

2011 MIDYEAR REPORT



NFLIS

**NATIONAL FORENSIC LABORATORY
INFORMATION SYSTEM**



**U.S. DEPARTMENT OF JUSTICE
DRUG ENFORCEMENT ADMINISTRATION**

OFFICE OF DIVERSION CONTROL

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Highlights

- From January 2011 through June 2011, an estimated 484,684 distinct drug cases were submitted to State and local laboratories in the United States and analyzed by September 30, 2011. From these cases, an estimated 827,157 drug reports were identified.
- Cannabis/THC was the most frequently reported drug (277,291), followed by cocaine (166,001), methamphetamine (78,889), and heroin (56,892). The four most frequently reported drugs accounted for 70% of all drug reports.
- Nationally, reports of oxycodone, hydrocodone, alprazolam, clonazepam, buprenorphine, and amphetamine increased significantly from the first half of 2001 through the first half of 2011 ($p < .05$).
- Regionally, reports of hydrocodone and clonazepam per 100,000 persons (aged 15 or older) increased significantly in all four U.S. census regions from the first six months of 2001 through the first six months of 2011. Reports of oxycodone, alprazolam, and amphetamine per 100,000 persons increased significantly in the Midwest, Northeast, and South. Buprenorphine increased significantly in the West, Midwest, and Northeast.
- More than 72% of narcotic analgesic reports were oxycodone or hydrocodone. Alprazolam accounted for 52% of tranquilizer and depressant reports. MDMA accounted for 32% of hallucinogen reports, and methamphetamine accounted for 83% of stimulant reports.
- From the first half of 2001 through the first half of 2011, cannabis/THC reports per 100,000 persons increased significantly in the Northeast, but decreased significantly in the remaining three U.S. census regions. Cocaine reports decreased significantly in all U.S. census regions. During this same period, methamphetamine reports decreased significantly in the West and Midwest and increased significantly in the South. Heroin reports increased significantly in the Midwest. MDMA reports per 100,000 persons increased significantly in the Midwest, but decreased significantly in the South.
- Cannabis/THC was the most frequently reported drug in the Midwest (45%), Northeast (34%), and South (30%), and methamphetamine was the most frequently reported drug in the West (29%).
- Nationwide, cannabis/THC, cocaine, and methamphetamine reports exhibited significant decreasing trends between the first six months of 2001 and the first six months of 2011.

Introduction

The National Forensic Laboratory Information System (NFLIS) is a program of the Drug Enforcement Administration (DEA), Office of Diversion Control. NFLIS systematically collects results from drug analyses conducted by State and local forensic laboratories. These laboratories analyze controlled and noncontrolled substances secured in law enforcement operations across the country, making NFLIS an important resource for monitoring illicit drug use and trafficking, including the diversion of legally manufactured drugs into illegal markets. NFLIS includes information on the specific substance and the characteristics of drug evidence, such as purity, quantity, and drug combinations. These data are used to support drug scheduling efforts and to inform drug policy and drug enforcement initiatives.

Since its inception in September 1997, NFLIS has developed into a comprehensive information system that includes data from forensic laboratories that handle over 88% of the Nation's estimated 1.3 million annual State and local drug analysis cases. Currently, NFLIS includes 47 State systems, 94 local or municipal laboratories/laboratory systems, and one territorial laboratory system, representing a total of 283 individual laboratories. In addition, the NFLIS database includes Federal data from the DEA's System To Retrieve Information from Drug Evidence II (STRIDE), which represents drug evidence analyzed at DEA laboratories across the country. NFLIS will continue recruiting nonparticipating State and local laboratories and work to incorporate the remainder of Federal laboratories that perform drug chemistry analyses.

This publication presents results of drug cases *submitted* to State and local laboratories from January 2011 through June 2011 that were *analyzed* by September 30, 2011. Data from STRIDE are also included in this publication. All data presented in this publication include the first, second, and third drugs that were mentioned in laboratories' reported drug items.

Section 1 of this publication provides national and regional estimates for the most frequently identified drugs. These estimates are based on the NEAR approach (National Estimates Based on All Reports). Section 2 presents results for major drug categories that were reported by State and local laboratories. Appendix A provides details on the methodology used in preparing the data presented in this publication. Appendix B includes a list of NFLIS participating and reporting laboratories. The benefits and limitations of NFLIS are presented in Appendix C.

Participating Laboratories, by U.S. Census Region



Section 1: National and Regional Estimates

This section presents national and regional estimates of drugs submitted to State and local laboratories from January 2011 through June 2011 that were analyzed by September 30, 2011 (see Table 1.1). National and regional drug estimates include all drug reports (up to three) mentioned in laboratories' reported drug items. National drug case estimates are also presented (see Table 1.2). In addition, semiannual trends are

presented for selected drugs from January 2001 through June 2011.

The NEAR approach (National Estimates Based on All Reports) was used to produce estimates for the Nation and for the U.S. census regions. The NEAR approach uses all NFLIS reporting laboratories. Appendix A provides a detailed description of the methods used in preparing these estimates.

Table 1.1

NATIONAL AND REGIONAL ESTIMATES FOR THE 25 MOST FREQUENTLY IDENTIFIED DRUGS¹

Estimated number and percentage of total drug reports submitted to laboratories from January 2011 through June 2011 and analyzed by September 30, 2011

Drug	National		West		Midwest		Northeast		South	
	Number	Percent								
Cannabis/THC	277,291	33.52%	33,756	24.90%	85,293	45.05%	48,253	34.22%	109,989	30.45%
Cocaine	166,001	20.07%	15,565	11.48%	29,242	15.44%	36,963	26.21%	84,231	23.32%
Methamphetamine	78,889	9.54%	38,826	28.64%	10,894	5.75%	744	0.53%	28,425	7.87%
Heroin	56,892	6.88%	9,673	7.14%	17,632	9.31%	17,122	12.14%	12,466	3.45%
Oxycodone	30,406	3.68%	2,811	2.07%	4,726	2.50%	7,746	5.49%	15,123	4.19%
Hydrocodone	23,144	2.80%	3,140	2.32%	4,344	2.29%	1,528	1.08%	14,132	3.91%
Alprazolam	21,690	2.62%	1,660	1.22%	3,324	1.76%	3,006	2.13%	13,700	3.79%
MDMA	8,007	0.97%	2,664	1.97%	1,117	0.59%	1,243	0.88%	2,983	0.83%
Clonazepam	5,517	0.67%	582	0.43%	1,033	0.55%	1,295	0.92%	2,607	0.72%
Buprenorphine	5,427	0.66%	373	0.27%	848	0.45%	2,180	1.55%	2,026	0.56%
Amphetamine	5,010	0.61%	459	0.34%	1,178	0.62%	839	0.59%	2,534	0.70%
Methadone	4,460	0.54%	763	0.56%	782	0.41%	930	0.66%	1,985	0.55%
1-Benzylpiperazine (BZP)	4,180	0.51%	394	0.29%	812	0.43%	941	0.67%	2,033	0.56%
Morphine	3,973	0.48%	754	0.56%	996	0.53%	396	0.28%	1,828	0.51%
Noncontrolled, non-narcotic ²	3,720	0.45%	1,133	0.84%	12	0.01%	393	0.28%	2,182	0.60%
Pseudoephedrine ³	3,590	0.43%	62	0.05%	850	0.45%	154	0.11%	2,524	0.70%
Diazepam	3,547	0.43%	517	0.38%	706	0.37%	512	0.36%	1,811	0.50%
Phencyclidine (PCP)	3,118	0.38%	344	0.25%	287	0.15%	1,578	1.12%	908	0.25%
Psilocin/psilocibin	2,584	0.31%	868	0.64%	695	0.37%	355	0.25%	666	0.18%
Carisoprodol	2,540	0.31%	434	0.32%	96	0.05%	60	0.04%	1,950	0.54%
JWH-018 (AM-678)	2,336	0.28%	258	0.19%	855	0.45%	156	0.11%	1,067	0.30%
Codeine	2,007	0.24%	334	0.25%	330	0.17%	326	0.23%	1,017	0.28%
Hydromorphone	1,503	0.18%	202	0.15%	273	0.14%	123	0.09%	905	0.25%
JWH-250	1,380	0.17%	73	0.05%	663	0.35%	17	0.01%	627	0.17%
Methylphenidate	1,322	0.16%	133	0.10%	394	0.21%	224	0.16%	572	0.16%
<i>Top 25 Total</i>	<i>718,534</i>	<i>86.87%</i>	<i>115,778</i>	<i>85.42%</i>	<i>167,381</i>	<i>88.40%</i>	<i>127,085</i>	<i>90.12%</i>	<i>308,290</i>	<i>85.34%</i>
<i>All Other Drug Reports</i>	<i>108,623</i>	<i>13.13%</i>	<i>19,766</i>	<i>14.58%</i>	<i>21,966</i>	<i>11.60%</i>	<i>13,935</i>	<i>9.88%</i>	<i>52,956</i>	<i>14.66%</i>
<i>Total Drug Reports⁴</i>	<i>827,157</i>	<i>100.00%</i>	<i>135,544</i>	<i>100.00%</i>	<i>189,348</i>	<i>100.00%</i>	<i>141,020</i>	<i>100.00%</i>	<i>361,246</i>	<i>100.00%</i>

MDMA=3,4-Methylenedioxymethamphetamine

JWH-018 (AM-678)=1-pentyl-3-(1-naphthoyl)indole

JWH-250=1-pentyl-3-(2-methoxyphenylacetyl)indole

¹ Sample n's and 95% confidence intervals for all estimates are available on request.

² As reported by NFLIS laboratories, with no specific drug name provided.

³ Includes items from a small number of laboratories that do not specify between pseudoephedrine and ephedrine.

⁴ Numbers and percentages may not sum to totals because of rounding.

Table 1.2

NATIONAL CASE ESTIMATES

Number and percentage of cases containing one or more of the 25 most frequently identified drugs, January 2011 through June 2011

Drug	Number	Percent
Cannabis/THC	194,554	40.14%
Cocaine	127,237	26.25%
Methamphetamine	55,826	11.52%
Heroin	42,291	8.73%
Oxycodone	23,219	4.79%
Hydrocodone	19,320	3.99%
Alprazolam	17,590	3.63%
MDMA	5,446	1.12%
Clonazepam	4,836	1.00%
Buprenorphine	4,806	0.99%
Amphetamine	4,186	0.86%
Methadone	3,893	0.80%
Morphine	3,338	0.69%
Diazepam	3,050	0.63%
Phencyclidine (PCP)	2,735	0.56%
1-Benzylpiperazine (BZP)	2,583	0.53%
Carisoprodol	2,328	0.48%
Pseudoephedrine ¹	2,315	0.48%
Noncontrolled, non-narcotic ²	2,212	0.46%
Psilocin/psilocibin	2,128	0.44%
Codeine	1,747	0.36%
JWH-018 (AM-678)	1,495	0.31%
Hydromorphone	1,326	0.27%
Lorazepam	1,105	0.23%
Methylphenidate	1,097	0.23%
Top 25 Total	530,664	109.49%
All Other Drugs	79,487	16.40%
Total All Drugs	610,152³	125.89%⁴

MDMA=3,4-Methylenedioxymethamphetamine

JWH-018 (AM-678)=1-pentyl-3-(1-naphthoyl)indole

¹ Includes items from a small number of laboratories that do not specify between pseudoephedrine and ephedrine.

² As reported by NFLIS laboratories, with no specific drug name provided.

³ Numbers and percentages may not sum to totals because of rounding.

⁴ Multiple drugs can be reported within a single case, so the cumulative percentage exceeds 100%. The estimated national total of distinct case percentages is based on 484,684 distinct cases submitted to State and local laboratories from January 2011 through June 2011 and analyzed by September 30, 2011.

System To Retrieve Information from Drug Evidence II (STRIDE)

Data from the DEA's System To Retrieve Information from Drug Evidence II (STRIDE) reflect results of substance evidence from drug seizures, undercover drug buys, and other evidence analyzed at DEA laboratories located across the country. STRIDE includes results for drug cases submitted by DEA agents, other Federal law enforcement agencies, and select local police agencies. Although STRIDE captures both domestic and international drug cases, the results presented in this section describe only those drugs obtained within the United States.

MOST FREQUENTLY REPORTED DRUGS IN STRIDE

Number and percentage of drug reports submitted to laboratories from January 2011 through June 2011 and analyzed by September 30, 2011

Drug	Number	Percent
Cocaine	6,491	16.96%
Cannabis/THC	6,411	16.76%
Methamphetamine	4,375	11.43%
Heroin	3,025	7.91%
Oxycodone	1,053	2.75%
Noncontrolled, non-narcotic drug	504	1.32%
Hydrocodone	314	0.82%
MDMA	307	0.80%
1-Benzylpiperazine (BZP)	266	0.70%
Phencyclidine (PCP)	236	0.62%
All Other Drug Reports	15,280	39.94%
Total Drug Reports	38,262	100.00%

MDMA=3,4-Methylenedioxymethamphetamine

Note: Percentages may not sum to 100% because of rounding.

National and Regional Drug Trends

The remainder of this section presents semiannual national and regional trends of selected drugs submitted to State and local laboratories during each six-month data reference period and analyzed within three months of the end of each six-month period. Trend estimates include all drug reports identified among the NFLIS laboratories' reported drug reports. From the first half of 2001 through the first half of 2011, the total number of drug reports decreased approximately 7%, from 887,939 to 827,157.

National prescription drug trends

Figure 1.1 presents national trends for the estimated number of drug reports that were identified as oxycodone, hydrocodone, alprazolam, clonazepam, buprenorphine, or amphetamine. Nationally, from the first half of 2001 through the first half of 2011, reports of all six drugs increased significantly ($p < .05$). Specifically, significant changes from the first half of 2001 through the first half of 2011 include the following:

- Oxycodone reports more than quadrupled from 6,611 to 30,406 reports.
- Reports of hydrocodone (from 6,802 to 23,144 reports) more than tripled.
- Reports of alprazolam (from 8,015 to 21,690 reports), clonazepam (from 2,016 to 5,517 reports), and amphetamine (from 2,379 to 5,010 reports) more than doubled.
- Buprenorphine reports increased more than 900-fold (from six to 5,427 reports).

Although significance tests were not performed on differences from the first half of 2010 to the first half of 2011, there were two notable changes during this time period. Hydrocodone reports decreased by about 11% (from 25,885 to 23,144 reports), while amphetamine reports increased by 10% (from 4,534 to 5,010 reports).

Other national drug trends

Figure 1.2 presents national six-month trends for reports of cannabis/THC, cocaine, methamphetamine, heroin, and MDMA. From the first half of 2001 through the first half of 2011, cannabis/THC, cocaine, and methamphetamine reports decreased significantly ($p < .05$). Reports of heroin did not significantly change during this time period. From the first half of 2001 through the first half of 2011, cocaine reports decreased by approximately 40% (from 280,217 to 166,001 reports), and methamphetamine reports decreased by nearly 25% (from 101,803 to 78,889 reports).

From the first half of 2010 to the first half of 2011, there was little change in reports of most of these drugs. However, during this time, reports of MDMA decreased by more than 40%, from 14,245 to 8,007 reports.



Figure 1.1 National trend estimates for selected prescription drugs, January 2001–June 2011

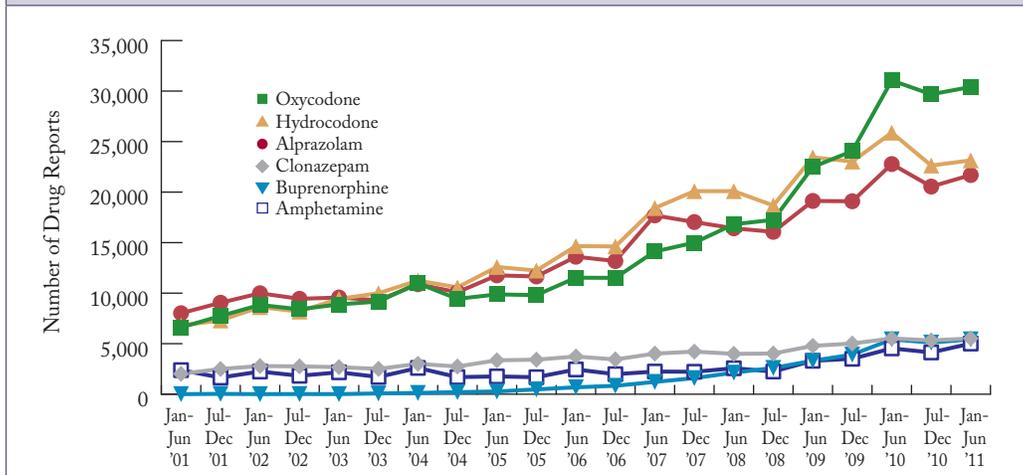
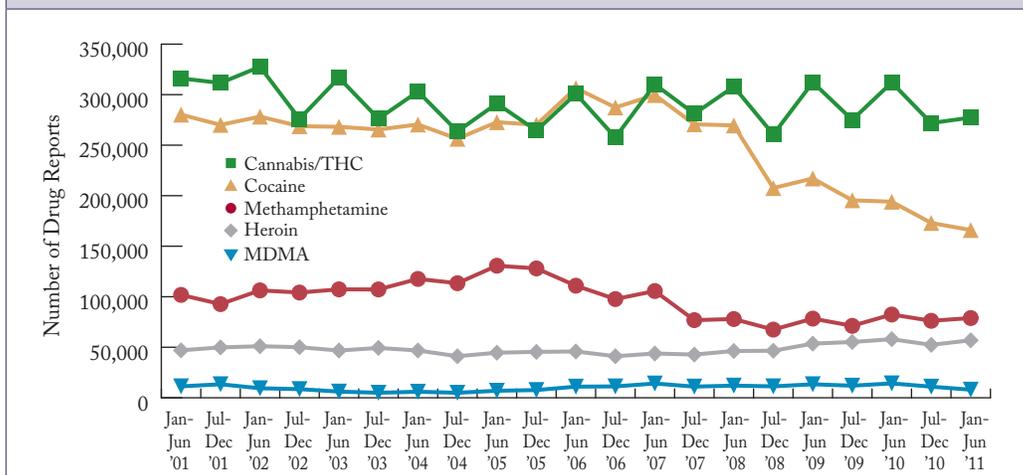
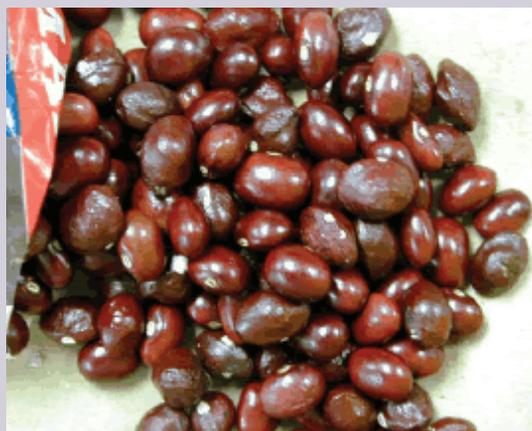


Figure 1.2 National trend estimates for other selected drugs, January 2001–June 2011



Heroin Bean (left) and Real Red Bean (right)



Heroin Beans and Real Red Beans Mixed

Regional prescription drug trends

Figures 1.3 through 1.8 show regional trends per 100,000 persons aged 15 or older for oxycodone, hydrocodone, alprazolam, clonazepam, buprenorphine, and amphetamine reports from the first half of 2001 through the first half of 2011. These figures illustrate changes in drugs reported over time, taking into account the population of each U.S. census region.

Reports of hydrocodone and clonazepam increased significantly in all regions from the first half of 2001 through the first half of 2011 ($p < .05$). Oxycodone, alprazolam, and amphetamine increased significantly in the Midwest, Northeast, and South. Buprenorphine increased significantly in the West, Midwest, and Northeast. The largest increases from the first half of 2001 through the first half of 2011 include the following:

- Oxycodone reports more than quadrupled in the Midwest (from 2.0 to 8.8 reports per 100,000 persons) and South (from 4.0 to 16.3 reports per 100,000 persons).
- Hydrocodone reports more than tripled in the West (from 1.6 to 5.4 reports per 100,000 persons) and more than

quadrupled in the Midwest (from 2.0 to 8.1 reports per 100,000 persons).

- Alprazolam reports more than tripled in the Northeast (from 2.0 to 6.6 reports per 100,000 persons).
- Reports of clonazepam more than tripled in the West (from 0.3 to 1.0 reports per 100,000 persons) and Midwest (from 0.6 to 1.9 reports per 100,000 persons).
- Buprenorphine reports increased in the Northeast from no reports at all to 4.8 reports per 100,000 persons.
- Reports of amphetamine tripled in the Northeast (from 0.6 to 1.8 reports per 100,000 persons).

From the first half of 2010 to the first half of 2011, oxycodone reports decreased by 20% or more in the West (from 6.1 to 4.9 reports per 100,000 persons) and Midwest (from 11.2 to 8.8 reports per 100,000 persons). However, reports of oxycodone in the Northeast increased by more than 20% (from 14.0 to 17.0 reports per 100,000 persons). Reports of amphetamine increased by 43% in the Northeast (from 1.3 to 1.8 reports per 100,000 persons).



Figure 1.3 Regional trends in oxycodone reported per 100,000 persons aged 15 or older, January 2001–June 2011*

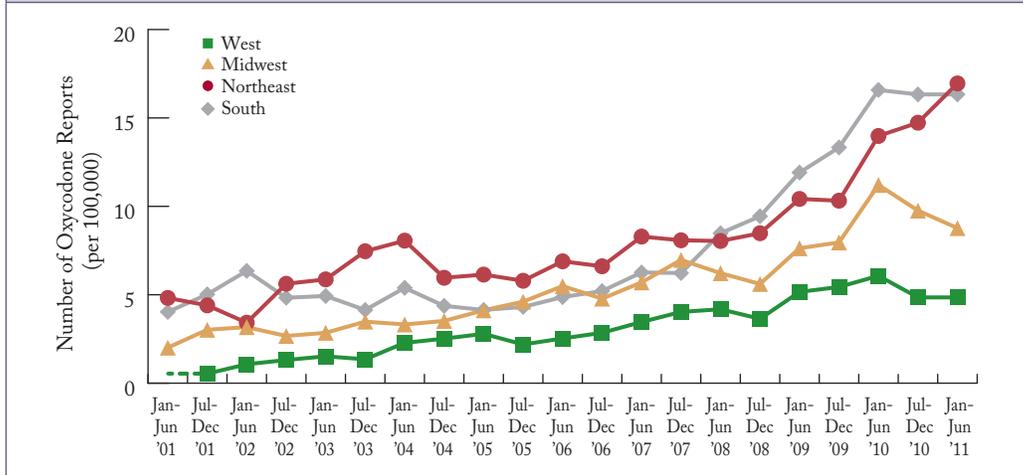


Figure 1.4 Regional trends in hydrocodone reported per 100,000 persons aged 15 or older, January 2001–June 2011

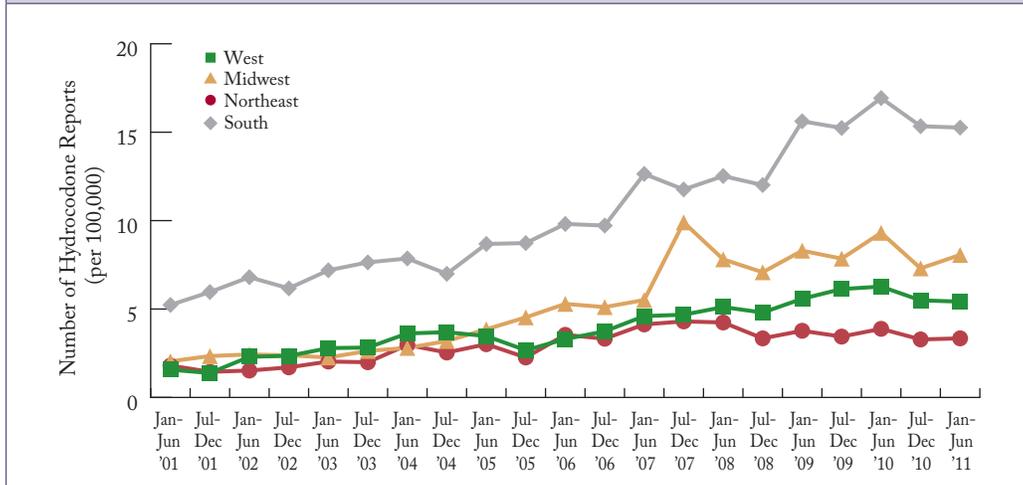
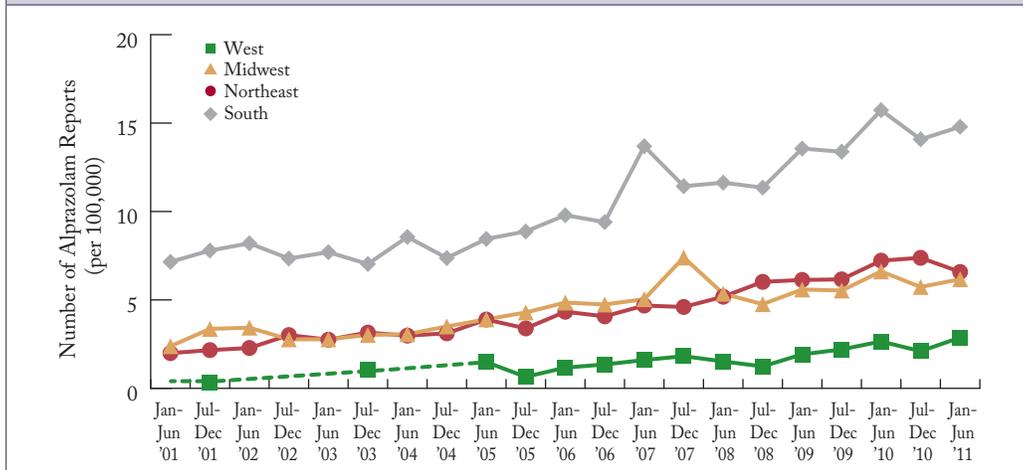


Figure 1.5 Regional trends in alprazolam reported per 100,000 persons aged 15 or older, January 2001–June 2011*



Note: U.S. Census 2011 population data by age were not available for this publication. Population data for 2011 were imputed.

* A dashed trend line indicates estimates did not meet the criteria for precision or reliability. See Appendix A for a more detailed methodology discussion.

Figure 1.6 Regional trends in clonazepam reported per 100,000 persons aged 15 or older, January 2001–June 2011

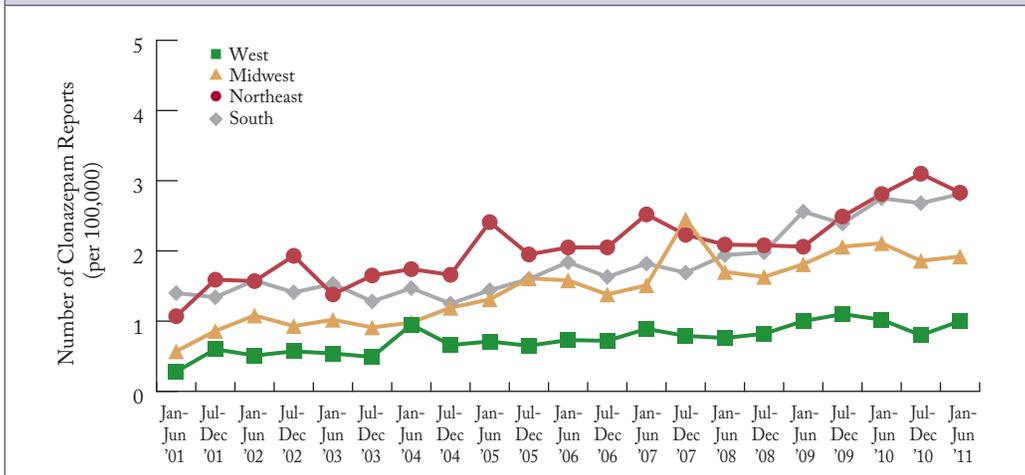


Figure 1.7 Regional trends in buprenorphine reported per 100,000 persons aged 15 or older, January 2001–June 2011*

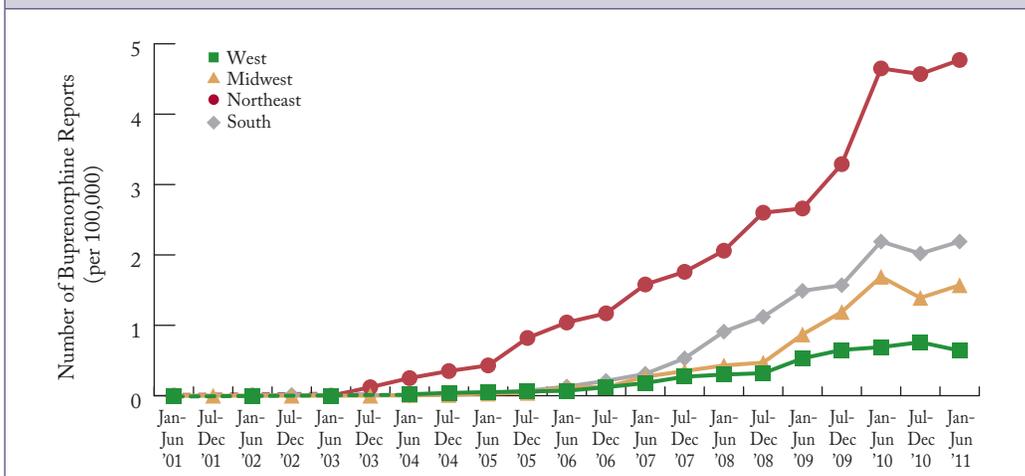
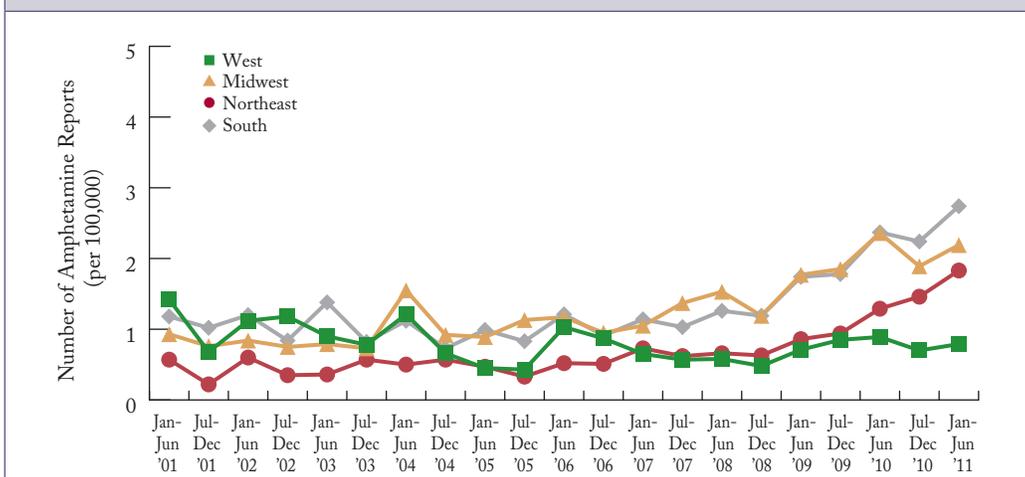


Figure 1.8 Regional trends in amphetamine reported per 100,000 persons aged 15 or older, January 2001–June 2011



Note: U.S. Census 2011 population data by age were not available for this publication. Population data for 2011 were imputed.

* A dashed trend line indicates estimates did not meet the criteria for precision or reliability. See Appendix A for a more detailed methodology discussion

Other regional drug trends

Figures 1.9 through 1.13 present regional trends per 100,000 persons aged 15 or older for cannabis/THC, cocaine, methamphetamine, heroin, and MDMA reports. From the first half of 2001 through the first half of 2011, cannabis/THC reports increased significantly in the Northeast, but decreased significantly in the West, Midwest, and South ($p < .05$). Cocaine reports decreased significantly in all four U.S. census regions. During this same time period, methamphetamine reports decreased significantly in the West and Midwest, but increased significantly in the South. Heroin reports increased significantly in the Midwest. Finally, MDMA reports increased significantly in the Midwest, but decreased significantly in the South.

From the first half of 2010 to the first half of 2011, reports of cannabis/THC decreased by 16% in the Midwest. Cocaine reports also decreased by 16% in the West and Northeast. In the Northeast during this same time period, reports of methamphetamine increased by 24%, while heroin decreased by 16%. Most notably, MDMA reports decreased by 59% in the Midwest (from 5.1 to 2.1 reports per 100,000 persons), by 46% in the Northeast (from 5.0 to 2.7 reports per 100,000 persons), by 44% in the West (from 8.1 to 4.6 reports per 100,000 persons), and by 35% in the South (from 5.0 to 3.2 reports per 100,000 persons).

Figure 1.9 Regional trends in cannabis/THC reported per 100,000 persons aged 15 or older, January 2001–June 2011

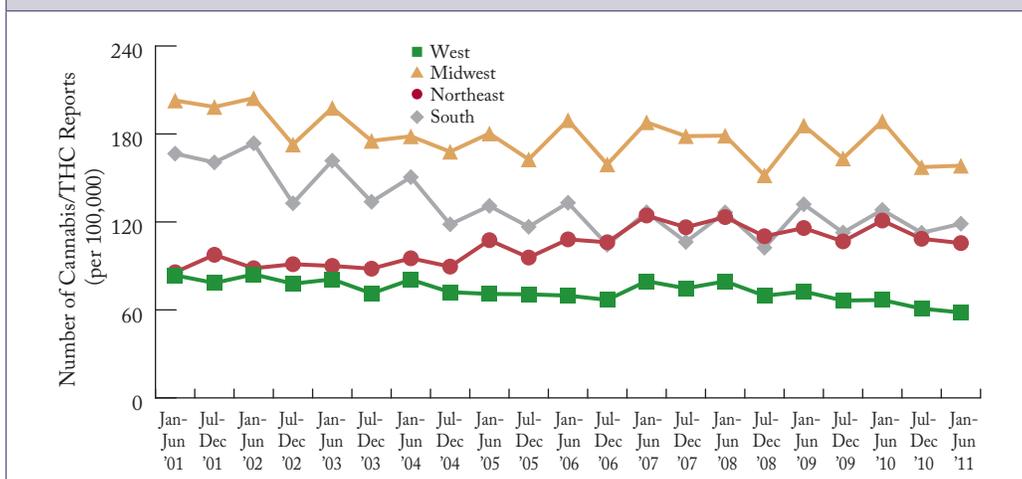
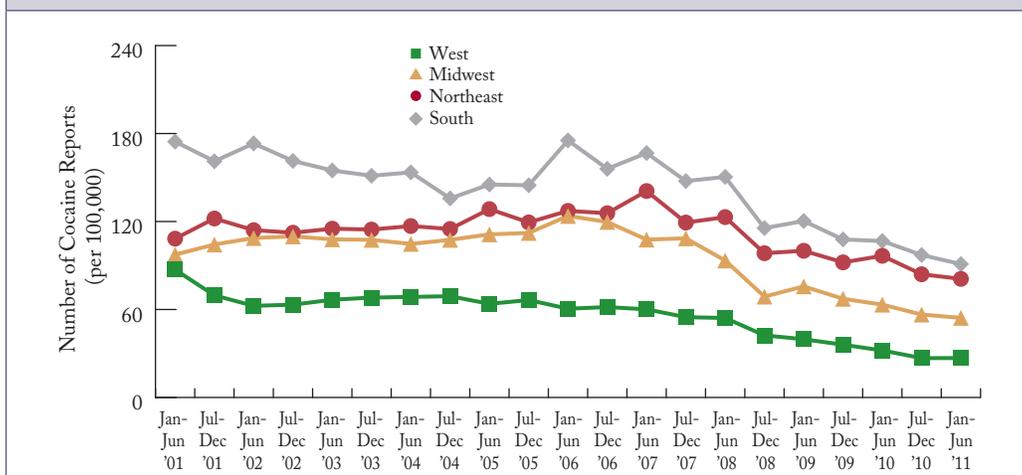


Figure 1.10 Regional trends in cocaine reported per 100,000 persons aged 15 or older, January 2001–June 2011



Note: U.S. Census 2011 population data by age were not available for this publication. Population data for 2011 were imputed.

Figure 1.11 Regional trends in methamphetamine reported per 100,000 persons aged 15 or older, January 2001–June 2011*

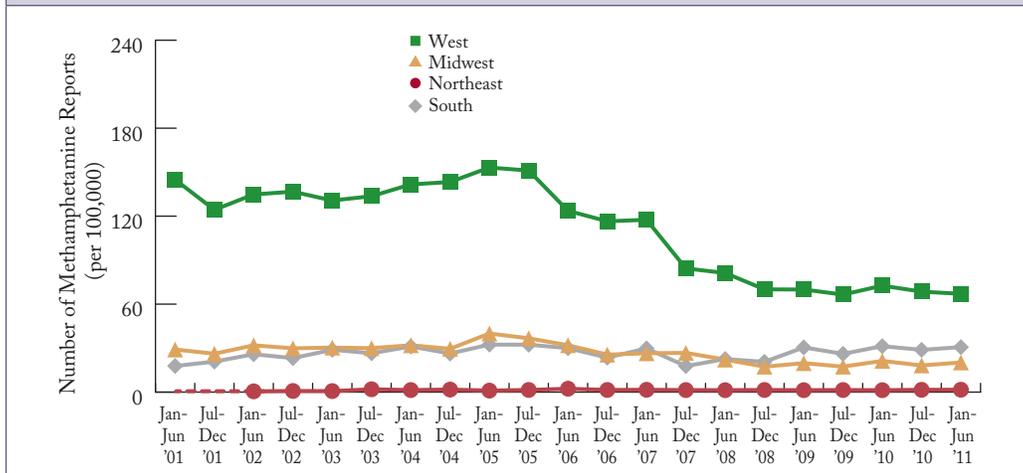


Figure 1.12 Regional trends in heroin reported per 100,000 persons aged 15 or older, January 2001–June 2011

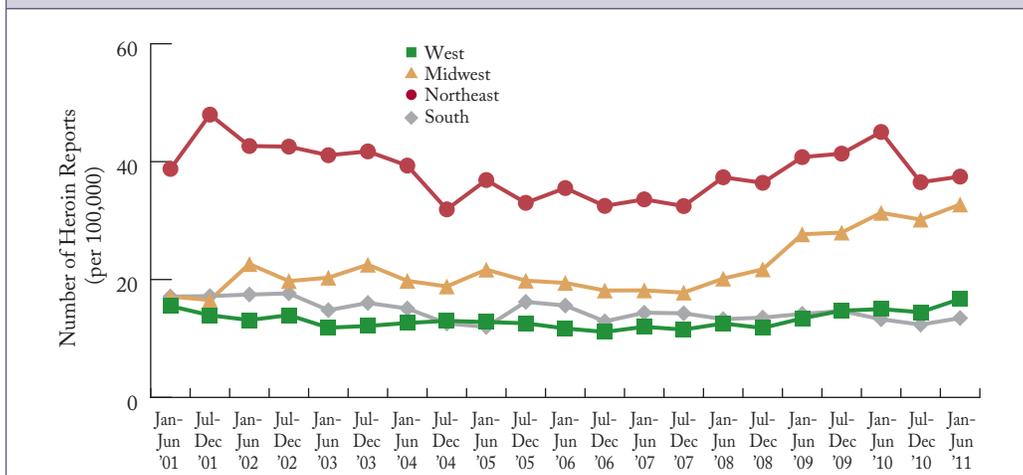
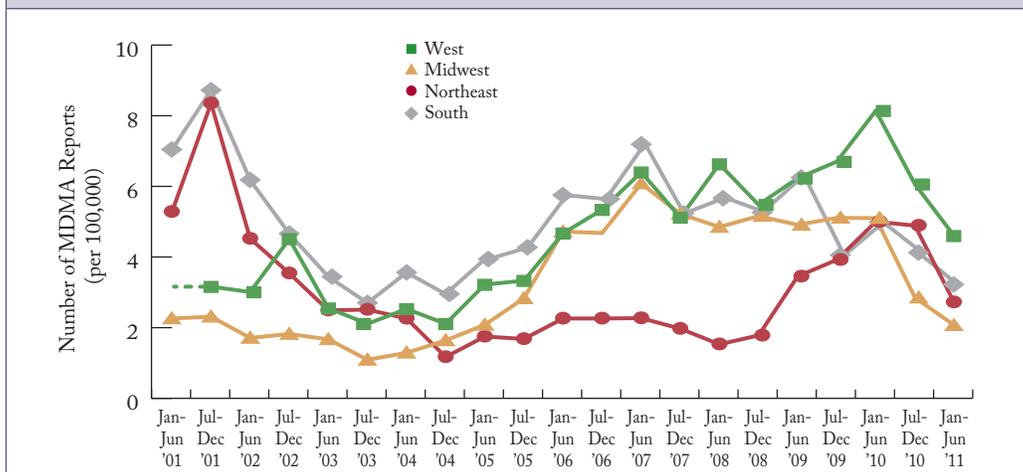


Figure 1.13 Regional trends in MDMA reported per 100,000 persons aged 15 or older, January 2001–June 2011*



Note: U.S. Census 2011 population data by age were not available for this publication. Population data for 2011 were imputed.

* A dashed trend line indicates estimates did not meet the criteria for precision or reliability. See Appendix A for a more detailed methodology discussion.

Section 2: Major Drug Categories

This section presents results for drug categories reported by NFLIS laboratories. Specifically, this section presents drug reports *submitted* to State and local laboratories from January 2011 through June 2011 that were *analyzed* by September 30, 2011. The first, second, and third drugs mentioned in laboratories' drug items are included in the counts. Drug categories presented in this section include narcotic analgesics, tranquilizers and depressants, hallucinogens, anabolic steroids, and stimulants.

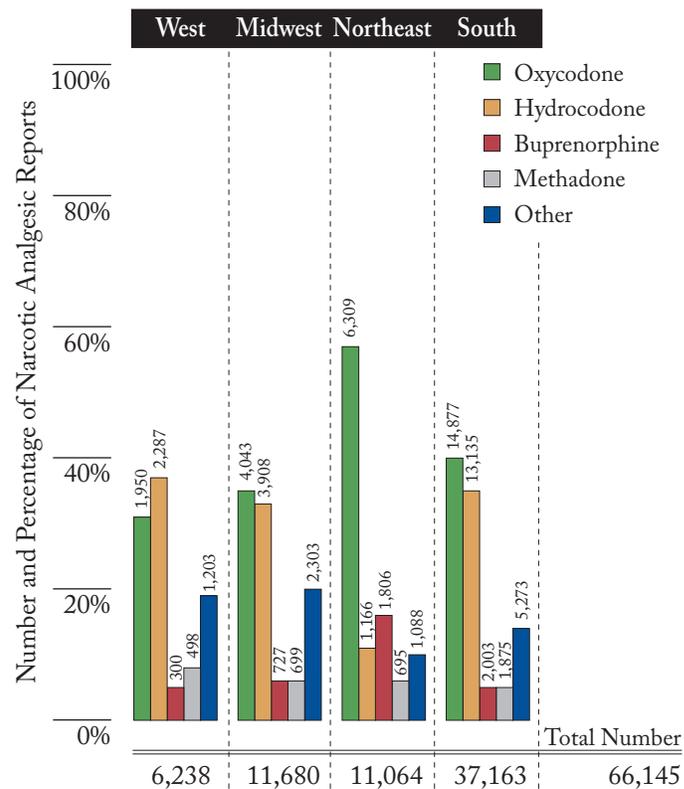
The results presented in this section are different from the national and regional estimates presented in Section 1. The estimates presented in Section 1 are based on the NEAR approach (National Estimates Based on All Reports). The data presented in Section 2 are not weighted and are only representative of those laboratories that provided data during the reference period. A total of 706,677 drugs were submitted to State and local laboratories during this six-month reference period and analyzed by September 30, 2011.

Table 2.1

NARCOTIC ANALGESICS
Number and percentage of narcotic analgesic reports in the United States, January 2011–June 2011*

Narcotic Analgesic Reports	Number	Percent
Oxycodone	27,179	41.09%
Hydrocodone	20,496	30.99%
Buprenorphine	4,836	7.31%
Methadone	3,767	5.70%
Morphine	3,627	5.48%
Codeine	1,693	2.56%
Hydromorphone	1,424	2.15%
Oxymorphone	1,128	1.71%
Tramadol (noncontrolled)	720	1.09%
Propoxyphene	540	0.82%
Opium	290	0.44%
Fentanyl	285	0.43%
Meperidine	80	0.12%
Pentazocine	49	0.07%
Dihydrocodeine	27	0.04%
Butorphanol	3	0.00%
Hydromorphanol	1	0.00%
Total Narcotic Analgesic Reports	66,145	100.00%
Total Drug Reports	706,677	

Figure 2.1 Distribution of narcotic analgesic reports within region, January 2011–June 2011*



* Includes drug reports submitted to laboratories from January 2011 through June 2011 that were analyzed by September 30, 2011.

Table 2.2

TRANQUILIZERS AND DEPRESSANTS
 Number and percentage of tranquilizer and depressant reports in the United States, January 2011–June 2011*

Tranquilizer and Depressant Reports	Number	Percent
Alprazolam	19,009	52.10%
Clonazepam	4,914	13.47%
Diazepam	3,061	8.39%
Phencyclidine (PCP)	2,478	6.79%
Carisoprodol	2,203	6.04%
Lorazepam	1,107	3.03%
Zolpidem (noncontrolled)	888	2.43%
Ketamine	650	1.78%
Cyclobenzaprine (noncontrolled)	617	1.69%
Temazepam	170	0.47%
Butalbital	156	0.43%
Pregabalin	115	0.32%
Triazolam	91	0.25%
Phenobarbital	81	0.22%
Gamma-hydroxybutyrate (GHB)	66	0.18%
Other tranquilizers and depressants	879	2.41%
Total Tranquilizer and Depressant Reports	36,485	100.00%
Total Drug Reports	706,677	

Figure 2.2 Distribution of tranquilizer and depressant reports within region, January 2011–June 2011*

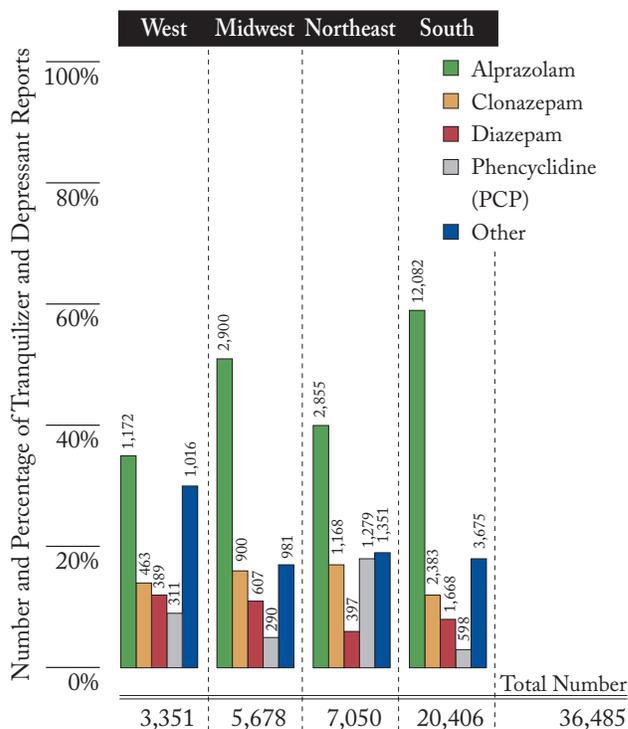
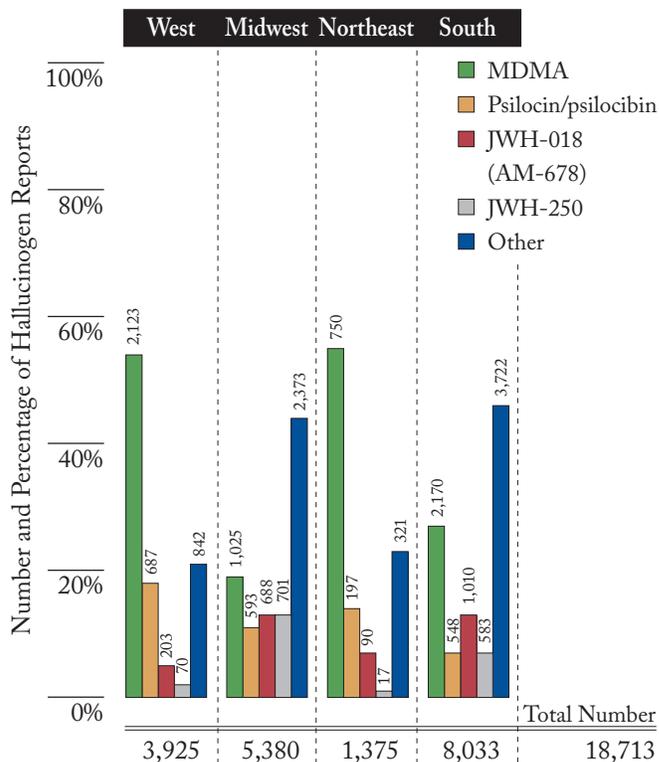


Table 2.3

HALLUCINOGENS
 Number and percentage of hallucinogen reports in the United States, January 2011–June 2011*

Hallucinogen Reports	Number	Percent
MDMA	6,068	32.43%
Psilocin/psilocibin	2,025	10.82%
JWH-018 (AM-678)	1,991	10.64%
JWH-250	1,371	7.33%
5-MEO-DIPT	888	4.75%
TFMPP (noncontrolled)	870	4.65%
AM-2201	801	4.28%
LSD	646	3.45%
JWH-122	597	3.19%
JWH-210	587	3.14%
JWH-081	582	3.11%
JWH-073	321	1.72%
RCS-4	234	1.25%
Other hallucinogens	1,732	9.26%
Total Hallucinogen Reports	18,713	100.00%
Total Drug Reports	706,677	

Figure 2.3 Distribution of hallucinogen reports within region, January 2011–June 2011*



MDMA=3,4-Methylenedioxyamphetamine
 JWH-018 (AM-678)=1-pentyl-3-(1-naphthoyl)indole
 JWH-250=1-pentyl-3-(2-methoxyphenylacetyl)indole
 5-MEO-DIPT=5-Methoxy-N,N-Diisopropyltryptamine
 TFMPP=1-(3-Trifluoromethylphenyl)piperazine
 AM-2201=1-(5-fluoropentyl)-3-(naphthoyl)indole
 JWH-210=1-pentyl-3-(4-ethyl-1-naphthoyl)indole
 JWH-122=4-methyl-1-naphthyl)-(1-pentylindol-3-yl)methanone
 JWH-081=1-pentyl-3-(4-methoxy-1-naphthoyl)indole
 JWH-073=1-butyl-3-(1-naphthoyl)indole
 RCS-4=1-pentyl-3-(4-methoxybenzoyl)indole
 Note: Percentages may not sum to 100% because of rounding.

* Includes drug reports submitted to laboratories from January 2011 through June 2011 that were analyzed by September 30, 2011.

Table 2.4

ANABOLIC STEROIDS
 Number and percentage of anabolic steroid reports in the United States, January 2011–June 2011*

Anabolic Steroid Reports	Number	Percent
Testosterone	696	45.05%
Methandrostenolone	152	9.84%
Stanozolol	133	8.61%
Nandrolone	132	8.54%
Trenbolone	123	7.96%
Oxandrolone	74	4.79%
Boldenone	71	4.60%
Oxymetholone	40	2.59%
Drostanolone	21	1.36%
Methyltestosterone	15	0.97%
Mesterolone	9	0.58%
Mestanolone	5	0.32%
Methenolone	5	0.32%
Other anabolic steroids	69	4.47%
Total Anabolic Steroid Reports	1,545	100.00%
Total Drug Reports	706,677	

Figure 2.4 Distribution of anabolic steroid reports within region, January 2011–June 2011*

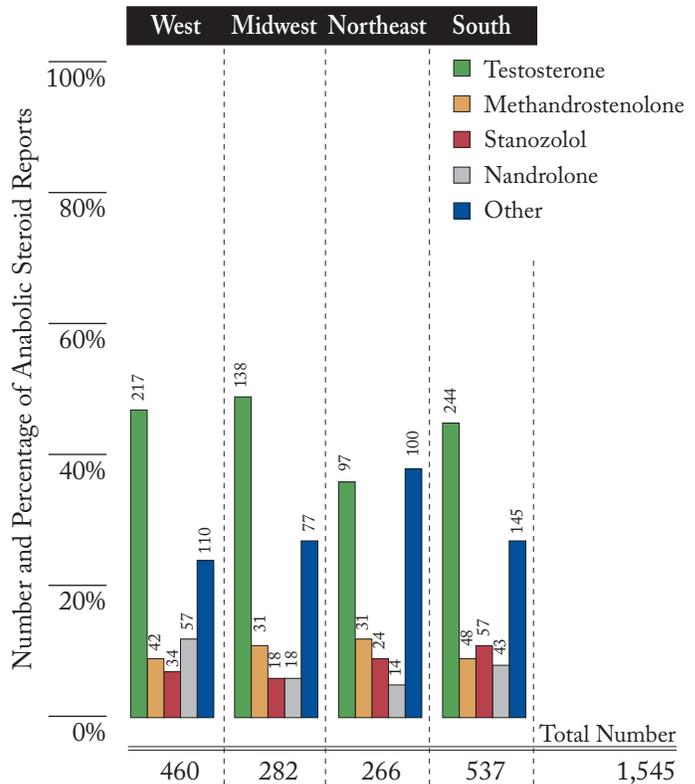
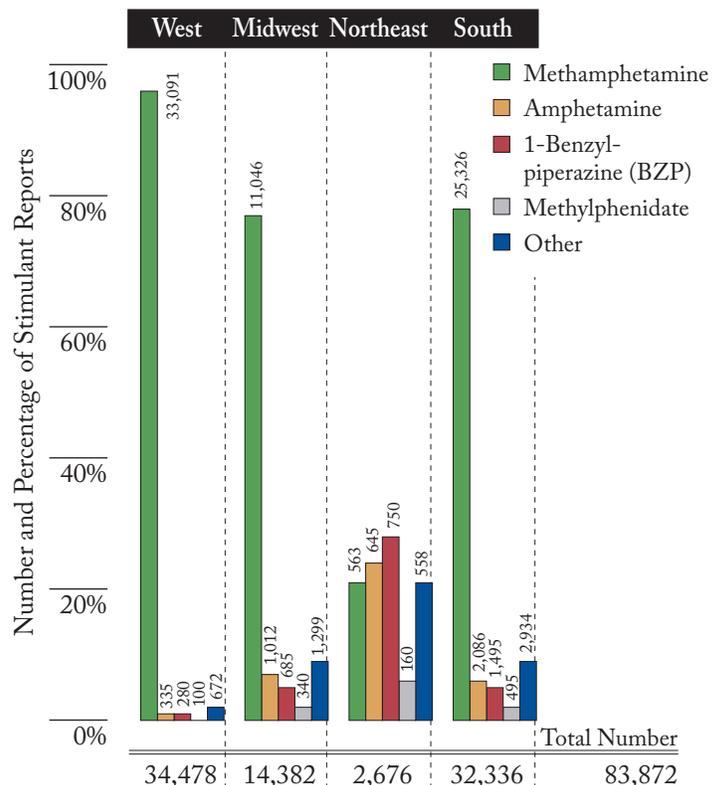


Table 2.5

STIMULANTS
 Number and percentage of stimulant reports in the United States, January 2011–June 2011*

Stimulant Reports	Number	Percent
Methamphetamine	70,026	83.49%
Amphetamine	4,078	4.86%
1-Benzylpiperazine (BZP)	3,210	3.83%
Methylphenidate	1,095	1.31%
MDPV	884	1.05%
Methylone (MDMC)	483	0.58%
Trazodone (noncontrolled)	436	0.52%
Lisdexamfetamine	426	0.51%
Phentermine	316	0.38%
Ephedrine (listed chemical)	263	0.31%
Mephedrone (4-MMC)	184	0.22%
Cathinone	156	0.19%
Citalopram (noncontrolled)	145	0.17%
Fluoxetine (noncontrolled)	127	0.15%
Sertraline (noncontrolled)	127	0.15%
Other stimulants	1,916	2.28%
Total Stimulant Reports	83,872	100.00%
Total Drug Reports	706,677	

Figure 2.5 Distribution of stimulant reports within region, January 2011–June 2011*



MDPV=3,4-Methylenedioxypropylvalerone
 Methylone (MDMC)=3,4-methylenedioxy-N-methylcathinone
 Mephedrone (4-MMC)=4-methylmethcathinone

* Includes drug reports submitted to laboratories from January 2011 through June 2011 that were analyzed by September 30, 2011.

Overview

Since 2001, NFLIS publications have included national and regional estimates for the number of drug reports and drug cases analyzed by State and local forensic laboratories in the United States. This appendix discusses the methods used for producing these estimates, including sample selection, weighting, and imputation procedures. RTI International, under contract to the DEA, began implementing NFLIS in 1997. Results from a 1998 survey (updated in 2002, 2004, and 2008) provided laboratory-specific information, including annual caseloads, which was used to establish a national sampling frame of all State and local forensic laboratories that routinely perform drug chemistry analyses. A representative probability proportional to size (PPS) sample was drawn on the basis of annual cases analyzed per laboratory, resulting in a NFLIS national sample of 29 State laboratory systems and 31 local or municipal laboratories, and a total of 168 individual laboratories (see Appendix B for a list of sampled NFLIS laboratories).

Estimates appearing in this publication are based on cases and items *submitted* to laboratories between January 1, 2011, and June 30, 2011, and *analyzed* by September 30, 2011. Analysis has shown that approximately 95% of cases submitted during a semiannual period are analyzed within three months of the end of the semiannual period (not including the approximately 30% of cases that are never analyzed).

For each drug item (or exhibit) analyzed by a laboratory in the NFLIS program, up to three drugs can be reported to NFLIS and counted in the estimation process. A drug-specific case is one for which the specific drug was identified as the first, second, or third drug report for any item associated with the case. A drug-specific report is the total number of reports of the specific drug.

Currently, laboratories representing more than 92% of the national drug caseload participate in NFLIS, with about 88% of the national caseload reported for each reporting period. This reporting provided an opportunity to implement a method, referred to as NEAR (National Estimates Based on All Reports), that has strong statistical advantages for producing national and regional estimates.

NEAR Methodology

In NFLIS publications before 2011, data reported by nonsampled laboratories were not used in national or regional estimates.¹ However, as the number of nonsampled laboratories reporting to NFLIS increased,² it began to make sense to consider ways to utilize the data they submitted. Under NEAR, the “volunteer” laboratories (i.e., the reporting nonsampled laboratories) represent themselves and are no longer represented by the reporting sampled laboratories. The volunteer laboratories are assigned weights of one, and hence the weights of the sampled and responding laboratories are appropriately adjusted downward. The outcome is that the estimates are more precise, especially for recent years, which include a large number of volunteer laboratories. More precision allows for more power to detect trends and fewer suppressed estimates in Tables 1.1 and 1.2 of the NFLIS annual and midyear reports.

NEAR imputations and adjusting for missing monthly data in reporting laboratories

Because of technical and other reporting issues, some laboratories do not report data for every month during a given reporting period, resulting in missing monthly data. If a laboratory reports fewer than six months of data for the annual estimates (fewer than three months for the semiannual estimates), it is considered nonreporting, and its reported data are not included in the estimates. Otherwise, imputations are performed separately by drug for laboratories that are missing monthly data, using drug-specific proportions generated from laboratories that are reporting all months of data. This imputation method is used for cases, items, and drug-specific reports and accounts for both the typical month-to-month variation and the size of the laboratory requiring imputation. The general idea is to use the nonmissing months to assess the size of the laboratory requiring imputation and then to apply the seasonal pattern exhibited by all laboratories with no missing data. Imputation of monthly case counts are created using the following ratio (r_L):

$$r_L = \frac{\sum_{m \in R_L} c_{L,m}}{\sum_{m \in R_L} c_{.,m}}$$

where

- R_L = set of all nonmissing months in laboratory L ,
- $c_{L,m}$ = case count for laboratory L in month m , and
- $c_{.,m}$ = mean case counts for all laboratories reporting complete data.

¹The case and item loads for the nonsampled laboratories were used in calculating the weights.

²In 2009, for example, out of 110 nonsampled laboratories and laboratory systems, 74 (or 67%) reported.

Monthly item counts are imputed for each laboratory using an estimated item-to-case ratio (s_L) for nonmissing monthly item counts within the laboratory. The imputed value for the missing monthly number of items in each laboratory is calculated by multiplying $c_{L,m}$ by s_L .

$$s_L = \frac{\sum_{m \in R_L} i_{L,m}}{\sum_{m \in R_L} c_{L,m}},$$

where

R_L = set of all nonmissing months in laboratory L ,

$i_{L,m}$ = item count for laboratory L in month m , and

$c_{L,m}$ = case count for laboratory L in month m .

Drug-specific case and report counts are imputed using the same imputation techniques presented above for the case and item counts. The total drug, item, and case counts are calculated by aggregating the laboratory and laboratory system counts for those with complete reporting and those that require imputation.

NEAR imputations and drug report-level adjustments

Most forensic laboratories classify and report case-level analyses in a consistent manner in terms of the number of vials of a particular pill. A small number, however, do not produce drug report-level counts in the same way as those submitted by the vast majority. Instead, they report as items the count of the individual pills themselves. Laboratories that consider items in this manner also consider drug report-level counts in this same manner. Drug report-to-case ratios for each drug were produced for the similarly sized laboratories, and these drug-specific ratios were then used to adjust the drug report counts for the relevant laboratories.

NEAR weighting procedures

Each NFLIS reporting laboratory was assigned a weight to be used in the calculation of design-consistent, nonresponse-adjusted estimates. Two weights were created: one for estimating cases and one for estimating drug reports. The weight used for case estimation was based on the caseload for every laboratory in the NFLIS population, and the weight used for drug reports' estimation was based on the item load for every laboratory in the NFLIS population. For reporting laboratories, the caseload and item load used in weighting were the reported totals. For nonreporting laboratories, the caseload and item load used in weighting were obtained from an updated laboratory survey administered in 2008.

When the NFLIS sample was originally drawn, two stratifying variables were used: (1) type of laboratory (State

system or municipal or county laboratory) and (2) determination of "certainty" laboratory status. To ensure that the NFLIS sample had strong regional representation, U.S. census regions were used as the geographical divisions to guide selection of certainty laboratories and systems. Some large laboratories were automatically part of the original NFLIS sample because they were deemed critically important to the calculation of reliable estimates. These laboratories are called "certainty laboratories." The criteria used in selecting the certainty laboratories included (1) size, (2) region, (3) geographical location, and (4) other special considerations (e.g., strategic importance of the laboratory).

Each weight has two components, the design weight and the nonresponse adjustment factor, the product of which is the final weight used in estimation. After imputation, the final item weight is based on the item count and the final case weight is based on the case count of each laboratory or laboratory system. The final weights are used to calculate national and regional estimates. The first component, the design weight, is based on the proportion of the caseload and item load of the NFLIS universe³ represented by the individual laboratory. This step takes advantage of the original PPS sample design, which provides precise estimates as long as the number of drug-specific case estimates and report estimates are correlated with the overall caseload and item load.⁴

For noncertainty reporting laboratories in the sample (and reporting laboratories in the certainty strata with nonreporting laboratories), the design-based weight for each laboratory is calculated as follows:

$$\text{Design Weight}_i = A / (B \times \text{Case [item] Count for Laboratory or Laboratory System } i),$$

where

i = i th laboratory or laboratory system;

A = sum of the case (item) counts for all of the laboratories and laboratory systems (sampled and nonsampled) within a specific stratum, excluding certainty strata and the volunteer stratum; and

B = number of sampled laboratories and laboratory systems within the same stratum, excluding certainty strata and the volunteer stratum.

Certainty laboratories were assigned a design weight of one.⁵

³See the Introduction of this publication for a description of the NFLIS universe.

⁴Lohr, S. L. (2010). *Sampling: Design and analysis* (2nd ed., pp. 231-234). Boston, MA: Brooks/Cole.

⁵With respect to the design weight, reporting laboratories and laboratory systems in certainty strata with nonreporting laboratories and laboratory systems are treated the same way as reporting noncertainty sampled laboratories and laboratory systems. This is done to reduce the variance; otherwise, all reporting laboratories and laboratory systems in certainty strata would get the same weight.

The second component, the nonresponse adjustment factor, adjusts the weights of the reporting and sampled laboratories to account for the nonreporting and sampled laboratories. The nonresponse (*NR*) adjustment, for both certainty and noncertainty laboratories, is calculated as follows:

$$NR_j = C/D,$$

where

j = stratum;

C = sum of the case (item) counts of all sampled laboratories and laboratory systems within the stratum, excluding the volunteer stratum; and

D = sum of the case (item) counts for all sampled reporting laboratories and laboratory systems within the same stratum.

Because volunteer laboratories only represent themselves, they were automatically assigned a final weight of one.

NEAR estimation

The estimates in this publication are the weighted sum of the counts from each laboratory. The weighting procedures make the estimates more precise by assigning large weights to small laboratories and small weights to large laboratories.⁶ Because most of the values being estimated tend to be related to laboratory size, the product of the weight and the value to be estimated tends to be relatively stable across laboratories, resulting in precise estimates.

A finite population correction is also applied to account for the high sampling rate. In a sample-based design, the sampling fraction, which is used to create the weights, equals the number of sampled laboratories divided by the number of laboratories in the NFLIS universe. Under NEAR, the sampling fraction equals the number of sampled laboratories divided by the sum of the number of sampled laboratories and the number of nonreporting, unsampled laboratories. Volunteer laboratories are not included in the sampling fraction calculation. Thus, the NEAR approach makes the sampling rate even higher because volunteer laboratories do not count as nonsampled laboratories.

Suppression of Unreliable Estimates

For some drugs, such as cannabis/THC and cocaine, thousands of reports occur annually, allowing for reliable national prevalence estimates to be computed. For other drugs, reliable and precise estimates cannot be computed because of a combination of low report counts and substantial variability in report counts between laboratories. Thus, suppression rules were established. Precision and reliability of estimates are evaluated using the relative standard error (RSE), which is the ratio between the standard error of an estimate and the estimate. Drug estimates with an RSE > 50% are suppressed and not shown in the tables.

Statistical Techniques for Trend Analysis

A trend analysis was performed on the January 2001 through June 2011 national and regional estimates for selected drug reports. Typically, models test for mean differences; however, the national and regional estimates are based on total drug report counts. To work around this challenge, a bootstrapping technique was employed. (Bootstrapping is an iterative technique used to estimate variances when standard variance estimation procedures cannot be used.⁷) All statistical tests were performed at the 95% confidence level ($p < .05$). In other words, there is a < 5% probability of detecting a statistically significant linear trend when no linear trend exists.

The bootstrapping method used for trend analysis has four steps. First, estimates and standard errors are obtained for all 21 semiannual periods beginning with January–June 2001 and ending with January–June 2011. Second, a background distribution that assumes no trend is generated using a simulation. For each semiannual period, 1,000 values are drawn from a normal distribution with a mean equal to the mean of all 21 semiannual estimates and a standard deviation equal to the actual standard error from the first step. Third, the slope of the least-squares trend line is calculated for each of the 1,000 simulated time series. Fourth, the slope of the observed least-squares trend line is calculated. If the observed slope is ≥ 975 of the 1,000 simulated slopes, a significant increasing trend is indicated; and if the observed slope is < 975 of the 1,000 simulated slopes, a significant decreasing trend is indicated. Otherwise, the data do not support a significant linear trend.

Note that the trend analyses test for a linear trend is based on a time series of semiannual estimates. The tests do not compare the most recent semiannual estimate with the estimate for the first half of 2001. Instead, the tests follow the trend across all time points. The trend line may not fit the time series particularly well because the actual time series shows a curvilinear pattern. For example, if the estimates increased drastically during the early years of the time series but decreased in recent years, the linear trend test may detect an increasing trend, thus oversimplifying the actual pattern. For the regional trends, the estimated drug reports are standardized to the most recent regional population totals for persons aged 15 years or older.

⁶See footnote 4.

⁷For more information on this technique, see Chernick, M. R. (1999). *Bootstrap methods: A practitioner's guide*. New York, NY: Wiley.

State	Lab Type	Laboratory Name	Reporting
AK	State	Alaska Department of Public Safety	✓
AL	State	Alabama Department of Forensic Sciences (10 sites)	✓
AR	State	Arkansas State Crime Laboratory (2 sites)	✓
AZ	Local	Mesa Police Department	✓
	Local	Phoenix Police Department	✓
	Local	Scottsdale Police Department	✓
	Local	Tucson Police Department Crime Laboratory	✓
CA	State	California Department of Justice (10 sites)	✓
	Local	Contra Costa County Sheriff's Office (Martinez)	✓
	Local	Fresno County Sheriff's Forensic Laboratory	✓
	Local	Kern County District Attorney's Office (Bakersfield)	✓
	Local	Long Beach Police Department	✓
	Local	Los Angeles County Sheriff's Department (4 sites)	✓
	Local	Los Angeles Police Department (2 sites)	✓
	Local	Orange County Sheriff's Department (Santa Ana)	✓
	Local	Sacramento County District Attorney's Office	✓
	Local	San Bernardino Sheriff's Office (2 sites)	✓
	Local	San Diego County Sheriff's Department	✓
	Local	San Diego Police Department	✓
	Local	San Francisco Police Department	✓
	Local	San Mateo County Sheriff's Office (San Mateo)	✓
	Local	Santa Clara District Attorney's Office (San Jose)	✓
Local	Ventura County Sheriff's Department	✓	
CO	State	Colorado Bureau of Investigation (5 sites)	✓
	Local	Aurora Police Department	✓
	Local	Colorado Springs Police Department	✓
	Local	Denver Police Department Crime Laboratory	✓
	Local	Jefferson County Sheriff's Office (Golden)	✓
CT	State	Connecticut Department of Public Safety	✓
DE	State	Chief Medical Examiner's Office	✓
FL	State	Florida Department of Law Enforcement (8 sites)	✓
	Local	Broward County Sheriff's Office (Fort Lauderdale)	✓
	Local	Indian River Crime Laboratory (Fort Pierce)	✓
	Local	Miami-Dade Police Department Crime Laboratory	✓
	Local	Palm Beach County Sheriff's Office Crime Laboratory (West Palm Beach)	✓
	Local	Pinellas County Forensic Laboratory (Largo)	✓
	Local	Sarasota County Sheriff's Office	✓
GA	State	Georgia State Bureau of Investigation (8 sites)	✓
HI	Local	Honolulu Police Department	✓
IA	State	Iowa Division of Criminal Investigations	✓
ID	State	Idaho State Police (3 sites)	✓
IL	State	Illinois State Police (8 sites)	✓
	Local	DuPage County Sheriff's Office (Wheaton)	✓
	Local	Northern Illinois Police Crime Laboratory (Chicago)	✓
IN	State	Indiana State Police Laboratory (4 sites)	✓
	Local	Indianapolis-Marion County Forensic Laboratory (Indianapolis)	✓
KS	State	Kansas Bureau of Investigation (4 sites)	✓
	Local	Johnson County Sheriff's Office (Mission)	✓
	Local	Sedgwick County Regional Forensic Science Center (Wichita)	✓
KY	State	Kentucky State Police (6 sites)	✓
LA	State	Louisiana State Police	✓
	Local	Acadiana Criminalistics Laboratory (New Iberia)	✓
	Local	Jefferson Parish Sheriff's Office (Metairie)	✓
	Local	New Orleans Police Department Crime Laboratory	✓
	Local	North Louisiana Criminalistics Laboratory System (3 sites)	✓
Local	Southwest Louisiana Regional Laboratory (Lake Charles)	✓	
MA	State	Massachusetts Department of Public Health (2 sites)	✓
	State	Massachusetts State Police	✓
	Local	University of Massachusetts Medical Center (Worcester)	✓
MD	State	Maryland State Police Forensic Sciences Division (3 sites)	✓
	Local	Anne Arundel County Police Department (Millersville)	✓
	Local	Baltimore City Police Department	✓
	Local	Baltimore County Police Department (Towson)	✓
	Local	Montgomery County Crime Laboratory (Rockville)	✓
ME	State	Maine Department of Human Services	✓
MI	State	Michigan State Police (7 sites)	✓
MN	State	Minnesota Bureau of Criminal Apprehension (2 sites)	✓
	Local	St. Paul Police Department	✓
MO	State	Missouri State Highway Patrol (8 sites)	✓
	Local	Independence Police Department	✓
	Local	KCMO Regional Crime Laboratory (Kansas City)	✓
	Local	St. Charles County Criminalistics Laboratory (O'Fallon)	✓
	Local	St. Louis County Crime Laboratory (Clayton)	✓
Local	St. Louis Police Department	✓	

State	Lab Type	Laboratory Name	Reporting	
MS	State	Mississippi Department of Public Safety (4 sites)	✓	
	Local	Jackson Police Department Crime Laboratory	✓	
	Local	Tupelo Police Department	✓	
MT	State	Montana Forensic Science Division	✓	
NC	State	North Carolina State Crime Laboratory (3 sites)	✓	
	Local	Charlotte-Mecklenburg Police Department	✓	
ND	State	North Dakota Crime Laboratory Division	✓	
NE	State	Nebraska State Patrol Criminalistics Laboratory (2 sites)	✓	
NJ	State	New Jersey State Police (4 sites)	✓	
	Local	Burlington County Forensic Laboratory (Mt. Holly)	✓	
	Local	Cape May County Prosecutor's Office	✓	
	Local	Hudson County Prosecutor's Office (Jersey City)	✓	
	Local	Ocean County Sheriff's Department (Toms River)	✓	
	Local	Union County Prosecutor's Office (Westfield)	✓	
NM	State	New Mexico Department of Public Safety (3 sites)	✓	
	Local	Albuquerque Police Department	✓	
NV	Local	Las Vegas Metropolitan Police Crime Laboratory	✓	
	Local	Washoe County Sheriff's Office Crime Laboratory (Reno)	✓	
NY	State	New York State Police (4 sites)	✓	
	Local	Erie County Central Police Services Laboratory (Buffalo)	✓	
	Local	New York City Police Department Crime Laboratory*	✓	
	Local	Niagara County Police Department (Lockport)	✓	
	Local	Onondaga County Center for Forensic Sciences (Syracuse)	✓	
	Local	Suffolk County Crime Laboratory (Hauppauge)	✓	
	Local	Westchester County Forensic Sciences Laboratory (Valhalla)	✓	
	Local	Yonkers Police Department Forensic Science Laboratory	✓	
	OH	State	Ohio Bureau of Criminal Identification & Investigation (3 sites)	✓
		State	Ohio State Highway Patrol	✓
		Local	Canton-Stark County Crime Laboratory (Canton)	✓
Local		Columbus Police Department	✓	
Local		Hamilton County Coroner's Office (Cincinnati)	✓	
Local		Lake County Regional Forensic Laboratory (Painesville)	✓	
Local		Mansfield Police Department	✓	
Local	Local	Miami Valley Regional Crime Laboratory (Dayton)	✓	
	Local	Newark Police Department Forensic Services	✓	
	Local	Toledo Police Forensic Laboratory	✓	
OK	State	Oklahoma State Bureau of Investigation (5 sites)	✓	
	Local	Tulsa Police Department Forensic Laboratory	✓	
OR	State	Oregon State Police Forensic Services Division (6 sites)	✓	
PA	State	Pennsylvania State Police Crime Laboratory (6 sites)	✓	
	Local	Allegheny County Coroner's Office (Pittsburgh)	✓	
	Local	Bucks County Crime Laboratory (Warminster)	✓	
Local	Philadelphia Police Department Forensic Science Laboratory	✓		
RI	State	Rhode Island Forensic Sciences Laboratory	✓	
SC	State	South Carolina Law Enforcement Division	✓	
	Local	Anderson/Oconee Regional Forensics Laboratory	✓	
	Local	Charleston Police Department	✓	
Local	Spartanburg Police Department	✓		
SD	Local	Rapid City Police Department	✓	
TN	State	Tennessee Bureau of Investigation (3 sites)	✓	
TX	State	Texas Department of Public Safety (13 sites)	✓	
	Local	Austin Police Department	✓	
	Local	Bexar County Criminal Investigations Laboratory (San Antonio)	✓	
	Local	Brazoria County Crime Laboratory (Angleton)	✓	
	Local	Fort Worth Police Department Criminalistics Laboratory	✓	
	Local	Harris County Medical Examiner's Office (Houston)	✓	
	Local	Jefferson County Sheriff's Regional Crime Laboratory (Beaumont)	✓	
	Local	Pasadena Police Department	✓	
	UT	State	Utah State Crime Laboratory (4 sites)	✓
VA	State	Virginia Department of Forensic Science (4 sites)	✓	
VT	State	Vermont Forensic Laboratory	✓	
WA	State	Washington State Patrol (6 sites)	✓	
WI	State	Wisconsin Department of Justice (3 sites)	✓	
WV	State	West Virginia State Police	✓	
WY	State	Wyoming State Crime Laboratory	✓	
PR	Territory	Puerto Rico Crime Laboratory (4 sites)	✓	

This list identifies laboratories that are participating in and reporting to NFLIS as of January 2012.

*The New York City Police Department Crime Laboratory currently reports summary data.

Benefits

The systematic collection and analysis of drug analysis data can improve our understanding of the Nation's illicit drug problem. NFLIS serves as a critical resource for supporting drug scheduling policy and drug enforcement initiatives both nationally and in specific communities around the country.

Specifically, NFLIS helps the drug control community achieve its mission by

- providing detailed information on the prevalence and types of controlled substances secured in law enforcement operations;
- identifying variations in controlled and noncontrolled substances at the national, State, and local levels;
- identifying emerging drug problems and changes in drug availability in a timely fashion;
- monitoring the diversion of legitimately marketed drugs into illicit channels;
- providing information on the characteristics of drugs, including quantity, purity, and drug combinations; and
- supplementing information from other drug sources, including the DEA's STRIDE, the Drug Abuse Warning Network (DAWN), the National Survey on Drug Use and Health (NSDUH), and the Monitoring the Future (MTF) study.

NFLIS is an opportunity for State and local laboratories to participate in a useful and high-visibility initiative. Participating laboratories regularly receive reports that summarize national and regional data. In addition, the Data Query System (DQS) is a secure website that allows NFLIS participants—including State and local laboratories, the DEA, other Federal drug control agencies, and researchers—to run customized queries on the NFLIS data. Enhancements to the DQS provide a new interagency exchange forum that will allow the DEA, forensic laboratories, and other members of the drug control community to post and respond to current information.

Limitations

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

- Currently, NFLIS includes data from State and local forensic laboratories, as well as data from the DEA's STRIDE, which includes data from DEA laboratories across the country. The STRIDE data are shown separately in this publication. Efforts are under way to enroll additional Federal laboratories.
- NFLIS includes drug chemistry results from completed analyses only. Drug evidence secured by law enforcement but not analyzed by laboratories is not included in the database.
- National and regional estimates may be subject to variation associated with sample estimates, including nonresponse bias.
- For results presented in Section 2, the absolute and relative frequency of analyzed results for individual drugs can, in part, be a function of laboratories that are participating in NFLIS.
- State and local policies related to the enforcement and prosecution of specific drugs may affect drug evidence submissions to laboratories for analysis.
- Laboratory policies and procedures for handling drug evidence vary. Some laboratories analyze all evidence submitted to them, while others analyze only selected case items. Many laboratories do not analyze drug evidence if the criminal case was dismissed from court or if no defendant could be linked to the case.
- Laboratories vary with respect to the records they maintain. For example, some laboratories' automated records include the weight of the sample selected for analysis (e.g., the weight of one of five bags of powder), while others record total weight.

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