

100





### NATIONAL FORENSIC LABORATORY INFORMATION SYSTEM

### Midyear Report 2003







### Contents

. . . 1

Introduction										
Innounchon										

### Section 1

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

### Section 2

Major Dr	rug Categories7
2.1	Narcotic Analgesics7
2.2	Benzodiazepines
2.3	Club Drugs9
2.4	Anabolic Steroids 10
2.5	Stimulants 10

### Section 3

D

rug	Cor	nbinations 12
	3.1	Cocaine Combinations 12
	3.2	Heroin Combinations 13
	3.3	Methamphetamine
		Combinations

DEA Update: Emerging Drugs

References												15	5

- Appendix B: Participating and Reporting Laboratories ..... 16
- Appendix C: NFLIS Benefits & Limitations ......17

### **Result Highlights**

Section 1:

- An estimated 874,251 drug items were analyzed by state and local laboratories in the United States from January 1, 2003, through June 30, 2003. Cannabis/THC was the most frequently identified drug (326,454 items), followed by cocaine (276,122 items), methamphetamine (102,426 items), and heroin (51,343 items).
- The estimated number of drug items analyzed by state and local laboratories declined from the 1st quarter of 2001 through the 2nd quarter of 2003 from 455,439 to 440,300. Over this 30-month period, the number of cannabis/THC items reported increased slightly (162,202 to 166,616) and the number of cocaine items declined (152,743 to 138,249). Methamphetamine (52,955 to 52,443) and heroin (26,832 to 25,849) remained relatively unchanged. None of the changes were significant at the 95% confidence level ( $\alpha$ =.05).
- Oxycodone and hydrocodone each experienced significant increases from the 1st quarter of 2001 to the 2nd quarter of 2003, with oxycodone increasing from 2,813 to 4,193 and hydrocodone from 2,772 to 4,113. Among other selected drugs, the number of MDMA items increased from 5,523 during the first quarter of 2001 to 8,407 during the fourth quarter of 2001, then declined significantly (α=.05) to 2,796 in 2003.

### Section 2:

- Overall, 34% of narcotic analgesics were identified as hydrocodone, 31% as oxycodone, and 10% as methadone. In the Northeast, 49% of narcotic analgesics were identified as oxycodone, 17% as hydrocodone, and 17% as methadone.
- Among benzodiazepines, nationally 54% were reported as alprazolam, 23% as diazepam, and 16% as clonazepam. In the West, 45% were reported as diazepam, 23% as alprazolam, and 21% as clonazepam.
- 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 18% 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 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. NFLIS data are 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 conduct nearly 70% of the nation's estimated 1.2 million annual state and local drug analysis cases. As of August 2003, 36 state systems and 62 local or municipal laboratories, representing a total of 197 individual labs, had joined NFLIS.

Over the next year, we will continue efforts to recruit all state and local labs, while incorporating federal laboratories operated by the Federal Bureau of Investigation (FBI), Customs & Border Protection, and other federal agencies into the system. As an initial step toward integrating federal laboratory data into NFLIS, data from the DEA's System to Retrieve Information from Drug Evidence II (STRIDE) has recently been added to the NFLIS database. STRIDE reflects the results of drug evidence analyzed at the eight DEA laboratories across the country.

This report provides the results of substances analyzed by state and local laboratories participating in NFLIS. Section 1 presents national and regional estimates for the 25 most frequently identified drugs, as well as quarterly trends for national and regional estimates from January 2001 through June 2003. These estimates are based on drug analysis data reported among the NFLIS national sample of laboratories. The remaining sections (Sections 2 and 3) present drug analysis results for all state and local laboratories reporting 3 or more months of data to NFLIS from January through June 2003. These include findings on major drug categories as well as reported drug combinations.



### Section 1: National and Regional Estimates

This section presents national and regional estimates for drug items analyzed from January through June 2003, as well as national and regional trends since 2001. National drug case estimates are also presented. A national sample of laboratories was used to produce estimates of drugs identified by forensic laboratories for the nation and for census regions. Appendix A describes 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 benefits and limitations of NFLIS.

### 1.1 Drug Items Analyzed

From January through June 2003, an estimated 874,251 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 drugs for the nation and for census regions.

The 25 most commonly identified drugs accounted for an estimated 826,379 items, or nearly 95% of all drugs analyzed by state and local laboratories during this period. The top four drugs accounted for 87% of all drugs, with 326,454 items reported as cannabis/THC (37%), 276,122 as cocaine (32%), 102,426 as methamphetamine (12%), and 51,343 as heroin (6%).

Many of the other drugs reported in the top 25 were pharmaceuticals. Overall, 13 of the top 25 were controlled drugs widely available in pharmaceutical products, the vast majority of which were either narcotic analgesics or benzodiazepines. Narcotic analgesics included oxycodone (8,228 items), hydrocodone (7,965 items), methadone (2,285 items), codeine (1,601 items), morphine (1,238 items), and propoxyphene (976 items). Benzodiazepines included alprazolam (9,126 items), diazepam (3,834 items), clonazepam (2,615 items), and lorazepam (804 items).

Two club drugs were reported in the top 25—3,4-methylenedioxymethamphetamine (MDMA) (5,806 items) and 3,4methylenedioxyamphetamine (MDA) (687 items). The top 25 also included three non-controlled drugs—pseudoephedrine (5,677 items) and ephedrine (755), two List I chemicals used to produce methamphetamine, and carisoprodol (1,608), a muscle relaxant.

### 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 the DEA, other federal law enforcement agencies, and some local police agencies. While STRIDE captures data on both domestic and international drug cases, the following results present only those drugs obtained within the U.S.

From January through June 2003, 29,201 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 NFLIS, a large proportion of items/exhibits in STRIDE were identified as cocaine (30%), cannabis/THC (26%), methamphetamine (15%), or heroin (9%). In addition, 3% of drugs in STRIDE were reported as MDMA and 3% as pseudoephedrine.

Compared to state and local labs, federal labs reported similar percentages of cocaine (30% in STRIDE vs. 32% in NFLIS), but a lower percentage of cannabis/THC (26% in STRIDE vs. 37% in NFLIS). Slightly higher percentages of methamphetamine (15% in STRIDE vs. 12% 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 2003–June 2003

29.71% 26.02% 14.90%
14.90%
9.21%
3.44%
2.96%
2.39%
0.76%
0.76%
0.62%
9.24%
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 2003–June 2003.

Drug	National			West		idwest		rtheast	South		
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Cannabis/THC	326,454	37.34%	42,518	25.39%	108,542	50.19%	43,151	33.76%	132,243	36.46%	
Cocaine	276,122	31.58%	35,342	21.11%	56,981	26.35%	48,513	37.95%	135,286	37.30%	
Methamphetamine	102,426	11.72%	61,232	36.57%	16,828	7.78%	212	0.17%	24,154	6.66%	
Heroin	51,343	5.87%	5,982	3.57%	10,516	4.86%	17,253	13.50%	17,592	4.85%	
Alprazolam	9,126	1.04%	***	***	1,630	0.75%	1,265	0.99%	5,683	1.57%	
Oxycodone	8,228	0.94%	640	0.38%	1,608	0.74%	2,777	2.17%	3,203	0.88%	
Non-controlled, non-narcotic drug	7,977	0.91%	***	***	2,039	0.94%	1,631	1.28%	1,474	0.41%	
Hydrocodone	7,965	0.91%	1,053	0.63%	1,192	0.55%	901	0.70%	4,819	1.33%	
MDMA	5,806	0.66%	1,027	0.61%	827	0.38%	1,000	0.78%	2,952	0.81%	
Pseudoephedrine**	5,677	0.65%	***	***	2,269	1.05%	***	***	1,845	0.51%	
Diazepam	3,834	0.44%	528	0.32%	583	0.27%	563	0.44%	2,160	0.60%	
Clonazepam	2,615	0.30%	236	0.14%	488	0.23%	914	0.71%	976	0.27%	
Phencyclidine (PCP)	2,541	0.29%	774	0.46%	302	0.14%	999	0.78%	467	0.13%	
Methadone	2,285	0.26%	290	0.17%	402	0.19%	716	0.56%	877	0.24%	
Acetaminophen	2,018	0.23%	***	***	774	0.36%	24	0.02%	614	0.17%	
Amphetamine	1,943	0.22%	422	0.25%	317	0.15%	257	0.20%	947	0.26%	
Carisoprodol	1,608	0.18%	***	***	173	0.08%	96	0.08%	963	0.27%	
Codeine	1,601	0.18%	264	0.16%	346	0.16%	185	0.14%	806	0.22%	
Psilocin	1,468	0.17%	643	0.38%	310	0.14%	75	0.06%	440	0.12%	
Morphine	1,238	0.14%	325	0.19%	243	0.11%	280	0.22%	391	0.11%	
Propoxyphene	976	0.11%	57	0.03%	302	0.14%	147	0.11%	469	0.13%	
Methylphenidate	882	0.10%	55	0.03%	224	0.10%	226	0.18%	377	0.10%	
Lorazepam	804	0.09%	114	0.07%	214	0.10%	203	0.16%	273	0.08%	
Ephedrine	755	0.09%	54	0.03%	152	0.07%	***	***	***	***	
MDA	687	0.08%	167	0.10%	152	0.07%	56	0.04%	312	0.09%	
Top 25 Total	826,379	94.52%	157,649	94.16%	207,414	95.91%	121,444	95.00%	339,871	93.55%	
All Other Analyzed Items	47,872	5.48%	9,783	5.84%	8,835	4.09%	6,391	5.00%	22,865	6.45%	
Total Analyzed Items	874,251	100.00%	167,431	100.00%	216,249	100.00%	127,835	100.00%	362,736	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.

An estimated 41% of drug cases reported from January 2001 through June 2003 contained one or more cannabis/THC items. Cocaine was identified in an estimated 210,971 cases during this period, or 37% of all cases nationally. Nearly 13% of cases were estimated to have contained methamphetamine, while about 7% of cases contained heroin. Alprazolam was estimated to have been included in 7,295 cases (1.3%), followed by hydrocodone (6,402 cases), oxycodone (6,121), and MDMA (4,478).



### Table 1.2 NATIONAL CASE ESTIMATES Number and percentage of cases containing

the 25most frequently identified drugs, January 2003–June 2003.

Drug	Number	Percent
Cannabis/THC	237,216	41.11%
Cocaine	210,971	36.56%
Methamphetamine	72,134	12.50%
Heroin	38,017	6.59%
Alprazolam	7,295	1.26%
Hydrocodone	6,402	1.11%
Non-controlled, non-narcotic drug	6,268	1.09%
Oxycodone	6,121	1.06%
MDMA	4,478	0.78%
Pseudoephedrine*	3,415	0.59%
Diazepam	3,211	0.56%
Phencyclidine (PCP)	2,245	0.39%
Clonazepam	2,203	0.38%
Methadone	1,890	0.33%
Acetaminophen	1,619	0.28%
Amphetamine	1,527	0.26%
Carisoprodol	1,467	0.25%
Codeine	1,303	0.23%
Psilocin	1,199	0.21%
Morphine	1,055	0.18%
Propoxyphene	828	0.14%
Lorazepam	703	0.12%
Methylphenidate	703	0.12%
MDA	581	0.10%
Ephedrine	556	0.10%
Top 25 Total	613,403	106.30%
All Other Cases	35,483	6.15%
Total All Cases	648,886	112.45% **

\* 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 577,024.

4

### 1.3 NATIONAL AND REGIONAL QUARTERLY DRUG TRENDS

### National drug trends

Figure 1.1 describes national trends for the estimated number of drug items analyzed for 3-month periods from January 2001 through June 2003. 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 small decrease in total analyzed items for the top four drugs, from 455,439 during the first quarter of 2001 to 440,300 during the second quarter of 2003. Among the top four drugs, cannabis/THC experienced a slight increase from 162,202 to 166,616, while methamphetamine and heroin remained relatively unchanged. The estimated number of cocaine items reported declined from 152,743 to 138,249. Neither the increase in cannabis/THC nor the increase in cocaine was statistically significant ( $\alpha$ =.05).

Figure 1.1 National estimates for top four drugs by quarter, January 2001–June 2003.

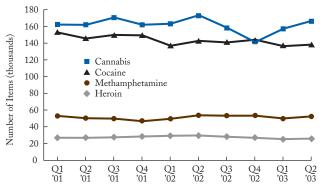
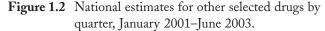
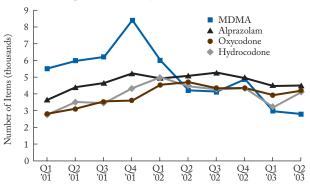


Figure 1.2 presents trends for MDMA, alprazolam, oxycodone, and hydrocodone. Among these selected drugs, MDMA increased significantly from 5,523 during the first quarter of 2001 to 8,407 during the fourth quarter of 2001, and then declined significantly to 2,796 in 2003. Oxycodone and hydrocodone both increased significantly nearly 50% over this time, with oxycodone increasing from 2,813 to 4,193 items and hydrocodone from 2,772 to 4,113 items. Alprazolam experienced a more modest increase, rising from 3,651 to 4,501 items ( $\alpha$ =.05).





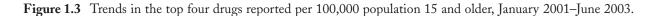
#### Regional drug trends, adjusted for population

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

For cannabis/THC and cocaine there were no significant changes from January 2001 to June 2003 ( $\alpha$ =.05). The highest rate of cannabis/THC items continues to be reported in the Midwest, followed by the South. The highest rate of cocaine continues to be reported in the South. Methamphetamine items declined in the West from 81 per 100,000 to 65 per 100,000, while gradual increases were reported in the Midwest and South. There were no major changes in heroin over this period. Northeastern laboratories continue to report heroin at more than twice the rate as in the South and the Midwest.

Figure 1.4 shows regional trends per 100,000 persons age 15 or older for other selected drugs reported from January 2001 through June 2003. The estimated number of hydrocodone items increased significantly in the Northeast, more than tripling during this 30-month period from 0.3 to 1.2 per 100,000 (129 items to 496 items). The highest rates of hydrocodone continue to be reported in the South. Oxycodone increased significantly in the Northeast, more than doubling over this period from 1.5 to 3.7 per 100,000 (654 items to 1,570 items). Among other selected drugs, MDMA declined in the Northeast from 3.1 to 0.8 per 100,000 (1,327 to 355 items) and in the South from 3.3 to 1.8 per 100,000 (2,620 to 1,409 items). For alprazolam, there were no statistically significant changes across any of the regions between the 1st quarter of 2001 and the 2nd quarter of 2003. Alprazolam continues to be reported at more than double the rate in the South than in other regions.

5



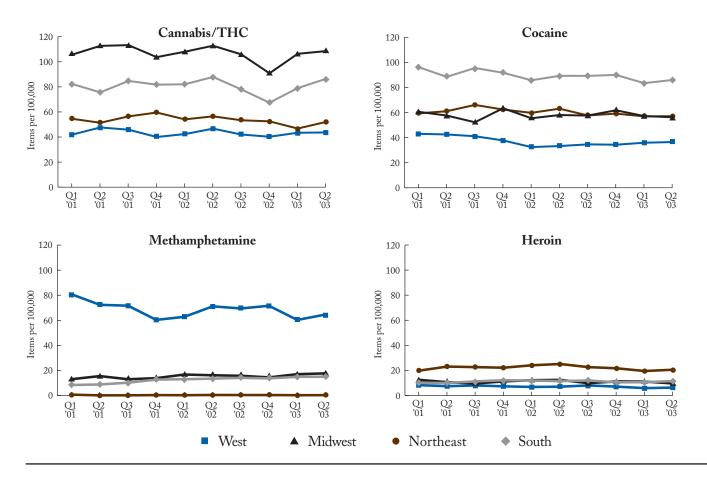
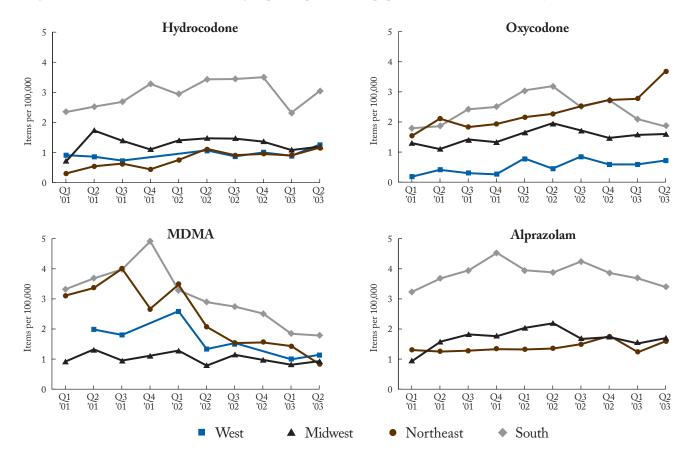


Figure 1.4 Trends in other selected drugs reported per 100,000 population 15 and older, January 2001–June 2003.



### SECTION 2: MAJOR DRUG CATEGORIES

Section 2 presents results for major drug categories reported by NFLIS labs from January through June 2003. It is important to note differences between the results presented in this section and the national and regional estimates described in Section 1. The estimates presented in Section 1 reflect national estimates based on data reported by the NFLIS national sample. Sections 2 and 3 reflect data reported by all labs participating in NFLIS that provided 3 or more months of data in 2003. During this 6-month period, 509,978 analyzed drug items were reported by NFLIS labs.

### 2.1 NARCOTIC ANALGESICS

Narcotic analgesics are a category of pain medications derived from natural or synthetic opiates. Because these drugs produce opiate-like effects, they can serve as reasonable substitutes for heroin, although non-heroin users can become addicted as well. Deaths and emergency department visits related to narcotic analgesics have increased dramatically since the mid-1990s and continue to rise. Emergency department mentions of narcotic analgesics increased from 47,683 to 55,311 from January–June 2001 to January–June 2002 (DAWN, 2003b).

# Table 2.1NARCOTIC ANALGESICS<br/>Number and percentage of total identified<br/>narcotic analgesics, January 2003–June 2003.AnalgesicsNumberPercentHydrocodone4,37333.66%

Oxycodone	4,069	31.33%
Methadone	1,265	9.74%
Codeine	895	6.89%
Morphine	735	5.66%
Propoxyphene	588	4.53%
Dihydrocodeine	434	3.34%
Hydromorphone	230	1.77%
Meperidine	126	0.97%
Tramadol*	117	0.90%
Nalbuphine*	65	0.50%
Fentanyl	64	0.49%
Pentazocine	23	0.18%
Buprenorphine	4	0.03%
Butorphanol	1	0.01%

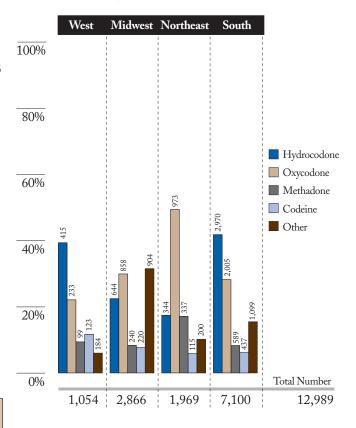
100.00%

12,989

Total Narcotic Analgesics

\*Non-controlled narcotic analgesics.

Figure 2.1 Distribution of narcotic analgesics within region, January 2003–June 2003.



NFLIS labs identified 15 different analgesics representing 12,989 items (about 3% of all items) during January through June 2003 (Table 2.1). Collectively, hydrocodone (34%) and oxycodone (31%) accounted for about two-thirds of all narcotic analgesics reported. In addition, 10% of narcotic analgesics were identified as methadone, 7% as codeine, 6% as morphine, and 5% as propoxyphene.

The Northeast continues to report the highest relative percentages of oxycodone (49%) and methadone (17%) (Figure 2.1). The highest proportions of hydrocodone were reported in the South (42%) and the West (39%). In the Midwest, 30% of narcotic analgesics were reported as oxycodone and 22% as hydrocodone. In addition, 13% were reported as dihydrocodeine, the highest percentage of any region (not shown in detail). The West reported the highest relative percentages of codeine (12%) and morphine (10%; not shown in detail).

### 2.2 BENZODIAZEPINES

Benzodiazepines represent a class of drugs widely prescribed and used as tranquilizers to treat anxiety, stress, panic attacks, and short-term sleep disorders. Due to the large volume of these drugs, there is a great potential for misuse and abuse. Emergency department drug-related mentions of benzodiazepines declined 13% between January–June 2001 and 2002, after increasing steadily since the mid-1990s (DAWN, 2003a). Of benzodiazepines specified during drug-related emergency department visits, more than a third were identified as alprazolam.

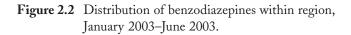
About 2% of all analyzed drugs, or 9,521 items, were identified as benzodiazepines in NFLIS from January 2003 through June 2003 (Table 2.2). The majority of benzodiazepines were identified as alprazolam (e.g., Xanax), and nearly a quarter were identified as diazepam (e.g., Valium). About 16% of benzodiazepines were reported as clonazepam (e.g., Klonopin, Rivotril).

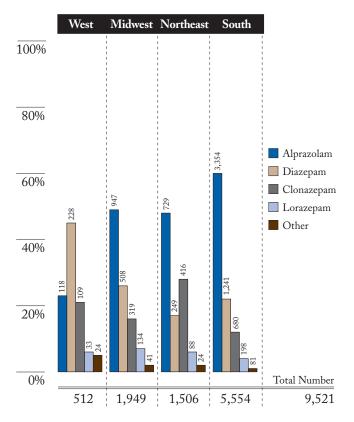
The largest percentages of benzodiazepines in the South (60%), Midwest (49%), and Northeast (48%) were identified as alprazolam (Figure 2.2). In the West, 45% of benzodiazepines were reported as diazepam, 23% as alprazolam, and 21% as clonazepam. Twenty-eight percent of benzodiazepines reported in the Northeast were identified as clonazepam, the highest percentage of any region.

### Table 2.2BENZODIAZEPINES

Number and percentage of total identified benzodiazepines, January 2003–June 2003.

Benzodiazepines	Number	Percent
Alprazolam	5,148	54.08%
Diazepam	2,226	23.38%
Clonazepam	1,524	16.01%
Lorazepam	453	4.75%
Temazepam	99	1.04%
Chlordiazepoxide	41	0.43%
Flunitrazepam	21	0.22%
Triazolam	9	0.09%
Total Benzodiazepines	9,521	100.00%







### 2.3 CLUB DRUGS

Club drugs refer to a category of substances that gained popularity in 1990s at dance clubs and "rave" parties. These drugs can produce both stimulant and psychedelic effects, which enables party-goers to dance and remain active for long periods of time. Abuse of club drugs, especially MDMA, has become widespread among youth. According to the 2002 Monitoring the Future Study, 10.5% of twelfth graders and 14.7% of college students reported using MDMA at least once during their lifetime (Johnston et al., 2003). While the majority of MDMA available in the U.S. is produced in Europe, MDMA clandestine laboratories also operate in this country. U.S. law enforcement seized 21 MDMA clandestine labs in 2001 and 12 labs in 2002 (Clandestine Laboratory Seizure System [CLSS], El Paso Intelligence Center).

Of the 509,978 drug items reported in NFLIS from January through June 2003, about 1% were club drugs (4,296 items). MDMA was by far the most common club drug reported by labs, representing 77% (3,310 items) of the club drugs reported (Table 2.3). Among other club drugs reported, 9% were identified as ketamine, 9% as MDA, and 4% as gamma-hydroxybutyrate or gamma-butyrolactone (GHB/GBL).

MDMA was the most common club drug reported across each region, representing 80% of club drugs in the South, 77% in the Northeast, 76% in the West, and 71% in the Midwest (Figure 2.3). Eighteen percent of club drugs reported in the Northeast were identified as ketamine, the highest percentage of any region. The Midwest reported the highest percentage of MDA (17%).



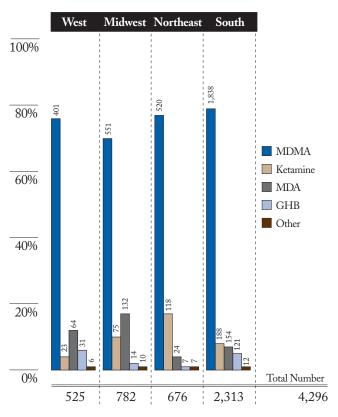
### Table 2.3 C

**CLUB DRUGS** Number and percentage of total identified club drugs, January 2003–June 2003.

Club Drug	Number	Percent
MDMA	3,310	77.03%
Ketamine	404	9.41%
MDA	374	8.71%
GHB/GBL	173	4.03%
MDEA	16	0.38%
5-MeO-DIPT	10	0.23%
BZP	6	0.14%
TFMPP	1	0.02%
AMT	1	0.02%
PMA	1	0.02%
Total Club Drugs	4,296	100.00%

MDEA = 3,4-Methylenedioxyethylamphetamine 5-MeO-DIPT = 5-Methoxy-N,N-diisopropyltryptamine BZP = N-Benzylpiperazine TFMPP = 1-(3-Trifluoromethylphenyl)piperazine AMT = Alpha-methyltryptamine PMA = p-Methoxyamphetamine

### Figure 2.3 Distribution of club drugs within region, January 2003–June 2003.



<sup>©</sup>Copyright 2001, Publishers Group

### 2.4 Anabolic Steroids

First developed in the 1930s, anabolic steroids are medically prescribed for conditions such as breast cancer, anemia, testicular failure, and impotence. Due to their effects on muscle development, anabolic steroids are commonly abused by athletes and bodybuilders as a means of increasing strength and performance. While some anabolic steroids in the illicit market are diverted from legitimate U.S. markets, the majority are smuggled in from other countries.

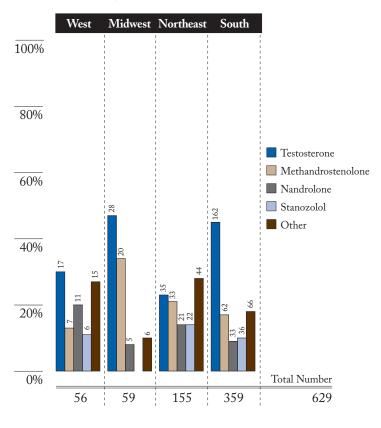
From January through June 2003, a total of 629 anabolic steroid items were reported in NFLIS (Table 2.4). Anabolic steroids were most commonly identified as testosterone (38%), methandrostenolone (19%), nandrolone (11%), or stanozolol (10%). The highest percentage of testosterone was reported in Midwest (47%), followed by the South (45%), West (30%), and Northeast (23%) (Figure 2.4). About one in five steroids in the Northeast and South regions was identified as methandrostenolone. In the South, more than one in five steroids was identified as stanozolol.

Table 2.4	ANABOLIC STEROIDS
	<b>ANABOLIC STEROIDS</b> Number and percentage of identified anabolic steroids, January 2003–June 2003.

Steroids	Number	Percent
Testosterone	242	38.47%
Methandrostenolone	122	19.39%
Nandrolone	70	11.13%
Stanozolol	64	10.17%
Anabolic steroids, not specified	45	7.17%
Boldenone	34	5.40%
Oxymetholone	23	3.66%
Mesterolone	8	1.27%
Oxandrolone	8	1.27%
Methyltestosterone	4	0.64%
Fluoxymesterone	3	0.48%
Methenolone	3	0.48%
Androstenedione*	2	0.32%
Methandriol	1	0.16%
Total Anabolic Steroids	629	100.00%

\*Non-controlled anabolic steroid.

Figure 2.4 Distribution of anabolic steroids within region, January 2003–June 2003.



### 2.5 STIMULANTS

Stimulants are a drug category dominated by methamphetamine, a highly addictive central nervous system stimulant that has become the most prevalent illicit synthetic drug manufactured in the United States. Methamphetamine can be easily manufactured in clandestine laboratories using commonly available materials. This ease in manufacturing combined with its highly addictive potential has contributed to the drug's popularity to increase throughout the nation. Originally concentrated in the West, the methamphetamine problem has now spread to almost every major metropolitan area in the U.S., with the exception of the Northeast. A total of 68,555 stimulants were identified in NFLIS during January through June 2003, accounting for about 13% of all items reported (Table 2.5). About 96% of stimulants, or 66,156 items, were identified as methamphetamine. An additional 405 items were identified as ephedrine, a precursor chemical used to manufacture methamphetamine. Ephedrine is also used as a single entity for its stimulant-type effects. Among other stimulants, 1,075 items were identified as amphetamine, 484 items as methylphenidate (e.g., Ritalin), and 220 as caffeine.

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 92% in the South. In the Northeast, 41% of stimulants were reported as methamphetamine, 27% as amphetamine, and 21% as methylphenidate.

### Table 2.5 STIMULANTS

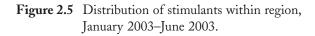
Number and percentage of total identified

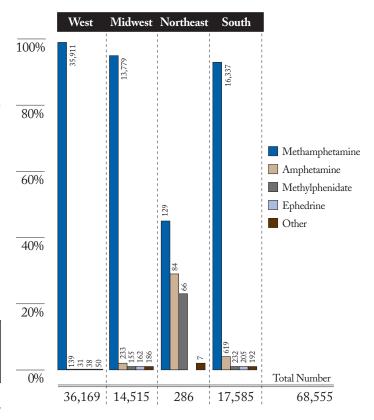
stimulants, January 2003–June 2003.

Stimulants	Number	Percent
Methamphetamine	66,156	96.50%
Amphetamine	1,075	1.57%
Methylphenidate	484	0.71%
Ephedrine	405	0.59%
Caffeine	220	0.32%
Phentermine	83	0.12%
Benzphetamine	33	0.05%
Cathinone	16	0.02%
Phendimetrazine	16	0.02%
Diethylpropion	13	0.02%
Methcathinone	13	0.02%
Cathine	9	0.01%
Pemoline	7	0.01%
Phenylpropanolamine	7	0.01%
Modafinil	6	0.01%
Propylhexedrine	5	0.01%
Fenfluramine	4	0.01%
Clobenzorex	2	0.00%
Phenmetrazine	1	0.00%
Total Stimulants	68 555	100 00%

Total Stimulants

68,555 100.00%







### SECTION 3: DRUG COMBINATIONS

In addition to tracking the types of substances identified by forensic laboratories, NFLIS can provide information on drug combinations or multiple substances reported within a single drug item. Mixing substances or taking multiple drugs simultaneously can exacerbate already serious health consequences. Medical examiner data from DAWN shows that more than three in four drug-related deaths involved two or more substances during 2001 (DAWN, 2003a). Apart from alcohol-related combinations, the most common combinations involved in DAWN drug-related deaths were cocaine and heroin/morphine; heroin/morphine and narcotic analgesics; and amphetamines and methamphetamine. Multiple drugs were reported in 9 out of 10 deaths involving either heroin/ morphine or narcotic analgesics and nearly 8 out of 10 deaths involving cocaine.

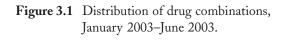
From January through June 2003, 5,102 items (1% of all items) reported in NFLIS contained two or more substances (Figure 3.1). The five most common substances—heroin/ cocaine (19%), cannabis/cocaine (12%), methamphetamine and cannabis (4%), amphetamine and methamphetamine (4%), and cannabis and heroin (4%)—represented 43% of all combinations reported.

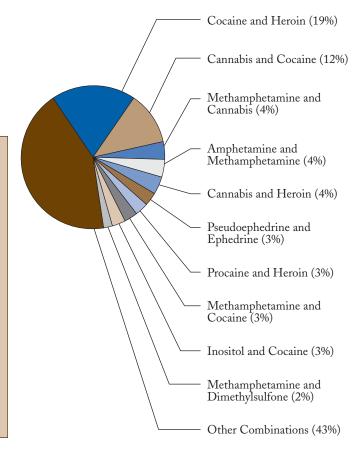
### Drug Combinations Reported in STRIDE, January 2003–June 2003

In STRIDE, which includes results from substances analyzed at DEA laboratories, 11,549 drug combinations (40% of all items) were reported during the first 6 months of 2003. Methamphetamine was present in 33% of combinations identified in STRIDE, including methamphetamine/dimethylsulfone (19%), methamphetamine/ pseudoephedrine (3%), and methamphetamine/MDMA (2%). Cocaine was present in 22% of combinations, most commonly cocaine/caffeine (4%), cocaine/procaine (4%), and cocaine/sodium bicarbonate (3%). Heroin was present in 20% of combinations including heroin/procaine (4%), heroin/quinine (3%), and heroin/caffeine (3%).

### 3.1 COCAINE COMBINATIONS

Cocaine, including powder and crack cocaine, was present in 43% of drug combinations reported during this 6-month period (Table 3.1). A total of 983 items contained cocaine and heroin, a combination commonly referred to as a "speedball," and 633 items contained cocaine/cannabis. Cocaine/ methamphetamine, a combination referred to as "zoom," was reported in 132 items, or about 3% of all combinations. Many of the remaining cocaine-related combinations reported in Table 3.1 were excipients used to adulterate or dilute cocaine. These include non-controlled substances such as inositol, boric acid, procaine, caffeine, lactose, lidocaine, and benzocaine.





## Table 3.1 COCAINE COMBINATIONS Total items identified as cocaine combinations, January 2003–June 2003.

<b>.</b>	5 6		
Substance One	Substance Two	Number	Percent
Cocaine	Heroin	983	19.27%
Cocaine	Cannabis	633	12.41%
Cocaine	Methamphetamine	132	2.59%
Cocaine	Inositol	131	2.57%
Cocaine	Boric acid	54	1.06%
Cocaine	Procaine	48	0.94%
Cocaine	Caffeine	38	0.74%
Cocaine	Lactose	35	0.69%
Cocaine	Lidocaine	29	0.57%
Cocaine	Benzocaine	15	0.29%
Other cocaine combinations		108	2.12%
Total Cocaine Com	binations	2,206	43.24%
All Combinations		5,102	

### 3.2 HEROIN COMBINATIONS

Heroin was present in 1,632 items, representing 32% of drug combinations reported from January through June 2003 (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 or adulterate heroin. The most commonly reported excipients were procaine, mannitol, lidocaine, and caffeine.

Table 3.2HEROIN COMBINATIONSTotal items identified as heroin combinations,<br/>January 2003–June 2003.

Substance One	Substance Two	Number	Percent
Heroin	Cocaine	983	19.27%
Heroin	Cannabis	180	3.53%
Heroin	Procaine	142	2.78%
Heroin	Mannitol	102	2.00%
Heroin	Methamphetamine	23	0.45%
Heroin	Lidocaine	21	0.41%
Heroin	Acetaminophen	17	0.33%
Heroin	Caffeine	15	0.29%
Heroin	Inositol	14	0.27%
Heroin	Benzodiazepine	7	0.14%
Other heroin combinations		128	2.51%
Total Heroin Comb	vinations	1,632	31.99%
All Combinations		5,102	



### 3.3 METHAMPHETAMINE COMBINATIONS

Methamphetamine was present in 18% of drug combinations, a total of 940 items (Table 3.3). Methamphetamine/cannabis (221 items) and methamphetamine/amphetamine (205 items) were the most commonly reported combinations. Methamphetamine was reported in combination with cocaine in 132 items, and dimethylsulfone, a diluent typically used by Mexican trafficking organizations, was reported in 119 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 2003–June 2003.

Substance One	Substance Two	Number	Percent
Methamphetamine	Cannabis	221	4.33%
Methamphetamine	Amphetamine	205	4.02%
Methamphetamine	Cocaine	132	2.59%
Methamphetamine	Dimethylsulfone	119	2.33%
Methamphetamine	MDMA	86	1.69%
Methamphetamine	Pseudoephedrine	58	1.14%
Methamphetamine	Heroin	23	0.45%
Methamphetamine	Ketamine	23	0.45%
Methamphetamine	Red phosphorus	21	0.41%
Methamphetamine MDA		13	0.25%
Other methamphetam	39	0.76%	
Total Methamphetamine Combinations		940	18.42%
All Combinations		5,102	

### DEA UPDATE Emerging Drugs of Abuse: Tryptamine, Piperazine, and Phenethylamine

The abuse of stimulant/hallucinogenic substances in allnight dance parties (raves) and other venues has been a major problem in Europe since the early 1990s. These activities have since spread to the United States. The Schedule I substance MDMA and its analogues, collectively known as Ecstasy, are the most commonly abused of these drugs. Raves have also recently become venues for the trafficking and abuse of other substances that are often promoted as either Ecstasy or its legal alternatives. Five substances have been increasingly encountered by federal, state, and local law enforcement authorities in several states since the late 1990s. These are alpha-methyltryptamine (AMT); 5-methoxy-N,N-diisopropyltryptamine (5-MeO-DIPT); N-benzylpiperazine (BZP); 1-(3-trifluoromethylphenyl) piperazine (TFMPP); and 2,5-dimethoxy-4-(n)-propylthiophenethylamine (2C-T-7). These substances have no accepted medical use and their safety has never been determined. The drugs are often illicitly obtained from foreign and U.S.-based chemical companies and from individuals through the Internet. The street names, pharmacological effects, and control status of these substances are shown below.

Drug	Street name(s) Form	Pharmacological Effects	Control Status
BZP TFMPP	Ecstasy, BZP, A2, legal E, legal X <i>Tablet, powder</i>	BZP – Amphetamine-like TFMPP – MDMA-like BZP/TFMPP – MDMA-like	Schedule I 9/20/2002 (67 FR 59160)
2C-T-7	Blue mystic, T7, beautiful, tweety-bird mescaline, tripstay <i>Powder</i>	Visual hallucinations, mood-elevating, volatility, music appreciation	Schedule I; Final Rule, September 20, 2002 (67 FR 59163) Proposal, 9/8/03 (68 FR 52872) Ext., 9/11/03 (68 FR 53289), these two actions also apply to BZP
AMT	Spirals Powder, tablet, capsule	Hallucinations, mood-elevating, sleeplessness, blurry vision	Schedule I; Final Rule, April 4, 2003 (68 FR 16427)
5-MeO-DIPT	Foxy, foxy methoxy <i>Powder, tablet,</i> <i>capsule</i>	Talkative, disinhibition, nausea, jaw clenching, hallucinations with auditory and visual distortio	ons

**BZP and TFMPP:** BZP and TFMPP are piperazine derivatives and are legitimately available as bulk chemicals for use as chemical intermediates. BZP was first synthesized as a potential antiparasitic agent and was subsequently shown to possess amphetamine-like and some antidepressant activity. Selfreports by abusers suggest that the subjective effects of TFMPP are like those experienced with hallucinogens. Experimental animal studies support the amphetamine- and MDMA-like effects of BZP and TFMPP, respectively. Selfreports also suggest that the subjective effects of the co-abuse of BZP and TFMPP fully mimic the effects of MDMA. Tablets seized by law enforcement predominantly contain the combination of BZP and TFMPP. Some seized BZP/TFMPP tablets actually resemble MDMA tablets in color and bear logos commonly seen on MDMA tablets, such as a bull's head, Taurus zodiac sign, housefly, heart, crown, and smiley face. BZP and TFMPP are also encountered as single entities.

**2C-T-7**: 2C-T-7 is structurally related to the Schedule I phenethylamine, 4-bromo-2,5-dimethoxyphenethylamine (2C-B), and other hallucinogens and thus is likely to have a pharmacological profile substantially similar to them. Drug discrimination studies in animals suggest that 2C-T-7 produces hallucinogenic-like discriminative stimulus effects and some LSD-like effects. Like 2C-B, 2C-T-7 selectively binds to serotonin receptors with high affinity. The pharmacological effects of 2C-T-7 may last for 6 to 8 hours. Three deaths have been reported related to the use of 2C-T-7. Additional studies are under way.

**AMT and 5-MeO-DIPT**: AMT and 5-MeO-DIPT are tryptamine derivatives and share chemical and pharmacological similarities with the Schedule I tryptamine hallucinogens. Abusers often administer these tryptamines orally, but they also smoke and snort these substances. The behavioral effects of orally administered AMT (20 mg) in humans are slow in onset, occurring after 3 to 4 hours, and gradually subside after 12 to 24 hours, but may last up to 2 days in some subjects. Subjects equate the effects of a 20-mg dose to those of 50 micrograms of LSD. Following oral administration of 6 to 10 mg, 5-MeO-DIPT produces subjective effects with an onset at about 20 to 30 minutes, a peak at about 1 to 1.5 hours, and a duration of about 3 to 6 hours.

In response to these abuse problems, these five substances were recently placed into Schedule I of the Controlled Substances Act (CSA) using the temporary (emergency) scheduling provisions of the CSA. We would appreciate receiving any information related to the identification, abuse, and adverse health effects of these substances. Such information could be used to support the permanent control of these substances. Contact either Dr. Srihari R. Tella at (202) 307-7175 (with information about AMT, 5-MeO-DIPT, BZP, and TFMPP) or Dr. BeLinda Hayes at (202) 307-7594 (with information about 2C-T-7). Information may also be faxed to (202) 353-1263 or mailed to the Drug and Chemical Evaluation Section, Office of Diversion Control, Drug Enforcement Administration, Washington, DC 20537. Contact either state or local forensic laboratories for information on the identification of these substances. Analytical data and reference standards for these substances can be obtained from the Special Testing Laboratory ((703) 668-3300), Drug Enforcement Administration, Sterling, Virginia.

14

### REFERENCES

Community Epidemiology Work Group (CEWG). (2003). Epidemiologic trends in drug abuse. Volume 2: Proceedings of the Community Epidemiology Work Group (NIH Publication No. 03-5110A). Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health.

Drug Abuse Warning Network (DAWN). (2003a). Mortality data from the Drug Abuse Warning Network, 2001 (DAWN Series D-23, DHHS Publication No. (SMA) 03-3781). Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies.

Drug Abuse Warning Network (DAWN). (2003b). The DAWN report. Narcotic Analgesics. pp. 1-8. Washington, DC: Substance Abuse and Mental Health Services Administration, Office of Applied Studies.

Drug Abuse Warning Network (DAWN). (2002). Emergency department trends from the Drug Abuse Warning Network, Preliminary estimates January–June 2002 (DAWN Series D-22, DHHS Publication No. (SMA) 03-3779). Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies.

Johnston, L.D., O'Malley, P.M., & Bachman, J.G. (2003). Monitoring the future: National results on adolescent drug use. Overview of key findings, 2002 (NIH Publication No. 03-5374). Bethesda, MD: National Institute on Drug Abuse.

U.S. Drug Enforcement Administration (DEA). (2001). Drug trafficking in the United States. Retrieved August 21, 2002, from http://www.dea.gov/pubs/intel/01020/ind ex.html#c2

U.S. Drug Enforcement Administration (DEA). (2002). Drug trafficking in the United States. Retrieved September 11, 2003, from http://www.dea.gov/concern/drug\_traffick ing.html

U.S. Drug Enforcement Administration (2003). System to Retrieve Information Drug Evidence II (STRIDE).

### Appendix A

### NATIONAL ESTIMATES METHODOLOGY

Since 2001, NFLIS reports have included national and regional estimates of the number of the drug items and drug cases analyzed by state and local forensic laboratories. 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 laboratories, a total of 165 individual laboratories (see Appendix B for a full list of sampled and nonsampled NFLIS laboratories). Only the data for those laboratories that reported drug analysis data for 3 or more months during the first 6 months of 2003 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 designconsistent, nonresponse-adjusted estimates. Weighted prevalence estimates were produced for drug cases and drug items analyzed by state and local forensic labs from January 2003 through June 2003.

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 2002. 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 itemlevel 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 marijuana 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 with 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 2003. These factors resulted in missing monthly data, which are a concern when calculating national estimates of drug prevalence. Imputations were performed separately by drug for laboratories missing up to 2 months of data using drug-specific proportions generated from laboratories reporting a full 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 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." Since 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 those of 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.

### PARTICIPATING AND REPORTING LABORATORIES

State AK	Lab Type State	Lab Name Reportin Alaska Department of Public Safety (Anchorage)	ng
AL	State	Alabama Department of Forensic Sciences (9 sites)*	Х
AR	State	Arkansas State Crime Laboratory (Little Rock)*	Х
CA	State	California Department of Justice (10 sites)*	Х
	Local	Fresno County Sheriff's Forensic Lab (Fresno)	Х
	Local Local	Kern County District Attorney's Office (Bakersfield) Los Angeles County Sheriff's Department (4 sites)*	х
	Local	Sacramento County District Attorney's Office (2 sites)*	Х
	Local Local	San Bernardino Sheriff's Office (San Bernardino)* San Diego Police Department (San Diego)*	X X
	Local	San Francisco Police Department (San Francisco)*	~
	Local	San Mateo County Sheriff's Office (San Mateo)	X X
	Local Local	Santa Clara District Attorney's Office (San Jose) Ventura County Sheriff's Department (Ventura)	X
СО	Local	Aurora Police Department (Aurora)	
	Local	Denver Police Department (Denver)*	Х
CT	Local	Jefferson County Sheriff's Office (Golden)	
CT	State	Connecticut Department of Public Safety (Hartford)*	X
FL	State Local	Florida Department of Law Enforcement (8 sites)* Broward County Sheriff's Office (Ft. Lauderdale)*	X X
	Local	Indian River Crime Lab at Indian River	X
	11	Community College (Ft. Pierce)	v
	Local Local	Miami-Dade Police Department (Miami)* Pinellas County Forensic Laboratory (Largo)	X X
	Local	Sarasota County Sheriff's Office (Sarasota)	
GA	State	Georgia State Bureau of Investigation (7 sites)*	Х
HI	Local	Honolulu Police Department (Honolulu)	Х
IA	State	Iowa Division of Criminal Investigation (Des Moines)*	Х
ID	State	Idaho State Police (3 sites)*	Х
IL	State	Illinois State Police (8 sites)*	Х
	Local Local	DuPage County Sheriff's Office (Wheaton) Northern Illinois Police Crime Lab (Chicago)*	х
IN	State	Indiana State Police Laboratory (4 sites)*	Х
	Local	Indianapolis-Marion Co. Forensic Lab (Indianapolis)	
KS	State	Kansas Bureau of Investigation (3 sites)	Х
	Local Local	Johnson County Sheriff's Office (Mission) Sedgwick County Regional Forensic Science Center (Witchita)	X
КҮ	State	Kentucky State Police (6 sites)*	, х Х
LA	State	Louisiana State Police Crime Laboratory (Baton Rouge)*	Х
	Local	Acadiana Criminalistics Laboratory (New Iberia)*	Х
	Local	New Orleans Police Department Crime Lab (New Orleans)*	Х
MA	State	Massachusetts Department of Public Health (2 sites)*	X
	State Local	Massachusetts Department of State Police (Sudbury)* University of Massachusetts Medical Center (Worchester)	X X
MD	Local	Anne Arundel County Police Department (Millersville)*	X
mo	Local	Baltimore City Police Department (Baltimore)*	x
	Local	Baltimore County Police Department (Towson)	Х
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 Local	Minnesota Bureau of Criminal Apprehension (2 sites) St. Paul Police Department (St. Paul)	Х

State	Lab Type	Lab Name Reporti	ng
MO	State Local Local	Missouri State Highway Patrol (6 sites)* Independence Police Department Crime Lab (Independence) MSSC Regional Crime Lab (Joplin)	) )
	Local Local Local	South East Missouri Regional Crime Lab (Cape Girardeau)* St. Charles County Criminalistics Lab (St. Charles) St. Louis County Crime Lab (Clayton)	Х
	Local	St. Louis Police Department (St. Louis)*	Х
MS	State	Mississippi Department of Public Safety (4 sites)*	Х
MT	State	Montana Forensic Science Division (1 site)	Х
NC	State	North Carolina State Bureau of Investigation (2 sites)*	Х
NJ	State Local Local Local	New Jersey State Police (4 sites)* Hudson County Prosecutor's Office Forensic Lab (Jersey City) Newark Police Department (Newark) Ocean County Sheriff's Department (Toms River)	Х
	Local	Union County Prosecutor's Office (Westfield)*	X
NM	State	New Mexico Department of Public Safety (Sante Fe)*	X
NV	Local	Las Vegas Police Department (Las Vegas)*	X
NY	Local Local Local	Erie County Central Police Services Lab (Buffalo) Nassau County Police Department (Mineola)* Niagara County Police Department Crime Lab (Lockport)	X X
	Local Local	New York Police Department Crime Laboratory** Onondaga County Center for Forensic Sciences (Syracuse)*	X X
ОН	State	Ohio State Highway Patrol (Columbus)*	Х
	State	Ohio Bureau of Criminal Identification & Investigation System (London)	Х
	Local Local	Canton-Stark County Crime Lab (Canton) Columbus Police Department (Columbus)	Х
	Local	Hamilton County Coroners Office (Cincinnati)*	Х
	Local Local	Lake County Regional Forensic Lab (Painesville)* Mansfield Police Department Crime Lab (Mansfield)	X X
	Local	Miami Valley Regional Crime Lab (Dayton)*	Х
	Local	Newark Police Department Forensic Services (Newark)	
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
ТХ	State Local	Texas Dept. of Public Safety (13 sites)* Austin Police Department Crime Laboratory (Austin)*	X X
	Local Local	Bexar County Criminal Investigations Lab (San Antonio)* Harris County Medical Examiner's Office (Houston)	Х
	Local	Pasadena Police Department (Pasadena)	Х
UT	State	Utah State Crime Lab (Salt Lake City)	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)	
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 markets;
- providing information on the characteristics of drugs including quantity, purity, and drug combinations; and
- supplementing information from other drug sources including the DEA's System to Retrieve Information from Drug Evidence (STRIDE), the Drug Abuse Warning Network (DAWN), the National Survey on Drug Use and Health (NSDUH), the Monitoring the Future Survey, and the Arrestee Drug Abuse Monitoring (ADAM) program.

NFLIS is an opportunity for state and local laboratories to participate in a useful and high-visibility initiative. Participating laboratories receive regular reports that summarize national and regional data. The Interactive Data Site (IDS) is a secure web site that allows NFLIS participantsincluding state and local laboratories, the DEA, other federal drug control agencies, and researchers-with the ability to run customized queries of NFLIS data. Efforts are under way to increase the flexibility with which NFLIS data can be analyzed. This includes making the IDS webaccessible and introducing 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 critical 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 comparison data from STRIDE, which includes data from DEA's laboratories across the country, are included in this report. Plans to enroll additional federal laboratories are being developed and may be implemented during 2003.
- 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 that relate to the enforcement and prosecution of specific drugs can affect the types of drug evidence 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 test drug evidence if the criminal case was dismissed from court or if no defendant was 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 seizure 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 for all preparation stages. At RTI, Kevin Strom was the major contributor to the report and led its production. Valley Rachal provided oversight and guidance and Lisa Fornnarino assisted with the report preparation. Albert Bethke and Jeffrey Ancheta oversaw the database preparation and Celia Eicheldinger provided statistical analyses and review. Michael Baylor and Carol Council provided review and technical inputs. Shari Lambert oversaw the graphic design and Joanne Studders edited the report.

### **Obtaining Additional Copies of Publication**

Copies may be obtained, free of charge, from RTI or the DEA. To submit comments or suggestions on this report, for more information on NFLIS, or to become a participating laboratory, please use the following contact information.



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

Attention: Liqun Wong, DEA Program Officer Phone: 202-307-7176 Fax: 202-353-1263 E-mail: lwong@leo.gov



RTI International<sup>\*</sup> Health, Social, and Economics Research Unit 3040 Cornwallis Road, PO Box 12194 Research Triangle Park, NC 27709-2194

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

September 2003

\*RTI International is a trade name of Research Triangle Institute.

