

Quarterly findings

The National Forensic Laboratory Information System (NFLIS) collects results from drug analyses conducted by State and local forensic laboratories. NFLIS data reflect drug evidence seized by law enforcement agencies and analyzed by forensic laboratories. Certain laboratories may not analyze all submitted evidence, for example, if the case was dismissed from court, if no defendant could be tied to the drug evidence, or if a guilty plea or plea bargain occurred.

In this report, results are presented for both drug items and drug cases. Drug items (also referred to as “exhibits” by some labs) are normally defined as specimens within a case. Laboratory drug cases are defined as submissions with the same unique identification number and are usually associated with a single criminal incident.

Section 1 presents national and regional estimates for the most common drugs identified by labs between October 1, 2002, and December 31, 2002 (see Appendix C). These estimates are based on data reported by the NFLIS national sample, comprising 29 State lab systems and 31 local labs. Section 2 describes results for drugs identified by all State and local labs reporting to NFLIS during the fourth quarter, including labs not part of the national sample.

About the System

Approximately 300 State and local forensic laboratories in the United States analyze nearly 2 million drug items each year. The Drug Enforcement Administration (DEA) recognizes the value of this information. Since 1997, NFLIS has developed into a fully operational information system and is moving toward the recruitment of all State and local labs. Current participation includes 35 State lab systems and 52 local or municipal labs, a total of 184 individual labs.

Highlights

Section 1:

- An estimated 450,266 drug items were analyzed by State and local laboratories in the United States from October 1, 2002, to December 31, 2002. Cocaine was the most frequently identified drug (153,692 items), followed by cannabis/THC (146,555 items), methamphetamine (50,328 items), and heroin (27,855 items).
- State and local laboratories analyzed an estimated 299,215 distinct drug cases during the quarter. About 39% of cases contained one or more cocaine item, 37% one or more cannabis/THC item, 12% one or more methamphetamine item, and 7% one or more heroin item.

Section 2:

- Nationally, 75% of club drugs were identified as MDMA, and 14% as ketamine. This compared to the Northeast where 58% of club drugs were identified as MDMA and 37% as ketamine.
- The largest relative percentages of both oxycodone and methadone continue to be reported in the Northeast. Hydrocodone was the most common narcotic analgesic identified in the South and West.
- One percent of all reported items contained two or more substances, most commonly heroin/cocaine. Nearly 60% of drug combinations contained either heroin or cocaine, or both, while 15% contained methamphetamine.

Section 1: National and Regional Estimates

Drug Items Analyzed

From October 1, 2002, to December 31, 2002, an estimated 450,266 drug items were analyzed by State and local forensic laboratories in the United States. Table 1.1 presents national and regional estimates for the 25 most frequently identified drugs.

The 25 most common drug items represented 93% of all drugs analyzed during the quarter. Cocaine was the most commonly identified drug (153,692 items), followed by cannabis/THC (146,555 items), methamphetamine (50,328 items), and heroin (27,855 items).

Fifteen of the substances in the top 25, nearly 6% of all items, are federally controlled drugs available in pharmaceutical products. These drugs include alprazolam (5,032 items), hydrocodone

(4,506), oxycodone (4,446 items), diazepam (2,191), clonazepam (1,565), phencyclidine (1,439 items), methadone (1,161 items), codeine (957 items), amphetamine (919 items), ketamine (758 items), morphine (667 items), propoxyphene (579 items), butalbital (558 items), lorazepam (446 items), and methylphenidate (423 items).

Pseudoephedrine (a List I chemical used to manufacture methamphetamine; 3,176 items), acetaminophen (954 items), and carisoprodol (734 items) were three non-controlled drugs reported in the top 25. An additional 4,738 items were identified as MDMA (or Ecstasy), a derivative of methamphetamine frequently used in club and other recreational settings by teenagers and young adults.

Figure 1.1 presents drugs identified by census region, illustrating the variation in drug trafficking and drug use that exists across different parts of the country. It should be noted that these differences may reflect not only variation in availability or prevalence, but also differing enforcement and prosecution priorities, as well as lab procedures.

The highest relative percentages of cocaine were reported in the South

(41%, or 71,262 items) followed by the Northeast (39%, or 25,765 items). The highest relative percentage of heroin continues to be reported in the Northeast. About 14%, or 9,208 items, were identified as heroin in the Northeast during the fourth quarter, compared to 6% in the Midwest (6,803 items), 5% in the South (8,307 items), and 4% in the West (3,537 items). Cannabis/THC was least common in the

West and the most common in the other census regions.

The highest relative percentage of methamphetamine was identified in the West (37%, or 31,701 items), with lower percentages reported in the Midwest (6%, or 7,471 items), the South (6%, or 11,015 items), and the Northeast (<1%, or 141 items). The highest relative percentage of alprazolam was reported in the South (nearly 2%, or 3,074 items).

Table 1.1 National and Regional Estimates for the 25 Most Frequently Identified Drugs

Estimated number and percentage of total analyzed drug items, October–December 2002

Drug	Census Region									
	National		West		Midwest		Northeast		South	
Cocaine	153,692	(34.13%)	18,336	(21.48%)	38,328	(31.10%)	27,765	(38.60%)	71,262	(40.75%)
Cannabis/THC	146,555	(32.55%)	18,504	(21.67%)	52,930	(42.95%)	21,831	(32.71%)	53,290	(30.47%)
Methamphetamine	50,328	(11.18%)	31,701	(37.13%)	7,471	(6.06%)	141	(0.21%)	11,015	(6.30%)
Heroin	27,855	(6.19%)	3,537	(4.14%)	6,803	(5.52%)	9,208	(13.79%)	8,307	(4.75%)
Alprazolam	5,032	(1.12%)	***	***	1,041	(0.84%)	704	(1.05%)	3,074	(1.76%)
Non-controlled, non-narcotic drug	4,837	(1.07%)	***	***	1,130	(0.92%)	1,258	(1.88%)	826	(0.47%)
MDMA	4,738	(1.05%)	***	***	582	(0.47%)	660	(0.99%)	1,972	(1.13%)
Hydrocodone	4,506	(1.00%)	448	(0.53%)	874	(0.71%)	398	(0.60%)	2,785	(1.59%)
Oxycodone	4,446	(0.99%)	273	(0.32%)	899	(0.73%)	1,139	(1.71%)	2,136	(1.22%)
Pseudoephedrine*	3,176	(0.71%)	***	***	1,153	(0.94%)	***	***	810	(0.46%)
Diazepam	2,191	(0.49%)	293	(0.34%)	470	(0.38%)	257	(0.39%)	1,171	(0.67%)
Clonazepam	1,565	(0.35%)	129	(0.15%)	369	(0.30%)	431	(0.65%)	636	(0.36%)
Phencyclidine	1,439	(0.32%)	432	(0.51%)	196	(0.16%)	535	(0.80%)	275	(0.16%)
Methadone	1,161	(0.26%)	94	(0.11%)	275	(0.22%)	373	(0.56%)	419	(0.24%)
Codeine	957	(0.21%)	139	(0.16%)	266	(0.22%)	114	(0.17%)	438	(0.25%)
Acetaminophen**	954	(0.21%)	***	***	376	(0.30%)	1	(0.00%)	291	(0.17%)
Amphetamine	919	(0.20%)	270	(0.32%)	232	(0.19%)	73	(0.11%)	345	(0.20%)
Psilocin	803	(0.18%)	203	(0.24%)	249	(0.20%)	55	(0.08%)	297	(0.17%)
Ketamine	758	(0.17%)	59	(0.07%)	150	(0.12%)	363	(0.54%)	186	(0.11%)
Carisoprodol**	734	(0.16%)	107	(0.13%)	155	(0.13%)	24	(0.04%)	448	(0.26%)
Morphine	667	(0.15%)	95	(0.11%)	258	(0.21%)	51	(0.08%)	262	(0.15%)
Propoxyphene	579	(0.13%)	25	(0.03%)	180	(0.15%)	47	(0.07%)	327	(0.19%)
Butalbital	558	(0.12%)	***	***	470	(0.38%)	21	(0.03%)	65	(0.04%)
Lorazepam	446	(0.10%)	67	(0.08%)	166	(0.13%)	78	(0.12%)	134	(0.08%)
Methylphenidate	423	(0.09%)	51	(0.06%)	128	(0.10%)	54	(0.08%)	189	(0.11%)
Top 25 Total	419,321	(93.13%)	74,763	(87.57%)	115,152	(93.43%)	63,583	(95.26%)	160,962	(92.03%)
All Other Analyzed Items	30,945	(6.87%)	10,614	(12.43%)	8,092	(6.57%)	3,166	(4.74%)	13,933	(7.97%)
Total Analyzed Items	450,266	(100.00%)	85,377	(100.00%)	123,244	(100.00%)	66,749	(100.00%)	174,895	(100.00%)

MDMA = 3,4-Methylenedioxymethamphetamine

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

** The standard error for these drugs in the Northeast is zero; either only certainty labs reported this drug or one randomly selected lab reported this drug.

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

Figure 1.1 Regional Estimates and Distribution of Identified Drug Items

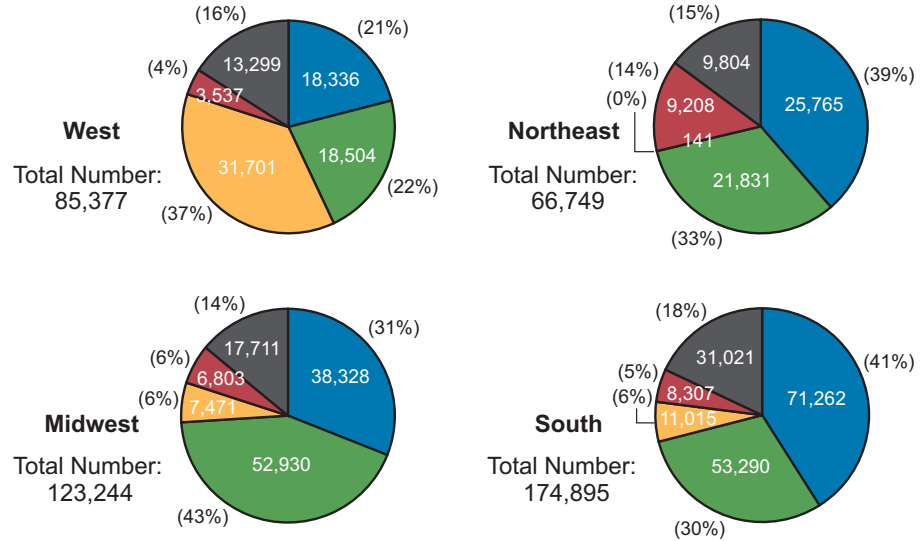
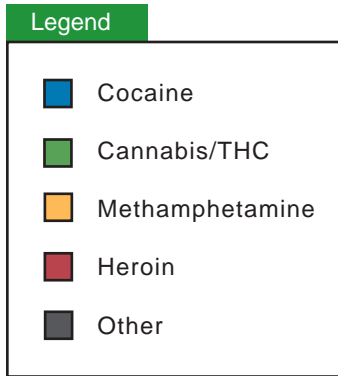


Table 1.2 National Case Estimates

Number and percentage of cases containing the 25 most frequently identified drugs, October–December 2002

Drug Cases Analyzed

Forensic laboratories also report chemical results for drug cases. These typically describe drugs identified within a single drug-related incident, although a small proportion of labs may assign a single case number to all drug submissions related to an investigation. Table 1.2 presents national estimates for cases containing the 25 most commonly identified drugs. Because multiple drug items can be reported within a single case, the cumulative percentage for all substances exceeds 100%.

Collectively, the majority of drug cases reported during the Quarter contained cocaine, cannabis, or both. One or more cocaine item was identified in 39% of all cases nationally, or in an estimated 117,212 cases. One or more cannabis/THC item was identified in 37% of all cases nationally, or in an estimated 109,391 cases. About 12%, or 36,248 drug cases analyzed by labs, contained methamphetamine and 7%, or 19,879 cases, contained heroin.

Drug	Count	Percentage*
Cocaine	117,212	39.17%
Cannabis	109,391	36.56%
Methamphetamine	36,248	12.11%
Heroin	19,879	6.64%
Alprazolam	4,170	1.39%
Hydrocodone	3,852	1.29%
Non-controlled, non-narcotic drug	3,820	1.28%
Oxycodone	3,477	1.16%
MDMA	3,212	1.07%
Diazepam	1,996	0.67%
Pseudoephedrine**	1,835	0.61%
Clonazepam	1,398	0.47%
Phencyclidine	1,253	0.42%
Methadone	986	0.33%
Acetaminophen	867	0.29%
Amphetamine	800	0.27%
Codeine	787	0.26%
Psilocin	766	0.26%
Carisoprodol	711	0.24%
Morphine	574	0.19%
Propoxyphene	527	0.18%
Ketamine	522	0.17%
Butalbital	442	0.15%
Lorazepam	394	0.13%
Methylphenidate	375	0.13%
Top 25 Total	315,493	105.44%
All Other Substances	23,500	7.85%
Total All Substances	338,993	113.29%

* Multiple drugs can be reported within a single case, and as a result the cumulative percentage exceeds 100%. The estimated national total of distinct cases that individual drug case percentages are based on is 299,215.

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

Section 2: Drug Analyses for All Reporting Labs

Section 2 presents results for all NFLIS labs that reported 2 or more months of data between October 1, 2002, and December 31, 2002, including labs not part of the NFLIS national sample. These counts are not weighted. During the fourth quarter of 2002, a total of 241,439 drug items were reported.

Narcotic Analgesics

Medically prescribed as pain relievers, narcotic analgesics have become one of the most serious drug problems in the United States (Pulse Check, 2002; the Drug Abuse Warning Network [DAWN], 2002; NHSDA, 2002). The National Household Survey on Drug Abuse (NHSDA) reports that the nonmedical use of pain relievers has more than doubled since the mid-1980s (NHSDA, 2003).

Table 2.1 describes results for narcotic analgesics reported by NFLIS labs. During the fourth quarter, 7,035 drug items were identified as narcotic analgesics, representing nearly 3% of all analyzed items. Two-thirds of narcotic analgesics were identified as either hydrocodone (35%) or oxycodone (31%). An additional 9% of items were identified as methadone, 7% as codeine, and 5% as morphine.

By region, the highest relative percentages of oxycodone (46%) and methadone (21%) were reported in the Northeast. Hydrocodone continues to be the most frequent narcotic analgesic reported in the South (41%) and West (39%). The West also reported the highest relative percentage of codeine (13%). Over a third of narcotic analgesics reported in the Midwest were included in the "other" category. These include dihydrocodeine (11%), morphine (10%), and propoxyphene (7%).

Legend	
■	Hydrocodone
■	Oxycodone
■	Methadone
■	Codeine
■	Other

Table 2.1

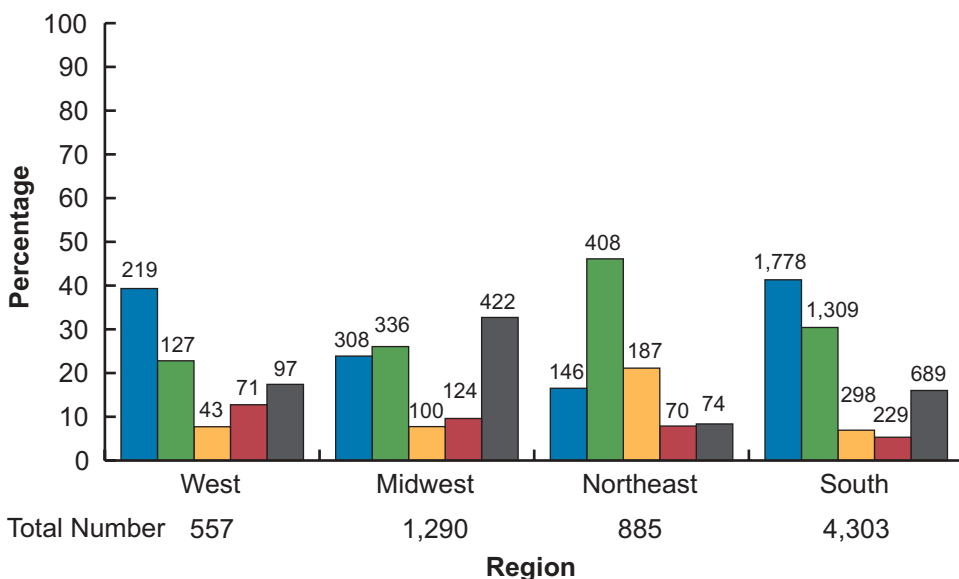
Narcotic Analgesics

Total items identified as narcotic analgesics

Analgesic	Total	Percentage
Hydrocodone	2,451	34.85%
Oxycodone	2,180	30.99%
Methadone	628	8.93%
Codeine	494	7.02%
Morphine	366	5.20%
Propoxyphene	352	5.00%
Hydromorphone	167	2.37%
Dihydrocodeine	154	2.19%
Nalbuphine	75	1.07%
Tramadol	73	1.04%
Meperidine	60	0.86%
Fentanyl	19	0.27%
Pentazocine	11	0.16%
Buprenorphine	3	0.04%
Butorphanol	2	0.03%
Total Analgesics	7,035	100%
Total Analyzed Items	241,439	

Figure 2.1

Distribution of narcotic analgesics by region



Benzodiazepines

Benzodiazepines are commonly prescribed by physicians to treat anxiety, stress, panic attacks and short-term sleep disorders. Benzodiazepines are also one of the most commonly abused and most dangerous pharmaceutical drug categories (CEWG, 2001).

Emergency department mentions of benzodiazepines increased from about 75,000 to 104,000 between 1994 and 2001 (DAWN, 2002). From 1998 to 2000 alone, emergency department mentions of alprazolam increased 24%.

During the fourth quarter, 5,115 drug items were identified as benzodiazepines by NFLIS labs (Table 2.2). The vast majority of benzodiazepines were identified as either alprazolam (e.g., Xanax), diazepam (e.g., Valium), or clonazepam (e.g., Rivotril). Overall, 55% were reported as alprazolam, 22% as diazepam, and 16% as clonazepam.

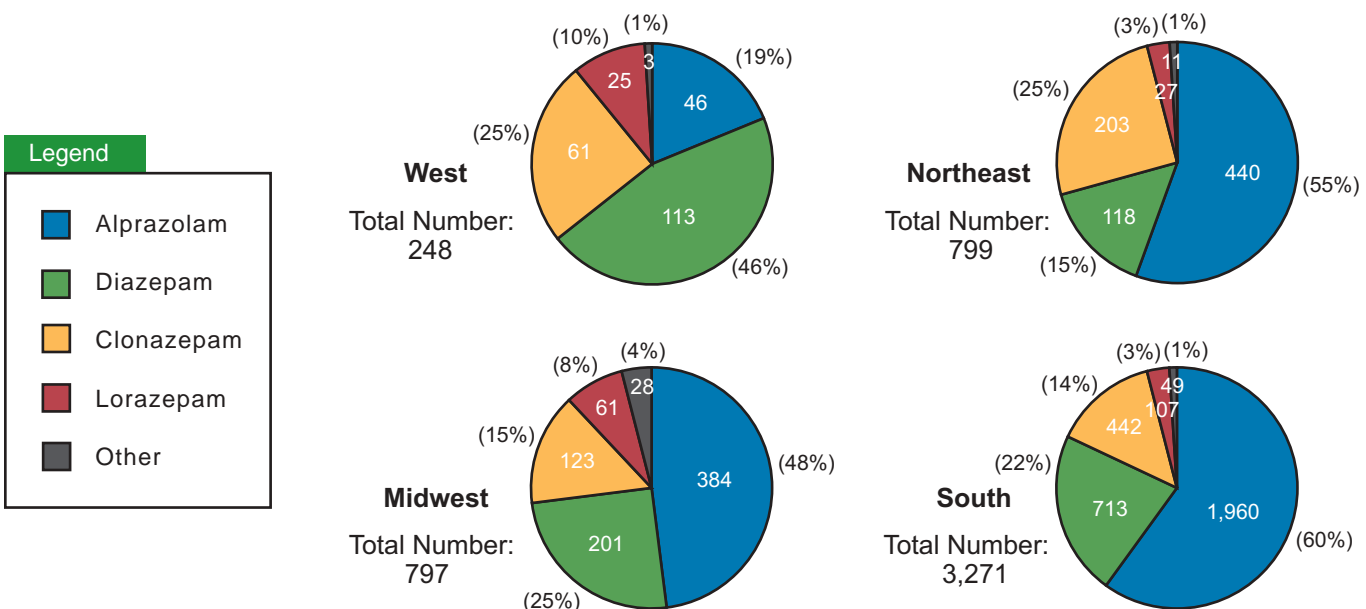
Alprazolam continues to be the most common benzodiazepine reported in the South (60%), Northeast (55%), and Midwest (48%; see Figure 2.2). In the West, however, nearly half of benzodiazepines were identified as diazepam (46%), the highest percentage of any region. A quarter of benzodiazepines reported in both the West and Northeast were identified as clonazepam.

Table 2.2 Benzodiazepines

Total items identified as benzodiazepines

Benzodiazepine	Total	Percentage
Alprazolam	2,830	55.33%
Diazepam	1,145	22.39%
Clonazepam	829	16.21%
Lorazepam	220	4.30%
Temazepam	44	0.86%
Chlordiazepoxide	21	0.41%
Flunitrazepam	11	0.22%
Triazolam	8	0.16%
Midazolam	7	0.14%
Total Benzodiazepines	5,115	100%
Total Analyzed Items	241,439	

Figure 2.2 Distribution of benzodiazepines by region



Club Drugs

Table 2.3 presents drug items identified as “club drugs,” a classification that refers to drugs such as MDMA (or Ecstasy) that originally gained popularity at “raves” and dance clubs, especially among youth. Sources estimate that the use of Ecstasy among teenagers increased 71% between 1999 and 2001 (Partnership for a Drug-Free America, 2003).

During the fourth quarter, three out of four club drugs reported to NFLIS were identified as MDMA. An additional 14% of club drugs were identified as ketamine (or “special K”), 6% were reported as 3,4-methylenedioxyamphetamine (MDA), and 5% as gamma-hydroxybutyrate or gamma-butyrolactone (GHB/GBL).

As shown in Figure 2.3, MDMA represented the majority of club drugs reported in each of the census regions, especially in the South (82%) and the West (80%). In the Northeast, 58% of club drugs were reported as MDMA and 37% as ketamine. This compared to the first quarter of 2002, when 84% of club drugs in the Northeast were reported as MDMA and 15% as ketamine. The highest percentage of MDA was reported in the Midwest (19%).

Table 2.3

Club Drugs

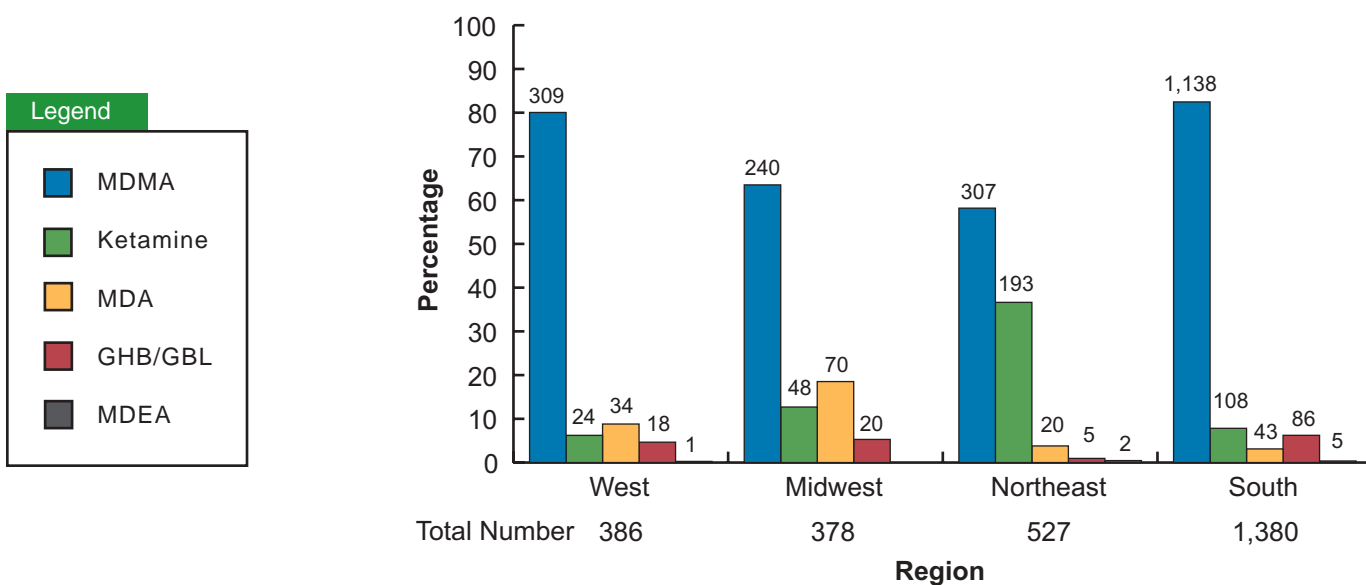
Total items identified as club drugs

Club Drug	Total	Percentage
MDMA	1,994	74.64%
Ketamine	373	13.97%
MDA	167	6.25%
GHB/GBL*	129	4.83%
MDEA	8	0.31%
Total Club Drugs	2,671	100%
Total Analyzed Items	241,439	

MDEA = 3,4-methylenedioxyethylamphetamine

**Includes items identified as gamma-hydroxybutyrate or gamma-butyrolactone.*

Figure 2.3 Distribution of club drugs by region



Drug Combinations

One of the strengths of NFLIS is its ability to provide information on drug combinations, defined as multiple substances reported within a single drug item. Combining substances can substantially increase the potential lethality of already dangerous substances. According to mortality data from medical examiners, three in four drug-related deaths in 2000 involved two or more substances (DAWN, 2002). During the fourth quarter of 2002, NFLIS labs reported multiple substances for 2,690 items, 1% of all reported items.

Cocaine

Nearly half of drug combinations reported contained cocaine (45%), including powder cocaine or crack (Table 2.4). Cocaine/heroin (17%) and cocaine/cannabis (11%) were the most commonly reported combinations including cocaine. Inositol, an excipient used to dilute or “cut” cocaine, was identified in about 4% of combinations, while excipients such boric acid and caffeine were identified less frequently. Cocaine/methamphetamine was identified in 80 items, or nearly 3% of all combinations.

Heroin

Heroin was present in nearly a third (31%) of reported drug combinations (Table 2.5). More than half of heroin-related combinations contained cocaine. About 4% of combinations contained heroin and procaine (103 items), which is a non-controlled local anesthetic. Other combinations containing heroin and a non-controlled substance included mannitol (67 items) and caffeine (24 items).

Methamphetamine

About 15% of drug combinations reported during the quarter contained methamphetamine, a total of 405 items (Table 2.6). The most common methamphetamine-related combinations were methamphetamine/cannabis, methamphetamine/amphetamine, and methamphetamine/cocaine. MDMA, a derivative of methamphetamine, was reported in 31 combinations, while dimethylsulfone was present in 24 items.

Dimethylsulfone (or methylsulfonylmethane) is used to “cut” methamphetamine and is typically used by Mexican trafficking organizations (DEA, 2001).

Table 2.4 Cocaine Combinations

Total items identified as cocaine combinations

Substance 1	Substance 2	Total	Percentage
Cocaine	Heroin	460	17.10%
Cocaine	Cannabis	289	10.74%
Cocaine	Inositol	106	3.94%
Cocaine	Methamphetamine	80	2.97%
Cocaine	Procaine	63	2.34%
Cocaine	Boric acid	43	1.60%
Cocaine	Caffeine	41	1.52%
Cocaine	Lactose	20	0.74%
Cocaine	Lidocaine	8	0.30%
Cocaine	Oxycodone	6	0.22%
Other Cocaine Combinations		87	3.23%
Total Cocaine Combinations		1,203	44.72%
All Combinations		2,690	

Table 2.5 Heroin Combinations

Total items identified as heroin combinations

Substance 1	Substance 2	Total	Percentage
Heroin	Cocaine	460	17.10%
Heroin	Procaine	103	3.83%
Heroin	Mannitol	67	2.49%
Heroin	Cannabis	53	1.97%
Heroin	Caffeine	24	0.89%
Heroin	Boric acid	10	0.37%
Heroin	Inositol	9	0.33%
Heroin	Lidocaine	8	0.30%
Heroin	Lactose	7	0.26%
Heroin	Methamphetamine	7	0.26%
Other Heroin Combinations		77	2.86%
Total Heroin Combinations		825	30.67%
All Combinations		2,690	

Table 2.6 Methamphetamine Combinations

Total items identified as methamphetamine combinations

Substance 1	Substance 2	Total	Percentage
Methamphetamine	Cannabis	98	3.64%
Methamphetamine	Amphetamine	92	3.42%
Methamphetamine	Cocaine	80	2.97%
Methamphetamine	MDMA	31	1.15%
Methamphetamine	Dimethylsulfone	24	0.89%
Methamphetamine*	Pseudoephedrine	18	0.67%
Methamphetamine	Phosphorus	11	0.41%
Methamphetamine	Ketamine	8	0.30%
Methamphetamine	Heroin	7	0.26%
Methamphetamine	MDA	6	0.22%
Other Methamphetamine Combinations		30	1.12%
Total Methamphetamine Combinations		405	15.06%
All Combinations		2,690	

* These combinations may reflect impurities derived from a clandestine manufacturing process.

Benefits & Limitations of NFLIS data

Benefits

The systematic collection and analysis of drug chemistry data can improve our understanding of the Nation's illegal drug problem. NFLIS can also serve as a critical resource for supporting drug scheduling policy and drug enforcement initiatives. A major advantage of the NFLIS data is that they reflect the results of chemical analyses conducted by forensic laboratories and therefore have a high degree of validity. The DEA and State and local forensic laboratories are increasingly being served by the NFLIS database. The data can also benefit regional, State, and local task forces as well as single-agency operations.

NFLIS helps the drug control community achieve its mission by:

- providing detailed information on the extent and variation of controlled substances over time and across geographic areas—information that can be used to support drug scheduling actions and drug policy initiatives;
- providing national, regional, State, and local indicators of drug trafficking and abuse patterns;
- identifying emerging drug problems and changes in drug availability in a timely fashion;
- monitoring the diversion of legitimately marketed drugs into illicit channels; and
- supplementing information from other drug sources including the DEA 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 represents an opportunity for State and local labs to participate in a useful and high-visibility initiative. Through the Interactive Data Site (IDS), participating labs are given access to the NFLIS database, which provides critical information about local, regional, and national trends in drug seizures, purchases, and recoveries by law enforcement agencies. Labs are also able to run customized queries on their own data, a feature useful for managing current workloads as well as for planning future needs.

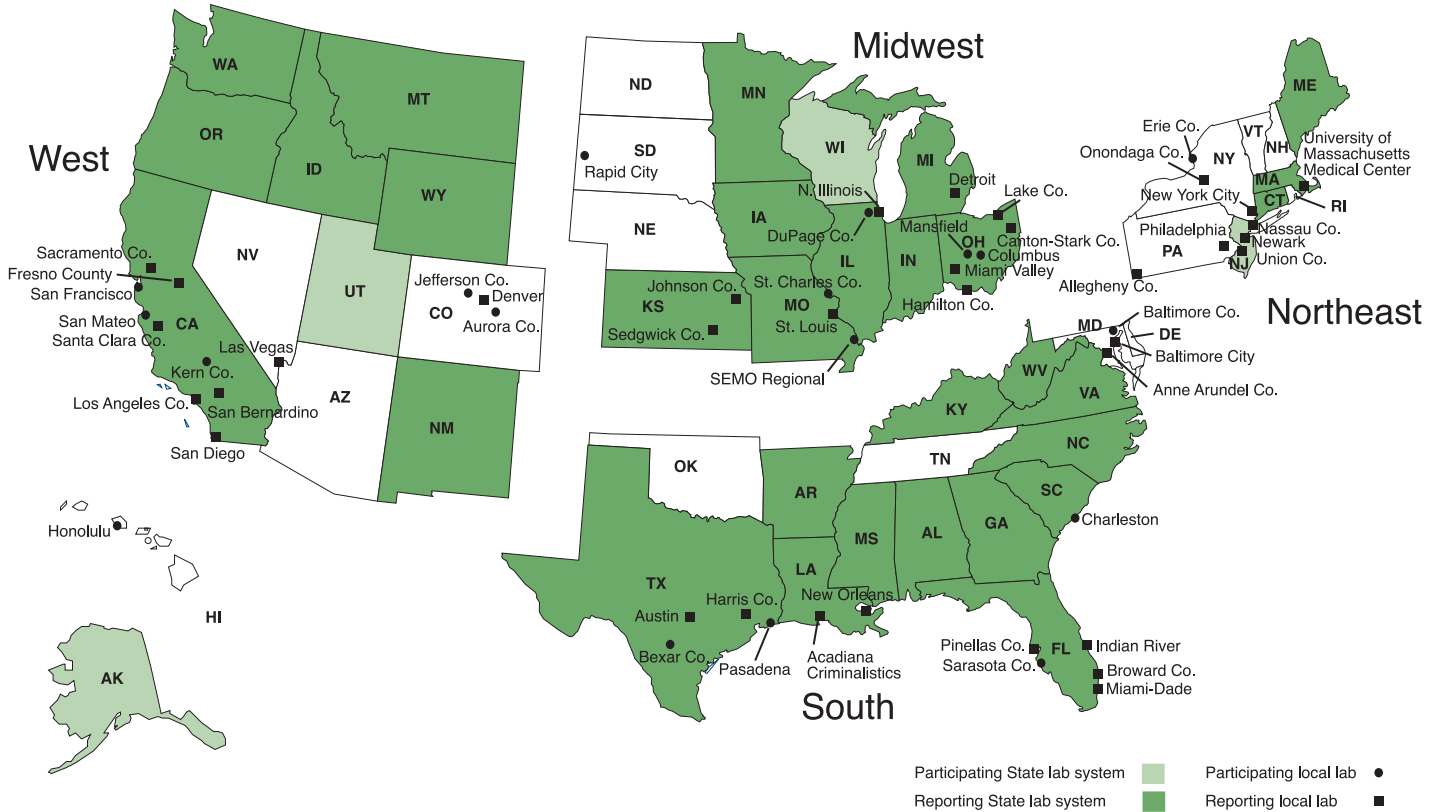
Limitations

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

- Currently, NFLIS includes only State and local forensic labs. Drug analyses conducted by Federal labs are not included, although plans to solicit the participation of all Federal labs are being developed and may be implemented during 2003.
- NFLIS currently includes drug chemistry results from completed analyses only. Drug evidence obtained by law enforcement but not analyzed by labs is not included in the database.
- State and local policies that relate to the enforcement and prosecution of specific drugs can affect the types of drug evidence submitted to labs for analysis.
- Lab policies and procedures for handling drug evidence vary. Some labs analyze all evidence submitted, while others analyze only selected items. The most common reasons cited by labs for not analyzing submitted evidence are if the case is dismissed from court or if no defendant can be tied to the case (e.g., drugs found on a park bench).
- National and regional estimates in Section 1 may be subject to variation associated with sample estimates, including nonresponse bias.
- For results presented in Section 2, the absolute and relative frequency of analyzed drug items can in part be a function of labs' participating in NFLIS.
- Labs vary with respect to the analytical records they maintain. For example, some labs' record total weight of the seizure, while others record only the weight of the sample selected for the analysis (e.g., the weight of one of five bags of powder).

Appendix A

Participating Labs, by Census Region (as of February 2003)



This quarterly report reflects data reported by 30 State labs and 35 local labs (a total of 160 individual State and local labs) from October 1, 2002, to December 31, 2002. The national and regional estimates in Section 1 reflect data reported in the NFLIS national sample. Of the labs in the national sample, 26 State lab systems and 26 local labs (a total of 139 individual State and local labs) reported data for this report (see list of labs on page 10).

Additional State and local labs have formally joined NFLIS and are considered “participating” in the program but have not begun to report drug analyses

data on a regular basis. Overall, 184 individual forensic laboratories, including 35 State lab systems and 52 local or municipal labs, had joined NFLIS as of February 2003.

The DEA and RTI will continue to improve NFLIS by fulfilling goals related to lab recruitment, reporting, and data analysis. One objective is to recruit all State and local forensic laboratories that regularly perform drug analyses. In addition, plans are to extend enlistment activities to Federal forensic laboratories including those operated by the DEA, FBI, and U.S. Customs. RTI staff will also continue to collaborate with newly

participating labs to facilitate reporting through their laboratory information systems and provide technical support when needed.

Another major goal is to continue to expand the types of data analyses presented in NFLIS reports. This includes special analyses on drug purity, drugs identified in strategic locations, and drug combinations. In addition, we will continue efforts to increase the flexibility of our Interactive Data Site (IDS), including additional options for producing customized and timely data queries, information exchange forums, and electronic bulletin boards.

Appendix B

Summary of Participating and Reporting Labs

State	Lab Type	Lab Name	Reporting
AK	State	Alaska Department of Public Safety (Anchorage)	
AL	State	Alabama Department of Forensic Sciences (9 sites)*	X
AR	State	Arkansas State Crime Laboratory (Little Rock)*	X
CA	State	California Department of Justice (10 sites)*	X
	Local	Fresno County Sheriffs Forensic Lab (Fresno)	X
	Local	Kern County District Attorney's Office (Bakersville)	
	Local	Los Angeles County Sheriffs Department (4 sites)*	X
	Local	Sacramento County District Attorney's Office (Sacramento)*	X
	Local	San Bernardino Sheriff's Office (2 sites)*	X
	Local	San Diego Police Department (San Diego)*	X
	Local	San Francisco Police Department (San Francisco)*	
	Local	San Mateo County Sheriffs Office (San Mateo)	
	Local	Santa Clara District Attorney's Office (San Jose)	X
CO	Local	Aurora Police Department (Aurora)	
	Local	Denver Police Department (Denver)*	X
	Local	Jefferson County Sheriff's Office (Golden)	
CT	State	Connecticut Department of Public Safety (Hartford)*	X
FL	State	Florida Department of Law Enforcement (8 sites)*	X
	Local	Broward County Sheriff's Office (Ft. Lauderdale)*	X
	Local	Miami-Dade Police Department (Miami)*	X
	Local	Pinellas County Forensic Laboratory (Largo)	X
	Local	Regional Crime Laboratory at Indian River Community College (Ft. Pierce)	X
	Local	Sarasota County Sheriff's Office (Sarasota)	
GA	State	Georgia State Bureau of Investigation (7 sites)*	X
HI	Local	Honolulu Police Department (Honolulu)	
IA	State	Iowa Division of Criminal Investigation (Des Moines)*	X
ID	State	Idaho State Police (3 sites)*	X
IL	State	Illinois State Police (8 sites)*	X
	Local	DuPage County Sheriffs Office (Wheaton)	
	Local	Northern Illinois Police Crime Lab (Chicago)*	X
IN	State	Indiana State Police Laboratory (4 sites)*	X
KS	State	Kansas Bureau of Investigation (3 sites)	X
	Local	Johnson County Sheriff's Office (Mission)	X
	Local	Sedgwick County (Wichita)	X
KY	State	Kentucky State Police (6 sites)*	X
LA	State	Louisiana State Police Crime Laboratory (Baton Rouge)*	X
	Local	Acadiana Criminalistics Laboratory (New Iberia)*	X
	Local	New Orleans Police Department Crime Lab (New Orleans)*	X
MA	State	Massachusetts Department of Public Health (2 sites)*	X
	State	Massachusetts Department of State Police (Sudbury)*	X
	Local	University of Massachusetts Medical Center (Worcester)	X
MD	Local	Anne Arundel County Police Department (Millersville)*	X
	Local	Baltimore City Police Department (Baltimore)*	X
	Local	Baltimore County Police Department (Towson)	
ME	State	Maine Department of Human Services (Augusta)*	X

State	Lab Type	Lab Name	Reporting
MI	State	Michigan State Police (7 sites)*	X
	Local	Detroit Police Department (Detroit)*	X
MN	State	Minnesota Bureau of Criminal Apprehension (2 sites)	X
MO	State	Missouri State Highway Patrol (6 sites)*	X
	Local	St. Louis Police Department (St. Louis)*	X
	Local	South East Missouri Regional Crime Lab (Cape Girardeau)*	
	Local	St. Charles County Criminalistics Lab (St. Charles)	
MS	State	Mississippi Department of Public Safety (4 sites)*	X
MT	State	Montana Forensic Science Division (1 site)	X
NC	State	North Carolina State Bureau of Investigation (2 sites)*	X
NJ	State	New Jersey State Police (4 sites)*	
	Local	Newark Police Department (Newark)	X
	Local	Union County Prosecutors Office (Westfield)*	X
NM	State	New Mexico Department of Public Safety (Santa Fe)*	X
NY	Local	Erie County Central Police Services Lab (Buffalo)	
	Local	Nassau County Police Department (Mineola)*	X
	Local	New York Police Department Crime Laboratory**	X
	Local	Onondaga County Center for Forensic Sciences (Syracuse)*	X
NV	Local	Las Vegas Metro Police Department Crime Lab (Las Vegas)*	X
OH	State	Ohio State Highway Patrol (Columbus)*	X
	Local	Canton-Stark County Crime Lab (Canton)	X
	Local	Columbus Police Department (Columbus)	
	Local	Hamilton County Coroners Office (Cincinnati)*	X
	Local	Lake County Regional Forensic Lab (Painesville)*	X
	Local	Mansfield Police Department Crime Lab (Mansfield)	
Local	Miami Valley Regional Crime Lab (Dayton)*	X	
OR	State	Oregon State Police Forensic Services Division (7 sites)*	X
PA	Local	Allegheny County Coroner's Office (Pittsburgh)*	X
	Local	Philadelphia Police Department (Philadelphia)*	X
SC	State	South Carolina Law Enforcement Division (Columbia)*	X
	Local	Charleston Police Department (Charleston)	
SD	Local	Rapid City Police Department (Rapid City)	
TX	State	Texas Dept. of Public Safety (13 sites)*	X
	Local	Austin Police Department Crime Laboratory (Austin)*	X
	Local	Bexar County Criminal Investigations Lab (San Antonio)*	
	Local	Harris County Medical Examiner Office (Houston)	X
	Local	Pasadena Police Department (Pasadena)	
UT	State	Utah State Crime Lab (Salt Lake City)	
VA	State	Virginia Division Forensic Science (4 sites)*	X
WA	State	Washington State Patrol (6 sites)*	X
WI	State	Wisconsin Department of Justice (3 sites)	
WV	State	West Virginia State Police (South Charleston)	X
WY	State	Wyoming State Crime Laboratory (Cheyenne)	X

* Laboratory is part of our national sample.

** The New York City Crime Lab is part of the national sample and currently reports summary data.

National Estimates Methodology

This section discusses the methods used for producing the national and regional estimates. These include weighting and imputation procedures and adjustments.

Sample Design

The initial planning and design of the NFLIS national sample began after NFLIS was implemented by the DEA and RTI in September 1997. Results from a 1998 survey provided lab-specific information, including annual case-load figures, used to establish a national sampling frame of all State and local forensic labs that routinely perform solid dosage drug analyses. A representative probability proportional to size sample was drawn on the basis of annual cases analyzed per lab, resulting in a NFLIS national sample of 29 State lab systems and 31 local labs, a total of 165 individual labs (see page 10 for a list of sampled and nonsampled NFLIS labs).

During 2001, data from a sufficient number of these sampled labs were collected to provide a basis for generating national and regional estimates. Only the data for those labs that reported drug analysis data for 2 or more months during the quarter 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 during the quarter. A separate item-level and case-level weight was computed for each sample lab or lab system using information obtained from an updated lab survey administered in 2002. These survey results allowed for the case- and item-level weights to be poststratified to reflect current levels of lab 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 labs with a sufficient frequency to allow reliable estimates to be computed. For some drugs, such as marijuana and cocaine, thousands of items are reported quarterly, allowing for reliable national prevalence estimates to be computed. Many other substances have substantially fewer observations for the entire sample. A prevalence estimate based upon so few observations is not likely to be reliable and thus was not presented with the national estimates. The method for evaluating the cutoff point involved an analysis 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 are suppressed and not shown in the tables.

Imputations and Adjustments

Because of technical and other reporting issues, several labs did not report data for every month during the quarter. These factors resulted in missing monthly data, which is a concern for presenting national estimates of drug prevalence. Imputations were performed separately by drug for labs missing monthly data, using drug-specific proportions generated from labs reporting a full 3 months' 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 labs report items in terms of the number of vials of the particular pill, but a few labs report the count of the individual pills themselves as "items." Because the case-level counts across labs are comparable, they were used to develop item-level counts for the few labs that define items differently. For those labs, it was assumed that drug-specific ratios of cases to items should be similar to those of labs serving similarly sized areas. Item-to-case ratios for each drug were produced for the similarly sized labs. These drug-specific ratios were then used to adjust the drug item counts for the relevant labs.

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