YEAR 2001 ANNUAL REPORT

NFLIS

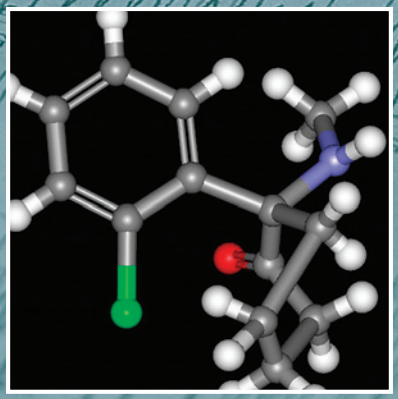
NATIONAL

FORENSIC

LABORATORY

INFORMATION

SYSTEM



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Foreword

I am pleased to present the 2001 Annual Report for the National Forensic Laboratory Information System (NFLIS), a DEA program that collects drug analyses results and other associated information from State and local forensic laboratories across the country. Only 5 years old, NFLIS is now a fully functioning information system comprising 174 forensic laboratories, including 32 State laboratory systems and 45 local or municipal laboratories. Over the next several years, the DEA will seek to expand the NFLIS partnership to all laboratories that perform solid dosage analyses, including Federal laboratories and additional State and local laboratories.

As the Nation's primary agency charged with enforcing the controlled substances laws and regulations of the United States, the DEA must invest in strategic and operational information sources at the local, State, Federal, and even foreign levels. NFLIS is enhancing DEA resources for carrying out its core mission. It is clear that NFLIS is an effective information source for better understanding and monitoring our Nation's drug problems. The NFLIS data system will improve our ability to track national, regional, and local drug patterns, including providing timely and geographically specific information on emerging drug problems. NFLIS can also be used to identify specific drug characteristics, including commonly reported abused drug combinations. One of the key advantages of NFLIS is that it collects forensic laboratory data verified by chemical analysis that have the highest degree of validity.

The DEA would like express our utmost thanks to those laboratories that have joined NFLIS and that are so critical to the program's ongoing success. I would also like to take this opportunity to encourage other Federal, State, and local forensic labs to join this exciting partnership. We look forward to all U.S. forensic laboratories' participating in this NFLIS system that serves not only the DEA and State and local control agencies but also the forensic laboratory community itself. Thank you again for your ongoing support.

Asa Hutchinson
Administrator
U.S. Drug Enforcement Administration

INTRODUCTION

The Nation's forensic laboratories are a unique source of information for monitoring and understanding drug abuse and trafficking in the United States, including the diversion of legally manufactured drugs into illegal markets. Laboratory results identify substances validated by chemical analysis. Furthermore, case- and item-level reporting provides details on the specific type of substances and on factors such as drug combinations and drug purity. As such, there are tremendous benefits associated with a national laboratory reporting system that provides timely and detailed analytic results.

The National Forensic Laboratory Information System (NFLIS) is a DEA-sponsored project that systematically collects results from solid dosage drug analyses conducted by State and local forensic laboratories. The results represent drug evidence seized by law enforcement agencies and analyzed by forensic laboratories. Variation in local policies and practices can influence when and whether evidence will be submitted to a lab and subsequently analyzed. For instance, certain labs may analyze submitted drug evidence only if a case goes to trial. Despite the limitations of NFLIS (discussed further in Appendix A) the centralized data system provides a key national, regional, and local data source for increasing our understanding of the Nation's drug problem. This includes the timely identification of relatively uncommon and emerging drugs of abuse that are of special interest to drug control agencies.

Under the direction of the DEA, the Research Triangle Institute (RTI) began developing NFLIS in September 1997. Since 1997, NFLIS has grown into a fully operational system and is moving toward the recruitment of all State and local labs. As of June 2002, 32 State lab systems and 45 local labs, representing 174 individual labs, were participating in NFLIS.

This 2001 Annual Report is divided into two major components. Section 1 provides statistically representative national and regional estimates for the 25 most frequently analyzed drug items during 2001 (see National Estimates Methodology in Appendix B for details). National case-level estimates for the most common drugs analyzed are also presented in this section. Lab cases are defined as submissions with the same unique case number and are usually associated with a single drug incident. Drug items (or exhibits) are normally defined as specimens within a case. Both the item- and case-level estimates presented in Section 1 are based on data reported among the 29 State lab systems and 31 local labs selected as the NFLIS national sample (see Appendix C).

Sections 2 through 5 provide drug item analyses for all State and local labs reporting 6 or more months of data to NFLIS in 2001. This includes findings on major drug categories such as narcotic analgesics, benzodiazepines, club drugs, anabolic steroids, and stimulants; drug combinations; and special analyses on drug purity and drugs identified in strategic "point of entry" locations. Section 6 presents results from the 2002 NFLIS laboratory survey, including administrative and procedural information reported by State and local forensic laboratories across the country.

This report was prepared under contract DEA-97-C-0059, 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 U.S. Department of Justice.

Section 1

NATIONAL ESTIMA

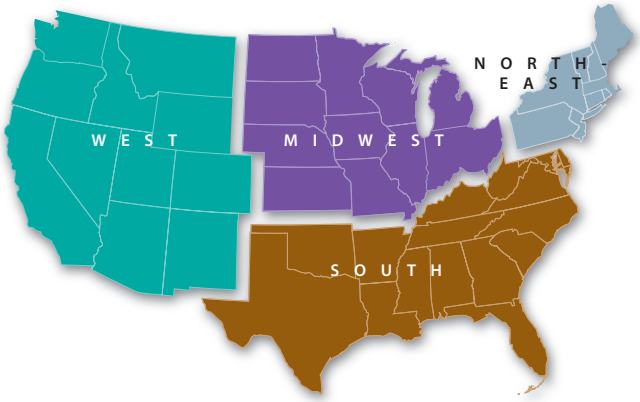
Since the implementation of NFLIS, a major goal has been the development of statistically representative national and regional estimates for drugs analyzed by State and local forensic laboratories in the United States. In 2001, sufficient data from labs constituting the NFLIS national sample were collected to provide a basis for generating reliable estimates for the most commonly reported drugs. For additional details on the NFLIS national sample and for methods used for the weighting or imputation procedures, see Appendix B.

1.1 Drug Items Analyzed

During 2001, an estimated 1,894,610 drug items were analyzed by State and local forensic laboratories in the United States. Table 1.1 provides drug item counts and prevalence estimates of the 25 most frequently analyzed drug items for the Nation and for census regions.

The top 25 analyzed drugs accounted for an estimated 1,790,254 drug items, about 94% of all drugs analyzed by State and local laboratories in the U.S. during 2001. The top four drugs—cannabis/THC, cocaine, methamphetamine, and heroin—comprised an estimated 1,658,526 items, or 88% of all analyzed drug items. Nationally, 36% of analyzed drug items were cannabis/THC, 33% were cocaine, 11% were methamphetamine, and about 8% were heroin.

Other commonly analyzed drug items include the club drug 3,4-methylenedioxymethamphetamine (MDMA) (22,188, or 1.2% of all estimated drug items), benzodiazepines including alprazolam (17,179, or 0.9%) and diazepam (7,876, or 0.4%), and narcotic analgesics such as hydrocodone (12,847, or 0.7%) and oxycodone (12,013, or 0.6%). Three non-controlled drug items were among the top 25 drugs analyzed. These included pseudoephedrine (5,583 items, or 0.3%) and ephedrine (1,753 items, or 0.1%), precursor chemicals that can be used to manufacture methamphetamine, and carisoprodol (1,890 items, or 0.1%), a muscle relaxant commonly abused with opiates.



There was considerable variation in drugs reported across census regions, although it should be noted that differing law enforcement and laboratory policies may influence the types of drugs submitted and subsequently analyzed by labs. Estimates for drug items analyzed show that cannabis/THC was the most common drug item analyzed in the Midwest

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Table 1.1 NATIONAL AND REGIONAL ESTIMATES FOR THE 25 MOST FREQUENTLY IDENTIFIED DRUG ITEMS*
Estimated numbers and percentages of total identified drugs, 2001

Drug	National		West		Midwest		Northeast		South	
	Total	Percentage	Total	Percentage	Total	Percentage	Total	Percentage	Total	Percentage
Cannabis/THC	690,916	36.47%	86,268	23.44	238,672	46.93	107,240	36.34	258,736	35.79
Cocaine	626,741	33.08%	79,176	21.52	161,711	31.80	105,580	35.78	280,274	38.77
Methamphetamine	198,864	10.50%	142,219	38.65	20,688	4.07	286	0.10	35,671	4.93
Heroin	142,004	7.50%	15,631	4.25	36,442	7.17	42,814	14.51	47,117	6.52
MDMA	22,188	1.17%	3,351	0.91	2,693	0.53	4,679	1.59	11,465	1.59
Alprazolam	17,179	0.91%	347	0.09	3,464	0.68	2,841	0.96	10,527	1.46
Non-Controlled, Non-Narcotic Drug	13,609	0.72%	2,377	0.65	4,900	0.96	4,023	1.36	2,309	0.32
Hydrocodone	12,847	0.68%	1,435	0.39	2,696	0.53	759	0.26	7,957	1.10
Oxycodone	12,013	0.63%	509	0.14	2,688	0.53	2,692	0.91	6,124	0.85
Diazepam	7,876	0.42%	1,022	0.28	1,475	0.29	905	0.31	4,474	0.62
Phencyclidine	5,951	0.31%	1,659	0.45	1,728	0.34	1,892	0.64	672	0.09
Pseudoephedrine	5,583	0.29%	1,737	0.47	2,188	0.43	6	0.00	1,651	0.23
Clonazepam	5,447	0.29%	592	0.16	757	0.15	1,913	0.65	2,185	0.30
Codeine	3,641	0.19%	493	0.13	1,401	0.28	380	0.13	1,367	0.19
Amphetamine	3,612	0.19%	626	0.17	609	0.12	326	0.11	2,051	0.28
Methadone	2,865	0.15%	145	0.04	477	0.09	1,377	0.47	866	0.12
Ketamine	2,831	0.15%	434	0.12	497	0.10	1,015	0.34	885	0.12
Lysergic Acid Diethylamide	2,675	0.14%	391	0.11	686	0.13	398	0.13	1,200	0.17
Psilocin	2,243	0.12%	1,103	0.30	502	0.10	109	0.04	530	0.07
Propoxyphene	2,171	0.11%	143	0.04	636	0.12	164	0.06	1,229	0.17
Carisoprodol	1,890	0.10%	259	0.07	415	0.08	165	0.06	1,052	0.15
Methylphenidate	1,880	0.10%	148	0.04	730	0.14	324	0.11	679	0.09
Morphine	1,842	0.10%	312	0.08	498	0.10	239	0.08	794	0.11
Ephedrine	1,753	0.09%	180	0.05	285	0.06	19	0.01	1,269	0.18
MDA	1,631	0.09%	303	0.08	699	0.14	212	0.07	417	0.06
Top 25 Total	1,790,254	94.49%	340,861	92.63	487,535	95.87%	280,356	95.00%	681,502	94.26
All Other Analyzed Items	104,357	5.51%	27,113	7.37	21,007	4.13%	14,761	5.00%	41,476	5.74
Total Analyzed Items	1,894,610	100.00%	367,974	100.00	508,542	100.00%	295,117	100.00%	722,978	100.00

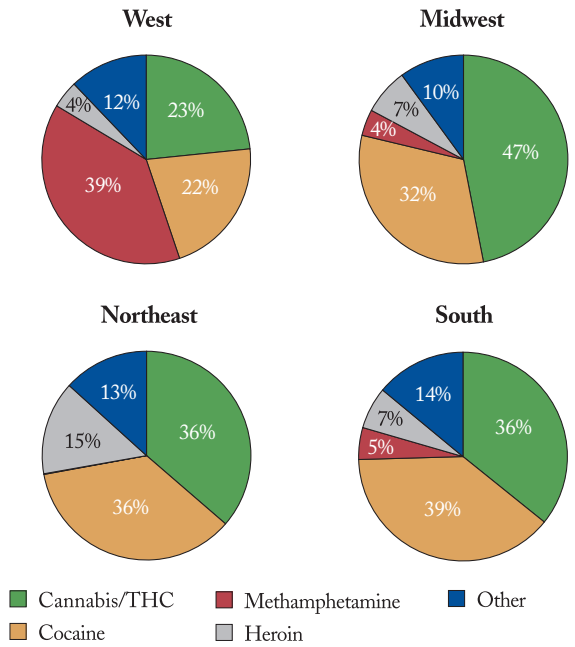
MDMA = 3,4-Methylenedioxymethamphetamine

MDA = 3,4-Methylenedioxyamphetamine

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

(238,672, or 47%) and the Northeast (107,240, or 36%) and accounted for 36%, or 258,736 items, in the South. The largest relative percentage of cocaine was in the South (280,274, or 39%), while Northeastern labs analyzed an estimated 105,580 cocaine items, or 36% of items. Methamphetamine continues to dominate in the West. Methamphetamine accounted for an estimated 39% of items analyzed in the West, or 142,219 total items, compared to 5% in the South, 4% in the Midwest, and 0.1% in the Northeast. Heroin represented an estimated 15% of items, or 42,814 analyzed items, in the Northeast, compared to 7% in the Midwest, 7% in the South, and 4% in the West.

Figure 1.1 Estimated distribution of the most common drug items by region, 2001.



1.2 Drug Cases Analyzed

Laboratory data can also be analyzed at the case level. Cases are typically defined by labs as submissions that are assigned a unique identification number. Cases are normally associated with a single drug seizure incident, although a small proportion of labs may attach one case number to all submissions related to an investigation.

Table 1.2 provides national case estimates for substances identified in cases reported by State and local forensic laboratories constituting the NFLIS sample. Multiple drugs can be reported within a single case, and as a result the cumulative percentage exceeds 100%. This table illustrates the estimated number of cases that contained at least one item of the specified drug.

Cannabis/THC is most frequently reported in drug cases by labs, with one or more cannabis items identified in an estimated 40% of all cases. Slightly over 37% of all cases were estimated to have included one or more cocaine item. Methamphetamine was estimated to have been identified in nearly 11% of cases, while heroin was identified in over 8% of all cases during 2001.

Among other drugs, MDMA was among the most commonly identified, estimated to have been present in about 1.3% of all cases, or about 15,000 cases. Oxycodone and hydrocodone were also relatively common and were estimated to have been identified in approximately 8,500 and 9,200 cases, respectively, or about 0.7% of cases.

Table 1.2 NATIONAL CASE-LEVEL ESTIMATES*
For substances identified in cases reported for the 25 most frequently identified drugs, 2001

Description	Count	Percentage
Cannabis/THC	487,890	39.78
Cocaine	456,617	37.23
Methamphetamine	133,937	10.92
Heroin	102,370	8.35
MDMA	15,429	1.26
Alprazolam	12,492	1.02
Hydrocodone	9,192	0.75
Non-Controlled, Non-Narcotic Drug	9,088	0.74
Oxycodone	8,497	0.69
Diazepam	5,925	0.48
Phencyclidine	4,661	0.38
Clonazepam	4,294	0.35
Pseudoephedrine	2,916	0.24
Amphetamine	2,753	0.22
Codeine	2,730	0.22
Methadone	2,335	0.19
Lysergic Acid Diethylamide	2,093	0.17
Ketamine	2,025	0.17
Psilocin	1,719	0.14
Propoxyphene	1,716	0.14
Carisoprodol	1,431	0.12
Methylphenidate	1,428	0.12
Morphine	1,391	0.11
MDA	1,186	0.10
Acetaminophen	1,095	0.09
Top 25 Total	1,275,208	103.98
All Other Substances	71,065	5.79
Total All Substances	1,346,274	109.77**

** Sample n's and 95% confidence intervals for all estimates are available from the DEA or RTI.*
*** 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 1,226,342.*

Section 2

MAJOR DRUG CATEGORIES

Section 2 presents analytic results for major drug categories reported by forensic labs in 2001. These include diverted pharmaceuticals such as narcotic analgesics benzodiazepines, club drugs, stimulants, and anabolic steroids.

It is important to note methodological differences between the statistically representative national and regional estimates presented in Section 1 and the results presented in subsequent sections. The weighted national and regional estimates presented in Section 1 are based on data reported among the State and local lab systems selected as part of the national NFLIS sample (see Appendix B). Section 2 and subsequent sections reflect nonweighted item counts for all NFLIS labs that reported at least 6 months of data between January 1, 2001, and December 31, 2001. During this period, a total of 848,713 analyzed drug items were reported by NFLIS labs.

2.1 Narcotic Analgesics

Over the past decade, the non-medical use of narcotic analgesics has become a serious problem in America, from both public health and law enforcement perspectives. Medically prescribed as pain relievers, in many areas prescription opiates are used as heroin substitutes (CEWG, 2001; ONDCP, 2001).

Deaths and emergency department visits, particularly those related to oxycodone and hydrocodone, have increased substantially in recent years. Emergency department mentions of oxycodone increased 68% from 1999 to 2000, reaching over 10,800 visits (DAWN, 2001). Hydrocodone mentions in emergency departments increased 31% from 1999 to 2000, with over 19,000 visits in 2000.

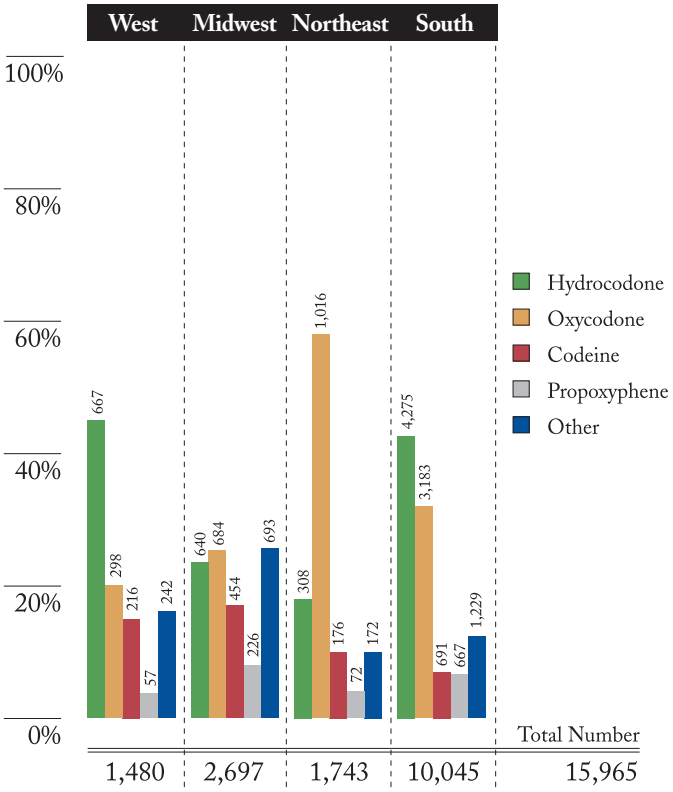
In NFLIS, reporting labs identified 14 different analgesics representing 15,965 items in 2001 (Table 2.1). As in the 2000 NFLIS Annual Report, about 7 in 10 narcotic analgesics were identified as either hydrocodone or oxycodone. Overall, 37% of analgesics were reported as hydrocodone, 32% as oxycodone, 10% as codeine, 6% as propoxphene, and 5% as morphine.

Differences were found in the types of analgesics reported by region (Figure 2.1). Oxycodone represented 58% of analgesics reported in the Northeast, compared to 32% in the South, 25% in the Midwest, and 20% in the West. While multiple data sources confirm high availability and use of oxycodone in the Northeast, NFLIS and other data indicate that oxycodone is an emerging problem in other regions, particularly the South (ONDCP, 2001; DAWN, 2001). Hydrocodone remains the most common analgesic reported by labs in the West and South.

Table 2.1 NARCOTIC ANALGESICS
Number and percentage of total identified narcotic analgesics, 2001

Analgesic	Total	Percentage
Hydrocodone	5,890	36.89%
Oxycodone	5,181	32.45%
Codeine	1,537	9.62%
Propoxyphene	1,022	6.40%
Morphine	872	5.46%
Dihydrocodeine	450	2.82%
Hydromorphone	376	2.36%
Meperidine	267	1.67%
Nalbuphine	132	0.83%
Tramadol	129	0.81%
Pentazocine	60	0.38%
Fentanyl	33	0.21%
Buprenorphine	11	0.07%
Butorphanol	5	0.03%
Total Narcotic Analgesics	15,965	100.00%

Figure 2.1 Distribution of narcotic analgesics by region, 2001.



The Midwest (17%) and West (14%) reported the highest relative frequencies of codeine, while the West reported the highest frequency of morphine (11%).

2.2 BENZODIAZEPINES

Benzodiazepines are tranquilizers medically prescribed to treat anxiety, stress, panic attacks, and short-term sleep disorders. When diverted from legitimate markets, these drugs are among the most dangerous and commonly abused pharmaceuticals (CEWG, 2001). According to DAWN (2001), emergency department drug-related mentions of benzodiazepines, particularly alprazolam and clonazepam, have been on the rise since the early 1990s. Diazepam was among the 10 most common drugs involved in drug-related deaths for a majority of cities in the DAWN (2002) medical examiner study.

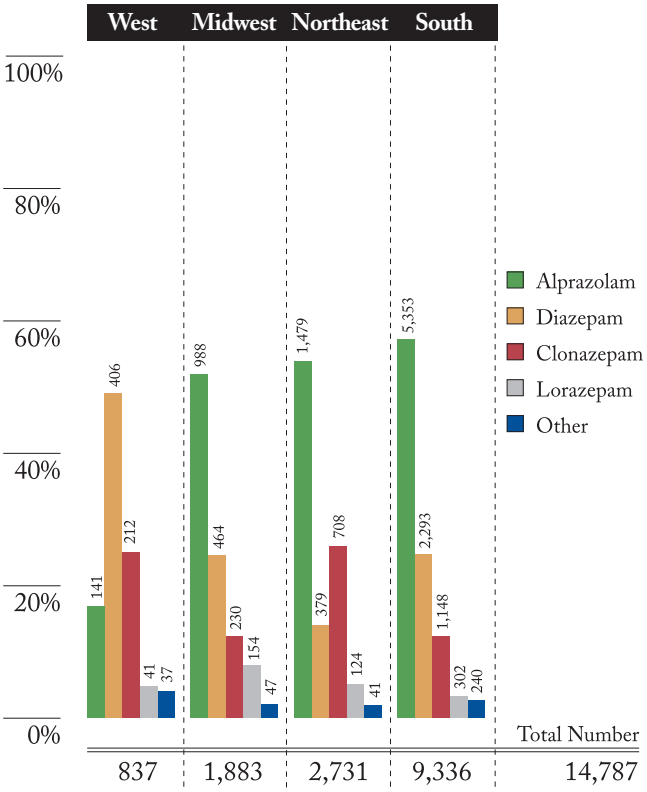
A total of 14,787 benzodiazepines were reported by NFLIS labs during 2001 (Table 2.2). More than half of benzodiazepines were identified as alprazolam (e.g., Xanax) and nearly a quarter as diazepam (e.g., Valium). About 16% of benzodiazepines were identified as clonazepam (e.g., Rivotril).

The majority of benzodiazepines reported in the Midwest, Northeast, and South were identified as alprazolam (Figure 2.2). In the West, 49% of benzodiazepines were identified as diazepam, the highest percentage of any region. The West and the Northeast reported the highest relative percentages of clonazepam, which accounted for about a quarter of benzodiazepines in these regions.

Table 2.2 BENZODIAZEPINES
Number and percentage of total identified benzodiazepine drugs, 2001

Benzodiazepines	Total	Percentage
Alprazolam	7,961	53.84%
Diazepam	3,542	23.95%
Clonazepam	2,298	15.54%
Lorazepam	621	4.20%
Temazepam	154	1.04%
Chlordiazepoxide	89	0.60%
Flunitrazepam	73	0.49%
Triazolam	39	0.26%
Midazolam	10	0.07%
Total Benzodiazepines	14,787	100.00%

Figure 2.2 Distribution of benzodiazepines by region, 2001.



2.3 Club Drugs

"Club drugs" refer to drugs used at all-night "rave" parties and at dance clubs and bars, although their use frequently occurs at informal recreational and social settings as well. Data from law enforcement, emergency departments, medical examiners, and household surveys indicate that club drug use has reached unprecedented levels (DAWN, 2000; Johnston, O'Malley, and Bachman, 2002; SAMHS, 2001). U.S. Customs reports an increase from 400,000 MDMA (or ecstasy) dosage seizures in 1997 to 9.3 million in 2000. Nearly two-thirds of high school seniors in 2001 stated that MDMA was "fairly easy" or "very easy" to obtain and more than 1 in 10 reported having tried the drug at least once (Johnston et al., 2002). The high availability coupled with a popular misconception that the drugs have few health implications has stimulated a sharp increase in club drug use, especially among teenagers and young adults (CEWG, 2001).

In NFLIS, MDMA is by far the most common club drug identified by labs (Table 2.3). Of the 12,298 club drugs reported during 2001, 10,067, or 82%, were identified as MDMA. Among the other club drugs reported, 10% were identified as ketamine, 6% as MDA, and 2% as gamma-hydroxybutyrate (GHB). GHB remains an extremely dangerous substance, with nearly 5,000 emergency department mentions in 2000 (DAWN, 2001).

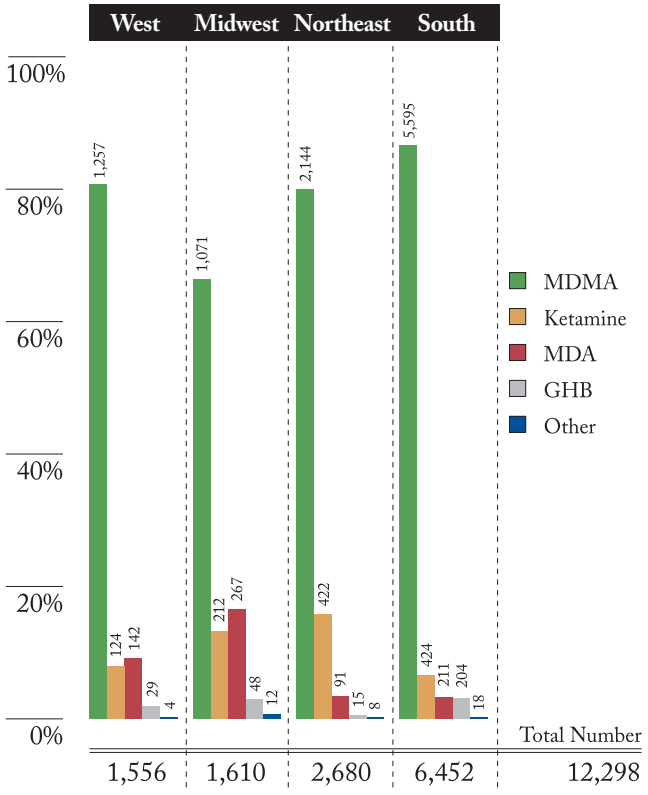
Table 2.3 **Club Drugs**
Number and percentage of total identified club drugs, 2001

Club Drug	Total	Percentage
MDMA	10,067	81.86%
Ketamine	1,182	9.61%
MDA	711	5.78%
GHB/GBL*	296	2.41%
MDEA	27	0.22%
PMA	15	0.12%
Total Club Drugs	12,298	100.00%

MDEA = Methylenedioxyethylamphetamine
PMA = p-Methoxyamphetamine
** Includes items identified as gamma-hydroxybutyrate or gamma-butyrolactone.*

High percentages of MDMA were reported in each region, particularly the West (81%), the Northeast (80%), and the South (87%) (Figure 2.3). The highest percentages of ketamine were reported in the Midwest (13%) and the Northeast (16%). The Midwest also continues to report the largest relative percentage of MDA, which represented 17% of club drugs in the region.

Figure 2.3 Distribution of club drugs by region, 2001.



2.4 Anabolic Steroids

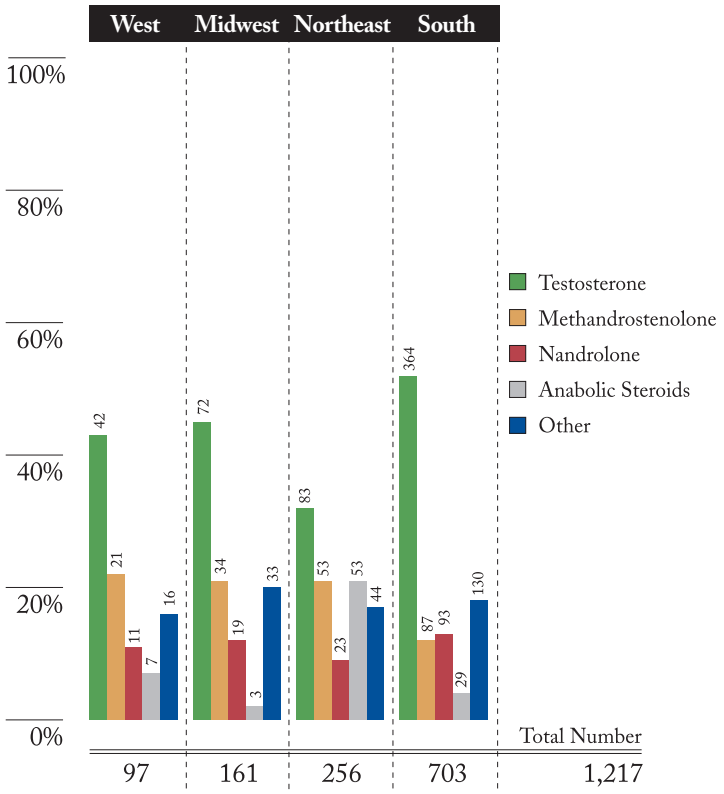
Anabolic steroids are medically prescribed for conditions such as breast cancer, anemia, testicular failure, and impotence. Due to the effects that steroids have on muscle development, they are commonly used by athletes and bodybuilders as a means for increasing strength and performance. Anabolic steroid use appears to be on the rise across the county (NIDA, 2000). In 2001, 3.7% of high school seniors reported ever using anabolic steroids, a higher proportion then at any time in the past decade (Johnston et al., 2001). This increase is particularly alarming because of the many serious life-threatening side effects associated with steroid use.

As shown in Table 2.4, a total of 1,217 analyzed items in 2001 were identified as anabolic steroids. Nearly half of the steroids were identified as testosterone (46%). Sixteen percent of steroids were reported as methandrostenolone and 12% as nandrolone. By region, the highest percentages of testosterone were reported in the South (52%) and Midwest (45%) (Figure 2.4). About one in five steroids in the West, Midwest, and Northeast were identified as methandrostenolone.

Table 2.4 **Anabolic Steroids**
Number and percentage of identified anabolic steroids, 2001

Steroids	Total	Percentage
Testosterone	561	46.10%
Methandrostenolone	195	16.02%
Nandrolone	146	12.00%
Anabolic steroid, non-specified	92	7.55%
Stanozolol	89	7.31%
Boldenone	59	4.85%
Oxymetholone	21	1.73%
Fluoxymesterone	12	0.99%
Oxandrolone	12	0.99%
Methenolone	11	0.90%
Mesterolone	9	0.74%
Androstenedione	5	0.41%
Methyltestosterone	4	0.33%
Methandriol	1	0.08%
Total Anabolic Steroids	1,217	100.00%

Figure 2.4 Distribution of anabolic steroids by region, 2001.



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2.5 Stimulants

Stimulants are a drug category that includes both diverted pharmaceuticals and clandestinely produced drugs such as methamphetamine and amphetamine. Methamphetamine in particular has become a growing problem for law enforcement agencies as use has grown appreciably since the mid-1990s (SAMHSA, 2001; ONDCP, 2001). Methamphetamine dominates as the most prevalent stimulant of abuse, particularly in the West, although the drug has also become increasingly more common in the Midwest and South (Figure 2.5). In 2001, Federal, State, and local law enforcement agencies seized more than 12,000 methamphetamine production labs (DEA National Clandestine Laboratory Database).

During 2001, 105,620 stimulants were reported to NFLIS (Table 2.5). About 92% of these drugs were identified as methamphetamine. A total of 3,244 items, or about 3% of stimulants, were reported as pseudoephedrine; 1,887 items (1.8%) as amphetamine; 1,018 items (0.96%) as ephedrine; and 863 (0.8%) as methyphenidate. Other sources also confirm the abuse of methylphenidate (e.g., Ritalin), a pharmaceutical prescribed for attention deficit hyperactivity disorder (ADHD) (CEWG, 2001).

In 2001, methamphetamine represented the vast majority of stimulants reported in all regions except the Northeast (Figure 2.5). In 2001, methamphetamine accounted for 97% of stimulants reported in the West and 85% in both the Midwest and the South. In contrast, the Northeast reported 24% of stimulants as methamphetamine, 22% as methylphenidate, and 20% as amphetamine.

Figure 2.5 Distribution of stimulants by region, 2001.

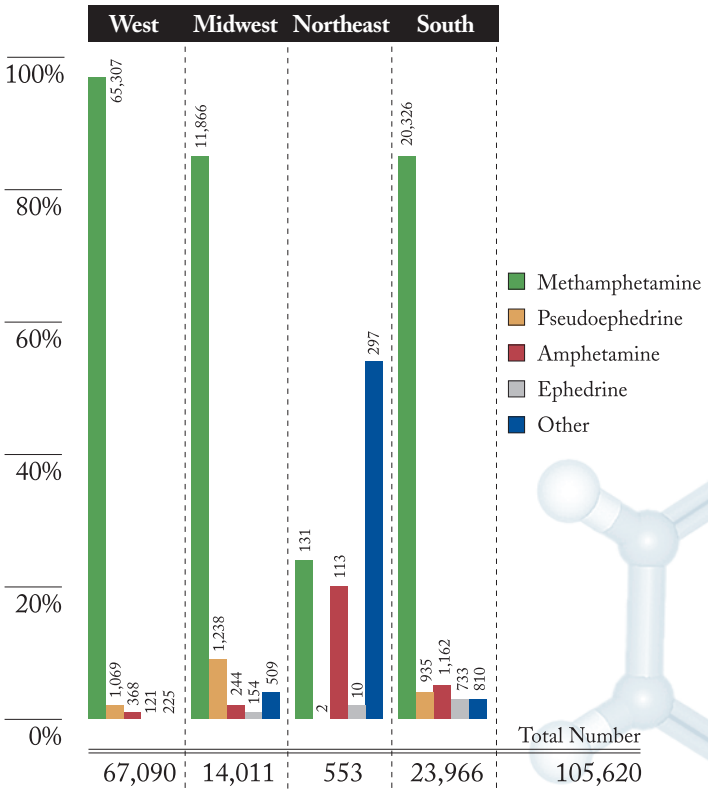
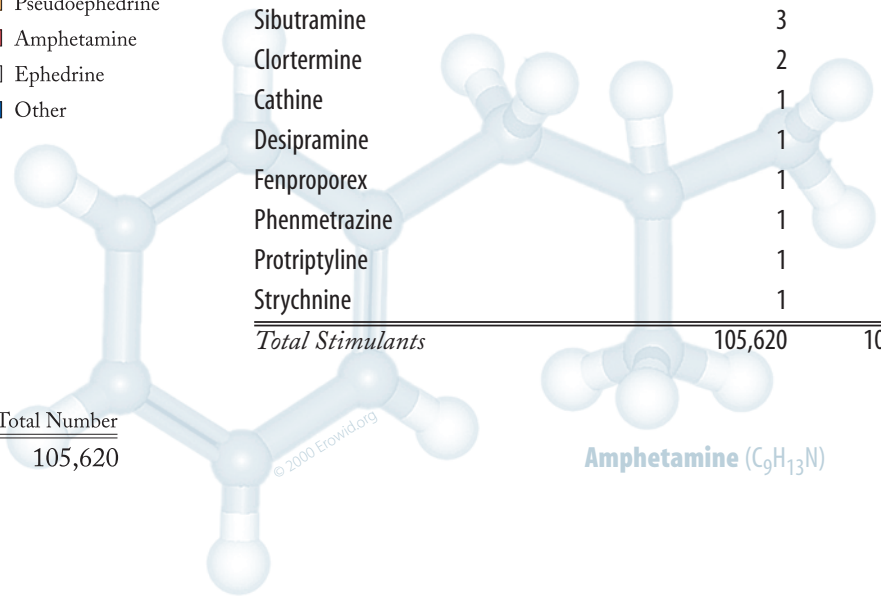


Table 2.5 STIMULANTS
Number and percentage of total identified stimulants, 2001

Stimulants	Total	Percentage
Methamphetamine	97,630	92.43%
Pseudoephedrine	3,244	3.07%
Amphetamine	1,887	1.79%
Ephedrine	1,018	0.96%
Methylphenidate	863	0.82%
Caffeine	280	0.27%
Phentermine	225	0.21%
Amitriptyline	142	0.13%
Fluoxetine	98	0.09%
Benzphetamine	60	0.06%
Phendimetrazine	29	0.03%
Cathinone	22	0.02%
Diethylpropion	22	0.02%
Phenylpropanolamine	21	0.02%
Dimethylamphetamine	17	0.02%
Nortriptyline	13	0.01%
Pemoline	8	0.01%
Fenfluramine	8	0.01%
N-Ethylamphetamine	7	0.01%
Propylhexedrine	7	0.01%
Clobenzorex	4	0.00%
Imipramine	4	0.00%
Sibutramine	3	0.00%
Clortermine	2	0.00%
Cathine	1	0.00%
Desipramine	1	0.00%
Fenproporex	1	0.00%
Phenmetrazine	1	0.00%
Protriptyline	1	0.00%
Strychnine	1	0.00%
Total Stimulants	105,620	100.00%



Section 3

DRUG COMBINATIO

In addition to tracking the types of substances identified by State and local forensic laboratories, NFLIS can provide information on drug combinations or multiple substances reported within a single drug item.

Mixing substances is sometimes desirable among drug users, as the use of different drugs simultaneously can elicit complementary effects. Combining substances can also substantially increase the potential lethality of these already dangerous and illegal substances. According to mortality data from DAWN (2002), three in four drug-related deaths in 2000 involved two or more substances.

3.1 Most Frequently Identified Drug Combinations

For the majority of analyzed items reported in NFLIS, only one substance was identified. Of all items reported in 2001, two distinct substances were identified in 11,498 items. The 10 most common drug combinations in 2001, which accounted for about 61% of all combinations identified during the year, are shown in Figure 3.1. The most frequently reported combinations were cannabis/cocaine (18%), heroin/cocaine (17%), cocaine/caffeine (5%), cannabis/heroin (5%), and pseudoephedrine/ephedrine (5%).

Figure 3.1 Distribution of top 10 drug combinations.

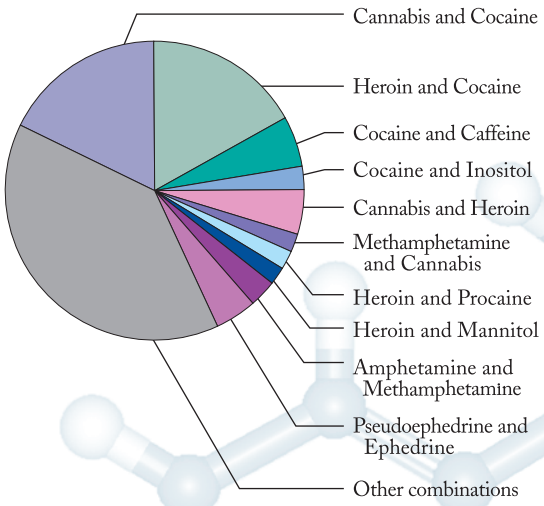


Table 3.1 MOST FREQUENTLY IDENTIFIED DRUG COMBINATIONS
Number and percentage of identified drug combinations, 2001

Substance One	Substance Two	Total	Percentage
Cannabis	Cocaine	2,033	17.68%
Heroin	Cocaine	1,955	17.00%
Cocaine	Caffeine	630	5.48%
Cannabis	Heroin	555	4.83%
Pseudoephedrine	Ephedrine	517	4.50%
Amphetamine	Methamphetamine	340	2.96%
Cocaine	Inositol	289	2.51%
Heroin	Procaine	233	2.03%
Methamphetamine	Cannabis	225	1.96%
Heroin	Mannitol	221	1.92%
Other combinations		4,500	39.14%
Total Combinations		11,498	100.00%

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Ephedrine ($C_{10}H_{15}NO$)

3.2 Most Frequent Cocaine Combinations

Cocaine, including both powder and "crack," was present in 53% of drug combinations reported in 2001 (Table 3.2), a similar figure to that reported in 2000. In addition to the most common combinations of cocaine/cannabis and cocaine/heroin, cocaine/methamphetamine accounted for 206 items, or about 2% of all identified combinations. Many of the remaining substances combined with cocaine could be considered as excipients typically used to dilute the pure cocaine. These included cocaine/caffeine (5.4%), cocaine/inositol (2.5%), cocaine/procaine (1.6%), cocaine/boric acid (1.5%), cocaine/lactose (1.1%), and cocaine/lidocaine (0.6%).

Table 3.2 **Most Frequently Identified Cocaine Combinations**
Number and percentage of identified cocaine combinations, 2001

Substance One	Substance Two	Total	Percentage
Cocaine	Cannabis	2,033	17.68%
Cocaine	Heroin	1,955	17.00%
Cocaine	Caffeine	630	5.48%
Cocaine	Inositol	289	2.51%
Cocaine	Methamphetamine	206	1.79%
Cocaine	Procaine	178	1.55%
Cocaine	Boric Acid	170	1.48%
Cocaine	Lactose	128	1.11%
Cocaine	Lidocaine	64	0.56%
Cocaine	Oxycodone	41	0.36%
Other cocaine combinations		421	3.66%
Total Cocaine Combinations		6,115	53.18%
All Combinations		11,498	

3.3 Most Frequent Heroin Combinations

Heroin was present in 30% of drug combinations reported in 2001 (Table 3.3). The most common heroin combinations reported were heroin/cocaine (17.0%), heroin/cannabis (4.8%), heroin/procaine (2.0%), and heroin/mannitol (1.9%). About 1 in 10 heroin-related combinations involved local anesthetics, including heroin/procaine, heroin/lidocaine (0.4%), and heroin/benzocaine (0.3%).

Table 3.3 **Most Frequently Identified Heroin Combinations**
Number and percentage of identified heroin combinations, 2001

Substance One	Substance Two	Total	Percentage
Heroin	Cocaine	1,955	17.00%
Heroin	Cannabis	555	4.83%
Heroin	Procaine	233	2.03%
Heroin	Mannitol	221	1.92%
Heroin	Alprazolam	45	0.39%
Heroin	Lidocaine	43	0.37%
Heroin	Methamphetamine	42	0.37%
Heroin	Caffeine	38	0.33%
Heroin	Benzocaine	35	0.30%
Heroin	Theophylline	30	0.26%
Other heroin combinations		251	2.18%
Total Heroin Combinations		3,448	29.99%
All Combinations		11,498	

3.4 Combinations of Other Drugs

Table 3.4 presents the top 10 drug combinations for which at least one of the substances identified was a pharmaceutical drug. These most common pharmaceutical combinations made up about 14% of all combinations reported in 2001. Acetaminophen/hydrocodone (4.8%) and pseudoephedrine/ephedrine (4.5%) were the most commonly reported combinations involving pharmaceutical drugs.

Table 3.4 **Combinations of Other Selected Drugs**
Number and percentage of selected pharmaceutical combinations, 2001

Substance One	Substance Two	Total	Percentage
*Acetaminophen	Hydrocodone	552	4.80%
Pseudoephedrine	Ephedrine	517	4.50%
Methamphetamine	Ephedrine	90	0.78%
*Acetaminophen	Propoxyphene	85	0.74%
*Acetaminophen	Oxycodone	80	0.70%
*Ephedrine	Guaifenesin	57	0.50%
Methamphetamine	Pseudoephedrine	57	0.50%
*Codeine	Promethazine	46	0.40%
Alprazolam	Heroin	45	0.39%
Caffeine	Inositol	44	0.38%
Total Selected Combinations		1,573	13.68%
All Combinations		11,498	

** These combinations may reflect a known pharmaceutical product combination.*

Section 4

DRUG PURITY FOR SE

In addition to tracking chemical analysis results of drug evidence, NFLIS can report on associated information including drug purity. An advantage to using the NFLIS data on drug purity is that the data reflect the results of scientific analyses and therefore have a high degree of validity.

Drug purity can substantially impact drug markets and drug use trends, as well as the public health implications of these drugs. For example, sources suggest that the purity of heroin has been rising nationally, especially in many large cities (CEWG, 2001). Due to the increase in heroin purity, intranasal use has emerged as a common method of use, which makes the drug more appealing to a larger population, including youth.

According to the 2002 NFLIS survey, a majority of State and local labs perform quantitative (or purity) analyses but only under certain circumstances, such as a special request from the prosecutor or investigating officer (see Section 6). A small number of labs perform quantitative analyses, most commonly for cocaine and heroin, and report these data more frequently to NFLIS.

It is important to consider the lab policies for conducting quantitative analysis when reviewing individual lab data, as these factors can have an impact on the nature of the results presented (i.e., higher-level versus street-level trafficking cases). The Baltimore City Police Department Crime Lab performs quantitative analysis on all white powders greater than 1/4 ounce or if more than 30 dosage units are present in a case, especially heroin seizures. The Massachusetts State Police lab expresses purity in terms of free base and has a policy of "routinely" performing quantitative analyses for heroin and cocaine submissions. The Texas Department of Public Safety (DPS) State system conducts quantitative analysis for powders over 200 grams, while the Illinois State Police lab system typically restricts quantitative analysis to powders greater than 1 kilogram.

Exhibits 4.1 through 4.6 present the purity analyses for heroin items reported by two labs and for cocaine items reported by four labs. Independent agreements with labs were established prior to presenting their lab-specific data.

LECTED LABS

4.1 Heroin Purity

Figure 4.1 and Figure 4.2 show heroin purity analyses reported by the Baltimore City Police Department Crime Laboratory and Massachusetts Department of State Police Crime Laboratory, both of whom perform quantitative analysis for a relatively large number of heroin cases. The Baltimore City Police Department reported heroin purity results for a total of 1,808 drug items in 2001. As shown in Figure 4.1, the purity distribution is somewhat bimodal with a concentration of items less than 30% and another cluster of items between 60-90%. This is indicative of two types of heroin on Baltimore streets, low purity and high purity, a finding documented by a Maryland Pulse Check report in the mid-1990s (Hsu, Pfeifer, and Wish, 1996). Overall, the average purity of heroin reported by Baltimore City in 2001 was 49%. The DEA reports that in 2000, the nationwide average purity for retail heroin from all sources was 36.8% (STRIDE, DEA).

Figure 4.2 illustrates heroin purity among 749 items reported by the Massachusetts State Police Forensic Lab in 2001. As mentioned, the Massachusetts State Police lab routinely performs quantitative analysis for heroin and cocaine seizures and expresses purity in terms of free base. Heroin purity reported by the Massachusetts State Police is more evenly distributed compared to Baltimore, with a cluster of items around 40-45% and 70-75%. The average purity of heroin items analyzed by the Massachusetts State Police lab was 49%.

Figure 4.1 Heroin purity, 2001: Baltimore City

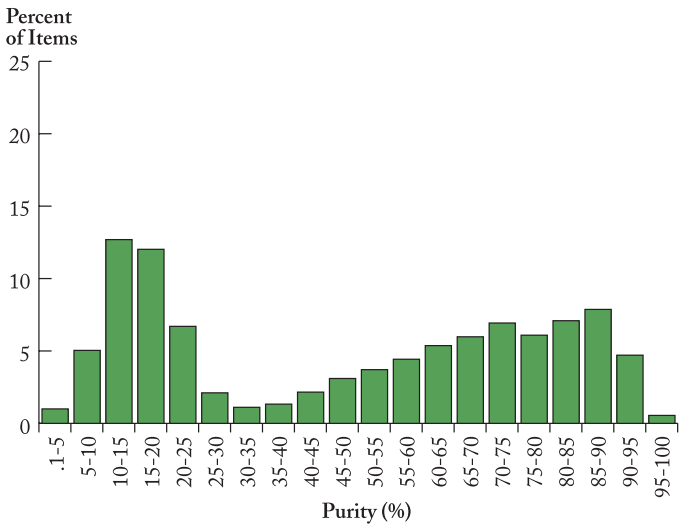
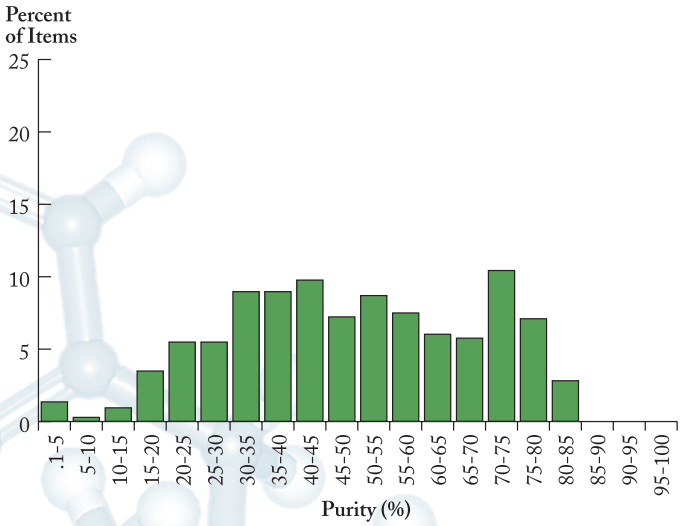
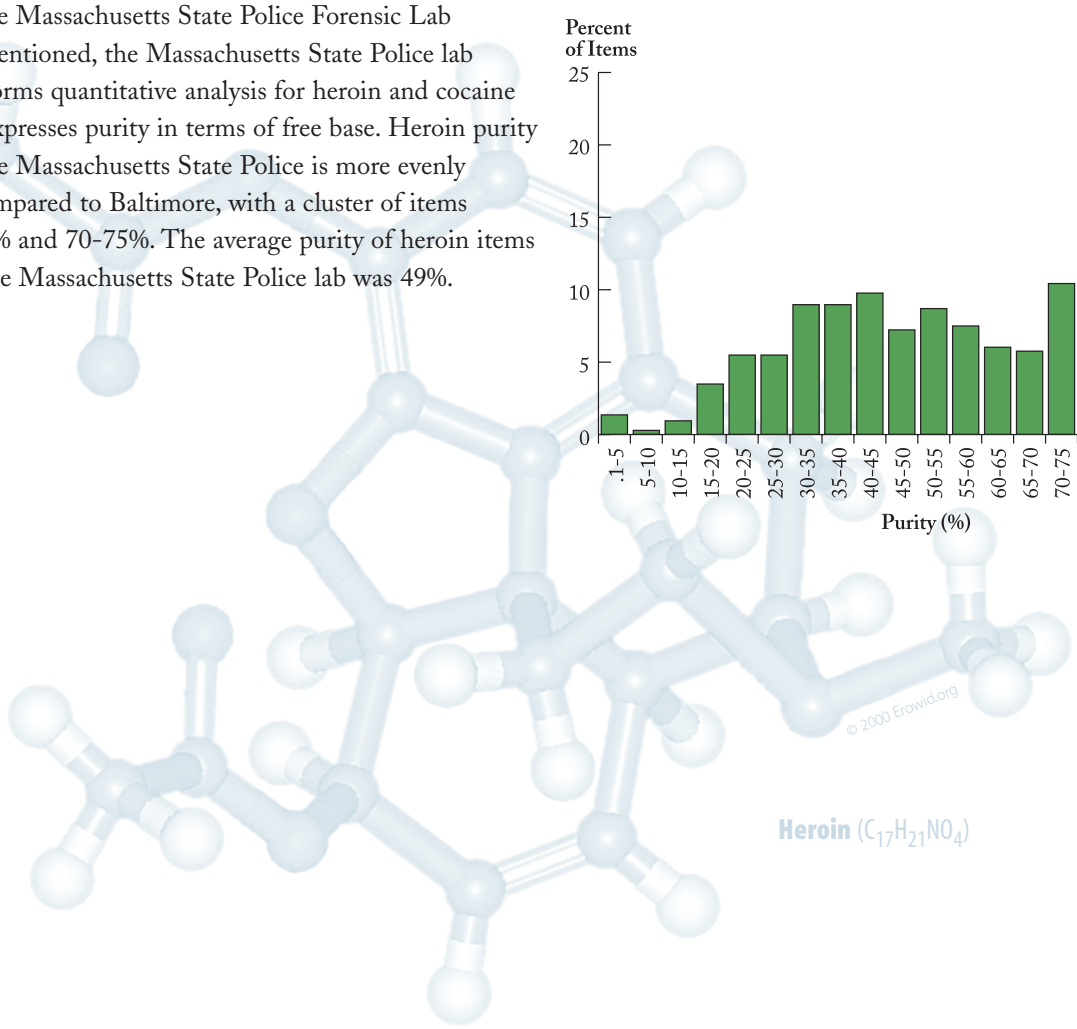


Figure 4.2 Heroin purity, 2001: Massachusetts State Police





4.2 Cocaine Purity

These figures present cocaine purity for items reported by the Illinois State Police Division of Forensic Services – Chicago lab, the Texas DPS Crime Laboratories, the Baltimore City Police Department lab, and the Massachusetts State Police lab. These analyses include both powder cocaine and crack cocaine.

Figure 4.3 depicts cocaine purity for the 71 items reported by the Illinois State Police – Chicago lab, which typically restricts purity analysis to cocaine cases greater than 1 kilogram. Cocaine purity levels are highly concentrated between 65 and 85%, with average cocaine purity of 69%. According to the DEA, the national average purity of cocaine in 2001 was about 73% for a kilogram and 63% for a gram and an ounce (STRIDE, DEA).

The Texas DPS laboratory system, whose labs typically conduct quantitative analyses for powders of 200 grams or more, reported these data for 273 cocaine items in 2001. Figure 4.4 shows a similar distribution to that of Illinois, with a concentration of items between 60 and 80% and an average purity of 56%.

The Baltimore City Police Department lab reported purity data for 813 cocaine items in 2001, for which the average purity was 61%. Peaks can be identified for cocaine between 50-55% and 65-80% (Figure 4.5).

Figure 4.6 presents purity analyses for 1,311 cocaine items reported by the Massachusetts State Police for 2001, a lab that routinely performs quantitative analysis on cocaine submissions. It reports lower levels of cocaine purity for 2001 than other labs, with an annual average purity of 42%.

Figure 4.3 Cocaine purity, 2001: Illinois State Police – Chicago Lab

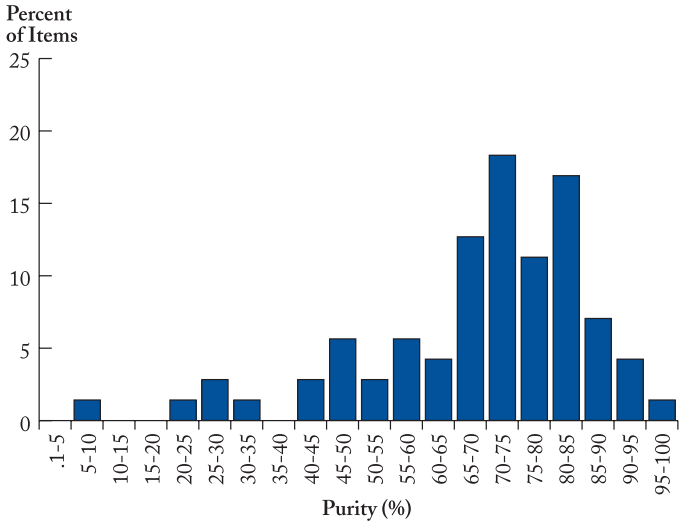


Figure 4.4 Cocaine purity, 2001: Texas DPS

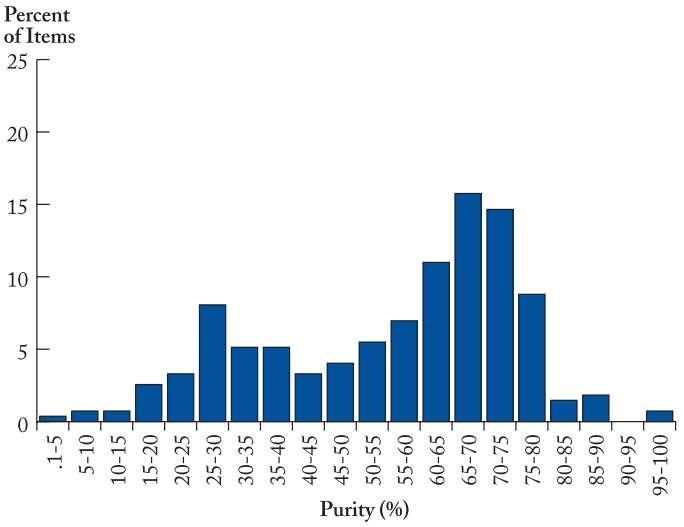


Figure 4.5 Cocaine purity, 2001: Baltimore City Police

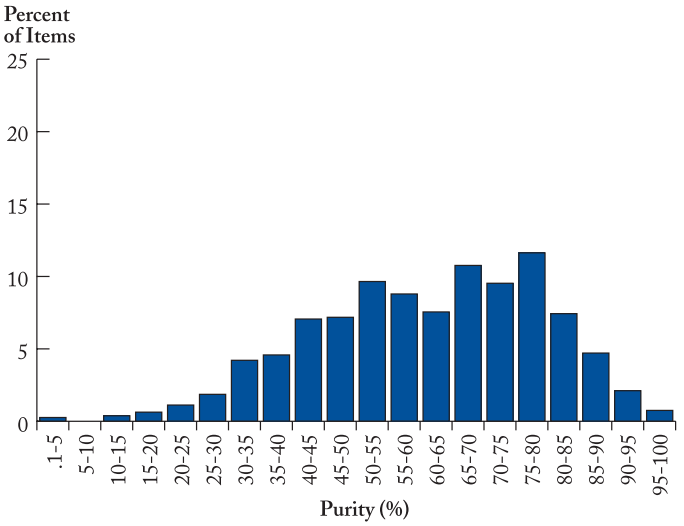
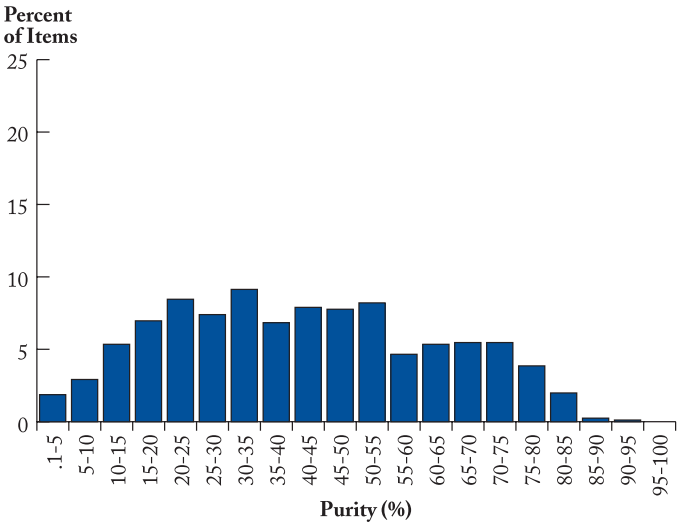


Figure 4.6 Cocaine purity, 2001: Massachusetts State Police



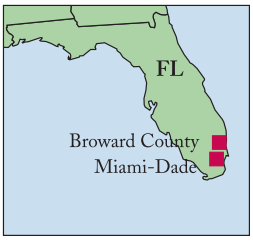
Section 5

DRUGS IDENTIFIED BY LOCATION

NFLIS provides the ability to analyze drugs identified by laboratories in strategically relevant locations. The following analysis focuses on those labs located in certain border "point of entry" locations across the country, including the U.S.–Mexico and U.S.–Canadian borders. Results are presented for labs in South Florida as well.

5.1 South Florida

Broward County Sheriff's Crime Laboratory; Miami-Dade Police Department Crime Laboratory



South Florida continues to be a major point of entry for South American cocaine smugglers (DEA, 2001). In NFLIS, 72% of drugs analyzed by the Broward County Sheriff's Office and Miami-Dade Police Department labs in 2001 were identified as cocaine. This percentage is substantially higher than in the South as a whole, for which 38% of analyzed items in 2001 were reported as cocaine. Among other findings, 15% of items reported by South Florida labs were identified as cannabis and 3% as alprazolam. In addition, 2.5% of items were identified as MDMA.

5.2 Texas Border

Texas Department of Public Safety Crime Laboratory Service (El Paso, Laredo, McAllen laboratories)

Among the selected Texas border labs, nearly half of drug items (48%) were identified as cocaine, compared to the entire South, for which 36% of items were reported as cocaine in 2001. The U.S.-Mexican border is a primary entry point for cocaine shipments smuggled into the United States. DEA intelligence estimates that about two-thirds of all cocaine entering the U.S. comes across the southwestern border (DEA, 2001). Seven percent of items in the Texas border labs were reported as benzodiazepines, most commonly clonazepam (5%) and diazepam (1%). About 0.6% of items were reported as MDA and 0.5% were identified as anabolic steroids, including testosterone, methandrostenolone, and nandrolone.

5.3 *Southern California*

San Diego Police Department Crime Laboratory

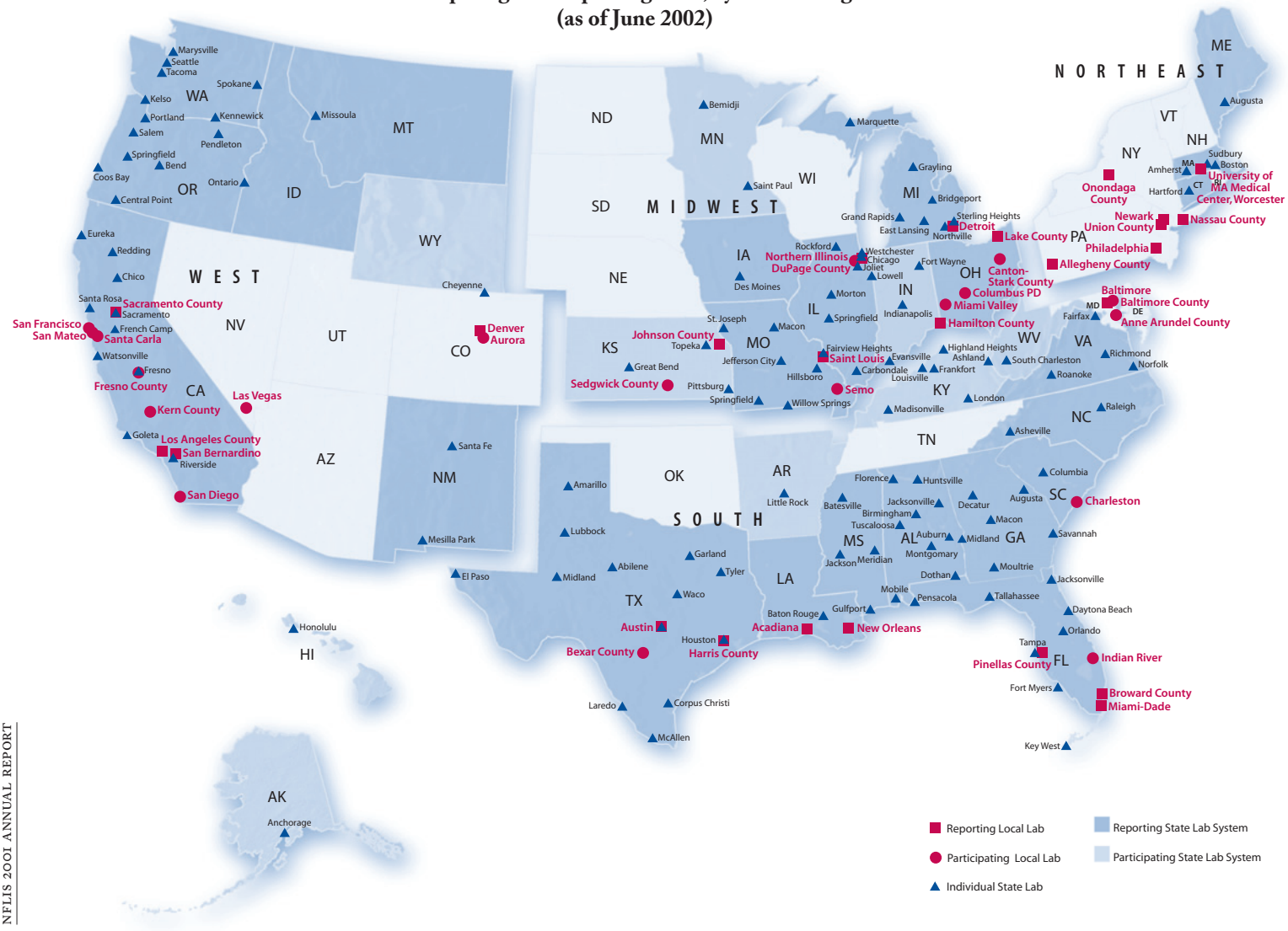
Fifty percent of drug items reported in San Diego during 2001 were cannabis/THC compared to 20% of drugs reported in the West. Compared to all reporting labs in the West, San Diego reported substantially lower percentages of methamphetamine (21% versus 42%). Among the pharmaceutical drug categories reported by the San Diego lab, nearly 2% of items in 2001 were identified as analgesics (mainly hydrocodone) and nearly 2% as benzodiazepines (mainly clonazepam or diazepam). In addition, 0.4% of items were identified as carisoprodol.

5.4 *Washington State*

Washington State Patrol Forensic Laboratory Services Bureau (Marysville, Seattle laboratories)

Two labs in Washington State, Marysville and Seattle, are near the U.S.-Canadian border. Overall, 37% of drugs analyzed by these two labs during 2001 were identified as cocaine, compared to 19% for the entire western region. Thirty-five percent of drugs reported by these northwestern labs were identified as methamphetamine, 15% as cannabis, and 7% as heroin. Among additional drug types, 1.4% of analyzed items were reported as MDMA and 0.9% as pseudoephedrine, a precursor chemical used to manufacture methamphetamine.

Participating and Reporting Labs, by Census Region (as of June 2002)



Section 6

PROFILE OF FORENSIC LABS

To better interpret the drug analysis results in NFLIS, it is important to understand the policies and procedures under which State and local forensic laboratories operate. Labs can have differing procedures for receiving and tracking evidence, differing techniques for processing and analyzing substances, and differing procedures for reporting the results of drug tests. In addition, labs vary in the number and type of jurisdictions they serve and the size of their drug caseloads.

In March 2002, RTI surveyed all State and local forensic labs that routinely perform solid dosage drug analyses. Of the known 292 State and local labs that routinely perform solid dosage drug analysis, 77%, or 224 labs, responded to the 2002 NFLIS survey. These included labs owned and operated by State, county, and municipal governments, as well private and regional or jointly owned labs. Laboratory directors were asked about their basic organizational characteristics, lab-specific policies and procedures including analytic capabilities, and 2001 lab caseload information. Federally owned labs, such as those operated by the DEA, the U.S. Postal Service, the military, and the Federal Bureau of Investigation (FBI), were excluded.

6.1 Organizational Characteristics

Among responding labs, 39% were located in the South, 26% in the Midwest, 22% in the West, and 13% in the Northeast. Overall, 63% of responding labs are operated by a State agency, 34% by a county or city, 3% are regional labs operated by multiple agencies, and 2% are privately operated. Forty-three percent of labs are stand-alone facilities with no organizational relationship to other labs, 40% are part of a multiple lab network with electronic data sharing, and 17% are part of a multiple lab network with no electronic data sharing.

6.2 Lab Procedures and Policies

Drug analysts use a variety of tests to identify substances submitted to their labs. Labs were questioned about the analytic instruments that their drug chemistry section had access to and used on at least an occasional basis. Ninety-nine percent of responding labs reported using gas chromatography/mass spectrometry (GC/MS), 96% used Fourier transform infrared (FTIR) spectrophotometry, 50% reported using "other" analytic instruments (e.g., scanning electron microscopy, GC with various detectors, or ultraviolet spectrometry), 10% used capillary electrophoresis (CE), 9% used liquid chromatograph/mass spectrometry (LC/MS), and 5% used GC/MS-MS. Nine labs reported using nuclear magnetic resonance (NMR) spectrometry.

Labs also differ in their policies for testing or not testing drug evidence submitted to their facility. About 86% of responding labs indicated that they do not analyze all drug cases submitted to them. Among the most common factors for not testing submitted evidence, 75% of labs do not test drug items if the case was dismissed or if no defendant was linked to the case (e.g., drugs were found on a park bench), 62% do not test if a guilty plea or plea bargain occurred, and 16% do not test some cases due to workload pressures.

6.3 Lab Information Systems

Labs were also asked about the type of laboratory information management system (LIMS) they currently had in place. Twelve percent of responding labs or lab systems did not currently have a LIMS in place, although many indicated they were planning to do so. Among labs with information systems, 40% reported having a customized LIMS, 16% use Justice Trax, 14% an "other" LIMS type (most commonly an in-house-developed system), 13% use BEAST (Barcoded Evidence Analysis Statistics and Tracking Program), 3% use Que-Tel, and 2% use LabVantage. One lab reported using BARD (Beyond a Reasonable Doubt).

SUMMARY

NFLIS provides a systematic approach for collecting results on solid dosage drug analyses conducted by State and local forensic laboratories across the country. The DEA-sponsored system is versatile, with the ability to monitor national, State, and local drug trends and provide timely information on emerging drugs and specific drug characteristics. This 2001 Annual Report is the first to include nationally representative estimates for the most common drugs analyzed by U.S. forensic laboratories during 2001 as well as analytic results for major drug categories including narcotic analgesics, benzodiazepines, club drugs, stimulants, and anabolic steroids. The report also provides findings on commonly reported drug combinations, drug purity reported among selected labs, and drugs identified by labs in border point-of-entry locations.

Results from NFLIS can serve multiple audiences, including forensic laboratories; policymakers; local, State, and Federal law enforcement personnel; and researchers. Findings from NFLIS can also supplement existing drug data sources including information from demand-side survey and drug testing programs. NFLIS provides a supply-side indicator, capturing information on drugs seized by law enforcement agencies and submitted to forensic laboratories for analysis. As noted, variation in law enforcement and laboratory policies and procedures on submitting and analyzing drug evidence can influence variation in the types of substances reported (see Appendix A).

The DEA and RTI will continue to improve NFLIS in the next year through several major goals. The first is the continued recruitment of all U.S. forensic laboratories that conduct solid drug dosage analysis, with the goal of integrating Federal forensic laboratories along with State and local labs into the NFLIS partnership. The DEA and RTI will also continue to enhance the types of data reported through NFLIS, including drug quantity, drug purity, and drug combinations. Finally, we will seek to increase flexibility by which NFLIS data can be analyzed through the Interactive Data Site (IDS) including providing additional options for producing customized and timely queries.

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Appendix A

NFLIS BENEFITS & LIMITATIONS

Benefits

The systematic collection and analysis of solid dosage drug analysis data can improve our understanding of the changes and trends in the Nation's illegal drug problem. The information system can also be a critical resource for supporting drug enforcement and a critical resource for supporting drug policy and drug enforcement initiatives both nationally and in specific communities around the country. 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, the Office of National Drug Control Policy (ONDCP), and other Federal agencies will be served by the NFLIS database. The data can also benefit State, regional, and local task forces as well as single-agency operations. Specifically, NFLIS will help 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;
- improving statistical estimates of local, State, and national drug availability;
- providing regional, State, and local trends of drug trafficking and abuse;
- identifying emerging drug problems 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 Household Survey on Drug Abuse (NHSDA), 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 must be considered when interpreting findings generated from the database.

- NFLIS includes results from completed lab analyses only. Evidence secured by law enforcement but not analyzed is not included in the system.
- National and regional estimates may be subject to variation associated with sample estimates, including nonresponse bias.
- For nonweighted results, the absolute and relative frequency of analyzed results for individual drugs can in part be a function of labs' participating in NFLIS.
- State and local policies that relate to the enforcement and prosecution of specific drugs can affect the types of drugs seized by law enforcement and 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.
- Labs vary with respect to the records they maintain. For example, some labs' automated records include the weight of the sample selected for analysis (e.g., the weight of one of five bags of powder), while others record total weight.
- Currently, NFLIS includes only State and local labs. Drug analyses conducted by Federal forensic labs are not included, but plans are under way to incorporate Federal labs and the drug analyses results they conduct into the reporting system.
- Drug evidence submitted for analysis is affected by differing law enforcement strategies for targeting specific types of drug trafficking.

NATIONAL ESTIMATES METHODOLOGY

The 2001 Annual Report is the first NFLIS report to compute national and regional estimates of the prevalence of drug cases and drug items analyzed by State and local forensic laboratories. This section discusses the methods used for producing these estimates, including weighting and imputation procedures.

Under contract to the DEA, RTI began planning and implementing NFLIS 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 (PPS) 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 Appendix C for a listing of sampled and non-sampled 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 6 or more months during the year 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 2001. 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 2001 survey results allowed for the case- and item-level weights to be post-stratified 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 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 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, a CV greater than 0.1 for drug prevalence values was used to establish a drug cutoff point, an associated drug item level of 500 items per year or greater.

Imputations and Adjustments

Due to technical and other reporting issues, several labs did not report data for every month during 2001 while other labs joined and started reporting during the course of the year. These factors resulted in missing monthly data, which are 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 year of data.

While most forensic laboratories report case-level analyses in a consistent manner, a small number of labs do not produce item-level counts that are comparable to those submitted by the vast majority of labs. Most labs report items in terms of the number of vials of the particular pill, yet a few labs report the count of the individual pills themselves as "items."

Since the case-level counts across labs are comparable, they were used to develop item-level counts for the few labs that count items differently. For those labs, it was assumed that drug-specific ratios of cases to items should be similar to labs serving similarly sized areas. Item-to-case ratios for each drug were produced for the similarly sized labs, and these drug-specific ratio were then used to adjust the drug item counts for the relevant labs.

Appendix C

SUMMARY OF PARTICIPATING AND REPORTING LABS

State	Lab Type	Lab Name	Reporting in 2001
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)*	
CA	State	California Department of Justice (10 sites)*	X
	Local	Fresno County Sheriffs Forensic Lab (Fresno)	
	Local	Kern County District Attorney's Office (Bakersfield)	
	Local	Los Angeles County Sheriffs Department (4 sites)*	X
	Local	Sacramento County District Attorney's Office (2 sites)*	X
	Local	San Bernardino Sheriff's Office (San Bernardino)*	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)	
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)	
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 Sheriff's Office (Wheaton)	
	Local	Northern Illinois Police Crime Lab (Chicago)*	X
IN	State	Indiana State Police Laboratory (4 sites)*	
KS	State	Kansas Bureau of Investigation (3 sites)	
	Local	Johnson County Sheriff's Office (Mission)	X
	Local	Sedgwick County Regional Forensic Science Center (Witchita)	
KY	State	Kentucky State Police (6 sites)*	
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)*	
	Local	Baltimore City Police Department (Baltimore)*	X
	Local	Baltimore County Police Department (Towson)	
ME	State	Maine Department of Human Services (Augusta)*	X
MI	State	Michigan State Police (7 sites)*	X
	Local	Detroit Police Department (Detroit)*	X
MN	State	Minnesota Bureau of Criminal Apprehension (2 sites)	
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)*	
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	Local	Newark Police Department (Newark)	X
	Local	Union County Prosecutors Office (Westfield)*	X
NM	State	New Mexico Department of Public Safety (2 sites)*	X
NV	Local	Las Vegas Police Department (Las Vegas)*	
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
OH	State	Ohio State Highway Patrol (Columbus)*	X
	Local	Canton-Stark County Crime Lab (Canton)	
	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 (8 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)	
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
VA	State	Virginia Division Forensic Science (4 sites)*	X
WA	State	Washington State Patrol (6 sites)*	X
WV	State	West Virginia State Police (South Charleston)	
WY	State	Wyoming State Crime Laboratory (Cheyenne)	

* Laboratory is part of our national sample.

** The North Carolina State system is part of the national sample and began reporting to NFLIS in January 2002.

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

For more information on NFLIS or to become a participating lab, please use the following contact information.

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