



DEA TOX

DRUG ENFORCEMENT ADMINISTRATION
TOXICOLOGY TESTING PROGRAM

QUARTERLY REPORT

Second Quarter – 2024



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

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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, etc.).

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 1013 are new psychoactive substances.

This publication presents the results of cases analyzed and completed by the CTEB laboratory from April 1, 2024, through June 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 April 1, 2024 and June 30, 2024, 136 biological samples from 127 cases originating from 15 states namely, Arizona (3), California (1), Colorado (1), Florida (13), Illinois (28), Indiana (1), Kansas (5), Kentucky (11), Maryland (10), Nebraska (15), New Mexico (3), Oregon (2), Tennessee (27), Texas (6), and Utah (1) were analyzed by DEA TOX. These samples were analyzed 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 23 serum, 12 plasma, 89 whole blood, one liver tissue, and 11 urine samples. 16 drug product samples were also analyzed originating from Arizona (2), California (9), Florida (1), Illinois (2), Maryland (1), and Oregon (1). Overall, there were 133 total cases which included those with biological samples and/or drug products.

DEA TOX identified and confirmed a total of 1,295 drugs and metabolites that consisted of 175 NPS detections, 535 TRD detections, 396 prescription or OTC drug detections, 98 DSS, and 91 P/A/I detections during this reporting period (Fig. 1A)¹. While some drugs identified could be placed in more than one category, for purposes of this report and for 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 U.S. are considered NPS.

A breakdown of the 1,295 total drug and metabolite confirmations demonstrated 114 different drugs, which consisted of 23 NPS, 23 TRD, 59 prescription or OTC drugs, 3 DSS, and 6 P/A/I.

Of the cases submitted this quarter, 79 out of the 133 cases (59.4%) detected at least one NPS. In addition, 70 out of the 133 cases (52.6%) contained fentanyl.

Fig. 1A Detection frequency

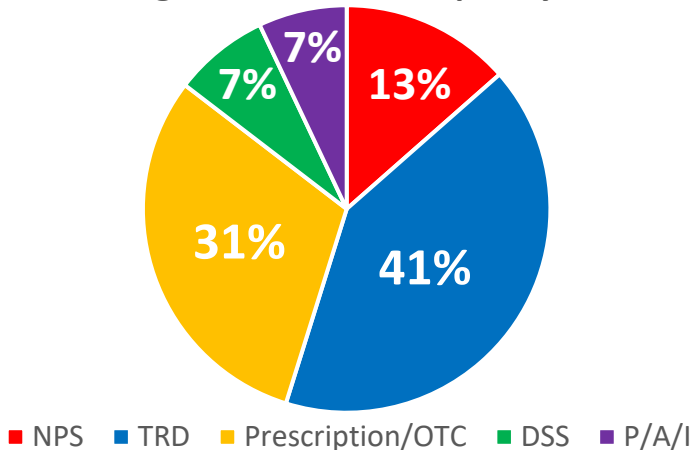
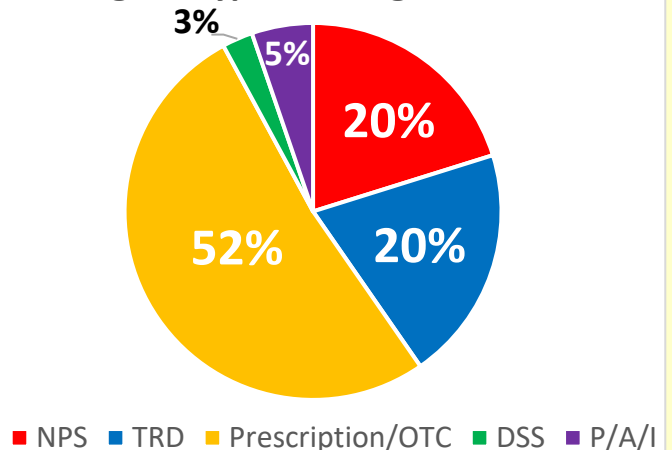
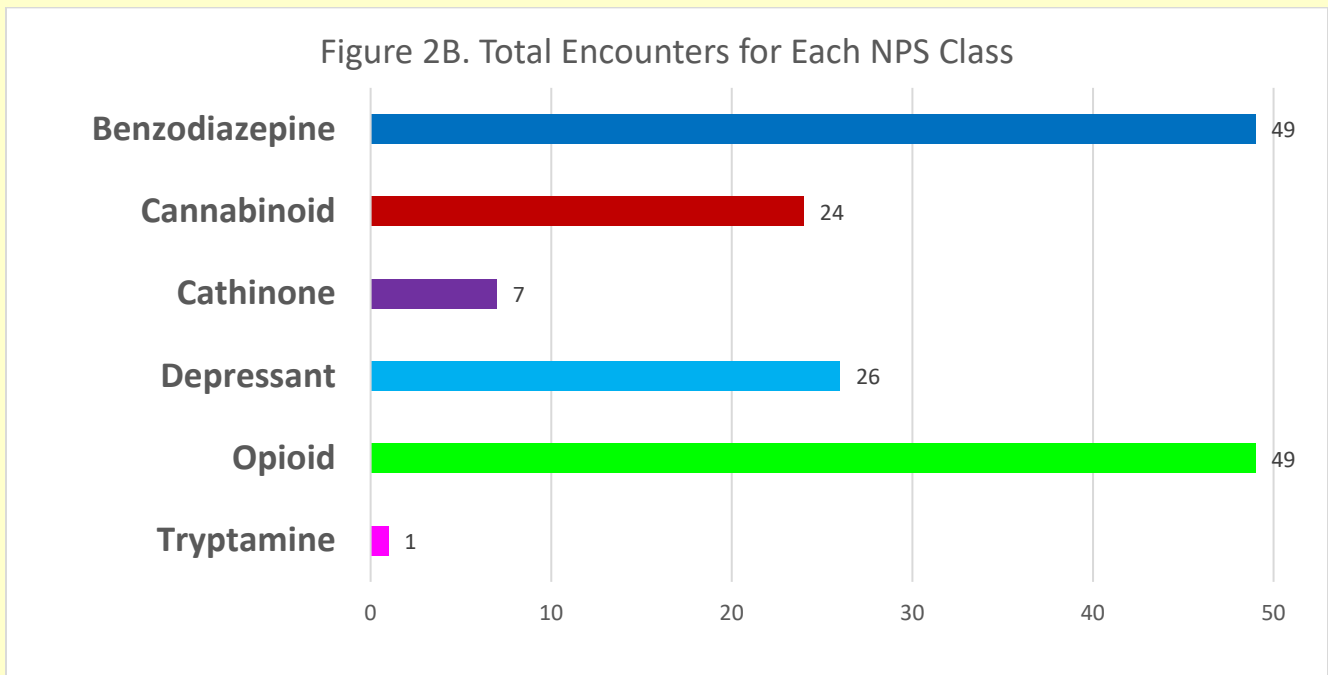
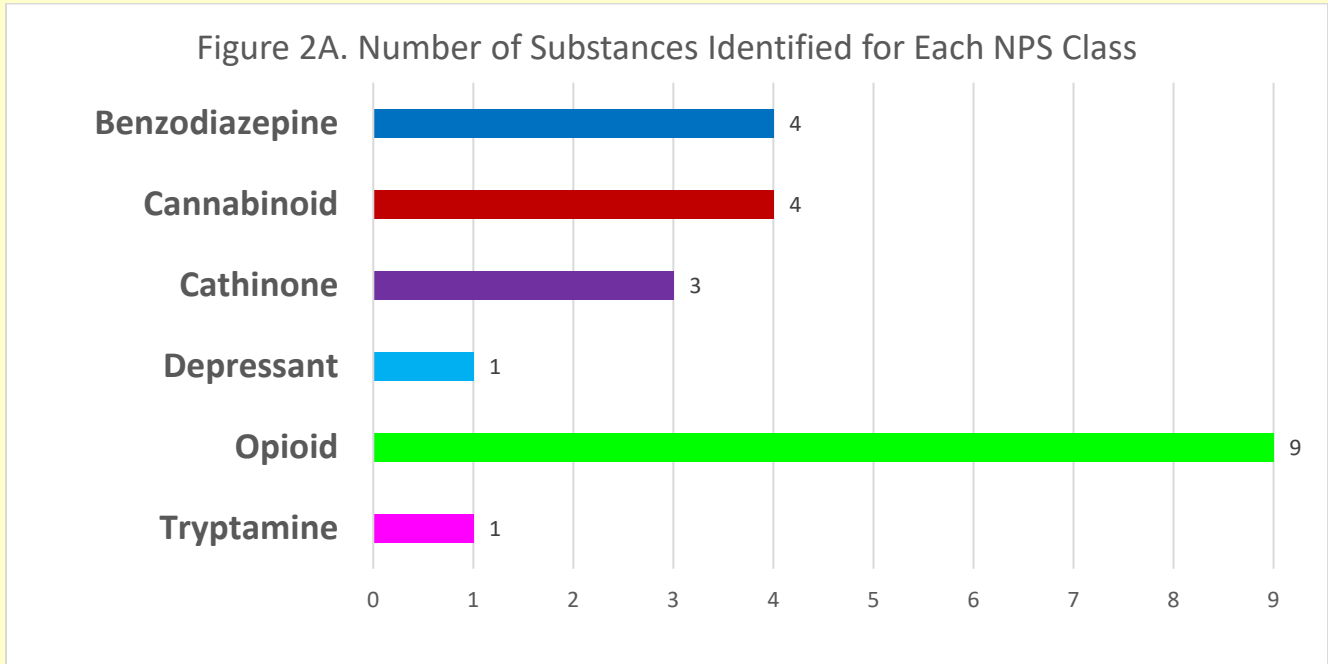


Fig. 1B Types of Drugs Detected



New Psychoactive Substances

DEA TOX confirmed 156 detections comprising of 22 NPS^s (Table 1) from six different classes of drugs (Figure 2A) in biological samples in the first quarter of 2024. The total encounters for each NPS class are summarized in Figure 2B. An additional 20 NPS detections from drug products are described in Table 6.



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Table 1. NPS detected in Biological Samples – Second Quarter 2024

Drug Class	Drug	Freq. (Fatal)	States Found*	Confirmed Levels (ng/mL)**			
				S	P	WB	U
Benzo-diazepine (4)	8-Amino Clonazolam	3 (3)	TN(3)			0.4-6.1	
	Alpha-Hydroxy Bromazolam	6 (4)	CO, KY, OR, TN(2), TX	3.5		0.9-6.4	352
	Clonazolam	1 (0)	IL	0.8			
	Bromazolam	31 (28)	CO, FL, IL(8), KY, MD, OR, TN(16), TX(2)	0.2-152		0.3-154	48.7
	Desalkylgidazepam	4 (1)	IL, KY, OR, TN	0.4		1.7-103	
	Flualprazolam	4 (1)	IL(2), KY, NE	5.9		1.6-40.4	
Cannabinoid (4)	11-nor-9-carboxy-delta-8-THC	7 (0)	AZ, IN, KY, OR, TX(3)	193-225	8730-20100		345
	ADB-BUTINACA	2 (2)	MD(2)			0.5-1.3	
	Delta-8-THC	2 (0)	KY, TX		31.0-265		
	MDMB-4en-PINACA	4 (3)	FL, KS, KY, MD			0.4-4.4	
	MDMB-4en-PINACA acid metabolite	5 (4)	FL, KS, KY, MD(2)			4.2-65.1	
	MDMB-BUTINACA	2 (1)	KY, MD			0.4-13.1	
	MDMB-BUTINACA acid metabolite	2 (1)	KY, MD			8.7-241	
Cathinone (3)	Alpha-PiHP	1 (1)	TN			6.7	
	<i>N,N</i> -Dimethylpentylone	3 (3)	FL(3)	15.7		6.7-375	
	Pentylone	3 (3)	FL(3)	17.8		0.5-347	

*AZ – Arizona; CO – Colorado; FL – Florida; IL – Illinois; IN – Indiana; KS – Kansas; KY - Kentucky; MD - Maryland; NE – Nebraska; OR – Oregon; TN – Tennessee; TX – Texas.

**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, it will still be counted as a unique drug. Both parent drugs and metabolites are counted as detections.

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

Drug Class	Drug	Freq. (Fatal)	States Found*	Confirmed Levels (ng/mL)**			
				S	P	WB	U
Depressant	Xylazine	26 (14)	IL(9), KS(2), KY(2), MD, NE, TN(11)	5.9- 56.3		0.1- 220	54.5
Opioid (9)	4'-Hydroxy Nitazene	1 (1)	CO				151
	7-OH Mitragynine	5 (4)	FL, NE, NM, TN(2)			4.3- 67.4	11300
	Acetyl Fentanyl	1 (1)	TN			3.9	
	Brorphine	1 (1)	TN			0.8	
	Despropionyl <i>para</i> -fluorofentanyl	8 (6)	IL, KY, NE, TN(4), TX			0.1-2.7	
	Metonitazene	5 (5)	TN(5)			0.2-2.9	
	Mitragynine	9 (6)	FL, KY, MD, NE(2), NM, TN(3)		244	2.1- 796	34600
	<i>N</i> -Desethyl Metonitazene	2 (2)	TN(2)			2.5-3.8	
	<i>N</i> -Pyrrolidino Etonitazene	1 (1)	TN			0.7	
	<i>N</i> -Pyrrolidino Protonitazene	2 (2)	TN, TX			2.2-2.4	
	<i>para</i> -Fluorofentanyl	10 (9)	KS, MD, NE, TN(6), TX	1.0		0.1- 35.8	
	Protonitazene	2 (2)	TN(2)			0.6-1.4	
	Tianeptine	2 (1)	NE, TN			4.9- 212	
Tryptamine	Ibogaine	1 (1)	MD	5330			

* CO – Colorado; FL – Florida; IL – Illinois; KS – Kansas; KY - Kentucky; MD - Maryland; NE – Nebraska; NM – New Mexico; OR – Oregon; TN – Tennessee; TX – Texas.

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Traditional Recreational Drugs

DEA TOX confirmed 451 detections of 17 TRDs[§] (Table 2) in biological samples in the second quarter of 2024. 86 additional TRD detections from drug products are described in Table 6.

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

Drug Class	Drug	Freq.	States Found*	Confirmed Levels (ng/mL)**			
				S	P	WB	U
Amphetamine (2)	4-OH Methamphetamine	2	KY, NE			19.5	991
	Amphetamine	17	FL, IL, KS, KY, MD, NE(6), TN(6)			24.3-847	8240
	Methamphetamine	30	FL(2), IL, KS, KY(4), NE(8), NM(2), OR, TN(10), TX		17.9-300	0.6-8090	44400
Arylcyclohexylamine (2)	Ketamine	7	FL, IL(2), KY, TN(2), TX	6.2-229		0.7-23.0	
	PCP	1	IL	12.3			
Cannabinoid (2)	11-nor-9-carboxy-delta-9-THC	10	AZ(3), FL(2), IL, IN, NM, TN(2)	28.0		16.5-279	232-6070
	Cannabidiol	2	AZ, OR			NQ	NQ
	Delta-9-THC	2	FL, TN			2.5-221	
Cocaine (2)	Benzoyllecgonine	42	FL(3), IL(18), KY(3), MD, NE(7), TN(9), TX	22.8-3000	1.2	0.3-5510	18200
	Cocaethylene	8	NE(6), TN, TX			NQ	
	Cocaine	20	IL(8), KY, NE(7), TN(3), TX	0.8-221		1.2-3510	24.1
	Ecgonine Methyl Ester	35	FL, IL(15), KY(3), MD, NE(7), TN(7), TX	NQ		NQ	NQ

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

Drug Class	Drug	Freq.	States Found*	Confirmed Levels (ng/mL)**			
				S	P	WB	U
Opioids (8)	6-Acetyl Morphine	1	TN			85.7	
	Beta-hydroxy Fentanyl	31	IL(15), KY(3), NE(3), NM(2), TN(7), TX	0.5-5.7	2.2-12.2	0.4-12.3	131
	Codeine	8	FL(2), IL(2), MD, NE, TN(2)	0.2-0.6		0.2-645	
	Desmethyl- <i>cis</i> -Tramadol	1	KS			43.7	
	Fentanyl	68	IL(25), KS(3), KY(4), MD, NE(8), NM(3), OR(2), TN(20), TX(2)	0.5-39.3	1.5-60.0	0.1-1710	47.2-1200
	Hydrocodone	1	KY			2.8	
	Morphine	15	AZ, FL, IL(8), MD, TN(4)	0.7-15.6		10.3-2100	10000
	Norfentanyl	61	FL(2), IL(23), KS(3), KY(4), MD(2), NE(6), NM(3), OR, TN(15), TX(2)	0.4-18.1	2.2-6.1	0.1-39.0	8.0-278
	Oxycodone	5	FL, MD, NE, TN(2)			1.7-87.6	
	Tramadol	3	KS, NE, TN			0.2-77.3	
Stimulant Alkaloid (1)	Cotinine	33	AZ(2), CO, FL(3), IL(5), KS(2), KY(3), MD(3), NE(3), NM, TN(10)	NQ		NQ	NQ
	Nicotine	44	AZ(2), CO, FL(2), IL(3), KS(3), KY(3), MD(3), NE(7), NM, TN(18), TX			NQ	NQ
	Nornicotine	4	KY(2), TN(2)			NQ	NQ

*AZ – Arizona; CO – Colorado; FL – Florida; IL – Illinois; KS – Kansas; KY – Kentucky; MD – Maryland; NE – Nebraska; NM – New Mexico; OR – Oregon; TN – Tennessee; TX – Texas;

**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, it will still be counted as a unique drug. Both parent drugs and metabolites are counted as detections.

NQ = Not Quantified

Prescription and Over the Counter Drugs

DEA TOX confirmed 393 detections of 61 prescription or OTC drugs[§] (Table 3) in the second quarter of 2024. Seven additional prescription/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 – Second Quarter 2024

Drug Class	Drug	Freq.	States Found*
Amphetamine (1)	Pseudoephedrine	2	KY(2)
Anesthetic (2)	Lidocaine	20	FL(2), IL(2), KS, KY(3), MD(3), NE, TN (6), TX(3)
	Medetomidine	15	IL(14), OR
Antidiarrheal (1)	Loperamide	1	CO
Antibiotic (1)	Sulfamethoxazole	2	KY, TN
Anticonvulsant (5)	Gabapentin	8	IL, KS, NE, TN(5)
	Lamotrigine	2	NE, TN
	Levetiracetam	10	AZ(2), FL, IL(2), KY(3), TN, UT
	Phenytoin	1	UT
	Topiramate	1	KY
Antidepressant (9)	Amitriptyline	1	TN
	Citalopram	3	MD, TN(2)
	Doxepin	1	KY
	mCPP**	9	IL(3), NE, TN(5)
	Mirtazapine	2	FL, TN
	Nordoxepin**	1	KY
	Nortriptyline**	2	MD, TN
	Paroxetine	1	CA
	Protriptyline	1	KY
	Sertraline	5	FL, KS, KY, NE, UT
	Trazodone	11	FL, IL(4), NE, TN(4), UT
	Venlafaxine	1	NE

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

Expected Metabolite	Parent Drug
mCPP	Trazodone
Nordoxepin	Doxepin
Nortriptyline	Amitriptyline

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

Drug Class	Drug	Freq.	States Found*
Antidiabetic (1)	Metformin	2	CA, IL
Antihistamine (6)	Brompheniramine	1	KY
	Chlorpheniramine	1	TN
	Diphenhydramine	50	IL (24), KY (7), MD, NE (3), TN (14), TX
	Doxylamine	1	TN
	Hydroxyzine	4	IL, NE, TN, UT
	Promethazine	5	IL, KY(2), TN(2)
Antipsychotic (5)	Aripiprazole	5	NE(2), TN(2), TX
	Droperidol	1	KY
	Haloperidol	2	IL, TN
	Olanzapine	3	IL, MD, NE
	Quetiapine	10	IL(5), OR, TN(4)
	Risperidone	2	TN, UT
Antiretroviral (1)	Emtricitabine	1	KY
Anxiolytic (2)	Buspirone	1	TX
	Meprobamate	1	KY
Barbiturate (1)	Butalbital	3	FL, KS, KY
Benzodiazepine (5)	7-amino Clonazepam**	8	IL (2), KY, NE (2), TN (3)
	Alpha-hydroxy Alprazolam**	5	KY, MD, NE, TN(2)
	Alprazolam	13	FL (2), KY, MD, NE (2), TN (7)
	Clonazepam	4	IL, KY, NE(2)
	Desalkylflurazepam**	1	TN
	Diazepam	3	FL, MD, TN
	Lorazepam	9	AZ (3), IL, KY, NE, TN (2), UT
	Midazolam	18	AZ (3), IL (3), KY (5), NM (2), OR (2), TN (2), UT
	Nordiazepam**	4	CO, FL, MD, TN
	Oxazepam**	3	CO, FL, MD
	Temazepam**	3	CO, FL, MD
Bronchodilator (1)	Albuterol	2	IL, KY

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

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

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

Drug Class	Drug	Freq.	States Found*
Cardiovascular (9)	Amiodarone	1	FL
	Atorvastatin	3	AC, NE, TN
	Atropine	8	AZ (2), IL (2), TN (4)
	Carvedilol	2	TN (2)
	Clonidine	2	KY, TN
	Diltiazem	1	TN
	Lisinopril	1	IL
	Metoprolol	5	IL (2), NE, TN (2)
	Propranolol	1	KY
Cough Suppressant (2)	Dextromethorphan	8	IL, KY (3), NE (2), TN (2)
	Dextrorphan	4	KY(3), TN
Diuretic (1)	Furosemide	3	IL(2), OR
Muscle Relaxant (2)	Baclofen	2	KY, NE
	Cyclobenzaprine	4	FL, MD, NE, TN
Opioid (3)	Buprenorphine	2	IL, KY
	EDDP**	8	IL (6), TN (2)
	Methadone	9	IL (7), TN (2)
	Naloxone	25	FL (2), IL (4), KS, KY, MD (2), NE (3), TN (10), TX (2)
	Norbuprenorphine**	1	KY
Pain Reliever (1)	Acetaminophen	37	FL, IL (9), KS (2), KY (4), MD (5), NE (5), NM, OR, TN (8), TX
Sedative (1)	Zopiclone	1	KY
Stimulant (1)	Methylphenidate	1	MD

*AZ – Arizona; CA – California; CO – Colorado; FL – Florida; IL – Illinois; KS – Kansas; KY – Kentucky; MD – Maryland; NE – Nebraska; NM – New Mexico; OR – Oregon; TN – Tennessee; TX – Texas; UT – Utah.

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

Expected Metabolite	Parent Drug	Expected Metabolite	Parent Drug
EDDP	Methadone	Norbuprenorphine	Buprenorphine

§ - 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, it will still be counted as a unique drug. Both parent drugs and metabolites are counted as detections.

OTC = Over the Counter

Dietary Supplement Stimulants

DEA TOX confirmed 86 detections of three DSS (Table 4) in biological samples in the second quarter of 2024. 13 additional DSS drug detections are described in Table 6.

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

Drug	Freq.	States Found*
Caffeine	82	CA, FL(6), IL(14), KS(4), KY(9), MD(5), NE(11), NM(3), OR(2), TN(23), TX(3), UT
Melatonin	1	TN
Yohimbine	3	KY, MD, TN

*CA – California; FL – Florida; IL – Illinois; KS – Kansas; KY – Kentucky; MD – Maryland; NE – Nebraska; NM – New Mexico; OR – Oregon; TN – Tennessee; TX – Texas; UT – Utah

Precursors/Additives/Impurities

DEA TOX confirmed 89 detections of 6 P/A/I[§] (Table 5) in biological samples in the second quarter of 2024. Eight additional P/A/I detections in drug products are described in Table 6.

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

Drug Class	Drug	Freq.	States Found*	Confirmed Levels (ng/mL)**			
				S	P	WB	U
Adulterant (3)	Levamisole	5	FL, NE(3), TX	0.1		15.4-269	
	Phenacetin	1	IL			0.2	
	Quinine	38	IL(20), KY(4), MD, NE, TN (12)	0.9-538	2.8-60.6	0.5-1980	167
Impurity (1)	<i>N,N</i> -dimethyl amphetamine	7	KS, NE(4), TN(2)			6.0-50.0	
Precursor (2)	4-ANPP	37	IL(8), KS, KY(3), NE(6), NM, TN(17), TX	0.6-2.7		0.1-79.4	43.2
	<i>N</i> -Boc Norfentanyl	1	TN			11.1	

*FL – Florida; IL – Illinois; KS – Kansas; KY – Kentucky; MD – Maryland; NE – Nebraska; NM – New Mexico; TN – Tennessee; TX – Texas.

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

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Drug Products

DEA TOX confirmed 134 detections of 33 drugs (Table 6) in 16 drug product samples analyzed in the second quarter of 2024.

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

Drug Class	Drug Subclass	Drug	Freq.	States Found*	Level
New Psychoactive Substances	Benzodiazepine (2)	Clonazolam	1	IL	170ng
		Flualprazolam	1	IL	1.92µg
	Opioid (5)	Acetyl Fentanyl	1	IL	50ng
		Brorphine	1	IL	30ng
		Metonitazene	1	IL	1.11µg
		Mitragynine	3	AZ, CA, MD	9.7-68µg
		<i>para</i> -Fluorofentanyl	2	IL(2)	0.19-3µg
	Tryptamine (1)	4-AcO-DMT	7	AZ, CA(6)	4.8-21mg
	Cannabinoid (1)	Delta-8-THC	1	TX	39.1mg
Depressant (1)	Xylazine	2	IL(2)	2.96-54.1µg	
Traditional Recreational Drugs	Cocaine (1)	Cocaine	2	IL(2)	0.16-32µg
	Kavalactones (6)	Desmethoxy Yangonin	11	AZ, CA(9), MD	0.063-1.6mg
		Dihydrokavain	11	AZ, CA(9), MD	0.13-1.6mg
		Dihydromethysticin	11	AZ, CA(9), MD	0.075-1.3mg
		Kavain	11	AZ, CA(9), MD	0.15-13mg
		Methysticin	11	AZ, CA(9), MD	0.27-2.7mg
		Yangonin	11	AZ, CA(9), MD	1.9-62mg
	Stimulant Alkaloid (1)	Nicotine	2	FL, IL	750ng-620mg
	Opioid (2)	Fentanyl	3	OR, IL(2)	0.786-2.58mg
		Heroin	2	IL(2)	0.19-11µg
		6-Acetyl Morphine	2	IL(2)	0.16-14µg
	Cannabinoid (2)	Cannabidiol	1	TX	NQ
		Cannabinol	1	TX	NQ
Tryptamine (1)	Psilocin	7	AZ, CA(6)	0.53-1.5mg	

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Table 6. Drugs Detected in Drug Products – Second Quarter 2024 (Continued)

Drug Class	Drug Subclass	Drug	Freq.	States Found*	Level
Prescription or Over the Counter Medications	Pain Reliever (1)	Acetaminophen	2	IL, OR	520ng-73.7mg
	Anesthetic (1)	Lidocaine	1	IL	60ng
		Medetomidine	1	IL	1.86mg
	Antidepressant (1)	Quetiapine	1	IL	79.8µg
	Antihistamine (1)	Diphenhydramine	2	IL(2)	1.6-39.1mg
Adulterants, Impurities Precursors	Adulterant (1)	Quinine	2	IL(2)	64.3-102µg
	Impurity (2)	Despropionyl- <i>para</i> -Fluorofentanyl [‡]	2	IL(2)	96-750ng
		Norfentanyl	1	IL	240ng
	Precursor (1)	4-ANPP	3	IL(2), OR	4.5-180µg
Dietary Supplements, Stimulants	Stimulant (1)	Caffeine	13	AZ(2), CA(9), IL, MD	220ng-85mg

* AZ – Arizona; CA – California; FL – Florida; IL – Illinois; MD – Maryland; OR – Oregon; TX – Texas.

** NQ = Not Quantified

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‡ - Despropionyl-*para*-fluorofentanyl can also be a precursor in the synthesis of *para*-fluorofentanyl

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Select Drug Product Exhibits:

Table 7. Drug Product Exhibit #1: Total Exhibit Weight: 106.9mg

Drug Class	Drug	State Found*	Confirmed Levels	Actual Amount within Drug Product
OTC	Acetaminophen	OR	689 mg/g	73.7mg
TRD	Fentanyl		24.1 mg/g	2.58mg
P/A/I	4-ANPP		1.7 mg/g	0.18mg



*OR - Oregon

Table 8. Drug Product Exhibit #2: Total Exhibit Weight: 3.5812g

Drug Class	Drug	State Found*	Confirmed Levels	Actual Amount within Drug Product
NPS	Delta-8-THC	TX	88.3 mg/g	340mg
TRD	Cannabinol		Observed Qualitatively	
	Cannabidiol			

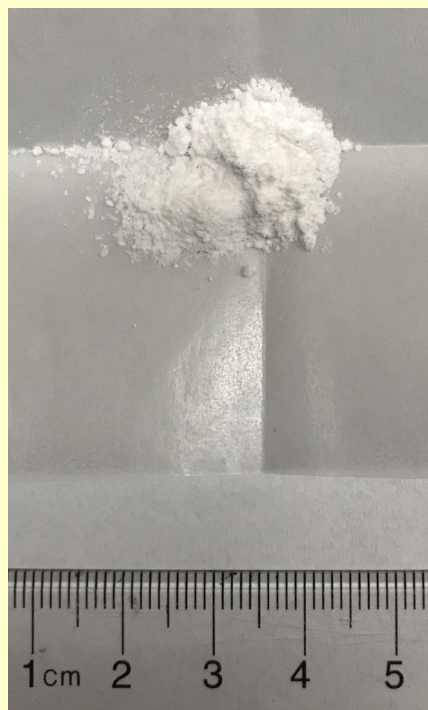


*TX - Texas

Drug Enforcement Administration – Toxicology Testing Program

Table 9. Drug Product Exhibit #3: Total Exhibit Weight: 375.9mg

Drug Class	Drug	State Found*	Confirmed Levels	Actual Amount within Drug Product
NPS	Xylazine	IL	144 µg/g	54.1µg
	<i>para</i> -Fluorofentanyl		8 µg/g	Trace
TRD	Fentanyl		209 µg/g	78.6µg
	Cocaine		86 µg/g	Trace
	6-Acetyl Morphine		38 µg/g	Trace
	Heroin		30 µg/g	Trace
PD/ OTC	Diphenhydramine		104 mg/g	39.1mg
	Medetomidine		4.96 mg/g	1.86mg
P/A/I	Quinine		171 µg/g	64.3µg
	4-ANPP		12 µg/g	Trace
	Despropionyl- <i>para</i> -Fluorofentanyl	2 µg/g	Trace	

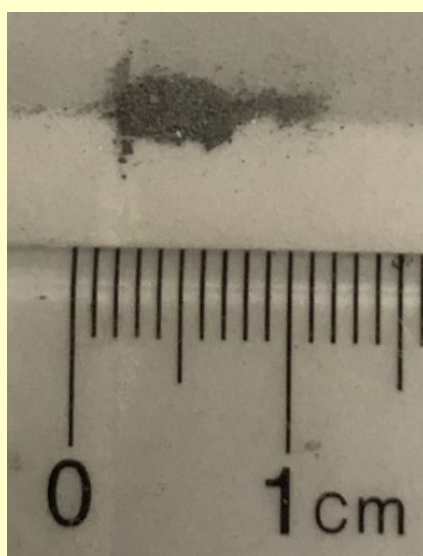


*IL - Illinois

Drug Enforcement Administration – Toxicology Testing Program

Table 10. Drug Product Exhibit #4: Total Exhibit Weight: 6.0mg

Drug Class	Drug	State Found*	Confirmed Levels	Actual Amount within Drug Product
NPS	Xylazine	IL	493 µg/g	2.96µg
	Flualprazolam		320 µg/g	1.92µg
	Metonitazene		185 µg/g	1.11µg
	<i>para</i> -Fluorofentanyl		32 µg/g	Trace
	Clonazolam		29 µg/g	Trace
	Acetyl Fentanyl		8 µg/g	Trace
	Brorphine		5 µg/g	Trace
TRD	Fentanyl		13.7 mg/g	82.2µg
	Nicotine		125 µg/g	Trace
	Heroin		32 µg/g	Trace
	6-Acetyl Morphine		27 µg/g	Trace
	Cocaine		27 µg/g	Trace
PD/OTC	Diphenhydramine		93.7 mg/g	562µg
	Quetiapine		13.3 mg/g	79.8µg
	Acetaminophen		87 µg/g	Trace
	Lidocaine		10 µg/g	Trace
DSS	Caffeine		36 µg/g	Trace
P/A/I	Quinine		17.0 mg/g	102µg
	4-ANPP		1.87 mg/g	11.2µg
	Norfentanyl		40 µg/g	Trace
	Despropionyl- <i>para</i> -Fluorofentanyl		16 µg/g	Trace



*IL - Illinois

Drug Enforcement Administration – Toxicology Testing Program

Table 9. Drug Product Exhibit #5*: Total Exhibit Weight: 52.9371g

Drug Class	Drug	State Found**	Confirmed Levels	Actual Amount within Drug Product
NPS	4-AcO-DMT	CA	110 µg/g	5.8mg
TRD	Yangonin		210 µg/g	11mg
	Methysticin		27 µg/g	1.4mg
	Dihydrokavain		14 µg/g	740µg
	Kavain		13 µg/g	690µg
	Psilocin		10 µg/g	530µg
	Dihydromethysticin		6.0 µg/g	320µg
	Desmethoxy Yangonin		5.8 µg/g	310µg
DSS	Caffeine		90 µg/g	4.8mg



*Analysis on this product is ongoing

**CA - California

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 etc.).
- 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.

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https://www.deadiversion.usdoj.gov/dea_tox/index.html.

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**Clinical Toxicology
and Environmental Biomonitoring Laboratory**

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