

# Contents

Result Highlights																				i	
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Introduction .....

Section 1

tional a	and Regional Estimates2
1.1	Drug Items Analyzed2
1.2	Drug Cases Analyzed 4
1.3	National and Regional
	Quarterly Drug Trends 5
	tional : 1.1 1.2 1.3

#### Section 2

Ma

ja	or Di	rug Categories7
	2.1	Narcotic Analgesics7
	2.2	Benzodiazepines 8
	2.3	Club Drugs9
	2.4	Anabolic Steroids9
	2.5	Stimulants 11

#### Section 3

Drug Cor	mbinations 12
3.1	Cocaine Combinations 12
3.2	Heroin Combinations 13
3.3	Methamphetamine
	Combinations

- Appendix B: Participating and Reporting Laboratories ..... 16

#### Appendix C: NFLIS Benefits

& Limitations																	1	7
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# **Result Highlights**

- An estimated 899,889 drug items were analyzed by state and local laboratories in the United States from January 1, 2004, through June 30, 2004. Cannabis/THC was the most frequently identified drug (305,400 items), followed by cocaine (282,867 items), methamphetamine (116,140 items), and heroin (54,421 items).
- Overall, the estimated number of drug items analyzed by state and local laboratories declined from the 1st quarter of 2001 through the 2nd quarter of 2004, from 455,439 to 406,971. Among the top four drugs, the most notable change over this 42-month period was the significant increase in methamphetamine in the South (6,534 items to 10,979 items; α =.05). Despite this increase, the West continues to report methamphetamine at more than four times the rate of other regions.
- Oxycodone and hydrocodone each experienced significant increases from the 1st quarter of 2001 to the 2nd quarter of 2004, with oxycodone increasing from 2,813 to 4,193 and hydrocodone from 2,772 to 4,113. MDMA has significantly declined over this period, decreasing from 5,427 to 2,099 items (α =.05).
- More than two-thirds of narcotic analgesics were identified as hydrocodone (36%) or oxycodone (32%). The highest percentages of oxycodone were reported in the Northeast (49%), followed by the Midwest (34%). Forty-three percent of narcotic analgesics reported in the South and West were identified as hydrocodone.
- One percent of all reported items contained two or more substances, most commonly heroin/cocaine. Overall, nearly 60% of drug combinations contained heroin or cocaine, or both, while over 25% contained methamphetamine.

# Introduction

# NFLIS Overview

The National Forensic Laboratory Information System (NFLIS) is a Drug Enforcement Administration (DEA)– sponsored program that systematically collects results from drug analyses conducted by state and local forensic laboratories. These laboratories analyze controlled and noncontrolled substances secured in law enforcement operations across the country and offer a valuable resource for monitoring and understanding illegal drug abuse and trafficking, including the diversion of legally manufactured drugs into illegal markets. The scientifically verified analysis data can identify not only the specific type of substance but also characteristics of drug evidence such as purity, quantity, and drug combinations. Information from NFLIS is used to support drug scheduling efforts as well as to inform drug policy and drug enforcement initiatives.

Since its implementation in September 1997, NFLIS has become an operational information system that includes data from forensic laboratories that handle over 71% of the nation's nearly 1.2 million annual state and local drug analysis cases. As of September 2004, 41 state systems and 78 local or municipal laboratories, representing a total of 241 individual labs, had joined NFLIS. Over the next year we will continue to work toward recruiting all state and local labs, while also incorporating federal labs from the DEA, the Federal Bureau of Investigation (FBI), Customs & Border Protection, and other federal agencies into the system. Federal data from these agencies will complement drug analysis data from DEA's System To Retrieve Information from Drug Evidence II (STRIDE), which is already a part of the NFLIS database.

This report presents the results of substances analyzed by state and local laboratories from January 2004 through June 2004. Federal laboratory data from STRIDE are also included in this report. Section 1 provides national and regional estimates for the most frequently identified drugs, as well as national and regional trends. These estimates are based on data reported among the NFLIS national sample of laboratories. Sections 2 and 3 present drug analysis results for all state and local laboratories reporting 3 or more months of data to NFLIS during this 6-month period. These include findings on major drug categories and drug combinations.



# Section 1: National and Regional Estimates

This section presents national and regional estimates for drug items analyzed from January 2004 through June 2004, as well as national and regional trends since 2001. National drug case estimates are also presented. A national laboratory sample was used to produce estimates of drug identified by forensic laboratories for the nation and for census regions. Appendix A provides a detailed description of the methods used for the weighting and imputation procedures. A list of NFLIS laboratories, including those in the national sample, can be found in Appendix B. Appendix C describes the benefits and limitations of NFLIS.

# 1.1 DRUG ITEMS ANALYZED

From January 2004 through June 2004, an estimated 899,889 drug items were analyzed by state and local forensic laboratories in the United States. Drug items (or exhibits) are typically defined as specimens within a case. Table 1.1 presents estimates for the 25 most frequently identified drug items for the nation and for census regions.

The 25 most commonly identified drugs accounted for an estimated 837,383 items, or about 93% of all drugs analyzed by state and local laboratories during this period. Cannabis/ THC (305,400 items, or 34%), cocaine (282,867 items, or 31%), methamphetamine (116,140 items, or 13%), and heroin (54,421 items, or 6%) were the four most frequently identified drugs, accounting for 84% of all analyzed drug items.

Many of the additional drugs reported in the top 25 were substances available pharmaceutically. Overall, 13 of the substances in the top 25 were controlled drugs available in pharmaceutical products, the vast majority of which were either narcotic analgesics or benzodiazepines. Narcotic analgesics included oxycodone (10,393 items), hydrocodone (9,862 items), methadone (3,528 items), codeine (2,226 items), morphine (1,412 items), and propoxyphene (1,112 items). Benzodiazepines included alprazolam (10,549 items), diazepam (3,618 items), clonazepam (2,992 items), and lorazepam (772 items). In addition, two club drugs were reported in the top 25-3,4-methylenedioxymethamphetamine (MDMA) (4,769 items) and 3,4methylenedioxyamphetamine (MDA) (1,043 items). The top 25 also included three non-controlled drugspseudoephedrine (5,021 items), acetaminophen (2,890), and carisoprodol (1,487), a muscle relaxant. For the first time, iodine (565 items), a non-controlled drug that is used in the manufacturing of methamphetamine, was one of the top 25 most commonly identified drugs.

# System to Retrieve Information from Drug Evidence II (STRIDE)

The DEA's System To Retrieve Information from Drug Evidence II (STRIDE) reflects results of substance evidence from drug seizures, undercover drug buys, and other evidence analyzed at the eight DEA laboratories located across the country. STRIDE includes results for drug cases submitted by DEA agents, other federal law enforcement agencies, and select local police agencies. While STRIDE captures both domestic and international drug cases, the following results present only those drugs obtained within the United States.

From January 2004 through June 2004, 27,367 drug items were reported in STRIDE, representing about 3% of estimated drug items reported by state and local labs during this same period. Similar to the amounts reported in NFLIS, a large proportion of substances in STRIDE were identified as the top 4 drugs: cocaine (29%), cannabis/THC (26%), methamphetamine (16%), and heroin (9%). In addition, 3% of drugs in STRIDE were reported as pseudoephedrine and 3% as MDMA.

Compared to state and local labs participating in NFLIS, DEA federal labs reported similar percentages of cocaine (29% in STRIDE vs. 31% in NFLIS) but a lower percentage of cannabis/THC (26% in STRIDE vs. 34% in NFLIS). Slightly higher percentages of methamphetamine (16% in STRIDE vs. 13% in NFLIS), heroin (9% vs. 6%), MDMA (3% vs. <1%), and pseudoephedrine (3% vs. <1%) were reported by DEA labs.

### MOST FREQUENTLY IDENTIFIED DRUGS IN STRIDE, January 2004–June 2004

Drug	Number	Percent
Cocaine	7,970	29.12%
Cannabis/THC	7,203	26.32%
Methamphetamine	4,346	15.88%
Heroin	2,461	8.99%
Pseudoephedrine	841	3.07%
MDMA	790	2.89%
Hydrocodone	291	1.06%
Non-controlled, non-narcotic drug	291	1.06%
Testosterone	220	0.80%
Alprazolam	212	0.77%
All Other Drugs	2,742	10.02%
Total Analyzed Items	27,367	100.00%

 
 Table 1.1
 NATIONAL AND REGIONAL ESTIMATES FOR THE 25 MOST FREQUENTLY IDENTIFIED DRUGS\*
 Estimated number and percentage of total analyzed drug items, January 2004–June 2004.

Drug	National		v	Vest	Μ	idwest	No	rtheast	South		
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Cannabis/THC	305,400	33.94%	42,818	22.87%	103,520	48.44%	45,882	31.63%	113,180	31.98%	
Cocaine	282,867	31.43%	37,125	19.83%	57,606	26.96%	55,594	38.32%	132,541	37.45%	
Methamphetamine	116,140	12.91%	71,046	37.94%	16,196	7.58%	648	0.45%	28,250	7.98%	
Heroin	54,421	6.05%	6,411	3.42%	11,441	5.35%	18,599	12.82%	17,970	5.08%	
Alprazolam	10,549	1.17%	***	***	1,735	0.81%	1,601	1.10%	6,580	1.86%	
Oxycodone	10,393	1.15%	957	0.51%	1,671	0.78%	3,673	2.53%	4,093	1.16%	
Hydrocodone	9,862	1.10%	1,091	0.58%	1,468	0.69%	1,286	0.89%	6,017	1.70%	
Non-controlled, non-narcotic drug	9,199	1.02%	3,516	1.88%	2,009	0.94%	2,055	1.42%	1,618	0.46%	
Pseudoephedrine**	5,021	0.56%	815	0.44%	1,970	0.92%	***	***	2,230	0.63%	
MDMA	4,769	0.53%	1,006	0.54%	570	0.27%	732	0.50%	2,461	0.70%	
Diazepam	3,618	0.40%	497	0.27%	722	0.34%	562	0.39%	1,837	0.52%	
Methadone	3,528	0.39%	417	0.22%	594	0.28%	1,038	0.72%	1,479	0.42%	
Clonazepam	2,992	0.33%	312	0.17%	575	0.27%	911	0.63%	1,194	0.34%	
Acetaminophen	2,890	0.32%	***	***	845	0.40%	***	***	671	0.19%	
Phencyclidine (PCP)	2,242	0.25%	499	0.27%	251	0.12%	1,116	0.77%	376	0.11%	
Codeine	2,226	0.25%	161	0.09%	344	0.16%	287	0.20%	1,434	0.41%	
Amphetamine	2,208	0.25%	528	0.28%	409	0.19%	349	0.24%	923	0.26%	
Psilocin	1,802	0.20%	689	0.37%	459	0.21%	202	0.14%	452	0.13%	
Carisoprodol	1,487	0.17%	383	0.20%	153	0.07%	75	0.05%	875	0.25%	
Morphine	1,412	0.16%	337	0.18%	291	0.14%	250	0.17%	533	0.15%	
Propoxyphene	1,112	0.12%	78	0.04%	421	0.20%	85	0.06%	528	0.15%	
MDA	1,043	0.12%	240	0.13%	129	0.06%	286	0.20%	388	0.11%	
Methylphenidate	865	0.10%	121	0.06%	281	0.13%	187	0.13%	275	0.08%	
Lorazepam	772	0.09%	117	0.06%	220	0.10%	157	0.11%	279	0.08%	
lodine	565	0.06%	379	0.20%	***	***	-	0.00%	102	0.03%	
Top 25 Total	837,383	93.05%	171,133	91.39%	203,964	95.45%	136,000	93.75%	326,285	92.20%	
All Other Analyzed Items	62,506	6.95%	16,116	8.61%	9,722	4.55%	9,069	6.25%	27,598	7.80%	
Total Analyzed Items	899,889	100.00%	187,249	100.00%	213,686	100.00%	145,069	100.00%	353,883	100.00%	

\* Sample n's and 95% confidence intervals for all estimates are available from the DEA or RTI.

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

\*\*\* These elements do not meet standards of precision and reliability due to their small sample sizes.

# 1.2 Drug Cases Analyzed

Drug analysis results are also reported to NFLIS at the case level. These typically describe drugs identified within a drugrelated incident, although a small proportion of labs may assign a single case number to all drug submissions related to an entire investigation. Table 1.2 provides national case estimates for cases containing the 25 most commonly identified drugs. Because multiple drugs can be reported within a single case, the cumulative percentage for all substances exceeds 100%.

Nationally, more than three-quarters of drug cases reported from January 2004 through June 2004 contained one or more cannabis/THC (39%) or cocaine (37%) items. Approximately 14% of cases were estimated to have contained methamphetamine, while about 7% of cases contained heroin. Alprazolam was estimated to have been included in 8,564 cases (1.5%), followed by oxycodone (7,867 cases), hydrocodone (7,841), and MDMA (3,750).



# Table 1.2NATIONAL CASE ESTIMATESNumber and percentage of cases containing<br/>the 25most frequently identified drugs,<br/>January 2004–June 2004.

Drug	Number	Percent
Cannabis/THC	223,815	38.53%
Cocaine	214,072	36.85%
Methamphetamine	81,273	13.99%
Heroin	40,800	7.02%
Alprazolam	8,564	1.47%
Oxycodone	7,876	1.36%
Hydrocodone	7,841	1.35%
Non-controlled, non-narcotic drug	6,945	1.20%
MDMA	3,750	0.65%
Pseudoephedrine*	3,298	0.57%
Diazepam	3,102	0.53%
Methadone	2,850	0.49%
Clonazepam	2,623	0.45%
Acetaminophen	2,477	0.43%
Phencyclidine	1,936	0.33%
Codeine	1,767	0.30%
Amphetamine	1,757	0.30%
Carisoprodol	1,384	0.24%
Psilocin	1,367	0.24%
Morphine	1,174	0.20%
Propoxyphene	979	0.17%
MDA	942	0.16%
Methylphenidate	688	0.12%
Lorazepam	679	0.12%
lodine	437	0.08%
Top 25 Total	622,396	107.14%
All Other Drugs	47,627	8.18%
Total All Drugs	670,023	115.32% **

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

\*\* Multiple drugs can be reported within a single case, so the cumulative percentage exceeds 100%. The estimated national total of distinct cases that drug case percentages are based on is 575,152.

### 1.3 NATIONAL AND REGIONAL QUARTERLY DRUG TRENDS

### National drug trends

Figures 1.1 and 1.2 describe national trends for the estimated number of drug items analyzed for 3-month periods from January 2001 through June 2004. It is important to note that while these data may describe trafficking and abuse patterns, they may also reflect differing drug enforcement priorities and laboratory policies. Overall, there was a decrease in total items analyzed during this period, from 457,967 during the first quarter of 2001 to 442,327 during the second quarter of 2004.

Among the top 4 drugs, cannabis/THC declined from 161,343 to 152,298, as did cocaine, from 151,294 to 137,810 (Figure 1.1). Methamphetamine, however, experienced a slight increase in the total number of items analyzed, while heroin remained relatively unchanged. Only the downward trend for cannabis/THC was statistically significant ( $\alpha$ =.05).

Figure 1.1 National estimates for top four drugs by quarter, January 2001–June 2004.



Figure 1.2 presents trends for other selected drugs: MDMA, alprazolam, oxycodone, and hydrocodone. Among these drugs, only MDMA experienced a significant decline during this 42-month period, decreasing from 5,427 to 2,115 items. The linear trend for oxycodone and hydrocodone during this time increased significantly. Oxycodone items increased from 2,771 to 5,463, and the number of hydrocodone items increased from 2,742 to 5,010. Alprozolam items also increased (from 3,616 to 5,400).

#### Regional drug trends, adjusted for population

Figure 1.3 shows regional trends per 100,000 persons age 15 or older for the top 4 drugs. This illustrates changes in drugs





reported over time, taking into account the population of each region.

Methamphetamine increased significantly in the South, more than doubling from 8 to 17 per 100,000 (6,534 items to 13,494 items). However, the highest rate of methamphetamine continues to be reported in the West, with 71 per 100,000. The only significant change for cannabis/THC was in the South, with a decline from 82 to 71 items per 100,000 ( $\alpha$ =.05). Overall, the highest rate of cannabis/THC continues to be reported in the Midwest, followed by the South. There were no significant changes for cocaine over the 31/2-year period. The highest rate of cocaine was reported by laboratories in the South, followed by the Northeast. There were no significant changes in heroin reporting over this period. Northeastern laboratories continue to report heroin at nearly twice the rate as in the South and the Midwest and at more than three times the rate in the West.

Figure 1.4 shows regional trends per 100,000 persons age 15 or older for other selected drugs reported from January 2001 through June 2004. MDMA declined significantly in all four regions, especially in the Northeast and the South ( $\alpha$ =.05). MDMA declined in the Northeast from 3.0 to 0.7 per 100,000 (1,275 to 318 items) and in the South from 3.3 to 1.4 per 100,000 (2,589 to 1,129 items). Oxycodone increased significantly in the Northeast and West. In the Northeast, the rate of oxycodone more than tripled over this period from 636 items to 2,075 items (1.5 per 100,000 to 4.9). In the West, the rate of oxycodone increased from 89 items to 570 items (0.2 per 100,000 to 1.2). Hydrocodone increased significantly in the Northeast and the South. In the Northeast, the rate of hydrocodone increased from 0.3 per 100,000 to 1.7. In the South, the rate increased from 2.3 per 100,000 to 3.8.

5



Figure 1.4 Trends in other selected drugs reported per 100,000 population 15 and older, January 2001–June 2004.



# Section 2: Major Drug Categories

Section 2 presents results for major drug categories reported by NFLIS labs during January 2004 through June 2004. 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 were based on data reported by the NFLIS national sample. Section 2 and subsequent sections reflect data reported by all NFLIS labs that provided 3 or more months of data during the first 6 months of 2004. During this 6-month period, 571,108 analyzed drug items were reported by NFLIS labs.

# 2.1 NARCOTIC ANALGESICS

The abuse of narcotic analgesics, a category of pain medications derived from natural or synthetic opiates, has increased substantially since the mid-1990s. From 1995 to 2002, drug abuse–related mentions of narcotic analgesics at emergency departments nearly tripled, from 45,254 to 119,185.<sup>1</sup> In addition, the 2003 National Survey on Drug Use and Health (NSDUH) findings show there was a significant increase between 2002 and 2003 in the number of persons age 12 or older with lifetime non-medical use of pain relievers, from 29.6 million to 31.2 million.<sup>2</sup>

Table 2.1	NARCOTIC ANALGESICS
	Number and percentage of total identified narcotic analgesics, January 2004–June 2004.

Analgesics	Number	Percent
Hydrocodone	7,425	36.06%
Oxycodone	6,538	31.75%
Methadone	2,172	10.55%
Codeine	1,297	6.30%
Morphine	992	4.82%
Propoxyphene	734	3.56%
Dihydrocodeine	656	3.19%
Hydromorphone	306	1.49%
Tramadol*	167	0.81%
Meperidine	128	0.62%
Fentanyl	97	0.47%
Pentazocine	44	0.21%
Buprenorphine	27	0.13%
Butorphanol	3	0.01%
Nalbuphine*	3	0.01%
Oxymorphone	1	0.00%
Total Narcotic Analgesics	20,590	100.00%

\*Non-controlled narcotic analgesics.





NFLIS labs identified 16 different narcotic analgesics, representing 20,590 items (about 4% of all items analyzed), from January 2004 through June 2004 (Table 2.1). More than two-thirds of all narcotic analgesics reported were identified as hydrocodone (36%) or oxycodone (32%). In addition, 11% of narcotic analgesics were identified as methadone, 6% as codeine, and 5% as morphine.

The Northeast continued to report the highest relative percentages of oxycodone (49%) and methadone (17%) from January 2004 to June 2004 (Figure 2.1). The highest proportions of hydrocodone were reported in the South (43%) and the West (43%). In the Midwest, 34% of narcotic analgesics were reported as oxycodone and 26% as hydrocodone. The West reported the highest percentage of morphine (9%), and the Midwest reported the highest percentages of dihydrocodeine (10%) and propoxyphene (6%) (not shown in figure).

<sup>&</sup>lt;sup>1</sup>Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (2003). *Drug Abuse Warning Network (DAWN). The DAWN Report: Narcotic Analgesics.* 

<sup>&</sup>lt;sup>2</sup>Substance Abuse and Mental Health Services Administration. (2004). *Results from the 2003 National Survey on Drug Use and Health: National Findings* (Office of Applied Studies, NSDUH Series H-25, DHHS Publication No. SMA 04-3964). Rockville, MD.

### 2.2 BENZODIAZEPINES

From 1995 to 2002, drug abuse-related emergency department (ED) visits involving benzodiazepines increased 41%. In 2002, over 100,000 drug abuse-related ED visits involved benzodiazepines, nearly half of them the result of suicide attempts.<sup>3</sup>

A total of 12,699 items, about 2% of all analyzed drugs, were identified in NFLIS from January 2004 through June 2004 as benzodiazepines (Table 2.2). Nearly 60% of benzodiazepines were identified as alprazolam (e.g., Xanax), and nearly 20% were identified as diazepam (e.g., Valium). About 17% of benzodiazepines were reported as clonazepam (e.g., Rivotril).

More than half of benzodiazepines in the South, Northeast, and Midwest and nearly a third in the West were identified as alprazolam (Figure 2.2). The highest percentage of benzodiazepines reported as diazepam (32%) and clonazepam (28%) occurred in the West.

Table 2.2	BENZODIAZEPINES
	Number and percentage of total identified
	benzodiazepines, January 2004–June 2004.

Benzodiazepines	Number	Percent
Alprazolam	7,365	58.00%
Diazepam	2,489	19.60%
Clonazepam	2,131	16.78%
Lorazepam	512	4.03%
Temazepam	116	0.91%
Chlordiazepoxide	48	0.38%
Triazolam	20	0.16%
Flunitrazepam	17	0.13%
Midazolam	1	0.01%
Total Benzodiazepines	12,699	100.00%

### Figure 2.2 Distribution of benzodiazepines within region, January 2004–June 2004.



Diazepam



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8

# 2.3 CLUB DRUGS

"Club drug" refers to a wide variety of drugs including MDMA (Ecstasy), GHB, Rohypnol, ketamine, methamphetamine, and LSD. From 1994 to 1999 club drug–related ED visits more than doubled, but from 2000 to 2002 ED visits associated with GHB/GBL (gammahydroxybutyrate or gamma-butyrolactone), ketamine, LSD, and MDMA remained stable. In 2002, club drugs were involved in only about 1%, or 8,100, ED visits.<sup>4</sup>

Less than 1% (4,248 items) of the 571,108 drug items reported in NFLIS from January 2004 through June 2004 were club drugs. MDMA was by far the most common club drug reported by labs, representing 73% (3,093 items) of the club drugs reported (Table 2.3). Among other club drugs reported, 15% were identified as MDA, 6% as ketamine, and 5% as GHB/GBL.

Across each region, MDMA was the most common club drug reported, representing 82% in the West, 77% in the South, 76% in the Midwest, and 50% in the Northeast (Figure 2.3). In the Northeast, 16% of club drugs were identified as ketamine and 29% were identified as MDA, the highest percentages of any region. The South reported the highest percentage of GHB (6%).



<sup>4</sup>Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (2004). Drug Abuse Warning Network (DAWN). *The DAWN Report: Club Drugs, 2002 Update.* 

### Table 2.3 C

**CLUB DRUGS** Number and percentage of total identified club drugs, January 2004–June 2004.

Club Drug	Number	Percent
MDMA	3,093	72.81%
MDA	645	15.18%
Ketamine	259	6.10%
GHB/GBL	210	4.94%
MDEA	21	0.49%
BZP	8	0.19%
TFMPP	7	0.16%
5-MeO-DIPT	4	0.09%
AMT	1	0.021%
Total Club Drugs	4,248	100.00%

MDEA = 3,4-Methylenedioxyethylamphetamine BZP = N-Benzylpiperazine

TFMPP = 1-(3-Trifluoromethylphenyl)piperazine

5-MeO-DIPT = 5-Methoxy-N,N-diisopropyltryptamine  $AMT = \alpha$ -methyltryptamine





# 2.4 ANABOLIC STEROIDS

Anabolic steroids are synthetically produced variants of the naturally occurring male hormone testosterone. Though medically prescribed for various conditions, anabolic steroids are commonly abused by athletes and bodybuilders to improve their physical performance. However, there is increasing concern regarding possible physical and psychological health problems associated with the abuse of steroids, such as high blood cholesterol, high blood pressure, severe acne, sterility and infertility, mood swings, depression, hostility, and aggression.<sup>5</sup>

From January 2004 through June 2004, a total of 665 anabolic steroid items were reported in NFLIS (Table 2.4). Anabolic steroids were most commonly identified as testosterone (33%), methandrostenolone (20%), nandrolone (12%), or stanozolol (12%). The highest percentage of testosterone was reported in the South (39%), followed by the Midwest (35%), West (25%), and Northeast (22%) (Figure 2.4). About 33% of steroids in the Midwest were identified as methandrostenolone.

Table 2.4	<b>ANABOLIC STEROIDS</b> Number and percentage of identified anabolic steroids, January 2004–June 2004.			
Steroids		Number	Percent	
Testosterone		219	32.93%	
Methandroster	nolone	136	20.45%	
Nandrolone		78	11.73%	
Stenozolol		77	11.58%	

9.32%

4.21%

4.06%

2.71%

1.05%

0.90%

0.75%

0.15%

0.15%

100.00%

62

28

27

18

7

6

5

1

1

665

Figure 2.4	Distribution of anabolic steroids within reg	gion,
	January 2004–June 2004.	





Stenozolol Anabolic steroids, not specified Boldenone Oxymetholone Oxandrolone

Total Anabolic Steroids

Fluoxymesterone

Mesterolone

Methandriol

Methenolone

Methyltestosterone

# 2.5 STIMULANTS

According to the 2003 NSDUH, more than 20 million people reported having used stimulants at least once in their lifetime. The stimulant most frequently reported was methamphetamine, with over 12 million reporting ever having used it.<sup>2</sup> Methamphetamine is a highly addictive central nervous system stimulant and the most prevalent synthetic drug manufactured in the United States.

A total of 85,309 stimulants were identified in NFLIS from January 2004 through June 2004, accounting for about 15% of all items reported (Table 2.5). About 97% of stimulants, or 82,498 items, were identified as methamphetamine. An additional 1,579 items were identified as amphetamine, 494 as methylphenidate (e.g., Ritalin), 293 as ephedrine (a precursor to making methamphetamine), and 215 as caffeine.

 STIMULANTS

 Number and percentage of total identified

	1	0 2	5
stimulants,	January	2004–June	2004.

Stimulants	Number	Percent
Methamphetamine	82,498	96.70%
Amphetamine	1,579	1.85%
Methylphenidate	494	0.58%
Ephedrine	293	0.34%
Caffeine	215	0.25%
Phentermine	146	0.17%
Benzphetamine	23	0.03%
Phedimetrazine	17	0.02%
Fenfluramine	11	0.01%
Cathinone	8	0.01%
Diethylpropion	7	0.01%
N,N-Dimethylamphetamine	5	0.01%
Modafinil	4	0.00%
Pemoline	4	0.00%
Phenylpropanolamine	2	0.00%
Sibutramine	2	0.00%
Phenmetrazine	1	0.00%
Total Stimulants	85,309	100.00%

With the exception of the Northeast, methamphetamine accounted for the majority of stimulants reported in every region (Figure 2.5). Methamphetamine represented 99% of the stimulants reported in the West, 95% in the Midwest, and 94% in the South. In the Northeast, 47% of stimulants were reported as methamphetamine, 34% as amphetamine, and 14% as methylphenidate.





# Section 3: Drug Combinations

NFLIS can provide information on drug combinations or multiple substances reported within a single drug item. Mixing substances or taking multiple drugs simultaneously can have serious health consequences. Medical examiner data from the Drug Abuse Warning Network (DAWN) show that approximately three-quarters of drug-related deaths during 2002 involved two or more substances. The most common drug combinations involved in drug-related deaths were cocaine and heroin/morphine; heroin/morphine and narcotic analgesics; and cocaine/narcotic analgesics.<sup>6</sup>

From January 2004 through June 2004, 5,722 items identified in NFLIS contained two or more substances (Table 3.1). The three most common substances—cocaine/heroin (16%), cannabis/cocaine (10%), and methamphetamine/cannabis (6%)—represented nearly one-third of all combinations reported (Figure 3.1).

# 3.1 COCAINE COMBINATIONS

Cocaine, including powder and crack cocaine, was present in 38% of drug combinations reported during this 6-month period (Table 3.1). A total of 910 items contained heroin and cocaine, a combination commonly referred to as a "speedball," and 582 items contained cocaine/cannabis. Cocaine/methamphetamine, a combination referred to as "zoom," was reported in 155 items, or about 3% of all combinations. All of the remaining cocaine-related combinations reported in Table 3.1 were excipients used to dilute cocaine. These include non-controlled substances such as inositol, boric acid, procaine, caffeine, lactose, lidocaine, and benzocaine.



# Drug Combinations Reported in STRIDE, January 2004–June 2004

In STRIDE, which includes results from substances analyzed at DEA laboratories, 11,326 drug combinations were reported during the first 6 months of 2004. Methamphetamine was present in 36% of combinations identified in STRIDE, including methamphetamine/ dimethylsulfone (22%), methamphetamine/MDMA (4%), and methamphetamine/pseudoephedrine (3%). Cocaine was present in 21% of combinations, most commonly cocaine/procaine (5%), cocaine/caffeine (3%), and cocaine/lidocaine (2%). Heroin was present in 22% of combinations, including heroin/procaine (4%), heroin/quinine (4%), heroin/caffeine (3%), and heroin/lidocaine (3%).



<sup>&</sup>lt;sup>6</sup>Substance Abuse Mental Health Services Administration (2004). *Mortality Data from the Drug Abuse Warning Network, 2002* (Office of Applied Studies, DAWN Series D-25, DHHS Publication No. SMA 04-3875). Rockville, MD.

Table 3.1	<b>COCAINE COMBINATIO</b> <i>Total items identified as coo</i> <i>January 2004–June 2004.</i>	ONS caine combina	ations,		
Substance One Substance Two Number Percent					
Cocaine	Heroin	910	15.90%		
Cocaine	Cannabis	582	10.17%		
Cocaine	Inositol	164	2.87%		
Cocaine	Methamphetamine	155	2.71%		
Cocaine	Procaine	81	1.42%		
Cocaine	Boric acid	74	1.29%		
Cocaine	Lactose	59	1.03%		
Cocaine	Benzocaine	29	0.51%		
Cocaine	Lidocaine	18	0.31%		
Cocaine	Caffeine	14	0.24%		
Other cocaine combinations		103	1.80%		
Total Cocaine	e Combinations	2,189	38.26%		
All Combinat	tions	5,722			

### 3.2 HEROIN COMBINATIONS

Heroin was present in 1,646 items, representing 29% of drug combinations reported from January 2004 through June 2004 (Table 3.2). More than half of the heroin combinations reported were identified as heroin/cocaine. Of the other substances combined with heroin, many were excipients designed to dilute heroin and provide bulk to the material. The most commonly reported excipients were procaine (a local anesthetic), mannitol, lidocaine, and caffeine.

Table 3.2	HEROIN COMBINATIONS
	Total items identified as heroin combinations
	January 2004–June 2004

Substance One	Substance Two	Number	Percent
Heroin	Cocaine	910	15.90%
Heroin	Procaine	218	3.81%
Heroin	Cannabis	137	2.39%
Heroin	Mannitol	118	2.06%
Heroin	Lidocaine	69	1.21%
Heroin	Caffeine	42	0.73%
Heroin	Methamphetamine	32	0.56%
Heroin	Acetaminophen	26	0.45%
Heroin	Lactose	22	0.38%
Heroin	Inositol	10	0.17%
Other heroin combinations		62	1.08%
Total Heroin Com	binations	1,646	28.77%
All Combinations		5,722	



### 3.3 Methamphetamine Combinations

Over one-quarter of drug combinations contained methamphetamine (Table 3.3). Methamphetamine/cannabis (339 items), methamphetamine/amphetamine (272 items), and methamphetamine/MDMA (268 items) were the most commonly reported combinations. Dimethylsulfone, a diluent typically used by Mexican trafficking organizations, was reported in 211 items. Cocaine was reported in combination with methamphetamine in 155 items. Methamphetamine combinations that include pseudoephedrine or phosphorus may reflect impurities resulting from a clandestine manufacturing process.

# Table 3.3METHAMPHETAMINE COMBINATIONSTotal items identified as methamphetamine<br/>combinations, January 2004–June 2004.

Substance One	Substance Two	Number	Percent
Methamphetamine	Cannabis	339	5.92%
Methamphetamine	Amphetamine	272	4.75%
Methamphetamine	MDMA	268	4.68%
Methamphetamine	Dimethylsulfone	211	3.67%
Methamphetamine	Cocaine	155	2.71%
Methamphetamine	MDA	65	1.14%
Methamphetamine	Heroin	32	0.56%
Methamphetamine	Ammonia gas	20	0.35%
Methamphetamine	Pseudoephedrine	20	0.35%
Methamphetamine	Phosphorus	13	0.23%
Other methamphetamine combinations		114	1.99%
Total Methamphetamine Combinations		1,509	26.39%
All Combinations		5,722	

# DEA Update

#### National Drug-Related Death Information System

There is no national data system that provides information regarding drug-related overdose deaths. Although existing federal drug abuse databases such as the Drug Abuse Warning Network (DAWN), Poison Control Center data, and the National Violent Death Reporting System (NVDRS) provide some information on drug-related overdose deaths, they do not provide the type or quality of information necessary to support the mission and accomplish the task of the Drug Enforcement Administration (DEA) in a timely and efficient manner.

The DEA is currently developing a National Drug-related Death Reporting System (NDDRS). This system, which is Internet-based, will be used to collect extensive information from medical examiners' and coroner's offices on deaths associated with drug use. The database will contain scientifically verified toxicological analysis and cause of death. This information will supplement and complement information obtained from the databases mentioned above. The combined information from all these sources will present a more complete indicator of the nature and extent of drug-related deaths.

Because the existing databases that track emergency department admissions (e.g., DAWN) do not provide data in a timely manner, emerging trends in drug abuse have not been detected early enough to allow for law enforcement or regulatory intervention. Meanwhile, several OxyContin®-like high-dose extended release narcotic analgesic drug products are either approved or are currently being reviewed for approval for marketing. Thus, there is an urgent need to establish a database that can detect the potential adverse public health consequences resulting from the introduction of these high-dose extended release narcotic analgesic products into the market.

Since the NDDRS is Internet-based, participating medical examiners' offices and coroner's offices will be able to input

**Tryptamines and Phenethylamines – Request for Information** 

Recently there has been an increase in law enforcement encounters with selected tryptamines and phenethylamines. Many of these substances are likely to be psychoactive, though none of them are currently scheduled under the Controlled Substances Act (CSA). The following is a partial list of these substances:

Tryptamines include

- 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-methyltyrptamine (5-MeO-AMT)
- 4-methoxy-N-methyl-N-isopropyltryptamine (4-MeO-MIPT)
- 5-methoxy-N-methyl-N-isopropyltryptamine (5-MeO-MIPT)
- N-methyl-N-isopropyltryptamine (MIPT)
- 4-hydroxy-N,N-diisopropyltryptamine (4-OH-DIPT)
- Phenethylamines include
- 2,5-dimethoxy-4-ethylthiophenethylamine (2C-T-2)
- 4-iodo-2,5-dimethoxy-phenethylamine (2C-I)

information directly, thereby updating the database as soon as their cases are finalized, usually within 2 to 4 months of the date of death. This will allow the DEA to quickly identify and target new and emerging drugs of abuse and link those trends to persons responsible for the diversion and/or trafficking of such drugs. It will also allow for the rapid dissemination of information on detected drugs to medical examiners, coroners, and other health professionals across the United States with access to the database.

The information from NDDRS has several other potential uses: providing information for use in drug scheduling actions; detecting new or changing trends in drug abuse; providing information to generate a statistically valid and accurate picture of drug availability; providing an additional basis for agency funding, personnel and resource allocation, and operational priorities; supporting drug policy determinations; enabling the U.S. to better estimate the availability, abuse, and trafficking of substances to fulfill international treaty requirements; and providing regional, state, and local trends of drug trafficking and abuse.

#### **Contact Us**

Drug and Chemical Evaluation Section (ODE) Office of Diversion Control **Drug Enforcement Administration** Washington, DC 20537 Dr. Christine Sannerud, Chief of ODE, DEA E-mail: chris.a.sannerud@usdoj.gov Phone: 202-307-7183 Susan Carr, Deputy Chief of ODE, DEA Phone: 202-307-7183 E-mail: susan.m.carr@usdoj.gov Dr. Karla Moore, Drug Science Officer, ODE, DEA Phone: 202-307-7732 E-mail: karla.a.moore@usdoj.gov Dr. Srihari Tella, Pharmacologist, ODE, DEA Phone: 202-307-7175 E-mail: srihari.r.tella@usdoj.gov Fax: 202-353-1263

- 2,5-dimethoxy-4(2-fluoroethylthio)phenethylamine (2C-T-21)
- 2,5-dimethoxy-4-ethylphenethylamine (2C-E)
- 2,5-dimethoxy-4-cholorophenethylamine (2C-C)
- 5-chloro-3,4-dimethoxyphenethylamine
- 5-(2-aminopropyl)indane (API)

The Drug and Chemical Evaluation Section (ODE) within the Office of Diversion Control at DEA Headquarters is interested in documenting the distribution, abuse, and possible public health risks of the tryptamines and phenethylamines listed above. This information is being documented for the possible future placement of these substances under the CSA. Federal, state, and local law enforcement agencies and forensic laboratories often provide valuable information for this purpose.

ODE would appreciate receiving any information related to law enforcement encounters, drug identification, and abuse of the tryptamines and phenethylamines listed here. Please contact ODE pharmacologist Dr. Srihari R. Tella (contact information above) with any information pertaining to these substances.

# 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 section 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 labs that routinely perform drug analyses. A representative probability proportional to size (PPS) 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 B for a list of sampled and nonsampled NFLIS labs). Only the data for those laboratories that reported drug analysis data for 3 or more months during the first 6 months of 2004 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 labs from January 2004 through June 2004.

A separate item-level and case-level weight was computed for each sample laboratory or laboratory system using caseload information obtained from an updated lab survey administered in 2004. These survey results allowed for the case- and item-level weights to be post-stratified 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 labs did not report data for every month during the first 6 months of 2004. 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 labs reporting all 6 months of data.

While most forensic laboratories report case-level analyses in a consistent manner, a small number of labs do not produce item-level counts that are comparable to those submitted by the vast majority of labs. 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." Since the case-level counts across labs are comparable, they were used to develop item-level counts for the few labs that count items differently. For those labs, it was assumed that drug-specific ratios of cases to items should be similar to labs 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.

#### **Stastical Techniques for Trend Analysis**

A trend analysis was performed on the January 2001 through June 2004 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 esimate variances when standard variance estimation procedures cannot be used\*). All statistical tests were performed at the 95% confidence level ( $\alpha$ =.05), thus the probability of declaring a significant result when the result was not significant was 5%. In other words, if the first reported quarter was found to be statistically different from the last reported quarter, the probability of observing the same or larger difference (under the assumption that no difference existed) was less than 5%.

\* For more information on this technique, please refer to Chemick, M.R. (1999). Bootstrap Methods: A Practioner's Guide. John Wiley and Sons.

# PARTICIPATING AND REPORTING LABORATORIES

State	Lab Type	Lab Name Reportin	ng
AK	State	Alaska Department of Public Safety (Anchorage)	-
AL	State	Alabama Department of Forensic Sciences (9 sites)*	Х
AR	State	Arkansas State Crime Laboratory (Little Rock)*	Х
AZ	Local Local	Scottsdale PD Phoenix PD Mesa PD	x
CA	State	California Department of Justice (10 sites)*	X
C. I.	Local	Fresno County Sheriff's Forensic Lab (Fresno)	X
	Local Local	Kern County District Attorney's Office (Bakersfield)	Х
	Local	Los Angeles Police Department (2 sites)*	Х
	Local Local	Los Angeles County Sheriff's Department (4 sites)* Sacramento County District Attorney's Office (Sacramento)*	X X
	Local	San Bernardino Sheriff's Office (2 sites)*	Х
	Local Local	San Diego Police Department (San Diego)* San Francisco Police Department (San Francisco)*	Х
	Local	San Mateo County Sheriff's Office (San Mateo)	Х
	Local Local	Santa Clara District Attorney's Office (San Jose) Ventura County Sheriff's Department (Ventura)	X X
со	Local	Aurora Police Department (Aurora)	Х
	Local	Denver Police Department (Denver)*	Х
	Local	Jefferson County Sheriff's Office (Golden)	Х
СТ	State	Connecticut Department of Public Safety (Hartford)*	Х
DE	State	DE State System	Х
FL	State	Florida Department of Law Enforcement (8 sites)*	X
	Local	Miami-Dade Police Department (Miami)*	X
	Local	Indian River Crime Laboratory at Indian River	v
	Local	Pinellas County Forensic Laboratory (Largo)	X
	Local	Sarasota County Sheriff's Office (Sarasota)	Х
GA	State	Georgia State Bureau of Investigation (7 sites)*	Х
HI	Local	Honolulu Police Department (Honolulu)	X
	State	Iowa Division of Criminal Investigation (Des Moines)*	X
	State	Idano State Police (3 sites)*	X
IL	Local	DuPage County Sheriff's Office (Wheaton)	X
	Local	Northern Illinois Police Crime Lab (Chicago)*	Х
IN	State Local	Indiana State Police Laboratory (4 sites)* Indianapolis-Marion County Forensic Lab (Indianapolis)	X X
KS	State	Kansas Bureau of Investigation (3 sites)	X x
	Local	Sedgwick County Regional Forensic Science Center (Witchita)	X
KY	State	Kentucky State Police (6 sites)*	Х
LA	State	Louisiana State Police Crime Laboratory (Baton Rouge)*	Х
	Local Local	Acadiana Criminalistics Laboratory (New Iberia)* Jefferson Parish Sheriff's Office Crime Lab (Metairie)	X X
	Local	New Orleans Police Department Crime Lab (New Orleans)*	Х
	Local	North Louisiana Criminalistics Lab System (3 sites)	X
MA	State	Massachusetts Department of Public Health (2 sites)* Massachusetts Department of State Police (Sudbury)*	X X
	Local	University of Massachusetts Medical Center (Worchester)	Х
MD	Local	Anne Arundel County Police Department (Millersville)*	X
	Local	Baltimore County Police Department (Towson)	X
ME	State	Maine Department of Human Services (Augusta)*	Х
MI	State Local	Michigan State Police (7 sites)* Detroit Police Department (Detroit)*	X X
MN	State	Minnesota Bureau of Criminal Apprehension (2 sites)	X
	Local	St. Paul Police Department (St. Paul)	

	Lab		
State	Туре	Lab Name Report	ing
МО	State	Missouri State Highway Patrol (6 sites)*	X
	Local	MSSU Regional Crime Lab (Joplin)	x
	Local	St. Louis Police Department (St. Louis)*	Х
	Local	St. Louis County Crime Laboratory (Clayton)	Х
	Local	South Fast Missouri Regional Crime Lab (Cape Girardeau)*	Х
MS	State	Mississippi Department of Public Safety (4 sites)*	Х
MT	State	Montana Forensic Science Division (Missoula)	Х
NC	State	North Carolina State Bureau of Investigation (2 sites)*	Х
	Local	Charlotte-Mecklenburg Police Department (Charlotte)	
NE	State	Nebraska State Patrol Criminalistics Lab (2 sites)*	
NJ	State	New Jersey State Police (4 sites)*	v
	Local	Cape May County Porensic Lab (Mit. Holly)	X X
	Local	Hudson County Prosecutor's Office (Jersey City)	~
	Local	Newark Police Department (Newark)	Х
	Local	Union County Sheriff's Department (Toms River)	X X
NM	State	New Mexico Department of Public Safety (Sante Fe)*	X
NV		Las Vegas Police Department (Las Vegas)*	X
NY	State	New York State Police (4 sites)	
[``	Local	Erie County Central Police Services Lab (Buffalo)	Х
	Local	Monroe County Department of Public Safety (Rochester)	V
	Local	Niagara County Police Department (Lockport) Nassau County Police Department (Mineola)*	X X
	Local	New York Police Department Crime Laboratory**	x
	Local	Onondaga County Center for Forensic Sciences (Syracuse)*	Х
	Local	Suffolk County Crime Laboratory (Hauppauge) Westchester County Forensic Sciences Laboratory (Valballa)	Х
	Local	Yonkers Police Department Forensic Science Lab (Yonkers)	
ОН	State	Ohio Bureau of Criminal Identification & Investigation (3 site	s) X
	State	Ohio State Highway Patrol (Columbus)*	X
	Local	Columbus Police Department (Columbus)	^
	Local	Hamilton County Coroners Office (Cincinnati)*	Х
	Local	Lake County Regional Forensic Lab (Painesville)*	Х
	Local	Mansheid Police Department Crime Lab (Mansheid) Miami Valley Regional Crime Lab (Dayton)*	X
	Local	Newark Police Department Forensic Services (Newark)	
ОК	State	Oklahoma State Bureau of Investigation (5 sites)	
OR	State	Oregon State Police Forensic Services Division (8 sites)*	Х
PA	Local Local	Allegheny County Coroner's Office (Pittsburgh)* Philadelphia Police Department (Philadelphia)*	X X
SC	State Local	South Carolina Law Enforcement Division (Columbia)* Charleston Police Department (Charleston)	X X
SD	Local	Rapid City Police Department (Rapid City)	Х
TN	State	Tennessee Bureau of Investigation (5 sites)*	
тх	State	Texas Dept. of Public Safety (13 sites)*	Х
	Local	Austin Police Department Crime Laboratory (Austin)^ Bexar County Criminal Investigations Lab (San Antonio)*	X
	Local	Harris County Medical Examiner's Office (Houston)	Х
	Local	Pasadena Police Department (Pasadena)	Х
UT	State	Utah State Crime Lab (4 sites)	Х
VA	State	Virginia Division Forensic Science (4 sites)*	Х
WA	State	Washington State Patrol (6 sites)*	Х
WI	State	Wisconsin Department of Justice (3 sites)	Х
WV	State	West Virginia State Police (South Charleston)*	Х
WY	State	Wyoming State Crime Laboratory (Cheyenne)	Х

\* Laboratory is part of our national sample.
 \*\* The New York City Crime lab is part of the national sample and currently reports summary data.

# NFLIS BENEFITS & 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
- 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) Survey.

NFLIS is an opportunity for state and local labs to parti-cipate 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 website 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 inter-agency exchange forum that will allow the DEA, forensic laboratories, and other member 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 only includes data from state and local forensic laboratories. Drug analyses conducted by federal laboratories are not included, although data from STRIDE, which includes data from DEA's laboratories across the country, have recently been added to the NFLIS database. The STRIDE data are shown separately in this report. Efforts are under way to enroll additional federal laboratories during 2004.
- 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 and 3, 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.

### **ACKNOWLEDGMENTS**

This report was prepared under contract DEA-03- C-0013, Drug Enforcement Administration, U.S. Department of Justice. Points of view or opinions expressed in this document do not necessarily represent the official position of the DEA or the U.S. Department of Justice.

At DEA, Liqun Wong contributed to the report and provided oversight across all preparation stages. At RTI, BeLinda Weimer was the major contributor and led its production, assisted by Allison Forti; Valley Rachal and Kevin Strom provided oversight and guidance; Albert Bethke and Jeffrey Ancheta oversaw the database preparation; Celia Eicheldinger and Allison Burns provided statistical analysis and review; Shari Lambert oversaw the graphic design; and Joanne Studders edited the report.