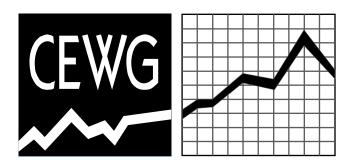
### **EPIDEMIOLOGIC TRENDS IN DRUG ABUSE**

# VOLUME I: HIGHLIGHTS AND EXECUTIVE SUMMARY

### **JUNE 2001**



COMMUNITY EPIDEMIOLOGY WORK GROUP National Institute on Drug Abuse

### NATIONAL INSTITUTES OF HEALTH

Division of Epidemiology, Services and Prevention Research National Institute on Drug Abuse 6001 Executive Boulevard Bethesda, Maryland 20892 The National Institute on Drug Abuse (NIDA) acknowledges the contributions made by the members of the Community Epidemiology Work Group (CEWG) who voluntarily have invested their time and resources in preparing the reports presented at the meetings.

The data in Volume I (this volume) of this publication were extracted from 21 city drug abuse indicator trend presentations. The full edited text from those reports appears in Volume II. Volume II also contains the full edited text of reports on specialized topics.

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### **FOREWORD**

The Community Epidemiology Work Group (CEWG) is a network of researchers from sentinel sites throughout the United States and from selected foreign countries. The CEWG was established by the National Institute on Drug Abuse (NIDA), National Institutes of Health (NIH), in 1976. It meets semiannually to provide ongoing community-level public health surveillance of drug use and abuse through presentation and discussion of quantitative and qualitative research data. This descriptive and analytical information is used to inform the health and scientific communities and the general public of the current nature and patterns of drug abuse, emerging trends, risk factors associated with drug abuse, characteristics of vulnerable populations, and consequences of abuse.

The 50th meeting of the CEWG was held in Rockville, Maryland, on June 12–15, 2001. This meeting represented a landmark achievement because it marked the 25th anniversary of the program. The important contribution that both the program and its members have made to the public health of the country over the years was highlighted by Dr. Alan I. Leshner, Director of NIDA, when he noted "...the unique and critical role that the CEWG has played in identifying every major drug abuse epidemic during the past 25 years."

The 25th anniversary meeting also was especially noteworthy because of its diverse agenda, which included presentations by NIDA grantees and staff, by a distinguished panel that offered reflections on the CEWG process and suggestions for the future, by researchers from selected countries, and by government officials and contract personnel who sponsor and operate the data systems that provide the information analyzed by CEWG members.

These meeting highlights included a presentation on NIDA-sponsored research by Dr. Robert Johnson of Johns Hopkins University, who reported findings from a study on the behavior within drug-injector networks that increased risk of HIV infection; by Dr. Deni Carise of the Treatment Research Institute at the University of Pennsylvania, who presented findings from the Drug Evaluation Network System (DENS), a national electronic treatment-tracking system that provides clinical and administrative information on patients entering substance abuse treatment throughout the Nation; by Dr. Nicholas Ialongo of Johns Hopkins University, who discussed the results of a preventive intervention project that gathered data on early antecedents of substance abuse, aggression, and depression among a school-based population in Baltimore; by Dr. Shenghen Lai, also of Johns Hopkins University, who reported on HIV infection and heroin abuse in China; and by Dr. James Inciardi of the University of Delaware, who discussed the relationship between sexual and drug-abusing behavior and HIV infection in Brazil. Additional reports on international epidemiologic research topics were presented by meeting participants from Indonesia, Malaysia, Singapore, and South Africa.

Another highlight of the meeting included presentations by a distinguished panel of participants chaired by Mr. Richard A. Millstein, the Deputy Director of NIDA. In opening remarks, Mr. Millstein congratulated the CEWG on its 25th anniversary and referred to remarks he made 5 years earlier, at the 20th anniversary meeting, listing the many emerging drug problems the CEWG had identified and tracked over the years. These problems included, among many others, pentazocine and phencyclidine abuse in the 1970s, crack cocaine and black tar

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heroin abuse in the 1980s, marijuana blunts and flunitrazepam abuse in the 1990s, and currently the club drugs. He then introduced the members of the panel: Dr. Robert DuPont, former Director of both NIDA and the White House Special Action Office for Drug Abuse Prevention, who discussed the fundamental value of epidemiologic data in understanding the dynamics of drug abuse in society and how it can be used to address public health policy; Dr. David Musto, an acclaimed medical historian with the Yale University School of Medicine, who presented a historical perspective of drug abuse in the United States during the past century; Dr. Richard Clayton, the Good Samaritan Foundation chair in Health Behavior at the University of Kentucky School of Medicine, who talked about the CEWG's history and its success in synthesizing multisource information from disparate communities and formulating it in a meaningful and timely publication; and Dr. Zili Sloboda of the Institute for Health and Social Policy, who greatly influenced the CEWG's development and direction during her tenure as Director of NIDA's Division of Epidemiology, Services and Prevention Research, and who emphasized the CEWG's unique capability to identify emerging drug abuse problems because of its community-based position.

The agenda also featured NIDA program officials who described new initiatives especially relevant to CEWG activities. These included presentations by Dr. Henry Francis, Director of the Center on AIDS and Other Medical Consequences of Drug Abuse; William J. Glass of the Division of Treatment Research and Development, who described NIDA's Clinical Trials Network; and Dr. Jack Stein, Deputy Director of the Office of Science

Policy and Communications. Descriptions and updates on the data sources used by CEWG members to monitor drug abuse in their communities were provided by Cecilia Balzer on the Domestic Monitor Program, sponsored by the Drug Enforcement Administration; by Drs. Henry Brownstein and Bruce Taylor on the Arrestee Drug Abuse Monitoring program, sponsored by the National Institute of Justice; by Dr. Lori Ducharme on the Drug Abuse Warning Network, sponsored by the Office of Applied Studies of the Substance Abuse and Mental Health Services Administration; and by Matthew Maggio of the National Drug Intelligence Center.

This anniversary meeting represents a milestone in the CEWG's history because it demonstrates the enduring value of a program that utilizes data from diverse national, regional, and local agencies, both public and private; a program that encourages interaction within and between agencies that provide and consume government services; a program that recognizes the unique contribution of and the need for different methodologies, both quantitative and qualitative, to understand the multifaceted nature and constantly changing dynamics of drug abuse; and, especially, a program that utilizes the frontline surveillance provided by community-level resources and expertise to keep us informed about drug abuse problems as they emerge and provide guidance on their resolution.

> Nicholas J. Kozel Division of Epidemiology, Services and Prevention Research

> > National Institute on Drug Abuse

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### EPIDEMIOLOGIC TRENDS IN DRUG ABUSE

### INTRODUCTION TO VOLUME I

The 50th meeting of the Community Epidemiology Work Group (CEWG) was held June 12–15, 2001, in San Francisco, California. During this meeting, 21 CEWG representatives reported on current drug trends and patterns in U.S. cities, as well as drug trends over the past 25 years. The following highlights and executive summary are based on these reports.

### **DATA SOURCES**

To assess drug abuse patterns and trends, cityand State-specific data are gathered and compiled from a variety of health and other drug abuse indicator sources. Such sources include public health agencies, medical and treatment facilities, criminal justice and correctional offices, law enforcement agencies, surveys, and other sources unique to local areas, including:

- **Drug-related deaths** reported on death certificates by medical examiner (ME)/local coroner offices, by State public health agencies, or by the Drug Abuse Warning Network (DAWN) of the Substance Abuse and Mental Health Services Administration (SAMHSA)
- Drug-related emergency department (ED) mentions (estimated mentions and estimated rates per 100,000 population) reported by DAWN (mentions differ from episodes—each ED episode may involve one or more mentions of specific drugs), and ED mentions reported by local poison control centers and hospitals

- **Primary substance of abuse** of clients at admission to treatment programs, as reported by drug abuse agencies
- Arrestee urinalysis results based on data collected by the Arrestee Drug Abuse Monitoring (ADAM) program of the National Institute of Justice
- Seizure, price, purity, prescription/distribution, and arrest data obtained from the Drug Enforcement Administration (DEA) and from State and local law enforcement agencies

Additionally, these quantitative data are enhanced with information obtained through field reports, focus groups, interviews, and other qualitative methodologies. Such observations are interspersed throughout executive summary discussions of indicator data; these excerpts and extracts may be set off in indented, bold italics.

### A NOTE TO THE READER

The highlights and executive summary are organized by specific drug of abuse. Please note, however, that multiple-drug abuse is the normative pattern among a broad range of substance abusers. Furthermore, most indicators do not differentiate between cocaine

hydrochloride (HCl) and crack. Finally, local comparisons are limited, especially for the following indicators:

■ Mortality—Definitions associated with drug deaths vary. Common reporting terms include "drug-related," "drug-induced,"

"drug-involved," and "drug detections" these terms have different meanings in different areas of the country.

- Treatment admissions—Many variables affect treatment admission numbers, including program emphasis, slot capacity, data collection methods, and reporting periods. While most areas report citywide data, Colorado, Hawaii, and Texas report statewide data.
- Arrests and seizures—The number of arrests, seizures, and quantity of drugs confiscated often reflect enforcement policy rather than levels of abuse.

The following methods were applied to facilitate local area comparisons in the highlights and executive summary:

- Most ED data are based on data files run by SAMHSA in September 2001. These data reflect weighted estimates of the number of mentions based on a sample of hospital emergency departments.
- Long-term ED trend data cover the first half of 1995 through the first half of 2000. Most short-term comparisons are based on data for the first half of 1999 versus the first half of 2000. Increases or decreases are noted only when they meet standards of precision at p<0.05.
- Unless otherwise specified, all percentages for treatment program admissions are calculated based on admissions excluding alcohol-only but including alcohol-incombination. Comparisons are generally for second half 1999 versus second half 2000.

- Percentage-point increases or declines between reporting periods generally are noted when they are ≥5 points.
- Row percentages in tables do not always add up to 100 percent, often because of rounding or large numbers in the "unknown" or "other" categories. In some 100-percent bar charts, the bars do not equal 100 percent for a variety of reasons, including the existence of categories such as "other," "unknown," or "not reported."
- ADAM arrestee urinalysis data are based on full-year figures for 2000. Data may not be compared with earlier time periods due to substantial changes in data collection and reporting.
- Heroin purity levels per milligram were obtained from the DEA Domestic Monitor Program (DMP), Intelligence Division, Domestic Unit. Data are for the first quarter of 2000. More current data are not available.
- Cumulative totals of acquired immunodeficiency syndrome (AIDS) cases for the total United States are based on the *HIV/-AIDS Surveillance Report* 12(1):8,9,12, 2000, from the Centers for Disease Control and Prevention (CDC).

Local areas vary in their reporting periods. Many indicators reflect fiscal periods that may differ among local areas.

Some indicator data are unavailable in certain areas. The symbol "NR" in tables refers to data not reported.

### **Drug Highlights**

Cocaine indicators suggest mixed trends. Heroin indicators increased or remained stable in most CEWG areas, with younger age groups continuing to initiate use. Marijuana indicators show mostly stabilizing trends after a major upsurge in the 1990s. Methamphetamine indicators show recent increases in many western areas after declining for the past 2 years. Club drugs, especially ecstasy and gamma hydroxybutyrate (GHB) and its precursors, continue to increase across the country, and ecstasy use is expanding to new populations and settings. Phencyclidine (PCP) use, often in combination with marijuana, also is increasing in a number of areas. The abuse of pharmaceuticals, especially oxycodone (Percodan, Percocet, and OxyContin), is emerging or increasing in many CEWG areas. Multisubstance abuse continues to be common for all drugs.

### **COCAINE**

Cocaine indicators during this reporting period showed mixed trends. Mortality data1 showed increases in six areas and declines in four. ED mentions<sup>2</sup> showed increases generally in western cities and declines generally in northeastern cities. Four significant increases (in Atlanta, San Diego, San Francisco, and Seattle) and four significant declines (in Baltimore, Newark, New Orleans, and New York) occurred. Cocaine remained the most common primary drug among treatment admissions<sup>3</sup> in six areas (Atlanta, Chicago, New Orleans, Philadelphia, St. Louis, and Texas), and treatment trends in most cities showed declines. Cocaine was the most frequently detected drug among adult male arrestees4 in four CEWG areas (Atlanta, Laredo, Miami, and New York) and was most frequently detected among female arrestees in

12 areas. Mortality, ED, treatment, and arrestee urinalysis data continue to reflect an aging user population. Cocaine is increasingly reported as a secondary or tertiary drug or as used in combination with other drugs, such as heroin and club drugs. Speedball injections (crack or cocaine hydrochloride [HCl] combined with heroin) continue in some cities, including Atlanta, Baltimore, New York City, Philadelphia, St. Louis, and Texas. Other combinations include crack with marijuana, pharmaceutical depressants, or phencyclidine (PCP). Cocaine HCl use or availability is increasing in several areas, including Boston, Denver, Los Angeles, and Newark. Purity and prices have remained relatively stable in most reporting areas, with several price changes in larger, wholesale amounts.

### **HEROIN**

Heroin indicators continued to rise or remained stable at elevated levels. Mortality figures¹ increased or were stable, except in San Francisco and Seattle, where they declined. ED mentions² showed mostly increases, with significant increases in seven cities (Atlanta, Boston, Detroit, Miami, New Orleans, San Diego, and San Francisco) and one significant decline (in Baltimore). Heroin as the primary drug of abuse accounts for the largest percentage of drug

treatment admissions<sup>3</sup> in eight CEWG areas. Positive arrestee urinalysis levels<sup>4</sup> remained relatively low (ranging from 3 to 21 percent for males and from 3 to 40 percent for females). Although heroin users tend to be older (35+), younger age groups in both suburban and central-city areas continued to initiate heroin use, according to reports from Atlanta, Baltimore, Boston, Denver, St. Louis, and Washington, DC. Injection remained the most frequently

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mentioned route of administration in areas outside of the Eastern regions of the country, while intranasal use remained most common in the Northeast and in Chicago and Detroit.

Other drugs, including cocaine, marijuana, and pharmaceutical depressants and opiates,

continued to be used concomitantly or as heroin substitutes. Heroin purity averages<sup>5</sup> range from 16 percent in Dallas to 77 percent in Newark, with mixed trends. The rise in heroin use could presage a rise in HIV/AIDS, hepatitis B, and hepatitis C.

### **MARIJUANA**

After increasing in all CEWG areas between 1990 and 1998, marijuana indicators began stabilizing in 1999 and 2000 in most areas (with exceptions in Chicago, Denver, Minneapolis/St. Paul, New York City, Phoenix, and St. Louis, where indicators continue to show increases). Marijuana ED mentions<sup>2</sup> showed mostly increases, with significant increases in five sites (Denver, Miami, San Diego, San Francisco, and Seattle) and significant declines in three sites (Newark, Philadelphia, and Phoenix). Marijuana continues as the predominant drug problem among treatment admissions<sup>3</sup> in three sites (Colorado, Minneapolis/St. Paul, and Seattle). However, the proportion of marijuana admissions referred by the criminal justice system remains high in most reporting areas when compared with other drug clients. Among adult males, marijuana surpassed other drugs as the most commonly detected drug in arrestee urinalyses<sup>4</sup>

in 12 cities, but among female arrestees it is highest in only Minneapolis and Seattle. Although marijuana use among adolescents remains prevalent in CEWG cities, the shift from adolescents to young adults continues in several cities including Newark, New York City, and Texas. Blunts remain common, especially among youth, in many urban areas including Boston, Chicago, New York City, Philadelphia, and Washington, DC. Blunts or joints also continue as a delivery medium for other drugs: PCP in Philadelphia, St. Louis, and Washington, DC; embalming fluid and PCP in Minneapolis/St. Paul and Texas; and cocaine in New York City, Philadelphia, and Washington, DC. Marijuana is commonly used with ecstasy in Miami, New York City, San Francisco, and Washington, DC. Availability of high-quality, indoor-grown marijuana "hydro") continued to increase in many CEWG areas.

### **METHAMPHETAMINE**

Methamphetamine remains concentrated in the West and in some rural areas elsewhere. After declining for the past 2 years in the West, indicators showed increasing or stable trends. Two midwestern areas reporting substantial increases were Minneapolis/St. Paul and St. Louis. Mortality data¹ suggest mixed trends. Methamphetamine ED mentions² showed mostly increases, with significant ones in six sites (Atlanta, Denver, Phoenix, St. Louis, San

Diego, and Seattle) and no significant declines. Methamphetamine remains the most common primary drug problem among treatment admissions<sup>3</sup> in Honolulu and San Diego. Positive arrestee urinalysis levels<sup>4</sup> among adult males were relatively low, except in Honolulu, Phoenix, and San Diego. Among adult females, levels were relatively low, except in Honolulu, Phoenix, San Diego, and Seattle. Methamphetamine production increased or remained a

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problem in several sites, especially in areas outside central cities, including Atlanta, Denver, Detroit, Honolulu, Los Angeles,

Minneapolis/St. Paul, St. Louis, and Washington, DC.

### **CLUB DRUGS**

Club drugs, including methylenedioxymethamphetamine (MDMA, ecstasy), gamma hydroxybutyrate (GHB) (and its precursors), ketamine, and flunitrazepam (Rohypnol) are typically used by youth in nightclub, rave, or college settings and involve multisubstance abuse. Ecstasy and GHB continued to show increases in most CEWG areas, ketamine showed mixed trends, and flunitrazepam continued to show declines. Ecstasy continues its increase in nearly every CEWG city—an increase that continues to be driven by two factors: high availability and the misconception that it is a relatively harmless drug. Mortality, ED, treatment, and poison control data continue to emerge. Ecstasy ED mentions<sup>2</sup> showed mostly increases, with 12 significant increases and only one significant decline. The expansion of ecstasy use among new populations (including older users, Blacks, and Hispanics) and in new settings (including streets, singles bars, shopping malls, and high school sporting events) continues. Adulterants and drugs sold as ecstasy, including paramethoxyamphetamine (PMA), continued to cause negative health consequences in CEWG areas. GHB (a central nervous system depressant sold mostly in clear liquid form, manufactured in clandestine labs, often mixed with beverages, and sold in nightclubs and raves) and two of its precursors,

gamma butyrolactone (GBL) and 1,4 butanediol (1,4 BD) (often sold as nutritional supplements in health food stores, on the Internet, and in gyms, or as cleaning products), have been increasingly involved in poisonings, overdoses, drug-assisted rapes and other criminal behaviors, or fatalities in nearly all CEWG areas. Overdoses tend to be more frequent with GHB than with other club drugs, especially when used in combination with alcohol. GHB ED mentions<sup>2</sup> increased in most CEWG areas, with four significant increases (Miami, New York, Seattle, and Washington, DC) and no significant declines. GHB treatment admissions are emerging in several areas, including Miami, Minneapolis/St. Paul, and Texas. As with other club drugs, multisubstance use, especially GHB with alcohol or ecstasy, is common. Ketamine, a veterinary anesthetic, is available in many CEWG areas, and is increasing in Denver and Detroit. It is often diverted from veterinary offices and pharmacies in liquid form, dried, and distributed as powder. Flunitrazepam, a benzodiazepine illegal in the United States but legally prescribed in other countries, has been associated with drug-assisted rape. However, its use has declined in most CEWG areas and currently is negligible, except in Atlanta, New Orleans, and Texas (especially along the Mexican border).

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### **HALLUCINOGENS**

Phencyclidine (PCP) ED mentions<sup>2</sup> increased in most areas, with significant increases in Baltimore, Chicago, Newark, San Diego, San Francisco, and Seattle, and significant declines in Boston and Philadelphia. PCP is sold in liquid form and continues to be combined with marijuana or cigarettes in Chicago, Los Angeles, Philadelphia, St. Louis, and Washington, DC; marijuana and embalming fluid in Texas and Minneapolis/St. Paul; and crack in New York City and Philadelphia. PCP has been

mentioned as a drug involved in the rave and nightclub scenes in Seattle and Washington, DC. **Lysergic acid diethylamide (LSD)** is often associated with the club drug scene and is typically ingested orally by youth. ED mentions<sup>2</sup> showed mostly declining trends. LSD continues to be combined with other drugs, including ecstasy, marijuana, cocaine, and sildenafil citrate (Viagra). **Psilocybin mushrooms** continue to be reported among youth.

### **ABUSED PHARMACEUTICALS**

Illicit use of opiates, such as oxycodone (Percodan, Percocet, and OxyContin—a highpotency, time-release form of oxycodone) and hydrocodone (Vicodin, Hycodan, Lortab, Lorcet, and NORCO), continues to increase in CEWG areas. Mortality, treatment, poison control, ethnographic, and law enforcement sources in 12 CEWG areas (Atlanta, Baltimore, Boston, Detroit, Miami, Minneapolis/St. Paul, Philadelphia, Phoenix, St. Louis, Seattle, Texas, and Washington, DC) reported increases in OxyContin abuse, especially by crushing pills and using them intranasally. The drug is often used as a heroin substitute and sometimes in combination with other drugs. Reports of youth abusing the stimulant methylphenidate (Ritalin) continue in four CEWG areas (Atlanta, Boston, Detroit, and Texas), where

they typically crush tablets and use them intranasally. The abuse of benzodiazepines, such as alprazolam (Xanax). clonazepam (Klonopin), and diazepam (Valium), remains common in CEWG areas, where the pills typically sell on the street for \$1–\$10. Other licit drugs abused or sold illicitly include antidepressants in Detroit and South Florida; carisoprodol (Soma); products containing dextromethorphan (DXM) among youth in Detroit, Minneapolis/St. Paul, Texas, and Washington, DC; inhalants, such as nitrous oxide, among clubgoers; sildenafil citrate (Viagra) in combination with other drugs, typically ecstasy, in South Florida and Washington, DC; steroids among bodybuilders in Boston; and in New York, drugs used to treat HIV/AIDS.

<sup>&</sup>lt;sup>1</sup>Mortality trends, available for cocaine-related deaths in 10 cities, heroin-related deaths in 9 cities, and methamphetamine-related deaths in 6 cities, are for 2000 versus 1999.

<sup>&</sup>lt;sup>2</sup>Emergency department (ED) mentions are for 20 CEWG cities in the Drug Abuse Warning Network (DAWN) of the Substance Abuse and Mental Health Services Administration (SAMHSA) Office of Applied Studies (OAS); comparisons are for the first half of 2000 versus the first half of 1999; statistically significant equals p<0.05.

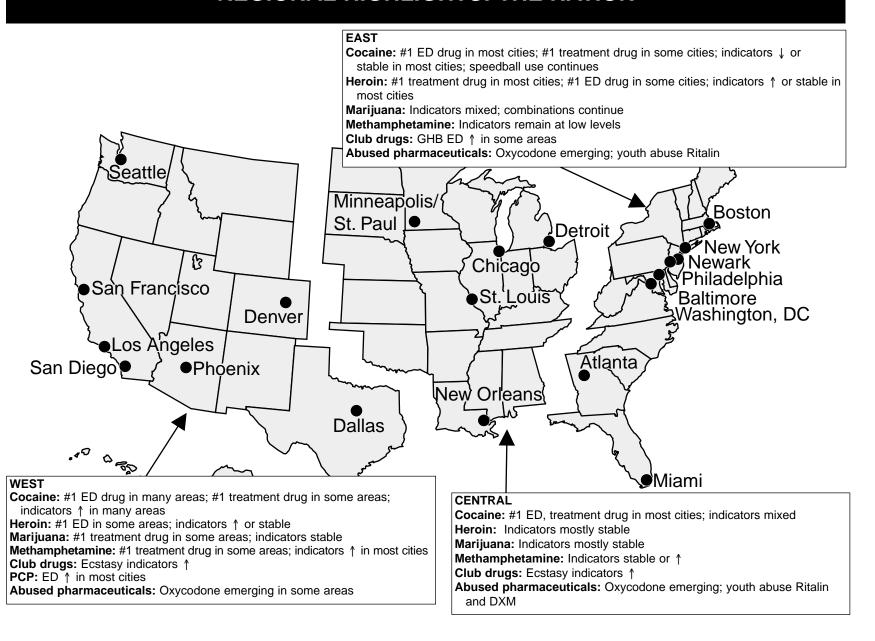
<sup>&</sup>lt;sup>3</sup>Treatment admissions figures were reported in 19 CEWG sites and are primary drug of abuse as a percentage of total admissions; comparisons are generally for the second half of 2000 versus the second half of 1999.

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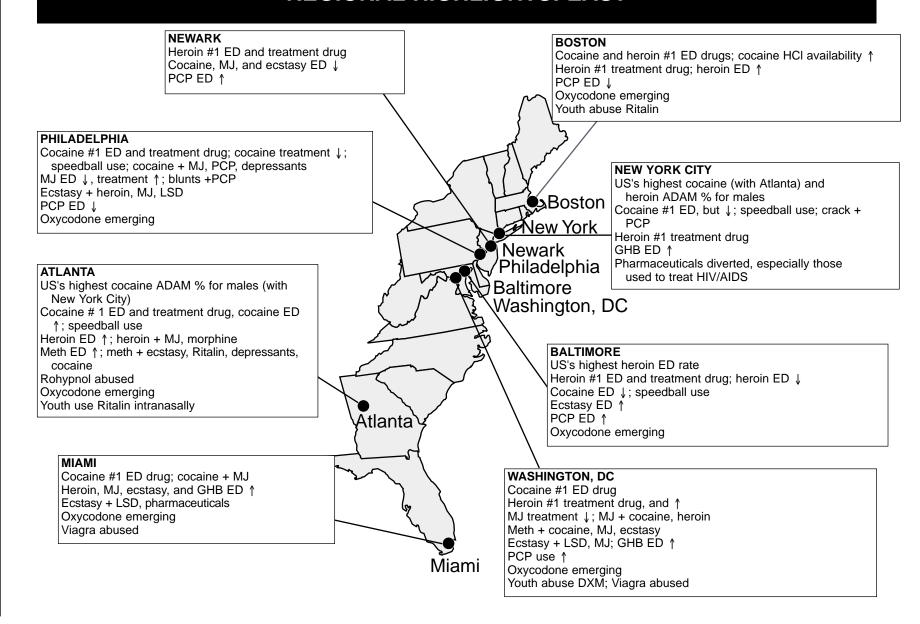
<sup>4</sup>Arrestee urinalysis data are for 17 CEWG cities (including 4 in Texas) for males and 16 (including 3 in Texas) for females in the National Institute of Justice (NIJ) Arrestee Drug Abuse Monitoring (ADAM) program; data are for 2000; comparisons with the current data cannot be made due to changes in data collection.

<sup>5</sup>Heroin purity information is for 20 CEWG sites (including two in Texas) in the Drug Enforcement Administration (DEA) Domestic Monitor Program (DMP); comparisons are for the first quarter of 2000 versus 1999.

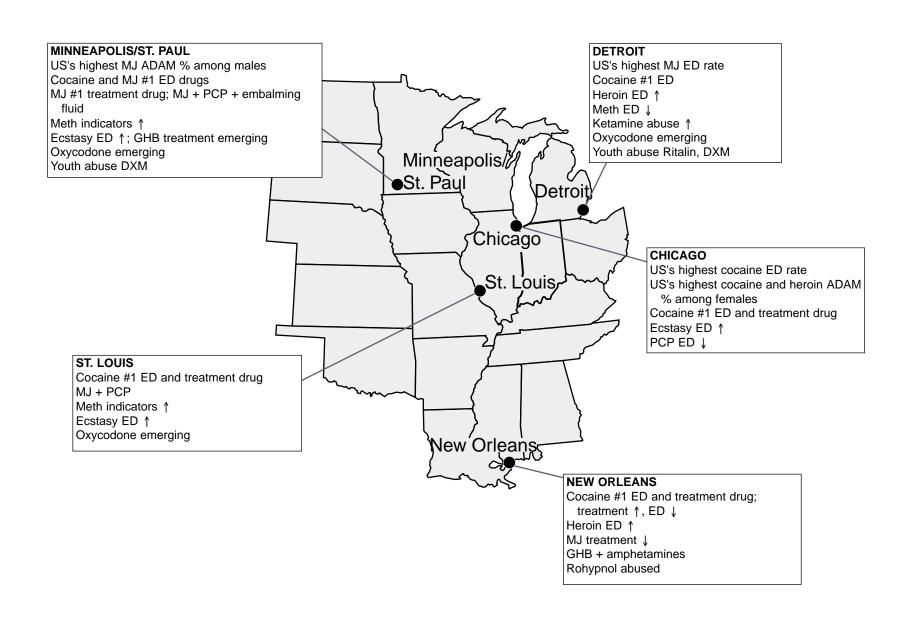
### **REGIONAL HIGHLIGHTS: THE NATION**



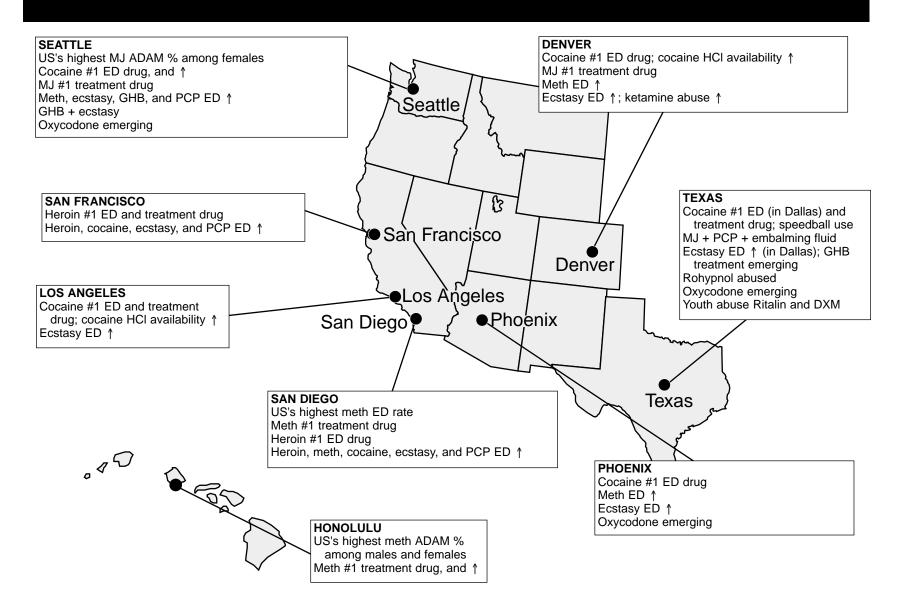
### **REGIONAL HIGHLIGHTS: EAST**



### **REGIONAL HIGHLIGHTS: CENTRAL**



### **REGIONAL HIGHLIGHTS: WEST**



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### CEWG CITY HIGHLIGHTS: KEY ABUSED DRUGS, JUNE 2001

AREA	COCAINE	HEROIN	MARIJUANA	OTHER DRUGS OF NOTE
Atlanta	ED rate 105 (↑); 56% of TXs; \$100/g, crack \$100/g; speedball use	ED rate 9 (†); 7% of TXs; \$1.18/mg; 41% pure; combined with morphine, MJ	ED rate 49; 18% of TXs; domestic \$120–\$240/oz, sinsemilla \$160–\$250/oz	Methamphetamine ED rate 2 (↑); Meth + ecstasy, Ritalin, depressants, cocaine; Ecstasy ED rate 2.4; GHB ED rate 4.6; Oxycodone emerging; Rohypnol abused; Youth snort Ritalin
Baltimore	ED rate 99 (↓); 14% of TXs	ED rate 123 (↓); 51% of TXs; \$.35/mg; 18% pure	ED rate 32; 16% of TXs	Ecstasy ED rate 2.7 (↑), spreading outside rave scene; PCP ED rate 21 (↑); LSD ED rate 0.7 (↓); Oxycodone emerging
Boston	ED rate 49; 12% of TXs; \$50–\$90/g (30–90% pure), crack \$10–\$20/rock (30–90% pure)	ED rate 48 (†); 52% of TXs; \$.62/mg; 66% pure	ED rate 36; 6% of TXs; commercial \$200–\$250/oz, sinsemilla \$200–\$300/oz	Ecstasy ED rate 3.3; PCP ED rate 0.2 (↓); Oxycodone emerging; Youth abuse Ritalin
Chicago	ED rate 121; 27% of TXs; \$80–\$150/g (39% pure), crack \$5–\$20/rock	ED rate 102; 17% of TXs; \$.70/mg; 23% pure	ED rate 42; 17% of TXs; \$100–\$200/oz	Ecstasy ED rate 3.6 ( $\uparrow$ ); spreading outside rave scene; GHB ED rate 2.3 ( $\uparrow$ ); PCP ED rate 7.1 ( $\uparrow$ )
Denver	ED rate 40; 14% of TXs; \$80/g, crack \$5–\$20/rock; HCl availability ↑	ED rate 20; 10% of TXs; \$.71/mg; 28% pure	ED rate 24 (↑); 27% of TXs; "BC bud" \$500/oz, locally grown \$200/oz, sinsemilla \$100–\$300/oz	Methamphetamine ED rate 4 (↑), 11% of TXs; Ecstasy ED rate 3.5 (↑); GHB ED rate 3.5, poison calls ↑; Ketamine abuse ↑
Detroit	396 deaths in 00; ED rate 94; 29% of TXs; crack \$5–\$50/rock	473 deaths in 00; ED rate 39 (†); 33% of TXs; \$.64/mg; 52% pure	ED rate 50	Methamphetamine ED rate (0.0) (↓); Ecstasy expanding outside rave scene, ED rate 1.4; Ketamine abuse ↑; Oxycodone emerging; Youth abuse Ritalin and DXM
Honolulu	22 deaths in 00; 10% of TXs; \$100–\$120/g (20–90% pure), crack \$20–\$100/rock	22 deaths in 00; 8% of TXs; \$200/g; 67% pure	31% of TXs; low quality \$300–\$500/oz, high quality \$400–\$800/oz	Methamphetamine 50% of TXs
Los Angeles	21 deaths in 00; ED rate 42; 18% of TXs; HCl availability ↑	ED rate 16; 45% of TXs; \$1.58/g; 20% pure	ED rate 33; 7% of TXs	Methamphetamine ED rate 6; 9% of TXs; Ecstasy ED rate 2.0 (↑); GHB ED rate 1.7; PCP use ↑
Miami	30 deaths in 00; ED rate 110; \$40–\$60/g, crack \$10–\$20/rock; combined with MJ	61 deaths in 00; ED rate 35 (†); \$1.03/mg; 23% pure	ED rate 45 (†); commercial \$200–\$400/oz, hydroponic \$500/oz	Ecstasy ED rate 5.4 (↑); Ecstasy + cocaine, MJ, GHB, Viagra; Oxycodone emerging
Minneapo- lis/St. Paul	60 deaths in 00; ED rate 15; 14% of TXs; \$100/g, crack \$20/rock	58 deaths in 00; ED rate 4; 3% of TXs; \$900/g	ED rate 16; 21% of TXs; \$165/oz; combined with PCP + embalming fluid	Methamphetamine ED rate 2, indicators ↑; Ecstasy 2.7 (↑); GHB ED rate 3.8, treatment emerging; Oxycodone emerging; Youth abuse DXM
Newark	ED rate 74 ( \ ); 8% of TXs; crack \$5-\$25/bag (50-60% pure)	ED rate 117; 77% of TXs; \$.25/mg; 78% pure	ED rate 14 (↓); 5% of TXs	Ecstasy ED rate 1.1 (↓), spreading outside rave scene; GHB use ↑; PCP ED rate 1.7 (↑)
New Orleans	ED rate 76 ( \ ); 33% of TXs; \$80–\$150/g, crack \$5–\$25/rock	ED rate 38 (†); 12% of TXs; \$1.64/ mg; 25% pure	ED rate 43; 30% of TXs; \$125–\$160/oz	Ecstasy ED rate 3.6; GHB ED rate 5.6; LSD ED rate 1.1 (↓); Rohypnol abused

New York City	ED rate 73 ( \ ); 29% of TXs; \$20-\$50/g, crack \$3-\$10/bag; combined with PCP; speedball use	ED rate 57; 47% of TXs; \$.27/mg; 60% pure	ED rate 20; 24% of TXs; organic \$700–\$800/oz	Ecstasy ED rate 2.3, spreading outside rave scene; GHB ED rate 0.3 (†); Ketamine used intranasally, injected; Pharmaceuticals diverted, especially those used to treat HIV/AIDS
Philadel- phia	311 deaths in 00; ED rate 105; 45% of TXs; crack \$5/rock	332 deaths in 00; ED rate 41; 26% of TXs; \$.31/mg; 73% pure	ED rate 49 (↓); 23% of TXs; PCP-laced blunts	Ecstasy ED rate 2.9, spreading to Black and Hispanic populations; Ecstasy + heroin, cough syrup, MJ, LSD; GHB ED rate 1.6; PCP ED rate 4.5 ( \( \); Oxycodone emerging
Phoenix	161 deaths in 00; ED rate 40; \$80/g, crack \$17.50–\$20/rock	137 deaths in 00; ED rate 21; \$.47/mg; 47% pure	ED rate 21 (↓); \$75–\$150/oz	Methamphetamine ED rate 12 (↑); Ecstasy ED rate 3.6 (↑); LSD ED rate 2.6 (↓); Oxycodone emerging
St. Louis	ED rate 47; 38% of TXs; \$100–\$125/g (77% pure), crack \$20/rock (50–90% pure)	ED rate 20; 13% of TXs; \$1.75/mg; 18% pure	ED rate 36; 27% of TXs; combined with PCP	Methamphetamine ED rate 4 (↑), Ecstasy ED rate 2.1 (↑); GHB use ↑; Ketamine thefts ↑; Oxycodone emerging
San Diego	58 deaths in 00; ED rate 22 (↑); 11% of TXs; \$75–\$100/g (45– 85% pure), crack \$10/0.1g (40–85% pure)	126 deaths in 00; ED rate 27 (†); 12% of TXs; \$.46/mg; 52% pure	ED rate 21 (†); 21% of TXs; sinsemilla \$200–\$400/oz, commercial \$70–\$100/oz	Methamphetamine ED rate 18 ( $\uparrow$ ), 38% of TXs; Ecstasy ED rate 1.9 ( $\uparrow$ ); GHB ED rate 2.6; PCP ED rate 1.7 ( $\uparrow$ ); LSD ED rate 0.8 ( $\downarrow$ )
San Francisco	95 deaths in 00; ED rate 71 (↑); 24% of TXs	ED rate 101 (†); 65% of TXs; \$.30/mg; 25% pure	ED rate 22 (†)	Methamphetamine ED rate 18, 14% of TXs; Ecstasy ED rate 6.6 (↑), spreading to Black populations; Ecstasy + MJ; GHB ED rate 9.3; PCP ED rate 2.5 (↑)
Seattle	89 deaths in 00; ED rate 73 (†); 14% of TXs; \$30/g, crack \$40/0.2–0.25g	101 deaths in 00; ED rate 65; 20% of TXs; \$.62/mg; 18% pure	ED rate 33 (†); 21% of TXs; \$325–\$400/oz	Methamphetamine ED rate 14 (↑), 9% of TXs; Ecstasy ED rate 6.5 (↑), spreading outside rave scene; GHB + ecstasy; GHB ED rate 2.9 (↑); PCP ED rate (↑); Oxycodone emerging
Texas	ED rate 41 in Dallas; 34% of TXs; \$50–\$100/g (68% pure), crack \$10–\$50/rock (56% pure); speedball use	ED rate 10 in Dallas; 14% of TXs; \$1.07/mg in Houston; 19% pure	ED rate 24 in Dallas; 23% of TXs; combined with PCP + embalming fluid	Methamphetamine ED rate 3 in Dallas, 8% of TXs; Ecstasy ED rate 2.8 (↑) in Dallas; GHB ED rate 6.7 in Dallas; GHB treatment emerging; Ketamine and Rohypnol use ↑; Oxycodone emerging; Youth abuse Ritalin and DXM
Washing- ton, DC	ED rate 34; 46% of TXs; \$3-\$20/rock	ED rate 24; 47% of TXs; \$1.36/mg; 23% pure	ED rate 32; 6% of TXs; commercial \$75–\$120, hydro- ponic \$480/oz; combined with cocaine, heroin	Ecstasy use ↑, ED rate 2.0, spreading outside rave scene; Ecstasy + MJ, LSD; PCP sold as ecstasy; GHB ED 0.6 (↑); PCP use ↑; Oxydodone emerging; Youth abuse DXM; Viagra abused

**ED** = DAWN estimates of emergency department mentions per 100,000 population for each drug in the first half of 2000; arrows reflect significant shifts (p<0.05) between the first halves of 1999 and 2000.

**TX** = Treatment admissions, including alcohol-in-combination, but excluding alcohol-only, except in Minneapolis/St. Paul and New Orleans, where alcohol-only is included, and in Hawaii, New York City, Philadelphia, and San Francisco, where alcohol-in-combination is excluded. Data are statewide for Colorado, Hawaii, and Texas. Reporting periods are July–December 2000, except for the following: January–June 2000 in Atlanta, Baltimore, and Chicago; full year 2000 in Minneapolis/St. Paul, New Orleans, and San Francisco; and January–June 2001 in Detroit and Texas.

**Purity** = Heroin price and purity data provided by the Domestic Monitor Program for the first quarter of 2000; arrows reflect 5-percentage-point shifts since full year 1999; other drug price and purity data is provided by June 2001 CEWG city reports.

### **EXECUTIVE SUMMARY**

### **COCAINE AND CRACK**

Chicago: "Cocaine use appears to have stabilized at a slightly lower level than in the mid-1990s, according to most quantitative indicators. However, prevalence of cocaine use remains relatively high."

Miami: "Although local cocaine abuse still outranks most other illicit drug problems, its decline appears to be speeding up."

Seattle: "In contrast to national trends of declining crack use, there appears to be an increase in crack smoking in public in the downtown core area."

### **MORTALITY DATA**

Between 1999 and 2000, cocaine-related deaths continued to show mixed trends, with 6 increases and 4 declines in the 10 CEWG areas where data were available.

Increases were reported in six areas:

- Detroit/Wayne County: Cocaine-positive toxicology reports peaked in 2000 (at 396 deaths), increasing 16 percent over the 1999 level (342).
- Los Angeles: Deaths in which cocaine was determined the primary cause increased slightly (from 18 to 21).
- Minneapolis/St. Paul: Although lower in 2000 than the 1996 peak, cocaine-related deaths in Hennepin and Ramsey Counties increased 13 percent between 1999 and 2000 (from 53 to 60).
- Philadelphia: Continuing the upward trend since 1996, cocaine-positive toxicology reports increased 31 percent (from 238 to 311), accounting for 47 percent of total drug-positive toxicology reports.
- San Diego: Continuing the steadily increasing trend since 1990, accidental cocaine overdose deaths increased 32 percent (from 44 to 58).

■ Seattle/King County: Cocaine-caused deaths increased 17 percent (from 76 to 89), continuing the upward trend since 1997. Furthermore, cocaine was involved in 41 percent of all drug-related deaths in 2000, a ratio higher than in the previous 6 years.

During the same time period (between 1999 and 2000), mortality trends declined in four areas:

- Honolulu: Continuing a general decline since 1994, cocaine-positive toxicology screens declined slightly (from 24 to 22).
- Miami-Dade County: Cocaine-induced deaths declined 30 percent (from 43 to 30).
- Phoenix: Cocaine-related deaths in Maricopa County declined 25 percent (to 161 in 2000) from the 1999 peak of 215 deaths.
- San Francisco: Deaths ascribed to cocaine declined 6 percent (from 101 to 95).

Longer term medical examiner (ME) data in cities where the majority of drug deaths involved cocaine also show mixed trends: cocaine-related deaths generally increased between 1995 and 1999 in Atlanta and Chicago, remained relatively stable in Miami and Newark, and declined in New York (exhibit 1).

Deaths 1,000 Chicago Newark New York Miami 800 Atlanta 600 400 200 1995 1996 1997 1998 1999 Year

Exhibit 1. Cocaine-related deaths in cities where the majority of drug deaths involved cocaine, 1995-99

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, 1999 (July 2000 update)

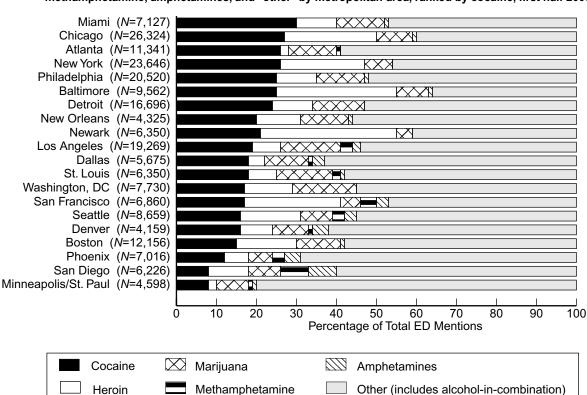


Exhibit 2. Percentages of total ED mentions composed of cocaine, heroin, marijuana, methamphetamine, amphetamines, and "other" by metropolitan area, ranked by cocaine, first half 2000\*

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 2000 (September 2000 update)

<sup>\*</sup>First-half-2000 data are preliminary.

### **EMERGENCY DEPARTMENT DATA**

Cocaine (including crack) remains the most frequently mentioned drug in 14 of the 20 CEWG cities in the Drug Abuse Warning Network (DAWN), according to first-half-2000 estimates, and it equals heroin as a proportion in Boston and marijuana as a proportion in Minneapolis/St. Paul (exhibit 2). It accounts for particularly high proportions ( $\geq$ 20 percent) of total emergency department (ED) drug mentions in nine cities: Atlanta, Baltimore, Chicago, Detroit, Miami, Newark, New Orleans, New York, and Philadelphia. It is outranked by heroin in four cities: Baltimore, Newark, San Diego, and San Francisco.

The Nations' highest rate of cocaine ED mentions per 100,000 population was reported in Chicago, followed by Miami and Atlanta; the lowest rates continued in Minneapolis/St. Paul and San Diego (exhibit 3).

Between the first halves of 1999 and 2000, cocaine ED mentions increased significantly (p<0.05) in four cities (Atlanta, San Diego, San Francisco, and Seattle) (exhibit 4). Moreover, in San Francisco, ED mentions increased substantially in number and as a proportion of total ED mentions (by 3 percentage points). By contrast, significant declines were noted in four cities (Baltimore, Newark, New Orleans, and New York), with Baltimore, New Orleans, and New York showing declines both in number and as a proportion of total ED mentions (by 3, 3, and 2 percentage points, respectively). In the remaining sites, cocaine remained relatively stable as a proportion of total ED mentions.

Long-term ED trends have varied somewhat among the Nation's four highest-ranking cities (exhibit 5). Miami and Chicago's ED rates increased generally between the first halves of 1995 and 2000, while Atlanta's rate generally

Exhibit 3. Estimated rate of cocaine/crack ED mentions per 100,000 population by metropolitan area, first half 2000\*



\*First-half-2000 data are preliminary.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 2000 (September 2000 update)

declined. Philadelphia's cocaine ED rate peaked in the first half of 1998 and has been declining since.

### TREATMENT DATA

Cocaine (including crack) as the primary drug of abuse continues to account for the largest percentage of treatment admissions in 6 of 19 reporting areas (exhibit 6). It also accounts for major proportions of admissions (≥20 percent) in four other areas: Detroit, New York City, San Francisco, and Washington, DC. Heroin continues to dominate treatment proportions in eight areas, marijuana in three, and methamphetamine in two.

Baltimore (N=2.343) -32<sup>b</sup> Philadelphia (N=5.083) -18 New York (N=6,250) –15<sup>b</sup> New Orleans (N=926) -14<sup>b</sup> Newark (N=1,357) –13<sup>b</sup> Washington, DC (N=1,305) -11 Minneapolis/St. Paul (N=364) Phoenix (N=828) St. Louis (N=1,134) Denver (N=646) Dallas (N=1,026) Boston (N=1,834) Detroit (N=4,083) Los Angeles (N=3,568) Miami (N=2,126) Chicago (N=7,217) Atlanta (N=2,934) San Diego (N=524) Seattle (N=1,428) San Francisco (N=1,143) Total U.S. (N=81,361) -30 -20 -10 10 20 30 40 50 Percent of Increase Percent of Decrease

Exhibit 4. Percentage of change in cocaine/crack ED mentions by metropolitan area, first half 2000 versus first half 1999<sup>a</sup>

NOTE: (N) refers to first-half-2000 mentions.

<sup>a</sup>First-half-2000 data are preliminary.

<sup>b</sup>p<0.05

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 2000 (September 2000 update)

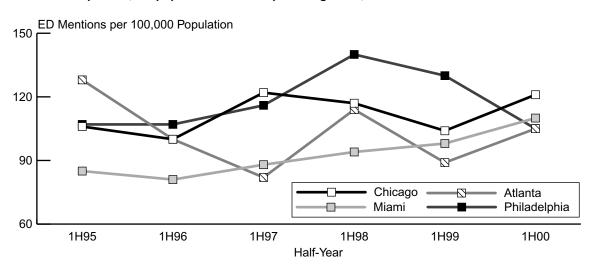


Exhibit 5. Five-year trends in cocaine/crack ED mentions per 100,000 population in four top-ranking cities, first half 1995–first half 2000\*

\*First-half-2000 data are preliminary.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 2000 (September 2000 update)

Exhibit 6. Primary drugs of abuse as percentages of treatment admissions in reporting CEWG areas, second half 2000 (including alcohol-in-combination and excluding alcohol-only)<sup>a</sup>

Area	Cocaine	Heroin	Marijuana	Stimulants
Atlanta	56	7	18	1
Philadelphia <sup>b</sup>	45	26	23	<1
St. Louis	38	13	27	3
Texas	34	14	23	8
New Orleans <sup>c</sup>	33	12	30	<1
Chicago	27	17	17	1
Newark	8	77	5	<1
San Francisco⁵	24	55	NR	14
Boston	12	52	6	<1
Baltimore	14	51	16	0
New York City <sup>b</sup>	29	47	24	NR
Washington, DC	46	47	6	1
Los Angeles	18	45	7	9
Detroit	29	33	NR	NR
Colorado	14	10	27	11
Minneapolis/St. Paul <sup>c</sup>	14	3	21	3
Seattle	14	20	21	9
Hawaii⁵	10	8	31	50
San Diego	11	12	21	38

NOTE: The bolded, shaded areas indicate the top-ranking primary drug of abuse in each area.

SOURCE: Drug abuse treatment agencies

Treatment percentages for cocaine declined in comparison with figures from the same reporting period 1 year earlier in 12 of the 17 sites where trend data were available. Atlanta, Los Angeles, Minneapolis/St. Paul, New Orleans, and San Francisco were the exceptions, with proportions increasing in Atlanta and New Orleans (by 4 and 6 points, respectively) and remaining stable in the other three cities. The largest declines in cocaine treatment proportions occurred in Hawaii (by 4 points), New York City (by 4 points), Philadelphia (by 7 points), and Washington, DC (by 4 points).

Long-term treatment data also show mostly declining or stable trends:

- Baltimore: Cocaine remained highly prevalent among treatment admissions, but continued to decline, from 20 percent in 1996 to only 14 percent in the first half of 2000.
- Boston: Just 9 percent of those in publicly funded treatment in the first half of fiscal year (FY) 2001 reported cocaine as their drug of choice compared with 27 percent in FY 1994. Furthermore, the proportion of admissions reporting past-month cocaine use dropped from 40 percent in FY 1995 to 26 percent in the first half of FY 2001.
- Denver: The proportion of cocaine admissions declined considerably between 1994 and 2000 (from 39 to only 22 percent).

<sup>&</sup>lt;sup>a</sup>Reporting periods are July–December 2000, except for the following: January–June 2000 in Atlanta, Baltimore, and Chicago; full year 2000 in Minneapolis/St. Paul, New Orleans, and San Francisco; and January–June 2001 in Detroit and Texas. 
<sup>b</sup>Alcohol-in-combination is excluded.

<sup>&</sup>lt;sup>c</sup>Alcohol-only is included.

■ Philadelphia: Cocaine admissions peaked in the first half of 1990 at 76 percent of total admissions, compared with 45 percent during the second half of 2000.

■ Texas: Crack is the primary illicit drug abused by adult clients admitted to publicly funded treatment programs, but it decreased between 1993 and 2000 (from 28 to 23 percent of all adult admissions).

Conversely, long-term increases were reported in the three CEWG cities in California:

- Los Angeles: Between 1995 and 2000, cocaine admissions increased steadily (from 14 to 18 percent of all drug admissions).
- San Diego: Between 1990 and 2000, the number of cocaine admissions increased by 128 percent. However, as a proportion of total admissions, cocaine admissions accounted for 8 percent in 1990 and 9 percent in 2000, suggesting fairly stable levels.
- San Francisco: The number of cocaine treatment admissions in the five-county bay area increased substantially between 1994 and 1999, and then declined substantially in 2000. However, as a proportion of total admissions, cocaine's share remained at 23–24 percent throughout the 4 years ending in 2000.

### ARRESTEE URINALYSIS DATA

According to available 2000 data, cocaine is the most frequently detected drug among adult male arrestees in four CEWG areas in the Arrestee Drug Abuse Monitoring (ADAM) program: Atlanta (at 49 percent), Laredo (at 45 percent), Miami (at 44 percent), and New York (at 49 percent) (exhibit 7). It is exceeded by marijuana in 12 CEWG areas (Dallas, Denver, Detroit, Houston, Minneapolis, New Orleans, Phoenix, Philadelphia, San Antonio, San Diego, Seattle, and Washington, DC) and by methamphetamine in Honolulu. Among adult female arrestees, however, cocaine ranks first in 12

areas (Atlanta, Chicago, Dallas, Denver, Detroit, Houston, Laredo, Los Angeles, New Orleans, New York, Philadelphia, and Phoenix), followed by marijuana in two (Minneapolis and Seattle) and methamphetamine in two (Honolulu and San Diego) (exhibit 8).

ADAM data from 2000 cannot be compared with previous data due to substantial modifications of the ADAM data collection and reporting system.

Continuing a decade-long decline, cocaine-positive urinalysis levels among adult arrestees involved in the DC Pretrial Services Agency were at 34 percent in 2000 and the first quarter of 2001. Juvenile arrestees in Washington, DC, tested cocaine-positive at less than 10 percent during 2000 and the first quarter of 2001.

### OTHER LOCAL DATA

Poison control data in various areas reflect mixed trends:

- Boston: In 2000, cocaine was mentioned in 15 percent of the helpline calls in which drugs were specified—close to previous periods. (By contrast, alcohol was mentioned in 43 percent and heroin in 26 percent of calls.)
- Denver: Between 1994 and 1995, calls to the poison center concerning cocaine dropped from 71 to 49, remained at about that level through 1999, but increased to 59 in 2000.
- Texas: Poison control centers reported 357 confirmed exposures to cocaine in 1999 and 1,455 in 2000.

Survey data for cocaine use also show mixed trends:

■ San Francisco County: The proportion of high school students who reported ever using cocaine dropped between 1997 and 1999 (from 6 to 5 percent).

Exhibit 7. Percentage positive for cocaine, heroin, marijuana, and methamphetamine among adult male booked arrestees, by metropolitan area, 2000 (ranked by cocaine)

				Mari-	Metham-
City	(N)	Cocaine	Heroin	juana	phetamine
New York	(1,534)	49	21	41	0
Atlanta	(1,115)	49	3	38	1
Laredo	(374)	45	10	29	0
Miami	(1,042)	44	4	39	0
Denver	(1,130)	35	3	41	3
New					
Orleans	(884)	35	16	47	0
Phoenix	(2,247)	32	7	34	19
Houston	(1,330)	32	7	36	1
Seattle	(1,858)	31	10	38	9
Philadelphia	(520)	31	12	49	0
Dallas	(1,574)	28	3	36	2
Minneapolis	(1,113)	26	3	54	2
Washington,					
DC	(635)	25	7	45	0
Detroit	(844)	24	8	50	0
San Antonio	(848)	20	10	41	0
Honolulu	(1,111)	16	7	30	36
San Diego	(1,568)	15	6	39	26

NOTE: Male findings are weighted and represent probability-based sampling; no urinalysis data for male arrestees are available for Chicago and Los Angeles at this time; shaded areas indicate highest ranking drug in each city.

SOURCE: National Institute of Justice, Arrestee Drug Abuse Monitoring program, 2000 Annual Report

■ Texas: The 2000 Texas School Survey of Substance Abuse (for grades 7–12) found that 8.6 percent of students had ever used cocaine hydrochloride (HCl) and 2.9 percent had used it in the past month. Use of crack was lower, with students reporting 2.6 percent lifetime and 0.7 percent past-month use. The levels of use in 2000 decreased very slightly from 1998 levels.

Additionally, Colorado hospital discharge data show that cocaine cases per 100,000 population

Exhibit 8. Percentage positive for cocaine, heroin, marijuana, and methamphetamine among adult female booked arrestees, by metropolitan area, 2000 (ranked by cocaine)

				Mari-	Metham-
City	(N)	Cocaine	Heroin	juana	phetamine
Chicago	(1,301)	59	40	26	0
Atlanta	(379)	58	3	24	0
New York	(481)	53	19	28	0
Denver	(387)	47	6	34	5
Detroit	(107)	42	24	24	0
New					
Orleans	(264)	41	9	28	0
Philadelphia	(96)	41	11	22	0
Seattle	(36)	39	17	48	22
Minneapolis	(40)	33	6	44	0
Los Angeles	(300)	33	8	32	12
Houston	(116)	32	3	27	2
Phoenix	(379)	30	22	26	24
San Diego	(554)	26	8	27	29
Dallas	(94)	24	5	21	3
Laredo	(77)	22	7	17	0
Honolulu	(162)	19	8	19	47

NOTE: Female findings are unweighted and not based on probability sampling; no urinalysis data among female arrestees are available for Miami, San Antonio, and Washington, DC, at this time; shaded areas indicate highest ranking drug in each city.

SOURCE: National Institute of Justice, Arrestee Drug Abuse Monitoring program, 2000 Annual Report

increased between 1994 and 1998 (from 60.1 to 62.8), declined in 1999 (to 62.3), but increased slightly in 2000 (to 63.5).

#### DEMOGRAPHIC DATA

Boston: "Cocaine continues to be the most common illicit drug among females and Black treatment admissions in the Greater Boston area."

Washington, DC: "Although anecdotal reports suggest that crack is occasionally used by Whites in the Dupont Circle and Adams Morgan

neighborhoods, this drug is used predominantly by Blacks. Major user groups include males in their fifties and sixties who use it as a sexual performance enhancer and women in their early twenties to midthirties who offer access to housing for the drug."

### Age

Mortality demographics (available in five CEWG areas) continue to reflect an aging cocaine-using population. For example, the average age of cocaine-related decedents was 37.1 years in Hennepin County (Minneapolis/St. Paul) in 2000 and 37.5 in Texas in 1999. Similarly, in FY 2000, cocaine decedents in San Francisco had a median age of just older

than 40, and in San Diego, 63 percent of 2000 accidental cocaine overdose decedents were between the ages of 36 and 45. Two-thirds of the Miami-Dade cocaine-related decedents in 2000 were older than 34.

Likewise, age distributions among cocaine ED mentions continue to suggest an aging cohort of cocaine users. The 35+ group continues to account for the largest proportion of cocaine mentions in every CEWG city in DAWN (exhibit 9). Between the first halves of 1999 and 2000, this oldest group's representation increased by ≥5 percentage points in three cities (Atlanta, New York, and San Francisco); moreover, that group also increased significantly

Exhibit 9. Age and gender distribution of cocaine ED mentions, by percentage, in reporting CEWG cities, first half 2000\* (ranked in descending order by the 35+ group)

City	( <i>N</i> )	35+	26-34	18–25	12–17	Males
Detroit	(4,083)	71	23	5	0-	61
San Francisco	(1,143)	64+	24+	9+	2	65+
Washington, DC	(1,305)	63	25–	10	1	55–
Atlanta	(2,934)	62+	27	10	0-	66+
Chicago	(7,217)	61	29	9+	1	60
New York	(6,250)	61	32-	7–	0	73
Miami	(2,126)	58+	27	13+	1+	66
San Diego	(524)	58+	20	18+	4+	60+
Seattle	(1,428)	58+	30+	11+	1	65+
Baltimore	(2,343)	58–	30–	11–	1	60–
St. Louis	(1,134)	58	30	10	2	60
New Orleans	(926)	56	27	16–	1	73–
Newark	(1,357)	55–	33–	11	0-	60–
Los Angeles	(3,568)	54	28	16	2	64
Boston	(1,834)	51	34	14	1	60
Philadelphia	(5,083)	49	34–	14	2	64–
Phoenix	(828)	47	28–	21	4–	68
Denver	(646)	46	32	18–	3	61
Dallas	(1,026)	44	35	17	4	64
Minneapolis/St. Paul	(364)	44	31–	20	5	66

NOTE: "+" or "-" indicates significant increase or decrease (p<0.05) in number (not percentage) of mentions since the first half of 1999.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 2000 (September 2000 update)

<sup>\*</sup>First-half-2000 data are preliminary.

in number of mentions in Atlanta and San Francisco. In the remaining cities, the proportion of the 35+ group increased slightly or remained relatively stable, except in Detroit, where the proportion declined by 4 points.

Correspondingly, as they moved into the oldest age group, the 26–34-year-olds declined as a percentage of cocaine ED mentions in every city except for Dallas, Denver, and St. Louis (where they increased by 3 points each). Between the first halves of 1999 and 2000, the largest declines (5–7 percentage points) occurred in Atlanta, Minneapolis/St. Paul, San Diego, San Francisco, and Washington, DC.

The young adult (18–25) group, accounting for 5–21 percent of cocaine ED mentions in the 20 cities, remained relatively stable. Similarly, the juvenile (12–17) group remained relatively stable, continuing to account for 0–5 percent of cocaine mentions.

Cocaine ED rates per 100,000 population were highest among the 26–34 age group in all CEWG cities in DAWN, except for Minneapolis/ St. Paul, where the rate for the 18–25 group equaled that of the 26–34 group (exhibit 10).

Similar to mortality and ED data, treatment data continue to reflect an aging group of cocaine users (exhibit 11). The oldest (35+) group accounts for the largest proportions of primary cocaine admissions (ranging from 48 percent in Colorado to 81 percent in Atlanta) in all reporting CEWG areas. The 26–34 group continues to transition into the oldest group: compared with the same period 1 year earlier, the 26–34 group declined in all 11 CEWG areas where comparison data were available, and the 35+ group increased as a proportion of cocaine treatment admissions in all reporting areas, except for Colorado, where the group's proportion declined by 3 points. (However, it is important to note that long-term trends among

Exhibit 10. Cocaine ED rates per 100,000 population, by age and metropolitan area, first half 2000\*

City	35+	26–34	18–25	12–17
Atlanta	124	178	86	4
Baltimore	101	202	102	9
Boston	44	109	54	7
Chicago	134	238	90	13
Dallas	36	83	59	18
Denver	34	82	76	15
Detroit	119	157	47	1
Los Angeles	44	76	46	9
Miami	111	225	132	13
Minneapolis/ St. Paul	12	28	28	9
Newark	70	183	73	3
New Orleans	79	147	108	8
New York	78	160	48	3
Philadelphia	91	262	136	20
Phoenix	35	78	70	15
St. Louis	49	100	44	10
San Diego	24	31	23	9
San Francisco	74	112	64	17
Seattle	75	140	73	12
Washington, DC	39	53	27	6

NOTE: Shaded areas indicate highest ranking age groups in each city.

\*First-half-2000 data are preliminary.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 2000 (September 2000 update)

Colorado cocaine admissions show that the 35+ group has generally increased.) The largest increase among the 35+ group (by 13 points) occurred in Seattle.

The young adult (18–25) group accounts for smaller proportions than the two older groups (ranging from 3 percent in Washington, DC, to 16 percent in Texas); trends within that group are relatively stable. Juveniles (≤17 years) account for 0–6 percent of cocaine admissions in reporting CEWG areas.

Exhibit 11. Age and gender distribution of primary cocaine treatment admissions, by percentage, in reporting CEWG areas<sup>a</sup> (ranked in descending order by the 35+ group)

Area	35+	26–34	18–25	≤17	Males
Atlanta	81	10	4	6	55
Washington, DC	72	25	3	<1	61
Seattle	70	33	6	4	58
San Diego	64	26	9	2	60
San Francisco	64	28	7	1	62
St. Louis	63	31	6	<1	60
Newark	59	37	4	0	51
Baltimore	58	34	7	1	59
Los Angeles <sup>b</sup>	57	32	10	1	58
New York City <sup>c</sup>	57	37	6		64
Boston	55	36	9	<1	62
Minneapolis/ St. Paul	53	35	11	2	65
Chicago	50	39	10	1	54
Texas	49	32	16	3	57
Colorado	48	34	15	2	58
Philadelphia	NR	NR	NR	NR	53

<sup>&</sup>lt;sup>a</sup>Reporting periods are July–December 2000, except for the following: January–June 2000 in Atlanta, Baltimore, and Chicago; full year 2000 in Minneapolis/St. Paul, New York City, and San Francisco; and January–June 2001 in Texas.

SOURCE: Drug abuse treatment agencies

Similar to other indicators, the highest levels of cocaine positives among adult male booked arrestees in 2000 were among the oldest age groups (36+ and 31–35 years) in all CEWG areas in the ADAM program (exhibit 12). Despite higher levels among the older age groups, cocaine-positive levels are also relatively high among the 26–30, 21–25, and <21 age groups: levels among the 26–30 group range from 9 percent in Detroit to 48 percent in New York, levels among the young adult group (21–25 years) range from 6 percent in Honolulu and Washington, DC, to 45 percent in Laredo, and levels among the <21 group range from 2 percent in Honolulu and Washington, DC, to 36 percent in Laredo.

Exhibit 12. Percent cocaine-positive, by age, among adult male booked arrestees, 2000 (ranked in descending order by the 36+ age group)

Area	36+	31–35	26–30	21–25	<21
New York	66	69	48	22	8
Atlanta	61	65	40	32	16
Detroit	51	34	9	10	3
Philadelphia	51	40	39	12	6
Miami	50	62	37	32	27
New Orleans	49	40	43	25	22
Houston	46	37	29	20	26
Laredo	45	59	45	45	36
Washington, DC	42	27	37	6	2
Seattle	41	43	26	16	20
Denver	40	45	30	26	29
Phoenix	40	35	28	24	25
Minneapolis	36	38	35	14	11
Dallas	33	28	27	27	21
Honolulu	26	14	13	6	2
San Diego	21	14	13	10	5
San Antonio	20	24	20	19	22

NOTE: No urinalysis data for male arrestees are available for Chicago and Los Angeles at this time; shaded areas indicate highest ranking age group in each city. SOURCE: National Institute of Justice, Arrestee Drug Abuse Monitoring program, 2000 Annual Report

#### Gender

Atlanta: "Cocaine once again was the most commonly mentioned illicit drug among females in treatment."

St. Louis: "The continued use of cocaine, particularly crack, by urban women, has potentially severe long-term consequences by contributing to the spread of sexually transmitted diseases through multiple partners. Numerous small behavioral studies of crack-abusing women have found that crack use is predictive of multiple partners and HIV-risk exposure."

Gender demographics among cocaine-related decedents (available in four western CEWG areas) show that males continue to account for the large majority. In 2000, among cocaine-

<sup>&</sup>lt;sup>b</sup>Age groups are 36+, 26–35, 18–25, and ≤17.

<sup>°</sup>Age groups are >35, 26-35, and <26.

related decedents, males accounted for 79 percent in San Diego, 81 percent in San Francisco County, and 83 percent in Seattle/King County. In 1999, 76 percent of cocaine-related decedents in Texas were male.

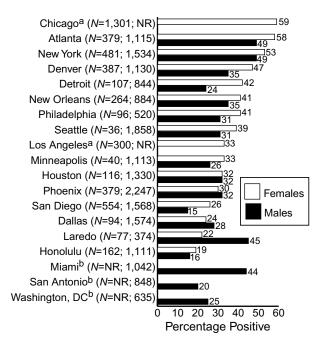
Similarly, males continue to outnumber females as a percentage of cocaine ED mentions in every CEWG city in DAWN (exhibit 9). The gender gap is widest in New Orleans and New York (73 percent male and 37 percent female for both cities); it is narrowest in Washington, DC (55 percent male and 45 percent female). Between the first halves of 1999 and 2000, the male-female ratio of cocaine ED mentions declined or remained relatively stable in most CEWG cities included in DAWN.

Males also outnumber females among cocaine treatment admissions in all reporting areas (exhibit 11). In the 12 areas where gender trend data were available, trends were relatively stable compared with the same period 1 year earlier, with two exceptions: female representation increased substantially (≥5 points) in Colorado (6 points) and declined substantially in San Diego (6 points).

In nearly every reporting area, the gender gap among treatment admissions was narrower for cocaine than for other drugs. By contrast, the gender gap continues to be widest for marijuana.

According to 2000 ADAM data, females tested cocaine-positive at higher levels than males in every CEWG area in ADAM, except for Phoenix and three Texas cities: Dallas, Houston (where male and female levels were equal), and Laredo (exhibit 13). Atlanta and New York had the highest levels among males (at 49 percent positive), while Chicago had the highest level among females (at 59 percent positive).

Exhibit 13. Percentage of adult male and female arrestees positive for cocaine, by metropolitan area, 2000 (ranked by females)



NOTE: Male findings are weighted and represent probability based sampling; female findings are unweighted and not based on probability sampling.

aData are not available for males at this time. bData are not available for females at this time.

SOURCE: National Institute of Justice, Arrestee Drug Abuse Monitoring program, 2000 Annual Report

### Race/Ethnicity

According to race/ethnicity demographics among cocaine decedents (available in three western CEWG areas), the typical cocainerelated decedent is White. For example, among cocaine decedents, 67 percent in San Diego were White in 2000; 79 percent in Seattle were White and 19 percent were Black in 2000; and 43 percent were White, 31 percent were Black, and 25 percent were Hispanic in Texas in 1999.

By contrast, Blacks predominate among cocaine ED mentions in 13 of the 20 CEWG cities in DAWN (ranging from 32 percent in San Diego to 77 percent in Detroit), Whites

predominate in 2 cities (ranging from 10 percent in Newark to 58 percent in Boston), and 5 cities have too many mentions in the "race unknown" category to be included in the count. The largest Hispanic representation continues to be reported in Los Angeles (at 24 percent).

SEVERAL CEWG AREAS REPORT INCREASES AMONG HISPANIC TREATMENT ADMISSIONS FOR COCAINE, ESPECIALLY FOR THE INTRANASAL USE OF COCAINE HCL:

Denver: Between 1994 and 2000, the proportion of Hispanic cocaine admissions among total cocaine admissions has nearly doubled (from 16 to 29 percent).

New York City: A recent trend of importance is an increase in Hispanics among treatment admissions who use cocaine HCl intranasally from 29 percent in 1999 to 37 percent in 2000.

Texas: Between 1987 and 2000, the proportion of Hispanic treatment admissions who use cocaine HCl has increased drastically (from 23 to 45 percent).

Between the first halves of 1999 and 2000, most cities' racial/ethnic distributions of cocaine ED mentions remained stable, although several did shift. For example, in Atlanta and San Diego, White representation declined (by 5 and 8 points, respectively), while Black representation increased in Atlanta (by 3 points) and Black and Hispanic representation increased in San Diego (by 4 and 2 points, respectively). Other shifts in racial/ethnic distributions were most likely due to the difference in the number of mentions in the "race unknown" category during that time period.

Similar to ED data, among primary cocaine treatment admissions, Black representation

(ranging from 21 percent in Colorado to 96 percent in Washington, DC) was greater than that of other races/ethnicities in all reporting areas but Colorado, where White representation was highest. Proportions of Whites among cocaine admissions ranged from 2 percent in Washington, DC, to 47 percent in Colorado. Hispanic representation ranged from 0 percent in St. Louis to 29 percent in Colorado.

Trends in racial/ethnic distribution among cocaine treatment admissions shifted in several of the 12 areas where comparable data for 1 year earlier were available: in Baltimore, Black representation increased, while White representation declined (by 9 points each); in Boston, Black representation declined (by 2 points), while White representation increased (by 4 points); in Colorado, Black representation declined, while Hispanic representation increased (by 5 points each); and in Newark, Black and White representation increased (by 2 and 3 points, respectively), while Hispanic representation declined (by 5 points). Racial/ ethnic distributions remained relatively stable elsewhere.

#### **USE PATTERNS**

Atlanta: "Although the crack market in Atlanta has changed somewhat since the start of the crack epidemic in the early 1980s, many ethnographers report the largest change among the users themselves. Many users, previously interested in quantity, are now more interested in quality. Changes in routes of administration over time may be one indication of this."

#### **Route of Administration**

Atlanta: "Ethnographic data suggest that smoking remains the more common route, but that other routes of administration may also be quite prevalent."

#### LOCAL GEOGRAPHIC PATTERNS:

In most CEWG metropolitan areas, smoking crack remains a central-city phenomenon, but using cocaine HCl intranasally occurs citywide and more often in suburban areas:

- Boston: Police, outreach workers, and treatment providers agreed that crack remains the predominant form of cocaine in the central city.
- Detroit: In Detroit/Wayne County during the first half of FY 2001, crack use accounted for 92 percent of primary cocaine treatment admissions, while statewide, crack use accounted for only 82 percent of primary cocaine admissions.
- St. Louis: Crack use varies by area. It is the primary drug of choice identified in inner-city treatment programs; alcohol, however, remains the primary drug in both the outlying rural areas and statewide. Cocaine has a wide market base, has remained relatively inexpensive, and is prevalent in the urban areas.

However, crack use among central-city residents may be declining in some areas:

- Baltimore: The proportion of cocaine treatment admissions living inside the central city is high but has been decreasing: 82 percent of first-half-2000 cocaine admissions live in the central city compared with 92 percent in 1996.
- Newark: Most of the decline in primary cocaine treatment admissions since 1992 may be attributed to reduced cocaine use by Newark residents. For example, the proportionate share of cocaine (including crack) admissions in Newark City declined from 27 percent in 1992 to only 9 percent in the first half of 2000.

Other patterns and trends of cocaine use related to location within metropolitan area vary from city to city. Changing demographics in San Francisco may partly explain the decline of cocaine use, especially in San Francisco County, where low-income Blacks have been priced out of their traditional neighborhoods, such as the Western Addition, or have lost their homes in recently demolished public housing projects. In Texas, students in schools near the Texas-Mexican border continue to show substantially higher levels of both cocaine HCl and crack use compared with students statewide; additionally, in Laredo, 45 percent of adult male arrestees and 22 percent of adult female arrestees tested cocaine-positive in 2000, underscoring the extent of the cocaine problem on the border.

St. Louis: "Most cocaine users smoke crack. Except for continued use among old-time injecting drug users (IDUs) who combine cocaine and heroin, little intravenous use is evident. Younger users smoke crack exclusively."

Washington, DC: "Intravenous injection of crack has become increasingly common."

Smoking, typically crack, remains the predominant route of administration among primary cocaine treatment admissions in every

reporting area (ranging from 60 percent in Colorado to 92 percent in Detroit and San Francisco), followed by intranasal use (ranging from 1 percent in Seattle to 28 percent in Newark) and injecting (ranging from 1 percent in Atlanta, Chicago, Los Angeles, and San Francisco, to 13 percent in Colorado).

Distribution of route of administration has remained relatively stable since 1 year ago in the 11 areas where trend data were available,

with a few exceptions: in Baltimore, cocaine smokers increased (by 5 points), while intranasal users declined slightly (by 2 points); in Colorado, continuing the trend since 1994, smokers declined (by 5 points), while intranasal users increased (by 4 points); and in Newark, the proportion of cocaine smokers declined, while those who use intranasally increased (by 7 points each). Injecting remained relatively stable or declined in all reporting areas.

### SIGNS POINT TO INCREASES IN COCAINE HCL AVAILABILITY AND USE IN SEVERAL CEWG AREAS:

Boston: Some police, outreach workers, and treatment providers report that cocaine HCl has become more available, especially in the central city.

Denver: The increases in intranasal use of cocaine HCl and declines of smoking crack among treatment admissions in recent years may be due to the increased availability of cocaine HCl.

Los Angeles: Although crack remains the predominant drug of use, cocaine HCl use shows slight increases among different indicators.

Newark: Between the second halves of 1999 and 2000, the proportion of treatment admissions who smoke crack declined, while the proportion of those who use cocaine HCI intranasally increased.

Route of administration continues to vary by demographic characteristics of the treatment population:

■ Newark: In the second half of 2000, 73 percent of Black cocaine admissions smoked cocaine, while 21 percent used it intranasally. The corresponding percentages among Hispanics were lower for smoking (47 percent) but higher for intranasal use (50 percent).

- New York City: Compared with those who use cocaine intranasally, those who smoke crack are more likely to be female (40 versus 27 percent), Black (72 versus 43 percent), readmissions to treatment (78 versus 67 percent), and without income (34 versus 23 percent). Hispanics have increased among treatment admissions who use cocaine intranasally (from 29 percent in 1999 to 37 percent in 2000).
- Philadelphia: Among male cocaine treatment admissions in 2000, 79 percent reported smoking the drug compared with 88 percent of females.
- Texas: Cocaine HCl treatment admissions are younger than crack admissions (31 versus 35 years) and more likely to be male and White. Between 1987 and 2000, the percentage of Hispanic treatment admissions who use cocaine HCl increased (from 23 to 45 percent), while the proportions among Whites and Blacks dropped (from 49 to 46 percent among Whites and from 28 to 8 percent among Blacks). Furthermore, the proportion of Black crack admissions dropped between 1993 and 2000 (from 75 to 50 percent), while the proportions of Whites and Hispanics increased (from 20 to 36 percent among Whites and from 5 to 14 percent among Hispanics).

#### **Multisubstance Use**

Atlanta: "Previously, heroin users tended to inject the drug, and most users injected a speedball.... However, initially the reference ['speedball'] was the combined injection of heroin and cocaine. Nowadays, a speedball includes any combined use of heroin and cocaine in all forms, including use of one drug after the other."

Available mortality data show high levels of heroin present in cocaine decedents, suggesting continued use of "speedballs" (combination of cocaine and heroin, typically by injecting cocaine HCl combined with heroin, and less commonly by injecting diluted crack combined

### IN MANY CEWG AREAS, COCAINE IS INCREASINGLY REPORTED AS A SECONDARY OR TERTIARY DRUG OR AS USED IN COMBINATION WITH OTHER DRUGS:

Baltimore: "Although cocaine was reported as a primary substance by only 14 percent of treatment admissions, it was reported as a secondary substance by an additional 37 percent."

Miami: "Cocaine is increasingly seen as a secondary drug of abuse in treatment indicators. The implication is that many people are still using and even trying cocaine for the first time. There is also a pattern to use it in combination with other drugs such as ecstasy (methylene-dioxymethamphetamine, MDMA). The concept is that users know cocaine is dangerous and have selected not to use too much of it, but they ignore the risks of concomitant drug use."

St. Louis: "Polydrug use is evident in the treatment data. The increases in marijuana, heroin, and methamphetamine use suggest this trend will continue."

Texas: "A 'new' drug, low-purity, adulterated heroin mixed with adulterated cocaine and pressed into a block, may soon appear due to the growing trend of using heroin and cocaine HCl together."

with heroin). For example, in San Diego, cocaine was rarely the only drug found in the 58 accidental overdose cocaine deaths, and common combinations were cocaine and heroin or alcohol. In Philadelphia, cocaine in combination with other drugs was found in 67 percent of all cocaine-positive decedents in 1999 and 75 percent in 2000; heroin was present in 35 percent of cocaine-positive toxicology reports in 1999 and 43 percent in 2000. Cocaine-only deaths in Phoenix in 2000 (161) reflect a substantial decline of 25 percent

compared with 1999; however, deaths from a combination of cocaine and morphine appear to remain unchanged for the same reporting period. Conversely, in Seattle/King County, cocaine-only deaths increased between 1999 and 2000 (to 35 percent of all drug deaths). Still, heroin and alcohol remain the most common other drugs detected there in combination with cocaine in 2000, consistent with previous years.

Qualitative reports of speedballing also continue in many CEWG areas including Atlanta, Baltimore, New York City, Philadelphia, St. Louis, and Texas. For example, spring 2001 focus groups in Philadelphia estimated that 55 percent of cocaine HCl buys are for intranasal use, 6 percent for injecting, and 39 percent for injecting in a speedball. Old-time injecting drug users (IDUs) in St. Louis continue to use speedballs. In Texas, the combination of cocaine HCl and heroin is considered a growing trend. And in Baltimore, cocaine and heroin ED rates and patterns have been similar since 1995, most likely due to the concurrent use of the two drugs.

Treatment data further suggest the overlap of cocaine and heroin use: among primary heroin users, cocaine was the most common secondary drug in 9 of the 11 reporting areas. (In Boston and Texas, alcohol was the most frequently reported secondary drug among heroin admissions.) The severity of cocaine as a secondary problem among primary heroin admissions is underscored by the high percentages reported, ranging from 22 percent in Colorado to 54 percent in Washington, DC.

Although heroin is often used with cocaine, alcohol is the most common secondary drug of abuse among primary cocaine treatment admissions in the 11 reporting areas, ranging from 22 percent in Atlanta to 57 percent in Minneapolis/St. Paul.

Additionally, marijuana is commonly mentioned as the tertiary drug of abuse among primary cocaine admissions in CEWG areas. Furthermore, 19 percent of 581 cocaine cases at a South Florida medical center involved the combination of cocaine and marijuana. In Philadelphia, "turbos" (blunts laced with cocaine HCl or crack) remain common, and in Washington, DC, small rocks of crack are added to marijuana blunts, and users sometimes dip blunts into a liquid solution of crack. Other crack combinations also remain common in Philadelphia, including alprazolam (Xanax) or diazepam (Valium) with crack and, less frequently, phencyclidine (PCP) with crack. Similarly, in New York City, cooking crack with diazepam was reported, and smoking crack and PCP together is called "space basing."

# LAW ENFORCEMENT AND MARKET DATA

Boston: "The proportion of lab submissions of crack...has declined steadily since 1994, suggesting the crack epidemic continues to wane."

Honolulu: "The Hawaii Police Department reports that there has been an increase with respect to cocaine use."

St. Louis: "Cocaine indicators such as deaths, treatment admissions, and law enforcement data show a recent upswing....However, cocaine is no longer the drug problem driving the efforts of St. Louis law enforcement and treatment programs. DEA emphasis has shifted from cocaine to methamphetamine and heroin."

## Arrests, Seizures, and Lab Submissions

Cocaine-related arrests and seizures in various CEWG areas continue to show high levels of activity and mostly declining trends:

■ Boston: Arrests continued to drop, from 45 percent of all drug-related arrests in 1999 to

41 percent in 2000—well below the all-time high of 66 percent in 1992.

- Boston: Cocaine lab submissions constituted 51 percent of all drugs analyzed in 1993 but fell to 26 percent in 2000. Within this trend, cocaine HCl submissions have fluctuated around 18 percent, while crack submissions decreased markedly from 34 to 8 percent.
- Chicago: Of the 55,000 drug arrests in 1999, 45 percent were for cocaine-related charges.
- Denver: The amount of cocaine HCl seized has declined from 526 pounds in 1999 to 244 pounds in 2000.
- Honolulu: The number of cocaine cases has plummeted over the past 4 years: cocainerelated cases in 2000 total about one-fifth the number in 1996.
- Los Angeles: Between 1999 and 2000, the amount of cocaine seized dropped 45 percent (from 4,344 to 2,375 pounds). One possible explanation for the decline is that major narcotics transshipments are bypassing Los Angeles for smaller, surrounding cities with heavy concentrations of Hispanic residents. This tactic allows for easier assimilation of the traffickers and dealers into the community. In addition, the shipment sizes have been reduced.
- New York: Cocaine arrests declined 22 percent between 1995 and 1999 (from 40,846 to 31,781). Nevertheless, more than 82 percent of arrests for cocaine in 1999 involved crack.

Conversely, in several CEWG areas (Minneapolis/St. Paul, Newark, Phoenix, and San Diego), cocaine seizures, arrests, or lab submissions increased recently. In Minneapolis/St. Paul, cocaine seizures are projected to increase between 2000 and 2001: 2,914 grams were seized in the entire year of 2000 and 2,239 grams were seized in just the first quarter of 2001. Additionally, Minnesota's State crime

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lab reported 10,177 grams of cocaine submitted in 2000 and 4,201 grams through April 2001. Similarly, in Newark, data suggest that 3,608 cocaine arrests were made in 1998, compared with 1,934 in just the first quarter of 2000. In Phoenix, the DEA noted an increase in cocaine seizures and arrests during the second quarter of 2001, and in San Diego, cocaine seizures also increased in 2000 and in 2001.

#### Availability, Price, and Purity

The availability of cocaine HCl is described as wide and steady in CEWG areas. Prices of cocaine HCl vary widely across the country, selling for as little as \$20–\$50 per gram in New York City to \$80–\$150 per gram in New Orleans (exhibit 14). Prices have remained relatively steady since the December 2000 reporting period, except in Chicago, where

prices have risen; in Miami, where kilogram prices have risen slightly; and in San Diego, where pound prices have decreased.

Packaging and the amount of cocaine HCl sold vary geographically. In New York City, cocaine HCl is packaged in tinfoil, glassine bags, pyramid paper, crisp dollar bills, and plastic wrap knotted on both ends. One dealer there reported packaging cocaine in pornographic magazine pages. In Phoenix, wholesale cocaine is typically sold in kilogram and half-kilogram pressed bricks, while retail cocaine (packaged in folded papers called "bindles," small vials, plastic zipper baggies, and plastic Tupperware-type containers) is sold in gram to ounce quantities. In Philadelphia, where cocaine HCl is not as readily available in small, \$5 quantities (as is crack), \$10 and \$20 bags are quite common. In Washington, DC, cocaine HCl is sold in "40 bags" (half-gram

Exhibit 14. Cocaine hydrochloride (HCI) prices and purity in reporting CEWG areas

Area	Purity (%)	Gram	Ounce	Kilogram
Atlanta	NR	\$100	NR	NR
Boston	30–90	\$50–\$90	\$800-\$1,400	\$25,000-\$32,000
Chicago	39	\$80–\$150	\$2,000	\$20,000-\$30,000
Denver	NR	\$80	\$600-\$1,000	\$17,000–\$20,000
Honolulu	20–90	\$100–\$120	\$1,100-\$1,500	\$26,000-\$56,000
Los Angeles	80–85	NR	NR	\$14,000-\$18,000 (wholesale) \$70,000-\$100,000 (street level)
Miami/South Florida	80–90 (wholesale)	\$40–\$60	\$600–\$700	\$17,000–\$20,000
Minneapolis/St. Paul	NR	\$100	\$700–\$1,200	\$24,000
New Orleans	NR	\$80–\$150	\$800-\$1,200	\$20,000-\$28,000
New York City	NR	\$20–\$50	\$650-\$1,000	\$20,000-\$28,000
Phoenix	NR	\$80	\$400–\$800	\$13,500-\$17,000
St. Louis	77	\$100–\$125	NR	NR
San Diego	45–85	\$75–\$100	NR	NR
San Francisco	60–90	NR	NR	\$14,000-\$22,000
Seattle	NR	\$30	NR	NR
Texas	68	\$50–\$100	\$400–\$1,200	\$10,000-\$22,000
Washington, DC	NR	NR	\$900–\$1,250	\$16,500–\$35,000

SOURCE: CEWG city reports, June 2001

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amounts retailing for \$40) in the Northeast warehouse district, affluent Georgetown, and nightclubs and restaurants around Dupont Circle.

Cocaine HCl purity in reporting CEWG areas ranges from 20 to 90 percent. Purity trends have been mixed since the December 2000 reporting period, with declines in Chicago (from 60-70 percent during 1991-99 to 39 percent pure in 2000), increases in New York City, and relatively stable trends in other reporting areas. In Boston, where cocaine has been found adulterated with creatine (a nutritional supplement), procaine (Novocain), caffeine, and boric acid, purity is increasingly variable, with more users encountering "burn bags" of low-quality product. Some sellers in Phoenix reportedly have two types of cocaine available: "Peruvian," at 98 percent pure, and "Colombian," at 90 percent pure.

New York City: "Given the current high purity of cocaine HCl, crack users are more likely to be freebasing their own. These people refer to themselves as 'chemists.'"

Philadelphia: "Crack is still as easy to acquire as it has been since the beginning of the epidemic 13 years ago."

Crack remains widely available in CEWG areas, except in Denver, where availability has declined and is limited to larger central-city areas in small amounts. Crack prices range from \$19–\$35 per gram in New York to \$250–\$400 per gram in St. Louis (exhibit 15). In most CEWG areas, prices and purity remain unchanged since the December 2000 report, except in Philadelphia, Seattle, and Washington, DC, where prices are stable but purity may have declined.

Ethnographic data in Washington, DC, indicate that larger retail units, such as "working fifties," are rarely sold, partly due to the

declining purity of crack on the street. In Dallas, street-level amounts of crack are sold by price amounts (a "20" or "50" means \$20 or \$50 worth of crack judged by eyesight of the buyer and seller), and mid- to upper-level amounts of crack are sold by weight (a "big eight" is C kilogram).

In CEWG areas, crack is typically sold by the rock, and alternative packaging varies geographically. For example, in Phoenix, crack is held loose in a person's pocket or mouth or packaged in small, plastic zipper bags. In Los Angeles, it is packaged in plastic "bundles," loose plastic, tinfoil, or balloons. In New York, where the packaging of crack continues to change, small glassine bags and plastic wrap knotted at both ends are replacing plastic vials. In Philadelphia, the predominant form of crack sold is "ready rock"—noticeably smaller than in fall 1999—and some dealers offer an even smaller rock (called a "trey"). Brand names for crack, reported for the first time in Philadelphia in 1997, have been consistently reported through spring 2001; however, it is much more common for crack to be sold in colored packets than with brand names or logos in that city. In Newark, designer brands cost more than regularly packaged crack.

# **Distribution and Trafficking**

In many areas, cocaine continues to be distributed by street gangs and criminal organizations. Mexican nationals control the majority of cocaine trafficking in Denver through Hispanic, White, and Black street-level distributors, with crack supplies continuing to come from street gangs in Los Angeles and Chicago. Gangs of medium to low sophistication in Washington, DC, distribute crack primarily around housing projects and open-air markets in low-income areas. In New York City, cocaine HCl is sold by White, Black, and Hispanic males in their late twenties or younger, but

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Exhibit 15. Crack cocaine prices and purity in reporting CEWG areas

Area	Price/Unit; Purity
Atlanta	\$100/gram
Boston	\$10-\$20/rock; 30-90% pure
Chicago	\$5, \$10, or \$20/rock
	\$500-\$800/ounce
Denver	\$5-\$20/rock \$800-\$1,000/ounce
Detroit	\$5-\$50/rock (\$10 average price)
Honolulu	\$5-\$15/dose \$20-\$100/rock \$100-\$250/gram \$1,000-\$1,500/ounce
Miami/South Florida	\$10–\$20/rock
Minneapolis/St. Paul	\$20/rock
Newark	\$5-\$25/bag; 50-60% pure
New Orleans	\$5-\$25/rock
New Offeatis	\$80-\$125/gram \$800-\$12,000/ounce
New York City	\$3, \$5, and \$10/bag \$19–\$35/gram \$700/ounce
Philadelphia	\$3/"trey" (3–5 millimeter rock) \$5/ready rock (6–9 millimeter rock)
Phoenix	\$17.50-\$20/rock \$485-\$600/ounce \$7,500-\$8,500/ 2 kilogram
St. Louis	\$20/rock; 50–90% pure (central city) \$300–\$400/gram; 50–90% pure (central city) \$250/gram; 50–90% pure (rural areas)
San Diego	\$10/ <sup>1</sup> / <sub>10</sub> gram; 40–85% pure (one "dime rock")
Seattle	\$20/ <sup>1</sup> / <sub>10</sub> –c gram \$40/ <sup>1</sup> / <sub>5</sub> –3 gram
Texas	\$10–\$50/rock \$375–\$1,000/ounce; 56% pure
Washington, DC	\$3-\$20/rock ("lump") \$80-\$100/gram \$125/ © ounce ("eightball") \$1,000-\$1,400/ounce

SOURCE: CEWG city reports, June 2001

Black and Hispanic males no older than their early twenties generally sell crack.

In most CEWG areas, cocaine continues to be transported into cities as HCl and converted to crack locally, perhaps due to dealers' concerns over more severe penalties for possession and distribution of large amounts of crack than for cocaine HCl. Several areas report that, to minimize risk of apprehension, some cocaine HCl buyers prefer to reduce the number of buys by purchasing larger quantities. For example, in Philadelphia, affluent populations of HCl users prefer to purchase larger quantities (\$200 bundles), and in New York City, cocaine HCl transactions are few but costs are high.

Trafficking patterns for cocaine HCl remained steady from 2000 to the first half of 2001 in most reporting areas. Detroit remains the source for cocaine destined for the Midwest. New York is considered the primary domestic source for cocaine in the Washington, DC, area, with much of the supply from Dominican organizations and with local couriers bringing the drug from another city or nonlocal suppliers setting up a temporary "shop" for distribution. Mexico is the source for many Western cities, with Mexican nationals reported as the primary traffickers in those areas. Colombians remain the primary suppliers for cocaine as reported in hub cities, such as Detroit and Boston, with trafficking there via the Dominican Republic, Puerto Rico, Florida, Texas, California, New Jersey, and New York. Most of the Miami cocaine supply entering the South Florida international airports comes from Jamaica, typically on bodypackers (individuals who swallow packets of drugs for purposes of smuggling into the United States), who carry about 1,000 packets, or 2 pounds, of the drug. Cocaine traffickers in Washington, DC, use a variety of transportation including rail, bus, and motor vehicles equipped with sophisticated secret compartments.

### **HEROIN**

Atlanta: "According to local ethnographers and law enforcement, heroin has always held a section of the drug market. Some describe its use over the past two decades as occurring in waves, or rather, the attention to its use occurs in waves....As crack became more dominant, many ignored heroin and its spread throughout the area."

Boston: "All key informants described heroin as the most common drug of abuse on the street and among those entering treatment."

New York City: "Over the past 25 years, important changes have occurred in the population of heroin users, the purity of street-level heroin, and the preferred route of administration. Treatment data show that the proportion of females has increased, Hispanics are now the modal group, and the population is aging. Purity levels have risen dramatically to more than 60 percent, which has encouraged intranasal use, as has the spread of AIDS among injecting drug users (IDUs)."

St. Louis: "Heroin treatment, medical examiner (ME), and law enforcement indicators have increased gradually since 1995."

San Francisco: "Overall, heroin indicators suggest that a rebound occurred at the end of the 1990s. Noteworthy are the predominance of older users and Whites and the unprecedented cheapness of the drug."

Washington, DC: "Heroin use is up, and the drug is available throughout the city. Likewise, the scope and characteristics of individual users continue to broaden."

#### **MORTALITY DATA**

St. Louis: "Most deaths involved older, experienced users and may have resulted from increased purity levels."

In the nine areas where 1999 versus 2000 trend data were available, heroin mortality figures suggest mostly increasing or stable trends.

In five reporting areas, heroin-related deaths increased:

- Detroit/Wayne County: Opiate-positive toxicology levels increased 23 percent (from 383 to 473), continuing the 1990s upward trend.
- Miami-Dade County: After the decline in 1999 from the 1998 peak, heroin-related deaths increased 5 percent (from 58 to 61).
- Minneapolis/St. Paul: Opiate-related deaths in Hennepin and Ramsey Counties increased 23 percent (from 47 to 58).

- Philadelphia: Continuing the increasing trend since 1998, heroin-positive toxicology reports increased 41 percent (from 236 to 332).
- Phoenix: Morphine-related deaths increased 29 percent (from 106 to 137), continuing the steady increase since 1997.

In two areas, the number of heroin-related deaths remained relatively stable:

- Honolulu: Heroin-positive toxicology screens remained relatively stable (at 23 in 1999 and 22 in 2000).
- San Diego: Although heroin accidental overdose deaths remained relatively stable in recent years (at 121 in 1999 and 126 in 2000), between 1990 and 2000, they increased 31 percent.

By contrast, in two areas, the number of heroin-related deaths declined:

- San Francisco County: Heroin-caused deaths declined 8 percent.
- Seattle/King County: Heroin-caused deaths declined 14 percent (from 117 to 101).

Long-term medical examiner (ME) data in the five cities with highest proportions of heroin deaths among total drug deaths show mixed trends, with general increases between 1995 and 1999 in Baltimore, relatively stable trends in Boston and Seattle (with upward "blips" in 1998), and declines in Philadelphia and San Francisco (exhibit 16).

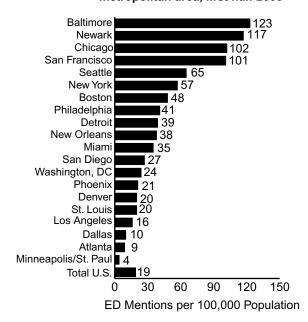
#### **EMERGENCY DEPARTMENT DATA**

In the first half of 2000, heroin was the emergency department (ED) illicit drug most frequently mentioned in four CEWG cities (Baltimore, Newark, San Diego, and San Francisco), and it equaled cocaine as the most frequent mention in Boston (exhibit 2). It also accounted for sizable percentages of ED mentions (≥20 percent) in Chicago and New York.

During that time period, Baltimore continued to have the highest rate of heroin mentions per 100,000 population of the 20 CEWG cities in the Drug Abuse Warning Network (DAWN),

followed by Newark, Chicago, and San Francisco (exhibit 17). Minneapolis/St. Paul continued to have the lowest heroin rate (as it did for cocaine).

Exhibit 17. Estimated rate of heroin/morphine ED mentions per 100,000 population by metropolitan area, first half 2000\*



\*First-half-2000 data are preliminary.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 2000 (September 2000 update)

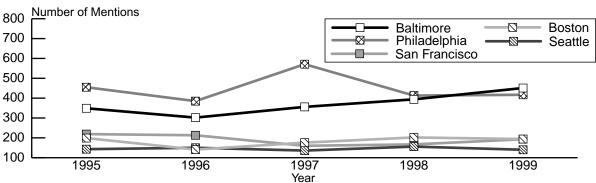


Exhibit 16. Heroin-related deaths in selected cities, 1995-99

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, 1999 (July 2000 update)

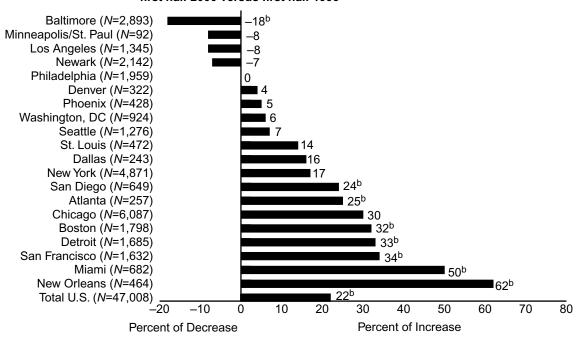


Exhibit 18. Percentage of change in heroin ED mentions by metropolitan area, first half 2000 versus first half 1999<sup>a</sup>

NOTE: (N) refers to first-half-2000 heroin mentions.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 2000 (September 2000 update)

Between the first halves of 1999 and 2000, heroin ED trends showed mostly increases (exhibit 18). Mentions increased significantly in seven cities (Atlanta, Boston, Detroit, Miami, New Orleans, San Diego, and San Francisco) and declined significantly only in Baltimore. As a proportion of total ED mentions, heroin increased substantially (≥3 points) in four areas (Chicago, New Orleans, New York, and San Francisco), declined substantially in Seattle, and remained relatively stable elsewhere.

Long-term ED trends show rates in the two top-ranking cities (Baltimore and Newark) as lower in the first half of 2000 than in the first half of 1995 (exhibit 19). In Chicago (the third-ranking city), rates increased steadily between the first halves of 1995 and 2000, and in San Francisco and Seattle, rates remained relatively stable during that period.

#### TREATMENT DATA

Atlanta: "Ethnographic research indicates that treatment admissions to private programs have increased. The majority of clients in these programs are middle class and White, with both genders equally represented."

Newark: "Among treatment admissions, heroin mentions surpassed cocaine mentions in 1994, and the increase in heroin mentions occurred much faster than the decline in cocaine mentions."

New York City: "In addition to heroin admissions to traditional treatment programs, heroin admissions for detoxification or crisis services have become sizable in number....In 1995, 4,503 such admissions were reported; by 1999, 10,633 admissions were reported—an increase of 136 percent."

<sup>&</sup>lt;sup>a</sup>First-half-2000 data are preliminary.

<sup>&</sup>lt;sup>b</sup>p<0.05

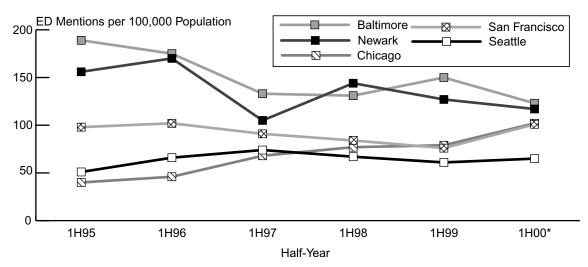


Exhibit 19. Five-year trends in heroin/morphine ED mentions per 100,000 population in five top-ranking cities, first half 1995–first half 2000\*

\*First-half-2000 data are preliminary.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 2000 (September 2000 update)

Seattle: "Demand for drug treatment remains extremely high; for example, at the needle exchange program a waiting list for methadone treatment vouchers includes more than 500 individuals."

Heroin as the primary drug of abuse accounts for the largest percentage of admissions in 8 of 19 CEWG areas (exhibit 6). Additionally, it accounts for large proportions of admissions (≥20 percent) in Philadelphia and Seattle (exhibit 20).

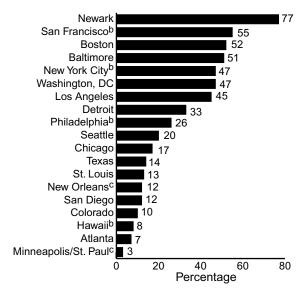
Heroin treatment proportions increased in most CEWG areas when compared with figures from the same reporting period 1 year earlier. Heroin proportions increased (1–12 points) in 11 areas (Atlanta, Baltimore, Boston, Chicago, Newark, New York City, Philadelphia, St. Louis, San Francisco, Seattle, and Washington, DC); declined (1–8 points) in four (Hawaii, Los Angeles, New Orleans, and Texas); and remained stable in Colorado and San Diego.

Long-term treatment data show mostly increasing or stable trends:

- Boston: The proportion of admissions who reported using heroin in the month before entering treatment increased steadily between fiscal year (FY) 1994 and the first half of FY 2001 (from 23 to 38 percent). Likewise, primary heroin admissions rose from 31 percent in FY 1996 to 40 percent in the first half of FY 2001.
- Colorado: The proportion and number of heroin admissions remained stable from 1994 through 2000 (at 14 percent). However, the proportion of new heroin users entering treatment increased from 11 percent in 1994 to 19 percent in 2000.
- Minneapolis/St. Paul: Primary heroin admissions accounted for 3 percent of treatment admissions in 2000, compared with 1.5 percent in 1991.
- New York City: Heroin admissions have been gradually increasing. Between 1991 and 2000, admissions increased 43 percent (from 15,085 to 21,616).

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Exhibit 20. Heroin as a proportion of primary drugs of abuse among treatment admissions, second half 2000 (including alcohol-in-combination and excluding alcohol-only)<sup>a</sup>



<sup>a</sup>Reporting periods are July–December 2000, except for the following: January–June 2000 in Atlanta, Baltimore, and Chicago; full year 2000 in Minneapolis/St. Paul, New Orleans, and San Francisco; and January–June 2001 in Detroit and Texas.

<sup>b</sup>Alcohol-in-combination is excluded.

<sup>c</sup>Alcohol-only is included.

SOURCE: Drug abuse treatment agencies

- St. Louis: From 1996 to the second half of 2000, treatment data showed a large increase in the number of heroin users (from 345 to 770).
- San Francisco: The number of heroin admissions in the entire bay area fluctuated narrowly between 1994 and 2000, with no particular trend. (However, it is important to note that heroin constituted 64 percent of all drug admissions in 1994 but only 55 percent in 2000.)

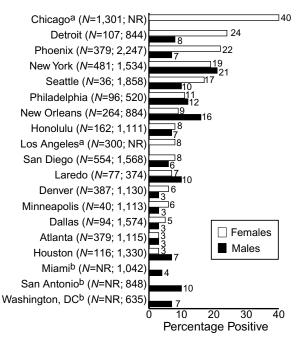
In Newark, the number and proportion of primary heroin admissions decreased: between 1995 and the first half of 2000, admissions

declined from 5,603 to 3,857, and the proportion declined from 78 to 77 percent.

#### ARRESTEE URINALYSIS DATA

Heroin-positive screens among adult arrestees remained low relative to those for cocaine and marijuana (exhibits 7 and 8). According to 2000 data from the Arrestee Drug Abuse Monitoring (ADAM) program, heroin-positive urinalysis levels among adult female booked arrestees in CEWG cities ranged from 3 percent in Atlanta and Houston to 40 percent in Chicago (exhibit 21). Among adult male arrestees, heroin-positive levels ranged from 3 to 21 percent.

Exhibit 21. Percentage of adult male and female arrestees positive for heroin, by metropolitan area, 2000 (ranked by females)



NOTE: Male findings are weighted and represent probability-based sampling; female findings are unweighted and not based on probability sampling.

<sup>a</sup>Data are not available for males at this time. <sup>b</sup>Data are not available for females at this time.

SOURCE: National Institute of Justice, Arrestee Drug Abuse Monitoring program, 2000 Annual Report

ADAM data from 2000 cannot be compared with previous data due to substantial modifications to the data collection and reporting system.

Continuing a relatively stable trend since 1990, opiate-positive urinalysis levels among adult arrestees involved in the DC Pretrial Services Agency remained at 10 percent in the first quarter of 2001.

#### OTHER LOCAL DATA

Poison control data in various areas reflect mixed trends:

- Boston: In 2000, similar to earlier periods, heroin was mentioned in 26 percent of the Massachusetts helpline calls that identified particular substances.
- Denver: Heroin-related calls to the poison center were steady from 1994 (21 calls) to 1998 (22 calls), increased to 36 in 1999, and declined to 12 in 2000.
- Texas: Heroin-related calls to poison control centers are increasing: 168 confirmed exposure calls were reported in 1998, 231 in 1999, and 271 in 2000. Of the 2000 callers, the average age was 33, and 79 percent were male.

Additionally, Colorado hospital discharge data show that heroin cases per 100,000 population, after dropping from 29.8 to 19.9 between 1994 and 1996, climbed steadily to 47.7 in 2000.

#### **DEMOGRAPHIC DATA**

Boston: "Compared with other drug treatment admissions, primary heroin users had the smallest proportion of Blacks (23 percent) and the lowest percentage of clients involved with the criminal justice system (21 percent) or with mental health problems (18 percent)."

#### Age

Mortality demographics (available in five CEWG areas) continue to reflect an older heroin-using population. For example, the average age of heroin-related decedents was 40.6 in Hennepin County (Minneapolis/St. Paul) in 2000 and 38.1 years in Texas in 1999. Similarly, in FY 2000 in San Francisco, heroin decedents had a median age of 40 years. Conversely, in San Diego, in 2000, a surprising 34 percent of heroin-related decedents were younger than 36.

Similar to mortality data, ED data showed that the oldest age group (35+) accounts for the largest proportion of heroin mentions in all CEWG areas in DAWN except for New Orleans, where the 18–25 group is largest (exhibit 22). The proportion of the 35+ group among heroin ED mentions in CEWG cities ranges from 35 percent in New Orleans to 81 percent in Detroit. The 26–34 group accounts for substantial proportions (≥20 percent) of heroin mentions in CEWG areas, with the exceptions of Denver, Detroit, New York, and Washington, DC. The young adult group (18–25 years) accounts for substantial proportions (>20 percent) in Dallas, Denver, New Orleans, Philadelphia, and St. Louis. Among CEWG cities, St. Louis has the highest representation of adolescents (12–17 years) (at 3 percent of heroin mentions).

Although age distribution shifts in recent years have suggested an aging heroin population, between the first halves of 1999 and 2000, trends were mixed. The oldest group (35+) as a proportion of heroin mentions increased in 8 of 20 CEWG cities in DAWN, declined in 9, and remained stable in 3; the 26–34 group increased in 9, declined in 10, and remained stable in 1; the young adult group (18–25 years) increased in 11, declined in 8, and remained stable in 1; and the youngest (12–17

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# TREATMENT DATA AND OTHER INDICATORS POINT TO A COHORT OF YOUNG HEROIN USERS FROM BOTH THE CENTRAL CITY AND THE SUBURBS IN SEVERAL CEWG AREAS:

Atlanta: "The prevalence of a young cohort of heroin users is indicated by ethnographic data and drug treatment admissions, with approximately 8 percent of clients age 17 or younger reporting heroin as their primary drug of choice....The age distribution of those reporting heroin as their primary drug of abuse in nonmetropolitan Atlanta counties is similar to the distribution reported in Atlanta, with fewer clients among the youngest cohort."

Baltimore: "The new cohort of White suburban youth that reportedly began to emerge about 1992–93 is now appearing in the treatment system. In the suburban counties, White admissions increased substantially (from 30 percent in 1996 to 45–50 percent since 1997), and as a proportion of suburban treatment admissions for injected heroin, those younger than 25 increased substantially (from 20 in 1995 to 33 percent in the first half of 2000)."

Boston: "Treatment providers report seeing younger heroin users, many from fairly stable backgrounds who began using heroin intranasally and recreationally, unaware of its high potential for addiction. One program director described the recent increase in heroin addicts seeking treatment as 'almost shocking,' and a clinician described it as 'overwhelming.'"

Denver: "Between 1994 and 2000, the 25-and-younger group as a proportion of heroin treatment admissions in Colorado increased (from 10 to 17 percent), and White representation increased (from 56 to 65 percent)."

St. Louis: "A hospital with a treatment program geared to young adults (<25 years) reported that as many as half of its admissions reported heroin use."

Washington, DC: "Interviews with health educators and outreach workers indicate an increase in heroin use among inner-city young adults (22–27 years), and High Intensity Drug Trafficking Area (HIDTA) data continue to show the abuse of heroin by suburban youth....These young drug users are increasingly combining heroin with alcohol and other substances. HIDTA data suggest that competition is flourishing among dealers for these 'new users.'"

years) declined in 5 areas and remained relatively stable elsewhere.

Heroin ED rates per 100,000 population are highest among the 26–34 age group in 12 CEWG cities, highest among the young adult group in 6 cities, and highest among the 35+ group in 2 cities (exhibit 23).

Similar to mortality and ED data, treatment data continue to reflect an aging group of cocaine users (exhibit 24). The oldest (35+) group accounts for the largest proportions of

primary heroin admissions (ranging from 42 percent in St. Louis to 87 percent in Washington, DC) in all 14 reporting areas.

Compared with the same time period 1 year ago, the 35+ group's representation was mixed, with more cities reporting increased proportions than declines (seven cities reported increases, three reported declines, and one reported stable trends). The 26–34 group also showed mixed trends, with more cities reporting declines than increases (two cities reported increases, seven reported declines, and

Exhibit 22. Age and gender distribution of heroin ED mentions, by percentage, in reporting CEWG cities, first half 2000\* (ranked in descending order by the 35+ group)

City	(N)	35+	26–34	18–25	12–17	Males
Detroit	1,685	81+	13	5+	0	64
Washington, DC	924	80+	14–	5–		60
New York	4,871	74	19	7	0	80
San Francisco	1,632	69+	21+	9	0+	67+
Los Angeles	1,345	68	23+	9	0	71
Phoenix	428	64	25	11	0	65
San Diego	649	63+	20	16+	0-	71+
Seattle	1,276	63+	24	12	0+	62
Chicago	6,087	61	29	10	0	58
Denver	322	60	19	21+	0-	72
Atlanta	257	57	23	18+	0	70+
Newark	2,142	56	32-	11		62–
Baltimore	2,893	54–	30-	15	1	61–
Minneapolis/St. Paul	92	54	35	10-	0-	74
Boston	1,798	53	32	15	0	65
Miami	682	52+	33+	16+	0	74+
Dallas	243	47	23	27+		68
Philadelphia	1,959	45	28	25	1	68
St. Louis	472	44	25+	28+	3	65
New Orleans	464	35+	23+	40+	1+	85+

NOTE: "+" or "-" indicates significant increase or decrease (p<0.05) in number (not percentage) of mentions since the first half of 1999; "..." indicates that the estimate does not meet standard of precision.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 2000 (September 2000 update)

two reported stable trends). The young adult group (18–25 years) showed mixed trends, with more increases than declines (six cities reported increases, three reported declines, and two reported stable trends.) Finally, the adolescent ( $\leq$ 17) representation was relatively stable.

Similar to other indicators, the highest heroinpositive levels among adult male booked arrestees in 2000 were among the two oldest age groups (36+ and 31–35 years) in most CEWG areas in the ADAM program (exhibit 25). Exceptions were in Philadelphia and Seattle, where the 26–30 group had the highest heroin-positive levels; Laredo, where the 26–30 and <21 groups tied for the highest levels; New Orleans and Houston, where the young adult group (21–25 years) had the highest levels; and Denver and Dallas, where the youngest group (<21 years) had the highest levels.

#### Gender

Philadelphia: "One of the most remarkable trends since the mid-1990s is the increasing proportion of females in methadone maintenance treatment, as well as the shift from injecting to intranasal use among females."

<sup>\*</sup>First-half-2000 data are preliminary.

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Exhibit 23. Heroin ED rates per 100,000 population, by age and metropolitan area, first half 2000\*

City	35+	26–34	18–25	12–17
Atlanta	10	13	14	0
Baltimore	116	251	166	16
Boston	45	102	56	2
Chicago	112	198	94	5
Dallas	9	13	22	
Denver	22	24	43	0
Detroit	56	38	20	1
Los Angeles	21	24	10	0
Miami	31	86	52	1
Minneapolis/St. Paul	4	8	3	0
Newark	111	280	122	
New Orleans	25	64	140	4
New York	73	76	34	1
Philadelphia	32	84	90	7
Phoenix	24	36	19	1
St. Louis	15	34	55	7
San Diego	33	38	26	2
San Francisco	115	138	88	5
Seattle	73	102	72	3
Washington, DC	35	20	10	

NOTE: Shaded areas indicate highest ranking age groups in each city; "..." denotes does not meet standard of precision. \*First-half-2000 data are preliminary.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 2000 (September 2000 update)

Gender distribution among heroin-related decedents (available in three CEWG areas) continued to show that males account for the large majority. Among heroin-related decedents, males accounted for 78 percent in San Diego in 2000, 87 percent in San Francisco in FY 2000, and 82 percent in Texas in 1999.

Males also outnumber females among heroin ED mentions in all CEWG cities in DAWN (exhibit 22). The male-female gender gap remains widest in New Orleans (85 versus 15 percent) and narrowest in Chicago (58 versus 42 percent). Between the first halves of 1999

Exhibit 24. Age and gender distribution of primary heroin treatment admissions, by percentage, in reporting CEWG areas (ranked in descending order by the 35+ group)

Area	35+	26–34	18–25	<u>&lt;</u> 17	Males
Washington, DC	87	11	2	<1	67
Atlanta	81	10	<1	8	63
Los Angeles <sup>b</sup>	72	21	7	<1	71
Seattle	72	22	8	1	60
New York City <sup>c</sup>	63	30	7	•	73
Colorado	62	21	16	1	66
Newark	59	36	6	<1	59
Texas	55	22	21	2	70
Baltimore	53	33	13	1	56
Boston	52	33	15	<1	75
Minneapolis/St. Paul	50	32	16	2	70
Chicago	49	34	15	<1	55
San Diego	48	24	27	1	65
St. Louis	42	25	31	1	69

<sup>a</sup>Reporting periods are July–December 2000, except for the following: January–June 2000 in Atlanta, Baltimore, and Chicago; full year 2000 in Minneapolis/St. Paul and New York City; and January–June 2001 in Texas.

SOURCE: Drug abuse treatment agencies

and 2000, males as a proportion of heroin ED mentions increased substantially (5–10 points) in Atlanta, Dallas, and San Diego; female proportions increased in Detroit; and gender distributions remained relatively stable elsewhere.

Supporting both mortality and ED data, males also outnumber females among heroin treatment admissions in all reporting areas (exhibit 24). In the 12 areas where gender trend data were available, trends were mixed, with six areas reporting increases in male representation, two areas reporting declines, and four areas reporting stable trends. The largest increase in male representation was in Atlanta (at 6 points), and the largest decline was in St. Louis (at 4 points).

<sup>&</sup>lt;sup>b</sup>Age groups are 36+, 26–35, 18–25, and ≤17.

<sup>&</sup>lt;sup>c</sup>Age groups are >35, 26-35, and <26.

Exhibit 25. Percent heroin-positive, by age, among adult male booked arrestees, 2000 (ranked in descending order by the 36+ age group)

City	36+	31–35	26-30	21-25	<21
New York	27	27	24	9	5
San Antonio	20	4	12	5	5
Detroit	17	8	6	3	0
Philadelphia	14	16	18	8	4
Washington, DC	14	0	7	5	0
Seattle	13	9	14	4	5
Phoenix	12	7	4	4	0
Honolulu	12	7	4	2	0
San Diego	10	3	4	4	3
Miami	7	2	3	2	4
New Orleans	7	11	9	28	19
Atlanta	4	4	1	0	1
Denver	4	4	3	2	5
Laredo	3	10	14	12	14
Minneapolis	3	9	4	1	0
Houston	2	10	2	13	10
Dallas	2	1	1	5	6

NOTE: No urinalysis data for male arrestees are available for Chicago and Los Angeles at this time; shaded areas indicate the highest ranking age group in each city.

SOURCE: National Institute of Justice, Arrestee Drug Abuse Monitoring program, 2000 Annual Report

According to 2000 ADAM data, females tested heroin-positive at higher levels than their male counterparts in all CEWG areas in ADAM, except for five (Houston, Laredo, New Orleans, New York, and Philadelphia) (exhibit 21). Chicago and Detroit had the highest levels of females testing heroin-positive (at 40 and 24 percent, respectively), and New York and New Orleans had the highest levels of males testing positive (at 21 and 16 percent, respectively).

# Race/Ethnicity

Race/ethnicity demographics among heroin decedents are available in two CEWG areas. Among heroin decedents, 73 percent in San Diego were White in 2000; in Texas, 53 percent were White, 34 percent were Hispanic, and 13 percent were Black in 1999.

Heroin ED racial/ethnic demographics vary depending on geographic location. In the first half of 2000, Whites were the largest racial/ethnic group among heroin mentions in seven CEWG cities (Boston, Dallas, Miami, Philadelphia, St. Louis, San Diego, and Seattle), Blacks were the largest in eight cities (Atlanta, Baltimore, Chicago, Detroit, New Orleans, New York, Newark, and Washington, DC), Hispanics were the largest in Los Angeles, and four cities had too many mentions in the "unknown" category to be included in the count.

Between the first halves of 1999 and 2000, several substantial shifts occurred in the racial/ethnic distributions among heroin ED mentions in CEWG cities:

- Whites declined substantially (4–16 points) as a proportion of heroin ED mentions, while Black representation increased (4–11 points) in four cities: Atlanta, Detroit, New Orleans, and New York.
- Whites increased as a proportion (3–9 points), while Blacks declined (2–9 points) in four cities: Baltimore, Philadelphia, St. Louis, and Washington, DC.
- The proportions of Whites and Blacks increased (by 6 and 2 points, respectively), while Hispanics declined (by 7 points) in San Francisco.
- Whites declined (by 3 points), while Hispanics increased (by 4 points) in Miami.
- Whites and Hispanics increased (by 3 points each), while Blacks declined (by four points) in Newark.

Similar to ED data, among primary heroin treatment admissions racial/ethnic demographics vary depending on geographic location. Black representation (ranging from 5 percent in San Diego to 96 percent in Washington, DC) was greater than that of other races/ethnicities in 7

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of 14 reporting areas (Atlanta, Baltimore, Chicago, Minneapolis/St. Paul, Newark, St. Louis, and Washington, DC); White representation was highest in 4 (Boston, Colorado, San Diego, and Seattle); and Hispanic representation was highest in 3 (Los Angeles, New York City, and Texas).

Trends in racial/ethnic distribution among heroin treatment admissions shifted in several of the 12 areas where comparable data for 1 year earlier were available:

- White representation increased in Chicago and Colorado (by 4 and 7 points, respectively) but declined in Los Angeles and San Diego (by 3 points each).
- Black representation increased (by 4 points) in Newark, but declined in Chicago and San Diego (by 4 points each).
- Hispanic representation increased in Atlanta, Los Angeles, and San Diego (by 8, 4, and 6 points, respectively), but declined in Colorado and Newark (by 7 and 3 points, respectively).

#### **USE PATTERNS**

#### **Route of Administration**

Atlanta: "Multiple routes of heroin administration appear to be common among users encountered by ethnographic researchers, with injection and intranasal use being the most common."

Minneapolis/St. Paul: "Smoking heroin by laying lines out on a piece of aluminum foil, heating it from below, and inhaling the vapors (known as 'chasing the dragon' in some parts of the world) is known as 'foiling."

New York City: "Researchers report that the sharing of needles among older heroin injectors appears to be increasing."

#### LOCAL GEOGRAPHIC PATTERNS:

Urban-versus-suburban patterns and trends of heroin use vary from city to city, with most areas reporting higher proportions of heroin treatment admissions in central-city areas than in noncentral-city areas. In Newark, the proportion of heroin mentions is larger among treatment clients in the city proper than among non-Newark City clients, but data show continued and parallel increases in heroin admissions in both Newark City and areas outside the city. Similarly, in Baltimore, the rate of heroin admissions per 100,000 population was more than five times as high in Baltimore City as in the suburban counties: however, just as heroin has historically dominated the Baltimore City treatment system, it has surpassed alcohol as the dominant primary drug in the suburban counties since 1997. In the first half of FY 2001, heroin admissions accounted for 33 percent of total admissions in Detroit/ Wayne County but only 12 percent statewide.

Routes of heroin administration may also differ in central-city versus noncentral-city areas. For example, compared with heroin treatment admissions statewide, those in Detroit/Wayne County were more likely to use intranasally (50 versus 37 percent) and less likely to inject (49 versus 61 percent). Likewise in Newark, compared with heroin admissions statewide, those in Newark City were more likely to use heroin intranasally (76 versus 60 percent) and less likely to inject (23 versus 40 percent). In Baltimore City, heroin treatment admission rates per 100,000 population for intranasal use have increased every year since 1997, and have surpassed the rate for heroin injection since 1998. However, in the suburbs, heroin admissions younger than 25 increased substantially for injected heroin.

#### INTRANASAL USE AND SMOKING VERSUS INJECTING: A CLOSER LOOK

#### Motivations for intranasal use and smoking instead of injecting:

Newark: "The substitution of intranasal use for injection among heroin users is believed to have resulted from improved purity and the heavy toll of the AIDS epidemic among IDUs."

St. Louis: "Young users reported a fear of needles as a reason for alternative methods of administration, and the increased availability of a consistently higher purity heroin has led to a wider acceptance of the drug in social circles because needle administration is not necessary."

Atlanta: "Although heroin smoking remains uncommon, it is regular practice among selected networks of users. Typically these users are White and have access to high-quality heroin. Middle-class heroin users are more likely to have access to health care other than emergency rooms and are reportedly more likely to curtail their habit because 'they have more at stake.'"

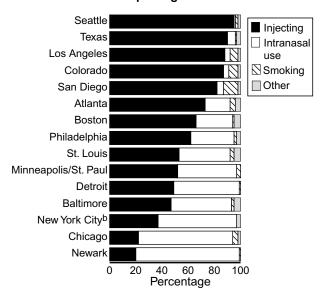
#### "Lag time" to treatment among injectors versus intranasal users:

Texas: "While the percent of individuals who use heroin intranasally is small (7 percent), it is significant to note that the lag period between first abuse and seeking treatment is 7 years rather than the 15 years for injectors. This shorter lag period means that contrary to street rumors that sniffing or inhaling is not addictive, intranasal users need treatment much more quickly than IDUs."

Injecting remains the most common route of administration among heroin treatment admissions in the majority of areas, with the highest proportions in the West, where lower purity black tar heroin continues to predominate (exhibit 26). Intranasal use predominates in Chicago, Detroit, Newark, and New York City, and it accounts for substantial proportions ( $\geq 20$ percent) in five other eastern and midwestern cities: Baltimore, Boston, Minneapolis/St. Paul, Philadelphia, and St. Louis. Smoking still accounts for relatively small proportions of heroin admissions, with the highest proportions reported in western areas: Los Angeles (at 6 percent), Colorado (at 7 percent), and San Diego (at 11 percent).

Compared with the same period 1 year earlier, route of administration remained relatively stable, except in Newark, where intranasal use increased (by 4 points) and injecting declined (by 5 points); in Colorado, where smoking increased (by 3 points); and in Atlanta and

Exhibit 26. Route of administration among heroin treatment admissions, by percentage, in reporting CEWG areas<sup>a</sup>



<sup>&</sup>lt;sup>a</sup>Reporting periods are July–December 2000, except for the following: January–June 2000 in Atlanta, Baltimore, and Chicago; full year 2000 in Minneapolis/St Paul; and January–June 2001 in Detroit and Texas.

SOURCE: Drug abuse treatment agencies.

<sup>&</sup>lt;sup>b</sup>Only two routes of administration are reported.

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Boston, where intranasal use declined (by 6 and 3 points, respectively).

Longer term trends show more marked shifts in route of administration, especially in eastern cities and from injecting to intranasal use. For example, the proportion of heroin treatment admissions reporting intranasal use continues to rise in Boston (from 60 percent in FY 1998 to 68 percent in the first half of FY 2001). Disturbingly, in some eastern cities route of administration among admissions may be trending back from intranasal use toward injecting. In Newark, for example, since 1995, heroin injection has been increasing, and the increase has been most pronounced among the young adult group (18–25 years). Similarly, in New York City, between the second half of 1998 and 2000, the proportion of heroin admissions reporting intranasal use declined, while injecting increased (by 5 percentage points). In noneastern areas, long-term route of administration trends for heroin admissions vary. In Colorado, smoking and intranasal use among heroin treatment admissions are becoming more common, increasing from 4 percent in 1994 to 10 percent in 2000.

Route of administration often varies demographically, with Whites more likely to inject and non-Whites more likely to use heroin intranasally, as demonstrated by the following treatment data:

- Baltimore: In the first half of 2000, compared with heroin injectors, those who use heroin intranasally were more likely to be female (48 versus 41 percent), Black (84 versus 55 percent), and receiving treatment for the first time (40 versus 33 percent).
- Newark: In the first half of 2000, 85 percent of female heroin admissions used intranasally, compared with 70 percent of males. Additionally, White males were more likely

- to have injected heroin (53 percent) than Hispanic males (45 percent) or Black males (17 percent).
- New York City: Compared with heroin injectors, those who use intranasally are more likely to be Hispanic (55 versus 47 percent) and first admissions to treatment (16 versus 10 percent). In contrast, heroin injectors are more likely than intranasal users to be White (32 versus 13 percent) and to have started use before age 20 (58 versus 42 percent).

#### **Multisubstance Use**

Available mortality data show high levels of multisubstance abuse among heroin decedents. For example, in Philadelphia, in the second half of 2000, heroin alone was identified in only 12 percent of heroin toxicology reports. As reported in the "Cocaine" section, the most common other drug present among heroin decedents in reporting areas appears to be cocaine, suggesting the continued use of speedballs.

Qualitative reports of speedballs also continue in many CEWG areas, including Atlanta, Baltimore, New York City, Philadelphia, St. Louis (among older users), and Texas, as reported in the "Cocaine" section. Similarly, among primary heroin treatment admissions, cocaine and alcohol remain the most common secondary and tertiary drugs of abuse in reporting CEWG areas.

Ethnographic reports in Atlanta suggest the use of heroin with alcohol, crack, cocaine HCl, and marijuana is common among users. Also in Atlanta, ethnographers reported a heroinmorphine combination (known as "red devil," "poison," "death," "killer Joe," and "bang") resembling a brown rock with fairly low purity (15–18 percent). Older users seem to prefer this combination, but younger users, who are

turning away from the heroin and morphine combination to cocaine HCl, do not. Marijuana users in Washington, DC, sometimes dip blunts into a liquid solution of heroin.

# LAW ENFORCEMENT AND MARKET DATA

Boston: "The impact of widely available, low cost, and very pure heroin is reported by treatment providers, who continue to see more heroin users seeking services."

#### THE HEROIN MARKET: A CLOSER LOOK

Atlanta: "The heroin market is very heterogeneous compared with the crack market and is very market driven. Unfortunately, local indicators do not often capture this. From 'oldschool' heroin users to new young initiates, use of the drug may come in phases based on its market value. One of the largest changes observed over time is the mixing of heroin markets with crack or cocaine HCl markets, as well as the mixing of types of users. According to ethnographers, many cocaine dealers have now incorporated heroin into their sales. User networks, which previously may have been associated with one drug or another, are now intermingling. Furthermore, the social context of both heroin and cocaine use appears to have changed somewhat over time. As one local user described it, 'it's an addiction to the route of administration, not the drug.' The same may be said of other drugs in the area."

# Arrests, Seizures, and Lab Submissions

Boston: "State police continue to report consistently large seizures of heroin, often packaged in compact, short latex 'fingers' or 'eggs.'"

Heroin-related arrests in various cities showed mixed trends in recent years, with declines in three areas (Honolulu, New York, and Seattle), increases in two (Boston and New Orleans), and stable trends in San Francisco:

- Honolulu: Police reported 74 heroin cases in 2000, down from the past 2 years.
- New York City: Much like cocaine arrests, heroin arrests peaked in 1989, declined for a few years, and then peaked again in 1995. Since then, they have declined 14 percent (to 32,949 heroin arrests) in 1999, somewhat higher than the comparable number of cocaine arrests (32,781).
- Seattle: The number of convictions for heroin-related offenses has shown a decline over the past 2 years. Convictions peaked in 1998, followed by a 22-percent decline from 1998 to 2000.
- Boston: In 2000, heroin arrests accounted for 27 percent of all drug arrests, up from 24 percent in 1999 and 13 percent in 1992.
- New Orleans: Between 1998 and 2000, heroin possession and distribution arrests increased (from 236 to 393 for possession and from 135 to 249 for distribution).
- San Francisco: Arrests for heroin-related offenses numbered 6,905 in the county in 1999—a number in the middle of the range (6,546 to 7,214) from 1996 to 1999.

The numbers of heroin seizures and submissions show stable or declining trends in reporting CEWG areas. Heroin submissions in Boston stayed level at 17 percent of all submissions in 1999 and 2000. Denver police report seizures of 25 and 24 pounds in 1999 and 2000, respectively. Heroin seizures in Washington, DC, declined between 1999 and the first 11 months of 2000 (from 939 to 771); there was also a decrease in the number of grams seized (from 1,852 to 1,227).

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## **Availability and Source**

Minneapolis/St. Paul: "Heroin quality and supply remained high, and prices remained low in 2000."

St. Louis: "The Domestic Monitor Program (DMP) purchased equal quantities of heroin on both the North and South Sides of the city, indicating wider market availability."

Heroin is widely available in nearly all CEWG areas, and its availability is increasing or stable at high levels in nearly all reporting areas.

In the first quarter of 2000, the DEA's Domestic Monitor Program (DMP) undercover heroin buys showed South American white heroin (57 percent average purity) to be the dominant source and type throughout the Northeast, Southeast, and Midwest (except in St. Louis, where Mexican heroin remains the most common type available). Mexican heroin (29 percent average purity) still predominates in the West and Southwest (Texas). A limited number of Southwest Asian heroin samples (41 percent average purity) were available in Atlanta, Baltimore, Chicago, Detroit, Newark, and New York. Southeast Asian samples (38 percent average purity) were available in Atlanta, Chicago, and Detroit.

Several recent changes in heroin type and source within cities were reported through 2001. For example, in St. Louis, although a steady supply of Mexican heroin remains available, some white heroin of unknown source has been reported recently. In Phoenix, where Mexican black tar heroin predominates, Mexican brown heroin reportedly has also been available. In New Orleans, where Colombian white heroin predominates and causes serious consequences due to its high purity, large amounts of Mexican black tar heroin have recently appeared in the area. In Texas, where Mexican black tar heroin predominates,

Mexican brown heroin remains available, Colombian white (rarely available in the past) is available in street-level quantities, and Southwest Asian is not as available as in the past.

#### **Price**

Atlanta: "Heroin has been part of the local market throughout time, but its price and purity have changed frequently. During the height of the crack epidemic, heroin was expensive and its purity levels low. As the crack market became saturated, cheap and pure heroin increasingly became available. This resulted in new ways of use, such as intranasal use and smoking."

Philadelphia: "Both men and women continue to report the exchange of unprotected heterosexual and homosexual sex for heroin."

Exhibit 27 lists price information reported at the local level. Prices range from \$50–\$100 per gram of Mexican heroin in Phoenix to \$1,000 per gram of South American heroin in Texas. Changes in price occurred for large quantities: in Chicago, prices of larger quantities increased; in Miami, they declined (1 kilogram cost \$55,000–\$65,000 in 2000, down from \$65,000–\$85,000 in 1999 and \$120,000 in 1998).

Prices may also vary depending on local marketing strategies. For example, in Chicago, street dealers commonly offer discounts for buying multiple bags, such as \$100 per 13 \$10-bags. Heroin street prices in Detroit reportedly drop from \$10–\$15 per packet or bag to \$5 at election time and holiday periods. Although \$10 bags remain most common in New York City, occasionally \$5 bags are made available to attract business, to market a new product, or as a sample of quality. Street-level heroin is sold mostly in \$10 bags (called "joints") in Washington, DC, but small-time dealers may purchase 10 packs or "bundles" of heroin for

Exhibit 27. Heroin prices and purity in reporting CEWG areas

Area	Type/Source	Price/Common Street-Level Unit	Gram	Ounce	Kilogram
Boston	South American	\$4-\$20/bag	NR	\$3,100-\$5,000	\$50,000-\$120,000
		(30-90% pure)		(30-90% pure)	(30–90% pure)
Chicago	NR	\$10, \$20/bag	\$100–\$200	NR	\$23,000-\$70,000
	Southeast Asian	NR	NR	\$2,000-\$3,000	NR
	Mexican black tar	NR	NR	\$1,000-\$2,500	NR
	Mexican brown	NR	NR	\$1,000-\$2,000	NR
Denver	Mexican black tar	\$20, \$40, \$50/bag	\$100 (16-18% pure)	\$1,500 (36% pure)	NR
	Mexican brown	\$20, \$40, \$50/bag	NR	\$1,500 (67% pure)	NR
Detroit	South American, Southeast Asian, Mexican, Southwest Asian	\$10–\$15/packet or bag	NR	NR	NR
Honolulu	Mexican black tar	\$50-\$75/paper	\$150-\$300	\$2,500-\$3,500	NR
		(67% pure)	(67% pure)	(67% pure)	
Los Angeles	Mexican black tar	NR	NR	NR	\$15,000-\$20,000 (wholesale); \$70,000-\$100,000 (street value) (25% pure)
Miami	South American	NR	NR	NR	\$55,000-\$65,000 (wholesale) (90% pure)
Minneapolis/ St. Paul	Mexican black tar	\$10/unit or paper	NR	\$900–\$2,000	NR
Newark	NR	\$10-\$20/bag	\$62–\$160	NR	NR
New Orleans	NR	NR	\$500–\$700 (42–50% pure)	\$5,500-\$9,900 (42-50% pure)	NR
New York	South American	\$10/bag	NR	NR	\$70,000-\$90,000 (62% pure)
Philadelphia	NR	\$5, \$10, \$20/bag	NR	NR	NR
Phoenix	Mexican	\$20/"BB" (80–100 milligrams); \$20–\$30/paper (0.25 grams)	\$50-\$100 (58-75% pure)	\$1,000-\$1,500 (one "piece") (58-75% pure)	\$32,000-\$40,000
St. Louis	Mexican black tar, Mexican brown	\$10/cap; \$40/"bindle"	NR	NR	NR
San Diego	Mexican black tar	\$20/ <sup>1</sup> /4 gram	\$50-\$120 (27-31% pure)	\$1,000-\$1,500 (42-68% pure)	NR
San Francisco	Mexican	NR	NR	NR	\$18,000-\$80,000 (20-60% pure)
Seattle	Mexican black tar	\$20/paper	NR	NR	NR
Texas	Mexican black tar	\$10-\$20/capsule	\$100–\$350	\$1,200–\$4,000	\$35,000-\$85,000
	Mexican brown	\$10/cap	\$110–\$300	\$600-\$3,000	NR
	South American	NR	\$1,000	\$2,000	\$70,000-\$80,000
Washington, DC	South American	\$10, \$20, \$40/bag or "joint"	\$120-\$130 (40-90% pure)	NR	NR

SOURCE: CEWG city reports, June 2001

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\$75–\$90 for resale on the street. Furthermore, heroin that is unadulterated at 40–80 percent pure can be purchased for \$30 and \$40 per bag at some locations in the more affluent parts of the District.

First-quarter-2000 DMP data continue to show wide price variations across the country, ranging from \$0.25 per milligram pure in Newark to \$1.75 in St. Louis. The metropolitan average price per milligram pure in 2000 was \$0.69.

#### **Purity**

Minneapolis/St. Paul: "Heroin purity levels remained high. Of the 42 heroin samples seized and analyzed for purity, 48 percent were more than 70 percent pure. This is significant because even experienced addicts can easily overdose from using heroin of unexpectedly high purity. Other recent changes in availability, price, and route of administration (more intranasal use) may have also contributed to the increased mortality rate by making heroin more accessible to new users."

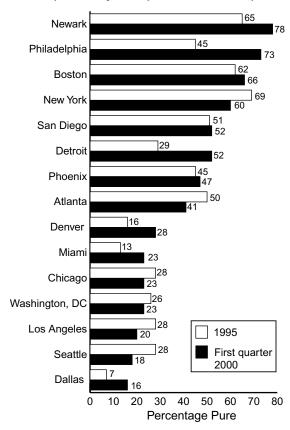
New York City: "With purity levels and availability high, some street dealers are diluting the heroin. Researchers hear complaints about 'bad dope' despite the high purity levels."

According to first-quarter-2000 DMP data, street-level purity remains highest in the Northeast, although high purity levels (>50 percent) continue in some parts of the Midwest (in Detroit) and the West (in San Diego) (exhibit 28). Newark surpassed Philadelphia as the city with the highest average purity of all controlled heroin buys, and Dallas has the lowest level purity (at 16 percent) of CEWG areas in the DMP program. Average purity for the metropolitan United States was 42 percent in the first quarter of 2000.

Longer term purity trends (1995 versus the first quarter of 2000) show mostly increases in the northeast (with the exception of New York

City, where levels declined) and mixed trends in the other regions, with more increases than declines (exhibit 28). The two most dramatic changes in heroin purity over that time period were increases (in Detroit and Philadelphia).

Exhibit 28. Average heroin purity per milligram in selected CEWG cities, 1995 versus first quarter 2000 (ranked by first-quarter-2000 levels)



SOURCE: DEA Domestic Monitor Program, Intelligence Division, Domestic Unit

# **Distribution and Trafficking**

In New York City, heroin distribution continues to be circumspect, with sales occurring in apartments, stores, and vacant buildings. In contrast, in Washington, DC, the majority of street-level heroin is sold in open-air drug markets, with the majority along the city borders, which helps make heroin more accessible

#### BRAND NAMES AS AN INDICATOR OF AVAILABILITY AND METHOD OF DISTRIBUTION:

New York City: "More and more sellers are shying away from identifying their bags of heroin with a brand name, thus trying to avoid monitoring and possible arrest. Some dealers, however, do use colored bags to identify themselves as the source."

Philadelphia: "Spring 2001 focus group participants identified 59 of the 67 heroin packaging brands identified by the autumn and spring 2000 groups. In addition, 27 new brands were identified."

Washington, DC: "The ready availability of heroin has led to competition among street dealers who label their packages ('bold step,' 'white dragon,' 'revenge,' and 'magic') as a means of distinguishing their product. Field reports indicate that purity levels even of brand names can fluctuate in quality week to week."

By contrast, plain, unmarked packaging is reported in several CEWG areas, including Denver, where black tar heroin is readily available in ¼-gram wax paper envelopes; Los Angeles, where heroin is often packaged in tinfoil or balloons; Minneapolis/St. Paul, where powdered, tan heroin may appear packed in small, clear capsules; and St. Louis, where most heroin is packaged in aluminum foil, some is sold in "bundles" (1/10 gram wrapped in plastic wrap and aluminum foil), and the number-5 gel capsule is also available.

to users outside the city. The majority of that region's drug distribution groups are, as in previous years, loosely organized "crews" ranging in age from early twenties to midthirties. In New York City, where heroin dealers range broadly in age from their late teens to late fifties, street dealers sometimes use teenagers to sell the drugs, and these teenagers can be seen on small bicycles loitering in front of grocery stores. Heroin activity in New Orleans occurs mainly in the economically disadvantaged areas of the city, but several sources report that the drug has recently spread citywide. In Atlanta, some have had a misconception that heroin is confined to specific neighborhoods in the city; this is no longer the case and has not been the case for some time now. In St. Louis, where small distribution networks and many small entrepreneurs sell heroin, most business is handled by cellular phone, decreasing the seller's need to have a house for users and reducing risk to the seller.

South Florida's expanding heroin epidemic is linked to the active marketing of South American heroin from Colombia that has been moving into the area since the beginning of the 1990s. Trafficking throughout New England, mostly stemming from New York, remains dominated by Dominican nationals, with smaller operations run by South and Central American, Nigerian, Asian, and local groups. Los Angeles is a major transshipment center for the distribution of black tar heroin to the Pacific Northwest, Southwest, and Midwest areas of the United States. Much of the heroin in New Orleans comes from Colombia and Mexico via Miami and Texas. In Phoenix, traffickers are using colored, powdered materials (photocopier toner, paint pigments, ore concentrates, and food products) and blending them with heroin or cocaine.

#### **MARIJUANA**

Minneapolis/St. Paul: "Multiple national and State student surveys note a marked increase in marijuana use among youth since 1992. The consequences of this abuse are reflected by increases in young people entering addiction treatment programs."

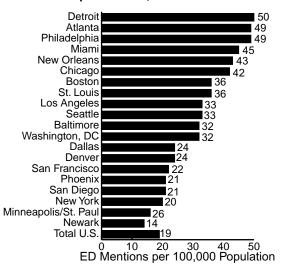
New York City: "Dramatic increases in marijuana during the past decade are probably related to increases in cocaine and heroin and may indicate a retreat to a drug that is perceived as much safer....marijuana activity continues to show steady and dramatic increases."

Washington, DC: "Recent indicators show that its use has remained steady overall and declined among youth in particular...users tend to be young, Black, male, and from low socioeconomic groups. Use among females and Hispanics may be increasing."

#### **EMERGENCY DEPARTMENT DATA**

In the first half of 2000, marijuana accounted for substantial proportions (≥10 percent) of total emergency department (ED) mentions in 10 cities: Atlanta, Boston, Dallas, Detroit, Los Angeles, Miami, New Orleans, Philadelphia, St. Louis, and Washington, DC, but it is important to note that many marijuana ED episodes include other drug mentions (exhibit 2). Detroit has the Nation's highest rate of marijuana ED mentions per 100,000 population, followed by Atlanta and Philadelphia (exhibit 29).

Exhibit 29. Estimated rate of marijuana/hashish ED mentions per 100,000 population by metropolitan area, first half 2000\*



\*First-half-2000 data are preliminary.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 2000 (September 2000 update) Between the first halves of 1999 and 2000, marijuana as a percentage of total ED mentions increased substantially (≥3 points) in San Francisco and remained relatively stable elsewhere. During the same time period, trends in the number of marijuana ED mentions were mixed, with 12 increases and 8 declines (exhibit 30). Mentions increased significantly in five cities (Denver, Miami, San Diego, San Francisco, and Seattle) and declined significantly in three (Newark, Philadelphia, and Phoenix).

Long-term trends in the four top-ranking cities (Atlanta, Detroit, Miami, and Philadelphia) show that rates in Atlanta, Miami, and Philadelphia increased overall between the first halves of 1995 and 2000. Rates in Detroit fluctuated, and in the first halves of 1999 and 2000 returned to first-half-1995 rates (exhibit 31).

#### TREATMENT DATA

Marijuana as the primary drug of abuse accounts for the largest percentage of treatment admissions in Colorado, Minneapolis/St. Paul, and Seattle (exhibits 6 and 32). Marijuana also accounts for substantial proportions (≥20 percent) in seven other areas.

Marijuana treatment proportions showed mostly increasing or stable trends when compared with figures from 1 year earlier. The largest increases were in Philadelphia (at 6 percentage points), and the largest declines

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Phoenix (N Newark Philadelphia ( New York (*N*= Baltimore (*I* **New Orleans** Detroit (N Dallas Washington, DC Chicago Los Angeles Atlanta Minneapolis/St. Paul San Diego Boston (A Miami (N= 60b Seattle San Francisco Total U.S. (*N*: 100 110 -100 10 20 30 40 80 Percent of Decrease Percent of Increase

Exhibit 30. Percentage of change in marijuana ED mentions by metropolitan area, first-half 2000 versus first-half 1999<sup>a</sup>

NOTE: (N) refers to first-half-2000 mentions.

<sup>a</sup>First-half-2000 data are preliminary.

<sup>b</sup>p<0.05

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 2000 (September 2000 update)

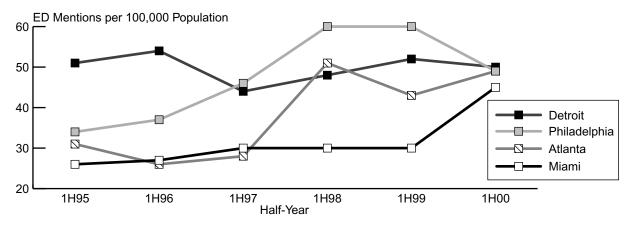


Exhibit 31. Five-year trends in marijuana/hashish ED mentions per 100,000 population in four top-ranking cities, first half 1995–first half 2000\*

\*First-half-2000 data are preliminary.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 2000 (September 2000 update)

were in New Orleans and Washington, DC (at 7 and 9 points, respectively).

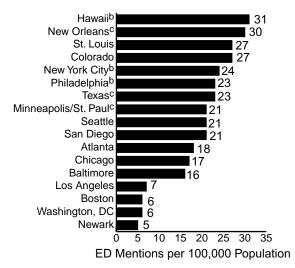
Long-term marijuana treatment admission trends showed mostly increasing trends:

■ Colorado: Marijuana users have accounted for the largest proportion of all drug treat-

ment clients since 1995. These increases since 1995 may be related in part to user accounts of increased potency. By contrast, the proportion of new users entering treatment for marijuana use declined steadily between 1994 and 1999 (from 37 to 25 percent); however, in 2000, this proportion climbed slightly to 29 percent.

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Exhibit 32. Marijuana as a proportion of primary drugs of abuse among treatment admissions in reporting CEWG areas, second half 2000 (including alcohol-incombination and excluding alcohol only)<sup>a</sup>



<sup>a</sup>Reporting periods are July–December 2000, except for the following: January–June 2000 in Atlanta, Baltimore, and Chicago; full year 2000 in Minneapolis/ St. Paul, New Orleans, and San Francisco; and January–June 2001 in Texas.

<sup>b</sup>Alcohol-in-combination is not included.

<sup>c</sup>Alcohol-only is not excluded.

SOURCE: Drug treatment agencies

- Hawaii: Marijuana admissions are currently the highest in the 10 years of data recorded, and the 2000 number is triple that of 1992.
- Minneapolis/St. Paul: In 1991, 8 percent of treatment admissions reported marijuana as the primary problem, compared with 23 percent in 2000. Marijuana admissions have outnumbered cocaine admissions since 1995.
- Newark: The proportion of marijuana admissions increased from 2 to 6 percent between 1992 and the first half of 2000.
- New York City: Marijuana admissions increased sevenfold between 1991 and 2000 (from 1,374 to 11,151). Furthermore, in 1991, they represented about 5 percent of all drug treatment admissions; by 2000, they represented 23 percent.

■ St. Louis: Marijuana admissions more than doubled between 1997 and 2000 (from 1,573 to 3,231).

Conversely, in Baltimore, between the peak in 1996 and 2000, the marijuana admission rate per 100,000 population declined. In Boston, the proportion of marijuana admissions reporting pastmonth use has been steady over the last 3 years at around 14 percent; however, primary marijuana users continue to constitute only a small proportion (4 percent) of those in treatment.

#### ARRESTEE URINALYSIS DATA

According to 2000 Arrestee Drug Abuse Monitoring (ADAM) program data, marijuana was the most frequently detected drug among adult male arrestees in 12 of 17 CEWG areas, with percent positive levels ranging from 29 in Laredo to 54 in Minneapolis (exhibits 7 and 33). However, among adult female arrestees, marijuana is the most frequently detected drug in only two areas (Minneapolis and Seattle), with positive levels ranging from 17 percent in Laredo to 48 percent in Seattle (exhibits 8 and 33). ADAM data from 2000 cannot be compared with previous data.

#### OTHER LOCAL DATA

Poison control data show mixed trends in marijuana use:

- Boston: In 2000, marijuana was mentioned in 4 percent of all helpline calls specifying particular drugs, level with prior periods.
- Denver: Marijuana calls to the poison center were nearly nonexistent between 1994 and 1998, with only one or two per year. However, in 1999 and 2000, there were 47 and 58 calls, respectively.
- Texas: In 2000, 520 confirmed cases of exposure to marijuana were reported to

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Females

10 20 30 40 50 60

Percentage Positive

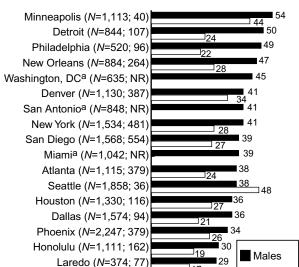


Exhibit 33. Percentage of adult male and female arrestees positive for marijuana, by metropolitan area, 2000 (ranked by males)

NOTE: Male findings are weighted and represent probability-based sampling; female findings are unweighted and not based on probability sampling.

aData are not available for females at this time. bData are not available for males at this time.

Chicagob (N=NR; 1,301)

Los Angeles<sup>b</sup> (N=NR; 300)

SOURCE: National Institute of Justice, Arrestee Drug Abuse Monitoring program, 2000 Annual Report

poison control centers. The average age of the caller was 23 years, and 56 percent were male.

Additionally, marijuana hospital discharges per 100,000 population in Colorado rose dramatically between 1994 and 1999 (from 41.9 to 57.1).

#### **DEMOGRAPHIC DATA**

## Age

Among marijuana ED mentions in the first half of 2000, all age groups continue to be represented substantially (exhibit 34). The young adult group (18–25 years) accounts for the largest proportion of mentions in 9 cities,

# CRIMINAL JUSTICE REFERRALS: AN EXPLANATION FOR INCREASES IN THE NUMBER OF MARIJUANA TREATMENT ADMISSIONS?

Baltimore: A large proportion of marijuana treatment admissions represent referrals through the criminal justice system (65 percent versus 23 percent for heroin injectors). Maryland instituted a drug court in 1994, which is possibly related to the high marijuana treatment admission rate. Treatment admission rates per 100,000 population for criminal justice and noncriminal justice referrals increased from 1992 to 1995. But, while rates from noncriminal justice referrals stabilized in 1995 and declined from 1997 to 1999, those for criminal justice referrals continued to increase through 1996.

Boston: Compared with primary cocaine and heroin admissions, marijuana admissions were more likely to have some criminal justice system involvement (53 percent for marijuana versus 32 and 21 percent for cocaine and heroin, respectively).

New York City: Among primary marijuana admissions in 2000, 70 percent had some criminal justice status, compared with 47 percent for cocaine and 36 percent for heroin.

San Diego: Marijuana represented the growth industry in the county-funded treatment system, increasing 1,768 percent between 1990 and 2000, when there were 2,447 marijuana admissions. Furthermore, between 1999 and 2000, marijuana admissions increased 15 percent. Most of the admissions were juveniles, 75 percent were referred by the criminal justice system, and the increase resulted from the county's ongoing treatment-on-demand initiative for adolescents.

the 35+ group is largest in 10 cities, and the adolescent group (12–17 years) is largest in Minneapolis/St. Paul. Adolescents also account

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for substantial proportions (≥20 percent) of mentions in four cities: Baltimore, Boston, Dallas, and Denver.

#### AGES OF MARIJUANA USERS CONTINUE TO SHIFT FROM ADOLESCENCE TO YOUNG ADULTHOOD IN SEVERAL CEWG AREAS:

Newark: Reversing the dramatic shift among marijuana admissions from adults to adolescents, the average age of marijuana admissions increased (from 22 years in 1998 to 23 years in the first half of 2000).

New York City: Between 1999 and 2000, the ages of marijuana treatment admissions increased (from 46 percent in the younger-than-20 age group to 38 percent).

Texas: The average age of adult marijuana admissions continues to increase: in 1985, the average age was 24; in 2000, it was 27. However, the proportion of adolescent drug treatment clients admitted for a primary problem with marijuana was 73 percent in 2000 compared with 35 percent in 1987.

Between the first halves of 1999 and 2000. percentages of ED mentions in the oldest age group (35+) increased substantially (5–10 points) in three cities (Atlanta, New Orleans, and San Francisco), declined substantially (7 points) in Newark, and remained relatively stable elsewhere. Continuing to indicate an aging cohort, the 26–34 group declined substantially (5–6 points) in four cities (Dallas, Miami, Minneapolis/St. Paul, and San Diego), increased substantially (by 8 points) only in Newark, and remained relatively stable elsewhere. The young adult and adolescent groups remained relatively stable in CEWG cities with two exceptions: New Orleans (where the young adult group decreased by 5 points) and San Francisco (where the adolescent group decreased by 9 points).

In the first half of 2000, marijuana ED rates per 100,000 population were highest among the young adult group in 17 CEWG cities in the Drug Abuse Warning Network (DAWN) and highest among adolescents in Minneapolis/St. Paul, San Francisco, and Washington, DC (exhibit 35).

Treatment data continue to reflect a young group of marijuana admissions, with the adolescent group (≤17 years) accounting for the largest proportions in eight areas, the young adult group (18–25 years) in five areas, and the oldest group (35+) in Atlanta (exhibit 36). Among cities where comparison data for 1 year earlier were available, age distribution shifts among marijuana treatment admissions showed mixed trends. The oldest age group's representation increased in seven areas and declined in four, while the 26–34 group's representation declined in nine areas and remained stable in two. The young adult group's representation increased in three areas, declined in seven, and remained stable in one, while adolescent representation increased in eight areas and declined in three.

Similar to other indicators, the highest levels of marijuana-positive urinalyses among adult male booked arrestees in 2000 were among the two youngest age groups (21–25 and <21 years), with percent positive levels ranging from 39 to 82 among the youngest age group and from 28 to 75 among the 21–25 age group (exhibit 37). Marijuana-positive levels were also relatively high among the other age groups.

#### Gender

In all CEWG cities in DAWN, males consistently outnumber females among marijuana ED mentions, with males ranging from 60 percent in Washington, DC, to 72 percent in Miami (exhibit 34). Between the first halves of 1999 and 2000, male representation declined in 11 cities, increased in 5, and remained stable

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Exhibit 34. Age and gender distribution of marijuana ED mentions, by percentage, in reporting CEWG cities, first half 2000\* (ranked by the 12–17 age group in descending order)

City	(N)	35+	26–34	18–25	12–17	Males
Minneapolis/St. Paul	(380)	19	14	33+	34	68
Dallas	(603)	23	20-	33	24	66
Denver	(389)	27+	20+	30	23+	66+
Baltimore	(758)	25	24	31	21	63
Boston	(1,369)		19	35	20+	64
Phoenix	(441)	24-	27	30-	19	65-
San Francisco	(363)	31+	25+	23+	19	64+
Newark	(260)	21-	27	35	17-	68-
Philadelphia	(2,361)	28	25-	29	17	66–
San Diego	(514)	39+	18	30+	14+	63
Seattle	(653)	27+	24+	34+	14+	61+
Chicago	(2,487)	32	27	27+	13	66
New York	(1,672)	32	25-	30	13	71
Washington, DC	(1,247)	29			13	60
St. Louis	(882)	33	26	29	12	63
Los Angeles	(2,840)		22	26	11	65
Miami	(859)	39+	23	29+	9+	72+
Detroit	(2,181)	39	28	26	6	63
Atlanta	(1,366)	40	30	24	5-	68
New Orleans	(522)	38	26	31-	5	71

NOTE: "+" or "-" indicates significant increase or decrease (p<0.05) in number (not percentage) of mentions since the first half of 1999; "..." denotes estimate does not meet standard of precision.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 2000 (September 2000 update)

elsewhere. The largest changes were increases in Washington, DC (by 7 points), Seattle (by 11 points), and San Francisco (by 13 points). Additionally, the number of male marijuana ED mentions increased significantly in four cities and declined significantly in three.

Males also outnumber females among marijuana treatment admissions in all 14 reporting areas (exhibit 36). In the 11 areas where gender trend data were available, trends were mixed: male representation increased in 4 areas, declined in 6, and remained relatively stable in 1. The largest increases occurred in Boston, San Diego, and Seattle (by 6, 4, and 4 percentage

points, respectively), and the largest decline occurred in Washington, DC (by 6 points). Among treatment admissions for all drugs, those for marijuana continue to have the widest gender gaps in nearly all CEWG areas.

According to 2000 data, adult males had higher levels of marijuana-positives than adult females in every CEWG area in ADAM, except for Seattle, where females tested at 48 percent positive and males at 38 percent positive (exhibit 33). Minneapolis and Detroit had the highest levels among males (at 54 and 50 percent positive, respectively); Seattle had the highest level among females.

<sup>\*</sup>First-half-2000 data are preliminary.

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Exhibit 35. Marijuana/hashish ED rates per 100,000 population, by age and metropolitan area, first half 2000\*

City	35+	26–34	18–25	12–17
Atlanta	37	92	101	27
Baltimore	14	52	88	81
Boston		47	99	92
Chicago	24	77	99	59
Dallas	11	28	66	61
Denver	12	30	75	63
Detroit	35	102	122	33
Los Angeles		48	61	40
Miami	30	77	120	45
Minneapolis/St. Paul	6	14	47	60
Newark	5	29	46	28
New Orleans	30	81	121	19
New York	11	34	53	30
Philadelphia	24	91	128	94
Phoenix	9	40	53	43
St. Louis	21	68	105	45
San Diego	16	26	39	36
San Francisco	11	37	50	65
Seattle	16	52	106	59
Washington, DC	17			49

NOTE: Shaded areas indicate highest ranking age group in each city; "..." denotes does not meet standard of precision. \*First-half-2000 data are preliminary.

# Race/Ethnicity

As with other drugs, marijuana ED racial/ethnic demographics vary depending on geographic location. In the first half of 2000, Whites were the largest racial/ethnic group among marijuana mentions in nine CEWG cities; Blacks accounted for the largest in seven (Atlanta, Detroit, Newark, New Orleans, New York, Philadelphia, and Washington, DC), Blacks and Whites were equal in Miami, and three cities had too many mentions in the "unknown" category to be

Exhibit 36. Age and gender distribution of primary marijuana treatment admissions, by percentage, in reporting CEWG areas<sup>a</sup> (ranked in descending order by the ≤17 group)

Area	35+	26–34	18–25	<u>&lt;</u> 17	Males
San Diego	10	8	15	68	77
Seattle	10	13	22	53	74
Baltimore	9	12	28	51	82
Texas	10	12	28	50	74
Minneapolis/St. Paul	10	13	30	48	79
Los Angeles <sup>b</sup>	15	17	26	43	66
Colorado	16	15	29	40	75
New York City <sup>c</sup>	13	25	24	38	80
Chicago	10	16	39	35	76
Newark	13	24	39	23	83
Boston	12	23	45	20	79
St. Louis	15	23	46	17	78
Atlanta	82	7	4	8	67
Washington, DC	20	26	47	8	83

<sup>a</sup>Reporting periods are July–December 2000, except for the following: January–June 2000 in Atlanta, Baltimore, and Chicago; full year 2000 in Minneapolis/St. Paul and New York City; and January–June 2001 in Texas.

SOURCE: Drug abuse treatment agencies

included in the count. Hispanics accounted for a substantial number of mentions (≥15 percent) in Miami, Newark, and New York.

Between the first halves of 1999 and 2000, the proportion of Whites among marijuana ED mentions increased in several cities, while the proportion of Blacks declined: White representation increased 5–7 percentage points in four cities (Baltimore, Boston, Detroit, and Philadelphia), while Black representation declined 6–9 points in three cities (Baltimore, New York, and Philadelphia). White representation decreased substantially (by 6 points) only in San Diego, and Black representation increased substantially (by 9 points) only in Washington, DC. Hispanic representation

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 2000 (September 2000 update)

<sup>&</sup>lt;sup>b</sup>Age groups are 36+, 26–35, 18–25, and ≤17.

<sup>&</sup>lt;sup>c</sup>Age groups are 36+, 26–35, 21–25, and <21.

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Exhibit 37. Percent marijuana-positive, by age, among adult male booked arrestees, 2000 (ranked in descending order by the <21 age group)

City	36+	31–35	26-30	21–25	<21
Baltimore	9	12	28	51	82
Washington, DC	16	34	41	62	82
Philadelphia	24	35	40	75	81
Detroit	23	37	50	70	76
Minneapolis	31	45	55	64	75
New York	24	33	45	60	70
New Orleans	21	23	47	62	69
Atlanta	21	34	50	62	68
Seattle	23	28	48	49	63
Phoenix	18	20	36	51	62
Laredo	15	14	30	28	58
Dallas	27	21	38	38	56
San Diego	29	31	44	52	55
Miami	22	34	43	57	54
Houston	15	29	30	48	53
Denver	30	40	41	56	52
San Antonio	29	31	39	49	50
Honolulu	25	27	24	45	39

NOTE: No urinalysis data for male arrestees are available for Chicago and Los Angeles at this time; shaded areas indicate highest-ranking age group in each city.

SOURCE: National Institute of Justice, Arrestee Drug Abuse Monitoring program, 2000 Annual Report

increased substantially (3–6 points) in Los Angeles, Miami, and San Diego and remained relatively stable in all other areas where comparisons were possible.

Similar to ED data, among primary marijuana treatment admissions, racial/ethnic demographics vary depending on geographic location. White representation (ranging from 2 percent in Washington, DC, to 69 percent in Minneapolis/St. Paul) was greater than that of other races/ethnicities in 7 of 14 reporting areas (Atlanta, Baltimore, Chicago, Denver, Minneapolis/St. Paul, San Diego, and Seattle); Black representation (ranging from 7 percent in Denver to 61

percent in St. Louis) was greatest in 5 (Boston, Newark, New York City, St. Louis, and Washington, DC); and Hispanic representation was greatest in Los Angeles and Texas.

Trends in racial/ethnic distribution among heroin treatment admissions shifted in several of the 11 areas where comparable data for 1 year earlier were available. In Boston and Seattle, White and Black representations declined, while Hispanic representation increased; in St. Louis, White representation declined, while Black representation increased; in Washington, DC, White and Hispanic representations increased, while Black representation declined; and in Colorado, White representation increased, while Black and Hispanic representations declined. (It is important to note that long-term trends in Colorado show a different picture: between 1994 and 2000, Hispanic representation increased, while White representation declined.)

#### **USE PATTERNS**

Miami: "The recent increase in marijuana ED mentions may be driven by marijuana use among users of cocaine and ecstasy. Marijuana is increasingly cited as a club drug used prior to going to raves or clubs and at after-event parties. The shift to club drug use at home and private parties may facilitate more use of marijuana in combination with other drugs."

Philadelphia: "Spring 2001 focus groups estimated that of all blunts smoked, 47 percent are laced with another drug."

Washington, DC: "A cause for concern is that users are smoking more potent marijuana in large amounts and using methods developed to enhance the weaker marijuana that was formerly available."

Among primary marijuana treatment admissions, alcohol and cocaine remain the most common secondary and tertiary drugs reported

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in CEWG areas. The severity of alcohol as a secondary drug of abuse is underscored by the high percentages reported, ranging from 27 percent in Atlanta to 77 percent in Minneapolis/St. Paul.

The 1990s saw an increasing trend in marijuana use in many CEWG areas, one that closely corresponded with the rise in popularity of "blunt" smoking, especially common among younger users. The popularity of blunts, large amounts of marijuana placed in a cigar wrapper and smoked, continues in 2000 and 2001. Since 1992, focus groups in Philadelphia have mentioned blunts, nicknamed "phillies" after the most popular cigar brand used in making blunts, or "L's" (more commonly used than phillies in 2001). The spring and autumn 2000 focus groups in Philadelphia reported new street names for blunts, including "dutchies," "blizzies," "stogies," and "chocolate tide," and spring 2001 groups added "bizzle," "Bob Marley," "chronic," and "dozier." Blunt smoking remains common in other large urban centers including Boston, Chicago, New York City, and Washington, DC.

When used in blunt form, marijuana can be easily combined with other drugs. For example, users in various cities, such as Philadelphia and Washington, DC, lace blunts with phencyclidine (PCP). This combination is called "love boat" or "wet" in Philadelphia, where users new to treatment report PCP-laced blunts are increasingly common.

In New York City, ecstasy and cocaine hydrochloride (HCl) were supposedly smoked in marijuana blunts. PCP-marijuana combinations are also reported in Minneapolis/St. Paul, St. Louis, and Texas. In Minneapolis/St. Paul, joints are sometimes dipped into other psychoactive substances prior to smoking to achieve additional effects or to enhance those of the marijuana alone. In that city, joints dipped in formaldehyde or embalming fluid (sometimes mixed with PCP) are known as "wets," and joints dipped in PCP are known as "wet daddies." In St. Louis, joints are dipped in PCP, and in Texas in 2000, poison control centers reported 104 cases of misuse or abuse of marijuana in which terms such as "formaldehyde," "fry," "amp," or "PCP" were mentioned.

Marijuana is also combined with cocaine in some CEWG cities, including Philadelphia and Washington, DC. Cocaine added to a blunt is referred to as "turbo" in Philadelphia, and small rocks of crack in Philadelphia and Washington, DC, are sometimes added to blunts. Users in Washington, DC, also dip blunts into a liquid solution of crack or heroin to intensify the effects, and clubgoers there tend to use drugs such as ecstasy, lysergic acid diethylamide (LSD), and methamphetamine with the more potent types of marijuana. Other combinations include marijuana with alprazolam (Xanax), cough syrup, oxycodone (Percocet), or ecstasy (MDMA) in Philadelphia, and some users like to dip blunts in honey to add flavor and slow the burn. Ecstasy is also commonly used with marijuana in Miami, San Francisco, and Washington, DC. In central Texas, a red dust called "red rock," reportedly made from the resin of the Daemonorops draco plant used to make incense, is sprinkled on marijuana cigarettes to reduce throat and lung irritation and to achieve a different psychological effect.

# LAW ENFORCEMENT AND MARKET DATA

## Arrests, Seizures, and Submissions

Recent trends in marijuana arrests increased in most reporting CEWG areas:

■ Boston: The proportion of marijuana arrests rose slightly between 1999 and 2000 (from

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28 to 29 percent of all drug-related arrests). According to police, most arrests are for small quantities and involve juveniles and young adults.

- Honolulu: Possession cases are steady at about 650 per year, but distribution cases have continued to increase.
- New Orleans: Between 1999 and 2000, arrests for possession of marijuana continued to rise (from 4,350 to a high of 5,731). Arrests for the distribution of marijuana rose between 1998 and 1999 (from 786 to 881) but declined slightly to 861 in 2000.
- New York City: In spite of the decriminalization of possessing small amounts of marijuana, police continue to make a record number of related arrests. Cannabis-involved arrests reached a low of 4,762 in 1991 and increased more than ninefold to 43,122 in 1999. Thirty-five percent of all cannabis arrests involved people younger than 20 years old.

Likewise, the amount of submissions and seizures remained high in reporting areas. Marijuana submissions in Boston for 2000 stayed level with recent years at 36 percent of all drugs analyzed—the highest proportion of any drug. In Newark, marijuana accounted for 25 percent of drug seizures in the first quarter of 2000, following those for heroin (30 percent) and cocaine (45 percent). In Denver, 8,227 and 2,683 pounds of marijuana were seized in 1999 and 2000, respectively. And in Seattle, 21 seizures of hashish and 523 seizures of marijuana were seized from Washington ports of entry, totaling 2,382 pounds.

## Availability, Purity, and Price

Miami: "The availability of Jamaican hash oil continues to be reported."

New York City: "One dealer reported adding twice the amount of oregano and parsley to marijuana, along with baking soda and alcohol, to make a mixture. He then dried it in the sun for 2 days and packaged it for \$10 per bag."

Marijuana is widely available in most reporting CEWG cities, with the exception of Seattle, where marijuana is not readily available as a street drug, and what is available is primarily the lower grade, more commercial product. Conversely, the potency of marijuana in most reporting areas remains high. For example, marijuana quality continues to increase in New York City due to new varieties and combinations, such as hydroponically grown marijuana ("hydro"), which is preferred by teenagers for its economy and quality, and an organic marijuana ("purple haze"), which is now more expensive than hydro. Similarly, in Chicago, marijuana is regarded as high quality, with a variety of types and prices. In Los Angeles, Mexican commercial grade marijuana has a potency of 4–6 percent tetrahydrocannabinol (THC), but higher grade marijuana has a potency of up to 25–30 percent THC.

Exhibit 38 presents available marijuana price data in CEWG areas. Ounce prices for commercial grade marijuana range from \$70-\$100 in San Diego to \$200-\$400 in Miami. Many CEWG areas report prices for small amounts of marijuana. For example, in Minneapolis/St. Paul, individual marijuana joints cost \$3-\$5, and dipped joints cost more. In New York City, bags of marijuana are priced at \$10-\$50, hydro joints are \$10 each, and blunts are \$15 each. In Washington, DC, "dime bags" of "kind bud" (marijuana grown with enhanced soil and lighting) or hydro (plants grown indoors in water) cost \$10-\$20 each, dime bags of commercial grade marijuana cost \$5-\$10, and blunts made with commercial grade marijuana cost \$10–\$20. In Chicago, marijuana on the street is most often sold in \$5, \$10, and \$20 bags; in

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Exhibit 38. Marijuana prices and potency in reporting CEWG areas, June 2001 reporting period

City		Sauras/Ouglity	Price/Ur	nit
	City	Source/Quality —	Ounce	Pound
Atlanta		Domestic	\$160–\$250	\$1,000-\$2,000
		Sinsemilla	\$120–\$240	\$1,200
Boston		Commercial	\$200–\$250	\$800-\$1,500
		Sinsemilla	\$200–\$300	\$2,500-\$3,000
Chicag	0	Type unspecified	\$100–\$200	NR
		Mexican	NR	\$900–\$1,000
		Colombian	NR	\$1,800–\$2,000
		Sinsemilla	NR	\$2,500-\$4,000
Denver		British Columbian ("BC bud")	\$500	\$4,000-\$5,000
		Sinsemilla	\$100–\$300	\$1,500–\$3,600
		Mexican and locally grown	\$200	\$550-\$900
Honolu	lu	Low quality	\$300-\$500	NR
		High quality	\$400–\$800	NR
		Type unspecified	NR	\$6,000-\$9,000
Los An	geles	Wholesale	NR	\$400-\$1,500
		Street value	NR	\$4,000-\$5,000
Miami		Commercial grade ("regs")	\$200–\$400	\$700–\$1,000
		(4–10% THC)		,
		Hydroponic ("crippy") (8–26% THC)	>\$500	\$1,600–\$3,700
Minnea	polis/St. Paul	NR	\$165	\$700–\$3,000
New O	rleans	Type unspecified	\$125–\$160	\$750-\$1,000
		Sinsemilla	\$300–\$400	\$2,000-\$3,000
New Yo	ork City	Organic ("purple haze") and	\$700–\$800	NR
		hydroponic ("hydro")		
		Wholesale	NR	\$800-\$2,500
		High-quality commercial	NR	\$2,000-\$4,000
Phoeni	x	NR	\$75–\$150	\$500-\$750
St. Lou	iis	Sinsemilla (20% THC)	NR	\$500-\$1,200
		Imported	NR	\$2,000-\$4,000
San Die	ego	Commercial (2-3% THC)	\$70–\$100	\$300-\$400
	· ·	Sinsemilla	\$200–\$400	\$2,000-\$4,000
		British Columbian	NR	\$4,000
		("BC bud") ( <u>&gt;</u> 30% THC)		
San Fra	ancisco	Type unspecified (3–20% THC)	NR	\$2,500
Seattle		Locally grown	\$325–\$400	\$4,000-\$5,200
Texas	Dallas	Commercial grade	NR	\$375–\$800
		Indoor-grown sinsemilla	NR	\$750-\$1,200
	Houston	Commercial grade	NR	\$350-\$600
	Laredo	Commercial grade	NR	\$180–\$200
Washin	ngton, DC	Commercial grade	\$75–\$120	\$700–\$1,400
	J , -	Hydroponic ("hydro") or "kind bud"	\$480	\$1,200–\$6,000

SOURCE: CEWG city reports, June 2001

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Hawaii, individual joints cost \$5–\$20; and in Newark, marijuana cost \$5–\$10 per bag and \$2–\$5 per joint. Since the December 2000 reporting period, marijuana prices have remained relatively stable in reporting areas, except for Seattle, where marijuana prices have followed the downward trend in prices seen for both heroin and cocaine.

## **Cultivation and Trafficking**

Boston: "High profit margins and relatively weak penalties are incentives to traffic in marijuana, according to police."

Washington, DC: "Ethnographic sources identified particular varieties of marijuana plants, including blueberry, white widow, and northern lights."

Indoor marijuana production continues to be a major way to cultivate marijuana in many CEWG areas. For example, while imported marijuana continues to move into South Florida, the source of marijuana has shifted from imported to domestic, approximately 30 percent of which is grown in sophisticated, fully automatic, indoor, hydroponic operations. Similarly, an increasing proportion of the marijuana in Washington, DC, is grown locally in indoor locations, contributing to its increasing potency. The two most commonly found types of locally grown marijuana in the District are hydro (plants grown in water) and "kind bud," also known as "bud" or "KB" (grown with enhanced soil and lighting). Indoor production in St. Louis is the primary cultivation mode, making weather less of a factor; law enforcement agencies now focus on indoor growing operations there. Indoor-grown marijuana continues to provide large amounts of high-quality cannabis in Texas. And in Los Angeles, while the major production of marijuana is conducted in the outlying areas of the county, indoor hydroponic sites continue to operate.

Although indoor-grown domestic marijuana is increasing in CEWG areas, outdoor Mexicangrown marijuana, transported via the Southwest United States, remains common. For example, although marijuana in Boston is locally grown, most marijuana is shipped overland or via delivery services from Mexico and the Southwest United States, as well as from Jamaica and Colombia. In Washington, DC, where Jamaican drug trafficking groups are responsible for much of the drug's importation and distribution, commercial-grade marijuana from the Southwest United States is the type most available. Also, in Detroit, Mexican marijuana continues to be increasingly dominant. Imported Mexican marijuana, as well as domestically cultivated marijuana from Southeast Oklahoma and Northeast Texas, continue to provide large amounts of marijuana in Texas. Mexican-grown marijuana is trafficked into the Denver area from the border areas of Texas, New Mexico, and Arizona, and vehicles with hidden compartments are used to transport pound to multipound shipments. Large quantities of marijuana are seized along the Arizona-Mexico border, with Tucson remaining a major transshipment point for loads destined to locations across the United States. The most remarkable change in marijuana production in the Los Angeles area is that Mexican nationals no longer transport the drug across the border. Rather, they cross the border and grow marijuana in Southern California, principally on national parklands.

High-potency marijuana from British Columbia ("BC bud") continues to be available in Denver, San Diego, and Seattle. This type of marijuana generally passes through the Seattle area en route to destinations further south on the west coast.

# **METHAMPHETAMINE**

St. Louis: "Because it [methamphetamine] is so inexpensive and easy to produce, it is possible that this drug will be around for a long time to come."

Washington, DC: "Ethnographic reports continue to indicate that this drug is used in the District by itself or in polydrug combinations with alcohol, marijuana, cocaine hydrochloride (HCl), and ecstasy [methylenedioxymethamphetamine, MDMA] among young heterosexuals, white-collar professionals, men who have sex with men, and college students."

#### **MORTALITY DATA**

Methamphetamine-related deaths remained relatively few. In the six CEWG areas where 1999 versus 2000 mortality data are available, methamphetamine figures suggest mixed trends:

- Honolulu: Methamphetamine-positive toxicology screens remained relatively stable, with 35 in 2000 and 34 in 1999.
- Minneapolis/St. Paul: Methamphetaminerelated deaths were relatively low, but seemed to be increasing (from 7 to 17).
- Philadelphia: Methamphetamine-related deaths remained low and declined slightly (from 12 to 5).
- Phoenix: Methamphetamine-related deaths increased 36 percent (from 75 to 102), continuing a steady increase since 1996.
- San Diego: Methamphetamine accidental overdose deaths have increased 65 percent (from 37 to 61), continuing a general increase since 1990.
- Seattle: Although methamphetamine-caused deaths have increased generally since 1997, they declined slightly between 1999 and 2000 (from 14 to 11).

Earlier, between 1998 and 1999, methamphetamine medical examiner (ME) mentions increased in western cities, according to the Drug Abuse Warning Network (DAWN): in Denver (from 3 to 9 mentions), Los Angeles (from 111 to 147), Phoenix (from 60 to 94), San Diego (from 84 to 88), San Francisco (from 45 to 58), and Seattle (from 4 to 30). Interestingly, methamphetamine ME mentions also increased substantially in New York during that time period (from 2 to 44 mentions).

# EMERGENCY DEPARTMENT DATA

Methamphetamine accounted for 1–7 percent of total emergency department (ED) mentions in the western CEWG cities in DAWN (Denver, Los Angeles, Phoenix, San Diego, San Francisco, and Seattle), and it accounted for 1–2 percent of ED mentions in Atlanta, Dallas, Minneapolis/St. Paul, and St. Louis (exhibit 2). In all the other cities, the drug was involved in fewer than 1 percent of ED mentions.

Western cities also had the Nation's highest methamphetamine ED rates per 100,000 population in the first half of 2000, with particularly high rates continuing in San Diego and San Francisco (exhibit 39). St. Louis had the highest rate of any nonwestern area at 4.1 per 100,000 population, and Atlanta had the highest rate on the east coast at 2.4 per 100,000 population.

After mostly declines last reporting period, methamphetamine ED mentions showed mostly increases between the first halves of 1999 and 2000, with mentions increasing in 10 cities, declining in four, and remaining stable in one (exhibit 40). Mentions increased significantly

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5

Exhibit 39. Estimated rate of methamphetamine ED mentions per 100,000 population by metropolitan area, first half 2000\*

\*First-half-2000 data are preliminary.

10

ED Mentions per 100,000 Population

15

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 2000 (September 2000 update)

in six cities (Atlanta, Denver, Phoenix, St. Louis, San Diego, and Seattle) and declined significantly in none.

Among the four top-ranking cities (Phoenix, San Diego, San Francisco, and Seattle), mentions declined overall or remained stable between the first halves of 1995 and 1999, but in all four cities, mentions resurged between the first halves of 1999 and 2000 (exhibit 41).

#### TREATMENT DATA

Honolulu: "The rate of increase in demand for treatment space for methamphetamine... 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."

Stimulant admissions (mostly involving methamphetamine) continued to account for the largest percentage of all treatment admissions in Hawaii and San Diego in 2000, and they accounted for noticeable proportions (9–14 percent) of admissions in the other western areas (exhibit 42). While the number of stimulant admissions remains relatively low in Chicago, there was an increase of 195 percent between the first halves of fiscal years (FYs) 2000 and 2001 (from 577 to 1,701). In other areas of the country, proportions remained relatively low.

#### ARRESTEE URINALYSIS DATA

Honolulu tops the list of CEWG cities in methamphetamine-positive urinalysis levels among adult Arrestee Drug Abuse Monitoring (ADAM) program arrestees, with 36 percent of males and 47 percent of females testing positive in 2000 (exhibit 43). In San Diego, 26 percent of male and 29 percent of female arrestees tested methamphetamine-positive. Outside western ADAM sites, methamphetamine continues to appear only sporadically, but it has recently appeared in four nonwestern areas: Atlanta, Minneapolis, Philadelphia (only males tested), and Washington, DC (only males tested); positive levels in those cities, however, have been very small (from less than 1 percent to 2 percent).

#### POISON CONTROL DATA

Poison control trend data were available for two CEWG areas (Colorado and Detroit), both of which showed increases. In Colorado, amphetamine-related calls fluctuated between 1994 and 1998 (11–38 calls) and then increased sharply to 291 in 1999 and 269 in 2000. Detroit poison centers reported 379 contacts involving amphetamine in 1999, 456 in 2000, and 211 in just the first quarter of 2001. In Texas, 315 poison cases mentioning amphetamines or methamphetamine were reported in 2000.

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Chicago (N=8) -13 Boston (N=7) -11 New Orleans (N=8) -7 Minneapolis/St. Paul (N=53) 0 Baltimore (N=5) 15 San Francisco (N=288) 19 Dallas (N=69) 23 New York (N=16) 24 Los Angeles (N=514) 67<sup>b</sup> Phoenix (N=245) 71<sup>b</sup> San Diego (N=444) 80<sup>b</sup> Seattle (N=270) 116<sup>b</sup> Atlanta (N=67) 118<sup>b</sup> Denver (N=61) 125<sup>b</sup> St. Louis (N=99) 48<sup>b</sup>

Exhibit 40. Percentage of change in methamphetamine ED mentions by metropolitan area, first half 2000 versus first half 1999a

NOTE: (N) refers to first-half-2000 mentions.

-30

Percent of Decrease

Total U.S. (N=6,980)

<sup>a</sup>First-half-2000 data are preliminary.

<sup>b</sup>p<0.05

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 2000 (September 2000 update)

30

60

90

Percent of Increase

120

<u>150</u>

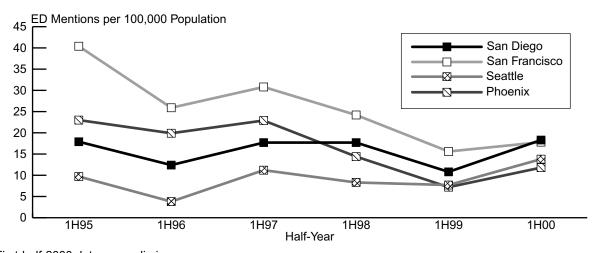


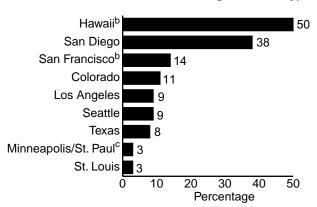
Exhibit 41. Five-year trends in methamphetamine ED mentions per 100,000 population in four top-ranking cities, first half 1995 through first half 2000\*

\*First-half-2000 data are preliminary.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 2000 (September 2000 update)

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Exhibit 42. Methamphetamine as a proportion of primary drugs of abuse among treatment admissions in selected CEWG areas, second half 2000 (including alcohol-in-combination and excluding alcohol only)<sup>a</sup>



<sup>&</sup>lt;sup>a</sup>Reporting periods are July–December 2000, except for the following: full year 2000 in Minneapolis/St. Paul and San Francisco, and January–June 2000 in Texas. <sup>b</sup>Alcohol-in-combination is excluded.

SOURCE: Drug abuse treatment agencies

#### **DEMOGRAPHIC DATA**

Chicago: "Gay men who use the drug continue to report being motivated by a wish to enhance their sexual experiences."

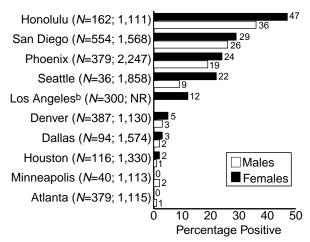
St. Louis: "Speed and its derivatives have become more widespread among high school and college students, who do not consider these drugs as dangerous as cocaine."

# Age

Of the methamphetamine-related decedents in the first half of 2000 in San Diego, 79 percent were age 35–45. The median age of San Francisco decedents in FY 2000 and of Texas decedents in 1999 was 40 and 37 years, respectively.

Primary methamphetamine treatment admissions tend to be in the two older-than-25 groups (exhibit 44). St. Louis is the only reporting area where younger clients (18–25 years) account for the largest group. In areas where trend data were

Exhibit 43. Percentage of adult male and female arrestees positive for methamphetamine in selected cities, 2000 (ranked by females)



NOTE: Male findings are weighted and represent probability based sampling; female findings are unweighted and not based on probability sampling.

\*Data are not available for males at this time.

SOURCE: National Institute of Justice, Arrestee Drug Abuse Monitoring program, 2000 Annual Report

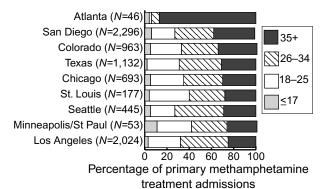
available for 1999 versus 2000, age distributions remained relatively stable with two exceptions: in St. Louis, the young adult (18–25 years) proportion increased, while the oldest age group's representation declined (by 8 and 7 points, respectively); and in Seattle, the 26–34 group increased, while the adolescent group declined (by 6 and 2 points, respectively).

In nonwestern cities, where methamphetamine use is low, ethnographic sources report that methamphetamine users are students or clubgoers. In New Orleans, street sources report that use among high school and college students remains high. The majority of methamphetamine use in Chicago takes place on the North Side where "ravers" congregate alongside young gay men and homeless youth. Similarly, clubgoers and gay men are the predominant user groups in New York City. And in Boston, users are generally students and young adults, especially those who frequent raves or have recently arrived from the west coast, where crystal methamphetamine ("ice") is common.

<sup>&</sup>lt;sup>c</sup>Alcohol-only is included.

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Exhibit 44. Age distribution of primary methamphetamine treatment admissions, by percentage, in reporting CEWG areas, second half 2000\*



\*Reporting periods are July–December 2000, except for the following: January–June 2000 in Atlanta and Chicago; full year 2000 in Minneapolis/St. Paul; and January–June 2001 in Texas.

SOURCE: Drug abuse treatment agencies

Biker gangs also remain among the traditional methamphetamine users in that city. In St. Louis, methamphetamine has become more widespread among high school and college students who do not consider stimulants as dangerous as cocaine.

#### Gender

In San Diego, most (78 percent) of methamphetamine-related decedents in 2000 were males. Similarly, 93 percent of FY 2000 methamphetamine-related decedents in San Francisco, and 86 percent of 1999 decedents in Texas, were males. In Seattle, all methamphetamine-related decedents in 2000 were males.

Female representation is generally higher among stimulant treatment admissions than among methamphetamine decedents and ED mentions. For example, females outnumber males among stimulant admissions in San Diego and Texas. Gender distributions remained relatively stable in the areas where trend data from the previous year were available for comparison. The largest shift was in

Washington, DC, where females increased and males correspondingly declined (by 36 percentage points) as a proportion of stimulant admissions. A more modest shift (6 percentage points) was noted in Texas, where males decreased and females increased in proportion. Other cities reported shifts of 1 percentage point or less.

More similar to treatment admissions than to mortality or ED data, female arrestees generally were more likely than their male counterparts to test methamphetamine-positive (although arrestee samples were smaller for females than for males) (exhibit 43).

According to ethnographic data, gay males remain the predominant methamphetamine users in several CEWG cities, including Chicago, New York City, and San Francisco. Because gay men remain the predominant users in San Francisco, there are localized increases in the apparent prevalence of use in districts where they have been displacing Blacks of lower socioeconomic status.

# Race/Ethnicity

Mortality and treatment data indicate that methamphetamine users are predominantly Whites. For example, among Texas decedents in 2000, 86 percent were White, 10 percent were Black, and 5 percent were Hispanic. Except for Baltimore, which reported only 5 primary methamphetamine admissions in 2000, Whites were the majority in all areas reporting race/ethnicity among methamphetamine treatment admissions, ranging from 58 percent in Los Angeles to 100 percent in Atlanta. However, White proportions have either declined or remained stable since one year earlier in nearly all reporting areas (except Seattle, where the proportion of Whites increased by 4 percentage points). Hispanics held large proportions in Los Angeles (28 percent) and San Diego (25 percent). In Chicago, Blacks as a

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proportion of methamphetamine admissions doubled between the first halves of 1999 and 2000 (from 10 to 20 percent).

#### **USE PATTERNS**

Atlanta: "Ethnographic reports suggest the use of methamphetamine with alcohol and marijuana to be common among users."

#### **Route of Administration**

Methamphetamine route of administration varies across the country (exhibit 45). For example, among primary methamphetamine treatment admissions, smoking was the most common route in Chicago, Colorado, Los Angeles, Seattle, and San Diego, while injecting predominated in St. Louis and Texas. Intranasal use, however, was the most common route in Minneapolis/St. Paul. In Atlanta, proportions for injecting and other routes of administration (including oral use) are equal.

The percentage of primary methamphetamine admissions who were smokers increased in at

least seven areas (Chicago, Colorado, Los Angeles, St. Louis, San Diego, Seattle, and Texas), corresponding to declines in intranasal use in six of those areas (Chicago, Colorado, Los Angeles, St. Louis, San Diego, and Texas), and decreases in injection in five areas (Colorado, Los Angeles, St. Louis, San Diego, and Seattle). Most of those changes in smoking were moderate (within 3–5 percentage points), except in Colorado and Seattle, where the changes were more substantial (7–18 points). Injectors declined somewhat in Colorado, Los Angeles, St. Louis, San Diego, and Seattle (1–3 points) and remained stable in Texas.

#### **Multisubstance Abuse**

Polydrug use among methamphetamine users is common in most areas. Of the 11 methamphetamine-related deaths in Seattle in 2000, 9 involved other substances. And in Atlanta, the use of methamphetamine in combination with ecstasy, methylphenidate (Ritalin), alprazolam (Xanax), butyl nitrite ("poppers"), hallucinogens, opiates, and cocaine has been noted in ethnographic reports. Among primary

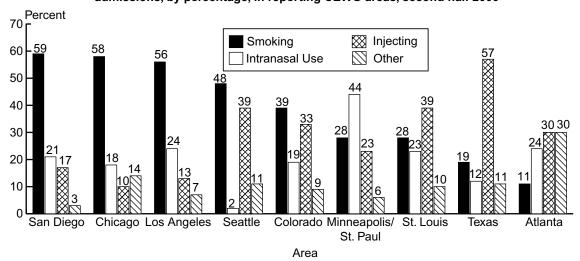


Exhibit 45. Route of administration distribution of primary methamphetamine treatment admissions, by percentage, in reporting CEWG areas, second half 2000\*

SOURCE: Drug abuse treatment agencies.

<sup>\*</sup>Reporting periods are July–December 2000, except for the following: January–June 2000 in Atlanta and Chicago, full year 2000 in Minneapolis/St. Paul, and January–June 2001 in Texas.

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stimulant admissions in reporting CEWG areas, marijuana and alcohol remained the most common secondary and tertiary drugs of choice.

# LAW ENFORCEMENT AND MARKET DATA

Minneapolis/St. Paul: "Purity levels of methamphetamine rose in 2000 as well...in January 2001, [some seizures] involved a product that was over 90 percent pure methamphetamine."

Washington, DC: "DEA intelligence reports that the availability of methamphetamine has shown a notable increase in the District and the surrounding region."

### Arrests, Seizures, and Submissions

Methamphetamine-related arrests increased in most reporting CEWG areas. In Seattle/King County, prosecutions involving methamphetamine have been steadily increasing, with prosecuted felonies in 2000 (85) increasing by 20 percent over the 1999 total, and by 85 percent since 1995. In addition, cases in Honolulu increased from 584 in 1999 to 699 in 2000, reversing a generally declining trend that began in 1995. In Washington, DC, the number of seizures has increased over the past 2 years, although the amount seized has decreased.

The number of methamphetamine labs seized continues to increase in three CEWG reporting areas: Michigan (from 14 in 1999 to 40 in 2000), Minnesota (from 22 in 1997 to 119 in 2000), and Seattle (from 60 in 1999 to 120 in 2000).

Although no trend data are available, the DEA seized 83 labs in the Phoenix area during just the second quarter of FY 2001. In northeastern and southern CEWG areas, methamphetamine labs are sporadically seized. For example, a few small, clandestine labs have been identified in operation in Washington, DC, and

several labs that are able to produce large quantities of methamphetamine have been discovered in cities surrounding Washington, DC.

Seizure data vary. Methamphetamine seizures remain infrequent in northeastern and southern CEWG areas; however, in the Washington, DC, area, the amount of methamphetamine seized from Mexicans with connections to Mexican drug traffickers increased in 2000 for the second straight year. And, in Denver, the amount of methamphetamine seized nearly doubled from 111 pounds in 1999 to 212 pounds in 2000. Finally, in Hennepin County (Minneapolis/St. Paul), the amount seized increased from 11,867 grams in 1999 to 21,790 grams in 2000, with the State crime lab reporting a rise from 9,025 to 13,369 grams during the same period.

### Availability, Price, and Purity

In most western areas of the United States, methamphetamine is readily available. In Los Angeles and Phoenix, it is often packaged in plastic wrap and plastic bags, respectively. In Hawaii, crystal methamphetamine ("ice") availability remains high; there it appears in two forms: "clear," a clean, white form; and "wash," a brownish, less processed form. Ice is also available in the Phoenix area. The DEA reports that methamphetamine is also readily available throughout the Midwest, where it is sold in plastic bags and paper wrappers. It is less available in the Northeast. For example, Philadelphia focus group members indicate that methamphetamine remains difficult to obtain, is not sold outdoors, and requires a connection. Likewise, in New York City, the drug is not sold on the street.

Methamphetamine prices vary in the reporting areas, depending on purity, availability, and quantity (exhibit 46). Since the last reporting period, prices have remained relatively stable

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Exhibit 46. Methamphetamine prices and purity in reporting CEWG areas, December 2001 reporting period

City	Durity (0/)	Price					
City	Purity (%)	Gram	Ounce	Pound			
Boston	NR	\$70–\$200	\$800-\$1,900	\$8,000—\$24,000			
Denver	7–20	\$80-\$100	\$700—\$1,000	\$5,500—\$9,000			
Hawaii	90–100	\$200-\$300	\$2,200—\$4,000	\$30,000			
Los Angeles	15–20	NR	NR	\$3,500–\$8,000 (wholesale) \$45,000–\$100,000 (street value)			
Minneapolis/St. Paul	>90	\$90-\$100	\$600—\$900	\$10,000—\$12,000			
New Orleans	NR	\$100–\$150	\$900-\$1,500	\$12,000–\$16,000			
Phoenix	23–26	\$48-\$50	\$300-\$600	\$3,500-\$6,500			
St. Louis	70–80 (local) 20–30 (Mexican)	\$37–\$100	\$700–\$1,300	NR			
San Diego	30-40 (average)	\$40–\$60	\$550-\$750	\$4,500–\$9,500			
San Francisco	NR	NR	\$500—\$1,000	\$3,500—\$10,000			
Seattle	NR	\$20–\$60	\$350-\$650	\$4,250-\$6,000			
Texas	10-15 (low grade)	NR	NR	\$8,500			
Dallas	35	NR	NR	NR			
Houston	NR	NR	\$500-\$800	\$6,000-\$9,000			
Laredo	NR	NR	NR	\$4,500			
North Texas	NR (domestic) NR (Mexican)	\$70–\$100 NR	\$400–\$1,000 NR	\$5,000-\$10,000 \$5,800-\$9,000			
Washington, DC	NR	\$100–\$150	\$2,700	\$23,000—\$30,000			

SOURCE: CEWG city reports, June 2001

in reporting areas, except in San Diego and Seattle, where ounce prices increased by \$250 and pound prices increased by nearly twothirds, respectively. Similarly, since the last reporting period, purity levels have remained relatively unchanged in reporting CEWG areas. In Washington, DC, high-quality forms of methamphetamine are called "hydro" (a powder substance) and "glass" (crystalline shards or powder); and during the second quarter of FY 2001, the DEA reported that crystal methamphetamine (ice) was identified in the metropolitan area. A common methamphetamine cutting agent in Minneapolis/St. Paul is dimethyl sulfone, a substance used to treat arthritis in horses.

# Manufacture, Distribution, and Trafficking

St. Louis: "Competition between imported methamphetamine from Mexico and locally produced methamphetamine is predicted to affect both price and purity."

Local methamphetamine labs among CEWG areas generally use two types of manufacturing methods: (1) the "Nazi method," which uses ephedrine or pseudoephedrine, lithium, and anhydrous ammonia, or (2) the "cold method," which uses ephedrine, red phosphorus, and iodine crystals.

Law enforcement authorities in Los Angeles report that the production and trafficking of

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methamphetamine has exploded in the last 5–10 years; labs are either "super labs" (operated by major trafficking groups) or "mom and pop" labs (rural and widely scattered). Clandestine labs in Hawaii continue to be closed at a regular pace, with 11 labs closed in 2000, yielding 31 kilograms of ice. In Phoenix during the second quarter of 2001, the DEA seized 83 methamphetamine labs that were using the ephedrine/pseudoephedrine reduction method.

In Washington State, the predominant manufacturing method still used in most rural counties is the "Nazi method," with ephedrine extraction, red phosphorous, and other methods also in use. In the Denver area, where the ephedrine reduction method is the primary local manufacturing process, most labs are generally capable of manufacturing an ounce or less per "cook" and vary from being primitive to quite sophisticated.

The number of "do-it-yourself" user-operated methamphetamine labs increased throughout Minnesota in 2000, from 46 in 1998 to 126 in just the first 5 months of 2001. The number of large-scale labs in Minnesota increased as well, including one that had stockpiled more than 2 kilograms of over-the-counter cold products containing ephedrine. Seizures of ephedrine and pseudoephedrine also continue in Michigan, with much coming from Canada. Law enforcement personnel also report the existence of a substantial black market for methamphetamine ingredients and precursors. Similarly, the DEA reports the continued movement of ephedrine and pseudoephedrine into the Washington, DC, area through airports, indicating a potential increase in use in that area. These caustic and volatile raw ingredients produce dangerous, toxic wastes that pose

serious environmental and safety dangers to the people and property in surrounding areas, as well as to law enforcement personnel.

Most methamphetamine available in CEWG areas is Mexican in origin, although 40 percent of all labs seized and 96 percent of large-scale labs seized in the United States in 1999 were located in California. Accordingly, most methamphetamine encountered in Mass-achusetts originated in California. In Denver, most methamphetamine originates in Mexico or large-scale labs in California, as is also the case in Texas, although local "mom and pop labs" are a source of supply there as well. Similarly, the majority of methamphetamine transported to Washington State is from Oregon, California, and Mexico.

In St. Louis, Hispanic traffickers, rather than the old network of motorcycle gangs, are the predominant distributors in addition to individual entrepreneurs. These Hispanic traffickers receive shipments from super labs in the southwest that are trucked in via the interstate. In Washington, DC, most methamphetamine comes from Mexican trafficking, but labs outside the District in Virginia have the capacity to produce large quantities of methamphetamine. California-based Mexican sources use Hawaii's cultural diversity to facilitate smuggling and distribution to and within the islands. Additionally, the DEA continues its efforts to break the supply route of methamphetamine precursors from California to Hawaii. In Atlanta, most of the methamphetamine comes from Mexican nationals, while White males in their twenties and thirties are the primary producers in rural Georgia, where it is generally produced for personal use.

# **CLUB DRUGS: ECSTASY**

Boston: "Although ecstasy [methylenedioxymethamphetamine, MDMA] has not appeared in treatment, emergency department (ED), or arrest indicators, other sources indicate that its availability and use may still be increasing."

Chicago: "All indicators suggest that the popularity of this drug is not diminishing."

Detroit: "There are suggestions that ecstasy has supplanted lysergic acid diethylamide (LSD) in popularity in some areas, is continuing to expand in use outside the rave scene, and is being used in combination with other drugs."

Miami: "Many indicators such as crime lab statistics, drug confiscations in the area, and national survey data point to an increased abuse of this drug. For the first time, in 2000, more teens abused ecstasy than cocaine."

Washington, DC: "The most striking feature of the club drug scene is the skyrocketing use of ecstasy. Said one respondent, 'E [ecstasy] is on the rise. Every week someone is trying it; every week someone is rolling [using ecstasy]."'

#### MORTALITY DATA

According to CEWG city reports, methylenedioxymethamphetamine (MDMA, ecstasy)related deaths are relatively rare but mostly increasing in reporting areas, and nearly all involved other drugs:

- Denver: Three serious MDMA-related incidents, two of which resulted in deaths, occurred within the first half of 2001. Two of these incidents were caused by hyponatremia (water intoxication).
- Detroit/Wayne County: One MDMA-related death occurred in 1998, two in 1999, and three in 2000. Multiple drugs were found in these cases.
- Florida: In the second half of 2000, 59 MDMA-related deaths were reported, in 25 of which MDMA was determined the cause of death.
- Minneapolis/St. Paul: Six MDMA-related deaths were reported in Hennepin and Ramsey Counties in 2000. Decedents ranged from 17 to 26 years old.

- Philadelphia: MDMA was present in four mortality cases in the second half of 1999, the first time this drug was detected by the medical examiner. In 2000, ecstasy was detected in eight cases.
- Phoenix: In 2001, a 16-year-old female used ecstasy, went into convulsions and a coma, and died after being taken off life support. She used a pill shaped like a clover that was pure MDMA.
- St. Louis: Recently, toxicology reports showed high levels of MDMA in the blood of five young men found dead in a car in a closed garage. The decedents were Vietnamese immigrants who died from carbon monoxide poisoning from car exhaust. Apparently, they were running the car engine and air conditioning to stay cool after taking the drug.
- Seattle/King County: In 2000, seven deaths involved MDMA, with the majority involving other drugs such as alcohol, cocaine, marijuana, methamphetamine, and phencyclidine (PCP).
- Texas: In 1999, there were two MDMA-related deaths.

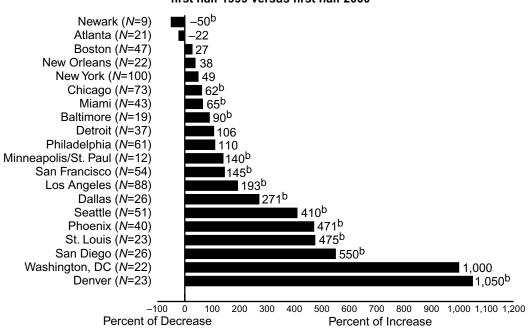


Exhibit 47. Percentage of change in ecstasy ED mentions by metropolitan area, first half 1999 versus first half 2000<sup>a</sup>

NOTE: (*N*) refers to first-half-2000 mentions; the percent change may be largely due to the relatively small numbers of mentions.

<sup>a</sup> First-half-2000 data are preliminary. b<sub>p</sub><0.05

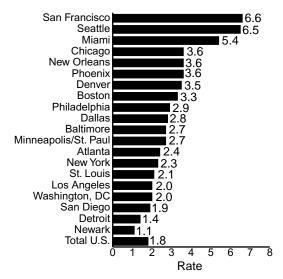
SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 2000 (September 2000 update)

# **EMERGENCY DEPARTMENT DATA**

According to Drug Abuse Warning System Network (DAWN) emergency department (ED) data, visits for MDMA are relatively rare, especially when compared with visits involving other major illicit drugs. Although MDMA ED mentions were low, between the first halves of 1999 and 2000, they increased in 18 of 20 CEWG cities in DAWN (exhibit 47). In 12 areas the increases were significant (p<0.05), and only in Newark was the decline significant.

In 2000, San Francisco had the highest rate per 100,000 population of MDMA mentions (6.6) followed by Seattle (6.5) and Miami (5.4) (exhibit 48).

Exhibit 48. Estimated rate of ecstasy ED mentions per 100,000 population, by metropolitan area, 2000



SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, 2000 (March 2001 update)

#### OTHER LOCAL DATA

Although ecstasy treatment admissions have not emerged in large numbers, in a few CEWG cities, they are increasing. For example, in Texas, admissions for primary, secondary, or tertiary problems with ecstasy increased between 1999 and 2000 (from 99 to 141); among adolescents, admissions increased from 17 in 1999 to 58 in 2000.

The numbers of poison calls related to ecstasy were relatively large and increasing in most reporting CEWG areas:

- Atlanta: According to poison control centers, ecstasy-related calls are common.
- Detroit: Poison control centers reported 10–15 callers regarding ecstasy in 1998, 31 in 1999, 66 in 2000, and 43 in the first 4 months of 2001, half of whom were females and nearly all in the late teens to age 30.
- Minneapolis/St. Paul: In 2000, poison centers received 45 calls regarding MDMA exposure.
- Texas: Poison control cases increased from 35 in 1999 to 96 in 2000. The average age of the 2000 callers was 20 years, and 56 percent were male.

Conversely, in Colorado, few calls involving ecstasy (3–11 calls) were reported each year between 1994 and 1999.

#### **DEMOGRAPHIC DATA**

Boston: "Its [ecstasy's] use is characterized as remaining a White, middle-class phenomenon, partially because of its relatively high cost."

New York City: "Young adult males seem to be selling the pills, and young adult females seem to be buying."

In 1999, national DAWN ED data corroborated anecdotal reports that ecstasy and club drug users tend to be young: at least 80 percent of ecstasy ED mentions were among patients 25 and younger (compared with only 29 percent of ED drug cases overall). Similarly, according to second-half-2000 ED data from a South Florida facility, 66 percent of ecstasy patients were younger than 30.

Other local data also corroborate that youth are the predominant ecstasy users. Of the adult treatment admissions with primary, secondary, or tertiary ecstasy problems in Texas in 2000, the average age was 24. In a recent survey among substance abuse recovery program clients in Seattle, 44 percent of youth (14–24 years) reported having ever used ecstasy, and 30 percent reported past-6-month use. However, among older clients (25–50 years), 45 percent reported having ever used ecstasy, and fewer than 10 percent reported past-6-month use. Ethnographic research in St. Louis indicates two age groups of ecstasy users: high school age (15–19 years) and college age (20–25 years).

#### USERS' MISCONCEPTIONS ABOUT ECSTASY:

Boston: "The rise in ecstasy use is being driven by its wide availability...and its reputation as a relatively benign, mood-enhancing substance."

Miami: "This psychoactive, synthetic DEA Schedule I drug has gained the reputation as a 'hug drug,' which can promote empathy, relaxation, and sexuality."

Phoenix: "Ecstasy has grown in popularity because of its 4–6-hour euphoric high and the perception that the drug is not dangerous."

Finally, student and young adult surveys across the United States show high and mostly increasing ecstasy use. For example, in Miami, between 1999 and 2000, past-year ecstasy use among 8th graders rose from 1.7 to 3.1 percent; among 10th and 12th graders, past-year ecstasy use rose from 4.4 and 5.6 percent to 5.4 and 8.2 percent, respectively. As part of

#### ECSTASY USE MAY BE CHANGING IN SEVERAL CEWG AREAS:

#### The expansion of ecstasy use among new populations is reported in several CEWG areas:

Baltimore: "It [ecstasy] is said to be spreading from the rave or club scene to general teen and young adult populations."

Los Angeles: "Demographically, [rave] attendees are mostly upper middle class, in their midteens to early twenties, and from various racial and ethnic backgrounds."

Minneapolis/St. Paul: "Law enforcement in Ramsey County seized 3,000 tablets in a single case this year in an Asian community."

Philadelphia: "In the last year, ecstasy use has spread from Whites of college age and clubgoers in their twenties to Blacks and Hispanics in their teens through thirties."

San Francisco: "Ecstasy continues to increase its presence, according to street-based observers. The most noteworthy trend is use among young Blacks, heretofore rarely reported."

#### Similarly, the expansion of ecstasy use to new settings is also reported in several CEWG areas:

Chicago: "Ecstasy use also occurs in house parties and is no longer largely confined to raves and dance clubs."

Denver: "It [ecstasy] is readily obtainable by individuals involved in the rave scene and is also being sold at many singles bars in the Denver metropolitan area."

Detroit: "Ecstasy use continues to spread outside the rave scene."

Minneapolis/St. Paul: "Ecstasy use has spread beyond raves or nightclub settings. Its use was reported at many recreational pastime or party-type settings, such as shopping malls or informal social gatherings that follow high school sporting events."

New York City: "Although ecstasy seems to be sold on the streets in the evenings and on the weekends, one dealer reported that he did not go to raves or clubs any more because customers flocked to his house. Field researchers believe most dealing still takes place in nightclubs."

Seattle: "The use of these drugs [club drugs] appears widespread not only at dance parties and clubs, but in normal recreational and social settings as well."

Washington, DC: "Ecstasy use and trafficking increased substantially between December 2000 and May 2001: it moved into rural areas surrounding the District and became increasingly available to mainstream user groups outside the nightclub and rave scenes."

a NIDA-funded study to test the reliability of DSM and ICD definitions for substance use disorders, researchers in St. Louis are testing a new section of the substance abuse module (SAM) on club drugs. Of the pilot sample of 60 adolescents and young adults, 23 percent reported using club drugs more than 5 times in their lives, all instances involving ecstasy use and several involving ketamine use.

Corroborating anecdotal information that club drug users (including ecstasy users) are typically Whites, the majority of national ecstasy ED mentions in DAWN in 1999 involved White patients in approximate proportion to the general U.S. population. According to ED data from a South Florida emergency department, 83 percent of the 30 ecstasy-related cases in the second half of 2000 were White. Similarly, in 2000, among adult treatment admissions with primary, secondary, or tertiary ecstasy problems in Texas, 83 percent were White, and 9 percent were Hispanic.

Focus groups in Philadelphia described Whites of college age and typical clubgoers as the predominant ecstasy users. In Chicago, White suburban teenagers and young adults are the most likely groups to use ecstasy, but, as in many reporting CEWG areas, ecstasy use may be expanding to other groups including non-Whites and those not involved in the rave scene.

#### **USE PATTERNS**

St. Louis: "'Stacking' or 'piggybacking' (taking three or more tablets at a time or in a row) is common."

Chicago: "Ecstasy continues to be sold in pill or capsule form in dance clubs, at house parties, or through individual dealers, and is typically used in social settings." Chicago: "Ecstasy use in raves is nearly universal, and its use in certain clubs is estimated by experienced clubgoers to be 50–70 percent of patrons."

Club Drugs: Ecstasy

In nearly every CEWG area, ecstasy is reportedly readily available at raves and other dance party venues, as well as many nightclubs. For example, in Boston, ecstasy use at nightclubs, raves, and dances among young adults seems widespread. At St. Louis raves, which have become more common, ecstasy is widely available. In the Phoenix area, law enforcement conducted a 5-month rave investigation to target illicit drug sellers. They reported no drug-free raves and were able to buy ecstasy, lysergic acid diethylamide (LSD), ketamine, marijuana, and psilocybin mushrooms. In Chicago, ecstasy use occurs mainly in club venues and underground parties, and in an attempt to counteract this trend, local authorities have recently passed laws that penalize raves.

# Multisubstance Abuse and Route of Administration

Miami: "The recent increase in marijuana ED mentions may be driven by marijuana use among users of cocaine and ecstasy."

Seattle: "Many users of club drugs tend to experiment or regularly use a variety of club drugs in combination."

Drugs used in combination with ecstasy vary from club drugs to major hard-core drugs and include gamma hydroxybutyrate (GHB), LSD, marijuana, cocaine hydrochloride (HCl), and heroin. Of 30 ecstasy cases at a South Florida emergency department in the second half of 2000, many involved a combination of ecstasy and alcohol (37 percent), marijuana (40 percent), benzodiazepines (especially alprazolam

[Xanax]) (13 percent), GHB (30 percent), or cocaine (27 percent). There was one ecstasy-LSD combination. A common combination among GHB-related nonfatal overdose cases in Seattle was GHB, alcohol, and ecstasy.

According to spring and autumn 2000 focus groups in Philadelphia, ecstasy is highly potent and used in combination with heroin, alcohol, or cough syrup. Spring 2001 focus groups there reported that it is used in combination with marijuana and LSD, which better describes use in clubs or raves. Similarly, in San Francisco, typical ecstasy use is in combination with marijuana and beer. In Washington, DC, where multisubstance use is a common feature of ecstasy and other club drug use, combinations include ecstasy and marijuana or LSD (known as "candyflipping"). In New York City, ecstasy is sold mostly in pill form, but in Brooklyn it was supposedly sold in powder form with cocaine HCl and smoked in a marijuana blunt.

Other ecstasy combinations include prescription drugs. In South Florida, users may be combining ecstasy with LSD, selegiline, and fluoxetine (Prozac) for a supposedly longer lasting high. Also in South Florida, "hammerheading" (the combination of ecstasy with or without LSD and sildenafil citrate [Viagra]) has been reported among adolescent and young adult males for the supposed heightened sexual effects. The term "hammerhead" describes the severe headache and the prolonged erection that the combination can cause.

# LAW ENFORCEMENT AND MARKET DATA

Denver: "The DEA reports that ecstasy has emerged as a popular drug in the region. It is readily obtainable by individuals involved in the rave scene and is being sold in many singles bars. The traffickers are typically White and in their late teens or twenties."

St. Louis: "The rave scene has become quite popular....To date, little law enforcement effort has been directed at this particular market."

San Diego: "Based on what they are seeing on the streets, law enforcement experts predict that ecstasy will be the next major drug problem in the county."

#### **Seizures and Submissions**

Ecstasy seizures or submissions continue to be numerous and increasing in reporting CEWG areas, including Atlanta, Boston, Miami, Minneapolis/St. Paul, and Texas. For example, in Boston, seizures continued to climb, and drug lab samples rose sharply between 1998 and 2000. In Denver, where police only recently began collecting information on club drugs, 268 tablets of ecstasy were seized during the first quarter of 2001. In Minneapolis/St. Paul, lab submissions rose from 2,047 doses in 2000 to more than 3,000 through April 2001; additionally, the local DEA removed 1.7 kilograms of MDMA powder and 1,578 pills in 2000. In Texas, the number of substances identified as MDMA by the Department of Public Safety (DPS) crime labs increased between 1999 and 2000 (from 102 to 303). By contrast, in South Florida between the first and second halves of 2000, ecstasy submissions declined (from 144 crime lab cases to 110); however, ecstasy still accounts for more submissions than heroin (90), LSD (15), ketamine (14), methamphetamine (8), or GHB (3).

Also in South Florida, one of the largest ecstasy drug busts ever in this country occurred in November 2000, when DEA agents seized 720,000 ecstasy tablets worth an estimated 14 million dollars. In 2001, law enforcement authorities shut down a Maryland ecstasy ring, arresting three males and seizing 1,000 tablets and \$42,000.

Executive Summary Club Drugs: Ecstasy

### Availability, Price, and Purity

San Francisco: "Quality is questionable: 'most people who take ecstasy don't really know what they're getting.""

Ecstasy remains widely available in nearly every CEWG area, and availability continues to increase in many. The quality of ecstasy pills varies and is often unknown by the users. For example, in Miami, an ecstasy pill generally contains only 75–125 milligrams of MDMA in a 300-milligram pill.

Ecstasy is sold primarily by the tablet and is available at the retail level for \$10–\$40 per tablet in reporting CEWG areas (exhibit 49). Wholesale costs are much cheaper (\$5–\$16 per tablet), making ecstasy distribution potentially lucrative. Ecstasy prices have remained stable in most CEWG areas since the last two reporting periods, except in Atlanta, where they have increased since December 2000.

Ecstasy tablets often appear in a variety of colors and shapes and may be stamped with a variety of logos. For example, in Denver,

# ACCORDING TO SEVERAL CEWG REPORTS, ECSTASY IS OFTEN CUT WITH OTHER DRUGS AND USERS OFTEN DO NOT KNOW WHAT THEY ARE USING:

Detroit: In 2000, a death of a 21-year-old female involving ecstasy and methylenedioxyamphetamine (MDA) occurred in Wayne County.

Minneapolis/St. Paul: MDA, a chemical similar in effect to MDMA, has been sold as ecstasy. The Minneapolis crime lab handled 401 tablets of MDA in 2000 and 71 in 2001 (through April). Dimethyltryptamine (DMT) and dipropyltryptamine (DPT), two other related compounds, were also reported.

Washington, DC: Lab analyses indicate that pills commonly sold as ecstasy often contain substances such as PCP, ketamine, methamphetamine, and cocaine. Police recently reported a large seizure of pink "Pikachu" pills consisting of PCP or PCP combined with ecstasy.

#### Paramethoxyamphetamine (PMA) sold as ecstasy has caused fatalities in several CEWG areas:

Detroit: One death was caused by PMA in June 2000 in Macomb County.

Miami/South Florida: PMA, an adulterant to MDMA, is being sold as ecstasy and was responsible for at least six deaths in Florida, including that of a 19-year-old female. Even though this adulterant has not been detected among Broward County decedents, it has been found in pills sold there, according to the crime lab. PMA appears to produce serious complications at a higher rate than other ecstasy formulations. Convulsions, agitated delirium, cardiac arrhythmias, and extremely high body temperatures are commonly seen.

#### Some users substitute other substances in an attempt to achieve an ecstasy-like high:

Texas: In Austin, benzylpiperazine (BZP) (an amphetamine) and 3-trifluoromethylphenylpiperazine (TFMPP) (a hallucinogen) are used together to produce an effect similar to MDMA.

Exhibit 49. Methylenedioxymethamphetamine (MDMA, ecstasy) prices in reporting CEWG areas, June 2001 reporting period

Area		Price/Pill or Dosage Unit				
Atlanta		\$15-\$40/pill or tablet				
Boston		\$20-\$30/tablet				
Chicago		\$20-\$40/pill				
Denve	er	\$25/capsule				
Miami		\$8/pill (wholesale) \$20–\$30/pill (retail)				
Minneapolis/ St. Paul		\$20/capsule				
New Y	ork City	\$20-\$25/pill; \$50/3 pills				
Philad	elphia	\$20-\$25/dose				
Phoenix		\$5-\$8/ tablet (wholesale) \$20-\$30/tablet (retail)				
St. Lo	uis	\$20-\$30/dose				
San F	rancisco	\$20/pill				
San D	iego	\$20-\$25/dose				
Seattle	Э	\$20-\$30/150-250 milligrams				
Texas	Dallas Houston	\$10-\$40/dose \$25/dose				
Washington, DC		\$6-\$9/pill (1,000 pills wholesale) \$12-\$16/pill (100 pills wholesale) \$20-\$30/pill (retail)				

SOURCE: CEWG city reports, June 2001

where logos are prevalent, they include four-leaf clovers, purple hearts, the Nike swoosh, UFOs, sunshine patterns, and kings' crowns. In Washington, DC, ecstasy pills and capsules are sold under a wide variety of brand names, common ones being "X-Files," "Pikachu," and "tuna."

## **Distribution and Trafficking**

The rise in ecstasy use is being driven by its wide availability. Ecstasy reportedly originates in clandestine labs in Western Europe (especially Belgium and the Netherlands). Two modes of entry into the United States are reportedly by mail (through the U.S. Post Office and express courier services) and by international airports.

A small number of MDMA labs have been seized in Georgia, but most ecstasy in Atlanta continues to come from Europe.

In Washington, DC, where distribution increased substantially between December 2000 and May 2001, some ecstasy dealers are professional drug traffickers, but DEA evidence suggests that dealers consist largely of persons who use the drug.

# **CLUB DRUGS: GAMMA HYDROXYBUTYRATE (GHB)**

Chicago: "Gamma hydroxybutyrate (GHB) use is uncommon and is most prevalent among young White males."

Denver: "GHB 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."

Detroit: "Reports of GHB (and its precursors) abuse became numerous in 1997 and have continued since then. Its use at nightclubs and rave parties continues to be reported, although some declines may have occurred recently."

Miami: "These products [GHB and its precursors] have become popular in the rave scene, are commonly mixed with alcohol, have been implicated in drug-assisted rapes and other crimes, have a short duration of action, and are not easily detectable on routine hospital toxicology screens."

St. Louis: "GHB use has increased. Because it is a depressant, its use with alcohol and its unpredictable purity present users with major health risks."

#### **MORTALITY DATA**

Gamma hydroxybutyrate (GHB) and its precursors gamma butyrolactone (GBL) and 1,4 butanediol (1,4 BD)—which convert into GHB once ingested—are often categorized as club drugs and are central nervous system depressants that can produce drowsiness, increased heart rate, depressed respiration, visual distortions, seizures, coma, unconsciousness, and sometimes death.

GHB-related deaths have occurred in several CEWG areas. In 2000, GHB was detected in 23 decedents in Florida and identified as the cause of death in 6 cases. In Minneapolis/ St. Paul, two GHB-related deaths occurred in 1999. Five GHB-related deaths have been reported in Missouri, and two near deaths in which GHB was used in drug-assisted rape have been reported recently. Three deaths involving GHB occurred in Texas in 1999; all decedents there were White, two were female, and the average age was 32.

#### **EMERGENCY DEPARTMENT DATA**

According to the Drug Abuse Warning Network (DAWN), emergency department

(ED) visits for GHB are relatively rare when compared with ED visits involving the major illicit drugs. Although ED mentions were relatively low, aggregate data showed that they increased significantly (p<0.05) between 1994 and 1999—similar to ED trends for methylene-dioxymethamphetamine (MDMA, ecstasy). Also like MDMA ED mentions, between the first halves of 1999 and 2000, GHB ED mentions increased in most (16 of 20) CEWG areas. Increases were significant (p<0.05) in four cities: Miami, New York, Seattle, and Washington, DC. No significant declines occurred.

In 2000, San Francisco had the highest rate of GHB ED mentions per 100,000 population (9.3), followed by Dallas (6.7) and New Orleans (5.6) (exhibit 50). San Francisco also had the highest rate of MDMA ED mentions.

Additionally, GHB-related overdoses continued to be reported in CEWG areas:

■ Chicago: According to ethnographic information, GHB-related overdoses are uncommon but more frequent than overdoses related to other club drugs, especially when GHB is used with alcohol.

# Exhibit 50. Estimated rate of GHB ED mentions per 100,000 population, by metropolitan area, 2000



SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, 2000 (March 2001 update)

- Minneapolis/St. Paul: The major hospital trauma center in St. Paul has reported treating up to five GHB-related cases per week since September 1999.
- South Florida: During the second half of 2000, a Broward County emergency department treated 34 people with GHB (or GHB precursor) overdoses, compared with 43 cases in the first half of 2000 and a total of 48 for all of 1999.

#### OTHER LOCAL DATA

As GHB-related ED mentions and overdoses continued, poison center calls for GHB

(including its precursors) also continued in reporting CEWG areas across the Nation:

- Atlanta: According to poison control centers, GHB is prevalent in the area. In the first half of 2000, the majority of GHB calls were among persons younger than 26 years, with more males than females.
- Boston: The poison control center continued to report many calls concerning GHB, mostly involving adolescent and young adult males.
- Colorado: During 1994–98, poison centers reported only one to six calls. However, in 1999, the number of GHB calls jumped to 92.
- Detroit: Case data from poison centers showed 100 cases involving GHB in 1999, compared with 35 cases in 2000. However, in just the first 4 months of 2001, 40 calls involving GHB were reported. (Some were attributed to GHB but could not be confirmed.)
- Maryland: In 2000, poison centers received 61 GHB-related calls, 32 of which involved hospital treatment.
- Minneapolis/St. Paul: Regional poison centers reported 65 GHB-related calls in 2000.
- Texas: Poison centers reported 100 confirmed exposures to GHB in 1998, compared with 166 in 1999 and 154 in 2000. In 2000, the average age of the callers was 25 years, and 63 percent were male.

#### **DEMOGRAPHIC DATA**

Los Angeles: "Demographically, [rave] attendees are mostly upper middle class, in their midteens to early twenties, and from various racial and ethnic backgrounds."

Washington, DC: "Limited use of GHB among clubgoers and young professionals was reported in the first half of 2001. Among users, GHB has a reputation for being a dangerous drug."

DAWN ED data in 1999 corroborated anecdotal reports that GHB and club drug users tend to be young: 59 percent of GHB ED mentions across the United States involved patients age 25 and younger (compared with 29 percent of ED drug cases overall).

#### CONTEXT AND USE PATTERNS

Atlanta: "According to the DEA, the GHB problem in Atlanta began with its use by bodybuilders. Years ago, one could only purchase the drug in local gyms and health food stores. Reports of its use at local clubs became common along with many more ED mentions."

Newark: "It is increasingly reported that GHB and ketamine are routinely used at rave parties around college campuses."

New Orleans: "GHB use continues among the young population, particularly in the French Quarter area of the city."

Club drugs, including GHB and its precursors, are typically used at raves and other dance party venues. Unlike some other club drugs, GHB is used not only as a party drug in raves and nightclubs, but also in drug-assisted rapes and as an alleged muscle-stimulating growth hormone and aphrodisiac. For example, at universities in Colorado, GHB has been associated with sexual assaults. In San Diego, GHB continued to be of major concern because of the role it has played in drug-assisted rapes. Public service messages warning women about leaving drinks unattended at gatherings have continued there.

Atlanta: "Ethnographic reports suggest the popularity of GHB, but its use is often in conjunction with other drugs."

#### REPORTS OF GHB TREATMENT CLIENTS OR USERS SUFFERING FROM WITHDRAWAL ARE EMERGING IN A FEW CEWG AREAS:

Minneapolis/St. Paul: Addiction treatment programs reported a growing number of patients presenting with GHB addiction who exhibited physical dependence, tolerance, and withdrawal symptoms.

South Florida: Three cases of GHB withdrawal were reported in 1999 and one in the second half of 2000. The case in the second half of 2000 was that of a 34-year-old White Hispanic woman who presented with severe agitation, nausea, and withdrawal symptoms. She had been taking GHB in large and frequent doses for 2 years and then had stopped suddenly 2 days prior to the ED visit. She required physical restraints, lorazepam (Ativan), and phenobarbital and was admitted to critical care, where she recovered over several days and was discharged.

Texas: Clients with primary, secondary, or tertiary problems with GHB continued to enter treatment. In 1999, 17 adults were admitted, and in 2000, 12 were admitted. In 2000, the average age was 27, 67 percent were female, and 75 percent were White.

As with other club drug use, the use of GHB with other substances, especially alcohol or ecstasy, is common. In a study of 43 GHB-related, nonfatal overdoses in Seattle, 37 percent of the patients consumed only GHB, 35 percent combined GHB with alcohol, 23 percent with ecstasy, and 9 percent each with methamphetamine and cocaine. A common drug combination involved GHB, alcohol, and ecstasy. Similarly, of 30 ecstasy cases at a South Florida emergency department in the second half of 2000, 30 percent involved GHB.

# LAW ENFORCEMENT AND MARKET DATA

#### **Seizures and Arrests**

Seizures of GHB and its precursors have been increasing in Atlanta, primarily due to the disruption of Internet sales, with liter bottles being the most common quantity encountered on Internet sites. Boston police reported occasional seizures, but noted that GHB is sometimes overlooked because it is a clear liquid often mistaken for water. In 2001, a district court in Minneapolis upheld the conviction of a man found in possession of 4,000 doses of GBL.

### Availability, Source, and Price

GHB, known as "easy lay," "G," "gamma," "G-caps," "Georgia home boy," "grievous bodily harm," "liquid E," "liquid X," "vita-G," and "water," is reported to be increasingly available in many CEWG areas, especially at nightclub, bar, and party settings. It is often manufactured in homes by "kitchen chemists" who use recipes and ingredients found on the Internet. For example, Washington, DC, High Intensity Drug Trafficking Area (HIDTA) data indicate that GHB is typically produced in home labs. GHB appears most often in liquid form, is taken orally (most often in combination with alcohol and mixed with water in spring water bottles), and is typically sold in dosage units (bottle capfuls, shots, or swigs). Dose prices range from \$5 to \$20 and have remained relatively stable since the December 2000 reporting period (exhibit 51).

Despite Federal regulatory action, GBL and 1,4 BD, both precursors to GHB, can still be found in over-the-counter nutritional substances and industrial organic solvents, which can be purchased over the Internet or in bars

or gyms in some CEWG areas. GBL products are sold under a variety of names, including Blue Nitro, Renewtrient, GH Revitalizer, Gamma G, Remforce, Firewater, ReActive, Rest-eze, Beta-Tech, Thunder, Jolt, and Verve. Product labels often refer to GBL as "furanone dihydro," "4-butyrolactone," "tetrahydro-2furanone," and "butyrolactone gamma." Brand names of 1,4 BD-containing products include Zen, Serenity, Somatopro, InnerG, NRG3, Enliven, Growth Hormone Release Extract (GHRE), Thunder Nectar, Weight Belt Cleaner, Rest-Q, X-12, Dormir, Amino Flex, Orange fX, Rush, Lemon fX Drop, Cherry fX Bomb, Borametz, Pine Needle Extract, Promusol, White Magic, and BVM. 1,4 BD products may list active ingredients as "tetramethylene glycol," "sucol B," "1,4-butylene glycol," "butane-1," "4diol," "butylene glycol," and "1,4-tetramethylene glycol." Artfully worded labels may state that these products are cleaners and that they are harmful if swallowed.

Exhibit 51. Gamma hydroxybutyrate (GHB) prices in selected reporting CEWG areas,

June 2001 reporting period

Area	Price/Quantity
Atlanta	\$10-\$20/dose
Chicago	\$5-\$10/bottle capful
Dallas	\$5–\$20/dose \$500–\$900/gallon
Denver	\$5-\$10/bottle capful
Miami	\$40-\$70/32-ounce bottle of 1,4 BD
Minneapolis/ St. Paul	\$10/capful, shot, glassful, or swig
St. Louis	\$5/capful \$40/ounce
San Diego	\$10/liquid ounce
Washington, DC	\$10/thimbleful

SOURCE: CEWG city reports, June 2001

# **CLUB DRUGS: KETAMINE AND FLUNITRAZEPAM (ROHYPNOL)**

#### **KETAMINE**

The veterinary anesthetic ketamine ("Special K") is a depressant with dissociative properties; its effects have been described as similar to the effects of phencyclidine (PCP). Ketamine is considered a club drug due to its illicit use in raves, nightclubs, and dance venues among White youth and often in combination with other club drugs. Several ketamine-related deaths were reported recently in CEWG areas: in Philadelphia, it was detected in three decedents in the first half of 2000, and in Texas, two deaths involved ketamine in 1999.

According to 2000 Drug Abuse Warning Network (DAWN) emergency department (ED) data, ketamine mentions remain fewer than 1 per 100,000 population in all CEWG cities. Other local indicators for the drug were also relatively low: for example, in Detroit, only five poison center contacts involving ketamine were reported in 2000 and only one in the first 4 months of 2001. In Miami, ketamine accounted for only 14 crime lab cases in the second half of 2000. In Seattle, according to a recent survey in a substance abuse recovery program, 14 percent of patients (age 14-24 years) reported having ever used ketamine, and 6 percent reported past-6-month use. (Similar numbers were reported among patients age 25–50 years.) In Texas, although relatively low, ketamine-related poison control cases are increasing (from 7 cases in 1999 to 28 in 2000). Additionally, in Texas, 25 substances were identified as ketamine by Department of Public Safety (DPS) labs in 1999, compared with 41 in 2000.

According to qualitative data in many reporting CEWG areas, ketamine is readily available (although typically not as available as ecstasy or GHB): in Atlanta, it remains somewhat

prevalent; in Boston, its use continues to be reported; in Chicago, it is somewhat available at rave parties or in clubs frequented by adolescents; in Denver, its use at raves is rising; in Detroit, indicators have shown increased use since 1998; in Newark, it is routinely used at rave parties and around college campuses; and in Washington, DC, its use is common in the nightclub and dance scenes. Conversely, in Los Angeles and New Orleans, ketamine availability is not common and may be declining.

In CEWG areas, ketamine is often diverted in liquid form, dried, and distributed as powder (often mistaken for cocaine hydrochloride [HCl]) for \$20–\$50 per dose (exhibit 52). Prices have remained relatively stable in most reporting areas since December 2000, except in Washington, DC, where they have increased to \$100 per bottle. One respondent there noted, "Gone are the days of the \$60 bottle." Ketamine is injected, used intranasally, swallowed in capsule or pill form, and used anally.

Exhibit 52. Ketamine prices in reporting CEWG areas, June 2001 reporting period

Area	Price			
Atlanta	\$20/dose			
Chicago	\$20/bag (powder or liquid)			
Denver	\$25/hit			
New York City	\$20/dose			
Philadelphia	\$10/tablet			
San Diego	\$36-\$50/.02-gram dose			
Washington, DC	\$20/bag (1/8 gram) \$100/bottle			

SOURCE: CEWG city reports, June 2001

Denver: "High Intensity Drug Trafficking Area (HIDTA) task forces have reported widespread veterinary burglaries that seem to stop once clinics post signs saying they have no ketamine on the premises."

Ketamine is typically obtained illicitly through veterinary burglaries, and these were recently reported in several CEWG cities, including Denver (where they are rising), Detroit, and St. Louis (where they are rising).

## FLUNITRAZEPAM (ROHYPNOL)

Flunitrazepam (Rohypnol, "roofies," "roach pills," "Mexican Valium," and "rope"), a benzodiazepine illegal in the United States but legally prescribed in other countries including Mexico, has been associated with club drugs and drug-assisted rape. Reports of its use have been declining in CEWG areas since legislation of recent years, and in CEWG areas, its use is very low or nonexistent (except in Atlanta, New Orleans, and Texas). For example, in Miami, alprazolam (Xanax) and clonazepam (Klonopin) have replaced flunitrazepam among adolescents, according to poison center calls. Similarly, in Colorado, flunitrazepam-related poison calls have declined from 22 in 1998 to only 7 in 1999.

By contrast, in New Orleans, flunitrazepam use continues to be common at private rave parties and nightclubs. In Atlanta, where flunitrazepam sells for \$5–\$10 per pill, poison control calls involving the drug are common, and it is often used in combination with other drugs. In Texas, flunitrazepam poison contacts (100 in 1998 and 124 in 2000) and treatment admissions continue to increase, especially among young Hispanics and in areas along the Mexican border. The 2000 Texas secondary school survey found that students from border areas were three to four times more likely to report flunitrazepam use than those living elsewhere in the State (13 percent lifetime use versus 3 percent). Furthermore, in the first quarter of 2000, the DEA reported an increase in flunitrazepam seizures in Laredo and Beaumont, and the Austin office reported that its use was becoming more prevalent, with the new blue pills preferred.

### **HALLUCINOGENS**

Atlanta: "Ethnographic data continue to reflect the popularity of lysergic acid diethylamide (LSD) and other hallucinogens in the area."

Los Angeles: "There has been a resurgence of phencyclidine (PCP) trafficking in the Los Angeles area. Most of the PCP manufactured is destined for a market outside the area."

Philadelphia: "According to users new to treatment, the use of PCP-laced blunts is increasing."

Washington, DC: "During the first quarter of 2001, 11 percent of juvenile arrestees involved with the DC Pretrial Services Agency tested PCP-positive, nearly double the 6 percent reported for the first quarter of 2000, surpassing even those testing positive for cocaine."

# ADVERSE MEDICAL CONSEQUENCES

Chicago had the Nation's highest estimated rate of phencyclidine (PCP) ("angel dust") emergency department (ED) mentions per 100,000 population in 2000 (7.1), followed by Los Angeles and Philadelphia (at 4.5 each) (exhibit 53). Between the first halves of 1999 and 2000, PCP ED trends showed mostly increases, with 10 increases, 4 declines, and 1 stable trend. Increases were significant (p<0.05) in six areas (Baltimore, Chicago, Newark, San Diego, San Francisco, and

Seattle); declines were significant (p<0.05) in two (Boston and Philadelphia) (exhibit 54). Long-term PCP ED trends in most CEWG cities show that after peaks in 1995, the rate of mentions per 100,000 population generally declined.

Similar to PCP ED mentions, in 2000, lysergic acid diethylamide (LSD) ("acid") ED mentions were relatively few across the Nation, with the highest rate per 100,000 population at 3.1 in Seattle, followed by 2.6 in Phoenix (exhibit 53). Between the first halves of 1999 and 2000, LSD ED trends showed mostly declining trends, with 11 declines and 6 increases.

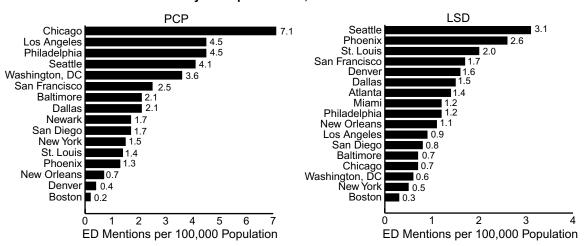


Exhibit 53. Estimated rate of PCP and LSD ED mentions per 100,000 population by metropolitan area, first half 2000\*

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 2000 (September 2000 update)

<sup>\*</sup>First-half-2000 data are preliminary.

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Newark (N=32) 129b San Diego (N=42) 91b 91b San Francisco (N=42) Baltimore (N=50) 86<sup>b</sup> Seattle (N=80) Chicago (N=424) Phoenix (N=26) St. Louis (N=33) Los Angeles (N=391) Washington, DC (N=141) New Orleans (N=9) Dallas (N=51) New York (N=124) Philadelphia (N=217) Boston (N=7) -46<sup>t</sup> 70 80 100 110 120 130 -50 -40 -30 -20 -10 20 40 Percent of Increase Percent of Decrease

Exhibit 54. Percentage of change in PCP ED mentions by metropolitan area, first half 1999 versus first half 2000<sup>a</sup>

NOTE: (*N*) refers to first-half-2000 PCP mentions. <sup>a</sup>First-half-2000 data are preliminary. <sup>b</sup>p<0.05

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 2000 (September 2000 update)

Declines were significant (p<0.05) in four areas: Baltimore, New Orleans, Phoenix, and San Diego; no significant increases occurred.

Furthermore, during the second half of 2000, the number of PCP detections by the Philadelphia medical examiner (ME) in decedents (34) was the largest amount in any half-year period on record. Treatment numbers and percentages involving primary hallucinogen use remain low and stable in most reporting CEWG areas, except in Texas, where primary, secondary, or tertiary PCP admissions among both adults and adolescents increased significantly between 1999 and 2000: from 50 to 174, and from 76 to 118, respectively.

In Texas, the only CEWG area reporting hallucinogen poison calls in 2000, the number of LSD calls decreased from 95 in 1999 to 87 in 2000. Also in Texas, 104 marijuana-related poison center calls mentioned the terms "PCP" or any of three names referring to embalming fluid used in combination with marijuana:

"formaldehyde," "fry," or "amp." Also in Texas, 204 psilocybin mushroom-related cases were reported—a substantial increase compared with 13 psilocybin cases in 1999.

#### ARRESTEE URINALYSIS DATA

In 2000, PCP-positive urinalysis levels among adult males in the Arrestee Drug Abuse Monitoring (ADAM) program were highest (from 3 to 5 percent) in Dallas, Houston, and Philadelphia. Females tested positive at similar levels: Philadelphia and Seattle had the highest levels at 4 percent each. According to DC Pretrial Services toxicology data, PCP-positive levels increased to 9 percent in 2000, after a marked long-term decline (from 17 percent in 1989 to 2 percent in 1998). Moreover, PCPpositive levels for juveniles revealed trends similar to those for adults: during the past several years, positive levels declined (from 18 percent in 1995 to 3 percent in 1998), but increased to 10 percent in 2000.

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### **DEMOGRAPHIC DATA**

PCP use seems to be concentrated among young males in most CEWG areas, and race/ethnicity varies by geographical location. In Texas, among recent poison cases involving PCP combined with marijuana, the average age was 23 years, and most (76 percent) were males. Also in Texas, most (86 percent) adult PCP treatment admissions were Black, most (73 percent) were male, and the average age was 23; among adolescent PCP treatment admissions, only 53 percent were Black, 28 percent were Hispanic, 20 percent were White, and 88 percent were male. In Washington, DC, primarily young Black males and lower to middle-class Whites who sometimes have ties to motorcycle gangs use PCP. However, the PCP user base within the Washington, DC, rave scene is expanding.

LSD and psilocybin mushrooms are used primarily by young Whites in most CEWG areas. For example, among South Florida LSD-related ED cases in 2000, most were younger than 30 and White, and all were male. In Texas, among 2000 LSD- and psilocybin mushroom-related poison cases, the average age was 20 years for both substances. In Detroit, most LSD use is limited to high school age suburban and rural youth. In Washington, DC, predominant LSD users are high school and college age individuals attending raves, nightclubs, and concerts.

#### **USE PATTERNS AND CONTEXTS**

Philadelphia: "Users describe the effects of PCP as making you 'crazy,' 'numb,' 'violent,' and 'hallucinate.'"

Seattle: "The use of these drugs [LSD, PCP, and psilocybin mushrooms] appears to be widespread not only in the dance parties and club scenes, but in normal recreational and social settings as well."

PCP is combined with marijuana or cigarettes in many CEWG areas, including Chicago, Los Angeles, Minneapolis/St. Paul, Philadelphia, St. Louis, Texas, and Washington, DC. In Chicago, PCP is smoked in several forms: "mint leaf" or "love leaf" (a moist, loose, tobacco-like substance sprayed with PCP and wrapped in tinfoil), "sherm sticks" or "happy sticks" (cigarettes dipped in PCP), and PCPlaced marijuana blunts. In Los Angeles, where dealers often maintain jars of PCP and charge users to dip cigarettes into the liquid, PCP is commonly smoked in sherm cigarettes or packaged as a liquid in small bottles. In Philadelphia, PCP is typically sprayed on mint leaves that are sometimes smoked in cigarette rolling papers with no other drug added, although users report that the practice of combining marijuana and PCP, frequently mixed in blunts and called "love boat" or "wet," is increasing. In St. Louis, PCP has generally been used as a dip on marijuana joints. Both powdered and liquid PCP are available in Phoenix, and cigarettes sprayed with or dipped in PCP are called "dips." In Washington, DC, PCP is sold primarily in combination with marijuana in aluminum foil packages. In Minneapolis/St. Paul, marijuana continued to be dipped in embalming fluid and PCP, a combination known as "wets" (also a term for PCP itself), and joints dipped only in PCP are referred to as "wet daddies." Similarly, in Texas, poison cases involving PCP combined with marijuana and sometimes embalming fluid continued.

Other PCP combinations include PCP with crack as reported in Philadelphia among treatment clients and in New York City, where the practice is called "space basing." In Washington, DC, police recently reported a large seizure of pink "Pikachu" pills consisting of PCP or PCP combined with ecstasy.

LSD is a clear liquid usually abused orally and applied to small tablets ("microdots"), thin

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squares of gelatin ("window panes"), blotter paper ("blotter acid"), stickers, sugar cubes, candy, and beverages, or stored in small dropper bottles. In Detroit, LSD typically appears on paper cutouts of various designs. In Minneapolis/St. Paul, most LSD is sprayed onto absorbent blotter paper, which is divided into very small pieces ("blotter acid") that are placed under the tongue. In Seattle, where LSD is known as "panes," "tabs," "trips," "cid," "sandoz," and "barrels," LSD liquid in bottles appears to be common and is often given to friends in single doses (a drop on their hands) for free. Users in Seattle consider the liquid lower in quality than the tablet or blotter paper form. In Phoenix and Tucson, blotter acid, Sweet Tarts candy laced with LSD, window panes, and liquid LSD are available, and liquid LSD is sometimes packaged in "Sweet Breath" mouthwash bottles. It also appears mostly in blotter paper form in Washington, DC, but liquid LSD is becoming increasingly available (carried in breath drop or eye drop bottles), and a new "crystal" LSD has recently been noted there. In Miami, LSD has recently appeared in gelatin capsule form and is often sold in bubble packaging at clubs and raves. Capsules are typically referred to by their color (e.g., "yellow jelly") in that city.

In many CEWG areas, anecdotal reports of LSD and LSD combined with other drugs among clubgoers are increasing. The practice of mixing ecstasy and LSD, called "candy flipping," is reported among young adults in Washington, D.C. In South Florida many LSD ED patients reported combining the drug with ecstasy, marijuana, or cocaine. Two new trends have appeared in South Florida: adolescent and young adult males are combining LSD with ecstasy and sildenafil citrate (Viagra), referred to as "hammerheading," and users are combining LSD with ecstasy, selegiline (Alzene, Carbex, Deprenyl, and Eldepryl), and fluoxetine (Prozac), to produce a longer lasting high.

# LAW ENFORCEMENT AND MARKET DATA

Boston: "State police reported that seizures of these drugs [hallucinogens] typically increase around the time of large outdoor concerts in the spring and summer."

Washington, DC: "Recent DEA intelligence indicates an expanding user base [for PCP] in connection with the city's rave scene."

Reports of PCP availability are sporadic. Although it is relatively rare in most of New England, it is available further south in New York City. In Philadelphia, where PCP started gaining popularity as an additive to blunts, it is easier to obtain than ever. Supply sources for Washington, DC, reside in surrounding Maryland and Virginia suburbs, as well as in Newark, New York City, and Philadelphia. In the District, the number of DEA seizures of PCP nearly doubled between 1999 and the first 10 months of 2000. There has been a resurgence of PCP trafficking in the Los Angeles area, and most of the PCP manufactured there is reportedly destined for outside markets. Black street gangs are reportedly the primary producers, suppliers, and distributors of PCP in Los Angeles.

PCP prices depend on its form and geographic location (exhibit 55). In the Harlem area of New York City, PCP is packaged in small plastic bags and sold for \$10 per bag, and it is sprayed on mint leaves and packaged in small bags in other areas of the city. In Philadelphia, liquid PCP sold in small bottles is easier to obtain than ever, and sells for \$5 per bottle. In Dallas, it sells for as much as \$500 per ounce. In Washington, DC, ounce prices increased dramatically, from approximately \$350 per ounce in 1998, 1999, and the second quarter of fiscal year (FY) 2000, to \$700–\$950 per ounce during the first quarter of FY 2001.

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LSD is widely available in CEWG cities, and prices are relatively low (\$1–\$10 per dose) (exhibit 56). In Michigan, a lab with reported capacity to manufacture LSD (along with methamphetamine) was seized in 2000. Much of the LSD in Washington, DC, is supplied from nearby college towns, as well as from California and the New York City club scene. In St. Louis, LSD has sporadically reappeared in local high schools and rural areas. In Phoenix, law enforcement professionals were able to buy LSD in various forms at raves during a 5-month rave investigation.

Exhibit 55. PCP prices in reporting CEWG areas, June 2001 reporting period

Area	Price/Unit			
Chicago	\$10, \$20/"mint leaf"			
	\$20/dipped cigarette			
Dallas	\$10/dose			
	\$500/ounce			
Los Angeles	\$10,000/gallon wholesale			
	\$150,000/gallon street price			
New York City	\$10/bag			
Philadelphia	\$5/bottle			
Phoenix	\$20/dipped cigarette			
St. Louis	\$350/ounce			
Washington,	\$15–\$25/marijuana-PCP combination			
DC	\$50/"lid" (packages of PCP-marijuana)			
	\$700-\$950/ounce			

SOURCE: CEWG city reports, June 2001

In Seattle, psilocybin mushrooms are available and common names include "shrooms," "magic mushrooms," "psilocybin cubes," and "liberty caps." In Minneapolis/St. Paul, where seizures of psilocybin mushrooms increased significantly in 2000, the drug sells for up to \$200 per ounce. In Boston, use of LSD, psilocybin mushrooms ("shrooms") and mescaline among adolescents and adults is common. In Phoenix, peyote appears to be readily available.

Exhibit 56. LSD prices in reporting CEWG areas, June 2001 reporting period

Area	Price/Dose	Other
Atlanta	\$4–\$10	\$1,000/1,000-dose blotter
Boston	\$5	\$300/100 doses
Chicago	\$5	NR
Dallas	\$1–\$10	NR
Honolulu	\$4–\$6	\$225-\$275/100-dose
		sheet (one "page")
Houston	\$5–\$10	NR
Minneapolis/		
St. Paul	\$5–\$10	NR
Phoenix	\$4	\$3/dose for three or more
		\$140-\$175/bottle
		(90 doses)
St. Louis	\$2–\$4	NR
Washington,	NR	\$3-\$7 \$800/sheet
DC		(100 doses)

SOURCE: CEWG city reports, June 2001

# **ABUSED PHARMACEUTICALS: OPIATES**

Detroit: "Indicators for opiates other than heroin remain relatively lower than those for cocaine or heroin. This has been a long-term trend. However, indicators for hydrocodone, carisoprodol, and oxycodone have increased recently."

Miami: "The most dramatic change in the second half of 2000 was the identification of widespread abuse of pharmaceutical opiates, specifically oxycodone or hydrocodone."

New York City: "Hospital emergencies, deaths, and treatment admissions indicate that the abuse of prescription drugs is not a serious problem relative to other major drug problems; however, the Street Studies Unit continues to report a variety of prescription drugs readily available."

Philadelphia: "Oxycodone abuse is increasing, and much local media attention has been given to its diversion and misuse."

Washington, DC: "OxyContin is being used recreationally with increasing frequency."

This drug group excludes heroin but includes opiates such as carisoprodol (Soma), codeine and its compounds, hydrocodone (Vicodin, Hycodan, Lortab, Lorcet, and NORCO), hydromorphone (Dilaudid), methadone (Dolophine), nalbuphine (Nubain), oxycodone (Percodan, Percocet, and OxyContin—a newer, higher dose, time-release formulation), propoxyphene (Darvon and Darvocet), and tramadol (Ultram).

#### **MORTALITY DATA**

Opiate-related mortality data in most reporting CEWG areas were relatively high and increasing:

- Detroit/Wayne County: Oxycodone was found in 10 decedents in 2000, hydrocodone was found in 60 in 2000 and 19 in the first 3 months of 2001, and carisoprodol was found in 20 in 2000 and 10 in the first 3 months of 2001. Between October 2000 and March 2001, 139 codeine-positive toxicology cases were reported; other drugs were found in most of the codeine-positive cases.
- Miami/South Florida: In the first half of 2000, 115 oxycodone- or hydrocodone-related deaths were reported. In several cases, cariso-prodol was also involved, indicating that it is a common co-ingestant. Statewide, 152 overdose deaths directly caused by oxycodone or

hydrocodone were reported during the second half of 2000.

- Philadelphia: Oxycodone was present in 49 decedents in 2000, compared with only 17 in 1999. Hydrocodone was present in 27 decedents in 2000, compared with 13 in 1999. Propoxyphene was present in 39 decedents in 2000, compared with 17 in 1999.
- Phoenix: Opiate-related deaths (not including heroin and morphine) have risen substantially since 1992, with a 21-percent increase between 1999 and 2000 (from 57 to 69 deaths).
- Seattle/King County: Deaths involving opiates other than heroin escalated between 1999 and 2000 (from 34 to 49). Methadone was the other opiate most frequently reported, with 24 cases in 2000. Oxycodone deaths totaled 18 in 1999 and 13 in 2000.

#### **EMERGENCY DEPARTMENT DATA**

The Nation's highest rate of oxycodone emergency department (ED) mentions per 100,000 population in the first half of 2000 was reported in Boston (6.8), followed by Phoenix (5.0) and Philadelphia (4.8) (exhibit 57). The Nation's highest rate of hydrocodone ED

mentions during that time period was reported in Phoenix (5.3), followed by San Diego (5.2) and Seattle (5.1). Propoxyphene and carisoprodol ED rates remained relatively low in most CEWG areas in the Drug Abuse Warning Network (DAWN) at fewer than 2 per 100,000 population.

Among the cities with the highest ED rates, 5-year trends for oxycodone and hydrocodone show general increases between the first halves of 1995 and 2000 (exhibit 58). According to more recent aggregate DAWN ED data, between 1999 and 2000, oxycodone mentions increased 68 percent (from 6,429 to 10,825), and mentions of drugs containing hydrocodone increased 31 percent (from 14,639 to 19,221). Mentions of oxycodone were 108 percent higher in 2000 than in 1998, and mentions of hydrocodone were 53 percent higher.

Furthermore, since 1999, South Florida hospitals have reported at least 221 oxycodone

overdoses, of which 150 occurred in 2000 and 40 in the first quarter of 2001.

#### OTHER LOCAL DATA

Other opiates as primary drugs of abuse continue to account for relatively small proportions of treatment admissions (0–3 percent of all drug admissions) in reporting CEWG areas.

By contrast, poison control data indicate a relatively high number of calls in reporting CEWG areas:

- Boston: In 2000, among helpline calls involving prescription drugs (totaling 8 percent of all helpline calls), oxycodone was the most frequently mentioned.
- Detroit: Oxycodone was involved in 27 poison center cases in the first 4 months of 2001.

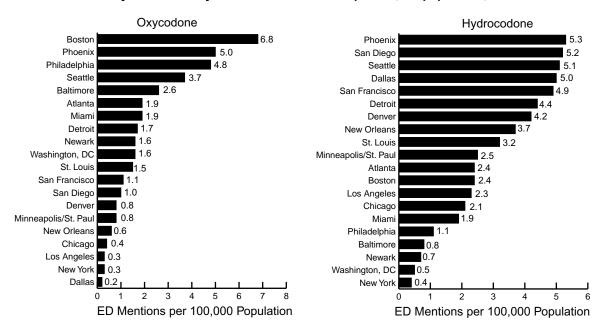


Exhibit 57. Oxycodone and hydrocodone ED mentions per 100,000 population, first half 2000\*

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 2000 (September 2000 update)

<sup>\*</sup>First-half-2000 data are preliminary.

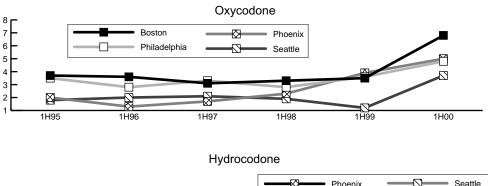
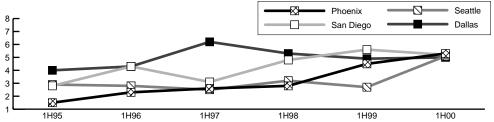


Exhibit 58. Five-year trends in oxycodone and hydrocodone ED mentions per 100,000 population in four top-ranking cities, first half 1995–first half 2000\*



\*First-half-2000 data are preliminary.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 2000 (September 2000 update)

■ Texas: Poison control centers reported 64 confirmed exposures to drugs in which the terms "OxyContin" or "oxycodone" were mentioned. The average age of contacts was 38 years, and 45 percent were male.

# USE PATTERNS AND DEMOGRAPHIC DATA

In many CEWG areas, prescription opiates are often used as heroin substitutes. Recently, the abuse of OxyContin (a high-dose, time-release oxycodone formulation) has received considerable media attention. If the pills are crushed and used intranasally, injected, or swallowed, the full effect of the dose is immediate. Oxycodone is combined with heroin (in South Florida), methamphetamine (in St. Louis), marijuana blunts (in Philadelphia), and other prescription medicines, including benzodiazepines, carisoprodol, and hydrocodone (in South Florida).

In the second half of 2000, among 34 oxycodone cases at a South Florida emergency department, most were male and White (82 percent), and the ages ranged widely (from 18 to 61 years), including 2 patients in their teens, 8 in their twenties, and 9 in their thirties. Among local users of unprescribed pills in Atlanta, one of the most commonly reported is OxyContin, and many of these users are White, generally young, and may also use heroin.

# LAW ENFORCEMENT AND MARKET DATA

Oxycodone (Percocet, Percodan, and OxyContin)—Oxycodone tablets are readily available in most reporting CEWG areas, with increases in abuse, availability, and related activity. For example, in Massachusetts, where many sources reported increased seizures and treatment mentions of OxyContin, oxycodone drug lab submissions doubled between 1999

and 2000 (from 178 to 374), with 145 samples from Boston. Massachusetts State Police also report well-organized trafficking from New York, with distribution points in several Massachusetts cities. Similarly, in Michigan, oxycodone arrests have been increasing. In Minneapolis/St. Paul, where OxyContin is reportedly becoming a more prevalent drug of abuse, users are typically experienced heroin addicts who return to their hometown areas to obtain prescriptions from unsuspecting rural doctors. In Phoenix, where oxycodone is one of the most commonly abused prescription drugs, an OxyContin prescription drug ring operation in the area is the subject of a DEA investigation: "runners" are passing fraudulent prescriptions and are either paying cash or billing an insurance company of someone whose medical records have been stolen. In St. Louis, the abuse of oxycodone by prescription is growing in popularity, and the injection of a liquid form of oxycodone has been reported. In Seattle, where oxycodone is sold in the downtown core area, street sales of OxyContin and other synthetic narcotics are increasing. Oxycodone abuse spread from Appalachia across Virginia and into the Washington, DC, area, where its abuse has been increasing.

OxyContin, referred to in several CEWG cities as "poor man's heroin" (even though it tends to be more expensive than heroin), costs as much as \$1 per milligram in reporting cities.

Hydromorphone (Dilaudid)—This drug is the pharmaceutical opiate preferred by many Chicago injecting drug users (IDUs), but its abuse has diminished there since 1987 because of decreased street availability. In St. Louis, hydromorphone abuse remains common among a small, chronic population of White addicts; in San Diego, it is reportedly abused by teens; in

Phoenix, it continues to be widely abused; and in Washington, DC, it can be purchased near methadone clinics. Street prices are reported in several cities: \$25–\$35 per 4 milligrams, \$15 per 2 milligrams, and \$7 per milligram in Chicago; \$20–\$80 per tablet in Dallas-Fort Worth; \$45–\$75 per 4 milligrams in St. Louis; and \$40–\$60 per 40 milligrams in San Diego.

Codeine—In Detroit, Houston, and Phoenix, codeine products, including cough syrups, are among the most commonly abused opiate pharmaceuticals, but in Chicago, codeine abuse in pill (Tylenol 3s and 4s) and syrup form has been declining over the past decade. Reported pill prices (for Tylenol 3s and 4s) are \$1–\$3 on Chicago's South Side, and \$3–\$10 in San Diego. In Houston, promethazine (Phenergan) with codeine sells for \$75–\$100 per 4 ounces, \$125 per 8 ounces, and \$1,600 per gallon.

Hydrocodone (Vicodin, Hycodan, Lortab, Lorcet, and NORCO)—This drug is the most commonly diverted opiate pharmaceutical in the Dallas area, selling for \$4–\$7 per tablet. It remains common in New Orleans, is increasing in street availability in New York, and is one of the most commonly abused prescription drugs in Phoenix. In San Diego, it costs \$3 per pill.

Methadone (Dolophine)—Recently, in Minneapolis/St. Paul, 14 patients of a for-profit methadone clinic were arrested for selling their methadone doses to an undercover police officer. Street prices for the drug include \$1 per milligram in Chicago and \$10 per tablet in Dallas-Fort Worth.

**Tramadol** (Ultram) and **nalbuphine** (Nubain)—These drugs continue to be highly abused in Phoenix.

# ABUSED PHARMACEUTICALS: STIMULANTS AND DEPRESSANTS

This section includes pharmaceutical stimulants, such as methylphenidate (Ritalin) and ephedrine. It also includes pharmaceutical depressants (other than ketamine and flunitrazepam [Rohypnol], which appear in the club drugs sections), especially benzodiazepines, such as alprazolam (Xanax), clonazepam (Klonopin), diazepam (Valium), and clonidine (Catapres).

#### **STIMULANTS**

The abuse among youth of **methylphenidate**, a pharmaceutical prescribed for attention deficit hyperactivity disorder (ADHD), has been reported in many CEWG areas. In Atlanta, Boston, Detroit, and Texas, methylphenidate poison control cases were numerous in 2000. In Detroit, where the drug is not widely available on the street, scattered reports of diversion and thefts of children's prescriptions continue. Methylphenidate tablets continue to be crushed and used intranasally in Minneapolis/St. Paul, where they sell for \$5 each. In Atlanta, methamphetamine is sometimes combined with methylphenidate.

In 2000, 84 Texas poison control cases mentioned Mini-Thins or Two-Ways (over-the-counter pills containing **ephedrine**).

### **DEPRESSANTS**

Benzodiazepines such as diazepam, clonazepam, and alprazolam are the most commonly abused pharmaceutical depressants in CEWG areas and are the ones most often identified in Drug Abuse Warning Network (DAWN) emergency department (ED) mentions. However, pharmaceutical depressant indicators remain relatively low. Overall, depressant treatment admissions continue to

account for only 1–8 percent of total admissions in reporting CEWG areas. Most benzodiazepine treatment admissions and decedents are White females.

Although diazepam has been considered the most commonly abused benzodiazepine for decades, it seems to be declining in many CEWG areas. Between the first halves of 1999 and 2000, diazepam ED mentions declined significantly (p<0.05) in five cities (Baltimore, Dallas, San Diego, San Francisco, and Washington, DC) and increased significantly in two (Philadelphia and Seattle). Alprazolam ED mentions also showed more significant decreases than increases, with significant decreases in Atlanta, Baltimore, and San Diego and increases in Miami and Seattle. However, clonazepam showed more significant increases than declines, with two such increases (San Diego and Seattle) and one decline (in Baltimore).

Poison center cases involving benzodiazepines remain common in Atlanta (where they also typically involve major drugs of abuse), Boston (where clonazepam is the one most frequently mentioned), South Florida (where alprazolam and clonazepam have replaced flunitrazepam among adolescent callers), and Texas.

According to Department of Public Safety (DPS) labs in Texas, alprazolam and diazepam are among the 10 most commonly identified substances, and clonazepam was more likely to be identified by labs located on the border.

According to recent focus groups in Philadelphia, alprazolam use is increasing and has surpassed diazepam as the most popular pill on the street. In contrast, diazepam is the most readily available and frequently used pharmaceutical depressant in Chicago.

In New York City, a variety of psychoactive prescription drugs, such as alprazolam ("footballs"), clonazepam, diazepam, and clonidine, are increasingly available on the street. Street prices for commonly diverted benzodiazepines in reporting areas are \$1–\$10 per 5- or 10-milligram tablet, depending on geographic location.

Combinations of benzodiazepines with other drugs include methamphetamine with alprazolam in Atlanta, alprazolam with marijuana blunts in Philadelphia, and alprazolam or diazepam with crack in Philadelphia.

### OTHER ILLICIT DRUGS AND ABUSED PHARMACEUTICALS

In addition to the substances discussed earlier, a wide variety of licit and illicit substances are abused across the country.

- Antidepressants—In Detroit, 44 amitriptyline (Elavil) poison control calls in the first
  quarter of 2001 were reported compared with
  140 in 2000. In the first quarter of 2001,
  82 trazodone (Desyrel) calls were reported
  compared with 175 in 2000. In South
  Florida, the combination of methylenedioxymethamphetamine (MDMA, ecstasy)
  (with or without lysergic acid diethylamide
  [LSD]) and selegiline (Alzene, Carbex,
  Deprenyl, and Eldepryl) or fluoxetine
  (Prozac) for the purpose of a longer lasting
  high has been reported.
- Dextromethorphan (DXM)—Teens in some CEWG areas, such as Detroit, Minneapolis/ St. Paul, Texas, and Washington, DC, abuse over-the-counter cough preparations containing DXM for their hallucinogenic properties ("robotripping") and their ability to prolong and enhance the effects of other drugs. In Minneapolis/St. Paul, school counselors continue to report the intermittent abuse of DXM sold as a powder or in clear capsules for \$5. Similarly, in Texas, school personnel and poison control centers report problems with its abuse, especially the use of Robitussin-DM, Tussin, and Coricidin Cough and Cold Tablets HBP. In Washington, DC, DXM (known as "drix") is viewed as an inferior high. Members of the rave and nightclub scenes in the District refer to DMX users as "roboheads" and regard them as "losers."
- Inhalants—Abuse of inhalants, especially nitrous oxide among clubgoers, continues to be reported in several CEWG areas. Nitrous oxide is readily available in head shops, catering supply stores, and over the Internet.

- Boxes of 10–24 canisters ("whippets") retail for \$6–\$15, and a plastic or metal tool, called a "cracker," retails for \$6. The cracker is used to break the seal of the whippet, allowing the gas to be expelled into the balloon. At raves in Phoenix, a balloon of nitrous oxide sells for \$2–\$5, and in the fall of 2000, an adolescent died after using the drug. Nitrous oxide and **amyl nitrite** are the most commonly used inhalants at clubs and parties among adolescents in Seattle, and at raves in Detroit, products inhaled for psychoactive effects vary widely.
- Khat—This plant's active ingredients, cathinone and cathine, are controlled substances. It is used in East Africa and the Middle East for its stimulant effects. In Minneapolis/St. Paul, its use remains almost exclusively within East African refugee communities.
- Opium—Continuing a pattern that began more than 15 years ago, packages containing opium are shipped from Asia to Asian communities in Minneapolis/St. Paul. More than 7,000 grams were seized at a single residence there in 2000.
- Sildenafil citrate (Viagra)—The drug is being used in combination with other drugs for recreational purposes and among clubgoers in Washington, DC. In South Florida, the practice of combining ecstasy (with or without LSD) and sildenafil citrate is called "hammerheading." Adolescents and young men use the combination for its supposed positive sexual effects.
- Steroids—Needle exchange personnel in western Massachusetts reported increases in steroid-injecting clients who request extralarge needles for intramuscular injection. These clients tend to be young, straight,

male bodybuilders seeking a quick increase in muscle mass. The needle exchange in Boston reported injection of illicitly purchased **hormones** by transgendered youth.

■ Drugs used to treat HIV/AIDS—In New York City, several drugs used to treat HIV/AIDS continue to be diverted, including dronabinol (Marinol, an appetite stimulant containing tetrahydrocannabinol [THC], megestrol acetate (Megace, an appetite stimulant), and efavirenz (Sistiva, an antivi-

ral drug). Efavirenz may have psychoactive properties. In the variety of drug-dealing roles in that city, the noncontrol person deals in legal pills and medication. Most recently these people have been focusing on medication for HIV. They often carry a color chart of medications showing the different brands and prices they will pay for them. Medication is then sold back to pharmacies, sometimes warehoused for future sales, and sometimes shipped to other countries in desperate need of these medications.

# **INFECTIOUS DISEASES RELATED TO DRUG ABUSE**

San Francisco: "The heterosexual injecting drug user (IDU) demography is like that of heroin users except for the overrepresentation of Blacks, while the gay male IDU demography is similar to that of male methamphetamine users."

Chicago: "Findings suggest that young IDUs, especially those in the suburbs, are engaging in high levels of HIV-risk behaviors."

#### AIDS MODE OF EXPOSURE

According to the Centers for Disease Control and Prevention (CDC), injecting drug use continues to be one of the most common modes of exposure among acquired immunodeficiency syndrome (AIDS) cases nationwide, second only to male-to-male sex. Through December 2000, injection-related AIDS cases accounted for 31 percent of cumulative adult and adolescent diagnoses: 25 percent (*n*=189,242) involved injecting drug use as the sole mode of exposure; 6 percent (*n*=47,820) involved the dual risk categories of injecting drug use and male-to-male sex (exhibit 59).

Newark and New York continue to have the highest proportions of injecting drug use as the sole mode of exposure (55 and 45 percent, respectively) among reporting CEWG areas; however, proportions in both cities declined 2 percentage points over the past 2 years. Between the June 2000 and June 2001 CEWG reporting periods, the proportion of injecting drug use as mode of exposure of cumulative AIDS cases remained relatively stable or declined in CEWG areas, with two exceptions: in Massachusetts, where it increased 5 percentage points, and in Philadelphia, where it increased 1 point. The proportions for dual exposure of injecting drug use and male-tomale sex remained relatively stable, except for a 1-percentage-point rise in Michigan.

#### AIDS DEMOGRAPHIC DATA

Washington, DC: "A recent community-based epidemiologic and ethnographic longitudinal study conducted among HIV-positive IDUs

found that 70 percent were not taking antiretroviral medication or regularly using HIV services."

Non-Whites continue to account for a disproportionately high number of injection-related cases. For example, in Georgia, 86 percent of injection-related AIDS cases involved Blacks. Similarly, during 1994–98, 96 percent of injecting drug users (IDUs) with AIDS in Washington, DC, were Black. In San Francisco, Blacks and Hispanics represent 62 percent of heterosexual IDUs with AIDS.

Males continued to constitute the majority of heterosexual injection-related AIDS cases in CEWG sites, including New York (75 percent) and San Francisco (70 percent). However, among female AIDS cases, the proportions related to injecting drug use are higher than among male cases. For example, in Arizona, 22 percent of male AIDS cases involve IDUs, compared with 38 percent of female cases. In Georgia, 23 percent of male cases compared with 29 percent of female cases are injection related, and in the Atlanta area, 38 percent of AIDS decedents among females were IDUs, compared with 22 percent of male decedents. In Los Angeles, 13 percent of male AIDS cases compared with 26 percent of female cases are injection related. In Minneapolis/St. Paul, 23 percent of female cases are IDUs, and an additional 20 percent are exposed from heterosexual contact with an IDU, compared with 14 percent of male cases connected to injection drug use. Among the female IDUs in New York, Blacks remain the majority, accounting for 47 percent, followed by Hispanics (33 percent) and Whites (13 percent). Furthermore, female IDUs in that

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city are typically younger than their male counterparts: 65 percent are 39 or younger, compared with 51 percent among males.

Unlike the male heterosexual demography of IDUs with AIDS in San Francisco, the homosexual IDUs with AIDS population is 72 percent White, 16 percent Black, and 9 percent Hispanic—similar to the demography of male methamphetamine users.

# INFECTIOUS DISEASES OTHER THAN AIDS AMONG IDUS

■ Hepatitis B—In Seattle, an alarming 70 percent of IDUs show indications of prior infection with hepatitis B. Studies in Seattle further reveal that 10 percent of IDUs who have not been infected with hepatitis B contract it every year. By contrast, in San Francisco, from 1996 through the beginning

- of May 2001, reported cases of hepatitis B have not changed from approximately one per week.
- Hepatitis C—Hepatitis C prevalence among IDUs in reporting CEWG areas is high. For example, in Atlanta, 46 percent of a sample of 75 methadone maintenance participants self-reported seroprevalence of hepatitis C. In Minnesota, the estimated level of hepatitis C among methadone patients is higher than 80 percent. In the San Francisco Bay Area, preliminary reports indicate that there is a 50–60 percent infection rate of hepatitis C among IDUs. Similarly, in Seattle, reports indicate the hepatitis C level among IDUs is at 85 percent, and recent studies show that 21 percent of noninfected IDUs contract the disease each year. A north Denver outreach program reports that most of its clients are older heroin injectors, of whom 72 percent are hepatitis C-positive.

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Exhibit 59. Acquired immunodeficiency syndrome among injecting drug users as reported by CEWG representatives, June 2001

	Cumulative Number of Cases				% IDU			% IDU and men/sex/men		
Area	(Reported through month/year for areas specified)			(sole mode of exposure) (dual mode of exposur					osure)	
	June 99	June 00	June 01	% Increase						
	CEWG Report	CEWG Report	CEWG Report	6/00–6/01	June 99	June 00	June 01	June 99	June 00	June 01
Arizona	6,278 (4/99)	7,055 (4/00)	7,354 (4/01)	4.2	11.6ª	12.0 <sup>a</sup>	12	11.0 <sup>a</sup>	10.4 <sup>a</sup>	10.6
Baltimore, MD	12,522 (12/98)	13,541 (12/99)	13,904 (6/00)	2.6	NR	NR	NR	NR	NR	NR
Colorado	6,498 (3/99)	6,800 (3/00)	7,125 (3/01)	4.7	8.5	8.8	8.8	10.8	10.9	11.0
Georgia	20,322 (3/99)	21,710 (3/00)	22,890 (3/01)	5.4	19.0	19.0	18.0	5.8	5.8	6.0
Honolulu, HI	1,639 <sup>b</sup> (12/98)	1,714° (12/99)	1,766 <sup>d</sup> (6/00)	3.0 <sup>e</sup>	NR	NR	NR	NR	NR	NR
Illinois <sup>a</sup>	21,985 (3/99)	23,769 (3/00)	25,159 (3/01)	5.8	25.0	26.0	>25.0	5.0	5.0	5.0
Los Angeles County	39,106 (3/99)	40,867 (3/00)	42,572 (3/01)	4.1	7.0	6.9	6.9	7.0	6.0	6.3
Louisiana <sup>a</sup>	11,393 (5/99)	12,143 (5/00)	12,872 (5/01)	6.0	19.0	19.0	19.0	9.0	8.0	8.0
Massachusetts <sup>a</sup>	14,088 (4/99)	15,500 (4/00)	16,269 (4/01)	4.9	35.0	34.0	39.0	NR	4.0	4.0
Miami, FL	21,039 <sup>b</sup> (12/98)	22,414 (4/00)	23,521 <sup>d</sup> (6/00)	4.9 <sup>e</sup>	NR	17.0	NR	NR	3.0	NR
Michigan	9,950 (12/98)	10,549 (12/99)	11,273 (12/00)	6.8	24.0	24.0	23.0	6.0	6.0	7.0
Minnesota	3,324 (12/98)	3,501 (12/99)	3,722 (3/01)	6.3	8.0	8.5	8.8	7.0	7.0	6.3
Newark, NJ <sup>a</sup>	7,115 (12/98)	7,410 (12/99)	7,770 (12/00)	4.8	57.0	56.0	55	4.0	4.0	4
New York, NY <sup>a</sup>	109,392 (9/98)	115,269 (9/99	122,758 (12/00)	6.4	47.0 <sup>a</sup>	47.0 <sup>a</sup>	45.0ª	NR	NR	NR
Philadelphia, PA <sup>a</sup>	11,141 (12/98)	12,641 (12/99)	13,488 (12/00)	6.7	35.7	35.7	36.7	6.1	5.8	5.7
St. Louis, MO	3,225 (3/98)	3,539 (9/99)	NR NR	NR	6.1	6.6	NR	6.2	6.3	NR
San Diego County <sup>a</sup>	9,833 (4/99)	10,382 (4/00)	10,717 (4/01)	3.2	8.0	8.0	9.0	9.0	9.0	9.0
San Francisco County	25,976 (3/99)	26,823 (3/00)	27,484 (3/01)	2.4	6.7	6.7	6.8	11.5	12.3	12.2
Seattle, WA (King County)	5,682 (3/99)	5,839 (12/999)	6,102 (12/00)	4.5	8.0	NR	NR	9.0	NR	NR
Texas	48,350 <sup>b</sup> (12/98)	51,449° (12/99)	52,667 <sup>d</sup> (6/00)	2.3 <sup>e</sup>	NR	NR	NR	NR	NR	NR
Washington, DC	11,312 (12/98)	12,154 (12/99)	12,539 (6/00)	3.1	28.0	28.0	27.4	NR	NR	NR
Total U.S.	688,200 <sup>b</sup> (12/98)	733,374° (12/99)	753,907 <sup>d</sup> (6/00)	2.7°	25.6 <sup>a,b</sup>	25.5 <sup>a,c</sup>	25.0 <sup>a,d</sup>	6.4 <sup>a,b</sup>	6.4 <sup>a,c</sup>	6.3 <sup>a,d</sup>

<sup>&</sup>lt;sup>a</sup>Calculated from adult and adolescent cases only

<sup>&</sup>lt;sup>b</sup>SOURCE: Centers for Disease Control and Prevention, HIV/AIDS Surveillance Report 10(2): tables 8 and 10, 1998

<sup>°</sup>SOURCE: Centers for Disease Control and Prevention, HIV/AIDS Surveillance Report 11(2): tables 4 and 5, 1999

<sup>&</sup>lt;sup>d</sup>SOURCE: Centers for Disease Control and Prevention, HIV/AIDS Surveillance Report 12(1): 8, 9, 12, 2000

The latest CDC data were available only through June 2000; any shifts since the last reporting period cover only 6 months, rather than a full year.