DEA TOX

DRUG ENFORCEMENT ADMINISTRATION

TOXICOLOGY TESTING PROGRAM

QUARTERLY REPORT

Third Quarter – 2024

U.S. Department of Justice
Drug Enforcement Administration
Diversion Control Division
Drug and Chemical Evaluation Section

Contents

Introduction

The Drug Enforcement Administration's Toxicology Testing Program (DEA TOX) began in May 2019 as a surveillance program aimed at detecting new psychoactive substances within the United States. In response to the ongoing synthetic drug epidemic, the Drug Enforcement Administration (DEA) awarded a contract with the University of California at San Francisco (UCSF) to analyze biological samples generated from overdose victims of synthetic drugs.

In many cases, it can be difficult to ascertain the specific substance responsible for the overdose. The goal of DEA TOX is to connect symptom causation to the abuse of newly emerging synthetic drugs (e.g., synthetic cannabinoids, synthetic cathinones, synthetic opioids, other hallucinogens).

DEA has reached out to local health departments, law enforcement partners, poison centers, drug court laboratories, hospitals, and other medical facilities to offer testing of leftover or previously collected samples for analysis of synthetic drugs. DEA TOX is interested in patients thought to have ingested a synthetic drug, where the traditional drug screen has produced little or no viable options to explain the symptoms exhibited by the patient (alcohol and THC are exempted). DEA TOX may approve testing of unused biological samples or on occasion non-biological samples from a medical facility or law enforcement partner only.

Requests for testing may be submitted directly to DEA TOX (**DEATOX@DEA.GOV**). Upon explicit approval of the request for testing of specific samples, the originating laboratory is invited to send their samples to the Clinical Toxicology and Environmental Biomonitoring (CTEB) Laboratory at UCSF. DEA covers the full cost of analysis for each sample approved for testing. Using liquid chromatography quadrupole time-of-flight mass spectrometry, synthetic drugs identified within the samples are confirmed and quantified.

The CTEB laboratory currently maintains a comprehensive drug library consisting of 1314 drugs, of which 1028 are new psychoactive substances.

This publication presents the results of cases analyzed and completed by the CTEB laboratory from July 1, 2024, through September 30, 2024. Confirmed levels denoted in the tables below with a defined range represent the low and high concentrations reported when the frequency of detection is greater than one.

Summary

Between July 1, 2024 and September 30, 2024, 147 biological samples from 134 cases originating from 21 states—namely California (14), Florida (5), Georgia (1), Iowa (1), Illinois (10), Indiana (4), Kansas (3), Kentucky (8), Louisiana (2), Maryland (8), Missouri (2), Nebraska (15), New Mexico (1), New York (1), Ohio (12), Oregon (2), Pennsylvania (2), Tennessee (22), Texas (7), Washington (12), and Wisconsin (2)—were analyzed by DEA TOX for novel psychoactive substances (NPS), traditional recreational drugs (TRD), prescription or over the counter (OTC) drugs, dietary supplement stimulants (DSS), and precursors, additives, or impurities (P/A/I). The biological samples submitted consisted of 40 serum, 16 plasma, 65 whole blood, 25 urine, and 1 gastric fluid sample. Sixteen drug product samples were also analyzed originating from California (2), Florida (1), Indiana (1), and Washington (12). Overall, there were 134 cases; some cases had both biological sample(s) and drug product, one case had only drug product, and one case had a biological sample and multiple drug products.

DEA TOX identified and confirmed a total of 1,056 drugs and metabolites that consisted of 102 NPS detections, 432 TRD detections, 356 prescription or OTC drug detections, 109 DSS, and 57 P/A/I detections during this reporting period (Fig. 1A) While some drugs identified could be placed into more than one category, for the purposes of this report and consistency, DEA TOX placed such substances in a single category only. Many prescription drugs that are commonly abused and encountered are listed as TRD. Substances that are not approved by the Food and Drug Administration for medical use within the United States are considered NPS.

A breakdown of the 1,056 total drug and metabolite confirmations indicated 112 different drugs, which consisted of 19 NPS, 22 TRD, 61 prescription or OTC drugs, 3 DSS, and 6 P/A/I.

Of the cases submitted this quarter, 42 out of the 134 cases (31.3%) detected at least one NPS. In addition, 49 out of the 134 cases (36.6%) contained fentanyl.

Fig. 1A Detection frequency

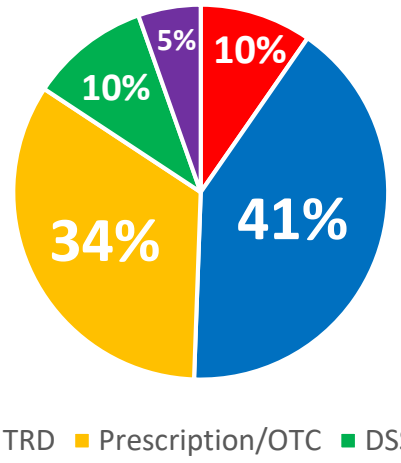
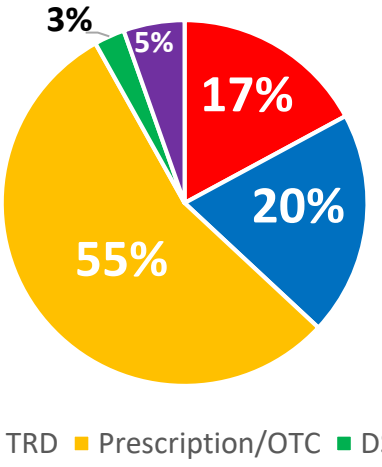


Fig. 1B Types of Drugs Detected



New Psychoactive Substances

DEA TOX confirmed 85 detections comprised of 17 NPS[§] (Table 1) from six different classes of drugs (Figure 2A) in biological samples from the third quarter of 2024. The total encounters for each NPS class are summarized in Figure 2B. An additional 17 NPS detections from drug products from two different drug classes are described in Table 6.

Figure 2A. Number of Substances Identified for Each NPS Class

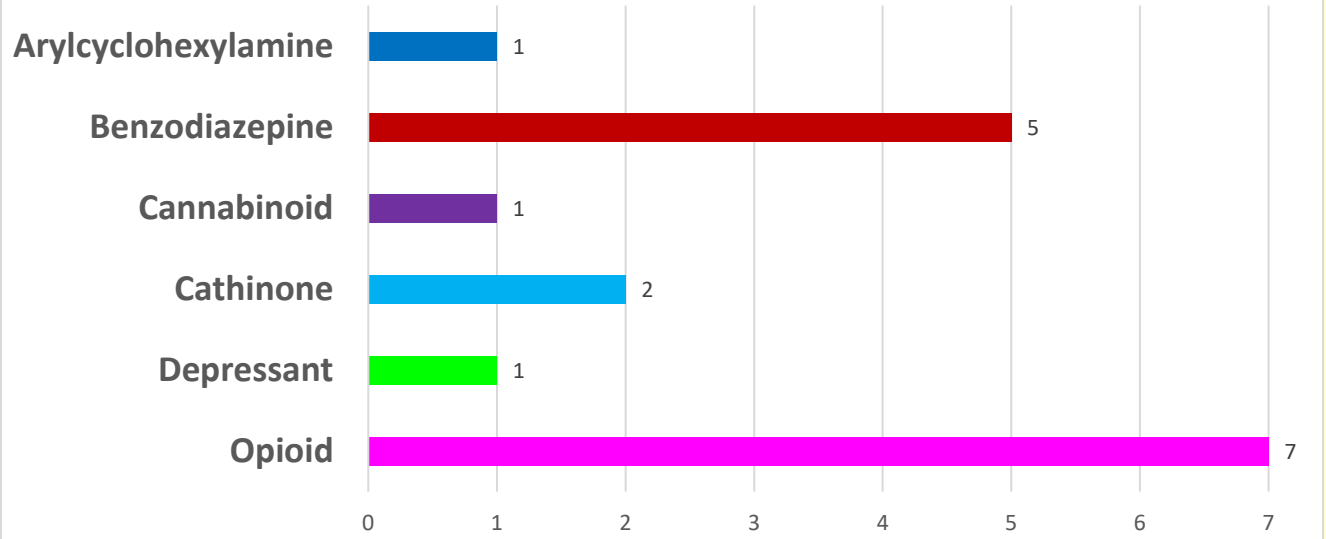


Figure 2B. Total Encounters for Each NPS Class

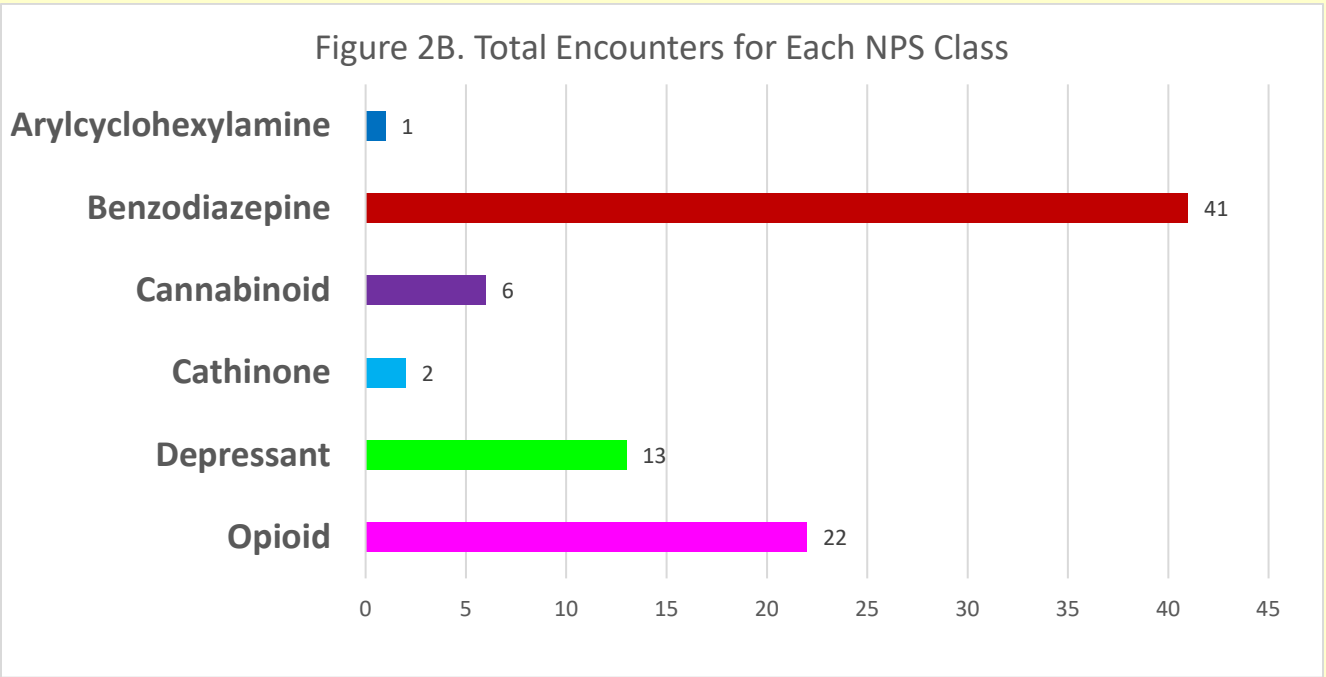


Table 1. NPS Detected in Biological Samples – Third Quarter 2024

Drug Class	Drug	Freq. (Fatal)	States Found*	Confirmed Levels (ng/mL)**			
				S	P	WB	U
Arylcyclo-hexylamine (1)	Rolicyclidine (PCPy)	1 (1)	MD			1.0	
Benzo-diazepine (5)	8-Amino Clonazolam	3 (3)	TN(3)			1.8–12.2	
	Alpha-Hydroxy Bromazolam	7 (5)	CA, KS, TN(5)			1.8–48.0	
	Bromazolam	26 (16)	CA(7), FL, KS, MD, OH(2), TN(12), WA(2)	0.2–44.1	20.6	0.1–175	
	Desalkylgidazepam	2 (2)	TN(2)			31.0–65.1	
	Etizolam	2 (0)	CA, OH	1.2–8.7			
	Flualprazolam	1 (1)	MD			5.7	
Cannabinoid (1)	11-nor-9-carboxy-delta-8-THC	5 (0)	KY, OH(2), OR, TX		218		576–14700
	Delta-8-THC	1 (0)	KY				651
Cathinone (2)	*N*,*N*-Dimethylpentylone	1 (1)	FL			113	
	Pentylone	1 (1)	FL			78.9	
Depressant (1)	Xylazine	12 (10)	CA, MD, NE(2), OH, PA, TN(6)	4.1–34.9		0.5–54.1	167
	4-OH Xylazine	1 (1)	PA				9.2

*CA – California; FL – Florida; KS – Kansas; KY – Kentucky; MD – Maryland; NE – Nebraska; OH – Ohio; OR – Oregon; PA – Pennsylvania; TN – Tennessee; TX – Texas; WA – Washington

**S – Serum; P – Plasma; WB – Whole Blood; U – Urine

§ – Parent drugs or metabolites are only counted once for the number of drugs detected in Tables 1–5. If only a metabolite is encountered in the absence of a parent drug, the metabolite will still be counted as a unique drug. Both parent drugs and metabolites are counted as detections.

Table 1 (Continued). NPS detected in Biological Samples – Third Quarter 2024

Drug Class	Drug	Freq. (Fatal)	States Found*	Confirmed Levels (ng/mL)**			
				S	P	WB	U
Opioid (7)	7-OH Mitragynine	5 (2)	CA(2), FL, OR, TN	8.9–33.1	15.4	0.8–565	
	Acetyl Fentanyl	1 (0)	OH	0.2			
	Despropionyl *para*-fluorofentanyl	1 (1)	TN			0.9	
	Isobutyryl Fentanyl	1 (1)	MD			7.3	
	Metonitazene	1 (1)	TN			0.5	
	Mitragynine	7 (3)	CA(2), FL, KS, OR, TN(2)	89.4–90.6	34.4	1.5–3100	216
	N-Pyrrolidino Etonitazene	1 (1)	NE			3.6	
	N-Pyrrolidino Protonitazene	1 (1)	TX			4.6	
	para-Fluorofentanyl	4 (3)	CA, NE, TN, WA	2.0–2.3		0.7–8.4	

*CA – California; FL – Florida; KS – Kansas; KY – Kentucky; MD – Maryland; NE – Nebraska; OH – Ohio; OR – Oregon; PA – Pennsylvania; TN – Tennessee; TX – Texas; WA – Washington

**S – Serum; P – Plasma; WB – Whole Blood; U – Urine

§ – Parent drugs or metabolites are only counted once for the number of drugs detected in Tables 1–5. If only a metabolite is encountered in the absence of a parent drug, the metabolite will still be counted as a unique drug. Both parent drugs and metabolites are counted as detections.

Traditional Recreational Drugs

DEA TOX confirmed 422 detections of 22 TRDs§ (Table 2) in biological samples in the third quarter of 2024. Ten additional TRD detections from drug products are described in Table 6.

Table 2. TRD Detected in Biological Samples – Third Quarter 2024

Drug Class	Drug	Freq.	States Found*	Confirmed Levels (ng/mL)**				
				S	P	WB	U	GC
Amphetamine (2)	4-OH Methamphetamine	3	CA, KY(2)				268	
	Amphetamine	19	FL, GA, IL, KS, KY(2), NE(6), TN(5), WA(2)	108–163		6.9–465	3720–19000	850
	Methamphetamine	38	CA(6), FL, KS(2), KY(2), NE(10), NY, TN(8), TX(2), WA(6)	18.1–2830	92.8	1.7–113000	12300–121000	
Arylcyclo-hexylamine (2)	Ketamine	5	FL, MO, NM, TX, WI	11.1	8.2–201	4860	27900	
	PCP	1	MD			728		
Cannabinoid (2)	11-nor-9-carboxy-delta-9-THC	16	CA(2), GA, IL, KY(4), MD(2), OH(2), TN, TX(3)			34.4–302	447–1730	
	Cannabidiol	3	KY, TN(2)			NQ	NQ	
	Delta-9-THC	10	CA(4), IL, MD(2), NE, TX(2)			155–2830		

*CA – California; FL – Florida; GA – Georgia; IL – Illinois; KS – Kansas; KY – Kentucky; MD – Maryland; MO – Missouri; NE – Nebraska; NY – New York; OH – Ohio; TN – Tennessee; TX – Texas; WA – Washington

**S – Serum; P – Plasma; WB – Whole Blood; U – Urine; NQ – Not Quantified

§ – Parent drugs or metabolites are only counted once for the number of drugs detected in Tables 1–5. If only a metabolite is encountered in the absence of a parent drug, the metabolite will still be counted as a unique drug. Both parent drugs and metabolites are counted as detections.

Table 2 (Continued). TRD in Biological Samples – Third Quarter 2024

Drug Class	Drug	Freq.	States Found*	Confirmed Levels (ng/mL)**				
				S	P	WB	U	GC
Cocaine (2)	Benzoylecgonine	32	CA(4), FL, KS, KY(3), MD(3), NE(3), NY, OH(3), PA, TN(4), TX(2), WA(6)	1.2–341	28.0	0.3–2980	14.6–902000	
	Cocaethylene	6	MD, NE, OH, TN(2), TX		NQ	NQ		
	Cocaine	14	CA(2), FL, KY, MD, NE(2), OH(2), PA, TN(2), TX, WA	0.2–4.3		1.1–328	13.7–5970	
	Ecgonine Methyl Ester	17	KS, KY(2), MD(2), NE(3), OH(3), PA, TN(3), TX, WA	NQ	NQ	NQ	NQ	
Kavalactone (3)	Dihydrokavain	1	GA					8.4
	Dihydro-methysticin	1	GA					4.6
	Kavain	1	GA					9.3
	Yongonin	1	GA					21.4

*CA – California; FL – Florida; GA – Georgia; KS – Kansas; KY – Kentucky; MD – Maryland; NE – Nebraska; NY – New York; OH – Ohio; PA – Pennsylvania; TN – Tennessee; TX – Texas; WA – Washington

**S – Serum; P – Plasma; WB – Whole Blood; U – Urine; NQ – Not Quantified

§ – Parent drugs or metabolites are only counted once for the number of drugs detected in Tables 1–5. If only a metabolite is encountered in the absence of a parent drug, the metabolite will still be counted as a unique drug. Both parent drugs and metabolites are counted as detections.

Table 2 (Continued). TRD in Biological Samples – Third Quarter 2024

Drug Class	Drug	Freq.	States Found*	Confirmed Levels (ng/mL)**				
				S	P	WB	U	GC
Opioids (9)	Beta-hydroxy Fentanyl	17	CA(6), KS(2), OH(3), PA, TN(2), WA(3)	1.4–52.7		0.4–14.3	21.4–115	
	Codeine	2	NE, KS			0.8-4.2		
	Desmethyl-*cis*-Tramadol	1	FL			11.4		
	Fentanyl	52	CA(6), FL, IL, KS(3), LA, MD(2), MO(2), NE(6), NY, OH(3), OR, PA, TN(10), TX(2), WA(12)	0.1–159		0.3–88.2	7.2–453	
	Hydrocodone	8	CA, FL, NE(3), TN(2), TX	1.6		2.1–159		
	Hydromorphone	1	NE			4.6		
	Morphine	5	KY, OH(3), OR	0.4–2.0	7.8		140–3680	
	Norfentanyl	42	CA(8), IL, KS(3), KY, MD(2), NE(3), NY, OH(3), OR, PA, TN(8), TX(2), WA(8)	0.2–124		0.2–152	1310–7460	
	Oxycodone	5	KS, NE(2), TN, WA	2290		17.0–108		
	Oxymorphone	2	TN, WA	73.6		155		
	Tramadol	1	FL			427		
Stimulant Alkaloid (1)	Cotinine	77	CA(9), FL(5), GA, IL(7), IN(2), KS, KY(6), LA, MD(4), NE(7), NM, NY, OH(8), PA(2), TN(15), TX, WA(5), WI	NQ	NQ	NQ	NQ	880
	Nicotine	38	FL(4), GA, IL(3), KS, KY(5), MD(4), NE(9), OH, TN(8), TX, WI			NQ	NQ	
	Nornicotine	2	CA, IL	NQ			NQ	
Tryptamine (1)	Psilocin	1	MD			37.1		

*CA – California; FL – Florida; GA – Georgia; IL – Illinois; IN – Indiana; KS – Kansas; KY – Kentucky; LA – Louisiana; MD – Maryland; NE – Nebraska; NM – New Mexico; NY – New York; OH – Ohio; PA – Pennsylvania; TN – Tennessee; TX – Texas; WA – Washington; WI – Wisconsin

**S – Serum; P – Plasma; WB – Whole Blood; U – Urine; GC – Gastric Contents; NQ – Not Quantified

§ – Parent drugs or metabolites are only counted once for the number of drugs detected in Tables 1–5. If only a metabolite is encountered in the absence of a parent drug, the metabolite will still be counted as a unique drug. Both parent drugs and metabolites are counted as detections.

Prescription and Over the Counter Drugs

DEA TOX confirmed 351 detections of 61 prescription or OTC drugs§ (Table 3) in the third quarter of 2024. Five additional PD/OTC drugs detections are described in Table 6. Drugs for the prescription/OTC drugs panel are not typically quantitated unless specifically requested thus "Confirmed Levels" are not provided.

Table 3. Prescription or OTC drugs detected in Biological Samples – Third Quarter 2024

Drug Class	Drug	Freq.	States Found*
Amphetamine (1)	Pseudoephedrine	3	PA, TN(2)
Anesthetic (2)	3-OH Medetomidine	1	PA
	Lidocaine	13	FL, IL, IN, NE, OH, PA, TN(5), TX(2)
	Medetomidine	2	LA, OH
Antibiotic (2)	Levofloxacin	1	TN
	Sulfamethoxazole	1	TN
Anticonvulsant (6)	Carbamazepine	2	CA, MD
	Gabapentin	11	FL, GA, NE(2), OH, TN(5), WA
	Lamotrigine	2	IL, OH
	Levetiracetam	5	KY, MO(2), NE, OH
	Oxcarbazepine	2	CA, MD
	Topiramate	2	IA, KY
Antidepressant (9)	Amitriptyline	2	OH, WI
	Citalopram	1	NE
	Doxepin	1	WA
	Duloxetine	1	CA
	mCPP**	7	CA, NE, OR, TN(2), TX, WA
	Mirtazapine	3	KS, TN, WA
	Nordoxepin**	2	CA, WA
	Nortriptyline**	2	NY, WI
	Paroxetine	1	TN
	Sertraline	2	IL, TN
	Trazodone	11	CA, IN, NE(2), OR, TN(4), TX, WA
	Venlafaxine	3	IL, OH, TX

**Compounds are expected metabolites of parent drugs, as follow:

Expected Metabolite	Parent Drug
mCPP	Trazodone
Nordoxepin	Doxepin
Nortriptyline	Amitriptyline

Table 3 (Continued). Prescription or OTC drugs in Biological Samples – Third Quarter 2024

Drug Class	Drug	Freq.	States Found*
Antidiabetic (1)	Metformin	4	NE(2), TN, WA
Antihistamine (6)	Cetirizine	1	TX
	Chlorpheniramine	3	NE, OH, WI
	Diphenhydramine	25	CA, FL, IL(2), LA, NE(6), NM, OH(2), TN(5), TX(2), WA(2), WI(2)
	Hydroxyzine	10	LA, MD, NE(2), OH, TN(3), TX, WA
	Loratadine	1	OH
	Promethazine	6	CA, FL, NE(2), TN(2)
Antipsychotic (6)	Chlorpromazine	1	OH
	Fluphenazine	1	OH
	Haloperidol	1	CA
	Olanzapine	5	NE(3), TN, WA
	Quetiapine	1	CA
	Risperidone	1	OH
Antiretroviral (2)	Emtricitabine	2	MD, NE
	Tenofovir	1	MD
Barbiturate (1)	Butalbital	3	IA, KS, WA
Benzodiazepine (5)	7-amino Clonazepam**	11	CA, KS, MD, NE(4), OH, TN(3)
	Alpha-hydroxy Alprazolam**	5	NE(4), TX
	Alpha-hydroxy Midazolam**	4	KY(2), TX, WI
	Alprazolam	13	CA(2), FL, GA, KS, LA, NE(6), TX
	Clonazepam	6	CA, KS, NE(3), OH
	Desalkylflurazepam**	1	KY
	Diazepam	3	IN, WA(2)
	Lorazepam	6	IL, KY, MO(2), OH, TX
	Midazolam	11	CA, IN, KY(3), LA, NM, OH, OR, TX, WI
	Nordiazepam**	6	IN, KY, LA, MD, WA(2)
	Oxazepam**	4	IN, KY, MD, WA
	Temazepam**	3	IN, KY, MD

**Compounds are expected metabolites of parent drugs, as follow:

Expected Metabolite	Parent Drug
7-Amino Clonazepam	Clonazepam
Alpha-Hydroxy Alprazolam	Alprazolam
Alpha-Hydroxy Midazolam	Midazolam
Desalkylflurazepam	Midazolam
Nordiazepam	Diazepam
Oxazepam	Diazepam
Temazepam	Diazepam

Table 3 (Continued). Prescription or OTC drugs in Biological Samples – Third Quarter 2024

Drug Class	Drug	Freq.	States Found*
Cardiovascular (9)	Amiodarone	2	IN, WI
	Atorvastatin	2	KY, TN
	Atropine	1	MO
	Carvedilol	3	IN, KY, TN
	Clonidine	3	GA, KY, NE
	Diltiazem	2	OH, TN
	Lisinopril	4	KY(2), OR, TN
	Metoprolol	5	FL, KY(2), MD, NE
	Propranolol	1	GA
Cough Suppressant (2)	Dextromethorphan	7	FL, LA, MD, NE, OH(2), TN
	Dextrorphan	3	NE, OH(2)
Nasal Decongestant (1)	Phenylephrine	1	PA
Diuretic (2)	Furosemide	2	KY, NM
	Hydrochlorothiazide	2	KY, LA
Muscle Relaxant (2)	Baclofen	1	LA
	Cyclobenzaprine	4	FL, MD, TN, WA
Opioid (3)	Buprenorphine	4	GA, KY, NE, TN
	EDDP**	3	MD, OH, WA
	Methadone	5	MD, OH, TN, WA
	Naloxone	23	FL, IL(3), KS(2), LA, MD(3), NE(5), OH(3), TN(4), TX
	Norbuprenorphine**	3	GA, KY, NE
Pain Reliever (1)	Acetaminophen	50	CA(3), FL(2), IA, IL(4), IN, KS(3), KY(4), MD(2), MO(2), NE(8), NM, OH(4), PA(2), TN(2), TX(2), WA(7), WI(2)

**Compounds are expected metabolites of parent drugs, as follow:

Expected Metabolite	Parent Drug
EDDP	Methadone

Expected Metabolite	Parent Drug
Norbuprenorphine	Buprenorphine

*CA – California; FL – Florida; GA – Georgia; IA – Iowa; IL – Illinois; IN – Indiana; KS – Kansas; KY – Kentucky; LA – Louisiana; MD – Maryland; MO – Missouri ; NE – Nebraska; NM – New Mexico; NY – New York; OH – Ohio; OR – Oregon; PA – Pennsylvania; TN – Tennessee; TX – Texas; WA – Washington; WI – Wisconsin

§ – Parent drugs or metabolites are only counted once for the number of drugs detected in Tables 1–5. If only a metabolite is encountered in the absence of a parent drug, the metabolite will still be counted as a unique drug. Both parent drugs and metabolites are counted as detections.

Dietary Supplement Stimulants

DEA TOX confirmed 109 detections of 4 DSS (Table 4) in biological samples in the third quarter of 2024.

Table 4. DSS Detected in Biological Samples – Third Quarter 2024

Drug	Freq.	States Found*
Caffeine	106	CA(12), FL(5), GA, IA, IL(10), IN(3), KS, KY(6), LA(2), MD(7), MO, NE(13), NM, OH(8), OR(2), PA, TN(17), TX(2), WA(11), WI(2)
Melatonin	1	TN
Theobromine	1	GA
Yohimbine	1	CA

*CA – California; FL – Florida; GA – Georgia; IA – Iowa; IL – Illinois; IN – Indiana; KS - Kansas; KY – Kentucky; LA – Louisiana; MD – Maryland; NE – Nebraska; NM – New Mexico; OH – Ohio; OR – Oregon; PA – Pennsylvania; TN – Tennessee; TX – Texas; WA – Washington; WI – Wisconsin

Precursors/Additives/Impurities

DEA TOX confirmed 55 detections of 6 P/A/I§ (Table 5) in biological samples in the third quarter of 2024. Three additional P/A/I detections in drug products are described in Table 6.

Table 5. P/A/I Detected in Biological Samples – Third Quarter 2024

Drug Class	Drug	Freq.	States Found*	Confirmed Levels (ng/mL)**			
				S	P	WB	U
Adulterant (2)	Levamisole	4	NE, NY, TX, WA	0.3–35.9		3.8–24.6	
	Quinine	14	CA(2), IL, MD, OH(2), TN(7), WA	2.0–4490		2.3–296	433
Impurity (1)	*N*,*N*-dimethyl amphetamine	5	KY(2), NE(3)			2.3–15.3	1360–1990
Precursor (3)	4-ANPP	30	CA(7), FL, MD, NE(2), OH(2), PA, TN(6), WA(10)	0.2–20.2		0.3–19.7	8.2–15.0
	N-Methyl Norfentanyl	1	CA	0.8			
	NPP	1	KS			3.6	

*CA – California; FL – Florida; IL – Illinois; KS – Kansas; KY – Kentucky; MD – Maryland; NE – Nebraska; NY – New York; OH – Ohio; PA – Pennsylvania; TN – Tennessee; TX – Texas; WA – Washington

**S – Serum; P – Plasma; WB – Whole Blood; U – Urine

§ – Parent drugs or metabolites are only counted once for the number of drugs detected in Tables 1–5. If only a metabolite is encountered in the absence of a parent drug, the metabolite will still be counted as a unique drug. Both parent drugs and metabolites are counted as detections.

Drug Products

DEA TOX confirmed 78 detections of 15 drugs (Table 6) in 16 drug product samples analyzed in the third quarter of 2024.

Table 6. Drugs Detected in Drug Products – Third Quarter 2024

Drug Class	Drug Subclass	Drug	Freq.	States Found*	Level
New Psychoactive Substances	Depressant (1)	Xylazine	2	WA(2)	152–310 µg
	Opioid (5)	7-OH Mitragynine	1	OR	240 µg
		Acetyl Fentanyl	3	CA(2), WA	12-58 µg
		Despropionyl-*para*-Fluorofentanyl	2	CA(2)	1.1–6.0 µg
		Mitragynine	1	OR	380 mg
		para-Bromofentanyl	2	WA(2)	50 ng–0.8 µg
		para-Chlorofentanyl	1	WA	200 ng
		para-Fluorofentanyl	5	CA(2), WA(3)	220 ng–46 µg
Traditional Recreational Drugs	Amphetamine (1)	Methamphetamine	4	CA, WA(3)	1.5–21.2 µg
	Cannabinoid (2)	Delta-9-THC	1	IN	261 mg
		Cannabinol	1	IN	2.2 mg
	Cocaine (1)	Cocaine	2	CA, WA	16 µg–24.6 mg
		Benzoylecgonine	1	WA	48 µg
		Ecgonine Methyl Ester	1	WA	8.1 µg
	Opioid (1)	Fentanyl	14	CA(2), WA(12)	7.4 µg–68.7 mg
		Norfentanyl	11	CA(2), WA(9)	1.0–60.0 µg
Prescription and Over-the-Counter Drugs	Anesthetic (1)	Lidocaine	2	WA(2)	140 ng–1.1 µg
	Pain Reliever (1)	Acetaminophen	9	CA, WA(8)	3.2 µg–60.6 mg
Adulterants, Impurities Precursors	Precursor (2)	4-ANPP	13	CA(2), WA(11)	290 µg–29.5 mg
		N-Boc Norfentanyl	2	WA(2)	4.6–250 µg

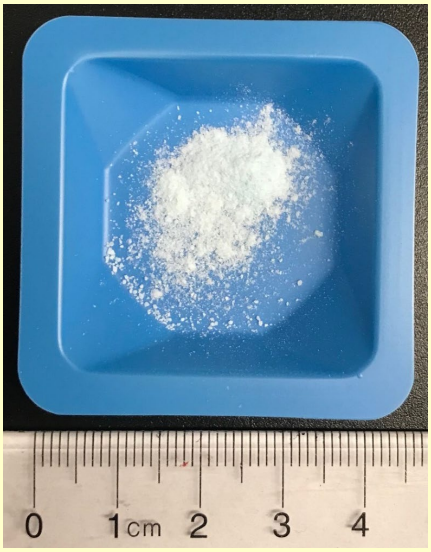
*CA – California; IN – Indiana; OR – Oregon; WA – Washington

§ – Parent drugs or metabolites are only counted once for the number of drugs detected in Tables 1–5. If only a metabolite is encountered in the absence of a parent drug, the metabolite will still be counted as a unique drug. Both parent drugs and metabolites are counted as detections.

Select Drug Product Exhibits:

Table 7. Drug Product Exhibit #1: Total Exhibit Weight: 90.9 mg

Drug Class	Drug	State Found*	Confirmed Levels	Actual Amount within Drug Product
TRD	Fentanyl	CA	110 µg/mg	10 mg
P/A/I	4-ANPP		7.9 µg/mg	720 µg
PD	Acetaminophen		1.6 µg/mg	150 µg
TRD	Cocaine		180 ng/mg	16 µg
NPS	Acetyl Fentanyl		130 ng/mg	12 µg
NPS	*Para*-Fluorofentanyl		95 ng/mg	8.6 µg
TRD	Methamphetamine		60 ng/mg	5.5 µg
NPS	Despropionyl-*para*-Fluorofentanyl		12 ng/mg	1.1 µg
TRD	Norfentanyl		12 ng/mg	1.1 µg



*CA – California

Table 8. Drug Product Exhibit #2: Total Exhibit Weight: 10.3 mg

Drug Class	Drug	State Found*	Confirmed Levels	Actual Amount within Drug Product
TRD	Fentanyl	WA	765 mg/g	7.9 mg
TRD	4-ANPP		224 mg/g	2.3 mg
NPS	Acetyl Fentanyl		5.65 mg/g	58 µg
P/A/I	*N*-Boc Norfentanyl		448 µg/g	4.6 µg
TRD	Norfentanyl		308 µg/g	3.2 µg
NPS	*para*-Chlorofentanyl		16.1 µg/g	200 ng
NPS	*para*-Bromofentanyl		4.8 µg/g	50 ng

Table 9. Drug Product Exhibit #3: Total Exhibit Weight: 182.1 mg

Drug Class	Drug	State Found*	Confirmed Levels	Actual Amount within Drug Product
PD	Acetaminophen	WA	185 mg/g	33.7 mg
TRD	Fentanyl		136 mg/g	24.8 mg
P/A/I	4-ANPP		31 mg/g	5.6 mg
NPS	Xylazine		1.7 mg/g	310 µg
TRD	Norfentanyl		20 µg/g	3.6 µg
PD	Lidocaine		6 µg/g	1.1 µg

*WA – Washington

Contact Information

We invite medical and law enforcement facilities to contact our program if you encounter an overdose of a suspected synthetic drug and desire to have any leftover biological samples (blood preferred) analyzed further for such synthetic substances.

- **Sample Qualifications:**
  - Patients thought to have ingested a synthetic drug, where the traditional drug screen has produced little or no viable options to explain the symptoms exhibited by the patient (alcohol and THC are exempted).
- **How to Contact Us and Send Your Samples:**
  - Once the above qualifications are satisfied:
    - Email **DEATOX@DEA.GOV** with a brief description of the case (including initial toxicology screen and history) and a request for testing.
    - DEA will respond to each inquiry, and if approved, will send the instructions for packing and shipping of sample(s) to UCSF.
      - The main reason for disapproval of a case would be the identification of substances (including methamphetamine, heroin, fentanyl, cocaine, LSD, PCP, etc.) in a routine toxicology screening at your facility.
      - This program's goal is to connect symptom causation to abuse of newly emerging synthetic drugs (e.g., synthetic cannabinoids, synthetic cathinones, fentanyl-related substances, other hallucinogens).
  - Ensure that you de-identify and label the sample with a numerical value, sex, date of birth or age, and the date and time the sample was collected in accordance with the labeling instructions (sent with shipping instructions).
  - Keep a master list of the patients and the numerical values you allocated to each sample at your institution.
- **Cost of Sample Analysis:**
  - DEA will cover the full cost of testing the patient samples.
    - The sender will only be responsible for paying for packing and shipping samples to UCSF.
- **Turn-around Time:**
  - Results are expected within three to four weeks of receipt of the sample at UCSF except in rare occurrences when a novel substance is identified.

Public Domain Notice

Suggested citation:
U.S. Drug Enforcement Administration, Diversion Control Division (2025). *DEA TOX: Quarterly Report – Third Quarter 2024*. Springfield, VA.

OBTAINING COPIES OF THIS PUBLICATION
Electronic copies of this publication can be downloaded from the DEA TOX website at:
https://www.deadiversion.usdoj.gov/dea_tox/index.html.

This report was produced in conjunction with the CTEB laboratory at UCSF.

Clinical Toxicology
and Environmental Biomonitoring Laboratory

DEA PRB-2025-13-3rdQtr