

U.S. Department of Health and Human Services
Public Health Service
National Institutes of Health
National Institute on Drug Abuse
6001 Executive Boulevard
Room 5213
Bethesda, MD 20892

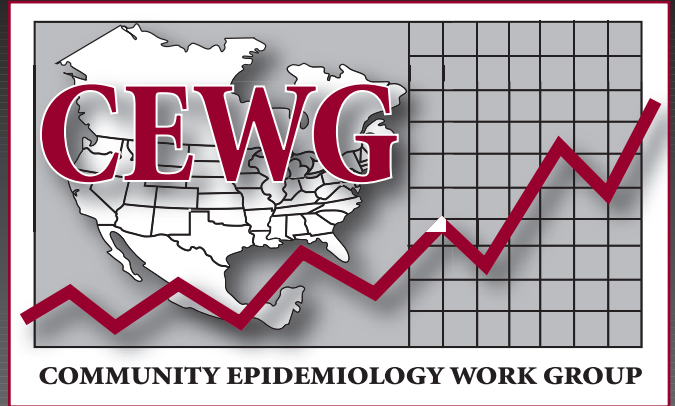
Official Business
Penalty for Private Use \$300.00

NIDA
NATIONAL INSTITUTE
ON DRUG ABUSE

NIH Publication No. 06-5878
Printed April 2006

FIRST-CLASS MAIL
POSTAGE AND FEES
PAID
DHHS/NIH
PERMIT NO. G-827

NIDA NATIONAL INSTITUTE
ON DRUG ABUSE



EPIDEMIOLOGIC TRENDS IN DRUG ABUSE

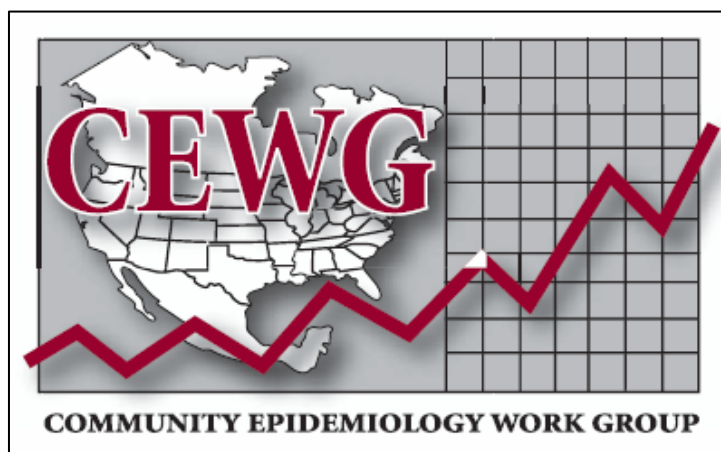
Advance Report

Community
Epidemiology
Work Group

January 2006

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

NATIONAL INSTITUTE ON DRUG ABUSE



EPIDEMIOLOGIC TRENDS IN DRUG ABUSE

Advance Report

Community
Epidemiology
Work Group

January 2006

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

Division of Epidemiology, Services
and Prevention Research
National Institute on Drug Abuse
6001 Executive Boulevard
Bethesda, Maryland 20892

The National Institute on Drug Abuse (NIDA) acknowledges the contributions made by the members of the Community Epidemiology Work Group (CEWG) who have prepared the reports presented at the meetings. Appreciation is extended also to other participating researchers who contributed information. This publication was prepared by MasiMax Resources, Inc., under contract number N01-DA-1-5514 from the National Institute on Drug Abuse.

This *Advance Report* is a synopsis of findings reported by the 21 CEWG members and issues discussed by participants at the January 2006 CEWG meeting. Abstracts of individual papers by CEWG representatives are also included; the full papers of the CEWG representatives and other participants will appear in *Volume II Proceedings*.

All material in this volume is in the public domain and may be reproduced or copied without permission from the Institute or the authors. Citation of the source is appreciated. The U.S. Government does not endorse or favor any specific commercial product. Trade or proprietary names appearing in this publication are used only because they are considered essential in the context of the studies reported herein.

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

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

***by mail: P.O. Box 2345
Rockville, MD 20852-2345***

***by phone: (301) 468-2600
(800) 729-6686***

by fax: (301) 468-6433

National Institute on Drug Abuse
NIH Publication No. 06-5878
Printed April 2006

FOREWORD

This *Advance Report* is a synthesis of findings presented at the 59th semi-annual meeting of the Community Epidemiology Work Group (CEWG) held in Phoenix, Arizona, on January 18–20, 2006, under the sponsorship of the National Institute on Drug Abuse (NIDA). The information from the CEWG network presented in this report includes an overview of drug abuse patterns and trends in CEWG areas, an *Abstract* from each CEWG representative's report, and tables and charts displaying the data in the appendices. This *Advance Report* focuses primarily on the abuse of cocaine/crack, heroin, other opiates, methamphetamine, marijuana, and MDMA in the United States. More complete coverage of these and other drugs reported in CEWG areas, as well as summaries of papers by members of the Panel on Criminal Justice Indicator Data in Phoenix/Arizona, a summary of a presentation on using hospital admissions data in monitoring drug abuse patterns and trends in Arizona, and a summary of the presentations by researchers from Mexico and Taiwan will be published in the *Epidemiologic Trends in Drug Abuse, Volume I* January 2006 CEWG report. Individual papers by CEWG representatives, panel participants, and Mexico's Epidemiologic Surveillance System on Addictions will be in the *Epidemiologic Trends in Drug Abuse, Volume II* of the January 2006 Proceedings. Information on how to obtain these volumes can be found on Page 2 of this report.

The information published after each CEWG meeting represents findings from CEWG members in 21 areas across the Nation. Findings from the CEWG network are supplemented by national data and by special presentations at each meeting. Publications are disseminated to drug abuse prevention and treatment agencies, public health officials, researchers, and policymakers. The information is intended to alert authorities at the local, State, regional, and national levels, and the general public, to current conditions and potential problems so that appropriate and timely action can be taken. Researchers also use the information to develop research hypotheses that might explain social, behavioral, and biological issues related to drug abuse.

At the January 2006 meeting, Wilson M. Compton, M.D., M.P.E., Director, Division of Epidemiology, Services and Prevention Research, NIDA, welcomed participants and provided an update on NIDA research activities, including new grant programs. He also noted challenges facing the CEWG and the drug abuse field.

Moirá P. O'Brien
Division of Epidemiology, Services and
Prevention Research
National Institute on Drug Abuse
National Institutes of Health
Department of Health and Human Services

CONTENTS

Foreword	3
Introduction to the CEWG Advance Report	6
Key Findings	10
Drug Abuse Patterns and Trends Across CEWG Areas	12
Cocaine/Crack	12
Heroin	14
Other Opiates	18
Methamphetamine	20
Marijuana	23
Methylenedioxymethamphetamine (MDMA)	25
Abstracts from CEWG Papers	27
Appendices	41
Appendix A. Treatment Admissions for Primary Cocaine, Heroin, Methamphetamine (MA), and Marijuana (MJ) in 20 CEWG Areas, by Percentage of Total Admissions (Excluding Alcohol): 2005	41
Appendix B. Number of Cocaine, Heroin, Methamphetamine (MA), and Marijuana (MJ) ED Reports in 17 CEWG Areas (Unweighted): 1H 2005	42
Appendix C. Cocaine, Heroin, Methamphetamine (MA), and Marijuana (MJ) Items Analyzed by Forensic Labs, by CEWG Area and Percentage of Total Items: FY 2005	43
Appendix D. Number of Selected Narcotic Analgesic/Opiate Items Analyzed by Forensic Laboratories in CEWG Areas: FY 2005	44
CEWG Participants	45

INTRODUCTION TO THE CEWG ADVANCE REPORT

Overview of This Report

This *Advance Report* presents a synopsis of selected findings from the January 2006 Community Epidemiology Work Group (CEWG) meeting. It includes a summary of abuse indicators for cocaine/crack, heroin, other opiates, methamphetamine, and MDMA (methylenedioxyamphetamine), as well as *Abstracts* from the papers prepared by the 21 CEWG representatives on drug abuse in their areas.

The CEWG, An Epidemiology Network

The CEWG is a unique epidemiology network. The CEWG has functioned for 29 years as a drug abuse surveillance system to identify and assess current and emerging drug abuse patterns, trends, and issues using multiple sources of information. Each source provides information about the abuse of particular drugs, drug-using populations, and/or different facets of the behaviors and outcomes related to drug abuse. The information obtained from each source is considered a drug abuse *indicator*. Indicators generally do not provide estimates of the number (prevalence) of drug abusers at any given time or the rate at which drug-abusing populations may be increasing or decreasing in size. However, indicators do help to characterize different types of drug abusers, such as those who have been treated in emergency rooms, have been admitted to drug treatment programs, or died with drugs found in their bodies. Data on items submitted for forensic chemical analysis serve as indicators on availability of different substances and engagement of law enforcement at the local level, and data such as drug price and purity are indicators of availability, accessibility, and potency of specific drugs. Drug abuse indicators are examined over time to monitor the nature and extent of drug abuse and associated problems within and across geographic areas.

The network is comprised of researchers from 21 areas: **Atlanta, Baltimore, Boston, Chicago, Denver, Detroit, Honolulu, Los Angeles, Miami/Ft. Lauderdale, Minneapolis/St. Paul, New Orleans, New York City, Newark, Philadelphia, Phoenix, St. Louis, San Diego, San Francisco, Seattle, Texas, and Washington, DC.** In past years, nonurban representation has been enhanced by presentations from guest researchers from Maine and Ohio. An Emerging/Current Trend approach draws on CEWG members' knowledge of local drug abuse patterns and trends, findings from small exploratory studies, research findings from NIDA-supported grant

studies, updates on pertinent information from federally supported data sources, and presentations by other speakers knowledgeable in a selected topic area. Presentations by researchers from other countries provide an international perspective on drug abuse patterns and trends.

At the January 2006 meeting...

- A representative from the University of Arizona presented hospital admissions data as a source for assessing drug abuse patterns and trends in Arizona.
- Personnel from five criminal justice agencies in the Phoenix area participated in a panel and provided information about their activities/programs and the most recent drug abuse data produced through their efforts.
- A representative from Cincinnati presented information about and data from the city's Drug and Poison Information Center.
- Federal personnel provided updates on the National Forensic Laboratory Information System, the National Drug Intelligence Center, and the Drug Abuse Warning Network.
- International researchers presented information on monitoring of drug abuse patterns and trends in Latin America, Mexico, and Taiwan.

Through ongoing research at State, city, and community levels, interactive semiannual meetings, e-mail, conference calls, and other exchange mechanisms, CEWG members maintain a multidimensional perspective from which to access, analyze, and interpret drug-related phenomena and change over time. At the semiannual meetings, CEWG representatives address issues identified in prior meetings, and, subsequently, identify drug abuse issues for followup in the future.

In semiannual meetings, CEWG representatives present drug abuse indicator data, survey findings, and other quantitative and qualitative data compiled from local, city, State, and Federal sources. Four primary sources of data used by the CEWG are summarized below; the data, by CEWG area, are presented in the appendices to this report.

- **Treatment data** are from CEWG reports and represent statewide data for Arizona, Hawaii, and Texas. No 2005 data were available for Washington, DC. Of the 20 reporting areas, 5 provided fiscal year (FY) 2005 data (*see Appendix A*). Philadelphia provided data for calendar year (CY) 2005. Data from all other areas were for the first half

of 2005. The data reported in the section on Drug Abuse Patterns and Trends Across CEWG Areas and in *Appendix A* are on primary admissions for treatment of specific drugs of abuse; the findings are reported as percentages of total admissions, excluding alcohol. Some area *Abstracts* report percentages for specific drugs based on total admissions, including alcohol. The most recent percentages for four major drugs are presented in *Appendix A*. Treatment data are not totally standardized across CEWG areas.

- **Drug Abuse Warning Network (DAWN) emergency department (ED) data** for the first half of 2005 were accessed through *DAWN Live!*, a restricted-access online service administered by the Office of Applied Studies (OAS), Substance Abuse and Mental Health Services Administration (SAMHSA), and represent patients of all ages in 17 CEWG areas. The 2005 data are from the redesigned DAWN system and are not comparable to data from 2002 or before, nor can the unweighted *DAWN Live!* data be compared across CEWG areas, reporting periods, or generalized within areas. Participation by EDs in each DAWN sample was incomplete; completeness data by CEWG area are summarized in *Appendix B*, together with the number of reports for four major drugs of abuse. The unweighted numbers in this publication represent drug reports involved in drug-related visits for illicit drugs and the nonmedical use of selected prescription drugs. Drug reports exceed the number of ED visits, because a patient may report use of multiple drugs (up to six drugs plus alcohol). Since all DAWN cases are reviewed for quality control and are subject to change following review, the data reported here are preliminary. As weighted estimates are published by SAMHSA, they will be reported by the CEWG, and comparisons will be made across areas in future NIDA reports.
- **Local drug-related mortality data** from medical examiners/coroners (ME/Cs) were reported for 14 CEWG areas. Eight reports are county-level data for 2004 (Newark/Essex County and San Francisco County) or for partial periods of 2005 (Ft. Lauderdale/Broward County; Detroit/Wayne County; Miami-Dade County; Minneapolis/Hennepin County; St. Paul/Ramsey County; and Seattle/King County). In addition, Phoenix reported on methamphetamine-related deaths in the first half of 2005. City-level data were reported by Honolulu and Philadelphia for the first half of 2005 and by Washington, DC, for 2004. State-level data were reported from Colorado and Texas for 2004. The actual mortality data are not comparable across areas because of variations in methods and procedures used by ME/Cs. Drugs may cause a death or simply be implicated in a death, and multiple drugs may be identified in a single case, with each reported in a separate drug category.

- **National Forensic Laboratory Information System (NFLIS) data** are maintained by the Drug Enforcement Administration (DEA); these are reported for FY 2005 in 20 CEWG metropolitan areas and Texas (statewide). The data are based on State and local forensic laboratory analyses of items received from drug seizures by law enforcement authorities. There are differences in local/State lab procedures and law enforcement practices that affect comparability across areas. Also, the data are not adjusted for population size. They are reported as the percentage that each drug represents in the total drug items analyzed by labs in a CEWG area in FY 2005. The FY 2005 NFLIS data for each CEWG area are presented on four major illicit drugs in *Appendix C* and on opiate-type drugs in *Appendix D*.

Other data sources used by many CEWG members include Threat Assessment data from the National Drug Intelligence Center (NDIC), U.S. Department of Justice; price and purity data from *Narcotics Digest Weekly*, DEA's Domestic Monitor Program, or local DEA offices; various local sources that provide data on drug arrests; calls to poison control centers and helplines; and drug-related data from surveys.

One source cited in this report is the *National Drug Threat Assessment 2005*. Johnstown, PA: U.S. Department of Justice, National Drug Intelligence Center, February 2005.

KEY FINDINGS

Cocaine/Crack abuse indicators remained at high levels in 15 of the 21 CEWG areas in 2005.

- In 14 areas, cocaine accounted for the largest percentages of drug items analyzed by forensic laboratories in FY 2005.
- Primary cocaine admissions exceeded those for other drugs (excluding alcohol) in 6 of 19 CEWG areas reporting treatment admissions data in 2005 time periods. In 11 of 14 areas with available data, between 74 and 99 percent of cocaine admissions were crack abusers. Boston, Los Angeles, and Texas reported increases in Hispanic cocaine admissions. Nine of 11 areas with available data reported that cocaine was the most commonly used secondary drug among heroin admissions.

Heroin abuse indicators continued to be higher than those for cocaine and methamphetamine in Baltimore, Boston, Chicago, Detroit, Newark, and San Francisco, with increased levels reported in Baltimore.

- Forensic lab data show that heroin accounted for relatively high percentages of the items analyzed in Baltimore, Boston, Chicago, Detroit, New York City, and Newark.
- Baltimore, Boston, Chicago, Detroit, New York City, Newark, San Francisco, and Seattle exceeded other CEWG areas in primary heroin treatment admissions (excluding alcohol).
- Domestic Monitor Program data for the last half of 2004 show that heroin purity decreased dramatically while retail prices for the drug increased in the 11 CEWG areas east of the Mississippi River where South American powder heroin is the predominant type of heroin available. Mexican black tar heroin purity increased in 6 of 10 CEWG areas located west of the Mississippi. In some areas, it was reported that narcotic analgesics (e.g., oxycodone and hydrocodone) were being used with or substituted for heroin.

Other Opiates abuse indicators are low but increasing in many CEWG areas.

- Oxycodone and hydrocodone were the most frequently reported opiates other than heroin in forensic lab, ED, and local mortality data.

- Other opiates accounted for only small percentages of treatment admissions (typically 1–6 percent of illicit drug admissions) in CEWG areas.

Methamphetamine abuse indicators continued to be highest in Honolulu and San Diego where they remained relatively stable from 2004 to 2005. Already at relatively high levels, these indicators increased in Denver, Los Angeles, Minneapolis/St. Paul, and Phoenix.

- Methamphetamine was identified in 51 to 65 percent of drug items reported by NFLIS in Honolulu and Minneapolis/St. Paul, respectively, and between 25 and 33 percent of the items analyzed in Atlanta, Los Angeles, Phoenix, San Diego, Seattle, and Texas.
- Methamphetamine continued to account for 58 percent of treatment admissions (excluding alcohol) in Hawaii, while increases in this admissions group were reported from eight CEWG areas. Available data from nine CEWG areas suggest that primary methamphetamine admissions are more likely than cocaine and heroin admissions to be female, White, and younger than 30.
- High-purity Mexican-produced methamphetamine has become more available in most CEWG areas.

Marijuana continued to be reported by CEWG representatives as the most widely available, inexpensive, and commonly used/abused drug in all CEWG areas.

- From 46 to 50 percent of the items analyzed by NFLIS labs in Boston, Chicago, New Orleans, and San Diego contained some variant of marijuana. In 10 other CEWG areas, marijuana was the drug most frequently reported by NFLIS.
- In 2005 reporting periods, primary marijuana admissions exceeded those for other illicit drugs in Denver and Minneapolis/St. Paul, continuing a 5-year trend. Marijuana treatment admissions tended to be younger than other illicit drug admissions in most CEWG areas.

MDMA (methylenedioxyamphetamine) continued to be the most frequently identified club drug. MDMA abuse indicators decreased or remained low in most CEWG areas.

DRUG ABUSE PATTERNS AND TRENDS ACROSS CEWG AREAS

Cocaine/Crack

Cocaine/crack abuse indicators were higher than those for heroin and methamphetamine in nine CEWG areas: Atlanta, Miami/South Florida, New Orleans, New York City, Philadelphia, St. Louis, Seattle, Texas, and Washington, DC. While remaining high, cocaine abuse indicators stabilized or decreased in five (Miami/South Florida, New Orleans, Philadelphia, San Francisco, and Washington, DC) between 2004 and 2005 and were mixed (some up, some down) in three (New York City, St. Louis, and Texas).

Cocaine/crack abuse indicators were also relatively high in six of the CEWG areas in which other drugs dominate: Chicago, Denver, Detroit, Los Angeles, Minneapolis/St. Paul, and San Francisco.

Treatment Data: In 18 CEWG areas where representatives reported admissions data from 2004 to 2005 periods, cocaine/crack admissions increased more than 3 percentage points in 2: New Orleans (3.9 percentage points) and Seattle (4.7). In three areas, cocaine/crack admissions decreased more than 3 percentage points; these were Atlanta (3.6 points), Chicago (6.2), and St. Louis (7.6). In 6 of 20 CEWG areas in 2005 reporting periods, primary cocaine admissions exceeded those for all other illicit drugs. Excluding alcohol, cocaine admissions were highest in Atlanta (49.6 percent) and ranged between 33.0 and 43.0 percent of admissions in Broward County, Florida, Detroit, New Orleans, Philadelphia, St. Louis, and Texas (*see Appendix A*). In 14 CEWG areas that reported data on route of administration by cocaine admissions, high percentages were crack abusers (e.g., smokers of the drug). In Chicago, Broward County, Florida, St. Louis, and Detroit, between 91 and 99 percent of cocaine admissions were crack abusers. Crack abusers in Minneapolis/St. Paul, San Diego, and Los Angeles accounted for between 82 and 86 percent of cocaine admissions, and in Newark, Baltimore, and Atlanta, between 74 and 78 percent of cocaine admissions were crack abusers. Crack admissions ranged between 56 and 65 percent of the cocaine admissions in Boston, Denver, New York City, and Texas. In many CEWG areas, cocaine/crack is reported as a secondary or tertiary drug, used in combination with other substances (see the examples below).

Cocaine as a Secondary Drug: In 9 of 11 CEWG areas reporting secondary drug treatment data for 2005, high proportions reported cocaine/crack as a secondary drug of abuse. For example, of the heroin admissions who reported use of a secondary drug in Newark, 51 percent reported cocaine/crack as their secondary drug. The proportions in Minneapolis/St. Paul and New York City were 42 and 43 percent, respectively, and between 30 and 33 percent of the primary heroin admissions in Atlanta and Denver cited cocaine as their secondary drug. In St. Louis and Los Angeles, respectively, cocaine was the secondary drug of one-fifth to one-fourth of the primary heroin admissions who used a substance other than heroin.

Demographics: Treatment data on primary cocaine abusers in the 2005 reporting periods show...

- In 15 CEWG areas in which race/ethnicity was reported, 12 indicated that one-half or more of primary cocaine/crack treatment admissions were African-American.
- Treatment data also suggest changes in the demographic characteristics of primary cocaine/crack admissions. For example, in some areas (Boston, Denver, Los Angeles, and Texas), it was reported that increasing percentages of Hispanic primary cocaine abusers entered treatment in 2005.
- In 9 of 10 CEWG areas reporting discreet age category data, cocaine/crack treatment admissions represented an aging cohort, with more than one-half being older than 30 or 35. In Atlanta, Boston, and Seattle, between 82 and 85 percent of the cocaine admissions were older than 30 or 35.

ED Data: Unweighted DAWN *Live!* data for the first half of 2005 show there were more cocaine ED reports than reports for heroin, methamphetamine, or marijuana in 15 of the 17 CEWG areas participating in DAWN. The exceptions were Phoenix and San Diego, where methamphetamine reports were more frequent than reports for other illicit drugs (see *Appendix B*).

Local Mortality Data: Of nine CEWG areas reporting cocaine-related deaths for the city or county for different time periods, the following numbers were noted...

- 318 in Detroit/Wayne County (January–October 2005)
- 183 in Philadelphia (1H 2005)
- 138 in Newark/Esssex County (2004)
- 77 in Miami-Dade County (1H 2005)
- 65 in San Francisco County (2004)
- 62 in Washington, DC (2004)

- 54 in Broward County, FL (IH 2005)
- 44 in Hennepin and Ramsey Counties, MN (January–September 2005)
- 34 in Seattle (27 percent of deaths) (1H 2005)

Cocaine-related deaths in 2004 were also reported for 2 States: Colorado (170) and Texas (699).

NFLIS Data: In 14 of the 21 CEWG areas in FY 2005, cocaine accounted for the largest percentages of drug items reported by NFLIS. Among the 14 areas, cocaine items represented more than one-half of the total in 3: New York City (53.4 percent), Atlanta (56.1 percent), and Miami (70.2 percent) (*see Appendix C*).

Cost of Crack: In the last half of 2004, the prices for crack cocaine in CEWG areas varied by the size/amount and cost per gram of cocaine. In most areas, crack could be purchased for \$100 per gram, although the price varied. The lowest prices per gram were reported in Newark (\$20), New York City (\$23), and Baltimore (\$40).

Purity of Crack: Crack cocaine is typically cut or broken into small pieces (“rocks”) that weigh from one-tenth to one-half of a gram. One gram of pure powder cocaine converts to about 0.889 grams of crack. So, rocks are generally small but between 75 and 90 percent pure.

Heroin

In assessing heroin abuse patterns and trends in the Nation, it is important to distinguish between the types of heroin abused. Regionally, South American heroin is the primary type available in the Northeast, Mid-Atlantic, and Southeast regions. Mexican heroin (black tar and, to a lesser extent, brown powder) is the primary type available in the Pacific, Southwest, and West Central regions. The type and purity of heroin are important factors that impact on heroin abuse indicators.

In 2005, heroin abuse indicators were higher than indicators for cocaine and methamphetamine in six CEWG areas: Baltimore, Boston, Chicago, Detroit, Newark, and San Francisco, although they showed some decline in San Francisco from 2000 to 2005.

In these six areas, heroin abuse indicators increased only in Baltimore. Some indicators suggested a “downward trend” in Boston and a “substantial

decline” in San Francisco, where, in the 5-county bay area, primary heroin treatment admissions decreased nearly one-half between 2000 and 2005.

Heroin abuse indicators also declined in another six CEWG areas that have had relatively low levels of heroin abuse—Atlanta, Denver, Honolulu, New Orleans, San Diego, and Seattle. Minneapolis/St. Paul, where heroin abuse indicators have been relatively low, was the only other CEWG area besides Baltimore that reported increases in heroin abuse indicators in 2005.

Purity: As noted above, in assessing heroin abuse, the purity of the drug is an important factor (see Impact of Purity below). DEA’s Domestic Monitor Program (DMP) data show that, between 2003 and 2004, the purity of South American heroin decreased dramatically in all 11 CEWG areas east of the Mississippi River. Purity was highest in Newark (52.7 percent) and Philadelphia (51.6 percent) and lowest in Chicago, Miami, and Washington, DC (ranging between 13.8 and 15.7 percent). In New York City, the purity of heroin decreased from 53.5 percent in 2003 to 43.3 percent in 2004.

In 2004, the purity of Mexican black tar heroin increased in six CEWG areas west of the Mississippi, remained stable at low levels in three, and decreased in only one area. The purity of black tar heroin was highest in the CEWG areas closest to the Mexican border, including San Diego (49.7 percent) and Phoenix (47.7 percent); it was much lower in San Francisco (11.1 percent) and Seattle (10.4 percent).

Impact of Purity: CEWG representatives commented that purity of heroin impacted on CEWG areas in a number of ways, including the following:

- Increased demand for treatment by heroin abusers
- How the drug was used (e.g., routes of administration)
- The extent to which other substances were used in combination with heroin
- The types of drugs used with heroin
- The demographic characteristics of the people who used heroin
- The extent to which heroin abusers switched to other drugs

Heroin treatment admissions may increase when there is a reduction in purity, primarily because of the physiological and/or psychological need for heroin of higher purity.

Across 17 CEWG areas in 2005, primary heroin treatment admissions (excluding alcohol) increased in seven, decreased in five, and remained stable in five; however, changes in most areas were modest (see Treatment Data below).

It was reported that white or beige-colored higher grade heroin is now being produced in Mexico and is available in parts of Texas. In New York City, there were reports that narcotic analgesics, such as oxycodone and hydrocodone, were being mixed with heroin to increase the “high.” In Philadelphia, treatment providers noted that some heroin clients over the past 2 years have switched to pharmaceutical products that have reliable purity and predictable effects (most notably oxycodone products). It was suggested that the lower purity of heroin in Miami was, in some ways, associated with the increases in narcotic analgesic abuse indicators in recent years.

NFLIS Data: Nationally, heroin items reported by NFLIS forensic laboratories from the first quarter of 2001 to the second quarter of 2005 declined significantly ($\alpha=.05$). In CEWG areas in FY 2005, heroin was the second most frequently reported drug by NFLIS labs in Newark (31.3 percent of all items analyzed). Heroin items were also relatively common in Baltimore (22.5 percent), Chicago (16.6 percent), Boston (12.9 percent), and Detroit and New York City (each 12.2 percent). In Philadelphia, St. Louis, and Washington, DC, heroin items ranged between 9.1 percent and 10.5 percent of the total items (*see Appendix C*).

Cost: DEA’s Domestic Monitor program data show that from 2003 to 2004 when heroin purity was decreasing, the price of heroin increased in all 11 areas east of the Mississippi River. In 2004, South American heroin was cheapest in Newark (the CEWG area with the highest purity) and Baltimore (each at \$0.50 per milligram pure) and most expensive in Atlanta (\$2.30).

From 2003 to 2004, the price of black tar heroin decreased in five CEWG areas west of the Mississippi, remained stable in five, and increased in San Antonio. In 2004, Mexican black tar heroin ranged in price from \$0.20 in San Diego and \$0.23 in Los Angeles to \$1.18 in Seattle and \$1.89 in St. Louis. The price tended to be lower in the areas closest to the U.S.-Mexico border.

Treatment Data: In 18 CEWG areas where CEWG representatives reported admissions data for 2004 and 2005 reporting periods, the proportions of primary heroin admissions (excluding alcohol) changed less than 3 percentage points in 12. In five areas, heroin admissions (excluding alcohol) increased approximately 3 percentage points or more: St. Louis (2.9 percentage points), Minneapolis/St. Paul (3.1), Chicago (5.7), Denver (6.6), and Phoenix (8.9). In Los Angeles, these admissions declined 5.7 percentage points. In 2005, admissions for primary heroin abuse (excluding alcohol) were higher than those for other drugs in eight CEWG areas and exceeded one-half of the admissions in Chicago (53.0 percent), Baltimore (60.6 percent), Boston (75.6 percent), and Newark (81.6 percent). In Detroit, New York City, and San Francisco, primary heroin admissions accounted for between 41 and 43 percent of illicit drug admissions, and, in Seattle, heroin admissions (26.6 percent) slightly exceeded those for other illicit drugs (*see Appendix A*).

Demographics: In nine CEWG areas, young cohorts of heroin abusers were identified in the treatment indicators. For example, in 2005, CEWG areas with relatively high proportions of primary heroin admissions younger than 25 included St. Louis (28 percent), New Orleans (21 percent), and San Diego (20 percent). Other 2005 data show...

- In Philadelphia, 42 percent of heroin admissions were age 21–30.
- In Seattle, 19 percent of heroin admissions were younger than 30.
- In Baltimore, 21 percent of the 1,076 heroin admissions who used the drug intranasally were younger than 25, and the proportion of injectors younger than 25 increased from 10 to 13 percent from 2001 to the first half of 2005.
- In Boston, approximately 35 percent of the heroin/other opiate abusers entering treatment facilities were age 19–29.
- In Detroit, indicators suggested that heroin was becoming more prevalent in younger, more middle class populations.

In the 15 CEWG areas that reported on the race/ethnicity of heroin admissions in 2005, Whites dominated in 7, African-Americans in 5, and Hispanics in 3. In Baltimore, 45.5 percent of heroin injectors who entered treatment in the first half of 2005 were White. Whites represented 60 percent of the heroin/other opiates admissions in Boston and 68 percent in Broward Addictions Recovery Centers. African-American heroin admissions were highest in Chicago and Detroit (each 82 percent), and Hispanics were highest in Los Angeles, New York City, and Texas (ranging between 47 and 55 percent of heroin admissions).

The Texas CEWG representative reported that between September 11 and December 9, 2005, 530 individuals displaced by Hurricanes Katrina and Rita entered Texas treatment programs. Forty-eight percent had problems with heroin. The displaced clients were more likely to be African-American than Texas clients who were not evacuees.

ED Data: Of the 17 CEWG areas represented in the unweighted DAWN *Live!* data in the first half of 2005, heroin ED reports were second to other illicit drug reports in 5: Baltimore, Boston, Chicago, New York City, and Seattle (*see Appendix B*).

Mortality Data: Relatively high numbers of heroin-related deaths were reported by medical examiners in Detroit/Wayne County (322 from January through October 2005), Philadelphia (104 in 1H 2005), San Francisco County (57 in 2004), Seattle (44, which approximated heroin in the 1H of 2005), and Colorado (22 in 2004). Small numbers of heroin-related deaths were also reported for the first half of 2005 from Miami-Dade ($n=7$) and Broward (8) Counties, and Honolulu (9), and, in Washington, DC, for 2004 ($n=5$).

Other Opiates

In 2005, abuse indicators for opiates other than heroin were low but were increasing in many CEWG areas. The areas reporting increases included Atlanta, Baltimore, Denver, Detroit, Honolulu, Miami/Ft. Lauderdale, New Orleans, San Diego, San Francisco, Washington, DC, and the State of Texas. While the numbers and percentages for other opiates tend to be small compared with other types of drugs, CEWG representatives continue to closely monitor data sources for information on a variety of opiates/narcotic analgesics.

Treatment Data: Treatment admissions data from 14 CEWG areas for 2004 and 2005 reporting periods show that the proportions of total admissions (excluding alcohol) for primary abuse of opiates other than heroin continued to be relatively low. The highest proportions in the 2005 periods were in Baltimore (6.4 percent) and Texas (6.1 percent), and the lowest were in Chicago, Los Angeles, and New York City (1.1 percent in each area). The proportions of other opiate admissions were fairly stable in most areas (changing 1 percentage point or less from 2004 to 2005); the exceptions were Baltimore, where there was an increase of 1.5 percentage points from the 2004 to 2005 reporting periods, and Boston, Detroit, Los Angeles, and Texas, where the proportion of other opiate treatment admissions decreased from 1 to 2 percentage points. Two other areas for which no 2004 data on primary admissions for other opiate abuse were available were Arizona and Broward County, Florida. In Broward County in the first half of 2005, 14.9 percent of the treatment admissions (excluding alcohol) at Broward Addictions Recovery Centers were for other opiates. In Arizona, 1.7 percent of the FY 2005 admissions (excluding alcohol) were for primary abuse of other opiates.

ED Data: In the unweighted DAWN *Live!* data for the first half of 2005, hydrocodone and oxycodone were frequently documented in ED reports in all 17 participating CEWG areas. The number of hydrocodone ED reports exceeded those for oxycodone in eight CEWG areas, while oxycodone reports were more frequent in nine.

Mortality Data: Nine CEWG areas reported on deaths related to opiates other than heroin. Note that the total numbers shown below may include decedents who had more than one other opiate (or other types of drugs) in their system. Detroit reports for the first 10 months of 2005, and Washington, DC, Colorado, and Texas all report for all of 2004. All other reports are for the partial time periods in 2005.

- In Broward County, Florida, the ME recorded 41 deaths involving oxycodone, 39 methadone-related deaths, 19 involving morphine, 13 involving hydrocodone, and 6 involving propoxyphene.

- In Detroit/Wayne County, toxicology reports from the ME showed that 223 involved codeine, followed by 103 hydrocodone/combinations, 65 methadone, and 22 oxycodone/combinations.
- In Honolulu, toxicology screens with morphine present totaled 21, those with methadone present totaled 14, and those with hydrocodone or oxycodone totaled 8 and 6, respectively.
- In Miami-Dade County, there were 12 morphine-related deaths, 8 methadone-related deaths, 6 involving oxycodone, 3 involving hydrocodone, and 2 involving propoxyphene.
- In Philadelphia, there were 61 deaths with the presence of oxycodone, 59 each with codeine or methadone, 34 with hydrocodone, 20 with propoxyphene, and 12 with hydromorphone.
- In Seattle/King County in the first half of 2005, methadone was identified in 44 deaths (compared with 67 for all of 2004), oxycodone was identified in 16 cases (similar to the level of 32 for all of 2004), and hydrocodone was present in 3 cases (lower than the levels in 2003 and 2004).
- In Washington, DC, in 2004, there 41 morphine-related deaths, 10 codeine/combinations-related deaths, 2 each for oxycodone/combinations and propoxyphene-related deaths, 1 for hydrocodone/combinations, and 20 deaths for which the opiate was not specified.
- In Colorado, 238 deaths related to other opiates were reported in 2004.
- In Texas in 2004, there were 201 deaths with a mention of hydrocodone, 164 with a mention of methadone, 66 involving oxycodone, and 32 with a mention of fentanyl.

NFLIS: Nationally, 11,225 items analyzed by forensic labs in the first half of 2005 contained hydrocodone and 9,716 contained oxycodone. These two narcotic analgesics were, by far, the most frequently identified narcotic drugs, other than heroin. During this same period, 3,684 methadone, 1,965 codeine, and 1,618 morphine items were identified.

In CEWG areas in FY 2005, the highest numbers of hydrocodone items were reported in Los Angeles (309), New York City (209), Atlanta (188), and Philadelphia (168). Across the Texas sites, 1,279 hydrocodone items were identified by the Department of Public Safety labs. The highest numbers of oxycodone items in metropolitan areas were identified by forensic labs in Philadelphia (491), Baltimore (149), New York City (140), and San Francisco (135). Labs in Texas identified 431 oxycodone items. Not surprisingly, forensic labs in New York City identified more items containing methadone than all other CEWG areas combined (*see Appendix D*). New York City has, by far, the largest number of methadone maintenance treatment programs in the country.

Cost: Diverted prescription opiates varied in price by and within CEWG area. For example, OxyContin is sold by the number of milligrams. In 2004, it sold retail for \$1.00 per milligram in many CEWG areas, includ-

ing Boston, Detroit, Miami, Philadelphia, Washington, DC, and areas within Texas. However, the price of 80-milligram OxyContin controlled-release tablets varied more by area—selling from \$50 to \$80 per tablet in Los Angeles to as low as \$10 per tablet in New York City.

Identifying and Monitoring Emerging Prescription

Opiate Abuse: CEWG representatives monitor data sources for emerging drug problems. At the January 2006 meeting, attention was focused on fentanyl, a potent synthetic opioid with short-acting analgesic activity, which was identified in five CEWG areas. In Detroit, where the Michigan Board of Pharmacies monitors the types and numbers of prescriptions, increases were reported for two types of fentanyl prescribed between 2003 and 2004: a 20.8-percent increase in the number (264,092 in 2004) of prescriptions for fentanyl patches (which contain a high fentanyl content) and a 299-percent increase in the number (5,149 in 2004) of prescriptions for fentanyl lozenges. In Los Angeles, fentanyl patches sell for \$25–\$100 each. In the State of Florida, 183 fentanyl-related deaths were reported in the first half of 2005. In Boston, 13 deaths were reported in the DAWN system in 2003. In Texas in 2004, there were 32 deaths with a mention of fentanyl.

Some CEWG representatives also assessed how and why different prescription opiates are used. For example, the Street Studies Unit in New York City reported that OxyContin was being used in combination with heroin (which has been decreasing in purity) and also to boost the effects of methadone. In Texas, illegal use of codeine cough syrup continues to be a problem. In San Francisco, local observers noted an increase in the popularity of oxycodone, which is regarded as a safe alternative to heroin. In Detroit, intelligence reports suggest that other opiates are a gateway to heroin use, especially if it becomes difficult to obtain prescribed opiates.

Methamphetamine

In 2005, most methamphetamine abuse indicators were higher than those for cocaine and heroin in six CEWG areas: Denver, Honolulu, Los Angeles, Minneapolis/St. Paul, Phoenix, and San Diego. Methamphetamine indicators increased in four of these areas and remained at very high levels in Honolulu and San Diego. Indicators also increased to a relatively high level in Seattle. In San Francisco, methamphetamine indicators leveled off after substantial increases from 2001 to 2004.

Methamphetamine indicators were closely monitored in and around the 15 CEWG areas where they have been relatively low because of the growing concern about the drug, the way it was spreading, and its devastating impact on other areas in the Nation. Methamphetamine abuse was reported as...

- The fastest growing problem in metropolitan Atlanta
- A growing problem in Texas, particularly in the north and east sections of the State
- Trending upward in Atlanta, Denver, Minneapolis/St. Paul, and Seattle

Although still at relatively low levels or found in particular populations, increases in methamphetamine abuse indicators were also reported in Baltimore, Boston, Chicago, New York City, and St. Louis. Newark was one CEWG area in which methamphetamine abuse indicators were low and showed no signs of increasing in 2005.

Production and Distribution of Methamphetamine: The number of small clandestine methamphetamine laboratories and high-capacity superlabs (capable of producing 10 or more pounds in a single production cycle) continued to decrease in and around CEWG areas, according to the U.S. Department of Justice (2005). In 2005, 14 superlabs were seized in the Nation; most were located in California. However, the production and transportation of methamphetamine from Mexico have reportedly increased. Mexican drug trafficking organizations widened their drug distribution networks, and a higher purity form of methamphetamine was reportedly being transported from Mexico and California to drug markets throughout the United States.

Purity: Methamphetamine purity varies greatly from area to area and within areas, based on whether it is produced in local clandestine labs (primarily in rural areas) or in large labs in the United States and other countries. The low-capacity domestic labs, producing 1 pound or less per production cycle, generally produce methamphetamine of low quality. The availability of crystal methamphetamine (“ice”) in the Nation increased sharply over the past 2 years, primarily because of substantial increases in ice production by Mexican criminal groups. In its purest form, ice is at least 80 percent pure, but the ice currently produced by Mexican trafficking groups is more likely to be discolored and of lower purity, according to the U.S. Department of Justice in 2005.

Cost: Based on the last half of 2004 data from the *Narcotics Digest Weekly* and local DEA data for 2005 in Los Angeles and San Diego, the lowest retail prices for one-eighth ounce of methamphetamine were reported in Los Angeles (\$100–\$125), San Diego (\$100–\$150), and Phoenix (\$150). The highest retail prices per gram were reported in Honolulu and Miami (\$200) and Detroit (\$175). Per gram, the cost of methamphetamine was \$20–\$60 in Seattle, \$70–\$100 in Dallas and Denver, and \$80–\$100 in Chicago and San Francisco. In St. Louis, the price ranged from \$100 to \$150 per gram, while in New York, the range was greater, at \$100–\$300 per gram. The cost of producing ice is slightly higher than the cost of producing powder methamphetamine, so ice is generally sold at a higher price.

NFLIS Data: In FY 2005, the proportions of methamphetamine items reported from forensic labs were high in several CEWG areas: 65.2 percent of all items in Honolulu; 51.5 percent in Minneapolis/St. Paul; between approximately 32.0 and 33.0 percent in Atlanta, Los Angeles, and Phoenix; and slightly more than 31.0 percent in both San Diego and Seattle. Methamphetamine represented 25 percent of the total drug items across Texas sites (*see Appendix C*).

Treatment Data: Data for 2005 reporting periods show that admissions for primary abuse of methamphetamine, as a proportion of total admissions excluding alcohol, continued to be highest in Hawaii (57.8 percent), San Diego (50.2 percent), Arizona (32.5 percent), and Los Angeles (30.9 percent) (*see Appendix A*). There was no substantial change between 2004 and 2005 in the percentage of methamphetamine admissions in Hawaii; however, primary methamphetamine admissions (excluding alcohol) increased 4.2 percentage points in Los Angeles and 5.0 percentage points in San Diego from 2004 and decreased 5.0 percentage points in Arizona.

Primary methamphetamine admissions also accounted for substantial proportions of illicit drug admissions in the first half of 2005 in Minneapolis/St. Paul (22.1 percent), Denver (20.8 percent), Seattle (15.9 percent), and Atlanta (15.8 percent). There was no substantial change from 2004 in Seattle, but there were percentage-point increases in Minneapolis/St. Paul (2.5), Denver (3.2), and Atlanta (4.5). Methamphetamine admissions in St. Louis represented 6.5 percent of illicit drug admissions in 2004 and 5.6 percent in the first half of 2005. In six CEWG areas where methamphetamine indicators have remained low, primary methamphetamine admissions continued to account for less than 1 percent of illicit drug admissions; however, there were slight increases in three (Baltimore, Philadelphia, and Newark). In two CEWG areas where methamphetamine is reported together with amphetamines, this primary admissions group (excluding alcohol) increased 2.8 percentage points in Texas (from 13.6 to 16.4 percent) while remaining stable in San Francisco at slightly more than 14.0 percent of illicit drug admissions.

Demographics: The 2005 treatment admissions data from 7 of 9 CEWG areas suggest that compared with cocaine and heroin abusers, primary methamphetamine admissions were more likely to be female, White, and younger than 25. In these seven areas, female admissions dominated in two: Atlanta (60 percent) and St. Louis (53 percent). In Chicago, Denver, Minneapolis/St. Paul, San Diego, and Seattle, the proportions of males ranged from 57 to 77 percent. In Detroit, all 19 primary methamphetamine admissions were male, and in Newark, 3 of the 4 admissions were male. Whites constituted more than one-half of the admissions in 7 of the 9 areas: 51 percent in San Diego; 75 percent in Detroit; 81 and 82 percent, respectively, in Seattle and Denver; 90 percent in Minneapolis/St. Paul; 95 percent in Atlanta; and 98 percent in St. Louis. In San Diego and Los Angeles, Hispanics accounted for 31 and 54 percent of methamphetamine admissions, respectively. One-half of the methamphetamine admissions in Denver and Minneapolis/St. Paul were younger than 25, and 46 percent in Seattle were younger than 30.

Of the five CEWG areas that reported on secondary drug use among primary methamphetamine admissions, four indicated that marijuana was the secondary drug most frequently used, with the proportion being high in St. Louis (37.0 percent) and Minneapolis/St. Paul (48.5 percent).

Route of Administration of Methamphetamine: In eight areas that reported on route of administration of methamphetamine, smoking was the route most frequently reported, characterizing 50–60 percent of the methamphetamine admissions in Atlanta, Denver, Detroit, and St. Louis. In Minneapolis/St Paul, 67 percent smoked the drug, and in Los Angeles and Seattle, 71 percent did so. Smaller proportions injected methamphetamine: 6 percent in Los Angeles, 11 percent in Atlanta, 14 percent in Minneapolis/St. Paul and Seattle, 23 percent in Denver, and 28 percent in St. Louis. None of the 19 admissions in Detroit injected methamphetamine.

At the January 2006 meeting, it was reported that methamphetamine abuse is increasing among Hispanics in Atlanta, Denver, and Los Angeles, and that some cocaine abusers have switched to methamphetamine in Colorado.

ED Data: In the first half of 2005, the unweighted number of methamphetamine ED reports in *DAWN Live!* exceeded those for cocaine, heroin, and marijuana in Phoenix and San Diego and were second behind cocaine in San Francisco (*see Appendix B*).

Mortality Data: Nine areas reported on the presence of methamphetamine in decedents. In the first half of 2005, 49 were reported in Phoenix, 44 in Honolulu, 17 in Seattle, and 9 in Philadelphia. Ten were reported in Hennepin and Ramsey Counties, Minnesota, from January through September 2005. In San Francisco County in FY 2004, 28 methamphetamine-related deaths were reported, and in Newark/Essex County, 2 were reported. No deaths involving this drug were reported in Washington, DC, in 2004. In Texas in 2004, there were 99 deaths with a mention of methamphetamine or amphetamine.

Marijuana

In 2005, CEWG area representatives reported that marijuana was the most widely available and commonly abused drug in all CEWG areas. In most CEWG areas, marijuana indicators stabilized at high levels. For example, it was reported that...

- In Atlanta, marijuana abuse was widespread, but the “indicators remained stable.”
- In Baltimore, marijuana abuse indicators have been “trending up since 2000.”
- In Greater Boston, marijuana use indicators “were stable at relatively high levels.”

- In Detroit, marijuana indicators reportedly “stabilized at elevated levels.”
- In New York City, marijuana indicators “stabilized after reaching new peaks.”
- In South Florida, marijuana is the “most prevalent illicit drug of abuse, dominating consequences among youth.”
- In Washington, DC, marijuana abuse indicators were mixed, with student use down, arrests increasing, and urinalysis results for juveniles stable.

Treatment Data: Across 20 CEWG areas, 2004 versus 2005 data show that the percentages of primary marijuana treatment admissions (excluding alcohol) increased in 6 areas, decreased in 9, and remained stable in 5. In the 2005 reporting periods, primary marijuana admissions (excluding alcohol) exceeded those for any other drug in Denver (40.4 percent), Minneapolis/St. Paul (34.7 percent), and Arizona (33.5 percent), continuing a 5-year trend in these three areas. The lowest proportions of marijuana admissions (excluding alcohol) were in Boston, Newark, and San Francisco, where they ranged between 5.0 and 9.4 percent (*see Appendix A*).

Demographics: The 2005 treatment data on primary marijuana admissions from 16 CEWG areas show that males predominated in 15, representing between 71 and 83 percent of this admissions group. Atlanta was an exception: 59 percent of the marijuana admissions were female. In 17 areas that reported on race/ethnicity, a majority were African-American in 9. African-Americans constituted 56 percent of this admissions group in both Atlanta and New York City, 60 percent in Philadelphia, and 76 and 85 percent, respectively, in Chicago and Detroit. In seven areas, marijuana admissions were more likely to be White—ranging from 42 percent in both Denver and San Diego to 65 percent in Minneapolis/St. Paul. Hispanics were the most dominant group in Los Angeles (55 percent) and Texas (43 percent), and they were the second most dominant ethnic group in Boston (22 percent), San Diego (31 percent), and Denver and New York City (each 32 percent).

In 11 of 16 CEWG areas, more than one-half of the primary marijuana admissions were younger than 25 or 26, ranging from 53 percent in Philadelphia to 83 percent in Baltimore. In Chicago, 41 percent of the marijuana admissions were younger than 18. In Seattle, 78 percent of the primary marijuana admissions were 29 or younger. Only 3 of the 14 areas reported sizable proportions of marijuana admissions who were 35 or older: New Orleans (35 percent), St. Louis (42 percent), and Broward County (52 percent).

Reports from seven CEWG areas indicated that alcohol was the most widely used secondary drug among admissions who used a drug other than marijuana. The proportions using alcohol were 29 percent in St. Louis and 65 percent in Minneapolis/St. Paul.

ED Data: In 9 of the 17 areas participating DAWN in the first half of 2005, marijuana ED reports were second in number to other illicit drugs (cocaine in 8 and methamphetamine in 1) (*see Appendix B*).

NFLIS Data: Nationally, cannabis/THC (tetrahydrocannabinol) items reported by NFLIS declined significantly between the first quarter of 2001 to the second quarter of 2005 in the Northeast and South ($\alpha=.05$). Across CEWG areas in FY 2005, the proportions of cannabis/THC items were low compared with other drug items reported in Atlanta (1.0 percent) and Minneapolis (9.9 percent), areas in which there have been sharp increases in items containing methamphetamine in recent years. However, cannabis/THC was the drug most frequently reported by forensic labs in Boston, Chicago, New Orleans, and San Diego, accounting for approximately 46–50 percent of the total items analyzed in these areas. In 10 CEWG areas, cannabis/THC was the second most frequently reported drug by NFLIS, ranging from nearly 19 percent of all drug items analyzed in Denver to 41 percent in both Detroit and St. Louis (*see Appendix C*).

Potency: Increased availability of higher potency marijuana (e.g., sinsemilla, “BC Bud”) and advances in marijuana cultivation techniques and production methods have resulted in marijuana of higher quality. The Potency Monitoring Project supported by NIDA showed that the average THC content for marijuana increased from 4.97 percent in 2003 to 5.81 percent in 2004, and that the average THC content of sinsemilla increased from 9.83 percent in 2003 to 13.33 percent in 2004. In 1973, the average THC content of marijuana was only 0.83 percent.

Price: The price of marijuana varied across CEWG areas depending on a number of factors, including type (e.g., domestic, commercial grade, Mexican, BC Bud) and closeness to where it was produced (e.g., Mexico, Canada, and areas within the United States). In 2005, one-quarter ounce of marijuana cost \$20 in San Diego, according to the local DEA. In the last half of 2004, one-quarter ounce of marijuana sold for \$30 in New York City and \$35 in Baltimore. In that same time period, marijuana was available in Atlanta, Miami, Chicago, and Minneapolis for \$5 per gram and in Dallas (commercial grade), Los Angeles, and Phoenix for \$10 per gram. A gram sold for as little as \$20 in Detroit and Newark and for \$25 in Honolulu.

Methylenedioxymethamphetamine (MDMA)

Abuse indicators for MDMA (also known as ecstasy) decreased or remained at low levels in all 21 CEWG areas. Three of four State-sponsored school surveys conducted in CEWG areas showed declining percentages of MDMA use among students...

- The 2003–2004 California Healthy Kids Survey showed that only 5.5 percent of the Los Angeles secondary school students had ever used ecstasy, a smaller proportion than reported in prior years.
- The Minnesota Student Survey reported that ecstasy use had declined markedly from prior years among metropolitan area high school students—from 9.1 percent in 2001 to 4.5 percent in 2004.
- The 2004 Texas Secondary School Survey found that lifetime ecstasy use dropped from 8.6 percent in 2002 to 5.5 percent in 2004. Past-year MDMA use dropped from 3.1 percent to 1.8 percent.
- MDMA use increased among students in grades 8–12 in Cook County, Illinois. Past-year use was reported by 2 percent of students in 2004, compared with 1 percent in 2002.

According to the U.S. Department of Justice in 2005...

- MDMA availability decreased substantially after peaking in 2001.
- Smuggling of MDMA from the major European sources (Netherlands and Belgium) decreased dramatically from 2002 to 2004.
- DEA’s System to Retrieve Information from Drug Evidence (STRIDE) data show that MDMA seizures have been decreasing since 2001.

NFLIS Data: In FY 2005, relatively small numbers of the items analyzed by forensic labs in CEWG areas contained MDMA or MDA (methylenedioxyamphetamine). A total of 2,466 items containing MDMA/MDA were reported across the 20 CEWG metropolitan areas, and 439 were reported from Texas sites. In San Francisco and Atlanta, MDMA/MDA items accounted for 2.5 and 2.6 percent of all drug items, respectively. In six CEWG areas, MDMA/MDA items represented between 1.2 and 1.8 percent of all items (Denver, Minneapolis/St. Paul, New Orleans, St. Louis, Washington, DC, and Texas). In the other 13 areas, MDMA/MDA items accounted for less than 1 percent of the total (0.02 to 0.8 percent).

Price: In 2004, ecstasy tablets sold for between \$15 and \$25 in most CEWG areas; however, tablets could be purchased for \$10 in Baltimore, Los Angeles, Miami, and New York City, and for as little as \$6 in Dallas and Washington, DC.

Purity: The DEA reports that most MDMA tablets weigh approximately 300 milligrams and contain between 70 and 120 milligrams of MDMA. However, the proportion of MDMA contained in items sold as “ecstasy” differs by time period, distribution network, and geographic area.

ABSTRACTS FROM CEWG REPORTS

Drug Trends in Metropolitan Atlanta

Brian J. Dew, Ph.D., Claire E. Sterk, Ph.D., Kirk W. Elifson, Ph.D.,
and Michael D. Brubaker, M.Div.

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

Drug Use in the Baltimore Metropolitan Area: Epidemiology and Trends, 2000–1H 2005

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

Heroin indicators for the Baltimore metropolitan area as a whole have generally shown an increase over 2001 levels. In the first half of 2005, heroin was responsible for 53 percent of drug-related treatment admissions. Heroin use in the Baltimore metropolitan area is complex. There are several groups of heroin users differing by urbanicity, route of administration, age, and race. Baltimore has a core of older African-American heroin users, both intranasal users and injectors (39 and 20 percent of all heroin treatment admissions, respectively, in the first half of 2005). White users entering treatment for heroin were younger and were predominantly injectors rather than intranasal users (27 and 29 percent of all heroin treatment admissions, respectively, in the first half of 2005). Cocaine indicators also began to increase in 2001. In the first half of 2005, cocaine use was reported by 52 percent of drug-related treatment admissions in the

Baltimore primary metropolitan statistical area (PMSA), with 14 percent reporting primary use and 38 percent reporting use secondary to use of alcohol or another drug. Cocaine smoking was the most prevalent route of administration among both primary and secondary users, followed by injection and intranasal use. Cocaine use was associated with heroin use, but the preferred route of administration of heroin differed from the preferred route of administration of cocaine. More than one-third (38 percent) of cocaine smokers used intranasal heroin. Almost all cocaine injectors (90 percent) injected heroin. More than one-third (35 percent) of intranasal cocaine users used heroin intranasally. Indicators of marijuana use have tended to increase since 2000. Like cocaine, marijuana was reported more frequently as a secondary substance than as a primary substance—30 percent of drug-related treatment admissions used marijuana (13 percent as a primary substance and 17 percent as a secondary substance). More often than not, marijuana use in the indicator data sets was associated with the use of alcohol or other drugs in the first half of 2005; 59 percent of marijuana treatment admissions reported use of additional substances. Persons entering treatment for primary marijuana use were young—38 percent were younger than 18. A large proportion of marijuana treatment admissions (60 percent) in the first half of 2005 represented referrals through the criminal justice system. Indicators for opiates and narcotics other than heroin have increased over the past several years. Stimulants other than cocaine are rarely mentioned as the primary substance of abuse by treatment admissions.

Greater Boston Patterns and Trends in Drug Abuse: January 2006

Daniel P. Dooley

Heroin and cocaine continue to dominate as the two most heavily abused illicit drugs in Boston. Indicators for both remain at very high levels. Recent heroin indicators available for trend analysis are mixed but starting to show some downward movement. The proportion of heroin treatment admissions continued to increase in FY 2005, even as the actual number of heroin admissions decreased. The proportion of heroin calls to the substance abuse Helpline in FY 2005 decreased notably (21 percent) from the previous year. Street-level heroin purchases by the Domestic Monitor Program (DEA) reveal decreases in average purity from 50 percent pure in 2002 to 28 percent pure in 2004. Cocaine indicators remained fairly stable. However, mainly because of increases in the number of crack admissions, the proportion of cocaine or crack treatment admissions did increase slightly for the first time in 7 years of reporting. Treatment admissions for marijuana steadily decreased both in number and as a proportion of all admissions during the past 6 years, while other marijuana indicators remained mostly stable. There are some indications that the alarming rise in oxycodone abuse may be starting to ease. FY 2005 numbers and proportions of both treatment admissions and Helpline calls for opiates decreased for the first time in 5 years, but they remain at historically high levels. The number of oxycodone calls to the Helpline decreased 24 percent from FY 2004 to FY

2005. However, oxycodone drug lab submissions appear to be increasing as measured over the first 9 months of 2005. Benzodiazepine misuse and abuse levels remain stable at high levels. Methamphetamine abuse numbers remain very small, but some are starting to increase. Remaining well below 1 percent of all treatment admissions, primary admissions for methamphetamine increased from 53 in FY 2004 to 75 in FY 2005. In 2004, there were 254 adult HIV/AIDS cases diagnosed in Boston. Primary transmission risk factors of these cases included 9 percent who were IDUs, 4 percent who had sex with IDUs, and 39 percent with an unknown/undetermined risk factor. Overall, most of the drug abuse and misuse indicators that can be used in trend analysis show decreasing numbers in greater Boston. The total number of greater Boston treatment admissions fell 27 percent from FY 2002 to FY 2005. The total number of drug and alcohol calls to the substance abuse Helpline decreased 14 percent during the same period. The number of Boston drug arrests decreased 10 percent from 2002 to 2004. Taken together, these decreases might suggest a general decrease in the overall level of drug abuse in Boston, but many factors not directly related to drug use can impact changes seen in these numbers.

Patterns and Trends of Drug Abuse in Chicago

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

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

trend in use among young African-Americans. LSD and PCP indicators continue to show levels of use below the national average. Nearly 15 percent of students interviewed for the 2004 Illinois Youth Survey reported past-year use of 'pain pills,' and the same proportion used 'other prescription' drugs. Injection drug use declined from 20 percent in 2000 to 12 percent in 2004 as the likely mode of transmission among persons in Chicago newly diagnosed with HIV infection.

Patterns and Trends in Drug Abuse: Denver and Colorado

Tamara Hoxworth

The use and trafficking of illegal drugs continues to be an expanding problem for Colorado, with much of the transporting, distributing, and selling of illegal substances supported by organized crime entities, mostly from Mexico and California. Excluding alcohol, marijuana abuse has continued to result in the highest number of treatment admissions annually since 1997, and along with 'other opiates' (excluding heroin), represents the highest percentage of users entering treatment within 3 years of initial use. In the first half of 2005, cocaine ranked third in number of treatment admissions behind marijuana and methamphetamine, but it accounted for the highest drug incidence rate per 100,000 persons for hospital discharges from 1996 through 2004 and for the highest number of ED reports in the first half of 2005. Cocaine also accounted for the highest drug-related mortality rates from 1996 through 2002 but was surpassed in 2003 by all opiates including heroin and in 2004 by opiates other than heroin. Cocaine represented the highest number of drug-related calls to the Rocky Mountain Poison & Drug Center for calendar years 2001 through 2003 for the Denver area but was surpassed by methamphetamine in 2004 and in the first half of 2005. Since 2003, methamphetamine has surpassed cocaine in numbers of treatment admissions statewide, and in the first half of 2005, methamphetamine admissions surpassed those for cocaine in the Denver/Boulder metropolitan area. Most indicators for methamphetamine abuse have been increasing, and drug enforcement officials and treatment providers have corroborated reports of increased methamphetamine use and trafficking in Colorado. While the amount of methamphetamine seized by law enforcement has increased in recent years, the number of clandestine laboratory closures has decreased since 2003. Most indicators for heroin abuse have decreased with the exception of drug seizures, which have increased since 2002. Anecdotal reports from Denver drug detectives and outreach workers suggest that heroin availability has increased, its price has fallen, and as a result, use is increasing, especially among youth on the street. In 2003 and 2004, opiate-related drug misuse mortalities exceeded those that were cocaine-related. In a recent local survey of treatment providers statewide, more than one-half of respondents reported an increase in opiate prescription diversion, especially OxyContin. Beyond abuse of illicit drugs, alcohol remained Colorado's most frequently abused substance and accounted for the most treatment admissions, emergency department reports, poison control center calls, drug-related hospital discharges, and drug-related mortality.

Drug Abuse in Detroit, Wayne County and Michigan

Cynthia L. Arfken, Ph.D.

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

Illicit Drug Use in Honolulu and the State of Hawaii

D. William Wood, M.P.H., Ph.D.

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

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

Beth Rutkowski, M.P.H.

Two main themes dominate Los Angeles County-level substance abuse indicator data in the current reporting period (through June 2005): (1) a relatively stable or mixed pattern for many drugs and (2) increasing patterns for methamphetamine. Between January 1999 and June 2004, heroin was consistently the most frequently used primary drug among Los Angeles County-level substance abuse treatment admissions. In the latter half of 2004, primary heroin and methamphetamine treatment admissions were nearly equal. By the first half of 2005, primary methamphetamine

admissions overtook heroin treatment admissions by a substantial margin (6,392 admissions vs. 4,870 admissions). During this latest timeframe, cocaine/crack admissions remained stable at 18 percent of all admissions and 21 percent of admissions excluding alcohol. Primary marijuana admissions continued to creep to approximately 16 percent of the total and 20 percent of illicit drug admissions. According to unweighted data from 6 to 11 Los Angeles-area hospitals that participated in DAWN in the first half of 2005, alcohol (1,064 reports), cocaine (969), stimulants (631), and marijuana (548) were the four major substances of abuse most frequently reported. The 4-county Los Angeles HIDTA region led all California-based HIDTAs in terms of clandestine methamphetamine laboratory seizures, accounting for 43 percent of the 128 seizures made in California in the first 6 months of 2005. Even though Indiana, Kentucky, Missouri, and Arkansas each had more laboratory seizures than California in the first half of 2005, and despite the steady decline in the number of methamphetamine laboratories throughout the State, California remains the home of the domestic methamphetamine 'superlab.' Seventy-one percent of the 14 superlabs seized throughout the United States were located in California; 50 percent of those were located in 2 southern California counties—Los Angeles and Orange. Cocaine and methamphetamine together accounted for 70 percent of all Los Angeles-based items analyzed and recorded by the NFLIS. Drug prices and purities were relatively stable in the first half of 2005, with small changes occurring at the midlevel and retail level for certain drugs. Los Angeles County-level California Poison Control System major drug exposure calls in the first half of 2005 were dominated by methamphetamine/amphetamine, cocaine/crack, marijuana, heroin, and MDMA. Furthermore, among prescription and over-the-counter medication-related exposure calls, opiates/analgesics were the most frequently mentioned category, followed by benzodiazepines and Coricidin HBP. Adolescent substance use data gathered from the California Healthy Kids Survey for the 2003–2004 school year illustrated that lifetime and past-month usage percentages among Los Angeles County secondary school students in grades 7, 9, and 11 were either the same or lower than percentages reported in previous school years. Aside from alcohol, students were most likely to report lifetime marijuana use (20 percent), followed by inhalants (13 percent), cocaine or methamphetamine (each at 7 percent), and LSD/other psychedelics or ecstasy (each at 6 percent). Indicator data for prescription drugs, PCP, LSD, MDMA, and GHB remained limited, but use and abuse are reported among some of the non-traditional indicators.

Drug Abuse Trends: Minneapolis/St. Paul

Carol Falkowski

Throughout 2005, the consequences of methamphetamine abuse in the Twin Cities captured headlines, filled the airwaves, and strained public health, treatment, child welfare, and criminal justice systems. At the same time, other drugs exhibited mixed patterns, including a significant increase in heroin in Minneapolis, a continued high number of cocaine reports in hospital emergency departments, and a sustained decline in 'club drugs.' An unprecedented 12.1 percent of patients entering Twin

Cities' addiction treatment programs in 2005 (first half) reported methamphetamine as the primary substance problem, a level that for the first time closely approached that of cocaine (13.4 percent). Excluding alcohol, methamphetamine accounted for 21.1 percent of primary admissions in the first half of 2005 (compared with 24.4 percent for cocaine). While the number of small-time methamphetamine labs declined (largely attributed to a new State law limiting retail sales of pseudoephedrine products), the purity level of the drug increased substantially. In Minneapolis, the overall weight-based purity of methamphetamine seized by law enforcement was 73.1 percent in 2005, compared with 13.6 percent in 2001. Methamphetamine-related deaths appeared stable from 2004 to 2005. Heroin appeared in Minneapolis in 2005 in record high amounts—all of it black tar heroin of Mexican origin. Opiate-related deaths continued at heightened levels, while treatment admissions rose to 5.2 percent of admissions in 2005, up from 3.1 percent in 2000. In hospital emergency departments, cocaine-related reports outnumbered those involving any other illicit drug in 2005 (first half). At addiction treatment programs in the first half of 2005, more patients reported marijuana as the primary substance problem than alcohol or any other illicit drug (19.0 percent of all admissions and 34.7 percent of admissions for illicit drug abuse), continuing a long-standing trend. Indicators regarding the abuse of 'club drugs' (GHB, MDMA, ketamine, LSD) showed persistent downward trends in 2005. The rate of alcohol consumption and binge drinking in Minnesota was among the highest in the Nation in 2004. Alcohol abuse exacted a costly toll among young people and on the highways, although alcohol-related treatment admissions fell to 45.2 percent of total admissions in the first half of 2005, down from 54.6 percent in 2000. Tobacco use among youth declined in the Twin Cities and statewide in 2004 and 2005, but it remained prevalent among patients in addiction treatment programs.

Drug Abuse in the Newark Primary Metropolitan Statistical Area

Allison S. Gertel-Rosenberg, M.S.

In this report, drug abuse indicators in the Newark primary metropolitan statistical area (Newark PMSA) are presented using substance abuse treatment data, medical examiner cases, and other information. The indicators demonstrate that the primary drugs of concern in the Newark PMSA are heroin and cocaine. Most primary admissions (79.7 percent) in State FY 2005 were for illicit drugs. Heroin accounted for 72.7 percent of all primary admissions for illicit drugs in the Newark PMSA, compared with 11.5 percent of admissions for primary crack/cocaine, and 12.6 percent of admissions for primary marijuana use. Excluding alcohol, heroin accounted for 81.6 percent of admissions in Newark City (compared with 8.6 percent for cocaine and 8.4 percent for marijuana admissions). Heroin purity remains high, at 52.7 percent in 2005. Between October 2004 and September 2005, cocaine accounted for 45.5 percent of items analyzed by NFLIS, followed by heroin (31.3 percent) and marijuana (8.4 percent). United States Sentencing Commission data indicate that in FY 2003, heroin-related Federal sentences accounted for 33.2 percent of New Jersey's drug-related Federal sentences, compared with 7.1 percent nationally.

With respect to transmission mode among people living with HIV/AIDS, injection drug use alone accounted for 31 percent of cases statewide and 38 percent in Newark. Although heroin is the most prominent primary drug of abuse in New Jersey, the data regarding drugs in combination indicate that cocaine may also be playing an important role in the drug landscape of New Jersey. Further information regarding available treatment and population differences will be studied in future reports.

Drug Abuse Indicators in New Orleans

Gail Thornton-Collins

This report focuses primarily on drug abuse indicator data collected in 2005 before Hurricane Katrina devastated New Orleans City and much of the Parish. Most drug dealers and abusers were forced to evacuate and are living in other areas. Treatment programs are closed. At least 80 percent of the New Orleans residents had not returned to the city 3 months after Katrina. The full consequences of the impact on drug abusers and treatment services are still unclear. Prior to Katrina, cocaine/crack indicators remained high. In FY 2005, cocaine accounted for 40 percent of drug items analyzed by NFLIS, for nearly 36 percent of treatment admissions (excluding alcohol) in Orleans Parish in the first half of 2005, and for nearly 53 percent of the (unweighted) ED illicit drug reports in the first half of 2005. Heroin abuse indicators remained relatively stable from 2001 to 2005 time periods. South American heroin sold for \$1.69 milligram pure in the last half of 2004, and, according to DEA, the average purity was 23.6 percent, considerably less than the average heroin purity of 31.8 percent purity reported in 2003. In FY 2005, 4.7 percent of drug items analyzed by NFLIS contained heroin. In the first half of 2005, 9.4 percent of treatment admissions were for primary heroin abuse (excluding heroin) and 15 percent of ED reports for illicit drugs were heroin reports. Marijuana abuse indicators remained high. Marijuana accounted for 50 percent of the items analyzed by NFLIS, for 42 percent of treatment admissions (excluding alcohol), and for 24 percent of the (unweighted) illicit drug reports. A growing problem is the abuse of narcotic analgesics, especially hydrocodone. In FY 2005, 1.3 percent of items analyzed by NFLIS contained hydrocodone; other narcotic analgesic items accounted for considerably less than 1 percent of the drug items analyzed. Hydrocodone ED reports were considerably higher (n= 361) than those for oxycodone (86). Opiates other than heroin represented 4.9 percent of treatment admissions (excluding alcohol) in the first half of 2005. MDMA use in clubs and other social settings continued to be reported. Of the 8,308 drug items analyzed by NFLIS in FY 2005, 1.2 percent contained MDMA/MDA and 3.4 percent of the illicit drug ED reports in the first half of 2005 were for MDMA.

Drug Use Trends in New York City

Rozanne Marel, Ph.D., John Galea, M.A., Robinson B. Smith, M.A., and Gregory Rainone, Ph.D.

Drug use trends were again mixed for this reporting period. Cocaine indicators in New York City appeared to be stable, and cocaine remains a major problem in New York City. While primary cocaine admissions con-

stitute one-quarter of New York City's drug and alcohol treatment admissions, many more admissions report cocaine as a secondary or tertiary substance of abuse. Although both cocaine powder and crack remain of good quality, many crack locations are seeing a decline in buyers and sellers. Prices for cocaine reported by the DEA for 2004 are considerably lower than those for 2003. Heroin indicators were mixed for this reporting period. Heroin remains widely available, although there has been a marked change in the purity and price of heroin in New York City. Between 2002 and 2004, the average purity for South American heroin fell from 61.5 to 43.3 percent, and the price rose from \$0.36 per milligram pure in 2002 to \$0.62 in 2004. Marijuana indicators, which had been reaching new peaks, seem to have stabilized. Marijuana continues to be of good quality and available in a wide variety of flavors and colors. Many dealers are marketing a premixed combination of two or three different types of marijuana. The most salient feature of the present drug scene is the general tendency of drug users, regardless of primary drug, to mix and combine multiple drugs for simultaneous use. Marijuana in a blunt cigar serves as the base to which other drugs are added. Although the numbers remain small, methamphetamine indicators are showing an increase in the gay community of New York City. PCP appears to be gaining in popularity in some sections of the city. Teens report mixing marijuana and PCP, and in some areas, crack is being soaked in PCP. Many kinds of prescription drugs continue to be available on the street, and they seem to be growing in popularity, based on indicator data and street observations. Of the 94,495 New Yorkers living with HIV or AIDS, men having sex with men and injection drug use history were the two major transmission risk factors.

Drug Use in Philadelphia, Pennsylvania

Samuel J. Cutler, and Marvin F. Levine, M.S.W.

Indicators remain mostly stable for the four major drugs of abuse—cocaine, heroin, marijuana, and alcohol. However, numerous other drugs are used that contribute to the abuse patterns in this city. Cocaine abuse, particularly in the form of crack, continues to lead the 2005 consequence data with respect to deaths with the presence of drugs, treatment admissions, and laboratory tests performed by NFLIS. It was the second substance most frequently encountered in urine/drug screens performed by the Philadelphia Adult Probation and Parole Department (APPD). The street-level purity of heroin has been declining since 2001, which appears to have caused users to seek or approximate a high through the use of increased amounts or adding other drugs to use in combination. In 2005, heroin ranked third among deaths with the presence of drugs (first half), treatment admissions, and the NFLIS, and fourth in APPD urinalysis. Deaths with the presence of oxycodone ranked eighth among all positive toxicology reports in the first half of 2005. Marijuana, which is not tested for in decedents, was the most frequently detected drug by the APPD, ranked second in the NFLIS study, and fourth in treatment admissions. Alcohol in combination with other drugs ranked second in drugs detected in decedents and treatment admissions. Alcohol ranked seventh in APPD urinalysis results. The two most frequently abused benzodiazepines con-

tinue to be alprazolam and diazepam, although others are abused/misused. Diazepam was the fourth most frequently detected drugs in decedents since 1994 and ranked fourth in the NFLIS study. Benzodiazepines ranked fifth in the APPD data and fifth among drugs of abuse mentioned by clients in treatment. Methamphetamine indicators continue to be low compared with other drugs. Methamphetamine use is largely confined to a relatively small segment of the population. The average number of drugs detected in decedents leveled off in the first half of 2005, having increased steadily from 2.0 in 1995 to 3.75 in 2004. In the first half of 2005, the average was 3.70 per decedent.

Drug Abuse Trends in Phoenix and Arizona

Ilene L. Dode, Ph.D.

Stimulant abuse has emerged as the second leading cause of admissions to substance abuse treatment in Arizona, rising from 11 percent in FY 2002 to 26 percent in FY 2005. Stimulant admissions included methamphetamine (69 percent), cocaine/crack (30 percent), and other stimulants (1 percent). Forty-five percent of admissions were for alcohol, followed by 18 percent for marijuana, 7 percent for narcotics, and 4 percent for other drugs. Forty percent of families referred for treatment by Child Protective Services (CPS) report methamphetamine as their primary drug of abuse, followed by alcohol (32 percent), marijuana (26 percent), and 'other' (2 percent). Of the 115 murders in Phoenix in the first 6 months of 2005, 38 people—1 in 3 victims—had methamphetamine in their system. Thirty-four of the 38 Phoenix murder victims in the first half of 2005 who died with methamphetamine in their systems were of Latino descent, representing 9 of every 10 cases. During the first half of 2005, 49 people in Maricopa County died of methamphetamine overdoses, methamphetamine-related heart attacks, and hemorrhages. The methamphetamine that is available on the streets in Phoenix is purer, cheaper, and more plentiful than ever before. Local methamphetamine labs have declined, while Arizona has become the leading pipeline for Mexican methamphetamine into the United States. As border enforcement increases, smugglers have turned to 'deep concealment' to move drugs through Arizona's ports of entry.

Patterns and Trends in Drug Abuse in St. Louis

Heidi Israel, Ph.D., R.N., L.C.S.W., and Jim Topolski, Ph.D.

St. Louis and St. Louis County law enforcement personnel continued to devote many resources to methamphetamine, and labs in rural areas continued to be a problem. Recent legislation to reduce access to pseudoephedrine-based cold medications may eventually reduce the clandestine lab activity but will have to be evaluated over a longer period of time. Preliminary figures for 2005 indicate that clandestine lab incidents have dropped more than 20 percent from the previous year. Jefferson County, just south of St. Louis, continued to be one of the most active areas for methamphetamine. Treatment admissions for heroin in the St. Louis area rose 65 percent from the first half of 2004 to the first half of 2005. During the same timeframe, admissions for the treatment of other opiates rose more than 52

percent. However, crack cocaine continued to be the major problem in the area. Marijuana indicators stabilized during this reporting period. Primary marijuana treatment admissions more than doubled between 1997 and 2001 and remained at this elevated level in the first half of 2005, increasing only 8.2 percent from the first half of 2004. Club drug use/abuse continued to be sparse and decreasing. In the St. Louis area, 5 percent of HIV cases had a risk factor of injection drug use, and another 5 percent were among men who have sex with men and also inject drugs. There has been increased interest in drug abuse epidemiology in the State with recent grants from the Center for Substance Abuse Prevention supporting epidemiologic efforts. Preliminary results from an HIV surveillance project targeting IDUs in the St. Louis area are becoming available and promote understanding of this population.

Drug Abuse Patterns and Trends in San Diego County, California

Steffanie Strathdee, Ph.D., and Robin Pollini, Ph.D.

Methamphetamine was the primary drug of abuse for one-half (50.2 percent) of all drug treatment admissions (excluding alcohol) in San Diego County in the first half of 2005. Methamphetamine was also the drug most commonly cited in DAWN ED reports (31.4 percent) involving major illicit drugs from January 1 to June 30, 2005, and in adult arrestee monitoring programs in 2004 (43 percent). Heroin was the primary drug of abuse for more than one in five (22.8 percent) treatment admissions (excluding alcohol) in the first half of 2005. The majority (83.0 percent) of those admitted for heroin treatment in San Diego cited injection as their primary route of administration, representing 72.5 percent of all primary admissions who injected drugs. However, heroin (12.4 percent) ranked behind methamphetamine and marijuana in DAWN ED reports in the major illicit drug category. Treatment admissions for primary use of 'other opiates' (e.g., hydrocodone, oxycodone) remained low at 2.3 percent (excluding alcohol admissions) but have increased over time; the number of ED reports attributed to these opioid drugs (n=426) exceeds reports for both heroin (n=263) and cocaine (n=318). Cocaine treatment admissions continued their slow decline in the first half of 2005.

Patterns and Trends of Drug Use in the San Francisco Bay Area

John A. Newmeyer, Ph.D.

The 2002–2005 period saw no consistent upward or downward trend in the cocaine indicators for the San Francisco bay area. The cocaine user population is predominantly older than 30. Most indicators point to a substantial decline in heroin use in the period from 2000 to 2005. Heroin users remain predominantly White and older, with a median age perhaps as high as 40. Injection remains by far the preferred route of heroin use. Methamphetamine indicators suggest a leveling off after substantial increases during the 2001–2004 period. Marijuana use appears to have peaked in 2001 and to have declined substantially since then. Very little

club drug use is evident. The prevalence of HIV among heterosexual drug injectors seems to have stabilized at a low level (6 to 10 percent).

Recent Drug Abuse Trends in the Seattle-King County Area

Caleb Banta-Green, T. Ron Jackson, Michael Hanrahan, Susan Kingston, David H. Albert, Steve Freng, Ann Forbes, Richard Harruff, and Sara Miller

Data for Seattle-King County, Washington, for the first half of 2005 revealed the following trends. Methamphetamine-involved deaths in the first half of 2005 (n=17) were nearly equal to the total for all of 2004 (18), representing a substantial increase and the highest level seen for such deaths in King County. Treatment admissions in which any use of methamphetamine was mentioned rose to their highest level—18 percent, double the proportion in 1999. Nearly one-third of local law enforcement drug seizures in the Seattle area tested positive for methamphetamine, up slightly since FY 2003, yet still lower than the 53 percent of samples from the rest of the State during FY 2005. Geographically, the pattern is inverted for cocaine, with 38 percent of tests in the Seattle area positive for cocaine, compared with 20 percent for the remainder of the State. Cocaine-involved deaths appear to be down slightly from the prior year, remaining in a range consistent with the prior 8 years. Forty-four percent of those admitted to treatment mentioned any use of cocaine, an increase to levels seen several years ago. Depressant-involved deaths, which had been increasing steadily since 1999, appear to have leveled off. Marijuana remained the most common illegal drug used by those entering drug treatment, with one-half of all people admitted to treatment noting marijuana as one of the top three drugs they use, a level consistent since 1999. Heroin deaths in the first half of 2005 (n=44) rose slightly compared with all of 2004 (76), still well below the peak seen in 1998 (144). Prescription-type opiate-involved deaths increased slightly with a first half of 2005 total of 67, suggesting a higher annual total compared with the 118 in all of 2004 and possibly forecasting the sixth straight year of increases. Prescription-type opiates as the primary drug of abuse for those entering treatment increased to 3.0 percent of all admissions, up from 1.0 percent in 1999, and accounted for 4.4 percent of admissions excluding alcohol in the first half of 2005. Local law enforcement seizures testing positive for prescription-type opiates doubled to 5 percent in 2005 compared with 2003 in the Seattle area. In June 2005, 2,654 King County residents were receiving treatment at opiate substitution programs (for heroin and/or prescription-type opiates), up more than 10 percent from the same timeframe a year prior. Overall, the most striking trends involve the continued increases in indicator data for prescription-type opiates and methamphetamine.

Drug Abuse in South Florida: January–June 2005

James N. Hall

This report addresses the extent, prevalence, and consequences of illicit drug and medication abuse in South Florida during the first 6 months of

2005. The completion of the first half of the decade provides an early glimpse into what may be emerging substance abuse issues for the new century. After alcohol and tobacco, the growing abuse of medications causes the most number of drug-induced and drug-related deaths locally and across Florida. The exception is in Miami-Dade County, where cocaine dominates drug-fatalities and medication-related deaths are fewer than in any other area of the State. Palm Beach and Broward Counties, immediately north of Miami-Dade County, have the highest number of narcotic analgesic and benzodiazepine deaths in Florida. Annual cocaine use is reported by less than 2 percent of Miami-Dade and Broward residents, but consequences of its use are responsible for the highest number of illicit drug deaths, medical emergencies, and treatment admissions. Cocaine trends are declining slightly in South Florida but are increasing statewide. There are early indications that cocaine street purity levels may be declining in order to keep retail supplies readily available as wholesale kilogram prices are rising. Heroin deaths are down substantially across the region and the State as fatalities from prescription opiates dramatically increase, except in Miami-Dade County. Methamphetamine abuse and related problems are low in the region but have been increasing over the past year. Marijuana is the most prevalent illicit drug of abuse and dominates consequences among youth. Marijuana-related emergency department reports and addiction treatment admissions rank second behind those for cocaine (excluding alcohol). Club drug consequences continue to decline as MDA and MDEA are also being sold as 'ecstasy' along with MDMA. GHB has been replaced by 1,4 butanediol, which is responsible for a declining number of cases linked to 'GHB.' Benzodiazepine-related consequences are dramatically higher in Broward and Palm Beach Counties than in the rest of Florida, including Miami-Dade County. Methamphetamine abuse among a small number of users has been linked to sharp increases in sexually transmitted diseases since 2001 in the region.

Substance Abuse Trends in Texas, January 2006

Jane Carlisle Maxwell, Ph.D.

Cocaine continues to be readily available; it is the primary illicit drug for which Texans enter treatment and it is a major problem on the border with Mexico, as documented in the school survey and treatment data. Crack cocaine continues to move beyond Black users to White and Hispanic users, including those on the border. Alcohol is the primary substance of abuse in Texas. Heroin purity is increasing and price is decreasing; addicts entering treatment are primarily injectors. Hydrocodone is a larger problem than oxycodone or methadone. Codeine cough syrup, 'Lean,' continues to be abused. Marijuana treatment admissions with criminal justice problems are less impaired than those who are referred from other sources. Methamphetamine is a growing problem, particularly in north and east Texas, and smoking 'ice' is now the major route of administration for persons entering treatment. Abuse of Xanax and Soma is increasing. Club drug users differ in their sociodemographic characteristics, just as the properties of these drugs differ. Ecstasy use is moving out of the White club scene, and the indicators are not decreasing. Ketamine continues to be abused. GHB and GBL remain a problem, particularly in

the Dallas-Fort Worth Metroplex area. Although indicators are down, Rohypnol remains a problem along the Texas-Mexico border, PCP indicators are mixed, and dextromethorphan is a problem with adolescents. Inhalants remain a problem with different types of users. The number of AIDS cases of females and persons of color is growing. The proportion of AIDS cases related to the heterosexual mode of transmission now exceeds the proportion of cases related to injection drug use.

Patterns and Trends of Drug Abuse in Washington, DC

Erin Artigiani, M.A., Margaret Hsu, M.H.S., and Eric Wish, Ph.D.

Cocaine/crack, marijuana, and heroin continued to be the main illicit drug problems in Washington, DC, in 2005. The use and availability of PCP declined in 2004 and remained about the same in 2005. Cocaine continued to be one of the most serious drugs of abuse in the District, as evidenced by the fact that more adult arrestees tested positive for cocaine than for any other drug in 2005. More seized items tested positive for cocaine than for any other drug in FY 2005. Drug-related deaths, however, were more likely to be related to opiates than cocaine in 2004. Pretrial Services test results indicated that PCP positives among juveniles increased slightly during this time. Juvenile arrestees were more likely to test positive for marijuana for than any other drug. While other parts of the country have seen shifts in the use of methamphetamine, use remains low and confined to isolated communities in DC. Research is currently underway to better understand the use of methamphetamine in these communities.

Appendix A. Treatment Admissions for Primary Cocaine, Heroin, Methamphetamine (MA), and Marijuana (MJ) in 20 CEWG Areas, by Percentage of Total Admissions (Excluding Alcohol): 2005¹

CEWG Area	Cocaine	Heroin	MA	MJ
Atlanta	49.6	6.7	15.8	27.9
Baltimore	16.4	60.6	0.2	15.4
Boston	12.5	75.6	<0.01	5.0
Broward Co. ²	40.2	22.9	0.4	16.9
Chicago	26.5	53.0	0.1	14.7
Denver	20.2	11.7	20.8	40.4
Detroit	34.7	43.6	<0.01	15.4
Los Angeles	21.2	23.5	30.9	19.5
Mpls./St. Paul	24.4	9.6	22.1	34.7
New Orleans	42.8	9.4	0.2	41.9
New York	29.1	40.6	0.3	25.5
Newark	8.6	81.6	<0.01	8.4
Philadelphia	34.3	22.7	0.1	22.8
St. Louis	33.3	17.5	5.6	27.4
San Diego	8.2	22.8	50.2	15.4
San Francisco	26.8	41.0	NR ³	9.4
Seattle	24.7	26.6	15.9	25.9
Arizona	14.1	10.6	32.5	33.5
Hawaii	5.5	3.1	57.8	24.3
Texas	35.0	11.7	NR ³	27.7

¹Arizona, Boston, Chicago, Detroit, and Newark reported data for FY 2005. Philadelphia reported data for full CY 2005. All others reported data for the first half of 2005.

²Includes two programs in Broward County, Florida.

³Reported with amphetamines; in San Francisco, 14.2 percent combined; in Texas, 16.4 percent combined.

SOURCE: CEWG January 2006 reports

Appendix B. Number of Cocaine, Heroin, Methamphetamine (MA), and Marijuana (MJ) ED Reports in 17 CEWG Areas (Unweighted¹): 1H 2005

CEWG Area	Total ²	Cocaine	Heroin	MA	MJ
Atlanta	6,319	3,896	233	448	1,331
Baltimore	6,192	2,876	2,244	14	918
Boston	4,896	1,947	1,570	35	1,141
Chicago	7,912	3,865	2,349	47	1,473
Denver	2,524	1,021	309	442	477
Detroit	5,578	2,679	1,293	16	1,367
Houston	3,148	1,701	83	106	915
Los Angeles	2,651	969	372	516	548
Miami-Dade	5,691	3,434	819	46	1,253
Mpls./St. Paul	4,267	1,532	376	673	1,390
New Orleans	2,117	1,113	318	39	507
New York City ³	13,295	6,603	3,995	71	2,197
Phoenix	3,730	926	415	1,118	749
San Diego	2,128	318	263	669	495
San Francisco	3,369	1,349	595	671	353
Seattle	5,434	2,038	1,163	863	939
Wash., DC	2,862	1,340	570	20	683

¹Unweighted data are not comparable across CEWG areas. All DAWN cases are reviewed for quality control, and based on review, may be corrected or deleted. Therefore, these data are subject to change.

²Represents the total numbers of reports in the "Major Substances of Abuse" category excluding alcohol reports.

³Represents five boroughs.

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

DAWN ED Samples and Reporting Information, by CEWG Area: January–June 2005

CEWG Area	Total EDs in DAWN Sample	No. of EDs Reporting per Month: Completeness of Data (%)		No. EDs Not Reporting
		≥ 90%	<90%	
Atlanta	36	14–15	0–2	20–21
Baltimore	24	7–11	2–7	7–15
Boston	37	17–19	1–3	17–18
Chicago	78	26–30	0–4	45–50
Denver	14	7	0	7
Detroit	29	19–21	0–3	7–8
Houston	40	11–14	0–2	26–28
Los Angeles	41	6–11	0–4	29–31
Miami-Dade	19	10	0–1	8–9
Mpls./St. Paul	26	11–13	0–1	13–15
New Orleans	22	8–10	0–2	11–12
New York City ¹	64	24–30	4–9	29–33
Phoenix	26	11–13	1–3	12–13
San Diego	17	8–9	0–2	7–8
San Francisco	19	10–11	0–2	7–9
Seattle	24	8–12	0–3	11–14
Wash., DC	32	9–11	1–4	19–21

¹Five boroughs.

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

Appendix C. Cocaine, Heroin, Methamphetamine (MA), and Marijuana (MJ) Items¹ Analyzed by Forensic Labs, by CEWG Area and Percentage of Total Items: FY 2005

CEWG Area	Cocaine	Heroin	MA	MJ
Atlanta	56.1	1.6	32.8	1.0
Baltimore	40.8	22.5	0.0	34.2
Boston	33.0	12.9	NR ²	46.4
Chicago	32.2	16.6	0.6	49.0
Denver	48.8	4.4	15.8	18.7
Detroit	46.0	12.2	0.2	41.0
Honolulu	14.7	1.7	65.2	14.1
Los Angeles	36.2	4.4	33.2	22.9
Miami	70.2	3.6	0.8	20.7
Mpls./St. Paul ³	27.3	1.1	51.5	9.9
New Orleans ⁴	39.7	4.7	0.6	50.2
New York City	53.4	12.2	0.5	27.2
Newark	45.5	31.3	0.2	8.4
Philadelphia	45.2	9.1	0.2	34.5
Phoenix	30.5	5.8	32.5	27.8
St. Louis	41.7	10.5	0.5	41.0
San Diego	15.1	1.7	31.3	46.2
San Francisco ⁴	45.5	8.2	14.5	22.1
Seattle	38.3	5.6	31.4	15.7
Wash., DC	43.6	10.3	2.8	36.1
Texas	32.3	1.1	25.0	25.2

¹Some substances include more than one variant of a drug.

²NR=Not reported.

³Data represent primarily the nonmetropolitan areas of Ramsey and Hennepin Counties.

⁴Includes only 9 months of data.

SOURCE: NFLIS, DEA

Appendix D. Number of Selected Narcotic Analgesic/Opiate¹ Items Analyzed by Forensic Laboratories in CEWG Areas: FY 2005

CEWG Area	Hydro-codone	Oxy-codone	Metha-done	Co-deine	Mor-phine
Atlanta	188	125	41	14	14
Baltimore	35	149	25	3	24
Boston	31	88	22	9	15
Chicago	79	23	69	41	10
Denver	39	47	4	5	16
Detroit	0	0	1	11	0
Honolulu	3	8	5	2	2
Los Angeles	309	44	33	104	22
Miami	37	56	8	5	1
Mpls./St. Paul ²	34	57	6	9	11
New Orleans ³	109	32	21	12	4
New York City	209	140	486	82	19
Newark	1	10	3	0	10
Philadelphia	168	491	51	103	39
Phoenix	35	34	4	12	15
St. Louis	36	51	10	25	1
San Diego	154	40	14	27	25
San Francisco ³	115	135	31	59	53
Seattle	42	65	45	9	20
Wash., DC	0	33	18	2	1
Texas	1,279	176	81	301	70

¹Excludes heroin.

²Data represent primarily the nonmetropolitan areas of Ramsey and Hennepin Counties.

³Includes only 9 months of FY 2005.

SOURCE: NFLIS, DEA

CEWG Participants

NIDA DESPR, CEWG Coordinators

Compton, Wilson, MD, MPE, NIDA

O'Brien, Moira, MPhil, CEWG Project Officer

CEWG Members/Organization/Area

Arfken, Cynthia L., PhD, Wayne State University (Detroit)

Artigiani, Erin, University of Maryland (Washington, DC)

Banta-Green, Caleb, University of Washington (Seattle)

Cutler, Samuel J., City of Philadelphia Behavioral Health System (Philadelphia)

Dew, Brian J., PhD, LPC, Georgia State University (Atlanta)

Dode, Ilene L., PhD, Emergency Mobile Pediatric and Adult Crisis Team (EMPACT)—Suicide Prevention Center, Inc. (Phoenix)

Dooley, Daniel P., Boston Public Health Commission (Boston)

Falkowski, Carol L. Hazelden Foundation (Mpls./St. Paul)

Gertel-Rosenberg, Allison S., New Jersey Department of Human Services (Newark)

Hall, James N., Up Front Drug Information Center (Miami/Ft. Lauderdale [South Florida])

Hoxworth, Tamara, PhD, Colorado Alcohol and Drug Abuse Division (Denver)

Marel, Rozanne, PhD, New York State Office of Alcoholism and Substance Abuse Services (New York City)

Maxwell, Jane C., PhD, University of Texas at Austin (Texas)

Newmeyer, John A., PhD, Haight-Ashbury Free Clinics, Inc. (San Francisco)

Ouellet, Lawrence, PhD, University of Chicago (Chicago)

Rutkowski, Beth A., MPH, University of California at Los Angeles (Los Angeles)

Strathdee, Steffanie, PhD, University of California at San Diego (San Diego)

Thornton-Collins, Gail, New Orleans Health Department (New Orleans)

Topolski, James, Missouri Institute of Mental Health (St. Louis)

Walker, Doren H., Synectics for Management Decisions, Inc. (Baltimore)

Wood, D. William, PhD, University of Hawaii at Manoa (Honolulu)

Other Contributors/Organization

Balance, Steve, MPA, Arizona Criminal Justice Commission

Ball, Judy K., PhD, MPA, Office of Applied Studies, SAMHSA

Bond, G. Randall, MD, Cincinnati Children's Hospital/Cincinnati Drug and Poison Information Center

Boyer, Edward W., MD, PhD, University of Massachusetts

Cunningham, James K., PhD, University of Arizona

Dargan, Janie B., MSW, Office of National Drug Control Policy

Gil, Lisa A., National Drug Intelligence Center

Hawthorne, Jr., George, Capt., Maricopa County Sheriff's Office

Hynes, Marya L., MHS, CICAD Inter-American Observatory on Drugs (OID)

Ivarie, Tom, Drug Enforcement Administration
Liu, Chiareiy, PhD, National Bureau of Controlled Drugs, Taiwan
Luczkiewicz, Slawek, Office of National Drug Control Policy
McGinty, Jennifer M., Drug Enforcement Administration
Moody, Corinne P., Food and Drug Administration
Pollini, Robin, MPH, PhD, Alternate CEWG Representative, University of California at San Diego
Rachal, Valley, RTI International
Tolliver, James M., MS, PhD, Drug Enforcement Administration
Tsay, Wen-Ing, National Bureau of Controlled Drugs, Taiwan
Vermeer, Brent, Lt., Phoenix Police Department
Wong, Liqun, Drug Enforcement Administration
Zaragoza, Santiago, Ministry of Health of Mexico
Zugor, Barbara A., BA, MA, Treatment Assessment Screening Center (TASC), Inc.