



DRUG ENFORCEMENT ADMINISTRATION
DIVERSION CONTROL DIVISION

NFLIS

NATIONAL FORENSIC LABORATORY INFORMATION SYSTEM



DRUG

NFLIS-Drug Special Report: Methamphetamine Reported in NFLIS, 2001–2017



Highlights

From 2001 to 2017, national annual estimates of reports of methamphetamine increased 83%, from 189,882 reports to 347,807 reports, based on the NEAR approach (National Estimates Based on All Reports). Also, from 2011 to 2017, reports of methamphetamine increased between 10% and 16% annually.

From 2010 to 2017, the total number of methamphetamine reports per 100,000 persons aged 15 or older more than tripled in the Midwest region, from 42.3 reports to 133.5 reports.

In the South region from 2001 to 2011, cocaine and cannabis/THC were reported much more frequently than methamphetamine and heroin. From 2011 through 2017, heroin reports increased noticeably but remained under 45 reports per 100,000 persons aged 15 or older, while cocaine and cannabis/THC reports decreased and methamphetamine reports increased. In 2017 in the South region, methamphetamine was reported more frequently than cannabis/THC, cocaine, or heroin.

In 2017, 10,099 (3%) of the total number of 339,986 reports of methamphetamine nationwide were reported with another drug in the same item. Of those 10,099 reports, heroin (2,018 reports or 20%) and narcotic analgesics (1,290 reports or 13%) were most frequently identified in the same item as methamphetamine, followed by synthetic cathinones (939 reports or 9%) and cocaine (889 reports or 9%).

From 2010 to 2017, the percentage of total drug reports that were methamphetamine more than doubled in 33 States, with five additional States having increases between 80% and 100%. States with the highest relative increases in methamphetamine reports as a percentage of their total drug reports were primarily in the Northeast region.

In 2017, the average purity of methamphetamine reported by Federal laboratories was 91%, and the average purity of methamphetamine reported by State and local laboratories was 84%.

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Introduction

The National Forensic Laboratory Information System (NFLIS) is a program of the Drug Enforcement Administration (DEA), Diversion Control Division. NFLIS-Drug systematically collects drug identification results and associated information from drug cases submitted to and analyzed by Federal, State, and local forensic laboratories. These laboratories analyze controlled and noncontrolled substances secured in law enforcement operations across the country, making NFLIS-Drug an important resource in monitoring drug abuse and trafficking, including the diversion of legally manufactured pharmaceuticals into illegal markets.

In the NFLIS-Drug 2017 Annual Report,¹ methamphetamine surpassed cannabis/THC as the most frequently identified drug in NFLIS, which led to this focused publication on methamphetamine reported to NFLIS. This NFLIS-Drug Special Report presents the results of methamphetamine drug cases submitted to State and local laboratories from January 1, 2001, through December 31, 2017, and analyzed within three months

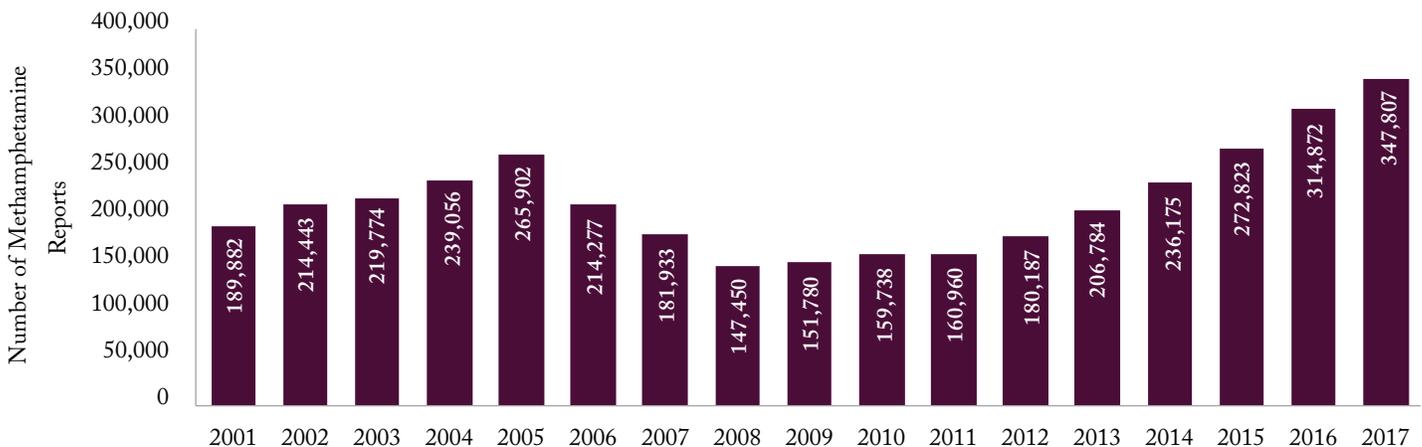
of each calendar year reporting period. National estimates of methamphetamine are reported. National and regional trends of methamphetamine and its comparison with cocaine and cannabis/THC trends are also presented. In addition, methamphetamine reports by Federal laboratories, methamphetamine reported with other drugs, and methamphetamine purity are shown. Moreover, representative State and county maps of methamphetamine reports are presented. These NFLIS-Drug data are compared with treatment admissions data from the Substance Abuse and Mental Health Services Administration’s (SAMHSA) Treatment Episode Data Set (TEDS) and drug overdose data from the National Center for Health Statistics, the latter through the Centers for Disease Control and Prevention’s (CDC) Wide-ranging ONline Data for Epidemiologic Research (WONDER).

National Estimates

Figure 1 presents national annual estimates of methamphetamine reports that were submitted to State and local laboratories from January 2001 through December 2017 and were analyzed within three months of each calendar

year reporting period. From 2001 to 2017, reports of methamphetamine increased 83%, from 189,882 reports to 347,807 reports. Also, from 2011 to 2017, reports of methamphetamine increased between 10% and 16% annually.

Figure 1 National annual estimates for methamphetamine in NFLIS, 2001–2017¹



¹ Includes methamphetamine reports submitted to laboratories from January 1, 2001, through December 31, 2017, and analyzed within three months of each calendar year reporting period.

National and Regional Trends

Estimated annual methamphetamine reports increased each year from 2001 to 2005 (from 189,882 to 265,902 reports), decreased each year from 2005 to 2008 (from 265,902 to 147,450 reports), and steadily increased from 2009 through 2017 (from 151,780 to 347,807 reports) (Figure 1). In 2014, methamphetamine reports exceeded cocaine reports nationally (236,175 vs. 213,167 reports) (Figure 2). In 2017, methamphetamine reports exceeded cannabis/THC reports nationally (347,807 vs. 344,167 reports). Although the West region had the highest number of methamphetamine reports per 100,000 persons aged 15 or older each year from 2001 to 2017 (Figure 3), increasing trends in the Midwest and the South regions (Figures 4 and 6) drove the national trend increases.

- In the West region, methamphetamine reports per 100,000 persons aged 15 or older were higher than those for heroin, cocaine, and cannabis/THC each year from 2001 through 2017, except for 2008 and 2009 when methamphetamine reports were approximately equal to cannabis/THC reports (Figure 3).
- In the Midwest region, methamphetamine was reported more frequently than heroin from 2001 to 2007, less frequently than heroin from 2008 through 2015, then more often than cocaine in 2015 and heroin in 2016 (Figure 4). From 2010 to 2017, the number of methamphetamine reports per 100,000 persons aged 15 or older more than tripled, going from 42.3 reports to 133.5 reports.
- Methamphetamine reports remained far less frequent than reports of cannabis/THC, cocaine, and heroin in the Northeast region from 2001 to 2017 (Figure 5). Methamphetamine reports had slight fluctuations, but remained at fewer than 5 reports per 100,000 persons aged 15 or older between 2002 and 2013. Since 2009, methamphetamine reports increased each year, reaching 14.7 reports per 100,000 persons aged 15 or older in 2017.
- In the South region from 2001 to 2011, cocaine and cannabis/THC were reported much more frequently than methamphetamine and heroin (Figure 6). From 2011 through 2017, heroin reports increased noticeably but remained under 45 reports per 100,000 persons aged 15 or older, while cocaine and cannabis/THC reports decreased and methamphetamine reports increased. In 2017, methamphetamine was reported more frequently than cannabis/THC, cocaine, and heroin.

Figure 2 National trend estimates for heroin, cocaine, cannabis/THC, and methamphetamine, January 2001–December 2017

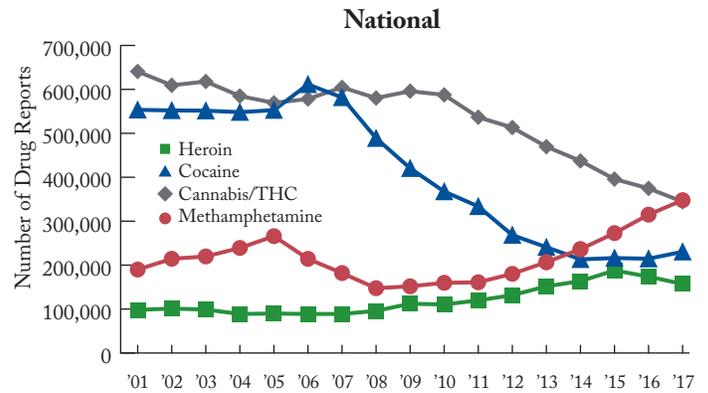
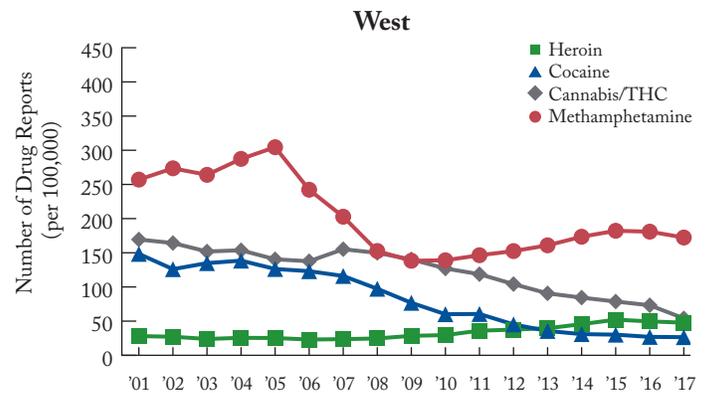


Figure 3 Trends in heroin, cocaine, cannabis/THC, and methamphetamine reported per 100,000 persons aged 15 or older in the West region, January 2001–December 2017



Note: For consistency, this publication uses the same 2017 population data used in the NFLIS-Drug 2017 Annual Report, which is an estimation based on predictive regression modeling of the 2001–2016 U.S. Census estimates.

Figure 4 Trends in heroin, cocaine, cannabis/THC, and methamphetamine reported per 100,000 persons aged 15 or older in the **Midwest** region, January 2001–December 2017

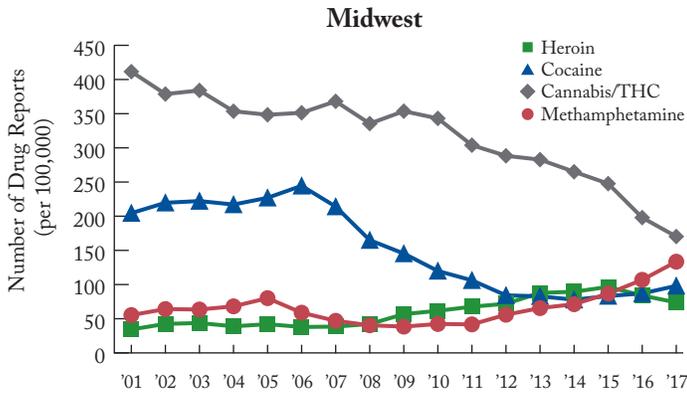


Figure 5 Trends in heroin, cocaine, cannabis/THC, and methamphetamine reported per 100,000 persons aged 15 or older in the **Northeast** region, January 2001–December 2017¹

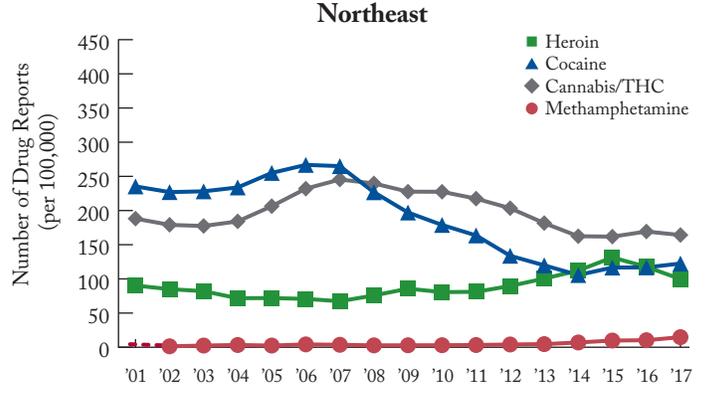
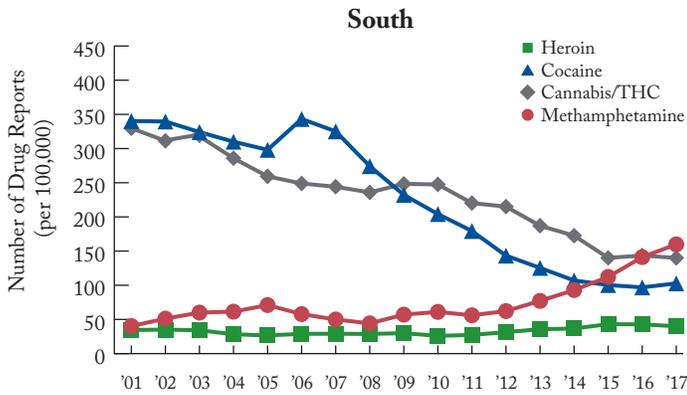


Figure 6 Trends in heroin, cocaine, cannabis/THC, and methamphetamine reported per 100,000 persons aged 15 or older in the **South** region, January 2001–December 2017



Note: For consistency, this publication uses the same 2017 population data used in the NFLIS-Drug 2017 Annual Report, which is an estimation based on predictive regression modeling of the 2001–2016 U.S. Census estimates.

¹ The dashed trend line between 2001 and 2002 in Figure 5 for methamphetamine indicates that estimates did not meet the criteria for precision or reliability. See the NFLIS Statistical Methodology publication linked to at the end of this NFLIS-Drug Special Report for a more detailed methodology discussion.

Methamphetamine Reports by Federal Laboratories

NFLIS-Drug collects the results of drug evidence from DEA and U.S. Customs and Border Protection (CBP) laboratories. The data reflect results of substance evidence from drug seizures, undercover drug buys, targeted operations, and other evidence analyzed at DEA and CBP laboratories across the country. Although DEA data capture both domestic and international drug cases, the results presented in this section describe only those drugs obtained in the United States. Similarly, the CBP data represent seizures at U.S. points of entry and domestic drug cases.

A total of 53,453 drug reports were submitted to DEA and CBP laboratories during 2017 and analyzed by March 31, 2018. Of these, methamphetamine was the most commonly identified drug reported by DEA and CBP laboratories, accounting for 19% (9,965 reports) of all reports. Methamphetamine has been the most frequently identified drug reported by DEA and CBP laboratories since 2013.

Counts of Methamphetamine Reported with Other Drugs

This section presents State and local laboratory counts, consisting of actual reported data rather than national and regional estimates, of reported items that contained methamphetamine and at least one other drug. All data reported by NFLIS-Drug laboratories are included. The NFLIS-Drug data presented in this section are not necessarily counts of true combinations (e.g., powders mixed together), but also include counts of separate drugs reported together in the same item. For example, a bag of heroin packaged with a bag of methamphetamine may be considered a single item, and both would be reported as substances within that item. Policies for identifying what constitutes an item vary by laboratory.

In 2017, of the 339,986 reports of methamphetamine, 10,099 (3%) were reported with another drug in the same item (Table 1). Of those 10,099 reports, heroin (2,018 reports or 20%), caffeine (1,526 reports or 15%), and narcotic analgesics (1,290 reports or 13%) were most frequently identified in the same item as methamphetamine, followed by synthetic cathinones (939 reports or 9%) and cocaine (889 reports or 9%). The most common narcotic analgesic reported in the same item was fentanyl, with 540 reports. N-Ethylpentylone was the most common synthetic cathinone reported in the same item with methamphetamine (669 reports or 7%). Approximately 5% of methamphetamine items also contained cannabis/THC (541 reports), and 4% contained a phenethylamine (408 reports). The most common phenethylamine reported in the same item as methamphetamine was 3,4-methylenedioxymethamphetamine (MDMA), with 174 reports (2%). An additional 2% of combinations included a benzodiazepine or synthetic cannabinoid, with alprazolam and FUB-AMB being the most common in their respective drug categories.

Table 1 COUNTS OF METHAMPHETAMINE REPORTED WITH OTHER DRUGS WITHIN THE SAME ITEM IN NFLIS, 2017

Drug	Number	Percent
Heroin	2,018	19.98%
Caffeine	1,526	15.11%
Narcotic analgesics	1,290	12.77%
Fentanyl	540	5.35%
Synthetic cathinones	939	9.30%
N-Ethylpentylone	669	6.62%
Cocaine	889	8.80%
Cannabis/THC	541	5.36%
Phenethylamines	408	4.04%
MDMA	174	1.72%
Benzodiazepines	198	1.96%
Alprazolam	134	1.33%
Synthetic cannabinoids	40	0.40%
FUB-AMB	19	0.19%
Other	2,250	22.28%
Total Drug Reports	10,099	100.00%

Note: Drugs listed in subrows represent subcategories of the drugs in the main rows. Therefore, their subtotals are already included in the subtotals of the drugs in the main rows.

MDMA=3,4-Methylenedioxymethamphetamine

FUB-AMB=Methyl 2-(1-(4-fluorobenzyl)-1H-indazole-3-carboxamido)-3-methylbutanoate

Methamphetamine Purity

Some State, local, and Federal laboratories perform analyses to determine drug purity, but the majority do so only under special circumstances. Provided in this section is the average methamphetamine purity reported by Federal laboratories and State and local laboratories from January 1, 2017, through December 31, 2017, and analyzed by March 31, 2018. These data are not representative of all laboratories across the Nation, but only of those that submitted purity data to NFLIS-Drug.

In 2017, there were 9,154 reports of methamphetamine with purity information reported by Federal laboratories. Of those reports, the average purity was 91%. The last NFLIS-Drug publication to include purity data from State and local laboratories was the 2011 Annual Report.ⁱⁱ In that publication, purity data were shown for methamphetamine from 2002 to 2011 for those laboratories that submitted purity data. In 2011, the average purity reported by State and local laboratories ranged from 58% to 66%. In 2017, there were 216 reports of methamphetamine purity from State and local laboratories, with an average purity of 84%.

Methamphetamine Reports, by State and County

The data presented in this section are actual reported data rather than national and regional estimates. The geographic data are based on information provided to the forensic laboratories by the submitting law enforcement agencies in the county of origin associated with the drug seizure incident. It is important to note that these data represent only those items that were submitted to and analyzed by forensic laboratories within three months of the calendar reporting period. A small number of laboratories within a few States were not reporting data to NFLIS-Drug, and their absence may affect the relative distribution of drugs seized and analyzed.

In 2010, only three States—California, Oklahoma, and Texas—had greater than 10,000 methamphetamine reports (Figure 7). In 2017, five additional States—Arkansas, Georgia, Kentucky, Ohio, and Missouri—had more than 10,000 methamphetamine reports (Figure 8).

In 2010, the State with the highest percentage of drug reports identified as methamphetamine was Hawaii (44% of

the total drug reports) (Figure 9). In 2017, methamphetamine reports comprised more than 50% of all drug reports in five States—California, Hawaii, Montana, Oregon, and South Dakota (Figure 10).

From 2010 to 2017, the percentage of total drug reports that were identified as methamphetamine increased in every reporting State except Vermont, which decreased from 1% to 0.5%. The percentage of total drug reports identified as methamphetamine more than doubled in 33 States, with five additional States having increases between 80% and 100%. States with the highest relative increases in methamphetamine reports as a percentage of their total drug reports (Figure 11) were primarily in the South and Northeast regions and included Delaware (3,023% increase), Maryland (1,588% increase), West Virginia (1,013% increase), Pennsylvania (880% increase), Illinois (858% increase), and New Jersey (608% increase). Nevada had the largest relative increase in the West region, going from 7% in 2010 to 32% in 2017, for an increase of 368%.

Figure 7 Methamphetamine reports, by State, 2010¹

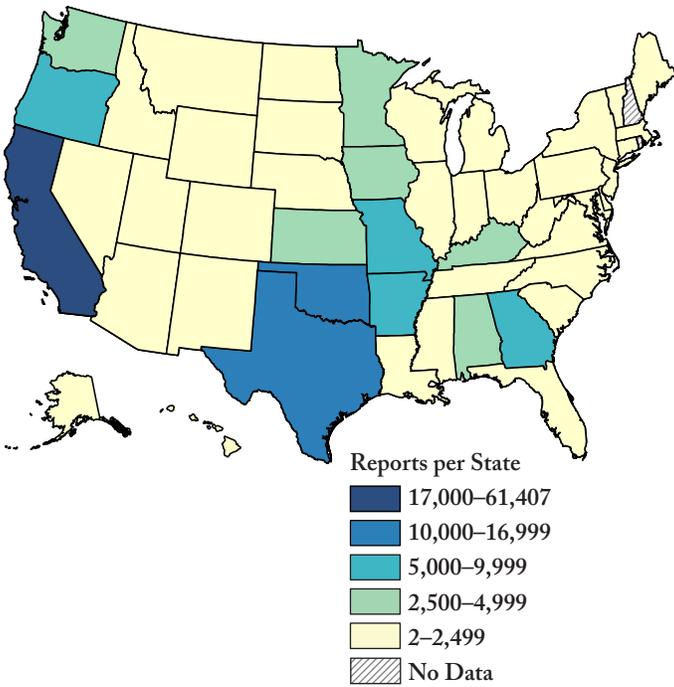
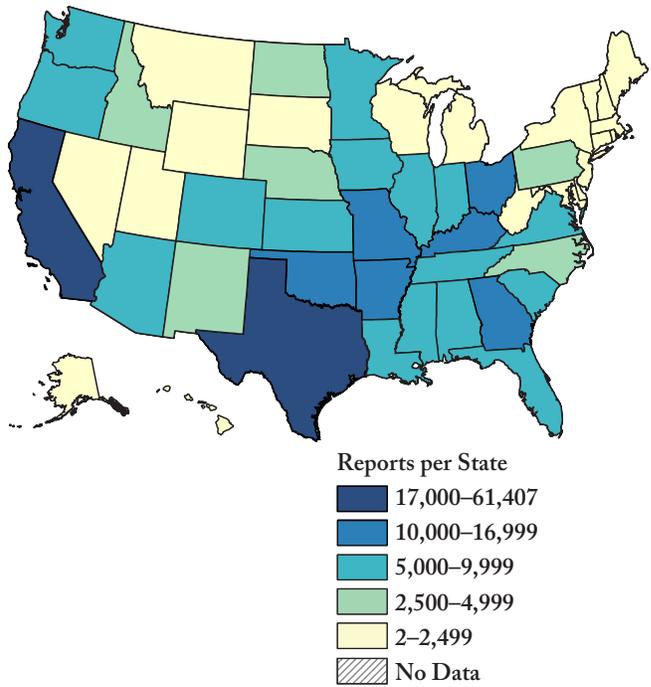


Figure 8 Methamphetamine reports, by State, 2017¹



¹ Includes drugs submitted to State and local laboratories during the calendar year that were analyzed within three months of the reporting period.

Figure 9 Percentage of total drug reports identified as methamphetamine, by State, 2010¹

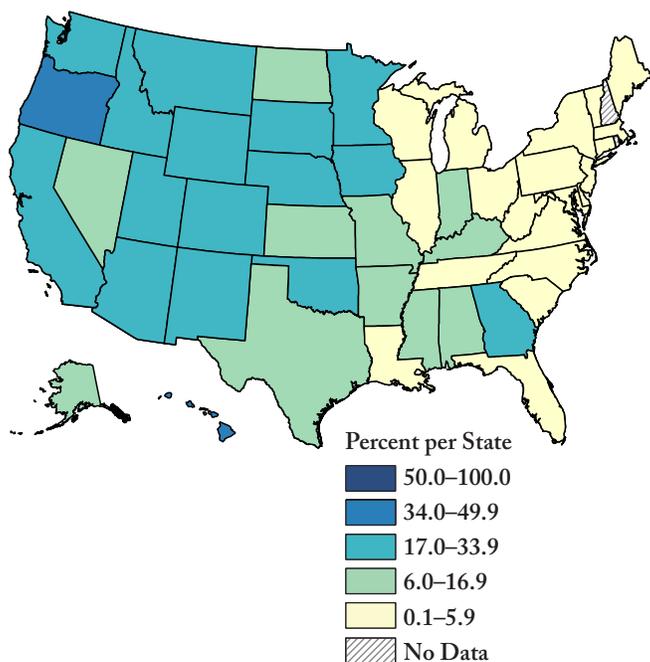
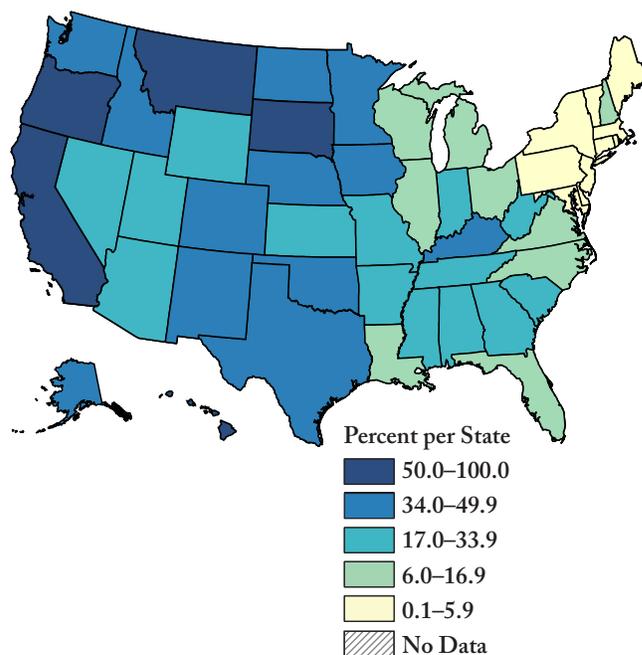
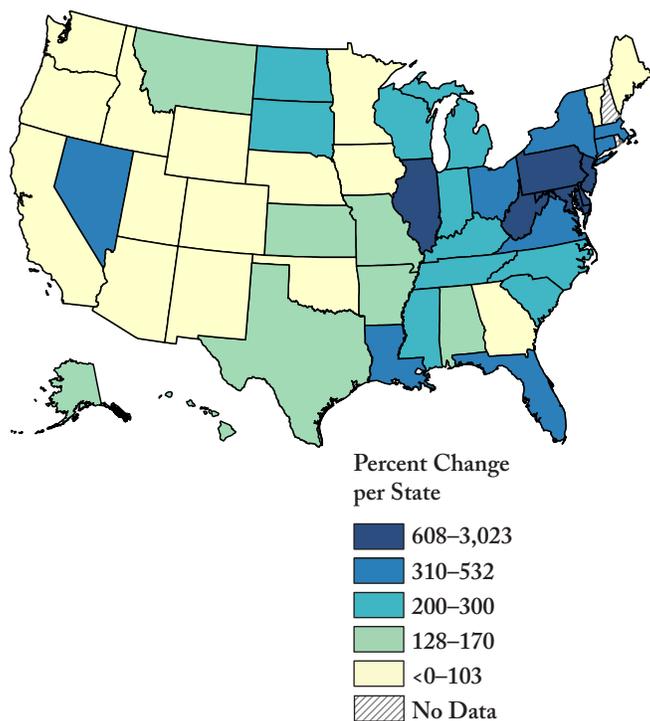


Figure 10 Percentage of total drug reports identified as methamphetamine, by State, 2017¹



¹ Includes drugs submitted to State and local laboratories during the calendar year that were analyzed within three months of the reporting period.

Figure 11 Relative change from 2010 to 2017 in the percentage of total drug reports identified as methamphetamine, by State¹



¹ Relative change in percentage calculated as follows: (percentage in 2017 – percentage in 2010)/(percentage in 2010).

Figures 12 to 15 show reports of methamphetamine, by counties in selected States. States were selected based on their geographic diversity (one State per U.S. census region) and large relative increases from 2010 to 2017 in the percentage of total drug reports identified as methamphetamine. In 2017, there were 61,407 methamphetamine reports in California, with Los Angeles and San Bernardino Counties having the highest numbers of reports. Missouri had the fourth highest number of methamphetamine reports across all States, with 14,127 reports. In Missouri, Greene and St. Louis Counties and the City of St. Louis each had almost twice as many reports (approximately 1,150 reports) as any other individual county in the State. Pennsylvania had one of the largest relative increases in methamphetamine as a percentage of its total drug reports, increasing by 880% from 2010 to 2017 (from 422 to 3,449 reports). The largest numbers of reports in Pennsylvania were concentrated in the eastern part of the State, including Berks, Lancaster, and Schuylkill Counties. Methamphetamine reports in Kentucky were fairly evenly distributed, although Jefferson County had more than three times the number of reports (1,751 reports) than any other county in Kentucky.

Figure 12 Methamphetamine reports in California, by county, 2017¹

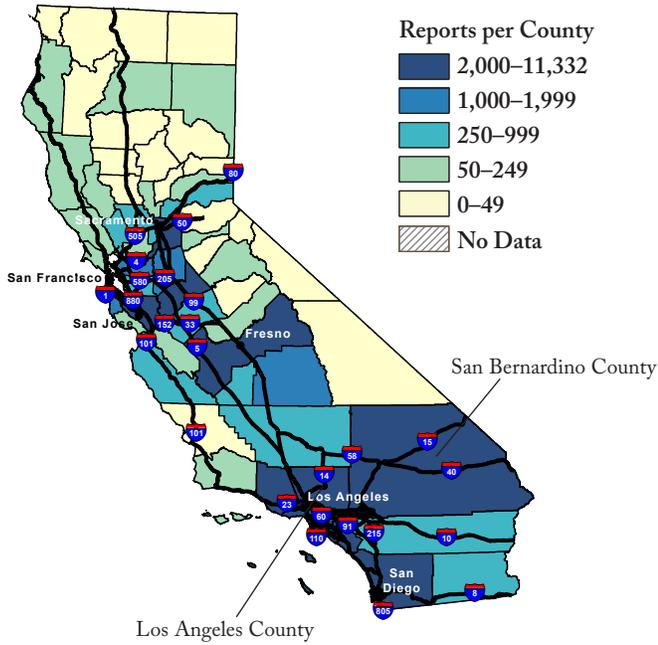


Figure 13 Methamphetamine reports in Missouri, by county, 2017¹

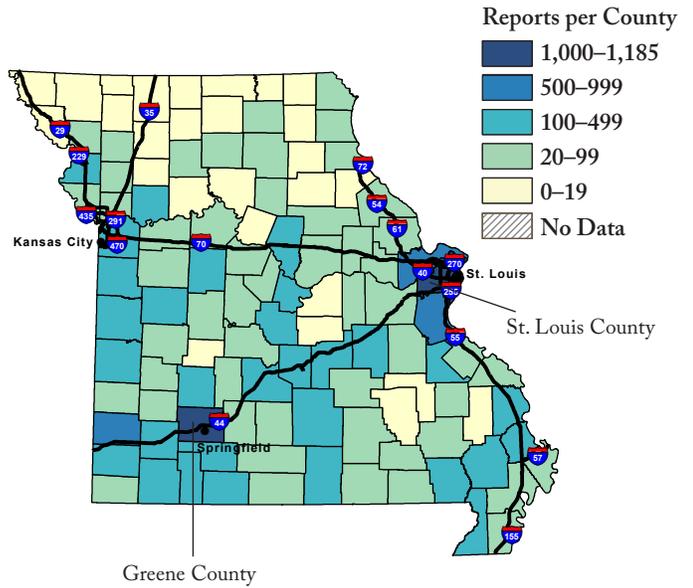


Figure 14 Methamphetamine reports in Pennsylvania, by county, 2017¹

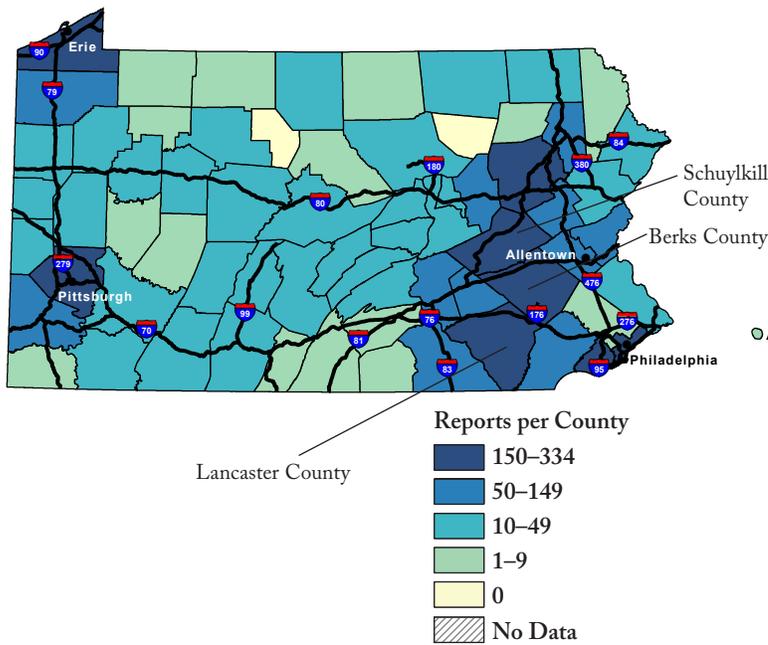
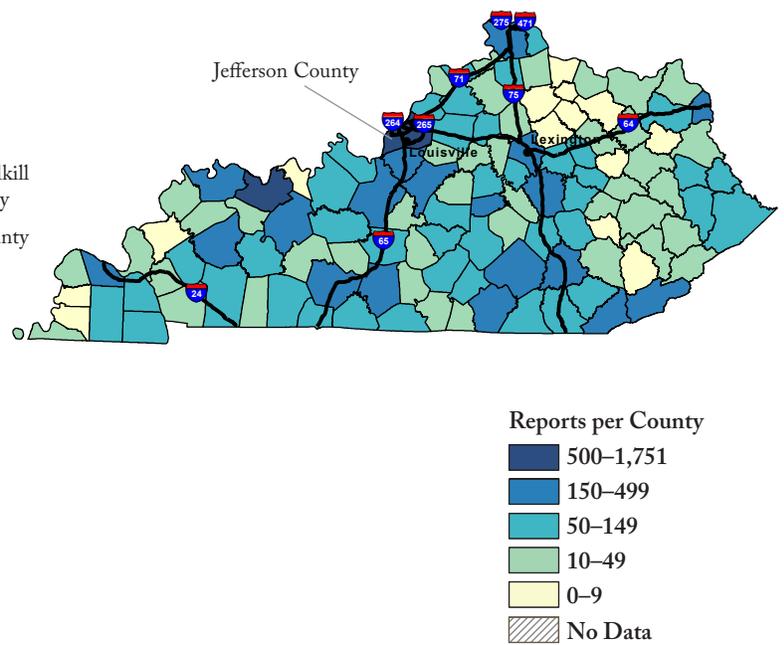


Figure 15 Methamphetamine reports in Kentucky, by county, 2017¹



¹ Includes drugs submitted to State and local laboratories during the calendar year that were analyzed within three months of the reporting period.

Comparisons with Other Data

Substance Use Treatment Admissions

According to SAMHSA’s TEDS,ⁱⁱⁱ the number of admissions to publicly funded treatment facilities involving methamphetamine as the primary substance of use increased 9%, from 155,619 admissions in 2006 to 170,374 admissions in 2016 (Table 2). Admissions for primary methamphetamine use decreased steadily from 2006 through 2011, then generally increased through 2016. In particular, the number of primary methamphetamine admissions increased 26% from 2015 to 2016 (from 135,681 to 170,374 admissions). Overall, 8% of all admissions reported in 2006 were for primary methamphetamine use compared with 10% in 2016. In 2016, methamphetamine was the fourth most reported primary substance of use after alcohol, heroin, and marijuana.

Table 2 NUMBER AND PERCENTAGE OF SUBSTANCE USE TREATMENT ADMISSIONS IN WHICH METHAMPHETAMINE WAS THE PRIMARY SUBSTANCE OF USE, 2006–2016

Year	Number	Percent
2006	155,619	7.9
2007	142,646	7.3
2008	122,255	5.9
2009	111,475	5.5
2010	108,064	5.6
2011	106,626	5.5
2012	117,095	6.4
2013	131,144	7.5
2014	135,993	8.3
2015	135,681	8.3
2016	170,374	10.0

Note: Based on administrative data reported to TEDS by all reporting States and jurisdictions for admissions aged 12 or older. Primary substance of use is the main substance of use at admission.

Note: Admissions for which values were not collected, unknown, or missing were excluded from the percentage base (denominator).

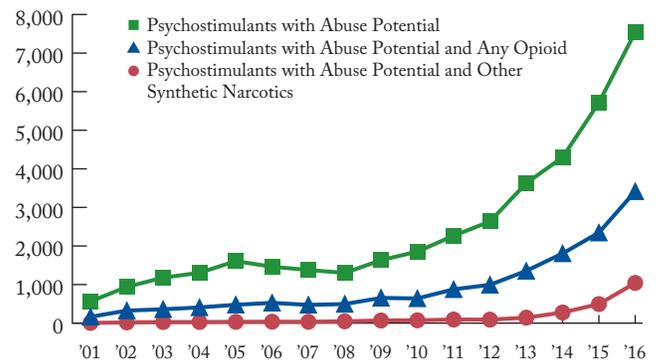
Source: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS). Data received through March 16, 2018.

Drug Overdose Deaths

The CDC categorizes methamphetamine within the “psychostimulants with abuse potential” category that also includes such drugs as amphetamine and MDMA. However, methamphetamine is the most prominent drug in this category; for example, in 2016, methamphetamine accounted for 90% of the deaths in this category.^{iv,v} In 2016, there were 6,762 deaths involving methamphetamine, with 50% (3,370 deaths) involving methamphetamine and one or more drugs.^{iv} Among overdose deaths in 2016 involving methamphetamine and one or more drugs, heroin (22%), fentanyl (11%), and cocaine (8%) were the most frequently involved.^{iv}

Figure 16 shows the deaths involving psychostimulants with abuse potential from 2001 through 2016.^{vi} From 2001 to 2005, deaths involving psychostimulants with abuse potential increased, decreased between 2006 and 2008, then continually increased from 2009 to 2016. The figure also shows deaths involving psychostimulants with abuse potential and any opioid or other synthetic narcotic. The percentage changes between 2015 and 2016 for psychostimulants, psychostimulants and any opioid, and psychostimulants and other synthetic narcotics were 32%, 46%, and 111%, respectively.

Figure 16 Psychostimulants with abuse potential overdose deaths in the United States, 2001–2016



Note: The data in this figure are based on overdose deaths related to psychostimulants with abuse potential, as coded in the International Classification of Diseases, 10th revision (ICD-10) (T43.6). This category is dominated by methamphetamine-related overdoses.

Note: The overdose death data in this figure include deaths with underlying causes of unintentional drug poisoning (X40–X44), suicide drug poisoning (X60–X64), homicide drug poisoning (X85), and drug poisoning of undetermined intent (Y10–Y14), as coded in ICD-10.

Source: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Wide-ranging ONline Data for Epidemiologic Research (WONDER).

References

- i U.S. Drug Enforcement Administration, Diversion Control Division. (2018). *National Forensic Laboratory Information System: NFLIS-Drug 2017 Annual Report*. Springfield, VA: U.S. Drug Enforcement Administration. <https://www.nflis.deadiversion.usdoj.gov/DesktopModules/ReportDownloads/Reports/NFLIS-Drug-AR2017.pdf>
- ii U.S. Drug Enforcement Administration, Office of Diversion Control. (2012). *National Forensic Laboratory Information System: Year 2011 Annual Report*. Springfield, VA: U.S. Drug Enforcement Administration. <https://www.nflis.deadiversion.usdoj.gov/DesktopModules/ReportDownloads/Reports/NFLIS2012AR.pdf>
- iii Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. (2018). *Treatment Episode Data Set (TEDS): 2016. Admissions to and discharges from publicly funded substance use treatment*. Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from <https://www.samhsa.gov/data/report/treatment-episode-data-set-teds-2016-admissions-and-discharges-publicly-funded-substance-use>
- iv Hedegaard, H., Bastian, B. A., Trinidad, J. P., Spencer, M., & Warner, M. (2018). Drugs most frequently involved in drug overdose deaths: United States, 2011–2016. *National Vital Statistics Reports*, 67(9), 1–14. Hyattsville, MD: National Center for Health Statistics. Retrieved from <https://www.cdc.gov/nchs/products/nvsr.htm>
- v Centers for Disease Control and Prevention. (2018). *2018 annual surveillance report of drug-related risks and outcomes — United States* (Surveillance Special Report). Retrieved from <https://stacks.cdc.gov/view/cdc/58547>
- vi Centers for Disease Control and Prevention. (2018). *CDC Wide-ranging ONline Data for Epidemiologic Research: CDC WONDER*. Retrieved from <https://wonder.cdc.gov/>

Methodology: A summary of the NFLIS estimation methodology can be found in the *NFLIS Statistical Methodology* publication at <https://www.nflis.deadiversion.usdoj.gov/DesktopModules/ReportDownloads/Reports/NFLIS-2017-StatMethodology.pdf>.

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