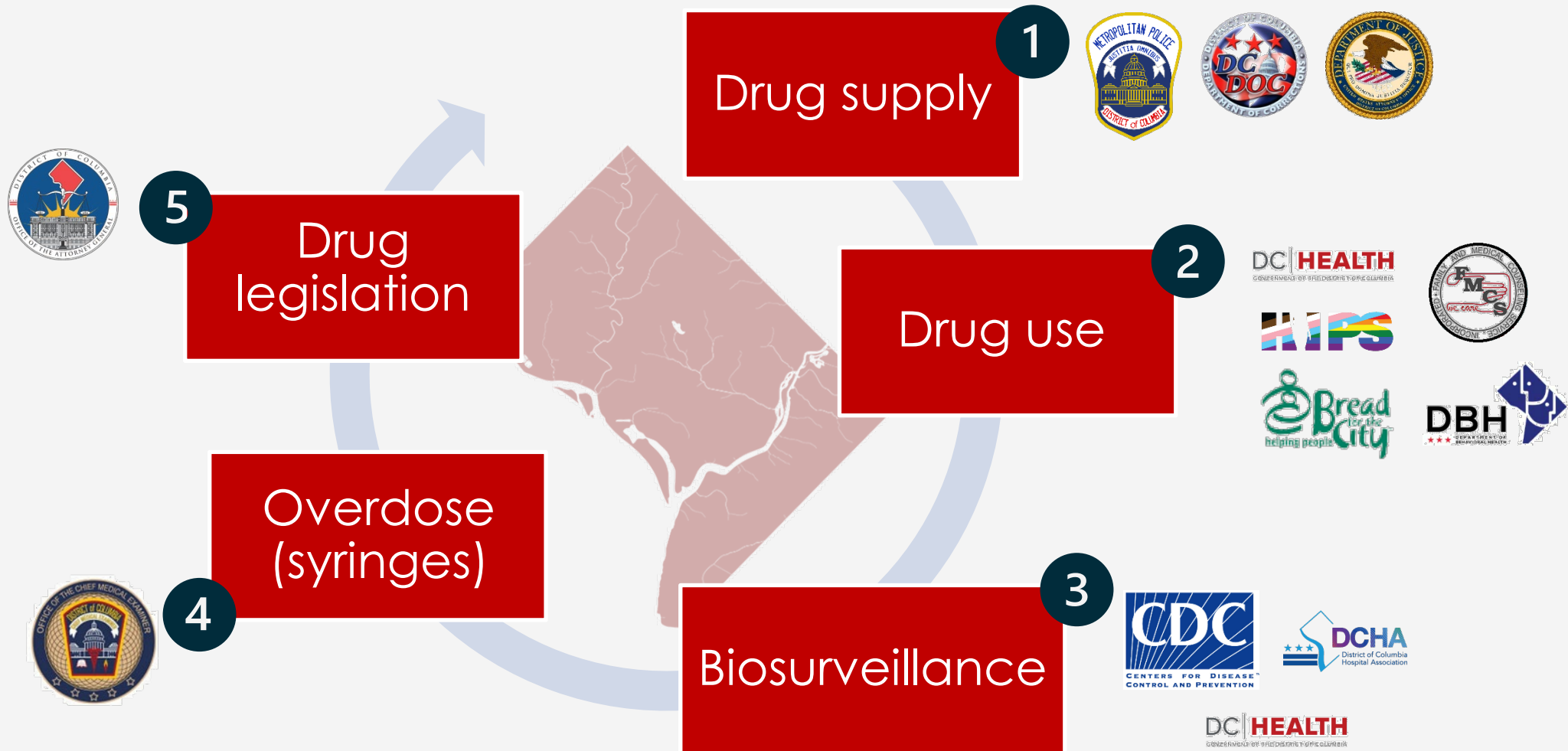


DC DFS

JUNE 2023

UPDATES ON THE ILLICIT DRUG SUPPLY

DFS DRUG SURVEILLANCE PROGRAM

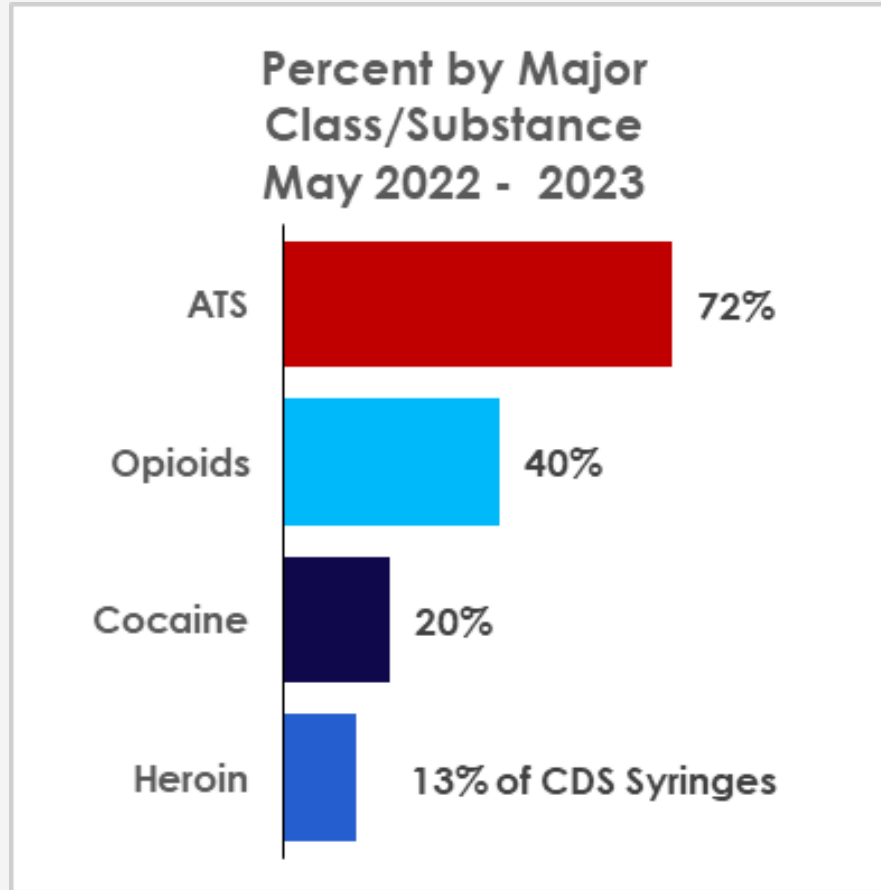


SYRINGE EXCHANGE ANALYSIS

- Analysis of drug residue from used needle-exchange syringes
- Objective: monitor for emerging psychoactive substances in the illicit drug supply and provide drug trend reports on intravenous drug use
- September 2020 – present (funded by CDC)
- Analyzed >5500 syringes in total



SYRINGE-EXCHANGE ANALYSIS



2,595 Syringes analyzed (May 2022 – May 2023)

Amphetamine-Type Stimulants (ATS) was most commonly detected drug class.

Top five controlled dangerous substances (CDS) during past 13-month period were:

1. Methamphetamine (35%)
2. Fentanyl (22%)
3. Cocaine (12%)
4. Heroin (8%)
5. Fluorofentanyl (4%)

OPIOIDS

Breakdown of Detected Opioids
May 2022 - April 2023

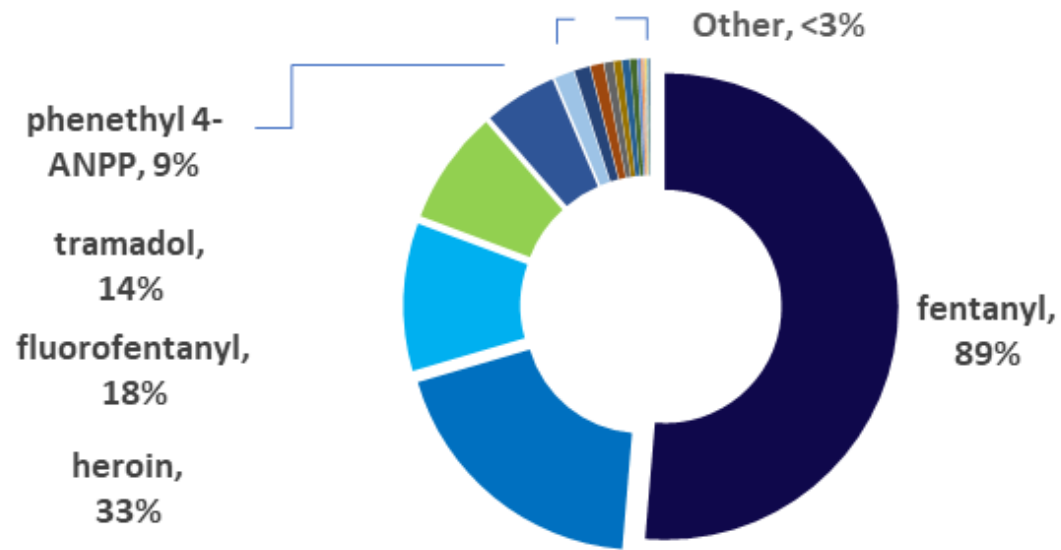
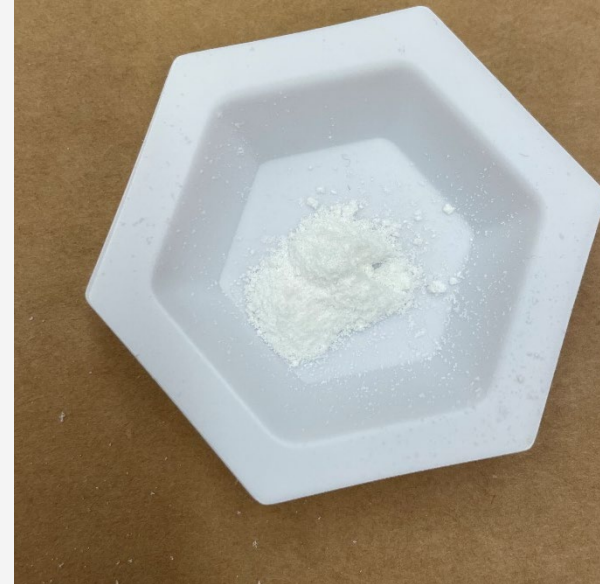
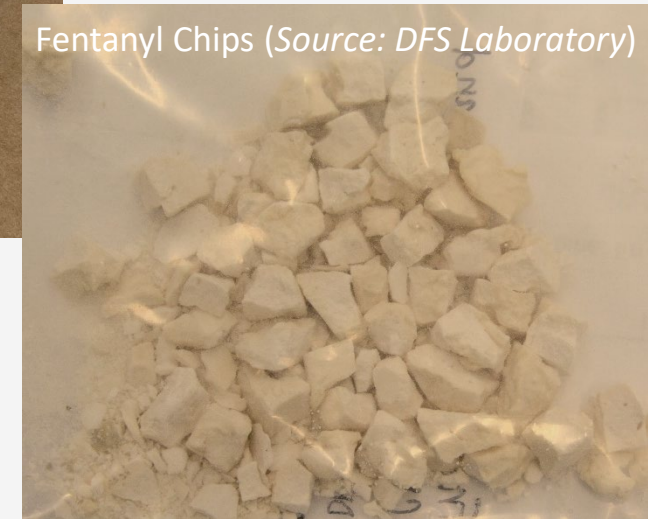


Figure 5. **Pie Chart of Detected Opioids.** Each slice represents the percentage of opioid syringes over the past 13-month period. Opioids that made up less than 3% of all opioid syringes are categorized as "other."

Heroin Powder (Source: DFS Laboratory)



Fentanyl Chips (Source: DFS Laboratory)



FENTANYL

Adulterated vs Unadulterated Fentanyl Syringes

May 2022 - April 2023

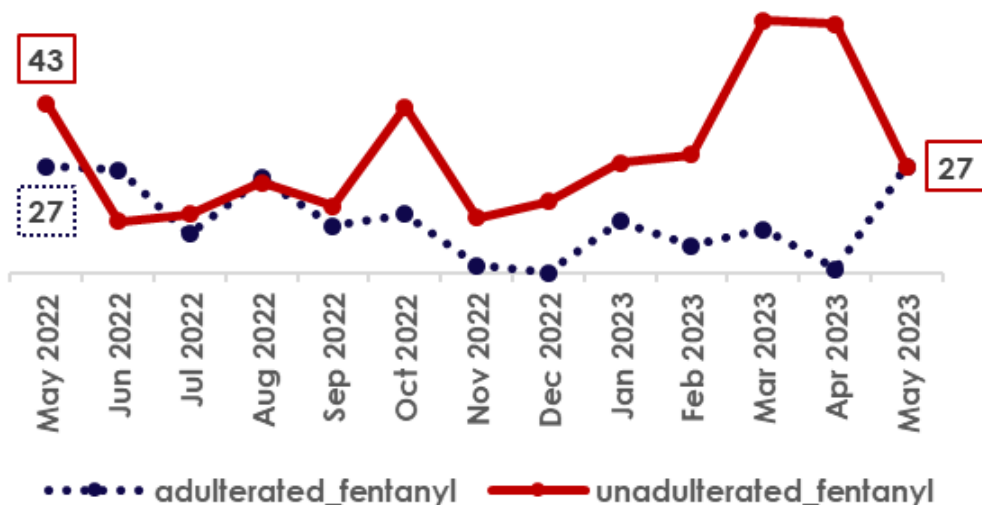


Figure 6. **Scatter Plot of Adulterated vs. Unadulterated Fentanyl.** Lines represent the number of syringes with adulterated (blue) vs unadulterated (red) fentanyl over the past 13-month period.

Total Adulterants in Fentanyl Syringes May 2022 - April 2023

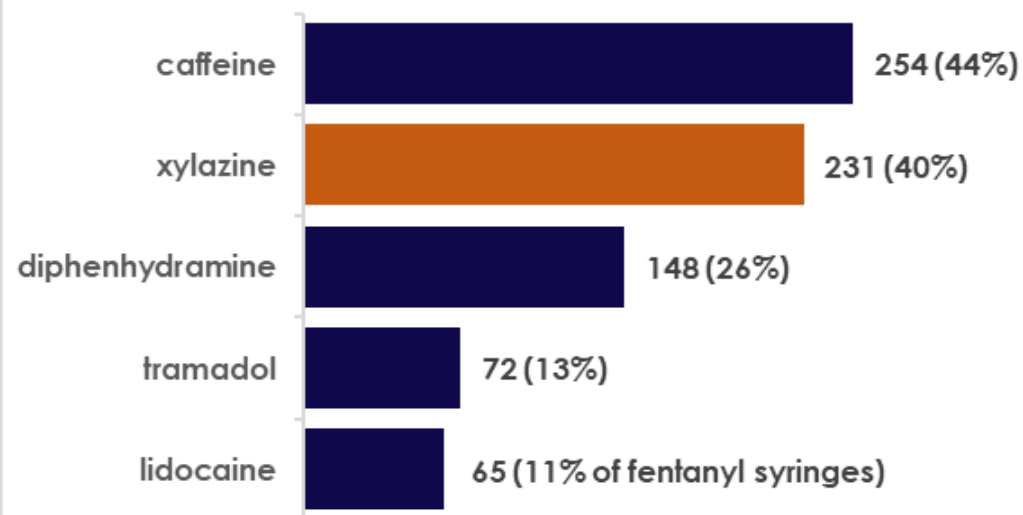
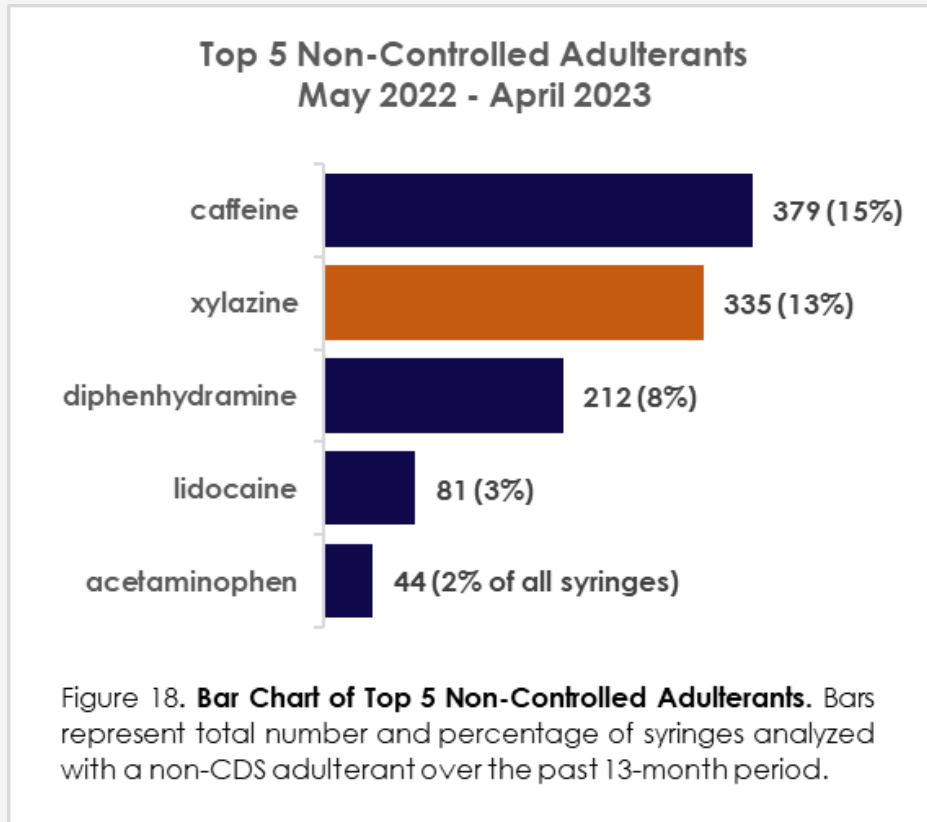


Figure 9. **Bar Chart of the Top Adulterants in Fentanyl Syringes.** Each bar shows the number and percentage of syringes with fentanyl in combination with one of its top adulterants over the past 13-month period.

XYLAZINE



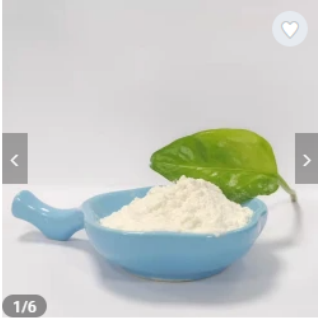
- Xylazine is 2nd most commonly detected adulterant in needle-exchange syringes
- Increasing trend over the past three (3) years
- Xylazine overdose induces sedation and can lead to respiratory depression, especially when used with opioids.
- No FDA-approved agents to treat xylazine overdose in humans.

EMERGING SUBSTANCES - MEDETOMIDINE

Medetomidine

- Sedative-analgesic
- Detected in drug surveillance samples at the DFS and in Maryland
- Appearing in combination with opioids; believed to be used as an adulterant in a similar fashion to xylazine





1/6



Medetomidine Hydrochloride CAS 86347-15-1 Medetomidine HCl

US\$ 10-100 / kg (FOB Price)


1 kg (MOQ)

Powder : Yes
Certification : ISO 9001, USP, BP
State : Solid

Customized : Customized
Suitable for : Adult
Purity : >99%

Henan Guange Biotechnology Co., Ltd. >  

[Contact Now](#) [Inquiry Basket](#) [Chat with Supplier](#)



1/6



Supply 99% Medetomidine Hydrochloride Powder CAS 86347-15-1 with Bottom Price

US\$ 108 / kg (FOB Price)

1 kg (MOQ)

Powder : Yes
Certification : GMP, ISO 9001, USP
State : Solid

Customized : Non-Customized
Suitable for : Elderly, Children, Adult
Purity : >99%

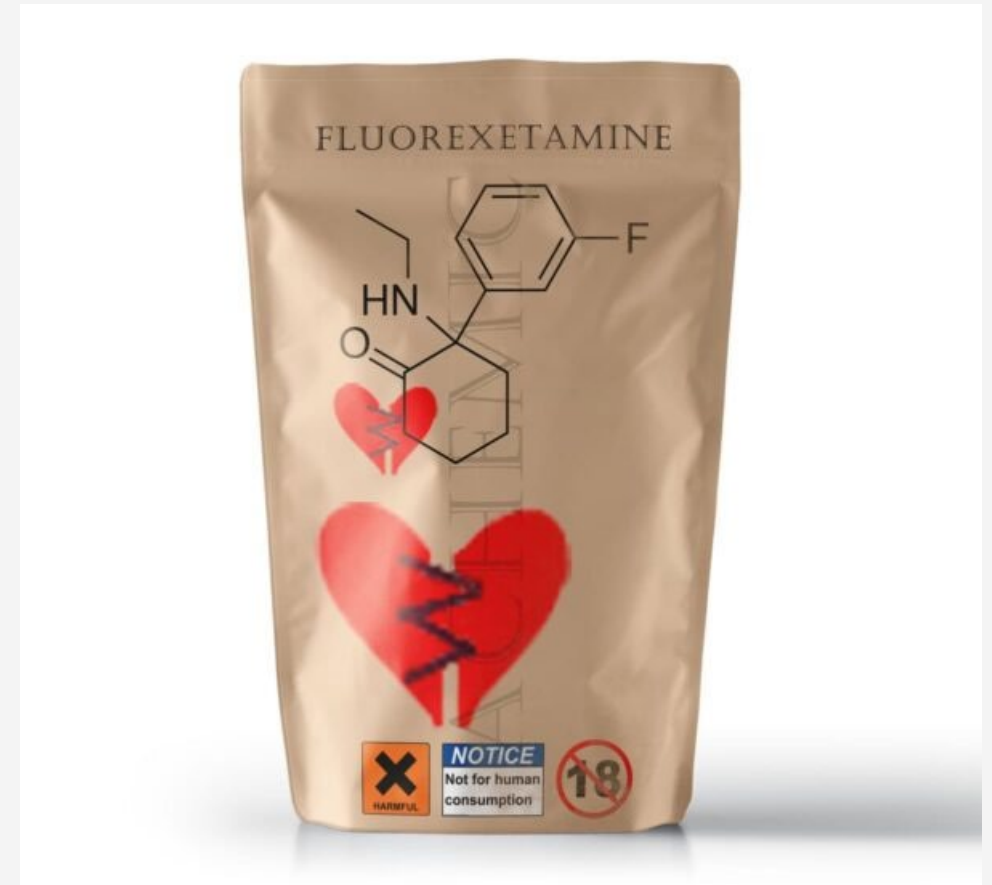
HEFEI JOYE IMPORT & EXPORT CO., LTD. >  

[Contact Now](#) [Inquiry Basket](#) [Chat with Supplier](#)

EMERGING SUBSTANCES - FLUOREXETAMINE

Fluorexetamine (FXE)

- Novel hallucinogen – reported to cause effects similar to ketamine and phencyclidine (PCP)
- First detected at DFS in May 2023
 - Found in samples also containing *fentanyl*, *cocaine*, *xylazine*, *heroin*, and *dipentylone*
- Also detected in submitted samples to Customs and Border Protection (CBP)



COUNTERFEIT PILLS - OPIOIDS

Counterfeit opioids are commonly marketed as oxycodone medication, but instead contain **fentanyl** with adulterants.









Top Row: Genuine prescription tablets (images from www.drugs.com)

Bottom Row: Counterfeit tablets (Source: DFS Laboratory)



“Rainbow” fentanyl (Source: DEA.gov)

COUNTERFEIT PILLS - BENZODIAZEPINES

Observed Imprint	Drugs.com Image	SUSPECTED	DETECTED
GG 258	 	Alprazolam	Etizolam
S 90 3	 	Alprazolam	Etizolam, Flualprazolam
XANAX 2	 	Alprazolam	Etizolam

Fake “Xanax”

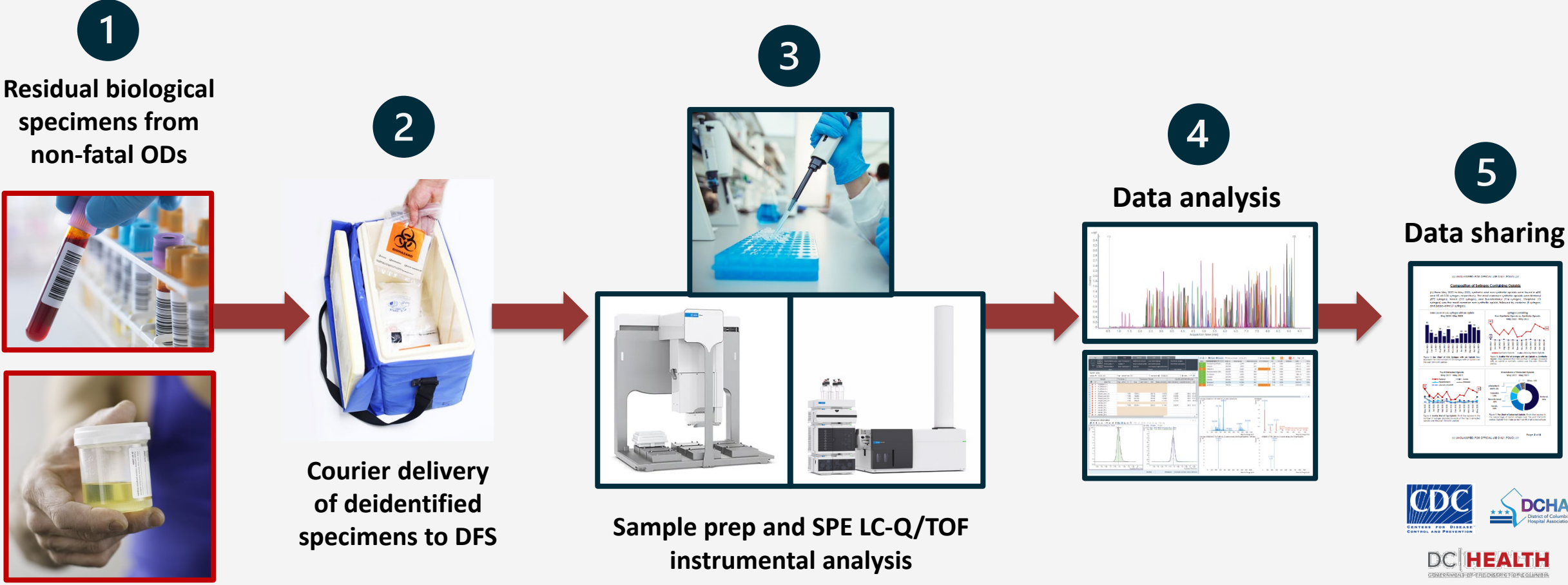
- Suspected alprazolam, but actually contain instead novel “designer” benzodiazepines
 - *Etizolam*
 - *Flualprazolam*
- Counterfeit pills contain unpredictable levels of drugs

BIOSURVEILLANCE

- Washington D.C. applied for the CDC funding opportunity **Overdose Data to Action in States (OD2A-S)**
- Objectives:
 1. Identify root cause of overdose events and clusters
 2. Increase visibility on the illicit drug supply
 3. Increase demographic-data associated with overdose events and clusters
 4. Disseminate actionable-data to stakeholders so they may adapt prevention and intervention strategies



BIOSURVEILLANCE - WORKFLOW



THANK YOU!

CONTACT INFORMATION

Alexandra Evans (Senior Chemist)

alexandra.evans@dc.gov

Office: (202) 868 – 6560

Samantha Leach (Supervisory Chemist)

samantha.leach@dc.gov

Office: (202) 481 – 3416