November 9, 2023





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

# **Emerging Drug Trends**

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COLLABORATE • SHARE • INFORM & HELP

# Overview

- Introductions
- Partners
- Tools/Process
- Drug Trends
- Challenges
- HIDTA Products

# Liberty Mid-Atlantic HIDTA

- HIDTA = High Intensity Drug Trafficking Areas
- Funded by the Office of National Drug Control Policy (ONDCP)
- A "Program", not an "Agency"
- Collaboration of federal, state, local, and tribal agencies
- Purpose: Reduce drug trafficking and production in the US
- Started the Overdose Response Strategy (ORS) in 2016









**COLLABORATE** across public health and public safety sectors



**SHARE** data, insights and trends we are seeing related to drug overdose in our communities



**INFORM AND HELP** local communities develop local solutions to reduce overdoses and save lives

OVERDOSE RESPONSE STRATEGY > PUBLIC HEALTH | PUBLIC SAFETY | PARTNERSHIP

## Partners

- Office of the Attorney General
- DEA, HSI, and FBI
- PA State Police (PSP)
- Delaware Valley Intelligence Center (DVIC)
- Lehigh Valley Regional Intelligence and Investigation Center (RIIC)
- Local Police Departments
- Office of Drug Surveillance and Misuse Prevention (ODSMP)
- National Guard National Counterdrug Training Centers (NCTC) and Drug Demand Reduction Outreach (DDRO)
- ORS teams in other states

## Tools used to monitor trends

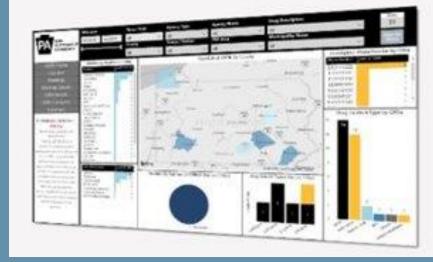
- Regular engagement with partners
- Outreach to labs
- ODIN and ODMAP
- Drug Checking Programs

# ODIN

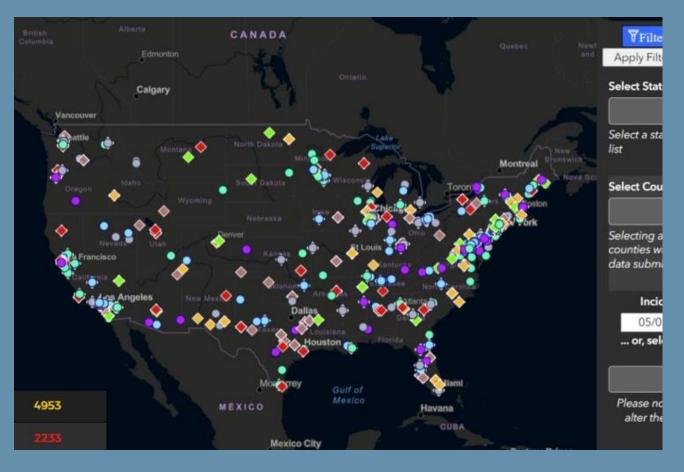
- Overdose Information Network
- PSP and HIDTA
- Act 158 requires police departments to report overdose incidents to ODIN as of Jan. 2023
- Law Enforcement Only



ODIN Investigative Dashboard "CRIMINAL JUSTICE USE ONLY"



# ODMAP

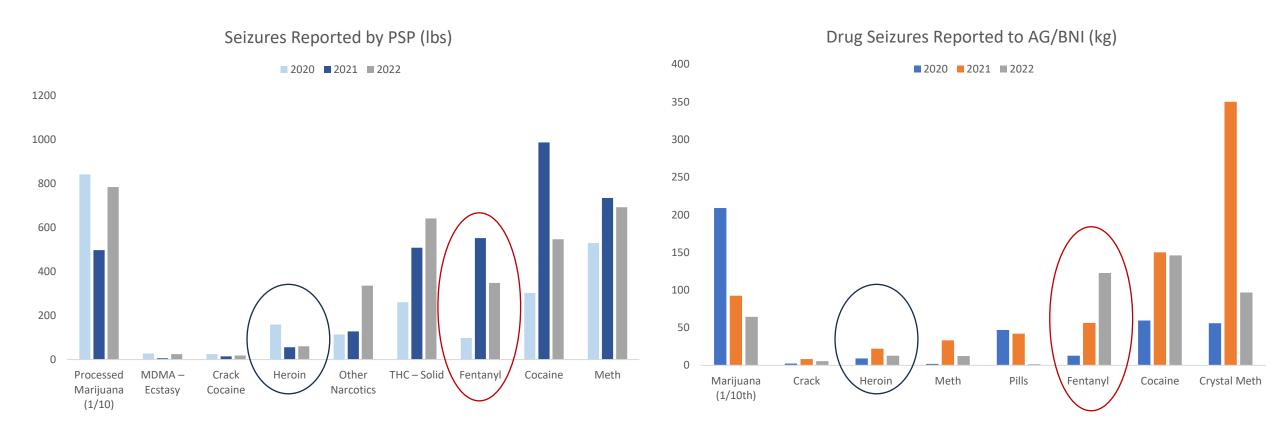


- Available free to government (federal, state, local, or tribal) agencies serving the interests of public safety and public health
- Data pushed from ODIN via API

# Current Drug Trends

- Fentanyl is the driver behind overdoses
- Polysubstance Use
- Counterfeit Pills
- Novel Psychoactive Substances
  - Designer Benzodiazepines
  - Nitazenes / Novel Synthetic Opioids (NSO)
- Xylazine

### Drug Seizures- State Police & Attorney Gen.

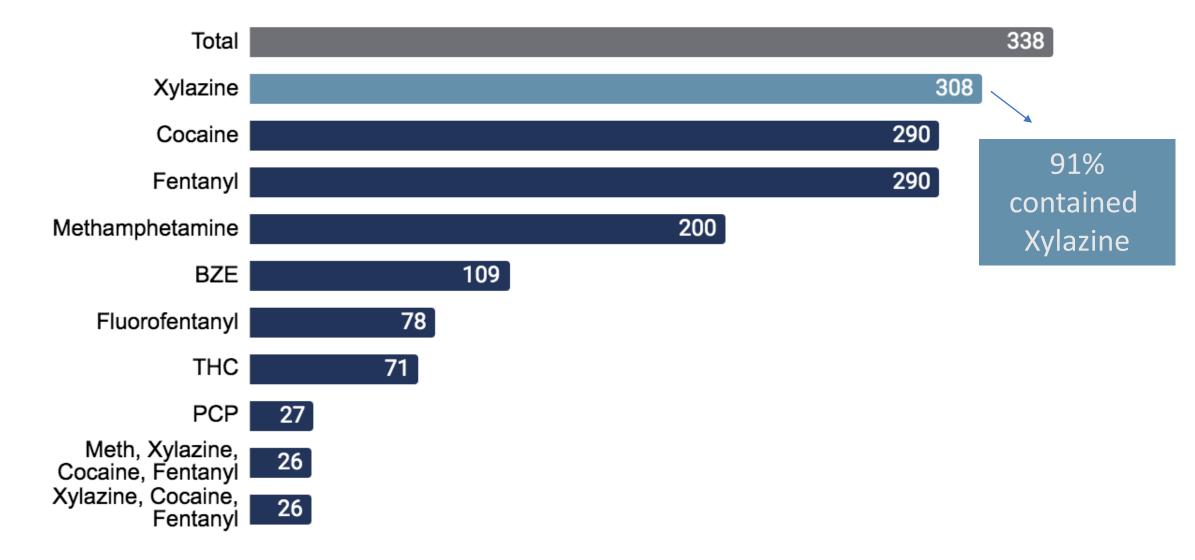


## Drug Recognition Expert (DRE) Training

- Participants recruited in Kensington
- Data Collected:
  - Reported use
  - Cheek swab

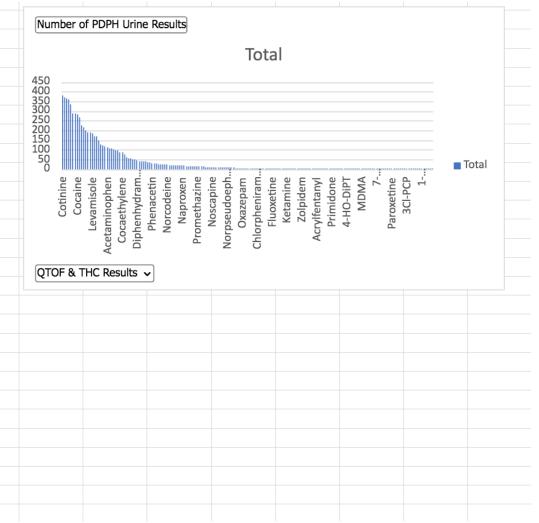
SUBJECT REPORTED USE	TOX RESULTS FROM CFSRE				
CRACK JUST NOW	Methamphetamine, Xylazine, BZE, Cocaine, Cocaethylene, Fentanyl				
FENT/TRANQ 15 MIN	Amphetamine, Methamphetamine, Xylazine, Cocaine, Fentanyl, Fluorofentanyl				
METH/DOPE 30 MIN	Amphetamine, Methamphetamine, Xylazine, Cocaine, Fentanyl, Fluorofentanyl				
DOPE 30 MIN	Methamphetamine, Xylazine, BZE, Cocaine, Fentanyl, Fluorofentanyl				
DOPE JUST NOW	Methamphetamine, Xylazine, BZE, Cocaine, Cocaethylene, Fentanyl				
DOPE LESS THAN HOUR AGO	Methamphetamine, Xylazine, Tramadol, BZE, Cocaine, Cocaethylene, Fentanyl				
HEROIN 30 MIN	Amphetamine, Methamphetamine, Xylazine, Cocaine, Fentanyl				
DOPE JUST NOW	Methamphetamine, Xylazine, Tramadol, BZE, Cocaine, Fentanyl				
HEROIN 30 MIN	Amphetamine, Methamphetamine, Xylazine, Cocaine, Fentanyl				
FENT/COKE 15 MIN	Methamphetamine, Xylazine, BZE, Cocaine, Fentanyl, Fluorofentanyl				
FENT HOUR AGO	Methamphetamine, Xylazine, Diphenhydramine, Cocaine, Methadone, Fentanyl, Fluorofentanyl				
COKE/FENT 25 MIN	Amphetamine, Methamphetamine, Xylazine, Cocaine, Fentanyl, Fluorofentanyl				
HEROIN 20 MIN	Amphetamine, Methamphetamine, Xylazine, Cocaine, Fentanyl, Fluorofentanyl				

### Substances Identified in DRE samples (April-June 2023)

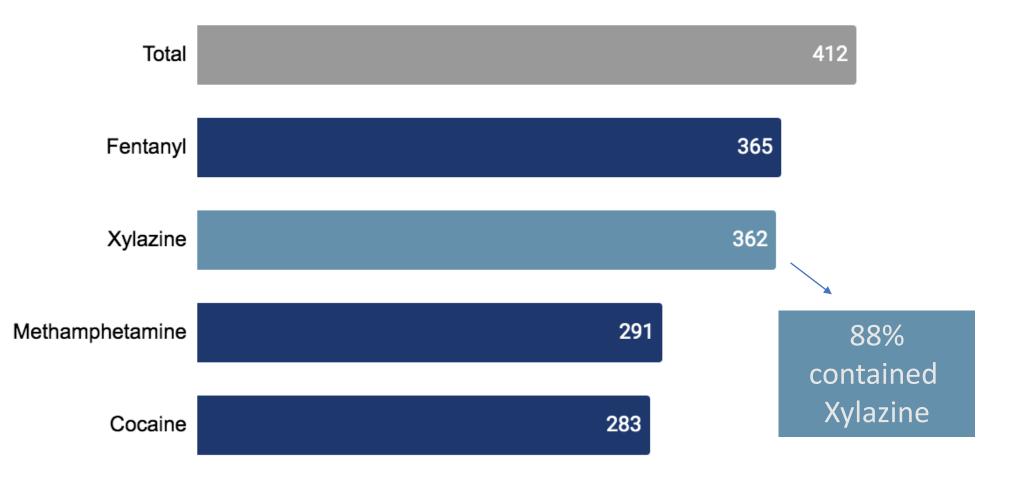


# PAD Program UDS - 2022

QTOF & THC Results	$\sim$	Number of PDPH Urine Results	PDPH Urine Results	Numb
Cotinine		381	92%	
Norfentanyl		369	90%	
Fentanyl		365	89%	450
Xylazine		362	88%	400 350
4-ANPP		334	81%	300 250
Methamphetamine		291	71%	200 150
Benzoylecgonine		288	70%	350 300 250 200 150 100 50 0
Cocaine		283	69%	
para-fluorofentanyl		269	65%	Cotinine
Norcocaine		225	55%	Cotto
Lidocaine		218	53%	
Tramadol		199	48%	
Monoethylglycinexylidide		191	46%	QTOF
Despropionyl ortho-Fluorofentanyl		191	46%	
Levamisole		184	45%	
bipiperidinyl 4-ANPP		172	42%	
Amphetamine		168	41%	
EDDP		151	37%	
Methadone		127	31%	
O-Desmethyltramadol		123	30%	
N-methyl Norfentanyl		117	28%	
Acetaminophen		111	27%	
beta-hydroxy Fentanyl		106	26%	
Morphine		105	25%	
Carboxy-THC		103	25%	
Quinine		98	24%	



### Substances identified in PAD UDS 2022



# **Counterfeit Pills**

- Types: Oxycodone M30, Adderall, Xanax
  - Fentanyl and Methamphetamine
- Dark Web and Social Media
- Pill Presses



#### Manual







#### **Counterfeit Pills**

#### WHAT ARE COUNTERFEIT PILLS?

Counterfeit pills are fake medications that have different ingredients than the actual medication. They may contain no active ingredient, the wrong active ingredient, or have the right ingredient but in an incorrect quantity. Counterfeit pills may contain lethal amounts of fentanyl or methamphetamine and are extremely dangerous because they often appear identical to legitimate prescription pills, and the user is likely unaware of how lethal they can be.

#### WHAT IS THEIR ORIGIN?

The majority of counterfeit drug production occurs in other countries, mainly China, Mexico, and India. Furthermore, an increasing number of pills laced with fentanyl are being produced in the U.S. Mexican and domestic drug trafficking organizations operating in the U.S. produce counterfeit pills with pre-made chemicals and drugs from China and/or Mexico. They are usually produced in substandard conditions, labeled incorrectly, and may include dangerous, unapproved substances. There are no quality control mechanisms in the illicit labs producing counterfeit pills to ensure dosing is not lethal. Online sales via internet marketplaces and social media are the major sources for obtaining counterfeit pills.

A significant number of high school and college students purchase Adderall and Xanax from dark web drug markets and/or through social media referrals<sup>1</sup>, which market deadly versions of these drugs tainted with fentanyl and/or methamphetamine. Some students begin using prescription stimulants, often referred to as "study drugs," in the belief it will benefit their academic performance, but the nonmedical use of prescription stimulants has not been proven to improve academic performance<sup>1</sup>.



Left: Authentic avycodone M30 tablets (top) vs. counterfeit avycodone M30 tablets containing fentanyl (bottom). Center: Authentic Adderoli tablets (top) vs. counterfeit Adderoli tablets containing methomphetamine (bottom). Right: Authentic Xanax tablets (white) vs. counterfeit Xanax tablets containing fentanyl (yellow).

#### What are common street names?

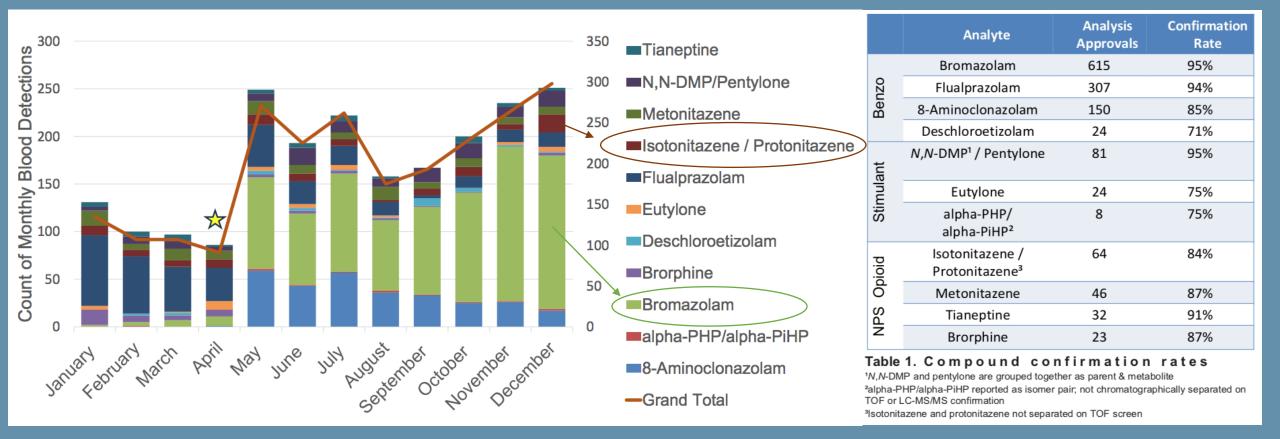
Counterfeit oxycodone M30 pills: Mexican Blues, Blues, M-Boxes

I. Moyle J. DNAb A. Coonder R. Banats W. HOrupolonalic: An exploration of the use of social media and encrypted mesoaging ages to supply and access drugs. Int J Drug Policy. 2018 Archi2 201 110. doi: 10.1016/j.4rugue.2018.08.005. Epu8 2018 Over J. PMID: 20180212.

2. University of Mode Island, "ADHD drugs do not improve capition in healthy college students," ScienceDally, ScienceDally, 23 July 2018.

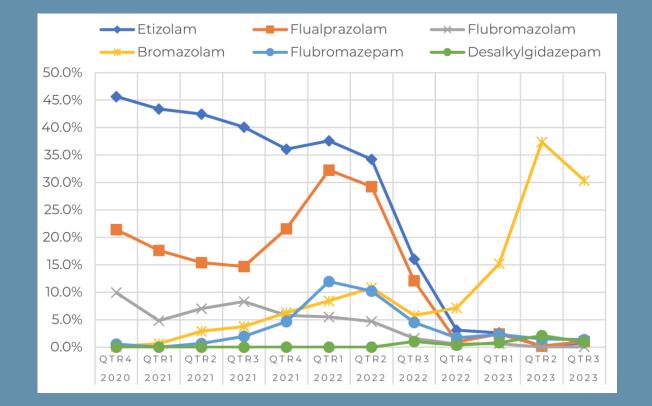
# Novel Psychoactive Substances (NPS)

### NMS Labs and CFSRE, nationwide, 2022



# Designer Benzodiazepines - Bromazolam

Powder and pill form, mixed with heroin or fentanyl Combined with opioids: "Benzo Dope"





#### Overview

Bromazolam is a synthetic designer benzodiazepine. Designer benzodiazepines are a public health concern due to their high potency and combination with Illicit opioids. Designer benzodiazepines can appear in a variety of preparations (powder, liquid, counterfeit pills).<sup>1</sup>



#### Emergence of Designer Benzodiazepines

- A new addition to the Illicit drug supply is the presence of synthetic benzodiazepine-loced opioids, referred to as "benzo dope".<sup>1</sup>
- The sedative effects of benzodiazepines combined with opioids increases the risk for respiratory depression and overdose.<sup>2</sup>
- In New Jersey, bromozolam has been identified in suspected heroin and pill form. Pills testing for bromozolam often mimic counterfelt Xonax or Alprazolam.

In 2022, fentanyl was detected in 97% of suspected heroin containing bromazolam. New Jessay State Police. Office of Drug Montaining & Analysis (October 2023) Bromazolam has been identified in illigit drug samples in <u>18 of 21</u> New Jersey counties.

## MEAN COMPANY

 Nolaxone will not reverse the effects of benzodiazepines but should still be administered because it will reverse the effects of any opioids present.
 Bromazolam and other designer benzodiazepines are commonly found in combination with fentanul.

Use of Naloxone for ALL Suspected Overdoses

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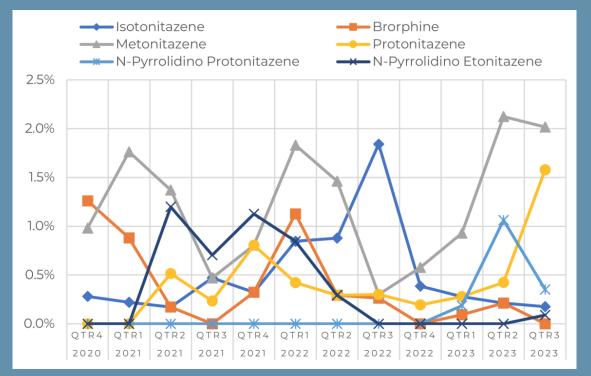
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Research for Information and Cantact Information, Any opensy with additional information regarding the topic or with guardines about this product reap contact the Drug Mexicous products (DMI), DMIs of Drug Mexicous E Analysis of DMISmap date.

# Nitazenes / Novel Synthetic Opioids (NSO)

### Potent analgesic (painkiller) and sedative properties

- Powder and pill form
- Example: Protonitazene, Isotonitazene











#### Overview

Nitazenes and their analogs are synthetic novel opioids with a potency similar to, or greater than, the potency of fentanyl. Nitazenes can appear in a variety of colors and preparations (powder, liquid, counterfeit pills). The Drug Enforcement Administration (DEA) has classified ten nitazene analogs as Schedule I drugs.



Isotonitazene\*

Metonitazene\*

Protonitazene\*

Flunitazene

\* Identified in New Jersey's drug environment.

**Recommendations for Law Enforcement** 

may be needed based on symptoms of victim.

Metodesnitazene

Butonitazene

Etodesnitazene

N-purrolidino\*

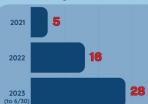
etonitazene

First responders should approach all suspected overdose victims and drug

Clonitazene

Etonitazene

#### Nitazenes were first analyzed in New Jersey in 2021. The chart below shows suspected heroin



Scheduled nitazene analogs include: cases containing nitazenes in the state.<sup>2</sup>





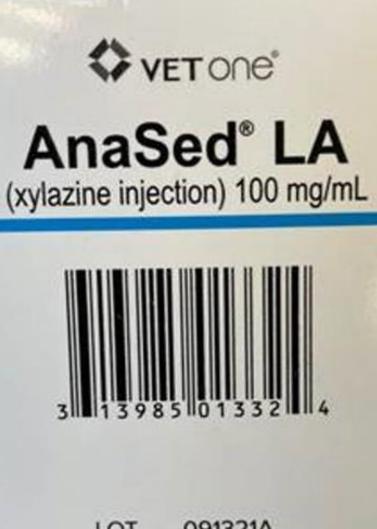
### seizures as though fentanyl or other opioids are present. Naloxone is effective in reversing nitazene-related overdoses. Multiple doses

# History of Xylazine in Philadelphia

- Early 2000s: First detection in Puerto Rico
- 2006: First detection in Philadelphia
- Philadelphia ties to Puerto Rico
- 2018-2019: 73% increase in xylazine detections in drug overdose deaths







LOT 091321A EXP 2025 - 09

# Drug Mill House







# Xylazine in Philadelphia (2023)

- Seizures:
  - FY2023: Customs and Border Patrol (CBP) seized 12.24 kg powder destined for Philadelphia from China
  - 53 bottles (~ 1 kilogram) destined for Philadelphia from Dominican Republic
- June 3, 2023: PA adds Xylazine to a list of Schedule III drugs under PA Controlled Substance Act (Title 35)
- Increasing problems with wounds and withdrawal symptoms
- Naloxone and rescue breathing!

## Recent Case Example:



January 2023: 20-year prison sentence was given for a 2020 case that involved a controlled delivery of Xylazine (via FedEx) leading to a seizure of 2.7 kilograms of fentanyl, cash, and various weapons.

### NPS Discovery Drug Checking Project

- Philadelphia Dept. Public Health and CFSRE
- 219 Samples May Sept 2022 (Q3)
- Polysubstance
- 91% of "Dope" included fentanyl and xylazine
- Xanax tablets containing clonazolam (Designer Benzo)

**QUARTERLY REPORT** — PHILADELPHIA, PA

DRUG Q3 CHECKING 2022

Department of





136

**49** 

Purpose: This report provides up-to-date information regarding the drug supply in Philadelphia, Pennsylvania, United States of America, and is our first Quarterly Drug Checking Report to include quantitative data on the purity of fentaryl, xylazine, cocaine, methamphetamine, and more.

Overview: Traditional drugs (e.g., heroin, fentaryl, cocaine, methamphetamine) are commonly identified among drug samples in cities across the United States, albeit at varying purities and combinations. Novel psychoactive substances (NPS) continue to appear within the drug supply, masked as traditional drugs or added to traditional drug preparations. Nationally, the drug supply remains a dynamic and evolving environment, especially relating to primary active drug components and cutting agents or adulterants added to drug preparations. The drug supply and drug use trends can be different from city to city or even within a given community, requiring specific regional or local assessments. Accurate understanding of drug materials and the drug supply in real-time is imperative for effective public health and public safety preparedness and response.

Objective: A partnership between the Center for Forensic Science Research and Education (CFSRE) and the Philadelphia Department of Public Health (PDPH) has been established to accurately assess the drug supply in Philadelphia, Pennsylvania. This initiative was established as a comprehensive effort examining various drug materials and drug forms. Select drug testing results from samples obtained within the city were compiled for preparation of this report. The results reported herein represent a subset of the drug supply and not its entirety.

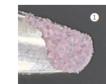
Acknowledgements This report was prepared by Alex J. Nortunki, FPQ, Ten Shinekeli, MS, Sahva Deleva, FPQ, Daniel Teineki ed Silva, MQ, and Barry K. Logan, FPQ, FABET. The authors advanceldge CFEE and PCDP preparement for their contributions and inheritements. This work is funded by the Catters for DisaseCarterial and Prevention IECQI through an Overdees Date to Action grant awarded to the city of Philadelphia. The opinions, Fridings, conclusions, and/or recommendations expressed in this publications and through an Overdees Date to Action the CDC or other deview, state, local, or privite agricults. The more information about drug checking services or NS Discover, please constate/interlinet/actional.g/cf.marger visite.com.printeger visi

#### Summary and Key Findings:

219 samples were tested between May and September 2022
 Fentanyl-xylazine (tranq-dope) proportions varied greatly
 The average fentanyl purity was 117% (range: 0.3-34.8%)
 The average xylazine purity was 33.8% (range: 0.64.8%)

Most dope samples (91%) contained fentanyl and xylazine
 synthetic cannabinoids remain dynamic and unpredictable
 Counterfeit Xanax tablets tested positive for clonazolam
 Cocaine purity varied greatly (average: 37.8%, range: 0.2-81.8%)

Date	Suspected	Drugs Identified		
9/13/2022	Dope	Fentanyl (18.4%), Xylazine (26.9%), 4-ANPP (10.6%) [CIPI=1.84]		
9/21/2022	Dope	Fentanyl (6.6%), Xylazine (40.5%), & ANPP (1.0%), Procaine, Caffeine (OPI-0.69)		
9/21/2022	Dope	Fentanyl (7.7%), Xylazine (32.4%), para-Fluorofentanyl (0.3%), 4-ANPP (0.7%) (0.7%)		
9/21/2022	Dope	Fentanyl (7.8%), Xylazine (26.6%), & ANPP (1.5%)		
9/21/2022	Dope	Fentanyl (8.2%), Xylazine (58.4%), 4-ANPP (0.6%) (OP(=0.82)		
9/21/2022	Dope	Fentanyl (8.3%), Xylazine (26.3%), 4-ANPP (1.6%) เดคเตลสม 🕕		
9/21/2022	Dope	Fentanyl (8.8%), Xylazine (30.1%), 4-ANPP (1.7%) (CIPI=C.88)		
9/21/2022	Dope	Fentanyl (10.0%), Xylazine (36.8%), 4-ANPP (1.7%) (0.091=1.00)		
9/21/2022	Dope	Fentanyl (11.2%), Xylazine (43.7%), 4-ANPP (1.7%) (OPI=1.12)		
9/21/2022	Dope	Fentanyl (11.9%), Xylazine (38.0%), 4-ANPP (3.0%) (OPPELIE)		
9/21/2022	Dope	Fentanyl (13.2%), Xylazine (64.8%), 4-ANPP (2.0%) (OPI=132)		
9/21/2022	Dope	Fentanyl (14.3%), Xylazine (21.6%), 4-ANPP (7.7%) [OP(=2.43]		
9/21/2022	Dope	Fentanyl (21.1%), Xylazine (40.2%), 4-ANPP (4.1%) (OP(=2.11)		
9/21/2022	Dope	Fentanyl (18.2%), Xylazine (27.5%), 4-ANPP (8.8%) [OP]=182]		
9/21/2022	Dope	Fentanyl (16.8%), Xylazine (54.4%), 4-ANPP (2.4%) (OP/=168)		
9/21/2022	Dope	Fentanyl (16.5%), Xylazine (47.3%), 4-ANPP (2.0%) (OPP-165)		
9/21/2022	Dope	Fentanyi (16.4%), Xylazine (6.8%), para-Fluorofentanyi (2.4%), 4-ANPP (3.3%), Heroin (trace), Caffeine (OPI-172)		
9/28/2022	Dope	Fentanyl (9.7%), Xylazine (60.1%), 4-ANPP (4.8%) (00/10.97)		
9/28/2022	Dope	Fentanyl (11.2%), Xylazine (47.5%), & ANPP (1.6%) (OPI=1.12)		
9/28/2022	Dope	Fentanyl (13.3%), Xylazine (52.6%), para-Fluorofentanyl (2.4%), 4-ANPP (3.1%) [OPI-141]		
9/28/2022	Dope	Fentanyl (13.7%), Xylazine (36.0%), 4-ANPP (2.5%) (OPI-1.37)		
9/28/2022	Dope	Fentanyl (14.3%), Xylazine (19.9%), 4-ANPP (3.9%), Quetiapine (OPI=143)		
9/28/2022	Dope	Fentanyl (14.8%), Xylazine (31.0%), 4-ANPP (3.4%), Quetiapine (OPI=1.48)		
ADDITIONAL QUANTITATIVE DATA FOR DOPE SAMPLES ON PAGE 4 & BEYOND				

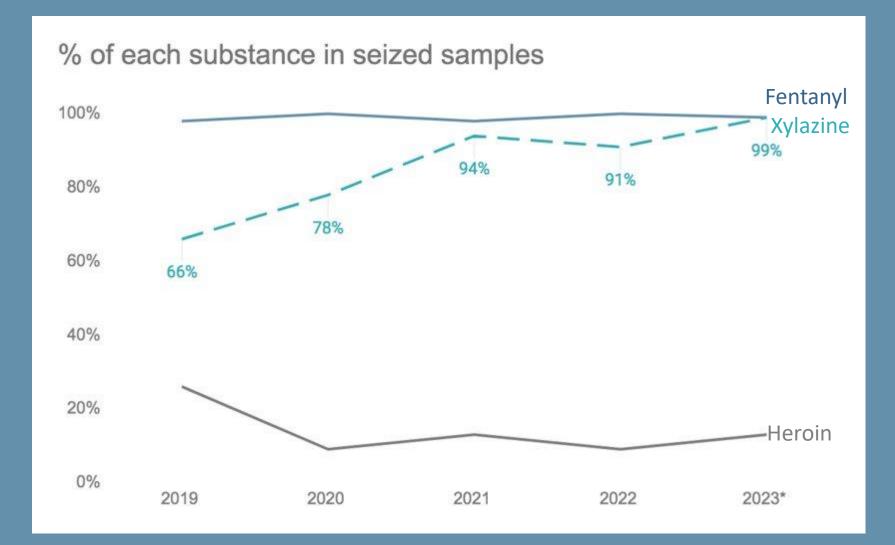








### PA Opioid Samples Seized by Law Enforcement



# Challenges

- Inconsistent reporting to ODIN, despite legislation
- No centralized repository or format for seizure data
  - Kilos vs. pounds vs. dosage units
  - Liquids vs. Pills
  - Lags in toxicology results
- Metabolites
- What's next?
  - Scheduling --> changes in drug supply
    - Xylazine --> Medetomidine/dexmedetomidine

### 2023

### Threat Assessment



Liberty Mid-Atlantic HIDTA 7801 Essington Ave, Suite A Philadelphia, PA 19153

Jeremiah A. Daley, Director June 2022

# HIDTA Threat Assessment

# HIDTA Monthly Intelligence Report

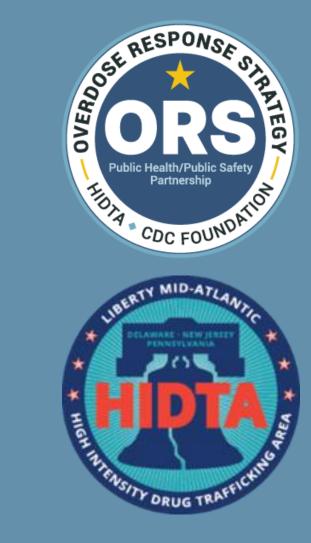
HIDTA	LMA HIDTA Monthly Intelligence Report November 2023									
ENSITY DRUG TRAFFICHT	Drug Pricing									
	Fentanyl/Heroin	Methamphetami	ne	Cocaine	Crack	Other				
Pill										
Gram										
Ounce										
Pound										
Kilo										
Other										
* Prices reflect the range reported for each locale derived from controlled purchases, human source debriefing and investigative data collected during the respective month. The prices are presented nolely as a suspathet of the regional drug environment at the time of publication. ** Pottanyl and benois pricing has been combined to reflect the changing drug environment										
	FYI			Inves	tigations					
	For inquiries, plea	ise contact Intelligence Analyst	, Amanda DiStefano (distefanoa@l	mahidta.org)						

## Contact

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Van Jackson Jacksonv@lmahidta.org

www.lmahidta.org https://orsprogram.org/



## Resources

- https://www.nmslabs.com/sites/default/files/2022-11/the-rise-and-fall-of-nitazene-analogs-poster.pdf
- https://www.nmslabs.com/sites/default/files/2023-11/SOFT-poster-2023-Papsun-100623.pdf
- https://www.cfsre.org/nps-discovery/drug-checking/drug-checking-q3-2022-philadelphia-pennsylvania-usa
- https://www.whitehouse.gov/ondcp/briefing-room/2023/04/12/biden-harris-administration-designates-fentanyl-combined-with-xylazine-as-an-emerging-threat-to-the-united-states/
- https://www.dea.gov/sites/default/files/2021-05/Counterfeit%20Pills%20fact%20SHEET-5-13-21-FINAL.pdf
- <u>https://aldianews.com/en/politics/policy/puerto-ricos-air-bridge</u>
- <u>https://www.nbcphiladelphia.com/news/local/what-to-do-about-the-heroin-air-bridge-public-hearing-held-in-philly/12278/</u>

## Resources

- https://www.nmslabs.com/sites/default/files/2022-11/the-rise-and-fall-of-nitazene-analogs-poster.pdf
- https://www.phila.gov/media/20231002090544/CHARTv8e3.pdf
- https://www.ccsa.ca/sites/default/files/2022-03/CCSA-CCENDU-Drug-Alert-Nitazenes-2022-en\_0.pdf
- <u>https://legislativeanalysis.org/wp-content/uploads/2023/09/Nitazenes-Fact-Sheet-FINAL.pdf</u>
- <u>https://www.dea.gov/sites/default/files/2023-</u>
  <u>10/FINAL\_Operation%20ChemKong%20Press%20Conference%20Remarks%20as%20Delivered.pdf</u>
- https://hip.phila.gov/document/3203/PDPH-HAN\_Alert\_2\_NitazeneAnalogs\_12.21.2022.pdf/