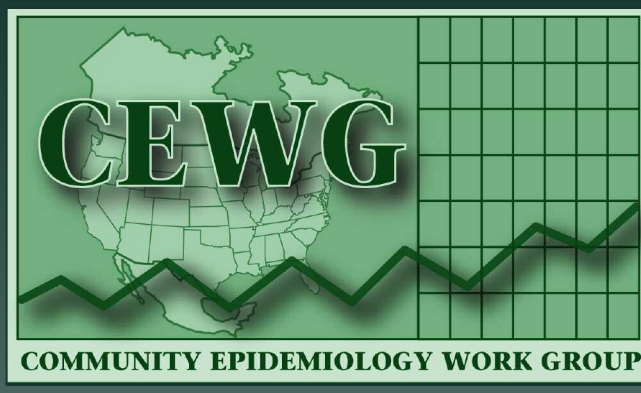
NIDA NATIONAL INSTITUTE ON DRUG ABUSE 30 Years 1974-2004



Epidemiologic Trends In Drug Abuse

Advance Report:

Prescription Drug Abuse

Community Epidemiology Work Group

June 2004

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

*This Advance Report is focused on prescription drug abuse, an issue of growing national and local concern that received special attention at the June CEWG meeting (see Introduction). Epidemiologic Trends in Drug Abuse, Volume I, includes information on illicit and prescription drugs presented at the meeting. Volume II includes the papers presented at the meeting.

NIDA NATIONAL INSTITUTE ON DRUG ABUSE 30 Years 1974-2004

EPIDEMIOLOGIC TRENDS IN DRUG ABUSE

Advance Report:

Prescription Drug Abuse*

Community Epidemiology Work Group

June 2004

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

NIDA publications, including Volumes I and II of the CEWG Proceedings, are available online at:

http://www.drugabuse.gov

Volume II of the proceedings is available in limited supply. E-mail requests should be sent to:

gbeschner@masimax.com

NIH Publication No. 04-5363A
Printed November 2004

CONTENTS

FOREWORD

This *Advance Report* is a synthesis of findings on prescription drug abuse presented at the 56th semiannual meeting of the Community Epidemiology Work Group (CEWG) held in Arlington, Virginia, on June 8–11, 2004, under the sponsorship of the National Institute on Drug Abuse, National Institutes of Health. Information presented on patterns and trends in the abuse of illicit drugs will be published in the forthcoming *Epidemiologic Trends in Drug Abuse, Volume I*; individual papers will appear in *Volume II* of the June 2004 CEWG Proceedings. Information on how to obtain these volumes can be found inside the front cover of this report.

The information published after each CEWG meeting represents findings from CEWG members from the following 21 areas: **Atlanta, Baltimore, Boston, Chicago, Denver, Detroit, Honolulu, Los Angeles, Miami/Ft. Lauderdale, Minneapolis/St. Paul, New Orleans, New York, Newark, Philadelphia, Phoenix, St. Louis, San Diego, San Francisco, Seattle, Texas, and Washington, DC.** To enhance nonurban representation in the CEWG, information was provided by guest researchers from Ohio and Maine.

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 the 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 June 2004 CEWG meeting, a keynote address was given by the Honorable John P. Walters, Director, White House Office of National Drug Control Policy. In addition to presentations by the 21 CEWG representatives and members of the Panel on Prescription Drug Abuse, the meeting included presentations on the following:

- NIDA's epidemiology research
- Emerging drugs, based on Drug Enforcement Administration data
- How to access local and State arrest data
- The status of and most recent data produced by the Canadian Community Epidemiology Network on Drug Use

In addition, updates were presented on three data sources: the Drug Abuse Warning Network, the Forensic Laboratory Information System, and the Arrestee Drug Abuse Monitoring program.

Moira P. O'Brien
National Institute on Drug Abuse
National Institutes of Health
Department of Health and Human Services

PRESCRIPTION DRUG ABUSE PATTERNS AND TRENDS: INTRODUCTION TO THE CEWG ADVANCE REPORT

Moira P. O'Brien, NIDA

This *Advance Report* is based on findings related to the nonmedical use or abuse of prescription drugs that were presented at the 56th semiannual meeting of the Community Epidemiology Work Group (CEWG) in Arlington, Virginia, on June 8–11, 2004, under sponsorship of the National Institute on Drug Abuse (NIDA), National Institutes of Health.

While there are many prescription drugs that can be misused or abused, the following three classes of these drugs are among the most commonly abused:

- Narcotic analgesics/opioids, which are most often prescribed to treat pain
- Central nervous system (CNS) depressants, which are used to treat anxiety and sleep disorders
- Stimulants, which are prescribed to treat attention-deficit disorder, narcolepsy, and obesity

These three classes of drugs are the focus of this *Advance Report*. Other detailed information on these types of prescription drugs is available from the following NIDA publications/Web sites:

- *Research Series—Prescription Drugs: Abuse and Addiction*—http://www.drugabuse.gov/ResearchReports/Prescription/Prescription.html
- *InfoFacts—Prescription Drugs and Pain Medication* http://www.drugabuse.gov/Infofax/PainMed.html

The abuse of prescription drugs has received considerable attention in recent CEWG meetings. Drawing from their local perspectives, CEWG members have pointed to risky behaviors such as the nonmedical use of "pills" (both over-the-counter and prescription) among youth, and the mixing of prescription drugs used nonmedically in combination with illicit drugs, such as the use of narcotic analgesics with heroin to enhance the "high." CEWG monitoring of data such as the Drug Abuse Warning Network (DAWN) emergency department and substance abuse treatment admissions indicate a widespread and growing trend of abuse of certain prescription drugs in recent years.

Other national data also indicate levels of prescription drug abuse that raise concern. The 2003 Monitoring the Future survey of 8th, 10th, and 12th grade students reveals relatively high levels of abuse of two narcotic analgesics—Vicodin and OxyContin. The 2002 National Survey on Drug Use and Health (NSDUH) reported that an estimated 15 million Americans had used a prescription-type psychotherapeutic drug nonmedically in the past year.

This *Advance Report* includes further analyses of the 2002 NSDUH data, as presented at the June CEWG meeeting. The 2003 NSDUH data were released after the June meeting. Although there was no statistically significant change in the estimate of nonmedical use of psychotherapeutic drugs overall from 2002 to 2003, there was a statistically significant increase in the number of lifetime nonmedical users of pain relievers age 12 and older. Among young adults age 18–25, increases in lifetime nonmedical use of tranquilizers and current (past month) nonmedical use of pain relievers were also observed.

While recent research has revealed the existence of a problem with prescription drug abuse, there are significant gaps in our knowledge of the broader epidemiologic picture with regard to patterns of use, such as how specific drugs are used, in what quantities and combinations, why they are abused, and the consequences associated with their abuse. Also needed is a better understanding of the regional and local variations in patterns of abuse, and the variations in use by age, gender, and race/ethnicity, all of which can provide an essential foundation for the development and targeting of interventions and services.

The findings included in this report address some of the gaps in knowledge about abuse of prescription drugs. The findings are based on CEWG area reports and an expert panel, *Emerging/Current Trend: Prescription Drug Abuse*.

The topic of prescription drug abuse is the third subject selected for a special CEWG session on an Emerging/Current Trend. In June 2003, a special panel was convened on Methadone Associated Deaths and, in December 2003, a PCP Abuse Panel addressed the abuse of phencyclidine as a localized emerging trend.

The Emerging/Current Trend approach draws upon the following:

- CEWG members' knowledge of local drug abuse patterns and trends
- Small exploratory studies
- Research findings from NIDA grants
- Presentations of pertinent information from Federally supported data sources
- Presentations by other speakers knowledgeable in a selected topic area

The CEWG, with its semiannual meeting, is uniquely positioned to bring crucial perspectives to bear on an urgent drug abuse issue in a timely fashion, and to illuminate its various facets within the local context.

The report begins with findings from the Prescription Drug Abuse Panel and concludes with relevant information on prescription drug abuse from CEWG areas. Subsequent publications of the CEWG Proceedings will synthesize CEWG findings on illicit drug abuse (*Volume I)* and individual papers of CEWG members and other participants (*Volume II*).

KEY FINDINGS

- Abuse of prescription-type psychotherapeutic drugs has escalated substantially across the Nation and in CEWG areas since the early 1990s.
- Problems associated with the nonmedical use of prescription drugs have appeared increasingly in indicator data.
- The types of prescription drugs abused and the patterns of abuse differ notably by geographic area and population group. However, indicators of abuse of pain relievers appear across all CEWG areas. According to the most recent national household survey, the number of lifetime nonmedical users of pain relievers age 12 and older in the United States increased significantly from 2002 to 2003.
- Particularly alarming is the abuse of prescription drugs among teenagers and young adults. Indicators show, for example, that…
  - Vicodin (hydrocodone) was the second most frequently abused drug among high school seniors in 2003.
  - Benzodiazepines were the prescription-type drug most frequently identified in teenage abuse/misuse cases reported by poison control centers to the Toxic Exposure Surveillance System in 2000–2003.
  - Alprazolam-related ED visits were as likely among youths age 12–17 as among older age groups (through age 34) in 2002.
  - The incidence rate of new stimulant users increased fourfold from 1991 to 2001 among persons age 12–17.
  - Lifetime nonmedical use of tranquilizers and current nonmedical use of pain relievers increased significantly from 2002-2003 among young adults age 18–25.
  - Treatment admissions for primary abuse of narcotic painkillers among males in their twenties increased substantially from 1997 to 2002.
- Polydrug abuse is common among abusers of prescription drugs. Prescription drugs are often used nonmedically in sequence or in combination with other prescription drugs, illicit drugs, and alcohol. Among the combinations reported are central nervous system depressants such as benzodiazepines and alcohol—a potentially life-threatening mixture.
- Risks associated with nonmedical use and mixing of prescription drugs appear to be greatly underestimated by users.

WHAT IS THE CEWG?

The CEWG, a unique epidemiology network and drug abuse surveillance system, functions to identify and assess drug abuse patterns and trends, as well as emerging drug problems and issues. Through ongoing research at the State, city, and community levels, interactive semiannual meetings, e-mail, conference calls, and other exchange mechanisms, the 21 CEWG members maintain a multidimensional perspective from which to access, analyze, and interpret drug-related phenomena and change over time. The CEWG pioneered in identifying the emergence of drug epidemics, such as those involving abuse of methaqualone (1979), crack (1983), methamphetamine (1983), and "blunts" (1993).

CEWG members bring the following attributes to the network:

- Extensive experience in community research
- A body of knowledge about their local communities, drugs, and drug-abusing populations
- Ongoing collaborative relationships with one another and other researchers and experts in the field
- The capability to access relevant drug-related data from Federal, State, community, and neighborhood sources
- An understanding of the strengths and limitations of the data sources
- The skills required to systematically analyze and synthesize multiple sources of data, and interpret findings within the local community context

Members often use qualitative methods to assess drug abuse problems and issues that emerge from the quantitative data. Major indicators and primary data sources on prescription drug abuse used by CEWG members and cited in this report include those shown in *Appendix A.*

PANEL ON PRESCRIPTION DRUG ABUSE

Emerging/Current Trend—Panel on Prescription Drug Abuse: Overview and Summary of Findings

Wilson M. Compton, M.D., M.P.E

Dr. Compton, Director, Division of Epidemiology, Services and Prevention Research, NIDA, noted that in planning the Panel on Prescription Drug Abuse, NIDA recognized the critical need to expand knowledge about the abuse of prescription drugs at the local, State, regional, and national levels. The CEWG model emphasizes the use of multiple sources of data and the interpretation of the data within and across communities. Data sources utilized by the CEWG include Federally supported monitoring systems with varying potential for regional, State, and local sociodemographic analyses; State and local data; relevant studies generated by independent organizations; and NIDA-supported research studies. The CEWG meeting provides a unique platform to bring together various perspectives on issues related to prescription drug abuse. Through this venue, CEWG representatives and the Panel on Prescription Drug Abuse have enhanced our understanding of prescription drug abuse. They have also provided insight into how research resources can be used to further understand prescription drug abuse and more effectively address problems associated with abuse of these drugs.

The Panel on Prescription Drug Abuse was designed to accomplish the following objectives:

- To better characterize the nature and extent of abuse of prescription drugs across national, regional, State, and local levels, with an emphasis on youth and young adults
- To identify key issues and research questions

Participants presenting information from large data sets—the National Survey on Drug Use and Health (NSDUH), the Monitoring the Future (MTF) survey, the Drug Abuse Warning Network (DAWN), the Treatment Episode Data Set (TEDS), the National Forensic Laboratory Information System (NFLIS), System to Retrieve Information from Drug Evidence (STRIDE), the Automation of Reports and Controlled Orders System (ARCOS), and Toxic Exposure Surveillance System (TESS)—were asked, if possible, to present geographic and demographic analyses of the data, and to provide data on three major classes of drugs (narcotic analgesics/opioids, CNS depressants, and stimulants) and on generic drugs within drug classes (e.g., hydrocodone, oxycodone, alprazolam, and methylphenidate).

A number of key issues and findings emerge from the data presented by the panel, including the following:

- Prescription drug abuse has increased across the United States in recent years. There has been an increase in the retail distribution and the theft and loss of many of these drugs, an increase in their nonmedical use among Americans age 12 and older, and increases in patients treated in hospital emergency departments (EDs) and substance abuse treatment facilities for nonmedical use of prescription drugs.
- There are notable differences by geographic area and population groups in the types of prescription drugs abused and in the patterns of abuse.
- Abuse of prescription drugs among teenagers and young adults is particularly alarming. For example, Vicodin is the second most frequently abused drug among high school seniors; alprazolam-related ED visits are as likely among teenagers as older age groups; treatment admissions for primary abuse of narcotic painkillers among males in their twenties has increased substantially; benzodiazepines were the prescription medications most commonly reported to TESS in teenage abuse/misuse cases in 2000–2003; and the incidence rate of new stimulant users increased fourfold from 1991 to 2000 among the 12–17 and 18–25 age groups.
- Hydrocodone and oxycodone abuse indicators suggest that they are the most widely abused narcotic analgesics, and alprazolam appears to be the most widely abused benzodiazepine in many areas. However, methadone abuse indicators are relatively high in some areas, and other prescription drugs, such as clonazepam and fentanyl, have been identified as emerging abused drugs.
- Prescription drugs are often used nonmedically in sequence or in combination with other prescription drugs, illegal drugs, and alcohol. Combinations reported include potentially life-threatening mixtures of CNS depressants such as benzodiazepines and alcohol.
- Users underestimate risks associated with nonmedical use and the mixing of prescription drugs.
- A high proportion of nonmedical users of prescription drugs have used illicit drugs.

In conducting studies of prescription drug abuse, researchers need to be aware of methodological problems and issues. For example, there are so many different prescription drugs available, and different street names for these drugs, that it is difficult to distinguish the specific drugs used. Therefore, in developing and testing questionnaires to be used in studies, researchers need to pilot test the nomenclature (names of drugs). Many respondents may not know the "generic" designation of a class of drugs, only the specific name of a prescribed drug or,

perhaps, only the street name. There is evidence also of use of multiple prescription drugs, often in combination with illicit drugs or alcohol. Development of methods to characterize the use, in combination or in sequence, of different substances will enhance understanding of the interactions and effects of different "polydrug" patterns. Geographic Information Systems techniques offer great potential for illuminating variations in patterns of abuse and consequences and changes over time. Several panelists made effective use of geocoded maps to vividly display data by drug and geographic areas and for different periods of time.

In a presentation on the 2002 NSDUH, it was shown that an estimated 47 million Americans age 12 and older had used prescription drugs nonmedically during their lifetime, nearly 15 million had done so in the past year, and more than 6 million had used in the past month. Dr. James Colliver noted that lifetime use of prescription drugs was highest for pain relievers (e.g., hydrocodone, oxycodone, methadone, and codeine products). Use of more than one drug was most common among 12–25-year-old users of pain relievers.

Nonmedical use of Vicodin, a hydrocodone product, ranked second (after marijuana) among drugs used by 12th graders, according to the 2003 Monitoring the Future survey. Approximately 10.5 percent of seniors had used Vicodin in the past year, and 4.5 percent had used OxyContin. According to Dr. Colliver, students' nonmedical use of prescription drugs remained at relatively high levels. Over the survey years, new patterns of prescription drug abuse have emerged. Students who had used Vicodin or OxyContin were likely to have used other drugs as well.

Rates of DAWN hospital emergency department drug abuse-related visits involving hydrocodone, oxycodone, and methadone increased significantly from 1995 to 2002. Fentanyl-related ED visits also increased significantly during this period, although the number of visits remained relatively small. Rates for narcotic analgesics were most likely to increase among young adults (age 20–25). Dr. Elizabeth Crane noted that ED visits involving alprazolam and clonazepam also increased. Rates for alprazolam-involved ED visits were equivalent across age groups, indicating that teenagers were as likely to enter the ED for this drug as older groups. Multiple drug use was common in the narcotic analgesics abuse cases.

The TEDS data show that increasing numbers of drug abusers entering treatment in recent years had abused narcotic painkillers (excluding nonprescribed methadone). Of the 84,000 admissions in 2002 who reported using narcotic painkillers, more than one-half identified these drugs as their primary drug of abuse. Using geocoded maps, Dr. Leigh Henderson presented rates (per 100,000 population) of narcotic painkiller admissions by State and by year (1992, 1997, and 2002).

Eleven States provided multiyear admissions data for specific types of narcotic painkillers used by treatment clients. From 1997–2002, admissions increased 129 percent for all narcotic painkillers, but admissions involving oxycodone products increased 1,267 percent over the 6-year period.

From 2000 to 2003, benzodiazepines were the most common group of prescription medications reported in teenage abuse/misuse cases to poison control centers across the Nation. Dr. William Watson reported that nearly one-half (49 percent) of the teenage benzodiazepine cases involved more than one substance.

In 2001–2003, ARCOS data showed that retail distribution increased for hydrocodone, oxycodone, methadone, morphine, and codeine, while theft and loss of oxycodone and hydrocodone peaked in 2002. Hydrocodone and oxycodone items were much more likely than items for other types of narcotic analgesics to be analyzed/identified by forensic laboratories (NFLIS, STRIDE); these two drugs were also more likely to be seized by Drug Enforcement Administration (DEA) agents. Liqun Wong pointed to geographic differences in the NFLIS data. For example, a higher proportion of the narcotic analgesic items analyzed in Atlanta, Dallas, Denver, and San Diego were hydrocodone, while oxycodone items predominated in Boston, Miami, and Philadelphia.

An exploratory study conducted in Colorado showed that clonazepam abuse was a problem in different parts of the State. Based on secondary analysis of State treatment data and information from clinicians who served as key informants, Bruce Mendelson, CEWG member, found that individuals entering State drug treatment facilities in 2002 and 2003 were more likely to report using clonazepam than any other benzodiazepine. The clinician key informants indicated that some reasons given for using clonazepam included using it to "come down" from other drugs or to boost the effects of other drugs. Other substances most often used with clonazepam included alcohol and/or other benzodiazepines, marijuana, and cocaine.

In a 2004 pilot study of students at a mid-Atlantic university (mostly freshman and sophomores), 15.5 percent had used pain relievers nonmedically, and 13.4 percent had used prescription stimulants nonmedically. The vast majority of the prescription drug abusers had also used other drugs (e.g., 92 percent had used marijuana and 54 percent had used hallucinogens). According to Dr. Amelia Arria, some of the students mixed drugs without knowing the differences between specific types of prescription medications and their potential dangers.

In a study of ecstasy abusers in Miami, which utilized quantitative and qualitative methods, 87 percent of the abusers reported using prescription drugs nonmedically more than five times during their lifetime. Dr. Steven

Kurtz identified many of the reasons prescription drugs were so popular in the club drug scene, including the fact that they were perceived as easily accessible; cheaper, purer; less harmful than other drugs; and less likely to lead to arrest than use of illicit drugs. The prescription drugs were used in many ways, including as a substitute for or in combination with other substances. Thus, personal expectations may play a role in prescription drug abuse.

Prescription Drug Abuse in the American Population

James Colliver, Ph.D.

Major findings from the 2002 National Survey on Drug Use and Health on prescription drug abuse in the noninstitutionalized population are as follows:

- An estimated 46.6 million Americans age 12 and older had used a prescription-type psychotherapeutic drug nonmedically at least once in their lifetime, nearly 15 million had done so in the past year, and more than 6 million had used in the past month.
- The percentage of lifetime use was highest for pain relievers (12.6 percent), followed by stimulants (9.0 percent), tranquilizers (8.2 percent), and sedatives (4.2 percent).
- Among pain relievers, Darvocet (propoxyphene), Darvon (dextropropoxyphene), or Tylenol with Codeine (acetaminophen and codeine), were the drugs most frequently abused (18.9 million, lifetime use), followed by the hydrocodone products Vicodin, Lortab, or Lorcet (13.1 million, lifetime use). Nearly 2 million people used OxyContin (oxycodone) nonmedically at some time in their life.
- Nonmedical use of a psychotherapeutic drug was highest among persons younger than 26, especially those age 18–25.
- Young abusers of prescription pain relievers were more likely than their nonusing counterparts to have used other drugs, such as marijuana, cocaine, inhalants, ecstasy, other hallucinogens, and heroin.
- The incidence rate for nonmedical use of prescription pain relievers, tranquilizers, and stimulants increased sharply over the last decade, and, in 2002, more than 2 million abusers of prescription-type psychotherapeutic drugs met diagnostic criteria for abuse or dependence in the past year.

Dr. Colliver, NIDA, reported these and other findings from the 2002 NSDUH, which is conducted by Research Triangle Institute and funded by OAS, SAMHSA.

Estimates of the percentages of Americans age 12 and older who reported using prescription-type drugs nonmedically in the 2002 survey are shown in exhibit A.

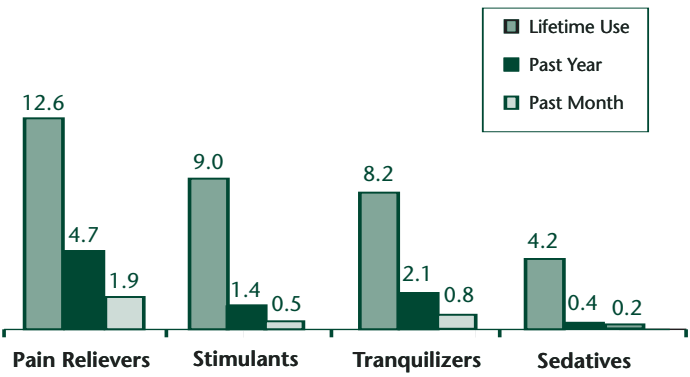
Exhibit A. Estimated Percentages of Lifetime, Past-Year, and Past-Month Nonmedical Use of Prescription Drugs Among Americans Age 12 and Older: 2002

SOURCE: NSDUH, OAS, SAMHSA

Overall, the data show that use of these psychotherapeutic drugs varies by type of drug and demographic group.

As shown in exhibit B, pain relievers are the most frequently used prescription-type drug, followed by stimulants, tranquilizers, and sedatives.

Exhibit B. Percentages of the Population Age 12 and Older Reporting Nonmedical Use of Prescription-Type Psychotherapeutic Drugs, by Type of Drug: 2002

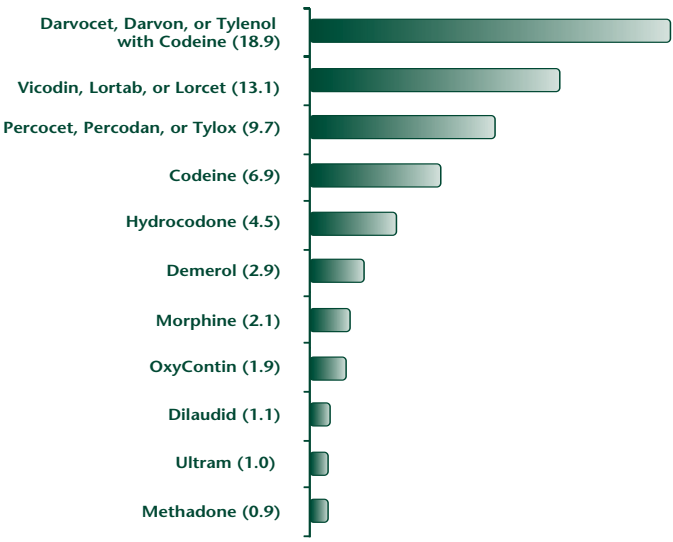


SOURCE: NSDUH, OAS, SAMHSA

PAIN RELIEVERS. An estimated 29.6 million Americans age 12 and older (12.6 percent) had ever used pain relievers nonmedically in 2002. An estimated 1.5 million of the nonmedical users met *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* (DSM-IV) criteria of abuse or dependence on pain relievers in the past year.

As shown in exhibit C, Darvocet, Darvon, or Tylenol with Codeine were "ever used" nonmedically by nearly 19 million persons in 2002. In 2002, 13.1 million persons had used Vicodin, Lortab, or Lorcet in their lifetime, and 9.7 million had used the oxycodone products Percocet, Percodan, or Tylox. Also, 1.9 million had used OxyContin and one million had used Ultram (tramadol).

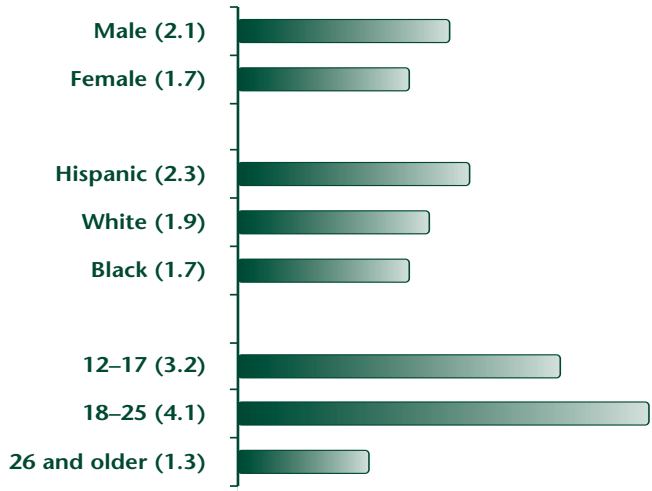
Exhibit C. Estimated Numbers (in Millions) of Lifetime Nonmedical Use of Selected Pain Relievers Among Persons Age 12 or Older: 2002



SOURCE: NSDUH, OAS, SAMHSA

Past-month nonmedical use of pain relievers was higher among persons age 12–25 than among those age 26 and older (*see exhibit D*). Around 2.1 percent of males, compared with 1.7 percent of females, were currently abusing prescription pain relievers. The proportions of use by race/ethnicity were 2.3 percent for Hispanics, 1.9 percent for Whites, and 1.7 percent for Blacks.

Exhibit D. Demographic Differences in Past-Month Nonmedical Use of Pain Relievers, by Percentage of Each Group: 2002

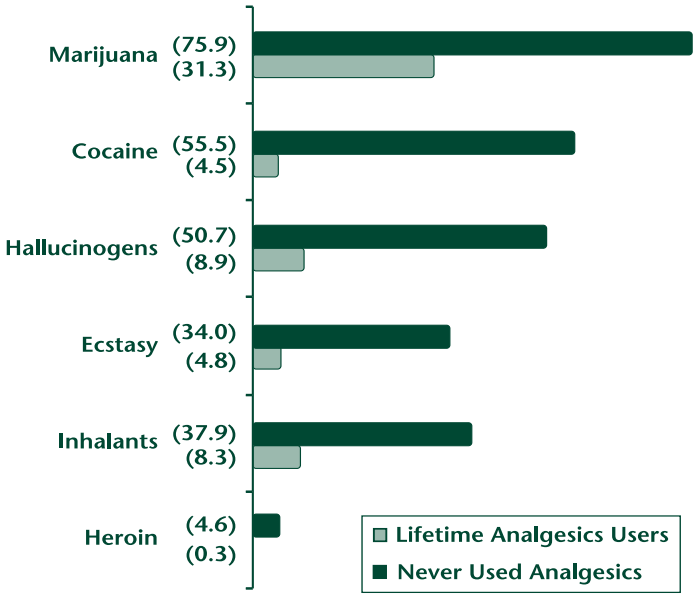


SOURCE: NSDUH, OAS, SAMHSA – SAMHDA Online Analysis

The incidence rate for nonmedical use of pain relievers remained relatively low and stable for those age 12–17 and 18–25 from 1969 to the early 1990s. Around 1994, the rates rose to approximately 12–13 per 1,000 persons for these age groups. Rates rose sharply thereafter to nearly 50 per 1,000 among 12–17-year-olds and to more than 30 for the 18–25 age group in 2001.

Adolescents and young adults who have used pain relievers nonmedically generally have tried other drugs as well, as shown in exhibit E. Lifetime use of marijuana was 2.4 times more common among 12–25-year-olds who had abused pain relievers than among persons in that age range who had not. Use of cocaine was 12.3 times more common, and similar patterns were found for hallucinogens (5.7 times more common among those who had used pain relievers nonmedically), ecstasy (7.1 times more common), inhalants (4.6 times more common), and heroin (15.3 times more common).

Exhibit E. Lifetime Use of Other Drugs by Persons Age 12–25 Who Had and Had Not Used Pain Relievers Nonmedically, by Percent: 2002



SOURCE: NSDUH, OAS, SAMHSA

STIMULANTS. An estimated 21 million Americans age 12 and older in 2002 had used prescription-type stimulants nonmedically during their lifetime, and 3.2 million reported abuse of these drugs in the past year. More than 400,000 met DSM-IV criteria for abuse of or dependence on stimulants in the past year.

There was little difference in use between males (0.6 percent) and females (0.5 percent) in past-month nonmedical use of stimulants. Past-month use was more likely to be reported by Whites (0.6 percent) than Hispanics (0.3 percent) or Blacks (0.1 percent). Such use was considerably more prevalent among those age 18–25 (1.3 percent) than those age 12–17 (0.7 percent) and those 26 and older (0.4 percent).

The incidence rates for nonmedical use of stimulants in both the 12–17 and 18–25 age groups increased over the recent decade. In 1991, for every 1,000 nonusers in these age groups, there were 4.5 new users age 12–17 and 4.1 new users age 18–25. In 2000, the respective rates for these two age groups were 17.6 and 13.2—a fourfold increase.

TRANQUILIZERS. Of the estimated 19.3 million Americans age 12 and older in 2002 who reported ever using tranquilizers nonmedically, 4.8 million had used them in the past year, and more than 500,000 met DSM-IV criteria for abuse or dependence in the past year.

There was little difference in past-month tranquilizer use by gender (0.8 and 0.7 percent of males and females,

respectively). Among Whites, 0.9 percent had used tranquilizers nonmedically in the past month, compared with 0.4 percent of Hispanics and 0.2 percent of Blacks. The most striking difference in past-month use was by age group: 1.5 percent of 18–25-year-olds, 0.7 percent of 12–17-year-olds, and 0.6 percent of those age 26 and older.

The incidence rate for nonmedical tranquilizer use in 1990 was 3.9 (new users per 1,000 persons at risk) for 12–17-year-olds and 5.5 for 18–25-year-olds. Over the ensuing decade, the numbers of new users of these drugs in these two age groups increased dramatically to 16.5 and 19.8, respectively—a more than threefold increase.

Student Use of Prescription Drugs: Monitoring the Future Survey

James Colliver, Ph.D

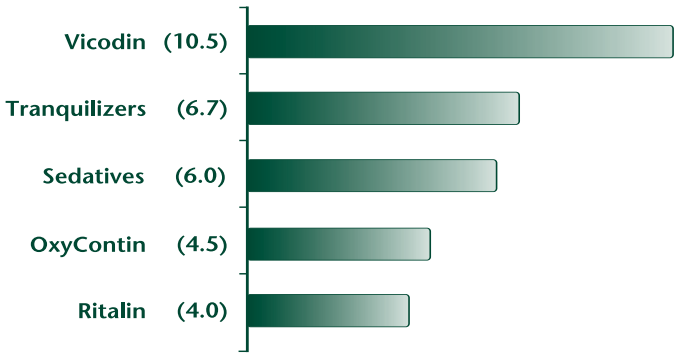
Major findings from the 2003 MTF project include the following:

- Vicodin ranked second (after marijuana) in past-year use among 12th grade students nationwide. Past-year nonmedical use of Vicodin was reported by 10.5 percent of seniors, 7.2 percent of 10th graders, and 2.8 percent of 8th grade students.
- Among seniors, nonmedical use of Vicodin was highest among males and Whites, students in the West Region, and students outside large metropolitan statistical areas (MSAs).
- Sedatives (barbiturates) were used nonmedically by 6 percent of seniors during the past year. Nonmedical use of sedatives by seniors increased from 1992 to 2002 and may have reached a plateau; however, higher levels were reported from 1975 to 1981.
- Nonmedical past-year use of OxyContin was reported by 4.5 percent of high school seniors in 2003, with use being highest among males, Whites, and students outside large MSAs.
- Ritalin was used nonmedically by 4 percent of seniors in the past year, the same as in 2002.

These and other findings are from the 2003 Monitoring the Future survey conducted by the Institute for Social Research, University of Michigan, through NIDA grant R01DA01Y11. The findings presented below cover nonmedical use of Vicodin (a hydrocodone product), tranquilizers, sedatives (barbiturates), OxyContin, and the stimulant Ritalin (methylphenidate).

Past-Year Use. As shown in exhibit A, Vicodin was the prescription drug most likely to be used nonmedically by 12th graders in the 2003 school year, followed by tranquilizers, sedatives (barbiturates), OxyContin, and Ritalin.

Exhibit A. Percentages of 12th Graders Nationally Who Used 5 Prescription-Type Drugs Nonmedically in the Past Year: 2003



SOURCE: MTF (University of Michigan and NIDA)

VICODIN. Of note is the fact that Vicodin ranked second, after marijuana, in past-year use. However, Vicodin use remained statistically unchanged from the previous school year, when 9.6 percent of seniors reported using the drug nonmedically.

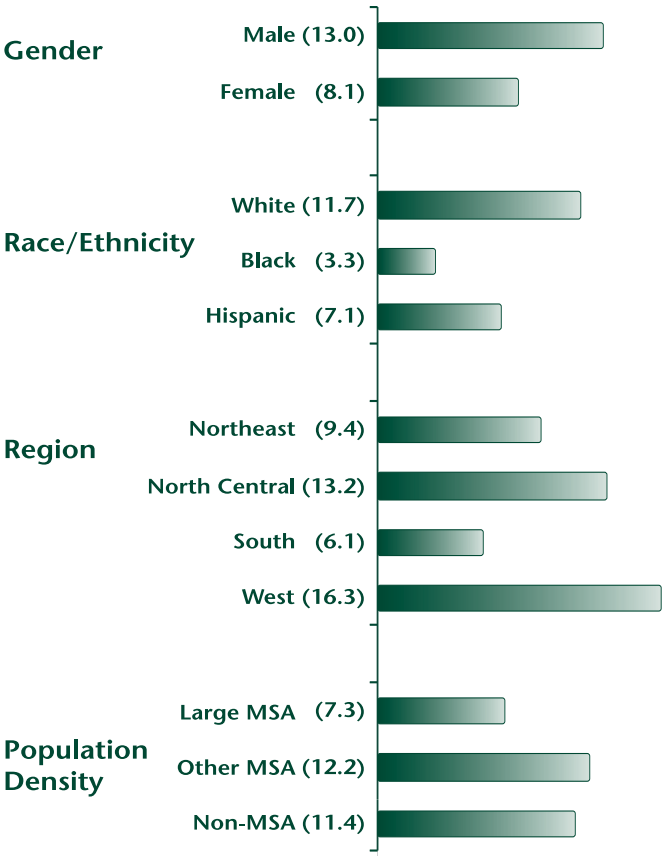
Comparing grades, past-year nonmedical use of Vicodin in 2003 was higher among seniors, followed by those in grade 10, as shown in exhibit B.

Exhibit B. Percentages of Students Reporting Nonmedical Use of Vicodin in the Past Year: 2002–2003

SOURCE: MTF (University of Michigan and NIDA)

Seniors' nonmedical use of Vicodin in the past year was higher among males, Whites, those in the West Region of the United States, and those outside large metropolitan areas (*see exhibit C*).

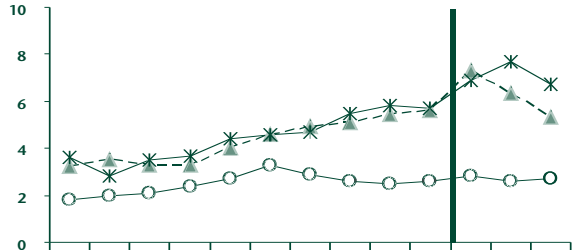
Exhibit C. Percentages of 12th Graders Reporting Past-Year Vicodin Use by Selected Demographic Characteristics and Population Density: 2003



SOURCE: MTF (University of Michigan and NIDA)

TRANQUILIZERS. Nonmedical use of tranquilizers among 10th and 12th grade students increased from 1991 to 2000, when a change in the instrument interrupted the trends. More recently, past-year tranquilizer use declined from 7.3 percent in 2001 to 5.3 percent in 2003 among 10th graders and from 7.7 percent in 2002 to 6.7 percent in 2003 among 12th graders (*see exhibit D*).

Exhibit D. Percentages of Students Reporting Nonmedical Use of Tranquilizers in the Past Year, by Grade and Year: 1991–2003[1]



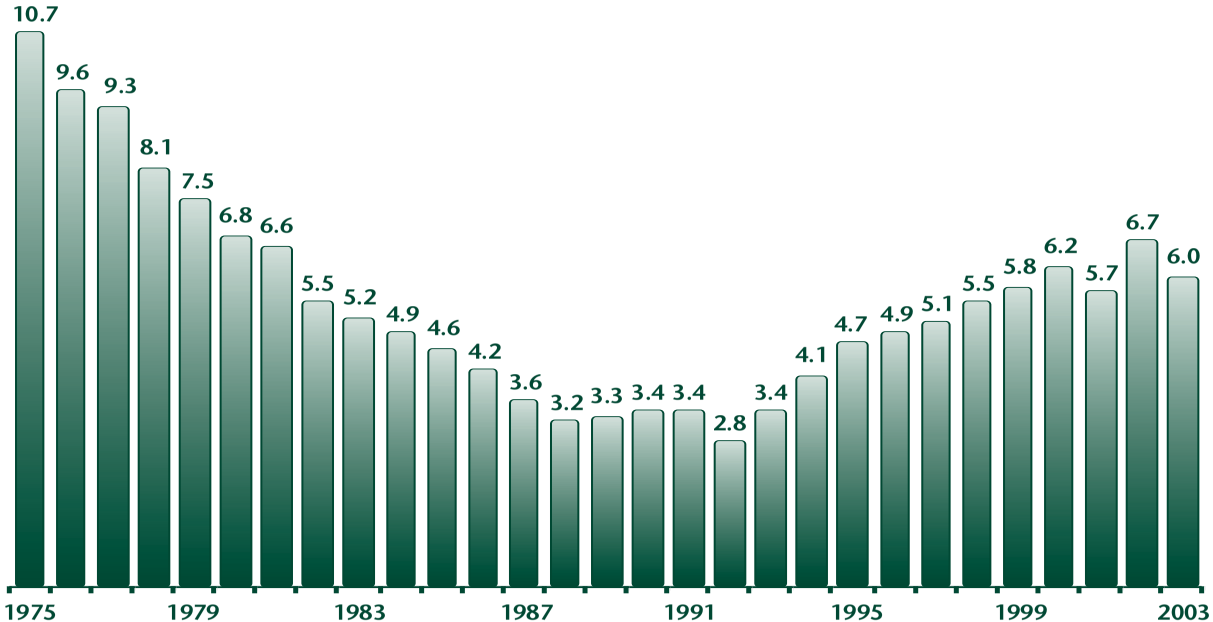
	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03
8th Grade	1.8	2.0	2.1	2.4	2.7	3.3	2.9	2.6	2.5	2.6	2.8	2.6	2.7
10th Grade	3.2	3.5	3.3	3.3	4.0	4.6	4.9	5.1	5.4	5.6	7.3	6.3	5.3
12th Grade	3.6	2.8	3.5	3.7	4.4	4.6	4.7	5.5	5.8	5.7	6.9	7.7	6.7

[1]Xanax replaced Miltown in tranquilizer items beginning in 2001.
SOURCE: MTF (University of Michigan and NIDA)

SEDATIVES. Among seniors, the only grade level asked about barbiturate/sedative use, past-year use of these drugs declined gradually from 10.7 percent in 1975 to 2.8 percent in 1992, then rose to a recent high of 6.7 percent in 2002 and ended at 6.0 percent in 2003, statistically unchanged from the previous year (*see exhibit E*).

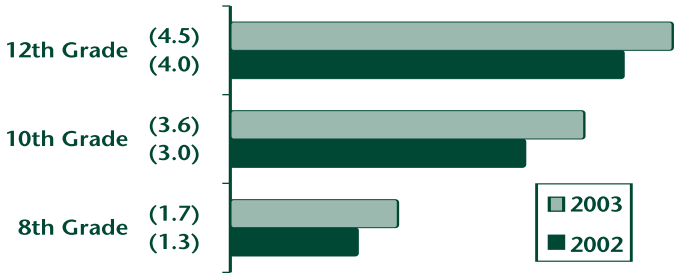
OXYCONTIN. Nonmedical use of OxyContin remained statistically unchanged from 2002 to 2003 for students in all three grades, as shown in exhibit F.

Exhibit E. Percentages of Seniors Reporting Past-Year Nonmedical Use of Sedatives, by Year: 1975–2003



SOURCE: MTF (University of Michigan and NIDA)

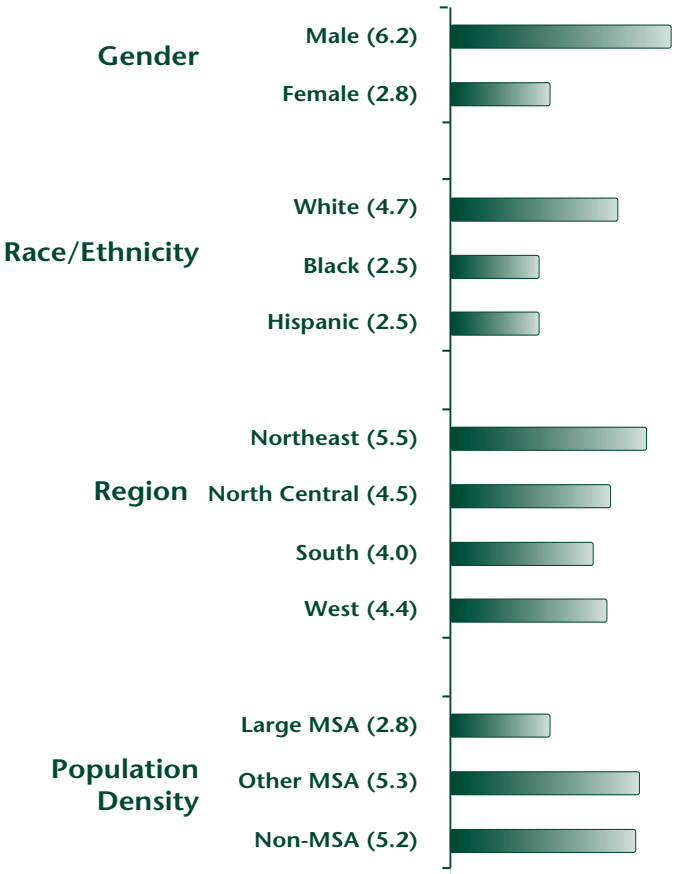
Exhibit F. Percentages of Students Reporting Past-Year Nonmedical Use of OxyContin by Grade and Year: 2002–2003



SOURCE: MTF (University of Michigan and NIDA)

Nonmedical use of OxyContin in the past year was higher among males and Whites, as shown in exhibit G. Differences by region were not great. Areas outside large metropolitan areas tended to have higher percentages of student use than areas inside large metropolitan areas.

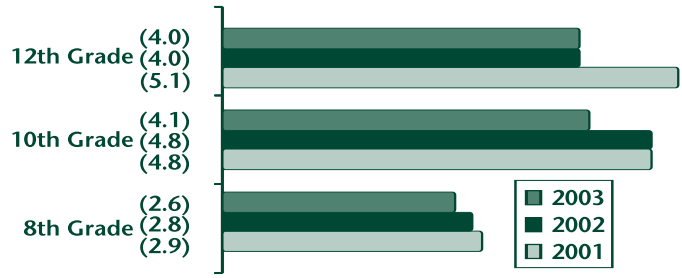
Exhibit G. Percentages of 12th Graders Reporting Past-Year Use of OxyContin by Selected Demographic Characteristics and Population Density: 2003



SOURCE: MTF (University of Michigan and NIDA)

RITALIN. Nonmedical use of Ritalin in the past year was reported by 4.0 percent of 10th and 12th graders and 2.6 percent of 8th graders in 2003, as shown in exhibit H. There were no statistically significant changes in the period from 2001 to 2003.

Exhibit H. Percentages of Students Reporting Nonmedical Past-Year Use of Ritalin: 2001–2003



SOURCE: MTF (University of Michigan and NIDA)

Prescription Drugs and Teens and Young Adults in Drug Abuse-Related Emergency Department Visits: 1995–2002

Elizabeth Crane, Ph.D., M.P.H.

Trend data from the Drug Abuse Warning Network on drug abuse-related hospital emergency department visits involving nonmedical use of narcotic analgesics and benzodiazepines show the following:

- ED visits involving nonmedical use of hydrocodone, oxycodone, methadone, and fentanyl increased between 1995 and 2002. ED visits involving hydrocodone exceeded 25,000, and those for oxycodone exceeded 20,000 in 2002.
- Rates of ED visits involving narcotic analgesics were most likely to increase among patients age 20–25.
- Rates for methadone visits increased from 1995 to 2002 for groups in the 12 to 34 age categories.
- Rates for methadone, hydrocodone, and oxycodone visits increased among males and females from 1995 to 2002 and continued to increase among males from 2000 to 2002.
- Polydrug use was common among drug abuse-related ED cases involving narcotic analgesics.
- Drug abuse-related visits involving the benzodiazepines alprazolam and clonazepam increased from 1995 to 2002. In 2002, visits involving alprazolam totaled more than 27,000, but they only increased among patients age 20–25. Visits involving clonazepam totaled slightly more than 17,000 in 2002.
- Rates for alprazolam-involved ED visits were equivalent across age groups, indicating that teenagers

were as likely to enter the ED for this drug as the older groups.

- Visits involving diazepam were stable from 1995 to 2002, when the total reached nearly 11,200.

These and other findings from the Drug Abuse Warning Network were presented by Dr. Crane, who is directly involved in DAWN efforts at the Office of Applied Studies, SAMHSA.

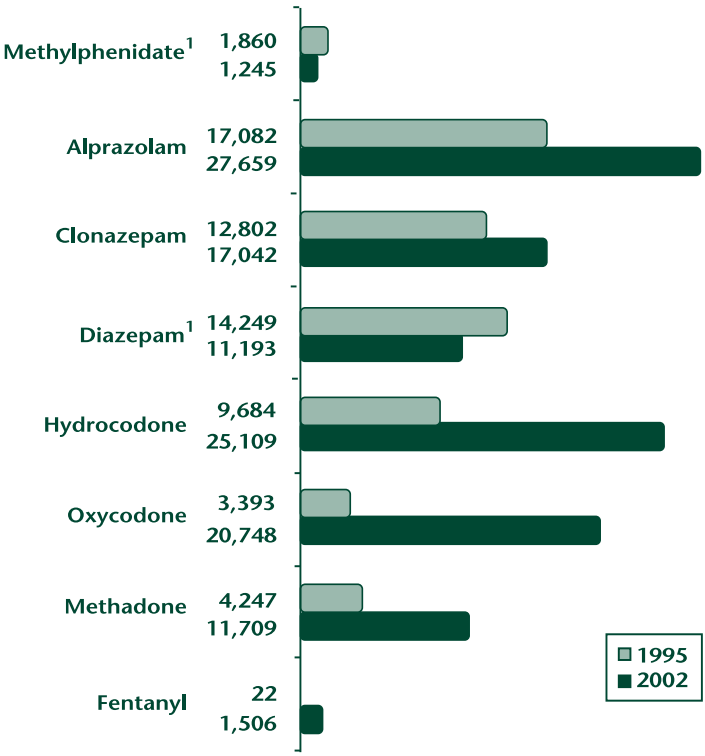
OVERVIEW. Data reported here represent ED visits from 1995 to 2002 that resulted from the nonmedical use of a prescription drug to achieve a psychic effect or because of dependence or suicidal behavior. Each visit may have involved more than one substance (including illicit, prescription, and over-the-counter drugs, and inhalants), and polydrug abuse was common.

The major drugs covered here are as follows:

- Narcotic Analgesics—hydrocodone, oxycodone, methadone, and fentanyl
- Benzodiazepines—alprazolam, clonazepam, and diazepam
- Stimulants—methylphenidate

The number of drug abuse-related ED visits for each of these drugs is shown in exhibit A.

Exhibit A. Drug-Abuse Related ED Visits for Selected Narcotic Analgesics, Benzodiazepines, and Methylphenidate: 1995–2002



[1]Stable from 1995 to 2002.
SOURCE: DAWN, OAS, SAMHSA

Other findings are presented by drug type and will focus on trends in gender and age differences in drug abuse-related ED visits. Changes over time that were statistically significant ($p<0.05$) will be noted.

Narcotic Analgesics

The magnitude of the problem of drug abuse-related ED visits involving hydrocodone, oxycodone, methadone, and fentanyl from 1995 to 2002 is depicted above in exhibit A. All differences in the number of visits between 1995 and 2002 are statistically significant.

AGE OBSERVATIONS. Analyses show age group differences in ED visits for hydrocodone, oxycodone, and methadone.* ED rates per 100,000 population for each of these drugs and age groups are shown in exhibit B. Rates for 12–17-year-olds were lower than those for the other age groups for each of the three drugs. The shaded cells for the 12–17 age group represent a statistically significantly lower rate compared with the other groups for the specified drugs. As the exhibit footnote indicates, there were increases from 1995 to 2002 in methadone-involved visits for all four age groups. ED visits also increased for hydrocodone- and oxycodone-involved visits among the 20–25 age group, with increases in hydrocodone-involved visits also reflected in the shorter term (2000–2002). Oxycodone-involved visits also increased from 1995 to 2000 and from 2000 to 2002 for the 26–34 age group. The 18–19-year-old group had a higher rate of oxycodone-involved visits from 2000 to 2002, but because the 1995 estimate was too imprecise, the trend from 1995 to 2002 could not be calculated.

Exhibit B. Rates of ED Visits Per 100,000 Population for Selected Narcotic Analgesics and Benzodiazepines, by Age Group: 2002[1]

Drug	12–17	18–19	20–25	26–34
Hydrocodone	4	14	16+*	16
Oxycodone	1	14*	13+	18+*
Methadone	0.3+	4+	7+*	8+
Alprazolam	9	15	15+*	18
Clonazepam	3	9	8	12
Diazepam	1	6	4-	7-

[1]The plus (+) sign indicates a statistically significant ($p<0.05$) increase from 1995 to 2002, while the minus (-) sign indicates a decrease. An asterisk (*) indicates a statistically significant increase from 2000 to 2002. Because the trend in oxycodone-involved visits from 1995 to 2002 could not be measured for the 18–19-year-olds, the increase noted is for 2000–2002.
SOURCE: DAWN, OAS, SAMHSA

*Small numbers prohibited further analysis of fentanyl visits.

Gender Observations. Combined age group data show few differences by gender. In 2002, the ED rates per 100,000 population were equivalent for males and females for each of the three narcotic analgesics (*see exhibit C*). The rates for each drug increased for both gender groups from 1995 to 2002. However, between 2000 and 2002, the rates for each drug leveled off for females, while the increases for males were statistically significant.

Exhibit C. Rates of Drug Abuse-Related ED Visits Per 100,000 Population Age 12–34 for Selected Narcotic Analgesics and Benzodiazepines, by Gender: 2002[1]

Drug	Males	Females
Hydrocodone	11+*	14+
Oxycodone	14+*	10+
Methadone	6+*	4+
Alprazolam	12+	15
Clonazepam	6	10
Diazepam	4-	5

[1]The plus (+) sign indicates a statistically significant ($p<0.05$) increase from 1995 to 2002, while the minus (-) sign indicates a decrease. An asterisk (*) indicates a statistically significant increase from 2000 to 2002.

SOURCE: DAWN, OAS, SAMHSA

Comparison Across CEWG Areas. Rates also varied by metropolitan area. In 2002, New Orleans and Detroit had the highest rates of hydrocodone-involved visits for the 20–25-year-old group, although the Detroit rate overlapped with some other metropolitan areas. No metropolitan area stood out for the 26–34 age group. Rates for oxycodone-involved visits were highest in Boston and Philadelphia for both the 20–25 and 26-34 age groups, although Philadelphia overlapped with some other metropolitan areas. Methadone rates were highest in Newark and Seattle among the 26–34 age group, but rates for the 18–25 age group were similar across metropolitan areas.

Benzodiazepines

The magnitude of the problem with the benzodiazepines alprazolam, clonazepam, and diazepam is depicted above in exhibit A. In 1995 and 2002, alprazolam-involved ED visits were more numerous than those for clonazepam and diazepam. Differences between 1995 and 2002 in the number of ED visits involving alprazolam and clonazepam were statistically significant.

Age Observations. Rates per 100,000 population for alprazolam-involved ED visits were equivalent across age groups, which means that teenagers were as likely to enter the ED as persons in the older groups (*see exhibit B on page 25*). Between 1995 and 2002, and between

2000 and 2002, the rate of alprazolam-involved ED visits increased only for the 20–25 age group. The only decreases occurring during this period were for diazepam-involved ED visits from 1995 to 2002 among the two older age groups.

Gender Observations. Rates of benzodiazepine-involved ED visits among the 12–34 age group were equivalent for males and females for alprazolam and diazepam in 2002 (*see exhibit C*). The female patients had a higher rate of drug abuse-related visits involving clonazepam, however. From 1995 to 2002, male patients experienced an increase in the rate of alprazolam-involved ED visits and a decrease in the rate of diazepam-involved visits. The trends between 2000 and 2002 were stable for both genders.

Comparison Across CEWG Areas. The rates of drug-abuse ED visits involving alprazolam in 2002 were highest in Philadelphia among patients age 20–25 and 26–34, with the latter age group also having a high rate in New Orleans. Rates for clonazepam were highest in Boston and Philadelphia among patients age 20–25 and in Boston for those age 26–34. The rates of diazepam-involved visits were similar across the metropolitan areas.

Stimulants

Drug abuse-related ED visits that involved methylphenidate were stable from 1995 (*n*=1,860) to 2002 (1,245). Because of small numbers, no further analysis was feasible for this drug.

Treatment Admissions for Abuse of Narcotic Painkillers—Treatment Episode Data Set: 1992–2002

Leigh Henderson, Ph.D.

Highlights from the TEDS data include the following findings on admissions (age 12 and older) reporting use of narcotic painkillers:

- There were 84,000 admissions for narcotic painkillers in 2002: 51 percent were for primary abuse of a narcotic painkiller.
- Among the polydrug abusers in this group, alcohol and heroin were the most prominent primary drugs.
- Of the narcotic painkiller admissions in 2002, 87 percent were White, 6 percent were Black, 4 percent were Hispanic, and 3 percent were members of other racial/ethnic groups.
- The age pattern of treatment admissions has shifted in recent years, with higher proportions of younger admissions being in their twenties in 2002 than was

the case in 1997. This shift was particularly pronounced for males in their twenties, the age group with the highest number of admissions in 2002. Admissions for females were highest in the 35–45 age group.

- Narcotic painkiller admissions were relatively stable from 1992 to 1997 (at approximately 30,000 each year), but rose sharply thereafter. In 1992, 5 States had narcotic painkiller admission rates of 24 or more per 100,000 population; by 1997, the number rose to 12 States, and, by 2002, to 31 States. From 1992 to 2002, one-quarter of the admissions were in five States, with New York and California ranking first and second, respectively. In 2002, rates were higher in non-central metropolitan areas and the highest rate was in Maine (207 per 100,000 population).
- An analysis of data from 11 States that used detailed drug codes showed that narcotic painkiller admissions increased 129 percent from 1997 to 2002. During that time period, admissions for oxycodone abuse increased 1,267 percent.
- Among 10 CEWG cities with the highest rates of narcotic painkiller admissions, 4 exceeded the national rate of 40, with Boston and Baltimore highest at 111 and 86, respectively.

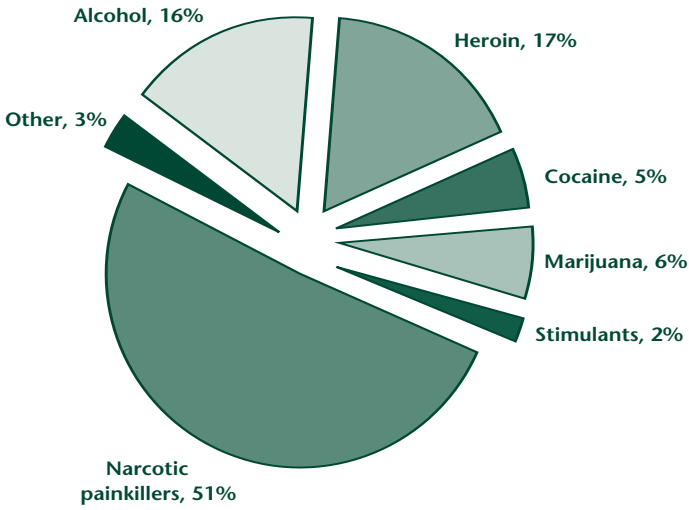
Data for this presentation, as reported by CEWG member, Leigh Henderson, Ph.D., Drug and Alcohol Services Information System (DASIS) Project Manager, Synectics for Management Decisions, Inc., was prepared in coordination with Deborah Trunzo and staff of OAS, SAMHSA.

OVERVIEW. TEDS, maintained by SAMHSA, collects client-level information on admissions from States. The data represent admissions (rather than individuals) age 12 and older who receive treatment in publicly funded facilities.

The focus of this presentation is on admissions for which narcotic painkillers ("Other opitates/synthetics") are the primary, secondary, or tertiary drug of abuse, excluding admissions for nonprescription use of methadone.

SELECTED FINDINGS. In 2002, 84,000 of the 1.9 million admissions in TEDS used a narcotic painkiller as a primary, secondary, or tertiary drug. Some 51 percent reported a narcotic painkiller as their primary drug, a 246-percent increase from the primary admissions in 1992. The 2002 admissions were primarily White (87 percent), with 6 percent being Black, 4 percent Hispanic, and 3 percent members of other racial/ethnic groups. This group of admissions was most likely to use heroin or alcohol, indicating some level of dual addiction (*see exhibit A*).

Exhibit A. Admissions Involving Narcotic Painkillers, by Primary Substance: 2002



SOURCE: TEDS, OAS, SAMHSA

From 1992 to 2002, admissions involving narcotic painkillers rose from approximately 28,000 to 84,000. The upward trend began in 1998, as depicted in exhibit B.

Exhibit B. Admissions Involving Narcotic Painkillers: 1992–2002

SOURCE: TEDS, OAS, SAMHSA

Other trend data show there has been a shift in the age pattern of narcotic painkiller admissions in recent years. As depicted in exhibit C on the following page, there has been a dramatic increase in the proportion of male admissions in their twenties, when 1997 and 2002 data are compared. Admissions for females were highest for those in the 35–45 age range.

Exhibit C. Narcotic Painkiller Admissions by Gender and Age: 1997 and 2002

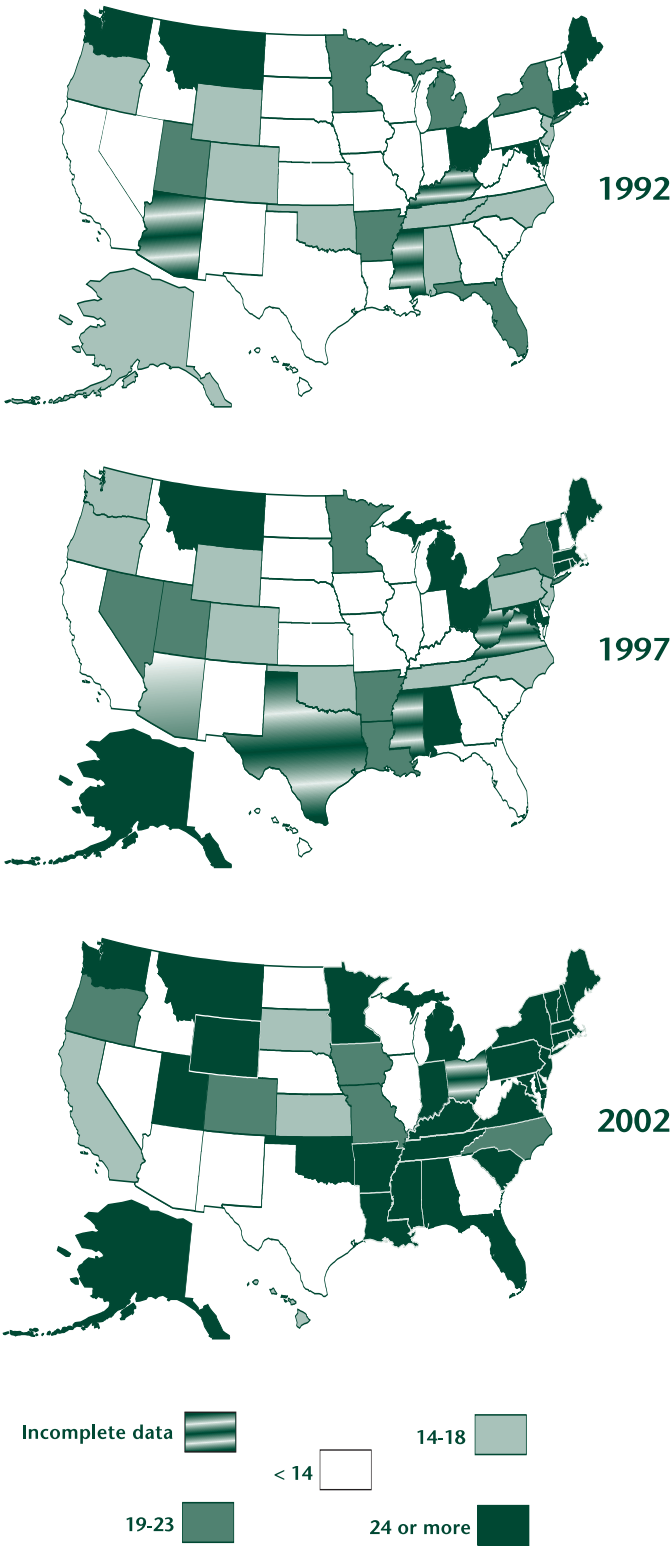
SOURCE: TEDS, OAS, SAMHSA

Five States accounted for 25 percent of the increase in narcotic painkiller admissions from 1992 to 2003 (the 2003 data are preliminary). These were, in rank order: New York (*n*=55,663), California (45,129), Washington (22,992), Texas (13,668), and Maine (10,894). The admissions were primarily White (87 percent in 2002).

The maps on the following page show narcotic painkiller admission rates per 100,000 population by State for 1992, 1997, and 2002 (*see exhibit D*). In 1992, 5 States (shown in dark green) had narcotic painkiller admission rates of 24 or more per 100,000 population. By 1997, another 7 States had rates of 24 or more, bringing the total to 12. In 2002, 31 States had narcotic painkiller admission rates of 24 or higher. The highest rates were in the New England States and ranged from 89 per 100,000

population in Connecticut to 207 in Maine. In each of the 3 years depicted in the maps, those in pale green fell below the median rate of narcotic painkiller admissions in reporting States.

Exhibit D. Rates of Narcotic Painkiller Admissions Per 100,000 Population: 1992, 1997, and 2002



SOURCE: TEDS, OAS, SAMHSA

DEA Data on Prescription Drug Abuse: Narcotic Analgesics

Liqun Wong, M.S.

Drug Enforcement Administration data for 2001–2003 on narcotic analgesics show the following:

- Hydrocodone and oxycodone were, by far, the narcotic analgesics most frequently analyzed by DEA, State, and local laboratories, followed by methadone and codeine.
- Hydrocodone items were more prevalent in the West and South Regions of the Nation, while oxycodone items were more numerous in the Northeast.
- From 2001 to 2003, retail distribution of narcotic analgesics increased for hydrocodone, oxycodone, methadone, morphine, and codeine; total theft and loss of oxycodone and methadone peaked in 2002.

Documentation of these findings, as presented by Liqun Wong, DEA, are based on data that are primarily from the following sources:

- The National Forensic Laboratory Information System, sponsored by DEA, which systematically collects results from State and local forensic laboratories on analyses of drug seizures
- The System to Retrieve Information from Drug Evidence, a DEA program that analyzes drugs seized by DEA, the Federal Bureau of Investigation, the U.S. Customs Service, and others
- Automation of Reports and Controlled Orders System, an automated DEA database that tracks the flow of controlled substances from the manufacturer to controlled distribution systems to sales at the dispensary/retail level (e.g., hospitals, pharmacies, and practitioners)

NFLIS Data. As shown in exhibit A, narcotic analgesics accounted for between 2.1 and 2.9 percent of all items analyzed by State and local forensic laboratories in 2001–2003. Of the total narcotic analgesic items analyzed, hydrocodone and oxycodone accounted for nearly 70 percent in each of the 3 years. Across the 3 years, the percentage of items that were methadone increased slightly by 2003, while those for codeine decreased slightly.

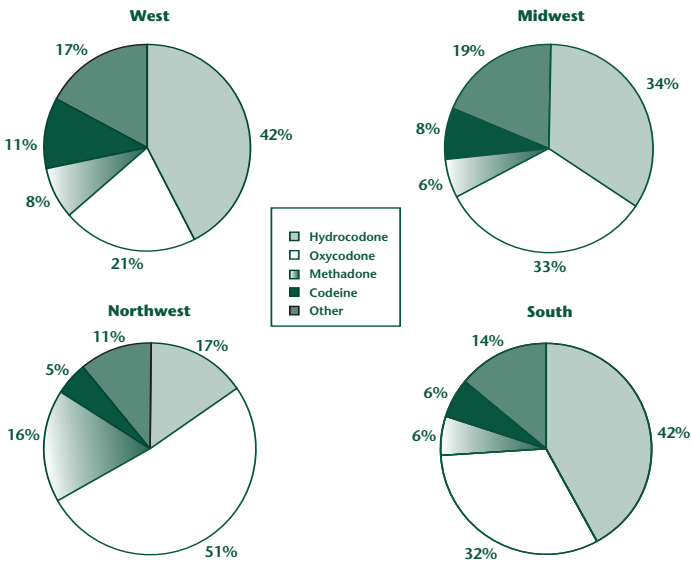
Exhibit A. Estimated Numbers and Percentages of Narcotic Analgesic Items Analyzed by Forensic Laboratories: 2001–2003

Drug	Total		2001		2002		2003	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Hydrocodone	47,399	34.5	13,659	34.9	16,838	34.2	16,903	34.6
Oxycodone	47,093	34.3	13,004	33.2	17,569	35.7	16,520	33.8
Methadone	11,299	8.2	2,490	6.4	3,842	7.8	4,967	10.2
Codeine	9,932	7.2	3,572	9.1	3,603	7.3	2,757	5.6
Morphine	7,037	5.1	2,103	5.4	2,400	4.9	2,534	5.2
Propoxyphene	6,853	5.0	2,264	5.8	2,486	5.0	2,103	4.3
Other Narcotic Analgesics	7,719	5.6	2,083	5.3	2,507	5.1	3,130	6.4
Total Narcotic Analgesic Items	137,332		39,174		49,244		48,914	
Total Analyzed Items	5,366,149		1,828,838		1,821,714		1,715,597	
Percent Identified as Narcotic Analgesics		2.6		2.1	2.7			2.9

SOURCE: NFLIS, DEA

There were regional differences in the distribution of the drugs seized/analyzed by NFLIS labs, as the combined data for 2001–2003 show (*see exhibit B*). Hydrocodone was more prevalent in the West and South Regions, while oxycodone was highest in the Northeast Region.

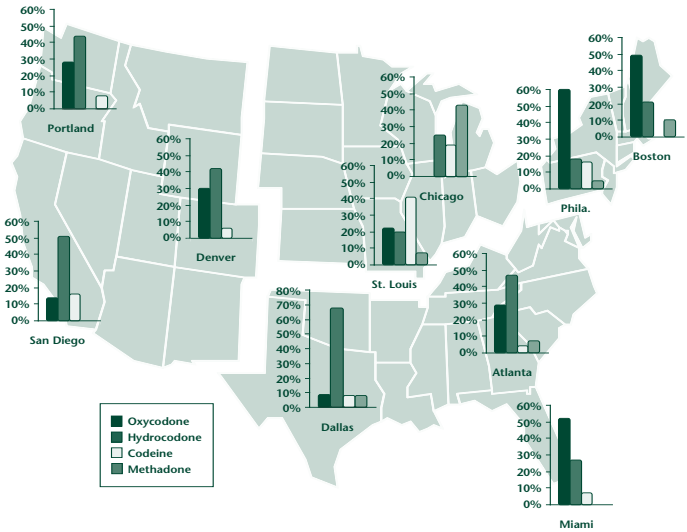
Exhibit B. Distribution of Narcotic Analgesic Items Analyzed by NFLIS, by Region and Percent: 2001–2003



SOURCE: NFLIS, DEA

Exhibit C depicts the percentages of the four most frequently analyzed narcotic analgesic items in nine CEWG areas and Portland, Oregon, from 2001 to 2003. Hydrocodone items dominate in Atlanta and in west coast and southwestern CEWG areas. Oxycodone is most predominant in Boston, Philadelphia, and Miami. Methadone accounted for the highest percentage of the narcotic analgesic items in Chicago, while codeine accounted for the largest percentage in St. Louis.

Exhibit C. Narcotic Analgesic Items Analyzed in 10 Cities, by Percent of All Narcotic Analgesic Items: 2001–2003



SOURCE: NFLIS, DEA

The pattern of seizures/analyses reported by STRIDE shows that hydrocodone and oxycodone account for the majority each year (*see exhibit D*).

Exhibit D. Seizures of Narcotic Analgesic Drugs Reported by STRIDE: 2001–2003

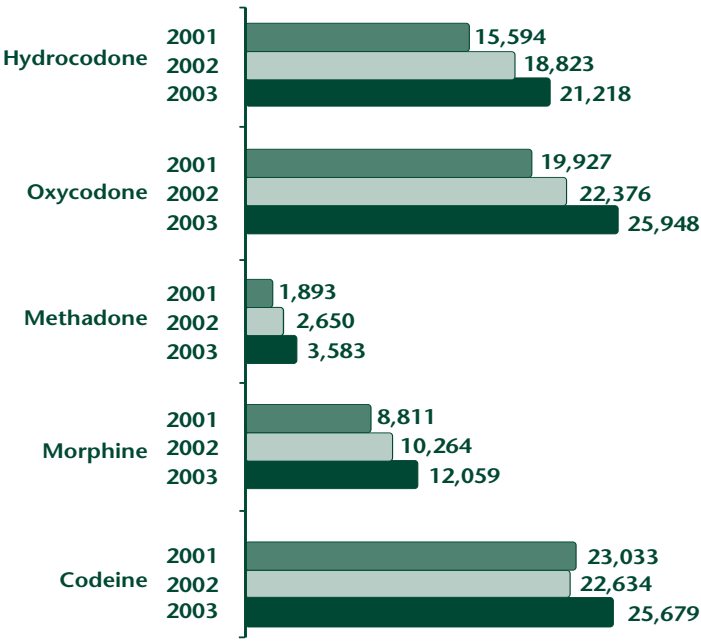
Drug	Total		2001		2002		2003	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Hydrocodone	1,120	32.8	291	25.1	344	32.8	485	40.2
Oxycodone	1,079	31.6	480	41.4	308	29.4	291	24.1
Methadone	299	8.8	84	7.2	97	9.2	118	9.8
Codeine	257	7.5	82	7.1	78	7.4	97	8.0
Morphine	220	6.4	59	5.1	80	7.6	81	6.7
Propoxyphene	174	5.1	71	6.1	58	5.5	45	3.7
Other Narcotic Analgesics	266	7.8	93	8.0	84	8.0	89	7.4

SOURCE: STRIDE, DEA

The pattern of STRIDE seizures/analyses differs little from that reported by NFLIS (*see exhibit A on page 33*). In both, hydrocodone and oxycodone account for the majority of items. As a percentage of all items seized, codeine and morphine were more prominent in STRIDE, while methadone and propoxyphene accounted for a larger percentage of NFLIS items by 2003.

RETAIL DISTRIBUTION DATA. ARCOS data for 2001, 2002, and 2003 on retail distribution of five narcotic analgesic drugs show a slightly upward trend for hydrocodone, with the amount distributed rising approximately 5,600 kilograms from 2001 to 2003 (*see exhibit E*). Oxycodone also shows an upward trend, with 6,000 more kilograms distributed retail from 2001 to 2003. Retail distribution of methadone, morphine, and codeine also increased over the 3 years.

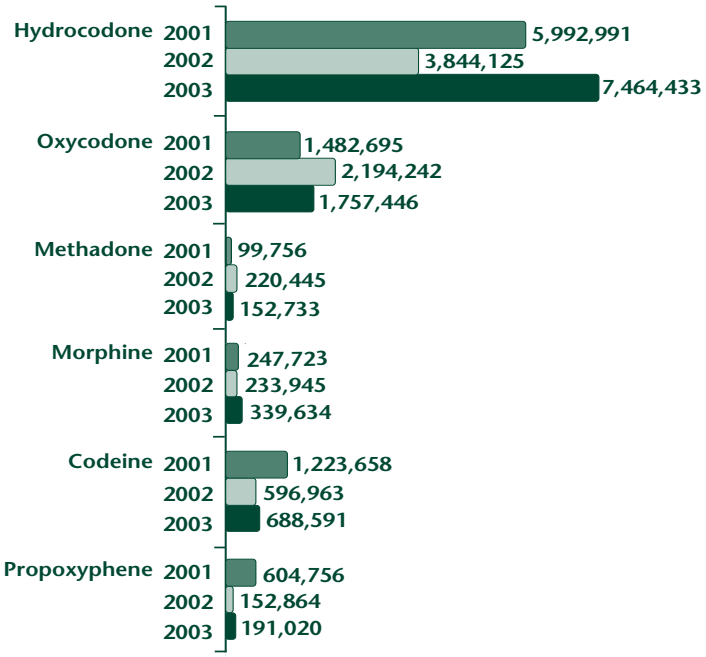
Exhibit E. Retail Distribution of 5 Narcotic Analgesic Drugs, in Kilograms: 2001–2003



SOURCE: ARCOS–2, DEA

THEFT AND LOSS. Information from another DEA database shows the dosage units of six narcotic analgesics and is based on information from registered narcotic analgesic handlers that are mandated to report theft or loss to the DEA. As shown in exhibit F, theft and loss for hydrocodone increased between 2002 and 2003, while oxycodone theft and loss declined during that time. For the other four drugs, codeine and propoxyphene loss decreased from 2001 to 2003, while morphine and methadone theft and loss increased in that period.

Exhibit F. Narcotic Analgesics Theft and Loss, in Number of Dosage Units: 2001–2003



SOURCE: DEA

Teenage Benzodiazepine Abuse and Misuse and United States Poison Control Centers: 2000–2003

William Watson, Pharm.D.

The Toxic Exposure Surveillance System (TESS) notes the following findings from 2000 through 2003 on teenagers reporting to poison control centers reporting to TESS. In 2003, 64 poison control centers (PCCs) reported to TESS, including 51 regional PCCs. The entire population of the 50 States, District of Columbia, and Puerto Rico were served by PCCs in 2003. However, because of variations in penetrance, the data, strictly speaking, cannot be considered national.

- Benzodiazepines were the most commonly abused and misused prescription medications involving teen cases reported to TESS.
- Alprazolam accounted for 48 percent of the teenage cases.

- Nearly one-half (49 percent) of the teenage benzodiazepine cases involved more than one substance.
- Of the cases followed up by poison control centers and for which treatment was indicated, 17.9 percent had moderate (e.g., disorientation) or major (e.g., life-threatening symptoms) outcomes.

These findings from the American Association of Poison Control Centers (AAPCC), TESS, represent center cases involving abuse and misuse of prescription drugs, especially benzodiazepines, by teenagers (age 13–19) from 2000 to 2003.

Overview of TESS. TESS was developed to provide uniformity in data collection from poison control cases. The AAPCC publishes an annual report each year in *The American Journal of Emergency Medicine* that summarizes human poisoning exposures. The information is available on the AAPCC Web site at <http://www.aapcc.org/annual.htm>.

The TESS data are useful for identifying the abuse of new or uncommon substances and changing patterns of abuse, since these cases may be more likely to result in health care providers contacting a poison center than is the case for more frequently encountered drugs. The predominance of calls to centers from the general public is unique among "real-time" surveillance systems and provides a different perspective on substance abuse. Geomapping permits comparison of rates of abuse and misuse by State and county.

Teenage Substance Abuse and Misuse. From 2000 through 2003, 670,064 poison center cases reported to TESS involved teenagers. More than one-half (55.9 percent) of the calls came from home, and 43.2 percent of cases were managed outside a health care facility. The reason for exposure was intentional in 306,213 cases (45.7 percent). The most common reasons for intentional poisoning exposures in this age group were suspected suicide (*n*=187,393), abuse (62,021), and misuse (43,480).

An assessment of the 200 most commonly abused and misused substances among teenagers shows that nonprescription drugs accounted for 33.7 percent of the cases and prescription medications accounted for 26.2 percent of the cases, followed by ethanol and illicit substances.

Benzodiazepines are the most common group of prescription medications reported in teenage abuse/misuse cases to poison control centers participating in TESS. This pattern was somewhat more common in 2000 and 2003 than in 2001 and 2002. From 2000 onward, the most commonly reported benzodiazepines were as follows:

- Alprazolam—48 percent
- Clonazepam—23 percent
- Diazepam—12 percent

- Lorazepam—11 percent
- Flunitrazepam—5 percent

More than one substance was involved in 49 percent of the benzodiazepine abuse or misuse cases.

Two-thirds of the benzodiazepine cases were followed up by the poison control center, and 17.9 percent had a moderate or major outcome. Moderate outcomes are those with symptoms that are not life threatening, rapidly respond to treatment, and have no residual disability (e.g., disorientation or hypotension); some form of treatment is usually indicated in these moderate cases. Major outcomes are defined as cases with life-threatening symptoms or those that result in significant residual disability or disfigurement (Watson et. al 2003).

Across the 4 years, 11 teenage deaths involved abuse or misuse of benzodiazepines. In all 11 deaths, benzodiazepines were in combination with at least one other drug, and the benzodiazepine was not listed as the primary drug in any of these cases.

Reference

Watson, W.A.; Litovitz, T.L.; Rodgers, Jr., G.C.; Klein-Schwartz, W.; Youniss, J.; Rose, S.R.; Borys, D.; and May, M.E. 2002 Annual Report of the American Association of Poison Control Centers Toxic Exposure Surveillance System. *The American Journal of Emergency Medicine* 21(5): 353–421, 2003.

Examining Clonazepam and Other Sedative Hypnotics Using Treatment and Qualitative Data

Bruce Mendelson, M.P.A.

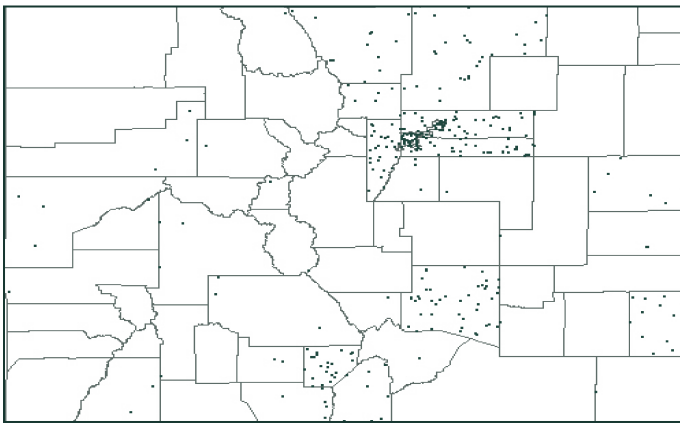
This exploratory study in Colorado focused on clonazepam (an anxiolytic/sedative benzodiazepine used medically to treat anxiety, panic, and seizure disorders) and resulted in the following findings/conclusions:

- In 2002 and 2003, relatively high percentages of sedative abusers who entered treatment in Colorado reported clonazepam as their primary drug of abuse.
- Results from this exploratory study suggest that clonazepam is widely available, especially in some areas of the State, and that it may be preferred because of its anti-anxiety effects and the long duration of effects.

METHODS. Bruce Mendelson, CEWG representative from Denver, described how secondary analysis of treatment data and a qualitative study were conducted in early 2004 to learn more about clonazepam abuse in Colorado. Clinicians from 13 treatment programs were contacted as key informants for the qualitative study. Additionally, treatment admissions data were examined to better characterize the drug-abusing population and the treatment experience of clonazepam abusers, and to assess clinical information from treatment programs.

FINDINGS. Of the 451 clients who reported sedative hypnotic abuse in 2002, 60 percent specified clonazepam as their primary drug. Among the sedative hypnotic treatment admissions in 2003 (*n*=361), 42.1 percent were primary clonazepam abusers. Individuals admitted to treatment in 2002 and 2003 were plotted on a map to determine where in the State they lived (*see exhibit A*). It was learned that most clonazepam treatment admissions resided in the Denver metropolitan area and in the southeast and south central sections of the State.

Exhibit A. Clonazepam Treatment Admissions by Colorado County: 2002–2003



SOURCE: Colorado Alcohol and Drug Abuse Division

Clonazepam abusers were less likely than other types of sedative hypnotic abusers to be daily users (14.7 vs. 30.3 percent), new users (5.7 vs. 16.0 percent), or to have been arrested. They were also less likely to have medical/physical problems at treatment admission and discharge. Clonazepam abusers were more likely to have made progress in achieving treatment goals. At discharge, some 36.6 percent received "high" ratings for achievement of treatment goals (compared with 22.1 percent for the other sedative hypnotic admissions), and 44.6 percent received "moderate" ratings (compared with 27.0 percent for other sedative hypnotic admissions).

Clinician informants identified primary reasons for using clonazepam, which included the following:

- Wide street availability and easy access were reported for the drug.
- Younger methadone clients liked it for the "high."
- Clients older than 18 had the ability to get prescriptions.
- The drug helps with ethanol withdrawal (i.e., shakes, fear of seizures).

The following were some of the desired effects from clonazepam identified by key informants:

- Relaxation, calm, reduced anxiety, sedation high
- Euphoria (i.e., feel good)
- Avoidance of withdrawal
- Reduction/elimination of pain
- Sleep enhancement

The treatment data show that 84.0 percent of the clonazepam abusers took the drug orally, 13.0 percent smoked it, and 1.4 percent inhaled the substance. Less than 1 percent reported that they injected clonazepam.

According to the informants, clonazepam is obtained from a variety of sources, including prescriptions from physicians and doctor shopping, family and friends, and dealers. The cost of the drug depends on the strength (i.e., 0.5, 1.0, 2.0 milligrams). Clonazepam pills typically sell for $2–$5 on the street.

Nonmedical Use of Prescription Drugs: Preliminary Findings from the College Life Study

Amelia Arria, Ph.D.

This pilot study, conducted in early 2004 at a mid-Atlantic university (primarily with freshmen and sophomores), led to the following estimates:

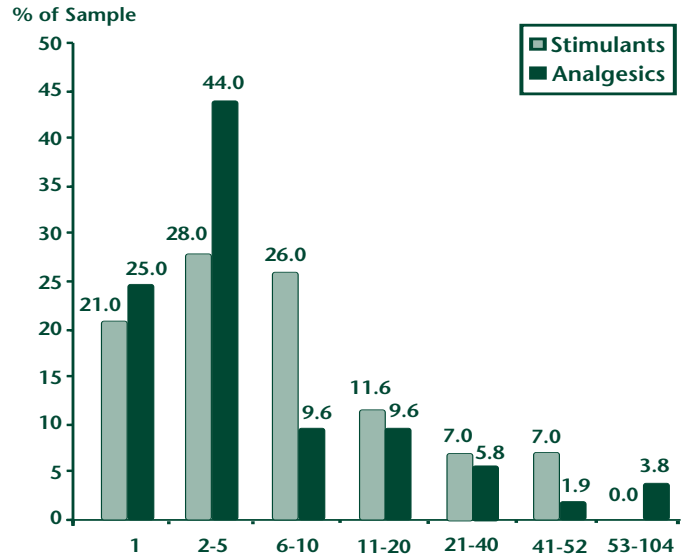
- An estimated 15.5 percent of the students had used prescription pain relievers nonmedically at least once in their lifetime.
- An estimated 13.4 percent of the students had used prescription stimulants nonmedically at least once in their lifetime.
- A high proportion of nonmedical users of prescription drugs had a history of using other illicit or licit drugs, including alcohol.

Dr. Arria, who serves as the Principal Investigator of this study at the Center for Substance Abuse Research (CESAR), University of Maryland, presented these and other findings from the pilot study supported through NIDA grant R01DA14845.

Sample and Methods. The pilot study included 468 students, age 18–25. Eighty percent were freshmen and sophomores. One-half were males, 69 percent were White, and 12 percent were African-American. All participants were administered a classroom-based questionnaire that included items on nonmedical use of prescription drugs, as well as use of alcohol, tobacco, and illicit drugs.

Findings. Of the pilot sample, 13.4 percent had used prescription stimulants nonmedically and 15.5 percent had used prescription pain relievers nonmedically at least once during their lifetime. More than one-half (51.6 percent) had used prescription stimulants nonmedically six or more times in the past year, compared with 31.0 percent of nonmedical prescription pain reliever users (*see exhibit A on the following page*).

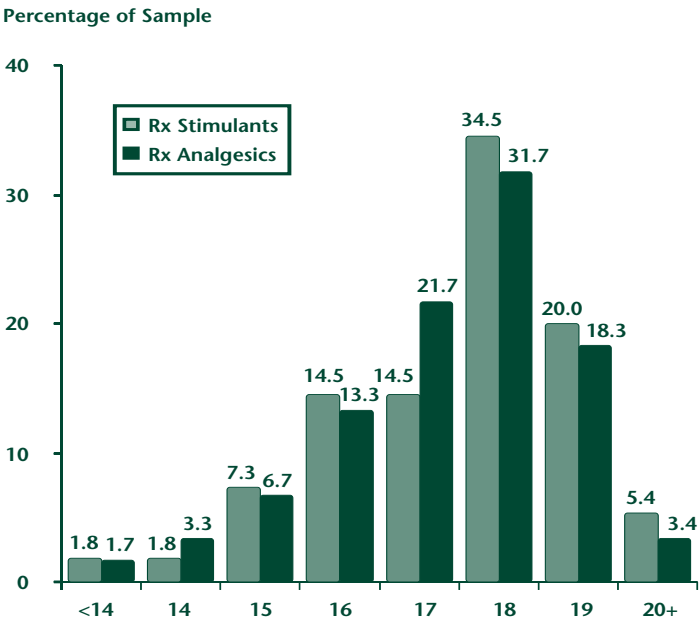
Exhibit A. Number of Occasions Prescription Stimulants and Analgesics Were Used Nonmedically by Students in the Past Year, by Percent: 2004



SOURCE: CESAR

Nearly one-half (47.2 percent) of the nonmedical prescription pain reliever users and 39.9 percent of the nonmedical prescription stimulant users began using these drugs before the age of 18 (*see exhibit B*).

Exhibit B. Age of First Use of Prescription Analgesics and Stimulants Nonmedically, by Percent: 2004



SOURCE: CESAR

Males were more likely than females to use prescription drugs nonmedically.

Comparisons were made between three groups of students: prescription analgesic users, prescription stimulant users, and nonusers of these prescription drugs. The Scholastic Achievement Test (SAT) scores and ages were comparable in all three groups. However, a higher proportion of prescription drug users than nonusers reported attention deficit or hyperactivity disorders.

Ninety-two percent of the nonmedical users of prescription stimulants had used marijuana, compared with 44 percent of the nonusers of either prescription drug. In addition, one-half of the nonmedical prescription pain reliever users had used hallucinogens, compared with only 5 percent of the nonusers.

The longitudinal "College Life Study" is now in its implementation phase. It builds on what was learned from the pilot study and is designed to assess the impact of alcohol and drug (nonmedical and illicit) use on students' behaviors, performance, and opportunities over time. A Federal Certificate of Confidentiality and Institutional Review Board approval have been obtained. Plans are to interview nearly 2,000 of the 4,500 incoming freshmen in the fall of 2004. In addition, an effort will be made to obtain funding for a qualitative study to obtain more insight into the process of initiation and consequences of nonmedical prescription drug use.

Prescription Drug Abuse Among Ecstasy Users in Miami

Steven Kurtz, Ph.D.

Major findings from this qualitative study of prescription drug/ecstasy users in Miami include the following:

- Polydrug use was the norm among the young people in the study. Use patterns crossed age, gender, and ethnic boundaries.
- Many different prescription drugs were used with illicit drugs to "get high."
- Prescription drugs were perceived as safer and purer, more respectable, and more available than illicit drugs, and also as less expensive and less likely to have negative side effects than illicit drugs.
- There were many potential prescription drug suppliers, including families, friends, pharmacies in other countries, and street- and nightclub-based dealers. The drugs were obtained in a variety of ways, including insurance fraud and theft from pharmacies and hospitals. Online pharmacies were not trusted for fear they were monitored by authorities.

Dr. Kurtz, University of Delaware, reported these and other findings from this research in Miami. The effort was

informed by a multisite study funded through NIDA grant R01DA1854, which is described by the Principal Investigator, Linda Cottler, Ph.D., in the June 2003 CEWG *Volume II Proceedings*.

Background. Based on quantitative data, it was found that 87 percent of ecstasy users in study of "club drug users" were also prescription drug abusers and had used prescription drugs for nonmedical purposes more than five times during their lifetime. Qualitative observational studies showed that the number of drugs used for partying in Miami clubs appears to keep expanding and that more clubs are reverting to being "cocaine friendly," meaning that customers can visit the restrooms regularly to get high without creating a problem with security guards. In fact, the term "club drugs" is not a very helpful one in Miami, because so many drugs and combinations of drugs are being used in the club cultures. Of note also is the fact that in a study of students in Delaware, it was found that those who used narcotic painkillers were more likely to be polydrug abusers than other students (Inciardi et al. 2004). Given such information, this followup qualitative study was designed and implemented.

Study Sample and Methods. The qualitative data were gathered through eight 60–90-minute focus groups comprised of three to four members each, who were recruited through flyers in nightclub districts and print media advertisements. One indepth interview was also conducted with a 39-year-old Hispanic prescription drug dealer. The study was also informed by a focus group of health professionals conducted in 2002.

The 30 focus group members included 24 males and 6 females. Thirteen of the 24 males were Hispanic, 5 were Anglo, 2 were African-American, and 4 were members of other racial/ethnic groups. Fourteen of the males were heterosexual; others were homosexual or bisexual. The males ranged in age from 18 to 45. The six females differed little in age from the males (19–43); five females were heterosexual, two were Hispanic, two were members of other racial groups, and the others were Anglo or African-American.

Based on eligibility criteria, all focus group members had used ecstasy in the prior 3 months and had used prescription drugs recreationally more than 5 times in the prior 12 months and at least once in the 30 days prior to the group meeting. All frequented nightclubs in the Miami area. Pseudonyms were used to link demographic questionnaire data to transcribed focus group discussion data. A grounded theory approach guided the study.

Findings. The results cover attitudes, onset patterns, continuing use patterns, sources of supply, and health and social consequences of prescription drug abuse.

ATTITUDES. Typically, focus group members perceived prescription drugs to be safer and purer than illicit street drugs. Prescription drugs were perceived to be more "respectable," legal, and available than illicit drugs, and also to be less expensive and less likely to have side effects. The following quotes from participants express some of these perceptions:

- *Knowing that some scientist somewhere said 'Yeah, it's safe enough to sell to a pharmacy' helps.* (Anglo male, age 32)
- *If you're taking prescription drugs, you're not really on drugs, you know? These are like products that you can sell. There's advertising for them. They just kind of fit into a capitalist framework better than marijuana, which is not packaged in proper packages. Whereas, Eli Lilly, you know that's a respectable name. They're traded on the New York Stock Exchange.* (Anglo male, age 35)
- *I know certain people who don't touch street drugs. They think they're horrible and grimy. But they'll blow [prescription drugs] up their nose like every day.* (Asian female, age 20)

With regard to legality, participants generally agreed that they would be less concerned about being caught by police with OxyContin or Xanax in their pocket than with ecstasy or cocaine. They felt any number of excuses could be used to explain why they could legally carry the drug (e.g., "I left my prescription at home," "I was carrying them for my girlfriend").

ONSET PATTERNS. There were two distinct patterns related to use of prescription drugs. "Early onset" describes those who first abused prescription drugs in junior or senior high school. Commonly used were Xanax, Ritalin, and diet pills. Use was peer-driven, no money usually changed hands, and onset often coincided with first use of alcohol and marijuana. For many early onset users, there was a period when they stopped using prescription drugs before they resumed, with the later abuse usually occurring in the context of the onset of "harder" street drug use.

The "later onset" pattern usually took the form of using benzodiazepines or opioids after using stimulants. Prescription drug use was engaged in specifically to "take the edge off" or "come down from" street stimulants, such as ecstasy, cocaine, and methamphetamine.

Another common pattern was using benzodiazepines and opioids with alcohol as a way of getting drunk without drinking so much. This cuts expenses at nightclubs, which typically charge a $25 cover and an average of $8 to $10 for an alcoholic beverage.

Prescription pills generally cost about $1–$2 each and are available through a wide range of sources, including peers and dealers. Prices vary by drug. OxyContin is the most expensive and is not particularly popular in this ecstasy-using population; however, a number of participants reported that OxyContin is a "sex enhancer." Polydrug patterns were typical, as indicated earlier and described in more detail below.

Continuing Use Patterns. In addition to the patterns of onset discussed above, there were other common themes expressed about using prescription drugs to "get high." Combining different prescription drugs or prescription drugs with street drugs was commonplace, with some users experimenting with many different combinations to see what psychic effect they would have. Surprisingly, antipsychotics were mentioned rather frequently as part of the drug "mix." One theory was that if the user were not psychotic, the drugs would induce a psychotic-type state. With respect to Xanax, participants felt they were more likely to take ecstasy if they already had a Xanax pill, because they would have a "smooth come down." It was frequently mentioned that dealers are now packaging either benzodiaepines or opioids with ecstasy so you "buy two for one."

Some prescription and illicit drug combinations used to get high were as follows:

- Ritalin, marijuana, and alcohol
- Benzodiazepines, opioids, and alcohol
- Codeine and ecstasy
- Hydrocodone and cocaine
- Antipsychotics, alprazolam, cocaine, marijuana, and alcohol

Some participants described using prescription drugs as substitutes for street drugs when the street drugs became unavailable, too expensive, or of poor quality. These included such combinations as phentermine plus cocaine

rather than methamphetamine; Valium instead of marijuana; and Klonopin plus Marinol rather than heroin.

Some participants described using prescription drugs as alternatives to illicit drugs, or combinations believed to be "equal" to a street drug. These included the following:

- Vicodin plus marijuana = ecstasy
- Xanax plus methamphetamine = ecstasy
- Painkillers plus alcohol = GHB (gamma hydroxybutyrate)

Sources of supply for prescription drugs include leftover personal or family member medications; prescriptions obtained through false statements; family or friends with legitimate medical conditions (especially HIV/AIDS); Medicare/insurance fraud; pharmacies in Mexico, South America, and the Caribbean; street- and nightclub-based dealers; flyer advertisements; online pharmacies; and pharmacy and hospital theft. Note, however, that online pharmacies were unpopular with this group because of fears that the sites are monitored by authorities.

Overall, this group of participants reported experiencing social problems from their abuse of prescription drugs, with isolation being common. Financial and employment problems, school problems, and problems with relationships with family and friends were also reported.

There is concern about the normalized integration of prescription and street drug cultures as well as the potential for seeking new drug experiences through experimentation with the types of drug combinations found in this study.

Reference

Inciardi, J.A.; Martin, S.S.; Surratt, H.L.; and Gealt, R. 2004. Prevalence of narcotic analgesic abuse among students: Individual or poly-drug abuse? *Archives of Pediatric and Adolescent Medicine* 158:498–499, 2004.

ISSUES AND FINDINGS FROM THE CEWG: PRESCRIPTION DRUG ABUSE

Much of the available data reported by the CEWG cover the general categories of "narcotic analgesics" or "other opiates" (i.e., opiates other than heroin). These data are presented first, followed by information on specific analgesics and opiates. The section concludes with indicator data on benzodiazepines/other depressants. Major data sources used by the CEWG are briefly described in *Appendix A*.

Narcotic Analgesics/ "Other Opiates"

Narcotic analgesics are commonly referred to as "painkillers" or "pain relievers." "Other Opiates" refers to opiates other than heroin; this classification is used for some indicators and includes narcotic analgesics. Treatment admissions for the abuse of "other opiates" (excluding heroin) are increasing in some CEWG areas. Various narcotic analgesics are among the drug items analyzed by forensic laboratories.

DAWN ED Data

The most recent DAWN data available at the time of the June 2004 CEWG meeting were from 2002. The characterization of trends using DAWN ED data is therefore limited to the period up to the end of 2002.

DAWN emergency department data show that rates for narcotic analgesics/combinations per 100,000 population increased significantly in 17 CEWG areas from 1995 to 2002 and in 2 other CEWG areas from 2000 to 2002 (*see exhibit 1*). Rates continued to increase significantly from 2001 to 2002 in Baltimore, Newark, Philadelphia, and St. Louis, but they decreased in San Diego and Seattle. In 2002, the rates were highest in Baltimore, Boston, Detroit, New Orleans, and Seattle, ranging from 95 in Seattle to 165 per 100,000 population in Baltimore.

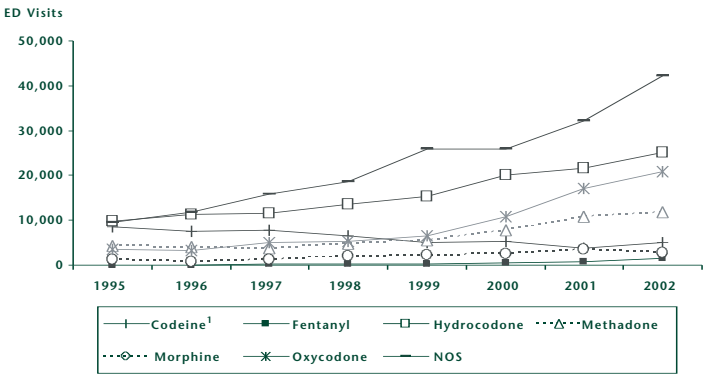
Exhibit 1. Rates of Narcotic Analgesics/Combinations ED Mentions Per 100,000 Population in 19 CEWG Areas: 1995–2002

CEWG Area	1995	2000	2001	2002	1995, 2002	Percent Change[1]	
						2000, 2002	2001, 2002
Atlanta	24	37	30	30	27.2	105.9	
Baltimore	30	80	114	165	444.5	82.4	45.0
Boston	38	53	81	97	151.6	55.9	
Chicago	31	39	65	61	95.5		
Denver	22	38	41	34	50.1		
Detroit	58	56	69	97	71.7		
Los Angeles	18	23	25	28	54.0		
Miami	11	19	21	22	98.1	44.5	
Mpls./St. Paul	20	27	37	40	97.7	79.3	
New Orleans	41	55	74	98	141.0	82.5	
New York	34	30	41	55		102.9	
Newark	25	31	43	64	152.9	47.4	49.3
Philadelphia	31	55	67	81	164.0		21.0
Phoenix	24	63	64	62	155.5	100.5	
St. Louis	17	34	48	68	291.6	10.2	40.0
San Diego	20	41	52	46	128.0	22.0	-11.7
San Francisco	34	43	53	52	51.9	9.8	
Seattle	51	86	120	95	84.7	50.7	-21.1
Washington, DC	20	17	26	26			

[1] These columns denote statistically significant ($p<0.05$) increases and decreases between estimates for the time periods noted.
SOURCE: DAWN, OAS, SAMHSA

Hydrocodone and oxycodone were the narcotic analgesics most frequently mentioned in drug abuse-related ED visits in 2002. It should be noted that substantial percentages of the narcotic analgesic/combinations visits in all 21 DAWN areas in 2002 were in the "not otherwise specified" (NOS) category (*see exhibit 2*), which means that the specific narcotic analgesic product was not identified in the hospital records. Data across all 21 DAWN areas in 2002 show that there were 108,320 mentions of narcotic analgesics/combinations; of these, 42,214 (nearly 40 percent) were in the NOS category.

Exhibit 2. Narcotic Analgesics That Changed in Frequency from 1995 to 2002

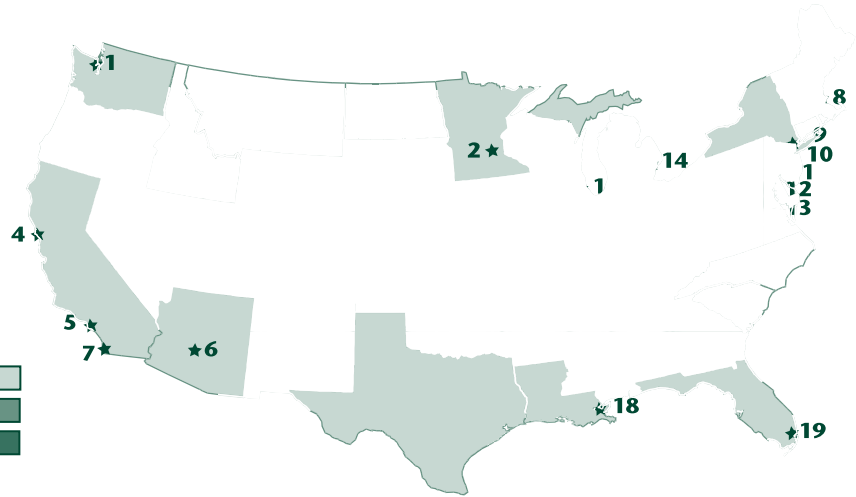


[1]Codeine-involved visits decreased from 1995 to 2002, but increased from 2001 to 2002.
SOURCE: DAWN, OAS, SAMHSA <http://oas.samhsa.gov/2k4analgesics.cfm>

Exhibit 3 depicts the rates of hydrocodone/combinations, oxycodone/combinations, and methadone mentions in 19 CEWG areas in 2002.

Exhibit 3. Rates of Hydrocodone/Combinations, Oxycodone/Combinations, and Methadone ED Mentions Per 100,000 Population in 19 CEWG Areas: 2002

1.	Seattle	17	11	20
2.	Mpls./St. Paul	8	9	4
3.	Denver	6	8	4
4.	San Francisco	5	14	9
5.	Los Angeles	1	6	4
6.	Phoenix	14	11	6
7.	San Diego	2	10	2



8.	Boston	34	8	4
9.	New York	2	1	15
10.	Newark	5	2	20
11.	Philadelphia	26	6	6
12.	Baltimore	13	2	8
13.	Wash., DC	8	2	3
14.	Detroit	4	16	...[1]
15.	Chicago	1	6	6
16.	St. Louis	9	10	1
17.	Atlanta	4	4	2
18.	New Orleans	11	24	...
19.	Miami	8	2	1

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

Mortality Data

DAWN data on narcotic analgesics-involved deaths in 19 CEWG areas in 2002 are shown in exhibit 4.

Exhibit 4. Number of Narcotic Analgesics-Involved Death Mentions in 19 CEWG Areas: 1999–2002

CEWG Area	1999	2000	2001	2002
Atlanta	51	83	79	106
Baltimore[1]	122	147	164	236
Boston	74	118	206	176
Chicago	175	171	142	185
Dallas	61	101	115	172
Detroit	284	298	354	410
Miami[1]	54	126	110	69
Mpls/St.Paul	37	47	77	90
New Orleans	124	118	200	352
New York	271	590	NR[2]	641
Newark	44	75	190	151
Philadelphia	370	501	460	440
Phoenix	291	318	261	217
St. Louis	65	77	78	123
San Diego[1]	137	179	164	123
San Francisco[1]	198	164	124	125
Seattle	43	75	85	133
Washington, DC	55	72	70	108

[1]In these sites, 100 percent of the population are covered.
[2]NR=Not reported (data were incomplete).
SOURCE: DAWN, OAS, SAMHSA

The majority of the narcotic analgesics-related deaths in DAWN involved more than one drug. In 2002, the five CEWG areas where the largest proportion of deaths in which a narcotic analgesic was the only drug identified were Boston (24 percent), Denver (21 percent), Minneapolis/St. Paul (19 percent), and Atlanta and Chicago (each 15 percent). In the other 14 areas, the proportions of single-drug deaths ranged between 1 and 10 percent.

Of note is that the number of narcotic analgesics-involved death mentions reported to DAWN in 11 CEWG areas in 2002 exceeded those for cocaine, heroin/morphine, marijuana, and methamphetamine; these were Detroit, Minneapolis/St. Paul, New Orleans, Newark, New York, Philadelphia, Phoenix, St. Louis, San Diego, San Francisco, and Seattle.

Local/State mortality data were reported by several CEWG members and the Maine participant, all of whom obtain data from local or State medical examiners. The data are primarily for 2003 and thus provide more recent information than is available through DAWN; they also may cover areas not included in DAWN. State-level reports provide a regional perspective on trends impacting local CEWG areas. Note that because CEWG areas that report local medical examiner data categorize deaths involving "other opiates/narcotics" differently, the findings are not comparable across sites or to DAWN data.

Florida

More people died from a lethal dose of a prescription drug than from an illicit street drug in Florida during 2003, continuing a pattern identified in 2002. Narcotic analgesics (as well as benzodiazepines) were the medications most frequently cited in these deaths. **—James Hall**

Maine

Most deaths (82 percent) caused by pharmaceuticals were related to at least one narcotic or 'polydrug toxicity' with narcotics. Of the 113 narcotic pharmaceutical deaths in 2003, 39 (35 percent) involved a single substance and 65 percent involved narcotics in combination with other drugs. The most frequent combination was 2 or more narcotics (n=32); 6 of these deaths involved a combination of 3 narcotics.

—Marcella Sorg

Seattle

Other opiates were identified in 84 deaths in 2003, 5 of which involved no other drugs. The total number of prescription opiate-involved deaths has tripled since 1997; this increase is related almost entirely to prescription opiates in combination with other drugs. **—Caleb Banta-Green**

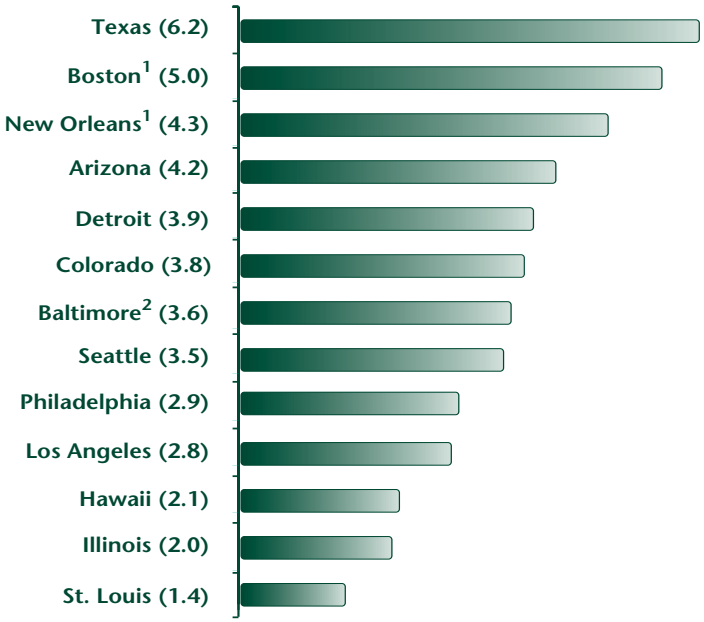
The Seattle representative provided the following caveat, which may well apply to other areas:

What constitutes a prescription opiate-related death is unclear, particularly among opiate-tolerant individuals. Issues of tolerance, potentiation with other drugs, and overlapping therapeutic and lethal dose levels complicate assigning causation in prescription opiate-involved fatalities. The cause of death in 11 percent of deaths involving prescription opiates is ruled to be undetermined. The source and form of prescription opiates involved in deaths are often undetermined as well.

Treatment Data

Treatment admissions data on other opiates were reported by 17 CEWG areas (exceptions were Atlanta, Miami, Minneapolis/St. Paul, and San Francisco). Exhibit 5 shows the most recent data for 13 CEWG areas where primary "other opiate" admissions exceeded 1 percent of all illicit drug admissions.

Exhibit 5. Percentages of Primary "Other Opiate" Treatment Admissions (Excluding Alcohol) in 13 CEWG Areas: 20031



[1]Represents either calendar or fiscal year 2003.
[2]Represents only the first half of calendar year 2003.
SOURCE: CEWG June 2004 reports on State and local data

Four other CEWG areas reported that between 0.2 and 0.9 percent of primary admissions (excluding alcohol) in 2003 were for other opiates. These were New York, Newark, San Diego, and Washington, DC. In Illinois, treatment data related to other opiates includes other drugs (tranquilizers, sedatives) and are not reported here.

Several CEWG members described the increase in other opiate treatment admissions in their areas; some provided demographic data on these admissions and some provided statewide data.

Baltimore

Treatment admission rates for opiates other than heroin more than doubled between 1999 and 2002, from 19 per 100,000 population age 12 and older to 44 per 100,000, and were projected to reach 52 per 100,000 in 2003.

—Leigh Henderson

Boston

Comparison of the last full year of data (FY 2003) to previous years shows the number reporting other opiates as their primary drug (n=780) increased 242 percent from FY 2000 and 622 percent from FY 1996. The number of mentions of current other opiate use (n=1,452) increased 87 percent from FY 2000, and 196 percent from FY 1996… In the first half of FY 2004, there were 352 admissions (4 percent of all admissions) identifying other opiates/synthetics as the primary drug and 745 mentions (8 percent of all admissions) of past-month other opiate use among those admitted to State-funded treatment programs. **—Daniel Dooley**

Los Angeles

Between July and December 2003, 645 (2.4 percent) of all admissions to Los Angeles County-based treatment and recovery programs reported other opiates/synthetics as their primary drug. This number was 11 percent higher than [that] reported in the previous 6 months of 2003 and 58 percent higher than the number reported in the second half of 2002….Sixty-four percent of the primary other opiate/synthetic admissions reported no secondary or tertiary drug of abuse; 7 percent reported heroin use and 9 percent reported primary alcohol use. **—Beth Finnerty**

Maryland

Treatment admissions related to opiates nearly tripled in Maryland from FY 1999 to 2003. **—Eric Wish**

New Orleans

In the first 9 months of FY 2004, 68 (4 percent) treatment admissions in Orleans Parish were for primary abuse of other opiates; all but 7 were White. **—Gail Thornton-Collins**

Newark

In 2003, primary admissions for 'other opiates or synthetics' in Newark City totaled only 12 (0.2 percent of admissions, excluding alcohol admissions). The number was higher in the metropolitan statistical area —189 (1.3 percent of admissions, excluding alcohol)… However, in the State as a whole, primary admissions for other opiates totaled 1,049, or 2.7 percent of all admissions, excluding alcohol. This is more than double the number of admissions reported in 1997 (513). The largest increase in numbers of other opiate admissions occurred between 2000 (592) and 2002 (1,124). In 2003, admissions reporting other opiates as a primary, secondary, or tertiary drug of abuse numbered 2,303 and accounted for nearly 6 percent of all drug admissions statewide. In the Treatment Episode Data Set for New Jersey in the first half of 2003, 91.6 percent of the primary other opiate admissions were White and 6.6 percent were Black. About 62 percent were male. **—Anna Kline**

Seattle

The number of treatment admissions for prescription opiate use increased from 343 in 1999 to 921 for adults in 2003 and from 6 to 41 for youth. (Only data on use of prescription opiates as the primary drug are available.) Past analy-

ses showed that 15 percent of those admitted to methadone maintenance programs in 2001 reported prescription opiates as one of the three main drugs they were currently using. These analyses also indicate that private-pay methadone treatment clients are more likely to report prescription opiate use than those who receive public funding.

—Caleb Banta-Green

Texas

Of the 2,293 clients who entered treatment for use of opiates other than heroin in 2003 (4 percent of all clients), 66 used illicit methadone. Of the other 2,227, 54 percent were female; the average age was 35; 84 percent were White; 35 percent had never been in treatment; 8 percent were homeless; 16 percent were employed; and 30 percent were referred by the criminal justice system. **—Jane Maxwell**

NFLIS Data

Small numbers of narcotic analgesic items were reported to NFLIS from CEWG areas in 2003. Data on the four narcotic analgesics most frequently reported are presented in exhibit 6. The data were reported from 17 of the 18 CEWG areas included in NFLIS. The Department of Public Safety submitted data to NFLIS from its 13 Texas sites. Because these data are not adjusted for population size and represent variations in law enforcement practices, they are not comparable across sites.

Exhibit 6. Estimated Numbers of Analyzed Narcotic Analgesic Items in 18 CEWG Areas: 2003

NFLIS Area	Hydrocodone	Oxycodone	Methadone	Codeine
Atlanta	244	184	61	22
Boston	43	79	19	6
Chicago	36	0	59	12
Denver	33	17	5	7
Detroit	0	0	5	39
Honolulu	14	8	8	0
Los Angeles[1]	1	143	14	73
Miami	27	61	6	8
New Orleans	95	18	21	6
New York	99	96	426	51
Newark	0	11	0	0
Philadelphia	76	331	28	98
St. Louis	29	36	17	36
St. Paul	18	42	0	7
San Diego	124	30	11	29
Seattle	23	29	13	6
Texas	1,212	174	63	58
Wash., DC	6	25	23	5

[1] Data are not complete for all months.
SOURCE: NFLIS, DEA

Polydrug Abuse

Use of narcotic analgesics/other opiates with other drugs is indicated in the DAWN data systems, as well as local mortality and treatment data. Several CEWG members report on the use of these drugs with other substances:

Chicago

The occasional use of other opiates is common among young noninjecting heroin users in Chicago. Seventy percent of participants in one study reported ever trying codeine, Tylenol 3 and 4, Dilaudid, Demerol, morphine, or methadone without a legal prescription. **—Dita Broz**

Minneapolis/St. Paul

One local middle school reported several incidents of students bringing handfuls of prescription medications, including narcotic analgesics and benzodiazepines, to school to share with friends. **—Carol Falkowski**

Polydrug patterns are also prominent in the abuse of specific narcotic analgesics/opioids described in the remainder of this section.

Hydrocodone

Hydrocodone products abused include Vicodin, Lortab, and Lorcet. In Los Angeles County, Vicodin retails for $5–$10 per tablet, and in Tyler, Texas, a tablet sells for $5. In San Antonio, hydrocodone sells for $1–$5 per pill. Across CEWG areas, hydrocodone indicators appear in ED, mortality, treatment, poison control center, and law enforcement data.

DAWN ED Data

Across the coterminous United States from 1995 to 2002, drug abuse-related ED visits involving hydrocodone increased 159 percent; from 2001 to 2002, a 17 percent increase was observed.

In CEWG areas, rates of hydrocodone/combinations ED mentions per 100,000 population in 2002 were highest in New Orleans (24), Detroit (16), San Francisco (14), Phoenix and Seattle (each 11) (*see exhibit 3, page 51*). Hydrocodone/combinations mentions increased significantly in Seattle from 2001 to 2002, while they decreased in Baltimore and San Diego.

CEWG reports detail the DAWN data, as illustrated in the examples below:

Chicago

Hydrocodone/combinations ED mentions increased between 1995 (n=152) and 2002 (330), a change of 117 percent. Mentions remained level between 2001 (339) and 2002. **—Dita Broz**

Denver

The number of hydrocodone/combinations ED mentions climbed from 65 in 1995 to 150 in 2002, a statistically significant increase of 130.8 percent. **—Bruce Mendelson**

Detroit

Hydrocodone and hydrocodone/combinations ED mentions began to be reported in southeast Michigan in 1994. The number of hydrocodone/combinations ED mentions increased significantly by 407 percent between 1995 (n=129) and 2002 (654), and between 2000 (371) and 2002. **—Phil Chvojka**

Miami

Hydrocodone-in-combination with acetaminophen ED mentions increased 300 percent, from 10 mentions in 1995 to 40 in 2002. **—James Hall**

San Francisco

Hydrocodone ED mentions rose sharply from 2000 to 2002. Local street-based observers concur that the use of this drug is on the rise. **—John Newmeyer**

Local/State Mortality Data

Medical examiner data on hydrocodone-related deaths were reported from five CEWG areas:

Detroit

Hydrocodone was identified by the Wayne County ME lab in 60 decedents in 2000, 80 in 2001, 120 in 2002, and in 108 cases in 2003. **—Phil Chvojka**

Miami/Florida

Miami-Dade County reported 15 hydrocodone-related deaths during 2003; 5 (33 percent) were hydrocodone-induced. Broward County recorded 38 hydrocodone-related deaths during that period; 20 (53 percent) were hydrocodone-induced. In Palm Beach County, 9 (17 percent) of the 52 hydrocodone-related deaths in 2003 were hydrocodone-induced.

Statewide, the number of hydrocodone deaths increased 3 percent between 2002 and 2003 to 572 cases, after having increased 32 percent from 420 in 2001 to 554 in 2002. Hydrocodone was the cause of death in 31 percent of the hydrocodone-related deaths in 2003. **—James Hall**

Philadelphia

Hydrocodone mentions in mortality cases have increased. There were 40 positive toxicology ME reports for hydrocodone in 2003 and a total of 188 cases in the 10-year period from 1994 through 2003. Hydrocodone-positive deaths now rank 15th among all substances tested by the ME.—**Samuel Cutler**

Seattle

There were 12 hydrocodone-related deaths in Seattle in 2003, an increase from 1997. **—Caleb Banta-Green**

Texas
Statewide, there were 25 deaths involving hydrocodone in 1999, compared with 52 in 2000, 107 in 2001, and 168 in 2002. **—Jane Maxwell**

Treatment and Poison Control Center (PCC) Data

The hydrocodone abuse problem is also reflected in treatment and PCC data, as exemplified by excerpts from several CEWG reports:

Denver
In areas throughout the State, clinicians are anecdotally reporting clients' increased use of Vicodin.
—Bruce Mendelson

Detroit
In 2003, 186 cases of intentional exposure to hydrocodone were reported to the Detroit-area poison control center, which is more than 3 times as many cases as in 2002. For the first 4 months of 2003, 54 intentional exposures to hydrocodone were reported to the statewide poison control network. **—Phil Chvojka**

Texas
The penetration rate of hydrocodone cases (rate per 100,000 population) reported to Texas Poison Control Centers increased by 112 percent between 1998 and 2003. The average age of the cases in 2003 was 32, and 52 percent were male. **—Jane Maxwell**

NFLIS Data

Forensic laboratories reporting to NFLIS in 2003 analyzed hydrocodone items in 16 of the CEWG areas shown earlier in exhibit 6 (*see page 56*). The numbers of hydrocodone items analyzed were high in Atlanta (244), Los Angeles (143), San Diego (124), New York City (99), and New Orleans (95).

Reporting on lab cases in Broward County, Florida (a non-NFLIS site), the CEWG Miami/Ft. Lauderdale representative noted that *'there were 88 hydrocodone lab cases in the first 6 months of 2003, compared with 77 cases in the last half of 2002.'*

Diversion Data

Diversion of hydrocodone products is reported from three CEWG areas:

Atlanta
Hydrocodone (Vicodin), which is abused in Atlanta, is obtained by doctor-shopping or purchasing from dealers. Some dealers steal prescription pads or rob pharmacies.
—Kristin Wilson

Detroit

Law enforcement sources report that Vicodin is commonly available, with some of it being diverted from pain clinic patients. **—Phil Chvojka**

New Orleans

Hydrocodone, especially Vicodin, is widely diverted in New Orleans. **—Gail Thornton-Collins**

OXYCODONE

Oxycodone is marketed in a variety of products including OxyContin, Percocet, Percodan, and Tylox, all of which have been diverted to the illicit market. OxyContin sells on the streets of several CEWG cities for the equivalent of $1 per milligram or less, as reported by representatives from Atlanta, Boston, Denver, Los Angeles, New York, St. Louis, San Antonio and Tyler, Texas, and Washington, DC. Tablets, obtained illegally, are sometimes crushed and dissolved in water, and the solution is injected. Indicators of oxycodone abuse were reported in emergency department, mortality, treatment, poison control center, Helpline, and law enforcement data across CEWG areas.

DAWN ED Data

Across the coterminous United States, drug abuse-related visits involving oxycodone (specifically identified) increased 512 percent from 1995 to 2002; however, the number of visits was stable from 2001 to 2002.

Across CEWG areas, rates of DAWN ED mentions of oxycodone/combinations in 2002, as shown earlier in exhibit 3 (*see page 51*), were highest in Boston (34) and Philadelphia (26), followed by Seattle (17), Phoenix (14), and Baltimore (13). Oxycodone/combinations ED mentions did not decrease significantly in any CEWG area from 2001 to 2002, but they did increase significantly in five—Baltimore, Detroit, St. Louis, San Francisco, and Seattle.

Excerpts from several CEWG reports exemplify the attention given to the DAWN ED data by CEWG members:

Boston

Of the 21 cities covered in DAWN, Boston had the highest estimated rate of oxycodone/combinations ED mentions (34), 3.8 times the national rate of 9.0. **—Daniel Dooley**

Chicago

Oxycodone/combinations ED mentions increased significantly between 2000 and 2002, from 24 to 80. Oxycodone ED mentions also increased significantly from 2000 to 2002. Between 2001 and 2002, oxycodone ED mentions rose from

37 to 72 mentions, a change of 95 percent. Reports of OxyContin use remain uncommon. **—Dita Broz**

Denver

ED mentions of oxycodone/combinations increased from 57 in 1995 to 116 in 2002, a statistically significant increase of 103.5 percent. **—Bruce Mendelson**

Miami

Oxycodone ED mentions increased significantly from 1 in 1995 to 107 in 2002. Oxycodone-in-combination with acetaminophen ED mentions increased 133 percent, rising from 24 ED mentions to 56 over the same 7-year period.

—James Hall

San Francisco

From 2000 through 2002, oxycodone ED mentions rose steeply. Street observers also found abuse of this narcotic analgesic to be increasing. **—John Newmeyer**

Seattle

Trends in oxycodone vary by formulation: oxycodone in combination with acetaminophen (e.g., Percocet) stayed level for the prior 8 years, while oxycodone (e.g., OxyContin) as the sole drug increased from a rate of zero to 11 per 100,000 population. Oxycodone-involved mentions represented 18 percent of narcotic-involved ED mentions in 2002.

—Caleb Banta-Green

Data from a local Florida ED exemplify the use of other drugs among cases involving oxycodone:

*In the **Broward County** emergency department, co-ingestants in the oxycodone cases included benzodiazepines in 35 percent of the cases, marijuana in 15 percent, cocaine in 28 percent, and other opioids such as heroin or methadone in 15 percent.* **—James Hall**

Local/State Mortality Data

Mortality data from seven areas show increases in oxycodone-related deaths in five:

Detroit

Oxycodone was found in 10 decedents in Wayne County in 2000, 13 in 2001, 12 in 2002, and 19 in 2003.

—Phil Chvojka

Honolulu

Of the 40 other opiate deaths in Honolulu in 2003, the majority involved oxycodone. **—D. William Wood**

Maine

Oxycodone-related deaths more than quadrupled from 2001 to 2002, increasing from 5 to 22; they decreased slightly to 19 in 2003 (14 percent of deaths). An additional five cases caused by 'polydrug toxicity' had oxycodone and other drugs present in the toxicology findings. **—Marcella Sorg**

Florida

Miami-Dade County reported 19 oxycodone-related deaths during 2003; 7 (37 percent) were oxycodone-induced deaths. Broward County recorded 81 oxycodone-related deaths; 57 (70 percent) were oxycodone-induced. Only five of the deaths involved oxycodone alone. In Palm Beach County, there were 53 oxycodone-related deaths; 21 (40 percent) were oxycodone-induced. Another drug was present in 87 percent of the cases… Statewide, the number of oxycodone deaths increased 7 percent between 2002 and 2003 after having increased 10 percent from 537 in 2001 to 589 in 2002. Oxycodone was the cause of death in 47 percent of the oxycodone cases in 2003. When the above ME mentions are added to those for heroin, these opioid-related ME mentions in Florida in 2003 totaled 2,073, a 2-percent increase from the previous year. With the addition of other opioids that were first tracked in 2003, the total of deaths for this category for that year was 3,401 statewide. Most were polydrug episodes, including 87 percent of the oxycodone ME cases, 86 percent of the methadone ME cases, 78 percent of the hydrocodone ME cases, 81 percent of the heroin deaths, 79 percent of propoxyphene deaths, and 70 percent of morphine ME cases. **—James Hall**

Philadelphia

Oxycodone was detected in 318 decedents from 1994 through 2003 (tied for eighth most frequently detected drug during that time period). Detections of oxycodone have been rapidly increasing since 2000. In 2003, oxycodone was present in 9.6 percent of all drug-positive deaths.

—Samuel Cutler

Seattle

There were 14 oxycodone-related deaths in Seattle in 2003, a decrease from a peak of 20 in 2002.

—Caleb Banta-Green

Texas

There were 8 deaths statewide with a mention of oxycodone in 1999, 20 in 2002, 40 in 2001, and 56 in 2002.

—Jane Maxwell

Treatment, PCC, and Helpline Data

Representatives from several CEWG areas continued to report data from treatment facilities, PCCs, and Helplines on the use and abuse of oxycodone products:

Boston

Helpline mentions of oxycodone continued to show dramatic increases. In 2003, there were 642 calls to the Helpline during which oxycodone or a derivative was self-identified as a substance of abuse (8 percent of all mentions). The percentage of Helpline call mentions attributable to oxycodone and derivatives increased 45 percent from 2002 and 77 percent from 2001. **—Daniel Dooley**

Colorado

Clinicians across the State are anecdotally reporting increased use of OxyContin. **—Bruce Mendelson**

Detroit

Oxycodone was involved in 15 cases reported to the 2 statewide poison control centers through the first 4 months of 2004. **—Phil Chvojka**

Philadelphia

The nonmedical use of oxycodone products, including OxyContin, Percocet, Percodan, Roxicet, and Tylox, continue to be reported by individuals in treatment. **—Samuel Cutler**

Texas

In Texas, there was a 390-percent increase in the rate of oxycodone misuse or abuse cases reported to Texas Poison Control Centers between 1998 and 2003. The average age was 30.6, and 63.0 percent were male. **—Jane Maxwell**

NFLIS Data

Forensic laboratory data for 2003 show that oxycodone items were reported in all areas except Chicago and Detroit (*see exhibit 6, page 56*). The number of oxycodone items analyzed were high in Philadelphia (331) and Atlanta (184), with the numbers ranging between 8 (Honolulu) and 96 (New York City) in the other 14 areas.

Availability, Diversion, Trafficking, and Seizure Data

Oxycodone products continue to be diverted, e.g., through pharmacy thefts, "doctor shopping," and forged prescriptions, as indicated in several reports from CEWG participants:

Boston

*Drug lab submissions show a 30-percent increase in the number of oxycodone samples from 2002 to 2003 (212 and 275 samples, respectively) and a 99-percent increase from 2001 (n=138). [*However*], statewide, OxyContin thefts have continued to decrease in number. There were 62 statewide OxyContin thefts from pharmacies during 2003, compared with 93 thefts in 2002, and the peak of 139 thefts in 2001. First quarter 2004 OxyContin thefts are down as well (7 thefts).* **—Daniel Dooley**

Denver

*The DEA reports that the diversion of OxyContin continues to be a 'major problem' in the Rocky Mountain West [*and*] that pharmacy break-ins are common, with OxyContin leading the list of the drugs stolen.* **—Bruce Mendelson**

Detroit

Reports continue of oxycodone being smuggled from Canada [and] of household (especially homes of cancer patients) break-ins and armed robberies related to the drug. Some pharmacies have posted signs that they no longer carry OxyContin. **—Phil Chvojka**

Florida

Florida is one of the largest markets for OxyContin. In July 2002, a tractor-trailer truck containing $3 million in prescription drugs was hijacked en route to Broward County.

—James Hall

Los Angeles

[Regarding oxycodone], LA CLEAR reports increases in the prevalence of burglaries, thefts, and robberies of residences and pharmacies. **—Beth Finnerty**

Maryland

A case study of OxyContin abusers recruited through physicians in Maryland showed that OxyContin is diverted to the illicit market. The OxyContin abusers had an extensive history of polysubstance abuse. **—Eric Wish**

Minneapolis/St. Paul

Law enforcement seizures of oxycodone increased.

—Carol Falkowski

New Orleans

Oxycodone (e.g., Percodan) is widely diverted in New Orleans. **—Gail Thornton-Collins**

New York City

According to the Street Studies Unit (SSU), OxyContin is available on the street in New York City; however, you have to know who is selling it. In the Bronx, the SSU continues to report instances of OxyContin being sold to dealers who scrape the top coloring off, reduce the balance of the pill to powder, and mix it with heroin to produce an enhanced high… In one area of New York City, researchers were able to obtain information that OxyContin was selling for $5 a pill (unknown milligrams), but it was very difficult to get because most dealers sell only the whole bottle, not individual pills. **—Rozanne Marel**

Ohio

OxyContin remains the primary pharmaceutical opioid of choice among drug abusers; however, higher prices and lower availability (related to increased media attention) have made the drug more difficult to obtain. Information from Ohio's Substance Abuse Monitoring (OSAM) Network (based on archival data and ethnographic research) from Akron, Cleveland, Columbus, Dayton, Toledo, and Youngstown shows increasing availability and abuse of OxyContin, predominately by White females. **—Harvey Siegal**

Texas

In Texas, hydrocodone is a much larger problem than oxycodone. **—Jane Maxwell**

It was reported that OxyContin abuse continues to be of concern to law enforcement officials in Atlanta and St. Louis.

METHADONE

Methadone, widely used since the 1960s to treat heroin addiction, has gained popularity as an analgesic (pain reliever) since the late 1990s. DEA data (ARCOS–2) show a continued increase in the retail distribution of methadone to pharmacies, hospitals, practitioners, and teaching institutions (see page 35). Concern about the increase in methadone-related deaths, emergency department visits, and diversion of the drug was addressed by the CEWG "Panel on Methadone-Associated Mortality" at the June 2003 meeting; the findings are published in Volume I and Volume II of the June 2003 Proceedings. Methadone sells on the streets of Dallas for $40 per tablet and in Chicago for $0.75 to $1 per milligram. Updates on these issues are provided in national data and by CEWG members in this section.

DAWN ED Data

Rates of methadone ED mentions in 2002 were highest in Newark and Seattle (each 20 per 100,000 population) and in New York City (15) (*see exhibit 3, page 51*). Rates of methadone ED mentions increased significantly from 2001 to 2002 in Baltimore, Newark, and Philadelphia, but decreased in Atlanta, Denver, St. Louis, San Diego, San Francisco, and Seattle.

In some CEWG areas, methadone ED mentions accounted for a substantial proportion of the narcotic analgesic ED mentions in 2002, as in the examples below:

Newark

Of the 1,115 ED narcotic analgesics/combinations mentions in 2002, methadone accounted for 346, or 31 percent, of the mentions, which is a significant increase from the 152 mentions reported in 2000. **—Anna Kline**

Seattle

Methadone was the most commonly identified type of opioid drug, constituting 21 percent of all opioid ED mentions in 2002. **—Caleb Banta-Green**

Local/State Mortality Data

Drug-related mortality data were reported by six CEWG participants:

Chicago

According to the Chicago Department of Public Health, methadone was mentioned in 25 death certificates as the cause of death in 2002. **—Dita Broz**

Florida

Methadone-related deaths statewide increased 9 percent between 2002 and 2003, when they reached 608. This followed a larger increase of 56 percent between 2001 and 2002. Methadone was the cause of death in 60 percent of the methadone cases in 2003… Miami-Dade County reported three methadone-related deaths in 2003; all were methadone-induced. Broward County recorded 51 methadone-related deaths during that period, with 20 (39 percent) considered methadone-induced. In Palm Beach County, there were 73 methadone-related deaths in 2003; 60 (82 percent) were considered methadone-induced.

—James Hall

Maine

The number of deaths in which methadone was indicated by the medical examiner to be a cause of or contributing factor to a death quadrupled from 2001 to 2002, but decreased from 57 in 2002 to 38 in 2003, when methadone was implicated in 28 percent of all drug deaths. Another 4 cases in 2003 are pending with regard to determination of the cause and manner of death, and another 11 cases were methadone-associated, caused by 'polydrug toxicity' with methadone and other drugs present. A detailed study of the deaths in 2001 revealed that in approximately one-quarter of the methadone deaths, the decedent had a prescription for liquid methadone (addiction treatment), and about one-quarter had a prescription for the pill form (pain treatment); one-half had no known prescription. State policy changes in methadone clinic regulations in early 2003 tightened control on take-home medication. **—Marcella Sorg**

Maryland

In Maryland, methadone-related deaths more than tripled from 24 in 1998 to 76 in 2002. Two-thirds of the decedents were White. Since 2002, the mean age of the decedents was 39.2, and more decedents have been from suburban and rural areas. Few of the decedents were known to be patients in methadone treatment programs. **—Eric Wish**

Seattle

Methadone was the most common type of other opiate-involved death in 2003; such deaths totaled 47, representing a more than threefold increase from 1997.

—Caleb Banta-Green

Texas

There were 36 deaths involving methadone in 1999, followed by 62 in 2000, 93 in 2001, and 131 in 2002.

—Jane Maxwell

Treatment and PCC Data

Treatment and poison control center data related to methadone were reported by two CEWG members:

New Orleans

In St. Tammany Parish, 21 of the 216 'other opiate' treatment admissions were for nonprescribed methadone, the highest number in any of the 9 parishes reported on in the first 3 quarters of fiscal year 2004. These admissions represented only 2 of 68 primary 'other opiate' admissions in Orleans Parish during the same time period.

—Gail Thornton-Collins

Texas

Of the 66 treatment admissions in Texas who reported a primary problem with illicit methadone in 2003, 58 percent were female. Seventy-three percent were White, 15 percent were Hispanic, and 12 percent were Black. Nine percent were homeless, 12 percent were employed, 33 percent were referred by the criminal justice system, and 32 percent had never before been in treatment… The number of poison control cases in Texas involving misuse or abuse of methadone increased by 134 percent between 1998 and 2002. In 2003, the average age was 31, and 68 percent were male. Of the 41 cases, 31 took the drug orally, 1 injected, and 4 reported having inhaled methadone pain pills; the average age of the inhalers was 29.6 years. **—Jane Maxwell**

NFLIS Data

Forensic laboratory data in 2003 show that some number of methadone items were reported to NFLIS from 16 sites (*see exhibit 6, page 56*). The number analyzed in New York, the most highly populated CEWG area, totaled 426. The next highest numbers were Atlanta (61) and Chicago (59).

Other Narcotic Analgesics

A variety of other prescription-type narcotic analgesics appear in drug indicators in CEWG areas. Two of the most frequently identified are codeine and hydromorphone products. Fentanyl is also discussed below because, in its new forms, there are signs of increasing abuse of this narcotic analgesic.

CODEINE is made in tablets alone or in combination with aspirin or acetaminophen (Tylenol with Codeine), as well as in a number of liquid forms used for cough suppression. On the illicit market, acetaminophen-codeine pills sell for $1 to $3.50 each in Chicago, while codeine syrup sells for about $30 for 4 ounces. In Los Angeles, codeine sells for $5 per tablet. In Houston, promethazine or Phenergan cough syrup with codeine sells for $75–$100 for 4 ounces, $125 for 8 ounces, and $1,600 for a gallon. In Dallas, promethazine syrup with codeine sells for $200–$300 per pint and $20–$40 per ounce. The Dallas/Fort Worth DEA reports increases in seizures of codeine cough syrup. Mentions of codeine/combinations appear in the 2002 DAWN ED data in all CEWG areas covered.

DAWN ED Data

From 1995 to 2000, drug abuse-related visits involving codeine (specifically identified) decreased 43 percent across the coterminous United States. However, from 2001 to 2002, a 34 percent increase was observed.

In 2002, ED mentions of codeine/combinations decreased significantly from 1995 to 2002 in 13 CEWG areas and increased in none. The numbers of mentions in 2002 were highest in Detroit (420), Los Angeles (203), Chicago (133), Philadelphia (117), Phoenix (93), and Minneapolis/St. Paul (90). The number of codeine/combinations ED mentions in the other 13 CEWG areas ranged from a low of 8 (Newark) to a high of 75 (New York). Between 2001 and 2002, these mentions increased significantly in Phoenix (from 77 to 93), while they decreased significantly in Newark and San Diego.

Local/State Mortality Data

Mortality data on codeine-related deaths in 2003 were reported from Maine and Philadelphia:

Maine

Codeine-related deaths have assumed a prominent role in drug deaths since 1997, increasing to 12 (7 percent) in 2002 and 12 (9 percent) in 2003. **—Marcella Sorg**

Philadelphia

Medications that contain codeine are commonly abused in Philadelphia. The ME detected codeine in 120 cases in 2003 and in 373 cases from 1994 through 2003 (the sixth most commonly occurring drug). **—Samuel Cutler**

Street Data

The **Texas** CEWG member reports the following information on codeine from street-level workers and informants:

Codeine cough syrup, 'Lean,' continues to be abused. Lean has long been popular in Houston, and it is reported by street outreach workers as becoming more popular in Beaumont, San Antonio, and Waco, as well as among youth and young adults in the suburban areas of Fort Worth… There are reports of older adults now using Lean…and drinking Lean has spread from the Black community to Hispanics and Whites. Pineapple-flavored soda water is now a favorite mix with cough syrup. **—Jane Maxwell**

NFLIS Data

Less than 7 percent of all narcotic analgesic items reported to NFLIS from CEWG areas in 2003 were codeine.

HYDROMORPHONE (Dilaudid) was identified as a problem in several CEWG areas. Hydromorphone mentions appear in the 2002 DAWN ED data in 14 CEWG areas.

DAWN ED Data

Small numbers of hydromorphone ED mentions were reported across 13 CEWG areas in 2002 (data were suppressed in Denver, Los Angeles, New York, and Phoenix, and there were no mentions in New Orleans or Newark). The 108 mentions in Seattle in 2002 were considerably higher than the 44 in Detroit, the area with the next highest number. Philadelphia and Washington, DC, had the third highest number of hydromorphone ED mentions, each at 32. Numbers in the other 9 areas ranged between 5 (St. Louis) and 15 (Dallas). Hydromorphone ED mentions increased significantly from 2001 to 2002 in San Diego and Seattle.

Diversion and Price Data

CEWG reports show increases in sales of hydromorphone to hospitals and pharmacies in Seattle, as documented by DEA. Prices of hydromorphone varied across four CEWG areas reporting price data:

Chicago

Hydromorphone (Dilaudid), the pharmaceutical opiate once preferred by many Chicago injection drug users, continued to be available, although in limited quantities (typical sources

are said to be cancer patients). The drug sells for approximately $25 per tablet. **—Dita Broz**

New Orleans

Hydromorphone is widely diverted in New Orleans.
—Gail Thornton-Collins

St. Louis

The use of hydromorphone (Dilaudid) remained common among a small population of White chronic addicts. The drug costs $30–$75 per 4-milligram pill.
—Heidi Israel-Adams

Texas

In San Antonio, hydrocodone sells for $1–$5 per pill. Dilaudid sells for $10–$15 per dose in McAllen.
—Jane Maxwell

FENTANYL is currently available in an injectable formulation; in lozenge form (Actiq); and in transdermal patches (Duragesic) from which the liquid may be removed and injected by illicit abusers. Patches sell for between $10 and $100 on the illicit market, depending on the dosage unit and geographic area. The lozenges sell for $20–$25 on the street.

DAWN ED Data

Across the coterminous United States, DAWN ED mentions of fentanyl increased significantly from just 22 in 1995 to 1,506 in 2002. Across the 20 CEWG areas covered in this system, fentanyl mentions were reported in 12. (None were reported in Baltimore, and data were suppressed in Atlanta, Denver, Los Angeles, New York, Newark, and Washington, DC.) Mentions were highest in Detroit (63), followed by Chicago (32), Philadelphia and Seattle (each 27), and Boston (24). Numbers in the other 7 CEWG areas ranged from 3 (Miami) to 14 (Phoenix). The number of fentanyl ED mentions increased significantly from 2001 to 2002 in San Diego and Seattle, with no changes in other areas.

Local/State Mortality Data

The Maine participant reported on deaths associated with fentanyl, as did the Philadelphia and Texas CEWG representatives:

Maine: *Fentanyl-related deaths more than doubled between 2001 and 2002, increasing from 6 to 14; they decreased to 7 in 2003 (5 percent of drug-related deaths). An additional death caused by polydrug toxicity had fentanyl and other drugs present in the toxicology findings.* **—Marcella Sorg**

Philadelphia

From 1994 through 2003, the ME recorded 35 deaths with the presence of fentanyl. Of these, seven occurred in the first half of 2003 and nine occurred in the second half of 2003.

—Samuel Cutler

Texas

There were 9 deaths in 2001 involving fentanyl and 22 in 2002. **—Jane Maxwell**

Fentanyl Reports

In a press conference in April 2003, the Pennsylvania Attorney General's Office called attention to the abuse of Actiq, noting that the diverted products were being encountered in Philadelphia, where they were selling on the street for $20 per "narco-pop" or "perc-o-pop," with the retail price being $9.10 (Mark Scoiforo, The Associated Press, April 28, 2004).

The **Ohio** participant also reported on fentanyl abuse in that State:

Fentanyl abuse is also being reported from several areas in Ohio through the statewide OSAM system: The first accounts of Duragesic abuse in Akron, Columbus, Dayton, and Youngstown were reported in January 2003. In January 2004, Akron, Columbus, and Youngstown reported continued abuse of fentanyl, and the first account of fentanyl abuse was reported in Cincinnati. In 2003, crime lab investigators in Dayton reported increasing availability of fentanyl patches and 'suckers' [lozenges]. Active drug users from Dayton reported increasing appearance of the drug on the streets and increasing demand for the drug among veteran heroin users. **—Harvey Siegal**

Benzodiazepines/ Other Depressants

Benzodiazepines (BZDs) abused in CEWG areas include alprazolam (Xanax), diazepam (Valium), lorazepam (Ativan), and clonazepam (Klonopin). Alprazolam sells on the streets of Los Angeles for $2–$3 per 0.5-milligram tablet and for $5–$10 for a 1-milligram tablet. A 2-milligram Xanax tablet sells for $3–$5 in Dallas. A Valium tablet costs $4 in Los Angeles. Diazepam sells for $1–$10 in Dallas, Fort Worth, and Tyler. The specific BZD most widely abused varied by CEWG area, but alprazolam was noted as a particular problem in several areas. CEWG members report that BZDs are commonly used in combination or sequentially with other drugs to increase or sustain the effects of other drugs, or to reduce the negative effects of other drugs.

Exhibit 7. Rates of Benzodiazepine ED Mentions Per 100,000 Population in 19 CEWG Areas: 1995–2002

CEWG Area	1995	2000	2001	2002	Percent Change[1] 1995, 2002	Percent Change[1] 2000, 2002	Percent Change[1] 2001, 2002
Atlanta	31	45	32	34			
Baltimore	29	45	59	60	105.0	33.8	2.2
Boston	107	77	95	102			
Chicago	34	42	46	47	37.0		
Denver	38	35	33	26			-22.7
Detroit	51	39	57	69		75.3	
Los Angeles	27	24	21	28			
Miami	41	49	52	49	20.7		
Mpls./St. Paul	24	24	27	26			
New Orleans	57	53	67	82			
New York	15	20	23	22			
Newark	35	38	49	57	62.7	49.3	15.5
Philadelphia	69	84	95	95	38.4		
Phoenix	66	58	52	53		-9.7	
St. Louis	44	46	55	78			
San Diego	29	49	52	45	57.1	-8.1	
San Francisco	51	41	52	42			-20.1
Seattle	48	62	63	50		-19.2	-21.2
Washington, DC	33	21	22	21			

[1]These columns denote statistically significant ($p<0.05$) increases and decreases between estimates for the time periods noted.
SOURCE: DAWN, OAS, SAMHSA

DAWN ED Data

Rates of benzodiazepine ED mentions per 100,000 population increased significantly in 6 CEWG areas from 1995 to 2002, with continuing increases in Baltimore and Newark (*see exhibit 7*). From 2001 to 2002, the rates of benzodiazepine ED mentions decreased significantly in four CEWG areas. Across the annual periods shown in exhibit 7, Boston and Philadelphia continued to have the highest rates, at 102 and 95, respectively, in 2002.

Note that a substantial proportion of the benzodiazepine ED mentions across CEWG areas in 2002 were in the "not otherwise specified" category, which means the specific benzodiazepine product was not identified in the hospital record. Across the coterminus United States in 2002, there were 105,752 benzodiazepine ED mentions; 34,697, or 32.8 percent, were in the NOS category.

Representatives from CEWG areas included in this DAWN system elaborated on findings relevant to their own areas in their reports. The following excerpts provide examples of CEWG coverage of the 2002 DAWN ED data:

Baltimore

Benzodiazepines were mentioned in 11 percent of drug-related ED episodes in 2002, representing a small (2 percent) increase from 59 mentions per 100,000 population in 2001 to 60 per 100,000 in 2002. The specific benzodiazepines involved were identified for only 25 percent of mentions. The most frequently specified were alprazolam, clonazepam, diazepam, and lorazepam. From 1995 to 2002, the rate of benzodiazepine mentions increased by 105 percent.

—Leigh Henderson

Boston

As a group, benzodiazepines are showing high levels of abuse. In 2002, Boston's benzodiazepines rate of 102 ED mentions per 100,000 population was highest among all 21 DAWN sites and 2.42 times the national rate of 42.

—Daniel Dooley

Chicago

Benzodiazepine ED mentions increased significantly between 1995 (n=1,959) and 2002 (2,776), a 42-percent change. Alprazolam ED mentions were relatively stable between 1995 (331) and 2002 (300); alprazolam was the most often mentioned benzodiazepine. Clonazepam was the second most often mentioned benzodiazepine in 2002 (227), followed by lorazepam (196) and diazepam (148). Consistent with ED mentions, ethnographic reports indicate that alprazolam appears to be the benzodiazepine most readily available on the street, closely followed by clonazepam and lorazepam, with variations in different areas of the city. **—Dita Broz**

Miami

In Miami-Dade County, there were 1,029 benzodiazepine-related DAWN ED mentions in 2002, representing a 39-percent increase from 1995. Alprazolam accounted for 409 of these mentions in 2002, up 32 percent from the 309 mentions in 2000. **—James Hall**

New York City

Alprazolam and clonazepam ED mentions increased from 1995 to 2002, while diazepam mentions decreased. From 1995 to 2002, alprazolam mentions increased 92 percent (from 333 to 638) and clonazepam mentions increased 182 percent (from 117 to 330). Clonazepam mentions also increased 48 percent from 2000 to 2002 (from 223 to 330). The decreases in diazepam mentions continued: 58 percent from 1995 to 2002 (from 450 to 189); 43 percent between 2000 and 2002; and 32 percent between 2001 and 2002. Lorazepam mentions remained stable with 143 mentions in 2002. In addition to these specific benzodiazepines, mentions for benzodiazepines not otherwise specified (NOS) increased 620 percent from 73 in 1995 to 526 in 2002.

—Rozanne Marel

Data from a local ED were reported by the Miami/Ft. Lauderdale representative:

*At **Broward General Medical Center** in the last 6 months of 2003, there were 219 benzodiazepine ED mentions, including 51 percent that specifically cited alprazolam. Males accounted for 64 percent of the cases. Teenagers accounted for 5 percent of these mentions; 27 percent were in their twenties, 31 percent were in their thirties, another 30 percent were in their forties, and 8 percent were age 50 or older.* **—James Hall**

Local/State Mortality Data

Deaths involving different depressant drugs in 2002 or 2003 were reported by two CEWG representatives and the Maine participant:

Florida

Statewide, there were 1,794 benzodiazepine-related deaths during 2003, representing a 10-percent increase over 1,307 ME mentions in 2002. Of the deaths in 2003, a benzodiazepine was identified as the cause of death in 368 cases (or 21 percent), the same proportion for this category as in 2002… Benzodiazepines were second only to alcohol in their involvement in drug-related deaths throughout Florida in 2002… Miami-Dade County reported 40 alprazolam-related deaths during 2003; 12 (30 percent) were alprazolam-induced deaths. In 2003, Broward County recorded 90 alprazolam-related deaths; 41 (46 percent) were alprazolam-induced, but only 7 of the deaths involved alprazolam alone. In Palm Beach County, there were 94 alprazolam-related deaths; 18 (19 percent) were alprazolam-induced. Another drug was present in 95 percent of the cases…

Miami-Dade County reported 25 diazepam-related deaths during 2003; 2 (8 percent) were diazepam-induced. Broward County recorded 98 diazepam-related deaths during that period, and 30 (31 percent) were diazepam-induced. In Palm Beach County, 6 (15 percent) of the 41 diazepam-related deaths in 2003 were diazepam-induced.

—James Hall

Maine

About one-third of Maine's drug deaths have some form of benzodiazepine present in their toxicology findings. Nine (6 percent) had a benzodiazepine mentioned on the death certificate in 2003, down from 18 (11 percent) in 2002. One of these, diazepam, is in the 'top 10' list for Maine, causing 21 deaths over the past 6 years. An additional 15 deaths caused by polydrug toxicity had one or more benzodiazepines present in the toxicology findings.

—Marcella Sorg

Philadelphia

Diazepam, having been detected by the ME in 497 decedents from 1994 through 2003, with 66 cases in 2003, ranks fourth among drugs present in mortality cases in Philadelphia… Alprazolam was the 13th most frequently detected drug among decedents by the Philadelphia ME (n=213) from 1994 through 2003, with 45 cases in 2003… Deaths with the presence of oxazepam (Serax) have been increasing. In 2003, there were 16 positive toxicology reports for oxazepam and 129 cases in the 10-year period from 1994 through 2003 (the 19th most frequently detected drug)… Deaths with the presence of olanzapine (Zyprexa) have been increasing. In 2003, there were 43 positive toxicology reports for olanzapine and 119 cases in the 10-year period from 1994 through 2003 (the 20th most frequently detected drug). **—Samuel Cutler**

Treatment Data

Primary depressants (including Rohypnol) admissions are not always distinguished by the type of depressant, and some CEWG areas include depressants in an "other drug" category. Twelve CEWG areas reported treatment data on depressants:

Atlanta

In metropolitan Atlanta, about 1 percent of primary heroin users chose benzodiazepines as a secondary drug choice, as did 2 percent of methamphetamine users. These FY 2003 percentages are consistent with the figures from the previous 2 years. **—Kristin Wilson**

Chicago

Treatment data…indicate that depressants are not primary drugs of choice for most users. **—Dita Broz**

Colorado

In 2003, 15 clients were admitted to treatment claiming Rohypnol (flunitrazepam) as their primary drug of abuse.

Thirteen were male and only two were female. As to race, 10 were White and 5 were Hispanic. Also, 10 were 35 and older. Eleven had taken the drug orally, while 2 reported smoking, and 2 said they had injected.

—Bruce Mendelson

Hawaii

The impact of benzodiazepine admissions on the treatment system is minimal, with less than 10 in 2003.

—D. William Wood

Los Angeles

In the second half of 2003, treatment and recovery program admissions associated with primary barbiturate, benzodiazepine, or other sedative/hypnotic abuse continued to account for less than 1 percent of all admissions in Los Angeles County. **—Beth Finnerty**

New Orleans

Treatment admissions data for the first three quarters of FY 2004 show six admissions for primary benzodiazepine abuse in Orleans Parish, with the same number in both East Baton Rouge and Ouachita Parishes. The numbers were higher in 4 other parishes—Lafayette (14), St. Tammany (18), Calcasieu (23), and Rapides (26). Benzodiazepine admissions in another two parishes were zero (Bossier) and two (Terrebonne). **—Gail Thornton-Collins**

Newark

Treatment data for the Newark primary metropolitan statistical area in 2003 showed increases in use of benzodiazepines among treatment admissions, with their use as a primary, secondary, or tertiary drug accounting for 2.8 percent of treatment admissions, compared with 1.6 percent in 2001. **—Anna Kline**

Philadelphia

The preliminary treatment admission reports for 2003 show benzodiazepines as primary drugs of abuse in 67 cases; however, these drugs were reported as secondary drugs of abuse in 187 additional cases and as tertiary drugs of abuse in 153 more cases. Most of the reports of benzodiazepines as secondary or tertiary drugs of choice indicated that heroin was the primary drug. **—Samuel Cutler**

Phoenix

Clonazepam was reported to be in high demand by heroin addicts who are in methadone treatment programs… Heroin addicts report consuming clonazepam when in methadone treatment to produce a heroin 'high' feeling… [they] prefer 0.5-milligram tablets because the dosage is not time released. **—Ilene Dode**

St. Louis

A few private treatment programs often provide treatment for benzodiazepine, antidepressant, and alcohol abusers.

Social setting detoxification has become the treatment of choice for individuals who abuse these substances. Since many of the private treatment admissions are polysubstance abusers, particular drug problems are not clearly identified.
—Heidi Israel-Adams

Seattle

Depressants were the primary drug for less than 1 percent of treatment clients in 2003 and in recent years. (Treatment admission data for depressants are limited to where they are noted as the primary drug.) **—Caleb Banta-Green**

Texas

The number of youths and adults admitted into treatment with a primary, secondary, or tertiary problem with Rohypnol has varied: 247 in 1998, 364 in 1999, 324 in 2000, 397 in 2001, 368 in 2002, and 331 in 2003. Clients abusing Rohypnol were the youngest of the 'club drug' patients and they were predominately Hispanic, which would reflect the availability and use of this drug along the border. Some 75 percent were involved with the criminal justice or legal system. While 15 percent of these clients said that Rohypnol was their primary problem drug, 55 percent reported a primary problem with marijuana. **—Jane Maxwell**

Poison Control Center and Helpline Data

Poison control center and Helpline data on benzodiazepines were reported from two CEWG areas:

Boston

In 2003, there were 185 calls to the Helpline during which benzodiazepines (including Ativan, Valium, Xanax, Klonopin, Rohypnol, Halcion, and others) were self-identified as substances of abuse (2.3 percent of all mentions)… remaining fairly stable from 2000 to 2003. **—Daniel Dooley**

Detroit

Michigan Poison Control Centers reported 75 intentional benzodiazepine exposures statewide in the first 4 months of 2004, with 2 deaths resulting. Of these 75 exposures, 17 were for youths age 6–19. **—Phil Chvojka**

NFLIS Data

Forensic laboratory data in exhibit 8 depict the number of benzodiazepine items analyzed in 2003 in CEWG areas covered by NFLIS. As shown, alprazolam was the benzodiazepine most likely to be identified, but it accounted for only small percentages of the total items analyzed. In 2003, relatively high numbers of alprazolam items were identified in New York (545), Philadelphia (465), Atlanta (320), and Miami (292). In San Diego, diazepam was the benzodiazepine most often identified (n=100). The numbers of diazepam items identified were also relatively high in Philadelphia (94), Atlanta (84), and Los Angeles (82). The numbers of clonazepam items identified were high in New York City (124), Texas (93), and San Diego (75). No benzodiazepine items were identified in Baltimore or Detroit.

Exhibit 8. Estimated Number of Analyzed Benzodiazepine Items in 17 CEWG Areas: 2003

NFLIS Area	Alprazolam	Diazepam	Clonazepam
Atlanta	320	84	28
Boston	32	17	41
Chicago	32	21	19
Denver	8	19	8
Honolulu	11	23	5
Los Angeles[1]	38	82	41
Miami	292	15	10
New Orleans	74	39	5
New York	545	67	124
Newark	17	0	0
Philadelphia	465	94	51
St. Louis	32	31	5
St. Paul	12	16	12
San Diego	56	100	75
Seattle	8	13	17
Texas	216	53	93
Washington, DC	20	2	9

[1]Data are not complete for all months.
SOURCE: NFLIS, DEA

CEWG members typically elaborate on NFLIS findings, as in the examples below:

Los Angeles

Approximately 581 of the 45,443 items analyzed by participating Los Angeles County laboratories and reported to the NFLIS system were positively identified as pharmaceutical/prescription medications (as opposed to illicit substances). Of those, 30 percent (174 items) were found to be benzodiazepines, and another 2 percent (12 items) were found to be a barbiturate (Phenobarbital). The most frequently cited benzodiazepines were diazepam (82 items), clonazepam (41 items), and alprazolam (38 items). **—Beth Finnerty**

Seattle

Law enforcement exhibits tested by the State toxicology laboratory showed that 1.2 percent (n=38) of exhibits from the Seattle area lab were benzodiazepines (i.e., alprazolam, diazepam, and clonazepam) and that 0.9 percent (105) of exhibits from the rest of the State were benzodiazepines.

—Caleb Banta-Green

Other Data

Qualitative and other quantitative data on benzodiazepines were reported by representatives from four CEWG areas, with some exemplifying multiple drug use patterns among benzodiazepine abusers and the popularity of alprazolam.

Atlanta

Depressants, especially benzodiazepines, are on the rise in Atlanta. The most commonly abused benzodiazepine is alprazolam (Xanax). **—Kristin Wilson**

Chicago

Lifetime use of tranquilizers or barbiturates without a prescription (Valium, Elavil, Ativan, Xanax) was reported by 32 percent of young noninjecting heroin users. Fourteen percent reported using in the past 30 days. Young injectors reported moderate use of barbiturates. In the Family Process study, 41 percent of young injectors reported ever using barbiturates, and 30 percent used them during the previous 12 months.

—Dita Broz

Philadelphia

Benzodiazepines, particularly alprazolam and diazepam, continue to be used in combination with other drugs… Benzodiazepine abuse was reported by focus group participants as common among users of heroin, oxycodone, cocaine, marijuana, and cough syrup. Since spring 2000, all focus groups have reported that alprazolam has overtaken diazepam as the 'most popular pill' on the street… While users new to treatment report that diazepam has become less popular in recent years, alprazolam use has increased.

—Samuel Cutler

Seattle

Key informants note that promethazine is often used by those on methadone to potentiate the high. Benzodiazepines (e.g., clonazepam and diazepam) are purchased on the street for three reasons: 1) to get high on, 2) to potentiate other drugs, and 3) for 'home detoxes' whereby users, of heroin in particular, try to stop using on their own.

—Caleb Banta-Green

APPENDIX A.
CEWG DATA SOURCES

Major indicators and primary data sources on prescription drug abuse used by CEWG members include those shown below.

Emergency department (ED) drug mentions data were provided by the Drug Abuse Warning Network (DAWN), Office of Applied Studies (OAS), Substance Abuse and Mental Health Services Administration (SAMHSA), for 1995–2002. The data represent drug abuse-related visits to 24-hour non-Federal facilities by persons age 6–97 in 21 metropolitan statistical areas. Up to four drugs may be recorded for each visit in a reporting year. Statistically significant changes ($p<0.05$) are reported as "percent change." DAWN tables are published on the Internet, as are other DAWN data, at <http//:samhsa.gov/oas/dawn.htm>. Information on changes in narcotic analgesic ED visits from 1995 to 2002 are from *The DAWN Report: Narcotic Analgesics, 2002 Update*, September 2004.

Medical examiner/coroner data were also provided by DAWN through 2002. In addition, local and State ME data were extracted from eight CEWG. The DAWN data are not comparable across sites because the proportions of the population and jurisdictions covered differ across areas. CEWG areas in which 100 percent of the population are covered are shown in a footnote to DAWN exhibits in this report. Local and State ME data are usually more recent than DAWN data, covering 2003. However, local/State medical examiners categorize deaths differently so that findings are not comparable across sites or to DAWN data.

Substance abuse treatment admissions data for calendar years or fiscal years (FYs) 2000–2003 were extracted from State treatment databases (18 CEWG areas); the Treatment Episode Data Set (TEDS) maintained by OAS, SAMHSA (Washington, DC); and a sample from Broward County, Florida. Arizona, Colorado, Hawaii, Illinois, and Texas report statewide treatment admissions data. Most areas reported full-year data for 2003; however, Baltimore data are for the first half of 2003 and the sample data from Broward County are for the last half of 2003. More recent data are also reported from three CEWG areas: Boston and Colorado (first half of FY 2004), and New Orleans (first three quarters of FY 2004). The findings represent percentages of admissions for primary

"other opiate" drugs of abuse; the denominators exclude alcohol admissions.

Forensic drug laboratory testing data are from the National Forensic Laboratory Information System (NFLIS), Drug Enforcement Administration (DEA), for 2003. State and local participating forensic labs in or near 18 CEWG cities, as well as 13 Texas sites, participated in NFLIS in 2003 (the exceptions were Phoenix and San Francisco). Comparisons across CEWG areas are subject to distortion for several reasons. For example, the data are not adjusted for population size, and there are variations within and across areas that can result in differences in drug seizures and analyses (e.g., police priorities, types of arrests from which drug specimens are taken, and other criminal justice procedures).

Trafficking and street price data on prescription-type drugs are derived from Drug Enforcement Administration (DEA) reports and the June 2004 CEWG reports.

CEWG PARTICIPANTS

NIDA DESPR, CEWG Coordinators

Compton, Wilson, MD, MPE, NIDA

O'Brien, Moira, CEWG Project Officer

Special Presenters/Organization

Vareen, Donald, MD, NIDA

Walters, John, Hon, White House ONDCP

CEWG Members/Organization/Area

Broz, Dita, University of Illinois (Chicago)

Chvojka, Phil, Michigan Dept. of Community Health (Detroit)

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

Dode, Ilene, PhD, EMPACT (Phoenix)

Dooley, Daniel, Boston Public Health Commission (Boston)

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

Finnerty, Beth A., Integrated Substance Abuse Programs, UCLA (Los Angeles)

Galea, John A., New York State Office of Alcoholism and Substance Abuse Services (New York)

Goldberg, Angela, Methamphetamine Strike Force (San Diego)

Hall, James, Up Front Drug Information Center (Miami)

Henderson, Leigh, PhD, Synectics for Management Decisions, Inc. (Baltimore)

Israel-Adams, Heidi, PhD, St. Louis University (St. Louis)

Jackson, T. Ron, University of Washington (Seattle)

Kline, Anna, PhD, University of Medicine and Dentistry of New Jersey (Newark)

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

Maxwell, Jane C., PhD, Gulf Coast Addiction Technology Transfer Center (Texas)

Mendelson, Bruce D., Colorado Department of Human Services (Denver)

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

Thornton-Collins, Gail, Dept. of Health (New Orleans)

Wilson, Kristin, Georgia State University (Atlanta)

Wish, Eric, PhD, University of Maryland (Washington, DC)

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

Other Contributors

Arria, Amelia, PhD, University of Maryland

Artigiani, Erin, PhD, University of Maryland

Ball, Judy K., PhD, MPA, SAMHSA

Boyer, Edward, MD, PhD, University of Massachusetts

Colliver, James D., PhD, NIDA

Crane, Elizabeth H., PhD, MPH, SAMHSA

Kurtz, Steven P., PhD, University of Delaware

Noone, Diana, NIJ

Siegal, Harvey A., PhD, Wright State University School of Medicine

Sorg, Marcella H., RN, PhD, University of Maine

Tolliver, James, MS, PhD, DEA

Watson, William, PharmD, American Association of Poison Control Centers, Inc.

Wong, Liqun, DEA

Wynn, Mona, Canadian Centre on Substance Abuse

NIH Publication No. 04-5363A
Printed November 2004

U.S. Department of Health And Human Services
Public Health Service
National Institutes of Health
National Institute on Drug Abuse

6001 Executive Boulevard
Room 5149
Bethesda, MD 20892

Official Business
Penalty for Private Use $300.00

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

NIDA NATIONAL INSTITUTE ON DRUG ABUSE 30 Years 1974-2004

NIH Publication No. 04-5363A
Printed November 2004