

Funded by the Office of National Drug Control Policy and the Centers for Disease Control and Prevention

Trends, Analysis & Threats

Overdose Response Strategy Webinar Series

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Agenda

Opening Remarks

Christopher Jakim, HIDTA Deputy National Coordinator, Overdose Response Strategy

National Overdose Data Highlight

Steve Barnes, Technical Advisor, Overdose Response Strategy

Speaker Briefings

- Agnes Winokur, Laboratory Director, DEA Special Testing Laboratory
- Kenn E. Dunklee, Intelligence Staff Coordinator, National Forensic Laboratories Information System (NFLIS), DEA Headquarters

Q&A and Closing Remarks

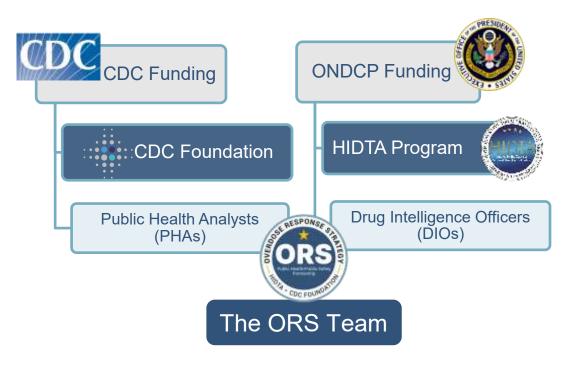
Overdose Response Strategy

The ORS is a nationally coordinated, cross-sector collaboration between public health and public safety.

The mission of the ORS is to help communities reduce fatal and non-fatal drug overdoses by connecting public health and public safety agencies, sharing information and supporting evidence-based interventions.

Connect

- 1. Go to www.orsprogram.org
- 2. Visit "ORS Interactive Teams Map" for team contact info



The ORS is implemented by 61 teams of DIOs and PHAs covering all 50 states, D.C., Puerto Rico, and the U.S. Virgin Islands.

Trends, Analysis & Threats Webinar: Acknowledgement of Data Sensitivity and Use

The information presented and discussed at ORS Trends, Analysis & Threats (TAT) meetings is shared voluntarily by data owners, often in advance of public release and is often preliminary and incomplete. The Overdose Response Strategy (ORS) does not own or manage any of the data presented.

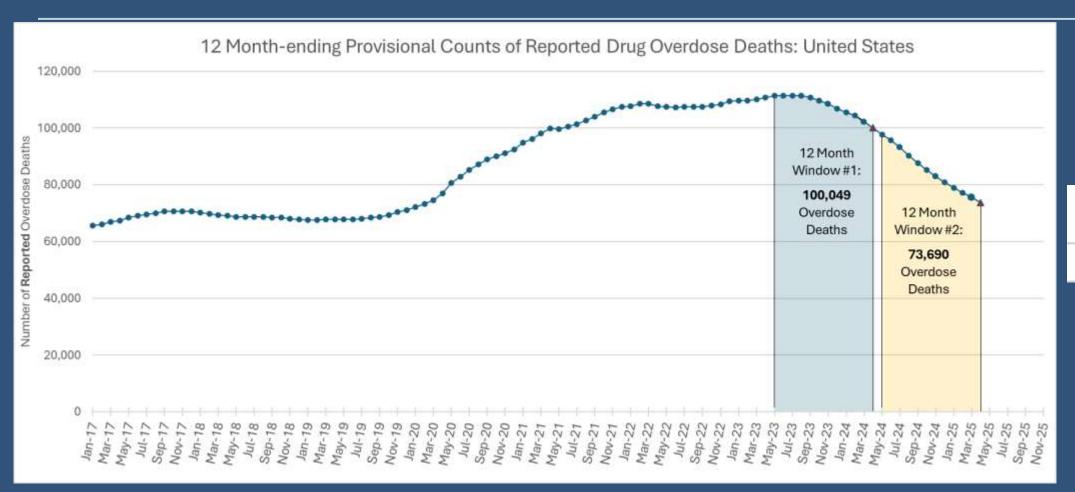


National Overdose Data Snapshot

Steve Barnes, *Technical Advisor*, *Overdose Response Strategy*



National Picture - Overdose Mortality



Percent Change for United States

-26.3

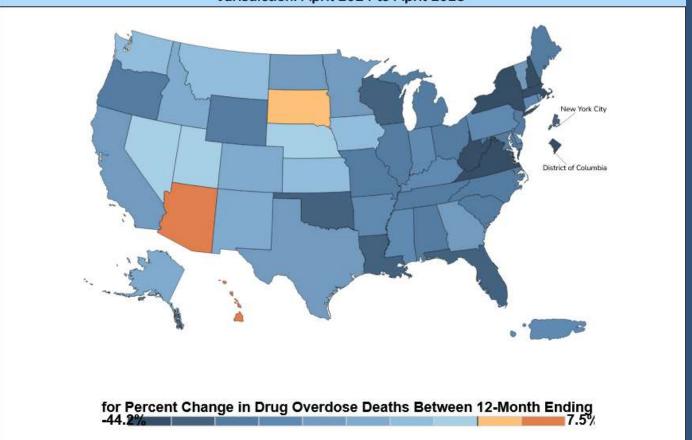


Based on data available for analysis on: September 7, 2025

National Center for Health Statistics, Provisional Drug Overdose Death Counts

National Picture - Overdose Mortality

Figure 1b. Percent Change in Reported 12 Month-ending Count of Drug Overdose Deaths, by Jurisdiction: April 2024 to April 2025



Percent Change for United States

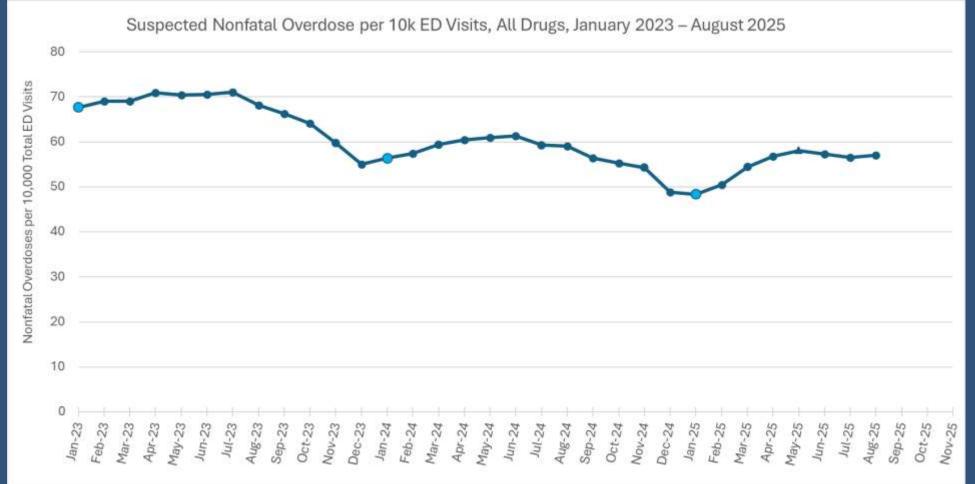
-26.3

Based on data available for analysis on: **September 7th, 2025**

National Center for Health Statistics, Provisional Drug Overdose Death Counts

Trends in Emergency Department Visits

January 2023 through August 2025



CDC Drug Overdose
Surveillance and
Epidemiology (DOSE)
System: Nonfatal Overdose
Syndromic Surveillance

Suspected Nonfatal Overdose per 10k ED Visits, 12-month rolling average, September – August, All Drugs



CDC Drug Overdose
Surveillance and
Epidemiology (DOSE)
System: Nonfatal Overdose
Syndromic Surveillance

Trends in Emergency Medical Services (911 Calls)

August 2024 Compared to August 2025



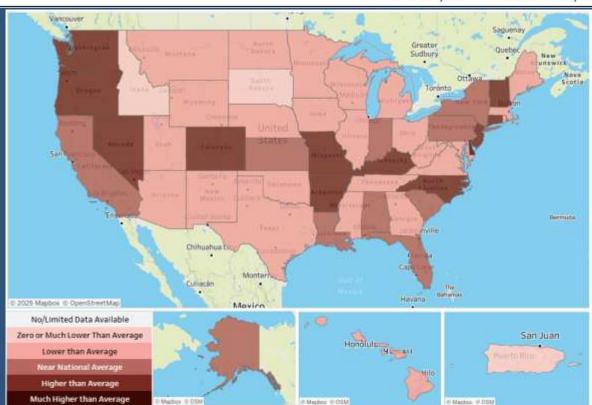


Drug Overdose Surveillance Dashboard

Provisional Mortality Data Updated On: August 13, 2024.

October 13, 2024 - October 12, 2025

Nonfatal Any/All Overdoses Involved in Motor Vehicle Crashes 5,482



Number/Rate Nonfatal Overdoses 650,512 or 200.5 (-5.5%)

Based on data available for analysis on: October 31st, 2025 National EMS information system (NEMSIS)

Partner Briefings



Drug Enforcement Administration National Forensic Laboratory Information System (NFLIS) Overview



Primary Purpose of NFLIS

Provide accurate, chemically verified data in support of drug scheduling.

- Supplement and complement other databases (e.g., National Survey on Drug Use and Health, poison control centers).
- Support Federal, State, and international control actions.

Drug Scheduling helps prevent injuries and deaths.





NFLIS-Drug Participation

Each laboratory/laboratory system chooses to participate.

- Option to leave the program at any time
- Reporting on their schedule (e.g. monthly or quarterly)

Assurances made by DEA:

- Accept data in whatever form available
- Reporting won't be burdensome
 - Contact with program staff is minimal
- Only aggregated data published
- Laboratories not directly compared





NFLIS - Three Components

NFLIS – DRUG (Traditional NFLIS, 1997)

- Laboratory chemically verified data
- Law Enforcement seizures

NFLIS – TOX (Established 2019)

- Drug testing results from toxicology laboratories
- Leading to improved treatment, prevention, and enforcement policies

NFLIS – MEC (Established 2019)

- Drug-related mortality data from medical examiner and coroner offices
- Deaths with drugs identified





NFLIS-Drug by the Numbers

40,766,031

Drug items processed since NFLIS-Drug was established

1,603,073

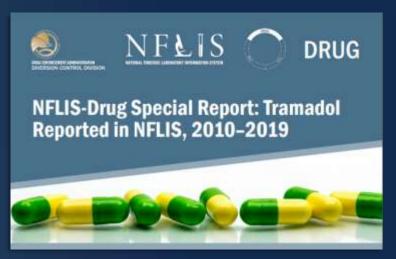
Annual average number of drug items processed (2010–2025 YTD)

3,141

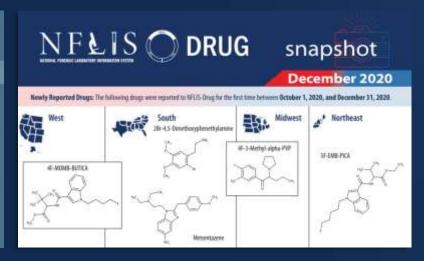
Base drugs identified in NFLIS-Drug

35

Drug categories (e.g., narcotic analgesics, benzodiazepines)









NFLIS - Drug Categories (35)

Analgesics

Antidepressants

Benzodiazepines

Cannabinoids

Cocaine Alkaloids

Depressants and Tranquilizers Phenethylamines

Fentanyl and Fentanyl-related

Hallucinogens

Heroin

Narcotic Analgesics

Narcotics

New Drug

No substance identified

Other

Other substances

Phenethylamines

Phenethylamines (2C Series)

(H)

Phenethylamines

(Aminoindanes) (H)

(Amphetamines) (H)

Phenethylamines

(Amphetamines) (S)

Phenethylamines (D Series) (H)

Phenethylamines (Other) (H)

Phenethylamines (Other) (S)

Phenethylamines (Stimulant)

Piperazines (Hallucinogen)

Piperazines (Stimulant)

Piperidines/PEA

Psychedelics

Steroids

Stimulants

Synthetic Cannabinoids

Synthetic Cathinones

Synthetic Cathinones

(Hallucinogen)

Tryptamines



Dynamic Databases

- NFLIS, CDC overdose death, and many other databases are dynamic databases with regular updates of new data as it becomes available.
- This means the data pulled on one day can be updated resulting in different numbers the next time the data is pulled because new information points were accumulated in the database.
- This is normal. The key to using the data is to document when the data was pulled.



Examples of how NFLIS-Drug data is used in DEA Intelligence reporting.



Example Products that use NFLIS-Drug Data







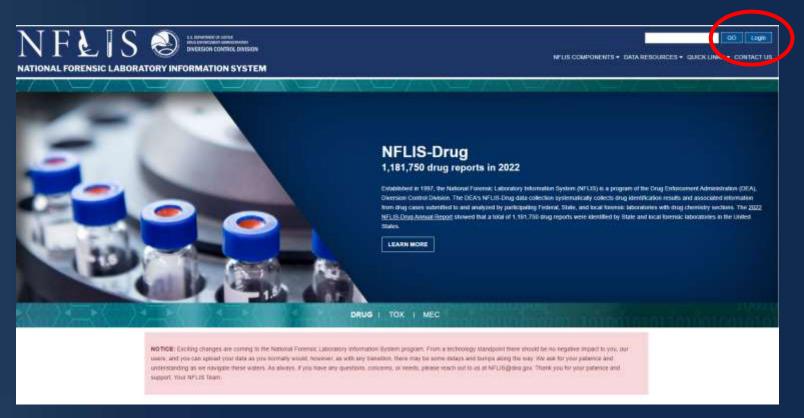




NFLIS – Home Page

https://www.nflis.deadiversion.usdoj.gov/

Home: NFLIS (usdoj.gov)



DATA RESOURCES V QUICK LINKS V CONDATA QUERY SYSTEM OVERVIEW

DQS

PUBLICATIONS

NFLIS SUBSTANCES

RELATED LINKS

FAQ



NFLIS Regions

West
Alaska
Arizona
California
Colorado
Hawaii
Idaho
Montana
Nevada
New Mexico
Oregon
Utah
Washington
Wyoming

Midwest Indiana Kansas Minnesota North Dakota Ohio South Dakota Wisconsin **Northeast** Connecticut **New Hampshire New Jersey** New York Pennsylvania Rhode Island Vermont

Northeast
Connecticut
Maine
Massachusetts
New Hampshire
New Jersey
New York
Pennsylvania
Rhode Island
Vermont

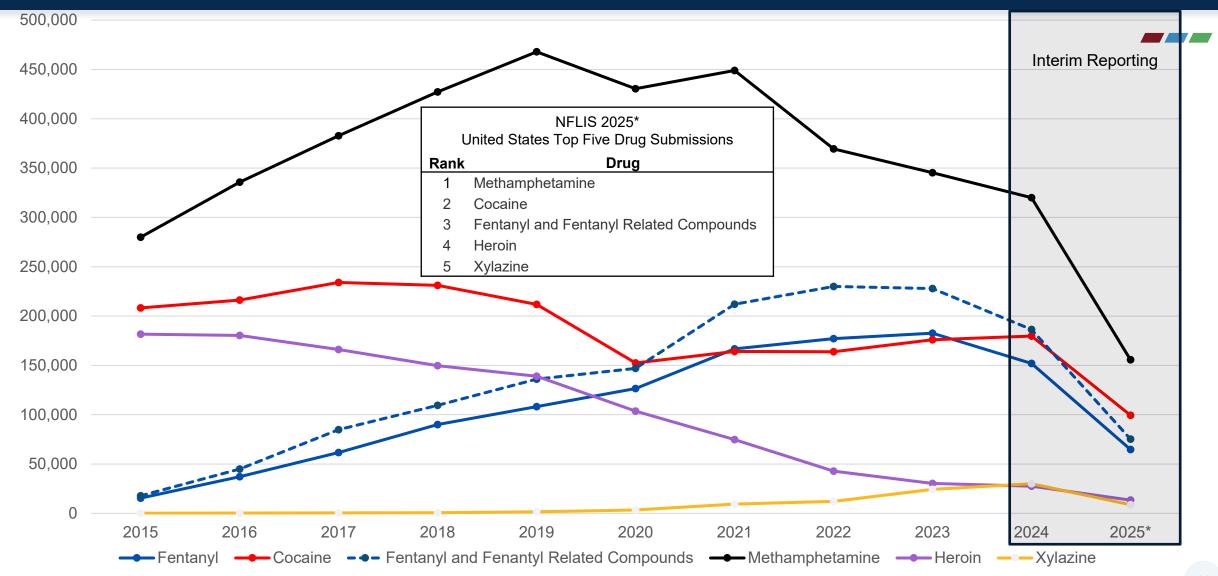
South Alabama Arkansas Delaware District of Colombia Florida Georgia Louisiana Maryland North Carolina Oklahoma Puerto Rico South Carolina Tennessee Texas Virginia West Virginia





The following slides are examples of how NFLIS-Drug is presented.

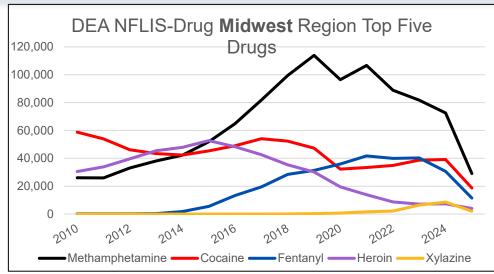
United States: NFLIS-Drug 2025* Top Five Drugs Trends

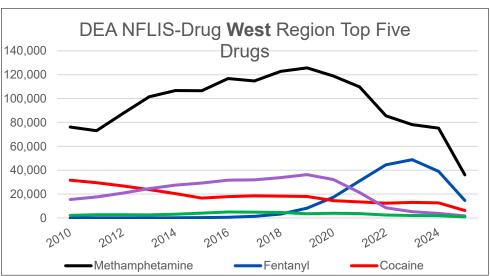


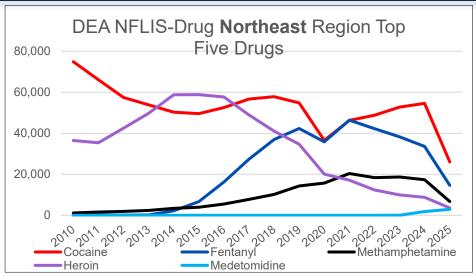
^{*2025} data is interim reporting. Source: DEA NFLIS-Drug, November 3, 2025.

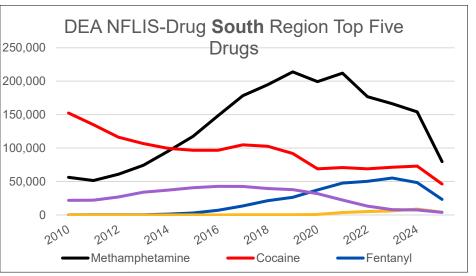
United States: NFLIS-Drug 2025* Top Five Drugs Trends with NFLIS-Drug Regions







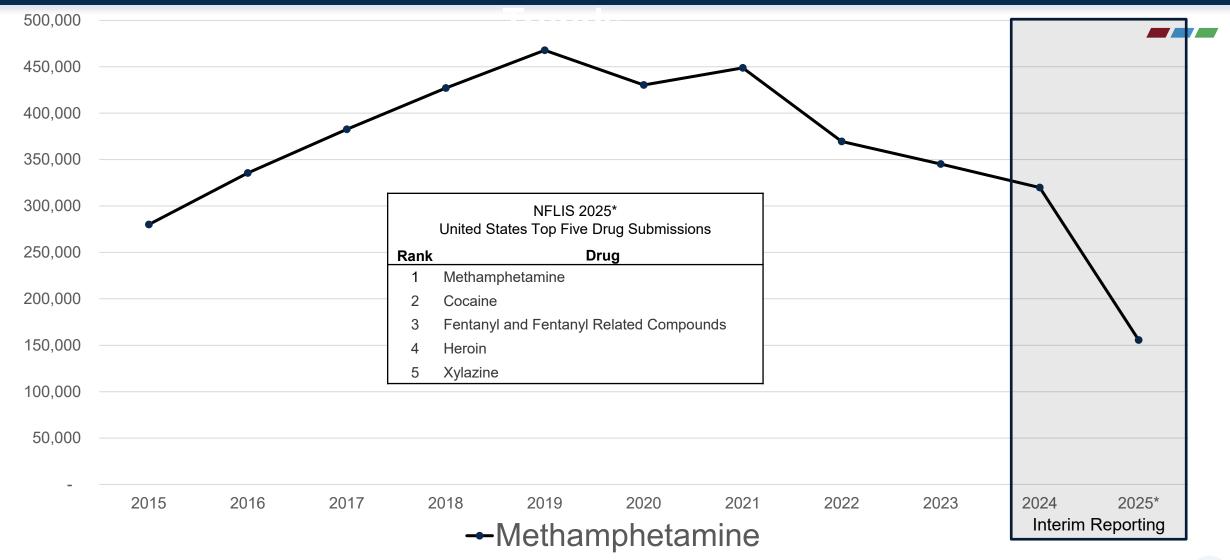




25



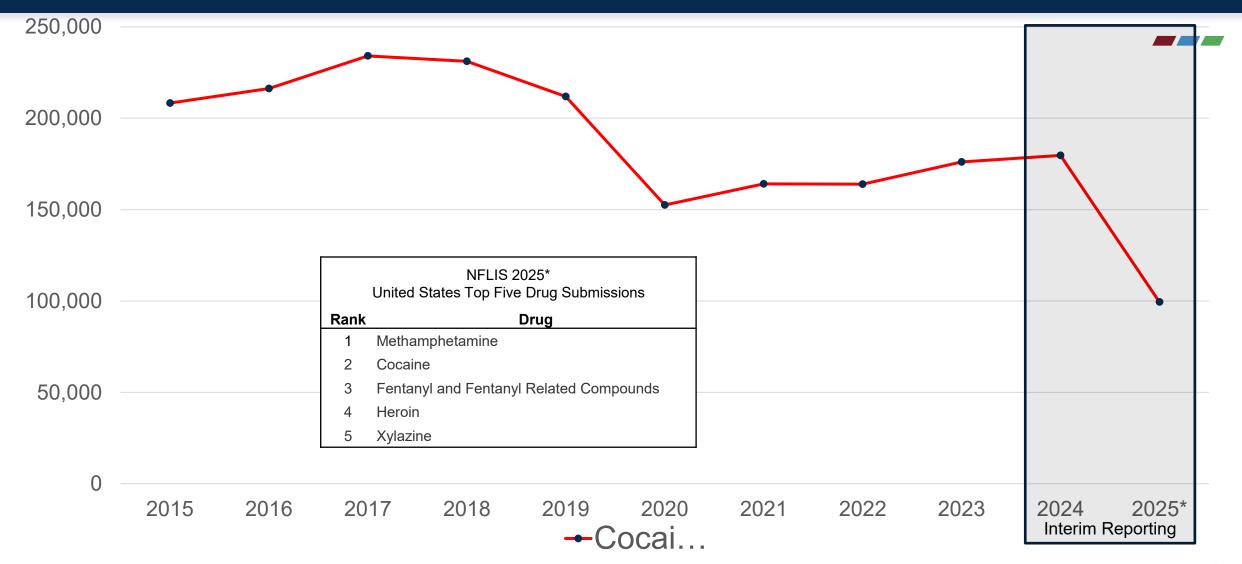
United States: NFLIS-Drug 2025* Methamphetamine



^{*2025} data is interim reporting. Source: DEA NFLIS-Drug, November 3, 2025.



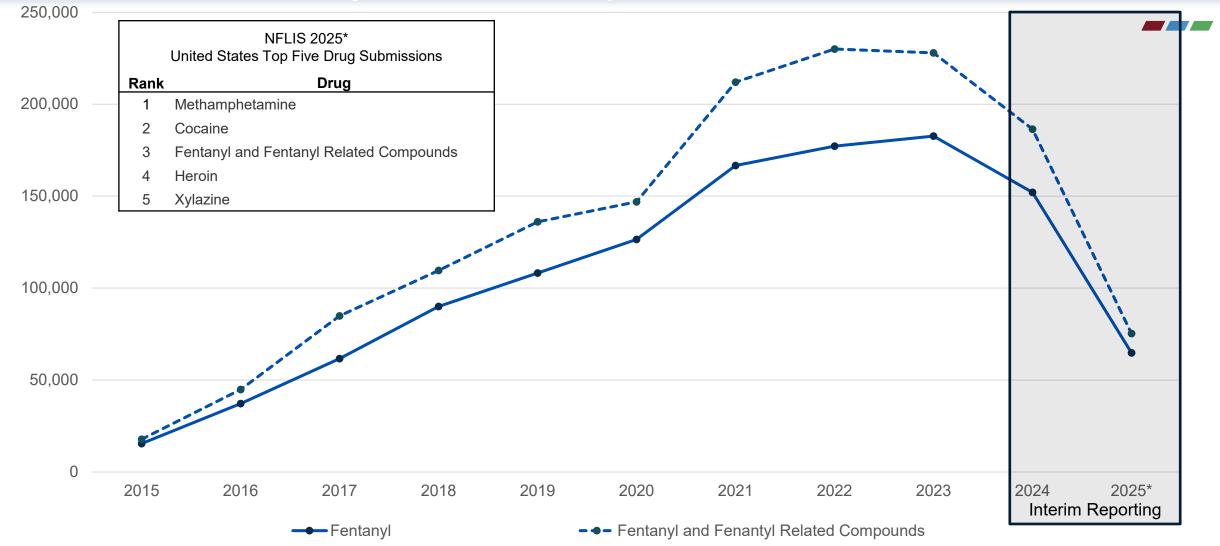
United States: NFLIS-Drug 2025* Cocaine Trends



^{*2025} data is interim reporting. Source: DEA NFLIS-Drug, November 3, 2025.

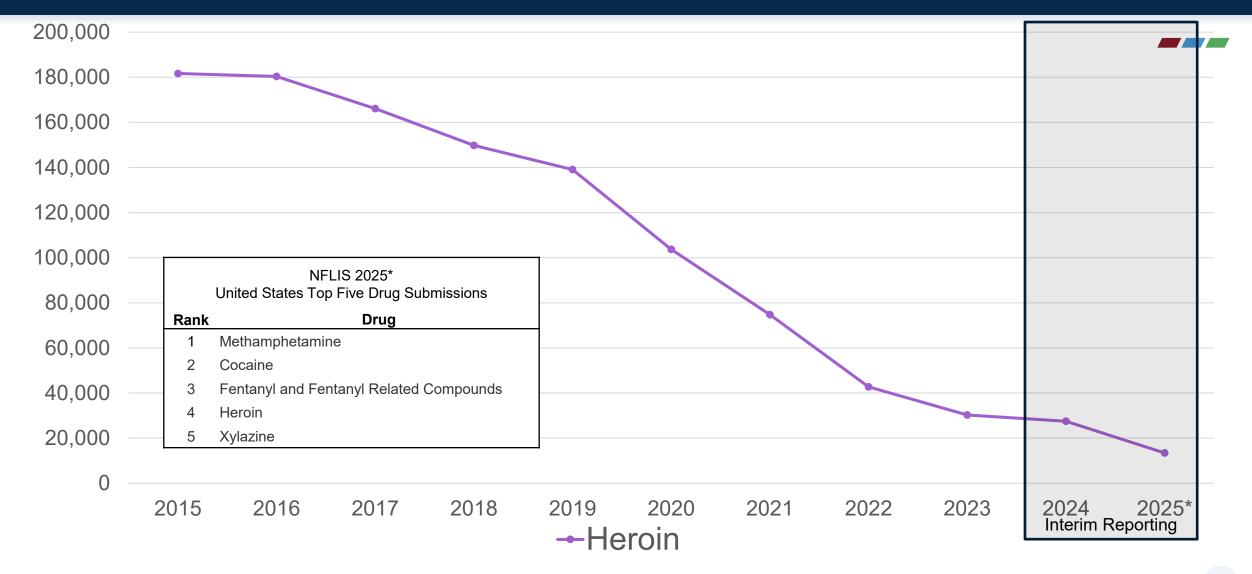
United States: NFLIS-Drug 2025* Fentanyl and Fentanyl Related Compound Trends







United States: NFLIS-Drug 2025* Heroin Trends



^{*2025} data is interim reporting. Source: DEA NFLIS-Drug, November 3, 2025.



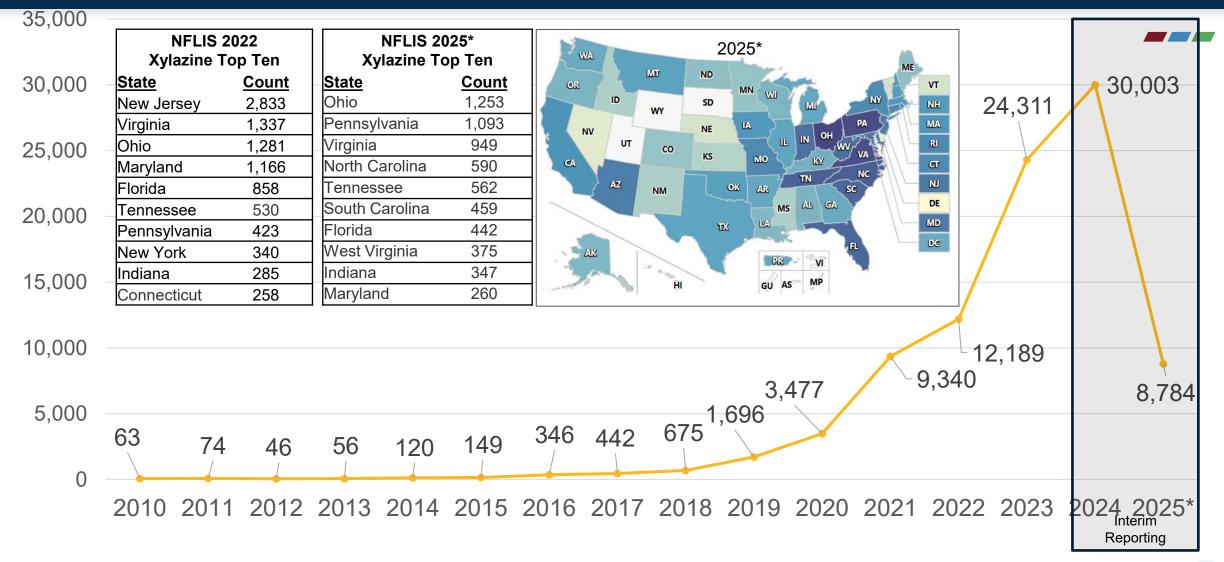
United States: NFLIS-Drug 2025* Xylazine Trends



^{*2025} data is interim reporting. Source: DEA NFLIS-Drug, November 3, 2025.

(U) United States: NFLIS-Drug Reported Xylazine Submissions*

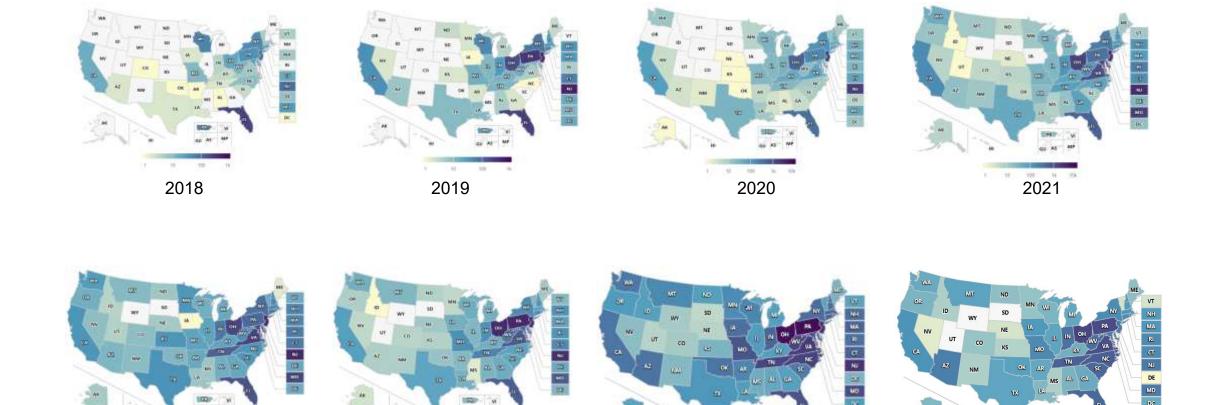




^{*}NFLIS-Drug data for 2025 is interim reporting as labs process outstanding exhibits and report their findings to NFLIS. Source: DEA National Forensic Laboratory Information System (NFLIS-Drug), as of November 3, 2025.

(U) United States: NFLIS Reported Xylazine Seizures 2018-2025*





2024

2022

Source: DEA National Forensic Laboratory Information System (NFLIS-Drug), as of November 3, 2025.

2023

2025*

^{*}NFLIS-Drug data for 2025 is interim reporting.

United States: NFLIS-Drug Reported N-Pyrrolidino etonitazene Submissions*



Count

10

DEA NFLIS-Drug	2021
N-Pyrrolidino etonit	azene
Top-Ten States	S

	. . .	
State	Count	<u>State</u>
Ohio	68	Florida
Florida	60	West Virginia
North Dakota	11	Ohio
Colorado	4	Kentucky
Georgia	4	Louisiana
Kentucky	4	Pennsylvania
New Hampshire	3	Colorado
West Virginia	3	lowa
Texas	2	Georgia
Wyoming	2	New Jersey
Total Number of States	14	Total Number States
Later and the second		-

DEA NFLIS-Drug 2022 N-Pyrrolidino etonitazene **Top-Ten States**

Count

94

14

State

Ohio

	13
Σy	7
na	6
vania	5
0	4
	4
	3 2
rsey	2
umber of	15
M1 M2	Α.
WY 50 W	
14	**

DEA NFLIS-Drug 2023 N-Pyrrolidino etonitazene **Top-Ten States**

OS W	
States	16
Total Number of	16
Missouri	2
Minnesota	3
Kentucky	3
Pennsylvania	4
Arkansas	4
Texas	6
Florida	8
Massachusetts	11
lowa	13
Offic	10

DEA NFLIS-Drug 2024 N-Pyrrolidino etonitazene Ton-Ten States

tes	Top-Ten States		Top-Ten Stat	es
Count	<u>State</u>	Count	<u>State</u>	Co
16	Ohio	204	Connecticut	
13	Pennsylvania	24	Massachusetts	
11	Virginia	16	Arkansas	
8	Indiana	9	Florida	
6	Florida	7	Indiana	
4	Texas	7	Louisiana	
4	lowa	6	Montana	
3	Kentucky	5	New York	
3	Louisiana	4	South Carolina	
2	New Hampshire	4	Texas	
16	Total Number of States	25	Total Number of States	1











DEA NFLIS-Drug 2025*

N-Pyrrolidino etonitazene

^{*}NFLIS-Drug data for 2025 is interim reporting as labs process outstanding exhibits and report their findings to NFLIS. Source: DEA National Forensic Laboratory Information System (NFLIS-Drug), as of October 31, 2025.



Questions

DEA NFLIS National Forensic Laboratory Information System Overview

Kenn E. Dunklee Intelligence Staff Coordinator Kenneth.E.Dunklee@dea.gov

DEA Drug Trends, Analysis, and Threats

Agnes D. Winokur, PhD Laboratory Director Special Testing and Research Laboratory

UNCLASSIFIED PRB 2025-73

DEA Forensic Sciences At-a-Glance



36

WHO:

- Chemists: Approx. 360 Positions
- Friction Ridge: Approx. 25 Positions
- Digital Examiners: Approx. 60 Positions
- Support Personnel: Over 100+ Positions (Evidence, Admin, etc.)
- · Total: Approx. 550 Positions

MISSION:

Deliver quality forensic information to counter the global drug threat.

VISION:

Serving with Integrity, Empowering with Information, Evolving through Innovation, and Committing to Improvement

WHAT:





Laboratory

Mid-Atlantic Laboratory (Largo, MD)

pecial Testing & Research

Laboratory

Digital Evidence Laboratory (Lorton, VA)



South Central

Seized Drugs

Digital Evidence

PRIORITIES:



Defeat Sinaloa/CJNG



Reduce Drug Poisonings

LOCATIONS:

Western Laboratory

Southwest Laboratory (Vista, CA)

* Future Lab Regional Lab ▲ Sub-Regional Lab

@ Digital Evidence Lab



Nashville Sub-Regiona

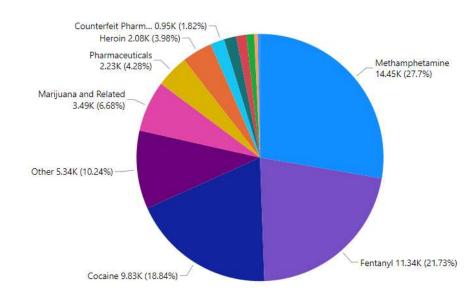
Laboratory Digital Laboratory Evidence (Nashville, TN)

North Central

BY THE NUMBERS:

Discipline	Receive	Analyze	Backlog
Seized Drugs	65-70K Annual	50-55K Annual	6K
Friction Ridge	2K Annual	1.5-2K Annual	3.3K
Digital	800+ Annual	1000+ Annual	450

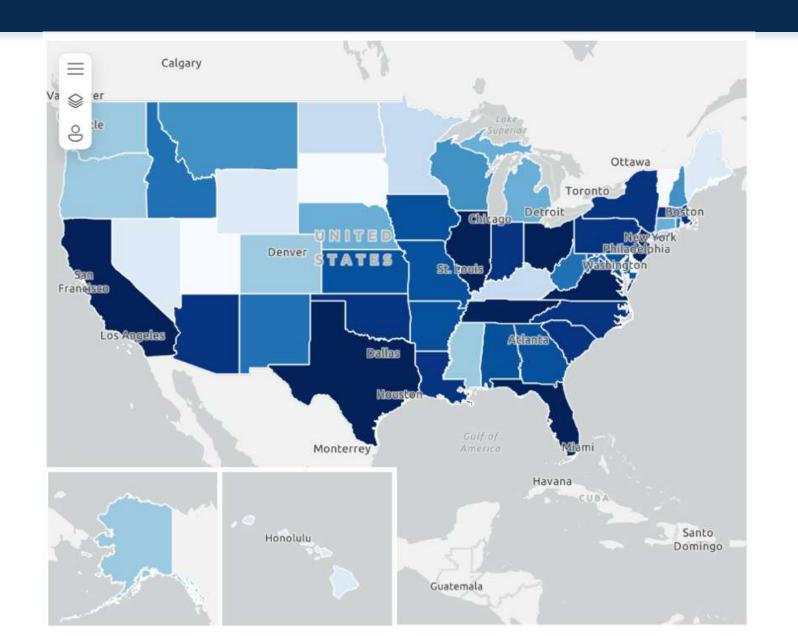
RECEPTIONS BY DRUG TYPE (2024):



Source: DEA Office of Forensic Science PRB 2025-73

Top States Reporting into NFLIS (State, Local, and Federal)





Top Ten States

State	Count
Texas	54,948
California	42,303
Florida	39,594
Virginia	33,991
Ohio	29,273
Illinois	26,109
Tennessee	22,340
New Jersey	20,689
Oklahoma	20,083
North Carolina	18,171

Top States Reporting Fentanyl 2025





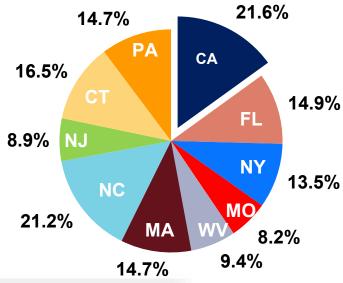
Count	Percent of Selected Substance	Co-Reported Substance	Drug Category
5,690	9.04%	HEROIN	Heroin
5,125	8.14%	XYLAZINE	Depressants and Tranquilizers
3,313	5.26%	MEDETOMIDINE	Analgesics
3,098	4.92%	LIDOCAINE	Other substances
2,851	4.53%	ACETAMINOPHEN	Analgesics
2,546	4.04%	BTMPS (BIS(2,2,6,6-TETRAMETHYL-4- PIPERIDINYL) SEBACATE)	Other
1,965	3.12%	4 ANILINO-1-PHENETHYLPIPERIDINE	Fentanyl and Fentanyl-related
1,631	2.59%	COCAINE	Cocaine Alkaloids
1,378	2.19%	METHAMPHETAMINE	Phenethylamines (Amphetamines) (S)
1,228	1.95%	CAFFEINE	Stimulants
1,016	1.61%	P-FLUOROFENTANYL	Fentanyl and Fentanyl-related
684	1.09%	DIPHENHYDRAMINE	Other substances
597	0.95%	TRAMADOL	Narcotic Analgesics
453	0.72%	PROCAINE	Other substances
444	0.71%	FLUOROFENTANYL	Fentanyl and Fentanyl-related
442	0.70%	QUININE	Other substances

Top substances mixed with Fentanyl

Fentanyl Powders: CY2024



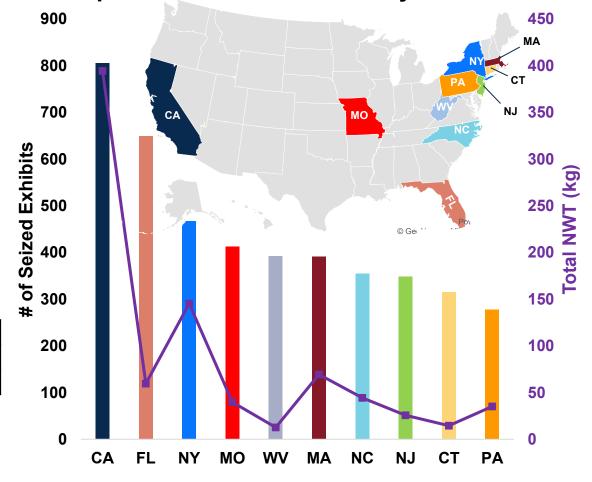
Fentanyl Purity Powders





Fentanyl Purity: Powder						
# Exhibits	7,844					
Average Purity	11.3%					

Top 10 States: Seized Fentanyl Powders



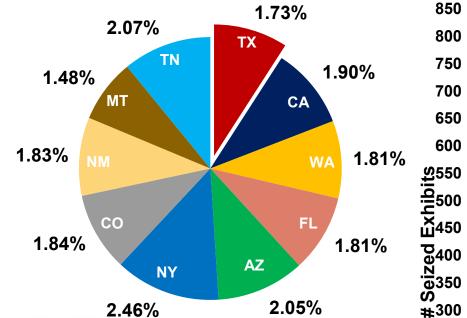
Fentanyl contamination of a hotel room

Source: DEA Office of Forensic Science PRB 2025-73

Fentanyl Tablets: CY2024





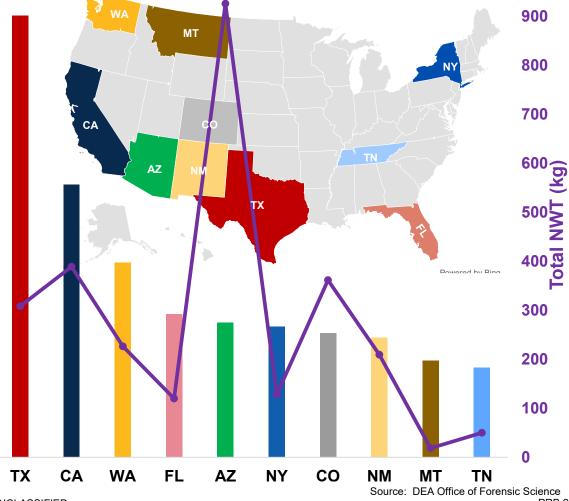




Source: DEA
Fentanyl tablet

Fentanyl Purity: Tablets				
# Exhibits	5176			
# Tablets	30,795,269			
Average Purity	1.72%			
Average Potency				
(mg/tablet)	1.89			
Max Potency (mg/tablet)	15.84			
% Tablets > 2 mg/tablet	46.9%			

Top 10 States: Seized Fentanyl Tablets

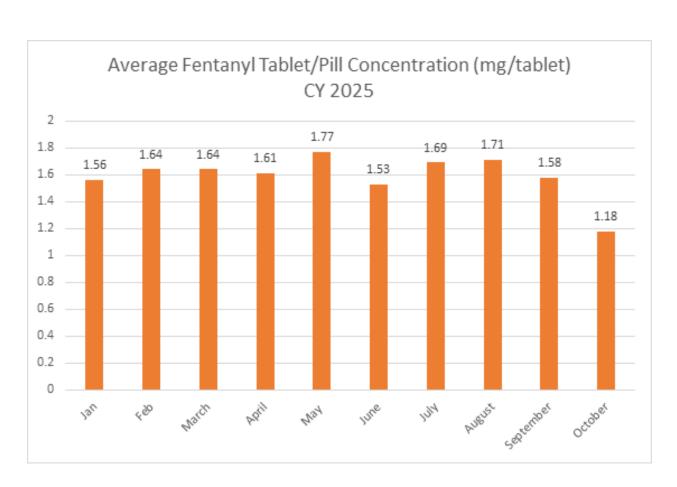


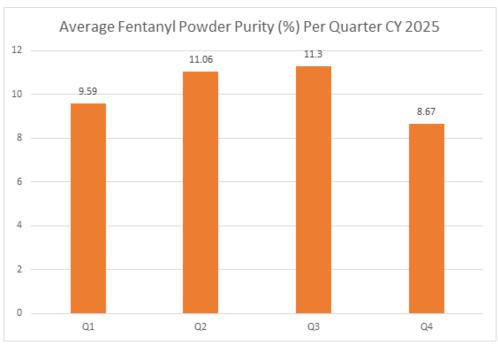
UNCLASSIFIED

PRB 2025-73

Fentanyl Purities 2025







Midwest Region



Drug Trends in Midwest Region



Calendar Year		2022			2023			2024	
Base Description	Count	Rank	Change	Count	Rank	Change	Count	Rank	Change
METHAMPHETAMINE	88,808	1		81,692	1		72,513	1	
COCAINE	34,926	4		38,557	3		39,043	2	
FENTANYL	39,855	3		40,174	2		30,491	3	
CANNABIS	41,694	2		35,538	4		27,569	4	
HEROIN	8,584	5		7,018	5		7,278	6	
NO CONTROLLED DRUG IDENTIFIED	6,452	6		6,094	7		5,399	7	
XYLAZINE	2,144	16		6,360	6		8,294	5	
4-ANILINO-1-PHENETHYLPIPERIDINE	5,589	7		4,487	8		2,475	9	
P-FLUOROFENTANYL	4,565	8		2,891	10		2,852	8	
NO DRUG FOUND	4,490	9		3,390	9		1,807	16	
OXYCODONE	3,114	11		2,799	11		2,437	10	
FLUOROFENTANYL	3,266	10		2,546	13		2,078	13	
ALPRAZOLAM	2,908	12		2,576	12		2,158	12	
BUPRENORPHINE	2,640	14		2,292	14		2,198	11	
PSILOCIN	1,785	18		2,172	15		1,956	14	
NEGATIVE RESULTS - TESTED FOR SPECIFIC DRUGS	2,177	15		1,800	17	₽ -2	1,751	17	
TRAMADOL	2,834	13		1,505	21		1,281	20	
ACETAMINOPHEN	1,711	19		1,676	20		1,932	15	
AMPHETAMINE	1,842	17		1,691	19		1,478	19	
BROMAZOLAM	910	30		2,104	16		1,597	18	
HYDROCODONE	1,481	20		1,367	22		1,098	23	
DIDLIFALLIVODA MINIE	4 202	22		1 000	26		4 276	24	

Top drugs in 2024-25 – Midwest Region



All Reported Substances 2024

Count	Substance Name
72,513	METHAMPHETAMINE
39,043	COCAINE
30,491	FENTANYL
27,569	CANNABIS
8,294	XYLAZINE
7,278	HEROIN
5,399	NO CONTROLLED DRUG IDENTIFIED
2,852	P-FLUOROFENTANYL
2,475	4-ANILINO-1-PHENETHYLPIPERIDINE
2,437	OXYCODONE
242,309	

All Reported Substances 2025*

Count	Substance Name
29,060	METHAMPHETAMINE
18,680	COCAINE
16,107	CANNABIS
11,468	FENTANYL
3,991	HEROIN
2,296	NO CONTROLLED DRUG IDENTIFIED
2,021	XYLAZINE
1,326	BTMPS (BIS(2,2,6,6-TETRAMETHYL-4-PIPERIDINYL) SEBACATE)
1,179	MEDETOMIDINE
108,769	

^{*} Indicates evidence analysis is ongoing

Top substances reported with Fentanyl in 2025



Count ▼	Percent of Selected Substance	Co-Reported Substance	Drug Category
1,992	19.65%	HEROIN	Heroin
439	4.33%	XYLAZINE	Depressants and Tranquilizers
412	4.06%	LIDOCAINE	Other substances
381	3.76%	BTMPS (BIS(2,2,6,6-TETRAMETHYL-4- PIPERIDINYL) SEBACATE)	Other
356	3.51%	ACETAMINOPHEN	Analgesics
317	3.13%	COCAINE	Cocaine Alkaloids
248	2.45%	DIPHENHYDRAMINE	Other substances
240	2.37%	P-FLUOROFENTANYL	Fentanyl and Fentanyl-related
155	1.53%	4-ANILINO-1-PHENETHYLPIPERIDINE	Fentanyl and Fentanyl-related
155	1.53%	CAFFEINE	Stimulants
139	1.37%	MEDETOMIDINE	Analgesics
111	1.09%	METHAMPHETAMINE	Phenethylamines (Amphetamines) (S)
103	1.02%	TRAMADOL	Narcotic Analgesics
70	0.69%	QUININE	Other substances
66	0.65%	DIMETHYLSULFONE	Other substances
65	0.64%	KETAMINE	Depressants and Tranquilizers

Spirochlorphine



Analysis via GC-MS and GC-FID confirmed the presence of fentanyl, N-pyrrolidino isotonitazene, spirochlorphine, and lidocaine. Several other components were indicated such as p-fluorofentanyl, 4-ANPP, despropionyl fluorofentanyl, phenacetin, xylazine, procaine, bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate (BTMPS), and caffeine but were not confirmed. The fentanyl was quantitated and found to have a purity of 1.1%.

Seizure Location & Date	Net Weight	Substances Identified	Form	
Providence, RI February 2025	19.9 g	See above	Rock-Like	
Providence, RI April 2025	97.2 g	See above	Powder	
Cincinnati, OH February 2025	13.3 g	Spirochlorphine, fentanyl, BTMPS, lidocaine, medetomidine, acetaminophen, xylazine	Powder	
Carrollton, TX April 2025	0.4 g	Spirochlorphine, N-desethyl protonitazene	Tablet	

Northeast Region



Drug Trends in Northeast Region



CalendarYear		2022			2023			2024	
Base Description	Count	Rank	Change	Count	Rank	Change	Count	Rank	Change
COCAINE	39,357	1		40,748	1		41,444	1	
FENTANYL	38,175	2		33,582	2		29,201	2	
CANNABIS	18,761	3		16,356	4		14,414	4	
METHAMPHETAMINE	16,917	4		16,797	3		15,505	3	
XYLAZINE	4,604	8		11,302	5		11,183	5	
HEROIN	10,194	5		7,549	6		6,480	6	
4-ANILINO-1-PHENETHYLPIPERIDINE	6,835	6		6,719	7		2,912	8	
FLUOROFENTANYL	6,677	7		4,075	8		2,574	10	
NO CONTROLLED DRUG IDENTIFIED	4,061	9		3,483	9		3,492	7	
RESULT NOT REPORTED	3,569	10		3,228	10		2,853	9	
OXYCODONE	2,573	12		2,643	11		2,171	11	
BUPRENORPHINE	2,849	11		1,969	13		1,661	14	
NO DRUG FOUND	2,242	15		2,043	12		1,940	12	
P-FLUOROFENTANYL	2,277	13		1,465	14		1,419	15	
ALPRAZOLAM	1,615	17		1,316	15		1,343	16	
TRAMADOL	2,269	14		1,159	17		622	30	
AMPHETAMINE	1,377	19		1,171	16		1,188	17	
CAFFEINE	1,423	18		997	22		1,108	19	
PHENACETIN	1,726	16		1,124	18		664	28	
ACETAMINOPHEN	1,170	21		955	23	₽ -2	1,176	18	4 5

Top drugs in 2024-25 – Northeast Region



All Reported Substances 2024

Count	Substance Name
41,444	COCAINE
29,201	FENTANYL
15,505	METHAMPHETAMINE
14,414	CANNABIS
11,183	XYLAZINE
6,480	HEROIN
3,492	NO CONTROLLED DRUG IDENTIFIED
2,912	4-ANILINO-1-PHENETHYLPIPERIDINE
2,853	RESULT NOT REPORTED
2,574	FLUOROFENTANYL
164,238	

All Reported Substances 2025*

Count	Substance Name
22,448	COCAINE
13,584	FENTANYL
6,315	METHAMPHETAMINE
3,562	CANNABIS
2,984	HEROIN
2,911	MEDETOMIDINE
2,064	XYLAZINE
1,968	RESULT NOT REPORTED
1,373	NO DRUG FOUND
1,310	NO CONTROLLED DRUG IDENTIFIED
75,178	

^{*} Indicates evidence analysis is ongoing

Top substances reported with Fentanyl in 2024



Count ▼	Percent of Selected Substance	Co-Reported Substance	Drug Category
9,523	32.61%	XYLAZINE	Depressants and Tranquilizers
4,707	16.12%	HEROIN	Heroin
2,580	8.84%	4-ANILINO-1-PHENETHYLPIPERIDINE	Fentanyl and Fentanyl-related
1,690	5.79%	FLUOROFENTANYL	Fentanyl and Fentanyl-related
1,660	5.68%	MEDETOMIDINE	Analgesics
907	3.11%	P-FLUOROFENTANYL	Fentanyl and Fentanyl-related
806	2.76%	COCAINE	Cocaine Alkaloids
736	2.52%	ACETAMINOPHEN	Analgesics
723	2.48%	CAFFEINE	Stimulants
626	2.14%	LIDOCAINE	Other substances
500	1.71%	METHAMPHETAMINE	Phenethylamines (Amphetamines) (S)
400	1.37%	PHENETHYL 4-ANPP	Fentanyl and Fentanyl-related
362	1.24%	PROCAINE	Other substances
361	1.24%	BTMPS (BIS(2,2,6,6-TETRAMETHYL-4- PIPERIDINYL) SEBACATE)	Other
290	0.99%	TRAMADOL	Narcotic Analgesics

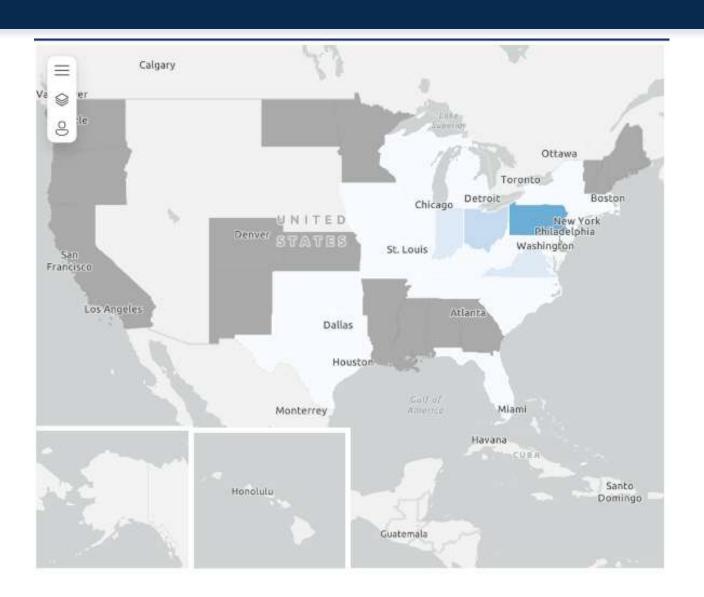
Top substances reported with Fentanyl in 2025



Count ▼	Percent of Selected Substance	Co-Reported Substance	Drug Category
2,587	19.04%	MEDETOMIDINE	Analgesics
1,998	14.71%	HEROIN	Heroin
1,489	10.96%	XYLAZINE	Depressants and Tranquilizers
717	5.28%	LIDOCAINE	Other substances
668	4.92%	BTMPS (BIS(2,2,6,6-TETRAMETHYL-4- PIPERIDINYL) SEBACATE)	Other
541	3.98%	ACETAMINOPHEN	Analgesics
440	3.24%	COCAINE	Cocaine Alkaloids
409	3.01%	CAFFEINE	Stimulants
347	2.55%	4-ANILINO-1-PHENETHYLPIPERIDINE	Fentanyl and Fentanyl-related
336	2.47%	PROCAINE	Other substances
231	1.70%	P-FLUOROFENTANYL	Fentanyl and Fentanyl-related
230	1.69%	FLUOROFENTANYL	Fentanyl and Fentanyl-related
186	1.37%	METHAMPHETAMINE	Phenethylamines (Amphetamines) (S)
135	0.99%	KETAMINE	Depressants and Tranquilizers
135	0.99%	QUININE	Other substances
111	0.82%	TRAMADOL	Narcotic Analgesics

Medetomidine 2025 State, Local, Federal



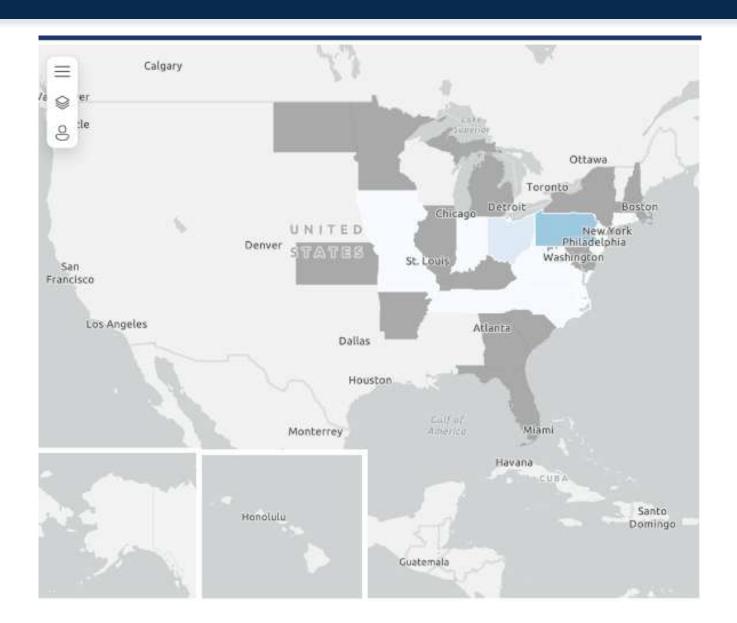


MEDETOMIDINE Top Ten States

State	Count			
Pennsylvania	2,502			
Ohio	701			
Virginia	318			
Indiana	254			
New Jersey	190			
North Carolina	155			
Tennessee	107			
lowa	75			
Connecticut	68			
Missouri	66			

Medetomidine 2024 State, Local, Federal



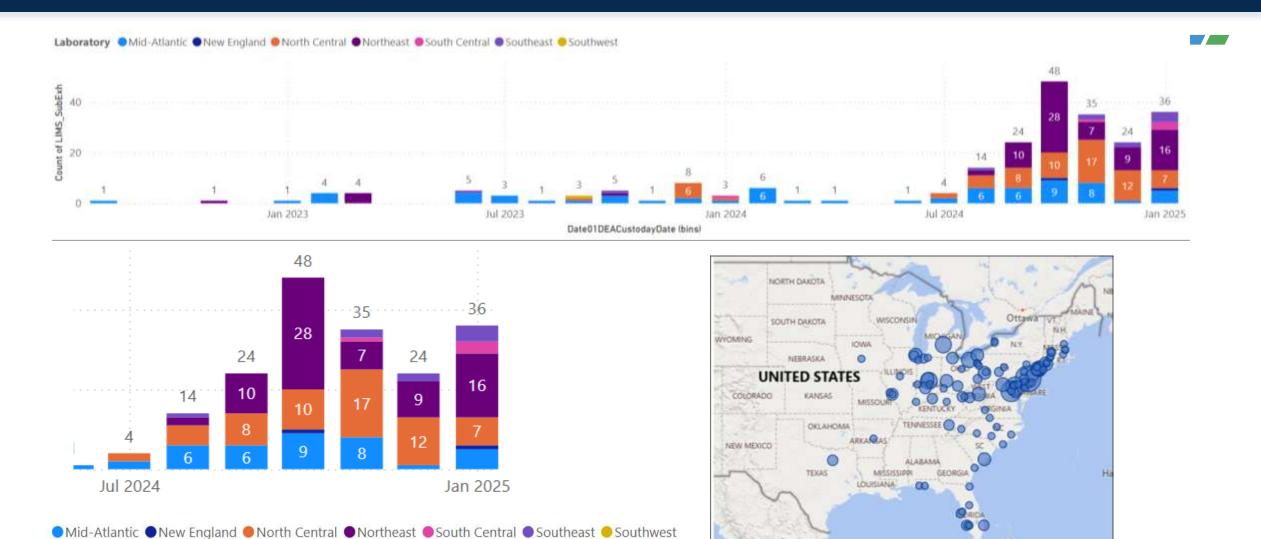


MEDETOMIDINE Top Ten States

State	Count
Pennsylvania	1,644
Ohio	330
New Jersey	150
Indiana	94
Virginia	85
North Carolina	31
lowa	23
Tennessee	22
Connecticut	21
West Virginia	20

Medetomidine DEA Data





Source: DEA Office of Forensic Science

Xylazine



- DEA seized xylazine in 49 states and DC (not seized in WY)
- Liquid veterinarian preparations and powdered xylazine being used to adulterate fentanyl
- As of June 2025:
 - 10.4% of fentanyl tablets adulterated with xylazine (over double in FY23: 5.1%)
 - 33.1% of powdered fentanyl adulterated with xylazine (up from FY23: 27.3%)

Xylazine and Medetomidine



Since March 2025:

- DEA seeing more Xylazine nationwide (562 exhibits) vs medetomidine (227 exhibits)
- Medetomidine is more prevalent in the east coast
 - Example: in just DC, MD, PA, & VA there are 63 exhibits containing medetomidine vs 93 exhibits that contain xylazine.
 - Of the 63 exhibits that contained medetomidine, 27 (42.8%) also contained xylazine.



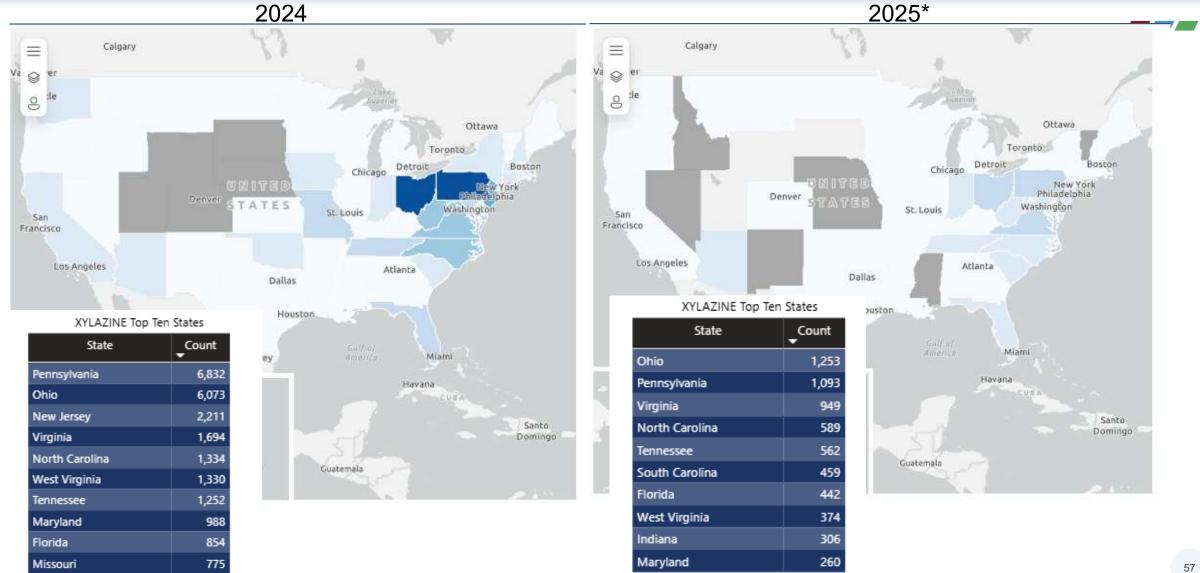
Morbidity and Mortality Weekly Report

May 1, 2025

Overdoses Involving Medetomidine Mixed with Opioids — Chicago, Illinois, May 2024

Xylazine 2024-25





*data for 2025 is interim reporting

South Region



Drug Trends in South Region



CalendarYear		2022			2023			2024	
Base Description	Count	Rank	Change	Count	Rank	Change	Count	Rank	Change
METHAMPHETAMINE	176,790	1		166,359	1		154,091	1	
CANNABIS	79,248	2		78,400	2		73,645	2	
COCAINE	68,707	3		71,213	3		72,772	3	
FENTANYL	50,253	4		55,035	4		48,246	4	
NO CONTROLLED DRUG IDENTIFIED	11,384	6		9,977	6		8,566	6	
HEROIN	13,092	5		7,910	8		7,516	8	
NO DRUG FOUND	9,570	7		9,134	7		7,979	7	
DIPENTYLONE (N,N-DIMETHYLPENTYLONE; 1-(1,3-BENZODIOXOL-5-YL)-2-(DIMETHYLAMINO)PENTAN-1-ONE)	5,336	13		10,189	5		6,269	10	
OXYCODONE	7,868	8		7,059	10		6,299	9	
XYLAZINE	4,941	14		6,009	12		8,739	5	1 7
ALPRAZOLAM	6,833	9		6,199	11		5,638	12	
4-ANILINO-1-PHENETHYLPIPERIDINE	5,498	12		7,128	9		5,801	11	
BUPRENORPHINE	6,362	10		5,921	13		5,397	14	
ACETAMINOPHEN	5,574	11		5,493	14		5,498	13	
CAFFEINE	4,216	15		3,545	18		3,506	16	
HYDROCODONE	4,126	16		3,783	17		3,135	20	
AMPHETAMINE	4,052	17		3,447	19		3,392	17	
PSILOCIN	2,782	22		3,981	15		4,107	15	
P-FLUOROFENTANYL	3,976	18		2,419	22		2,945	21	
RESULT NOT REPORTED	3,641	19		3,169	20		2,431	23	
DIMETHYLSULFONE	3,013	21		2,883	21		3,255	19	1 2

Top drugs in 2024-25 – South Region



All Reported Substances 2024

Count	Substance Name
154,091	METHAMPHETAMINE
73,645	CANNABIS
72,772	COCAINE
48,246	FENTANYL
8,739	XYLAZINE
8,566	NO CONTROLLED DRUG IDENTIFIED
7,979	NO DRUG FOUND
7,516	HEROIN
6,299	OXYCODONE
6,269	DIPENTYLONE (N,N-DIMETHYLPENTYLONE; 1-(1,3-
490,767	

All Reported Substances 2025*

Count	Substance Name
79,857	METHAMPHETAMINE
46,091	COCAINE
35,758	CANNABIS
23,195	FENTANYL
4,901	NO CONTROLLED DRUG IDENTIFIED
4,873	NO DRUG FOUND
4,034	XYLAZINE
3,844	HEROIN
3,694	4-ANILINO-1-PHENETHYLPIPERIDINE
3,365	ALPRAZOLAM
259,203	

^{*} Indicates evidence analysis is ongoing

Top substances reported with Fentanyl in 2024



Count ▼	Percent of Selected Substance	Co-Reported Substance	Drug Category
5,281	10.95%	XYLAZINE	Depressants and Tranquilizers
2,925	6.06%	HEROIN	Heroin
2,262	4.69%	4-ANILINO-1-PHENETHYLPIPERIDINE	Fentanyl and Fentanyl-related
1,857	3.85%	ACETAMINOPHEN	Analgesics
1,444	2.99%	P-FLUOROFENTANYL	Fentanyl and Fentanyl-related
1,293	2.68%	METHAMPHETAMINE	Phenethylamines (Amphetamines) (S)
1,154	2.39%	COCAINE	Cocaine Alkaloids
815	1.69%	FLUOROFENTANYL	Fentanyl and Fentanyl-related
713	1.48%	CAFFEINE	Stimulants
653	1.35%	LIDOCAINE	Other substances
447	0.93%	TRAMADOL	Narcotic Analgesics
436	0.90%	BTMPS (BIS(2,2,6,6-TETRAMETHYL-4- PIPERIDINYL) SEBACATE)	Other
421	0.87%	DIMETHYLSULFONE	Other substances
414	0.86%	DIPHENHYDRAMINE	Other substances
386	0.80%	QUININE	Other substances

Top substances reported with Fentanyl in 2025



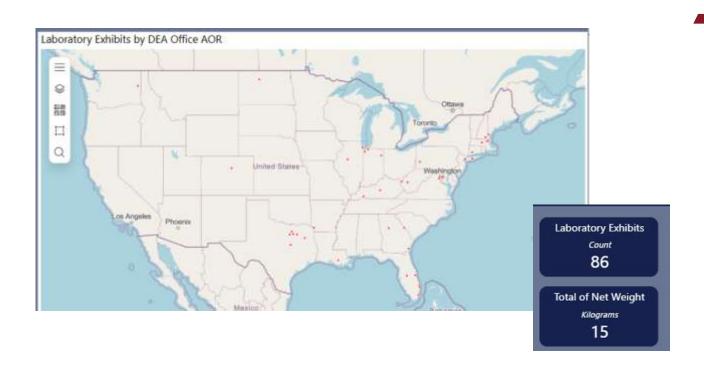
Count ▼	Percent of Selected Substance	Co-Reported Substance	Drug Category
2,603	11.22%	XYLAZINE	Depressants and Tranquilizers
1,552	6.69%	HEROIN	Heroin
1,434	6.18%	4-ANILINO-1-PHENETHYLPIPERIDINE	Fentanyl and Fentanyl-related
1,116	4.81%	LIDOCAINE	Other substances
880	3.79%	BTMPS (BIS(2,2,6,6-TETRAMETHYL-4- PIPERIDINYL) SEBACATE)	Other
845	3.64%	ACETAMINOPHEN	Analgesics
767	3.31%	COCAINE	Cocaine Alkaloids
572	2.47%	METHAMPHETAMINE	Phenethylamines (Amphetamines) (S)
532	2.29%	MEDETOMIDINE	Analgesics
481	2.07%	CAFFEINE	Stimulants
320	1.38%	P-FLUOROFENTANYL	Fentanyl and Fentanyl-related
263	1.13%	TRAMADOL	Narcotic Analgesics
219	0.94%	QUININE	Other substances
208	0.90%	DIPHENHYDRAMINE	Other substances
193	0.83%	DIMETHYLSULFONE	Other substances
157	0.68%	KETAMINE	Depressants and Tranquilizers

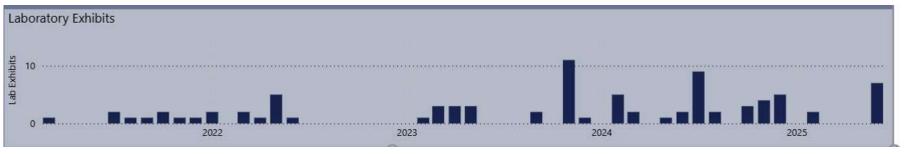
Highlights – South Region











West Region



UNCLASSIFIED

Drug Trends in West Region



Calendar Year		2022		2023			2024		
Base Description (Rank	Change	Count	Rank	Change	Count	Rank	Change
METHAMPHETAMINE	85,519	1		78,152	1		75,233	1	
FENTANYL	44,535	2		48,787	2		38,834	2	
COCAINE	12,415	5		13,001	4		12,697	3	
CANNABIS	14,183	3		11,598	5		11,060	4	
NO DRUG FOUND	13,577	4		14,808	3		1,953	9	
HEROIN	8,552	6		5,261	7		3,836	6	
ACETAMINOPHEN	3,327	8		4,712	8		4,471	5	
UNKNOWN	5,538	7		5,399	6		768	25	
NO CONTROLLED DRUG IDENTIFIED	2,965	9		2,877	10		3,175	7	
ALPRAZOLAM	2,453	10		2,042	11		1,927	11	
4-ANILINO-1-PHENETHYLPIPERIDINE		12		2,933	9		1,902	12	
RESULT NOT REPORTED		11		1,881	12		1,991	8	
PSILOCIN	1,528	13		1,667	13		1,947	10	
P-FLUOROFENTANYL	1,324	15		909	19		1,828	13	
BUPRENORPHINE	1,510	14		1,333	15		1,153	17	
CONTROLLED SUBSTANCE	1,314	16		1,429	14		1,211	15	
TETRAHYDROCANNABINOL/TETRAHYDROCANNABINOLIC ACID	1,157	18		1,259	16		1,170	16	
OXYCODONE	1,219	17		1,201	17		1,036	22	
MDMA (3,4-METHYLENEDIOXYMETHAMPHETAMINE)		21		940	18		1,099	18	
FLUOROFENTANYL	940	20		593	22		1,047	21	
HEMP	1,025	19		777	20		572	30	

Top drugs in 2024-25 – West Region



All Reported Substances 2024

Count	Substance Name
75,233	METHAMPHETAMINE
38,834	FENTANYL
12,697	COCAINE
11,060	CANNABIS
4,471	ACETAMINOPHEN
3,836	HEROIN
3,175	NO CONTROLLED DRUG IDENTIFIED
1,991	RESULT NOT REPORTED
1,953	NO DRUG FOUND
1,947	PSILOCIN
186,287	

All Reported Substances 2025*

Count	Substance Name
36,083	METHAMPHETAMINE
14,581	FENTANYL
6,256	COCAINE
3,587	CANNABIS
1,782	HEROIN
1,463	ACETAMINOPHEN
1,215	RESULT NOT REPORTED
1,137	NO CONTROLLED DRUG IDENTIFIED
987	NO DRUG FOUND
922	LIDOCAINE
79,026	

Top substances reported with Fentanyl in 2024



Count ▼	Percent of Selected Substance	Co-Reported Substance	Drug Category
2,491	6.41%	ACETAMINOPHEN	Analgesics
1,162	2.99%	P-FLUOROFENTANYL	Fentanyl and Fentanyl-related
890	2.29%	METHAMPHETAMINE	Phenethylamines (Amphetamines) (S)
820	2.11%	4-ANILINO-1-PHENETHYLPIPERIDINE	Fentanyl and Fentanyl-related
819	2.11%	XYLAZINE	Depressants and Tranquilizers
708	1.82%	LIDOCAINE	Other substances
572	1.47%	BTMPS (BIS(2,2,6,6-TETRAMETHYL-4- PIPERIDINYL) SEBACATE)	Other
530	1.36%	FLUOROFENTANYL	Fentanyl and Fentanyl-related
376	0.97%	MANNITOL	Other substances
338	0.87%	CAFFEINE	Stimulants
232	0.60%	TRAMADOL	Narcotic Analgesics
227	0.58%	DIPYRONE	Analgesics
180	0.46%	COCAINE	Cocaine Alkaloids
174	0.45%	HEROIN	Heroin
169	0.44%	PHENETHYL 4-ANPP	Fentanyl and Fentanyl-related

Top substances reported with Fentanyl in 2025



Count ▼	Percent of Selected Substance	Co-Reported Substance	Drug Category
1,015	6.96%	ACETAMINOPHEN	Analgesics
725	4.97%	LIDOCAINE	Other substances
539	3.70%	BTMPS (BIS(2,2,6,6-TETRAMETHYL-4- PIPERIDINYL) SEBACATE)	Other
508	3.48%	METHAMPHETAMINE	Phenethylamines (Amphetamines) (S)
474	3.25%	XYLAZINE	Depressants and Tranquilizers
204	1.40%	P-FLUOROFENTANYL	Fentanyl and Fentanyl-related
93	0.64%	COCAINE	Cocaine Alkaloids
92	0.63%	CAFFEINE	Stimulants
88	0.60%	TRAMADOL	Narcotic Analgesics
79	0.54%	HEROIN	Heroin
73	0.50%	FLUOROFENTANYL	Fentanyl and Fentanyl-related
63	0.43%	CARFENTANIL	Fentanyl and Fentanyl-related
35	0.24%	METHORPHAN	Narcotic Analgesics
33	0.23%	4-ANILINO-1-PHENETHYLPIPERIDINE	Fentanyl and Fentanyl-related
32	0.22%	DIMETHYLSULFONE	Other substances

Purple and Green Fentanyl







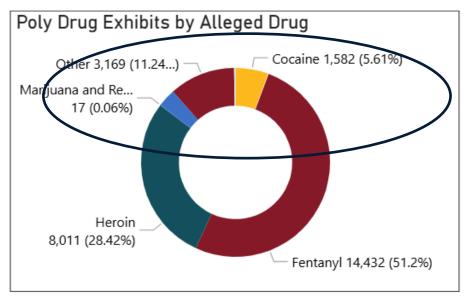
Other



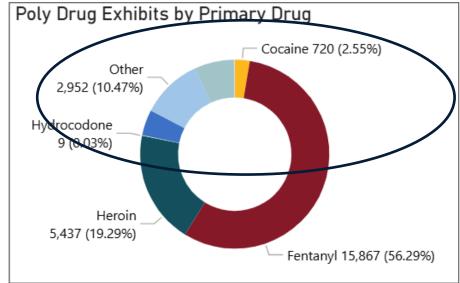
UNCLASSIFIED PRB 2025-73

Alleged versus Actual Drug Found





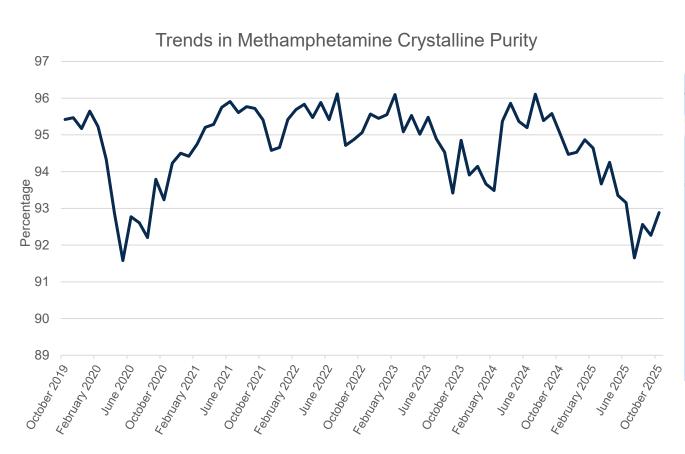






Methamphetamine Trends







Carfentanil in 2025





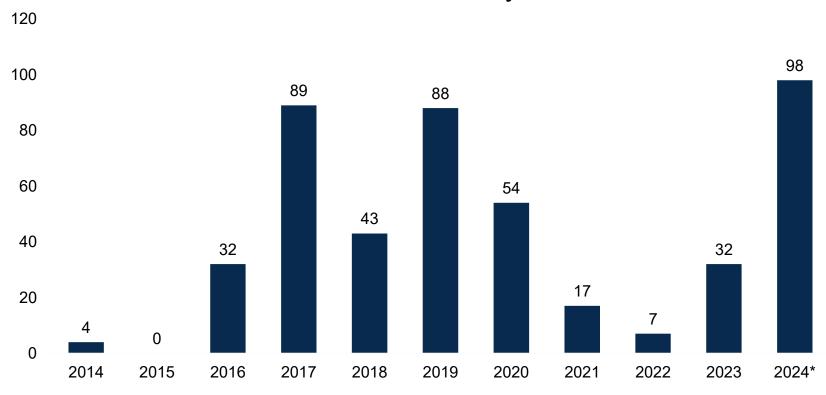
CARFENTANIL Top Ten States

State	Count
Arizona	256
Ohio	97
Massachusetts	88
California	83
New Mexico	53
New Jersey	47
Virginia	45
Tennessee	32
Florida	31
North Carolina	26

Carfentanil-Containing Submissions to the DEA Laboratory System



Count of Submissions by Year



*Indicates evidence analysis is ongoing

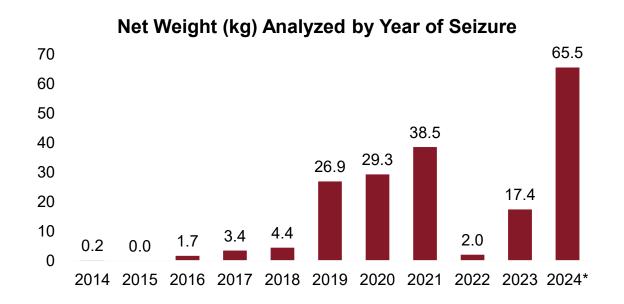
LIMS extract carfentanil exhibits retrieved 01-14-2025

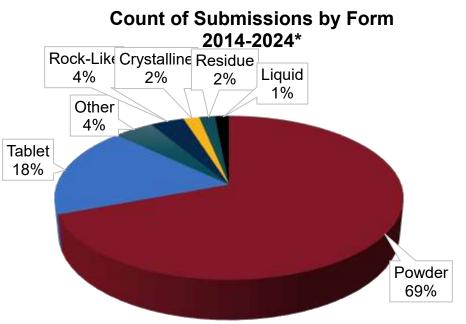
Source: DEA-SFL1-BUL-003-25 PRB 2025-73

Carfentanil-Containing Submissions to the DEA Laboratory System









LIMS extract carfentanil exhibits retrieved 01-14-2025

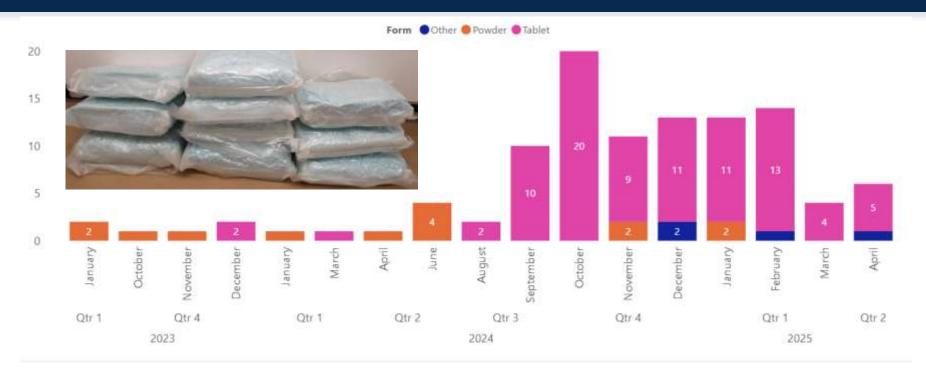
*Indicates evidence analysis is ongoing

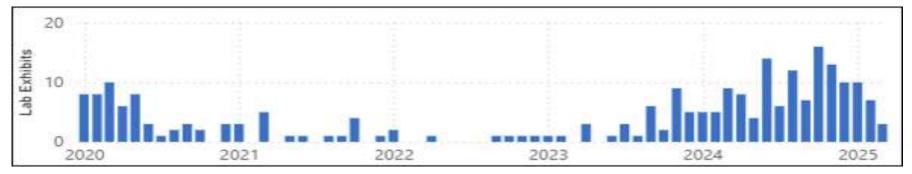
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Source: DEA-SFL1-BUL-003-25

Carfentanil Trends

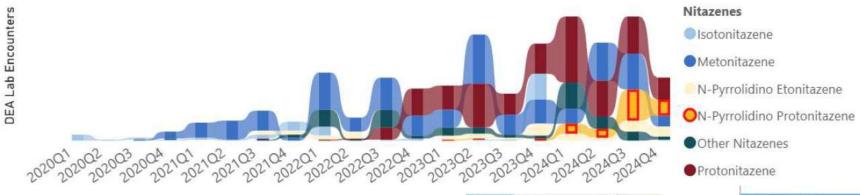




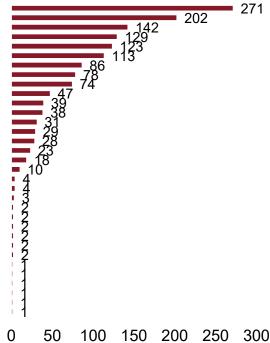


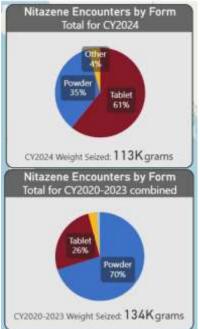
Nitazenes







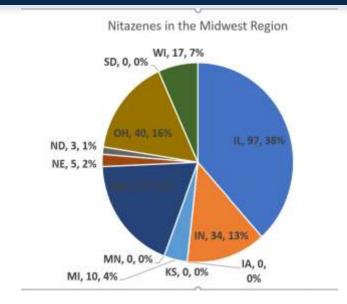


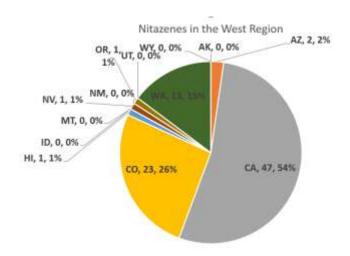


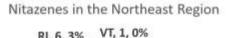


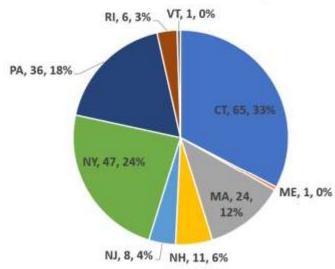
Nitazenes by Region



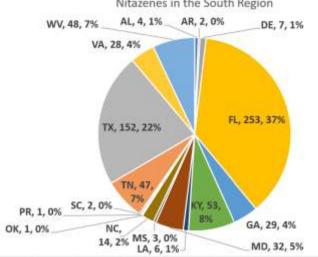












Kratom Products: Tablets, Capsules, Powders, & Liquids

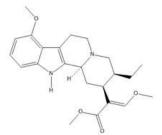


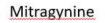


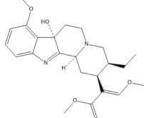
7-hydroxymitragynine – analytical challenges



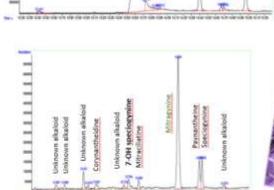


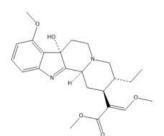




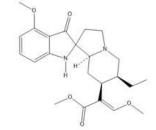








7-OH Speciogynine



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Mitragynine Pseudoindoxyl

Thank you for your attention!



Agnes D Winokur

Laboratory Director DEA Special Testing and Research Laboratory

SFL1Fire@dea.gov





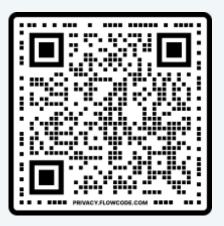
Questions

Trends, Analysis & Threats Webinar Series

MAILING LIST



ZOOM SERIES



Trends, Analysis & Threats Webinar Series

UPCOMING CALLS

Wednesday, January 7 from 2PM-3PM Wednesday, March 4 from 2PM-3PM

Feedback Requested

