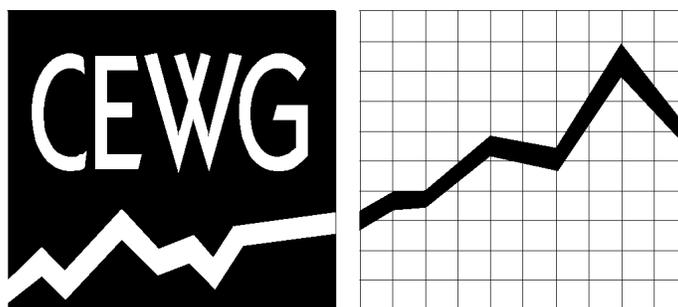


EPIDEMIOLOGIC TRENDS IN DRUG ABUSE

VOLUME I: HIGHLIGHTS AND EXECUTIVE SUMMARY

JUNE 2000



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
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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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For more information about the Community Epidemiology Work Group, and for some past publications, come visit the CEWG home page through the NIDA website:

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FOREWORD

The Community Epidemiology Work Group (CEWG), established in 1976 by the National Institute on Drug Abuse (NIDA), National Institutes of Health (NIH), is a network of researchers from 21 major metropolitan areas of the United States who meet semiannually. The group's primary objective is to present and discuss the most recent drug abuse data from ongoing community-level public health surveillance, principally from epidemiologic and ethnographic research sources. Through this program, the CEWG provides current descriptive and analytical information to public health and other officials and policymakers, the research community, and the general public regarding the current nature and patterns of drug abuse, emerging trends, characteristics of vulnerable populations, correlates of abuse, and social and health consequences.

The 48th meeting of the CEWG, held in Baltimore, Maryland, on June 13–16, provided a forum for presentation and assessment of drug abuse indicator and other quantitative and qualitative data from the CEWG sites in the United States and from Canada, Mexico, Australia, South Africa, Pakistan, and other countries of Asia, Europe, and the Pacific Islands. The venue in Baltimore also provided the occasion for presentations on issues of special concern to the local community and on the varied research being conducted in the city. These included presentations on the Ethnographic Neighborhood Biography project, on trend analysis research of the city's heroin epidemics, and on the Drug Early Warning System (DEWS)—the statewide drug abuse surveillance project in Maryland. In addition, Federal officials of the Crime and Narcotics Center and the National Drug Intelligence Center, respectively, presented the most recent trends in worldwide and

domestic production and trafficking of drugs; and findings were presented from a study (the Electronic Collaboratory for Investigation of Drugs project) on the relationship between exposure to substance use opportunity and subsequent use in selected countries of Latin America.

In addition, staff from NIDA Divisions, Offices, and Centers made a series of presentations on the latest research being conducted by the Institute and on other issues of concern and interest. The meeting also afforded the opportunity for dialogues with Dr. Alan I. Leshner, Director, and Mr. Richard A. Millstein, Deputy Director, of the National Institute on Drug Abuse. During the course of the meeting, the unique capability of community-based surveillance networks to identify and characterize emerging problems of drug abuse was fully recognized, as reflected in the contribution of the CEWG during the past 24 years. The dialogues with the Directorate emphasized this accomplishment, but also presented a challenge to the CEWG and its sister epidemiology work groups in the United States and around the world: to expand the horizons of data collection, to improve the quality of data analysis, to communicate findings more effectively, to speed up information dissemination, and to begin integrating preventive intervention strategies into the analytical process. The ultimate objective of implementing these activities at the earliest stage of outbreak identification is to eliminate, or at least greatly minimize, harmful consequences and to protect both individual and public health.

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EPIDEMIOLOGIC TRENDS IN DRUG ABUSE

INTRODUCTION TO VOLUME I

The 48th meeting of the Community Epidemiology Work Group (CEWG) was held June 13–16, 2000, in Baltimore, Maryland. During this meeting, 21 CEWG representatives reported on current drug trends and patterns in U.S. cities. The following highlights and executive summary are based on these reports.

DATA SOURCES

To assess drug abuse patterns and trends, city- and 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 (Note: 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 State 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 are set off in indented, bold italics.

A NOTE TO THE READER

The highlights, executive summary, and 21 U.S. city report summaries are organized by specific drug of abuse. Please note, how-

ever, 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.
- **Arrest/seizure data**—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 October 1999. 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 halves of 1994 through 1999. First-half-1999 data are preliminary. Short-term comparisons are based on first-half-year data for 1998 versus 1999. 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-in-combination. Comparisons are generally for second half 1998 versus second half 1999, unless specified otherwise.
- Percentage-point increases or declines between reporting periods generally are noted only when they are ≥ 3 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.
- Comparisons of ADAM arrestee urinalysis data are based on full-year figures for 1998 and 1999. Full-year-1999 figures are preliminary.
- Heroin purity levels per milligram were obtained from the DEA Domestic Monitor Program, Intelligence Division, Domestic Unit. Comparisons are for full years 1998 versus 1999. Full-year-1999 data are preliminary.
- Cumulative totals of acquired immunodeficiency syndrome (AIDS) cases for the total United States are based on the *HIV/AIDS Surveillance Report* 11(2):4,5,1999, from the Centers for Disease Control and Prevention (CDC).

Local areas vary in their reporting periods. Many indicators reflect fiscal periods that may differ between 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 declining or stable trends in most CEWG areas. Heroin indicators are mixed, with younger populations continuing to initiate use in several cities and some shifting from snorting to injecting. Marijuana indicators remain at elevated levels, with generally stable or mixed trends. Methamphetamine indicators continue to decline in western and central CEWG sites; indicators remain low in the East but may be trending upward. "Club drugs," especially GHB, GBL, "ecstasy" (MDMA), and ketamine, continue to spread across the country. MDMA is highly available, and its use is reportedly increasing in many areas. The contents of the product being sold as MDMA vary widely.

COCAINE AND CRACK

Although some indicators increased slightly in many CEWG areas during the last reporting period, most cocaine indicators during this period declined or were stable. Cocaine deaths¹ declined or remained stable in six areas (Detroit, Honolulu, Miami, Philadelphia, San Diego, and San Francisco) and increased substantially in Phoenix, where 1999 deaths outnumbered cumulative deaths for 1993–98, and in Seattle. After increasing in many sites during the last 6-month period, cocaine emergency department (ED) mentions² decreased significantly in seven cities (Atlanta, Chicago, Dallas, New Orleans, New York, San Francisco, and Washington, DC); only two significant increases were noted (in Baltimore and St. Louis). Cocaine is the primary drug of choice among treatment admissions³ in seven CEWG sites. Among cocaine treatment and ED admissions, the 35-and-older cohort seems to be increasing in many sites. Mixed trends were

found in cocaine-positive urinalysis percentages⁴ among adult male arrestees, with increases at three sites (Dallas, Laredo, and Washington, DC), declines at four (Chicago, Los Angeles, Philadelphia, and San Antonio), and stable trends at the rest; the drug is now surpassed by marijuana in all but six cities. By contrast, among female arrestees, cocaine is still the most commonly detected drug in all but one city (San Diego); levels increased in four cities (Chicago, Dallas, Minneapolis/St. Paul, and Phoenix) and declined in Houston, Laredo, Los Angeles, and Seattle. Speedball (crack combined with heroin) injections continue in many cities. High purity and greater availability of cocaine hydrochloride (HCl) may be driving the increase in HCl indicators in some sites, including Denver, Miami, Minneapolis/St. Paul, and Newark, and the decrease in crack indicators in some cities, such as Boston, Denver, Miami, and Newark.

HEROIN

Heroin indicators show mixed trends. Mortality figures¹ were mixed, with deaths increasing notably in four areas (Austin, Detroit, Minneapolis/St. Paul, and Phoenix), declining in five (Miami, Philadelphia, St. Louis, San Diego, and Seattle), and stable in one. ED indicators² were also mixed, with

10 cities showing decreases (2 significant—San Francisco and Washington, DC) and 10 showing increases (2 significant—Baltimore and Miami). Heroin is the predominant drug of choice among treatment admissions³ in six reporting sites. Opiate-positive urinalysis levels⁴ among adult males remained rela-

tively low (3–20 percent) and stable in most cities, except for Atlanta and Washington, DC, where opiate-positive levels increased, and Philadelphia and Seattle, where they declined. Conversely, among adult females, levels increased substantially in six cities (Chicago, Minneapolis/St. Paul, New Orleans, Phoenix, San Diego, and Seattle); levels declined notably in Detroit. Heroin purity⁵ ranges from 11 percent in Miami to 72 percent in Philadelphia. Purity trended mostly upward or remained stable: increases were particularly steep in five cities (Detroit,

Los Angeles, Newark, New Orleans, and Phoenix); declines were notable in Denver and Houston (by 22 and 17 percentage points, respectively). Increases in heroin use among younger populations are becoming apparent in many cities. In Boston, Chicago, Denver, Miami, and Washington, DC, snorting seems to be increasing and is often the starting route for many young, new users. Conversely, injecting is on an upward trend especially among younger users in Baltimore, Boston, Minneapolis/St. Paul, Newark, New York City, and Seattle.

MARIJUANA

After several periods of increases, marijuana indicators are mixed or stable in most sites. Marijuana ED mentions² increased significantly in three cities (Baltimore, Minneapolis/St. Paul, and Phoenix) and declined significantly in five cities (Chicago, Dallas, New Orleans, San Diego, and San Francisco). Marijuana is the predominant drug treatment problem³ in three areas. Treatment admissions, particularly among clients who use only marijuana, seem to be increasing in many areas. However, compared with other drug client proportions, the proportion of marijuana treatment admissions referred by the criminal justice system is very high in most reporting areas. Among adult male arrestees⁴, marijuana has surpassed cocaine as the most commonly detected drug in the majority of CEWG cities. Positive findings continue to increase—sharply in six cities (Atlanta, Chicago, Los Angeles,

Miami, Phoenix, and Seattle); conversely, levels declined in five cities (Dallas, Laredo, Philadelphia, San Antonio, and Washington, DC). Levels also increased or remained stable among female arrestees, except for two notable declines in Laredo and Seattle. Juvenile arrestee levels exceeded adult marijuana-positive levels at all four sites where juveniles were tested. Marijuana blunts remain common in many CEWG areas, especially on the east coast. Marijuana also continues as a delivery medium for other drugs, including PCP (in Chicago) and crack (in Chicago, New York City, and parts of Texas). In Texas, marijuana/embalming fluid/PCP combinations are reported, and joints are sometimes dipped in codeine cough syrup. High-quality marijuana is available in most areas, and potency continues to increase in many.

METHAMPHETAMINE

Methamphetamine remains concentrated in the West and, to a lesser extent, in some

rural areas elsewhere. In the West, most indicators continued showing the declines

reported since 1998. Declining indicators are most likely related to low purity levels and increased law enforcement attention; however, reports of manufacturers switching to methods that create high-purity methamphetamine may warrant attention in relation to future increased negative health consequences. In the East, methamphetamine indicators remain low, but ethnographic and law enforcement information indicates slight increases in availability among whites, especially in rural areas and among youth at raves and college parties. Methamphetamine

ED mentions² declined significantly in eight cities (Atlanta, Denver, Dallas, Chicago, New Orleans, Phoenix, San Diego, and San Francisco). Methamphetamine remains the number-one primary drug problem among treatment admissions in two sites³. Methamphetamine-positive percentages among adult male arrestees⁴ remained relatively low and stable, except in San Diego, where they declined notably; percentages among adult female arrestees increased notably in San Diego and Seattle and declined notably in Phoenix.

"ECSTASY"

Ecstasy (methylenedioxymethamphetamine, MDMA), used primarily at dance clubs, raves, and college scenes, is reportedly increasing in almost every CEWG city—an increase most likely driven by two factors: high availability due to large shipments from the Netherlands and other European countries; and the perception that it is a relatively harmless drug (known as the “hug drug” in Miami and the “love drug” in Minneapolis/St. Paul). In Boston and New York City, it seems to be spreading outside the club scene to the streets. In many cities, ecstasy content varies widely, and it frequently consists of substances entirely different from MDMA, ranging from caffeine to dextromethorphan (DXM). For example, in Chicago, the MDMA-like substance paramethoxyamphetamine (PMA) was involved

in the deaths of two suburban youths who mistakenly thought the substance was true MDMA. In Washington, DC, where ecstasy is taken by a wide range of age groups, some circular tablets are thought to be MDMA plus mescaline, some triangular tablets are thought to be heroin plus MDMA, and “nexus” tablets were verified by the DEA as LSD plus MDMA. In Phoenix, a large quantity of high-quality MDMA, known as “candy canes” for their red and white stripes, was seized. Some older users in New York City prefer MDMA to cocaine because it lasts longer and is considered safer. MDMA is usually taken orally in pill form, but snorting has been reported (in Atlanta and Chicago), as has injecting (in Atlanta) and anal suppository use (in Chicago).

GAMMA HYDROXYBUTYRATE (GHB)

Problems associated with rave and club drugs have risen dramatically in 1999. Gamma hydroxybutyrate (GHB, a central nervous system depressant) and two of its

precursors, **gamma butyrolactone (GBL)** and **1,4 butanediol (BD)** have been increasingly involved in poisonings, overdoses, drug rapes and other criminal behaviors, or

fatalities in nearly all CEWG cities and their surrounding suburban and rural areas. These products, obtainable over the Internet and sometimes still sold in health food stores, are also available at some gyms, nightclubs, raves, gay male party venues, on college campuses, or on the street. They are commonly mixed with alcohol (which may cause unconsciousness), have a short duration of action, and are not easily detectable on routine hospital toxicology screens. New esters and analogs of GHB have continued to appear, even after Federal laws removed the sale of these drugs. In 1999, GHB accounted for 32 percent of illicit-drug-

related poison center calls in Boston—a level higher than that for MDMA. Conversely, in Chicago and San Francisco, GHB use is reportedly low compared with MDMA use, although GHB overdoses seem frequent compared with overdoses related to other club drugs. Even though GHB may be difficult to distinguish from water, it has appeared in law enforcement indicators, including seizures of large amounts in Minneapolis/St. Paul and Phoenix. Withdrawal, addiction, and treatment indicators are emerging in several areas, including Miami and Minneapolis/St. Paul.

HALLUCINOGENS

Lysergic acid diethylamide (LSD) ED mentions² increased significantly in five cities (Baltimore, Detroit, Minneapolis/St. Paul, Phoenix, and Washington, DC); no significant declines were recorded. In several CEWG areas, LSD used in combination with other club drugs continues to be reported among youth. In Minneapolis/St. Paul for the first time, LSD has been sold on soda crackers, and in Phoenix, it is sold in dropper bottles of a breath freshener.

Phencyclidine (PCP) ED mentions² were mixed. Among arrestees, PCP-positive findings remained generally stable, except

for a decrease in Philadelphia and, following a decade of marked decline, an upturn in Washington, DC. PCP continues to be smoked with marijuana in Chicago (known there as “wicky stick” or “donk”), Minneapolis/St. Paul, New York City, and St. Louis. In New York City, it is also sold as a liquid in small shaker bottles. **Psilocybin mushrooms** (“shrooms”) and **mescaline** are common among youth in Boston. **Peyote** is readily available in Phoenix. In 1999, Texas poison centers reported calls involving the hallucinogenic plant, morning glory.

OTHER DRUGS

Methylphenidate (Ritalin) abuse may be increasing. Eight sites reported its abuse, primarily among youth who crush and snort tablets, including Baltimore, Boston, Detroit, Minneapolis/St. Paul, Phoenix, and parts of Texas. African-Americans on Chicago’s South Side inject it, sometimes

with heroin or heroin and cocaine. White injecting drug users (IDUs) in Chicago inject **phenmetrazine** (Preludin). In Seattle, youth are reportedly “mega-dosing” on **pseudoephedrine**, and in Texas, **ephedrine** abuse seems to be rising, especially among young adults. Use of the tranquilizer **ketamine**

(“Special K” or “vitamin K”), available and common in club, rave, and party scenes, is increasingly reported, especially among white youth in many cities, including Atlanta, Baltimore, Boston (where some users inject it, it is used as a heroin adulterant, and it may have been involved in some overdose deaths), Chicago (where it is available in powder and liquid form), Minneapolis/St. Paul (where injecting is reported), Newark, New York City (where it is available on the street, is either snorted or injected, and is sometimes mistaken for cocaine HCl), Phoenix, San Diego, Texas, and Washington, DC. In Detroit and St. Louis, veterinary break-ins for ketamine have increased in the past year. **Clonazepam (Klonopin or Rivotril)** and **alprazolam (Xanax)** use, in various combinations, is reported in Boston, where diverted prescription drug seizures have increased sharply after a recent rash of pharmacy break-ins. Those two drugs have replaced **flunitrazepam (Rohypnol)** among adolescents in Miami; similarly, in parts of

Texas, clonazepam continues to replace flunitrazepam. Flunitrazepam continues to be a problem among treatment admissions in Texas, particularly among young Hispanic males along the Mexican border. It also remains available in Atlanta, Boston, and New Orleans. Recent deaths in Seattle have involved concomitant injection of heroin and a depressant, typically **diazepam**. Cough medicines with **DXM** are commonly abused (“robo tripping”) by teens in Boston and Minneapolis/St. Paul, where it is reportedly also available as a powder in clear capsules. In Atlanta, **inhalants** are increasingly used among club goers; in Detroit, nitrous oxide and propane use continues to be reported; in Phoenix, seven deaths in 1999 involved inhalants. **Sildenafil citrate** (Viagra) is reportedly combined with MDMA in Boston. Needle exchange personnel in areas surrounding Boston report **steroid** injection among young male bodybuilders. In Atlanta, law enforcement sources note the potential for abuse of the anabolic steroid **clenbuterol (Spiropent)** by weightlifters.

1. Mortality figures are for 1998 versus 1999 and were available for cocaine- and heroin-related deaths in 10 reporting areas.
2. 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 first-half 1998 versus first-half 1999 estimates; statistically significant equals $p < 0.05$; first-half-1999 data are preliminary.
3. Treatment admission figures were reported in 20 CEWG sites and are primary drug of abuse as a percentage of total admissions; total admissions generally exclude alcohol-only and alcohol-in-combination.
4. Arrestee urinalysis data are for the 20 CEWG cities in the National Institute of Justice (NIJ) Arrestee Drug Abuse Monitoring (ADAM) program; comparisons are for 1998 versus 1999; 1999 data are preliminary; changes are noted only when they are ≥ 3 percentage points.
5. Heroin price and purity data are for 19 CEWG cities in the Drug Enforcement Administration (DEA) Domestic Monitor Program (DMP); comparisons are for 1998 versus 1999; 1999 data are preliminary.

REGIONAL HIGHLIGHTS: THE NATION

EAST

Cocaine: #1 ED in most cities; #1 treatment drug in some cities; indicators ↓ or stable; crack ↓; speedballs injected

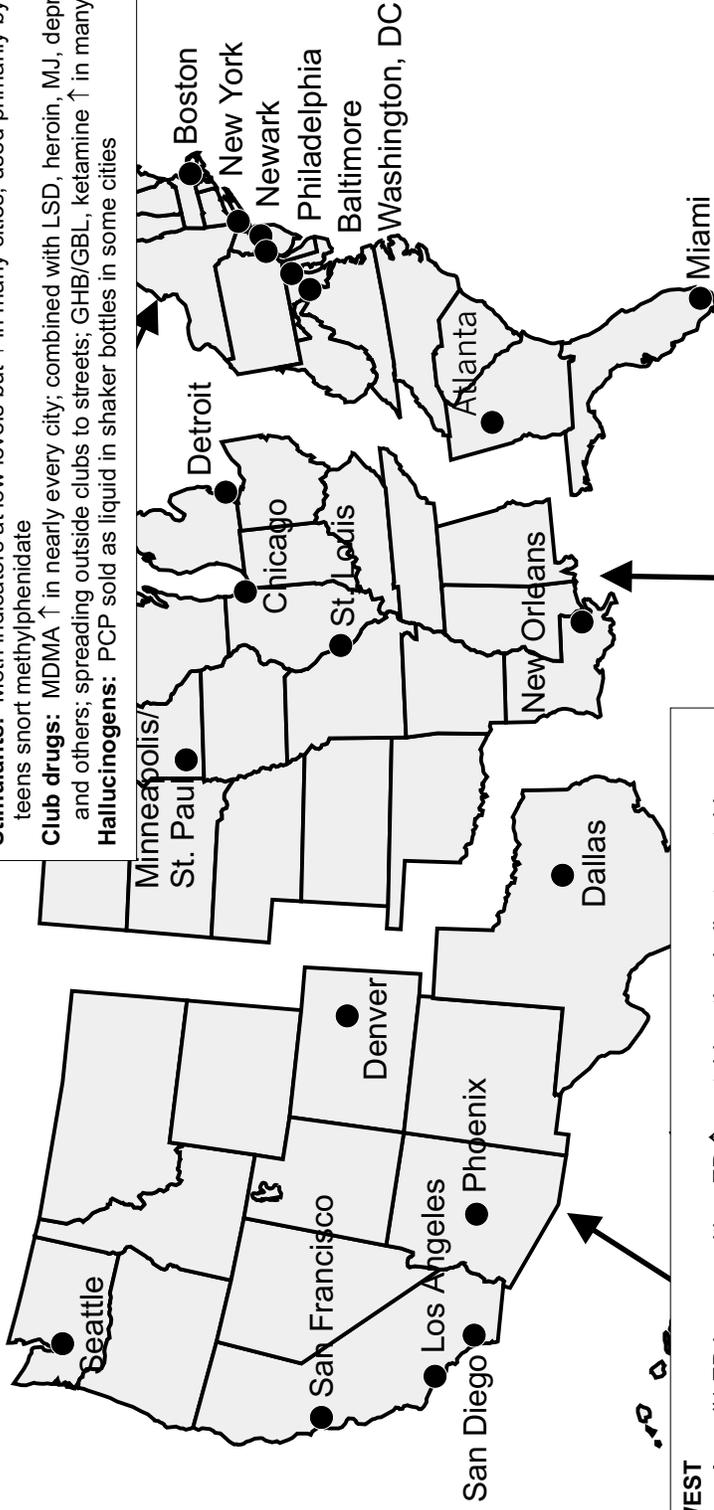
Heroin: #1 treatment and ED drug in some cities; mortality ↓ or stable; ED mixed; treatment admissions ↓ or stable; mostly high-purity Colombian; some snorters starting to inject

Marijuana: Treatment admissions ↑ or stable; other indicators stable in most cities; blunt use common; combined with cocaine, heroin, PCP, embalming fluid, or meth

Stimulants: Meth indicators at low levels but ↑ in many cities; used primarily by young club goers; teens snort methylphenidate

Club drugs: MDMA ↑ in nearly every city; combined with LSD, heroin, MJ, depressants, DXM, and others; spreading outside clubs to streets; GHB/GBL, ketamine ↑ in many cities

Hallucinogens: PCP sold as liquid in shaker bottles in some cities



WEST

Cocaine: #1 ED in many cities; ED ↑ or stable; other indicators stable; speedballs injected

Heroin: #1 ED and treatment drug in some cities; ADAM females ↑ or stable; most inject Mexican black tar

Marijuana: #1 treatment drug in some cities; ED ↓ or stable; ADAM males ↑ or stable in most cities

Stimulants: Meth #1 treatment drug in some cities; mortality ↑ in some cities; ED ↓ in most cities, but still Nation's highest; teens abuse methylphenidate, ephedrine

Club drugs: MDMA ↑; GHB/GBL consequences; ketamine, LSD, psilocybin mushrooms abused

CENTRAL

Cocaine: #1 ED; #1 treatment drug in most cities; indicators stable

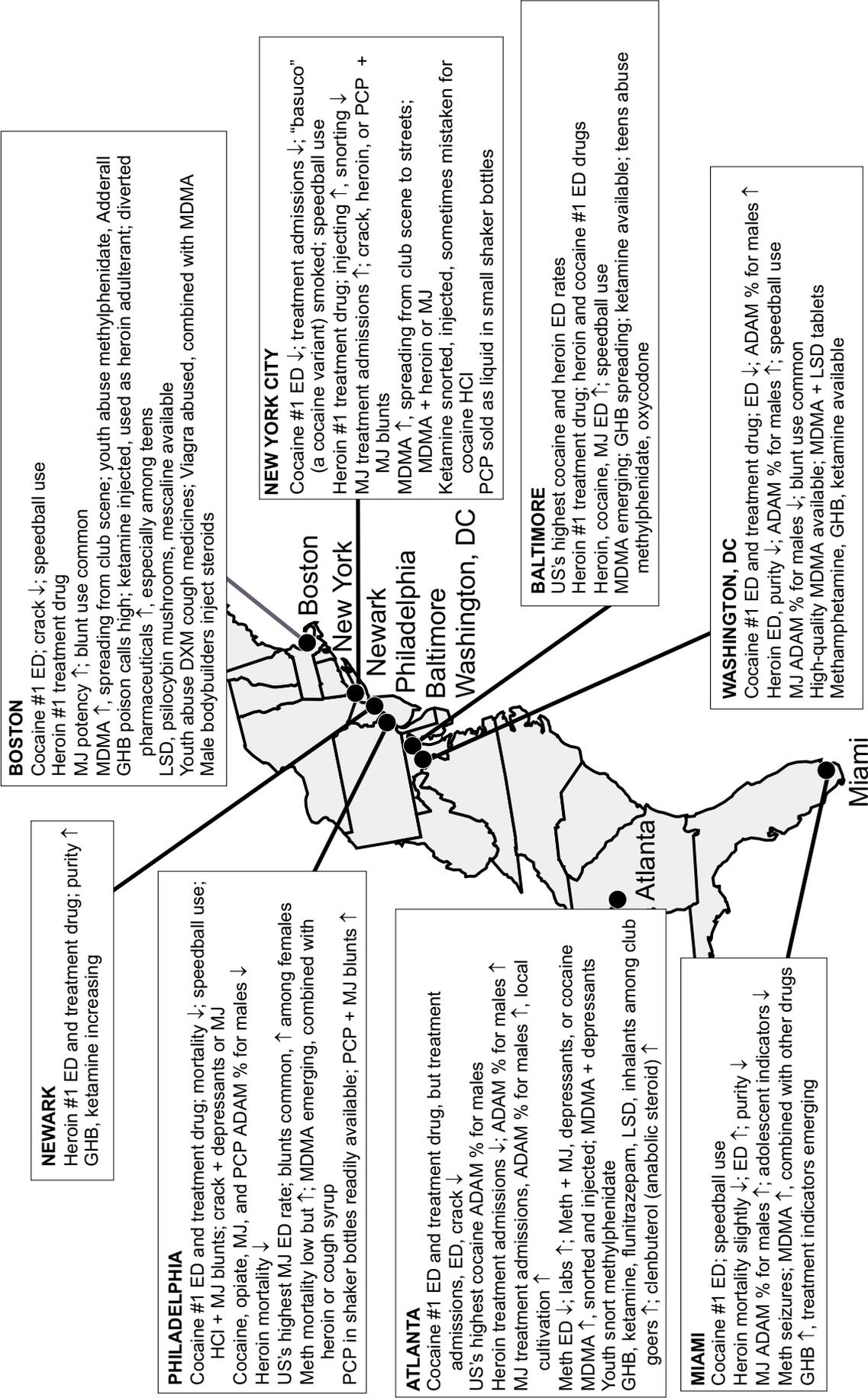
Heroin: Indicators ↑ slightly or stable; purity ↑, prices ↓ in some cities

Marijuana: #1 treatment drug in some cities; treatment admissions, ADAM % for females ↑ or stable; other indicators stable; often combined with PCP or crack

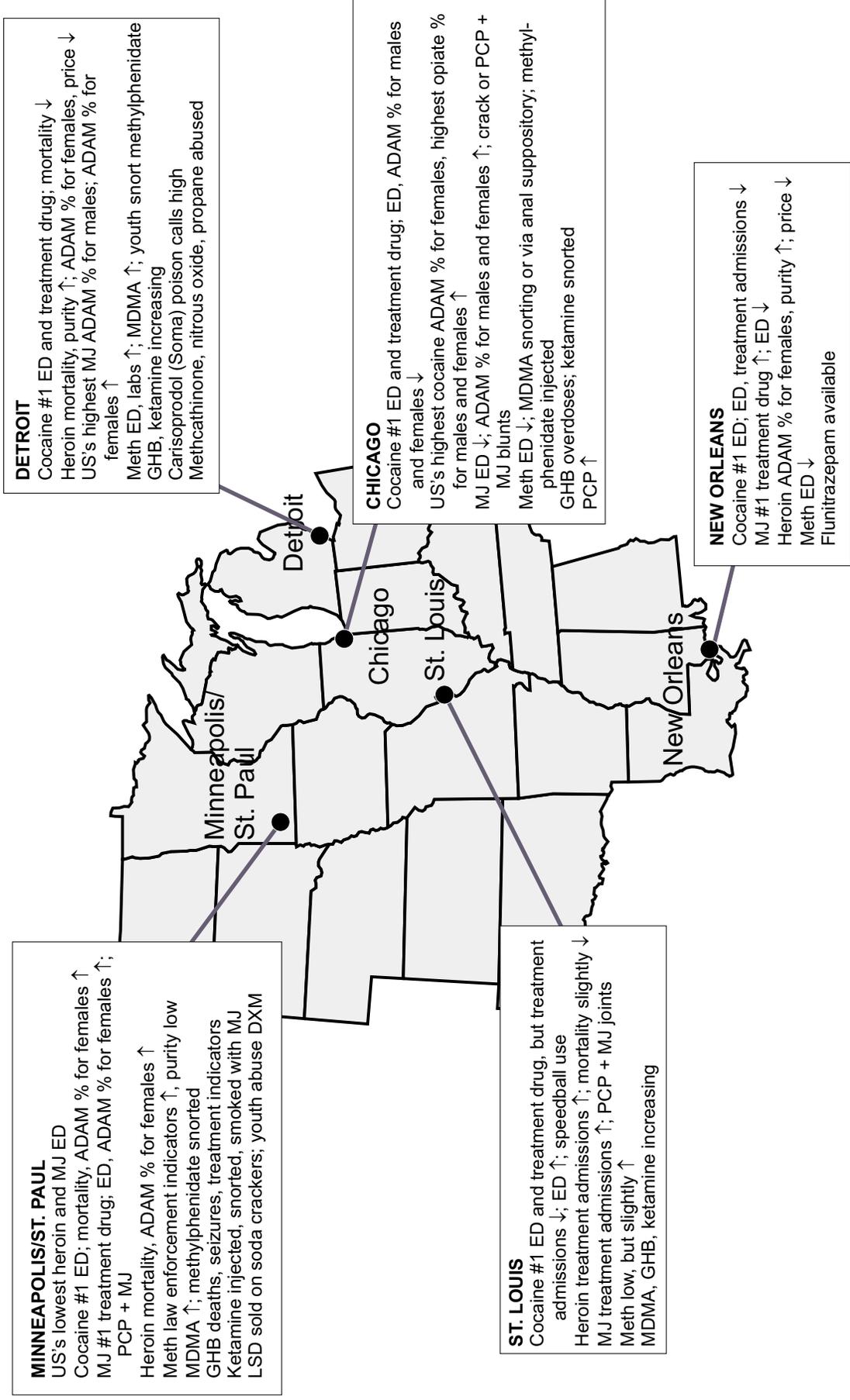
Stimulants: Meth law enforcement indicators ↑ in some cities, especially rural areas; teens abuse methylphenidate

Club drugs: MDMA, GHB/GBL ↑ in most cities; ketamine, hallucinogens available

REGIONAL HIGHLIGHTS: EAST



REGIONAL HIGHLIGHTS: CENTRAL



REGIONAL HIGHLIGHTS: WEST

Seattle

Heroin #1 ED; heroin and MJ #1 treatment drugs
 Heroin mortality, price ↓; ADAM % for males ↓, females ↑;
 heroin + depressant injection deaths; heroin + cocaine or
 meth
 Cocaine mortality ↑; ADAM % for females ↓
 MJ ADAM % for males ↑, females ↓
 Meth mortality, ADAM % for females, labs ↑; "lithium speed"
 available; youth abuse pseudoephedrine
 GHB consequences
 MDMA, LSD, psilocybin mushrooms available

DENVER

Cocaine #1 ED; price, speedball use ↑
 MJ #1 treatment drug; BC bud available
 US's highest MJ ADAM % for females ↑
 Heroin purity sharply ↓
 Meth ED ↓; poison calls sharply ↑

SAN FRANCISCO

Heroin #1 ED and treatment drug; ED, purity ↓
 Cocaine ED ↓; speedballs widely available
 MJ ED ↓
 US's highest meth ED rate; mortality, ED ↓
 MDMA increasing; GHB available

LOS ANGELES

Cocaine #1 ED drug; ADAM % for males and
 females ↓
 Heroin #1 treatment drug; purity ↑
 MJ ADAM % for males ↑
 GHB increasing

SAN DIEGO

Meth #1 treatment drug; mortality, ED ↓; purity up
 US's highest meth ADAM % for males and females,
 males ↓, females ↑
 Heroin #1 ED; mortality ↓; ADAM % for females ↑
 Cocaine mortality ↓
 MJ ED ↓; BC bud available
 Club drugs (MDMA, GHB, ketamine) emerging

HONOLULU

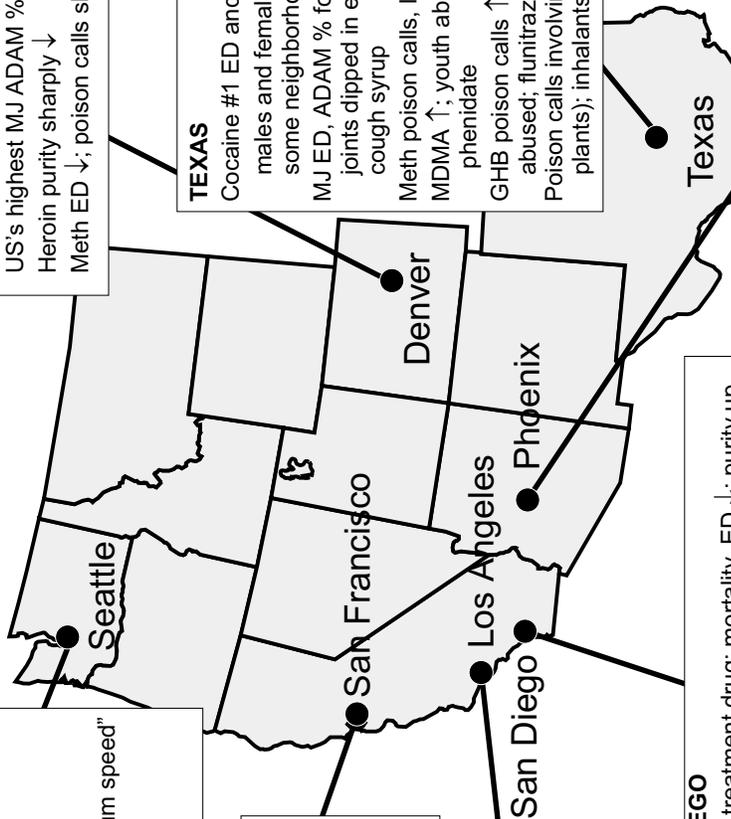
Meth #1 treatment drug; MJ #2
 Meth mortality, treatment admissions ↑
 Cocaine mortality, treatment admissions ↓

TEXAS

Cocaine #1 ED and treatment drug; ED ↓; ADAM % for
 males and females (Dallas) ↑; crack reemerging in
 some neighborhoods
 MJ ED, ADAM % for males (Dallas) ↓; crack + MJ blunts;
 joints dipped in embalming fluid + PCP or codeine
 cough syrup
 Meth poison calls, labs ↑; ED, purity ↓
 MDMA ↑; youth abuse ephedrine, Adderall, snort methyl-
 phenidate
 GHB poison calls ↑; ketamine, psilocybin mushrooms
 abused; flunitrazepam treatment along border continues
 Poison calls involving morning glories (hallucinogenic
 plants); inhalants abused

PHOENIX

Cocaine #1 ED drug; mortality, ADAM % for females ↑
 Heroin and meth #1 treatment drugs
 Heroin mortality, ADAM % for females, purity ↑
 Meth mortality ↑; ED, ADAM % for females ↓
 MJ ED, ADAM % for males ↑
 High-quality MDMA seized; youth snort methylphenidate
 GHB seizures; ketamine available
 LSD sold as liquid in "Sweet Breath" bottles; PCP-, inhalant-
 related deaths; peyote available
 Tramadol abused; adolescents abuse corticidin



CEWG CITY HIGHLIGHTS: KEY ABUSED DRUGS, JUNE 2000

AREA	COCAINE	HEROIN	MARIJUANA	OTHER DRUGS OF NOTE
Atlanta	ED rate 92 (↓); 52% of TXs; \$100/g; crack \$85-\$100/g	ED rate 8; 2% of TXs; \$.82/mg; 60% pure	ED rate 45; 25% of TXs; sinsemilla \$160-\$250/oz, domestic \$120-\$250/oz	Meth ED rate 1 (↓), seizures ↑, combined with MJ, depressants or cocaine; MDMA ↑, snorted and injected, combined with depressants; Youth snort methylphenidate (Ritalin); GHB, ketamine, flunitrazepam(Rohypnol), LSD, inhalants, clenbutrol ↑
Baltimore	ED rate 150 (↑); 15% of TXs	ED rate 152 (↑); 50% of TXs; \$.33 (↓); 27% pure; speedball use	ED rate 35 (↑); 15% of TXs	MDMA emerging; GHB spreading; Ketamine available; Teens abuse methylphenidate, oxycodone
Boston	ED rate 50; 17% of TXs; \$90 (70-90% pure); crack \$20/vial (40-60% pure)	ED rate 37; 46% of TXs; \$1.08/mg (↓); 59% pure; speedballs; ketamine used as heroin adulterant	ED rate 28; 6% of TXs; commercial \$150-\$250/oz, sinsemilla \$300-\$500/oz	MDMA ↑, combined with Viagra; Youth abuse methylphenidate, Adderall, DXM; GHB poison calls high; Ketamine injected; Diverted pharmaceuticals ↑; LSD, psilocybin mushrooms, mecaline available; Steroids injected
Chicago	ED rate 104 (↓); 28% of TXs; \$50-\$100/g (54% pure); crack \$3-\$5/rock	ED rate 79; 16% of TXs; \$.62/mg; 25% pure	ED rate 39 (↓); 16% of TXs; \$100-\$200/oz; blunts + crack, PCP	Meth ↓; MDMA snorted or via anal suppository; Methylphenidate injected; GHB overdoses; Ketamine snorted; PCP ↑
Denver	ED rate 32; 17% of TXs; crack \$80-\$125/g (75% pure); \$10-\$20/rock	ED rate 14; 10% of TXs; \$1.25/mg (↑); 17% pure (↓); speedball use ↑	ED rate 16; 27% of TXs; commercial \$50-\$150/oz, sinsemilla \$100-\$200/oz	Meth ED rate 2 (↓), 8% of TXs, poison calls ↑
Detroit	104 deaths in 1Q2000; ED rate 87; 34% of TXs; crack \$5-\$50/rock	114 deaths in 1Q2000; ED rate 30; 33% of TXs; \$.61/mg (↓); 52% pure (↑)	ED rate 53; 7% of TXs	Meth ED, labs ↑; MDMA, GHB, ketamine ↑; Youth snort methylphenidate; Carisoprodol poison calls high; Nitrous oxide, propane abused
Honolulu	24 deaths in 99; \$100-\$120/g (20-50% pure); crack \$5-\$15/dose	19 deaths in 99	"low quality" \$250-\$500/oz, "high quality" \$400-\$800/oz	Meth deaths ↑, #1 TX drug
Los Angeles	ED rate 34; 17% of TXs; \$80/g (80% pure)	ED rate 15; 48% of TXs; \$.39/mg; 33% pure (↑)	ED rate 28; 6% of TXs; \$150 or less/oz	Meth ED rate 4, 8% of TXs; GHB ↑
Miami	36 deaths in 99; ED rate 97; \$40-\$60/g (62-75% pure); crack \$10-\$20/rock	58 deaths in 99; ED rate 24 (↑); \$1.98/mg (↑); 11% pure (↓)	ED rate 29; commercial \$800-\$1,000/lb, hydroponic \$600+/oz	MDMA ↑, combined with other drugs; GHB ↑, TX indicators emerging
Minneapolis/St. Paul	14 deaths in 1Q2000; ED rate 17; 14% of TXs; \$100/g; crack \$20/rock	19 deaths in 1Q2000; ED rate 4; 3% of TXs	ED rate 13 (↑); 21% of TXs; \$250/oz; combined with PCP	Meth ED rate 2, seizures ↑, purity low; MDMA ↑; Methylphenidate snorted; GHB deaths, seizures, TX indicators; Ketamine injected, snorted, smoked with marijuana; Youth abuse DXM
Newark	ED rate 87; 10% of TXs; crack \$8-\$10/bag	ED rate 124; 75% of TXs; \$.37/mg; 68% pure (↑)	ED rate 17; 4% of TXs	GHB, ketamine ↑
New Orleans	ED rate 88 (↓); 27% of TXs; \$80-\$150; crack \$5-\$25/rock	ED rate 23; 20% of TXs; \$1.19/mg (↓); 36% pure (↑)	ED rate 44 (↓); 37% of TXs; \$125-\$160/oz	Meth ED rate 1 (↓); Flunitrazepam available

New York City	ED rate 90 (↓); 31% of TXs; \$650–\$1,000/oz; crack \$25–\$50/rock	ED rate 50; 44% of TXs; \$.52/mg; 63% pure; speedball use	ED rate 22; 20% of TXs; \$800–\$4,000/lb; combined with crack, heroin, PCP	MDMA ↑, combined with heroin or marijuana; Ketamine snorted, injected; PCP sold as liquid
Philadelphia	224 deaths in 99; ED rate 130; 40% of TXs; crack \$5/rock; crack combined with depressants, marijuana	ED rate 41; 20% of TXs; \$.32/mg; 72% pure; speedball use	ED rate 59; 15% of TXs; combined with HCl, PCP	Meth deaths ↑ but low; MDMA emerging, combined with heroin or cough syrup; PCP available
Phoenix	215 deaths in 99; ED rate 40 (↑); 11% of TXs; \$13,500–\$17,000/kg (28–77% pure); crack \$17.50–\$20/rock	106 deaths in 99; ED rate 19; 20% of TXs; \$.33/mg; 39% pure (↑)	ED rate 26 (↑); 16% of TXs; \$75–\$150/oz	Meth deaths ↑, ED rate 8 (↓), 20% of TXs, seizures ↑; High-quality MDMA seized; Youth snort methylphenidate, abuse Coricidin; GHB seized; Ketamine, LSD, peyote available; PCP-, inhalant-related deaths; Tramadol abused
St. Louis	51 deaths in 99; ED rate 47; 36% of TXs; \$52–\$100/g (75% pure); crack \$25/rock	44 deaths in 99; ED rate 16; 18% of TXs; \$2.15/mg (↑); 23% pure; speedballs	ED rate 36; 23% of TXs; combined with PCP	Meth ED rate 2, seizures ↑; MDMA, GHB, ketamine ↑
San Diego	49 deaths in 99; ED rate 17; 12% of TXs; \$700/oz (75–80% pure); crack \$10/0.1g (20–40% pure)	127 deaths in 99; ED rate 21; 12% of TXs; \$.20/mg; 56% pure	ED rate 17 (↓); 19% of TXs; \$50–\$75/oz (2–3% THC), \$4,000/lb (25% THC)	Meth deaths ↓, ED rate 11 (↓), 38% of TXs, purity ↑; MDMA, GHB, ketamine emerging
San Francisco	101 deaths in 99; ED rate 41 (↓); 23% of TXs	ED rate 72 (↓); 56% of TXs; \$.47/mg (↑); 20% pure (↓); speedball use	ED rate 9 (↓)	Meth deaths ↓, ED rate 14 (↓), 14% of TXs; MDMA ↑; GHB available
Seattle	76 deaths in 99; ED rate 56; 18% of TXs; \$30/g; crack \$20/0.1g	111 deaths in 99; heroin+depressant deaths; ED rate 61; 23% of TXs; \$.60/mg (↓); 19% pure; combined with cocaine, meth	ED rate 21; 23% of TXs; sinsemilla \$325–\$400/oz	Meth deaths ↑, ED rate 8, 7% of TXs, seizures ↑, “lithium speed” available; Youth abuse pseudoephedrine; GHB consequences; MDMA, LSD, psilocybin mushrooms available
Texas	ED rate 41 in Dallas (↓); 40% of TXs; \$100–\$125/g (85–90% pure); crack \$10–\$50/rock	ED rate 9 in Dallas; 14% of TXs; \$.93/mg in Dallas (↓); 14% pure in Dallas	ED rate 25 (↓); 21% of TXs; \$45–\$100/oz; combined with crack, dipped in embalming fluid+PCP or codeine syrup	Dallas meth ED rate 2 (↓); MDMA ↑; Youth abuse ephedrine, Adderall, snort methylphenidate; GHB poison calls ↑; Ketamine, psilocybin mushrooms, inhalants abused; Flunitrazepam TX continues; Poison calls involving morning glories (hallucinogenic plants)
Washington, DC	ED rate 37 (↓); 47% of TXs; \$100–\$200/g (19–95% pure); crack \$3–\$4/rock (31–81% pure)	ED rate 22 (↓); 37% of TXs; \$.92/mg (↑); 21% pure (↓); speedball use	ED rate 32; 16% of TXs; \$120/oz	Meth, GHB, ketamine, high-quality MDMA available; MDMA+LSD tablets

ED = DAWN estimates of emergency department mentions per 100,000 population for each drug in first half 1999; arrows reflect significant shifts (p<0.05) between the first halves of 1998 and 1999.

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 New York City, San Francisco, and Washington, DC, where alcohol-in-combination is excluded. Data are statewide for Colorado, Hawaii, and Texas. Reporting periods are July–December 1999, except for the following: FY 2000 in Detroit; January–June 1999 in Baltimore, Chicago, and St. Louis; full calendar year 1999 in Minneapolis/St. Paul, New Orleans, and Washington, DC; October–December 1999 in Los Angeles; full calendar year 1998 in Phoenix and San Francisco.

Price and Purity = Heroin price and purity data provided by the Domestic Monitor Program for 1999; arrows reflect ≥3-percentage-point purity shifts and ≥\$0.10 price shifts since 1998; other drug price data provided by June 2000 CEWG city reports.

EXECUTIVE SUMMARY

COCAINE AND CRACK

Boston: “According to focus groups with teens and youth treatment providers, cocaine use remains relatively rare among adolescents. Crack in particular has a bad reputation among teens, and its use is strongly stigmatized.”

Philadelphia: “Recent focus groups report an aging crack-using population with fewer new users.”

San Francisco: “Street-based reporters note that cocaine use ‘continues at low levels’—that is, much below what it was in the early 1990s.”

MORTALITY DATA

Cocaine-related mortality data for 1999 were available for 10 cities. Compared with 1998 data, deaths increased in four areas and remained stable or decreased in six. The declining or stable trends were reported in the following cities:

- Detroit: Positive cocaine toxicology reports declined (from 384 to 342), although early 2000 data (first 3 months) suggest a projected increase (to 416, many of which involved heart complications).
- Honolulu: Cocaine-related deaths declined slightly (from 29 to 24). They have remained relatively stable over the last 5 years.
- Miami: Cocaine-induced deaths, which have been declining since the 1986 peak, declined slightly (from 39 to 36).
- Philadelphia: Cocaine-related deaths continued to decline (from 245 to 224, according to preliminary data).
- San Diego: Accidental cocaine overdose deaths continued to decline (from 54 to 49).
- San Francisco: Since the 1996 peak, deaths ascribed to cocaine have remained stable. For example, in 1998 and in 1999, 101 cocaine-ascribed deaths were reported for each year.

Mortality trends appear to be increasing in the following cities:

- Minneapolis/St. Paul: Cocaine-related deaths in Hennepin and Ramsey Counties increased slightly from 44 to 52, levels substantially below 64 deaths in 1996.
- Phoenix: Cocaine-related deaths more than doubled (from 87 to 215). Cocaine deaths in 1999 totaled more than cumulative cocaine deaths between 1993 and 1998.
- St. Louis: Cocaine-related deaths increased slightly (from 47 to 51). After declining from 1993 to 1996, cocaine deaths continue to stabilize.
- Seattle: Cocaine-caused deaths in King County increased (from 69 to 76). Except for a 1997 decline, deaths have increased for several consecutive years.

Earlier (1997 versus 1998) medical examiner (ME) data show 13 increases in cocaine-related deaths, 4 declines, and 2 stable trends (≤ 3 percent) (exhibit 1). Cocaine-related deaths peaked (since 1995) in 1998 in Atlanta, Baltimore, Chicago, and Phoenix.

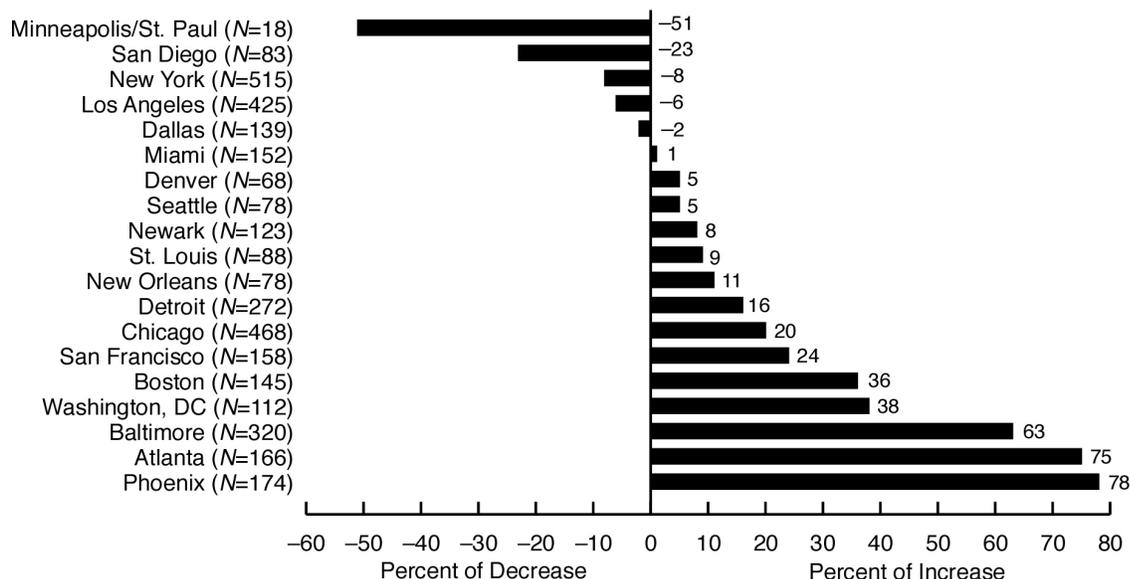
EMERGENCY DEPARTMENT DATA

Cocaine (including crack) remains the most frequently mentioned drug in 15 of the 20 CEWG cities in the Drug Abuse Warning Network (DAWN), according to first-half-1999 preliminary estimates, and it equals

heroin as a proportion in Baltimore (exhibit 2). It accounts for particularly high proportions (>20 percent) of total emergency department (ED) drug mentions in nine cities (Atlanta, Baltimore, Chicago, Detroit, Miami, New Orleans, New York, Newark, and Philadelphia). It is outranked by heroin, however, in four cities (Newark, San Francisco, San Diego, and Seattle).

The Nation's highest rate of cocaine ED mentions per 100,000 population was reported in Baltimore (as it has been since 1992), followed by Philadelphia; the lowest rates were in Minneapolis/St. Paul and San Diego (exhibit 3).

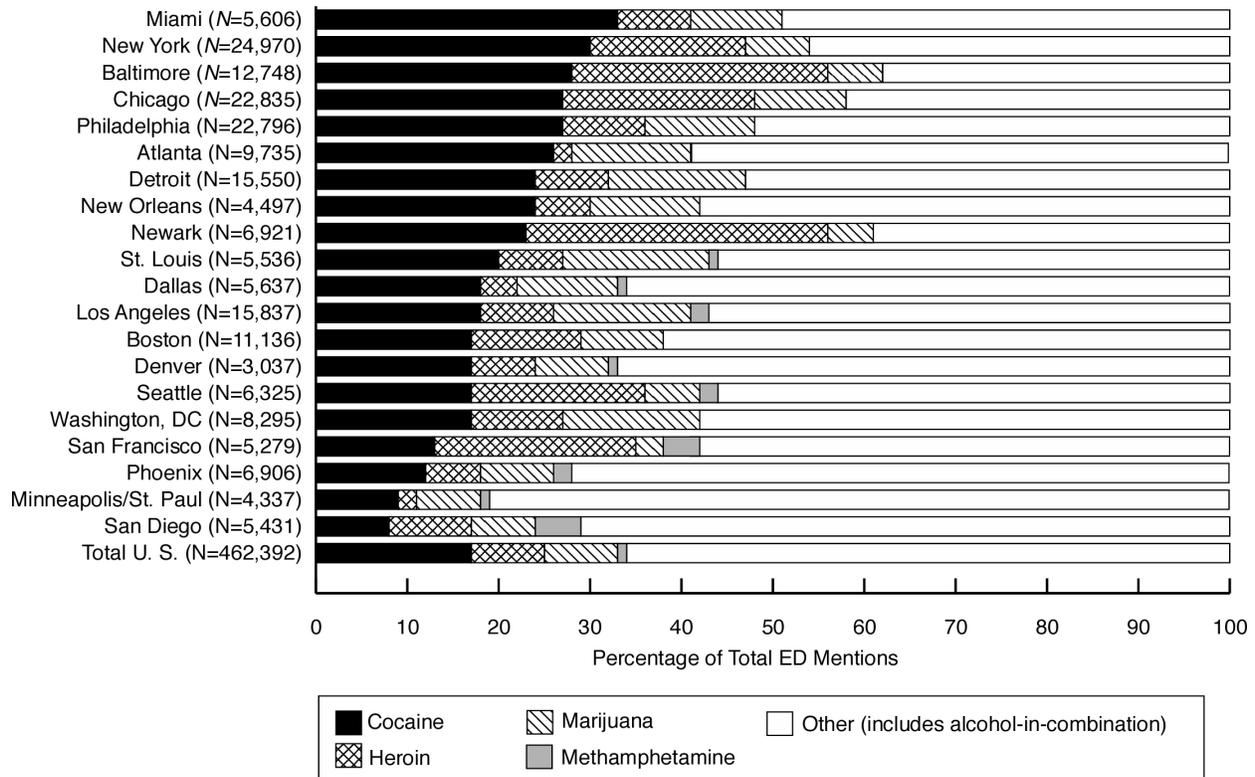
Exhibit 1. Percentage of change in medical examiner cocaine/crack mentions by metropolitan area, 1997 versus 1998



NOTE: (N) refers to 1998 medical examiner cocaine/crack mentions.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, annual medical examiner data, 1998

Exhibit 2. Percentages of total ED mentions composed of cocaine, heroin, marijuana, methamphetamine, and "other" by metropolitan area, ranked by cocaine, first half 1999*



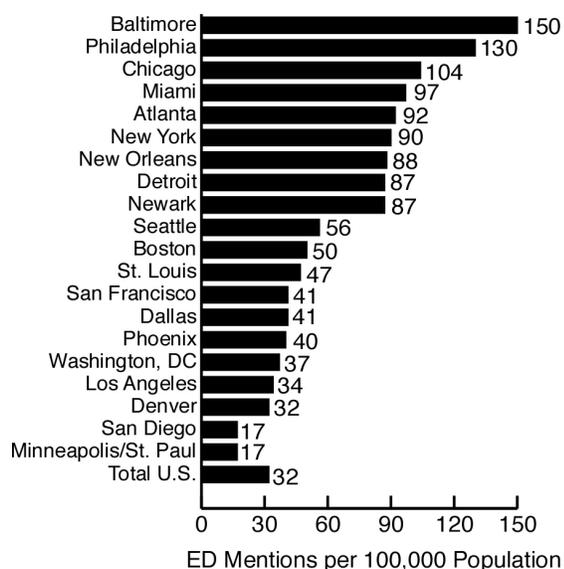
*First-half-1999 data are preliminary.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 1999 (October 1999 update)

Between the first halves of 1998 and 1999, cocaine ED mentions increased significantly (≥ 10 percent, $p < 0.05$) in two cities (Baltimore and St. Louis) (exhibit 4). Significant declines were noted in seven cities (Atlanta, Chicago, Dallas, New Orleans, New York, San Francisco, and Washington, DC). Over

that same period, cocaine as a proportion of total ED mentions increased slightly in Denver (by 3 percentage points). Cocaine ED mentions declined both in number and as a proportion of total ED mentions (by 3 and 5 points, respectively) in Atlanta and New York.

Exhibit 3. Estimated rate of cocaine/crack ED mentions per 100,000 population by metropolitan area, first half 1999*



*First-half-1999 data are preliminary.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 1999 (October 1999 update)

Long-term ED trends have varied somewhat among the Nation's four highest-ranking cities (exhibit 5). Baltimore's cocaine ED rate generally declined between the first halves of 1994 and 1998, and then increased in the first half of 1999. Conversely, after peaking in 1997, Chicago's rate continued to decline. Similarly, Philadelphia's rate, which peaked in the first half of 1998, seems trending slowly downward. New York's rate fell to the lowest level ever.

TREATMENT DATA

Cocaine (including crack) as the primary drug of abuse accounts for the largest per-

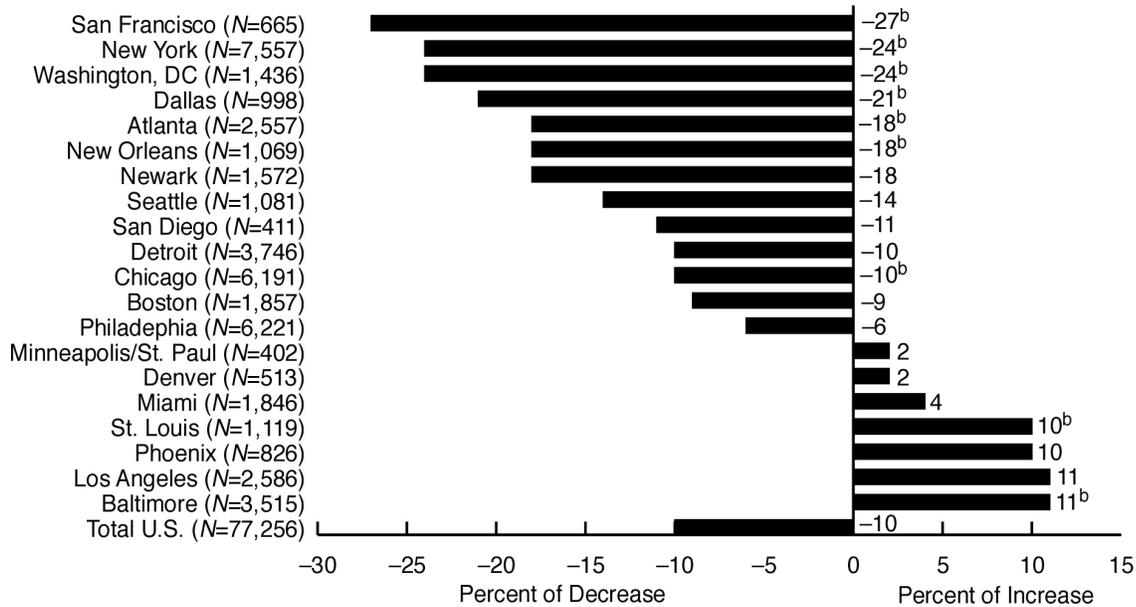
centage of admissions in 7 of 20 reporting areas: Atlanta, Chicago, Detroit (exceeding heroin by 1 percentage point), Philadelphia, St. Louis, Texas, and Washington, DC (exhibit 6). It also accounts for major proportions of admissions (≥ 20 percent) in New Orleans, New York City, and San Francisco. Heroin now dominates treatment proportions in six areas, marijuana in four, and methamphetamine in three.

Similar to most ED indicators, treatment percentages for cocaine remained relatively stable (within 3 points) or declined in all sites where trend data were available (14 sites), in comparison with figures from the same reporting period 1 year earlier. The largest declines were noted in Atlanta, St. Louis, and New York City (by 7, 7, and 5 percentage points, respectively). Honolulu treatment sources also show a dramatic drop in cocaine treatment admissions (from 315 to 102) between spring and fall 1999, although the trend over the past 8 years remains a generalized increase.

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

- Chicago: Since 1995, the number of cocaine admissions has remained relatively stable.
- Colorado: New cocaine treatment admission proportions (those admitted within 3 years of initial cocaine use) have declined between 1993 and 1999 (from 18 to 16 percent). The proportion of all cocaine treatment admissions also has declined considerably between 1993 and 1999 (from 41 to 24 percent).

Exhibit 4. Percentage of change in cocaine/crack ED mentions by metropolitan area, first half 1998 versus first half 1999^a



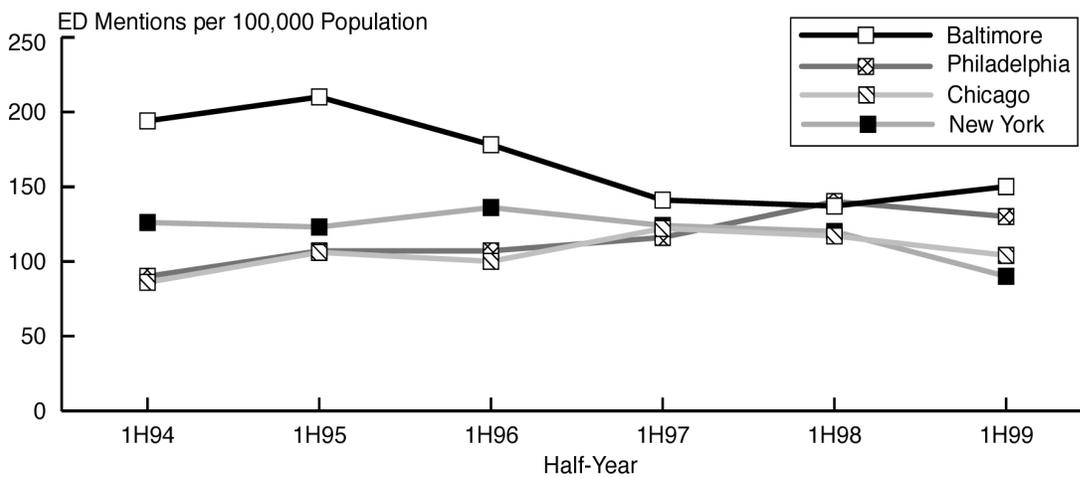
NOTE: (N) refers to first-half-1999 mentions.

^aFirst-half-1999 data are preliminary.

^bp<0.05

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 1999 (October 1999 update)

Exhibit 5. First-half-year trends in cocaine/crack ED mentions per 100,000 population in four top-ranking cities, first half 1994–first half 1999*



* First-half-1999 data are preliminary.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 1999 (October 1999 update)

Exhibit 6. Primary drugs of abuse as percentages of treatment admissions^a in reporting CEWG areas, second half 1999^b

Area	Cocaine	Heroin	Marijuana	Stimulants
Atlanta	52	2	25	2
Washington, DC ^{b,c}	47	37	16	<1
Texas ^d	40	14	21	5
Philadelphia	40	20	15	<1
St. Louis ^b	36	18	23	2
Detroit ^b	34	33	7	0
Chicago ^b	28	16	16	1
Newark	10	75	4	<1
San Francisco Bay ^{b,c}	23	56	NR	14
Baltimore ^b	15	50	15	NR
Los Angeles ^b	17	48	6	8
Boston	17	46	6	NR
New York City ^c	31	44	20	NR
Seattle	18	23	23	7
New Orleans ^{b,e}	27	20	37	<1
Colorado	17	10	27	8
Minneapolis/St. Paul ^{b,e}	14	3	21	2
San Diego	12	12	19	38
Phoenix ^b	11	20	16	20

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

^aThe total admissions number excludes alcohol-only but includes alcohol-in-combination.

^bReporting periods are July–December 1999, except for the following: FY 2000 in Detroit; January–June 1999 in Baltimore, Chicago, and St. Louis; full calendar year 1999 in Minneapolis/St. Paul, New Orleans, and Washington, DC; October–December 1999 in Los Angeles; full calendar year 1998 in Phoenix and San Francisco.

^cAlcohol-only and alcohol-in-combination are excluded.

^dDallas area data are not included.

^eAlcohol-only is included.

SOURCE: State drug abuse treatment agencies

- Detroit: The proportion of cocaine admissions declined markedly between 1992 and the first half of 1999 (from 33 to 10 percent).
- Minneapolis/St. Paul: The proportion of primary cocaine treatment admissions has remained relatively unchanged for the past 6 years; most cocaine admissions (83 percent) are for crack.

- New York City: Primary cocaine treatment admissions have declined 15 percent between 1994 and 1999 (from 17,853 to 15,131 admissions).

Drug users experience a substantial lag time between the period of first consistent or regular use of a drug and the date of admission to treatment. For example, in Texas, crack smokers and cocaine hydrochloride (HCl) intranasal users average 8–9 years between first regular use and entrance to treatment; injectors average 12 years before entering treatment.

OTHER LOCAL DATA

Local data sources around the country underscore the severity of the cocaine problem, while corroborating level or declining trends:

- Chicago: In 1998, 57 percent (914) of infants who were positive for controlled substances tested cocaine-positive—a decline from 1996, when 64 percent tested positive.
- Colorado: In 1999, 49 cocaine-related poison control calls were reported—a number level since 1995.
- New York City: In 1998, 742 females admitted using cocaine during pregnancy—a decline from 3,168 in 1989.
- San Francisco: In 1999, 5 percent of students in San Francisco County

reported lifetime cocaine use—a slight decline (1 percentage point) from the 1997 level.

- South Florida: In 1999, according to the CDC's Youth Risk Behavior Survey, 6 percent of Broward County teenagers reported lifetime cocaine use—a proportion stable since 1997.
- Texas: In 1998, a survey of male prison inmates found that 57 percent of incoming inmates reported lifetime cocaine HCl use, 34 percent reported lifetime crack use, 11 percent reported past-month cocaine HCl use, and 9 percent reported past-month crack use.

DEMOGRAPHIC DATA

CHANGING DEMOGRAPHY:

Atlanta: "Indicators show an increase of cocaine use among whites. Among them one finds middle-class users with sufficient resources to support their habit as well as those who engage in illegal activities to pay for their cocaine."

Denver: "...the increased availability of cocaine HCl may be bringing about changes in the cocaine user groups, and thus, in the population entering treatment."

San Francisco: "The big decline in cocaine indicators noted in the past decade may be partly the result of changing demographics: low-income African-Americans have been 'priced out' of their traditional neighborhoods...[and] many [have] moved to lower cost suburbs."

Age

Available mortality demographics continue to reflect an aging cocaine-using population. For examples, the median age of cocaine decedents in San Francisco (in FY 1999) reached a record high of 40.6 years; the mean age in Miami (in January–September 1999) was 39 years; and two-thirds of the San Diego cocaine decedents (in 1999) were older than 35. In Texas, the average age of cocaine decedents increased between 1992 and 1998 to 36.9 years.

Age distributions among cocaine ED mentions generally suggest an aging cohort of cocaine users. The 35+ group continues to account for the largest percentage of cocaine mentions in every CEWG city in DAWN (exhibit 7). Between the first halves of 1998 and 1999, this oldest group's representation increased by 5 or more percentage points in three cities: Boston, Chicago, and Phoenix (by 6, 8, and 11 percentage points, respectively, with Phoenix also showing significant changes in number of mentions). Only in San Diego (where juvenile cocaine mentions increased significantly) and San Francisco (where the oldest group's number also declined significantly) did the proportion of the 35+ group decrease.

Correspondingly, as they moved into the oldest age group, the 26–34-year-olds declined as a percentage of cocaine ED mentions in nearly every city, accounting for only 25–37 percent of cocaine mentions among the 20 cities. Between the first halves of 1998 and 1999, the largest declines (5–6 percentage points) were recorded in Boston, Newark, and Phoenix.

The young adult (18–25) group, which accounts for 7–20 percent of cocaine ED mentions, remained relatively stable in proportion, with a few exceptions: a 6-point decline in Minneapolis/St. Paul (where the number also declined significantly) and a 5-point decline in Phoenix. Similarly, the juvenile (12–17) group remained relatively stable between the first halves of 1998 and 1999, accounting for 0–3 percent of cocaine mentions, except in Dallas (6 percent), Denver (4 percent), and Phoenix (4 percent).

Like age distribution shifts, changes in the number of mentions suggest generally leveling or declining trends. Between the first halves of 1998 and 1999, cocaine ED mentions by juveniles declined significantly in six areas and increased significantly only in San Diego (exhibit 8). Similarly during the same time periods, mentions among the young adult age group decreased significantly in four areas and did not increase significantly in any CEWG area.

The 26–34 group followed similar declining trends (with 10 significant decreases), but the 35+ group's trends were mixed (with significant declines in Atlanta, San Francisco, and Washington, DC, but significant increases in Baltimore and Phoenix).

Similar to ED data, treatment data continue to reflect an aging group of cocaine users (exhibit 9). The oldest (35+) group accounts for the largest percentages of primary cocaine admissions (ranging from 44 percent in Phoenix to 65 percent in Washington, DC) in all CEWG reporting areas. In all areas where trend data are available, the 26–34 group continues to transition into the

Exhibit 7. Age and gender distribution of cocaine ED mentions, by percentage, in reporting CEWG cities, first half 1999*

City	12-17	18-25	26-34	35+	Male
Atlanta	<1	11	34	54	64
Baltimore	<1	10	34	55	61
Boston	1	16	34	47	58
Chicago	1	8	32	59	61
Dallas	6	18	32	44	63
Denver	4	20	29	47	64
Detroit	1	7	25	67	63
Los Angeles	2	16	28	54	67
Miami	<1	10	31	58	68
Minneapolis/ St. Paul	2	14	37	46	69
Newark	1	9	33	57	63
New Orleans	<1	18	27	54	73
New York City	<1	8	36	55	71
Philadelphia	<1	14	35	49	66
Phoenix	4	19	33	43	68
St. Louis	1	12	26	60	64
San Diego	3	16	27	55	60
San Francisco	3	11	30	57	67
Seattle	2	12	30	55	65
Washington, DC	1	9	31	58	60

*First-half-1999 data are preliminary.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 1999 (October 1999 update)

oldest group: compared with the same period 1 year earlier, the 26-34 group declined substantially (≥ 3 percentage points) in six cities (Atlanta, Boston, Chicago, Newark, St. Louis, and Seattle), while the older group generally increased correspondingly.

According to longer term data in Colorado, the oldest group of cocaine admissions increased steadily between 1993 and 1999 (from 32 to 52 percent), while those younger than 35 declined steadily in proportion (from 68 to 49 percent).

The young adult (18-25) group accounts for smaller percentages than the two older groups (ranging from 4 percent in Washington, DC, to 17 percent in Phoenix); trends within that group are relatively stable, except for a 5-point increase in Atlanta. Juveniles (≤ 17 years) account for 0-2 percent of cocaine admissions, except in Seattle and Texas (4 and 3 percent, respectively).

Exhibit 8. Significant changes ($p < 0.05$) in cocaine ED mentions, by age group, first half 1998 versus first half 1999*

City	12-17	18-25	26-34	35+
Atlanta			▼	▼
Baltimore	▼			⬆
Chicago	▼	▼	▼	
Dallas		▼	▼	
Detroit			▼	
Los Angeles	▼			
Miami	▼			
Minneapolis/St. Paul		▼	▼	
Newark			▼	
New Orleans	▼	▼	▼	
New York			▼	
Philadelphia	▼			
Phoenix				⬆
San Diego	⬆			
San Francisco			▼	▼
Washington, DC			▼	▼

*First half 1999 data are preliminary.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 1999 (October 1999 update)

Exhibit 9. Age distribution of primary cocaine treatment admissions, by percentage, in reporting CEWG areas^a

Area	≤17	18–25	26–34	35+	Male
Atlanta	1	16	35	48	62
Boston	0	9	39	52	57
Chicago ^a	<1	11	41	48	52
Colorado	2	11	35	51	64
Los Angeles ^a	1	10	38	51	58
Minneapolis/ St. Paul	2	11	35	51	68
Newark	<1	6	40	54	50
New York City ^b		7	41	51	64
Phoenix ^a	0	17	39	44	58
St. Louis ^a	<1	7	40	53	68
San Diego	2	11	30	58	55
Seattle	4	5	29	62	54
Texas ^c	3	16	34	47	59
Washington, DC ^a	<1	4	31	65	59

^aReporting periods are July–December 1999, except for the following: January–June 1999 in Chicago and St. Louis; full calendar year 1999 in Minneapolis/St. Paul and Washington, DC; October–December 1999 in Los Angeles; full calendar year 1998 in Phoenix.

^bAge groups are ≤25, 26–35, and 36+.

^cDallas area data are not included.

SOURCE: State drug abuse treatment agencies

Available male juvenile arrestee urinalysis data show level or declining trends. In Denver, cocaine-positive findings in that population declined considerably between 1998 and 1999 (from 13 to 9 percent). Levels remained relatively stable in the other four cities where ADAM tests juveniles: Los Angeles (at 8 percent), Phoenix (at 16 percent), San Antonio (at 7 percent), and San Diego (at 3 percent). According to the District of Columbia Pretrial Services Agency, urinalysis levels among juvenile arrestees have remained relatively stable between 1996 and the first quarter of 2000 (at 6–8 percent).

Gender

Available mortality data show that males continue to account for the large majority of cocaine decedents: 86 percent in San Francisco, 84 percent in San Diego (a slight decline since the previous reporting period), 79 percent in Seattle (continuing a 3-year decline), and 60 percent in Miami.

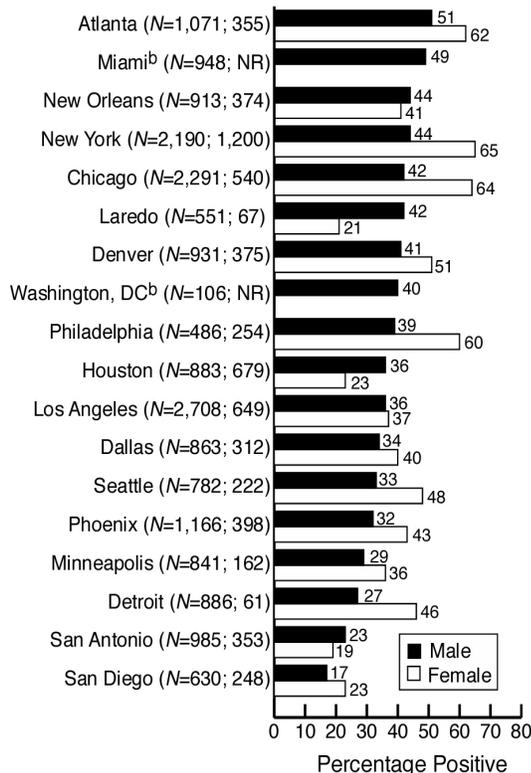
Similarly, males continue to outnumber females as a percentage of cocaine ED mentions in every CEWG city in DAWN (exhibit 7). The gender gap remains widest in New Orleans (73 percent male and 27 percent female) and New York (71 percent male and 29 percent female); it is narrowest in Boston (58 percent male and 42 percent female). Between the first halves of 1998 and 1999, gender distributions remained generally stable or mixed, with 3–4-percent-age-point increases among females in Atlanta, Detroit, and San Francisco, and 3-point declines among females in Miami, Minneapolis/St. Paul, and St. Louis.

Males also outnumber females among cocaine treatment admissions in all reporting areas, except Newark, where males and females are evenly divided (exhibit 9). In areas where comparative data are available, gender gaps among treatment admissions are generally narrower than gender gaps among ED mentions. For examples, in Baltimore, 45 percent of crack cocaine admissions are females; in Detroit, 41 percent of crack admissions are females. Gender trends were mixed compared with the same period 1 year earlier: female representation increased by 4 percentage points in Boston and 2 points in Newark; female proportions declined by 2–4 points in Atlanta, Colorado, New York City, St. Louis, and Seattle.

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

Only in one indicator do women continue to predominate: according to preliminary 1999 ADAM data, female arrestees tested cocaine-positive at higher levels than males in nearly every CEWG city, with exceptions in New Orleans and three Texas cities (exhibit 10). Atlanta had the highest levels among males, while New York had the highest level among females.

Exhibit 10. Percentage positive for cocaine among adult male and female booked arrestees, 1999^a (ranked by males)



^a 1999 data are preliminary.
^b Females are not tested at these sites.

SOURCE: National Institute of Justice, Arrestee Drug Abuse Monitoring program (March 2000 files)

Race/Ethnicity

According to available mortality data, whites predominate as cocaine decedents in several CEWG areas, such as Miami, San Diego (where whites account for 55 percent), and Texas (where whites account for 48 percent).

In contrast with mortality data, African-Americans (ranging from 10 percent in Phoenix to 72 percent in Washington, DC) predominate among cocaine ED mentions in 12 of the 20 CEWG cities in DAWN; whites (ranging from 11 percent in Newark to 58 percent in Boston) predominate in 4; and 3 cities have too many mentions in the “race unknown” category to be included in the count. The largest Hispanic representations occur in Los Angeles, New York, and Phoenix (at 25, 25, and 20 percent, respectively).

Between the first halves of 1998 and 1999, most cities’ racial/ethnic distributions of cocaine ED mentions remained stable, although several did shift. For example, the distribution in San Diego continued to shift dramatically, with an 8-percentage-point increase for whites and a 6-point decline for Hispanics. During the same period in St. Louis, whites as a proportion of cocaine ED mentions rose, while African-American proportions fell; conversely, in Boston and Dallas, African-Americans increased, while whites declined. And, in Los Angeles, Hispanic admissions continued to enter treatment at an increasing rate.

Among 1999 primary cocaine treatment admissions, African-Americans outnumber other races/ethnicities in all but two reporting areas (Colorado and Phoenix, where whites predominate). Whites hold

high percentages (≥ 20 percent) of cocaine treatment admissions in 10 of 14 reporting areas (Atlanta, Boston, Chicago, Colorado, Minneapolis/St. Paul, New Orleans, Phoenix, San Diego, Seattle, and Texas); Hispanics account for high percentages (≥ 20 percent) in 3 (Colorado, Phoenix, and Texas).

In areas where comparative treatment data for a year earlier were available, race/ethnic distributions were relatively stable, except in Atlanta, where the racial distribution shifted dramatically (whites as a proportion of cocaine admissions increased by 15 percentage points and African-Americans declined correspondingly). In reporting areas where shifts were slight, whites generally declined or remained stable (except in New Orleans, where whites increased by 4 points), Hispanics generally increased or remained stable, and African-Americans generally declined. According to longer term treatment data in Colorado, white cocaine admissions have increased slightly between 1993 and 1999 (from 42 to 46 percent of total admissions), Hispanics have increased steadily (from 15 to 26 percent), and African-American admissions have decreased sharply (from 40 to 26 percent).

USE PATTERNS

Route of Administration

Smoking, typically crack, remains the predominant route of administration, by far, among primary cocaine treatment admissions in every reporting area but Phoenix, where intranasal use predominates. Between the last halves of 1998 and 1999, the proportion of smokers among treatment admissions continued to increase in only two areas

(Atlanta and Colorado—by 7 and 3 percentage points, respectively; in Colorado, the proportion of intranasal users has been increasing since 1994). In Newark, where smoking declined between the first halves of 1998 and 1999, it increased by 8 percentage points between the second halves of 1998 and 1999; intranasal use declined correspondingly.

Route of administration continues to vary by demographic characteristics of the treatment population. For example, in Newark the majority (72 percent) of African-American cocaine treatment admissions smoke, whereas the majority of white (54 percent) and Hispanic (58 percent) cocaine admissions snort. Similarly in New York City, compared with intranasal admissions, those who smoke crack are more likely to be African-American, female, and without income. In Texas, cocaine HCl users are younger than their crack counterparts (average ages are 31 and 35 years, respectively), and they are more likely to be male and white.

Multisubstance Use

Available mortality data show high levels of heroin present in cocaine decedents, possibly suggesting continued use of “speedballs” (combination of cocaine and heroin, usually by injecting). Heroin was present in 70 percent of 1999 cocaine-related deaths in Seattle and in 29 percent of Philadelphia cocaine decedents in the second half of 1999—a decline from the second half of 1998. In Phoenix, cocaine/morphine-related deaths declined 15 percent between 1998 and 1999, although methamphetamine/combination deaths (some of which include cocaine) increased sharply (by 43 percent).

Treatment data further suggest the overlap of cocaine and heroin use: among primary heroin users, cocaine was the secondary drug listed in 8 of 11 reporting areas (Baltimore, Colorado, Newark, New York City, St. Louis, San Diego, Texas, and Washington, DC). The severity of cocaine as a secondary drug problem among heroin admissions is underscored by the high percentages reported, ranging from 19 to 56 percent.

CONCURRENT USE OF HEROIN AND COCAINE?

Baltimore: "The similarity in the cocaine and heroin ED rates and patterns (since 1995) may be attributable to concurrent use of the two drugs."

Speedballing continues to be reported in many CEWG areas. In San Francisco, speedball combinations are reportedly widely available and cheap (\$7–\$8). Ethnographic sources in Boston, San Francisco, and Washington, DC (where injection is becoming a common method of crack administration), report that crack is used for speedballing by dissolving it in lemon juice or vinegar, combining it with heroin, and injecting it. Speedball use continues among “old-time” injecting drug users (IDUs) in St. Louis, and speedball use is growing in Denver, according to ethnographic sources. Spring 2000 focus groups in Philadelphia estimate 75 percent of cocaine HCl buys are for snorting and as many as 25 percent are for speedball injecting.

Alcohol, however, is the most frequently reported secondary drug of abuse among primary cocaine treatment admissions, except in Washington, DC, where marijuana is the most frequently reported secondary

drug (among 18 percent of primary cocaine admissions). Both marijuana and alcohol are commonly mentioned as tertiary drugs of abuse among primary cocaine admissions: marijuana is the tertiary drug most reported in Atlanta, New York City, St. Louis, and Washington, DC; alcohol is the tertiary drug most reported in Boston, Colorado, Minneapolis/St. Paul, and San Diego. Alcohol and marijuana tie as Newark’s most reported tertiary drug among primary cocaine admissions.

In Philadelphia, cocaine HCl continues to be used in marijuana blunts (“turbo”), and crack continues to be used with alprazolam (Xanax), diazepam, or marijuana, and less frequently, with heroin or phencyclidine (PCP).

LAW ENFORCEMENT DATA

Arrestee Data

Cocaine is the most frequently detected drug among adult male arrestees in seven CEWG areas in the ADAM program: Atlanta, Laredo, Los Angeles, Miami, New Orleans, New York, and Washington, DC (exhibit 10). It is exceeded by marijuana in the other 11 cities (Chicago, Dallas, Denver, Detroit, Houston, Minneapolis, Philadelphia, Phoenix, San Antonio, San Diego, and Seattle). Among adult female arrestees, however, cocaine still ranks first in all cities, except for San Diego, where it is exceeded by both methamphetamine and marijuana.

Compared with 1998 levels, cocaine-positive levels among male adult arrestees in 1999 were relatively stable (within 4 percentage points), except for increases in Dallas, Laredo, and Washington, DC (all by 5 points), and decreases in Los Angeles (by 7

points), Philadelphia (by 6 points), and San Antonio (by 5 points). Trends among females were mixed: levels increased (7–10 percentage points) in Chicago, Dallas, and Minneapolis; they decreased (8–14 points) in Houston, Laredo, Los Angeles, and Seattle; and they remained relatively stable elsewhere.

According to urinalyses conducted on adult arrestees by the District of Columbia Pretrial Services Agency, cocaine remains the most commonly detected drug. In 1997 and 1999, 39 percent of adult arrestees tested cocaine-positive, but during the first quarter of 2000 this percentage declined to 34.

Other arrest data generally show level or declining trends:

- Boston: Between 1998 and 1999, arrests related to cocaine and its derivatives declined (from 48 to 45 percent of arrests for all controlled substances). Levels for both years were well below the 1992 all-time high level.
- Honolulu: In 1999, cocaine cases totaled 385, with arrests declining between the first and second halves of that year.
- New Orleans: Between 1998 and 1999, cocaine-related arrests declined 14 percent (from 3,603 to 3,113).
- New York: In the first 6 months of 1999, 17,244 cocaine-related arrests were reported (82 percent of which were for crack), a likely decline for the full year compared with 35,577 cocaine-related arrests in 1998. Cocaine-related arrests have declined since 1995.

Conversely, in Newark, cocaine-related arrests may be increasing according to first quarter 2000 arrest data, which totaled 1,934, compared with 3,608 in 1998.

Market Data

A NEW SUBSTANCE?

New York: “Basuco’ (a dry, beige cocaine variant resembling sugar) is smoked in filtered cigarettes, mixed with some of the tobacco, or smoked in a pipe. It is not clear that this newly available substance is the same as a coca paste, also known as basuco, which is prevalent among youthful populations in the cocaine production and trafficking countries of South America.

Cocaine HCl and crack continue to be widely available in most CEWG areas. In many areas, including Atlanta, Boston, and Washington, DC, crack is the predominant form of cocaine in the inner city. For example, in Atlanta, as well as other urban areas, crack is known as a drug that impacts poor, inner-city, mostly African-American communities; in Dallas, crack is becoming popular again in predominantly African-American and Hispanic neighborhoods. In many reporting CEWG areas (including Atlanta, Miami, south Texas, and St. Louis) cocaine is transported into the city in HCl form and converted to crack locally, perhaps due to concerns over more severe penalties for crack than for cocaine HCl. In New York City, crack has become so adulterated that users claim they purchase cocaine HCl and process their own crack.

Cocaine HCl and crack prices vary widely across the country, with cocaine HCl selling for as low as \$40 per gram in Miami to \$200 per gram in Washington, DC (exhibit 11). Crack cocaine sells for \$1 per puff in New York City and as much as \$100 per rock in Honolulu (exhibit 12). In many cities, such as Atlanta, prices per crack rock fluctuate; at some crack houses, users can borrow rock-loaded pipes, typically stored in one large box, for \$6. Also in Atlanta, women can purchase rocks for \$2 if they have sex with the dealer.

Cocaine prices, especially at the kilogram level, increased in several CEWG areas (Boston, Dallas, and Phoenix); the increases may be due to the recent decrease in the availability of cocaine HCl at the kilogram

BEYOND THE CITY LIMITS...

Boston: "Crack remains the predominant form of cocaine in the inner city, with cocaine HCl more popular in nearby suburbs."

Denver: "Cocaine is widely available; with the recent increase of cocaine HCl, it may be more available than methamphetamine even in very rural areas."

level. In San Diego, the kilogram price range of cocaine recently narrowed (to \$15,000–\$18,000 in 2000). In Washington, DC, where quality varies and beige rocks are perceived as higher in quality than white rocks, crack prices have reportedly increased.

Exhibit 11. Cocaine hydrochloride prices in reporting CEWG areas

Area	Purity (%)	Gram	Ounce	Kilogram
Atlanta	NR	\$100	\$1,000	\$23,000
Boston	70–90	\$90	\$650–\$1,400	\$21,000–\$42,000
Chicago	54 (2–25 g)	\$50–\$100	\$700–\$1,800	\$15,000–\$20,000
Denver	75	\$80–\$125	\$800	\$16,000–\$22,000
Honolulu	20–50 (g) >90 (lb)	\$100–\$120	\$900–\$3,500	\$25,000–\$28,000
Los Angeles	80 (g)	\$80	\$600–\$700	\$14,000–\$16,000
Miami	62–75	\$40–\$60	\$600–\$700	\$14,000–\$20,000
Minneapolis/St. Paul	NR	\$100/g \$200/"eightball" (1/8 oz)	\$1,200	\$24,000
New Orleans	NR	\$80–\$150	\$800–\$1,200	\$20,000–\$28,000
New York City	NR	NR	\$650–\$1,000	\$20,000–\$28,000
Phoenix	28–77	NR	NR	\$13,500–\$17,000
St. Louis	75	\$52–\$100 in quantity \$62–\$100 on the street	NR	NR
San Diego	75–80 (oz–lb)	\$45–\$80	\$700	\$15,500–\$18,000
Seattle	NR	\$10/"dime bag" (1/4 g) \$30/g	NR	NR
Texas	85–90	\$100–\$125	\$500–\$850	\$12,000–\$22,000
Washington, DC	19–95	\$100–\$200	\$1,200–\$1,800	\$25,000–\$28,000

SOURCE: CEWG city reports, June 2000

Although prices have not increased in Philadelphia, “ready rock,” which costs \$5, is 1/4 inch across—noticeably smaller than in autumn 1999. Similarly, in Austin, although the price and quality have remained stable, the size of crack rocks is smaller than during previous periods.

Cocaine prices declined in two areas: Chicago (where cocaine availability appears high, prices are fairly low, and purity has decreased) and Miami (where it is reportedly highly available, with prices decreasing slightly).

Stable prices are reported in several other cities: Detroit (where availability, price, and purity have remained level for the past 4 years), Honolulu (where it has remained stable for the past 2 years), Newark (where crack prices appear to have stabilized at \$10 per bag, with designer brands selling for higher prices than regularly packaged crack), New Orleans (where both price and purity have stabilized), St. Louis (where quality is reportedly high, and prices have remained low), Seattle (where crack prices have remained relatively stable for the last 4–5 years, although users indicate that purity has declined over the past year), and Washington, DC (where prices have been stable, but purity has been more variable during early 2000 than during early 1999).

Cocaine purity seems to be declining in Philadelphia, but it reportedly increased in San Diego over the past year. In Denver, ethnographic sources indicate that crack is of low quality, while cocaine HCl is readily available at high purity levels. In Washington, DC, “shake” (cocaine HCl) quality fluctuates; a supposedly high-quality cocaine, referred to as “pacman,” is sold in the mid-northwest section of the city.

Exhibit 12. Crack prices and purity in reporting CEWG areas

Area	Price/Unit
Atlanta	\$85–\$100/g \$750–\$1,000/oz \$22,000–\$26,000/kg
Boston ^a	\$20/vial
Chicago	\$3–\$5/rock \$1,500/oz
Denver	\$10–\$20/rock \$800–\$1,200/oz
Detroit	\$5–\$50/rock
Honolulu	\$5–\$15/dose \$20–\$100/rock \$100–\$250/g \$1,000–\$1,500/oz
Miami	\$10–\$20/rock \$700–\$1,000/“cookie”
Minneapolis/St. Paul	\$20/rock
Newark	\$8–\$10/bag
New Orleans	\$5–\$25/rock \$80–\$125/g \$800–\$1,200/oz \$20,000–\$28,000/kg
New York City	\$25–\$50/rock \$700/oz
Philadelphia	\$5/“ready rock”
Phoenix ^b	\$17.50–\$20/rock \$300–\$600/oz
St. Louis	\$25/rock \$40–\$100/g in quantity
San Diego ^c	\$10/1/10g
Seattle	\$20/1/10–1/8 g \$40/1/5–1/4 g
Texas	\$10–\$50/rock
Washington, DC ^d	\$3–\$4/rock \$100/g \$24,000–\$27,000/kg

^aPurity 40–60 percent
^bGram purity 77 percent
^cPurity 20–40 percent
^dPurity 31–81 percent

SOURCE: CEWG city reports, June 2000

Seizures, Trafficking, and Distribution

Between 1998 and 1999, cocaine seizures decreased in two of four reporting cities (Seattle and Washington, DC) and increased in the other two (Minneapolis/St. Paul and San Diego). In Boston, the cocaine proportions both of lab submissions and of drugs analyzed by the Department of Public Health drug labs have declined since 1994 (with cocaine HCl proportions increasing slowly and crack proportions declining markedly). Conversely, since 1993, the volume of cocaine examined by the Texas Department of Public Safety labs has increased.

In many urban areas, cocaine continues to be distributed generally by street gangs and organizations: in Boston, by African-American, Jamaican, and other street gangs; in Denver, by African-American gangs; in Seattle, by Latino gangs; and in South Florida, by Colombian and Haitian organizations. In Denver, crack distribution methods are reportedly not as organized as in the past and have moved from distribution systems to more of a free-for-all with individual dealers.

In New York City, cocaine dealing, much like other drug dealing, is done surreptitiously and indoors. Some homes there have become minidrug supermarkets, where a variety of drugs are sold and used.

Detroit remains the source for cocaine destined for smaller and more rural areas throughout the Midwest; New York, Florida, California, and Texas are the sources for cocaine entering Atlanta, where cocaine is transported inside sophisticated, hidden compartments in private or rental cars. Colombians are the primary suppliers for Detroit; Colombian and Haitian organizations dominate the importation of South Florida's cocaine; and Colombian and Dominican organizations dominate Boston cocaine trafficking, with other Hispanic groups also participating. Haitian freighters importing cocaine have increased recently, and it has been reported that Colombians may be coloring cocaine to avoid detection. Mexican nationals primarily traffic cocaine to Denver, and recently 80-percent-pure cocaine HCl from Mexico has reportedly been available.

HEROIN

Boston: *“Heroin remains very cheap, pure, and available, with a relatively benign reputation among new users compared with crack.”*

Denver: *“Programs in northeast Denver assert that a younger, more affluent heroin-using population sees smoking or inhaling as more ‘socially acceptable,’ almost chic, like cocaine use in the eighties. Reports from the Western Slope also indicate a small, but perhaps growing, group of young, white, noninjecting recreational heroin users. Clinicians are concerned that some smokers and snorters will become dependent and eventually convert to needle use.”*

MORTALITY DATA

In the 10 areas where 1998–99 trend data were available, heroin mortality figures were mixed. Declines were reported in five areas, and a stable trend was reported in one:

- Honolulu: Heroin-related deaths remained relatively stable, totaling 20 in 1998 and 19 in 1999 (but down from 1996).
- Philadelphia: Positive heroin/morphine toxicology reports declined 23 percent between 1997 and 1998 (from 353 to 271) and another 23 percent between 1998 and 1999 (to 210, according to preliminary data).
- South Florida: Heroin-induced deaths for Miami-Dade and Broward Counties combined declined 7 percent (from 105 to 98).
- San Diego: Accidental overdose deaths involving heroin declined 8 percent (to 127), but heroin remained the most frequently detected drug.
- Seattle: After increasing to a record high between 1997 and 1998 (from 111 to 143), morphine-caused deaths

returned to their earlier level in 1999 (totaling 111).

- St. Louis: After declining nearly 30 percent between 1997 and 1998 (from 67 to 47), heroin-related deaths declined a more moderate 6 percent in 1999 (to 44).

Four cities showed increases between 1998 and 1999:

- Austin: The number of heroin overdose deaths increased from 21 to 28.
- Detroit: Continuing a steadily upward trend since 1992, positive heroin toxicology increased 24 percent between 1998 and 1999 (from 308 to 383) and appears to be increasing sharply again in 2000 (114 in the first 3 months).
- Minneapolis/St. Paul: Opiate-related deaths increased 15 percent between 1997 and 1998 (from 33 to 38) and 24 percent between 1998 and 1999 (to 47), and they appear to be increasing again in 2000 (19 in the first 2–3 months).
- Phoenix: Following an 88-percent increase between 1997 and 1998 (from 48 to 90), morphine-related deaths increased 18 percent in 1999 (to 106).

EXPLANATIONS FOR INCREASED MORTALITY AND OVERDOSES?

Minneapolis/St. Paul: "The recent growth in heroin-related mortality may be related, in part, to exceptionally high purity levels of heroin. ... Even experienced addicts can easily overdose from unknowingly using a much more potent drug with an unexpectedly high purity level. ...it is possible that recent changes in heroin availability, packaging, and pricing have also contributed to the increased deaths by making it more accessible to new users. ... The combined influence of high purity heroin at low cost likely contributes to the recent growth in opiate-related mortality."

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

Boston: "Focus group participants and treatment providers suggested a number of reasons injectors are at risk for overdosing: the occasional addition of toxic additives (including scopolamine and ketamine); the variable purity of the drug; and the cooccurring use of benzodiazepines, synthetic opiates, cocaine, and alcohol. Heroin users leaving treatment are particularly at risk due to their lowered tolerance for the drug. An increase in purity variability in Boston may result partially from poor batch mixing, now done in New England by marginally trained workers who receive bulk heroin from New York."

AND YET...

San Diego: "The low cost and high purity might be expected to lead to increased use, but such use has not yet been demonstrated by indicators...."

Earlier 1997–98 medical examiner data from DAWN showed a more pronounced pattern of increase: heroin deaths during those periods increased in 14 cities (≥ 20 percent in Atlanta, Miami, Minneapolis, New Orleans, Phoenix, and St. Louis), declined somewhat (3–14 percent) in 4 cities (Dallas, Denver, New York, and Washington, DC), and remained stable in 1 (San Diego) (exhibit 13). The 1998 total in New York was a relative low point, representing a 40-percent decline from the 1995 total (from 751 to 448 heroin-involved deaths).

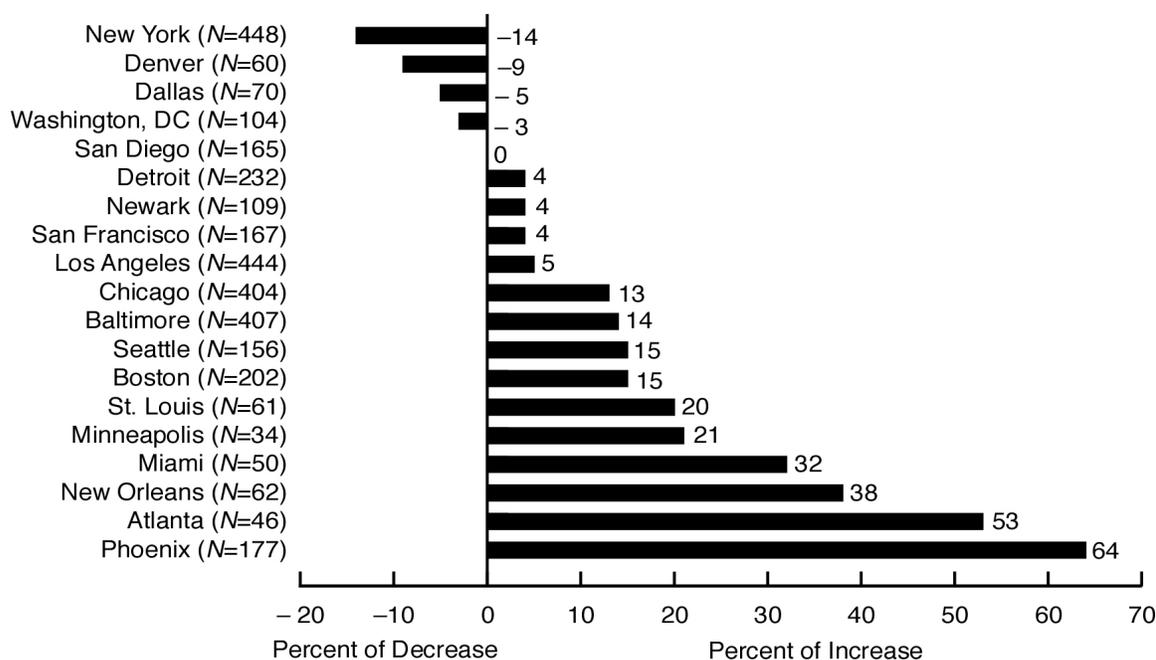
EMERGENCY DEPARTMENT DATA

During the first half of 1999, heroin was the most frequent ED illicit drug mention in Newark, San Francisco, and Seattle (accounting for 33 percent, 22 percent, and

19 percent, respectively, of those cities' total drug mentions), and it equaled cocaine as Baltimore's most frequent mention (at 28 percent each) (exhibit 2). It also accounted for sizable percentages of ED mentions in Chicago (21 percent), New York (17 percent), Boston (12 percent), and Washington, DC (10 percent).

During that time period, Baltimore topped the DAWN list of 20 CEWG cities in the rate of heroin mentions per 100,000 population, followed by Newark, Chicago, San Francisco, and Seattle (exhibit 14). Minneapolis/St. Paul once again had the lowest heroin rate (as it did for cocaine). Rates in the two top-ranking cities, Baltimore and Newark, were about level with rates of the same period 5 years earlier (in 1994), with fluctuations in between and peaks during 1995 and 1996, respectively (exhibit 15). In

Exhibit 13. Percentage of change in medical examiner heroin mentions by metropolitan area, 1997 versus 1998



NOTE: (N) refers to 1998 heroin mentions.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, annual medical examiner data, 1998

the other three top-ranking cities, 5-year trends were generally upward in Chicago and Seattle and downward in San Francisco.

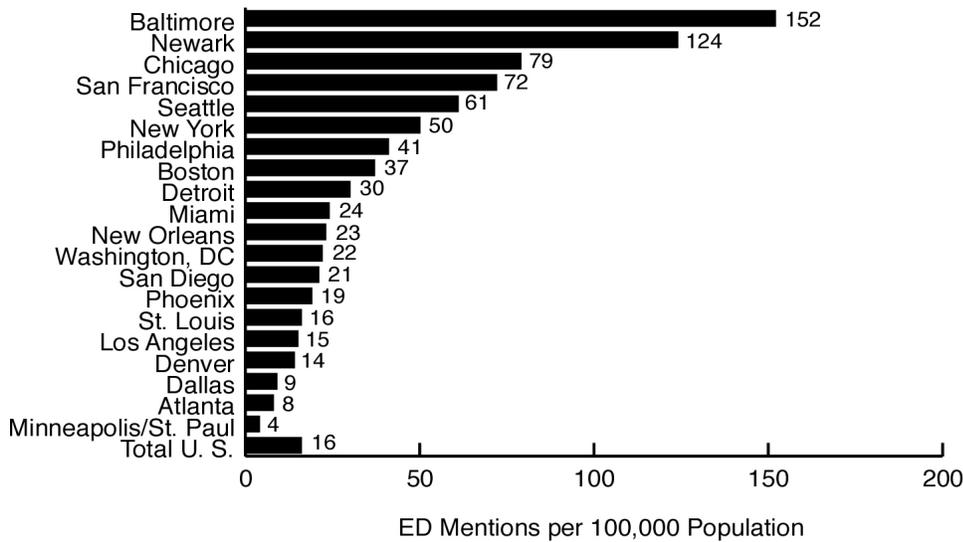
More recently, between the first halves of 1998 and 1999, heroin ED trends were mixed, with few dramatic changes (exhibit 16): mentions increased significantly ($p < 0.05$) in Baltimore and Miami (18 percent and 24 percent, respectively) and nonsignificantly (≤ 5 percent) in another five cities; conversely, mentions declined significantly in Washington, DC, and San Francisco (19 percent and 14 percent, respectively) and nonsignificantly (≥ 5 percent) in eight other cities. As a percentage of total ED mentions, heroin remained stable in all the cities (within 2

percentage points) during that same time period.

TREATMENT DATA

Heroin as primary drug of abuse (excluding alcohol-only but including alcohol-in-combination) accounts for the largest percentage of admissions in 6 of 20 reporting areas on the east and west coasts—Baltimore, Boston, Los Angeles, Newark, New York City, and San Francisco; it equals marijuana as the top primary treatment drug in Seattle (at 23 percent of admissions); and it accounts for one-third or more of admissions in Detroit and Washington, DC (exhibits 6 and 17).

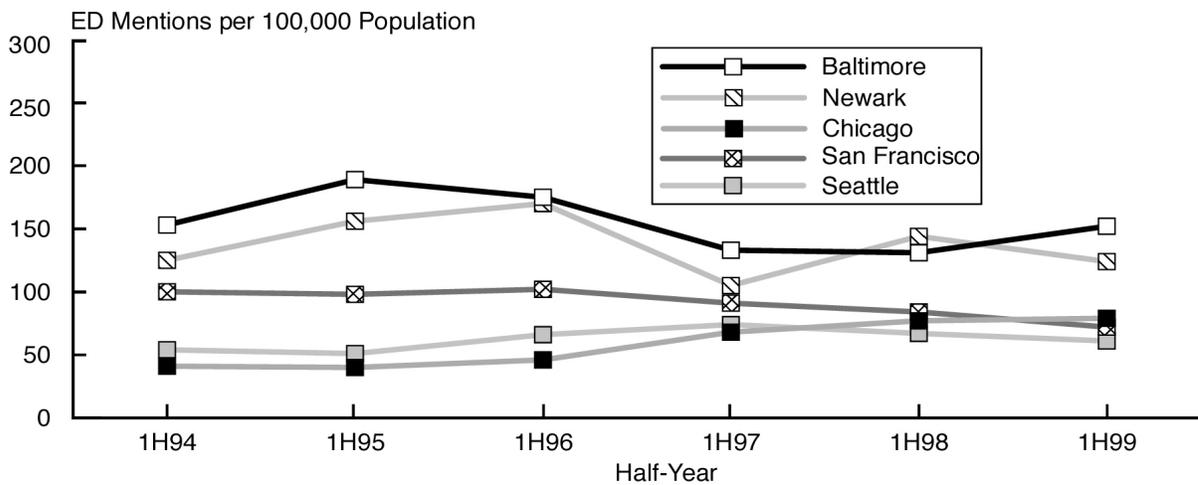
Exhibit 14. Estimated rate of heroin/morphine ED mentions per 100,000 population by metropolitan area, first-half 1999*



*First-half-1999 data are preliminary.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 1999 (October 1999 update)

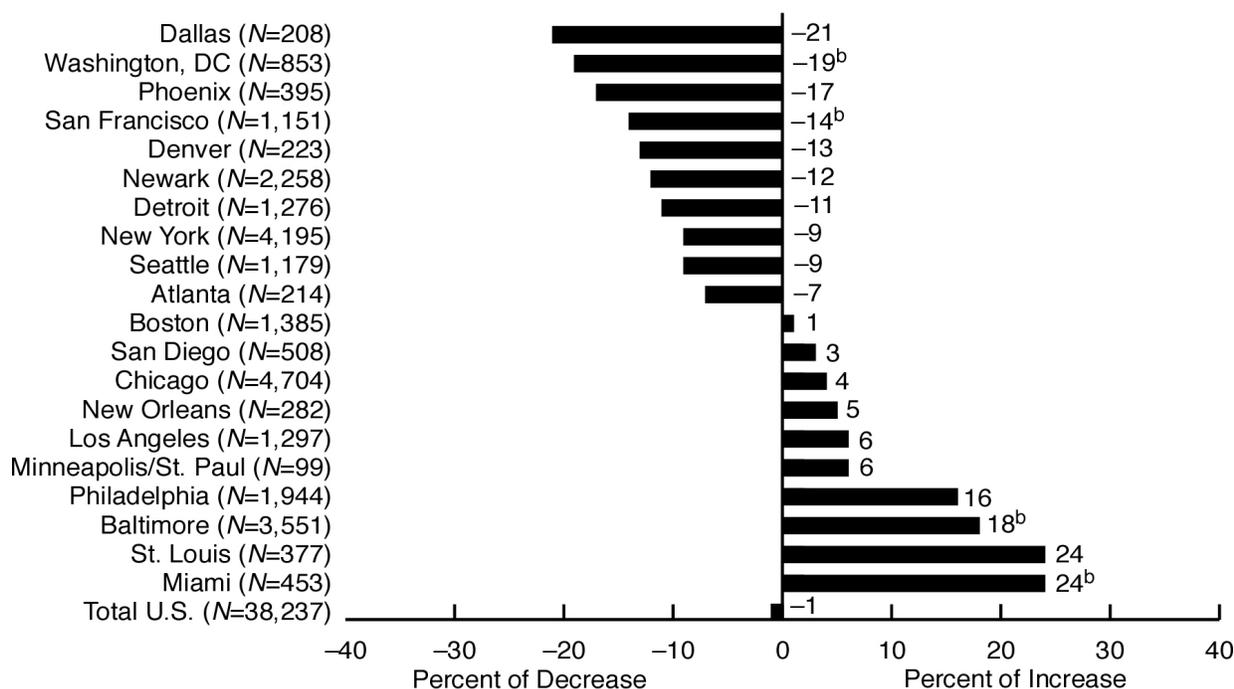
Exhibit 15. First-half-year trends in heroin ED mentions per 100,000 population in five top-ranking cities, first half 1994–first half 1999*



*First-half-1999 data are preliminary.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 1999 (October 1999 update)

Exhibit 16. Percentage of change in heroin ED mentions by metropolitan area, first-half 1998 versus first-half 1999^a



NOTE: (N) refers to first-half-1999 heroin mentions.

^aFirst-half-1999 data are preliminary.

^bp<0.05

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 1999 (October 1999 update)

BEYOND THE CITY LIMITS...

Baltimore: "The admission rate was almost six times as high in Baltimore City as in the suburban counties."

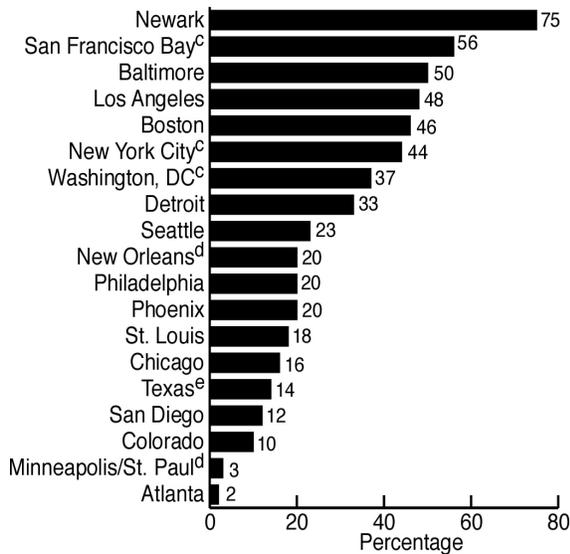
Newark: "Treatment data show a continuing and parallel increase in the use of heroin both in Newark City and areas outside the city."

Compared with treatment percentages from the same reporting period 1 year earlier, heroin figures remained relatively stable

(within 2 percentage points) in nearly all of the 14 areas where trend data were available.

Some exceptions include increases (5–6 percentage points) in St. Louis and Seattle and a slight decline (3 points) in Atlanta. Longer term treatment data show sharper shifts in some areas. In San Francisco, for example, heroin declined from 66 percent of drug admissions in 1993 to 62 percent in 1996 and 56 percent in 1999. In Chicago, however, primary heroin admissions have accounted for a fairly stable proportion (approximately 15 percent of admissions) since their rise in 1996.

Exhibit 17. Heroin as a proportion of primary drugs of abuse among treatment admissions^a, second half 1999^b



^aTotal admissions number excludes alcohol-only but includes alcohol-in-combination.

^bReporting periods are July–December 1999, except for the following: FY 2000 in Detroit; January–June 1999 in Baltimore, Chicago, and St. Louis; full calendar year 1999 in Minneapolis/St. Paul, New Orleans, and Washington, DC; October–December 1999 in Los Angeles; full calendar year 1998 in Phoenix and San Francisco.

^cAlcohol-only and alcohol-in-combination are excluded.

^dAlcohol-only is included.

^eDallas area data are not included.

SOURCE: State drug abuse treatment agencies

OTHER LOCAL DATA

An assortment of indicators and studies in various cities show the seriousness of heroin consequences:

- **Boston:** In 1999, the citywide ambulance service and emergency medical personnel reported 209 cases in which naloxone (Narcan), an opiate antagonist, was administered—likely for cases in

which a heroin overdose resulted in respiratory distress/arrest or unconsciousness.

- **Seattle:** Data from two longitudinal cohort studies of IDUs suggest that new study recruits and young injectors remain highly likely to report heroin as their primary drug.
- **San Francisco:** Heroin is the most frequently mentioned drug in hospital discharges, and such mentions increased by 10 percent between 1996 and 1998 (to 5,723).

Other indicators or studies in some areas suggest stable or declining trends:

- **Chicago:** Among infants tested for controlled substances, opioid toxicity remained stable (at 8–9 percent) between 1995 and 1998, and declined slightly (to 6 percent) in the first quarter of 1999.
- **Massachusetts:** In 1999, heroin was mentioned in 23 percent of helpline calls, similar to earlier periods.
- **South Florida:** Among 3,269 urine toxicology screens performed at a major local hospital during the second half of 1999, 5 percent were opioid-positive, consistent with the previous 6 months.

Poison control data were available in some areas:

- **Atlanta:** Of 83,683 poison center toxic exposure calls in 1999, 1,686 (2 percent) involved opioid use—a stable percentage compared with that in 1998.

- Denver: Heroin-related poison center calls, which had been steady from 1994 (21 calls) to 1998 (22 calls), increased to 36 in 1999.
- Texas: Poison control calls involving heroin increased between 1998 and 1999 (from 168 to 231).

HOW QUICKLY DO TREATMENT INDICATORS DETECT NEW USERS?

Philadelphia: "Focus groups revealed an influx of new younger users in 1997. The treatment admissions figures in the subsequent time periods beginning in January 1998 revealed increasing percentages of heroin inhalation compared with 1997 and earlier, demonstrating the lag time between experimentation and seeking treatment."

Texas: "While the number of individuals who inhale heroin is small, it is significant to note that their lag period in seeking treatment is 8 years rather than 14 years for injectors. This shorter lag period means that, contrary to street rumors that 'sniffing or inhaling is not addictive,' inhalers will need treatment much more quickly than needle users."

HOW ACCURATE AN INDICATOR IS TREATMENT DATA?

Seattle: "Each year, the increase has reflected an attempt to meet a high underlying demand rather than an increase in heroin use. For example, demand for drug treatment at the Seattle needle exchange program has remained high for many years, and the waiting list has grown to more than 500."

USE PATTERNS

Route of Administration

Injecting remains the most common route of administration among heroin treatment admissions in the majority of cities, with the highest percentages reported in the West, where lower purity black tar heroin still predominates (exhibit 18). Intranasal use continues to predominate in Chicago, Detroit, Newark, and New York City, and it accounts for substantial proportions (>25 percent) in several other eastern and mid-western cities: Boston, Minneapolis/St. Paul, Philadelphia, St. Louis, and Washington, DC. Smoking still accounts for relatively small percentages of heroin admissions. The highest proportions were reported in San Diego (10 percent), Los Angeles (8 percent), and Washington, DC (8 percent).

Compared with the same period a year earlier, injection generally remained stable as a percentage of heroin admissions; however, injection percentages did increase disturbingly in a few areas, including New York (7 percentage points), St. Louis (6 points), Minneapolis/St. Paul (4 points), and the State of Colorado (4 points). Conversely, injecting declined in Washington, DC (7 points). Intranasal use also remained fairly stable: the largest reported shifts were a 7-point decline in Minneapolis/St. Paul, a 5-point decline in St. Louis, and a 5-point increase in Washington, DC.

Longer term trends show some more marked shifts. In Chicago, for example, intranasal use has increased dramatically, from 60 percent of heroin admissions in FY 1996 to 74

percent in FY 1999. Similarly, in Philadelphia, treatment figures since the mid-1990s show a shift away from injecting toward intranasal use. In Newark, intranasal use surpassed injecting in 1992, but injecting has been slowly rebounding since its low point (20 percent) in 1995.

In addition to injecting, intranasal use, and smoking, more unusual routes of administration are sometimes reported. In Chicago, for example, some users dissolve black tar heroin and drip the solution into their nostrils.

Route of administration often varies demographically, as demonstrated in the following examples:

- Newark: The increase in heroin injection has been faster among 18–25-year-olds compared with other age groups. Among heroin admissions in that city, females are more likely than

males to use intranasally (85 percent versus 69 percent).

- Baltimore: Nearly half of intranasal users are women. Among intranasal users, the proportion younger than 25 has decreased (from 28 percent in 1995 to 13 percent in the first half of 1999). The proportion of white heroin injectors entering treatment increased dramatically (from 33 percent 1995 to 44 percent in the first half of 1999).
- New York: Compared with heroin injectors, those who use heroin intranasally are more likely to be younger than 36 (43 percent versus 36 percent) and Hispanic (48 percent versus 40 percent); in contrast, primary heroin injectors are more likely than intranasal users to be white (37 percent versus 19 percent) and to have started use before reaching age 20 (59 percent versus 44 percent).

FROM FEAR OF NEEDLES...TO SNORTING...

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

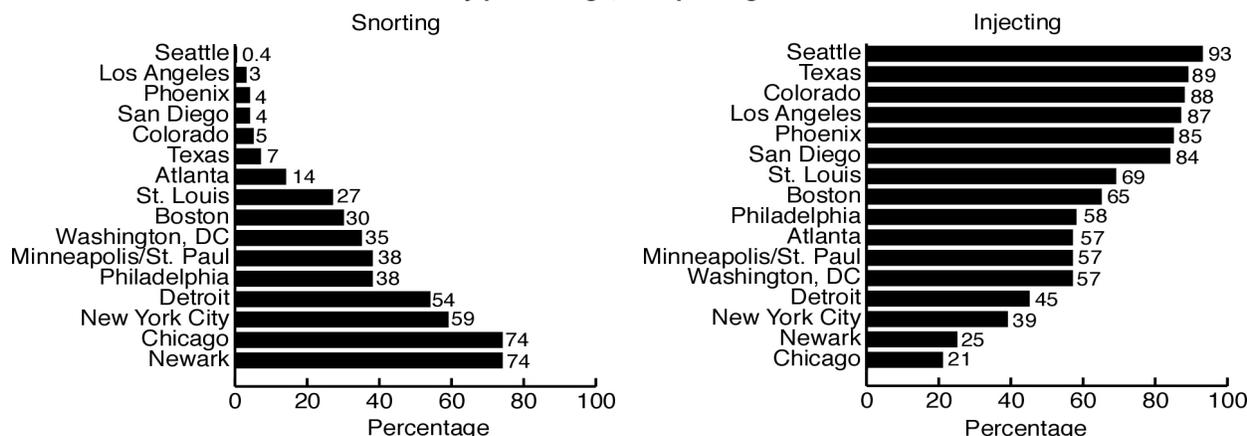
Denver: "One Denver treatment program...reports more younger users, and a small number of clients who inhale or smoke because of needle aversion. A north Denver outreach program reports that most of its clients are older heroin injectors, who would not consider smoking or inhaling the drug... Southeastern and south-central treatment programs...describe area users getting 'chiva' that they don't have to inject, 'so they won't become junkies.'"

FROM SNORTING...TO INJECTING...

Boston: "Due to high purity, snorting is the common starting route of administration for new and younger users. However, progression to injection is widely reported, perhaps due to the increased effect from a given amount of heroin and the need to buy fewer bags to support a habit."

Atlanta: "Ethnographic data indicate that a number of heroin snorters move to injecting the drug."

Exhibit 18. Snorting versus injecting^a among heroin treatment admissions, by percentage, in reporting CEWG areas^b



^aSmoking and other routes of administration also account for small percentages in some areas.

^bReporting periods are July–December 1999, except for the following: FY 2000 in Detroit; January–June 1999 in Chicago, and St. Louis; full calendar year 1999 in Minneapolis/St. Paul, and Washington, DC; October–December 1999 in Los Angeles full calendar year 1998 in Phoenix.

SOURCE: State drug abuse treatment agencies

- Colorado: Heroin intranasal users and injectors are more similar demographically than either group is to smokers: two-thirds of smokers are age 35 or younger, versus 43 percent of intranasal users and 38 percent of injectors; smokers are more likely to be white (78 percent) than intranasal users (53 percent) or injectors (56 percent).
- Texas: Injectors are more likely than inhalers to be male (68 percent versus 53 percent) and white (42 percent versus 32 percent).

Multisubstance Use and Adulteration

Cocaine was identified in 30 percent of the heroin-positive decedents in Philadelphia during the second half of 1999. In Seattle, consistent with previous years, multiple drugs, including alcohol, were present in more than 80 percent of the heroin-related deaths, with cocaine the most common other

drug. Among the 17 opiate-related deaths in St. Paul during the first 3 months of 2000, 7 involved benzodiazepines or cocaine, and 3 involved methadone.

Among primary heroin treatment admissions, cocaine and alcohol remain the most common secondary and tertiary drugs of abuse, respectively, in nearly all reporting areas. Boston is one exception, with alcohol most common as both secondary and tertiary drug. The level of polysubstance use among primary heroin users in Boston is the highest for any primary drug, with 87 percent reporting use of at least one other illicit drug in the month prior to admission. In Baltimore, inhalers are less likely than injectors to report use of other drugs, and the drugs used are different.

According to New York field workers, heroin is sometimes mixed with alprazolam (Xanax), with methylenedioxymethamphetamine (MDMA or “ecstasy”), and with crack

cocaine, vinegar, and lemon juice. In Texas, in order to inhale black tar, which has a gummy consistency, users freeze it until it is very hard and then grind it in a coffee grinder with diphenhydramine (Dormin or Benadryl). In Austin, it is cut with lactose. In Washington, DC, injectors prefer “scramble” (heroin that has been cut) to “bone” (a putatively uncut heroin used primarily for snorting) because it provides a rush or nod due to adulterants (such as sleeping pills). In Denver, DEA lab analysts have identified Coca Cola as a cutting agent for black tar, resulting in significant levels of caffeine in lab analysis.

DEMOGRAPHIC DATA

Atlanta: *“Ethnographic data show the older ‘dinosaur’ users to be both African-American and white, while the younger users are primarily white.”*

Boston: *“Most focus groups among adolescents revealed relatively low awareness and use of heroin compared with marijuana, diverted prescription medications, lysergic acid diethylamide (LSD), or MDMA. However, anecdotal reports from police and treatment contacts suggest that heroin snorting has increased among high school youth.”*

Chicago: *“Younger IDUs use white heroin most often, because it is frequently what they start using. Brown is more popular among some older addicts, who perceive it to have higher heroin purity.”*

Age

In CEWG areas reporting mortality demographics, heroin decedents were usually in

the older age groups. For example, almost three-quarters (74 percent) of decedents in San Diego were age 36 or older. In Austin, the average age of decedents in 1999 was 36.7.

The 26–34 group still accounts for substantial proportions (≥ 25 percent) of heroin ED mentions in nearly half of the CEWG cities in DAWN (9 out of 20), but the oldest (35+) group now accounts for the highest percentages in all but one of the cities (exhibit 19). The exception was New Orleans, where the young adult (18–25) group has surpassed the oldest group for the first time (at 40 percent). The young adult group also accounts for a substantial proportion (28 percent) of heroin mentions in Dallas. Dallas also has a higher representation of adolescents (age 12–17) than the other cities (nearly 5 percent of heroin mentions). Chicago, Phoenix, and St. Louis also have a slightly higher representation (2–3 percent) for that youngest group than do the other cities. While still a rarity, adolescent involvement in heroin ED mentions has been a growing phenomenon: in 1994 they had been reported in 6 cities; in 1997, they were reported in 11 cities; and in the first half of 1999, they were reported in 14 cities.

Between the first halves of 1998 and 1999, age distribution shifts among heroin ED mentions continued to suggest the transition of the largest cohort of users into the oldest age bracket: the 26–34 group declined as a percentage of heroin ED mentions in every city, without exception; concurrently, the oldest (35+) group increased in all but four cities (it declined in Minneapolis/St. Paul and New Orleans and remained stable in New York and Seattle). These shifts were particularly marked (5–11 percentage points) in Atlanta, Boston, Chicago, Los Angeles,

and San Francisco. Trends were not as clear among any younger cohorts. The young adult (18–25) group remained relatively stable in most cities, with a few exceptions: their representation declined in Denver and Phoenix (6 percentage points in each) and increased in Minneapolis/St. Paul (11 points), St. Louis (11 points), and New Orleans (9 points). Adolescent representation remained generally stable.

BEYOND THE CITY LIMITS...

Baltimore: “Both indicators and anecdotal evidence point to a substantial and growing heroin problem among youth, particularly in the suburban counties surrounding Baltimore City.... The new cohort of white suburban youth, reported to have begun emerging in about 1992–93, is beginning to appear in the treatment system....”

Boston: “Needle exchange contacts in Boston proper report mostly traditional, older clients who have injected heroin for many years, while exchange contacts in Cambridge and Northampton (in western Massachusetts) have seen an increase in younger heroin injectors. Interviews with some of these injectors suggest that early onset of heroin use is not uncommon, sometimes in the midteens.”

Detroit: “Reports continue of increased heroin use among youth, especially in suburban Detroit.”

Like the shifts in age distribution between the first halves of 1998 and 1999, changes in the numbers of heroin mentions during that period similarly suggest that the 26–34 group has been transitioning into the 35+ group: the former declined significantly ($p < 0.05$) in eight cities and increased in only one (Baltimore); the latter increased

significantly in four cities and declined in only one (Washington, DC) (exhibit 20). Again, the two younger groups showed less clear-cut trends in ED numbers.

Exhibit 19. Age and gender distribution of heroin ED mentions, by percentage, in reporting CEWG cities, first half 1999*

Area	12–17	18–25	26–34	35+	Male
Atlanta	0	14	23	64	71
Baltimore	.9	13	31	54	59
Boston	.6	18	27	54	66
Chicago	1.6	11	31	57	57
Dallas	4.8	28	22	45	56
Denver	.4	13	17	69	75
Detroit	...	4	15	80	69
Los Angeles	...	7	17	75	73
Miami	.2	11	32	57	75
Minneapolis/ St. Paul	1.0	19	30	49	70
Newark	.3	13	35	51	64
New Orleans	0	40	22	38	87
New York City	.2	8	21	70	76
Philadelphia	.7	22	30	47	72
Phoenix	2.0	10	29	59	68
St. Louis	2.6	23	15	59	68
San Diego	1.3	11	22	65	63
San Francisco	0	11	17	72	69
Seattle	.2	13	26	60	62
Washington, DC	...	8	17	74	64

NOTE: “...” denotes estimate does not meet standard of precision.

*First-half-1999 data are preliminary.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 1999 (October 1999 update)

Exhibit 20. Significant changes (p<0.05) in heroin ED mentions by age group, first half 1998 versus first half 1999

Area	12-17	18-25	26-34	35+
Atlanta	▼		▼	
Baltimore			△	△
Chicago	△	▼		△
Dallas			▼	
Denver		▼	▼	
Detroit		▼		
Los Angeles			▼	
Miami		△		△
Newark			▼	
New Orleans	▼	△		
Phoenix	△	▼		△
St. Louis			▼	
San Diego	△			
San Francisco	▼		▼	
Seattle	▼			
Washington, DC		△	▼	▼

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 1999 (October 1999 update)

Similar to ED mentions, the oldest (35+) group accounts for the highest percentages of admissions for primary heroin abuse in every reporting area (exhibit 21). The 26-34 group, however, is still well represented at 20 percent or more of heroin admissions in every reporting area except St. Louis and Washington, DC. The younger 18-25 group accounts for fairly substantial percentages (≥20 percent) in three reporting areas: Minneapolis/St. Paul, St. Louis, and San Diego. The high percentage in San Diego corroborates anecdotal stories about heroin use by youth and young adults.

Heroin users in treatment, like those who show up in emergency departments, generally appear to be aging, but the age

distribution shifts are not as marked: since the same period a year earlier, the 26-34 group declined somewhat (2-5 percentage points), while the 35+ group correspondingly increased, in five reporting areas: New York, St. Louis, Seattle, Washington, DC, and the State of Texas. The two younger age groups remained fairly stable, except for a substantial increase (8 percentage points) among young adults (18-25) in Minneapolis/St. Paul and slight declines (3-4 points) for that group in Atlanta, San Diego, and Texas.

Exhibit 21. Age and gender distribution of primary heroin treatment admissions, by percentage, in reporting CEWG areas, second half 1999^a

Area	≤17	18-25	26-34	35+	Male
Boston	0.1	14	32	54	75
Chicago	<1.0	14	36	50	55
Colorado	0.5	18	27	60	65
Los Angeles	0	7	25	68	72
Minneapolis/St. Paul	2.5	26	29	43	68
Newark	.4	8	36	55	55
New York City ^b		7	32	60	72
St. Louis	0.8	23	18	58	73
San Diego	2.4	21	26	51	62
Seattle	1.0	8	22	70	56
Phoenix	0	10	26	64	64
Texas ^c	3.0	19	22	56	70
Washington, DC	0.2	2	11	87	67

^aReporting periods are July-December 1999, except for the following: January-June 1999 in Chicago and St. Louis; full calendar year 1999 in Minneapolis/St. Paul and Washington, DC; October-December 1999 in Los Angeles; full calendar year 1998 in Phoenix.

^bAge groups are ≤25, 26-35, and 36+.

^cDallas area data are not included.

In New York, sellers continue to be young adults, often younger than 25, and sometimes as young as 14 or 15 years.

Gender

Males continue to predominate in heroin mortality figures in all areas where such data are available: Austin (89 percent of decedents); Philadelphia; San Diego (90 percent); and South Florida.

Males also outnumber females as a percentage of heroin ED mentions in all the CEWG cities in DAWN (exhibit 19). The male–female gender gap remains widest in New Orleans (87 percent versus 13 percent) and remains narrowest in Chicago (57 percent versus 42 percent). Males also predominated among the 49 heroin cases in a South Florida emergency department in the second half of 1999 (accounting for 78 percent).

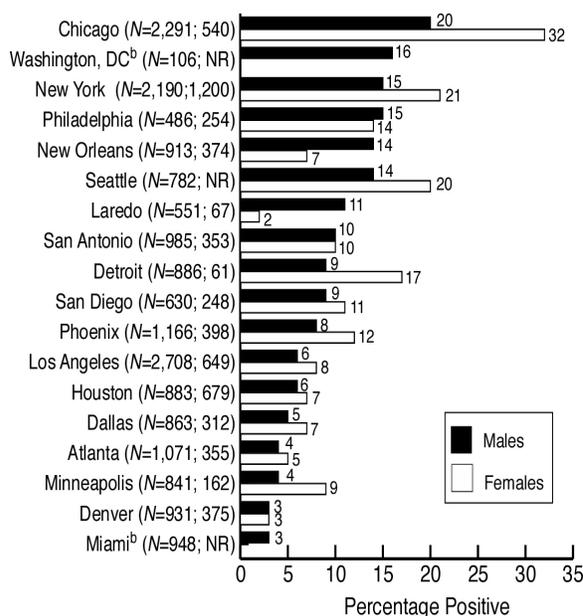
Between the first halves of 1998 and 1999, heroin mentions involving females remained relatively stable, increasing significantly ($p < 0.05$) in only three cities (Atlanta, Miami, and Phoenix) and declining in another three (Denver, New Orleans, and Washington, DC). Shifts were more evident in the proportion of females among heroin mentions: proportions increased somewhat (3–6 percentage points) in six cities (Atlanta, Baltimore, Dallas, New York, Phoenix, and Seattle) and declined somewhat in four (Denver, Newark, New Orleans, and San Diego).

Similarly, among treatment admissions, males outnumber females in every CEWG reporting area (exhibit 21). Women had the largest representation (44–45 percent) in Chicago, Newark, and Seattle and the smallest representation (25–28 percent) in Boston, St. Louis, Los Angeles, and New York. Since the same period a year earlier, females as a percentage of heroin admissions increased in six reporting areas: markedly (8 percentage points) in Atlanta, and to a lesser

extent (2–4 points) in Chicago, Newark, Philadelphia, San Diego, and Washington, DC. By contrast, females declined in proportion in three areas: sharply (10 points) in St. Louis, and less so (3 points) in Boston and Texas.

Women continue to appear more prominently in the ADAM data than in other indicators: female arrestees tested higher for opiates than males in 12 of the 16 CEWG cities where both males and females were tested (exhibit 22). The gender disparity was most noticeable in Chicago, where women had the highest opiate-positive levels among the cities. New York and Seattle also had particularly high levels among women. Only in Denver, Laredo, New Orleans, and Philadelphia did females test positive at lower levels than males.

Exhibit 22. Percentage positive for opiates among male and female booked arrestees, 1999^a (ranked by males)



^a1999 data are preliminary.

^bFemales are not tested at these sites.

SOURCE: National Institute of Justice, Arrestee Drug Abuse Monitoring program, March 2000 files

Race/Ethnicity

Whites predominate in heroin mortality figures in all CEWG areas where such data are available, including Austin (75 percent of decedents), Philadelphia, San Diego (61 percent), and South Florida. Hispanics are overrepresented among San Diego decedents (at 31 percent), as they are in most of that city's heroin indicators.

Heroin ED racial demographics are mixed. In the first half of 1999, whites were the largest racial/ethnic group in 10 of the 20 CEWG cities in DAWN (Atlanta, Boston, Dallas, Denver, Miami, Minneapolis/St. Paul, Philadelphia, Phoenix, St. Louis, and San Diego); African-Americans were the largest group in 7 of the cities (Baltimore, Chicago, Detroit, Newark, New Orleans, New York City, and Washington DC), and they nearly equaled whites in Atlanta and St. Louis; and Hispanics were the largest group in Los Angeles. Hispanics also accounted for considerable portions (20–22 percent) of heroin ED mentions in Denver, New York City, and San Diego. In the South Florida emergency department where data were available, whites accounted for 78 percent of the heroin cases.

Preliminary data suggest some large shifts between the first halves of 1998 and 1999. Whites declined as a percentage of ED mentions in eight cities: sharply in Dallas (14 percentage points), and to a lesser extent (5–10 points) in Detroit, New Orleans, Philadelphia, Phoenix, San Francisco, and Seattle). Correspondingly, the number of mentions involving whites also declined significantly ($p<0.05$) in Dallas, Detroit, New Orleans, and Seattle. Conversely, percentages for whites increased sharply (10–15 points) in three cities (Atlanta, Miami, and

St. Louis), but only in Miami did the number of mentions correspondingly increase ($p<0.05$).

Shifts were less dramatic among African-Americans. That group declined as a percentage of heroin mentions (5–15 points) in only four cities (Atlanta, Miami, Phoenix, and St. Louis), and they declined significantly ($p<0.05$) in number only in Phoenix and San Diego. Conversely, African-Americans increased, both in proportion (5–9 percentage points) and in number of heroin mentions ($p<0.05$), in only three cities (Boston, New Orleans, and Philadelphia). Hispanic representation increased in San Diego and declined in Phoenix, both in proportion and number.

BEYOND THE CITY LIMITS...

Baltimore: "...in the suburban counties, white admissions increased from 31 percent in 1995 to 47 percent in the first half of 1999."

Among primary heroin treatment admissions during the most recent reporting period, whites constituted the largest group in eight reporting areas (Atlanta, Boston, Colorado, Minneapolis/St. Paul, Phoenix, San Diego, Seattle, and South Florida); African-Americans predominated in four (Chicago, Newark, St. Louis, and Washington, DC); and Hispanics were the predominant group in three (Los Angeles, New York City, and Texas).

Racial/ethnic distributions among heroin treatment admissions have remained generally stable in most reporting areas since the same period 1 year earlier. Some exceptions include declining white representation and

increasing African-American representation in St. Louis, and a decline in whites with a corresponding increase in Hispanics, ongoing since 1996, in Texas.

LAW ENFORCEMENT DATA

Arrestee Data

Opiate-positive screens among arrestees remain low relative to those for cocaine and marijuana (exhibit 22). Adult males in eight CEWG cities in the ADAM program, spanning all regions of the country, had levels of 10 percent or higher in 1999: Chicago, Laredo, New Orleans, New York, Philadelphia, San Antonio, Seattle, and Washington, DC. Likewise, adult females tested positive at 10 percent or higher in eight CEWG cities from diverse parts of the country: Chicago, Detroit, New York, Philadelphia, Phoenix, San Antonio, San Diego, and Seattle.

Between 1998 and 1999, opiate-positive levels remained generally stable among males (within 3 percentage points), with two exceptions: a 4-percentage-point decline in Philadelphia and a 6-point increase in Washington, DC (however, the sample size in Washington, DC, declined considerably between the two reporting periods; furthermore, Washington, DC's more extensive Pretrial Services urinalyses show fairly stable levels of 11 and 12 percent, respectively, during 1998 and 1999). Among females, slight increases (3–5 percentage points) were reported in several cities: Chicago, Minneapolis, New Orleans, Phoenix, San Diego, and Seattle. (Note, however, that the sample sizes in Chicago and Seattle increased considerably between the two reporting

periods.) Only in Detroit did opiate-positive levels decline notably (5 points) among females.

Other available law enforcement indicators in various cities show mixed trends:

- Boston: Heroin accounted for 24 percent of all drug arrests in 1999, up slightly from the previous year, and substantially up from the all-time low of 13 percent in 1992.
- Honolulu: Heroin cases increased slightly between 1998 and 1999 (totaling 87 and 96, respectively).
- New Orleans: Arrests for both possession and distribution increased between 1998 and 1999.
- New York: Heroin arrests peaked in 1995 (at 38,131), declined slightly over the following 2 years, rebounded somewhat in 1998 (to 37,483—exceeding cocaine arrests), but seem to be declining in 1999 (17,244 in the first half).
- San Francisco: The 6,905 heroin-related arrests in 1999 are in middle of the range (6,546–7,214) recorded in the 4 years 1996–99.
- Seattle: The number of convictions for heroin-related offenses increased in 1998 (to 1,326), then declined slightly (4 percent) in 1999 (to 1,271).

Availability

BRAND NAMES AS AN INDICATOR OF AVAILABILITY, PURITY, AND ATTITUDES...

New York: "Interestingly, brand names may have changed somewhat. Traditionally, they have invoked images of death, such as 'body bag,' 'DOA,' and 'death wish.' Now, when brand names appear, they are more likely to invoke less dramatic images, using such names as 'justice,' 'HBO,' and 'triple 777.'"

Philadelphia: "The spring 2000 focus group discussions of heroin packaging identified only 22 out of the 34 brands identified by the autumn 1999 groups. In addition, 11 new brands were named in spring 2000."

Washington, DC: "Ethnographic data continue to show that a steady supply of heroin is available in many sections..., although police activity intermittently makes heroin procurement difficult. An ever-changing variety of brand names are for sale, most of which fluctuate substantially in quality. In the northern Northwest quadrant of the city, bags of heroin are called 'silk,' 'blue-steel,' or no-name.' ... In the Southeast section, a brand called '2000' is sold."

During 1999, undercover buys showed South American to be the dominant heroin form throughout the East and in all midwestern DMP cities except for St. Louis, where Mexican heroin remains the only type available. Mexican heroin still predominates throughout the West. A limited number of samples of Southwest Asian heroin were available in Atlanta, Chicago, Detroit, and Philadelphia, and some Southeast Asian samples were available in Atlanta, Baltimore, Chicago, Dallas, Detroit, Newark, and Washington, DC.

Wide or increasing availability is reported in several areas, including Boston, Denver, Miami, Minneapolis/St. Paul, New York, Phoenix (with record black tar availability throughout Arizona), and Texas.

BEYOND THE CITY LIMITS...

St. Louis: "Heroin has also become available in the smaller rural cities of Springfield and Joplin, each of which has a small IDU population using heroin and methamphetamine."

Seizures and Submissions

Seizure data suggest increases in several areas. Heroin seizures in Newark, which had averaged about 1,500 per year between 1991 and 1995, increased to 3,372 in 1998 and 2,363 in the first 10 months of 1999. In Washington, DC, after declining between 1997 and 1998, heroin seizures rebounded in 1999 (totaling 924, 795, and 939, respectively). State police in the Boston area continue to report consistently large, multi-bag seizures; however, after reaching 18 percent of all samples analyzed in 1998, heroin submissions in that city fell slightly to 16 percent in 1999. Amounts of heroin seized have also increased in Minneapolis/St. Paul—especially in St. Paul, where as much heroin was seized in the first quarter of 2000 as in all of 1999. In Texas, too, seizure totals increased 13 percent in the second quarter of 2000.

While Mexican black tar predominates in Phoenix, two seizures of white heroin were recently reported at the border.

Price

Exhibit 23 lists price information reported at the local level. Price declines were reported in four cities: Miami, where kilogram prices in the first part of 2000 have collapsed to about half of what they were in 1999; Minneapolis/St. Paul, where dosage, quarter-gram, and ounce prices have hit rock bottom in some areas; Phoenix, where dose, ounce, gram, pound, and kilogram prices have declined, and price varies depending on proximity to the border; and San Diego, where ounce prices have continued to decrease. Stable trends were reported in four cities: Atlanta, where average prices have remained relatively stable since 1998, while average purity levels have drastically increased; Boston and Detroit (bag prices); and Denver (gram prices). Increased prices were reported in only two cities: Los Angeles (gram prices) and Honolulu.

Preliminary 1999 DMP data continue to show wide variations across the country (exhibit 24). Between 1998 and 1999, prices per milligram pure declined in nine cities (Baltimore, Boston, Dallas, Detroit, Houston, Los Angeles, New Orleans, San Diego, and Seattle), remained stable in five (Atlanta, Newark, New York, Philadelphia, and Phoenix), and increased in six (Chicago, Denver, Miami, San Francisco, St. Louis, and Washington, DC). Price drops were particularly steep in New Orleans (\$1.50) and Houston (\$1.39). Some of the declines continue long-term downward trends: in Dallas, for example, prices dropped a dramatic 86 percent since 1996 (from \$6.66).

Purity

BEYOND THE CITY LIMITS...

Atlanta: "...ethnographic information suggests much variation in the purity of heroin by geographic location. While heroin purity levels are dropping in a number of the inner-city neighborhoods with a long history of heroin use, the purity in newer suburban areas is higher."

According to preliminary 1999 DMP data, street-level purity remains highest in the Northeast, although high purity levels (>50 percent) were also found in parts of the Midwest (in Detroit) and the West (in San Diego). Philadelphia continued to have the highest average purity of all controlled heroin buys, as it has for the past several years.

After reaching record levels in 1998, DMP purity declined dramatically in Denver and Houston in 1999 (22 and 17 percentage points, respectively). Declines during that period were also recorded in Miami (5 points) and San Francisco (6 points). By contrast, purity increased somewhat (5–6 percentage points) in five cities: Detroit, Los Angeles, Newark, New Orleans, and Phoenix. Elsewhere, purity levels remained fairly stable (within 5 percentage points).

Longer term trends show more dramatic shifts, as in Chicago, where average purity increased from 1–2 percent during the 1980s (one of the lowest levels in the Nation) to 10 percent in 1991 to more than 30 percent in 1997, but has been declining somewhat since then.

Exhibit 23. Heroin prices in reporting CEWG areas

Area	Type/Source ^a	Gram	Ounce	Kilogram
Atlanta	NR	\$300	\$6,000	\$106,000
Baltimore	SA	NR	NR	NR
Boston	SA	NR	\$3,100–\$5,000	\$120,000
Chicago	unspecified	\$100–\$175	NR	\$20,000
	SEA	NR	\$1,000–\$2,500	NR
	Brown	\$150	\$2,000	NR
	Tar	NR	\$1,500	NR
Denver	Black tar	\$100–\$150	NR	NR
	Mexican brown	NR	\$1,200–\$1,500	
Detroit	SA (Colombian), SEA, Middle East, Mexico	NR	NR	NR
Honolulu ^c	Black tar, China white	\$200	\$3,500–\$5,000	NR
Los Angeles	Black tar	\$80–\$100	^b \$600–\$900	\$24,000–\$34,000
Miami	Latin America, Mexican black tar	\$100–\$200	NR	\$55,000–\$65,000
Minneapolis/St. Paul ^c	white, off-white, tan powder	\$300	\$900–\$2,000	NR
New York City	SA	NR	NR	\$70,000–\$90,000
Phoenix ^c	SA white	\$50–\$100	NR	\$80,000–\$120,000
St. Louis	Mexican brown or black tar	\$250–\$600	NR	NR
San Diego	Black tar	NR	\$900–\$1,450	NR
San Francisco	Mexican	\$20	NR	NR
Texas	Black tar	\$110–\$400	\$800–\$5,000	\$70,000–\$175,000
	Mexican brown	NR	\$2,200–\$3,000	NR
	SEA	NR	\$3,500–\$4,500	NR
	SA	\$1,000	NR	NR
Washington, DC	SA	\$120–\$130	NR	NR

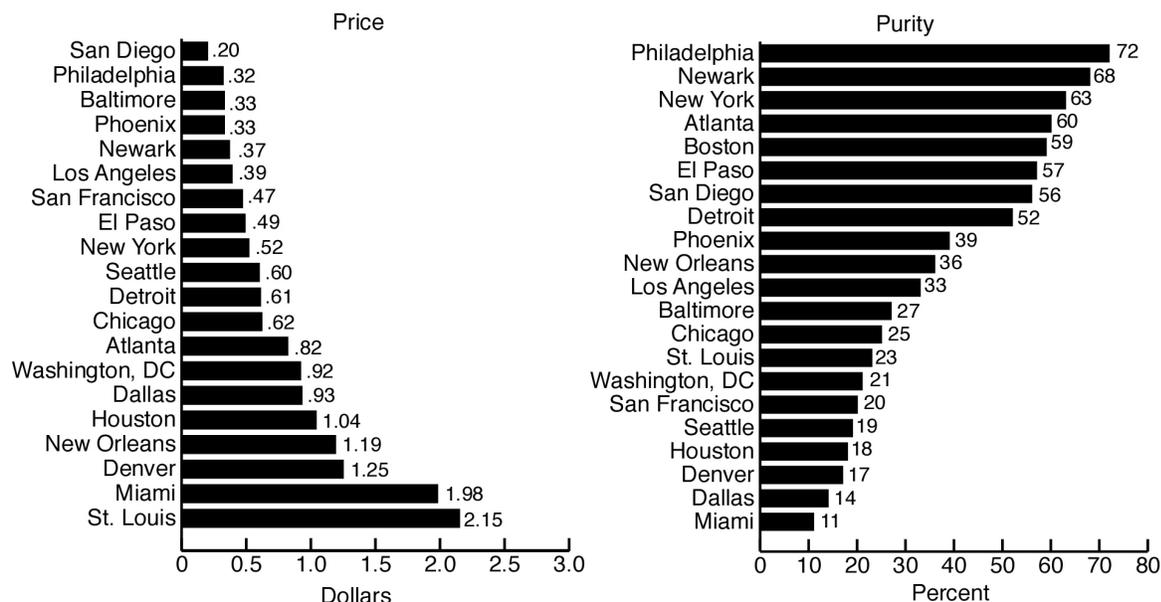
^aSA denotes South American, and SEA, Southeast Asian.

^b"Pedazo" (a Mexican ounce)

^cHonolulu: \$50/quarter-gram, \$1,400/quarter-ounce; Minneapolis/St. Paul: \$50/quarter-gram; Phoenix: \$16,000–\$18,000/pound

SOURCE: CEWG city reports, June 2000

Exhibit 24. Average heroin price and purity per milligram in CEWG cities, 1999



SOURCE: DEA Domestic Monitor Program, Intelligence Division, Domestic Unit, preliminary unpublished data for 1999

Trafficking and Distribution

Miami International Airport has surpassed Kennedy International Airport as the Nation's number-one heroin importation point. Miami street crack dealers now also offer heroin that has been fronted by their traditional cocaine sources. In New York, selling takes place mainly indoors, in houses, apartments, and hallways. Further up the east coast, most of Boston's heroin is transported from New York and originates in Colombia. Trafficking in that city is dominated by Dominican nationals, with smaller operations run by South and Central American, Nigerian, Asian, and local groups. Boston police credit the advent of cellular phone and beeper technology with helping decrease drug-related crime: turf wars are infrequent, and buys arranged by

beeper are now usually consummated off the street, sometimes in stores, malls, supermarkets, cars, and private homes.

Similarly, in St. Louis, most business is handled by cellular phone, which has decreased the seller's need to have a house for users, thus reducing risk to the seller. In St. Louis, like in other smaller urban areas, heroin is sold by distribution networks, as well as by many small entrepreneurs.

In the West, Denver's marketing is controlled by Mexican nationals. Reports out of Phoenix continue to indicate Colombian traffickers establishing laboratories in Mexico for producing a refined white heroin. Texas has been increasingly reported as a transshipment point for Colombian heroin en route to the Northeast.

MARIJUANA

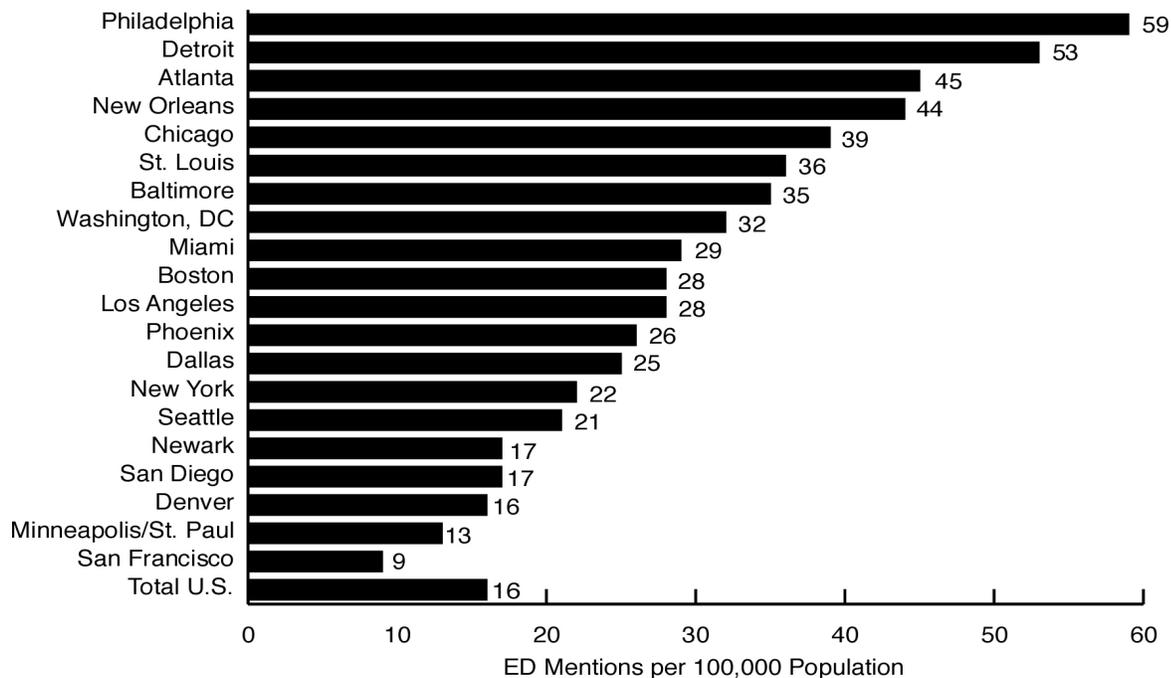
Colorado: *“Some clinicians assert that older marijuana clients claim they are using marijuana to deal with the pain and medical conditions of their aging bodies. Other clinicians, though reporting substantial use among adolescents, also report increased use by older clients, some of whom are alcoholics trying to switch to marijuana as a mood-altering alternative.”*

EMERGENCY DEPARTMENT DATA

In the first half of 1999, preliminary ED data show that marijuana accounted for substantial proportions (≥ 10 percent) of total ED mentions in the following 10 cities: Atlanta, Chicago, Dallas, Detroit, Los Angeles, Miami, New Orleans, Philadelphia, St. Louis, and Washington, DC (exhibit 2).

Philadelphia has the Nation’s highest estimated rate of marijuana ED mentions, followed by Detroit, Atlanta, and New Orleans (exhibit 25). First-half-year rates per 100,000 population had been generally climbing throughout the 1990s in three of those four cities; in Detroit, however, they declined and then leveled off between the first halves of 1997 and 1998 (exhibit 26). More recently, between the first halves of

Exhibit 25. Estimated rate of marijuana/hashish ED mentions per 100,000 population by metropolitan area, first half 1999*



*First-half-1999 data are preliminary.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 1999 (October 1999 update)

1998 and 1999, rates rebounded in Detroit. Conversely, rates declined in Atlanta and New Orleans and remained stable in Philadelphia.

Across the country, between the first halves of 1998 and 1999, marijuana ED mentions showed mixed trends: they increased significantly (>10 percent, $p<0.05$) in Baltimore (17 percent), Minneapolis/St. Paul (25 percent), and Phoenix (39 percent); and they declined significantly in Chicago (12 percent), Dallas (18 percent), New Orleans (25 percent), San Diego (35 percent), and San Francisco (33 percent) (exhibit 27). Los Angeles registered an 80-percent increase between the two periods.

TREATMENT DATA

Primary marijuana abuse accounts for the top percentage of total admissions in Colorado, Minneapolis/St. Paul (alcohol-only is included), and New Orleans; it equals heroin as a percentage in Seattle (exhibits 6 and 28).

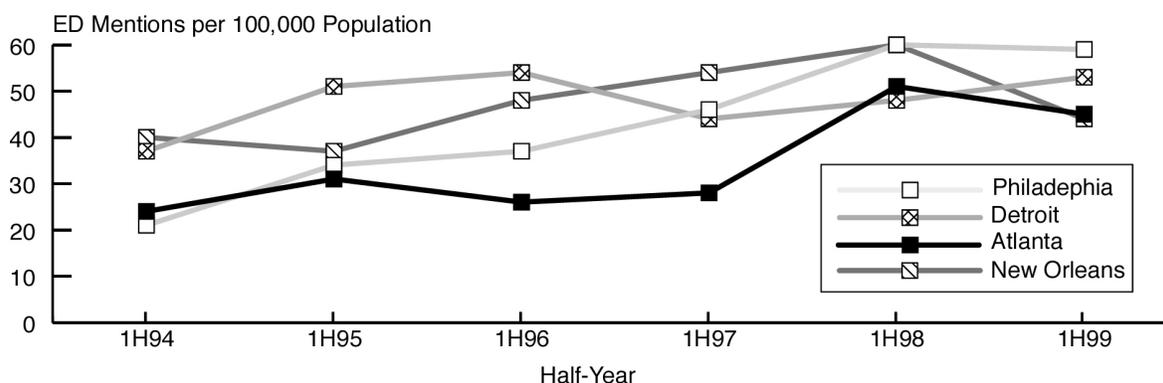
Marijuana also accounts for substantial proportions of admissions (≥ 20 percent) in Atlanta, New York City, St. Louis, and Texas.

Among cities where comparison data were available between the second halves of 1998 and 1999, marijuana as a percentage of treatment admissions increased (by 3–5 points) in Atlanta, New Orleans, New York, and St. Louis; it remained stable elsewhere.

Several increases in longer term trends are noteworthy:

- Colorado: Marijuana users have accounted for the largest proportion of all drug treatment clients since 1995—a continuing trend in 1999, with marijuana admissions accounting for 43 percent of all admissions.
- Hawaii: The number of primary marijuana admissions in the first half of 1999 was 723, triple the number registered in 1992.

Exhibit 26. First-half-year trends in marijuana/hashish ED mentions per 100,000 population in four top-ranking cities, first half 1994–first half 1999*



*First-half-1999 data are preliminary.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 1999 (October 1999 update)

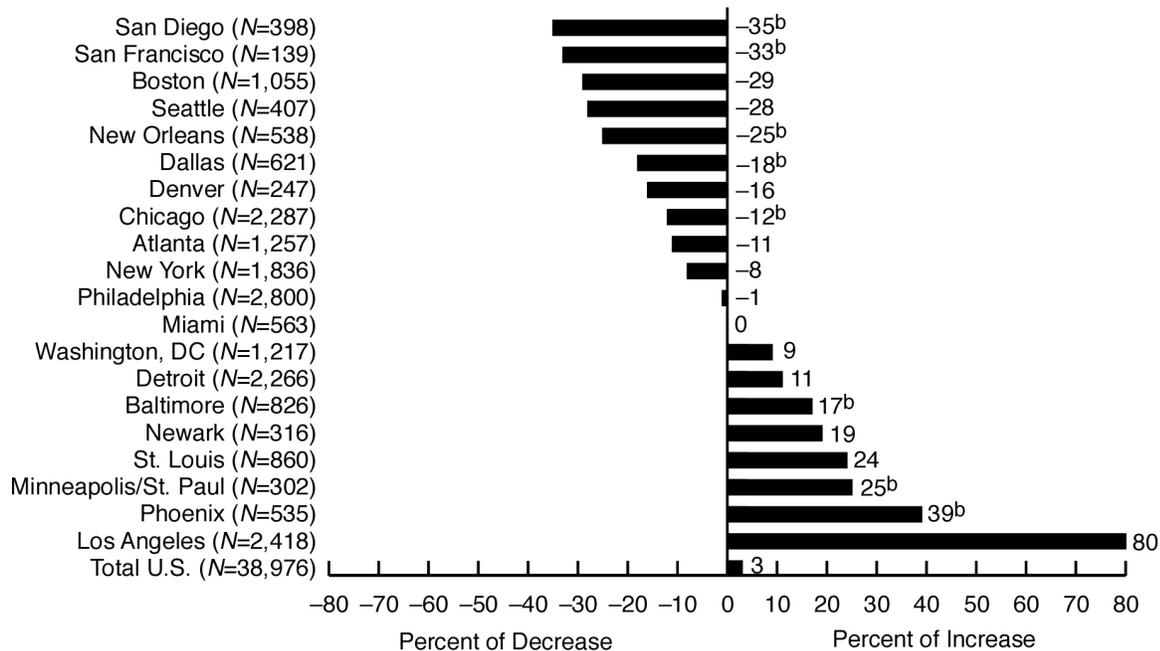
- **New York City:** Primary marijuana treatment admissions have been increasing steadily over the past 10 years. In fact, the number almost quintupled between 1991 and 1999 (from 1,990 to 9,181). The 1999 number is the highest ever. In 1991, marijuana admissions represented about 5 percent of all admissions; by 1999, they represented about 20 percent.
- **San Diego:** Primary marijuana admissions continue to increase. Between 1993 and the first half of 1999, they increased 367 percent—more than for any other drug.

A high proportion of marijuana treatment admissions in Baltimore (61 percent overall and 64 percent in the city) represent referrals through the criminal justice system. Likewise, in San Diego, the majority of young marijuana admissions are referred by the criminal justice system.

OTHER LOCAL DATA

Some local data sources around the country show declines (especially student surveys), other studies show increases, and others show large numbers.

Exhibit 27. Percentage of change in marijuana/hashish ED mentions by metropolitan area, first half 1998 versus first half 1999^a



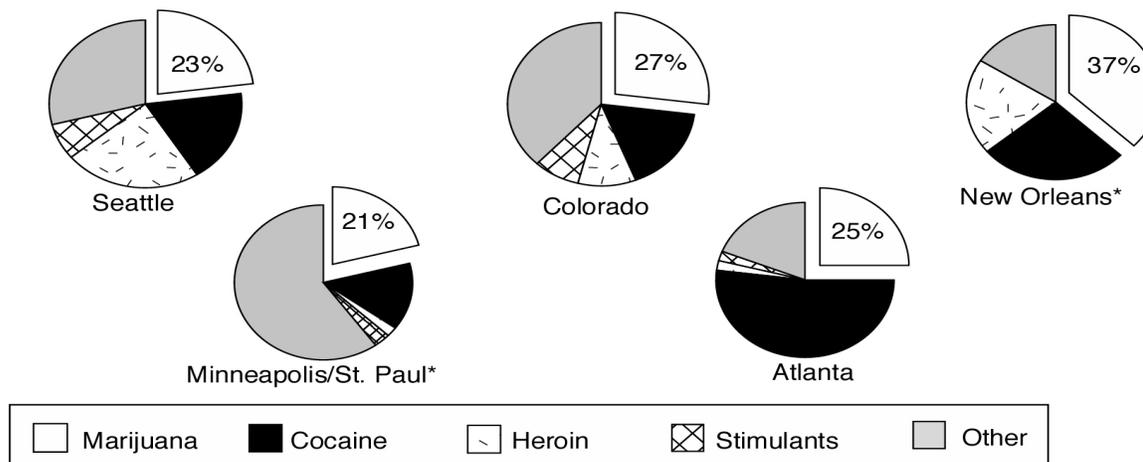
NOTE: (N) refers to first-half-1999 mentions.

^aFirst-half-1999 data are preliminary.

^bp<0.05

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 1999 (October 1999 update)

Exhibit 28. Marijuana as a proportion of primary drugs of abuse among treatment admissions (excluding alcohol-only) in five CEWG areas, June–December 1999



*Alcohol-only is included.

SOURCE: State drug abuse treatment agencies

- **San Francisco:** Between 1997 and 1999, reported lifetime marijuana use fell from 33 to 31 percent among high school students and from 17 to 12 percent among middle school students.
- **Miami:** The prevalence of marijuana use among youth has continued its decline since 1995. Based on a May 1999 school survey of 7th–12th graders, the 22-percent decline was accompanied by positive shifts in risk factors, including (1) social disapproval, (2) perceived harmfulness of marijuana use, (3) ease in obtaining the drug, and (4) perceived use by friends. Past-month marijuana use among 7th–12th graders declined from 13 percent in 1995 to 10 percent in 1999.
- **Newark:** The 1980–98 statewide high school survey data showed a decline in past-month marijuana use from 36 to 12 percent between 1980 and 1989. In 1995, marijuana use jumped to 22 percent and stayed at that level in 1998. By comparison, in 1998, 7 percent of New Jersey middle school students reported past-month use, down from 8 percent in 1995.
- **Chicago:** Adverse Pregnancy Outcomes Reporting System (APORS) data show increases in marijuana use. Among the 2,249 Illinois infants who tested positive for controlled substances in 1995, 96 (4 percent) tested marijuana-positive. This percentage increased to 5 percent in 1996, 7 percent in 1997, and 8 percent in 1998, indicating a slow upward trend. Data from the first quarter of 1999 show 11 percent of infants testing cannabis-positive.
- **Texas:** In 1998, 82 percent of male prison inmates had ever used marijuana or hashish, and 19 percent had used it in their last month on the street. Thirty-two percent of the past-month users had smoked “fry,” a marijuana joint or cigars

dipped in embalming fluid or formaldehyde that may contain phencyclidine (PCP), with only 15 percent knowing that it often contained PCP.

USE PATTERNS

Marijuana, rarely the sole drug that precipitates a trip to hospital emergency rooms in Minneapolis/St. Paul, is often used in combination with other drugs. Similarly, in Baltimore, more than two-thirds (70 percent) of marijuana admissions reported using additional substances; in Hawaii, even those who listed marijuana as their primary drug at admission also reported using other substances. In Newark, primary marijuana abusers represented only 4 percent of all treatment admissions; of those, 53 percent cited alcohol as the most frequently used secondary drug. Conversely, marijuana appeared to be the only drug of choice for a majority of those admitted to treatment for marijuana use in Atlanta, with about two-thirds of those admitted (67 percent) reporting no secondary drug of abuse.

The 1990s saw an increasing trend in marijuana use in many CEWG areas and a rise in popularity of “blunt” smoking, especially common among youth. Blunt smokers cut cigars open using a razor, pour out the tobacco, and replace it with marijuana. However, some users in Chicago lace the blunt with crack or PCP before smoking. In several locations on Chicago’s South and West Sides where laced blunts are sold, the code “3750” identifies the product. Field observations on the behaviors of blunt smokers note that some youth exhibit a lack of control over their marijuana use and express sentiments about “kicking the habit” more typically associated with heroin and cocaine dependence. Marijuana smoked in

blunt cigars also remains popular in New York City, especially among African-American youth, and reports of marijuana mixed with cocaine or heroin appear to be increasing there. In Boston, marijuana is often consumed in the form of a blunt, as well as in bongos (pipes), and less often in cigarette-sized joints.

In Washington, DC, many youth and young adults (16–24 years old) smoke marijuana rolled in Philly blunt cigar wrappers, which are believed to make marijuana stronger. These youth will often smoke blunts and drink malt liquor at the same time. In Texas, dipping joints in embalming fluid that contains PCP or in codeine cough syrup continues, as does smoking blunt cigars filled with marijuana or adding crack or other drugs to marijuana cigarettes.

DEMOGRAPHIC DATA

Atlanta: “Marijuana is the second most prevalent drug on the Atlanta market. It is increasingly used by a wider variety of people, mostly male, white, and adolescent or young adult.”

Age

Among marijuana ED mentions in the first half of 1999, all age groups are represented fairly substantially (exhibit 29). The 18–25 group continues to be overrepresented, accounting for the largest proportion of mentions in 11 cities; the 35+ group was largest in seven cities. In Minneapolis/St. Paul, the two youngest groups (≤17 and 18–25) represented the largest proportion of mentions, and in San Francisco, the youngest group accounted for the largest proportion (at 32 percent).

Exhibit 29. Age and gender distribution of marijuana ED mentions, by percentage, in reporting CEWG cities, 1999*

Area	≤17	18–25	26–34	35+	Male
Atlanta	8	27	30	35	67
Baltimore	20	32	23	25	66
Boston	18	36	22	23	61
Chicago	17	24	27	32	66
Dallas	22	34	25	19	64
Denver	21	32	18	27	62
Detroit	10	24	28	38	66
Los Angeles	11	26	23	NR	65
Miami	7	29	28	35	72
Minneapolis/ St. Paul	29	29	21	21	73
Newark	19	33	20	28	70
New Orleans	7	36	25	32	74
New York City	11	29	28	31	68
Philadelphia	14	30	28	27	67
Phoenix	18	33	23	26	66
St. Louis	12	29	21	37	63
San Diego	14	26	23	37	66
San Francisco	32	22	27	19	78
Seattle	15	33	26	25	72
Washington, DC	13	33	27	26	67

*First-half-1999 data are preliminary.

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

In Dallas and San Francisco, marijuana ED mentions are involving younger patients, with the youngest group (17 and younger) increasing as a percentage of marijuana mentions between the first halves of 1998 and 1999 (by 5 and 12 percentage points, respectively). Newark, on the other hand, showed a substantial decrease (11 percentage points) in this age group during that period.

Mirroring the marijuana ED mention figures, the 18–25 age group, which accounts for the largest proportion of treatment admissions in seven cities, is also overrepresented in marijuana admissions (where data are available) (exhibit 30). The youngest group (17 and younger) accounts for the largest proportion in six areas: Colorado, Los Angeles, Minneapolis/St. Paul, San Diego, Seattle, and Texas. In New York City, the two youngest groups (≤17 and 18–25) account for 65 percent of the admissions.

In Baltimore, where primary marijuana use represented 15 percent of treatment admissions in 1998, 41 percent were younger than 18. In Hawaii, marijuana accounted for the majority of treatment admissions among those younger than 18. In addition, the marijuana admissions in San Diego were the youngest in the treatment population, with 64 percent younger than 18.

Among cities where comparison data for marijuana treatment admissions were available between the second halves of 1998 and 1999, the youngest group declined notably (≥5 percentage points) in Atlanta, Newark, and Washington, DC; the 18–25 group increased in Atlanta and Washington, DC. Newark was the only city where the 26–34 age group substantially increased.

In Miami, indicators suggest a decline in marijuana problems among adolescents; however, indicators also show rising trends in the 18–25 and 35+ age categories. In Boston, survey and focus group data indicate that marijuana use remains very common among youth, with the widespread perception that cannabis is less risky than drugs

Exhibit 30. Age and gender distribution of primary marijuana treatment admissions, by percentage, in reporting CEWG areas^a

Area	≤17	18–25	26–34	35+	Male
Atlanta	7	57	23	13	78
Boston	16	48	22	14	73
Chicago ^a	36	39	16	9	77
Colorado	36	27	17	21	78
Los Angeles ^a	40	25	20	16	69
Minneapolis/ St. Paul ^a	49	28	13	10	79
Newark	26	34	31	9	81
New York City ^b		65	24	11	80
Phoenix ^a	0	46	31	22	78
St. Louis ^a	10	49	27	14	80
San Diego	64	16	11	9	73
Seattle	54	23	14	10	70
Texas ^c	50	27	13	9	75
Washington, DC ^a	5	50	30	15	88

^aReporting periods are July–December 1999, except for the following: January–June 1999 in Chicago and St. Louis; full calendar year 1999 in Minneapolis/St. Paul and Washington, DC; October–December 1999 in Los Angeles; full calendar year 1998 in Phoenix.

^bAge groups are ≤25, 26–35, and 36+.

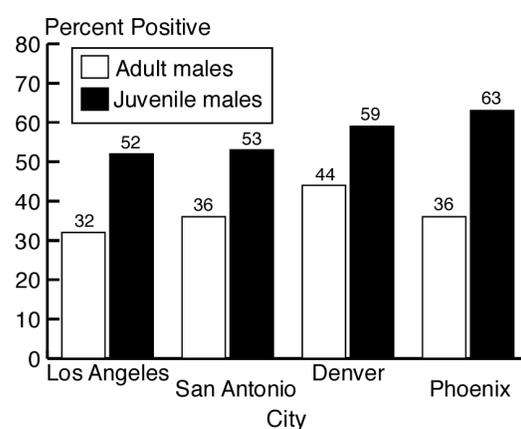
^cDallas area data are not included.

SOURCE: State drug abuse treatment agencies

such as lysergic acid diethylamide (LSD), cocaine, or heroin. In Minneapolis/St. Paul, marijuana maintained a strong presence as a drug of abuse among adolescents. Mean age of first marijuana use in Atlanta was 16 years, much lower than in the previous semester (24 years). Although marijuana is considered a substance mainly used by youth in New York City, older adults (25 years and older) are using marijuana openly and appear to be growing in number.

In the five CEWG cities where ADAM test results were reported for male adult and juvenile arrestees—Denver, Los Angeles, Phoenix, San Antonio, and San Diego—the

percentage of juveniles testing positive for marijuana in 1999 was substantially greater than the percentage of adults (exhibit 31).

Exhibit 31. Percentage positive for marijuana among adult and juvenile male booked arrestees, 1999*

*1999 data are preliminary.

SOURCE: National Institute of Justice, Arrestee Drug Abuse Monitoring program (March 2000 files)

Gender

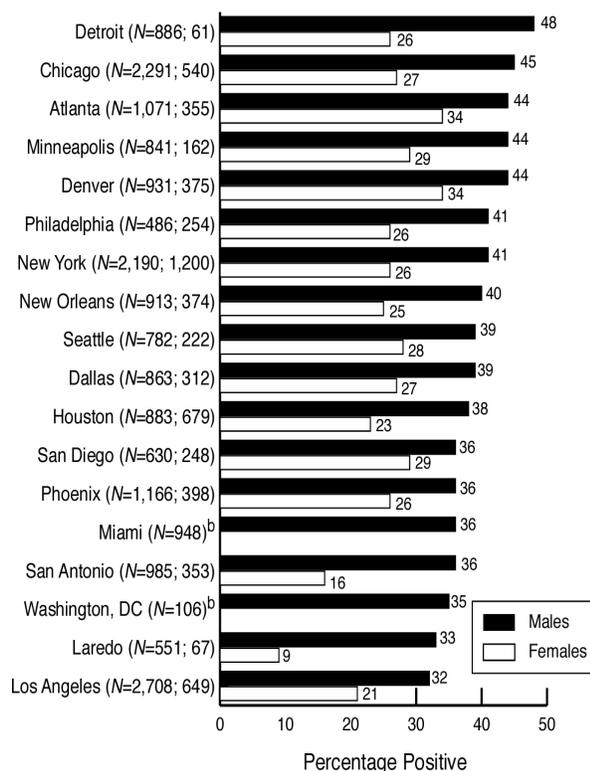
In all CEWG cities in DAWN, males consistently outnumber females in marijuana ED mentions, with males ranging from 61 percent in Boston to 78 percent in San Francisco (exhibit 29). Between the first halves of 1998 and 1999, only Minneapolis/St. Paul showed an increase in the percentage of males among marijuana ED mentions (12 percentage points). Conversely, the percentage of females among marijuana mentions increased (5–9 percentage points) in Denver, Los Angeles, New York, St. Louis, and San Francisco.

Treatment admissions in the second half of 1999 were also more likely to involve males than females (exhibit 30). In all 14 areas where data were available, males accounted

for the vast majority of marijuana treatment admissions, ranging from 69 percent in Los Angeles to 88 percent in Washington, DC.

According to 1999 ADAM data, adult males tested marijuana-positive at higher levels than adult females in all CEWG cities where both genders were tested (exhibit 32). Detroit had the highest level for males (48 percent), and Los Angeles had the lowest (32 percent). Among cities where adults females were tested, the highest percentages were in Atlanta and Denver (both at 34 percent), and the lowest was in Laredo (at 9 percent).

Exhibit 32. Percentage positive for marijuana among male and female booked arrestees, 1999^a (ranked by males)



^a1999 data are preliminary.

^bFemales are not tested at these sites.

SOURCE: National Institute of Justice, (March 2000 files)

Race/Ethnicity

Among marijuana ED mentions in the first half of 1999, whites and African-Americans each predominated in about half of the CEWG cities. Whites accounted for the largest percentage of mentions in 10 cities: Baltimore, Boston, Dallas, Denver, Minneapolis/St. Paul, Phoenix, St. Louis, San Diego, San Francisco, and Seattle. African-Americans accounted for the majority in nine cities: Atlanta, Chicago, Detroit, Miami, Newark, New Orleans, New York, Philadelphia, and Washington, DC. (No data were reported for African-Americans in Los Angeles.) Hispanics accounted for a substantial number of the mentions (≥ 15 percent) in five cities: Los Angeles (22 percent), Newark (15 percent), New York (28 percent), Phoenix (15 percent), and San Francisco (17 percent).

Between the first halves of 1998 and 1999, the percentage of white marijuana ED mentions increased considerably (≥ 5 percentage points) in Newark, San Diego, and Seattle (12, 5, and 6 percentage points, respectively). The proportion of African-American marijuana mentions increased 5–7 points in Atlanta, New Orleans, and Philadelphia. Correspondingly, the percentage of whites decreased considerably (5–14 points) in seven cities: Atlanta, Boston, Denver, Los Angeles, Philadelphia, Phoenix, and San Francisco. The proportion of African-Americans decreased considerably in 5 cities: Denver, Detroit, Newark, New York, and Phoenix. In Denver and Phoenix, marijuana ED mentions for Hispanics decreased 16 and 9 percentage points, respectively, between those same periods.

In nearly all areas where data were available, whites predominated in marijuana treatment

admissions. Specifically, whites accounted for the majority of admissions in eight areas (Atlanta, Boston, Chicago, Colorado, Minneapolis/St. Paul, Phoenix, San Diego, Seattle, and Texas), while African-Americans accounted for the majority in four cities (Newark, New York, St. Louis, and Washington, DC). In Boston, African-Americans and Hispanics accounted for the same percentage of marijuana admissions (24 percent each). Hispanics accounted for the majority only in Los Angeles; however, they also accounted for substantial proportions (≥ 20 percent) in Boston, Colorado, Newark, New York City, Phoenix, San Diego, and Texas.

In cities where data for the second halves of 1998 and 1999 were available, the race distribution of marijuana treatment admissions remained fairly stable.

LAW ENFORCEMENT DATA

Arrestee Data

In 1999, marijuana was the most frequently detected drug among adult male arrestees in 11 CEWG ADAM cities (Chicago, Dallas, Denver, Detroit, Houston, Minneapolis, Philadelphia, Phoenix, San Antonio, San Diego, and Seattle). The findings in those 11 cities ranged from a low of 36 percent of male arrestees testing positive in Phoenix, San Antonio, and San Diego, to a 48-percent high in Detroit. Positive marijuana findings among female arrestees ranged from 9 percent in Laredo to 34 percent in Atlanta and Denver.

Comparing 1998 and 1999 figures, the percentage of adult male arrestees testing positive for marijuana increased substantially (≥ 5 points) in Atlanta (18 percentage points), Miami (7 points), and Los Angeles

(5 points). Laredo registered a substantial decrease (6 percentage points), as did San Antonio (5 points). Figures remained relatively stable for the rest of the cities in the ADAM program. Among adult female arrestees, substantial increases were recorded only in Chicago (7 percentage points) and Minneapolis (6 points), while a substantial decrease was recorded in Seattle (10 points). The female arrestee figures remained relatively stable in the rest of the cities.

In the seven CEWG cities where ADAM tests male juvenile arrestees, marijuana remained by far the number-one drug detected. Positive marijuana findings among male juveniles ranged from 52 percent in Los Angeles to 63 percent in Phoenix. Data for female juvenile arrestees in the four CEWG cities where ADAM tests this group also show that marijuana is, by far, the number-one drug detected, with positive findings from 24 percent in San Antonio to 41 percent in Denver and San Diego.

In Washington, DC, pretrial services data indicate that between 1999 and the first 4 months of 2000, about 63–64 percent of juveniles arrested tested marijuana-positive. Fourth-quarter-1999 and first-quarter-2000 data from the Juvenile Probation Program in Phoenix revealed that 84 and 86 percent of youth clients, respectively, report marijuana as their primary drug of abuse.

In spite of the decriminalization of possessing small amounts of marijuana, the New York Police Department continues to make a record number of related arrests. Cannabis-involved arrests had reached a low of 4,762 in 1991, and then increased nearly ninefold to 42,030 in 1998. Between 1997 and 1998, the number increased 53 percent (from 27,531 to 42,030) and remained relatively

stable in the first 6 months of 1999 (20,775 arrests). Nearly all of these 1999 arrests were for misdemeanors, and one-third of cannabis arrests involved 16- to 20-year-olds.

Market Data

Exhibit 33 presents available marijuana price data in the CEWG areas. Prices have remained relatively stable since the December 1999 reporting period. While the 1999 marijuana price in Washington, DC, was low compared with that of other metropolitan areas in the region (such as Baltimore, Maryland; Charleston, West Virginia; and Norfolk, Virginia), the 2000 price per pound is the highest among these metropolitan areas (at \$2,000 per pound), possibly reflecting the increase in dealer arrests and seizures.

The DEA reports that marijuana remained the most prevalent drug of abuse in Atlanta during the first quarter of fiscal year (FY) 2000. Street researchers in New York report the ready availability of marijuana, and sales are flourishing in a variety of indoor locations. Similarly, in Seattle/King County, where marijuana remains the most widely used illegal drug, it is not readily available as a street drug—the main venues for sale and purchase of marijuana are known (“house”) connections or selected coffeehouses and bars.

The DEA reports that marijuana continues to be readily available in Boston, and the size of local growing operations discovered in Massachusetts and the tetrahydrocannabinol (THC) content of the local plants have increased. In Chicago, available marijuana is regarded as high quality, and the abundance and popularity of the drug across the city has

led to an increased array of varieties and prices.

In some CEWG areas, THC content seems to be rising. For example, Denver reports indicate a substantial availability of stronger marijuana, and marijuana from British Columbia, known as “BC bud,” is available. New sophisticated indoor growing methods in Florida may contribute to an increase in THC content (from about 1.8 percent in the 1980s to 4.6 percent currently). In addition, sinsemilla THC content has increased from 6 percent in the 1980s to 12–20 percent now.

Seizures

The majority of marijuana seizures in Michigan are of shipments believed to originate in Mexico. Furthermore, it appears that outdoor growing in Michigan may have declined in 1998 and 1999. In St. Paul, Minnesota, a large indoor marijuana growing operation was uncovered in April, with 135 mature plants and 74 seedlings.

The share of marijuana among drug seizures in Newark increased between 1991 and 1997. Marijuana accounted for 25 percent of drug seizures in the first quarter of 2000, compared with heroin (30 percent) and cocaine (45 percent). DEA drug seizures in the Newark area declined between FYs 1998 and 1999 (from 4,773 to 2,280).

Although cannabis seizure rates increased significantly in Seattle between 1997 and 1998, data from the U.S. Customs Service (USCS) for 1999 (through October 6) indicate a decrease in both the number and average weight of such seizures. In 1999,

**Exhibit 33. Marijuana prices and purity in reporting CEWG cities,
June 2000 reporting period**

City	Source/Quality	Price/Unit	
		Ounce	Pound
Atlanta	Sinsemilla	\$160–\$250	\$1,000–\$2,000
	Domestic	\$120–\$240	\$1,200
Boston	Commercial grade	\$150–\$250	\$1,000–\$2,000
	Sinsemilla	\$300–\$500	\$1,500–\$3,500
Chicago	Sinsemilla	\$100–\$200 (type unspecified)	\$2,500–\$4,000
	Colombian		\$1,800–\$2,000
	Mexican		\$900–\$1,200
Denver	Commercial grade	\$50–\$150	\$800–\$1,200
	Sinsemilla	\$100–\$200	\$1,500–\$3,500
Honolulu	“Low quality”	\$250–\$500	\$6,000–\$9,000
	“High quality”	\$400–\$800	(type unspecified)
Los Angeles	NR	≤\$150	\$1,000–\$1,500
Miami	Commercial grade (“regs”)	NR	\$800–\$1,000
	Hydroponic (“crippy”)	\$600+	\$2,000–\$4,000
Minneapolis/St. Paul	NR	\$250	\$800–\$850
New Orleans ^a	NR	\$125–\$160	\$750–\$1,000
New York City	NR	NR	\$800–\$2,500
	“Good-quality commercial”		\$2,000–\$4,000
Phoenix	NR	\$75–\$150	\$500–\$750
San Diego	NR (2–3% THC)	\$50–\$75	\$310
	“BC bud” (25% THC)	NR	\$4,000
San Francisco	NR	NR	NR
Seattle ^b	Sinsemilla	\$325–\$400	\$4,000–\$5,200
Texas	Commercial grade	\$40–\$100	\$450–\$800
	Mexican	NR	\$325–\$700
	Sinsemilla	NR	\$3,000–\$5,000
Washington, DC	Average quality	\$120	\$2,000

^a\$2,000/kilogram^b\$6,000–\$8,000/kilogram

SOURCE: CEWG city reports, June 2000

the USCS reported 431 seizures, compared with 853 in 1998. In addition, the average weight of seizures in 1999 was 6 pounds, compared with 34 pounds in 1998.

According to the Washington, DC, police, the number of adults arrested for marijuana sales increased to 355 in 1999, after hovering

at 240 in 1996–98; however, the number of adults arrested for possession remained steady. Furthermore, for the past several years, marijuana has been the second most common illicit drug seized: in 1999 and the first quarter of 2000, marijuana accounted for more than one-third of all drug seizures, and the amount seized increased between 1997

and 1999 and remained relatively stable through the first quarter of 2000 (at 27 kilograms).

Cultivation and Trafficking

Miami: “Approximately 30 percent of the domestic marijuana in South Florida is grown in sophisticated, fully automatic indoor hydroponic operations. Marijuana plants found in a Florida house raided in 1999 had a THC content of 26.5 percent, close to the national record of 30 percent.”

Phoenix: “The DEA reported an increasing trend along the Arizona-Mexico border. Marijuana is packaged in ball shapes that are 6–12 inches in diameter and covered in brown contact paper. The balls are joined by either a piece of rope or with the remaining contact paper. U.S. Border Patrol officers indicated that ‘mules’ can sling the balls or jettison the drugs into low desert underbrush when law enforcement personnel approach the smugglers.”

Indoor marijuana production seems to be increasing in many CEWG areas. While imported marijuana continues to move into

South Florida, the major sources of marijuana have shifted from imported to domestic, approximately 30 percent of which is grown in hydroponic operations. Indoor production is also the primary cultivation mode in St. Louis, making weather less of a factor; law enforcement officials now focus on indoor growing operations. Much of the marijuana grown in Missouri is shipped out of State.

Despite the ready availability and rise of domestic marijuana, the imported variety remains the preference of many wholesaler and retailer groups. Most cannabis is shipped overland or via delivery services from Mexico via the U.S. Southwest, as well as from Jamaica and Colombia. Good profit margins and relatively weak penalties are incentives to traffic in marijuana, according to police contacts. For example, the Denver DEA states that the most abundant supply of marijuana is Mexican grown, trafficked into the area by vehicles in shipments of 2–500 pound quantities. Marijuana, which remains widely available in Arizona, is the most frequently seized drug along the southwest border, and Tucson is considered the transshipment point for loads destined for other areas across the United States.

METHAMPHETAMINE

Boston: “Key informants and focus group participants thought that methamphetamine is more likely used as a ‘club drug’ along with GHB, ketamine, and MDMA. Users are generally students and young adults, especially those who frequent raves or have recently arrived from the west coast, where crystal methamphetamine is common.”

Denver: “Anecdotal reports from clinicians, researchers, and street outreach workers around the State affirm the erratic, up-and-down trends of methamphetamine indicators. Treatment programs report drops in methamphetamine use due to enforcement (lab busts) and lowered drug quality. Reports of not trusting ‘cookers’ are common. In addition, many communities have distributed substantial information about the considerable physical and psychological problems brought about by methamphetamine use.”

MORTALITY DATA

Methamphetamine-related deaths remained relatively few. Between 1998 and 1999, stimulant mortality data show increases in four CEWG reporting areas:

- Honolulu: Methamphetamine-related deaths increased 26 percent (from 27 to 34).
- Philadelphia: Methamphetamine toxicology reports doubled (from 6 to 12).
- Phoenix: Continuing an upward trend, methamphetamine-related deaths increased 47 percent (from 51 to 75).
- Seattle/King County: Amphetamine-caused deaths increased sharply (to 14) after the 1998 low of 3.

By contrast, between 1998 and 1999, methamphetamine-related deaths declined in two areas and remained stable in one:

- Minneapolis/St. Paul: Methamphetamine-related deaths remained relatively stable (from 8 to 7).
- San Diego: Methamphetamine-related overdose deaths, which peaked in 1997

(at 62 deaths), declined 19 percent (from 52 to 42).

- San Francisco: Amphetamine-caused deaths declined 56 percent (from 45 to 20).

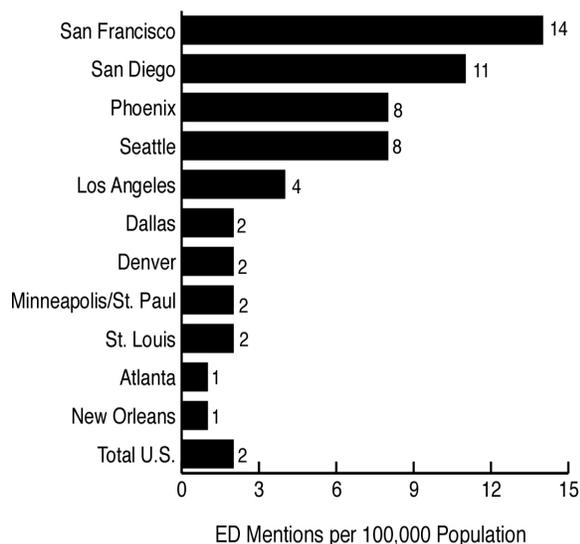
Earlier (1997 versus 1998) DAWN ME data show six declines of methamphetamine mentions in drug-related deaths (in Dallas, Denver, Los Angeles, Philadelphia, San Diego, and San Francisco), two increases (in Phoenix and St. Louis), and two stable trends (in Minneapolis/St. Paul and Seattle). Methamphetamine ME mentions peaked in 1997 in most areas (Dallas, Denver, Los Angeles, Philadelphia, and San Diego), in 1998 in Phoenix, and in 1995 in San Francisco and Seattle.

EMERGENCY DEPARTMENT DATA

The highest proportions of methamphetamine-per-total ED mentions in the first half of 1999 were in the Western United States: Los Angeles, Phoenix, San Diego, San Francisco, and Seattle (from 2 to 5 percent) (exhibit 2). All these percentages declined from 1998 proportions (except for Seattle’s, which remained stable).

In the first half of 1999, among CEWG cities in DAWN, San Francisco, San Diego, Seattle, Phoenix, and Los Angeles had the highest methamphetamine-per-total-mention proportions, and also the highest ED rates per 100,000 population (exhibit 34).

Exhibit 34. Estimated rate of methamphetamine ED mentions per 100,000 population by metropolitan area, first half 1999*



*First-half-1999 data are preliminary.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 1999 (October 1999 update)

Between the first halves of 1998 and 1999, methamphetamine ED mentions declined significantly ($p < 0.05$) in eight cities (Atlanta, Chicago, Dallas, Denver, New Orleans, Phoenix, San Diego, and San Francisco), declined nonsignificantly in four cities (Los Angeles, Minneapolis/St. Paul, New York, and Seattle), and increased nonsignificantly in three (Boston, Philadelphia, and St. Louis) (exhibit 35).

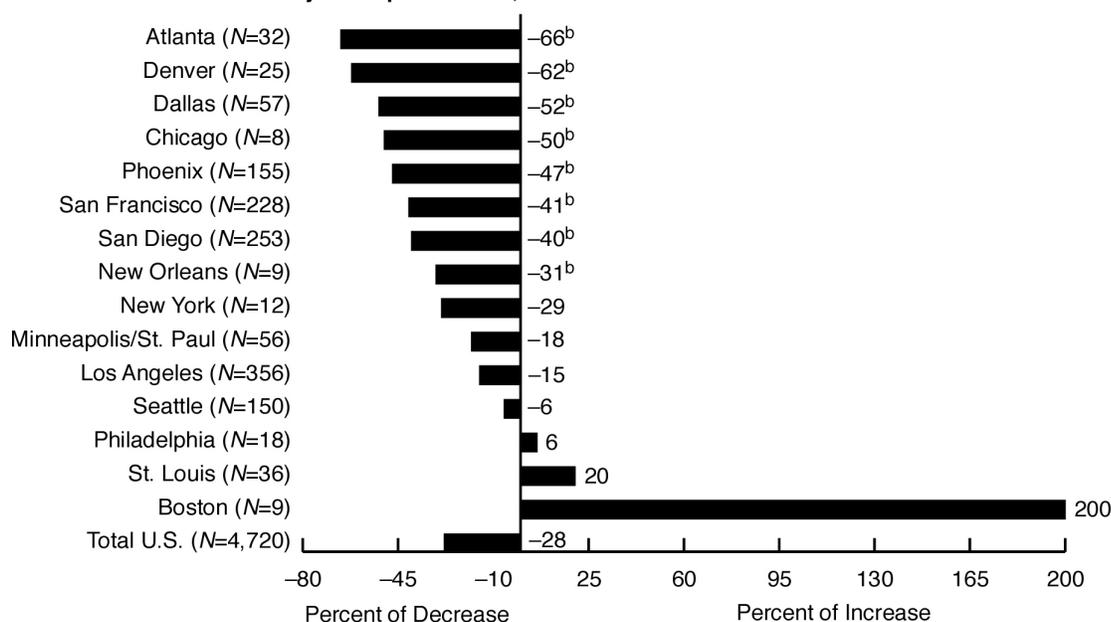
Recent declines in western areas continue generally downward trends (exhibit 36). Rates in most of these areas peaked in the first halves of 1995 and 1997 and declined in the first halves of 1998 and 1999. The most recent rates represent an 8-year low for San Francisco, a 7-year low for Los Angeles, and a 5-year low for Phoenix.

OTHER LOCAL DATA

Other local data show mixed trends and low- to mid-levels of methamphetamine use.

- Denver: The 7-year trend (1993–99) of amphetamine-related hospital discharges per 100,000 population is nearly identical to the methamphetamine ED rates per 100,000 population for this time period. Both more than doubled from 1993 to 1995, declined in 1996, increased in 1997, and declined in both 1998 and 1999.
- Denver: Amphetamine-related poison calls had decreased between 1994 and 1996 (from 36 to 16 calls), but increased sharply in 1997 (38 calls). While such calls dropped to only 11 in 1998, they rebounded to an astounding 291 in 1999.
- Detroit: Amphetamine-related poison calls increased 8 percent between 1998 and 1999 (from 351 to 379).
- San Francisco: Amphetamine-related hospital discharges increased 32 percent between 1996 and 1997, but decreased in 1998 by 15 percent.

Exhibit 35. Percentage of change in methamphetamine ED mentions by metropolitan area, first half 1998 versus first half 1999^a



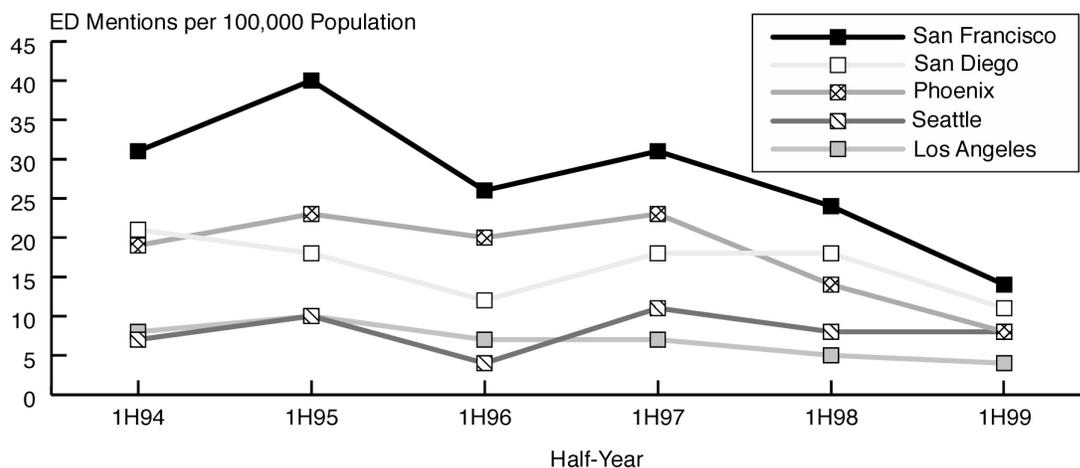
NOTE: (N) refers to first-half-1999 mentions.

^aFirst-half-1999 data are preliminary.

^bp<0.05

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 1999 (October 1999 update)

Exhibit 36. 5-year trends in methamphetamine ED mentions per 100,000 population in the five cities with the highest rates, first half 1994 through first half 1999*



*First-half-1999 data are preliminary.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 1999 (October 1999 update)

- South Florida: In the last half of 1999, 37 amphetamine-positive toxicology screens at Broward General Medical Center were reported (1 percent of all screens).
- Texas: Poison centers reported 178 amphetamine cases in 1999. Of these, 102 involved misuse or abuse. The average age was 27 years, 55 percent were male, and 27 percent were from the Dallas area.
- Texas: According to a 1998 male prison inmate survey, 7 percent reported past-month stimulant use. The most popular were “crystal,” “black mollies,” “Methedrine,” and “speed.” Injection was the most common route of administration.

TREATMENT DATA

Stimulants continued to account for the largest percentage of all treatment admissions in Hawaii and San Diego, and stimulant admission proportions equaled heroin proportions for the first time in Phoenix (exhibit 6). Stimulant admission proportions remained low in other areas of the country (exhibit 37). In all CEWG areas where stimulant trend data were available for the second halves of 1998 and 1999, admission proportions remained relatively stable. In Hawaii, despite long waiting lists, methamphetamine admissions increased 11 percent between the first and last halves of 1999 (from 900 to 999 admissions).

Long-term treatment admission trends in western cities show increases between 1993 and 1998, but some show recent declines:

BEYOND THE CITY LIMITS...

Detroit: “In the first half of FY 2000, there were 51 statewide admissions with stimulants as the primary drug, with none of these occurring in Detroit/Wayne County. These admissions lived in 20 different counties—most in the western part of Michigan, and many in largely rural areas.”

Minneapolis/St. Paul: “In 1999, 42 percent of methamphetamine treatment admissions were from the metropolitan area compared with 53 percent in 1994—a change that may reflect increased use in nonmetropolitan areas of the State.”

St. Louis: “In rural areas, methamphetamine recently appeared in treatment data, ED data, and anecdotal reports. While the numbers were still relatively low, in rural treatment programs methamphetamine was the drug of choice after alcohol.”

Seattle: “Data suggest that methamphetamine is becoming a more significant problem in rural eastern and southern Washington and Puget Sound outside of Seattle and King County. ...Lewis County, a predominately rural county in south central Washington, had the highest methamphetamine treatment admissions rate of 249 per 100,000 population.”

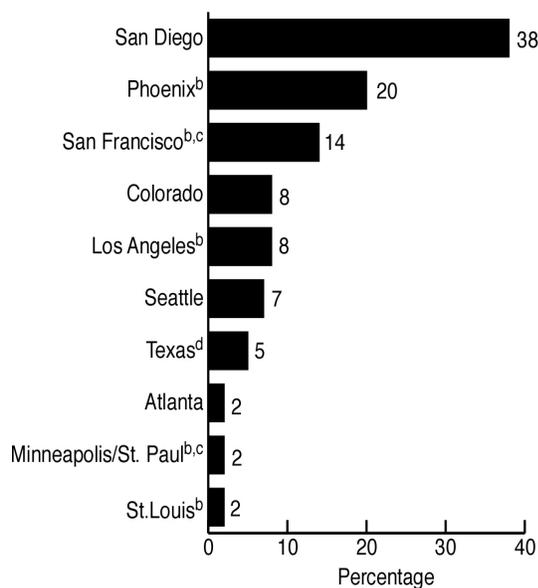
- Denver: Methamphetamine admissions more than quadrupled between 1993 and 1998, with its percentage of total treatment admissions increasing from 5 to 14 percent; however, between 1998 and 1999 this proportion dropped to 11 percent. The proportion of new admissions peaked at 31 percent in 1997, but declined to 20 percent in 1999.

- San Francisco Bay area: Between 1993 and 1999, amphetamine admissions increased 229 percent, but have remained unchanged between 1998 and 1999. All other methamphetamine indicators are down in the area—a discrepancy most likely due to a lag from 1997 (the peak use year) and to county support of several new treatment programs for methamphetamine users.
- Seattle/King County: Over the last 7 years, admissions increased, with the most dramatic increases occurring in 1993–95 and 1997–98.

USE PATTERNS

Washington, DC: “Ethnographic reports indicate several user groups: young, heterosexual adults, who use methamphetamine primarily at dance and music venues, men who have sex with men, and college students. These groups use the drug intermittently or on a more continuous basis and commonly with other drugs (such as marijuana, cocaine HCl, alcohol, or MDMA) to heighten its effect or to mitigate the discomfort of ‘coming down’ from it. Individuals use it for social and recreational, as well as occupational, purposes. For instance, area college students use it to maintain hyperalertness in their studies over long periods of time.”

Exhibit 37. Methamphetamine as a proportion of primary drugs of abuse among treatment admissions^a, second half 1999^b



^aTotal admissions number excludes alcohol-only but includes alcohol-in-combination.

^bReporting periods are July–December 1999, except for the following: January–June 1999 in St. Louis; full calendar year 1999 in Minneapolis/St. Paul; October–December 1999 in Los Angeles; full calendar year 1998 in Phoenix and San Francisco.

^cAlcohol-only is not excluded.

^dDallas area data are not included.

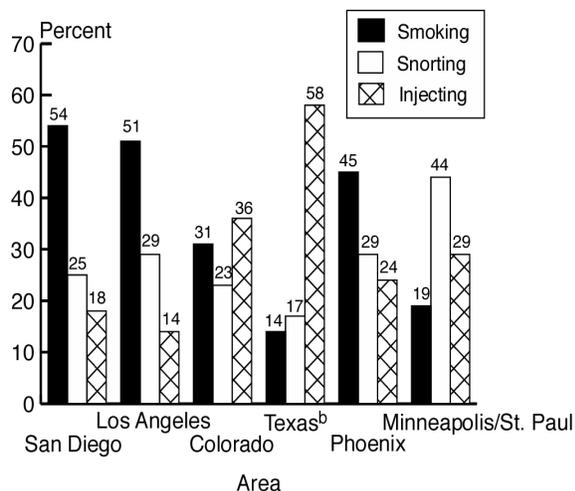
SOURCE: State drug abuse treatment agencies

Route of Administration

Methamphetamine route of administration varies across the country. Within cities, it tends to be more equally distributed among smoking, intranasal use, and injecting than are other drugs. Among western cities where data are available, smoking and injecting are the most common routes of administration: smoking is most common in three of six western areas (Los Angeles, Phoenix, and San Diego); and injecting is most common in the other three (Colorado, Seattle, and Texas) (exhibit 38). Intranasal use accounts for 1–29 percent of methamphetamine treatment admissions in reporting areas.

In two of three of the nonwestern cities with available data, intranasal use is most common (at 44 percent in Minneapolis/St. Paul and 36 percent in St. Louis). In Chicago, smoking is most common (at 34 percent), but intranasal use is relatively high (at 29 percent). In these nonwestern areas, pro-

Exhibit 38. Route of administration among primary methamphetamine treatment admissions in selected CEWG areas during the most recent reporting period^a



^aReporting periods are July–December 1999, except for the following: full calendar year 1999 in Minneapolis/St. Paul; October–December 1999 in Los Angeles; full calendar year in 1998 Phoenix.

^bDallas area data are not included.

SOURCE: State drug abuse treatment agencies

portions of methamphetamine admissions who inject range from 16 to 35 percent. In Atlanta, intranasal use seems to be the most common route of administration, but many intranasal users later switch to injecting. By contrast, in Hawaii, methamphetamine smokers (the majority of treatment admissions) rarely shift from smoking to injecting.

In Denver between 1993 and 1999, the proportion of methamphetamine clients who inject declined (from 50 to 36 percent), while the proportion of those who smoke increased (from 8 to 34 percent). Similarly, in Los Angeles, the proportion of methamphetamine admissions who smoke increased recently. Conversely, in Minneapolis/St. Paul, the proportion of methamphetamine admissions who inject

increased between 1998 and 1999 (from 20 to 29 percent).

In Texas, where most methamphetamine admissions inject, demographic differences are noted by mode of administration. For example, methamphetamine clients who inject tend to be older, are more likely to be white, and are more evenly distributed between genders than those who use intranasally or smoke. Those who smoke are more likely to be Hispanic and female than those who use intranasally or inject.

Multisubstance Abuse

Polydrug use among methamphetamine users appears high in most areas. Of five Ramsey County (Minneapolis/St. Paul) methamphetamine-related deaths in 1999, one involved cocaine and another involved both cocaine and opiates. Methamphetamine-in-combination deaths in Phoenix continued to increase between 1998 and 1999 (from 30 to 43). Among primary stimulant admissions in reporting CEWG areas, marijuana and alcohol were mentioned as secondary and tertiary drugs of choice, except in San Diego, where alcohol was mentioned as both the secondary and tertiary drug of choice. In San Diego, among alcohol-in-combination primary treatment admissions, methamphetamine was the most common secondary drug.

Youth workers in Seattle report disturbing increases in the number of youth who are mixing heroin with methamphetamine, causing concerns of potential overdoses. In Chicago, heroin users who also use crystal methamphetamine often report using it to stay functional as opposed to getting high. In Atlanta, ethnographic sources indicate that the use of marijuana and alcohol, as

well as common depressants, is common among methamphetamine users to ease the crash of a methamphetamine high. Reports there also show that cocaine use is common among some methamphetamine users, and that some drug users have turned to methamphetamine instead of cocaine.

DEMOGRAPHIC DATA

Age

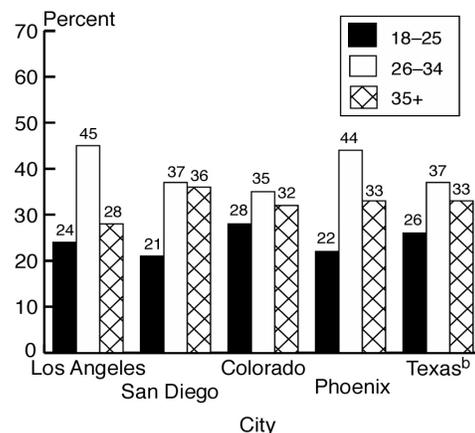
Of the 42 methamphetamine-related decedents in 1999 in San Diego, most (83 percent) were 36 years or older. In San Francisco, the median age of FY 2000 methamphetamine-related decedents was 42.

Treatment clients older than 25 account for the majority (59 to 77 percent) of stimulant treatment admissions in all reporting CEWG areas (Chicago, Colorado, Los Angeles, Minneapolis/St. Paul, Phoenix, St. Louis, San Diego, Seattle, and Texas) (exhibit 39). The 18–25 group constitutes more than 20 percent of stimulant treatment admissions in all reporting CEWG areas. The ≤17 group accounts for ≥5 percent in five areas: Chicago, Colorado, Minneapolis/St. Paul, San Diego, and Seattle.

In Denver, proportions of methamphetamine treatment admissions shifted between 1998 and 1999: the ≤25 group declined (from 38 to 32 percent), while the ≥35 group increased (from 27 to 32 percent). Similarly in Texas, methamphetamine admissions seem to be aging: between 1985 and 1999, the average age rose from 26 to 31. By contrast, in San Diego, methamphetamine admissions are the youngest of all drug treatment admissions, except for marijuana. The 18–35-year-olds account for 60 percent of treatment admissions there.

In nonwestern cities, where methamphetamine use is low, ethnographic sources find that methamphetamine users are students or club goers. For example, in 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. In New Orleans, use seems to be high among young people age 17–25. In Baltimore and Boston, methamphetamine is used as a club drug by youth. In Atlanta, ethnographic sources indicate that the highest prevalence of methamphetamine use is among teens and young adults, although younger individuals are not represented in public drug treatment data—possibly due to recent initiation of use and the perception of controlled use. During the past 2 years in Chicago, young, white youth in an area on the North Side and on the Chicago-Indiana State border have used methamphetamine, especially those who have traveled extensively in the West.

Exhibit 39. Age distribution of primary methamphetamine treatment admissions in selected CEWG areas during the most recent reporting period^a



^aReporting periods are July–December 1999, except in Los Angeles (October–December 1999) and Phoenix (full calendar year 1998).

^bDallas area data are not included.

SOURCE: State drug abuse treatment agencies

In 1999, methamphetamine-positive levels among male juveniles (tested in Denver, Los Angeles, Phoenix, San Antonio, and San Diego) in the ADAM program ranged from 0.4 in San Antonio to 16 in San Diego. Also in San Diego, the methamphetamine-positive level among juvenile arrestees is the second highest of all drugs tested, following marijuana. Levels among male juvenile arrestees there increased between 1998 and 1999 (from 12 to 16 percent); levels remained stable in other cities.

Gender

In San Diego, most (83 percent) of methamphetamine-related decedents in 1999 were male. Similarly, 90 percent of San Francisco methamphetamine-related decedents were male.

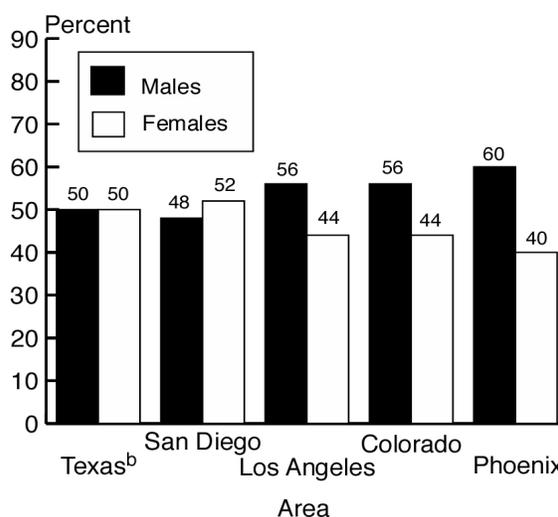
Conversely, among methamphetamine treatment admissions, males and females are distributed relatively evenly (≤ 12 percentage points) in reporting CEWG cities, except in Minneapolis/St. Paul and Phoenix (62 percent males) (exhibit 40). In San Diego, among methamphetamine admissions, females outnumber males (52 versus 48 percent), but in all other reporting areas males outnumbered females.

In several areas (including Atlanta, New Orleans, and San Francisco), gay men are the predominant participants of the methamphetamine user populations. In San Francisco, this population may create localized increases in the apparent prevalence of methamphetamine use in districts where gay men are displacing African-Americans.

Female arrestees generally were as likely as their male counterparts to test methamphetamine-positive in almost all ADAM sites

(although arrestee samples were smaller for females than for males in all sites) (exhibit 41).

Exhibit 40. Gender of primary methamphetamine treatment admissions in selected CEWG areas during the most recent reporting period^a



^aReporting periods are July–December 1999, except in Los Angeles (October–December 1999) and Phoenix (full calendar year 1998).

^bDallas area data are not included.

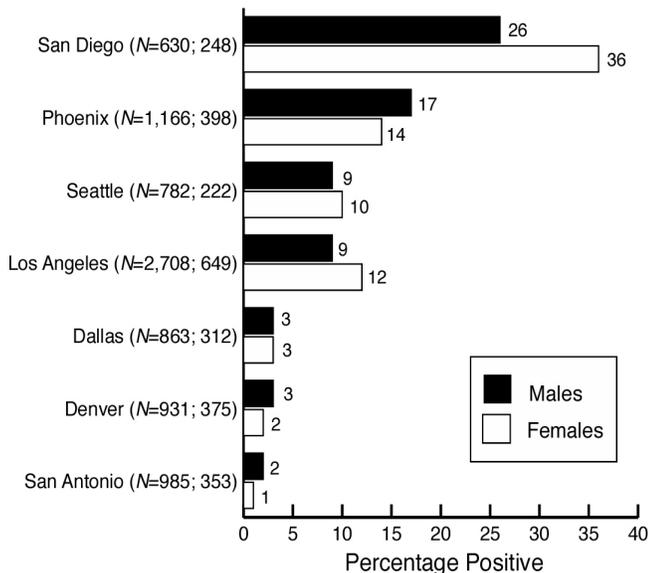
SOURCE: State drug abuse treatment agencies

Race/Ethnicity

Mortality and treatment data indicate that methamphetamine users are predominantly white. For example, in San Diego, among methamphetamine-related decedents in 1999, most (71 percent) were white, 12 percent were African-American, and 14 percent were Hispanic. Whites were the majority group in all areas reporting treatment data, ranging from 59 percent in Los Angeles to 97 percent in St. Louis. Hispanics held large proportions in Los Angeles (26 percent, and the number is increasing) and San Diego (12 percent). In San Diego, the racial/ethnic breakdown for methamphetamine admissions, unlike that for other drug admissions,

continues to closely resemble the general population demographics. By contrast in Seattle, the ethnic minority representation was disproportionately low, with whites constituting 86 percent. In Texas, where whites constitute 92 percent, Hispanics 5 percent, and African-Americans only 1 percent, minority proportions continue to decline. In the Miami area, all (12) hospital cases involving amphetamine in 1999 were young and white; most (11) were male.

Exhibit 41. Percentage positive for methamphetamine among male and female booked arrestees in selected cities, 1999* (ranked by males)



*1999 data are preliminary.

SOURCE: National Institute of Justice, Arrestee Drug Abuse Monitoring Program (March 2000 files)

LAW ENFORCEMENT DATA

Arrestee Data

San Diego, by far, tops the list of CEWG cities in methamphetamine-positive urinalysis levels among adult ADAM arrestees (exhibit 41). 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 there, however, have been small (≤ 3 percent).

Between 1998 and 1999, methamphetamine-positive levels among male adult arrestees remained relatively stable (<3 percentage-point change), except in San Diego, where male arrestee levels declined by 7 points. By contrast, levels among female arrestees increased in San Diego (by 3 percentage points) and Seattle (by 4 points), but declined sharply (by 8 points) in Phoenix.

In 1999, Seattle/King County prosecuted 80 methamphetamine-related felonies, a mild increase from 75 in 1998. However, Big Island methamphetamine cases in Hawaii have increased almost sixfold between the second halves of 1998 and 1999 (from 36 to 205).

Market Data

BEYOND THE CITY LIMITS...

Boston: "The DEA reported some multiounce and pound seizures in Maine and user quantity seizures in New Hampshire, suggesting that rural New England areas (including western Massachusetts) might be developing local methamphetamine markets."

In most western areas of the United States, methamphetamine is readily available. In Hawaii, methamphetamine ("ice") availability remains high; there it appears in two forms: "clear," a clean, white form; and "wash," a brownish, less processed form. The DEA reports that methamphetamine is also readily available and in high demand through the Midwest, where it is sold in vials, plastic bags, and paper or foil wrappers. It is less

available in the East. For example, Philadelphia focus group members indicate that methamphetamine remains difficult to obtain, is not sold outdoors, and requires a connection. Although methamphetamine indicators in Washington, DC, are low, ethnographic data indicate the availability of a range of methamphetamine, differentiated by strength and purity, and known in increasing potency as “peanut butter,” “bathtub speed,” “crystal,” “hydro,” “glass” (one of the most common high-quality forms available there), and “ice.” Unscrupulous dealers in Washington, DC, may be selling Epsom salts as methamphetamine.

Methamphetamine prices vary in the reporting areas, depending on purity, availability, and quantity (exhibit 42). Since the last reporting period, prices have remained relatively steady in CEWG reporting areas, except in Phoenix, where gram and kilogram prices declined. In Washington, DC, from 1999 to the first quarter of 2000, gram and ounce prices increased by one-third, and pound prices doubled. Methamphetamine purity, which declined in several areas during the last two reporting periods, remained steady in most CEWG areas (except in San Diego, where purity has increased in the past 6 months). Purity ranges from a low of 1 percent in Washington, DC, to up to 100 percent in Hawaii and St. Louis. As manufacturing processes change in many CEWG areas, increases in purity may occur in the near future.

Seizures and Submissions

Recently, the number of methamphetamine labs seized increased in 5 CEWG reporting areas: Georgia (from 29 in 1999 to 27 in the first half of 2000), Minneapolis/St. Paul (from 46 in 1998 to 109 in 1999—most were outside the metropolitan area), Phoenix (from 201 in

the first half of 1999 to 212 in the first half of 2000), Missouri (from 422 in 1997 to 679 in 1998), and Seattle/King County (from 50 in 1998 to 60 in 1999). Also in Seattle/King County, environmental agencies reported a 226-percent increase in the number of lab cleanups between 1998 and 1999 (from 242 to 789—a number greater than the 1995–98 combined total).

COMMENT ON LOW METHAMPHETAMINE INDICATORS:

Minneapolis/St. Paul: “Given the increase in methamphetamine availability reported by law enforcement officials, one probable explanation for the lack of growth in indicators reflecting the negative health consequences was the very low purity of the drug....Nearly 80 percent of the methamphetamine samples contained less than 30 percent actual methamphetamine....Even a popular type of allegedly high-quality methamphetamine (‘fluff’) turned out to be of low purity when analyzed. Thus, the negative health consequences could be declining, in part, because large amounts of the actual drug are not being ingested.”

Although no trend data are available, 166 labs were seized in the Denver area in the second quarter of FY 2000. In the East, methamphetamine labs are sporadically seized. For example, two methamphetamine labs were discovered in western Massachusetts recently, and four were discovered in Ft. Lauderdale in 1999.

In Detroit, 19 pounds of methamphetamine were seized in 1999, and seizures of pseudoephedrine (a common methamphetamine manufacturing ingredient) increased. Methamphetamine seizures in Washington, DC, were low and declined between 1996 and 1999. But in the broader Baltimore/Wash-

ington, DC, area, the amount of methamphetamine seized increased 81 percent between 1998 and 1999, suggesting a possible future risk to the area. In Texas, methamphetamine submissions increased between 1998 and 1999 (from 80,039 to 204,323 grams).

Manufacture, Trafficking, and Distribution

Boston: "For reasons most likely related to the entrenched tradition of cocaine and heroin trafficking, methamphetamine has not become a common street drug in the Boston area."

Texas: "Large-scale ephedrine theft has been reported recently, as well as large purchases of ether and starter fluid from auto supply stores....also, the recent increase in motel fires may be related to methamphetamine manufacturing."

Local methamphetamine labs in Texas 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. In Seattle, new methamphetamine production trends are emerging: over the past few years, most locally manufactured methamphetamine was produced using red phosphorus. In the past year, more manufacturers have adopted the Nazi method, a quicker cooking process that uses the more volatile and toxic precursors as described above. This new method allows for smaller and more mobile labs that can produce larger quantities of methamphetamine in a shorter amount of time. This local "lithium speed" is commonly reported to produce high levels of paranoia, psychosis, and unpredictable behavior; the labs themselves are more volatile,

resulting in more fires and explosions. The exponential increases in local lab production using the Nazi method also confirm accounts of declining consumer preference for low purity Mexican methamphetamine.

In Minneapolis/St. Paul, makeshift labs typically produce small amounts of the drug and are operated by people who are inexperienced in chemistry. As a result, fires and explosions are possible, and the toxic wastes and byproducts constitute serious environmental health hazards to people in surrounding areas. A "cold cooking" method of methamphetamine manufacture recently has been seen in South Florida.

Mexico, California, Texas, and Arizona are the primary locations for methamphetamine trafficking into the Atlanta area, although local labs have become more common. Methamphetamine in Boston (at fairly low levels) most likely originates in California. Likewise, most methamphetamine in the Denver area originates in Mexico or large-scale California labs. Texas methamphetamine comes from small, individual labs within the State and from Mexico (amphetamine is also reportedly being produced there), either through California or now more often across the Texas border. High-purity ice is manufactured in California, but is not available there—it is shipped to Hawaii where a pound sells for up to \$45,000. "Glass" and Mexican methamphetamine are both heavily trafficked throughout Arizona.

In St. Louis, Hispanic traffickers, rather than the former network of motorcycle gangs, are predominant distributors in addition to individual entrepreneurs. In Washington, DC, Korean gangs, as well as closed social networks, are involved in methamphetamine distribution.

**Exhibit 42. Methamphetamine prices and purity
in reporting CEWG areas, June 2000 reporting period**

City	Purity (%)		Price		
			Gram	Ounce	Pound
Atlanta	35		\$100	\$1,500	\$14,600
Boston	NR		\$70–\$200	\$800–\$1,900	\$10,000–\$24,000
Denver	20		\$80–\$200	\$800–\$1,400	\$5,000–\$10,000
Hawaii (Oahu)	“wash”	90–100	\$200–\$300	\$3,500–\$5,000	\$40,000
	“clear”		\$800–\$1,000	^a \$1,500–\$3,000	\$240,000–\$250,000
Los Angeles	15–20		^b \$60 ^c \$100–\$120	\$500–\$700	\$5,000–\$6,000
Minneapolis/St. Paul	4–78, mostly <30		\$100 and ^c \$180	\$1,200	\$10,000–\$12,000
New Orleans	NR		\$100–\$150	\$1,400–\$1,600	^d \$20,000
Phoenix	“glass”	96–98	\$50 (type not specified)	NR	\$10,000–\$12,000
	Mexican	20–30		NR	\$2,000–\$3,000
St. Louis	up to 100		\$37–\$100	\$700–\$1,000	NR
San Diego	averages 25–53, up to 70		\$40–\$120	\$500–\$800	\$6,500–\$8,000
Seattle	NR		^e \$20–\$30	NR	NR
Texas (Houston)	domestic	NR	NR	\$600–\$800	\$10,000–\$14,000
	Mexican	NR	NR	\$350–\$600	\$5,000–\$8,000
Washington, DC	1–84		up to \$150	\$2,200–\$2,700	\$22,000–\$30,000

^a1/4 ounce

^b1/16 ounce (“teener”)

^c1/8 ounce (“eightball”)

^dkilogram

^e1/4 gram

SOURCE: CEWG city reports, June 2000

“ECSTASY”

Boston: “Drug use trends in the Boston metropolitan area continue to show a pattern of stabilization, except for a sharp increase in reports of methylenedioxy-methamphetamine (MDMA) use.”

Detroit: “There are suggestions that MDMA may be supplanting LSD in popularity.”

Miami: “MDMA is the synthetic Schedule I hallucinogenic amphetamine that has gained the reputation as a ‘hug drug,’ which users claim will promote empathy, relaxation, and sexuality. Numerous indicators point to increased abuse of MDMA and other drugs and combinations also referred to as ‘ecstasy.’”

NEGATIVE MEDICAL CONSEQUENCES

YOUTHS’ PERCEPTIONS:

Chicago: “Most young users report that they do not perceive any major negative consequences from using MDMA. For example, they do not develop a drug habit, overdoses are rare, and they are not aware of any serious physical long-term consequences. Its use is sometimes rated comparable to alcohol or marijuana use in terms of associated risks. Attitudes are mixed regarding the risk of combining MDMA and alcohol. Some users perceive that alcohol kills or slows the high; others feel it has no effect.”

So far, in 1999 and 2000, deaths related to methylenedioxymethamphetamine (MDMA, “ecstasy”) were recorded in four CEWG areas:

- Detroit/Wayne County: In 1999, two deaths involving MDMA were recorded.
- Miami: In 1999, one death attributed to MDMA occurred—a case with similarities to the cocaine sudden death syndrome observed in South Florida in the late 1980s.

- Minneapolis/St. Paul: In the first half of 2000, one death occurred due to the use of MDMA, heroin, and alcohol.
- Philadelphia: MDMA was present in three mortality cases in the first half of 1999, the first time that MDMA has been detected in any standard indicators there.

In May 2000, two Chicago-area deaths were linked to an MDMA-like substance known as paramethoxyamphetamine (PMA). The decedents were teenagers who lived in two different suburban counties and died 14 days apart. Both decedents, who thought they were ingesting MDMA, ingested pills (brand name “double stack” or “Mitsubishi”) imprinted with the Mitsubishi logo.

Nationally, MDMA-related ED visits have skyrocketed in recent years, more than quadrupling from 250 in 1994 to 1,142 in 1998. MDMA was mentioned in 12 cases at a South Florida hospital in the second half of 1999. All of the patients were young and white, including two teenagers, eight in their twenties, and two 30-year-olds. Many of the cases involved drug combinations: two for marijuana and one each for heroin, cocaine, and lysergic acid diethylamide (LSD).

MDMA-related poison control calls have increased recently in several CEWG areas. For example, Detroit poison center contacts more than doubled between 1998 and 1999 (from 10–15 to 31). In the first 4 months of 2000, 15 calls regarding MDMA were made in Minneapolis/St. Paul. Texas poison centers reported 35 cases in 1999—the average age was 20.7 years, and 60 percent involved males. Boston poison centers reported that many new variants of ecstasy tablets are showing up in seizures and lab analyses.

USE PATTERNS

Minneapolis/St. Paul: “People under the influence of MDMA (‘ecstasy,’ ‘Adam,’ ‘the love drug’) refer to the experience as ‘rolling’ and sometimes give each other prolonged body massages, use oral pacifiers to reduce teeth grinding, and wear disposable, surgical masks rubbed with mentholated, over-the-counter cold preparations to allegedly enhance the effects of the drug.”

Settings and Context

BEYOND THE CITY LIMITS...

Newark: “MDMA is still unknown in Newark; however, the ‘rave’ phenomenon and MDMA use are cited across the State, particularly in college towns.”

In almost every CEWG area and especially on the east coast, MDMA is reportedly readily available at raves and other dance parties, as well as many nightclubs. In the Chicago area, for example, MDMA use in the rave and club scenes has been noted predominantly on the North Side, in the city’s surrounding suburbs, and on the

Indiana border. Youth there report that in clubs where the drug is popular, as many as 50–70 percent of club attendees may be using MDMA (“rolling on E”), and its use among rave attendees is often said to be universal.

Although, MDMA use (referred to as “rolling” in areas across the country as well as “blowing up” in Miami) is widespread nationally in rave, nightclub, and dance party scenes, it may be spreading to other settings. For example, in Boston, MDMA seems to be expanding to include recreational use by younger adolescents in other social contexts. In New York City, street sources now find MDMA not only in dance clubs but in street locations, where it had not been previously available. These street locations generally included places where young people congregate, such as school areas and shopping malls. Although sources in Washington, DC, indicate that MDMA is predominantly used by young adults (younger than 30) who attend dance and music clubs and raves and are involved in polydrug use (including methamphetamine, LSD, and marijuana), a wide range of age groups reportedly use ecstasy, including individuals older than 40 and high school students from the suburbs.

Route of Administration and Multisubstance Use

The most common route of MDMA administration is oral ingestion via capsule or tablet (more tablets than capsules are available, according to San Francisco sources), although a few CEWG cities report other modes. For example, intranasal use is reported in Atlanta and Chicago, where a powder form is available and perceived as purer than pressed pills. Ingestion as an anal

suppository is also reported in Chicago and is perceived as creating a stronger and faster effect. Injection is reportedly a common mode of administration in Atlanta.

Combining MDMA with other drugs is reportedly common among MDMA users. MDMA is sometimes mixed with heroin in New York City and in Philadelphia, where it is also combined with alcohol or cough syrup. It is combined with marijuana in New York City and Washington, DC. In Atlanta, many are using MDMA simultaneously with other club drugs or hallucinogens, such as LSD or mescaline; diazepam and alprazolam (Xanax) are often reported to be used with or following MDMA or other stimulants there. In Washington, DC, it is also used with LSD, a combination known as “candy flipping,” and methamphetamine. Sildenafil citrate (Viagra) is sometimes combined with MDMA in Boston.

Miami: “The term ‘ecstasy’ itself does not necessarily imply only MDMA, reflecting ignorance among some users about what they are consuming.”

In addition to the dangers inherent in combining drugs, “ecstasy” pills themselves are often a combination of MDMA and other drugs or may contain no MDMA. Atlanta sources suggest that ecstasy users have no idea of the content of the pills they are taking. In Boston, where new variants of MDMA tablets have shown up in seizures and lab analyses, pills sold as MDMA frequently contain adulterants and sometimes consist entirely of other substances such as caffeine, phenylpropanolamine, dextromethorphan (DXM), or various

amphetamines including methamphetamine. In Phoenix, MDMA tablets resembling candy were found to be laced with heroin and methamphetamine. Some MDMA brands in Washington, DC, are considered to be combinations of heroin or mescaline and MDMA, and DEA reports indicate that one type of tablet there (“nexus”) contained both LSD and MDMA.

DEMOGRAPHIC DATA

Boston: “All data (from poison control, DEA, State police, and key informants) show MDMA continuing its rapid rise as a recreational drug of choice among adolescents and young adults.... Although it has not shown up in treatment, ED, or arrest indicators, other sources continue to suggest a rapid increase in its use, especially among high school youth.”

Student and young adult surveys across the United States show high and increasing MDMA use. For example, the Illinois Youth Survey shows recent increases in use among high school students. According to the survey, MDMA use remained relatively stable throughout the mid-1990s (at approximately 2.5 percent lifetime use among high school students) but rose to 4 percent in 1997. According to the 1996–97 Massachusetts school survey, nearly 14 percent of male and 7 percent of female 12th graders reported lifetime MDMA use. And, in a recent Seattle survey of 23–29-year-old men who have sex with men (MSM), 41 percent reported lifetime MDMA use (a percentage topped only by marijuana), and 24 percent reported past-6-month use (again, topped only by marijuana).

Ethnographic and anecdotal sources from CEWG areas corroborate survey data that reveal high MDMA use among youth. For example, in Baltimore, interviews with juvenile offenders age 13–16 indicate that MDMA is easy to obtain. Youth treatment providers in Boston reported more mentions of MDMA tablets by their clients than during previous reporting periods. School-based counselors in Minneapolis/St. Paul reported a significant increase in MDMA use among students since April 2000. And in San Francisco, according to street-based researchers, MDMA has increased and is concentrated especially among young people age 15–25.

BEYOND THE CITY LIMITS...

Chicago: "According to the 1997 Illinois Youth Survey, suburban areas showed the highest levels of lifetime use (6 percent among non-Cook County seniors, compared with 5 percent of Cook County seniors). In previous years, differentials were nonsignificant between Cook and non-Cook Counties, suggesting that the recent rise in MDMA use is largely a suburban (and possibly rural) phenomenon. These trends are mirrored in national data."

Most ethnographic sources report that young whites are the predominant MDMA users. For example, in Philadelphia, whites of college age were described as primary users by spring 2000 focus groups, in which MDMA was mentioned significantly for the first time. Atlanta sources report that MDMA has increased in availability among white traffickers and users age 18–25. MDMA use has grown in the past 5 years in the Chicago area, most specifically among young white and suburban teenagers.

Although white youth are reportedly the predominant MDMA users, as MDMA spreads from club scenes to other settings (including the streets) in some CEWG areas, older MDMA users are emerging. For example, in Washington, DC, groups of adults older than 40 reportedly use MDMA, and in New York City, some older drug users prefer MDMA to cocaine because it lasts longer, it is considered safer, and the high is similar.

LAW ENFORCEMENT DATA

MDMA indicators, such as submissions, seizures, arrests, and cases, suggest a growing problem in many CEWG areas.

- Boston: MDMA lab submissions skyrocketed between 1997 and 1999 (from 20 to 342).
- Chicago: A large shipment of MDMA being shipped in refrigerator magnets from Amsterdam was seized, which may have disrupted a ring of young people who were supplying bars in a particular club district.
- Miami: Recently, 1.5 million MDMA tablets were seized in two related shipments from Europe at the Hollywood/Ft. Lauderdale International Airport.
- Minneapolis/St. Paul: In March 2000, there was one large Hennepin County case involving seven packages of 1,000 pills each.
- Phoenix: The largest MDMA trafficking organization in Arizona, responsible for distributing 25,000–30,000 pills each week, was dismantled by law enforcement in February 2000.

- San Diego: In late May 2000, 19 MDMA-related arrests took place at a night club. The arrests came at the end of a 3-month investigation during which agents bought MDMA inside the club.

MARKET DATA

Availability, Price, and Purity

MDMA is reportedly highly available in nearly every CEWG area, and availability is increasing in most. MDMA pills are often sold using brand names—ones that invoke successful business or wealth status are often used—and names or logos are imprinted on them. Other faddish aspects of MDMA sales include the frequent changing of pill or capsule colors. Brand names and logos differ according to geographic location. For example, in Chicago, recent major brand names include “Mercedes-Benz,” “Volkswagen,” “IBM,” “Pokemon,” and “CK.” In February 2000 in Phoenix, a large seizure of MDMA tablets revealed insignia stamps of Nike “swooshes,” Teletubbies, Smurfs, Ferrari, Toyota, and BMW. Some capsules that contained a high quantity of MDMA were referred to as “candy canes” and marked with red and white stripes.

In Washington, DC, some of the names of MDMA are “X-Files” (which is currently popular and widely available), “Warner Brothers,” “Buddha,” “Star of David,” “Versace,” and “Mitsubishi.” X-Files are imprinted with an X; Warner Brothers are imprinted with “WB,” and some imprints are diamond- or cross-shaped. Some types are considered to be cut with various drugs and are sought for their particular effects. For instance, the triangular X-Files brand with brown or golden flecks is considered to be a

combination of heroin and MDMA, while the circular X-Files is considered to be a combination of mescaline and MDMA. “Nexus” contains both LSD and MDMA.

MDMA is available at the retail level per tablet or capsule for as low as \$5 in Atlanta and as high as \$80 in Houston (exhibit 43). Wholesale costs are much cheaper (from \$2–\$8 per tablet) in CEWG areas, making MDMA distribution potentially lucrative. MDMA purity and content varies widely. For example, in Washington, DC, MDMA purity varied widely at 1–69 percent in 1999; information from street contacts in the second quarter of 2000 reiterated the wide range of MDMA quality. According to sources in Miami, each logo-emblazoned 300-milligram pill actually containing MDMA (and sometimes other adulterants) contains 75–125 milligrams of MDMA.

Distribution and Trafficking

The rise in MDMA use may be driven by an increase in availability, primarily from Europe via New York, where shipments continue to increase dramatically. MDMA reportedly originates in clandestine labs in Western Europe (especially Belgium, The Netherlands, and Luxembourg) and is transported to the United States often through the U.S. Post Office. Spain is emerging as a secondary source country for MDMA destined for the United States, often through mail and express courier services. Mexico is also used as a diversionary route. Miami serves as the transshipment point for MDMA trafficking between Europe and South America. Russian-Eurasian (including Israeli) organized crime groups appear to be the key MDMA operatives working, mostly in the Miami area.

**Exhibit 43. Methylenedioxymethamphetamine (MDMA) prices
in reporting CEWG areas, June 2000 reporting period**

Area		Price
Atlanta		\$5–\$25/pill
Baltimore		\$25/pill
Boston		\$20–\$30/tablet
Chicago		\$20–\$40/capsule
Miami	wholesale	\$8/tab
	retail	\$20–\$30/tab
Minneapolis/St. Paul		\$30/capsule
New York City	wholesale	\$2/dose
	retail	\$25–\$30/dose \$20–30/tablet on street
Philadelphia		\$20–\$25/dose
Phoenix	wholesale	\$6–\$8/pill
	retail	\$20–\$30/pill \$12–15/pill
St. Louis		\$15–\$30/tablet
Texas	Dallas	\$20–\$25/dose
	Houston	\$15–\$80/dose
Washington, DC		\$25–\$30/individual tablet \$15–\$18 each/10, 50, or 100 tablets

SOURCE: CEWG city reports, June 2000

GAMMA HYDROXYBUTYRATE (GHB)

Washington, DC: *“A number of drugs are being used in Washington, DC, largely at dance and music clubs and raves. These drugs are MDMA (ecstasy) and methamphetamine, LSD, ketamine, and GHB. Club and rave attendees are often involved in polydrug use patterns, combining these typical club drugs with cocaine, marijuana, and alcohol, or varying the use of these drugs depending on their availability, personal preference, and activities planned for the night (such as dancing or listening to music).”*

NEGATIVE MEDICAL CONSEQUENCES

Gamma hydroxybutyrate (GHB) and its precursors, gamma butyrolactone (GBL) and 1,4 butanediol (BD)—(which convert into GHB once ingested)—are central nervous system depressants that produce drowsiness, increased heart rate, depressed respiration, visual distortions, seizures, coma, unconsciousness, and sometimes even death. GHB-related deaths continue in many CEWG areas: at least 19 in Florida between 1997 and 1999; two in 1999 in Minneapolis/St. Paul (both decedents were white males in their thirties); and five in Missouri. Two near-deaths were reported in St. Charles, Missouri, where GHB was used as a date rape drug.

St. Louis: *“GHB use has increased in the St. Louis area. Because it is a depressant, its use with alcohol and its unpredictable purity present major health risks to users.”*

Chicago: *“Compared with other club drugs, overdose experiences are more frequent with GHB, especially when used in combination with alcohol.”*

Nationally, GHB-related ED visits have increased more than twentyfold (from 55 in 1994 to 1,282 in 1998). (Data for 1999 are not yet available.) GHB-related overdoses were reported in many CEWG areas:

- Boston: Heavy GHB use has been reported in some Boston clubs, resulting in overdoses requiring ED treatment.
- Maryland: In 1999, 23 overdoses were reported.
- Newark: Recently, GBL attracted attention because of its relation to 18 hospitalizations and 2 overdoses of college students.
- Seattle: Anecdotal accounts of GHB use continue to be received from ED staff throughout the area as previously reported, with incidents of intoxication and incapacitation occurring two to three times per week.
- South Florida: In 1999, a hospital treated 48 young people with GHB or GHB-precursor toxicity. In virtually every case, the reason for the visit was unresponsiveness/coma lasting less than 3 hours; convulsions were mentioned in several cases.
- Washington, DC: In the first quarter of 2000, street reporters described several individuals (purported to be seven cases) who became unconscious after ingesting a combination of GHB and alcohol at clubs. Some club owners, trying to avoid the problems people have when taking GHB (especially with alcohol) on their premises, are having people removed from their clubs if they are using or selling it.

As ED mentions and overdoses rise, poison center calls for GHB and its precursors continue to emerge in CEWG areas across the Nation, with several areas reporting hundreds of calls each year:

- Boston: More GHB-related calls (32 percent of illicit-drug-related calls) are reported than for any other club drug, including MDMA. The number of calls, which involve mostly adolescent and young adult males, continues to increase.
- Detroit: In 1999, poison centers encountered 100 GHB/GBL cases, of which 22 were life threatening and 6 involved GBL. The number of cases continues to increase in 2000.
- Los Angeles County: In 1999, more than 100 GHB-related calls (two-thirds involving males) were reported, most of which were listed as “moderate effect.”
- Minneapolis/St. Paul: In the first 4 months of 2000, 28 calls were received involving GHB and related products.
- Phoenix: Several calls were received in the first quarter of 2000 for “verve,” the local term for GHB.
- Texas: Between 1998 and 1999, calls increased sharply (from 100 to 166 confirmed exposure cases). Most 1999 cases (57 percent) involved males; the average age was 26 years. Forty-four percent of the calls were from the Dallas-Fort Worth area.

Although GHB figures prominently in calls to many poison centers, it seems thus far overlooked by treatment providers,

according to several CEWG sources. For example, Boston sources state that most clinicians contacted were unfamiliar with GHB, further suggesting a need for informational outreach to treatment providers. Meanwhile, reports of GHB treatment clients or users suffering from withdrawal are emerging in some CEWG areas. For example, in Minneapolis/St. Paul, a small but growing number of people who sought treatment reported GHB/GBL as the primary substance of abuse, physical dependence, tolerance, and withdrawals. In South Florida, two episodes of GHB withdrawal occurred in 1999.

GHB WITHDRAWAL: A CLOSER LOOK

Miami: In addition to GHB toxicity cases, two known episodes of GHB withdrawal occurred. Both cases involved the same individual 3 months apart in 1999, underscoring the physically addictive properties of GHB and its precursors. The patient had been ingesting 30–45 milliliters of White Magic “cleaner” every 2 hours for 2 months and had difficulty speaking, was tremulous, and experienced visual and auditory hallucinations. He had started taking the product, which contains the precursor BD for its purported growth-hormone-increasing effects, but came to rely on it for sleep and as a mood enhancer. He had abruptly stopped taking the product approximately 10 hours before arriving in the emergency department. He purchased this product regularly at a local health food store and stated that numerous others also purchased this “cleaner” for a similar purpose. Almost 3 months later, this same individual relapsed by taking another locally sold product (Verve), which contained GBL. He returned to the hospital with symptoms similar to those shown at his previous visit.

USE PATTERNS, CONTEXTS, AND DEMOGRAPHICS

BEYOND THE CITY LIMITS...

Newark: "GHB and ketamine ('Special K') are increasingly reported as routinely used at rave parties around college campuses."

Club drugs, including GHB and its precursors, are usually taken at parties, raves, and clubs. For example, in the second half of 1999, the initial setting for 14 of 22 GHB-related ED visits to a South Florida hospital was a local night club, a bar, or the beach; 16 presented between midnight and 6 a.m. GHB is used not only as a party drug at raves and nightclubs but also in drug-assisted rapes and as an alleged muscle-stimulating growth hormone and aphrodisiac. For example, in San Diego, widespread accounts of drink dosing with GHB or flunitrazepam (Rohypnol) and stories connecting drug rape with GHB lead to articles and news stories about the "drink condom," a thin rubber disk spread across the opening of a cocktail glass when the owner is dancing or away from the glass for any appreciable amount of time. In Atlanta, GHB is a commonly used synthetic steroid found in many gyms throughout the area, although the drug also remains available and common at gay male party venues, raves, and clubs.

GHB and its precursors are used mostly by white adolescents and young adults, especially males. For example, Massachusetts GHB poison contacts involve mostly adolescent and young adult males, and in South

Florida most GHB-related ED cases in the second half of 1999 involved males younger than 30.

Club and rave attendees often combine club drugs (including GHB) with amphetamines, cocaine, marijuana, alcohol, and other club drugs, depending on their availability, personal preference, and activities planned for the night (such as dancing or listening to music). Emergency department data from a South Florida hospital corroborate this information: many toxicology screens of those presenting with GHB-related overdoses revealed use of a combination of drugs, including amphetamine, cocaine, marijuana, and alcohol. According to researchers in Atlanta, GHB or pharmaceutical depressants are often reportedly used with or after methamphetamine, MDMA, or other stimulants.

LAW ENFORCEMENT DATA

This CEWG reporting period marks the first time that GHB-related police cases, seizures, and submission data have been reported. In Minneapolis/St. Paul, two recent law enforcement cases in suburban areas involved large amounts (cases) of GBL-containing liquids purchased via the Internet as solvents; a third recent case occurred in a college town nearby. Although police report that GHB is sometimes overlooked in drug seizures because it is a clear liquid often mistaken for water, more than 1,800 gallons of GBL were seized in Phoenix in March 2000. In 1999, 112 GHB exhibits, 4 GBL exhibits, and 4 BD exhibits were analyzed in Texas, 83 percent of them in Dallas County.

MARKET DATA

GHB, known as “Georgia home boy,” “grievous bodily harm,” “gamma,” “great hormones at bedtime,” “liquid E,” “liquid X,” “salty water,” “somatomax,” and “verve,” seems to be increasingly available at club and party settings in many CEWG areas. It is often manufactured in homes by “kitchen chemists” who use recipes and ingredients found on the Internet. It appears most often in liquid form, is taken orally (sometimes combined with alcohol), and is usually sold in doses (capfuls, teaspoons, swigs, and drops). Dose prices range widely, at \$5–\$40 (exhibit 44).

Exhibit 44. Gamma hydroxybutyrate (GHB) prices in selected reporting CEWG areas, June 2000 reporting period

City	Price
Atlanta	\$10–\$25/dose
Chicago	\$35–\$40/capful
Phoenix	\$5–\$10/dose (teaspoon)
St. Louis	\$5/capful \$40/ounce
Texas	\$5–\$10/capful (¼ ounce) \$15–\$20/ounce \$750–\$1,000/gallon

SOURCE: CEWG city reports, June 2000

Although GHB is controlled as a Schedule I substance as of March 2000, GBL and BD can be found in over-the-counter nutritional supplements and industrial solvents at nutrition stores or via the Internet. They can be manufactured into liquid GHB, or used as is.

GBL-containing products may have ingredients listed as “furanone, furanone dihydro, 4-butyrolactone, dihydro-2 (3H)-furanone dihydro, tetrahydro-2-furanone, and butyrolactone gamma.” Brand name examples of GBL include Blue Nitro, Renewtrient, GH Revitalizer, Gamma G, Remforce, Firewater, ReActive, Rest-eze, Beta-Tech, Thunder, Jolt, and Verve. GBL also is used legitimately as a wax stripper, and in Phoenix, the wax stripper sells for \$1,000 per 55-gallon drum from legitimate distributors, although one seller of illegitimate GBL sold drums for \$3,200 per drum.

Products containing BD may list active ingredients as “tetramethylene glycol, sucol B, 1,4-butylene glycol, butane-1,4diol, butylene glycol, and 1,4-tetramethylene glycol.” Brand names of 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, and BVM. Artfully worded labels often say that this product does not contain GHB or GBL. In addition, these labels may state that this product is a cleaner and that it is harmful if swallowed. However, in South Florida for example, it is sold in health food stores with dietary supplements, and a 32-ounce bottle typically sells for \$40–\$70. This price is similar to what GBL- and GHB-containing products sell for and is far out of proportion with what most reasonable people would pay for a “cleaner.” One example of a BD product sold as an extremely expensive cleaner is White Magic.

HALLUCINOGENS

Boston: “Despite the low treatment and ED indicators for hallucinogens, use of lysergic acid diethylamide (LSD), psilocybin mushrooms (‘shrooms’), and mescaline among adolescents and young adults is common, as indicated by survey data and focus groups. In focus groups, LSD was often the most common illicit drug mentioned after marijuana and pharmaceuticals.”

Seattle: “LSD, psilocybin mushrooms, and MDMA (ecstasy) continue to appear in area reports involving primarily younger users at local concerts or raves.”

Texas: “While ADAM and DAWN percentages for phencyclidine (PCP) are low, slight increases may be additional evidence for the use of marijuana cigarettes dipped in embalming fluid containing PCP.”

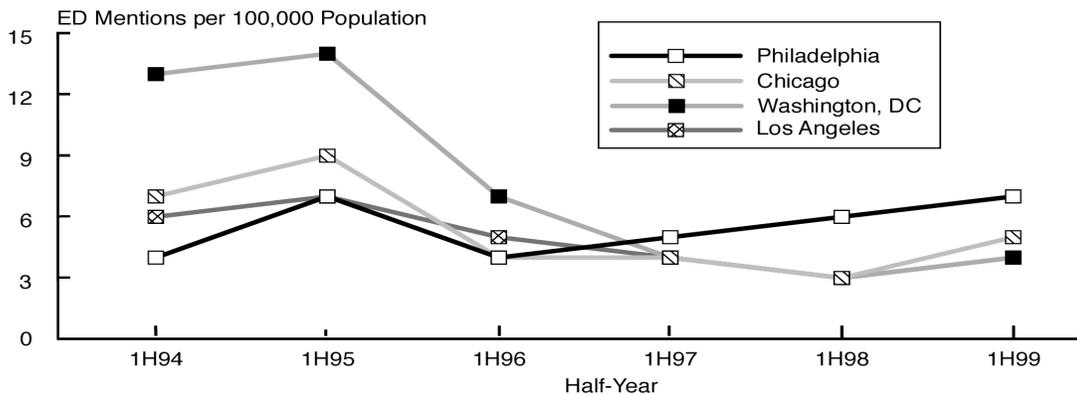
NEGATIVE MEDICAL CONSEQUENCES

Philadelphia had the Nation’s highest estimated rate of phencyclidine (PCP) ED mentions per 100,000 population in the first half of 1999 (7—the highest rate ever recorded in that city) followed by Chicago (5) and both Los Angeles and Washington, DC (at 4 each) (exhibit 45). Between the first halves of 1998 and 1999, PCP-related mentions increased significantly ($p < 0.05$) in two cities (Chicago and Dallas) and declined significantly in two (Miami and San Francisco).

Long-term PCP ED trends in CEWG cities with the highest ED rates show that after peaks in the first half of 1995, mentions generally declined. However, following the first half of 1998, mentions increased in the first half of 1999.

Similar to PCP ED mentions, those for lysergic acid diethylamide (LSD) are relatively few across the Nation, with the highest first-half-1999 rate per 100,000 population at 5 in Phoenix, followed by 3 each in Seattle and Dallas.

Exhibit 45. Rate of PCP ED mentions per 100,000 population in four top-ranking cities, first half 1994–first half 1999*



*First-half-1999 data are preliminary.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 1999 (October 1999 update)

However, between the first halves of 1998 and 1999, LSD mentions increased significantly ($p < 0.05$) in five areas (Baltimore, Detroit, Minneapolis/St. Paul, Phoenix, and Washington, DC); no significant declines occurred.

Poison call data involving PCP, LSD, and psilocybin mushrooms in 1999 varied in reporting CEWG areas: of Massachusetts calls, nearly 20 percent were related to psilocybin mushrooms and LSD, but in Detroit only 11 PCP-related calls were made and only 14 LSD-related calls were reported. LSD-related calls in Texas increased between 1998 and 1999 (from 77 to 95), as did PCP-related calls (from 17 to 27 confirmed exposures). Also in Texas, 13 mushroom-related calls were made, and 23 calls involved hallucinogenic plants, half of which were morning glories.

Treatment numbers and percentages involving primary hallucinogen use generally remain low and stable in reporting CEWG areas.

DEMOGRAPHIC DATA

The PCP-using population demographics vary by geographical location. PCP use in Los Angeles is relatively low, endemic, and mainly among gang youth. The average age of PCP poison callers in 1999 in Texas was 28 and most (81 percent) were male.

By contrast, the average age of LSD poison callers in Texas in 1999 was 18, and in most CEWG areas LSD is used primarily by young whites. For example, over the past 10 years, primary LSD treatment admissions in Chicago have been mostly young and white. In Detroit, most LSD use is limited to high

school suburban and rural youth. In St. Louis, LSD (much of which is thought to be imported from the Pacific coast) sporadically reappeared recently in local high schools and rural areas. It has also increased among white traffickers and users (18–25 years) in Atlanta. Conversely, the New Jersey high school survey showed a continued decline in hallucinogen use between 1995 and 1998 (from 6 to 4.6 percent).

USE PATTERNS AND CONTEXTS

PCP (“angel dust”) is combined with marijuana or cigarettes in many CEWG reporting cities. In Chicago, it 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); “wicky stick” or “donk” (PCP mixed with marijuana); and “3750” (PCP-laced blunts). Similarly, in New York City, PCP is sold in three forms: as a powder sprinkled on green mint leaves or marijuana, or in liquid form in a small shaker bottle. In St. Louis, PCP is generally used as a dip on marijuana joints. Recently, PCP-soaked cigarettes and marijuana joints were reported by Minneapolis/St. Paul area law enforcement sources. In Texas, marijuana cigarettes are sometimes dipped in embalming fluid containing PCP (“fry”). In Philadelphia, heroin or PCP is used with crack, and the combination of marijuana and PCP, frequently mixed in blunts, is called “love boat.” According to users new to treatment, the use of PCP-laced blunts is increasing there.

LSD is usually abused orally in small tablets (“microdots”), in thin squares of gelatin

(“window panes”), and on blotter paper. In Minneapolis/St. Paul, LSD was reportedly sold on soda crackers for the first time, although it is typically sold as blotter acid on small pieces of paper. In Phoenix, LSD is reportedly packaged in Sweet Breath bottles of breath freshener. In the Austin area, where LSD seizures increased recently, the most common types of LSD are gel tabs, blotter paper, and capsules. In Detroit, most LSD is on paper cutouts of various designs and originates in California.

In many CEWG areas, anecdotal reports of LSD and LSD combined with other drugs among club goers are increasing. In Atlanta, many are using LSD or mescaline with MDMA or other club drugs. “Rolling and trolling” (LSD combined with MDMA) remains common among youth in South Florida. In Texas, along with MDMA and other drugs with hallucinogenic properties, LSD is increasingly available to young adults in nightclubs. LSD is linked to methamphetamine in Texas, but the link is related to distribution rather than combined consumption: it is sold there (in up to 2,000-dose quantities), by Mexican nationals who also distribute methamphetamine.

LAW ENFORCEMENT DATA

Arrestee Data

In 1999, PCP-positive urinalysis levels among ADAM adult male arrestees were highest (from 5 to 7 percent) in Dallas, Houston, Philadelphia, and Washington, DC. Levels increased only in Washington, DC (by 4 percentage points); they declined in Philadelphia (by 4 points). Females tested positive at lower levels: Houston had the highest level at 3 percent. According to Washington, DC, Pretrial Services toxicol-

ogy data, the percentage of adult arrestees testing PCP-positive has declined markedly during the past 10 years (from 17 to 2 percent between 1989 and 1998); however, recent data suggest a possible upturn in 1999 to 6 percent. Additionally, during the first quarter of 2000, 7 percent tested positive.

Market Data

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. Furthermore, three recent seizures of PCP occurred in Massachusetts—a low number, yet notable due to the drug’s rarity there. In Philadelphia, where PCP started gaining popularity as an additive to blunts in 1994, it is easier to obtain than ever.

PCP prices depend on its form and geographic location (exhibit 46). Mint leaf (a tobacco-like substance sprayed with PCP) can be purchased on Chicago’s West Side and sporadically on the Northwest Side for \$10 or \$20; sherm sticks (PCP-dipped cigarettes) are sold on the North Side for \$30 each or, more commonly, cut into three equal parts and sold for \$10 each; wicky stick or donk (PCP mixed with marijuana) is used mostly by adolescents and is sold for \$20 per joint in Chicago. In New York City, Philadelphia, St. Louis, and Washington, DC, PCP is sold as a liquid for as much as \$350 per ounce.

LSD is widely available in CEWG cities and often in their suburbs and surrounding rural areas. Prices are relatively low (\$1–\$6 per dose) (exhibit 47). Purity is reportedly much lower than it was in the 1960s and 1970s. Peyote is readily available in Phoenix.

Exhibit 46. PCP prices in reporting CEWG areas, June 2000 reporting period

Area	Price/Unit
Chicago	\$10, \$20/laced blunt, joint, or "mint leaf"; \$30/dipped cigarette
New York City	\$10-\$20/PCP-laced bag of mint or marijuana; \$20/bottle
Philadelphia	\$5/bottle
St. Louis	\$350/fluid ounce
Washington, DC	\$350/ounce

SOURCE: CEWG city reports, June 2000

Exhibit 47. LSD prices in reporting CEWG areas, June 2000 reporting period

Area	Retail/Dose	Wholesale/Unit
Atlanta	\$4-\$6	\$1,000/1,000-dose blotter
Boston	\$5	\$300/100 doses
Chicago	\$5	NR
Honolulu	\$4-\$6	\$225-\$275/100-dose sheet
Minneapolis/St. Paul	\$10	NR
Newark	\$0.50	NR
Phoenix	\$4	\$100/Sweet Breath bottle with 90 doses)
St. Louis	\$2-\$4	NR
Texas (Dallas) (Houston)	\$2-\$10 \$1-\$3	NR
Washington, DC	\$5	NR

SOURCE: CEWG city reports, June 2000

OPIATES OTHER THAN HEROIN

NEGATIVE MEDICAL CONSEQUENCES

In Seattle, after increasing 72 percent between 1997 and 1998 (from 25 to 43), the number of drug-caused deaths involving opiates other than heroin declined in 1999 (to 33, or 20 per 100,000 population). Methadone was involved in more than half (19 of 33), and 2 cases involved fentanyl (down from 5 in 1998). Deaths involving methadone, either alone or in combination with other drugs (heroin, cocaine, or methamphetamine), were also reported in Phoenix, where they increased 65 percent between 1998 and 1999 (from 26 to 43), continuing a steadily increasing trend since 1993.

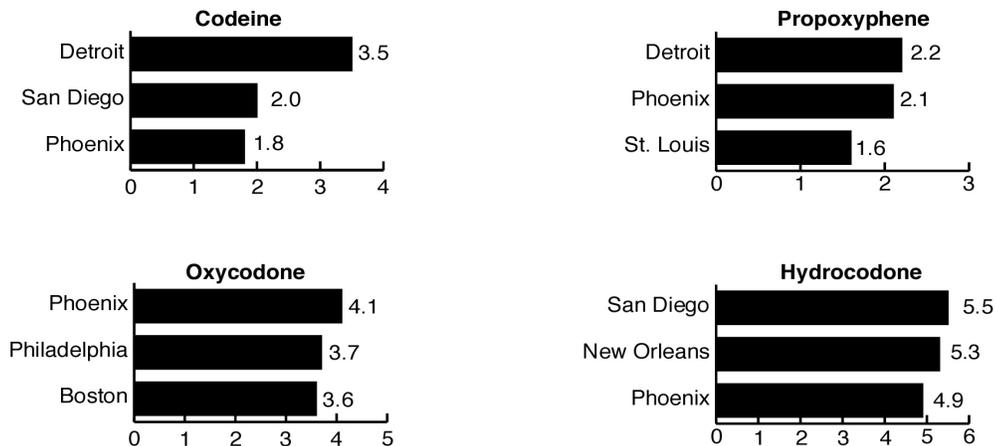
Similarly, propoxyphene (Darvon, Darvocet) and propoxyphene-in-combination deaths nearly tripled in Phoenix between 1998 and 1999 (from 20 to 57), continuing a steadily

increasing trend since 1996 (when they totaled 4). Codeine is one of the leading prescription drugs involved in deaths in New York.

Exhibit 48 lists the CEWG cities with the highest ED rates per 100,000 population in the first half of 1999 for selected opiates: codeine, propoxyphene, oxycodone (Percocet, Percodan), and hydrocodone (Vicodin, Lortab, Lorcet, and NORCO). Interestingly, Phoenix shows up among the top three cities for all four drugs. Detroit and San Diego appear twice.

Between the first halves of 1998 and 1999, hydrocodone ED mentions increased significantly ($p < 0.05$) in five CEWG cities (Chicago, Detroit, Philadelphia, Phoenix, and San Diego), while propoxyphene ED mentions declined significantly in four (Atlanta, Denver, St. Louis, and San Francisco).

Exhibit 48. Cities with the highest rates of ED mentions per 100,000 population for four selected opiates, first half 1999*



*First-half-1999 data are preliminary.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, first half 1999 (October 1999 update)

Trends during that period were mixed for codeine and oxycodone: codeine ED mentions declined significantly in five cities (Denver, Miami, Minneapolis/St. Paul, New Orleans, and Phoenix) and increased in two (Atlanta and Baltimore); and oxycodone mentions declined significantly in four cities (Denver, St. Louis, San Francisco, and Washington, DC) and increased in three (Baltimore, Philadelphia, and Phoenix).

In 1999, Texas poison control centers recorded 69 exposures to morphine (of which 38 involved intentional misuse or abuse) and 24 exposures to methadone.

TREATMENT DATA

Other opiates as primary drugs of abuse account for relatively small proportions of treatment admissions. For example, they account for 2 percent of adult clients in Texas and less than 1 percent of clients in New Orleans. Detroit treatment admissions for other opiates totaled 50 in the first half of FY 2000.

DEMOGRAPHIC DATA

Among the Seattle other-opiate decedents, nearly half (45 percent) were females, the majority (85 percent) were white, and the mean age was 42.1. In Texas, among the morphine misuse poison control cases, nearly half (47 percent) were females and the average age was 31; the methadone cases involved a higher percentage of males (66 percent) and a higher average age (38 years). In comparison with heroin addicts, Texas treatment clients who use other opiates are more likely to be older, white, and female. Treatment data in New Orleans continue to show a preponderance of white males, who recently have increased in percentage.

USE PATTERNS AND MARKET DATA

Hydromorphone (Dilaudid)

Hydromorphone is one of the most commonly abused pharmaceuticals in parts of Texas. It is also commonly used by a small, chronic population of white addicts in St. Louis, and heroin users in Washington, DC, continue to use it (along with other available pharmaceutical narcotics) as heroin substitutes, to potentiate heroin strength, or to ward off heroin withdrawal symptoms. The drug is also preferred by many Chicago IDUs, but its use has diminished considerably there since 1987 due to decreased street availability.

Street prices are reported in several cities: \$25–\$35 for 4 milligrams, \$15 for 2 milligrams, and \$7 for 1 milligram on Chicago's North Side (when available); \$25 per wholesale dose and \$75 per retail dose in New Orleans (stable); \$45–\$75 per 4-milligram pill in St. Louis; \$20–\$40 per tablet in Dallas; and \$20 per pill in Washington, DC.

Codeine

Codeine (and its prescription compounds) remains the most widely abused other opiates in Detroit, where it is sometimes combined with either hydrocodone or carisoprodol (Soma). Codeine combinations are also commonly diverted in New York and Phoenix. Promethazine with codeine is commonly abused in parts of Texas. In Chicago, where codeine is used primarily among heroin addicts to moderate withdrawal symptoms, abuse has been declining over the past decade. Reported pill prices (in Tylenol 3s and 4s) are \$1–\$3 in Chicago and \$1–\$2 in Washington, DC.

Other Abused Opiates

- **Hydrocodone** (Vicodin, Lortab, Lorcet, and NORCO)—Hydrocodone diversion and abuse continues to be reported in Detroit (where it is commonly combined with acetaminophen containing codeine), New York, Phoenix, and parts of Texas (where it sells for \$3–\$5 per tablet).
- **Methadone** (Dolophine)—In San Francisco, some selling of “take home doses” of methadone has been reported. Street prices across the country include \$1 per milligram in Chicago, \$5 per pill in New York, \$5 per 10-milligram tablet in Phoenix, and \$10 per pill in Washington, DC.
- **Oxycodone** (Percocet and Percodan)—Oxycodone is commonly diverted or abused in New York, Phoenix, and St. Louis. Reported pill prices include \$5–\$8 in New York, \$3 in Phoenix, and \$5 in Washington, DC.
- **Morphine**—The DEA reports that because of problems in the processing stage in Mexico, morphine has been sold as black tar heroin in Texas.
- **Opium**—The U.S. Customs Service in Washington State continues to seize mail parcels containing raw opium. Opium is also routinely shipped from Asia to the Asian community in Minneapolis/St. Paul.
- **Propoxyphene** (Darvon and Darvocet) —Pills sell for \$1–\$2 in New York.

STIMULANTS OTHER THAN METHAMPHETAMINE AND ECSTASY

- **Adderall:** A combination of four amphetamines (dextroamphetamine saccharate, amphetamine aspartate, dextroamphetamine sulfate, and amphetamine sulfate) and a drug prescribed for attention deficit hyper-activity disorder (ADHD), Adderall figures prominently in poison calls in Boston and Texas. In 1999, 278 confirmed exposures were reported in Texas, with 149 involving misuse or abuse, and age of callers averaging 18 years.
- **Ephedrine and pseudoephedrine:** In Seattle, youth workers report increases in the number of youth who are “mega-dosing” on pseudoephedrine cold tablets, causing concerns of potential overdoses. According to 1999 poison data in Texas, 351 ephedrine calls were reported, of which 111 involved misuse or abuse (55 percent of callers were female and the average age was 25 years). Of the cases, 64 involved Mini-Thins or Two-Way, over-the-counter pills containing ephedrine and guaifenesin.
- **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, for example, khat first appeared several years ago in the Somali refugee community. In Boston, its use seems restricted to small enclaves of recent immigrants. In Washington, DC, it is reportedly the drug of choice among Ethiopians. Typically it is chewed, and dried leaves are smoked or brewed as tea. Washington, DC, street prices are \$35 per kilogram in a bundle containing twigs (about 40 twigs in a bundle).
- **Methcathinone:** “Cat” or “goob” is an easily manufactured stimulant that was identified in Michigan in 1990; an epidemic followed. Although several treatment admissions have been reported in the area each year since 1990, no methcathinone labs have been seized there since 1994.
- **Methylphenidate (Ritalin):** The abuse among youth of methylphenidate, a pharmaceutical prescribed for ADHD, has been reported in many areas: Baltimore, mostly among middle and high school students; Boston, especially among middle- and upper-middle-class communities; Detroit; Minneapolis/St. Paul, where pills cost \$5 each; Phoenix; and Texas. Methylphenidate tablets are often used orally or crushed and used intranasally. A recent suburban Detroit boy (14 years old) died of a heart attack caused by chronic, long-term effects of its use. Also, in 1999, 165 methylphenidate-related poison calls were made in Detroit; and 419 were reported in Texas, with 114 of those involving intentional misuse or abuse. In Minneapolis/St. Paul, 32 ED mentions were recorded in 1998. On Chicago’s South Side, where it costs \$3–\$4 per pill, some African-Americans inject methylphenidate (“west coast”); some mix it with heroin as a speedball, or in combination with both cocaine and heroin for a more potent effect.
- **Phenmetrazine (Preludin):** Some whites on Chicago’s North Side inject this stimulant, but its availability has been limited for the past few years.

DEPRESSANTS OTHER THAN GAMMA HYDROXYBUTYRATE (GHB)

This section includes benzodiazepines—such as alprazolam (Xanax), clonazepam (Klonopin), diazepam (Valium), and flunitrazepam (Rohypnol)—ketamine, and carisoprodol (Soma).

Benzodiazepines

Benzodiazepines such as diazepam, clonazepam, and alprazolam are the most commonly abused pharmaceutical depressants in CEWG areas: they are the depressants most often identified in the ADAM program and in DAWN ED mentions. However, pharmaceutical depressant indicators remain relatively low in most CEWG areas. For example, depressant treatment admissions account for only 1–8 percent of total admissions in reporting CEWG areas. Most benzodiazepine treatment admissions and decedents involve white females.

Although diazepam has been considered the most commonly abused benzodiazepine for decades, it seems to be declining in many CEWG areas while clonazepam and alprazolam increase. For example, between the first halves of 1998 and 1999, diazepam ED mentions declined significantly ($p \leq 0.05$) in five CEWG areas (Chicago, Dallas, New Orleans, Phoenix, and St. Louis) and increased significantly in two (Baltimore and San Diego). According to focus groups in Philadelphia, alprazolam has reportedly overtaken diazepam as the most “popular pill” on the street. In Boston, alprazolam

and clonazepam are widely available and are used by risk-taking adolescents; law enforcement sources there report that in connection with a rash of pharmacy break-ins, seizures of diverted prescription drugs have increased in the past year. Street prices for commonly diverted benzodiazepines in reporting areas are \$1–\$10 for 5- or 10-milligram tablets.

Benzodiazepines are often combined with other drugs, and combinations often vary by geographical location. For example, the indiscriminate mixing of benzodiazepines in various combinations and with alcohol seems to have increased recently among Boston adolescents. Also in Boston, focus groups mentioned depressants as common ancillary or substitute drugs for heroin (which may contribute to overdoses) as well as drugs used to potentiate the effects of methadone. Depressants combined with opiates are reported in other CEWG areas as well: a trend first noted in 1998 in Seattle involving the concomitant injection of heroin and a depressant (typically diazepam) continues; in Texas, the use of alprazolam to heighten and prolong the effects of heroin has reportedly increased recently. In Atlanta, where diazepam and alprazolam are among the widely abused prescription drugs, they are often used with or following methamphetamine, MDMA, or other stimulants. In Miami, the use of “rollers” (concomitant depressants and stimulants) continues among youth.

BENZODIAZEPINES: ALPRAZOLAM AND CLONAZEPAM REPLACE FLUNITRAZEPAM?

Miami: "According to sources, alprazolam and clonazepam have replaced flunitrazepam among adolescents."

Texas: "Through 1997, the ED rate for clonazepam increased in Dallas, possibly related to the initial popularity of flunitrazepam, and the ensuing use of clonazepam, legally importable from Mexico, to replace it."

Flunitrazepam (Rohypnol, "roofies," "roach pills," "Mexican valium," and "rope"), a benzodiazepine, has been associated with drug-assisted rape and club drugs. While reports have been declining since the legislation of recent years, it is still common in several CEWG reporting areas, including Atlanta, Boston, New Orleans, and Texas. In Atlanta, it is reported to be increasingly available and can be purchased for \$5–\$10. In Texas, flunitrazepam treatment admissions (467 youth and 239 adults from January 1998 to April 2000) are concentrated along Mexican border areas; most are Hispanic and male.

Conversely, in many CEWG areas flunitrazepam abuse is low or nonexistent. For example, Michigan has had only one known seizure of flunitrazepam so far, and no indications of its availability or use have been reported over the past 2 years. Likewise, in Newark, there is no evidence for the involvement of flunitrazepam in reported rapes in the State.

Ketamine ("K," "Special K," "vitamin K")

Boston: "Psychedelics such as LSD and psilocybin mushrooms remain popular among youth, while drugs such as MDMA, ketamine, and crystal methamphetamine are still reported in the club and rave scenes."

The veterinary anesthetic ketamine is a depressant with dissociative properties; its effects, known as being in the "k-hole," have been described as similar to the effects of PCP. Ketamine is considered a club drug due to its use in raves, clubs, and dance venues among white youth. It is available in many CEWG areas: Atlanta, where its use may be increasing; Baltimore, where a small but stable market in the suburban counties continues; Boston; Chicago; Detroit, where it was present in 10 deaths in 1999; Minneapolis/St. Paul; Newark, where it is reportedly used around college campuses; New York City; Phoenix, St. Louis; San Diego; Seattle; Texas, where poison calls continue; and Washington, DC.

Ketamine is often sold as a powder (for \$20 per bag in Chicago, \$20 per dose in New York City, and \$60–\$80 per 2-gram bottle—containing 20–40 doses—in Washington, DC). It is often used intranasally and may be mistaken for cocaine (HCl). Ketamine injection is reported in several CEWG areas: in Boston, among young, middle-class whites; and in Minneapolis/St. Paul, where one law enforcement encounter involved injection. In Chicago, it is sometimes sold as a liquid; in Minneapolis/St. Paul, it is sometimes smoked with marijuana; and in Boston, it is used as a heroin adulterant and might have played a role in some overdose deaths. It is

usually diverted from veterinary offices or pharmacies, and recent increases in veterinary break-ins have been reported in Detroit and St. Louis. Compared with MDMA and GHB, ketamine indicators in Boston and Chicago were relatively low; however, in Seattle, according to a survey of 23–29-year-old males who have sex with other males (MSMs), lifetime use of ketamine was 15 percent, following methamphetamine (33 percent) but leading GHB (11 percent).

Carisoprodol (Soma)

Poison control cases for carisoprodol, a muscle relaxant, were reported in Detroit

and Texas. In Detroit, cases during 1998 and 1999 totaled 98 and 97, respectively, with life-threatening emergencies involved in 13 and 6 of them, respectively, and one of the 1998 cases ending in death. The drug in that city is commonly combined with acetaminophen containing codeine. In Texas, 414 of the 536 carisoprodol-related cases in 1999 involved misuse or abuse. Over the past several years, carisoprodol ED mentions increased in several CEWG areas; however, between the first halves of 1998 and 1999, they were mixed, with two significant increases (in New Orleans and Philadelphia) and two significant declines (in Baltimore and Newark).

OTHER DRUGS

- **Dextromethorphan (DXM):** Teens in some cities, such as Boston and Minneapolis/St. Paul, 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. School-based counselors in Minneapolis/St. Paul report that it is also sold as a powder or in clear capsules for \$5.
- **Inhalants:** Abuse of inhalants and its consequences continued to be reported in several CEWG areas. For example, seven inhalant deaths were reported in Phoenix in 1999. Texas inhalant abusers constituted 2 percent of the admissions to adolescent treatment programs in 1999. In addition to methamphetamine and MDMA, inhalant (“rush,” “poppers,” “butyl”) use has increased among club goers in Atlanta. In Detroit, reports continue intermittently regarding nitrous oxide and other inhalants (including propane).
- **Steroids:** In Atlanta, use of **clenbuterol** and other anabolic steroids is becoming increasingly common at raves. Steroid-injecting clients (usually young, male bodybuilders) in the Boston area reportedly request extra-large needles for intramuscular injection. Law enforcement sources report continued steroid availability in commercial gyms and exercise clubs in Detroit, especially through smuggling via Canada.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

Newark: *“The recent increase in heroin injection by young adults (those younger than 26), along with the sharp rise in heroin use, has set a dangerous precedent for a rise in infectious diseases such as HIV/AIDS, hepatitis B, and hepatitis C.”*

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

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 June 2000, injection-related AIDS cases accounted for 31 percent of total adult and adolescent diagnoses: 25 percent ($n=184,429$) involved injecting drug use as the sole mode of exposure; 6 percent ($n=46,582$) involved the dual risk categories of injecting drug use and male-to-male sex (exhibit 49).

Newark and New York continue to have the highest rate of injecting drug use as the sole mode of exposure (56 and 47 percent, respectively) among reporting CEWG areas, although Newark's IDU proportion declined by 1 percentage point over the past year. Between the June 1999 and June 2000 CEWG reporting periods, the proportion of injecting drug use as mode of exposure for AIDS remained relatively stable or declined, except in Illinois, where it increased 1 percentage point. The proportion for dual exposure of injecting drug use and male-to-male sex remained relatively stable, except for declines in Los Angeles County and Louisiana (by 1 percentage point each).

AIDS DEMOGRAPHIC DATA

Nonwhites continue to account for a disproportionately high number of injection-related cases. For example, in Washington, DC, 96 percent of recent injection-related AIDS cases involve African-Americans. In New York, nonwhites are also disproportionately represented: African-Americans account for 47 percent of IDUs with AIDS, followed by 38 percent for Hispanics, and 15 percent for whites. In Seattle, methadone treatment clients of African-American or Native American backgrounds have significantly higher HIV prevalence than white clients (2.6, 4.2, and 1.5 percent, respectively; $p<0.05$).

Males continue to constitute the majority of heterosexual, injection-related AIDS cases in CEWG sites, including New York (75 percent) and San Francisco (71 percent), although proportions of female AIDS cases related to injecting drug use are higher than male proportions in several CEWG areas. For example, in Arizona, 10 percent of male AIDS cases involve IDUs, compared with 38 percent of female cases. In Fulton County (Atlanta), 18 percent of male cases compared with 40 percent of female cases are injection related; in Los Angeles, 6 percent of heterosexual male cases compared with

26 percent of female cases are injection related; and in Minneapolis/St. Paul, 7 percent of heterosexual male and 23 percent of female cases are related to injecting drug use.

In Washington, DC, among female IDUs, African-American women continue to represent the majority (53 percent), followed by Hispanic women (33 percent) and white women (13 percent). Female IDUs are also younger than their male counterparts: 65 percent are 39 or younger, compared with 58 percent of the males.

In San Francisco, heterosexual IDU demography is like that of heroin users except for an overrepresentation of African-Americans; the gay male IDU demography is similar to that of male methamphetamine users.

LOCAL DATA

A local longitudinal study in the Seattle area reveals that between 1994 and 1997, HIV infections among IDUs who were not in drug treatment increased twice as much as among in-treatment IDUs. Similarly, in San Francisco, the HIV rate is much higher for IDUs not in treatment than for those in treatment. The same Seattle study previously mentioned estimated HIV seroprevalence among men who have sex with men (MSM) and inject methamphetamine to be 47 percent—the highest level of infection of any risk group in the area.

INFECTIOUS DISEASES OTHER THAN AIDS AMONG IDUs

- **Hepatitis B**—Cases in the San Francisco Bay area declined 43 percent between 1994 and 1998 (from 265 to 151 cases); however, in San Francisco County, cases have trended slightly upward (from 50 in 1995 to 60 in 1999). Since 1995 in Atlanta, African-Americans have outnumbered whites three to one in reported cases of hepatitis B, and cases among males and females have been approximately equal. In a 2-year (1997–99) longitudinal Chicago study of 18–30-year-old IDUs, hepatitis B seroincidence was 12.5 per 100 person-years.
- **Hepatitis C**—Hepatitis C prevalence among IDUs in CEWG areas is high. For example, preliminary serosurveillance of San Francisco Bay area IDUs suggests a hepatitis C infection rate in the 80–90 percent range. A north Denver outreach program reports that most of its clients are older heroin injectors, of whom 72 percent are hepatitis C-positive. Likewise, in Boston, high rates of hepatitis C have been reported among needle exchange clients. In a 2-year longitudinal study of young IDUs in Chicago (the same study mentioned previously), hepatitis C seroincidence was 12.5 per 100 person-years. Since 1995 in Atlanta, reported cases of hepatitis C have been primarily (60 percent) male, and all older than 30 years, with equal distribution between African-Americans and whites.

Exhibit 49. Acquired immunodeficiency syndrome among injecting drug users as reported by CEWG representatives, June 2000

Area	Reported through month/year for areas specified			% Increase 99-00	% IDU (sole mode of exposure)			% IDU and men/sex/men (dual mode of exposure)		
	June 98 CEWG Report	June 99 CEWG Report	June 00 CEWG Report		June 98	June 99	June 00	June 98	June 99	June 00
Arizona	5,583 (5/98)	6,278 (4/99)	7,055 (4/99)	12.3	^a 11.0	^a 11.6	^a 12.0	^a 12.0	^a 11.0	^a 10.4
Baltimore, MD	11,394 (12/97)	12,522 (12/98)	13,541 (12/99)	8.1	NR	NR	NR	NR	NR	NR
Colorado	6,172 (3/98)	6,498 (3/99)	6,800 (3/00)	4.6	8.3	8.5	8.8	10.8	10.8	10.9
Georgia	19,017 (12/97)	20,322 (3/99)	21,710 (3/00)	6.8	19.2	19.0	19.0	5.8	5.8	5.8
Honolulu, HI	^b 1,576 (12/97)	^c 1,639 (12/98)	^d 1,714 (12/99)	4.5	NR	NR	NR	NR	NR	NR
Illinois	20,679 (3/98)	21,985 (3/99)	23,769 (3/00)	8.1	NR	^a 25.0	^a 26.0	NR	^a 5.0	^a 5.0
Los Angeles County, CA	37,331 (3/98)	39,106 (3/99)	40,867 (3/00)	4.5	6.9	7.0	6.9	6.5	7.0	6.0
Louisiana ^a	10,348 (5/98)	11,393 (5/99)	12,143 (5/00)	6.5	16.0	19.0	19.0	10.0	9.0	8.0
Massachusetts ^a	12,893 (4/98)	14,088 (4/99)	15,500 (4/00)	10.0	34.0	35.0	34.0	4.0	NR	4.0
Miami, FL	20,107 (5/98)	^e 21,039 (12/98)	22,414 (4/00)	6.5	19.0	NR	17.0	3.7	NR	3.0
Michigan	9,419 (4/98)	9,950 (1/99)	10,549 (12/99)	6.0	24.0	24.0	24.0	6.0	6.0	6.0
Minnesota	3,143 (12/97)	3,324 (12/98)	3,501 (12/99)	5.3	8.0	8.0	8.5	7.0	7.0	7.0
Newark, NJ	NR	NR	7,410 (12/99)	4.1	NR	^a 57.0	^a 56.0	NR	^a 4.0	^a 4.0
New York, NY	99,256 (9/97)	109,39 (9/98)	115,26 (9/99)	5.3	45.0	^a 47.0	^a 47.0	3.0	NR	NR
Philadelphia, PA ^a	10,286 (12/97)	11,141 (12/98)	12,641 (12/99)	13.4	35.1	35.7	35.7	6.2	6.1	5.8
St. Louis, MO	3,175 (12/97)	3,225 (3/98)	3,539 (9/99)	9.7	6.2	6.1	6.6	6.2	6.2	6.3
San Diego County, CA	9,244 (4/98)	9,833 (4/99)	10,382 (4/00)	5.5	8.0	^a 8.0	^a 8.0	9.0	^a 9.0	^a 9.0
San Francisco County, CA	25,221 (3/98)	25,976 (3/99)	26,823 (3/00)	3.2	6.5	6.7	6.7	10.3	11.5	12.3
Seattle, WA	5,485 (3/98)	5,682 (3/99)	5,839 (12/999)	2.7	8.0	8.0	NR	8.0	9.0	NR
Texas	^b 44,501 (12/97)	^c 48,350 (12/98)	^d 51,449 (12/99)	6.4	17.0	NR	NR	6.0	NR	NR
Washington, DC	10,169 (12/97)	11,312 (12/98)	12,154 (12/99)	7.4	27.0	28.0	28.0	5.0	NR	NR
Total U.S.	^b633,0 (12/97)	^c688,20 (12/98)	^d733,3 (12/99)	6.5	^{a,b}25.6	^{a,c}25.6	^{a,d}25.5	^{a,b}6.4	^{a,c}6.4	^{a,d}6.4

^aCalculated from adult and adolescent cases only

^bSOURCE: Centers for Disease Control and Prevention, HIV/AIDS Surveillance Report 9(2): tables 7 and 10, 1997

^cSOURCE: Centers for Disease Control and Prevention, HIV/AIDS Surveillance Report 10(2): tables 8 and 10, 1998

^dSOURCE: Centers for Disease Control and Prevention, HIV/AIDS Surveillance Report 11(2): tables 4 and 5, 1999

