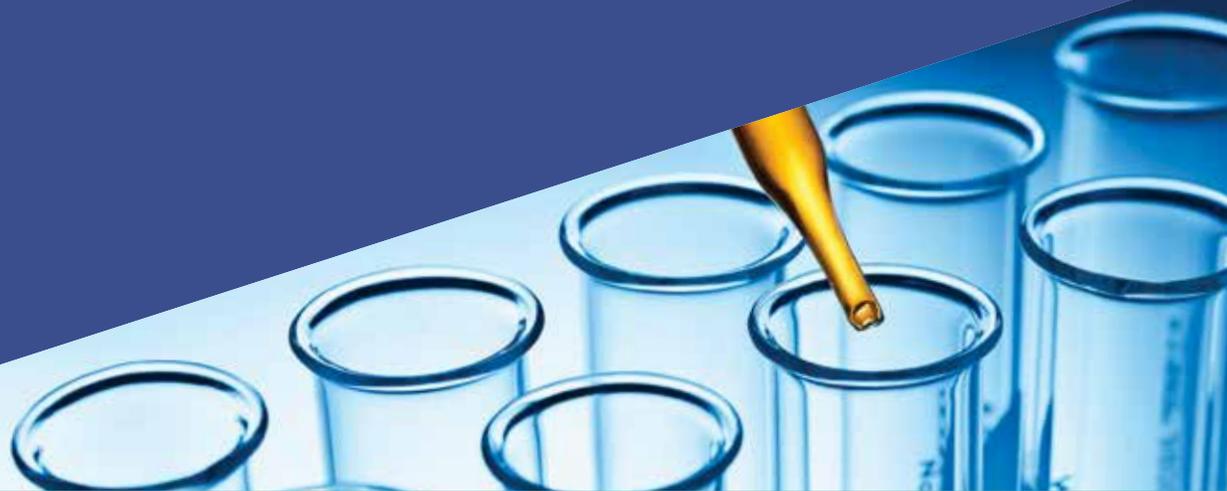


2012 MIDYEAR REPORT



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 2012 through June 2012, an estimated 486,452 distinct drug cases were submitted to State and local laboratories in the United States and analyzed by September 30, 2012. From these cases, an estimated 848,634 drug reports were identified.
- Cannabis/THC was the most frequently reported drug (272,615), followed by cocaine (155,476), methamphetamine (88,865), and heroin (65,510). The four most frequently reported drugs accounted for 69% of all drug reports.
- Nationally, oxycodone reports increased significantly ($p < .05$) since 2001 and did so more dramatically from 2006 through 2012. Buprenorphine showed a similar pattern, but its rate of increase slowed in 2011 and 2012. Although hydrocodone and alprazolam reports increased from 2001 through 2010, they began to decrease in 2011 and 2012. Clonazepam reports showed a linear increasing trend since 2001. Amphetamine reports decreased from 2001 through 2004, but increased from 2004 to 2012.
- Regionally, oxycodone reports in the Northeast and the South showed significant upward curving trends, while the West and the Midwest showed increasing trends that began curving downward in 2010. Hydrocodone trends began to curve downward for all four regions, but at different times. For alprazolam and clonazepam, all regions showed increasing linear trends except in the South. In the South, the alprazolam trend began curving downward in 2010, while the clonazepam trend started curving upward in 2003. For buprenorphine and amphetamine, all regions showed upward curving trends. The rate of increase for buprenorphine, however, slowed in recent years, especially since 2009. For amphetamine, all trends curved upward. For the West, the trend was more U-shaped, showing a decrease from 2001 through 2006, while the trend was on the increase since before 2006 for the remaining regions.
- Approximately 69% of narcotic analgesic reports were oxycodone or hydrocodone. Alprazolam accounted for about 51% of tranquilizer and depressant reports, and methamphetamine accounted for 84% of stimulant reports.
- For cannabis/THC reports, the West, Midwest, and South showed significant linear decreasing trends, while in the Northeast the trend increased from 2001 to 2009, but decreased between 2009 and 2012. Cocaine trends for the Northeast, Midwest, and South curved downward, and in the West the decreasing cocaine trend flattened out after 2011. Methamphetamine trends generally increased since about 2009, while MDMA trends decreased since then. Heroin trends increased since about 2006 and 2007 for both the Northeast and the West and since about 2004 for the Midwest.
- Cannabis/THC was the most frequently reported drug in the Midwest (42%), Northeast (35%), and South (29%), and methamphetamine was the most frequently reported drug in the West (31%).
- Nationwide, cocaine reports decreased significantly between 2005 and 2006 and in 2012. Methamphetamine reports decreased from 2003 to 2009, but increased since then. MDMA reports showed the opposite pattern, increasing from 2003 to 2009, then decreasing dramatically from 2009 to 2012. Heroin reports decreased from 2001 to 2005, but increased since 2005. Cannabis/THC reports showed no significant trend.

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.

NFLIS is 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, 49 State systems and 94 local or municipal laboratories/laboratory systems participate in NFLIS, representing a total of 277 individual laboratories. In addition, the NFLIS database includes Federal data from the DEA's System To Retrieve Information from Drug Evidence II (STRIDE) and from U.S. Customs and Border Protection (CBP) laboratories. STRIDE 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.

The NFLIS results presented throughout this publication are drug cases *submitted* to State and local laboratories from January 2012 through June 2012 that were *analyzed* by September 30, 2012. Data from Federal laboratories 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 NFLIS national and regional estimates (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 2012.

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 2012 through June 2012 and analyzed by September 30, 2012

Drug	National		West		Midwest		Northeast		South	
	Number	Percent								
Cannabis/THC	272,615	32.12%	32,250	22.38%	84,281	42.08%	50,861	35.01%	105,223	29.31%
Cocaine	155,476	18.32%	16,092	11.17%	25,774	12.87%	33,959	23.38%	79,650	22.19%
Methamphetamine	88,865	10.47%	44,881	31.15%	14,241	7.11%	799	0.55%	28,944	8.06%
Heroin	65,510	7.72%	11,279	7.83%	19,635	9.80%	19,880	13.68%	14,717	4.10%
Oxycodone	27,053	3.19%	3,146	2.18%	3,799	1.90%	6,780	4.67%	13,328	3.71%
Hydrocodone	21,901	2.58%	2,781	1.93%	4,363	2.18%	1,485	1.02%	13,271	3.70%
Alprazolam	20,070	2.36%	1,448	1.01%	3,153	1.57%	3,288	2.26%	12,180	3.39%
AM-2201	10,457	1.23%	1,537	1.07%	3,194	1.59%	1,408	0.97%	4,319	1.20%
Clonazepam	5,748	0.68%	652	0.45%	1,143	0.57%	1,227	0.84%	2,726	0.76%
Buprenorphine	5,614	0.66%	541	0.38%	821	0.41%	2,058	1.42%	2,195	0.61%
Amphetamine	4,984	0.59%	515	0.36%	1,329	0.66%	677	0.47%	2,463	0.69%
Morphine	4,467	0.53%	891	0.62%	1,157	0.58%	395	0.27%	2,025	0.56%
Methadone	4,199	0.49%	843	0.59%	702	0.35%	778	0.54%	1,875	0.52%
Noncontrolled, non-narcotic ²	3,640	0.43%	1,261	0.88%	0	0.00%	341	0.23%	2,038	0.57%
MDMA	3,276	0.39%	1,167	0.81%	655	0.33%	640	0.44%	815	0.23%
Diazepam	3,227	0.38%	490	0.34%	657	0.33%	312	0.21%	1,769	0.49%
Phencyclidine (PCP)	2,870	0.34%	314	0.22%	479	0.24%	1,328	0.91%	749	0.21%
1-Benzylpiperazine (BZP)	2,803	0.33%	232	0.16%	1,321	0.66%	517	0.36%	733	0.20%
Carisoprodol	2,754	0.32%	431	0.30%	181	0.09%	113	0.08%	2,029	0.57%
Pseudoephedrine ³	2,730	0.32%	62	0.04%	1,205	0.60%	145	0.10%	1,318	0.37%
Psilocin/psilocibin	2,495	0.29%	890	0.62%	688	0.34%	252	0.17%	665	0.19%
MDPV	2,036	0.24%	76	0.05%	579	0.29%	386	0.27%	995	0.28%
Hydromorphone	1,988	0.23%	238	0.17%	306	0.15%	99	0.07%	1,346	0.37%
Codeine	1,908	0.22%	394	0.27%	448	0.22%	279	0.19%	787	0.22%
JWH-122	1,900	0.22%	324	0.22%	434	0.22%	348	0.24%	795	0.22%
<i>Top 25 Total</i>	<i>718,588</i>	<i>84.68%</i>	<i>122,735</i>	<i>85.19%</i>	<i>170,542</i>	<i>85.15%</i>	<i>128,355</i>	<i>88.36%</i>	<i>296,956</i>	<i>82.72%</i>
<i>All Other Drug Reports</i>	<i>130,046</i>	<i>15.32%</i>	<i>21,343</i>	<i>14.81%</i>	<i>29,741</i>	<i>14.85%</i>	<i>16,913</i>	<i>11.64%</i>	<i>62,050</i>	<i>17.28%</i>
<i>Total Drug Reports⁴</i>	<i>848,634</i>	<i>100.00%</i>	<i>144,078</i>	<i>100.00%</i>	<i>200,283</i>	<i>100.00%</i>	<i>145,268</i>	<i>100.00%</i>	<i>359,005</i>	<i>100.00%</i>

AM-2201=1-(5-fluoropentyl)-3-(1-naphthoyl)indole

MDMA=3,4-Methylenedioxyamphetamine

MDPV=3,4-Methylenedioxypropylvalerone

JWH-122=1-pentyl-3-(4-methylnaphthoyl)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

Top 25 estimated number of drug-specific cases and their percentage of distinct cases, January 2012 through June 2012

Drug	Number	Percent
Cannabis/THC	191,529	39.37%
Cocaine	119,106	24.48%
Methamphetamine	61,254	12.59%
Heroin	49,322	10.14%
Oxycodone	20,787	4.27%
Hydrocodone	18,033	3.71%
Alprazolam	16,537	3.40%
AM-2201	5,897	1.21%
Clonazepam	4,951	1.02%
Buprenorphine	4,838	0.99%
Amphetamine	4,168	0.86%
Morphine	3,696	0.76%
Methadone	3,613	0.74%
Diazepam	2,766	0.57%
Phencyclidine (PCP)	2,506	0.52%
Carisoprodol	2,309	0.47%
Noncontrolled, non-narcotic ¹	2,212	0.45%
MDMA	2,021	0.42%
Psilocin/psilocibin	1,977	0.41%
Pseudoephedrine ²	1,758	0.36%
Hydromorphone	1,727	0.36%
1-Benzylpiperazine (BZP)	1,623	0.33%
Codeine	1,599	0.33%
Oxymorphone	1,375	0.28%
Methylone	1,311	0.27%
Top 25 Total	526,913	108.32%
All Other Drugs	91,314	18.77%
Total All Drugs	618,226³	127.09%⁴

AM-2201=1-(5-fluoropentyl)-3-(1-naphthoyl)indole

MDMA=3,4-Methylenedioxyamphetamine

¹ As reported by NFLIS laboratories, with no specific drug name provided.

² Includes items from a small number of laboratories that do not specify between pseudoephedrine and ephedrine.

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 486,452 distinct cases submitted to State and local laboratories from January 2012 through June 2012 and analyzed by September 30, 2012.

Drugs Reported by Federal Laboratories

The majority of drug reports presented in this section are from the DEA's System To Retrieve Information from Drug Evidence II (STRIDE). STRIDE reflects 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. In addition to drug reports from STRIDE, reports from seven U.S. Customs and Border Protection (CBP) laboratories are also included.

MOST FREQUENTLY REPORTED DRUGS BY FEDERAL LABORATORIES¹

Number and percentage of drug reports submitted to laboratories from January 2012 through June 2012 and analyzed by September 30, 2012

Drug	Number	Percent
Cocaine	5,660	15.80%
Cannabis/THC	5,549	15.49%
Methamphetamine	4,696	13.11%
Heroin	2,536	7.08%
Oxycodone	770	2.15%
AM-2201	755	2.11%
Noncontrolled, non-narcotic	529	1.48%
alpha-PVP	227	0.63%
Phencyclidine (PCP)	224	0.63%
Alprazolam	211	0.59%
All Other Drug Reports	14,672	40.95%
Total Drug Reports	35,829	100.00%²

AM-2201=1-(5-fluoropentyl)-3-(1-naphthoyl)indole
alpha-PVP=alpha-Pyrrolidinopentiophenone

¹ Federal drug reports in this table include 34,798 reports from DEA laboratories and 1,121 reports from U.S. Customs and Border Protection (CBP) laboratories.

² 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. Beginning with this publication, enhanced trend analyses were implemented. The new analyses test the data for the presence of both linear and curved trends using statistical methods described in more detail in Appendix A. Curved trends are sometimes described as U-shaped (i.e., decreasing in earlier years and increasing in recent years) and S-shaped (i.e., two turns in the trend, roughly either increasing-decreasing-increasing or decreasing-increasing-decreasing). Estimates include all drug reports (up to three) identified among the NFLIS laboratories' reported drug reports. Between the first half of 2001 and the first half of 2012, the total estimated number of drug reports decreased approximately 4%, from 887,939 to 848,634.

National prescription drug trends

Figures 1.1 and 1.2 present national trends for the estimated number of prescription drug reports that were identified as oxycodone, hydrocodone, alprazolam, clonazepam, buprenorphine, and amphetamine. Nationally, from the first half of 2001 through the first half of 2012, all six of these drugs exhibited a significant ($p < .05$) increasing trend. More specifically:

- Oxycodone reports increased more dramatically from 2006 through 2012 than they did from 2001 through 2005. Buprenorphine showed a similar pattern, but for buprenorphine, the rate of increase slowed in 2011 and 2012.

- Hydrocodone and alprazolam reports began to decrease in 2011 and 2012.
- Clonazepam reports showed a linear increasing trend since 2001.
- Amphetamine reports decreased from 2001 through 2004, but increased since 2004.

Significance tests were also performed on differences from the first half of 2011 to the first half of 2012 in order to identify more recent changes. Across these two periods, reports of oxycodone (from 30,406 to 27,053 reports), hydrocodone (from 23,144 to 21,901 reports), and alprazolam (from 21,690 to 20,070 reports) decreased significantly ($p < .05$).

Other national drug trends

Figures 1.3 and 1.4 present national trends for reports of cannabis/THC, cocaine, methamphetamine, heroin, and MDMA. Significant ($p < .05$) results include the following:

- Cocaine reports decreased between 2005 and 2012.
- Methamphetamine and MDMA reports showed S-shaped trends. Methamphetamine reports increased from 2001 through 2003, decreased from 2003 through 2009, and increased since 2009. MDMA reports decreased from 2001 through 2003, increased from 2003 through 2009, and decreased dramatically since 2009.
- Heroin reports showed a U-shaped trend in that they decreased from 2001 through 2005, but increased since 2005.
- Cannabis/THC reports showed no significant trend.

Figure 1.1 National trend estimates for oxycodone, hydrocodone, and alprazolam, January 2001–June 2012

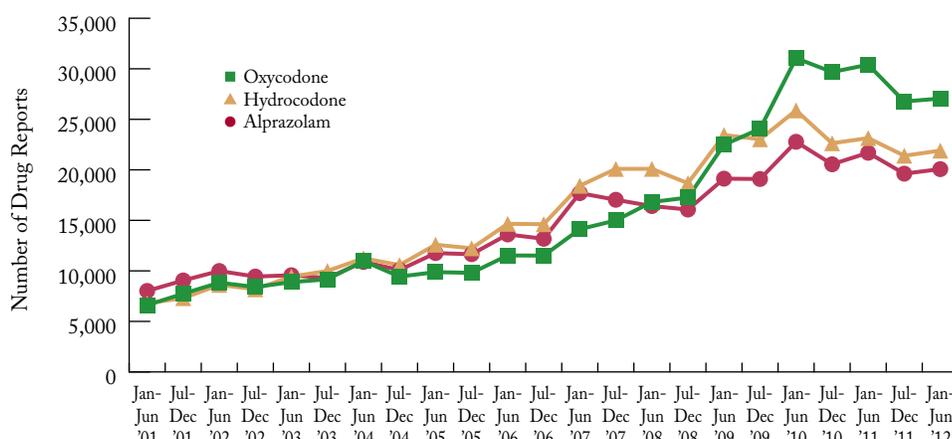


Figure 1.2 National trend estimates for clonazepam, buprenorphine, and amphetamine, January 2001–June 2012

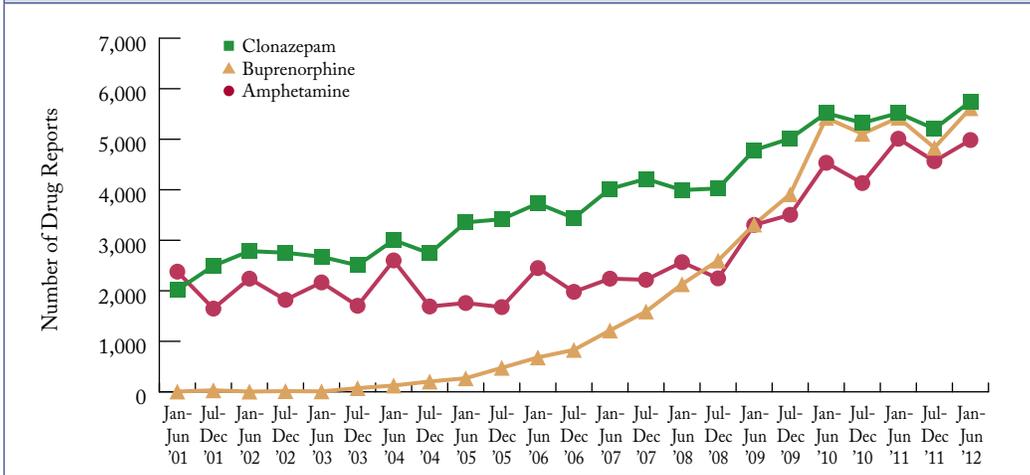


Figure 1.3 National trend estimates for cannabis/THC and cocaine, January 2001–June 2012

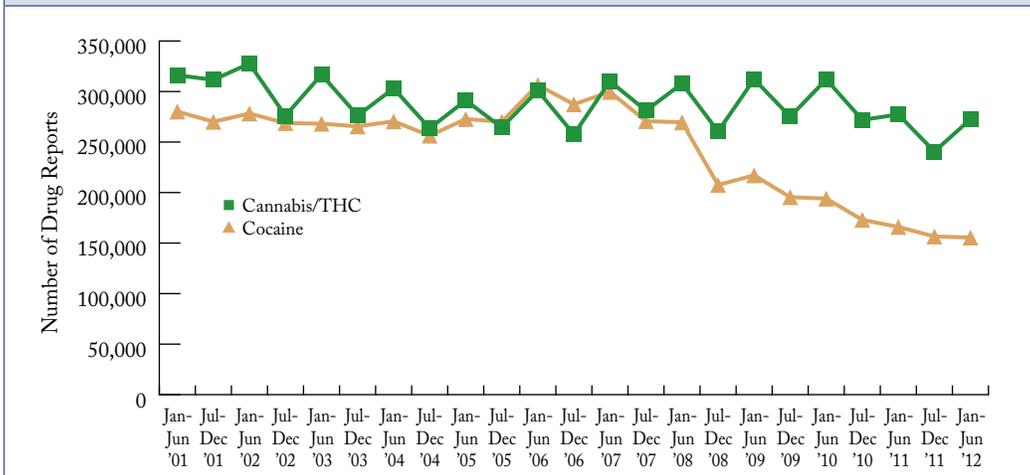
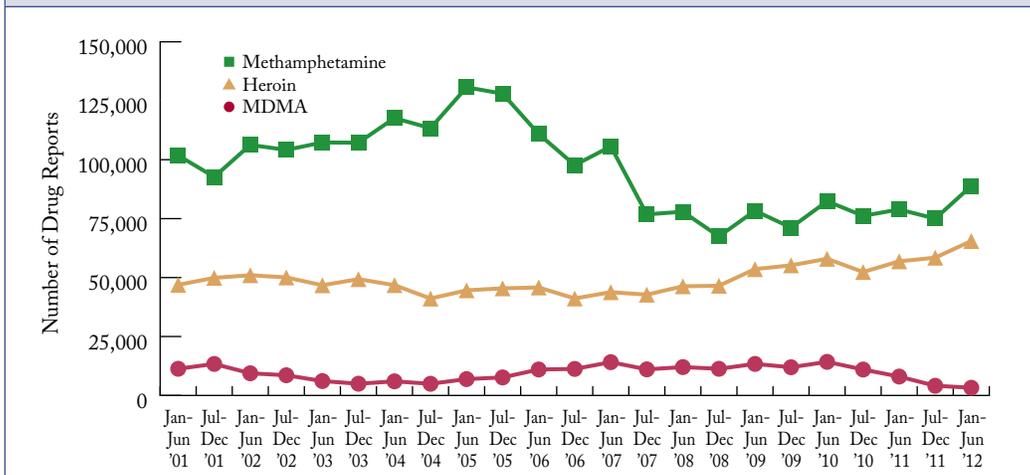


Figure 1.4 National trend estimates for methamphetamine, heroin, and MDMA, January 2001–June 2012



More recently, from the first half of 2011 to the first half of 2012, reports of cocaine (from 166,001 to 155,476 reports) and MDMA (from 8,007 to 3,276 reports) decreased significantly ($p < .05$), while reports of methamphetamine (from 78,889 to 88,865 reports) and heroin (from 56,892 to 65,510 reports) increased significantly.

Regional prescription drug trends

Figures 1.5 through 1.10 show regional trends per 100,000 persons aged 15 or older for reports of oxycodone, hydrocodone, alprazolam, clonazepam, buprenorphine, and amphetamine from the first half of 2001 through the first half of 2012. These figures illustrate changes in prescription drugs reported over time, taking into account the population of each U.S. census region. Significant ($p < .05$) trend results include the following:

- For oxycodone, the Northeast and the South showed upward curving trends, while the West and (especially) the Midwest showed increasing trends that began curving downward in 2010.
- For hydrocodone, after initial increasing trends, the trends began to curve downward for all four regions, but at different times.

- For alprazolam and clonazepam, all regions showed increasing linear trends except in the South. For alprazolam, the trend in the South began curving downward in 2010. For clonazepam, the trend in the South started curving upward in 2003.
- For buprenorphine, all regions showed upward curving trends. In the Northeast, the rate of increase slowed in recent years, especially since 2009.
- For amphetamine, all trends curved upward. For the West, the trend was more U-shaped, showing a decrease from 2001 through 2006; for the other regions, the trend was on the increase since before 2006.

More recently, from the first half of 2011 to the first half of 2012, oxycodone reports decreased significantly in all regions except in the West ($p < .05$). Hydrocodone and alprazolam decreased significantly in the South, and alprazolam increased significantly in the Northeast. Buprenorphine decreased in the Northeast, but increased in the West. Amphetamine increased in the Midwest.



Figure 1.5 Regional trends in oxycodone reported per 100,000 persons aged 15 or older, January 2001–June 2012*

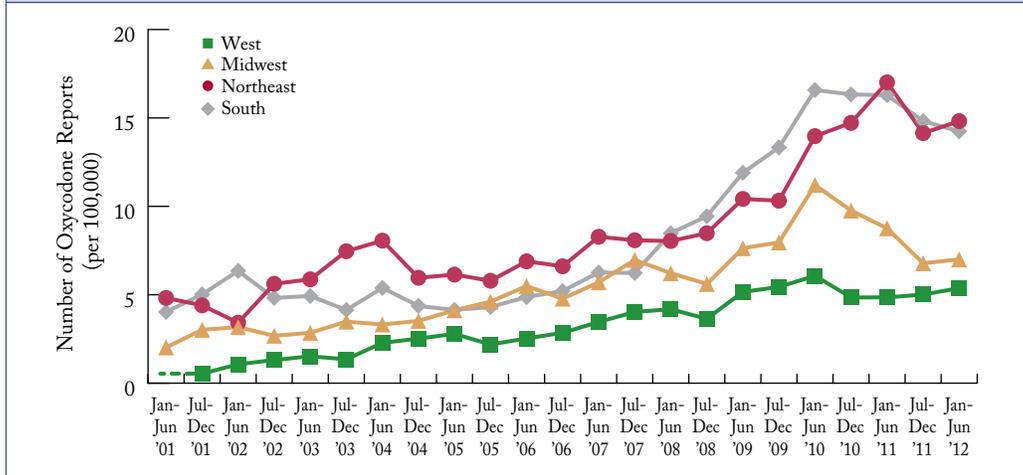


Figure 1.6 Regional trends in hydrocodone reported per 100,000 persons aged 15 or older, January 2001–June 2012

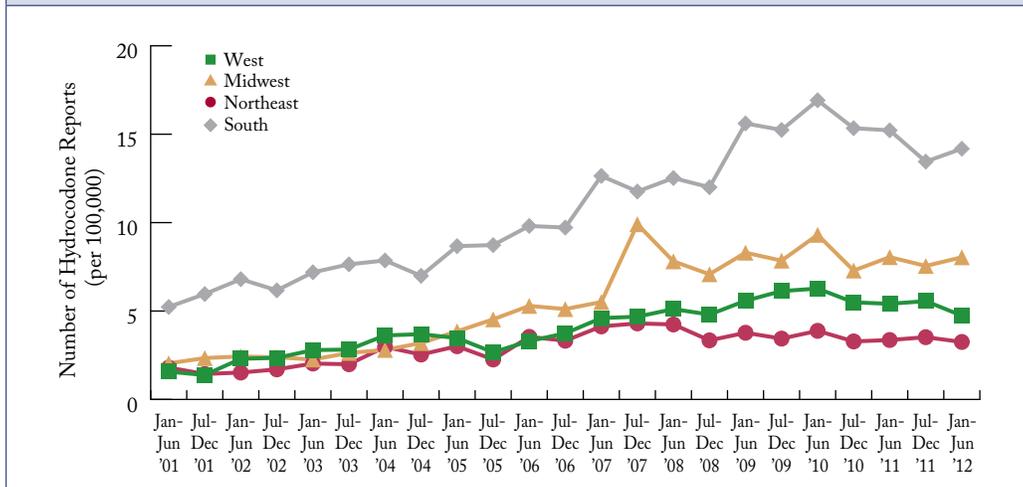
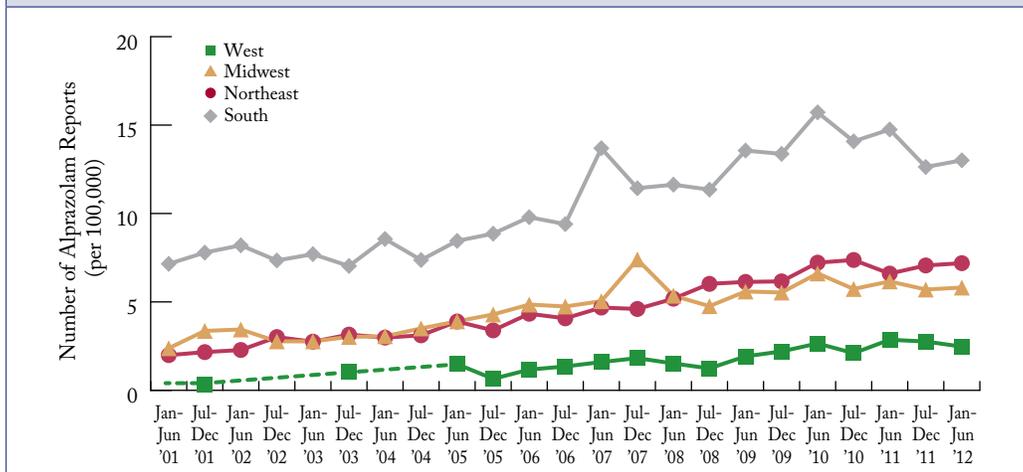


Figure 1.7 Regional trends in alprazolam reported per 100,000 persons aged 15 or older, January 2001–June 2012*



Note: U.S. Census 2012 population data by age were not available for this publication. Population data for 2012 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 1.8 Regional trends in clonazepam reported per 100,000 persons aged 15 or older, January 2001–June 2012

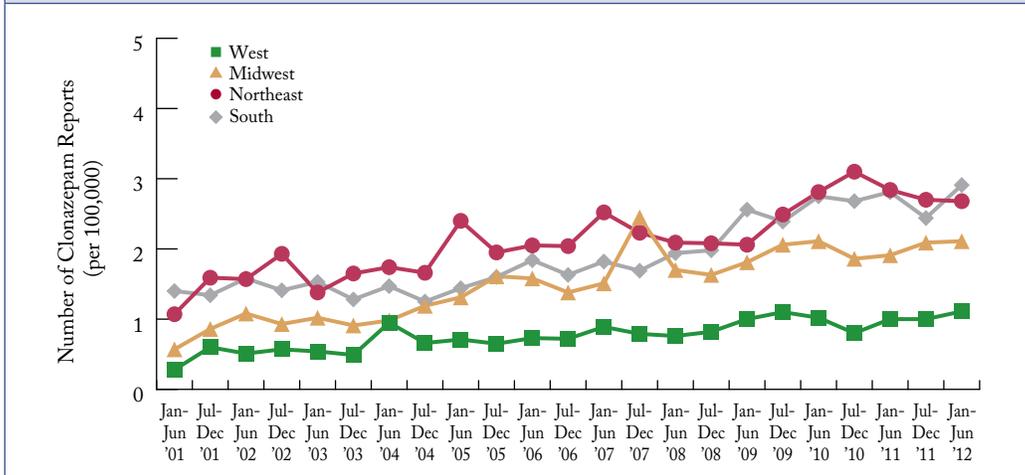


Figure 1.9 Regional trends in buprenorphine reported per 100,000 persons aged 15 or older, January 2001–June 2012*

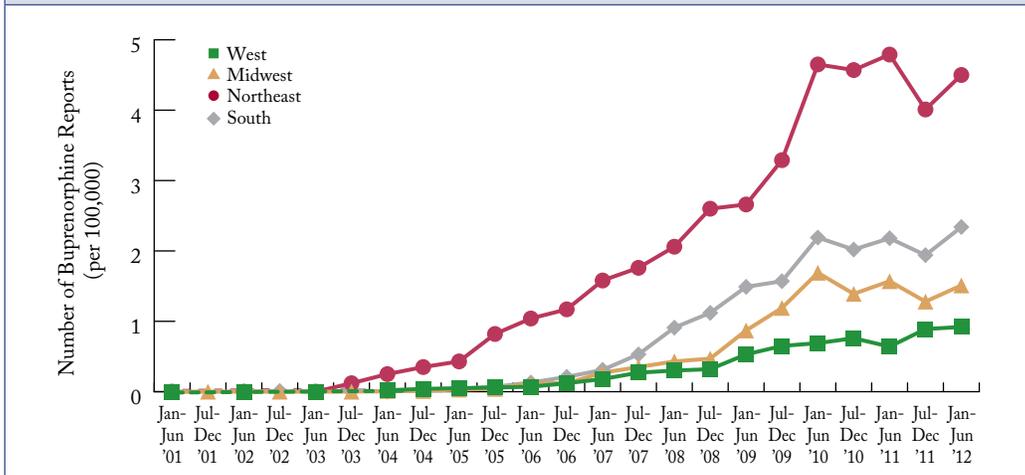
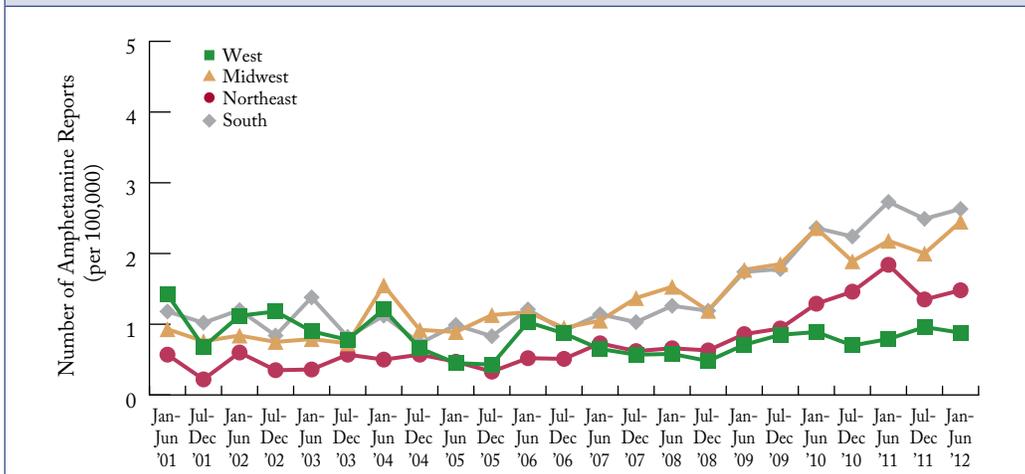


Figure 1.10 Regional trends in amphetamine reported per 100,000 persons aged 15 or older, January 2001–June 2012



Note: U.S. Census 2012 population data by age were not available for this publication. Population data for 2012 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 1.11 through 1.15 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 2012. Significant ($p < .05$) trends include the following:

- For cannabis/THC reports, all regions except the Northeast showed linear decreasing trends. In the Northeast, the trend increased from 2001 to 2009, but decreased between 2009 and 2012.
- For cocaine, the trends for the Northeast, Midwest, and South regions curved downward. In the West, the decreasing trend flattened out after 2011.
- For methamphetamine and MDMA, all regions showed S-shaped trends. For both drugs, there was variation across

regions with respect to the time periods when the curves increased and decreased. Generally, methamphetamine trends increased since about 2009, while MDMA trends decreased since then.

- For heroin, the Northeast, Midwest, and West regions showed U-shaped trends. The lowest point occurred in 2006 and 2007 for the Northeast and West regions and in 2004 for the Midwest region.

Between the first half of 2011 and the first half of 2012, MDMA reports decreased significantly in all regions, and cocaine reports decreased significantly in all regions except in the West ($p < .05$). Heroin increased in all regions except in the South. Methamphetamine increased in the Midwest and West, while cannabis/THC increased in the Northeast, but decreased in the Midwest and South.

Figure 1.11 Regional trends in cannabis/THC reported per 100,000 persons aged 15 or older, January 2001–June 2012

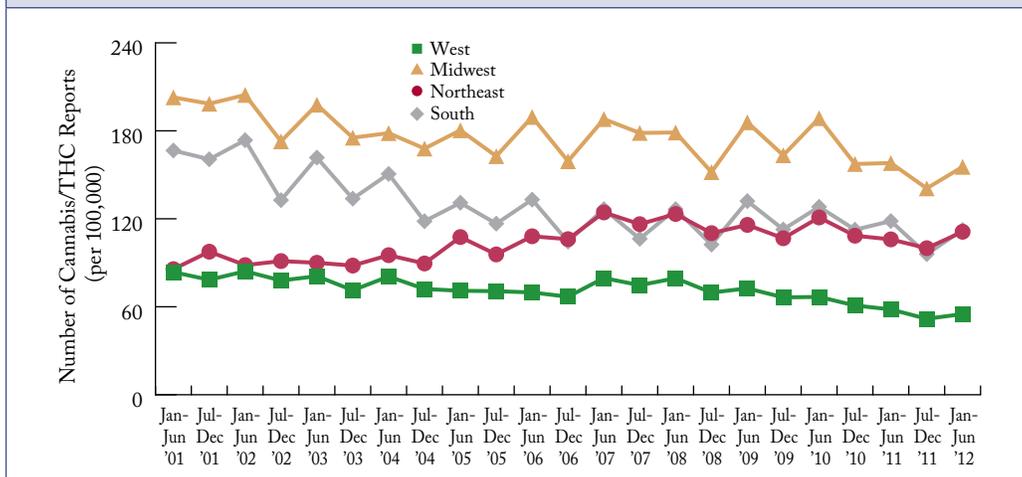
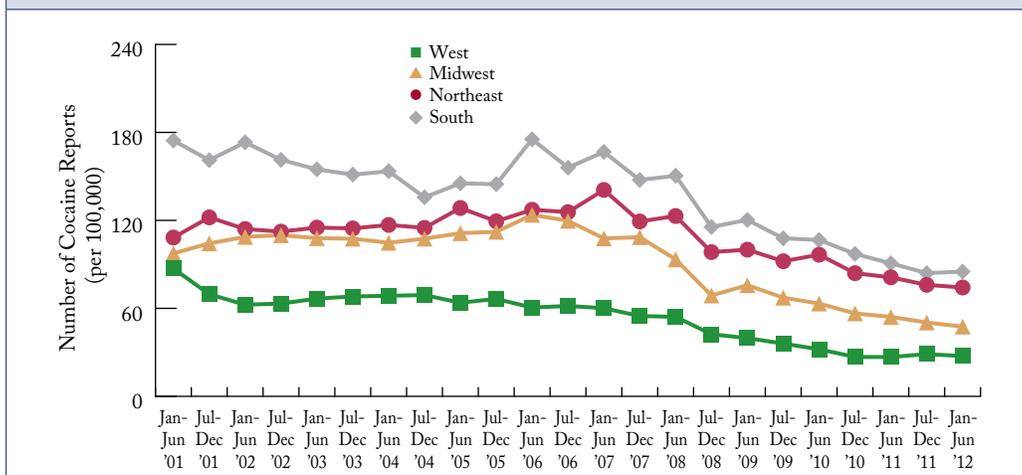


Figure 1.12 Regional trends in cocaine reported per 100,000 persons aged 15 or older, January 2001–June 2012



Note: U.S. Census 2012 population data by age were not available for this publication. Population data for 2012 were imputed.

Figure 1.13 Regional trends in methamphetamine reported per 100,000 persons aged 15 or older, January 2001–June 2012*

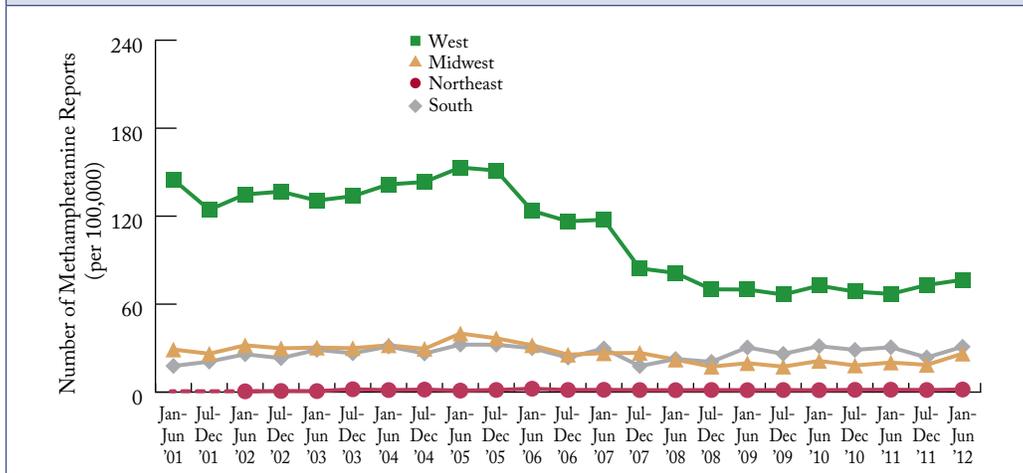


Figure 1.14 Regional trends in heroin reported per 100,000 persons aged 15 or older, January 2001–June 2012

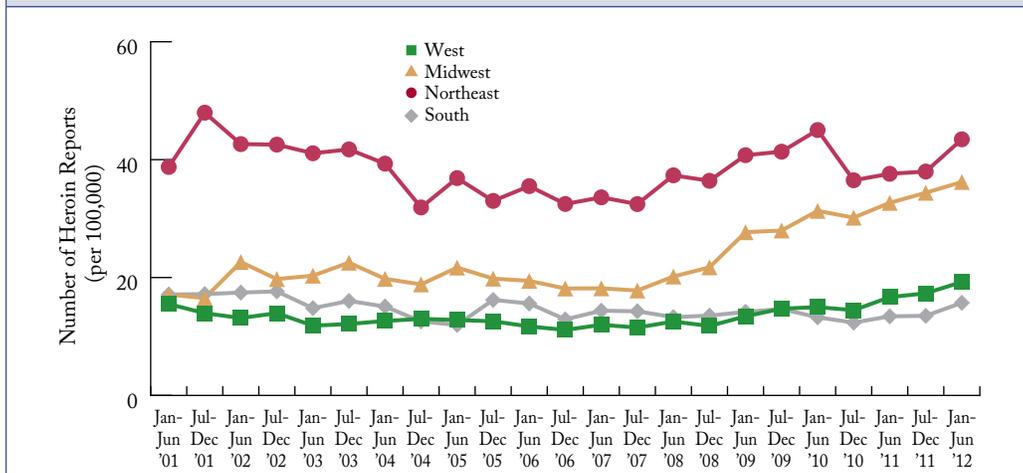
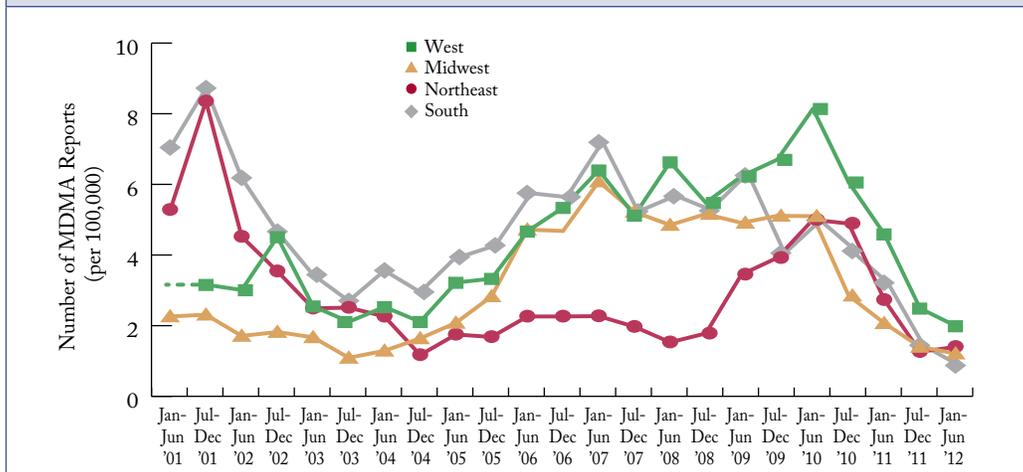


Figure 1.15 Regional trends in MDMA reported per 100,000 persons aged 15 or older, January 2001–June 2012*



Note: U.S. Census 2012 population data by age were not available for this publication. Population data for 2012 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

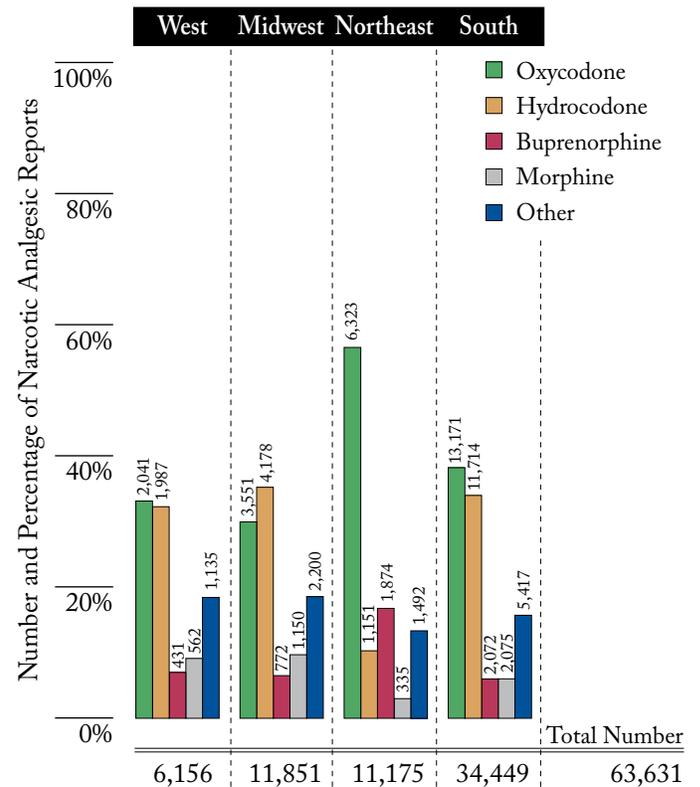
This section presents results for drug categories reported by NFLIS laboratories. The first, second, and third drugs mentioned in laboratories' drug items are included in the counts. Drug categories presented in this section include narcotic analgesics, tranquilizers and depressants, hallucinogens, anabolic 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 764,108 drug reports were submitted to State and local laboratories during this six-month reference period and analyzed by September 30, 2012.

Table 2.1		
NARCOTIC ANALGESICS		
<i>Number and percentage of narcotic analgesic reports in the United States, January 2012–June 2012*</i>		
Narcotic Analgesic Reports	Number	Percent
Oxycodone	25,086	39.42%
Hydrocodone	19,030	29.91%
Buprenorphine	5,149	8.09%
Morphine	4,122	6.48%
Methadone	3,463	5.44%
Hydromorphone	1,859	2.92%
Oxymorphone	1,524	2.40%
Codeine	1,514	2.38%
Tramadol	957	1.50%
Fentanyl	289	0.45%
Propoxyphene	170	0.27%
Dextropropoxyphene	71	0.11%
Meperidine	68	0.11%
Acetylcodeine	57	0.09%
Pentazocine	50	0.08%
Dihydrocodeine	42	0.07%
Other narcotic analgesics	180	0.28%
<i>Total Narcotic Analgesic Reports</i>	63,631	100.00%
<i>Total Drug Reports</i>	764,108	

Figure 2.1 Distribution of narcotic analgesic reports within region, January 2012–June 2012*



* Includes drug reports submitted to laboratories from January 2012 through June 2012 that were analyzed by September 30, 2012.

Table 2.2

TRANQUILIZERS AND DEPRESSANTS
 Number and percentage of tranquilizer and depressant reports in the United States, January 2012–June 2012*

Tranquilizer and Depressant Reports	Number	Percent
Alprazolam	17,807	50.57%
Clonazepam	5,120	14.54%
Diazepam	2,847	8.08%
Phencyclidine (PCP)	2,533	7.19%
Carisoprodol	2,322	6.59%
Lorazepam	1,190	3.38%
Zolpidem	860	2.44%
Cyclobenzaprine	623	1.77%
Ketamine	492	1.40%
Temazepam	193	0.55%
Hydroxyzine	175	0.50%
Butalbital	152	0.43%
Pregabalin	140	0.40%
Gamma-hydroxybutyrate (GHB)	76	0.22%
Other tranquilizers and depressants	684	1.94%
Total Tranquilizer and Depressant Reports	35,214	100.00%
Total Drug Reports	764,108	

Figure 2.2 Distribution of tranquilizer and depressant reports within region, January 2012–June 2012*

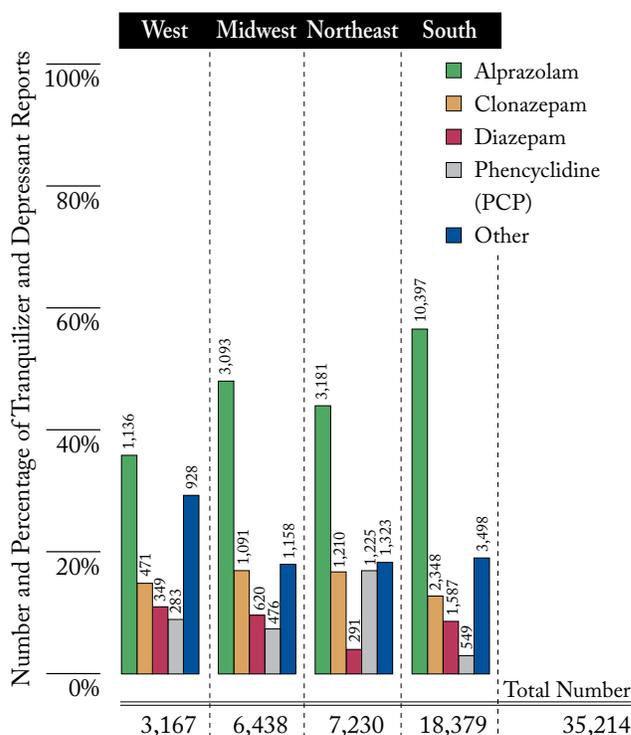
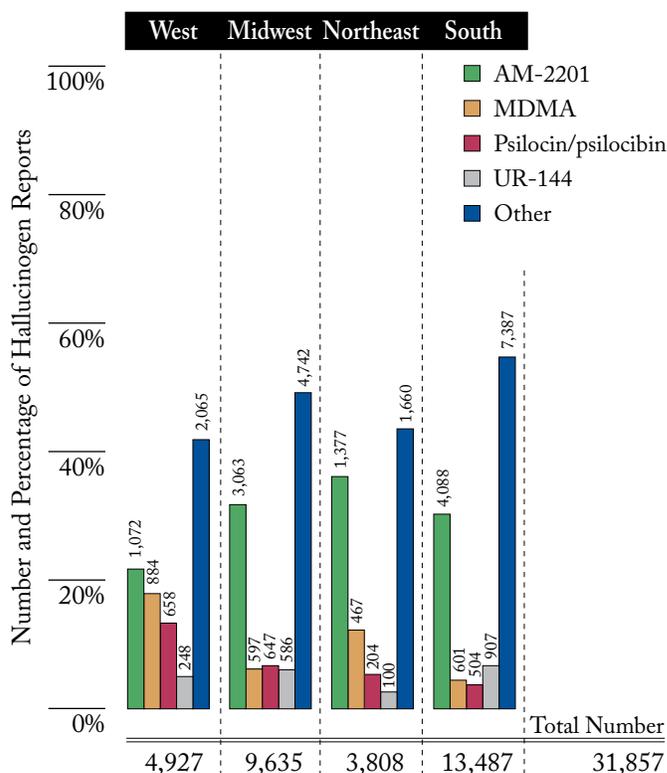


Table 2.3

HALLUCINOGENS
 Number and percentage of hallucinogen reports in the United States, January 2012–June 2012*

Hallucinogen Reports	Number	Percent
AM-2201	9,600	30.13%
MDMA	2,549	8.00%
Psilocin/psilocibin	2,013	6.32%
UR-144	1,841	5.78%
MDPV	1,717	5.39%
JWH-122	1,676	5.26%
Methylone	1,361	4.27%
JWH-210	1,335	4.19%
XLR11	1,271	3.99%
TFMPP	1,009	3.17%
5-MEO-DIPT	894	2.81%
MAM-2201	782	2.45%
JWH-018 (AM-678)	613	1.92%
JWH-250	473	1.48%
LSD	422	1.32%
Dimethyltryptamine (DMT)	315	0.99%
Other hallucinogens	3,986	12.51%
Total Hallucinogen Reports	31,857	100.00%
Total Drug Reports	764,108	

Figure 2.3 Distribution of hallucinogen reports within region, January 2012–June 2012*



AM-2201=1-(5-fluoropentyl)-3-(1-naphthoyl)indole
 MDMA=3,4-Methylenedioxymethamphetamine
 UR-144=(1-pentyl-1H-indol-3-yl)-(2,2,3,3-tetramethylcyclopropyl) methanone
 MDPV=3,4-Methylenedioxypropylvalerone
 JWH-122=1-pentyl-3-(4-methylnaphthoyl)indole
 JWH-210=1-pentyl-3-(4-ethyl-1-naphthoyl)indole
 XLR11=[1-(5-fluoropentyl)-1H-indol-3-yl] (2,2,3,3-tetramethylcyclopropyl)methanone
 TFMPP=1-(3-Trifluoromethylphenyl)piperazine
 5-MEO-DIPT=5-Methoxy-N,N-diisopropyltryptamine

MAM-2201=(1-(5-fluoropentyl)-1H-indol-3-yl)(4-methyl-1-naphthalenyl)-methanone
 JWH-018 (AM-678)=1-pentyl-3-(1-naphthoyl)indole
 JWH-250=1-pentyl-3-(2-methoxyphenylacetyl)indole

Note: Percentages may not sum to 100% because of rounding.
 * Includes drug reports submitted to laboratories from January 2012 through June 2012 that were analyzed by September 30, 2012.

Table 2.4

ANABOLIC STEROIDS
 Number and percentage of anabolic steroid reports in the United States, January 2012–June 2012*

Anabolic Steroid Reports	Number	Percent
Testosterone	722	45.90%
Methandrostenolone	140	8.90%
Trenbolone	133	8.46%
Nandrolone	122	7.76%
Stanozolol	111	7.06%
Boldenone	79	5.02%
Oxandrolone	76	4.83%
Oxymetholone	49	3.12%
Drostanolone	24	1.53%
Dehydrochloromethyltestosterone	10	0.64%
Methyltestosterone	10	0.64%
Mesterolone	9	0.57%
Methenolone	5	0.32%
Other anabolic steroids	83	5.28%
Total Anabolic Steroid Reports	1,573	100.00%
Total Drug Reports	764,108	

Figure 2.4 Distribution of anabolic steroid reports within region, January 2012–June 2012*

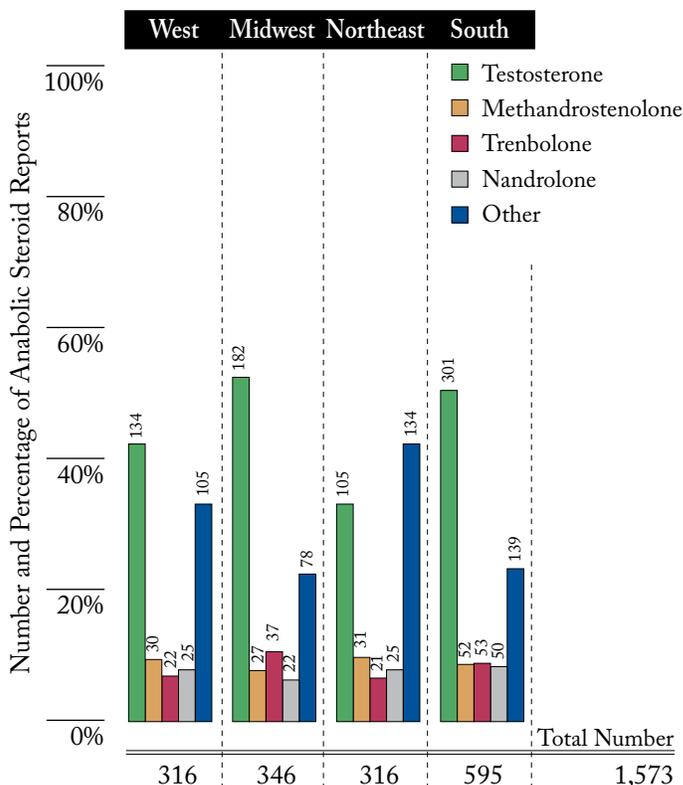
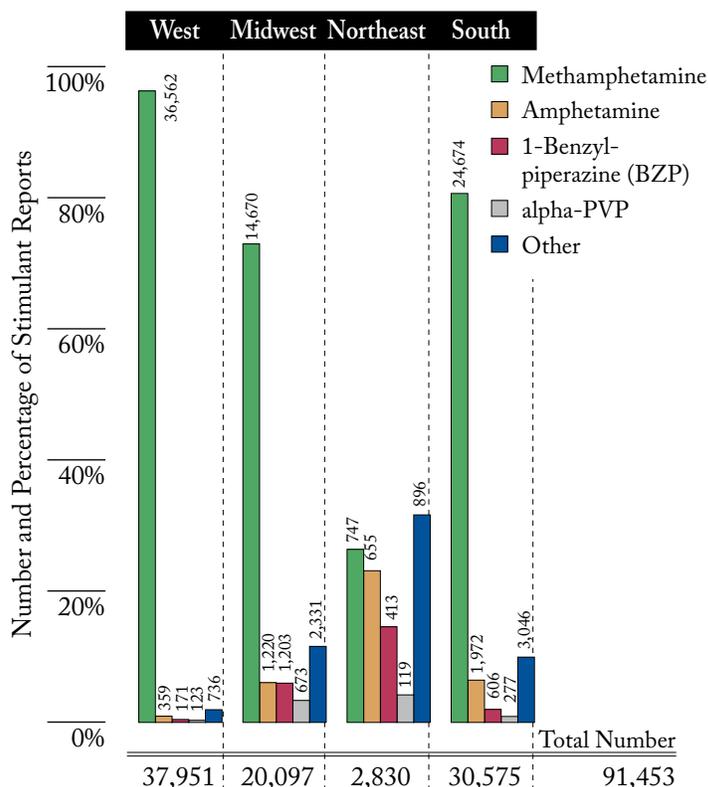


Table 2.5

STIMULANTS
 Number and percentage of stimulant reports in the United States, January 2012–June 2012*

Stimulant Reports	Number	Percent
Methamphetamine	76,653	83.82%
Amphetamine	4,206	4.60%
1-Benzylpiperazine (BZP)	2,393	2.62%
alpha-PVP	1,192	1.30%
Methylphenidate	1,153	1.26%
Lisdexamfetamine	619	0.68%
Pentedrone	553	0.60%
Trazodone	447	0.49%
4-MEC	440	0.48%
Phentermine	337	0.37%
Cathinone	279	0.31%
Ephedrine (listed chemical)	150	0.16%
Butylone	146	0.16%
Citalopram	144	0.16%
4-MEPPP	133	0.15%
Sertraline	128	0.14%
Amitriptyline	123	0.13%
Pyrovalerone	107	0.12%
Other stimulants	2,250	2.46%
Total Stimulant Reports	91,453	100.00%
Total Drug Reports	764,108	

Figure 2.5 Distribution of stimulant reports within region, January 2012–June 2012*



alpha-PVP=alpha-Pyrrolidinopentiophenone
 4-MEC=4-Methyl-N-Ethylcathinone
 4-MEPPP=4'-Methyl-alpha-pyrrolidinopropiophenone

*Includes drug reports submitted to laboratories from January 2012 through June 2012 that were analyzed by September 30, 2012.

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, imputation, and trend analysis 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, 2012, and June 30, 2012, and *analyzed* by September 30, 2012. 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 90% 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.

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

² In 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

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

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

⁵ With 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

Two types of analyses to compare estimates across years were used. The first is called *prior-year comparisons* and compared national and regional estimates from January 2011 through June 2011 with those from January 2012 through June 2012. The second is called *long-term trends* and examined trends in the annual national and regional estimates from January 2001 through June 2012. The long-term trends' method described below was implemented beginning with the 2012 Midyear Report. The new method offers the ability to identify both linear and curved trends, unlike the method used in previous NFLIS publications. Both types of trend analyses are described below. For the region-level prior-year comparisons and long-term trends, the estimated drug reports were standardized to the most recent regional population totals for persons aged 15 years or older.

Prior-year comparisons

For selected drugs, the prior-year comparisons statistically compared estimates in Table 1.1 of this publication with estimates in Table 1.1 of the 2011 Midyear Report. The specific test examined whether the difference between any two estimates was significantly different from zero. A standard *t*-test was completed using the statistic,

$$t_{df} = \frac{a\hat{T}_{2012} - b\hat{T}_{2011}}{\sqrt{a^2 \text{var}(\hat{T}_{2012}) + b^2 \text{var}(\hat{T}_{2011}) - 2ab \text{cov}(\hat{T}_{2011}, \hat{T}_{2012})}},$$

where

- df = the appropriate degrees of freedom (number of laboratories minus number of strata);
- \hat{T}_{2012} = estimated total number of reports for the given drug for January 2012 through June 2012;
- \hat{T}_{2011} = estimated total number of reports for the given drug for January 2011 through June 2011;
- $\text{var}(\hat{T}_{2012})$ = variance of \hat{T}_{2012} ;
- $\text{var}(\hat{T}_{2011})$ = variance of \hat{T}_{2011} ; and
- $\text{cov}(\hat{T}_{2011}, \hat{T}_{2012})$ = covariance between \hat{T}_{2011} and \hat{T}_{2012} .

For the national prior-year comparisons, $a = b = 1$. For the regional prior-year comparisons, $a = 100,000$ divided by the regional population total for 2012, and $b = 100,000$ divided by the regional population total for 2011.

The percentile of the test statistic in the *t* distribution determined whether the prior-year comparison was statistically significant (a two-tailed test at $\alpha = .05$).

⁶ See footnote 4.

Long-term trends

A long-term regression trends' analysis was performed on the January 2001 through December 2012 semiannual national estimates of totals and regional estimates of rates for selected drug reports. The models allow for randomness in the totals and rates due to both the sample and the population. That is, for the vector of time period totals over that time,

$$\mathbf{Y}^T \equiv (Y_1, Y_2, \dots, Y_{23}),$$

and for the estimates,

$$\hat{\mathbf{Y}}^T \equiv (\hat{Y}_1, \hat{Y}_2, \dots, \hat{Y}_{23}),$$

the regression model is

$$\hat{\mathbf{Y}} = \mathbf{X}\beta + \eta + \varepsilon,$$

where

$\eta = \hat{\mathbf{Y}} - \mathbf{Y}$ is a 23×1 vector of errors due to the probability sample, and

ε is a 23×1 vector of errors due to the underlying model.

Randomness due to the sample exists because only a sample of all eligible laboratories has been randomly selected to be included. Randomness due to the population exists because many factors that can be viewed as random contribute to the specific total reported by a laboratory in a time period. For example, not all drug seizures that could have been made were actually made, and there may have been some reporting errors. If rates (per 100,000 persons aged 15 years or older) and not totals are of interest, the above model can be applied to $\hat{\mathbf{Y}}^* = c\hat{\mathbf{Y}}$, where c equals 100,000 divided by the 15-or-older regional population size as given by the U.S. Census Bureau.

The regression model used to perform the analysis is

$$Y_t = \alpha_0 + \alpha_1 t + \alpha_2 t^2 + \alpha_3 t^3 + \varepsilon_t \quad t = 1, \dots, T,$$

where

Y_t is the population total value, considered to be a realization of the underlying model; and

ε_t is one of a set of 23 independent normal variates with a mean of zero and a variance of σ^2 .

The model allows for a variety of trend types: linear (straight-line), quadratic (U-shaped), and cubic (S-shaped).

Because it is a model for Y_t but the sample estimates \hat{Y}_t differ by the sampling error, estimation was performed by restricted maximum likelihood (REML), allowing for the two sources of error.

To implement the regression model, point estimates of totals \hat{Y}_t and their standard errors were obtained for all 23 semiannual periods beginning with January to June 2001 period and ending with January to June 2012 period. Sampling standard errors were estimated as the full sampling variance-covariance matrix \mathbf{S} over these 23 time periods. The \mathbf{S} matrix contains variances in totals at any time period and covariances in totals between any two time periods, thus giving a very general modeling of the sampling variance structure. The variance-covariance matrix of the totals is then $V[\hat{\mathbf{Y}}] = \sigma^2 \mathbf{I} + \mathbf{S}$, where \mathbf{I} is the identity matrix.

Regression coefficients were estimated using the REML method. Because higher order polynomial regression models generally show strong collinearity among predictor variables, the model was reparameterized using orthogonal polynomials. The reparameterized model is

$$Y_t = \beta_0 X_0(t) + \beta_1 X_1(t) + \beta_2 X_2(t) + \beta_3 X_3(t) + \varepsilon_t,$$

where

$X_0(t) = 1/\sqrt{T}$ for all t , and

$X_1(t), X_2(t), X_3(t)$ provide contributions for the first-order (linear), second-order (quadratic), and third-order (cubic) polynomials, respectively.

Note that the error term is the same in both the original model and the reparameterized model because the fitted surface is the same for both models. The model was further constrained to have regression residuals sum to zero, a constraint that is not guaranteed by theory for these models, but was considered to improve model fit due to an approximation required to estimate \mathbf{S} . Standard errors of the regression trend estimates were obtained by simulation.

Final models were selected after testing for the significance of coefficients at the $\alpha = 0.05$ level ($p < .05$), which means that if the trend of interest (linear, quadratic, cubic) were in fact zero, then there would be a 5% chance that the trend would be detected as statistically significant when in fact it is not. Final fitted models are most easily interpreted using graphical plots.

State	Lab Type	Laboratory Name	Reporting
AK	State	Alaska Department of Public Safety	✓
AL	State	Alabama Department of Forensic Sciences (9 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	Alameda County Sheriff's Office Crime Laboratory (San Leandro)	✓
	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 (7 sites)	✓
	Local	Broward County Sheriff's Office (Fort Lauderdale)	✓
	Local	Indian River Crime Laboratory (Fort Pierce)	✓
	Local	Manatee County Sheriff's Office (Bradenton)	✓
	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 (7 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 (7 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	✓

This list identifies laboratories that are participating in and reporting to NFLIS as of December 31, 2012.

* The Detroit Police Department currently reports data via the Michigan State Police.

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

State	Lab Type	Laboratory Name	Reporting
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	✓
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 Bureau of Investigation (3 sites)	✓
	Local	Charlotte-Mecklenburg Police Department	✓
ND	State	North Dakota Crime Laboratory Division	✓
NE	State	Nebraska State Patrol Criminalistics Laboratory (2 sites)	✓
NH	State	New Hampshire State Police Forensic Laboratory	✓
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	Cuyahoga County Regional Forensic Science Laboratory (Cleveland)	✓
	Local	Hamilton County Coroner's Office (Cincinnati)	✓
	Local	Lake County Regional Forensic Laboratory (Painesville)	✓
	Local	Mansfield Police Department	✓
	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 (5 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 (3 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)	✓

Benefits

The systematic collection and analysis of drug analysis data aid our understanding of the Nation's illicit drug problem. NFLIS serves as a 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 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, 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 Federal, State, and local forensic laboratories. Federal 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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U.S. Drug Enforcement Administration
Office of Diversion Control
8701 Morrisette Drive
Springfield, VA 22152