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Foreword

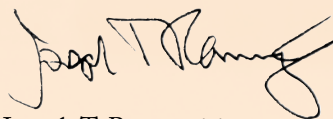
The Drug Enforcement Administration's (DEA's) Office of Diversion Control is pleased to present the *National Forensic Laboratory Information System (NFLIS) 2006 Annual Report*. NFLIS provides a unique source of information on the nation's drug problem by providing detailed and timely information on drug evidence secured in law enforcement operations across the country. Through a partnership that includes 274 federal, state, and local forensic laboratories, the information collected through NFLIS supports DEA's mission to enforce the controlled substances laws and regulations of the United States and serves as an important information source for state and local drug control agencies.

The *NFLIS 2006 Annual Report* presents national and regional findings on drug cases analyzed during the past year, including city- and county-level results on drug seizure locations. Among the key findings presented in the *NFLIS 2006 Annual Report*:

- An estimated 1.9 million drug items were analyzed by state and local laboratories in the United States in 2006. Cocaine was the most frequently identified drug (640,141 items), followed by cannabis/THC (609,633 items), methamphetamine (208,262 items), and heroin (97,213 items).
- For the top four drugs reported in NFLIS, there was a 12% increase in total analyzed items from 2001 to 2006, from 1,328,818 items in 2001 to 1,555,249 items in 2006. Nationally, cannabis/THC and heroin declined significantly during this period, while hydrocodone, oxycodone, and alprazolam increased significantly. MDMA items also doubled from 2004 to 2006.
- Regionally, methamphetamine increased and heroin decreased significantly in the Northeast and South between 2001 and 2006, while cocaine increased in the Northeast.
- In addition to the top four drugs, hydrocodone increased significantly in all regions between 2001 to 2006. Alprazolam increased in the South, Midwest, and Northeast, while oxycodone increased in the West, Midwest, and Northeast. MDMA increased in the Midwest but decreased in the Northeast.

The DEA stands committed to continually improving drug intelligence data available to U.S. drug control agencies. We fully understand that this system would not be successful without the participation of forensic laboratories across the country. The DEA would like to extend a special thank you to the laboratories that have joined NFLIS and encourage those laboratories that are not currently participating in NFLIS to contact us about joining this important program.

Thank you again for your ongoing support.



Joseph T. Rannazzisi
Deputy Assistant Administrator
Office of Diversion Control
U.S. Drug Enforcement Administration

INTRODUCTION

The National Forensic Laboratory Information System (NFLIS) is a program sponsored by the Drug Enforcement Administration's (DEA's) Office of Diversion Control that systematically collects drug identification results and associated information from drug cases analyzed by federal, state, and local forensic laboratories. These laboratories analyze controlled and noncontrolled substances secured in law enforcement operations across the country. NFLIS represents an important resource in monitoring illicit drug abuse and trafficking, including the diversion of legally manufactured pharmaceuticals into illegal markets. NFLIS data are used to support drug scheduling decisions and to inform drug policy and drug enforcement initiatives both nationally and in local communities around the country.

NFLIS is a comprehensive information system that includes data from forensic laboratories that handle over 88% of the nation's estimated 1.2 million annual state and local drug analysis cases. As of June 2007, NFLIS included 42 state systems, 92 local or municipal laboratories, and 1 territorial laboratory, representing a total of 274 individual laboratories. The NFLIS database also includes federal data from the DEA's System To Retrieve Information from Drug Evidence II (STRIDE), which reflects the results of drug evidence analyzed at DEA laboratories across the country.

This 2006 Annual Report presents the results of drug cases analyzed by forensic laboratories between January 1, 2006, and December 31, 2006. Section 1 presents national and regional estimates for the 25 most frequently identified drugs, as well as national and regional trends from 2001 through 2006. National and regional estimates are based on the NFLIS national sample of laboratories (see Appendix A for a list of NFLIS laboratories, including those in the national sample). Federal laboratory data reported in STRIDE are also presented. Sections 2 and 3 present drug analysis results for all state and local laboratories that reported at least 6 months of data to NFLIS during 2006. The benefits and limitations of NFLIS are presented in Appendix B.



This report also highlights areas of enhancement in NFLIS. Section 4 presents drugs reported for selected cities across the country, and Section 5 presents a Geographic Information System (GIS) analysis on drug seizures of cannabis/THC, cocaine, methamphetamine, and heroin by state and by county for selected states. Another key area of improvement to NFLIS includes ongoing enhancements to the NFLIS Interactive Data Site (IDS). Appendix C summarizes these IDS enhancement activities.



- Reporting State Lab System
- Participating State Lab System (Not Yet Reporting)
- No Participating State Lab System
- No State Lab System
- Individual State Lab
- Reporting Local Lab
- Participating Local Lab (Not Yet Reporting)

NATIONAL AND RE

Since 2001, NFLIS has produced estimates of the number of drug items and drug cases analyzed by state and local laboratories from a nationally representative sample of laboratories.

The following section describes national and regional estimates for drug items analyzed by state and local laboratories in 2006. Trends are presented for selected drugs from 2001 through 2006. The methods used in preparing these estimates are described in Appendix D.

1.1 DRUG ITEMS ANALYZED

In 2006, a total of 1,935,788 drug items were analyzed by state and local forensic laboratories in the United States. This estimate is an increase from the 1,749,275 drug items analyzed during 2005. Table 1.1 presents the 25 most frequently identified drugs for the nation and for census regions.

The top 25 drugs accounted for 90% of all drugs analyzed in 2006. As in previous years, the majority of all drugs reported in NFLIS were identified as the top 4 drugs, with cocaine, cannabis/THC, methamphetamine, and heroin representing 80% of all drugs analyzed. Nationally, 640,141 items were identified as cocaine (33%), 609,633 as cannabis/THC (31%), 208,262 as methamphetamine (11%), and 97,213 as heroin (5%).

There were 8 narcotic analgesics in the top 25 drugs: hydrocodone (30,480 items), oxycodone (25,041 items), methadone (9,822 items), morphine (4,672 items), codeine (3,375 items), buprenorphine (1,809 items), propoxyphene (1,775 items), and hydromorphone (1,516 items). Also included were four benzodiazepines: alprazolam (29,143 items), clonazepam (8,370 items), diazepam (7,548 items), and lorazepam (1,714 items). Other controlled pharmaceutical drugs were phencyclidine (PCP) (3,305 items) and methylphenidate (1,742 items). Pseudoephedrine (4,674), a listed chemical, carisoprodol (3,558), a noncontrolled pharmaceutical, and clonidine (1,581) were also included in the top 25 most frequently identified drugs. Clonidine is mainly used for treatment of hypertension, and it is also used in treating and preparing addicted subjects for withdrawal from narcotics, alcohol, and tobacco.



REGIONAL ESTIMATES

Table 1.1 NATIONAL AND REGIONAL ESTIMATES FOR THE 25 MOST FREQUENTLY IDENTIFIED DRUGS*
Estimated number and percentage of total analyzed drug items, 2006.

Drug	National		West		Midwest		Northeast		South	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Cocaine	640,141	33.07%	71,839	20.79%	128,297	28.83%	120,951	33.41%	319,054	40.74%
Cannabis/THC	609,633	31.49%	80,127	23.19%	201,987	45.38%	93,640	25.86%	233,879	29.86%
Methamphetamine	208,262	10.76%	123,780	35.83%	28,671	6.44%	2,108	0.58%	53,703	6.86%
Heroin	97,213	5.02%	12,195	3.53%	19,814	4.45%	32,588	9.00%	32,616	4.16%
Hydrocodone	30,480	1.57%	2,939	0.85%	5,228	1.17%	4,137	1.14%	18,177	2.32%
Alprazolam	29,143	1.51%	**	**	6,110	1.37%	4,109	1.13%	17,462	2.23%
Oxycodone	25,041	1.29%	2,792	0.81%	5,029	1.13%	7,752	2.14%	9,468	1.21%
Noncontrolled, non-narcotic drug	21,919	1.13%	4,607	1.33%	7,239	1.63%	5,086	1.40%	4,987	0.64%
MDMA	21,044	1.09%	5,144	1.49%	4,333	0.97%	2,448	0.68%	9,120	1.16%
Methadone	9,822	0.51%	1,280	0.37%	1,624	0.36%	2,488	0.69%	4,431	0.57%
Clonazepam	8,370	0.43%	783	0.23%	1,774	0.40%	2,392	0.66%	3,420	0.44%
Diazepam	7,548	0.39%	1,176	0.34%	1,856	0.42%	1,119	0.31%	3,396	0.43%
Pseudoephedrine***	4,674	0.24%	391	0.11%	2,232	0.50%	**	**	1,999	0.26%
Morphine	4,672	0.24%	1,029	0.30%	1,223	0.27%	660	0.18%	1,760	0.22%
Amphetamine	4,519	0.23%	924	0.27%	1,119	0.25%	525	0.14%	1,952	0.25%
Carisoprodol	3,558	0.18%	**	**	**	**	151	0.04%	2,262	0.29%
Codeine	3,375	0.17%	509	0.15%	642	0.14%	419	0.12%	1,804	0.23%
Phencyclidine (PCP)	3,305	0.17%	699	0.20%	159	0.04%	1,282	0.35%	1,166	0.15%
Psilocin	3,293	0.17%	1,057	0.31%	1,109	0.25%	347	0.10%	779	0.10%
Buprenorphine	1,809	0.09%	**	**	127	0.03%	1,254	0.35%	366	0.05%
Propoxyphene	1,775	0.09%	95	0.03%	597	0.13%	385	0.11%	698	0.09%
Methylphenidate	1,742	0.09%	241	0.07%	493	0.11%	447	0.12%	561	0.07%
Lorazepam	1,714	0.09%	220	0.06%	495	0.11%	316	0.09%	683	0.09%
Clonidine	1,581	0.08%	**	**	1,316	0.30%	172	0.05%	68	0.01%
Hydromorphone	1,516	0.08%	253	0.07%	265	0.06%	125	0.03%	874	0.11%
<i>Top 25 Total</i>	1,746,150	90.20%	314,416	91.00%	422,097	94.84%	284,954	78.70%	724,684	92.53%
<i>All Other Analyzed Items</i>	189,638	9.80%	31,084	9.00%	22,970	5.16%	77,115	21.30%	58,467	7.47%
<i>Total Analyzed Items****</i>	1,935,788	100.00%	345,500	100.00%	445,067	100.00%	362,069	100.00%	783,151	100.00%

MDMA=3,4-Methylenedioxymethamphetamine

MDA=3,4-Methylenedioxyamphetamine

* Sample n's and 95% confidence intervals for all estimates are available upon request.

** The estimate for this drug does not meet standards of precision and reliability because too few laboratories reported this specific drug.

*** Includes items from a small number of laboratories that do not specify between pseudoephedrine and ephedrine.

**** Numbers may not sum to totals due to suppression and rounding.

1.2 DRUG CASES ANALYZED

Drug analysis results are also reported to NFLIS at the case level. These case-level data typically describe all drugs identified within a drug-related incident, although a small proportion of laboratories may assign a single case number to all drug submissions related to an entire investigation. Table 1.2 presents national estimates of cases containing the 25 most commonly identified drugs. This table illustrates the number of cases that contained one or more items of the specified drug.

Table 1.2 NATIONAL CASE ESTIMATES
Number and percentage of cases containing the 25 most frequently identified drugs, 2006.

Drug	Number	Percent
Cocaine	495,391	40.56%
Cannabis/THC	458,528	37.54%
Methamphetamine	152,987	12.53%
Heroin	74,477	6.10%
Hydrocodone	25,281	2.07%
Alprazolam	24,523	2.01%
Oxycodone	19,644	1.61%
MDMA	16,151	1.32%
Noncontrolled, non-narcotic drug	15,644	1.28%
Methadone	8,342	0.68%
Clonazepam	7,101	0.58%
Diazepam	6,618	0.54%
Morphine	3,939	0.32%
Amphetamine	3,847	0.31%
Carisoprodol	3,417	0.28%
Pseudoephedrine *	3,350	0.27%
Psilocin	2,914	0.24%
Phencyclidine (PCP)	2,896	0.24%
Codeine	2,867	0.23%
Propoxyphene	1,619	0.13%
Lorazepam	1,586	0.13%
Buprenorphine	1,583	0.13%
Methylphenidate	1,472	0.12%
Clonidine	1,403	0.11%
Hydromorphone	1,297	0.11%
<i>Top 25 Total</i>	<i>1,336,876</i>	<i>109.46%</i>
<i>All Other Drugs</i>	<i>152,087</i>	<i>12.45%</i>
<i>Total All Drugs</i>	<i>1,488,963**</i>	<i>121.91%***</i>

* Includes cases from a small number of laboratories that do not specify between pseudoephedrine and ephedrine.

** Numbers may not sum to totals due to rounding.

*** Multiple drugs can be reported within a single case, so the cumulative percentage exceeds 100%. The estimated national total of distinct case percentages is based on 1,218,136 distinct cases analyzed during 2006.

Among cases, cocaine was the most common drug reported during 2006. Nationally, an estimated 41% of analyzed drug cases contained one or more cocaine items, followed by cannabis/THC, which was identified in 38% of all drug cases. About 13% of drug cases were estimated to have contained one or more methamphetamine items, and 6% of cases contained one or more heroin items. Hydrocodone, alprazolam, and oxycodone were each reported in about 2% of cases, while MDMA was reported in about 1% of drug cases.

System To Retrieve Information from Drug Evidence II (STRIDE)

The DEA's System To Retrieve Information from Drug Evidence II (STRIDE) collects the results of drug evidence analyzed at DEA laboratories across the country. STRIDE reflects evidence submitted by the DEA, other federal law enforcement agencies, and some local police agencies that was obtained during drug seizures, undercover drug buys, and other activities. STRIDE captures data on both domestic and international drug cases; however, the following results describe only those drugs obtained in the United States.

During 2006, a total of 55,861 drug exhibits or items were reported in STRIDE, about 3% of the estimated 1.9 million drug exhibits analyzed by state and local laboratories during this period. More than half of the drugs in STRIDE were identified as cocaine (33%) or cannabis/THC (25%). Other commonly reported drugs included methamphetamine (14%), heroin (8%), and MDMA (4%).

MOST FREQUENTLY IDENTIFIED DRUGS IN STRIDE, 2006

Drug	Number	Percent
Cocaine	18,179	32.54%
Cannabis/THC	14,067	25.18%
Methamphetamine	8,083	14.47%
Heroin	4,474	8.01%
MDMA	2,125	3.80%
Noncontrolled, non-narcotic drug	1,046	1.87%
Hydrocodone	691	1.24%
Oxycodone	586	1.05%
Testosterone	527	0.94%
Pseudoephedrine	523	0.94%
<i>All Other Drugs</i>	<i>5,560</i>	<i>9.95%</i>
<i>Total Analyzed Exhibits</i>	<i>55,861</i>	<i>100.00%</i>

1.3 NATIONAL AND REGIONAL DRUG TRENDS

National drug trends

Figure 1.1 presents national trends for the number of cannabis/THC, cocaine, methamphetamine, and heroin items analyzed by state and local laboratories from 2001 through 2006. Overall, there was a 12% increase in total analyzed items for the top four drugs between 2001 and 2006, from 1,328,818 items to 1,555,249 items. Cannabis/THC and heroin exhibited decreasing trends ($\alpha = .10$) during this period. For both drugs, the 2005 reports were the lowest, with cannabis/THC decreasing from 660,111 items in 2001 to 573,904 items in 2005 (a 13% decrease) and heroin decreasing from 110,797 items in 2001 to 87,402 items in 2005 (a 14% decrease). The number of analyzed cocaine and methamphetamine items did not change significantly from 2001 to 2006.

Figure 1.2 describes national trends for MDMA, alprazolam, oxycodone, and hydrocodone. Among these drugs, reports of hydrocodone, oxycodone, and alprazolam experienced significant increases from 2001 to 2006 ($\alpha = .05$). Hydrocodone and oxycodone reports more than doubled during this time.

Figure 1.1 National trend estimates for the top four drugs by year, 2001–2006.

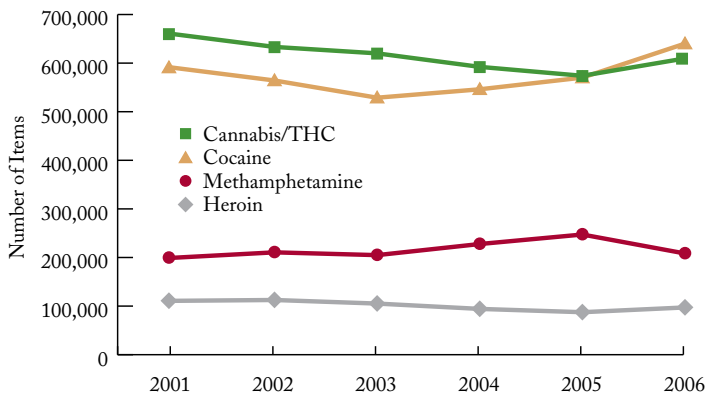
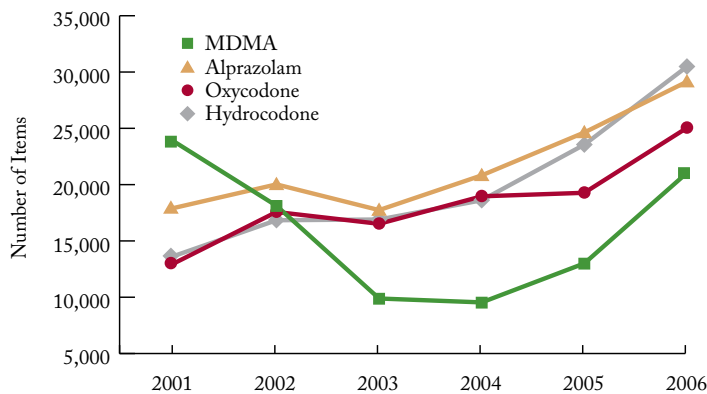


Figure 1.2 National trend estimates for other selected drugs by year, 2001–2006.



Hydrocodone items increased from 13,659 in 2001 to 30,480 in 2006, and oxycodone items increased from 13,004 in 2001 to 25,041 in 2006. Alprazolam increased from 17,926 items to 29,143 items, a 62% increase. From 2001 to 2004, MDMA declined sharply (not statistically tested), then more than doubled from 2004 to 2006.

Regional drug trends

Figure 1.3 presents regional trends per 100,000 persons aged 15 or older for the top four reported drugs. This figure illustrates changes in drugs reported over time, taking into account the population of each region.

Methamphetamine reporting significantly increased from 2001 to 2006 in the Northeast and the South ($\alpha = .05$). In the Northeast, reports increased from 0.9 items per 100,000 persons in 2001 to 4.9 items per 100,000 in 2006. Similarly, in the South, reports increased from 39.7 items per 100,000 to 68.0 items per 100,000. An overall decline in heroin was reported in the Northeast and South. In the Northeast, reports decreased from 90.6 items per 100,000 in 2001 to 76.3 items in 2006. In the South, reports of heroin were the lowest in 2005, falling from 44.5 items per 100,000 in 2001 to 25.3 items in 2005. However, from 2005 to 2006, reports of heroin increased 63% to 41.3 items per 100,000. Reports of cocaine increased significantly from 2001 to 2006 in the Northeast where the number of items increased from 104,368 in 2001 to 120,951 in 2006, a 16% increase.

Figure 1.4 shows regional trends per 100,000 persons aged 15 or older for hydrocodone, oxycodone, MDMA, and alprazolam from 2001 through 2006. During this period, reports of alprazolam increased significantly in the Midwest, South, and Northeast. In the South, reports increased from 13.3 items per 100,000 in 2003 to 22.1 items in 2006 (a 66% increase). From 2001 to 2006, reports of oxycodone increased significantly in the West, the Midwest, and the Northeast ($\alpha = .05$). In the West, the reported rate of oxycodone items increased by more than 400%, from 1.1 to 5.7 items per 100,000 (533 to 2,792 items). In the Northeast, oxycodone reports increased 72% from 2005 to 2006.

From 2001 to 2006, reports of MDMA increased significantly in the Midwest from 4.3 to 8.6 items per 100,000 persons. Although MDMA increased significantly in the Northeast from 2005 to 2006 (a 75% increase), it decreased significantly overall from 2001 to 2006 from 12.7 to 5.7 items per 100,000 persons. Although not statistically significant, reports of MDMA increased 154% in the West and 88% in the South from 2003 to 2006. Reports of hydrocodone increased significantly in all census regions from 2001 to 2006, with the largest increase occurring in the Northeast (2.0 to 9.7 items per 100,000 persons).

Figure 1.3 Trends in the top four drugs reported per 100,000 persons aged 15 or older, 2001–2006.

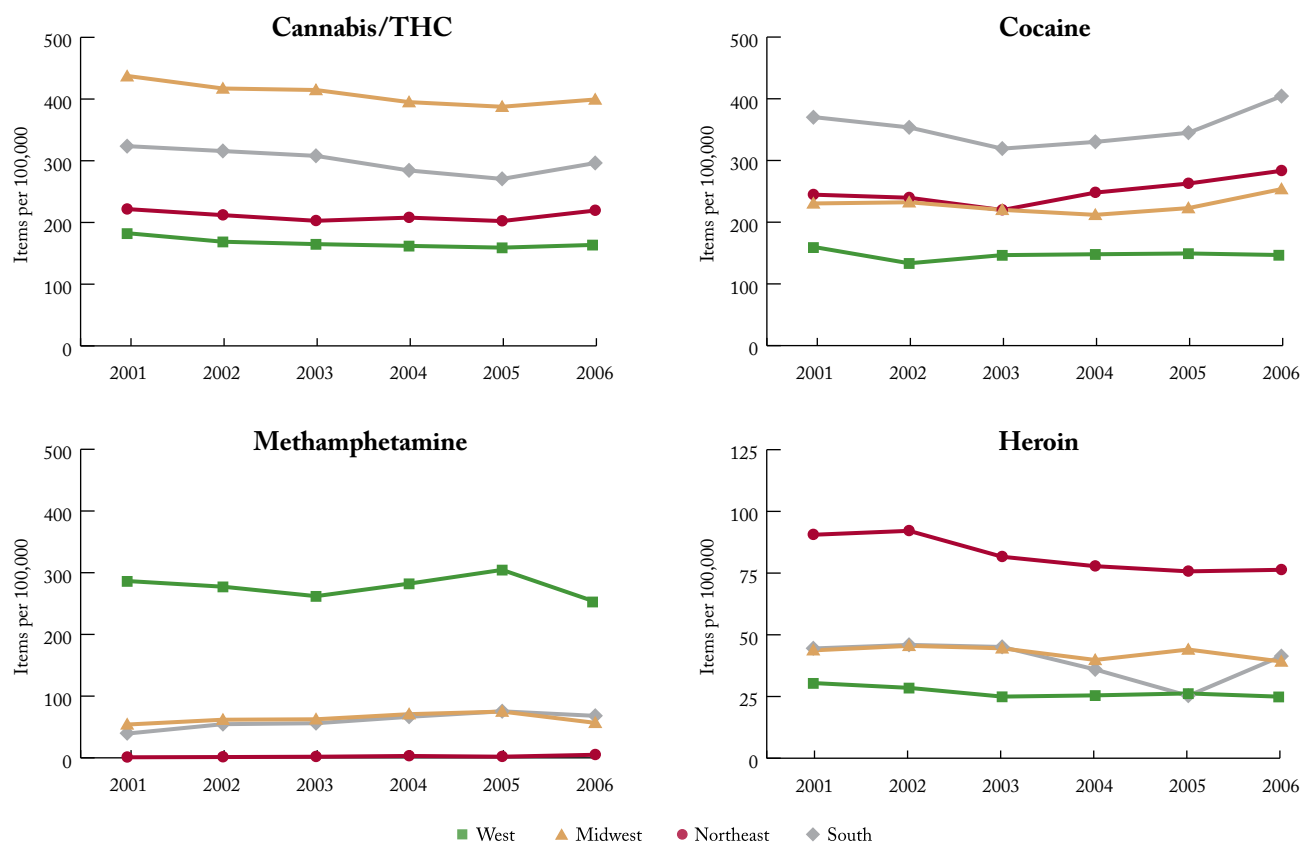
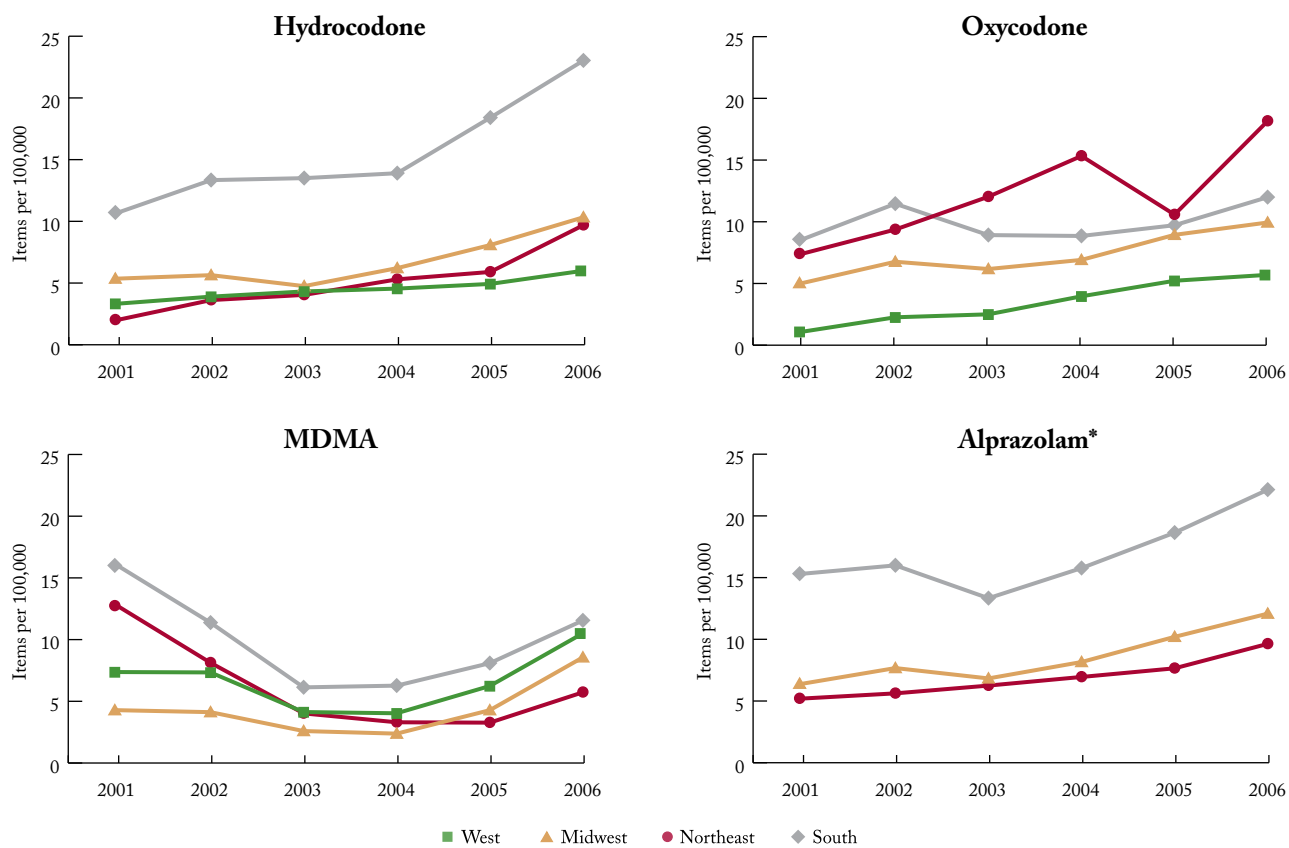


Figure 1.4 Trends in other selected drugs reported per 100,000 persons aged 15 or older, 2001–2006.



*The absence of a trend line implies unstable estimates due to small sample sizes.

MAJOR DRUG CATEGORIES

Section 2 presents results for major drug categories reported by NFLIS laboratories during 2006. It is important to note differences between the results presented in this section and the national and regional estimates presented in Section 1. The estimates presented in Section 1 are based on data reported by the NFLIS national sample of laboratories. Section 2 and subsequent sections include data from all NFLIS laboratories that reported 6 or more months of data in 2006. NFLIS laboratories analyzed a total of 1,529,796 drug items during 2006.

2.1 NARCOTIC ANALGESICS

According to the 2005 National Survey on Drug Use and Health (NSDUH), approximately 13% of persons aged 12 or older used narcotic analgesics, or prescription pain relievers, for nonmedical reasons during their lifetime, 5% used them in the past year, and 2% used them in the past month. Moreover, among persons aged 12 or older, 9% used propoxyphene or codeine products, and 8% used hydrocodone products for nonmedical reasons at least once during their lifetime.¹

A total of 66,963 narcotic analgesics were identified by NFLIS laboratories in 2006, representing 4% of all items analyzed (Table 2.1). Hydrocodone (39%) and oxycodone (30%) accounted for the majority of all narcotic analgesics reported. The remaining narcotic analgesics reported included methadone (10%), morphine (6%), codeine (4%), propoxyphene (2%), hydromorphone (2%), dihydrocodeine (2%), fentanyl (2%), and buprenorphine (2%).

¹ Office of Applied Studies. (2006, September). *Results from the 2005 National Survey on Drug Use and Health: Detailed tables*. Rockville, MD: Substance Abuse and Mental Health Services Administration. [Available at <http://www.oas.samhsa.gov/WebOnly.htm#NHSDAtabs>]

Table 2.1 NARCOTIC ANALGESICS
Number and percentage of identified narcotic analgesics, 2006.

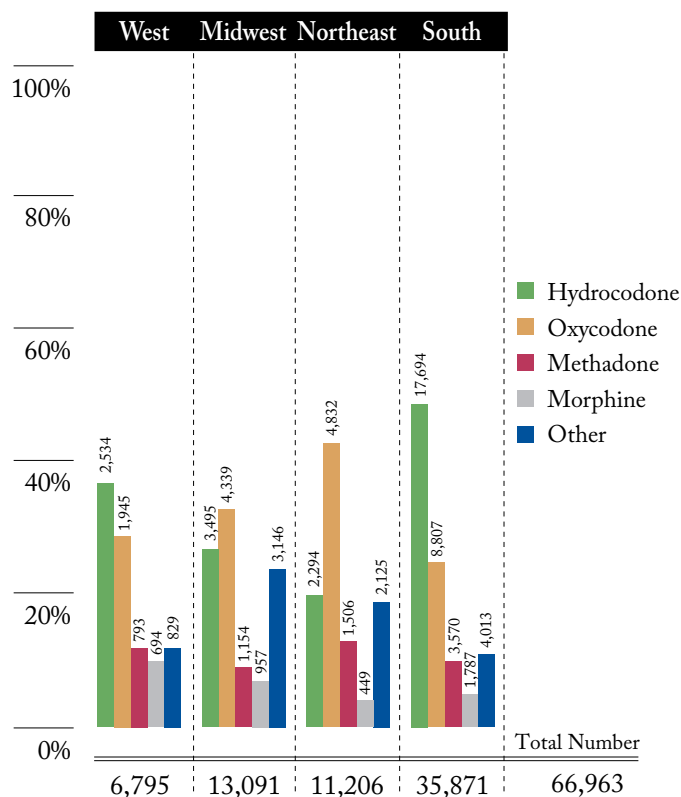
Analgesic	Number	Percent
Hydrocodone	26,017	38.85%
Oxycodone	19,923	29.75%
Methadone	7,023	10.49%
Morphine	3,887	5.81%
Codeine	2,597	3.88%
Propoxyphene	1,488	2.22%
Hydromorphone	1,303	1.95%
Dihydrocodeine	1,290	1.93%
Fentanyl	1,270	1.90%
Buprenorphine	1,113	1.66%
Tramadol*	598	0.89%
Meperidine	334	0.50%
Pentazocine	80	0.12%
Nalbuphine*	18	0.03%
Oxymorphone	14	0.02%
Butorphanol	9	0.01%
<i>Total Narcotic Analgesics</i>	66,963	100.00%
<i>Total Items Analyzed</i>	1,529,796	

*Noncontrolled narcotic analgesics.



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Figure 2.1 Distribution of narcotic analgesics within region, 2006.



The types of narcotic analgesics reported varied considerably by region (Figure 2.1). The highest percentages of hydrocodone were reported in the South (49%) and West (37%). Oxycodone represented 43% of analgesics reported in the Northeast compared with 33% in the Midwest, 29% in the West, and 25% in the South. The Northeast also reported the highest percentage of methadone (13%), while the West reported the highest percentage of morphine (10%).

2.2 BENZODIAZEPINES

Benzodiazepines are central nervous system (CNS) depressants that are habit-forming, especially when taken for a long time or in high doses. According to the 2005 NSDUH, 8% of persons aged 12 or older used benzodiazepines for nonmedical reasons in their lifetime. Approximately 13% of adult aged 18 to 25 used benzodiazepines in their lifetime (see footnote 1).

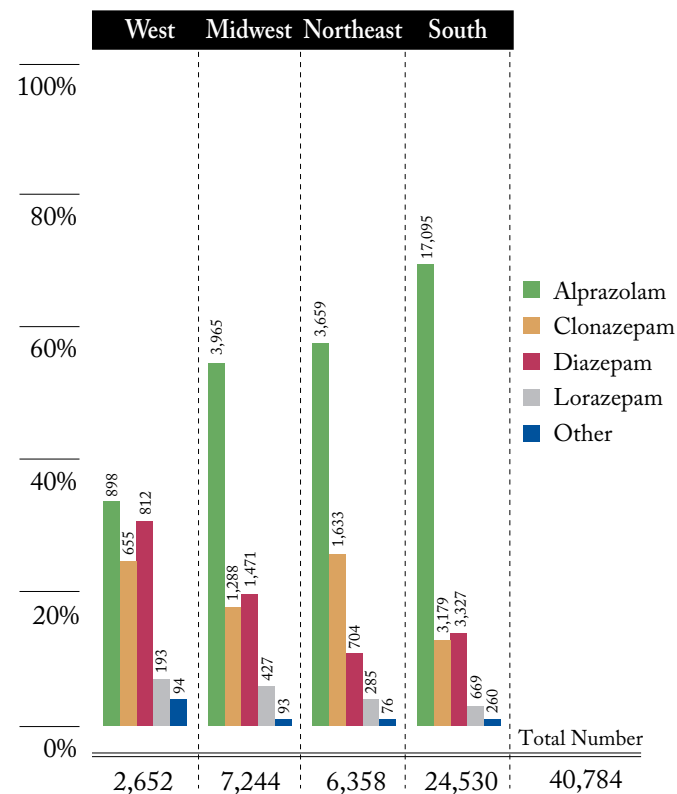
During 2006, approximately 3% of all analyzed drugs, or 40,784 items, were identified by NFLIS laboratories as benzodiazepines (Table 2.2). Alprazolam accounted for 63% of reported benzodiazepines. Approximately 17% of benzodiazepines were identified as clonazepam, 16% were identified as diazepam, and 4% were identified as lorazepam.

More than half of benzodiazepines reported in the South (70%), Northeast (58%), and Midwest (55%) were identified as alprazolam (Figure 2.2). Clonazepam accounted for approximately one quarter of benzodiazepines identified in the Northeast and in the West. Diazepam accounted for nearly one third of benzodiazepines identified in the West and one fifth identified in the Midwest.

Table 2.2 BENZODIAZEPINES
Number and percentage of identified benzodiazepines, 2006.

Benzodiazepine	Number	Percent
Alprazolam	25,617	62.81%
Clonazepam	6,755	16.56%
Diazepam	6,314	15.48%
Lorazepam	1,574	3.86%
Temazepam	326	0.80%
Chlordiazepoxide	100	0.25%
Triazolam	50	0.12%
Flunitrazepam	35	0.09%
Midazolam	12	0.03%
Total Benzodiazepines	40,784	100.00%
Total Analyzed Items	1,529,796	

Figure 2.2 Distribution of benzodiazepines within region, 2006.



2.3 CLUB DRUGS

Use of MDMA, GHB/GBL, and ketamine may cause changes in brain function, coma, seizure, delirium, and amnesia.² According to the 2005 Youth Risk Behavior Survey (YRBS), 6% of students nationwide used MDMA, also known as Ecstasy, during their lifetime.³

NFLIS laboratories identified 19,153 items as club drugs in 2006 (Table 2.3). Of these, 88% were identified as MDMA. Among the other club drugs reported, 6% were identified as MDA, 4% as ketamine, and 1% as GHB/GBL.

As shown in Figure 2.3, MDMA was the highest percentage for each region, representing 92% of club drugs in the West, 92% in the Midwest, 88% in the South, and 71% in the Northeast. The Northeast reported the highest percentages of MDA (18%) and ketamine (10%).

² National Institute on Drug Abuse. (2006, May). *NIDA InfoFacts: Club drugs*. Bethesda, MD: Author. [Available at <http://www.nida.nih.gov/Infofacts/clubdrugs.html>]

³ Centers for Disease Control and Prevention. (2006, June 9). Youth Risk Behavior Surveillance—United States, 2005. *CDC Surveillance Summaries: Morbidity and Mortality Weekly Report*, 55 (No. SS-5), 1-108. [Available at <http://www.cdc.gov/mmwr/preview/mmwrhtml/ss5505a1.htm>]

Figure 2.3 Distribution of club drugs within region, 2006.

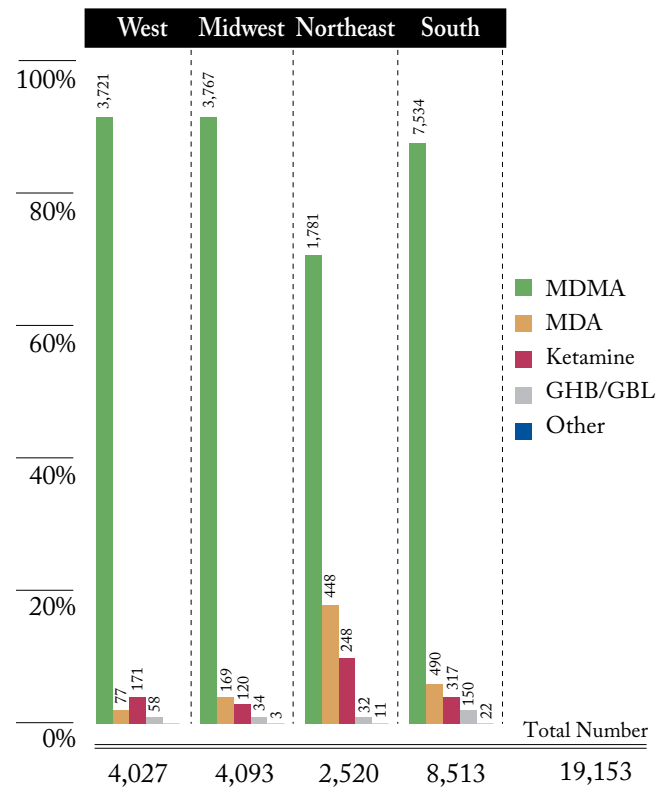


Table 2.3 CLUB DRUGS

Number and percentage of identified club drugs, 2006.

Club Drug	Number	Percent
MDMA	16,803	87.73%
MDA	1,184	6.18%
Ketamine	856	4.47%
GHB/GBL	274	1.43%
MDEA	31	0.16%
BZP	3	0.02%
TFMPP*	2	0.01%
Total Club Drugs	19,153	100.00%
Total Analyzed Items	1,529,796	

MDMA=3,4-Methylenedioxyamphetamine

MDA=3,4-Methylenedioxyamphetamine

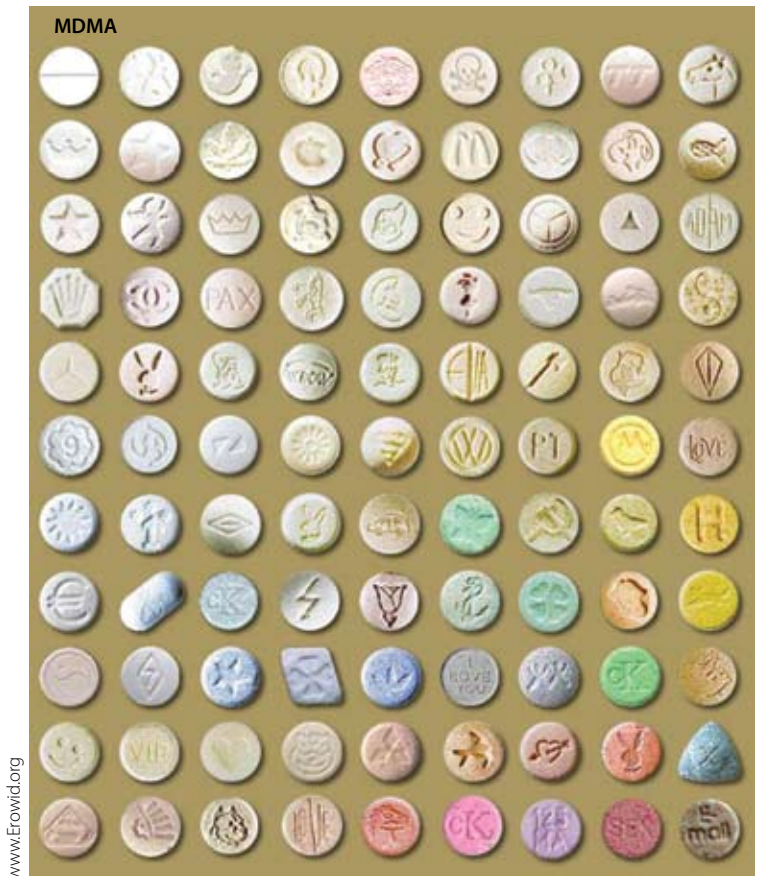
GHB/GBL=gamma-hydroxybutyrate or gamma-butyrolactone

MDEA=N-ethyl-3,4-methylenedioxyamphetamine

BZP=1-Benzylpiperazine

TFMPP=1-(3-Trifluoromethylphenyl)piperazine

* Noncontrolled club drug.



2.4 ANABOLIC STEROIDS

People abuse steroids in order to improve athletic performance, increase muscle mass, and reduce body fat. However, steroid abuse has been associated with a variety of adverse side effects, including acne, heart attack, stroke, and liver cancer, as well as increased aggression and irritability.⁴ The Monitoring the Future (MTF) study showed a decline in past month steroid use among 12th grade students from 2% in 2004 to less than 1% in 2005, with a slight increase to 1% in 2006.⁵

During 2006, a total of 2,147 items were identified as anabolic steroids (Table 2.4). The most commonly identified anabolic steroid was testosterone (45%), followed by methandrostenolone (15%), nandrolone (12%), and stanozolol (10%). Approximately 59% of items in the Midwest, 47% in the South, 36% in the Northeast, and 32% in the West were identified as testosterone (Figure 2.4). The West (20%) reported the highest percentage of methandrostenolone followed by the Northeast (17%) and Midwest (13%).

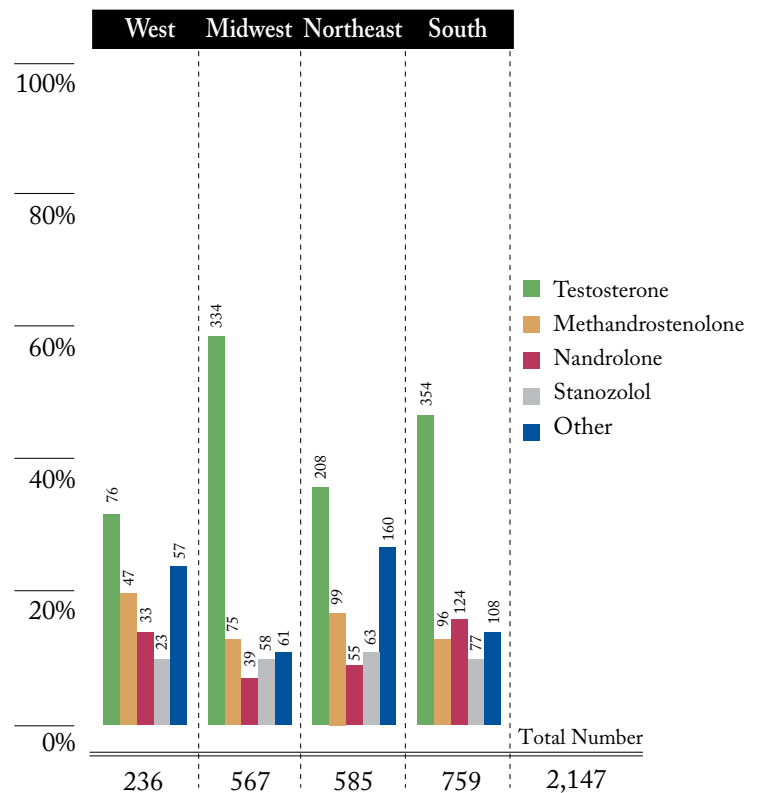
⁴ National Institute on Drug Abuse. (1991; revised 2006, August). *Anabolic steroid abuse* (NIH Publication No. 06-3721). Bethesda, MD: Author. [Available at <http://www.nida.nih.gov/PDF/RRSteroids.pdf>]

⁵ Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2006, December 21). *Teen drug use continues down in 2006, particularly among older teens; but use of prescription-type drugs remains high*. Ann Arbor, MI: University of Michigan News and Information Services. [Available at <http://www.monitoringthefuture.org/press.html>]

Table 2.4 ANABOLIC STEROIDS
Number and percentage of identified anabolic steroids, 2006.

Steroid	Number	Percent
Testosterone	972	45.26%
Methandrostenolone	317	14.76%
Nandrolone	251	11.69%
Stanozolol	221	10.29%
Anabolic steroids, not specified	130	6.08%
Boldenone	86	4.00%
Oxymetholone	75	3.49%
Oxandrolone	46	2.14%
Drostanolone	13	0.61%
Methyltestosterone	12	0.56%
Methenolone	10	0.47%
Mesterolone	9	0.42%
Fluoxymesterone	5	0.23%
<i>Total Anabolic Steroids</i>	2,147	100.00%
<i>Total Analyzed Items</i>	1,529,796	

Figure 2.4 Distribution of anabolic steroids within region, 2006.



2.5 STIMULANTS

Methamphetamine is highly addictive, and psychotic symptoms, such as paranoia, hallucinations, and delusions, can continue to occur long after use has ceased.⁶ In 2005, 8% of admissions to treatment involved methamphetamine as the primary substance of abuse. More than two fifths of admissions involving methamphetamine were among adults aged 20 to 29.⁷

A total of 202,118 stimulant items were analyzed during 2006, accounting for about 13% of all items reported (Table 2.5). Methamphetamine accounted for 96% of stimulants, or 194,882 items, identified in 2006. An additional 3,790 items were identified as amphetamine and 1,297 as methylphenidate.

Methamphetamine accounted for 99% of stimulants reported in the West, 94% in the Midwest, and 94% in the South (Figure 2.5). In the Northeast, 21% of stimulants were reported as amphetamine and 13% as methylphenidate.

⁶ Office of National Drug Control Policy. (2007, June 6). *Drug facts: Methamphetamine*. Washington, DC: The White House. [Available at <http://www.whitehousedrugpolicy.gov/drugfact/methamphetamine/index.html>]

⁷ Office of Applied Studies. (2006, November [posted to Web in February 2007]). *Treatment Episode Data Set (TEDS) highlights - 2005: National admissions to substance abuse treatment services* (DHHS Publication No. SMA 07-4229, Drug and Alcohol Services Information System Series S-36). Rockville, MD: Substance Abuse and Mental Health Services Administration. [Available at <http://www.oas.samhsa.gov/dasis.htm#teds3>]

Figure 2.5 Distribution of stimulants within region, 2006.

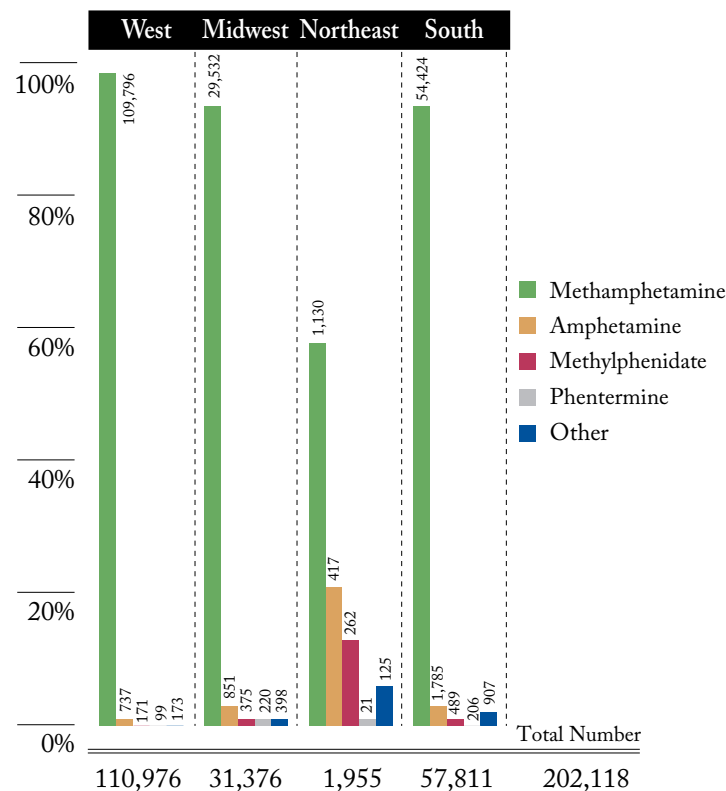


Table 2.5 STIMULANTS
Number and percentage of identified stimulants, 2006.

Stimulant	Number	Percent
Methamphetamine	194,882	96.42%
Amphetamine	3,790	1.88%
Methylphenidate	1,297	0.64%
Caffeine*	546	0.27%
Ephedrine**	530	0.26%
Phentermine	466	0.23%
Cathinone	200	0.10%
N,N-dimethylamphetamine	126	0.06%
Cathine	55	0.03%
Benzphetamine	49	0.02%
Phendimetrazine	48	0.02%
Modafinil	39	0.02%
Diethylpropion	20	0.01%
Sibutramine	16	0.01%
Methcathinone	13	0.01%
Clobenzorex	8	0.00%
Phenylpropanolamine**	8	0.00%
Fenfluramine	5	0.00%
Propylhexedrine	5	0.00%
Pemoline	4	0.00%
Fenproporex	3	0.00%
Phenmetrazine	2	0.00%
4-Methylaminorex	1	0.00%
Chlorphentermine	1	0.00%
Mazindol	1	0.00%
Mephentermine***	1	0.00%
Protriptyline***	1	0.00%
Total Stimulants	202,118	100.00%
Total Analyzed Items	1,529,796	

* Substance is an ingredient of many controlled pharmaceutical products and is often used as a cutting agent.

** Listed chemical.

*** Noncontrolled stimulants.

DRUG COMBINATIONS

In addition to tracking the types of substances identified by state and local forensic laboratories, another important function of NFLIS is the system's ability to capture information on drug combinations or multiple substances reported within a single drug item. Combinations reported in NFLIS are both mixtures of substances and separately packaged substances within the same item or exhibit.

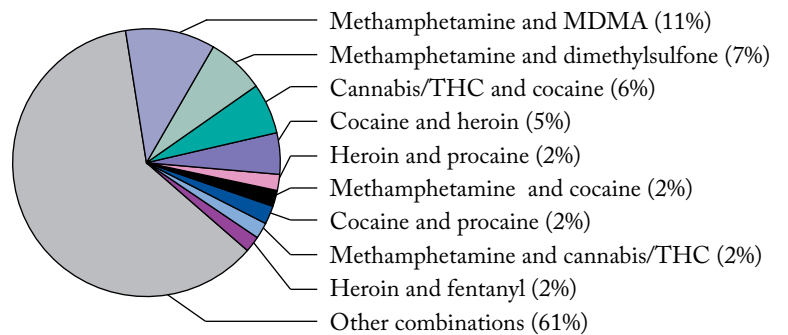
An important feature of NFLIS is the system's ability to capture information on drug combinations or multiple substances reported within a single drug item. Combinations reported in NFLIS are both mixtures of substances and separately packaged substances within the same item or exhibit.

Each year, numerous deaths occur as a result of polydrug abuse. According to the Drug Abuse Warning Network (DAWN), most drug misuse deaths in 2003 involved two or more drugs. Although cocaine with opiates/opioids was the most common lethal drug combination involving death, the use of methadone, hydrocodone, or oxycodone with other opiates or opioids were also frequently reported as contributing to drug misuse deaths.⁸

During 2006, 29,812 items analyzed by state and local laboratories contained two or more substances, representing 2% of all reported items (Figure 3.1). The most common combinations involving illicit drugs included methamphetamine and MDMA (11%), cannabis/THC and cocaine (6%), and cocaine and heroin (5%), which accounted for slightly less than one quarter of all combinations reported.

⁸ Office of Applied Studies. (2005, March). *Drug Abuse Warning Network, 2003: Area profiles of drug-related mortality* (DHHS Publication No. SMA 05-4023, Drug Abuse Warning Network Series D-27). Rockville, MD: Substance Abuse and Mental Health Services Administration. [Available at <http://dawninfo.samhsa.gov/pubs/mepubs/default.asp>]

Figure 3.1 Distribution of drug combinations, 2006.



Drug combinations reported in STRIDE, 2006

A total of 24,166 drug combinations, or 46% of all exhibits, were reported in STRIDE during 2006. STRIDE collects results of drug evidence analyzed at DEA laboratories across the county. Methamphetamine and MDMA (5%) was the most commonly identified drug combination reported in STRIDE. Many of the other most frequently reported combinations included excipients used to dilute or adulterate methamphetamine, cocaine, or heroin. The most common combination identified was methamphetamine and dimethylsulfone (26%). Some other frequently reported combinations were cocaine and sodium bicarbonate (5%), cocaine and procaine (4%), heroin and procaine (3%), heroin and caffeine (3%), and cocaine and caffeine (2%).

3.1 COCAINE COMBINATIONS

Cocaine, including powder and crack cocaine, was present in 21% of all drug combinations reported during 2006 (Table 3.1). The most common cocaine combinations contained cannabis/THC (6%) and heroin (5%). Many of the other substances combined with cocaine were excipients used to dilute cocaine. These included noncontrolled substances, such as procaine (a local anesthetic), inositol, lactose, boric acid, and benzocaine.

3.2 HEROIN COMBINATIONS

Heroin was present in 14% of all drug combinations, or in 4,187 items, reported in 2006 (Table 3.2). More than one third of the heroin combinations were reported as heroin, cocaine, and fentanyl. Among the other substances combined with heroin, many were excipients designed to dilute or adulterate heroin, including procaine, mannitol, caffeine, and lidocaine.

3.3 METHAMPHETAMINE COMBINATIONS

Methamphetamine combinations were present in a total of 8,660 items, or 29% of all drug combinations (Table 3.3). MDMA was the drug most commonly reported in combination with methamphetamine (11%).



www.Erowid.org

Table 3.1 COCAINE COMBINATIONS
Number and percentage of items identified as cocaine combinations, 2006.

Substance One	Substance Two	Number	Percent
Cocaine	Cannabis/THC	1,787	5.99%
Cocaine	Heroin	1,457	4.89%
Cocaine	Methamphetamine	660	2.21%
Cocaine	Procaine	579	1.94%
Cocaine	Inositol	364	1.22%
Cocaine	Diltiazem	234	0.78%
Cocaine	Lactose	93	0.31%
Cocaine	Oxycodone	89	0.30%
Cocaine	Boric acid	83	0.28%
Cocaine	Benzocaine	65	0.22%
Other cocaine combinations		890	2.99%
<i>Total Cocaine Combinations</i>		6,301	21.14%
<i>All Combinations</i>		29,812	100.00%

Table 3.2 HEROIN COMBINATIONS
Number and percentage of items identified as heroin combinations, 2006.

Substance One	Substance Two	Number	Percent
Heroin	Cocaine	1,457	4.89%
Heroin	Procaine	676	2.27%
Heroin	Fentanyl	456	1.53%
Heroin	Clonidine	354	1.19%
Heroin	Mannitol	181	0.61%
Heroin	Caffeine	164	0.55%
Heroin	Diphenhydramine	112	0.38%
Heroin	Methamphetamine	86	0.29%
Heroin	Lidocaine	66	0.22%
Heroin	Morphine	53	0.18%
Other heroin combinations		582	1.95%
<i>Total Heroin Combinations</i>		4,187	14.04%
<i>All Combinations</i>		29,812	100.00%

Table 3.3 METHAMPHETAMINE COMBINATIONS
Number and percentage of items identified as methamphetamine combinations, 2006.

Substance One	Substance Two	Number	Percent
Methamphetamine	MDMA	3,229	10.83%
Methamphetamine	Dimethylsulfone	2,031	6.81%
Methamphetamine	Cocaine	660	2.21%
Methamphetamine	Cannabis/THC	461	1.55%
Methamphetamine	Amphetamine	376	1.26%
Methamphetamine	Ephedrine/Pseudoephedrine	374	1.25%
Methamphetamine	Caffeine	248	0.83%
Methamphetamine	Ketamine	168	0.56%
Methamphetamine	MDA	134	0.45%
Methamphetamine	Heroin	86	0.29%
Other methamphetamine combinations		893	3.00%
<i>Total Methamphetamine Combinations</i>		8,660	29.05%
<i>All Combinations</i>		29,812	100.00%

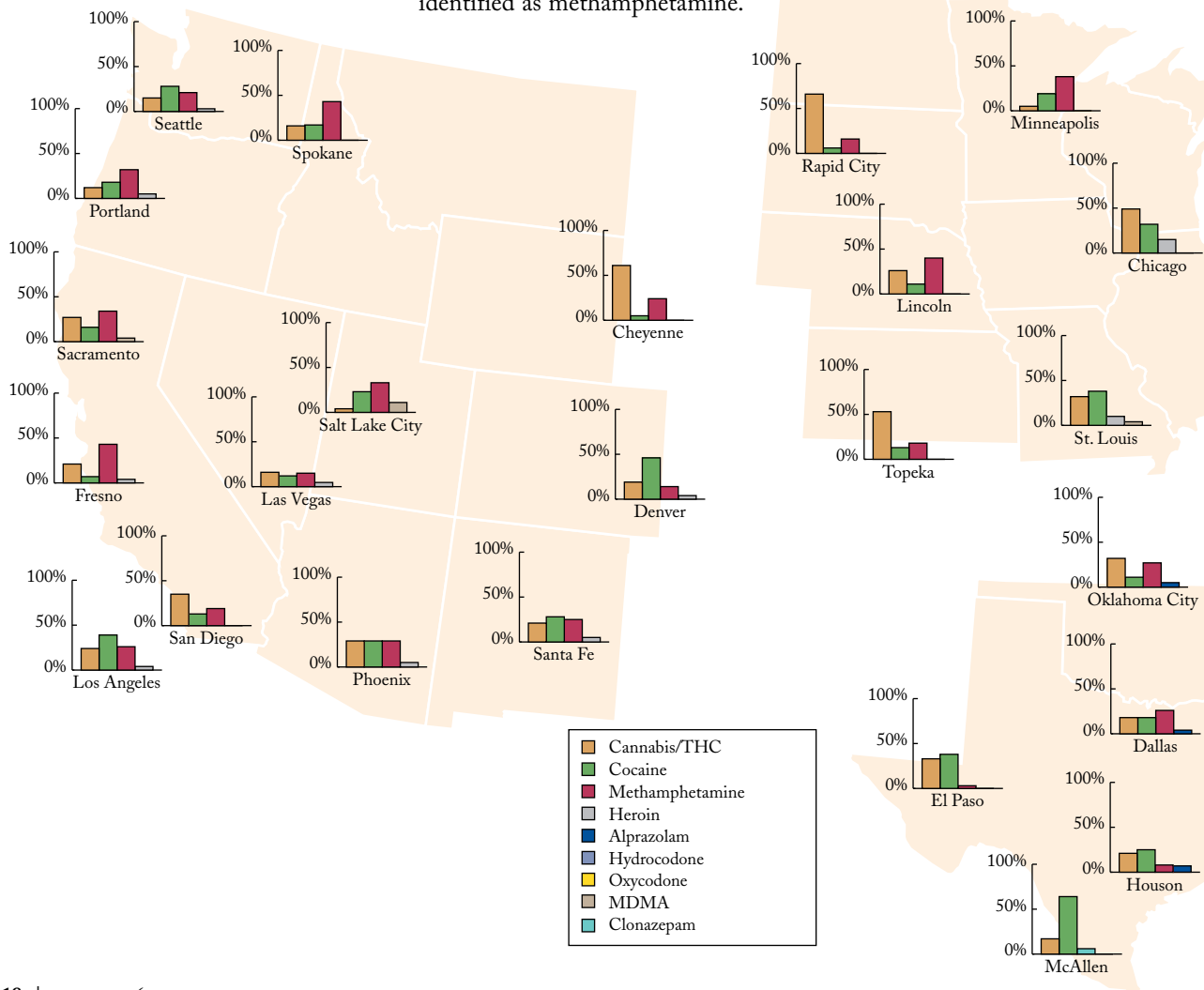
DRUGS IDENTIFIED SELECTED U.S. CITIES

NFLIS can be used to monitor drugs reported by forensic laboratories across the country, including large U.S. cities. The drug analysis results presented in this section were reported during 2006 by NFLIS laboratories in selected large cities.

This section presents 2006 data for the four most common drugs reported by NFLIS laboratories in selected cities. Based on the total number of drugs reported, drugs that were reported 2% or less are not presented even if they were one of the top four drugs for a selected location. The following results highlight geographic differences in the types of drugs abused and trafficked, such as the higher levels of methamphetamine reporting in cities on the West Coast and cocaine reporting in cities on the East Coast.

East Coast cities, such as the following, reported the highest relative percentages of cocaine: Miami (60%), Newark (51%), New York City (50%), Atlanta (46%), Raleigh (46%), and Orlando (43%). McAllen (64%), Denver (46%), and Cincinnati (46%) also reported a high percentage of drugs identified as cocaine. Nationally, 33% of all drugs were identified as cocaine (see Table 1.1).

The highest percentages of methamphetamine were reported in cities located in the West and Midwest, such as Spokane (43%), Fresno (43%), Lincoln (40%), Minneapolis (38%), Sacramento (34%), Salt Lake City (33%), and Portland (32%). Nationally, 11% of drugs were identified as methamphetamine.

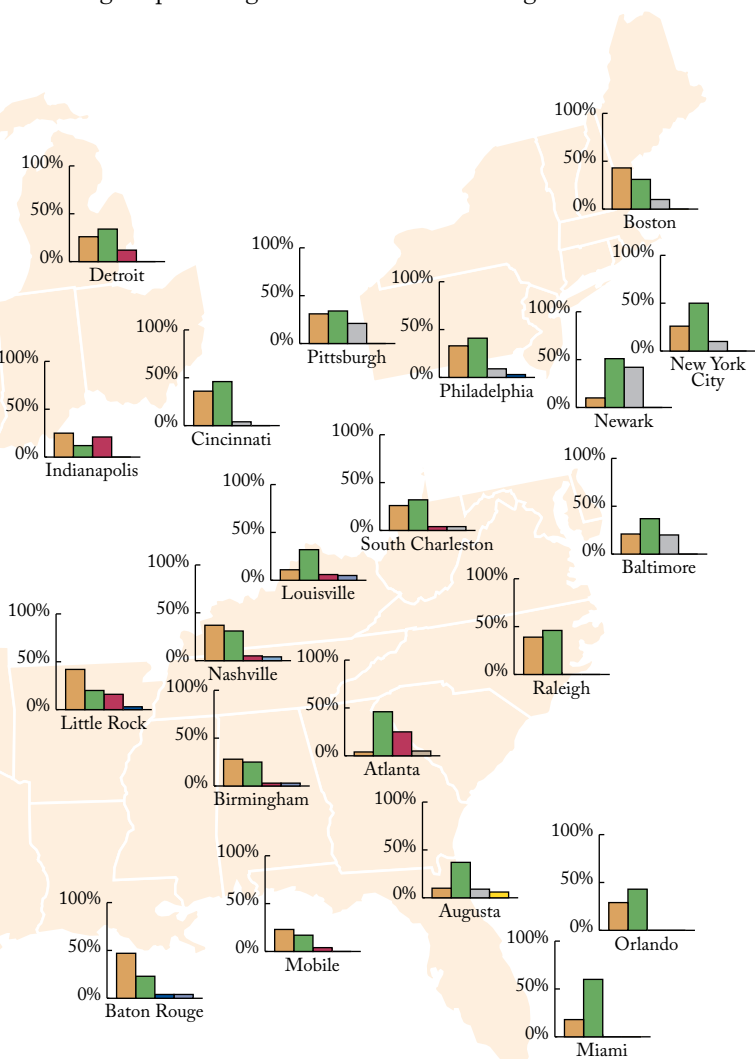


BY LABORATORIES IN

High percentages of heroin were reported in Northeastern cities, such as Newark (32%), Pittsburgh (21%), and Baltimore (20%), although Chicago (15%), Detroit (12%), Salt Lake City (11%), St. Louis (10%), New York City (10%), Boston (10%), Philadelphia (9%), and Augusta (9%) also reported heroin at a rate higher than the national average of 5%.

Cannabis/THC reporting did not show the same type of patterns with respect to regions, with Rapid City (66%), Cheyenne (61%), Topeka (53%), Chicago (49%), Baton Rouge (47%), Boston (43%), Little Rock (42%), Raleigh (39%), Nashville (37%), Cincinnati (36%), and San Diego (35%) reporting cannabis/THC at a higher rate than the national average of 31%. These findings may be influenced by the increased use of field tests to identify marijuana.

Among controlled prescription drugs, Houston (7%), Oklahoma City (5%), Dallas (4%), and Baton Rouge (4%) reported alprazolam at a higher percentage than the national average of 2%, while Atlanta (5%), Sacramento (4%), and St. Louis (4%) reported MDMA at a higher percentage than the national average of 1%.



Selected Laboratories
Atlanta (Georgia State Bureau of Investigation—Decatur Laboratory)
Augusta (Maine Department of Human Services)
Baltimore (Baltimore City Police Department)
Baton Rouge (Louisiana State Police—Baton Rouge Laboratory)
Birmingham (Alabama Department of Forensic Sciences—Birmingham Laboratory)
Boston (Massachusetts Department of Public Health—Boston Laboratory)
Cheyenne (Wyoming State Crime Laboratory)
Chicago (Illinois State Police—Chicago Laboratory)
Cincinnati (Hamilton County Coroner's Office)
Dallas (Texas Department of Public Safety—Garland Laboratory)
Denver (Denver Police Department Crime Laboratory)
Detroit (Detroit Police Department)
El Paso (Texas Department of Public Safety—El Paso Laboratory)
Fresno (Fresno County Sheriff's Forensic Laboratory)
Houston (Harris County Medical Examiner's Office)
Indianapolis (Indiana State Police Laboratory—Indianapolis)
Las Vegas (Las Vegas Police Department)
Lincoln (Nebraska State Patrol Criminalistics Laboratory—Lincoln Laboratory)
Little Rock (Arkansas State Crime Laboratory)
Los Angeles (Los Angeles Police Department and Los Angeles County Sheriff's Department)
Louisville (Kentucky State Police—Louisville Laboratory)
McAllen (Texas Department of Public Safety—McAllen Laboratory)
Miami (Miami-Dade Police Department Crime Laboratory)
Minneapolis (Minnesota Bureau of Criminal Apprehension—Minneapolis Laboratory)
Mobile (Alabama Department of Forensic Sciences—Mobile Laboratory)
Nashville (Tennessee Bureau of Investigation—Nashville Laboratory)
Newark (Newark Police Department)
New York City (New York Police Department Crime Laboratory)
Oklahoma City (Oklahoma State Bureau of Investigation—Oklahoma City Laboratory)
Orlando (Florida Department of Law Enforcement—Orlando Laboratory)
Philadelphia (Philadelphia Police Department Forensic Science Laboratory)
Phoenix (Phoenix Police Department)
Pittsburgh (Allegheny County Coroner's Office)
Portland (Washington State Patrol—Portland Laboratory)
Raleigh (North Carolina State Bureau of Investigation—Raleigh Laboratory)
Rapid City (Rapid City Police Department)
Sacramento (Sacramento County District Attorney's Office)
Salt Lake City (Utah State Crime Laboratory—Salt Lake City Laboratory)
San Diego (San Diego Police Department)
Santa Fe (New Mexico Department of Public Safety)
Seattle (Washington State Patrol Crime Laboratory—Seattle Laboratory)
South Charleston (West Virginia State Police)
Spokane (Washington State Patrol—Spokane Laboratory)
St. Louis (St. Louis Police Department Crime Laboratory)
Topeka (Kansas Bureau of Investigation—Topeka Laboratory)

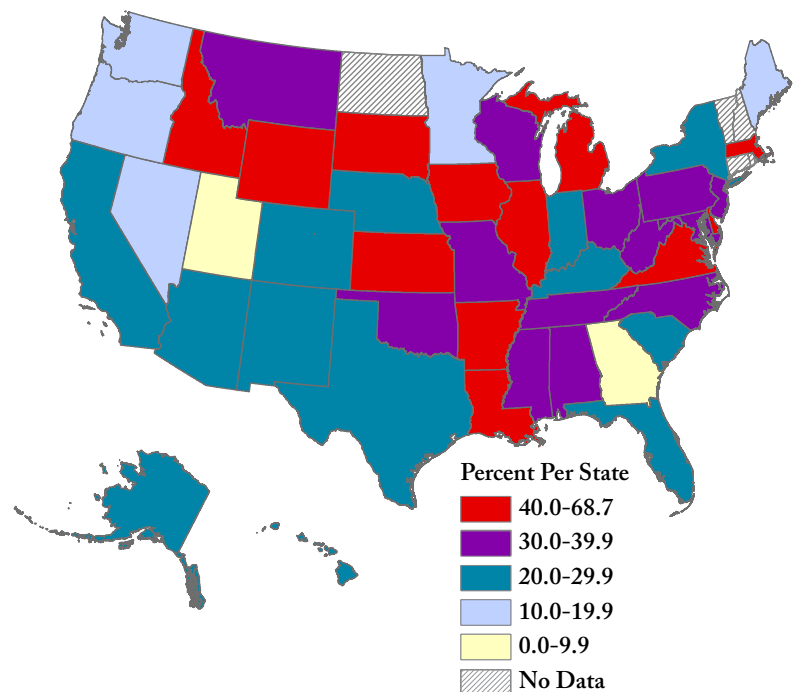
GIS ANALYSIS: TOP FOUR DRUGS, BY

One of the enhanced features of NFLIS is the ability to analyze and monitor variation in drugs reported by laboratories by the county of origin. By using Geographic Information System (GIS) analyses, NFLIS can provide more detailed geographic information on drug seizure location.

This section presents 2006 data at the state and county levels for the percentage of analyzed drug items identified as cannabis/THC, cocaine, methamphetamine, and heroin. The Geographic Information System (GIS) analysis is based on information provided to the forensic laboratories by the submitting law enforcement agencies. The information submitted by law enforcement includes the ZIP Code or county of origin associated with the drug seizure incident or the name of the submitting law enforcement agency. When ZIP Code or county of origin is not available, the drug seizure or incident is assigned to the same county as the submitting law enforcement agency. If the submitting agency is unknown, the seizure or incident is assigned to the county in which the laboratory completing the analyses is located.

It is important to note that these data may not include all drug items seized at the state and county levels. Instead, these data represent only those items that were submitted and analyzed by forensic laboratories. In addition, some laboratories within several states are not currently reporting data to NFLIS, and their absence may affect the relative distribution of drugs seized and analyzed. Nevertheless, these data can serve as an important source for identifying abuse and trafficking trends and patterns across and within states.

Figure 5.1 Percentage of analyzed drug items identified as cannabis/THC, by state, 2006.



LOCATION

Figure 5.2 Percentage of analyzed drug items identified as cocaine, by state, 2006.

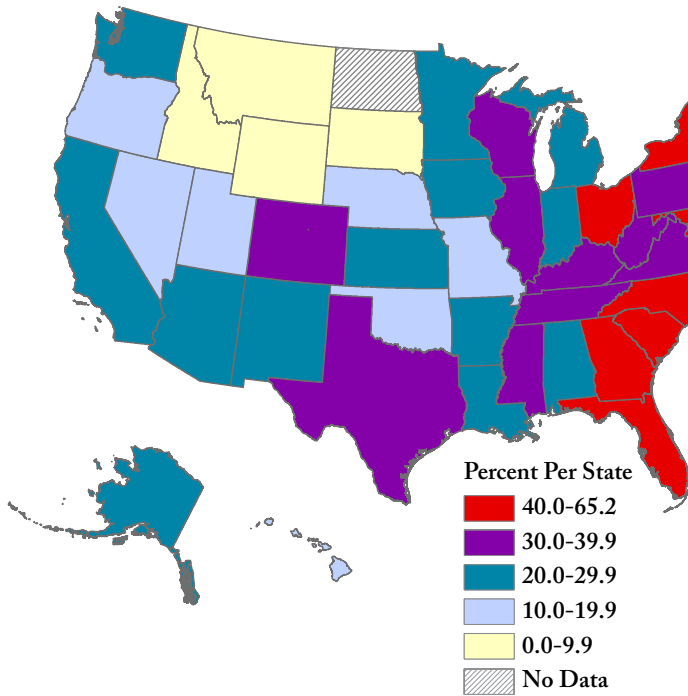


Figure 5.3 Percentage of analyzed drug items identified as methamphetamine, by state, 2006.

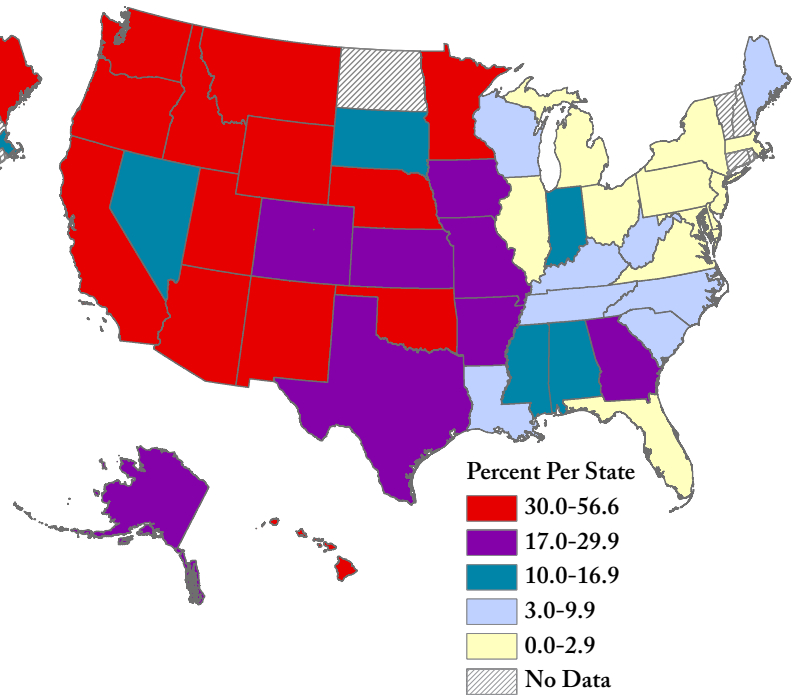


Figure 5.4 Percentage of analyzed drug items identified as heroin, by state, 2006.

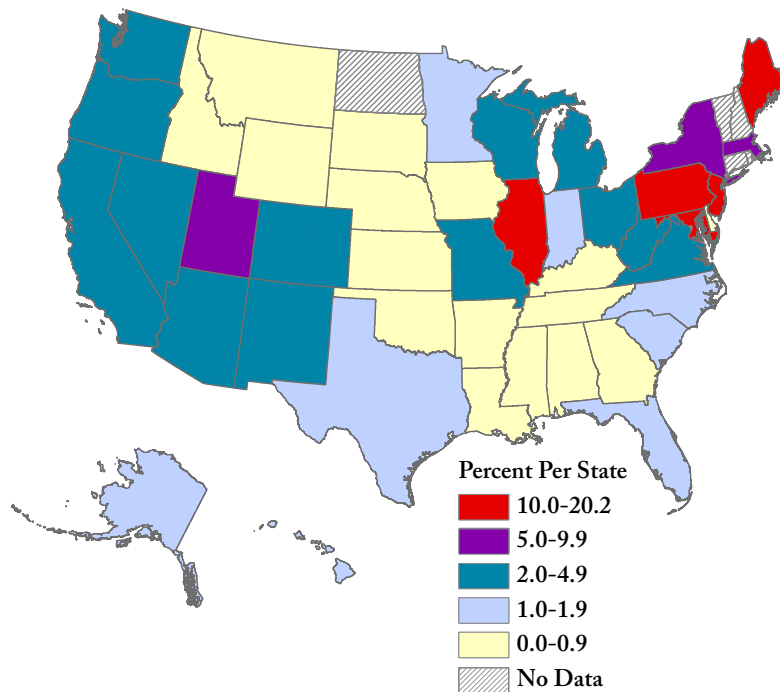


Figure 5.5 Percentage of analyzed drug items identified as cannabis/THC in Pennsylvania, by county, 2006.

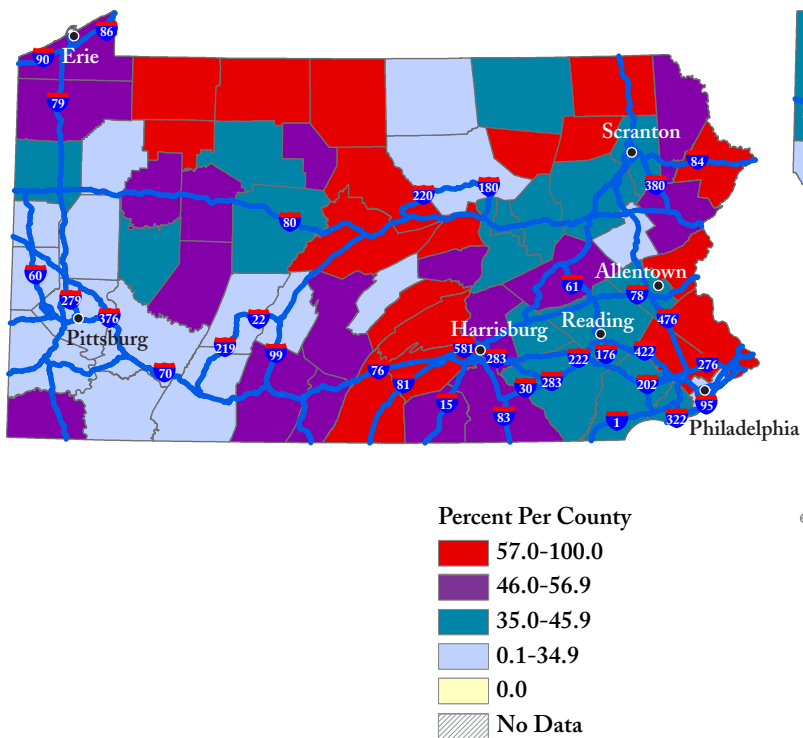


Figure 5.6 Percentage of analyzed drug items identified as cocaine in Louisiana, by parish, 2006.

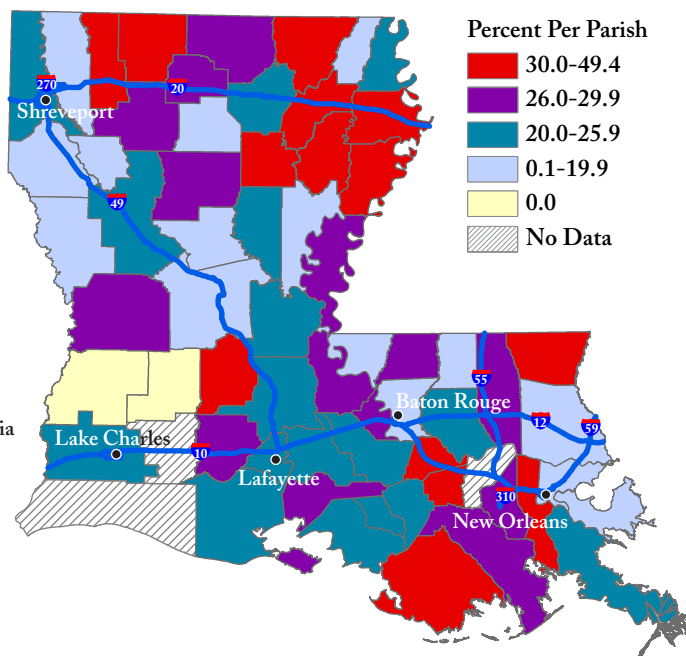


Figure 5.7 Percentage of analyzed drug items identified as methamphetamine in Idaho, by county, 2006.

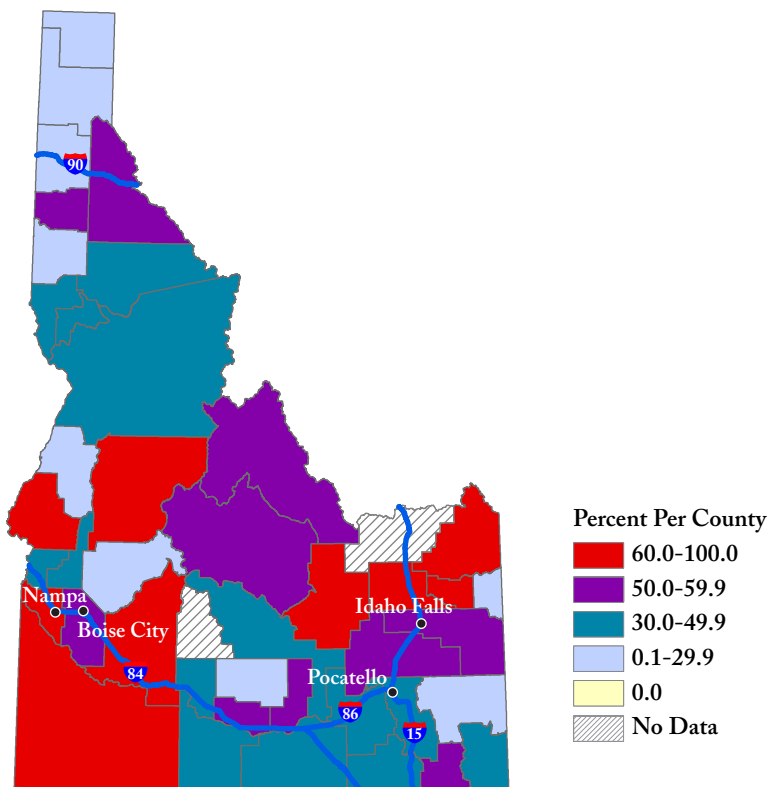
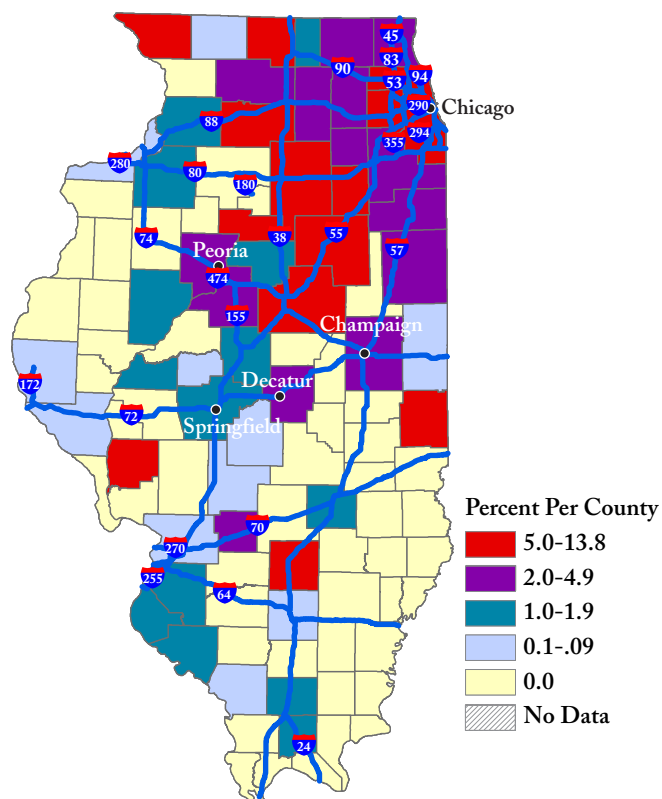


Figure 5.8 Percentage of analyzed drug items identified as heroin in Illinois, by county, 2006.



DEA UPDATE

Salvinorin A and *Salvia divinorum*—Request for Information

Salvinorin A is the main pharmacologically active component in *Salvia divinorum*, a plant belonging to the mint family and originating from the Oaxacan region of Mexico. The abuse potential of salvinorin A is associated with its ability to evoke hallucinogenic effects, which, in general, are qualitatively similar to those of schedule I hallucinogens (i.e., N,N-dimethyltryptamine [DMT], lysergic acid diethylamide [LSD], and psilocybin mushrooms) and the schedule III substance ketamine. However, unlike other scheduled hallucinogens, the hallucinogenic effects of salvinorin A appear to be mediated through the activation of the kappa opioid receptor. Salvinorin A and *Salvia divinorum* are available in several different forms, including fresh *Salvia divinorum* leaves, natural dried leaves, extract-enhanced leaves of various strengths (e.g., 5x, 10x, 20x, 30x), liquid extracts, and whole plants, which are readily available at local retail shops (e.g., head shops and tobacco shops) and on the Internet.

Salvinorin A and *Salvia divinorum* are currently not controlled under the federal Controlled Substances Act (CSA) (see <http://www.usdoj.gov/dea/pubs/csa.html>). However, because of concerns about the increasing abuse of these substances by adolescents and young adults, Delaware, Louisiana, Maine, Missouri, North Dakota, Oklahoma, and Tennessee have placed salvinorin A and/or *Salvia divinorum* under regulatory control as of May 2007. In addition, legislative bills proposing regulatory controls on salvinorin A and/or *Salvia divinorum* are pending in 14 other states.

There is very limited information on reported seizures and cases involving salvinorin A and *Salvia divinorum*. Seizures are not frequently reported, and forensic laboratories do not

routinely analyze seizures of *Salvia divinorum* or purported samples of salvinorin A. According to the System To Retrieve Information from Drug Evidence II (STRIDE), from 2000 to 2006, federal law enforcement authorities seized three drug exhibits containing *Salvia divinorum*. The National Forensic Laboratory Information System (NFLIS) registered seven cases from January 2001 through December 2005. However, as more states control salvinorin A and *Salvia divinorum*, the Drug Enforcement Administration (DEA) expects that more information on seizures and cases involving salvinorin A and *Salvia divinorum* will be reported.

The DEA has reviewed the relevant data and will request a scientific and medical evaluation and scheduling recommendation for salvinorin A from the U.S. Department of Health and Human Services. The DEA's Drug and Chemical Evaluation Section (ODE), Office of Diversion Control, continues to gather information on the abuse, diversion, and trafficking of salvinorin A and *Salvia divinorum*. The ODE would appreciate receiving any information related to federal, state, and local law enforcement encounters, drug identification, diversion, and abuse of salvinorin A and *Salvia divinorum*.

Contact Us

Dr. Patricia M. Brundage, Pharmacologist
Drug and Chemical Evaluation Section
Office of Diversion Control
Drug Enforcement Administration, Washington, DC 20537
Phone: 202-307-7183
Fax: 202-353-1263
E-mail: patricia.m.brundage@usdoj.gov

Tryptamines and Phenethylamines—Request for Information

Recently, there has been an increase in law enforcement encounters of several tryptamines and phenethylamines. These substances are not scheduled under the Controlled Substances Act (CSA) (see <http://www.usdoj.gov/dea/pubs/csa.html>). The following provides partial lists of these substances.

Tryptamines include these substances:

- N,N-dipropyltryptamine (DPT)
- N,N-diisopropyltryptamine (DIPT)
- 5-methoxy-N,N-diethyltryptamine (5-MeO-DET)
- 5-methoxy-N,N-dimethyltryptamine (5-MeO-DMT)
- 5-methoxy-alpha-methyltryptamine (5-MeO-AMT)
- 5-methoxy-N-methyl-N-isopropyltryptamine (5-MeO-MIPT)
- 4-hydroxy-N,N-diisopropyltryptamine (4-OH-DIPT)

Phenethylamines include these substances:

- 2,5-dimethoxy-4-ethylthiophenethylamine (2C-T-2)
- 2,5-dimethoxy-4-iodo-phenethylamine (2C-I)
- 2,5-dimethoxy-4(2-fluoroethylthio)phenethylamine (2C-T-21)
- 2,5-dimethoxy-4-ethylphenethylamine (2C-E)
- 2,5-dimethoxy-4-chlorophenethylamine (2C-C)

For purposes of possible future scheduling under the CSA, the Drug and Chemical Evaluation Section (ODE), Office of Diversion Control, is monitoring the abuse and the public health risks for these substances and several other tryptamines and phenethylamines. The ODE is responsible for collecting and analyzing the data used by the government in scheduling decisions. Federal, state, and local law enforcement agencies and forensic laboratories often provide valuable information for this purpose. We would appreciate receiving any information related to law enforcement encounters, drug identification, and abuse of the above-mentioned tryptamines and phenethylamines and any related substances.

Contact Us

Dr. Srihari R. Tella, Pharmacologist
Drug and Chemical Evaluation Section
Office of Diversion Control
Drug Enforcement Administration, Washington, DC 20537
Phone: 202-307-7175
Fax: 202-353-1263
E-mail: Srihari.R.Tella@usdoj.gov

PARTICIPATING AND REPORTING FORENSIC LABORATORIES

State	Lab Type	Laboratory Name	Reporting
AK	State	Alaska Department of Public Safety	✓
AL	State	Alabama Department of Forensic Sciences (10 sites)	✓
AR	State	Arkansas State Crime Laboratory	✓
AZ	Local	Mesa Police Department	✓
	Local	Phoenix Police Department	✓
	Local	Scottsdale Police Department	✓
CA	State	California Department of Justice (10 sites)	✓
	Local	Contra Costa County Sheriff's Office	✓
	Local	Fresno County Sheriff's Forensic Laboratory	✓
	Local	Kern County District Attorney's Office (Bakersfield)	✓
	Local	Long Beach Police Department	✓
	Local	Los Angeles Police Department (2 sites)	✓
	Local	Los Angeles County Sheriff's Department (4 sites)	✓
	Local	Orange County Sheriff's Department	✓
	Local	Sacramento County District Attorney's Office	✓
	Local	San Bernardino Sheriff's Office (2 sites)	✓
	Local	San Diego County Sheriff's Department	✓
	Local	San Diego Police Department	✓
	Local	San Francisco Police Department	✓
	Local	San Mateo County Sheriff's Office (San Mateo)	✓
	Local	Santa Clara District Attorney's Office (San Jose)	✓
	Local	Ventura County Sheriff's Department	✓
CO	State	Colorado Bureau of Investigation (3 sites)	✓
	Local	Aurora Police Department	✓
	Local	Colorado Springs Police Department	✓
	Local	Denver Police Department Crime Laboratory	✓
	Local	Grand Junction Police Department	✓
	Local	Jefferson County Sheriff's Office (Golden)	✓
CT	State	Connecticut Department of Public Safety	✓
DE	State	Chief Medical Examiner's Office	✓
FL	State	Florida Department of Law Enforcement (8 sites)	✓
	Local	Broward County Sheriff's Office (Ft. Lauderdale)	✓
	Local	Miami-Dade Police Department Crime Laboratory	✓
	Local	Indian River Crime Laboratory	✓
	Local	Pinellas County Forensic Laboratory (Largo)	✓
	Local	Sarasota County Sheriff's Office	✓
GA	State	Georgia State Bureau of Investigation (7 sites)	✓
HI	Local	Honolulu Police Department	✓
IA	State	Iowa Division of Criminal Investigations	✓
ID	State	Idaho State Police (3 sites)	✓
IL	State	Illinois State Police (8 sites)	✓
	Local	DuPage County Sheriff's Office (Wheaton)	✓
	Local	Northern Illinois Police Crime Laboratory (Chicago)	✓
IN	State	Indiana State Police Laboratory (4 sites)	✓
	Local	Indianapolis-Marion County Forensic Laboratory	✓
KS	State	Kansas Bureau of Investigation (3 sites)	✓
	Local	Johnson County Sheriff's Office (Mission)	✓
	Local	Sedgwick County Regional Forensic Science Center (Wichita)	✓
KY	State	Kentucky State Police (6 sites)	✓
LA	State	Louisiana State Police	✓
	Local	Acadiana Criminalistics Laboratory (New Iberia)	✓
	Local	Jefferson Parish Sheriff's Office (Metairie)	✓
	Local	New Orleans Police Department Crime Laboratory	✓
	Local	North Louisiana Criminalistics Laboratory System (3 sites)	✓
	Local	Southwest Louisiana Regional Laboratory (Lake Charles)	✓
MA	State	Massachusetts Department of Public Health (2 sites)	✓
	State	Massachusetts State Police	✓
	Local	University of Massachusetts Medical Center (Worcester)	✓
MD	Local	Anne Arundel County Police Department (Millersville)	✓
	Local	Baltimore City Police Department	✓
	Local	Baltimore County Police Department (Towson)	✓
	Local	Montgomery County Crime Laboratory (Rockville)	✓
ME	State	Maine Department of Human Services	✓
MI	State	Michigan State Police (7 sites)	✓
	Local	Detroit Police Department	✓
MN	State	Minnesota Bureau of Criminal Apprehension (2 sites)	✓
	Local	St. Paul Police Department	✓
MO	State	Missouri State Highway Patrol (6 sites)	✓
	Local	Independence Police Department	✓
	Local	KCMO Regional Crime Laboratory (Kansas City)	✓
	Local	MSSU Regional Crime Laboratory (Joplin)	✓
	Local	St. Charles County Criminalistics Laboratory	✓
	Local	St. Louis County Crime Laboratory (Clayton)	✓
	Local	St. Louis Police Department	✓
	Local	South East Missouri Regional Crime Laboratory (Cape Girardeau)	✓
MS	State	Mississippi Department of Public Safety (4 sites)	✓
	Local	Jackson Police Department Crime Laboratory	✓
	Local	Tupelo Police Department	✓
MT	State	Montana Forensic Science Division	✓
NC	State	North Carolina State Bureau of Investigation (2 sites)	✓
	Local	Charlotte-Mecklenburg Police Department	✓
NE	State	Nebraska State Patrol Criminalistics Laboratory (2 sites)	✓
NJ	State	New Jersey State Police (4 sites)	✓
	Local	Burlington County Forensic Laboratory (Mt. Holly)	✓
	Local	Cape May County Prosecutor's Office	✓
	Local	Hudson County Prosecutor's Office (Jersey City)	✓
	Local	Newark Police Department	✓
	Local	Ocean County Sheriff's Department (Toms River)	✓
	Local	Union County Prosecutor's Office (Westfield)	✓
NM	State	New Mexico Department of Public Safety	✓
	Local	Albuquerque Police Department	✓
NV	Local	Las Vegas Police Department	✓
NY	State	New York State Police (4 sites)	✓
	Local	Erie County Central Police Services Laboratory (Buffalo)	✓
	Local	Monroe County Department of Public Safety (Rochester)	✓
	Local	Nassau County Police Department (Mineola)	✓
	Local	New York City Police Department Crime Laboratory*	✓
	Local	Niagara County Police Department (Lockport)	✓
	Local	Onondaga County Center for Forensic Sciences (Syracuse)	✓
	Local	Suffolk County Crime Laboratory (Hauppauge)	✓
	Local	Westchester County Forensic Sciences Laboratory (Valhalla)	✓
	Local	Yonkers Police Department Forensic Science Laboratory	✓
OH	State	Ohio Bureau of Criminal Identification & Investigation (3 sites)	✓
	State	Ohio State Highway Patrol	✓
	Local	Canton-Stark County Crime Laboratory	✓
	Local	Columbus Police Department	✓
	Local	Hamilton County Coroner's Office (Cincinnati)	✓
	Local	Lake County Regional Forensic Laboratory (Painesville)	✓
	Local	Mansfield Police Department	✓
	Local	Miami Valley Regional Crime Laboratory (Dayton)	✓
	Local	Newark Police Department Forensic Services	✓
	Local	Toledo Police Forensic Laboratory	✓
OK	State	Oklahoma State Bureau of Investigation (5 sites)	✓
OR	State	Oregon State Police Forensic Services Division (8 sites)	✓
PA	State	Pennsylvania State Police Crime Laboratory (6 sites)	✓
	Local	Allegheny County Coroner's Office (Pittsburgh)	✓
	Local	Philadelphia Police Department Forensic Science Laboratory	✓
SC	State	South Carolina Law Enforcement Division	✓
	Local	Charleston Police Department	✓
	Local	Spartanburg Police Department	✓
SD	Local	Rapid City Police Department	✓
TN	State	Tennessee Bureau of Investigation (3 sites)	✓
TX	State	Texas Department of Public Safety (13 sites)	✓
	Local	Austin Police Department	✓
	Local	Bexar County Criminal Investigations Laboratory (San Antonio)	✓
	Local	Brazoria County Crime Laboratory (Angleton)	✓
	Local	Harris County Medical Examiner's Office (Houston)	✓
	Local	Jefferson County Sheriff's Regional Crime Laboratory (Beaumont)	✓
	Local	Pasadena Police Department	✓
	Local	Fort Worth Police Department Criminalistics Laboratory	✓
UT	State	Utah State Crime Laboratory (4 sites)	✓
VA	State	Virginia Division Forensic Science (4 sites)	✓
WA	State	Washington State Patrol (6 sites)	✓
WI	State	Wisconsin Department of Justice (3 sites)	✓
WV	State	West Virginia State Police	✓
WY	State	Wyoming State Crime Laboratory	✓
PR	Territory	Puerto Rico Crime Laboratory	✓

This list identifies participating and reporting laboratories as of April 30, 2007.

Laboratories in bold are part of the national sample.

*The New York City Police Department Crime Laboratory currently reports summary data.

NFLIS BENEFITS AND LIMITATIONS

BENEFITS

The systematic collection and analysis of drug analysis data can improve our understanding of the nation's illegal drug problem. NFLIS serves as a critical resource for supporting drug scheduling policy and drug enforcement initiatives both nationally and in specific communities around the country.

Specifically, NFLIS helps the drug control community achieve its mission by

- providing detailed information on the prevalence and types of controlled substances secured in law enforcement operations;
- identifying variations in controlled and noncontrolled substances at the national, state, and local levels;
- identifying emerging drug problems and changes in drug availability in a timely fashion;
- monitoring the diversion of legitimately marketed drugs into illicit channels;
- providing information on the characteristics of drugs, including quantity, purity, and drug combinations; and
- supplementing information from other drug sources, including the DEA's STRIDE, the Drug Abuse Warning Network (DAWN), the National Survey on Drug Use and Health (NSDUH), and the Monitoring the Future (MTF) study.

NFLIS is an opportunity for state and local laboratories to participate in a useful and high-visibility initiative. Participating laboratories regularly receive reports that summarize national and regional data. In addition, the Interactive Data Site (IDS) is a secure Web site that allows NFLIS participants—including state and local laboratories, the DEA, other federal drug control agencies, and researchers—to run customized queries on the NFLIS data. Enhancements to the IDS will also provide a new interagency exchange forum that will allow the DEA, forensic laboratories, and other members of the drug control community to post and respond to current information.

LIMITATIONS

NFLIS has limitations that must be considered when interpreting findings generated from the database.

- Currently, NFLIS includes data from state and local forensic laboratories, as well as data from DEA's STRIDE. STRIDE includes data from DEA's laboratories across the country. The STRIDE data are shown separately in this report. Efforts are under way to enroll additional federal laboratories during 2007.
- NFLIS includes drug chemistry results from completed analyses only. Drug evidence secured by law enforcement but not analyzed by laboratories is not included in the database.
- National and regional estimates may be subject to variation associated with sample estimates, including nonresponse bias.
- For results presented in Sections 2 through 5, the absolute and relative frequency of analyzed results for individual drugs can, in part, be a function of laboratories' participating in NFLIS.
- State and local policies related to the enforcement and prosecution of specific drugs can affect the types of drugs submitted to laboratories for analysis.
- Laboratory policies and procedures for handling drug evidence vary. Some laboratories analyze all evidence submitted to them, while others analyze only selected items. Many laboratories do not analyze drug evidence if the criminal case was dismissed from court or if no defendant could be linked to the case.
- Laboratories vary with respect to the records they maintain. For example, some laboratories' automated records include the weight of the sample selected for analysis (e.g., the weight of one of five bags of powder), while others record total weight.

NFLIS INTERACTIVE DATA SITE

Available since September 2001, the NFLIS Interactive Data Site (IDS) allows NFLIS laboratories to run queries on their own case-level data as well as on aggregated regional and national data.

The IDS operates as a secure section of the NFLIS Web site located on a restricted server. To access the IDS, each NFLIS laboratory is assigned a laboratory-specific username and password.

Over the past 2 years, a number of enhancements have been made to the IDS, including providing World Wide Web access to the IDS. This provides more secure and confidential IDS access, as well as improved system performance for laboratories with high-speed/broadband Web access. Laboratories without Internet access can still use a modem to make a direct dial-up

connection to the IDS. As part of the enhanced IDS, different access levels are assigned to satisfy the specific NFLIS data needs of various users. Information about NFLIS, published reports, links to agencies, information relevant to drug control efforts, and NFLIS contact information are available to the general public. Participating NFLIS laboratories have access to their own case- and item-level data, as well as to aggregated state- and metropolitan-level data. Nonparticipating laboratories have access to aggregated state- and metropolitan-level data. Users have the ability to conduct analyses using preset queries. New usernames and passwords are required to access restricted areas of the NFLIS Web site, including the IDS. To participate, please visit the NFLIS Web site at <https://www.nflis.dea.diversion.usdoj.gov/>.

The screenshot shows the NFLIS Home page in a Windows Internet Explorer browser window. The browser title is "National Forensic Laboratory Information System - Windows Internet Explorer". The address bar shows the URL "https://www.nflis.dea.diversion.usdoj.gov/Default.aspx". The page header includes the DEA logo and "Drug Enforcement Administration Office Of Diversion Control". The main content area is titled "NFLIS Home" and contains a detailed description of the system, a "Member Login" section with username and password fields, and a "NFLIS NEWS" section with a "6/28/2006 DEA Alert" about "Illicit Manufacture of Fentanyl" and a "2006 Mid Year Report" now available. The footer includes "Last Updated 5/24/2007 12:04:13 PM" and links for "DEA Diversion Control", "Site Map", "Contacts", "FAQ", and "Disclaimer".

NATIONAL ESTIMATES METHODOLOGY

Since 2001, NFLIS reports have included national and regional estimates for the number of drug items and drug cases analyzed by state and local forensic laboratories in the United States. This appendix discusses the methods used for producing these estimates, including sample selection, weighting, and imputation and adjustment procedures. RTI International, under contract to the DEA, began implementing NFLIS in September 1997. Results from a 1998 survey provided laboratory-specific information, including annual caseload figures, used to establish a national sampling frame of all state and local forensic laboratories that routinely perform drug analyses. A representative probability proportional to size sample was drawn on the basis of annual cases analyzed per laboratory, resulting in a NFLIS national sample of 29 state laboratory systems and 31 local or municipal laboratories, a total of 165 individual laboratories (see Appendix A for a list of sampled and nonsampled NFLIS laboratories). Only the data for those laboratories that reported drug analysis data for 6 or more months during 2006 were included in the national estimates.

WEIGHTING PROCEDURES

Data were weighted with respect to both the original sampling design and nonresponse in order to compute design-consistent, nonresponse-adjusted estimates. Weighted prevalence estimates were produced for drug cases and drug items analyzed by state and local forensic laboratories from January 2006 through December 2006.

A separate item-level and case-level weight was computed for each sample laboratory or laboratory system using caseload information obtained from an updated laboratory survey administered in 2004. These survey results allowed for the case- and item-level weights to be poststratified to reflect current levels of laboratory activity. Item-level prevalence estimates were computed using the item-level weights, and case-level estimates were computed using the case-level weights.

DRUG REPORT CUTOFF

Not all drugs are reported by laboratories with sufficient frequency to allow reliable estimates to be computed. For some drugs, such as cannabis/THC and cocaine, thousands of items are reported annually, allowing for reliable national prevalence estimates to be computed. Many other substances have 100 or fewer annual observations for the entire sample. A prevalence estimate based upon such few observations is not likely to be

reliable and thus was not included in the national estimates.

The method for evaluating the cutoff point was established using the coefficient of variation, or CV, which is the ratio between the standard error of an estimate and the estimate itself. As a rule, drug estimates with a CV greater than 0.5 were suppressed and not shown in the tables.

IMPUTATIONS AND ADJUSTMENTS

Due to technical and other reporting issues, several laboratories did not report data for every month during 2006. This resulted in missing monthly data, which is a concern in calculating national estimates of drug prevalence. Imputations were performed separately by drug for laboratories missing monthly data, using drug-specific proportions generated from laboratories reporting a full year of data.

Although most forensic laboratories report case-level analyses in a consistent manner, a small number of laboratories do not produce item-level counts that are comparable with those submitted by the vast majority of laboratories. Most laboratories report items in terms of the number of vials of the particular pill, yet a few laboratories report the count of the individual pills themselves as items. Because the case-level counts across laboratories are comparable, they were used to develop item-level counts for the few laboratories that count items differently. For those laboratories, it was assumed that drug-specific ratios of cases to items should be similar to laboratories serving similarly sized areas. Item-to-case ratios for each drug were produced for the similarly sized laboratories, and these drug-specific ratios were then used to adjust the drug item counts for the relevant laboratories.

STATISTICAL TECHNIQUES FOR TREND ANALYSIS

A trend analysis was performed on the January 2001 through December 2006 national and regional estimates. Typically, models test for mean differences; however, the national and regional estimates are totals. To work around this challenge, a bootstrapping technique was employed. (Bootstrapping is an iterative technique used to estimate variances when standard variance estimation procedures cannot be used.)* All statistical tests were performed at the 95% confidence level ($\alpha = .05$). In other words, if a linear trend was found to be statistically different, then the probability of observing a linear trend (under the assumption that no linear trend existed) was less than 5%.

* For more information on this technique, see Chernick, M.R. (1999). *Bootstrap Methods: A Practitioner's Guide*. New York: Wiley.

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Drug Enforcement Administration
Office of Diversion Control
600 Army Navy Drive
Arlington, VA 22202

Attention: DeMia Peters, DEA Program Officer
Phone: 202-307-7732
Fax: 202-353-1263
E-mail: DeMia.E.Peters@usdoj.gov



RTI International*
Health, Social, and Economics Research
3040 Cornwallis Road, PO Box 12194
Research Triangle Park, NC 27709-2194

Attention: Valley Rachal, NFLIS Project Director
Phone: 1-800-334-8571, ext. 7712
Fax: 919-485-7700
E-mail: jvr@rti.org

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