NFLIS

National Forensic Laboratory Information System

Quarterly findings

The National Forensic Laboratory Information System (NFLIS) systematically 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.

Results in this report are presented for both drug items and drug cases. Drug items (or exhibits) 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 incident.

Section 1 provides nationally and regionally representative estimates of the most common drug items and drug cases analyzed between July 1, 2002, and September 30, 2002 (see Appendix C). These estimates are based on data reported among the NFLIS national sample, comprising 29 State lab systems and 31 local labs. Section 2 describes results for drug items identified by all State and local labs reporting to NFLIS during the third quarter, including labs that are not part of the national sample. Results presented in Section 2 are not weighted.

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) has long recognized that these analyses represent valuable information. Since 1997, NFLIS has developed into a fully operational information system and is moving toward the recruitment of all State and local labs. The current partnership includes 34 State lab systems and 49 local or municipal labs, a total of 179 individual labs.

Highlights

Section 1:

■ From July 1, 2002, to September 30, 2002, an estimated 452,449 drug items were analyzed by State and local laboratories in the United States. Cannabis/THC was the most commonly identified drug (162,536 items), followed by cocaine (144,913 items), methamphetamine (51,421 items), and heroin (28,085 items). It is estimated that these four drugs accounted for 86% of all analyzed drug items.

■ NFLIS laboratories also report chemical results for drug cases, which typically reflect all drug items obtained during a single incident. State and local laboratories analyzed an estimated 303,468 drug cases during the quarter. More than 40% of cases contained one or more cannabis/THC item, 37% had one or more cocaine item, 12% had one or more methamphetamine item, and 7% contained one or more heroin item.

Section 2:

■ Two-thirds of narcotic analgesics were identified as either hydrocodone or oxycodone. The largest percentage of oxycodone continues to be reported in the Northeast, while hydrocodone is the most common narcotic analgesic reported in the West and South.

■ MDMA is the most common club drug identified in every region. Nearly a quarter of club drugs reported in the Northeast were identified as ketamine. In addition, 9% of club drugs in the Midwest and 8% in the West were identified as GHB/GBL.

■ One percent of all reported items contained two or more substances, most commonly heroin/cocaine. Overall, about 4 in 10 drug combinations contained cocaine, 3 in 10 contained heroin, and nearly 2 in 10 drug combinations contained methamphetamine.

Section 1: National and Regional Estimates

Drug Items Analyzed

From July 1, 2002 to September 30, 2002, an estimated 452,449 drug items were analyzed by State and local forensic laboratories in the United States. Table 1.1 provides nationally and regionally representative counts and prevalence estimates for the 25 most commonly identified drug items.

The 25 most common drug items accounted for 94% of all drugs analyzed during the quarter, an estimated 425,779 items. Cannabis/THC was the most commonly identified drug item (162,536 items), followed by cocaine (144,913 items), methamphetamine (51,421 items), and heroin (28,085 items). These four drugs accounted for 86% of all analyzed drug items.

Fifteen of the substances appearing in the top 25 were controlled drugs that are available in pharmaceutical products: alprazolam (5,018 items), oxycodone (4,338 items), hydrocodone (3,984), diazepam (2,037), clonazepam (1,724), phencyclidine (1,454 items), methadone (957 items), amphetamine (837 items), codeine (694 items), ketamine (642 items), morphine (640 items), propoxyphene (600 items), lorazepam (498 items), methylphenidate (391

items), and butalbital (373 items). Pseudoephedrine (a precursor chemical used to manufacture methamphetamine; 2,722 items), acetaminophen (1,168 items), and carisoprodol (866 items), were non-controlled drugs found in the top 25. An additional 3,778 items were identified as MDMA (or Ecstasy), a derivative of methamphetamine increasingly widespread as a recreational drug of abuse.

Figure 1.1 illustrates the regional variation that exists in the types of drugs that are most frequently identified. It should be noted, however, that these differences in part may reflect variation in enforcement and prosecution priorities, as well as variation in lab procedures.

The largest relative percentage of heroin was reported in the Northeast. Overall, the Northeast identified about 14%, or 9,486 items, as heroin during the third quarter, followed by 5% in the South (9,352 items), 4% in the Midwest (5,615 items), and 4% in the West (3,632 items). The highest proportions of cocaine continue to be reported in the South (40%, or 68,348 items) and Northeast (37%, or 24,622 items).

The highest relative percentages of methamphetamine were identified in the West (38%, or 33,365 items), with lower percentages reported in the Midwest (6%, or 8,026 items), the South (6%, or 9,876 items), and the Northeast (<1%, or 153 items). A higher percentage of alprazolam (1.8%, or 2,998 items) was reported in the South than in other census regions (Table 1.1).

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

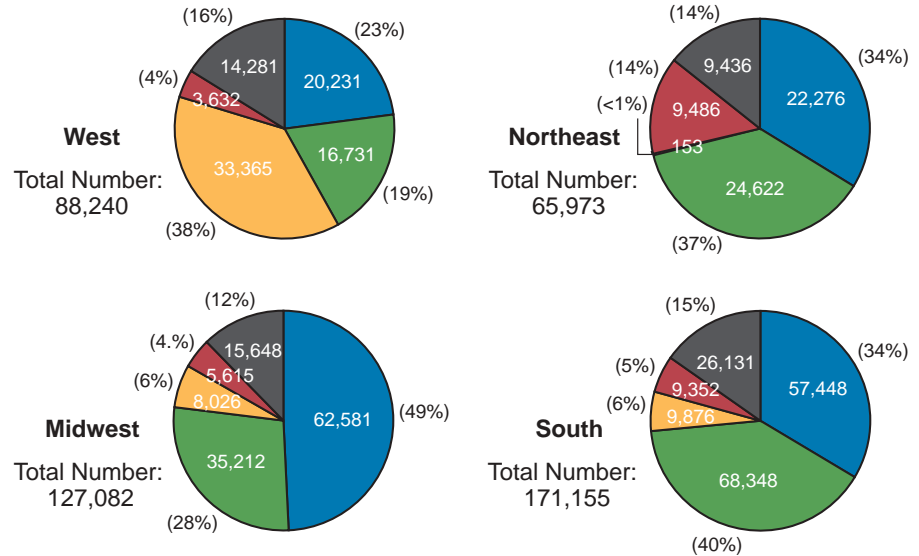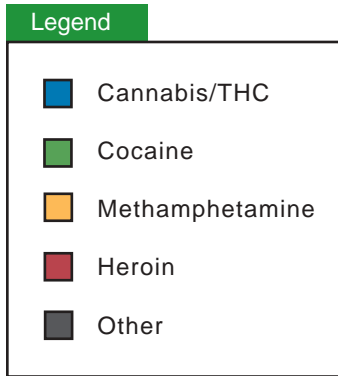Estimated number and percentage of total analyzed drug items, July–September 2002

	Census Region									
Drug	National		West		Midwest		Northeast		South	
Cannabis/THC	162,536	(35.92%)	20,231	(22.93%)	62,581	(49.24%)	22,276	(33.76%)	57,448	(33.57%)
Cocaine	144,913	(32.03%)	16,731	(18.96%)	35,212	(27.71%)	24,622	(37.32%)	68,348	(39.93%)
Methamphetamine	51,421	(11.36%)	33,365	(37.81%)	8,026	(6.32%)	153	(0.23%)	9,876	(5.77%)
Heroin	28,085	(6.21%)	3,632	(4.12%)	5,615	(4.42%)	9,486	(14.38%)	9,352	(5.46%)
Non-controlled, non-narcotic drug	5,352	(1.18%)	2,343	(2.65%)	1,183	(0.93%)	797	(1.21%)	1,029	(0.60%)
Alprazolam	5,018	(1.11%)	***	***	952	(0.75%)	642	(0.97%)	2,998	(1.75%)
Oxycodone	4,338	(0.96%)	431	(0.49%)	1,043	(0.82%)	1,067	(1.62%)	1,797	(1.05%)
Hydrocodone	3,984	(0.88%)	403	(0.46%)	892	(0.70%)	382	(0.58%)	2,308	(1.35%)
MDMA	3,778	(0.84%)	643	(0.73%)	570	(0.45%)	630	(0.95%)	1,936	(1.13%)
Pseudoephedrine*	2,722	(0.60%)	927	(1.05%)	1,100	(0.87%)	0	(0.00%)	694	(0.41%)
Diazepam	2,037	(0.45%)	328	(0.37%)	438	(0.35%)	213	(0.32%)	1,057	(0.62%)
Clonazepam	1,724	(0.38%)	181	(0.21%)	335	(0.26%)	552	(0.84%)	656	(0.38%)
Phencyclidine	1,454	(0.32%)	534	(0.61%)	205	(0.16%)	526	(0.80%)	188	(0.11%)
Acetaminophen	1,168	(0.26%)	***	***	403	(0.32%)	***	***	285	(0.17%)
Methadone	957	(0.21%)	151	(0.17%)	191	(0.15%)	297	(0.45%)	318	(0.19%)
Carisoprodol	866	(0.19%)	***	***	160	(0.13%)	40	(0.06%)	431	(0.25%)
Amphetamine	837	(0.19%)	216	(0.24%)	198	(0.16%)	105	(0.16%)	318	(0.19%)
Psilocin	751	(0.17%)	294	(0.33%)	213	(0.17%)	52	(0.08%)	192	(0.11%)
Codeine	694	(0.15%)	105	(0.12%)	181	(0.14%)	124	(0.19%)	284	(0.17%)
Ketamine	642	(0.14%)	77	(0.09%)	133	(0.10%)	269	(0.41%)	163	(0.10%)
Morphine	640	(0.14%)	165	(0.19%)	181	(0.14%)	66	(0.10%)	229	(0.13%)
Propoxyphene	600	(0.13%)	39	(0.04%)	172	(0.14%)	56	(0.08%)	333	(0.19%)
Lorazepam	498	(0.11%)	55	(0.06%)	204	(0.16%)	65	(0.10%)	174	(0.10%)
Methylphenidate	391	(0.09%)	63	(0.07%)	138	(0.11%)	57	(0.09%)	132	(0.08%)
Butalbital	373	(0.08%)	***	***	291	(0.23%)	19	(0.03%)	52	(0.03%)
Top 25 Total	425,779	(94.11%)	82,055	(92.99%)	120,617	(94.91%)	62,509	(94.75%)	160,600	(93.80%)
All Other Analyzed Items	26,670	(5.89%)	6,185	(7.01%)	6,465	(5.09%)	3,465	(5.25%)	10,555	(6.20%)
Total Analyzed Items	452,449	(100.00%)	88,240	(100.00%)	127,082	(100.00%)	65,973	(100.00%)	171,155	(100.00%)

MDMA = 3,4-Methylenedioxymethamphetamine
* Includes items from a small number of labs that do not specify between pseudoephedrine and ephedrine.
*** These estimates do not meet standards of precision and reliability due to their small sample sizes.

Legend

- 🟦 Cannabis/THC
- 🟩 Cocaine
- 🟨 Methamphetamine
- 🟥 Heroin
- ⬛ Other

West
Total Number: 88,240

(16%) 14,281 / (23%) 20,231 / (4%) 3,632 / 33,365 (38%) / 16,731 (19%)

Northeast
Total Number: 65,973

(14%) 9,436 / (34%) 22,276 / (14%) / (<1%) 9,486 / 153 / 24,622 (37%)

Midwest
Total Number: 127,082

(12%) 15,648 / (4.%) 5,615 / (6%) 8,026 / 62,581 (49%) / 35,212 (28%)

South
Total Number: 171,155

(15%) 26,131 / (34%) 57,448 / (5%) 9,352 / (6%) 9,876 / 68,348 (40%)

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 nationally representative estimates for cases containing the most commonly identified drugs. Because multiple drug items can be reported within a single case, the cumulative percentage for all substances exceeds 100%.

Cannabis/THC and cocaine are heavily represented in the drug case results. Overall, nearly 8 in 10 drug cases contained either cannabis/THC or cocaine. One or more cannabis/THC item was identified in 40% of all cases nationally, or an estimated 122,157 cases. One or more cocaine item was identified in 36% of all cases nationally, or an estimated 110,929 cases. In addition, 12% or 36,883 drug cases analyzed by labs contained one or more methamphetamine item, while 7% or 20,566 cases contained heroin.

Among other drugs, alprazolam was estimated to have been reported in 1.3% or 3,928 cases. Oxycodone (3,356 cases), hydrocodone (3,310 cases), and MDMA (2,839 cases) were each estimated to have been identified in approximately 1% of all analyzed drug cases.

Table 1.2   National Case Estimates

Number and percentage of cases containing the 25 most frequently identified drugs, July–September 2002

Drug	Count	Percentage*
Cannabis/THC	122,157	40.25%
Cocaine	110,929	36.55%
Methamphetamine	36,883	12.15%
Heroin	20,566	6.78%
Non-controlled, non-narcotic drug	3,948	1.30%
Alprazolam	3,928	1.29%
Oxycodone	3,356	1.11%
Hydrocodone	3,310	1.09%
MDMA	2,839	0.94%
Pseudoephedrine**	1,822	0.60%
Diazepam	1,741	0.57%
Clonazepam	1,445	0.48%
Phencyclidine	1,303	0.43%
Acetaminophen	919	0.30%
Carisoprodol	867	0.29%
Methadone	838	0.28%
Amphetamine	667	0.22%
Psilocin	649	0.21%
Codeine	594	0.20%
Morphine	528	0.17%
Propoxyphene	524	0.17%
Ketamine	463	0.15%
Lorazepam	416	0.14%
Methylphenidate	315	0.10%
Butalbital	285	0.09%
Top 25 Total	343,210	105.87%
All Other Substances	20,823	6.52%
Total All Substances	364,033	112.40%

* 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 303,468.

** 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 drug item counts for all NFLIS labs that reported 2 or more months of data between July 1, 2002, and September 30, 2002, including reporting labs not part of the NFLIS national sample. These counts are not weighted. During the third quarter, a total of 235,829 drug items were reported by NFLIS labs.

Narcotic Analgesics

The illegal use of narcotic analgesics, commonly prescribed by medical professionals for pain, is one of the most serious emerging drug problems in the United States (Pulse Check, 2002; DAWN, 2002; NHSDA, 2002). In many areas, prescription opiates such as oxycodone are used as heroin substitutes. From 1999 to 2001, drug abuse-related emergency department mentions of oxycodone rose 68%, of methodone rose 44%, and of hydrocodone rose 32% (DAWN, 2002).

During the third quarter, NFLIS labs identified 5,947 drug items as narcotic analgesics, representing nearly 3% of all analyzed items (Table 2.1). More than two-thirds of narcotic analgesics were identified as either hydrocodone (34%) or oxycodone (33%). An additional 8% of items were identified as methadone, 6% as codeine, and 6% as morphine.

Figure 2.1 shows the distribution of narcotic analgesics by census region. Hydrocodone continues to be the most frequently identified narcotic analgesic in the South (40%) and West (41%). The Northeast reported the highest relative frequency of oxycodone (46%) and methadone (21%). The Midwest reported the highest relative percentage of dihydrocodeine (10%), which is included in the "other narcotic analgesics" category.
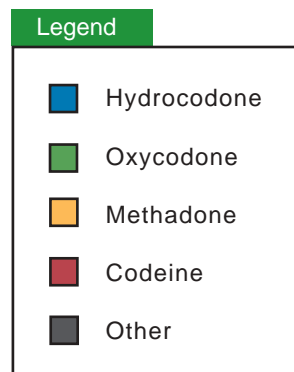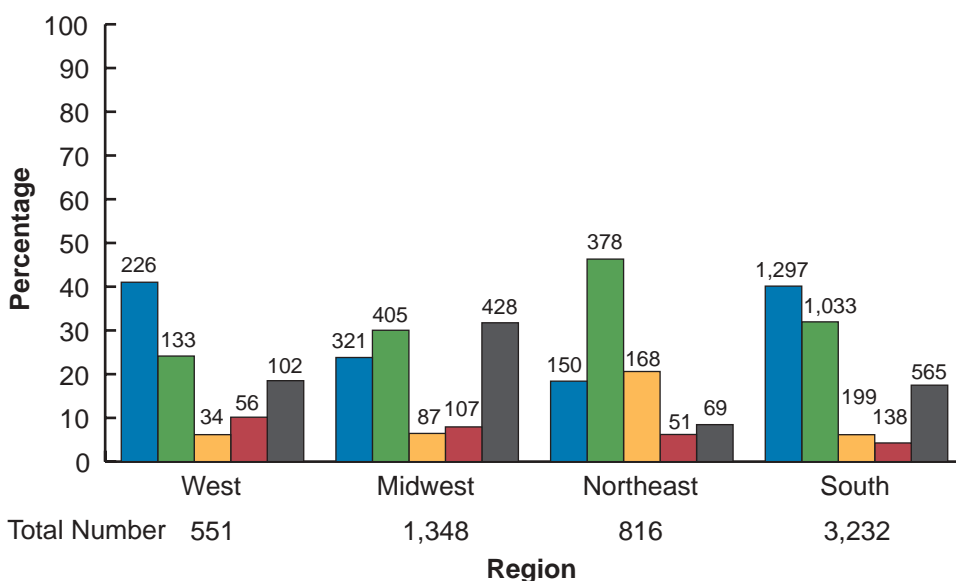
Table 2.1

Narcotic Analgesics
Number and percentage of identified narcotic analgesics

Analgesic	Total	Percentage
Hydrocodone	1,994	33.53%
Oxycodone	1,949	32.77%
Methadone	488	8.21%
Codeine	352	5.91%
Morphine	347	5.83%
Propoxyphene	328	5.52%
Dihydrocodeine	134	2.26%
Hydromorphone	133	2.24%
Meperidine	68	1.14%
Tramadol	56	0.94%
Nalbuphine	51	0.86%
Fentanyl	20	0.34%
Pentazocine	19	0.32%
Butorphanol	5	0.08%
Buprenorphine	3	0.05%
Total analgesics	**5,947**	**100%**
Total analyzed items	**235,829**	

Figure 2.1

Distribution of narcotic analgesics by region

Legend:
- Hydrocodone
- Oxycodone
- Methadone
- Codeine
- Other

	West	Midwest	Northeast	South
Hydrocodone	226	321	150	1,297
Oxycodone	133	405	378	1,033
Methadone	34	87	168	199
Codeine	56	107	51	138
Other	102	428	69	565
Total Number	551	1,348	816	3,232

Benzodiazepines

Benzodiazepines are depressants medically prescribed 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%.

NFLIS laboratories reported a total of 4,558 benzodiazepine drug items during the 3rd quarter (Table 2.2). More than 9 in 10 benzodiazepines were identified as either alprazolam (e.g. Xanax), diazepam (e.g., Valium), or clonazepam (e.g., Rivotril). Overall, 53% of benzodiazepines were reported as alprazolam, 22% as diazepam, and 18% as clonazepam.

Alprazolam continues to be most commonly reported in the South, where 60% of benzodiazepines were identified as alprazolam, followed by the Midwest (49%; see Figure 2.2). In the West, 43% of benzodiazepines were identified as diazepam. More than a third of benzodiazepines in the Northeast were identified as clonazepam (35%), by far the largest percentage of any region.
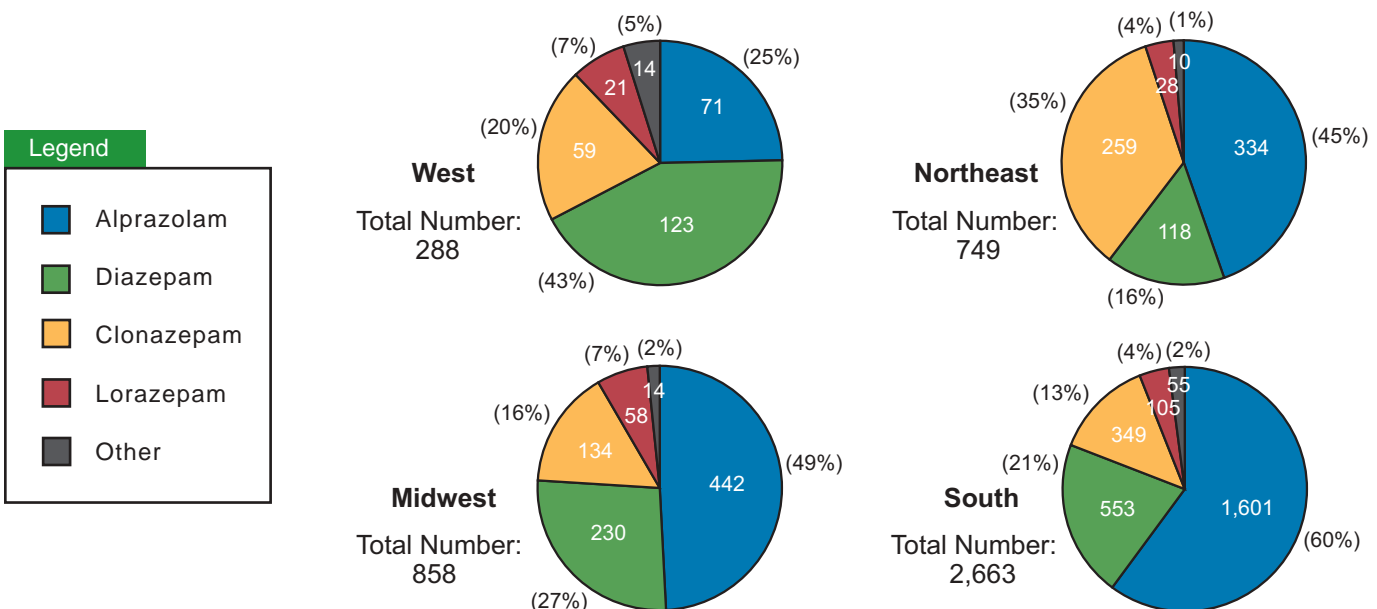
Table 2.2	**Benzodiazepines** Number and percentage of total identified benzodiazepines	
Benzodiazepines	**Total**	**Percentage**
Alprazolam	2,428	53.27%
Diazepam	1,024	22.46%
Clonazepam	801	17.56%
Lorazepam	212	4.65%
Temazepam	40	0.88%
Chlordiazepoxide	29	0.64%
Flunitrazepam	15	0.33%
Triazolam	8	0.18%
Midazolam	1	0.02%
Total benzodiazepines	**4,558**	**100%**
Total analyzed items	**235,829**	

Figure 2.2   Distribution of benzodiazepines by region

Legend
- Alprazolam
- Diazepam
- Clonazepam
- Lorazepam
- Other

West Total Number: 288
- (25%) 71
- (43%) 123
- (20%) 59
- (7%) 21
- (5%) 14

Northeast Total Number: 749
- (45%) 334
- (16%) 118
- (35%) 259
- (4%) 28
- (1%) 10

Midwest Total Number: 858
- (49%) 442
- (27%) 230
- (16%) 134
- (7%) 58
- (2%) 14

South Total Number: 2,663
- (60%) 1,601
- (21%) 553
- (13%) 349
- (4%) 105
- (2%) 55

Club Drugs

Table 2.3 presents drug items identified as "club drugs." This classification refers to drugs such as MDMA (or Ecstasy) that originally gained popularity at all-night "raves" and dance clubs, although the drugs are now commonly used in bars, private parties, and other settings, especially by teenagers and young adults (Pulse Check, 2002; Monitoring the Future, 2002). The sale and use of club drugs has risen sharply since the late 1990s, as documented by multiple sources including survey, emergency department, and law enforcement data (Monitoring the Future, 2002; DAWN, 2002; Pulse Check, 2002).

About three in four club drugs reported to NFLIS during the 3rd quarter were identified as MDMA (Table 2.3). An additional 12% of club drugs were identified as ketamine (or "special K"), 7% were reported as 3,4-methylenedioxyamphetamine (MDA), and 6% as gamma-hydroxybutyrate or gamma-butyrolactone (GHB/GBL).

As shown in Figure 2.3, MDMA represented the majority of club drugs reported in each census region: 81% in the South, 71% in the Northeast, 67% in the West, and 65% in the Midwest. Beyond MDMA, regions vary in the types of club drugs that are commonly identified. Nearly a quarter of club drugs reported in the Northeast were identified as ketamine. The highest percentages of MDA were reported in the West (14%) and Midwest (12%), while 9% of club drugs in the Midwest and 8% in the West were identified as GHB/GBL.

Legend	
■ (blue)	MDMA
■ (green)	Ketamine
■ (orange)	MDA
■ (red)	GHB/GBL
■ (gray)	Other

Table 2.3

Club Drugs

Number and relative percentage of identified club drugs

| Club Drug	Total	Percentage
MDMA	1,825	74.27%
Ketamine	306	12.46%
MDA	177	7.20%
GHB/GBL*	146	5.94%
MDEA	2	0.08%
PMA	1	0.04%
Total club drugs	**2,457**	**100%**
Total analyzed items	235,829	

MDEA = 3,4-methylenedioxyethylamphetamine

PMA = para-methoxyamphetamine

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

Figure 2.3

Distribution of club drugs by region

Region	Total Number
West	327
Midwest	466
Northeast	399
South	1,265
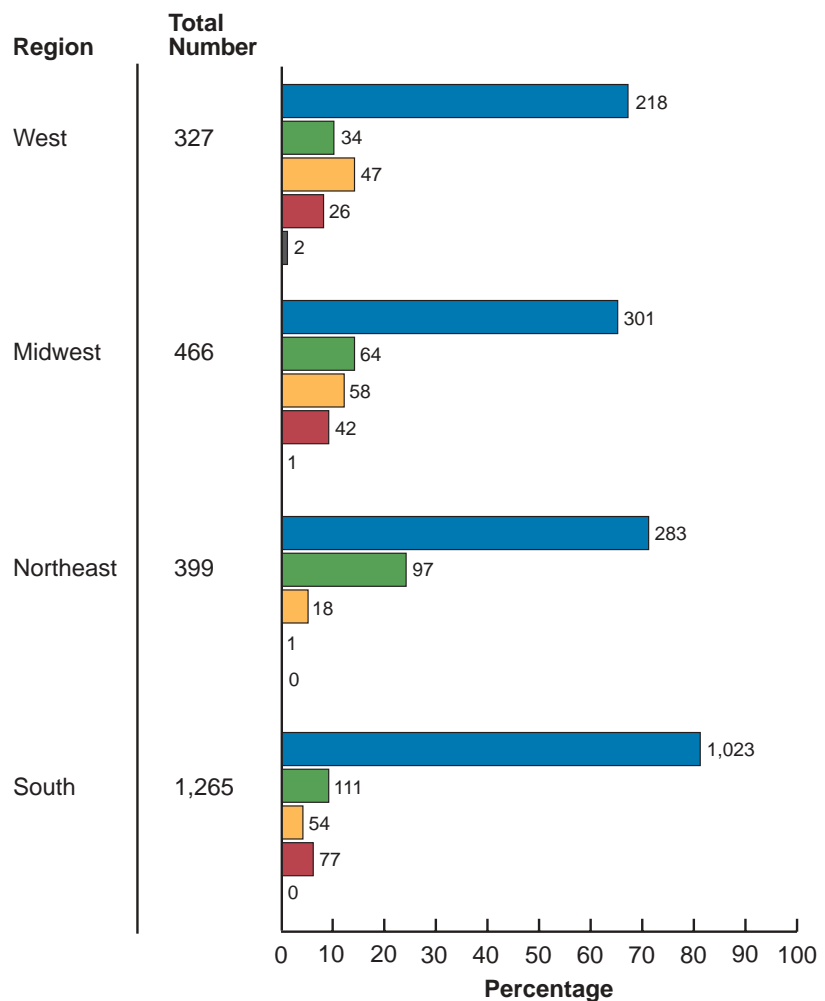
Drug Combinations

In addition to tracking unique substances identified by forensic labs, NFLIS can provide data on drug combinations or multiple substances reported within a single drug item. Combining substances can substantially increase the potential lethality of already dangerous and harmful drugs. According to mortality data from medical examiners, three in four drug-related deaths in 2000 involved two or more substances (DAWN, 2002). During the third quarter of 2002, multiple substances were identified in 2,513 items, about 1% of all reported items.

Cocaine

Cocaine, including both powder and "crack," was present in 41% of all drug combinations identified during the 3rd quarter (Table 2.4). In addition to cocaine/heroin (18%) and cocaine/cannabis (10%), cocaine/methamphetamine was identified in 70 items, or nearly 3% of all combinations. Many of the remaining substances combined with cocaine could be considered excipients typically used to dilute the cocaine. Among these combinations, the most commonly identified were cocaine/inositol, cocaine/boric acid, and cocaine/caffeine.

Heroin

Heroin was present in 31% of identified drug combinations (Table 2.5). By far the most common combination was heroin/cocaine, which accounted for more than half of heroin-related combinations. Other commonly reported combinations contained heroin and a non-controlled substance such as procaine, mannitol, or caffeine.

Methamphetamine

Methamphetamine was present in about 17% of drug combinations reported during the quarter, a total of 424 items (Table 2.6). One of the most commonly identified methamphetamine-related combinations was methamphetamine/dimethylsulfone (76 items). Dimethylsulfone (or methylsulfonylmethane) is a "cut" in methamphetamine typically used by Mexican trafficking organizations (DEA, 2001). Methamphetamine/pseudoephedrine and methamphetamine/phosphorus may reflect impurities resulting from a clandestine manufacturing process.

Table 2.4 — Cocaine Combinations
Number and percentage of identified cocaine combinations

Substance 1	Substance 2	Total	Percentage
Cocaine	Heroin	453	18.03%
Cocaine	Cannabis	242	9.63%
Cocaine	Methamphetamine	70	2.79%
Cocaine	Inositol	45	1.79%
Cocaine	Boric Acid	38	1.51%
Cocaine	Procaine	27	1.07%
Cocaine	Caffeine	20	0.80%
Cocaine	Lactose	19	0.76%
Cocaine	Lidocaine	12	0.48%
Cocaine	Oxycodone	10	0.40%
Other Cocaine Combinations		104	4.14%
Total Cocaine Combinations		**1,040**	**41.38%**
All Combinations		**2,513**	

Table 2.5 — Heroin Combinations
Number and percentage of identified heroin combinations

Substance 1	Substance 2	Total	Percentage
Heroin	Cocaine	453	18.03%
Heroin	Procaine	82	3.26%
Heroin	Cannabis	64	2.55%
Heroin	Mannitol	51	2.03%
Heroin	Caffeine	30	1.19%
Heroin	Lidocaine	12	0.48%
Heroin	Methamphetamine	10	0.40%
Heroin	Inositol	7	0.28%
Heroin	Benzocaine	6	0.24%
Heroin	Boric Acid	5	0.20%
Other Heroin Combinations		69	2.75%
Total Heroin Combinations		**789**	**31.40%**
All Combinations		**2,513**	

Table 2.6 — Methamphetamine Combinations
Number and percentage of identified methamphetamine combinations

Substance 1	Substance 2	Total	Percentage
Methamphetamine	Cannabis	84	3.34%
Methamphetamine	Dimethylsulfone	76	3.02%
Methamphetamine	Cocaine	70	2.79%
Methamphetamine	Amphetamine	67	2.67%
Methamphetamine	MDMA	33	1.31%
Methamphetamine*	Pseudoephedrine	28	1.11%
Methamphetamine	Ketamine	16	0.64%
Methamphetamine	Heroin	10	0.40%
Methamphetamine*	Phosphorus	9	0.36%
Methamphetamine	Caffeine	3	0.12%
Other Methamphetamine Combinations		28	1.11%
Total Methamphetamine Combinations		**424**	**16.87%**
All Combinations		**2,513**	

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 changes and trends in the Nation's illegal drug problem. NFLIS can also be a critical resource for supporting drug scheduling 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 our Nation's State and local forensic laboratories are increasingly being served by the NFLIS database. The data can also benefit State, regional, and local task forces as well as single-agency operations.

Specifically, NFLIS assists the drug control community in achieving 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 is an opportunity for State and local labs to participate in a useful and high-visibility initiative. Participating labs receive regular reports that summarize data from their specific labs, as well as national and regional data. Through the Interactive Data Site (IDS), 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 labs. Drug analyses conducted by Federal forensic labs are not included, but plans to solicit the participation of all Federal labs are being developed and may be implemented in 2003.

- NFLIS currently includes results from completed drug chemistry analyses only. Evidence obtained by law enforcement but not analyzed 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 drugs 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 factors given 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.
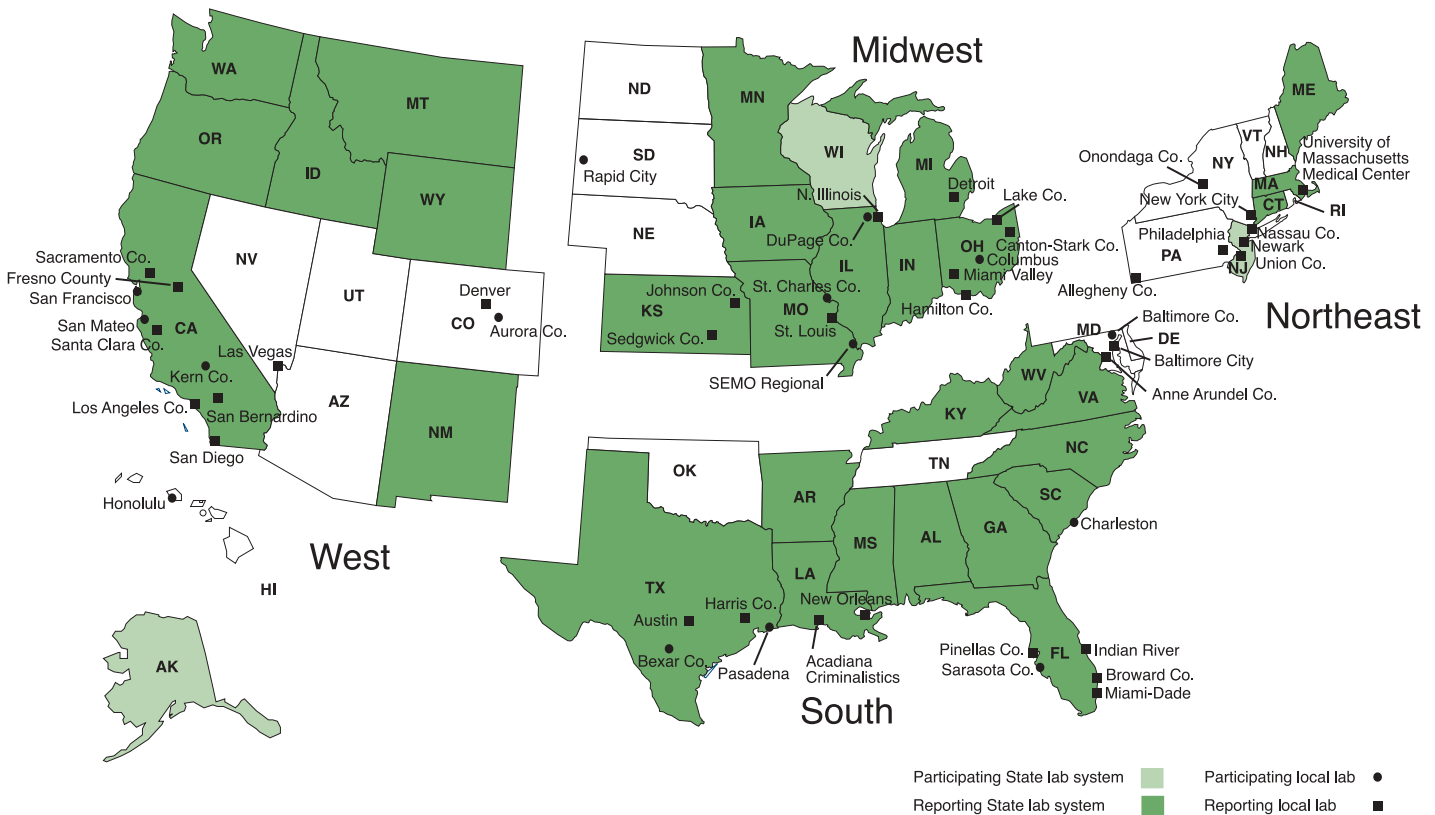
- For results presented in Section 2, the absolute and relative frequency of analyzed drug items can in part be a function of labs' participating in NFLIS.

- 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).

Participating Labs, by Census Region (as of December 2002)

Map of the United States showing participating labs by census region (West, Midwest, South, Northeast).

West: WA, OR, MT, ID, WY, NV, UT, CO, AZ, NM, CA, HI, AK; Sacramento Co., Fresno County, San Francisco, San Mateo, Santa Clara Co., Las Vegas, Kern Co., Los Angeles Co., San Bernardino, San Diego, Honolulu, Denver, Aurora Co.

Midwest: ND, SD, NE, KS, MN, IA, MO, WI, IL, IN, MI, OH; Rapid City, N. Illinois, DuPage Co., Johnson Co., Sedgwick Co., St. Charles Co., St. Louis, SEMO Regional, Detroit, Lake Co., Canton-Stark Co., Columbus, Miami Valley, Hamilton Co.

South: OK, TX, AR, LA, MS, AL, GA, KY, TN, WV, VA, NC, SC, FL, MD, DE; Austin, Bexar Co., Pasadena, Harris Co., New Orleans, Acadiana Criminalistics, Pinellas Co., Sarasota Co., FL, Indian River, Broward Co., Miami-Dade, Charleston, Baltimore Co., Baltimore City, Anne Arundel Co.

Northeast: ME, VT, NH, NY, MA, CT, RI, PA, NJ; Onondaga Co., New York City, University of Massachusetts Medical Center, Nassau Co., Newark, Union Co., Philadelphia, Allegheny Co.

Legend:
- Participating State lab system
- Reporting State lab system
- Participating local lab ●
- Reporting local lab ■

This quarterly report reflects data reported by 30 State labs and 36 local labs (a total of 156 individual State and local labs) from July 1, 2002, to September 30, 2002. The national and regional estimates presented in Section 1 reflect data reported among the NFLIS national sample (see National Estimates Methodology on page 11). Of the labs in the national sample, 26 State lab systems and 25 local labs (a total of 141 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. RTI is actively working with all of these participating labs toward various lab information system solutions to ensure that reporting can begin as soon as possible. Overall, 180 individual forensic laboratories, including 34 State lab systems and 49 local or municipal labs, had joined NFLIS as of December 2002.

The DEA and RTI will continue to improve NFLIS in the next year by fulfilling goals related to lab recruitment, reporting, and data analysis. One primary objective is the recruitment of all State and local forensic laboratories that regularly perform drug analyses. In addition, over the next year 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 enlisted 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. For instance, the 2001 NFLIS Annual Report provides information on drug purity, drugs identified in strategic locations such as South Florida and the southwestern border, and commonly reported drug combinations. In addition, we will continue efforts to increase the flexibility by which NFLIS data can be analyzed through the Interactive Data Site (IDS), including additional options for producing customized, timely data queries, information exchange forums, and electronic bulletin boards.

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	Los Angeles County Sheriffs Department (4 sites)*	X
	Local	Kern County District Attorney's Office (Bakersville)	
	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
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 (Worchester)	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	
	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	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	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)	
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 described in Section 1. These include weighting and imputation procedures and adjustments.

Sample Design

The initial planning and design of the NFLIS national sample began shorly after NFLIS was implemented by the DEA and RTI in September 1997. Results from a 1998 survey provided lab-specific information, including annual caseload 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 listing 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. With respect to months of reporting, 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 such 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.