475

Note: Data are duplicated; most deaths involve multiple drugs.
 SOURCE: Medical Examiners Office, Public Health Seattle-King County

Exhibit 6b. Proportion of Drug-Involved Deaths Due to a Single Drug in King County, Washington, Related to Illicit and Prescription Drugs: 1997–June 2004

Single Drug Identified	Cocaine	Heroin/Opiate	Other Opiate	Amphetamine	Depressant	Muscle Relaxant
1997 H1	19	52	0	0	20	0
1997 H2	17	43	7	50	12	0
1998 H1	19	48	32	100	8	0
1998 H2	7	43	21	0	12	0
1999 H1	17	44	17	0	13	0
1999 H2	18	41	33	50	23	0
2000 H1	33	39	23	0	16	0
2000 H2	37	42	17	50	7	0
2001 H1	14	21	11	33	4	0
2001 H2	20	33	20	0	0	0
2002 H1	27	27	8	0	0	0
2002 H2	10	15	8	33	0	0
2003 H1	22	14	8	33	6	0
2003 H2	14	9	4	44	3	0
2004 H1	21	9	8	29	5	0
Average	20	35	13	31	7	0
Range (Min, Max)	(7, 37)	(9, 52)	(0, 33)	(0, 100)	(0, 23)	(0, 0)

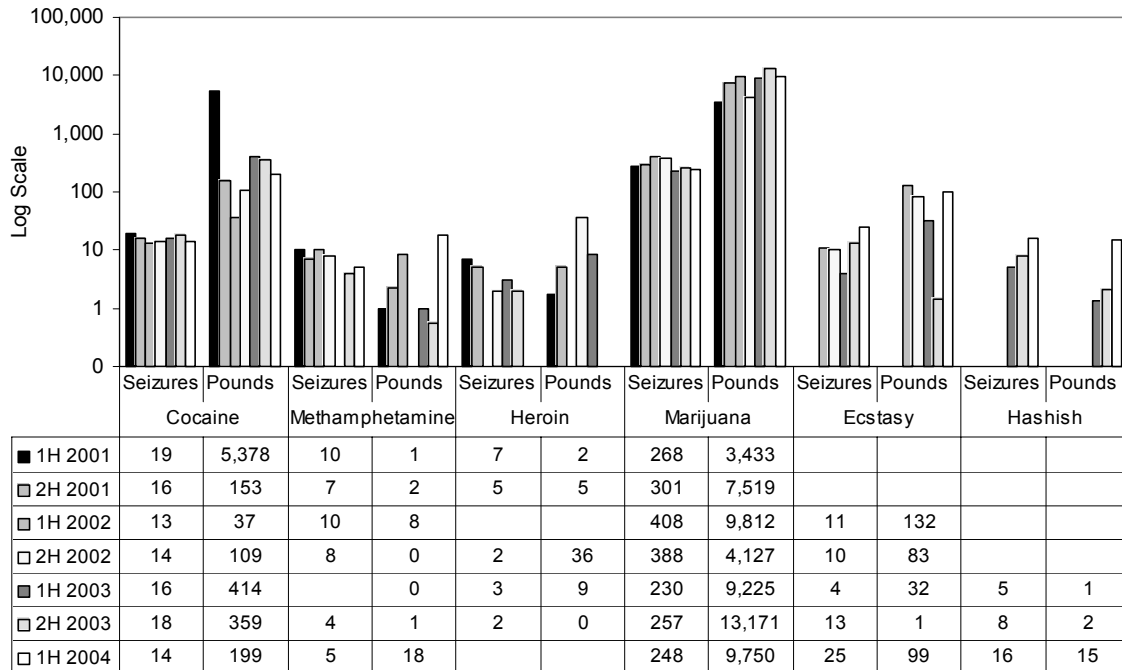
SOURCE: Medical Examiners Office, Public Health – Seattle & King County

Exhibit 6c. Demographics of Drug-Involved Deaths in King County, Washington, Related to Illicit and Prescription Drugs, by Percent: 1997–June 2004

Demographic	Cocaine	Heroin/Opiate	Other Opiate	Amphetamine	Depressant	Muscle Relaxant	All Drugs
Median Age (in Years)	(41)	(41)	(43)	(36.5)	(43)	(42)	(42)
% Female	20.7	18.5	42.2	22.4	43.1	61.8	28.7
Race							
Caucasian	73.2	84.0	87.4	88.3	88.9	100.0	83.6
African-American	20.1	9.5	8.7	3.9	6.4	0.0	10.2
Asian/Pacific Islander	1.1	0.4	1.0	2.6	1.4	0.0	1.4
Native American	2.1	2.9	2.0	2.6	1.9	0.0	2.5
Hispanic	1.5	1.7	0.5	0	0.6	0.0	1.2
Other/Mixed	1.9	1.5	0.5	2.6	0.8	0.0	1.2

Note: Data are duplicated; most deaths involve multiple drugs.
 SOURCE: Medical Examiners Office, Public Health Seattle & King County.

Exhibit 7. Drug Seizures by U.S. Customs, Washington State Ports of Entry: 2001–June 2004



SOURCE: U.S. Customs Service

Exhibit 8. Opiate Substitution Treatment Among King County Residents: 1999–June 2004

	1999	2000 ¹	2001	2002	2003	Jan–June 2004
Admissions(N)	632	924	890	794	633	291
Discharges (N)	1,333	1,560	1,238	1,175	1,084	671
Primary Drug at Entry (%)						
Heroin	94.6	93.3	92.8	90.4	87.7	83.9
Prescription Opiate	3.0	6.1	6.5	8.8	11.4	14.0

¹Treatment capacity increased by 350 in 2000

SOURCE: Washington State TARGET data system—Structured Ad Hoc Reporting System

Exhibit 9. Methadone Waiting List, Managed by Syringe Exchange Program, King County: 1997–2004¹

	1997	1998	1999	2000 ¹	2001	2002	2003	2004
Number on Waiting List	198	307	548	624	495	663	638	487

¹Figures are for the close of each year.

SOURCE: Public Health – Seattle & King County, HIV/AIDS Program

Exhibit 10. Syringes Exchanged and Number of Encounters for King County Syringe Exchanges: 2002–2004

	2002	2003	2004
Syringes Exchanged	1,801,151	1,969,522	2,183,150
Encounters ¹	73,752	65,593	63,898
Avg. Number of Syringes Per Encounter	24	30	34

¹Encounters are duplicated.

SOURCE: Public Health – Seattle & King County, HIV/AIDS Program

Exhibit 11. Prescription Opiates Sold to Hospitals and Pharmacies, King County Area¹ (Grams of Active Ingredient Per 100,000 Population Per Year): 1997–June 2004

Active Ingredient	1997	1998	1999	2000	2001	2002	2003	1H 2004	Percent Change ²
Codeine	9,311	8,651	8,318	...	7,190	...	6,789	6,384	-31%
Oxycodone	3,328	4,662	6,032	7,615	10,012	11,133	13,702	14,237	328%
Hydromorphone	179	158	175	...	244	252	322	...	80%
Hydrocodone	2,868	3,103	3,542	3,772	4,212	5,127	5,530	5,713	99%
Meperidine	2,346	2,214	2,085	...	1,931	...	1,641	1,424	-39%
Methadone	561	682	839	...	1,442	1,843	2,575	3,252	480%
Morphine	3,071	3,314	3,404	...	4,170	...	5,781	7,022	129%
Fentanyl	40	45	48	...	72	...	109	105	162%

¹Data are for Zip Codes 980xx and 981xx, which approximate King County boundaries. Data not adjusted for widely varying potencies (morphine equivalencies) of these substances.

²1997 through last year of available data.

SOURCE: ARCOS/DEA http://www.deadiversion.usdoj.gov/arcos/retail_drug_summary/index.html

Exhibit 12. Comparison of HIV and HCV Seroprevalence by Primary Injection Drug and MSM¹ Status in Recently Arrested Male Injectors, Seattle-King County, Kiwi Study: 1998–2002

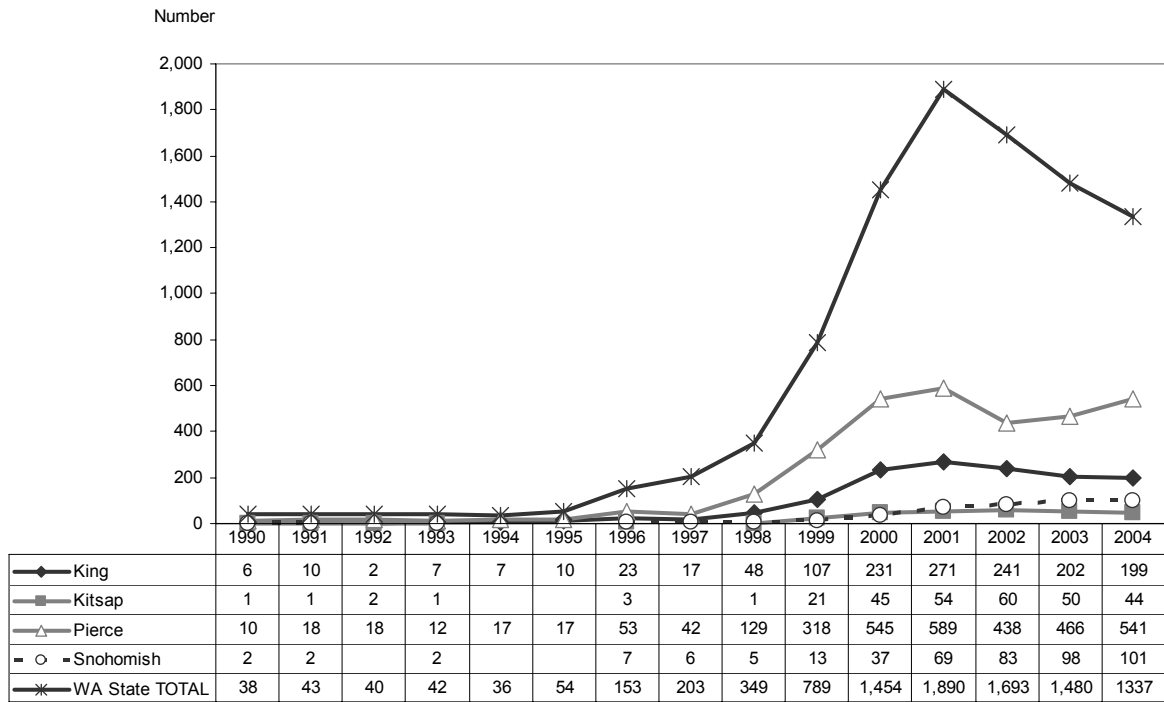
MSM Status and Primary Injection Drug	HIV		Hepatitis C	
	N	Percent HIV+	N	Percent HCV+
Never-MSM heroin injectors	553	2.0	364	78.3
Never-MSM amphetamine ² injectors	343	1.1	307	38.1
MSM heroin injectors	32	9.7	16	75.0
MSM amphetamine injectors	41	29.3	32	37.5

¹MSM=male-male sex in the past year.

²Amphetamine¹ was the term used in some data collection, but it is believed that the findings related directly to methamphetamine specifically.

SOURCE: Public Health – Seattle & King County

Exhibit 13. Number of Methamphetamine Labs and Dump Sites Reported in King and Neighboring Counties: 1990–2004



SOURCE: Washington State Department of Ecology

Exhibit 14. MDMA Pill Testing Results for Seattle, by Substance Detected and Year: 2000–2003

Substance Detected	2000	2001	2002	2003	Total	% of Total Drugs De- tected	% of Pills Tested
MDMA	3	8	8	3	22	35%	52%
Caffeine			5	5	10	16%	24%
MDA	1	1	5	2	9	14%	21%
Meth	1		3	4	8	13%	19%
Pseudoephedrine	2		3	2	7	11%	17%
PCP	2				2	3%	5%
Foxy-methoxy			2		2	3%	5%
MDE		1			1	2%	2%
DXM		1			1	2%	2%
Other 1				1	1	2%	2%
Nothing			2		2	N.A.	5%
Total Drugs	9	11	26	17	63	100%	
Total Pills Tested	6	10	18	8	42		100%

Note: The data are based upon pills submitted for testing that were suspected of being adulterated. The data do not represent estimates or rates for the Seattle area.

SOURCE: www.ecstasydata.org

Exhibit 15. Persons Diagnosed with HIV Infection, Including Those With AIDS: 2001–June 2004

	King County HIV including AIDS		Other WA Counties HIV including AIDS		Washington State HIV including AIDS		United States ³ AIDS only	
Cumulative Diagnoses of HIV, including AIDS ¹	8,934		4,761		13,695		886,575	
Cumulative HIV or AIDS Deaths	3,901		2,045		5,946		501,669	
Number currently living with HIV, including AIDS	5,033		2,716		7,749		384,906	
Case Demographics	King County ² HIV including AIDS 01/2001–12/2003		Other WA Counties ² HIV including AIDS 01/2001–12/2003		Washington State ² HIV including AIDS 01/2000–12/2003		United States ³ AIDS only 01/2000–12/2002	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Gender:								
Male	844	90%	403	77%	1,247	85%	92,057	73.88%
Female	92	10%	122	23%	214	15%	32,546	26.12%
Age:								
12 and younger	1	0%	1	< 1%	2	0%	---	
13–19	7	1%	6	1%	13	1%	---	
20–29	199	21%	118	22%	317	22%	---	
30–39	429	46%	188	36%	617	42%	---	
40–49	228	24%	137	26%	365	25%	---	
50–59	59	6%	53	10%	112	8%	---	
60 and older	13	1%	22	4%	35	2%	---	
Race/Ethnicity:								
White	585	63%	349	66%	934	64%	35,688	28.64%
Black	185	20%	78	15%	263	18%	62,116	49.85%
Hispanic	101	11%	57	11%	158	11%	24,694	19.82%
Asian/Pacific Islander	32	3%	20	4%	52	4%	1,307	1.05%
Native American	18	2%	18	3%	36	2%	579	0.46%
Multi-Race	12	1%	0	0%	12	1%	N/A	
Unknown	3	0%	3	1%	6	0%	219	0.18%
Exposure Category:								
Male-male sex	634	68%	244	46%	878	60%	49,316	39.58%
Injecting drug user	54	6%	74	14%	128	9%	31,849	25.56%
IDU & male-male sex	64	7%	29	6%	93	6%	5,914	4.75%
Heterosexual contact	95	10%	105	20%	200	14%	35,239	28.28%
Blood product exposure	3	0%	0	0%	3	0%	877	0.70%
Mother at risk/has AIDS	0	0%	1	0%	1	0%	311	0.25%
Undetermined/other	87	9%	72	14%	159	11%	1,097	0.88%
Total HIV Cases diagnosed in last 3 years	936	100%	525	100%	1,461	100%	124,603	100.00%

¹ The HIV/AIDS data through 10/31/2004 show substantially fewer reported AIDS cases than in previous months. This is because Washington and King County completed a national AIDS case de-duplication project in October. AIDS cases have always been counted for the geographic area where they were first diagnosed with AIDS. If a PWA is reported as a new diagnosis in King County but is known to have moved from another State, we confirm with that State where the AIDS diagnosis FIRST occurred. However, if we are unaware of the prior residence, we have no routine way to confirm with another State and would count the case as King County. This is how duplicates are created in the national data set. During the past year, we have participated in a national project to identify duplicates. CDC (which does not have names) provided us with a list of potential matches to cases in other States. We then consulted with each State to determine which were duplicates, and which State should appropriately count the case. Nationally, about 5% of all cases were found to be duplicated in more than one State. We discovered that 405 Washington State Cases (225 in King County) were previously diagnosed while residing in other States. Therefore, we have removed those cases from our counts. All the data are accurate according to the revised tallies.

² These cases were diagnosed with HIV infection between July 2001 and June 2004, and reported to Public Health–Seattle & King County or the Washington Department of Health as of 11/30/2004.

³ United States HIV data are not currently available in a format consistent with the Washington data. In addition, U.S. AIDS data do not include age distributions by year of diagnosis. The most current available national AIDS data are through December 2002.

TECHNICAL NOTE: The U.S. data do not show specific incidence estimates for hemophilia or transfusion cases for 2000–2002; these numbers were interpolated from earlier incidence data.

SOURCE: Public Health – Seattle & King County, the Washington State Department of Health, and the Federal Centers for Disease Control and Prevention

Substance Abuse Trends in Texas, January 2005

Jane Carlisle Maxwell, Ph.D.¹

ABSTRACT

Cocaine continues to be readily available, and the price for a kilogram has decreased. It is the primary illicit drug for which Texans enter treatment. It remains a problem on the border with Mexico, as documented in the school survey. Use of crack cocaine, which is at an endemic level, continues to move beyond Black users to White and Hispanic users. Alcohol is the primary drug of abuse in Texas in terms of dependence, deaths, and treatment admissions. Heroin addicts entering treatment are primarily injectors. In Texas, hydrocodone is a much larger problem than oxycodone or methadone. Codeine cough syrup, 'Lean,' continues to be abused. Treatment data show that marijuana clients admitted with criminal justice problems are less impaired than those who are not referred from the criminal justice system. 'Ice,' which is smoked methamphetamine, is a growing problem and the price has dropped dramatically. Xanax and Soma continue as widely abused pharmaceutical drugs. 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. Ketamine continues as a problem. GHB, GBL, and similar precursor drugs 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 continuing to rise 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 due to the heterosexual mode of transmission now exceeds the proportion of cases due to injecting drug use. Forty-one percent of persons testing positive for hepatitis C were exposed through injecting drug use.

INTRODUCTION

Area Description

The population of Texas in 2004 is 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.

A major problem is that Mexican pharmacies sell many controlled substances to U.S. citizens who then bring them into the States. Both private and express mail companies are used to traffic narcotics and smuggle money. Seaports are used to import heroin and cocaine via commercial cargo vessels. The international airports in Houston and Dallas/Fort Worth are major ports for the distribution of drugs into and out of the State.

Data Sources

Substance Abuse Trends in Texas is an ongoing series which 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 2004 report. Complete 2004 data will be published in the June 2005 report. To compare the January 2005 report with earlier periods, please access <http://www.utexas.edu/research/cswr/gcattc/drugtrends.html>.

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 Texas Department of State Health Services (TDSHS), formerly the Texas Commission on Alcohol and Drug Abuse.
- **Adult substance use data** came from TDSHS's *2000 Texas Survey of Substance Use Among Adults*.
- **Use by Texans ages 12 and older data** came from the Substance Abuse and Mental Health Services Administration (SAMHSA) *State Estimates of Substance Use from the 2002 National Survey on Drug Use and Health*.

¹The author is affiliated with The University of Texas at Austin, Center for Social Work Research, Austin, Texas.

- **Poison Control Center data** came from the Texas Poison Center Network, TDSHS, for 1998 through June 2004. Analysis was provided by Mathias Forrester, epidemiologist with the Texas Poison Center Network, and by the author. In addition, findings from three papers authored by Forester, “Carisoprodol Abuse in Texas, 1998-2003,” “Flunitrazepam Abuse and Malicious Use in Texas, 1998-2003,” and “Oxycodone Abuse in Texas, 1998-2003,” were used in this report.
- **Treatment data** were provided by TDSHS’s client data system provided information on clients at admission to treatment in TDSHS-funded facilities from the first quarter of 1983 through June 30, 2004. For most drugs, the characteristics of clients entering with a primary problem with the drug are discussed, but in the case of emerging club drugs, information is provided on any client with a primary, secondary, or tertiary problem with that drug. Analysis was by the author.
- **Overdose death data** on statewide on drug overdose deaths came from death certificates from the Bureau of Vital Statistics, TDSHS; analysis was by the author. 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 arrests 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 submitted results from toxicological analyses of substances submitted in law enforcement operations for 1998 through June 30, 2004, to the National Forensic Laboratory Information System (NFLIS) of the Drug Enforcement Administration (DEA). Analysis was by the author.
- **Price, purity, trafficking, distribution, and supply** information was provided by fourth quarter 2004 reports on trends in trafficking from the Dallas, El Paso, and Houston Field Divisions of the DEA.
- **Reports by users and street outreach workers** drug trends for September through November 2004 were reported to TDSHS by street outreach workers.

- **Acquired immunodeficiency syndrome (AIDS) data** were provided by TDSHS for annual and year-to-date periods through June 2004.
- **Hepatitis C (HCV) data** were provided by TDSHS on HCV counseling and testing for the period January 2003 to December 31, 2003.

DRUG ABUSE TRENDS

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 9.3 percent in 1998 to 7.9 percent in 2004, while past-month use dropped from 3.5 percent in 1998 to 3.2 percent in 2004. Some 7.0 percent of students in nonborder counties had ever used powder or crack cocaine, and 2.5 had used it in the past month. In comparison, students in schools on the Texas border reported higher levels of cocaine use: 13.3 percent lifetime and 5.8 percent past-month use (exhibit 1).

The *2000 Texas Survey of Substance Use Among Adults* reported 11.8 percent of Texas adults had ever used powder cocaine. Some 1.9 percent had used it in the past year. In 2002, the National Survey on Drug Use and Health estimated that 2.4 percent of Texans ages 12 and older had used cocaine in the past year. Estimates by age group were 2.6 percent of those age 12–17, 6.7 percent of those 18–25, and 1.5 percent of those 26 and older.

Texas Poison Control Center calls involving the use of cocaine increased from 503 in 1998 to a high of 1,194 in 2002 before dropping to 979 in 2003. This trend is changing in 2004, where in the first half of the year, 720 cases had already been reported.

Cocaine (crack and powder) represented 26 percent of all admissions to TDSHS-funded treatment programs in the first half of 2004. With 18 percent of all admissions, crack cocaine is the primary illicit drug abused by clients admitted to publicly funded treatment programs in Texas (exhibit 29).

Abusers of powder cocaine were 8 percent of all admissions to treatment. 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 were most likely to be White (exhibit 2).

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 10 years between first regular use and entrance to treatment, while injectors average 14 years of use before they enter treatment.

Between 1987 and 2004, the percentage of Hispanic treatment admissions using powder cocaine has increased from 23 percent to 47 percent, while for Whites and Blacks, the percent has dropped (from 48 percent to 38 percent, and from 28 percent to 12 percent, respectively). Exhibit 3 shows these changes by route of administration. It also shows the proportion of Black crack cocaine admissions fell from 75 percent in 1993 to 50 percent in 2004, while the proportion of Whites increased from 20 percent in 1993 to 33 percent in 2004. Hispanic admissions rose from 5 percent to 15 percent in the same time period.

The number of deaths statewide in which cocaine was mentioned has increased over the years, from 223 in 1992 to 541 in 2002, but decreased to 477 deaths in 2003 (exhibit 4). The average age of the decedents was 39.3 years in 2003, and 43 percent were White, 25 percent were Hispanic, and 31 percent were Black. Eighty percent were male.

Exhibit 5 shows the proportion of substances identified as cocaine by the DPS labs is decreasing. In 1998, cocaine accounted for 40 percent of all items examined, as compared to 30 percent in the first half of 2004.

In the fourth quarter of 2004, powder cocaine was reported by the Dallas DEA Field Division as being available in ounce to gram quantities. It is readily available in Lubbock and in small towns and rural communities in north Texas. Crack cocaine is also readily available, and while concentrated in urban areas, it is also available in small towns and rural areas. In Dallas, it is particularly popular in the predominantly Black and Hispanic neighborhoods and it is the most visible drug trafficked in Tyler. In Midland, an area referred to as “The Flats” is known as an area with street corner and crack house dealers. Cocaine availability has remained constant in the Houston Field Division, except availability is up in Houston and there has been a large increase in cocaine seizures in the Laredo area. Crack cocaine is also readily available in the division, with availability increasing in the rural areas around Austin. Use of crack in the Laredo district remains minimal.

In addition to continuing to be readily available, the price for a kilogram has dropped from \$11,000–\$22,500 in the first half of 2004 to \$10,000–\$22,500

in the last half of 2004 (exhibit 6). A gram of powder cocaine costs \$50–\$80 in Dallas, \$50–\$60 in El Paso, and \$100 in Amarillo and Lubbock. Cocaine is less expensive at the border. An ounce costs \$400–\$500 in Laredo, \$700–\$900 in Midland, \$500–\$600 in El Paso, \$400–\$650 in Houston, \$650–\$950 in Dallas, \$600 in Alpine, \$400–\$600 in McAllen, \$500–\$700 in San Antonio, \$500–\$600 in Austin, \$500–\$900 in Waco, \$650–\$850 in Amarillo, \$500–\$850 in Lubbock, \$300–\$750 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–\$450 in Houston, \$500 in Galveston, \$500–\$600 in Austin, \$500–\$700 in Waco, \$700–\$1,100 in Dallas, \$450–\$550 in Tyler, \$500–\$800 in Beaumont, \$450–\$850 in Amarillo and Lubbock, \$400–\$600 in San Antonio, \$830 in El Paso, \$700–\$900 in Midland, \$500 in McAllen, and \$650–\$750 in Fort Worth.

In Austin, street outreach workers report crack continues to be abundant and is sold in quantities of three rocks for \$30 as a “Friday Night Special.” A “Big Slug,” which sells for \$20, is a larger piece of crack which is considered to be a “higher” grade of cocaine and is reported to make users’ ears “ring” when smoking it. Crack smokers are now using hollowed-out tire gauges to smoke crack, since these do not break like glass pipes. Rubber covers from spark plug wires are used to prevent burned lips (to decrease the risk of human immunodeficiency virus [HIV] infection). The larger rubber tips are used on the tire gauges, while the small tips are used on glass pipes and radio antennae.

In the Galveston-Brazoria area, crack cocaine continues to be the most visible drug on the street. Prostitution continues to be a primary source of income for drug purchasing, and younger women are now on the street.

Alcohol

Alcohol is the primary drug of abuse in Texas. The 1998 secondary school survey found that 72 percent of students had ever drunk alcohol and 38 percent had drunk alcohol in the last month. In 2004, 68 percent had ever used alcohol and 33 percent had drunk alcohol in the last month: an important drop in alcohol use.

Of particular concern is heavy consumption of alcohol, or binge drinking, 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. The percentage of students who normally drank five or more beers has decreased since 1988. While the percentage of binge drinking of wine or wine coolers has fallen from its peak in 1994, it is still higher than in 1988 (exhibit 7). The percentage of binge drinking of hard liquor has remained relatively stable since 1994.

Among students in grades 4–6 in 2004, 26 percent had ever drunk alcohol and 16 percent had drunk alcohol in the past school year.

The 2000 Texas adult survey found that 50.3 percent of Texas adults reported drinking alcohol in the past month. Some 17 percent reported binge drinking, 6 percent reported heavy drinking in the past month, and 5.1 percent of all adults met the criteria for being dependent on alcohol. This estimate was based on the Diagnostic and Statistical Manual of Mental Disorders, III-R (DSM III-R).

The 2002 National Survey on Drug Use and Health estimated that 47.9 percent of Texans ages 12 and over had drunk alcohol in the past month (17.6 percent of those age 12–17, 59.3 percent of those 18–25, and 50.5 percent of those 26 and older). Some 23.5 percent had drunk five or more drinks on at least 1 day (binge drinking) in the past month (10 percent of those 12–17, 41.3 percent of those 18–24, and 22.2 percent of those ages 26 and older). Some 7.9 percent met the criteria for alcohol dependence based on the Diagnostic and Statistical Manual of Mental Disorders-IV (DSM-IV). The level of alcohol dependence was estimated at 5.4 percent of those 12–17, 17.3 percent for those 18–25, and 6.4 percent of those 26 and older.

In 2004, 28 percent of all clients admitted to publicly funded treatment programs had a primary problem with alcohol (exhibit 29). They were the oldest of the clients (average age of 38), and 68 percent were male. Some 58 percent were White, 24 percent were Hispanic, and 15 percent were Black.

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. The rates for the other substance abuse offenses are fairly level (exhibit 8).

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 2000 Texas adult survey found that 1.2 percent of adults reported lifetime use of heroin and 0.1 percent reported past-month 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 208 in 2003 and 79 in the first half of 2004. In 2004, the average age was 33, and 59 percent were male. Thirteen percent of heroin exposures involved inhalation (snorting or smoking).

Heroin is the primary drug of abuse for 10 percent of clients admitted to treatment. The characteristics of these addicts vary by route of administration, as exhibit 9 illustrates. Most heroin addicts entering treatment inject heroin. While the number of individuals who inhale heroin is small, it is important to note that the lag period from first use and seeking treatment is 8 years rather than 16 years for injectors. This shorter lag period means that contrary to 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, increase their risk of hepatitis C and HIV infection, become more impaired, and enter treatment later.

Exhibit 10 shows that the proportion of clients who are Hispanic has increased since 1996, but there has been little change since 2002.

Data report that there were 278 deaths statewide with a mention of heroin or narcotics in 2003 (exhibit 11). Some 56 percent were White, 33 percent were Hispanic, and 9 percent were Black; 72 percent were male. The average age was 39 years.

Exhibit 5 shows that the proportion of items identified as heroin by DPS labs has remained constant at 1–2 percent over the 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 12 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–\$350 per gram, \$800–\$4,500 per ounce, and \$35,000–\$50,000 per kilogram. An ounce costs \$800–\$2,000 in Dallas, \$1,200–\$1,700 in Fort Worth, \$1,000–\$1,500 in El Paso, \$2,100–\$2,200 in Alpine, \$3,500–\$4,000 in Midland, and \$3,500–\$4,500 in Lubbock. In Houston, an ounce

costs \$1,200–\$1,500, compared with \$1,300 in Laredo, \$400–\$1,500 in McAllen, \$1,400–\$1,600 in Austin, and \$1,600–\$2,800 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 \$50–\$350 per gram. An ounce costs \$500–\$600 in San Antonio, \$1,100 in McAllen, \$800–\$1,600 in Dallas, and \$2,200–\$3,000 in Lubbock.

Colombian heroin sells for \$10 per cap, \$2,000 per ounce, and \$70,000 per kilogram in Dallas. Asian heroin costs \$200–\$350 per gram, \$2,000–\$4,000 per ounce, and \$70,000 per kilogram in Dallas.

The DEA Houston Field Division reports the supply of brown and black tar heroin is stable, with an increase in activity in Austin. White heroin is available in isolated instances in the large metropolitan areas. In the Dallas area, black tar is readily available and Colombian is available in multikilogram quantities. Sources report white and beige-colored heroin are now being produced in Mexico using Colombian production methods.

Street outreach workers in Austin report that supplies are so plentiful that the price of a balloon of heroin has dropped from \$20 to \$15 and quality is “strong.”

Other Opiates

This group excludes heroin but includes opiates such as methadone, codeine, hydrocodone (Vicodin, Tus-sionex), 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 reported ever having drunk codeine cough syrup to get high. Some 8.7 percent of Black and White students reported lifetime use, as did 8.5 percent of Native American students and 5 percent of Hispanic students. There was no difference by gender, but lifetime use increased from 2.7 percent of seventh graders to 10.5 percent of twelfth graders.

The 2000 Texas adult survey found that lifetime use of other opiates was 4.4 percent, and past-month use was 0.5 percent in 2000. In comparison, use was lower in 1996, with lifetime use at 3 percent and past-month use at 0.2 percent. Some 2.3 percent of Texas adults in 2000 reported ever having used codeine, and 0.7 percent used in the past year. Lifetime use of hydrocodone was 0.7 percent, and past-year use was 0.4 percent.

Hydrocodone is a larger problem in Texas than is oxycodone, but use of oxycodone is growing faster, as exhibit 13 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 certificates, and forensic laboratory data usually do not report the form of methadone being abused. The form of the drug could be an overdose by new patients in narcotic treatment programs, liquid methadone which 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 17 in 1998 to 53 in 2002 and dropped to 41 in 2003, with 39 cases in the first half of 2004.

Some 5.5 percent of all clients who entered publicly funded treatment during the first half of 2004 used opiates other than heroin. Of these, 29 used illegal methadone and 1,344 used other opiates (exhibit 29). Those who reported a primary problem with illicit 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 room and to report more sickness and health problems in the month prior to entering treatment.

Of the hydrocodone deaths, 49 percent were male, 90 percent were White, and average age was 41.5 years. Of the oxycodone deaths, 67 percent were male, 88 percent were White, and average age was 33 years—younger than the hydrocodone decedents. Of the methadone deaths, 66 percent were male, 84 percent were White, and average age was 35. There were 10 deaths with a mention of fentanyl in 2003.

Narcotic treatment programs are required to report deaths of their clients. Between 1994 and 2002, 776 deaths were reported. Twenty percent died of liver disease, 18 percent of cardiovascular disease, and 14 percent of drug overdose. Compared to 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 \$2–\$10 per tablet. OxyContin sells for \$1 per milligram. Methadone sells for \$10 per 10-milligram tablet, and promethazine syrup with codeine sells for \$200–\$325 per pint in Dallas and Fort Worth and \$20 per ounce. 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 \$1–\$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.

DPS labs report increases in the number of exhibits of hydrocodone, oxycodone, and methadone each year from 1998 through the first half of 2004 (exhibit 13). There were two fentanyl exhibits in 2003 and six in the first half of 2004.

Outreach workers in Houston report increases in the sale and use of OxyContin in areas where injecting drug users gather.

Marijuana

The proportion of Texas students in grades 4–6 who have ever used marijuana dropped from 2.8 percent in 2000 to 2.5 percent in 2004, and use in the past school year dropped from 2.1 percent to 1.7 percent. Among Texas secondary students (grades 7–12), 30 percent have ever tried marijuana and 13 percent had used in the past month, levels lower than in 2000. Use by students in seventh and eighth grades continued to drop, while use by students in grade 12 remained stable (exhibit 14).

In comparison, the 2000 Texas adult survey found that 37 percent of adults reported lifetime and 4 percent past-month marijuana use, as compared to 34 percent lifetime and 3 percent past-month use in 1996. The prevalence was much higher among younger adults. Thirteen percent of those aged 18–24 reported past-month use, as compared to 6 percent of

those aged 25–34 and 2 percent of those aged 35 and older. The increase in past-year use between 1996 and 2000 (6 percent to 7 percent) is statistically significant.

The 2002 National Survey on Drug Use and Health estimated that 4.9 percent of Texans ages 12 and older had used marijuana in the past month, with 5.9 percent of those ages 12–17, 13.2 percent of those ages 18–25, and 3.1 percent of those ages 26 and older reporting past-month use.

The Texas Poison Control Centers reported there were 135 calls confirming exposure to marijuana in 1998, as compared to 406 in 2003. There have been 240 in the first half of 2004.

Marijuana was the primary problem for 19 percent of admissions to treatment programs in the first half of 2004 (exhibit 29). The average age was 22. Some 43 percent were Hispanic, 32 percent were White, and 22 percent were Black. Seventy-six 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 7 days in the month prior to admission, as compared to 12 days for the non-criminal justice referrals. The same differences were reported for number of days in the past month that the second problem drug was used (3.2 days vs. 5.9 days) and the number of days a third problem drug was used (2.6 days vs. 5.2 days).

The Addiction Severity Index scores were lower for justice referrals: 33 percent of the criminal justice referrals reported employment problems vs. 45 percent non-criminal justice referred clients; for sickness or health problems, 14 percent vs. 19 percent; for family problems, 27 percent vs. 45 percent; for social problems with peers, 22 percent vs. 33 percent; for emotional problems, 19 percent vs. 36 percent; and for substance abuse problems, 40 percent vs. 58 percent. These differences, all of which were significant at $p < .0001$, 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 had dropped to 29 percent in the first half of 2004 (exhibit 5).

The Houston DEA Field Division reports hydroponic marijuana is especially available in Asian communi-

ties. In the DFW area, Mexican marijuana is readily available, but there are continuing seizures of domestically grown marijuana (both indoor and outdoor grows). Mexican “sinsemilla” is also plentiful. Marijuana is reported as more available in the El Paso Division.

High quality sinsemilla sells for \$900–\$1,200 a 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 and hydroponic sells for \$3,500 in Houston, as compared to \$3,000 in Austin and \$4,600 in McAllen. The average price for a pound of commercial grade marijuana is \$140–\$160 in Laredo, \$125–\$425 in McAllen, \$350–\$450 in San Antonio, \$350–\$375 in Austin, \$280–\$350 in Houston, \$500 in El Paso, \$500–\$700 in Alpine, \$300–\$400 in Midland, \$350–\$600 in the Dallas/Fort Worth areas, \$500–\$600 in Lubbock, and \$340–\$500 in Tyler. Locally grown indoor marijuana sells for \$3,800 per pound in Dallas. Exhibit 15 shows the decline in prices since 1992.

Stimulants

Amphetamine-type substances come in different forms and with different names. “Speed” (“meth,” “crank,”) is a powdered methamphetamine of relatively low purity and 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 2004 secondary school survey reported that lifetime use of uppers was 8.1 percent in 1998 and 6.0 percent in 2004. Past-month use was 3.1 percent in 1998 and 2.5 percent in 2002.

Among Texas adults, 12 percent reported lifetime use of uppers and 1 percent reported past-month use in 2000. In comparison, lifetime use was 10 percent and past-month use was 1 percent in 1996. The difference in past-year use from 1996 to 2000 (1.1 percent to 1.9 percent) was statistically significant.

There were 144 calls to Texas poison control centers involving exposure to methamphetamines in 1998, 183 in 1999, 264 in 2000, 321 in 2001, 382 in 2002, 389 in 2003 and 109 in the first half of 2004. Of these 2004 calls, there were 38 mentions of “Ice” or “Crystal.” There were also 100 calls involving abuse or misuse of amphetamine pills, phentermine, or Adderall, and another 13 calls involving abuse or misuse of Ritalin.

Methamphetamine/amphetamine admissions to treatment programs have increased from 5 percent of all admissions in 2000 to 10 percent in 2004, and the average age of clients admitted for a primary problem with stimulants is increasing. In 1985, the average age was 26; in 2004, it was 30. The proportion of White clients has risen from 80 percent in 1985 to 90 percent in 2004, while the proportion of Hispanics has dropped from 11 percent to 7 percent and the proportion of Blacks has dropped from 9 percent to 1 percent. Unlike the other drug categories, more than one-half of these clients entering treatment are women (54 percent) (exhibit 29). The proportion smoking Ice has also increased from less than 1 percent in 1988 to 35 percent in 2004. The percent of clients injecting methamphetamine has dropped from 84 percent in 1988 to 50 percent in 2004 (exhibit 16).

In addition, users of amphetamines or methamphetamines tend to differ depending on their route of administration, as exhibit 17 shows. Those who took the substance orally tended to be users of pills. Methamphetamine injectors were more likely to have been in treatment before (58 percent readmissions) as compared to amphetamine pill takers (50 percent), Ice smokers (40 percent), or inhalers (34 percent).

There were 17 deaths where amphetamines or methamphetamines were mentioned in 1997, 20 in 1998, 21 in 1999, 39 in 2000, 51 in 2001, 69 in 2002, and 80 in 2003. Of the decedents in 2003, 70 percent were male, 84 percent were White, and average age was 35.

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 had increased to 24 percent in the first half of 2004 (exhibit 5). Twenty-three percent of the exhibits were methamphetamine and less than 1 percent were amphetamine.

Methamphetamine is more of a problem in the northern half of the State, as exhibit 18 shows. In Abilene, 58 percent of all of the drug items examined by the DPS laboratory were methamphetamine, while in McAllen and Laredo, only 1 percent were. 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. Methamphetamine is also more of a problem in the western United States than in the Midwest or east: 31 percent of all treatment admissions in California are for methamphetamine or amphetamine, as compared to 10 percent in Texas.

According to the El Paso Field Division, methamphetamine is primarily trafficked by Mexican organizations operating in Arizona and Southern California. The Houston Field Division reports that the availability of both Mexican and locally produced methamphetamine is increasing. Ice is more expensive than powdered methamphetamine; it is trafficked by White and Asian males. Most of the methamphetamine in the Division is produced in Mexico, although domestically produced methamphetamine is made by motorcycle gangs and small home producers. There are also numerous laboratories operating in East Texas and in the Corpus Christi, Austin, and Waco areas.

The Dallas Field Division reports that the availability of methamphetamine, especially Ice, is steady or rising at the retail level and has emerged as the primary problem in the Lubbock/Amarillo area. Mexican methamphetamine dominates this market and it is available for purchase in multipound quantities. Ice is produced in Michoacan, Monterrey, and Nuevo Leon for distribution in Dallas. Methamphetamine is primarily distributed by Mexican nationals, but Asian gangs are also involved.

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. At the same time, the number of labs seized has risen from 1,707 to 3,908, yet prices are dropping. The price for a pound of methamphetamine was \$8,000 in Houston 6 months ago; now it is \$7,000, and in Laredo it has dropped from \$4,500–\$5,500 to \$2,500. It sells for

\$6,000–\$8,000 in San Antonio, \$8,000 in Midland, \$4,000–\$9,000 in Dallas, \$5,000–\$10,000 in Fort Worth, and \$8,000–\$9,000 in Lubbock. An ounce of domestic methamphetamine sells for \$600–\$800 in Dallas (it was \$700–\$1,000 6 months ago), while an ounce of Mexican sells for \$400. An ounce of methamphetamine sells for \$600 in Fort Worth, \$600–\$1,200 in Tyler, \$400–\$1,200 in Lubbock, \$960 in El Paso, \$600 in Alpine, \$700 in Midland, \$500–\$850 in Houston, \$700–\$1,000 in San Antonio, and \$900–\$1,250 in Waco. The price of Ice has dropped even more, from \$13,000–\$17,000 down to \$8,000–\$12,000 in Houston. It now costs \$8,500–\$16,000 in Dallas, \$9,000–\$10,000 in Fort Worth, and \$10,000–\$18,000 in Tyler. An ounce of Ice sells for \$1,000–\$2,000 in Dallas, \$800–\$1,000 in Fort Worth, \$1,400 in Tyler, \$700–\$1,200 in Houston, and \$1,000–\$1,500 in San Antonio.

Street outreach workers in Amarillo report increases in the use of methamphetamine. Users are shifting to smoking to reduce their risk of HIV from injecting, but as their decision-making processes deteriorate with the effects of smoking Ice, they are at risk from unprotected sex. Use of “Crystal” by young men having sex with men is increasing in Corpus Christi and surrounding counties. In Austin, it has been reported that good quality methamphetamine is on the streets and more laboratories are being established. Users are smoking methamphetamine with glass pipes or inhaling it on tinfoil. Ice is either being injected or smoked. In Fort Worth, there is an increase both in the use of methamphetamine and in users seeking treatment. An ambulatory detoxification program has been established as an interim program for those needing residential treatment, and an outpatient program geared specifically to methamphetamine users has been established. In Dallas, methamphetamine is called “Ice” or “Tina,” and drug treatment programs are reporting increasing admissions of methamphetamine users as well as more users testing positive for hepatitis C.

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 decreased from 7.1 percent in 2002 to 5.9 percent in 2004. Past-year use decreased from 3.4 percent in 2002 to 2.6 percent in 2004.

The 2000 adult survey reported lifetime use of downers at 6.9 percent and past-month use at 0.6 percent; in 1996, lifetime use was 6.2 percent and past-month use was 0.3 percent. The difference in past-year use between 1996 and 2000 (1 percent to 1.8 percent) was statistically significant.

About 1 percent of the clients entering treatment in 2004 had a primary problem with barbiturates, sedatives, or tranquilizers. These clients were the most likely to be female; only 36 percent were male. They were also likely to be highly impaired, based on their ASI scores (see exhibit 29).

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. The proportion of cases that are alprazolam (Xanax) continues to increase (exhibit 19).

Alprazolam sells for \$3–\$5 in Dallas, Fort Worth, and Houston, and for \$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 20 shows the demographic characteristics of clients entering TDSHS-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 percent of clients who had a primary problem with another drug, such as marijuana, but who had a secondary or tertiary problem with the club drug shown at the top of the column. Note that the treatment data uses a broader category, “Hallucinogens,” that includes lysergic acid diethylamide (LSD), dimethyltryptamine (DMT), STP, mescaline, psilocybin, and peyote.

Based on exhibit 20, hallucinogen admissions are the most likely to be male, gamma hydroxybutyrate (GHB) clients are the most likely to be White, phenylcyclohexylamine (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, users of Rohypnol, ecstasy, and hallucinogens are

more likely to have a primary problem with marijuana, rather than with a club drug.

Exhibit 21 shows the percent of exhibits identified by DPS laboratories that contained various club drugs. Only the proportion of PCP exhibits has not decreased over time.

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 the number of abuse and misuse cases involving dextromethorphan rose from 99 in 1998 to a high of 432 in 2002, and then dropped to 365 in 2003 and 91 in the first half of 2004. Average age was 23.8. 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 189 in 2003. There have been 175 cases in the first half of 2004. Average age in 2004 was 16.2 years, which shows that youths can easily access and misuse this substance.

DPS labs examined 2 substances in 1998 that were dextromethorphan, 13 in 1999, 36 in 2000, 18 in 2001, 42 in 2002, 10 in 2003, and 8 in the first half of 2004.

Ecstasy (Methylenedioxymethamphetamine or MDMA)

The 2004 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 2000 adult survey reported that 3.1 percent had ever used ecstasy and 1.0 percent had used in the past year.

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, and 169 in the first half of 2004. In 2004, 48 percent were male, and the average age was 20.8.

There were 63 admissions for a primary, secondary, or tertiary problem with ecstasy in 1998, 114 in 1999, 199 in 2000, 349 in 2001, 521 in 2002, 502 in 2003, and 289 in the first half of 2004. Approximately 36 percent reported marijuana as their primary problem drug, as compared to 12 percent who reported ecstasy as their primary problem drug. Exhibit 22 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 clients.

In 1999, there were two deaths that involved ecstasy in Texas. There was one death in 2000, five in 2001, five in 2002, and two in 2003.

Exhibit 21 shows the substances identified by DPS labs. The labs identified MDMA in 107 exhibits in 1999, 387 in 2000, 814 in 2001, 503 in 2002, 484 in 2003, and 325 in the first half of 2004. Methylenedioxyamphetamine (MDA) was identified in 31 exhibits in 1999, 27 in 2000, 48 in 2001, 90 in 2002, 94 in 2003, and 29 in the first half of 2004.

According to the Houston DEA Field Division, ecstasy is more available at clubs, raves, and gyms, and use is increasing in the Galveston, Beaumont, and Fort Hood areas. Logos on the tablets include A&E, Blue Dolphins, Bear, Music Notes, Crescent Moon, Yellow Dolphins, Aladdin Lamp, Yellow Alligator, Yellow Trumpets, Omega, X-5 (aka BMW), JJ, Spade, and Footprints. While most tablets contain MDMA, some have high concentrations of caffeine or methamphetamine. Asian gangs and White males continue to be involved in MDMA distribution.

The Dallas DEA Field Division reports that MDMA, which is brought into the Division from Mexico, is heavily adulterated and of poor quality. Use is spreading among Blacks and among older users. 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). The club drug distribution in the Division is dominated by Asian traffickers who are also involved with hydroponic marijuana and methamphetamine.

Single dosage units of ecstasy sell for \$6–\$20 in Dallas, \$5–\$12.50 in Fort Worth, \$12–\$25 in Tyler, \$4.75–\$25 in Houston, \$20–\$30 in McAllen, \$20 in Laredo, and \$11–\$20 in San Antonio. Multiple dos-

age 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 2000 Texas adult survey reported that 0.4 percent had ever used GHB and 0.1 percent had used in the past year.

The number of cases of misuse or abuse of GHB 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, and 54 in the first half of 2004. Average age of the abusers in 2004 was 28, and of the callers whose gender was known, 38 percent were male.

Adult and adolescent clients with a primary, secondary, or tertiary problem with GHB, GBL, or 1,4 butanediol (1,4 BD) are seen in treatment. In 1998, 2 were admitted, as compared to 17 in 1999, 12 in 2000, 19 in 2001, 35 in 2002, 31 in 2003, and 21 in the first half of 2004. Clients who used GHB tended to be the oldest of all the club drug users (age 26) and the most likely to be White (91 percent). GHB users were more likely to have used the so-called “hard-core” drugs; 43 percent had a history of injecting drug use. Fifty-two percent had a primary problem with amphetamines or methamphetamines. 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 20).

In 1999, there were three deaths that involved GHB, five in 2000, three in 2001, two in 2002, and two in 2003.

In 1998, there were 18 items identified by DPS labs as being GHB, in 1999 112 were GHB, 4 were GBL, and 4 were 1,4 BD (exhibit 21). In 2000, 45 were GHB, 7 were GBL, and 4 were 1,4 BD. In 2001, 34 were GHB, 7 were GBL, and 19 were 1,4 BD. In 2002, 81 were GHB, 6 were GBL, and 4 were 1,4 BD. In 2003, 150 were GHB, 5 were GBL, and none were 1,4 BD. In the first half of 2004, 44 were GHB and none were GBL or 1,4 BD (exhibit 21). In 2004, 82 percent of the GHB 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 had increased from \$100–\$200 per gallon to \$250–\$500 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 Anto-

nio 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 where GBL ordered over the Internet is mixed with other chemicals and water to produce GHB.

Ketamine

The 2000 adult survey reported that 0.3 percent had ever used ketamine and 0.1 percent had used it in the last year.

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, and 5 in the first half of 2004.

Five clients were admitted to TDSHS-funded treatment programs in the first half of 2004 with a secondary or tertiary problem with ketamine. Forty percent had a history of injecting drug use, and all had problems with the legal or criminal justice system (exhibit 20).

There were two deaths in 1999 that involved use of ketamine, none in 2000, one in 2001, and one in 2002.

In 1999, 25 substances were identified as ketamine by DPS labs. There were 29 in 2000, 119 in 2001, 78 in 2002, 84 in 2003, and 40 in the first half of 2004 (exhibit 21).

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.) is continuing to decrease. Lifetime use peaked at 7.4 percent in 1996 and had dropped to 4.8 percent by 2004. Past-month use dropped from 2.5 percent in 1998 to 1.6 percent in 2004.

The 2000 adult survey reported that 8.8 percent of Texas adults had ever used LSD and 0.9 percent had used in the past year.

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, and 14 in the first half of 2004. 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, and 76 in 2004.

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, and 142 in the first half of 2004. Of the admissions in 2004, the average age was 22, 76 percent were male, 62 percent were White, 26 percent were Hispanic, and 10 percent were Black. Sixty-three percent were referred from the criminal justice or legal system (exhibit 20).

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, 10 in 2002, 10 in 2003, and 12 in the first half of 2004 (exhibit 21).

A dosage unit of LSD is selling for \$1–\$10 in Dallas, \$5–\$10 in Tyler, \$6–\$10 in Fort Worth, \$7 in Lubbock, and \$5–\$12 in San Antonio. A dosage sheet of 100 sells for \$800 in San Antonio.

Phencyclidine (PCP)

The 2000 Texas adult survey reported that 0.9 percent of adults had ever used PCP or Angel Dust, and 0.1 percent had used it in the past year.

Texas Poison Control Centers reported cases of “Fry,” “Amp,” “Water,” “Wack,” or “PCP.” Often, marijuana joints were dipped in formaldehyde that contained PCP or PCP was sprinkled on the joint. The number of cases involving PCP increased from 102 in 1998 to a high of 237 in 2002, 172 in 2003, and 102 in the first half of 2004. There were also 18 cases involving misuse or abuse of formaldehyde or formalin in 2003 and 29 in the first half of 2004.

Adolescent and adult admissions to treatment with a primary, secondary, or tertiary problem with PCP are increasing (exhibit 20), rising from 164 in 1998 to 417 in 2003 and 175 in the first half of 2004. Of these clients in 2004, 83 percent were Black, 56 percent were male, 54 percent were involved in the criminal justice system, 22 percent were employed, and 20 percent were homeless. While 38 percent reported a primary problem with PCP, another 31

percent reported a primary problem with marijuana, which demonstrates the link between these two drugs and the use of “Fry” (exhibit 26).

There were three deaths in 1999, three in 2000, five in 2001, eight in 2002, and two in 2003 that involved PCP.

DPS labs identified 10 substances as PCP in 1998, 84 in 1999, 104 in 2000, 163 in 2001, 95 in 2002, 143 in 2003, and 83 in first half of 2004 (exhibit 21).

PCP costs \$700–\$1,200 per ounce in San Antonio and \$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.

Street outreach workers in the Galveston/Brazoria area report “Water” is a problem, and in Houston, there is an increase in the number of clients who identify their drug of choice as “Fry.”

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 23, 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 the border and non-border has declined since its peak in 1998.

The 2000 Texas adult survey found that 0.8 percent reported lifetime use and 0.1 percent reported past-year use of Rohypnol.

The number of confirmed exposures to Rohypnol reported to the Texas Poison Control Centers peaked at 102 in 1998; 40 cases were reported in the first half of 2004. Average age in 2003 was 16.7 years, 45.0 percent were male, and 83.0 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).

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, and 137 in the first half of 2004. Clients abusing Rohypnol were among the youngest of the club drug patients, and they were predominately Hispanic, which reflects the availability and use of this drug along the border (exhibit 20). Some 64 percent were involved with the criminal justice or legal system. While 14 percent of these clients said that Rohypnol was their primary problem drug, 45 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, 22 in 2002, 17 in 2003, and 11 in the first half of 2004. This decline in the percent of seizures, as shown in exhibit 21, 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 7.8 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 24). This decrease in inhalant use as students

age may be partially due 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.

Inhalant abusers represented 0.3 percent of the admissions to treatment programs in 2004. The clients tended to be male (63 percent) and Hispanic (82 percent). The overrepresentation of Hispanics is due to the fact that TDSHS has developed and funded treatment programs that were targeted specifically to this group. Average age was 22. Seventy percent were involved with the criminal justice system, average education was 8.9 years, 10 percent were homeless, and 16 percent had a history injecting drug use.

In 2000, there were 12 deaths involving misuse of inhalants, compared with 15 in 2001, 8 in 2002, and 13 in 2003. The categorization of inhalant deaths is difficult and leads to underreporting, but of those reported in 2003, the average age was 34, 85 percent were male, 69 percent were White, and 31 percent were Hispanic.

Street outreach workers in Austin reported the deaths of two clients in their quarterly report at the end of 2004. Both were homeless Hispanic males, in their late forties or early fifties, who were “huffers” and died from inhaling carburetor fluid. One of the clients had been inhaling since he was 13 years old.

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 many steroids are brought across the border, the school survey found lifetime usage lower among border students (1.4 percent) than among non-border students (2.1 percent).

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 235 in 2003, and there were 160 in the first half of 2004. In addition to the abuse and misuse cases, there were another 329 cases in which the reason for the call was suicide.

Between 1998 and 2003, 51 percent of these cases involved males and 83 percent involved persons older than 19. Some 37 percent of the cases were in the Houston region, 18 percent were in the Dallas and Fort Worth region, and 11 percent were in the

Beaumont region. 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).

In 2003, carisoprodol was mentioned on 51 death certificates. Only 1 of the deaths involved exclusively carisoprodol. Hydrocodone, propoxyphene, alcohol, and benzodiazepines were also substances that were mentioned along with carisoprodol.

DPS lab exhibits of carisoprodol reported to NFLIS increased from 13 in 1998 to 90 in 1999, 153 in 2000, 202 in 2001, 179 in 2002, 278 in 2003, and 132 in the first half of 2004.

According to the Dallas DEA Field Division, Soma sells for \$2–\$5 per tablet.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

Hepatitis C

Exhibit 25 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 injecting drug use. The rates were higher for males, for American Indians and Blacks, and for persons aged 40 and older. The highest HCV positivity rates 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. However, only 5 percent reported they were HIV positive.

HIV and AIDS Cases

In 2003, the percent of AIDS cases involving heterosexual exposures was greater than the percent of cases due to injecting drug use (exhibit 26). The proportion due to heterosexual contact has risen from 1 percent in 1987 to 27 percent in the first half of 2004, while the proportion attributed to injecting drug use was 16 percent in the first half of 2004.

In 1987, 3 percent of the AIDS cases were females older than age 12; in the first half of 2004, 24 percent were female. In 1987, 12 percent of the adult and adolescent cases were Black; in 2004, 44 percent

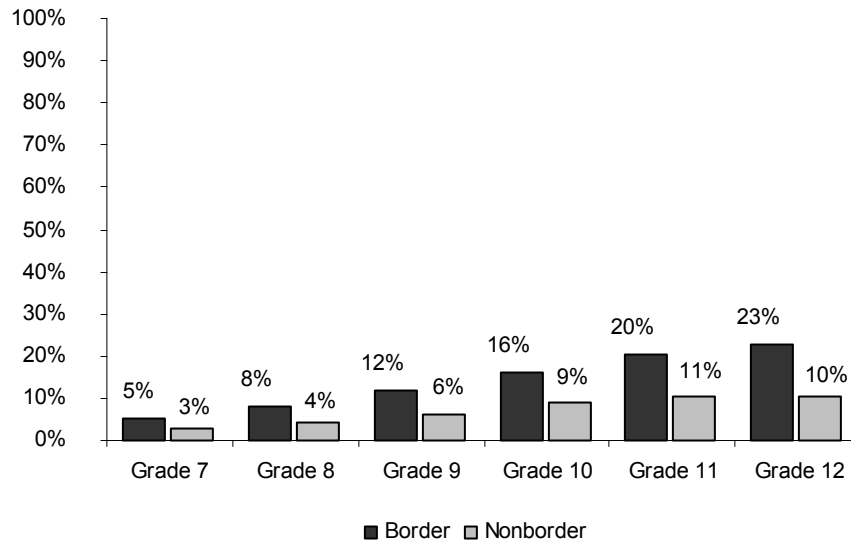
were Black. As exhibit 27 shows, the proportion of White males has dropped, while the proportion of Blacks and Hispanics has increased.

The proportion of adult needle users entering TDSHS-funded treatment programs has decreased

from 32 percent in 1988 to 22 percent for 2004. 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 28).

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Exhibit 1. Secondary Students Who Had Ever Used Powder or Crack Cocaine, by Grade: 2004



SOURCE: TDSHS

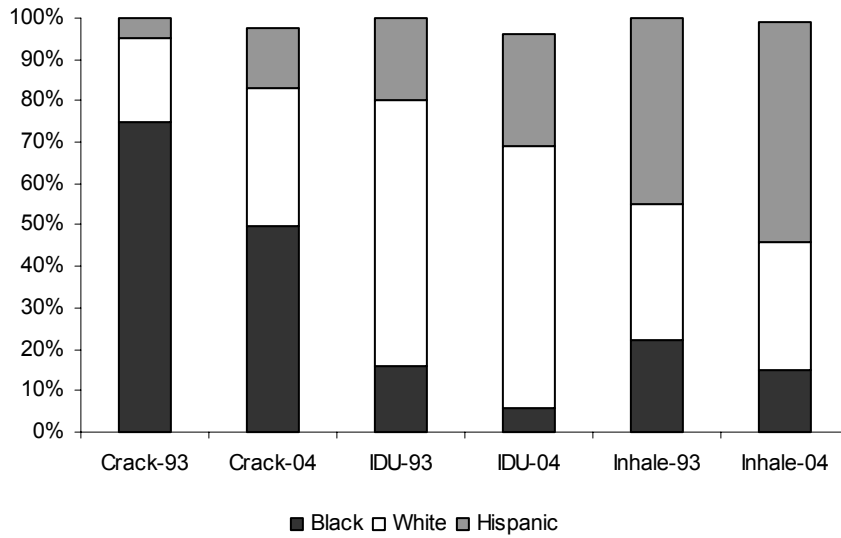
Exhibit 2. Characteristics of Clients Admitted to TDSHS-Funded Treatment with a Primary Problem with Cocaine, by Route of Administration: January–June 2004

	Crack Cocaine Smoke	Powder Cocaine Inject	Powder Cocaine Inhale	Cocaine All*
# Admissions	4,868	554	1,505	7,009
% of Cocaine Admits	70	8	22	100
Lag-1st Use to Tmt-Yrs.	12	14	10	12
Average Age	37	36	31	36
% Male	55	65	57	56
% Black	50	5	15	39
% White	33	63	31	35
% Hispanic	15	27	53	25
% CJ Involved	37	48	49	41
% Employed	12	15	28	16
% Homeless	19	13	5	15

*Total includes clients with "other" routes of administration.

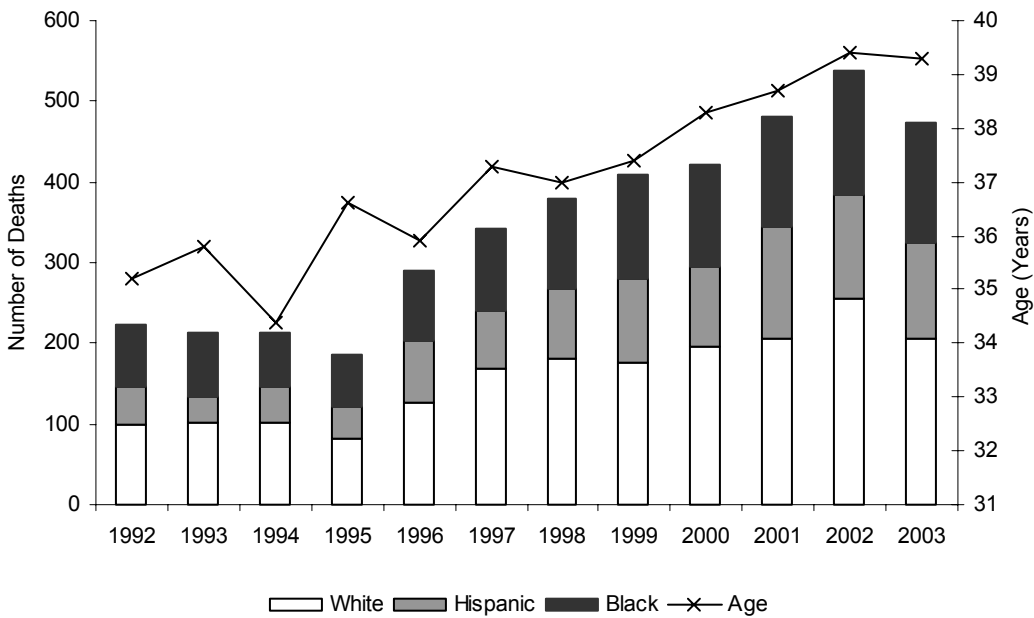
SOURCE: TDSHS

Exhibit 3. Routes of Administration of Cocaine by Race/Ethnicity from TDSHS Treatment Admissions: 1993–1H 2004



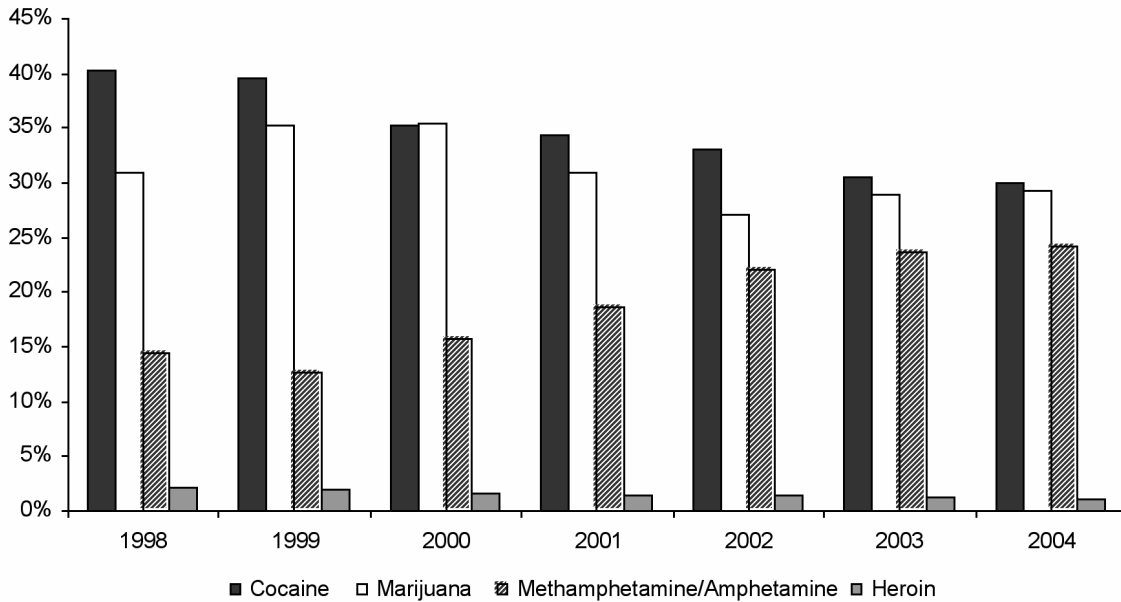
SOURCE: TDSHS

Exhibit 4. Age and Race/Ethnicity of Persons Dying with a Mention of Cocaine in Texas: 1992–2003



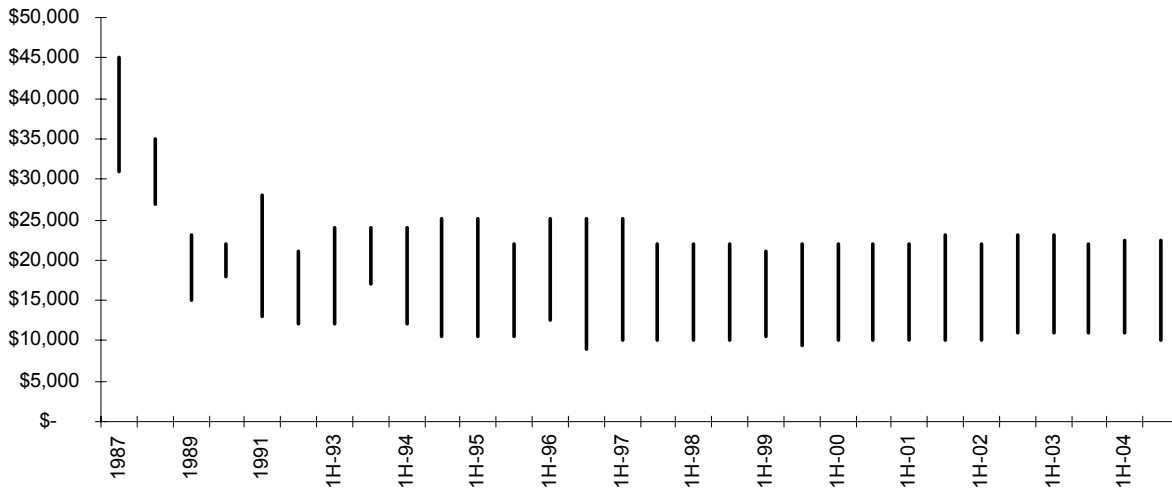
SOURCE: TDSHS

Exhibit 5. Substances Identified by Texas DPS Labs: 1998–1H 2004



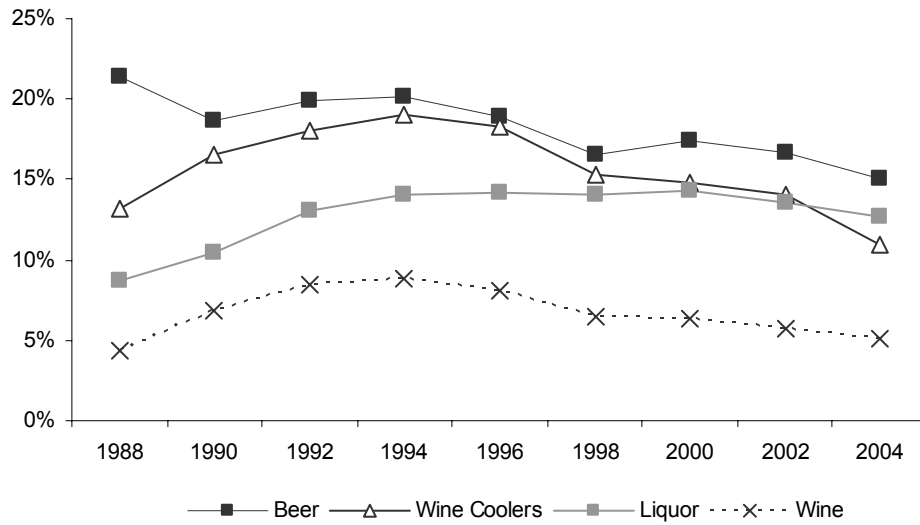
SOURCE: NFLIS

Exhibit 6. Price¹ of a Kilogram of Cocaine in Texas as Reported by the DEA: 1987–2004



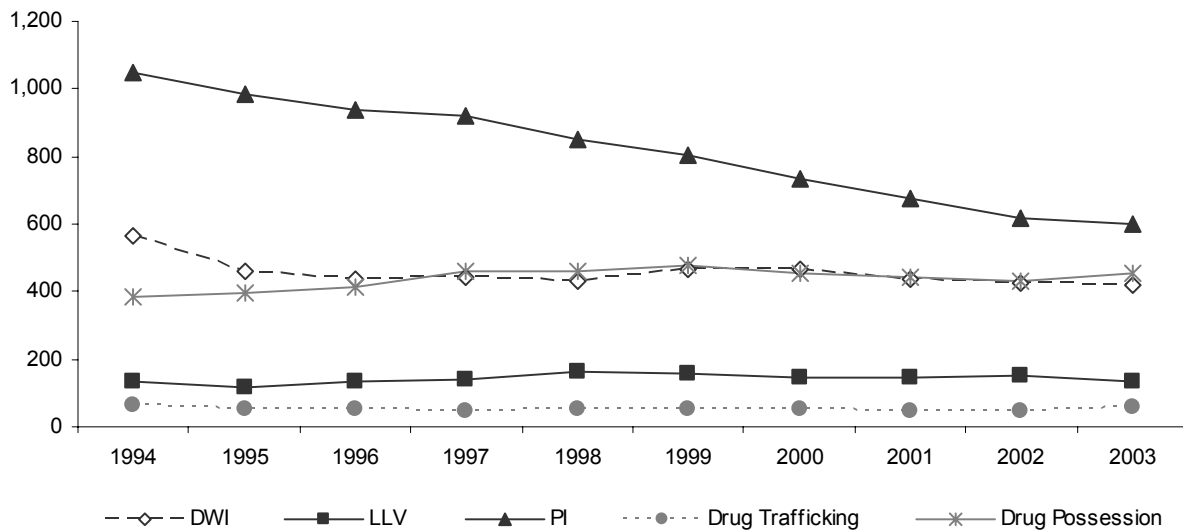
¹Prices reported by half year since 1993.
SOURCE: DEA

Exhibit 7. Percentage of Texas Secondary Students Who Reported They Normally Consumed Five or More Drinks at One Time, by Specific Alcoholic Beverage: 1988–2004



SOURCE: TDSHS

Exhibit 8. Texas Substance Abuse-Related Arrests¹ Per 100,000 Population in Texas: 1994–2003



¹DWI=Driving While Intoxicated; LLV=Liquor Law Violation; PI=Public Intoxication.
SOURCE: Texas DPS

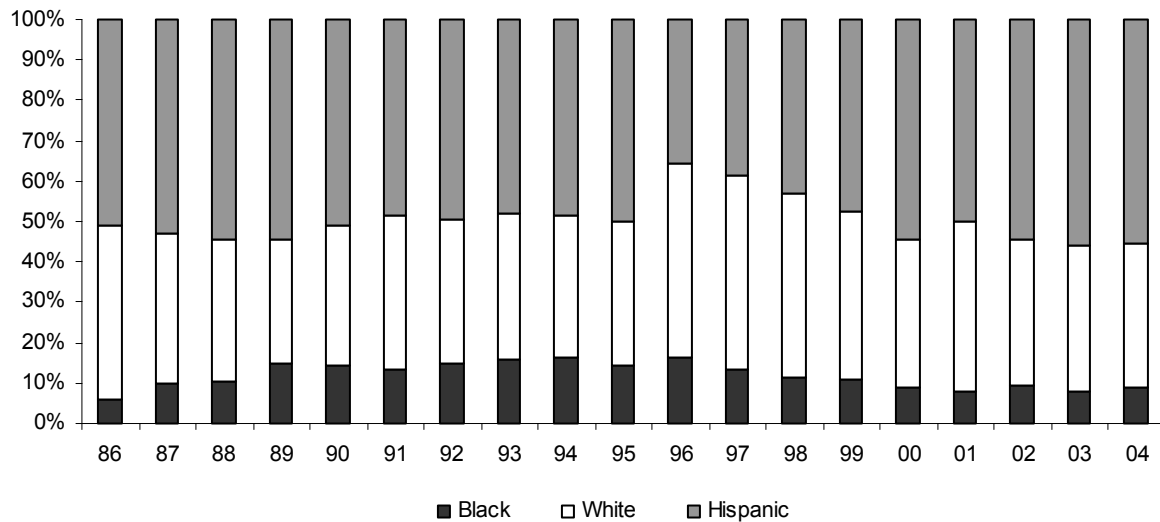
Exhibit 9. Characteristics of Clients Admitted to TDSHS-Funded Treatment with a Primary Problem with Heroin, by Route of Administration: 1H 2004

	Inject	Inhale	Smoke	All*
# Admissions	2,394	255	27	2,702
% of Heroin Admits	89	9	1	100
Lag-1st Use to Tmt-Yrs.	16	8	7	15
Average Age	37	29	28	36
% Male	69	53	48	67
% Black	6	33	7	9
% White	37	18	44	35
% Hispanic	55	47	41	54
% CJ Involved	31	29	15	30
% Employed	11	16	7	12
% Homeless	13	10	7	13

*Total includes clients with other routes of administration.

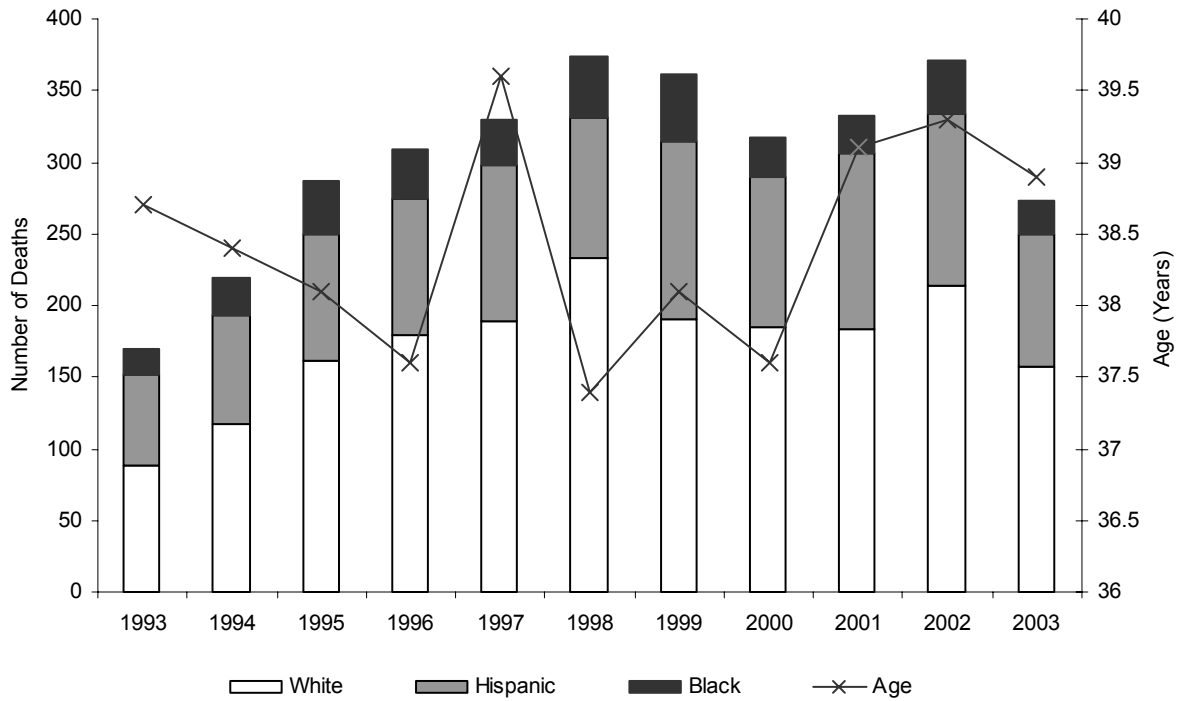
SOURCE: TDSHS

Exhibit 10. Heroin Admissions to TCADA-Funded Treatment by Race/Ethnicity: 1986–1H 2004



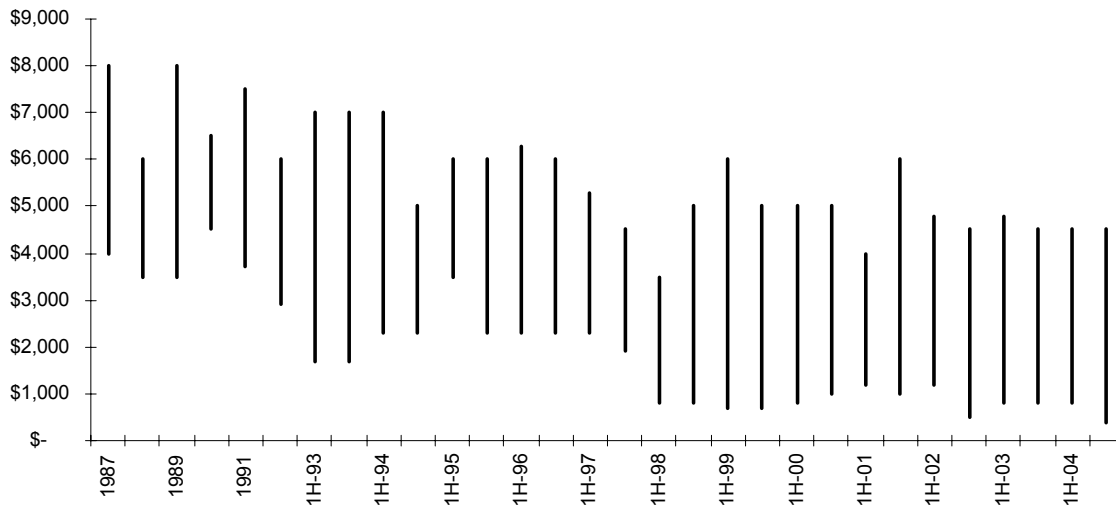
SOURCE: TDSHS

Exhibit 11. Age and Race/Ethnicity of Persons Dying with a Mention of Heroin in Texas: 1992–2003



SOURCE: TDSHS

Exhibit 12. Price¹ of an Ounce of Mexican Black Tar Heroin in Texas as Reported by the DEA: 1987–2004



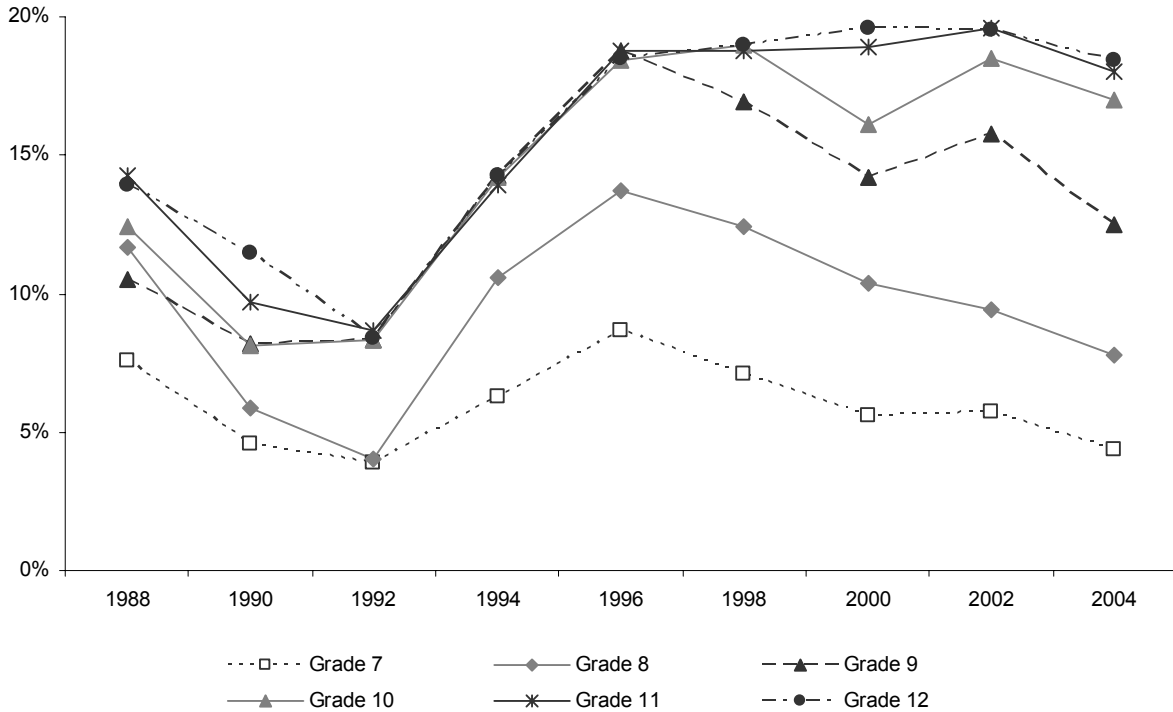
¹Prices reported by half year since 1993.
SOURCE: DEA

Exhibit 13. Hydrocodone, Oxycodone, and Methadone Indicators in Texas: 1998–1H 2004

	1998	1999	2000	2001	2002	2003	1H 2004
Poison Control Center Cases of Abuse and Misuse							
Hydrocodone	192	264	286	339	429	414	285
Oxycodone	12	26	22	34	68	64	42
Methadone	16	19	21	26	50	41	39
TDSHS Treatment Admissions							
"Other Opiates" ¹	542	802	879	1,336	1,752	2,227	1,344
Methadone	53	68	44	50	63	66	29
Deaths with Mention of Substance (TDSHS)							
Hydrocodone		25	52	107	168	140	
Oxycodone		8	20	40	56	60	
Methadone	30	36	62	93	131	122	
Drug Exhibits Identified by DPS Laboratories							
Hydrocodone		479	629	771	747	1,212	776
Oxycodone		36	72	115	106	174	121
Methadone	1	19	22	42	49	63	67

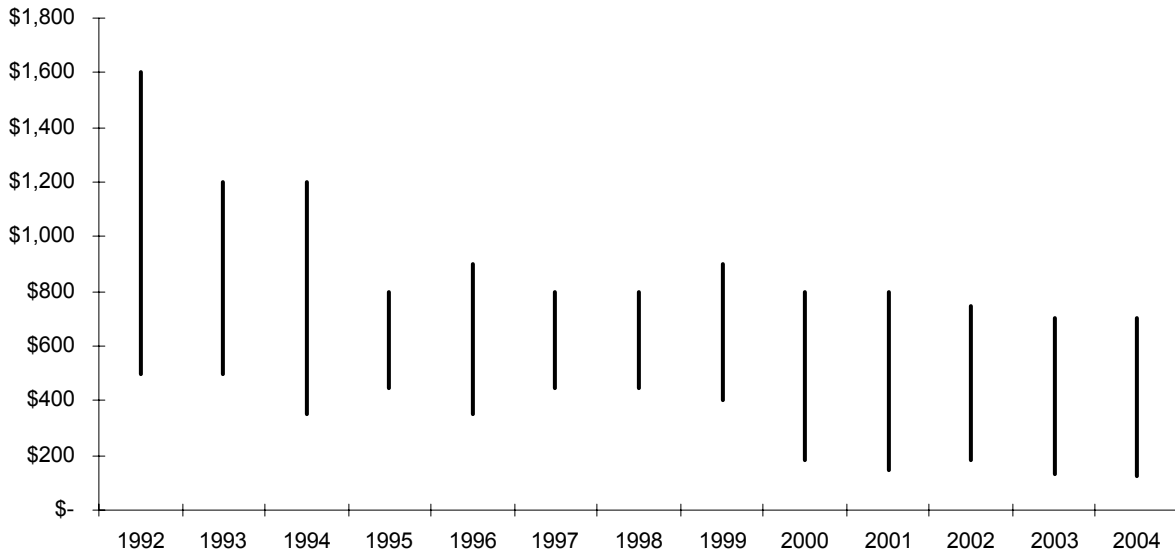
¹"Other Opiates" refers to those other than heroin.
 SOURCES: TPCN, TDSHS, NFLIS, and TDH

Exhibit 14. Percentage of Texas Secondary Students Who Had Used Marijuana in the Past Month, by Grade: 1998–2004



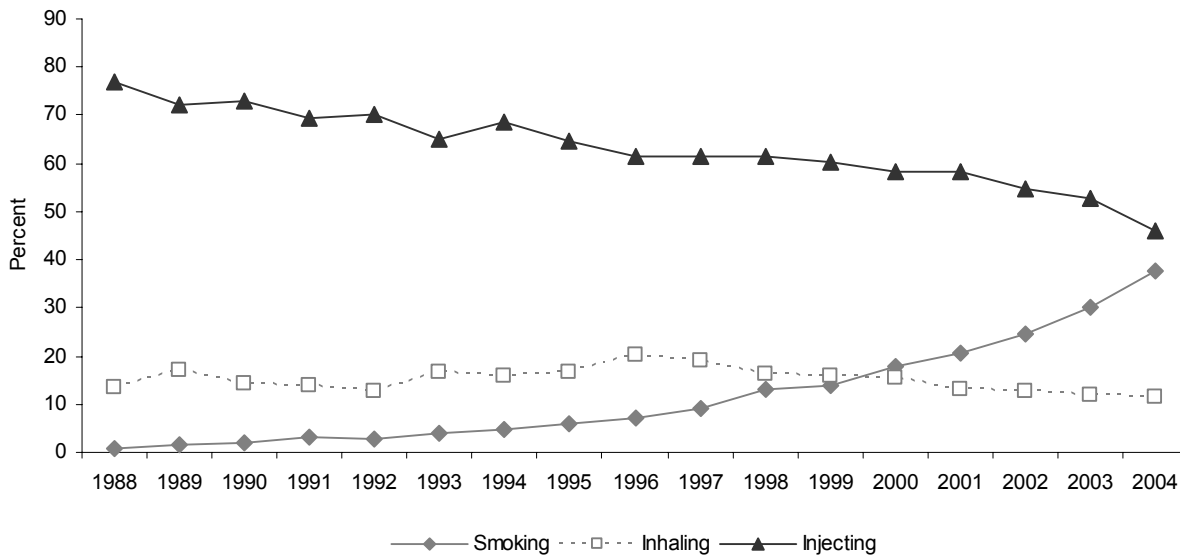
SOURCE: TDSHS

Exhibit 15. Price of a Pound of Commercial Grade Marijuana in Texas, as Reported by the DEA: 1992–2004



SOURCE: DEA

Exhibit 16. Route of Administration of Methamphetamine by Clients Admitted to TDSHS-Funded Programs: 1988–1H 2004



SOURCE: TDSHS

Exhibit 17. Characteristics of Clients Admitted to TDSHS-Funded Treatment with a Primary Problem of Amphetamines or Methamphetamines, by Route of Administration: 1H 2004

	Smoke	Inject	Inhale	Oral	All*
# Admissions	911	1,292	299	103	2,607
% of Stimulant Admits	35	50	12	4	100
Lag-1st Use to Tmt-Yrs.	9	13	10	11	11
Average Age-Yrs.	28	31	31	31	30
% Male	44	47	48	48	46
% Black	1	0	1	2	1
% White	86	95	87	84	90
% Hispanic	10	4	9	13	7
% CJ Involved	48	51	48	52	50
% Employed	22	16	25	26	19
% Homeless	7	10	6	11	9

*Total includes clients with "other" routes of administration

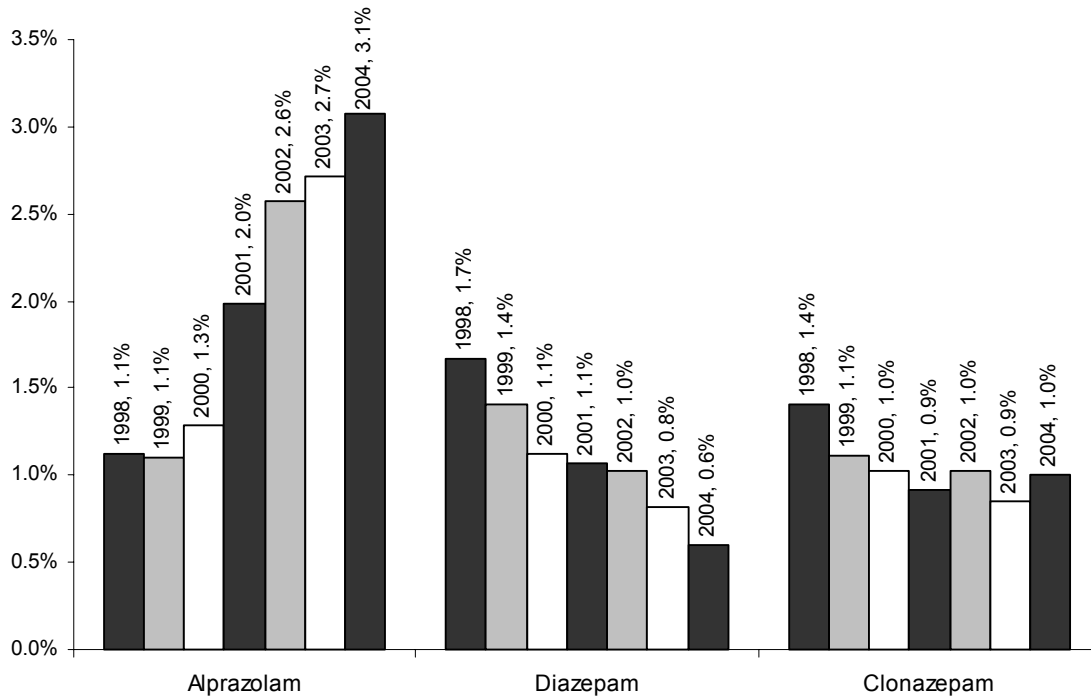
SOURCE: TDSHS

Exhibit 18. Percent of Items Analyzed by Texas DPS Laboratories Identified as Methamphetamine, by County and City: 1H 2004

County/City	Percent
Hidalgo (McAllen)	0.40
Webb (Laredo)	1.02
El Paso (El Paso)	3.55
Nueces (Corpus Christi)	11.69
Harris (Houston)	10.86
Travis (Austin)	22.11
McLennan (Waco)	26.14
Smith (Tyler)	29.90
Dallas (Dallas)	35.78
Midland (Odessa)	18.69
Taylor (Abilene)	57.75
Lubbock (Lubbock)	29.30
Potter (Amarillo)	44.50

SOURCE: NFLIS

Exhibit 19. Benzodiazepines Identified by DPS Labs in Texas: 1998–1H 2004



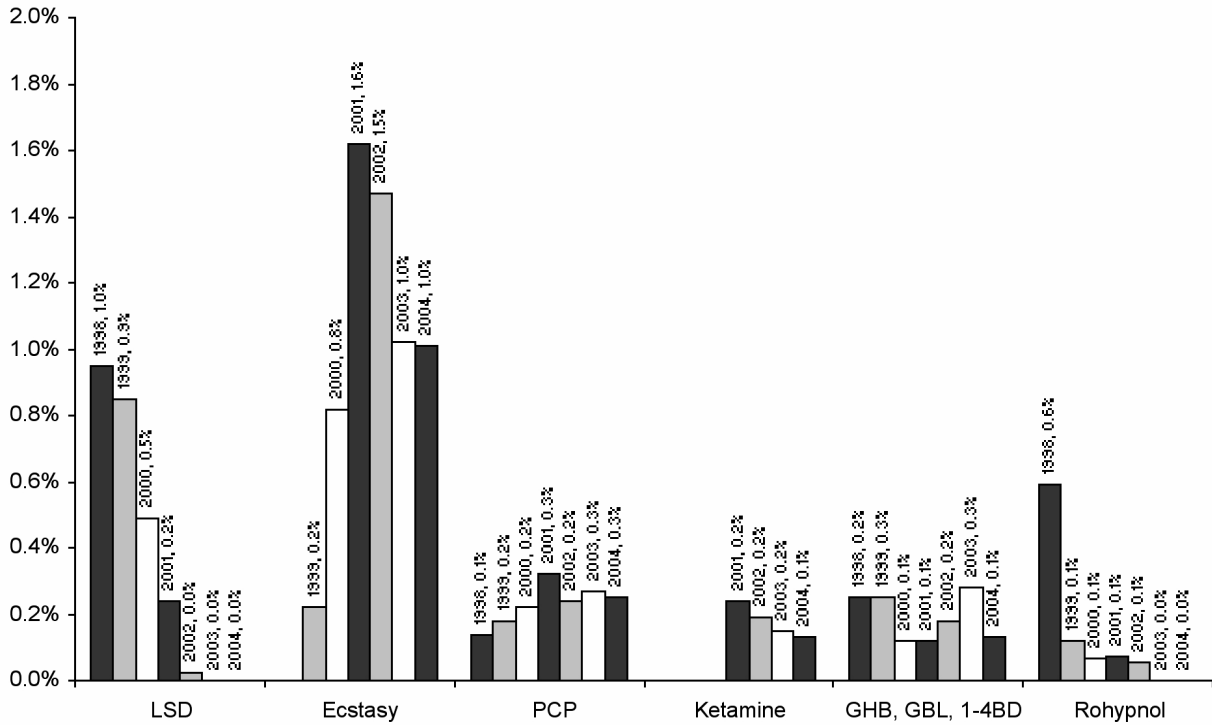
SOURCE: NFLIS

Exhibit 20. Characteristics of Clients Admitted to TDSHS-Funded Treatment with a Primary, Secondary, or Tertiary Problem with Club Drugs: 1H 2004

Club Drug	GHB	Hallucinogens	Ecstasy	PCP	Ketamine	Rohypnol
# Admissions	21	142	289	175	5	137
% Male	57	76	57	56	100	70
% White	91	62	63	8	60	1
% Hispanic	9	26	19	9	40	99
% Black	0	10	16	83	0	0
Average Age (Years)	26	22	22	24	16	19
% Criminal Justice Involved	43	63	64	54	100	64
% History Needle Use	43	22	22	3	40	12
% Primary Drug=Club Drug	29	18	12	38	20	14
Other Primary Drug						
% Marijuana	5	46	36	31	40	45
% Alcohol	5	13	9	11	0	10
% Methamphet/Amphetamines	52	7	16	1	0	0
% Powder Cocaine	0	6	13	7	20	15
% Crack Cocaine	5	3	5	9	0	0
% Heroin	0	1	2	1	8	7

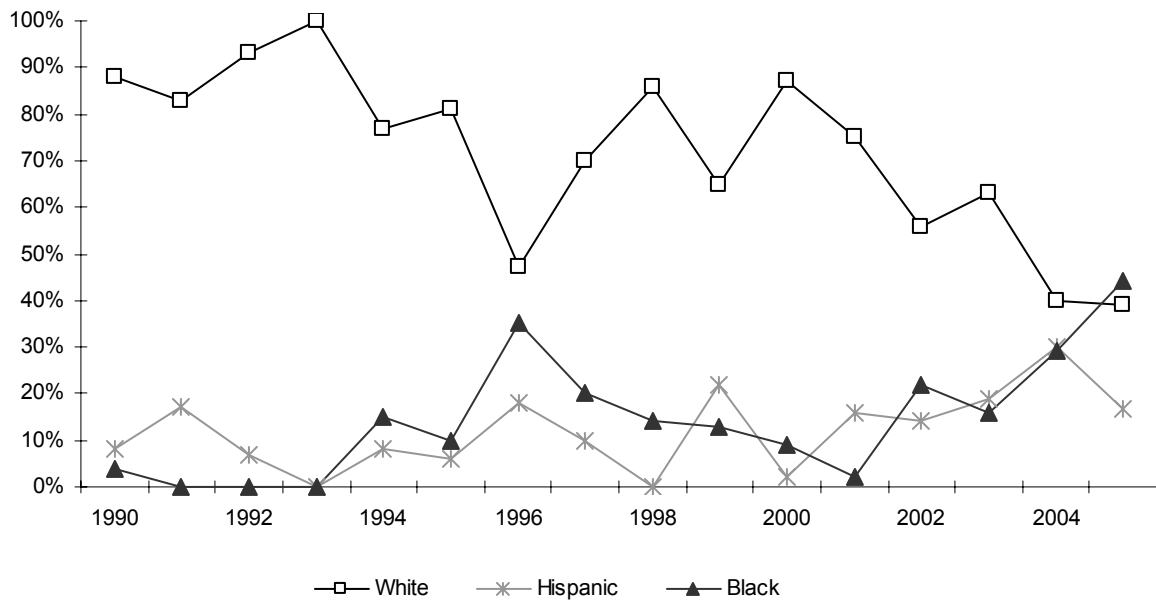
SOURCE: TDSHS

Exhibit 21. Club Drugs Identified by DPS Labs in Texas: 1998–1H 2004



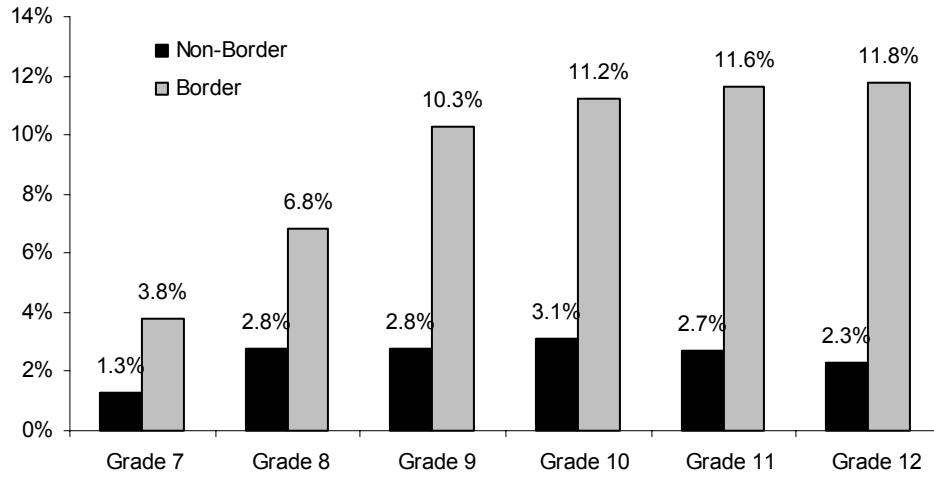
SOURCE: NFLIS

Exhibit 22. Characteristics of Clients Admitted to TDSHS-Funded Treatment with a Problem with Ecstasy: 1990–1H 2004



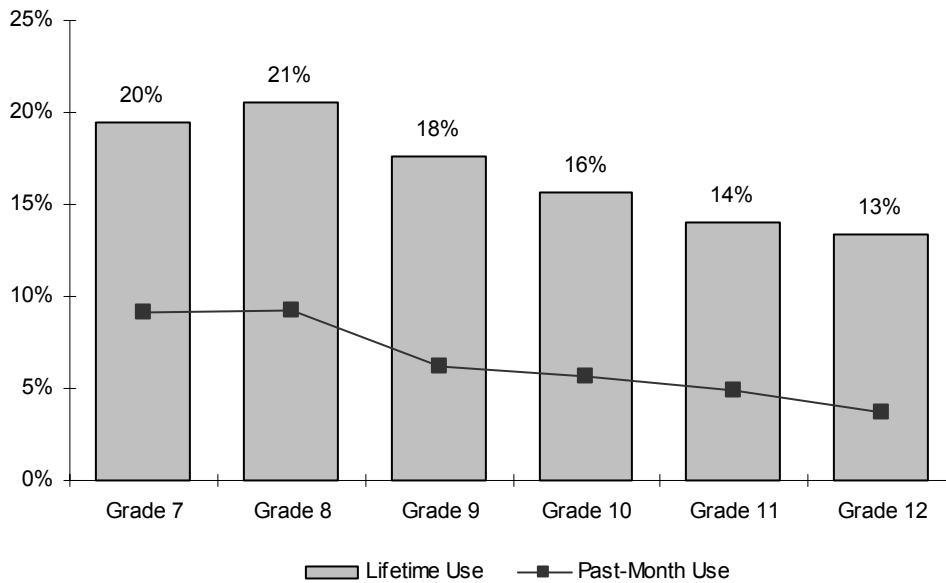
SOURCE: TDSHS

Exhibit 23. Percentage of Border and Nonborder Texas Secondary Students Who Had Ever Used Rohypnol, by Grade: 2004



SOURCE: TDSHS

Exhibit 24. Percentage of Texas Secondary Students Who Had Used Inhalants Ever or in the Past Month, by Grade: 2004



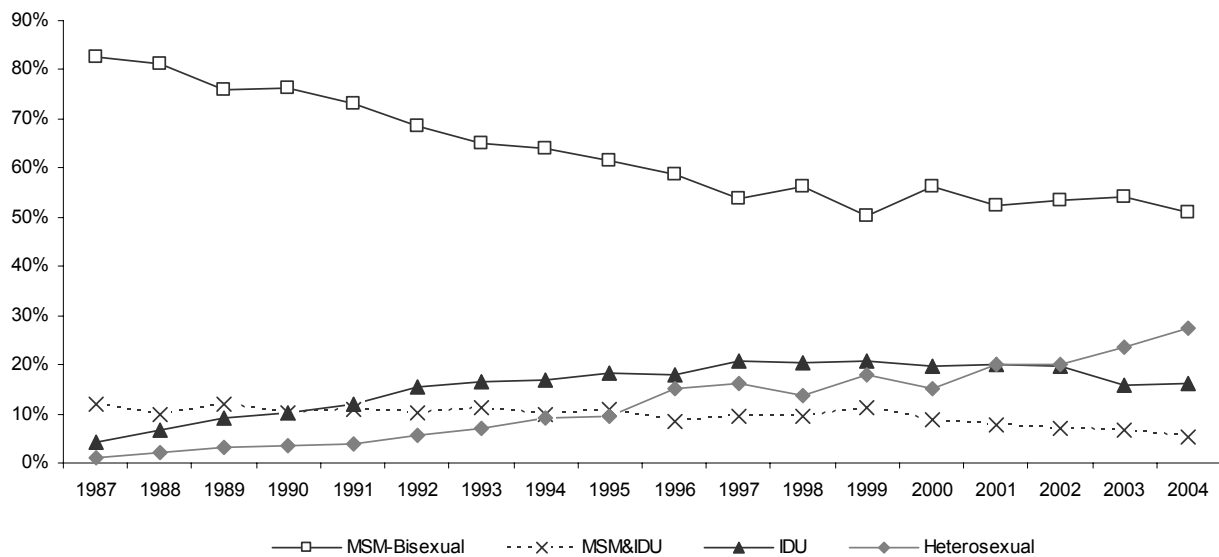
SOURCE: TDSHS

Exhibit 25. 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: TDSHS

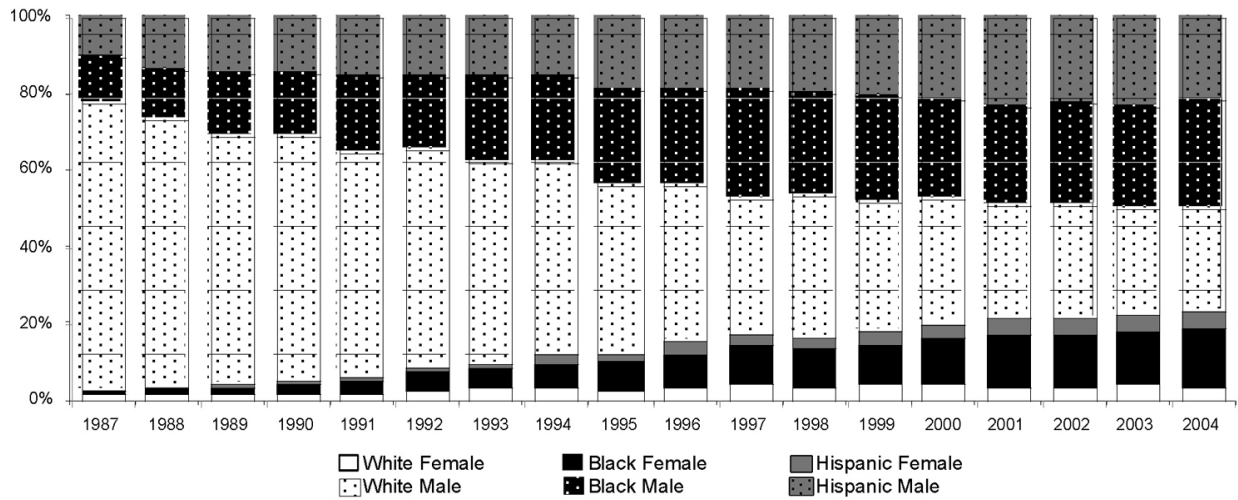
Exhibit 26. AIDS Cases¹ in Texas by Route of Transmission: 1987–June 2004



¹Cases with risk not reported excluded.

SOURCE: TDSHS

Exhibit 27. Texas Male and Female AIDS Cases by Race/Ethnicity: 1987–June 2004



SOURCE: TDSHS

Exhibit 28. Characteristics of Clients Admitted to TDSHS-Funded Treatment Who Used Needles: 1H 2004

	Heroin	Cocaine	Stimulants
# Admissions	2,394	554	1,292
% of Needle Admits\Drug	89	8	50
Lag-1st Use to Tmt-Yrs.	16	14	13
Average Age	37	36	31
% Male	69	65	47
% Black	6	6	0
% White	37	63	95
% Hispanic	55	27	4
% CJ Involved	31	48	51
% Employed	11	15	16
% Homeless	13	13	10

SOURCE: TDSHS

Exhibit 29. Adult and Youth Admissions to TDSHS-Funded Programs: 1H 2004

Primary Substance	Total Admissions	% of All Admissions	Average Age	Avg. Age 1st Use	Avg. Lag-1st Use to Admission	% First Treatment	Percent Married	Percent Male	% Use Needles	% History of IV Drug Use
Total	28,261	100.0	32.4	19.1	14.0	43.2	18.7	61.8	19.2	33.1
Heroin	2,702	9.9	35.7	21.5	15.0	21.4	17.0	66.9	87.0	90.5
Methadone	29	0.1	32.2	25.8	7.0	21.9	21.9	37.5	31.3	56.3
Other Opiates	1,344	4.8	35.1	25.2	11.0	35.3	26.6	42.1	17.5	39.2
Alcohol	7,060	28.2	38.0	15.6	23.5	38.8	17.9	68.0	6.4	24.7
Depressants	368	1.3	31.4	23.2	9.0	39.3	18.8	35.7	7.8	26.9
Stimulants	2,760	9.8	30.1	19.7	11.3	50.7	21.0	45.9	49.3	61.4
Powder Cocaine	2,233	7.9	32.1	21.4	11.4	47.1	21.8	58.8	25.7	33.9
Marijuana	5,380	19.0	21.5	13.8	9.0	66.3	19.2	72.4	1.9	7.1
Hallucinogens	92	0.3	26.0	19.8	7.0	38.6	8.4	55.4	6.0	7.2
Other Drugs	160	0.6	31.1	22.4	9.6	50.5	7.7	42.9	9.9	20.9
Crack Cocaine	5,125	18.1	37.4	26.0	12.3	30.7	16.4	55.1	5.3	30.1

Primary Substance	Percent Black	Percent White	Percent Hispanic	% Involved with CJ or Legal System	Percent Employed	% Employed Over Last 12 Months	Average Education (Years)	Percent Homeless	Average Income At Adm	# of Women Pregnant at Admission
Total	20.0	48.7	29.4	49.0	20.5	3.9	11.3	11.8	\$5915	533
Heroin	8.7	35.2	54.1	31.0	12.5	2.7	11.2	12.8	\$3780	38
Methadone	6.3	81.3	9.4	40.6	12.5	2.5	11.8	12.5	\$2653	0
Other Opiates	9.1	81.9	7.9	31.1	12.1	3.5	12.3	7.8	\$6179	13
Alcohol	15.4	58.2	24.4	44.4	24.7	4.6	12.0	13.4	\$7382	53
Depressants	7.1	83.8	8.4	36.7	12.0	3.6	12.1	5.8	\$5057	4
Stimulants	0.8	90.4	6.6	50.0	19.6	3.7	11.7	8.8	\$5551	96
Powder Cocaine	12.3	38.2	47.1	50.0	26.0	4.5	11.4	6.6	\$6502	62
Marijuana	21.6	32.4	43.4	75.9	35.5	4.8	9.9	7.7	\$6140	126
Hallucinogens	78.3	14.5	7.2	51.8	24.1	2.8	11.2	12.0	\$2611	3
Other Drugs	17.6	42.9	38.5	52.7	9.9	2.5	11.8	5.5	\$4088	6
Crack Cocaine	49.7	33.5	15.4	37.6	12.1	3.0	11.7	18.4	\$4847	129

Primary Substance	% on Medication	Percent Emergency Room Visit	% Sickness or Health Problems	Percent Employment Problems	% Family or Marital Problems	Percent Social/Peer Problems	Percent Psych/Emot. Problems	Percent Drug/Alcohol Problems
Total	21.3	34.0	25.4	52.0	49.4	41.0	41.5	69.1
Heroin	29.1	32.9	25.6	67.3	61.3	55.4	38.2	88.4
Methadone	28.1	53.1	46.9	68.8	81.3	78.1	71.9	93.8
Other Opiates	32.8	56.6	40.0	52.9	57.8	46.8	58.7	84.3
Alcohol	24.0	40.0	27.3	52.8	49.1	41.3	47.4	72.2
Depressants	36.0	57.5	37.0	61.7	62.3	46.8	58.4	83.8
Stimulants	17.5	40.9	28.1	59.2	57.1	45.7	53.6	74.9
Powder Cocaine	18.1	35.8	23.6	48.6	47.7	35.7	38.5	66.0
Marijuana	12.9	15.5	15.3	35.7	31.1	24.2	23.2	44.1
Hallucinogens	14.5	44.6	25.3	54.2	55.4	41.0	30.1	61.4
Other Drugs	38.5	39.6	28.6	48.4	45.1	34.1	36.3	62.6
Crack Cocaine	22.3	38.3	29.6	58.8	57.7	49.4	46.2	77.7

SOURCE: TDSHS

Patterns and Trends of Drug Abuse in Washington, DC

Erin Artigiani, M.A., Margaret Hsu, M.P.H., and Eric Wish, Ph.D.¹

ABSTRACT

Cocaine/crack, marijuana, and heroin continued to be the main illicit drug problems in Washington, DC, in 2004, while the use and availability of PCP started to decline. Although cocaine/crack treatment admissions declined, cocaine remained one of the most serious drugs of abuse in the District. More adult arrestees tested positive for cocaine than for any other drug during the first 8 months of 2004. Pretrial Services test results indicate that PCP positives dropped sharply during this time. Juvenile arrestees were more likely to test positive for marijuana than for any other drug, but the percentage testing positive decreased slightly. Heroin treatment admissions increased slightly. While other parts of the country have seen shifts in the use of methamphetamine, use remains low and confined to isolated populations in DC.

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). A majority of the District's wealthy White residents live in the northwest part of the city, while many of the poor African-American residents live in the northeast and southeast. There are slightly more females than males, and the majority of the District's population continues to be African-American (60 percent). Nearly one-third of the population is White (31 percent), and the remainder is primarily Hispanic and/or Asian (U.S. Bureau of the Census, 2000 Census). The population of the District is slightly older than the general U.S. 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 grew by 38.6 percent, and the number of Hispanic residents grew by 37.4 percent. The White population also grew by a much more modest 2 percent during this time period (Pach et al. 2002).

Despite a nationwide economic recession, wealth distributions in the District became more polarized during 2002. Buoyed by the draw of potential income from service employment, government spending, and an established technology industry, measures of wealth such as median household income (\$40,127 in the District in 1999) increased in the DC metropolitan region. The percentage of persons living in poverty also increased in many areas in and around Washington (Pach et al. 2002). One in five residents were living in poverty in 1999 (U.S. Census Bureau).

Alcohol abuse costs the District approximately \$700 million per year, and illicit drug use costs about \$500 million per year. 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.

Homicides in the District decreased sharply from 248 in 2003 to 198 in 2004. Drugs are still listed as one of the four most common motives behind these homicides, along with arguments, retaliation, and robberies. The major drug problems in the District continue to be cocaine/crack, marijuana, and heroin. The use and availability of phencyclidine (PCP) increased from 2000 to 2002 but decreased in 2004. The use of club drugs like methylenedioxymethamphetamine (MDMA) also appears to be decreasing.

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

¹The authors are affiliated with the Center for Substance Abuse Research, College Park, Maryland. Some background material was taken from prior CEWG reports.

York and Miami (Pach et al. 2002). The street-level dealing in DC was described as less organized and more free-flowing than the organized networks in these larger cities. Information from NDIC suggests that Colombian drug trafficking organizations continue to play a major role in supplying opiates and cocaine to DC criminal groups of Colombian and Dominican descent.

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 2004 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). Eligible hospitals in the area totaled 34; hospitals in the DAWN sample totaled 29; EDs in the DAWN sample numbered 30. (One hospital has two EDs.) The data were incomplete, with varying numbers of EDs reporting each month (*see exhibit 1a*). Tables reflect cases that were received by DAWN as of January 18, 2005, 1:13 P.M. ET. 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. The data are unweighted and are not estimates for the Washington, DC, metropolitan area. Data presented in this paper 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). These data cannot be compared with DAWN ED data from 2002 and before, nor can they be used for comparison with future data accessed through DAWN *Live!*. Only weighted data released by SAMHSA can be used in 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** were derived from DAWN, OAS, SAMHSA, and annual medical examiner (ME) data for 1997 to 2002.
- **Drug treatment data** for 2000–2003 were obtained from the Treatment Episode Data Set (TEDS), OAS, SAMHSA.
- **Arrest, crime, and law enforcement action data** were derived from the Metropolitan Police Department (MPD) crime statistics and press releases pertaining to law enforcement action through December 2004, which can be accessed at www.mpdc.dc.gov.
- **Arrestee urinalysis data** were derived from the District of Columbia Pretrial Services Agency for adult and juvenile arrestees for 2000 through the first 8 months of 2004.
- **Drug prices and trafficking trends** were obtained from the NDIC *Narcotics Digest Weekly Special Issue: Illicit Drug Prices January 2004–June 2004* and the Washington-Baltimore High Intensity Drug Trafficking Area (HIDTA) *Washington/Baltimore Threat Assessment* reports released in 2003 and 2004.
- **General information on drug use** was derived from the University of Maryland’s Center for Substance Abuse Research (CESAR), Drug Early Warning System (DEWS) County indicators, DEWS Investigates reports, and CESAR Briefings, available at www.dewsonline.org and www.cesar.umd.edu. Additional information was obtained from the Citywide Comprehensive Substance Abuse Strategy for the District of Columbia, 2003, and the National Poison Control Center, 2000–2003.
- **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,” available at <http://www.planning.D.C.gov/documents/census2002.shtm>.
- **Test results on drug items analyzed** by local crime lab(s) were obtained from the National Forensic Laboratory Information System (NFLIS) for Federal fiscal year (FY) 2004.
- **Regional counts on methamphetamine labs seized** were obtained from the El Paso Intelligence Center’s (EPIC) National Clandestine Laboratory Seizure Database for 1999–2003.
- **Human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS) data** were obtained from the HIV/AIDS Epidemiologic Profile for the District of Columbia, 2004.

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 episodes, adult arrestee positive drug tests, and drug-related deaths than any other drug. Only heroin has a higher percentage of treatment admissions. Cocaine is most often sold at open-air markets in the poorer parts of the city and is decreasing in price. The NDIC reported that powder cocaine sold for \$27,500–\$28,000 per kilogram and \$60–\$100 per gram during the first 6 months of 2004. Crack sells for slightly more: \$28,000–\$34,000 per kilogram and \$80–\$100 per gram. NFLIS data for Federal FY 2004 show that analyzed drug items were more likely to test positive for cocaine (39.57 percent) than for any other drug. Cocaine is smuggled into the District from New York, Miami, Los Angeles, or Philadelphia.

Unweighted data accessed from DAWN *Live!* show that cocaine was the most frequently involved substance in reported ED visits (exhibit 1b). Of the 2,728 ED reports involving cocaine in 2004, 61 percent were male, 74 percent were Black, and 20 percent were White. Nearly three-quarters (73 percent) were age 35 or older, 19 percent were age 25 to 34, and 7 percent were between the ages of 18 and 25. Nearly one-quarter (21 percent) of the cases involved patients seeking detoxification, and 3 percent resulted from suicide attempts. The majority of these patients (75 percent) were designated “other” substance abuse cases.

Cocaine-involved deaths totaled 58 in 2002, 27 of which were single-drug deaths (exhibit 2). These 58 deaths represent an increase from 2001, when the total was 42, and from 2000, when the total was 54.

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 non-smoked 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. In 2003, the number of admissions for crack (912) continued to decrease. Admissions for powder cocaine decreased in 2003 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, re-

spectively) 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 DC Pretrial Services Agency indicate that the percentage of adult arrestees testing positive for cocaine has remained about the same since 2000 (exhibit 4a). In the first 8 months of 2004, 37 percent of adult arrestees in DC Pretrial Services tested positive for cocaine; in the first 8 months of 2004, 3.0 percent of juveniles tested positive (exhibit 4b). The percentage of adults testing positive in 2004 appears to be slight increase from 2003.

Heroin

Heroin is 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 NDIC reported that heroin sold for \$74,000–\$110,000 per kilogram and \$100–\$110 per gram during the first 6 months of 2004. NFLIS data for Federal FY 2004 show that approximately 13 percent of analyzed drug items tested positive for heroin.

The number of heroin abusers in the District continued to increase in 2003, with estimates of 14,000 to 18,000 abusers according to the Washington/Baltimore HIDTA. Most heroin is from South America, although Southeast Asian and Southwest African heroin are still distributed by various groups. Purity ranged from 20.8 percent (South American) to 22.7 percent pure (Southeast Asian). Northwest Washington is frequented by White suburban users purchasing high-purity heroin, while eastern Washington is frequented by more well-established sellers and long-term addicts. Eastern Washington experiences higher levels of trafficking and associated violence.

Unweighted data from DAWN *Live!* show approximately 1,442 ED heroin reports in 2004 (exhibit 1b). Nearly two-thirds (65 percent) of these patients were male; 71 percent were Black and 24 percent were White. More than three-quarters (78 percent) were age 35 or older. Nearly one-quarter (21 percent) of the cases involved individuals seeking detoxification, and 1 percent resulted from suicide attempts. The majority of the cases (78 percent) were designated “other” (exhibit 1b).

Of the 20 heroin-involved deaths in 2002, 4 were single-drug deaths (exhibit 2). The number of deaths in 2002 was substantially lower than the totals in 1997 to 2000, but it was an increase from 2001. Deaths peaked at 53 in 1998.

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 DC Pretrial Services Agency indicate that the percentage of adult arrestees testing positive for opiates has remained about the same since 2001 (exhibit 4a). Ten percent of adult arrestees tested positive for opiates in 2003 and in the first 8 months of 2004. Juvenile arrestees were not tested for opiates during this time (exhibit 4b).

Other Opiates/Narcotics

Unweighted data accessed from DAWN *Live!* for 2004 show that there were 989 ED reports involving narcotic analgesics. Of these 989 reports, oxycodone/combinations accounted for 39 (4 percent) cases, methadone accounted for 201 (20 percent), and hydrocodone/combinations accounted for 155 (16 percent). Nearly one-quarter (24 percent) of narcotic analgesic cases were for adverse reactions, 22 percent were for overmedication, and 16 percent were for patients seeking detoxification. Approximately one-third (32 percent) were designated “other.” One-half of these patients were male; 24 percent were Black and 65 percent were White. Nearly two-thirds (65 percent) were age 35 or older.

Twenty-six deaths involving narcotic analgesics were reported in 2002 (exhibit 2). This is a substantial increase from the 6 in 2001 and from the 15–22 reported in the prior 3 years. The number of deaths involving methadone in the DC metropolitan area increased from 15 in 2001 to 18 in 2002. Two of the 2002 deaths occurred in DC.

Other opiates were the primary substance of abuse among 0.3 percent of the 4,832 treatment admissions in 2003 (exhibit 3a). This percentage has remained about the same since 2000.

Criminal justice and public health contacts indicate that OxyContin abuse is low and scattered, but one contact described it in mid-2003 as emergent in the economically depressed areas surrounding the District. Several high-profile cases were conducted in Northern Virginia. Prescription medications like OxyContin are available at street markets and are also obtained through doctor shopping by organized groups, prescription fraud, and improper prescribing practices. According to the MPD, OxyContin available at street markets in northeast DC sells for less than pills sold in the surrounding suburbs (\$0.50 per

milligram vs. \$1 per milligram in 2003). Oxycodone and hydrocodone combined accounted for less than 1 percent of analyzed drug items reported to NFLIS.

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 package delivery services by Mexican and Jamaican trafficking organizations, according to the most recent NDIC and HIDTA threat assessments. Marijuana is most often smoked in blunts or joints, which can be combined with rocks of cocaine or dipped in liquid PCP. Popular types of marijuana in the District and Maryland suburbs include “chronic,” “kind bud,” “purple haze,” “blueberry,” and “orange tulip.” All of these types are reputed to have high levels of tetrahydrocannabinol (THC). The NDIC reported that commercial grade marijuana sold for \$1,800 per pound and Hydro sold for \$5,000 per pound during the first 6 months of 2004. Joints sold for \$5 to \$10 during this time. NFLIS data for Federal FY 2004 show that approximately 34.8 percent of analyzed drug items tested positive for marijuana, making marijuana the second most frequently found drug.

In the data accessed from DAWN *Live!* for 2004, there were 1,210 ED reports involving marijuana (exhibit 1b). More than two-thirds (68 percent) of these reports involved patients who were male; 51 percent were Black and 35 percent were White. Twenty-nine percent involved patients age 18–24, 23 percent were patients age 25–34, and 30 percent were those age 35 and older. Eighteen percent involved patients age 12–17. Twelve percent of the cases involved patients seeking detoxification, and 3 percent resulted from suicide attempts. The majority of the cases (85 percent) were designated “other.”

Marijuana in combination with other drug(s) was involved in one death in the District in 2001 and one in 2000 (exhibit 2). No marijuana-involved deaths were reported in 2002.

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 87.8 percent were Black (exhibit 3b). Approximately one-third (32.7 percent) of these admissions were age 12 to 17, and more than one-quarter (28.6 percent) were age 18 to 25.

The DC Pretrial Services Agency does not test adult arrestees for marijuana, but more than one-half of juveniles have tested positive for marijuana each year between 2000 and 2003 (exhibit 4b). During the first 8 months of 2004, 49 percent of juveniles tested positive for marijuana.

Phencyclidine

According to the MPD, the number of adult arrests related to PCP increased 65 percent between 2001 and 2002 (from 142 to 234). According to the *Washington/Baltimore HIDTA 2003 Threat Assessment*, PCP was rapidly becoming the drug of choice at raves and nightclubs, sometimes used in combination with marijuana and/or MDMA (ecstasy). In 2004, however, PCP use began to decline, and its use is still well behind that of crack and marijuana.

While most PCP is transported to the District from southern California, the seizure of precursor chemicals and PCP at a clandestine laboratory in Baltimore several months ago indicates the drug has been produced in the region. No clandestine labs have been identified to date in the District. NFLIS data for Federal FY 2004 show that approximately 5 percent of analyzed drug items tested positive for PCP, making PCP the fourth most frequently found drug (after cocaine, marijuana, and heroin).

In the unweighted DAWN *Live!* system in 2004, there were 275 ED reports involving PCP (exhibit 1b). More than three-quarters (77 percent) were for patients who were male, and 82 percent were for Blacks. Nearly one-third (29 percent) involved patients age 18–24, 32 percent were for those age 25–34, and 31 percent were for those age 35 and older. Eight percent were patients age 12–17. Eight percent of the cases involved patients seeking detoxification, and 3 percent resulted from suicide attempts. The majority of the cases (89 percent) were designated “other.”

There were 27 PCP-related deaths in the metropolitan area in 2002—8 in the District and 14 in Prince George’s County, Maryland. The number of deaths in the District increased from three in 2001.

The National Poison Control Center reports an increase in reported PCP exposures in the District from 4 in 2000 to 38 in 2002. Although the numbers remain low, the volume is now at a level last seen in 1988. As of June 12, there were 11 reported exposures in 2003.

In 2003, PCP was the primary substance of abuse among 3.9 percent of treatment admissions, an in-

crease 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 4b). More than one-half (59 percent) were age 18–25, and one-third (33 percent) were 26–35.

Data from the DC Pretrial Services Agency show the rise in PCP use from the low single digits in the late 1990s to levels in the mid-teens in 2002 and 2003 (exhibit 4a). In 2003, 13.5 percent of adult arrestees screened for illicit drugs tested positive for PCP, which is up dramatically from 2.0 percent in 1998. PCP use declined in the first 8 months of 2004, however, from 10.6 percent in January to 4 percent in August. Trend data from 1987 to the present indicate that PCP use in the juvenile arrestee population has mirrored that of the adult arrestee population (exhibits 5 and 6), with spikes in the late 1980s, mid-1990s, and again in the current decade. The number of juveniles testing positive for PCP decreased from 13.4 percent in 2002 to 2.2 percent in the first 8 months of 2004 (exhibit 4b).

Amphetamine/Methamphetamine

Abuse of amphetamines and methamphetamine does not appear to be a major problem in the District. Five deaths involving amphetamines ($n=2$) or methamphetamine ($n=3$) were reported from 1997 to 2002 (exhibit 2). One methamphetamine-involved death and one amphetamine-involved death were reported in 2002.

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 (exhibit 3c). In 2002, there were only 29 methamphetamine mentions, a decrease of 38 percent.

Amphetamine ED reports in the unweighted data from DAWN *Live!* totaled 74 in 2004, and those for methamphetamine totaled 30. Nearly two-thirds (63 percent) of the methamphetamine patients were White, and 90 percent were male. One-third of the methamphetamine patients were age 18–24, 47 percent were age 25–34, and 17 percent were those age 35 and older. Three percent were patients age 12–17. More than one-third (37 percent) of the cases involved individuals seeking detoxification, and 63 percent were designated “other.”

The Washington/Baltimore HIDTA reports that methamphetamine use is established in the homosexual community. In addition, detectives from the Met-

ropolitan Police Department report that both tablet and powder methamphetamine are visible in the Washington, DC, club scenes. NFLIS data for Federal FY 2004 show that approximately 1 percent of analyzed drug items tested positive for methamphetamine. The NDIC reported that methamphetamine sold for \$4,800 per one-half pound and 8-balls sold for \$400 during the first 6 months of 2004.

As in the District, the demand for and availability of methamphetamine in Maryland is extremely low compared to other drugs. Methamphetamine users in Maryland tend to be Caucasian males, particularly youth, those involved with the rave and club scenes, and middle- to lower-class blue collar workers. Methamphetamine use is more prevalent in the rural Western, Eastern, and Southern parts of the State. From January 2003 to May 2004, law enforcement officials reported that there were eight methamphetamine labs seized in Maryland: two in Garrett, one in Washington, three in Charles, one in Prince George's, and one in Cecil Counties.

Although there is little indication that methamphetamine is an emerging problem in the District, there have been increases in the number of methamphetamine labs seized in several of the States surrounding the District. For example, there were 8 methamphetamine labs seized in Virginia in 1999, compared to 23 in 2003. In West Virginia and Pennsylvania, the number of labs seized over this period increased even more dramatically, from 3 to 52 and from 1 to 49, respectively.

The Washington Post reported that nearly all of the methamphetamine seized in Virginia in 2004 was found in the Shenandoah Valley; methamphetamine is the primary drug seized along the north-south corridor between Winchester and Harrisonburg. A special report on methamphetamine from the Washington/Baltimore HIDTA explains this trend further. The cities of Harrisonburg and Strasburg, in particular, are highlighted by law enforcement as having a substantial methamphetamine presence. According to law enforcement, the primary users in these areas are rural, White, working-class adults, while the sellers are primarily Latino. Rival Hispanic criminal groups, such as MS-13 and South Side Locos in Strasburg, VA, have collaborated in the sale of methamphetamine since early 2004, increasing the chance that methamphetamine may increase in the area because of the presence of MS-13 in Maryland.

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 \$18–\$25 per tablet in the fourth quarter of 2002, according to the DEA Washington Division. The Washington/Baltimore HIDTA estimated a slightly lower range for the cost per dosage unit: \$10–\$20. MDMA is most frequently used and distributed by teens and young adults at raves and nightclubs. MDMA is typically driven to the District from New York, Philadelphia, Orlando, and Miami by Dominican and Asian trafficking organizations.

In the unweighted data accessed from DAWN *Live!* for 2004, there were 82 ED reports involving MDMA, 7 involving GHB, and 8 involving lysergic acid diethylamide (LSD) (exhibit 1b). There was only one report involving ketamine. MDMA and methylenedioxyamphetamine (MDA) each accounted for approximately 1 percent of analyzed drug items tested through NFLIS in Federal FY 2004. GHB and ketamine were each found in less than 1 percent of analyzed drug items tested through NFLIS in Federal FY 2004. No drug items tested positive for LSD. No deaths involving club drugs were reported in the DAWN mortality data from 1997 to 2002 (exhibit 2).

Mentions of benzodiazepines are reported in the DAWN ED and mortality reports. In the unweighted DAWN data for 2004, 718 reports involved benzodiazepines. One death in 2001 was attributed solely to benzodiazepines (exhibit 2), but in the 1997–2000 time period, mentions of benzodiazepines in the mortality data ranged between 10 and 13. In 2002, four deaths were attributed to multiple drugs, including benzodiazepines.

In the 2004 unweighted DAWN *Live!* system, there were 2,438 reports involving alcohol. DAWN mortality data show that mentions of deaths involving alcohol in combination with other drugs decreased from 29 in 1997 to 17 in 2001, with a peak of 44 in 1998. In 2002, however, alcohol-involved deaths more than doubled to 37 deaths (exhibit 2). In 2003, primary alcohol admissions accounted for approximately 18 percent of all treatment admissions, a slight decline from 2000 and 2001 (exhibit 3a).

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

The diagnosis of AIDS cases increased rapidly from 1982 to 1993, when they peaked at 1,342 cases. The number of cases decreased 49 percent from 1993 to 2001, but cases increased 37.5 percent in 2002. There were 943 diagnosed cases in 2002, the last year for which data are available (exhibit 7). Males accounted for 70 percent of cases diagnosed in 2002. Almost three-quarters of the diagnoses in 2002 occurred

among 30–49-year-olds. Almost two-thirds (62 percent) of people in DC diagnosed with AIDS in 2002 were African-American, and about 21 percent had a history of injection drug use. The rate of AIDS deaths decreased from 47 per 100,000 in 1998 to 25 per 100,000 in 2003.

REFERENCE

Pach, A.; Brown, J.; Hendrickson, J.; Odom, T.; and Nemes, S. “Patterns and Trends of Drug Abuse

in Washington, DC.” *Epidemiologic Trends in Drug Abuse, Volume II: Proceedings of the Community Epidemiology Work Group June 2002*. Washington, DC: National Institute on Drug Abuse, 2002.

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Exhibit 1a. Data Completeness for Washington, DC, Metropolitan Area DAWN Emergency Departments (n=30),¹ by Month: 2004

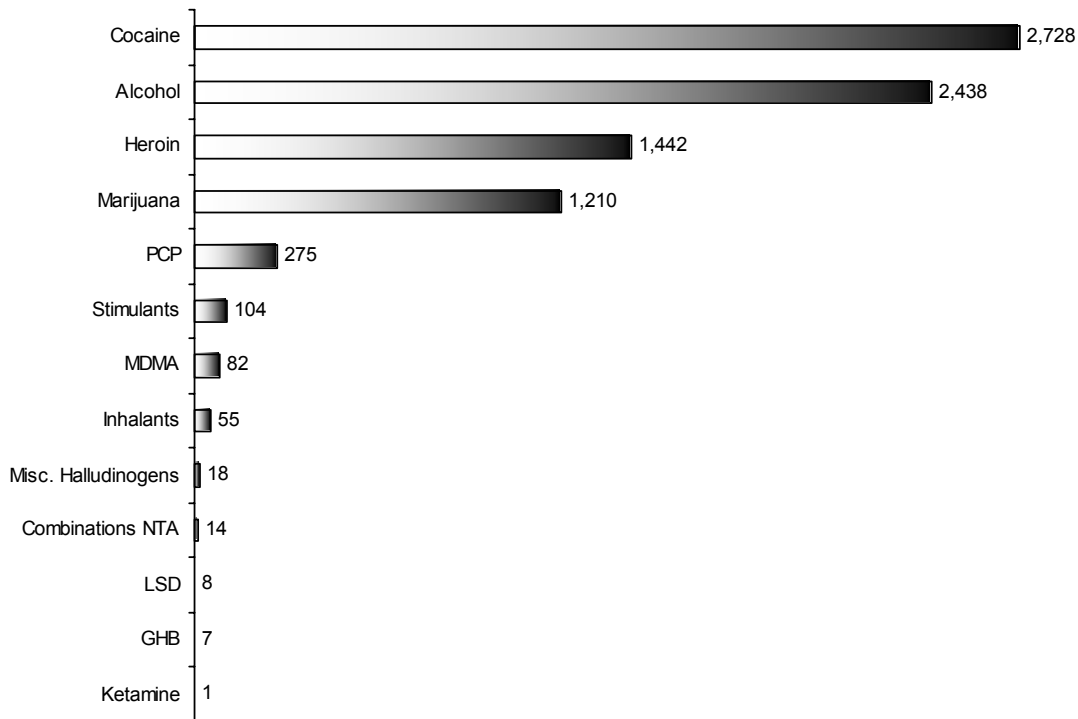
Data Completeness	Number of EDs by Month											
	Jan-04	Feb-04	Mar-04	Apr-04	May-04	Jun-04	Jul-04	Aug-04	Sep-04	Oct-04	Nov-04	Dec-04
Basically Complete ¹	9	11	11	12	10	11	13	8	8	9	9	7
Partially Complete ²	4	2	2	1	3	2	2	5	3	3	3	2
Incomplete ³	0	0	1	0	0	1	0	2	0	2	1	4
No Data Reported	17	17	16	17	17	16	15	15	19	16	17	17
Total EDs in Sample ⁴	30	30	30	30	30	30	30	30	30	30	30	30

¹Total eligible hospitals in area = 34; Hospitals in DAWN sample = 29; Hospitals not in DAWN Sample = 5. Tables reflect cases that have been received by DAWN as of 1/18/05, 1:13 P.M. ET.

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, updated 1/18/2005

Exhibit 1b. Major Substances of Abuse in ED Reports in the Washington, DC, Metropolitan Area, by Substance (Unweighted¹): 2004



¹The unweighted data are from 11 to 15 Washington, DC, 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.

SOURCE: DAWN *Live!*, OAS, SAMHSA, updated 1/18/2005, 1:13 pm ET.

Exhibit 2. Drug-Related Deaths in Washington, DC: 1997–2002

Drug	1997	1998	1999	2000	2001	2002	Single-Drug Deaths, 2002
Alcohol-in-Combination	29	44	37	26	17	37	N/A
Cocaine	33	63	64	54	42	58	27
Heroin/Morphine	41	53	41	36	15	20	4
Marijuana	–	–	–	1	1	–	–
Amphetamines	–	–	–	1	–	1	–
Methamphetamine	–	1	–	1	–	1	–
Club Drugs ¹	–	–	–	–	–	–	–
Hallucinogens ²	1	–	2	1	3	8	2
Inhalants	–	–	–	–	–	–	–
Narcotic Analgesics ³	6	22	15	20	6	26	6
Other Analgesics	2	3	3	2	1	1	1
Benzodiazepines	13	13	11	10	1	4	–
Antidepressants	4	14	11	4	1	–	–
All Other ³	7	30	18	10	1	5	1
Total Drug Deaths	79	145	121	100	53	91	41
Total Drug Mentions	136	243	202	166	88	161	41
Total Deaths Certified	1,414	1,607	1,763	1,751	1,582	1,754	N/A

¹Includes ecstasy (MDMA), ketamine, GHB-GBL, and Rohypnol.

²Includes PCP, LSD, and miscellaneous hallucinogens.

³Not tabulated above.

SOURCES: DAWN 2002 9/2003 Update, OAS, SAMHSA

Exhibit 3a. Percentages of Treatment Admissions in Washington, DC, by Year: 2000–2003

Drug	2000	2001	2002	2003
Total Admissions (<i>N</i>)	(6,025)	(5,755)	(5,659)	(4,832)
Powder Cocaine	7.4	8.2	12.7	9.6
Crack Cocaine	27.0	25.2	20.7	18.9
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 (includes methamphetamine)	0.2	0.6	0.3	0.2

SOURCE: TEDS, SAMHSA

Exhibit 3b. Demographic Characteristics of Treatment Admissions in Washington, DC, by Selected Drugs and Percent: 2003¹

Drug	Powder Co-caine	Crack Cocaine	Heroin	Marijuana	PCP	Amphetamines ³
(N=)	(466)	(912)	(2,023)	(336)	(189)	(10)
Gender						
Male	65.7	64.7	72.0	75.9	63.0	90.0
Female	34.3	35.3	28.0	24.1	37.0	10.0
Race/Ethnicity						
Black	94.4	94.8	95.8	87.8	98.4	10.0
White	0.9	1.2	1.8	0.9	0.0	90.0
Other ²	4.8	4.0	2.3	11.3	1.6	0.0
Age Group						
17 and younger	0.0	0.2	0.0	32.7	2.1	0.0
18–25	4.5	2.7	1.7	28.6	55.0	10.0
26–35	15.8	18.3	9.9	20.8	32.8	30.0
36–45	54.5	58.2	45.6	12.2	6.3	60.0
46–55	21.9	18.0	38.4	5.1	2.7	0.0
56 and older	3.2	2.4	4.4	0.6	1.1	0.0

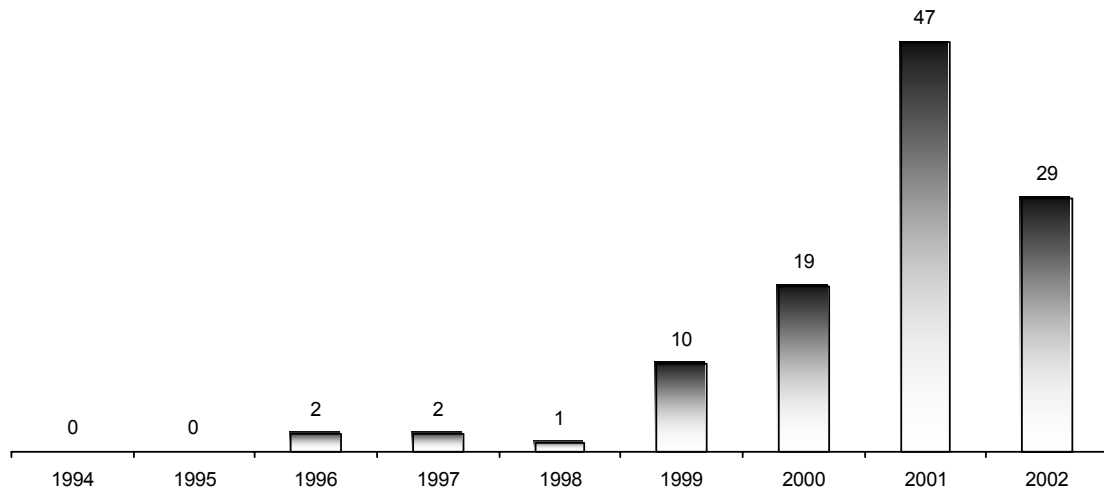
¹May not add up to 100 percent due to rounding.

²Primarily Hispanic or Latino.

³Amphetamines includes methamphetamines, Benzedrine, Dexedrine, Preludin, Ritalin, and any other amines and related drugs.

SOURCE: TEDS, SAMHSA

Exhibit 3c. Numbers 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: 2000–2004

Drug	2000	2001	2002	2003	2004¹
(N=)	(15,630)	(17,350)	(17,952)	(17,742)	(13,617)
Cocaine	33.6	34.2	35.2	34.8	36.8
PCP	9.3	12.7	14.2	13.5	6.5
Opiates	9.5	10.5	10.5	10.0	9.9
Any Drug	43.2	46.1	48.0	47.3	44.1

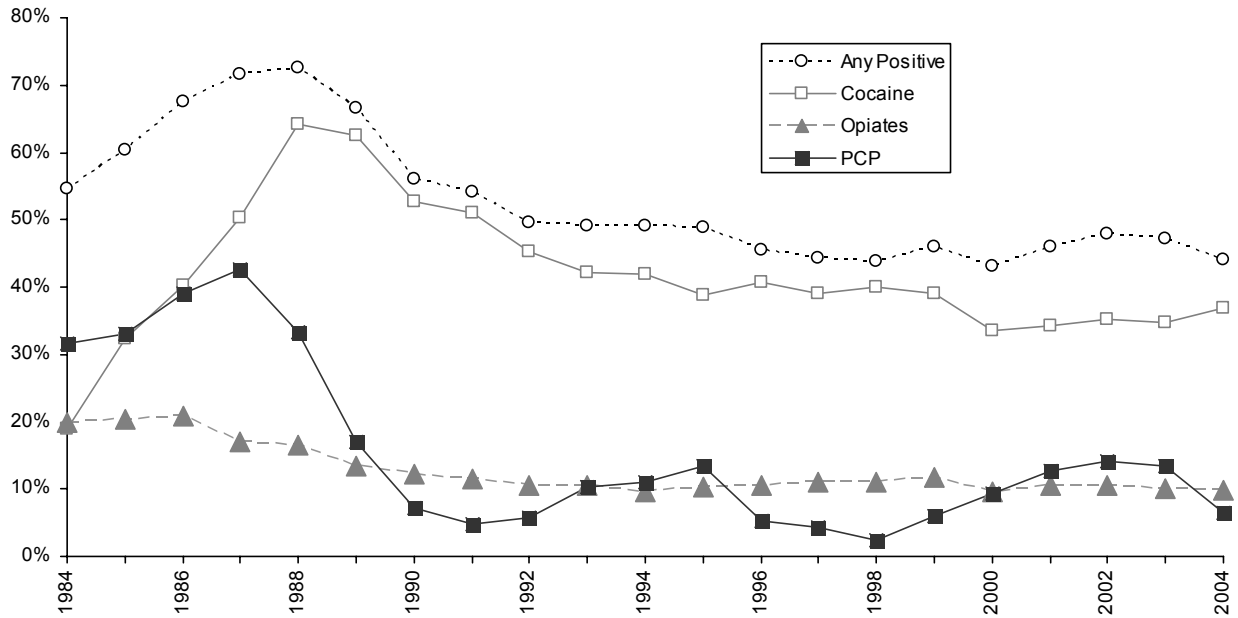
¹2004 data include urines tested through August 2004.
SOURCE: District of Columbia Pretrial Services Agency

Exhibit 4b. Percentages of Juvenile Arrestees in Washington, DC, Testing Positive for Selected Drugs: 2000–2004

Drug	2000	2001	2002	2003	2004¹
(N=)	(2,162)	(2,165)	(1,896)	(1,899)	(1,379)
Marijuana	60.7	56.9	54.2	50.8	48.2
Cocaine	5.7	4.8	5.5	3.7	3.0
PCP	9.8	13.5	13.4	11.1	2.2
Any Drug	62.0	59.1	56.4	53.1	48.7

¹2004 data include urines tested through August 2004.
SOURCE: District of Columbia Pretrial Services Agency

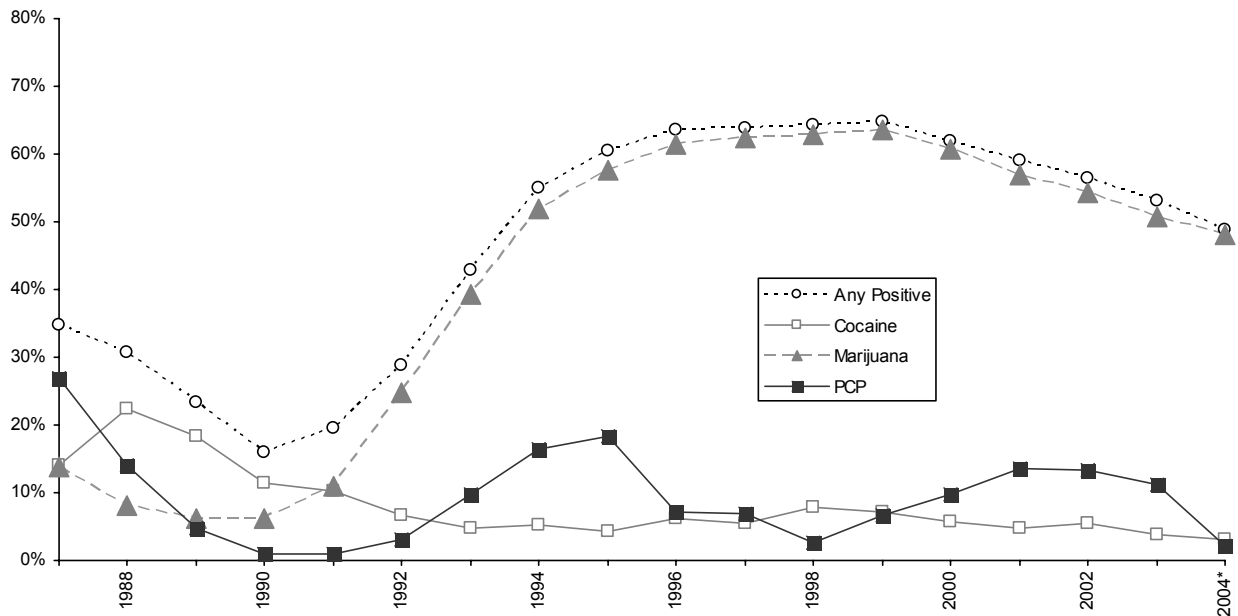
Exhibit 5. Percentages of Washington, DC, Adult Arrestees Testing Positive for Any Drug, Cocaine, PCP, and Opiates: 1984–2004¹



¹Data for 2004 are through August.

SOURCE: Adapted by CESAR from data from the District of Columbia Pretrial Services Agency.

Exhibit 6. Percentages of Washington, DC, Juvenile Arrestees Testing Positive for Any Drug, Marijuana, PCP, and Opiates: 1987–2004¹



¹Data for 2004 are through August.

SOURCE: Adapted by CESAR from data from the District of Columbia Pretrial Services Agency.

Exhibit 7. District of Columbia Diagnosed AIDS Cases by Gender, Race/Ethnicity, Age, and Exposure: 1981–2002

Characteristic	1998		1999		2000		2001		2002		Cumulative 1981–2002	
	#	%	#	%	#	%	#	%	#	%	#	%
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												
12 and younger	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

International Report

Update of the Epidemiological Surveillance System of Addictions (SISVEA) in Mexico: January–June 2004

Roberto Tapia-Conyer, Patricia Cravioto, Pablo Kuri, Mario Cortés, and Fernando Galván¹

ABSTRACT

In the first half of 2004, cocaine remained the most common primary drug of use among patients at government treatment centers. At nongovernment treatment centers, however, alcohol was the most common current primary drug of abuse. Information from the Juvenile Detention Centers shows that 34.4 percent of the 5,393 juveniles arrested during the first half of 2004 used marijuana. According to medical examiners, the abuse of alcohol was involved in 85.2 percent of the drug-related deaths.

INTRODUCTION

The Epidemiological Surveillance System of Addictions (SISVEA) monitors the use and abuse of tobacco, alcohol, and medical and illegal drugs, as well as their effects on morbidity, mortality, and juvenile arrests. Created in 1990 by the General Directorate of Epidemiology, SISVEA initially operated in eight cities located on Mexico's northern border; since then, it has monitored drug consumption throughout Mexico. Currently, SISVEA provides information on 31 States in Mexico.

Initially, SISVEA was based conceptually and operationally on three strategies, which have evolved and been reinforced to form the present system. The five main indicators of the present system give continuity to the original model. The indicators and data sources are shown below:

- Information on consumption of tobacco, alcohol, and medical and illegal drugs is obtained from treatment centers.
- Data on diseases and accidental mortality are provided by emergency rooms.
- Information on mortality among drug users is provided by coroners' offices.
- Statistics on crimes against health are obtained from law enforcement agencies.

- General information on consumption of tobacco, alcohol, and medical and illegal drugs in the general population and risk groups is obtained from surveys and qualitative studies.

Data Sources for This Update

The data sources used to construct different indicators are described below:

- **Treatment information** covers the characteristics and consumption patterns related to the first drug of use and primary drug of use. These data were obtained from government treatment centers (GTCs or Centers of Juvenile Integration) and nongovernment treatment centers (NGCs) that participated in SISVEA cities in the first 6 months of 2004.
- **Drug consumption data** is gathered from the general population and the risk groups. Data on juvenile infractors was reported by the Juvenile Detention Centers for the first 6 months of 2004.
- **Medical examiner (ME) data** cover drug-related deaths in the first half of 2004. The data cover accidental and violent deaths (homicides or suicides) in cases in which drug abuse may be the direct cause of death or a contributing factor.

DRUG ABUSE PATTERNS AND TRENDS

Marijuana

According to GTCs, marijuana users during the first half of 2004 were mostly male (92.1 percent); 27.1 percent were age 15–19; 46.0 percent had only a middle school education; 61.4 percent were single; and 49.0 percent came from a middle-low socioeconomic level (exhibit 1). The age of onset for 49.1 percent of marijuana users occurred between 10 and 14 years of age, and for 43.4 percent between 15 and 19 years of age. Of this user group, 66.1 percent reported daily use.

¹ The authors are affiliated with the Ministry of Health of Mexico.

Among GTC patients, marijuana was the second most common drug of first use (11.6 percent); as a primary drug, marijuana also ranked second (17.7 percent) (exhibit 2).

Based on GTC data on the natural history of marijuana use, an average of 10.4 percent of patients used only marijuana at treatment entry; 89.6 percent had progressed to a second drug, usually alcohol (32.9 percent) or tobacco (21.4 percent) (exhibit 3). Of the multiple drug users in this group, 84.8 percent advanced to a third drug, usually alcohol (24.1 percent), tobacco (21.2 percent), or cocaine (20.4 percent).

Among patients at NGCs, most marijuana users were male (95.5 percent); 23.1 percent were age 35 and older; 41.1 percent had a middle school education; and 59.4 percent were single (exhibit 4). The age of onset for marijuana use among 48.0 percent of these patients was between 10 and 14; 85.9 percent reported daily use.

Marijuana ranked second (26.7 percent) as the drug of first use for NGC admissions in the first half of 2004; as a primary drug, it was fourth most common (10.4 percent) (exhibit 5).

Natural history data on marijuana consumption reported by NGCs in the first half of 2004 show that 12.2 percent of patients were monodrug users at treatment entry; the remaining 87.8 percent had progressed to a second drug, mainly cocaine (26.1 percent) and alcohol (17.3 percent) (exhibit 3). Of this NGC group, 74.4 percent were already using a third drug at the time of treatment entry, mainly cocaine (22.8 percent), heroin (18.3 percent), and crystal methamphetamine (14.8 percent).

Information from the Juvenile Detention Centers shows that 34.4 percent of the 5,393 juveniles arrested during the first half of 2004 used marijuana (exhibit 6). Most of this population were male (95.2 percent); 50.7 percent had an elementary school education; 40.3 percent were subemployed; 37.1 percent had a tattoo; and 31.5 percent were gang members. Nearly one-third (31.5 percent) of the offenses were committed under intoxication, and 42.8 percent of the offenses were robberies.

ME data indicated that 3.2 percent of the intoxication deaths reported were associated with marijuana; this decedent group was primarily male (91.2 percent). More than one-quarter (26.5 percent) were age 20–24, and 20.6 percent were age 40 or older (exhibit 7). The main cause of death in these cases was asphyxia (19.4 percent), followed by firearms (16.1 percent).

More than one-half of these deaths occurred either on the street (33.3 percent) or at home (21.2 percent).

Inhalants

Inhalant users attending GTCs were mostly male (85.1 percent) and age 15–19 (31.3 percent) (exhibit 1). Most patients had a middle school education (55.3 percent); 76.4 percent were single; and 55.1 percent were from a middle-low socioeconomic level (exhibit 1). Most began to use inhalants between ages 10 and 14 (65.9 percent); 42.2 percent used inhalants daily; and 41.3 percent used them once a week.

During the first half of 2004, inhalants ranked as the third most commonly reported drug of onset (7.4 percent) and fourth as primary drug (10.6 percent) among GTC patients (exhibit 2).

GTC data on the natural history of inhalants use show that 25.7 percent of inhalant patients were monodrug users when entering treatment and that 74.3 percent were already using a second drug, mainly marijuana (33.8 percent), alcohol (22.4 percent), or tobacco (20.9 percent). Of the multiple drug user group, 81.0 percent had used a third drug, mainly alcohol (27.9 percent), marijuana (20.0 percent), tobacco (17.9 percent), or cocaine (13.3 percent) (exhibit 8).

NGCs reported that of the 2,243 patients who used inhalants in the first 6 months of 2004, most were male (92.4 percent), and 31.6 percent were age 15–19 (exhibit 4). More than one-half (58.7 percent) had an elementary school education; 71.7 percent were single; 58.8 percent began to use inhalants between ages 10 and 14; and 89.4 percent reported daily use.

Among NGC patients, inhalants ranked third (11.0 percent) as drug of onset and fifth (8.1 percent) as a primary drug of abuse (exhibit 5).

As for the natural history of drug use for inhalant users, 58.8 percent of the NGC patients had progressed to a second drug by the time of treatment entry, mainly marijuana (52.3 percent), alcohol (15.5 percent), and other inhalants (8.4 percent). Of this group, 74.1 percent used a third drug, usually cocaine (25.6 percent), marijuana (16.1 percent), tranquilizers (12.2 percent), or heroin (8.6 percent) (exhibit 8).

According to Juvenile Detention Centers, 13.9 percent of juvenile arrestees used inhalants (exhibit 6). Most were male (94.8 percent), had an elementary school education (61.4 percent), and were subemployed (45.3 percent). More than one-third (39.4 percent) had tattoos, and 40.5 percent belonged to a

gang. Of these arrestees, 37.8 percent committed the offense while intoxicated, and robbery was the most common offense (46.5 percent).

Alcohol

Of the 10,761 GTC patients who attended treatment during the first 6 months of 2004, 3,582 were abusing alcohol. The majority (82.6 percent) were male; 24.0 percent were age 15–19; and 20.9 percent were age 35 or older (exhibit 1). Many had a middle school education (41.8 percent); 54.9 percent were single; and 54.5 percent were from a middle-low socioeconomic level. Almost one-half (47.0 percent) began to use alcohol between ages 15 and 19; 48.2 percent reported weekly use; and 31.3 percent reported using alcohol 1–3 times per month.

Alcohol was the most commonly reported drug of first use (33.3 percent) among GTC patients, but it ranked third (17.4 percent) as a primary drug (exhibit 2).

Among GTC patients whose drug of first use was alcohol, 91.4 percent had progressed to using a second drug by the time of treatment entry, usually tobacco (57.8 percent), marijuana (17.3 percent), or cocaine (13.2 percent) (exhibit 9). Of this multiple drug user group, 74.6 percent reported using a third drug, usually marijuana (33.1 percent), cocaine (26.6 percent), or inhalants (10.5 percent).

NGCs reported that most of the 6,123 patients who abused alcohol during the first half of 2004 were male (91.6 percent) (exhibit 4); 42.2 percent were age 35 or older; 33.3 percent had only an elementary school education; 42.6 percent were single; and many (46.4 percent) started to use alcohol between ages 15 and 19. The majority (72.0 percent) reported daily alcohol use, and 21.9 percent used alcohol once a week.

Among NGC patients, alcohol ranked first as the drug of first use (30.1 percent) and first as a current drug of use (19.8 percent) (exhibit 5).

Natural history data on alcohol use among NGC patients show that 29.6 percent were monodrug users upon treatment entry, while the remaining 70.4 percent had progressed to a second drug, typically marijuana (36.9 percent), cocaine (21.4 percent), or tobacco (15.5 percent). The 64.5 percent who had progressed to using a third drug were most likely to use cocaine (32.8 percent), marijuana (17.3 percent), or crystal methamphetamine (13.9 percent) (exhibit 9).

Among juvenile infractors, 13.3 percent reported alcohol abuse (exhibit 6). Most (91.5 percent) were male; 45.1 percent had an elementary school educa-

tion; 38.8 percent were subemployed; 30.7 percent had tattoos; and 26.1 percent were gang members. More than one-third of the juveniles (46.4 percent) committed the offense while intoxicated, and robbery (40.7 percent) was the most common offense.

According to medical examiners, the abuse of alcohol was involved in 85.2 percent of the drug-related deaths. Most of these decedents were male (93.8 percent), and 40.4 percent were age 40 or older (exhibit 7). The main cause of death was asphyxia (19.6 percent), followed by traffic accidents (17.8 percent). The most common place where deaths occurred was on the street (37.0 percent) or at home (30.4 percent).

Cocaine

GTCs reported that cocaine users in the first half of 2004 were mostly male (78.6 percent) (exhibit 1). More than one-quarter (26.3 percent) were age 15–19 or 20–24; 45.6 percent had a middle school education; 51.8 percent were single; and 26.7 percent were married. More than one-half (56.9 percent) were members of a middle-low socioeconomic level, and 49.3 percent initiated cocaine use between ages 15 and 19. Forty-two percent used cocaine once a week, and 35.8 percent used the drug daily.

Among GTC patients, cocaine ranked fourth as the first drug of use (3.8 percent) and first as primary drug (25.8 percent) (exhibit 2).

Natural history data on cocaine use among GTC patients show that 25.7 percent were monodrug users upon treatment entry; the remainder were already using a second drug, usually alcohol (31.3 percent), marijuana (20.0 percent), or tobacco (18.3 percent). Of the multiple drug users, 69.3 percent were using a third drug, usually alcohol (28.4 percent), tobacco (26.9 percent), or marijuana (19.7 percent) (exhibit 10).

Of the cocaine users who attended NGCs, 91.3 percent were male; 23.6 percent were age 20–24; 39.5 percent had a middle school education; 31.5 percent had an elementary school education; and 50.4 percent were single (exhibit 4). Many (43.5 percent) started to use cocaine between ages 15 and 19; 72.9 percent reported daily use; and 21.4 percent reported weekly use of cocaine.

Cocaine ranked fourth as the drug of onset (6.3 percent) among the NGC cases and second as current drug (18.7 percent) (exhibit 5).

Natural history data on cocaine abuse among NGC patients in the first half of 2004 show that 36.2 percent were monodrug users upon entry to treatment.

Others (63.8 percent) were using a second drug, usually marijuana (26.1 percent), crystal methamphetamine (20.9 percent), alcohol (15.4 percent), or heroin (12.3 percent). Of the multiple drug using group, 46.3 percent used a third drug, mainly crystal methamphetamine (23.9 percent), marijuana (15.2 percent), or alcohol (14.6 percent) (exhibit 10).

Juvenile Detention Centers reported that 15.2 percent of the younger arrestees in the first half of 2004 used cocaine (exhibit 6). Most were male (94.4 percent); 54.3 percent had an elementary school education; 39.5 percent were subemployed; 35.5 percent had tattoos; and only 32.5 percent were gang members. Less than one-third of these juvenile infractors (29.3 percent) committed the offense under intoxication, and robbery was the most common offense (48.5 percent).

Heroin

According to GTCs, heroin patients in the first half of 2004 were all males. More than one-quarter (27.3 percent) were age 20–24; 18.2 percent were age 15–19; 90.0 percent were equally divided between having an elementary, middle school, and high school education; and 27.3 percent were single (exhibit 1). Sixty percent came from a middle low socioeconomic background, and 30.0 percent were from a low socioeconomic level. The age of onset for 45.5 percent of the heroin users occurred between the ages of 10 and 14. All reported daily use.

Of the 11 GTC patients attending treatment during the first half of 2004, only 0.1 percent reported heroin as their drug of onset; as a primary drug it ranked fifth (2.4 percent).

According to NGC data, most heroin patients were male (92.2 percent); 39.1 percent were age 35 and older; 40.5 percent had only an elementary school

education; and 54.7 percent were single. The most common age of first use of heroin among these patients was 15–19 (38.6 percent); 95.2 percent reported daily use.

Since 1994, heroin as drug of onset among NGC patients has been increasing. In the first half of 2004, 2.1 percent of NGC patients reported heroin as a drug of first use. As the primary drug of use, heroin ranked third among NGC patients (18.3 percent).

Juvenile Detention Centers reported that 0.4 percent of the juveniles arrested during the first half of 2004 used heroin (exhibit 6). Most were male (95.5 percent); 57.1 percent had an elementary school education; 36.4 percent were unemployed; 50.0 percent had tattoos; and 45.5 percent were gang members. Of the heroin arrestees, 42.9 percent of their offenses were committed under intoxication, and robbery was the most common offense (59.1 percent).

CONCLUSIONS

SISVEA has been strengthened and currently includes all areas in Mexico. The types of drugs reported varied according to different sources of information. Marijuana and cocaine increased among the Juvenile Detention Center population. GTCs reported a slight increase in the use of cocaine among female patients. Prior to 1998, marijuana was the most frequently reported drug in NGCs. Beginning in 1999, however, surveillance data show a slight increase in alcohol consumption among NGC patients; alcohol currently ranks first in consumption reports. Alcohol appears as the greatest drug of impact during the first half of 2004 and ranked slightly above cocaine and heroin. An increase in alcohol use was also observed at GTCs as both the drug of onset and the drug of impact; it ranked above cocaine as the drug of impact.

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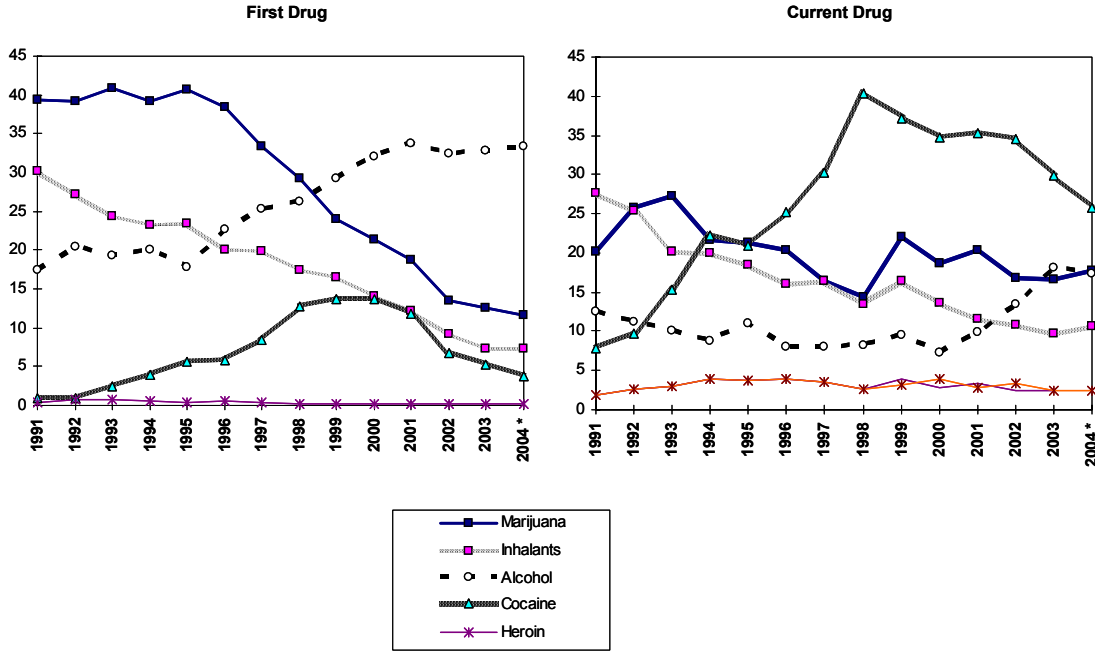
Exhibit 1. Demographic Characteristics of GTC Patients, by First Drug of Use and Percent: January–June 2004

Demographic Characteristic	Total N=10,761	Marijuana n=1,250	Inhalants n=799	Alcohol n=3,582	Cocaine ¹ n=404	Heroin n=11	Tobacco n=4,460
Gender							
Male	82.4	92.1	85.1	82.6	78.6	100.0	79.3
Female	17.6	7.9	14.9	17.4	21.4	0.0	20.7
Age							
5–14 years	8.7	6.6	28.6	7.0	6.5	0.0	7.2
15–19	26.8	27.1	31.3	24.0	26.3	18.2	28.3
20–24	18.5	19.7	15.3	18.9	26.3	27.3	17.7
25–29	15.1	18.0	11.0	16.5	22.1	9.1	13.3
30–34	11.1	12.9	6.5	12.7	11.7	0.0	10.2
35 and older	19.8	15.8	7.3	20.9	7.1	45.4	23.2
Schooling							
Elementary school	19.4	22.9	33.2	16.8	15.9	30.0	18.2
Middle school	43.9	46.0	55.3	41.8	45.6	30.0	43.0
High school	22.1	21.3	8.1	24.8	25.9	30.0	22.4
College studies	9	6.5	0.5	10.3	6.5	10.0	10.4
No formal education	0.4	0.5	0.9	0.6	0.3	0.0	0.2
Other	5.1	2.7	2.0	5.8	5.8	0.0	5.8
Marital Status							
Single	57.9	61.4	76.4	54.9	51.8	27.3	56.6
Married	23.4	18.4	10.2	26.2	26.7	27.3	24.8
Divorced	2.1	1.8	0.6	2.3	1.6	27.3	2.3
Widowed	0.6	0.2	0.0	0.4	0.0	0.0	1.0
Living together	10.4	11.9	8.9	10.4	13.7	18.2	10.0
Other	5.6	6.3	3.9	5.8	6.2	0.0	5.4
Socioeconomic Level							
High, middle-high	15.3	14.0	8.4	15.4	12.2	10.0	16.9
Middle-low	54.2	49.0	55.1	54.5	56.9	60.0	54.9
Middle	7.4	9.5	4.5	7.6	5.1	0.0	7.4
Low	23.2	27.5	32.0	22.5	25.9	30.0	20.7
Age of Onset							
9 and younger	5.2	2.1	6.5	5.2	1.7	0.0	6.1
10–14	48.4	49.1	65.9	39.5	29.1	45.5	53.5
15–19	40.2	43.4	26.6	47.0	49.3	27.3	35.7
20–24	4.3	4.5	0.8	6.1	8.6	18.2	3.2
25–29	1.1	0.6	0.1	1.3	7.6	0.0	0.9
30–34	0.4	0.2	0.0	0.5	2.3	9.1	0.3
35 and older	0.4	0.1	0.0	0.5	1.3	0.0	0.3
Frequency							
Daily	53.9	66.1	42.2	16.7	35.8	100.0	79.2
Once a week	27.6	21.1	41.3	48.2	42.3	0.0	12.4
1–3 times per month	16.8	11.2	14.6	31.3	20.9	0.0	8.0
1–11 times per year	1.7	1.6	1.9	3.8	1.0	0.0	0.4

¹Includes cocaine, basuco, and crack.

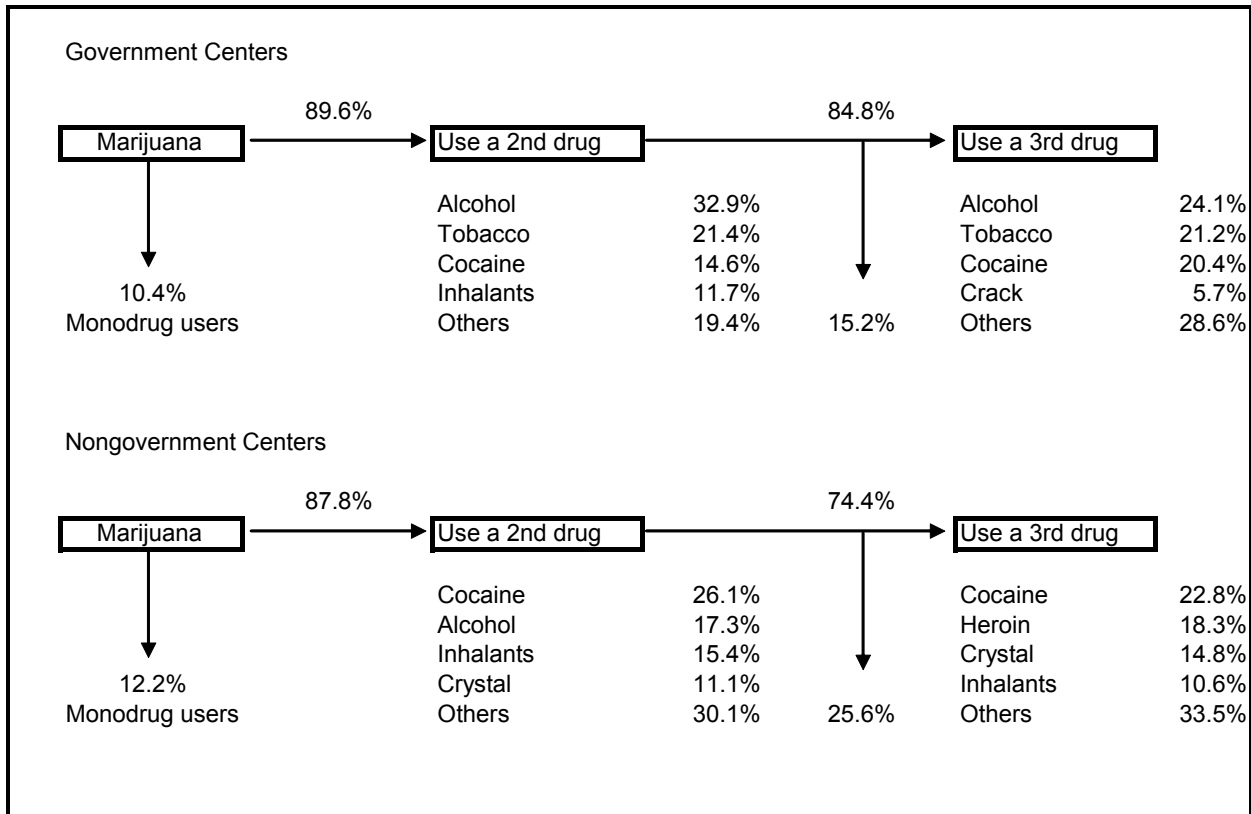
SOURCE: SISVEA—Government treatment centers

Exhibit 2. First Drug of Use and Current Drug of Use Among Patients at Government Treatment Centers, by Percent: 1991–June 2004



SOURCE: SISVEA—Government treatment centers

Exhibit 3. Natural History of Marijuana Use Among Treatment Patients: January–June 2004



SOURCE: SISVEA—Government and nongovernment treatment centers

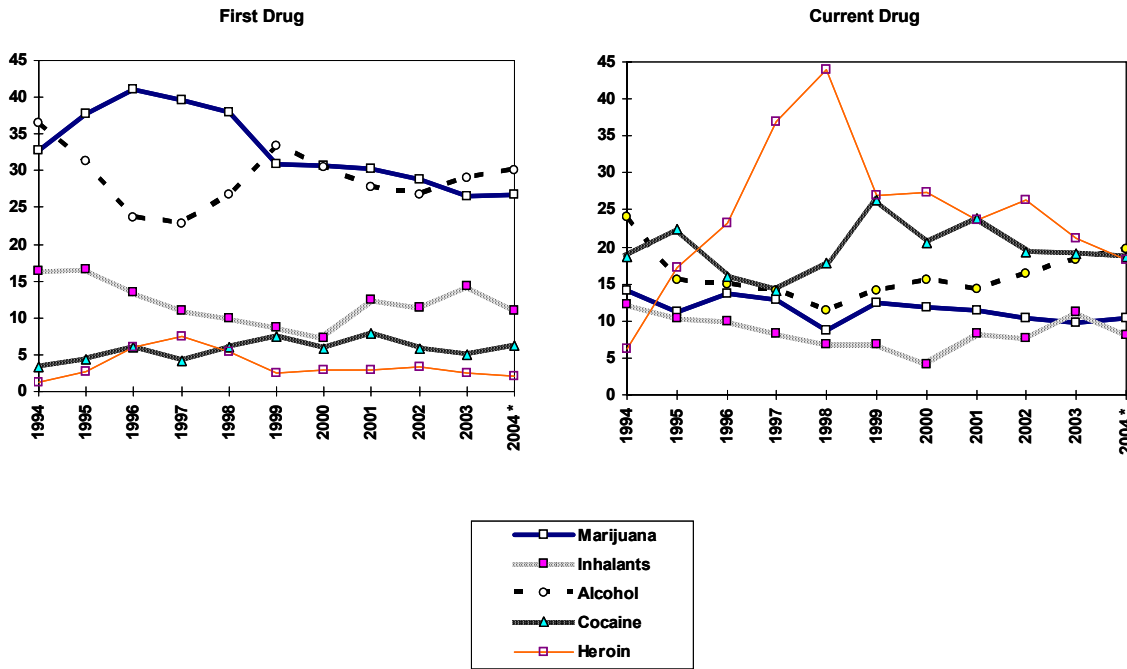
Exhibit 4. Demographic Characteristics of NGC Patients, by First Drug of Use and Percent: January–June 2004

Demographic Characteristic	Total N=20,324	Marijuana n=5,436	Inhalants n=2,243	Alcohol n=6,123	Cocaine ¹ n=1,273	Heroin n=422	Tobacco n=3,838
Gender							
Male	93.0	95.5	92.4	91.6	91.3	92.2	92.6
Female	7.0	4.5	7.6	8.4	8.7	7.8	7.4
Age							
5–14 years	2.2	1.9	7.4	1.1	0.9		1.9
15–19	15.5	16.9	31.6	9.6	18.5	4.7	13.8
20–24	19.3	22.7	23.8	13.9	23.6	14.7	19.6
25–29	18.4	20.0	16.5	16.8	21.9	23.5	18.2
30–34	15.5	15.5	9.5	16.4	18.3	18.0	16.3
35 and older	29.1	23.1	11.1	42.2	16.7	39.1	30.3
Schooling							
Elementary school	37.8	36.8	58.7	33.3	31.5	40.5	36.1
Middle school	36.0	41.1	29.0	31.3	39.5	37.4	39.1
High school	16.9	16.4	4.3	20.3	22.0	14.9	18.1
College studies	4.8	2.5	0.7	8.8	5.0	3.4	4.0
No formal education	4.2	3.0	7.2	5.7	1.7	3.8	2.4
Other	0.3	0.2		0.6	0.3		0.2
Marital Status							
Single	53.9	59.4	71.7	42.6	50.4	54.7	54.7
Married	23.3	18.6	11.0	32.4	28.3	17.5	21.8
Divorced	3.8	3.6	1.7	5.0	2.6	4.3	3.8
Widowed	1.0	0.6	0.4	1.6	0.6	1.2	0.9
Living together	11.9	11.9	10.9	11.4	12.5	12.5	12.7
Other	6.2	5.9	4.2	7.0	5.6	9.8	6.1
Age of Onset							
9 and younger	5.8	4.5	9.7	4.3	1.0	1.7	9.8
10–14	43.3	48.0	58.8	35.4	19.6	16.0	51.1
15–19	39.9	40.2	28.8	46.4	43.5	38.6	34.5
20–24	6.8	4.9	1.8	9.2	17.3	20.2	3.5
25–29	2.4	1.4	0.4	2.7	10.7	11.0	0.7
30–34	1.0	0.5	0.1	1.1	4.2	6.7	0.3
35 and older	0.9	0.4	0.3	0.9	3.7	6.0	0.3
Frequency							
Daily	80.3	85.9	89.4	72	72.9	95.2	80.9
Once a week	15.7	11.4	8.0	21.9	21.4	3.8	15.7
1–3 times per month	3.2	2.0	2.0	4.9	4.3	1.0	2.8
1–11 times per year	0.9	0.7	0.5	1.2	1.3		0.7

¹Includes cocaine, basuco, and crack.

SOURCE: SISVEA—Nongovernment treatment centers

Exhibit 5. First Drug of Use and Current Drug of Use Among Patients at Nongovernment Treatment Centers, by Percent: 1994–June 2004



SOURCE: SISVEA—Nongovernment treatment centers

Exhibit 6. Social Characteristics and Type of Offense Committed by Juvenile Drug-Using Arrestees, by Percent: January–June 2004

Total N=5,393	Marijuana n=1,857	Inhalants n=750	Alcohol n=720	Cocaine n=821	Heroin n=22
Male 91.5%	Male 95.2%	Male 94.8%	Male 91.5%	Male 94.4%	Male 95.5%
Elementary school 46.5%	Elementary school 50.7%	Elementary school 61.4%	Elementary school 45.1%	Elementary school 54.3%	Elementary school 57.1%
Subemployed 31.6%	Subemployed 40.3%	Subemployed 45.3%	Subemployed 38.8%	Subemployed 39.5%	Unemployed 36.4%
Tattoo 23.3%	Tattoo 37.1%	Tattoo 39.4%	Tattoo 30.7%	Tattoo 35.5%	Tattoo 50.0%
Belong to a gang 20.6%	Belong to a gang 31.5%	Belong to a gang 40.5%	Belong to a gang 26.1%	Belong to a gang 32.5%	Belong to a gang 45.5%
Offense under intoxication 18.5%	Offense under intoxication 31.5%	Offense under intoxication 37.8%	Offense under intoxication 46.4%	Offense under intoxication 29.3%	Offense under intoxication 42.9%
Frequent Offenses					
Robbery 44.1%	Robbery 42.8%	Robbery 46.5%	Robbery 40.7%	Robbery 48.5%	Robbery 59.1
Against health 13.9%	Against health 26.2%	Against health 18.7%	Injuries 11.7%	Against health 28.5%	Against health 13.6
Injuries 9.4%	Drug 8.4%	Drug 11.2%	Against health 10.4%	Drug 5.2%	Drug 9.1
Damages 6.6%	Consumption 5.8%	Consumption 5.3%	Damages 7.2%	Consumption 5.2%	Consumption 18.2
Other 28.0%	Injuries 16.8%	Arms bearing 18.3%	Other 30.0%	Injuries 12.6%	Other

SOURCE: SISVEA—Juvenile detention centers

Exhibit 7. Type of Death Under Intoxication of Selected Drugs¹ in Mexico by Percent: January–June 2004

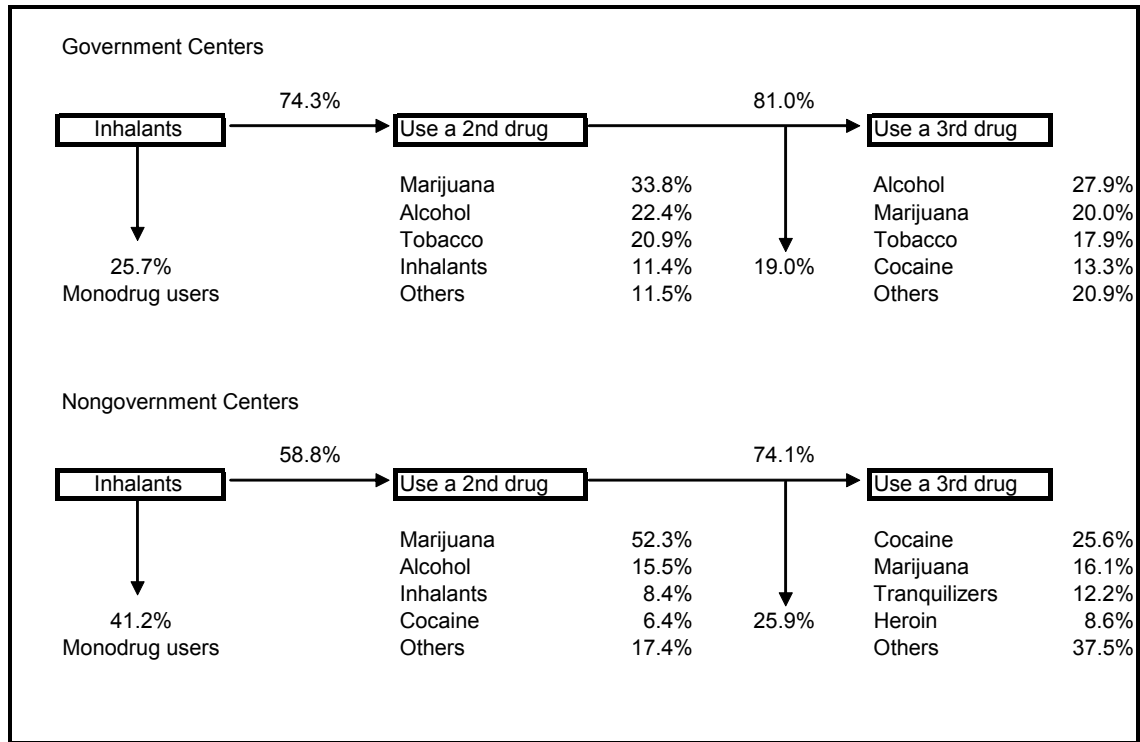
Type of Death	Total N=1,048	Alcohol n=893	Marijuana n=34	Opioids ² n=36
Gender				
Male	92.9	93.8	91.2	94.4
Female	7.1	5.7	8.8	5.6
Age Group				
10–14	0.3	0.2	0.0	0.0
15–19	8.8	8.1	14.7	13.9
20–24	13.0	13.2	26.5	16.7
25–29	13.2	14.0	14.7	16.7
30–34	10.9	10.6	14.7	19.4
35–39	13.7	13.4	8.8	16.7
40 and older	40.2	40.4	20.6	16.7
Cause of Death				
Run over	13.1	14.5	6.5	0.0
Traffic accident	15.9	17.8	9.7	2.8
Fall	4.7	4.9	9.7	0.0
Electrocuted	0.8	0.6	0.0	0.0
Burned	1.3	1.0	6.5	0.0
Beaten	3.3	3.5	0.0	0.0
Asphyxia	18.1	19.6	19.4	0.0
Crushed	0.1	0.1	0.0	0.0
Fire arm	8.6	9.3	16.1	0.0
Steel knife	4.2	4.6	12.9	0.0
Violation	0.0	0.0	0.0	0.0
Intoxicated	9.9	5.9	9.7	94.4
Poisoned	0.3	0.2	0.0	0.0
Other	19.9	18.0	9.7	2.8
Place of Death				
Traffic	16.8	18.1	9.1	0.0
Home	30.6	30.4	21.2	13.9
Street	36.0	37.0	33.3	63.9
Public baths	0.2	0.1	3.0	2.8
Recreational areas	4.5	4.9	12.1	0.0
At work	1.1	1.2	3.0	0.0
Service areas	6.7	1.8	6.1	13.9
Other	4.2	3.9	12.1	5.6

¹Deaths fro all causes totaled 8,095.

²Indicates opium, morphine, and heroin.

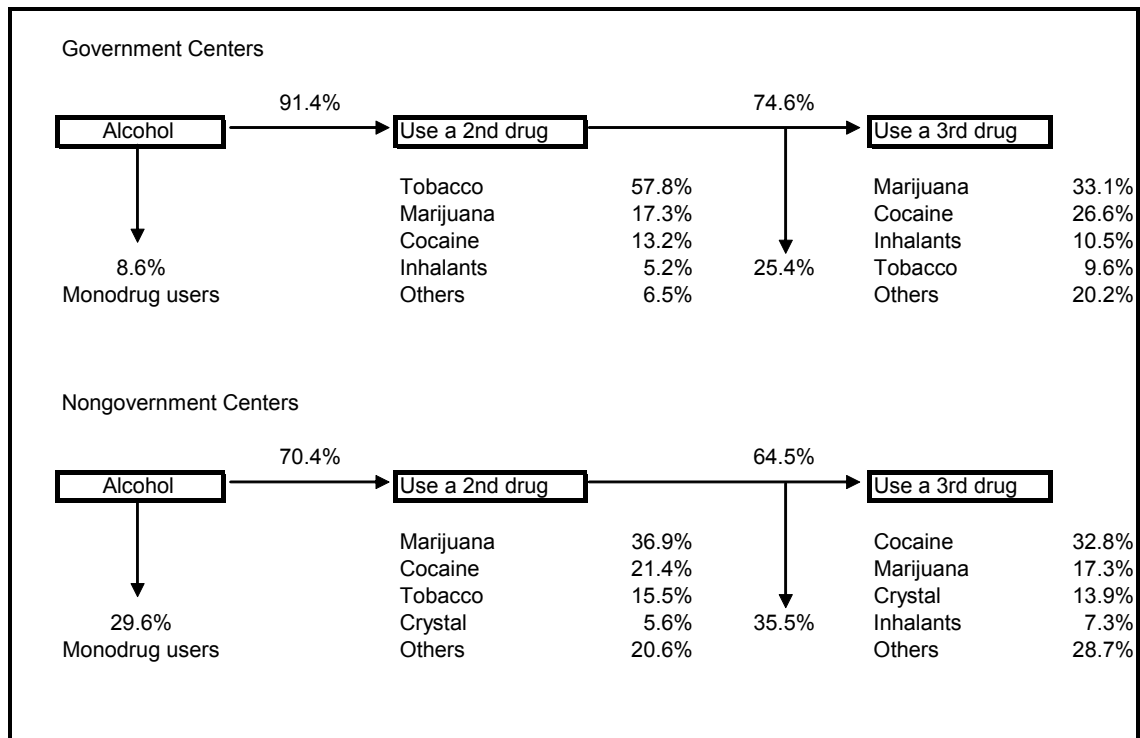
SOURCE: SISVEA—Medical examiner

Exhibit 8. Natural History of Inhalants Use Among Treatment Patients: January–June 2004



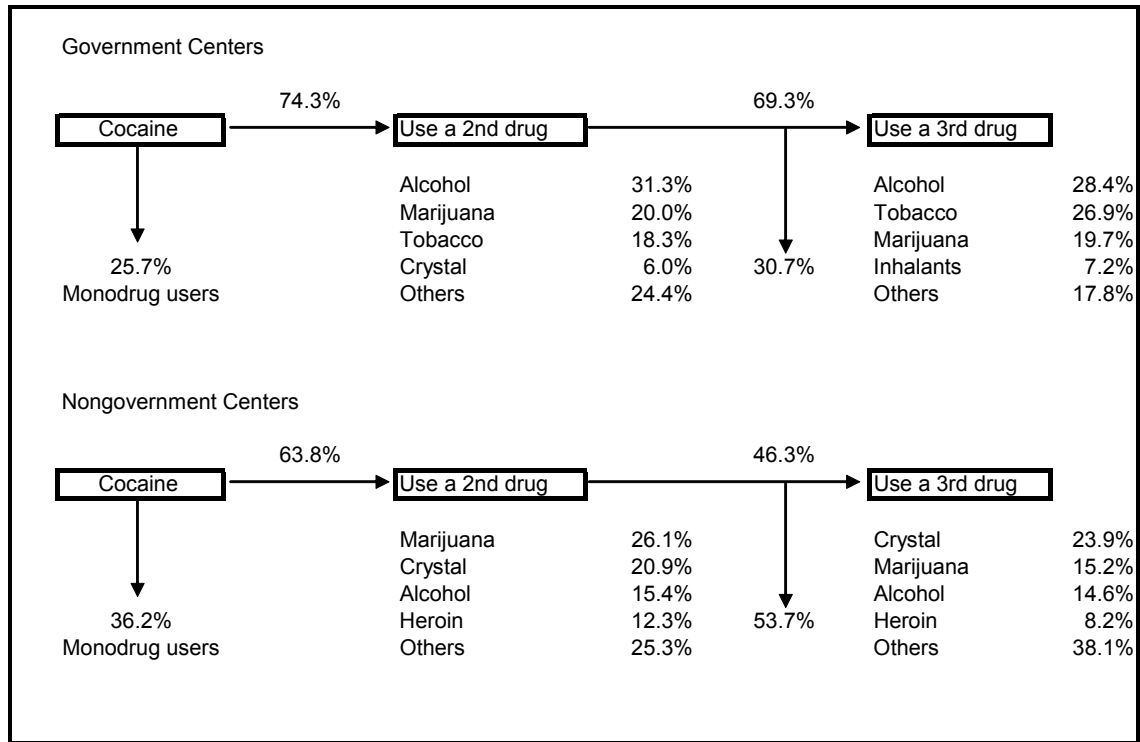
SOURCE: SISVEA—Government and nongovernment treatment centers

Exhibit 9. Natural History of Alcohol Use Among Treatment Patients: January–June 2004



SOURCE: SISVEA—Government and nongovernment treatment centers

Exhibit 10. Natural History of Cocaine Use Among Treatment Patients: January–June 2004



SOURCE: SISVEA—Government and nongovernment treatment centers

Panel
on
Methamphetamine
Abuse:

NIDA-Supported
Research
Studies

Panel on Methamphetamine Abuse: NIDA-Supported Research Studies

Natural History of Methamphetamine (MA) Abuse and Long-Term Consequences

Mary-Lynn Brecht, Ph.D.

MAJOR FINDINGS

Major findings from a natural history study of 350 methamphetamine abusers admitted to publicly funded drug abuse treatment programs in Los Angeles County include the following:

- All had used alcohol, marijuana, and/or tobacco, with 95 percent initiating one or more of these prior to first use of MA. Ninety-seven percent had also used at least one other drug, initiated prior to first use of MA for 65 percent.
- The average age of first use of methamphetamine was 19.
- More than one-half (51 percent) of the respondents reported prolonged use of MA (at least 20 days per month for at least 36 months since the age of 14).
- Health problems reported by a majority of the users included weight loss (84 percent), sleeplessness (78 percent), paranoia (67 percent), hallucinations (61 percent), violent behavior (56 percent), and dental problems (55 percent).
- Prolonged MA use (more than 36 months) was associated with current health problems and lower self-reported health status.
- Pregnancy and fetal loss rates were higher than national figures; 406 children were born to the 153 women in the sample. One-third (33 percent) of these women reported having children with disabilities; 75 percent had children who had lived with someone else during at least some period of the child's life.
- Four of every 10 respondents reported continuous MA abstinence for at least 12 months after treatment discharge. Approximately 2 in 10 were still MA abstinent 48 months after discharge from treatment.

- Nearly one-half (46 percent) of the respondents completed treatment. The average time in treatment was 3.7 months. Respondents with longer times in treatment were more likely to maintain abstinence to 24 and 48 months after treatment.
- Time-to-relapse outcomes were worse for respondents who sold MA and respondents who experienced parental divorce during childhood.

BACKGROUND AND STUDY DESCRIPTION

From 1992 to 2002, there was a fivefold increase in the number of methamphetamine treatment admissions in California—from 5 to 27 percent of all treatment admissions to outpatient and residential programs. To better understand the impact of MA use on the treatment system, a NIDA-funded study [RO1 DA11020] was undertaken by the University of California Los Angeles Integrated Substance Abuse Programs (ISAP) to study the patterns of MA use and the consequences of MA use on health, risk behaviors, and treatment outcomes.

The ISAP study sample was randomly selected from adults admitted to Los Angeles County-funded outpatient and residential programs from 1995 to 1997 (most were admitted in 1996). The sample was stratified by gender, ethnicity, and modality. Of the sample selected...

- Seventy-six percent were located.
- Three-quarters (75 percent) of those located participated in study interviews conducted in 1999–2000 ($n=365$); 282 of them participated in a second interview in 2001–2003.
- Complete data were available for analysis of the first interview on 350 study subjects.

CONCLUSIONS

The major findings, as summarized above, are evidence of the impact of MA abuse on users and the treatment system.

Given the increase in MA treatment admissions, the health problems of users, special needs (e.g., of children born to MA abusers), and the long-term treatment outcomes, there is a need to implement and

evaluate specialized treatment approaches for this population.

Because of the health problems associated with long-term MA use, early interventions could decrease the high medical and social costs of MA use.

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Prenatal Exposure to Methamphetamine and Child Development

Barry Lester, Ph.D., Linda LaGasse, Ph.D., Lynne M. Smith, M.D., Chris Derauf, M.D., Penny Grant, M.D., Rizwan Shah, M.D., Amelia Arria, Ph.D., Marilyn Huestis, Ph.D., and Jing Liu, Ph.D.

Preliminary findings on infants exposed prenatally to methamphetamine (MA) and nonexposed infants suggest...

- Prenatal exposure to MA is associated with an increase in SGA (small for gestational size).
- Neurobehavioral deficits at birth were identified in NNNS (Neonatal Intensive Care Unit Network Neurobehavioral Scale) neurobehavior, including dose response relationships and acoustical analysis of the infant's cry.

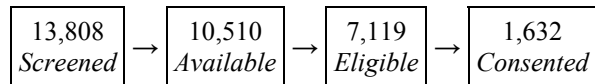
These preliminary findings are from the IDEAL (Infant Development, Environment, and Lifestyle) clinical network study supported by NIDA (RO1DA-01498-01). The final sample will be comprised of 204 exposed and 208 nonexposed infants and their caretakers.

STUDY SAMPLE AND METHODS

The sample for these preliminary findings is based on infants who were exposed to MA prenatally and infants who were not exposed to MA. Exposure was determined through mothers' self-reports and/or GC/MS (Gas Chromatography/Mass Spectroscopy) confirmation of MA in meconium. Subjects in both groups were ineligible for the study if the mothers used lysergic acid diethylamide (LSD), phencyclidine (PCP), opiates, or cocaine only during pregnancy. Other maternal exclusion criteria were non-English speaking, mental confusion or psychotic symptoms, low cognitive function, and being younger than 18. Infant exclusion criteria were multiple gestation,

congenital anomalies or chromosomal abnormalities, unlikely to survive, and overt TORCH (Toxoplasmosis, Other Agents, Rubella, Cytomegalovirus, Herpes Simplex) infections. Mothers who used alcohol, tobacco, or marijuana during pregnancy were included in both the exposed or nonexposed groups.

The subjects were recruited from seven hospitals at four clinical research sites (Tulsa, OK; Des Moines, IA; Los Angeles, CA; and Honolulu, HI) from September 1, 2002, through August 31, 2003. The figures below show the number of mothers who were screened and ineligible, and the final number of eligibles who consented to participating in the study.



Subjects with MA exposure and matched comparisons were enrolled in the followup phase (84 exposed and 92 comparison). In the comparison group, mothers denied MA use and the infants had a negative meconium screen. The comparison group was matched to the exposed group by race, infants' birthweight, type of medical insurance, and maternal education.

Data were collected soon after the infants' birth and at a 1-month followup. Mothers were interviewed at both time points for demographic information, drug use during pregnancy, and psychological characteristics. SGA was determined from physical growth parameters from hospital medical charts. The NNNS was used to test infant neurobehavior at birth. The NNNS includes measures of arousal, stress and abstinence signs, self-regulation, and quality of movement. Statistical analyses on NNNS scores included comparison between groups, trimester effects of MA use, and dose response relationships between the amphetamine metabolite in meconium and newborn neurobehavior. Following the NNNS exam, the infant's cry was elicited and tape-recorded for subsequent computer acoustical analysis. The SASSI (Substance Abuse Subtle Screening Inventory) was used to determine substance dependence disorder in the mothers at 1 month.

FINDINGS

Based on self-reports of 1,632 eligible mothers who consented to participation, it was found that 6 percent used MA during pregnancy. Findings from this recruitment sample showed that MA-exposed infants were significantly more likely than their comparison counterparts to have lower birthweight and were more likely to be SGA. However, only the SGA effect remained with adjustment for covariates.

Findings below are based on the initial followup sample of 84 subjects in the methamphetamine group and 92 subjects in the comparison group. MA use was higher in the first trimester (3 days a week) than in the second or third trimesters (2 days a week). Maternal use of alcohol, marijuana, and tobacco was higher in the MA group than in the comparison group (e.g., 79 percent of the MA mothers used tobacco compared with 26 percent of the comparison group). Most mothers in the MA group had more than one prenatal care visit (89 percent), while almost all (99 percent) in the comparison group had more than one visit. However, the number of visits was somewhat lower in the MA group (11 vs. 14 in the comparison group), and the first prenatal visit took place later in the pregnancy in the exposed group (exposed 15 weeks vs. comparison 9 weeks gestational age).

At hospital discharge, 26 percent of the MA infants were not placed with their biological mothers, compared with 2 percent of the nonexposed infants. Child protection service (CPS) referrals were also higher (51 vs. 6 percent), as was CPS supervision at discharge (48 vs. 3 percent). On the SASSI, 74 percent of mothers in the MA group had a substance use disorder, compared with 11 percent in the comparison group. This effect remained after adjustment for covariates. Among infants, NNNS arousal scores were significantly lower and stress abstinence scores (with covariates) were higher in MA-exposed infants. The amount of MA use during the first and third trimester was related to more stress/abstinence signs; MA use during the third trimester was also related to a poorer quality of movement. There were dose response relationships between the amount of MA metabolite in the infant's meconium and quality of movement, stress/abstinence signs, and regulation scores. Acoustic cry analysis showed that with covariates, more MA-exposed infants cried to the first stimulus, they had more dysphonation (turbulence), changes in voice pitch, variability in amplitude (loudness), and changes in voicing patterns than infants in the comparison group. There were no differences in maternal or newborn infant medical factors between the two groups.

CONCLUSIONS

According to the 1999 National Survey on Drug Use and Health, MA was the only substance with the same percentage of use by pregnant and non-pregnant women. In the 2002 Treatment Episode Data Set, it was found that 21 percent of those pregnant reported use of MA, in contrast to 13 percent of the non-pregnant women. Few studies have been conducted on the in utero effects of MA. These studies do suggest birth abnormalities (e.g., placental abruption,

premature delivery, fetal growth retardation) and later learning disabilities, aggressive behavior, and increased rates of attention deficit disorder. However, these findings on humans have been based on small sample sizes and lack of controls for confounding variables (including use of other drugs), lack of a control group, and examiners not being blinded to exposure status. The IDEAL study has been undertaken to provide greater knowledge of the effects of MA use during pregnancy on infants. The preliminary findings reported here found an increase in SGA, neurobehavioral and cry deficits in MA-exposed infants. It is possible that this is "déjà vu," reminiscent of the effects of cocaine use on human development. The findings point to the following needs:

- There is a need for well-designed studies to determine the effects of MA on child outcome.
- There is a need for caution in not over interpreting findings that can lead to unwarranted stigmatizing of drug-exposed infants and their families.
- There is a need for effective intervention programs that meet the special needs of female MA users and their children to reduce potential MA-related deficits.

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Evidence-Based Approaches for Addressing Methamphetamine Use Among Gay Urban Males

Cathy J. Reback, Ph.D.

Findings from a study of 162 gay and bisexual men enrolled in outpatient treatment for methamphetamine abuse or dependence included...

- Drug abuse treatment interventions were found to be effective in reducing methamphetamine use and human immunodeficiency virus (HIV) risk behaviors of methamphetamine abusers...
 - At baseline, the mean number of sexual partners in the prior 30 days was 8.6, compared with 2.9 at 52-week follow-up
 - Participants demonstrated a threefold decrease in methamphetamine use (verified by urinalysis) and unprotected anal intercourse at 1-year followup.
- Combined contingency management (CM) and cognitive behavioral therapy (CBT) produced maximal short-term reductions in drug use and moderate effects on high-risk sex behaviors.
- Gay-specific CBT produced maximal short-term high-risk sex reduction and moderate drug use reduction.

STUDY METHODS

Sample

The study sample consisted of 162 self-reported gay or bisexual men who were enrolled in a Hollywood, California, outpatient treatment program for methamphetamine abuse. All men met the DSM-IV criteria for methamphetamine abuse or dependence. The participants were recruited for treatment through advertisements at gay venues and in the gay media, as well as through agency referrals. Men who responded were scheduled for an intake interview, completed an admission form, and began the informed consent process (approved by the Friends Research Institute West Coast Institutional Review Board).

Participants ranged in age from 19 to 57, with an average age of 37. Most were White (80.2 percent)

and highly educated (mean years of schooling=14.7). On average, respondents reported a lifetime use of methamphetamine of 8.3 years. Nearly 38 percent reported a history of injection drug use, and 60.5 percent were HIV-infected.

Interventions

Following screening, participants were randomly assigned to one of four treatment conditions: contingency management (CM), cognitive behavioral therapy (CBT), CM + CBT, and gay-specific CBT (GCBT). The first three interventions targeted only drug use, and no instructions were given regarding sexual risk behaviors. The GCBT integrated the standard CBT with referents to cultural norms and values of an urban gay lifestyle and an emphasis on HIV-related issues. Treatment was scheduled for a 16-week duration. Groups met for 90 minutes, three evenings each week. Nearly 59 percent of the sample completed the 16-week intervention to which they were assigned.

Data Collection

Quantitative data were obtained from all participants at baseline, at 16 weeks, at 6 months, and at 1 year following treatment initiation. In addition to the Admission Form that collected demographic, substance use, treatment history, sexual behavior, and medical and psychiatric background data at baseline,

two other instruments were used: the Substance Use Inventory and the Behavior Questionnaire—Amphetamine (BQA). Urinalysis was used to verify self-reported drug use. Qualitative interviews were conducted with 34 of the participants at baseline, 16 weeks, and 1 year.

STUDY FINDINGS

At baseline, 85.2 percent of the men responded that methamphetamine (i.e., “crystal”) use and sex were integrally connected, and “always” or “often” go together. Nearly 76 percent reported engaging in sex in the prior 30 days while high on methamphetamine. On average, these men had 8.6 unique sexual partners during that 30-day period. Sex was considered “compulsive” by 69.1 percent of the participants.

By 1-year followup, the mean number of sexual partners was significantly lower (2.9, $p<.001$). There was a regained sense of control over sexual choices. Significantly fewer respondents reported engaging in sexual behaviors, including oral sex, unprotected receptive anal intercourse, and any “public sex.” Significantly more participants were engaging in protected anal intercourse practices, thus decreasing risk for HIV/AIDS. Respondents also reported a greater willingness to disclose their HIV status.

Outcomes by type of intervention are summarized below in exhibit 1.

Exhibit 1. Outcomes by Treatment Condition

Measure	CM n=42	CBT n=40	CM+CBT n=40	GCBT n=40
Percent completers ¹	59%	40%	74%	62%
Consecutive negative urines—in weeks ¹	5.2	2.1	7.2	3.5
Retention in treatment—in weeks ¹	12.0	8.8	13.4	11.3
Unprotected receptive anal intercourse at termination—times in 30 days ²	1.1 (3.1)	2.0 (5.5)	2.2 (4.0)	0.5 (1.9)

¹ $p<.01$
² $p<.001$

CONCLUSIONS

The study findings demonstrate that drug treatment for methamphetamine abuse can be effective in modifying high-risk sexual behaviors. The followup findings indicate that the behavior changes can be sustained for more than 1 year. Intervention focused specifically on methamphetamine abuse resulted in maximal short-term reductions in drug use and mod-

erate effects on high-risk sexual behaviors, while the gay-specific intervention resulted in maximal short-term reductions in high-risk sexual behaviors and a moderate reduction in drug use.

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Predicting Relapse in Methamphetamine-Dependent Individuals

Martin P. Paulus, M.D.

Findings from a study of the use and effectiveness of Functional Magnetic Resonance Imaging (fMRI) in predicting relapse in methamphetamine (MA) dependent individuals show that...

- fMRI imaging results can be used to predict whether and when relapse may occur; findings show that fMRI correctly predicted...
 - 17 of 18 relapses
 - 20 of 22 nonrelapses
- In relapse, there is less activation in insular cortex structures that are critical for decisionmaking; the poor decisionmaking “sets the stage” for relapse.

This study, designed to examine the neurobiology of decisionmaking dysfunction in stimulant dependent subjects and the efficacy of using fMRI as a tool to predict relapse, was supported by NIDA [DA 013186 and DA 016663] and conducted by the University of California San Diego and the San Diego Veterans Affairs Health Care System.

STUDY SAMPLE AND METHODS

The initial sample included 46 males who were diagnosed as MA-dependent using the Structured Clinical Interview for DSM IV diagnosis; 6 were lost for followup, which was conducted in a median of 370 days. All subjects had been sober for a median of 25 days at baseline. All subjects were drawn from the San Diego Veterans Affairs Health Care System Alcohol and Drug Treatment Program under the leadership of Dr. Marc Schuckitt.

Of the 40 subjects included in the final analyses, 22 were “nonrelapsers” and 18 were “relapsers.” Some characteristics of the two groups are shown in exhibit 1.

Exhibit 1. Characteristics of the Study Samples

Characteristic	Nonrelapsers	Relapsers
Average Age	40.3	41.9
Percent White	73.0	67.0
Percent Divorced/ Separated/ Never Married ¹	95.0	89.0
Average Years of Education	12.9	13.5
Average Years of MA Use ²	14.9	17.3

¹Most in this category were either divorced or separated.

²At baseline, 5 nonrelapsers and 7 relapsers were currently abusing alcohol/marijuana; at follow-up, the respective numbers were 1 and 2 and 1 nonrelapse subject was also abusing cocaine.

The fMRI was used to determine changes in blood oxygenation and identify brain areas involved in the behavioral tasks. The Assessment Protocol at baseline included the following:

- **The two-choice prediction task** is used to determine the response characteristics in decision-making situations that have an uncertain outcome (for a detailed description, see Paulus 1997). Briefly, on a computer screen a house is presented with a person to the left and right. The subject is told that the task is to predict whether a car will come by on the left or right side to pick up the person on the computer screen. The subject has to make a decision (pressing the left or right button) and is shown the car *after* pressing the button for 300 milliseconds. If the selected response is “correct,” (i.e., reinforced), the person on the selected side crosses over to the car; otherwise the person moves halfway across the screen and then returns to the center of the screen. The reinforcement schedule is determined apriori, such that 50 percent of the responses will be reinforced, as if they were “correct” predictions.
- **The two-choice response task** is one in which the subject is told that the task is to press the button on the same side that the car is shown on the screen (i.e., left or right). The duration of each trial depends on the time between presentation of the initial situation and the selection of the response. Therefore, the number of trials per experimental block depends on the subject’s average latency to select a response during a trial block.

- The key difference between these two tasks is that during the two-choice prediction task, the subject does not know the correct response in advance, and the only information provided that may guide the selection of the current response is the sequence of previous responses and outcomes. In comparison, during the two-choice response task, the subject knows the correct answer before selecting a response, and the current button press does not depend on the previous responses.
- **Diagnostic**—SCID (Structured Clinical Interview for DSM IV Diagnoses), used to obtain DSM IV diagnoses.
- **Symptoms**—BPRS/HDRS (Brief Psychiatric Rating Scale and Hamilton Depression Rating Scale) used to assess general psychiatric and depressive symptoms, and the YMRS (Young Mania Rating Scale), used to assess manic symptoms.
- **Decisionmaking:** see above.
- **A MRI**—Block design using the Two-Choice Prediction Task versus the Two-Choice Response Task. Briefly, both tasks were presented for 30 seconds each and were repeated five times.

FINDINGS

The fMRI correctly predicted by imaging included 17 of 18 relapses and 20 of 22 nonrelapses, with a high level of sensitivity (94.4 percent) and specificity (86.4 percent).

Relapse was predictable by less activation in brain structures that are critical to decisionmaking; these were shown to be in the insular cortex, particularly the anterior insula, the inferior parietal lobule, and the dorsolateral prefrontal cortex. It also appears that poor assessment of the decisionmaking situation and subsequent reliance on habitual behavior involves processes in the inferior parietal lobule.

CONCLUSIONS

This study has shown that brain patterns can be used to predict whether and when relapse may occur. Questions that need to be more fully addressed in future research are...

- What are the specific cognitive processes involved in relapse?
- Do interventions have an impact on relapse?
- Do such findings apply to other addictions?

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Appendix A

New
Drug Abuse
Warning Network
(DAWN) Emergency
Department Data
and
DAWN *Live!*:
Major Features

APPENDIX A

New Drug Abuse Warning Network (DAWN) Emergency Department Data and DAWN *Live!*: Major Features

NEW DAWN EMERGENCY DEPARTMENT (ED) DATA

Major changes to DAWN were instituted at the beginning of 2003. These changes are a result of a redesign that altered virtually every feature of DAWN except its name. New DAWN data cannot be trended with prior years.

DAWN Hospitals and Areas. A sample of hospitals has been selected for each participating metropolitan area. Eligible hospitals in DAWN are short-term, general, non-Federal hospitals that operate 24-hour emergency departments. Some operate more than one emergency department (ED). Boundary definitions are based on the 2000 Census.

A DAWN Case. In the new DAWN system a DAWN case is defined as any emergency department visit related to recent drug use by persons of any age. The visits may be associated with substance abuse but also include drug misuse, both intentional and accidental. Included are visits related to the use of drugs for legitimate therapeutic purposes. Current medications unrelated to a visit are not reported.

To be considered a DAWN case, a drug need not be the cause of the visit but must be implicated in the visit. Only recent drug use is included. Case criteria are “broad enough to encompass all types of drug-related events, which include, but are not limited, to explicit drug use” (OAS 2004)¹.

Case Finding and Case Types. Case finding involves a retrospective review of medical charts for all patients treated in an ED. Reporters are rigorously trained and quality assurance protocols identify points where threats to data quality can be avoided or identified and corrected.

Each Dawn case is assigned hierarchially into one and only one case type, based on a series of questions

and rules. Cases are classified into the first case type that applies, even if it might fit into more than one case type. The eight case types in hierarchical are...

- Suicide attempt
- Seeking detoxification
- Alcohol only in patients under age 21
- Adverse reactions
- Overmedication
- Malicious poisoning (includes drug-facilitated sexual assault or product tampering)
- Accidental ingestion
- Other

The final case type, which is called *other*, is designed to capture all drug-related ED visits that could not be classified in any of the prior seven case types. *Other* is the case-type category designed to capture most drug abuse cases.

Patient Reporting. A maximum of six drugs, plus alcohol, may be reported by a patient in an ED visit. The substances reported may include illicit drugs, prescription and over-the-counter drugs, dietary supplements, non-pharmaceutical inhalants, alcohol-in-combination with other drugs, and alcohol only for patients younger than 21.

DAWN Publications. After each annual data collection, the DAWN data are cleaned and weighted, statistical tests are conducted to produce estimates for each metropolitan area and for the coterminous United States, and an annual report is published and disseminated.

¹For additional details on case definitions and other aspects of DAWN, see *DAWN, 2003: Interim National Estimates of Drug-Related Emergency Department Visits* (DAWN Series D-26, DHHS Publication No. (SMA) 04-3927). Rockville, MD: SAMHSA, Office of Applied Studies, December 2004. Available on-line at <<http://DAWNinfo.samhsa.gov>>.

DAWN *LIVE!*

The new DAWN includes capability for “real-time” surveillance of ED visits through DAWN *Live!*, an online data system. Access to DAWN *Live!* is limited to authorized users. Data in DAWN *Live!* are raw and unweighted reports of individual cases from participating hospitals. The data from one hospital may not be representative of all cases in the area; other hospitals may treat different types of cases or users of different drugs. Also, data from some hospitals may be reported more rapidly than data from other hospitals. DAWN *Live!* does not produce estimates (i.e., measures extrapolated from sample data to an entire universe (e.g., to an entire metropolitan area).

In examining DAWN *Live!* data, it is important to consider how many hospitals are reporting and the completeness of their data.

Since DAWN *Live!* data are raw and unweighted, they cannot be generalized to the entire metropolitan area. However they can help answer the following questions:

- What is the nature of the drug-related ED visits in participating hospitals?
- What drugs were involved?
- What was the relative mix of case types?

DAWN *Live!* data can also prove useful in identifying in a timely fashion the emergence of new drugs in an area and provide some insights into who is using these drugs and the associated health consequences.

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