



Rapid Analysis of Drugs (RAD)

Collaborative Call

May 21st, 2025

Goals of Rapid Analysis of Drugs (RAD)

The Office of Harm Reduction (OHR) RAD project tests routine paraphernalia from Maryland Syringe Services Program (SSP) participants.

The goals of RAD are to:

- Better understand the drug market landscape in MD
- Empower people who use drugs with knowledge about the drug supply to inform their decisions and reduce risks
- Provide critical information about new and emerging trends in the drug supply

Agenda

1. Updates and Reminders
2. Recent Results
3. Emerging Trends
4. Program Report Out

Updates and Reminders

Materials from Calls

- Materials from [September Training](#) can be found here.
- Materials from collaborative calls can be found in the folder corresponding to the meeting date [here](#).
- Here is the link to the [RAD submission Cognito form](#).
- Law enforcement [memo](#)
- [RAD Flyer](#)

Cognito Form - Update

- We have changed the Cognito webform slightly to allow for a jurisdiction field.
- *If you serve multiple jurisdictions* - please select your organization and then select the jurisdiction that the compound was collected in.

Please provide unique number on barcode label: *

SSP Name *



SSP Jurisdiction *



Please select a jurisdiction served by your SSP: Cecil, Harford

Results - 15 Compound Expansion

- NIST is in the process of updating their results to include 15 compounds instead of 10 due to the polysubstance prevalence in samples.
- We are working to modify our Results Spreadsheet and Tableau Database to accommodate this.

Complete Cognito Webform

- The [Cognito web form](#) must be completed for EVERY sample **before** the sample is mailed.
- If a webform is not completed for a sample, you will receive an email - ***please stay alert to emails!***

Requesting Supplies

- Supply requests go directly to NIST.
- The link for the supply request is:
forms.gle/FHUxCT8GwrZhkWcw5

Mailing envelopes seem to be running low. OHR is working on procuring more. If you run out, use ACCESS funds for mailing supplies.

Results

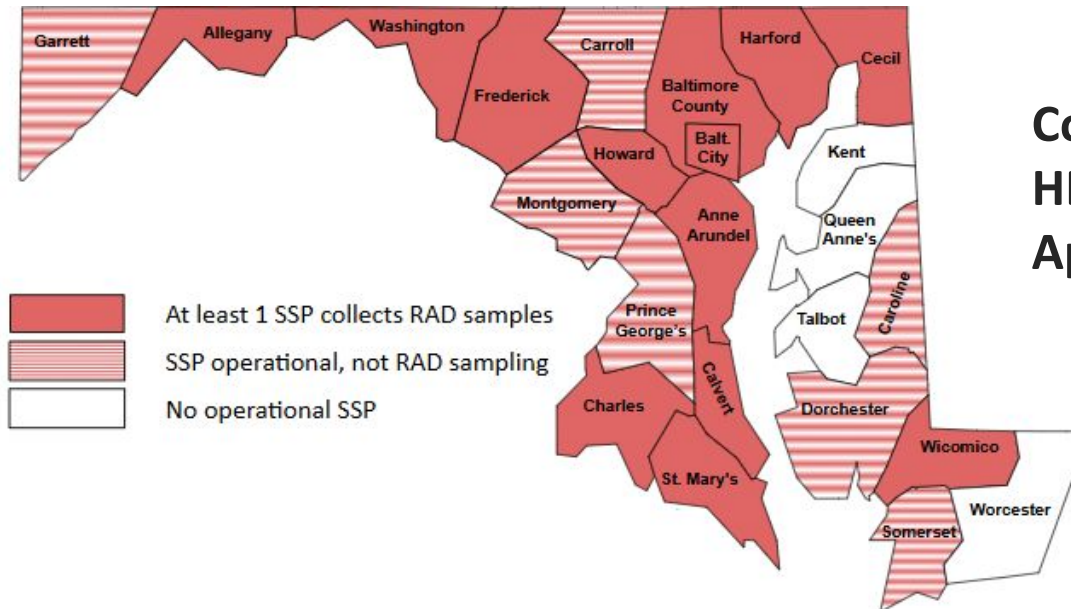
- You are now receiving results directly from NIST, so help reduce the lag time in results getting back to programs.
- All results are still available in the [RAD database](#).

RAD Data/Publication Updates

- Working on incorporating RAD on the public overdose dashboard.
- [RAD CY2024 Q4 Newsletter](#) - Q1CY2025 is in the works!
- [NIST April Newsletter](#)
 - If you want to sign up to receive the newsletter, you can do so at the bottom on the link above

Want to get started?

- If you are an SSP not currently sampling for RAD and you want to get involved, please reach out to Maggie



**Congrats to Charles County
HD who started sampling in
April!**

NPHL Maryland SSP Law Fact Sheet

- The Network for Public Health Law recently put out a fact sheet on the [Maryland SSP Law](#).

NIST Updates

Ed Sisco

Drug Effects/ Symptoms Tracker

Lizzie Spradley

Recent Results

RAD Data Disclaimers

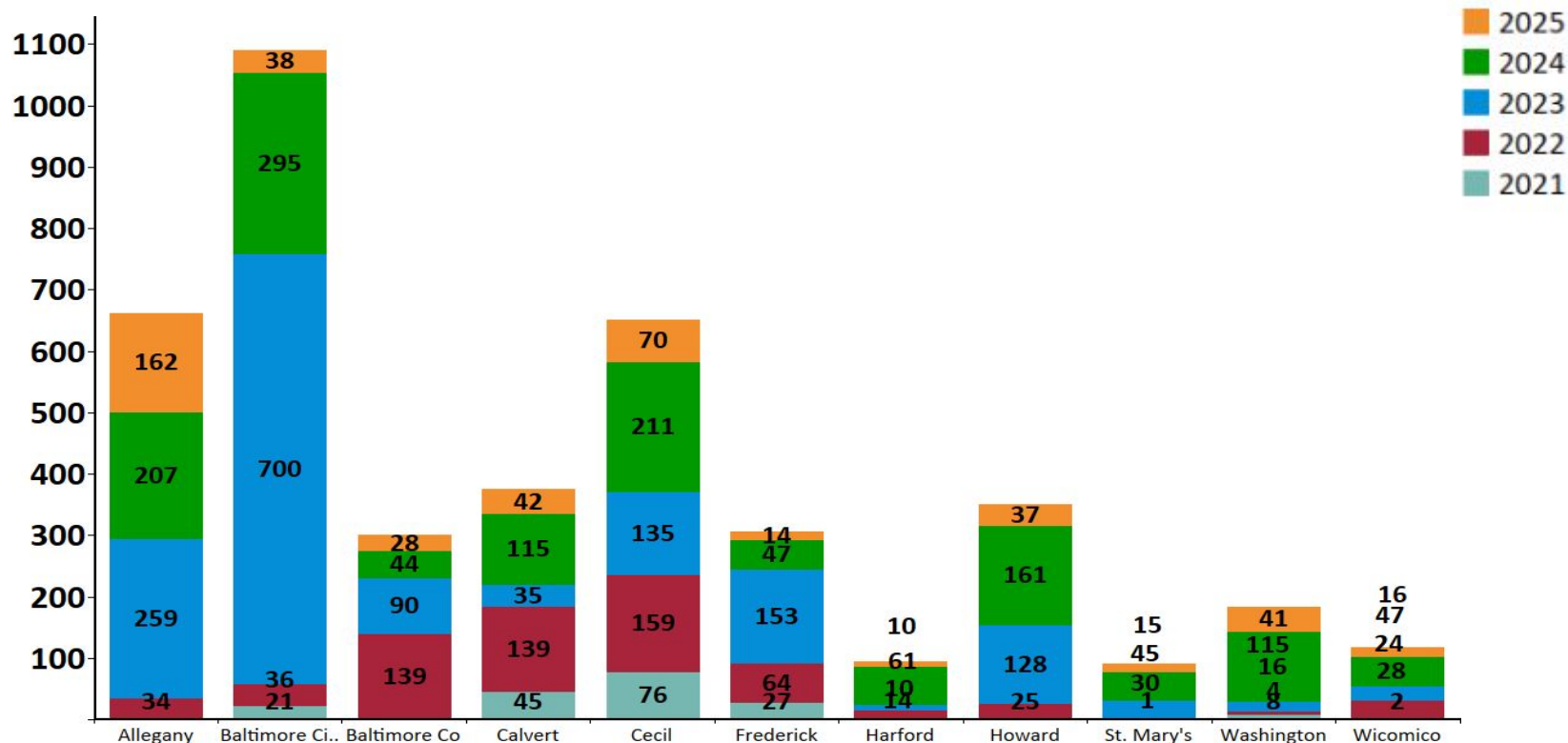
- Convenience Sampling -
 - RAD is a completely voluntary program that Maryland SSP participants can choose to engage in
 - Not all MD jurisdictions have an SSP that participate in RAD
- No personally identifiable data is collected, therefore we do not know how many participants are accounted for in the sample size

RAD gives us some indication of the near real time drug market in Maryland, but it should not be considered as fully representative.

Samples Collected

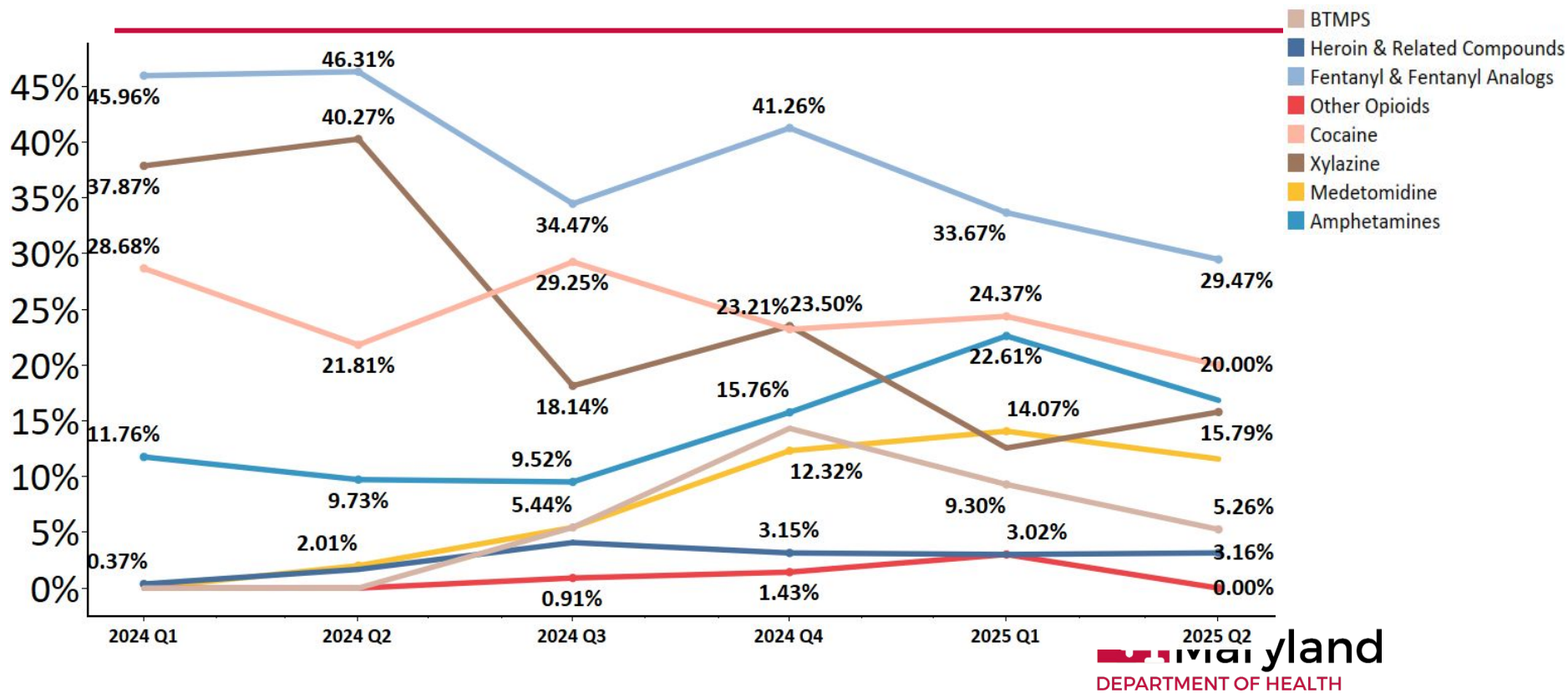
- Sample Collection began in October 2021 and is continuing
- As of May 7th, 4050 samples have been tested via NIST
- 18 of the 27 SSPs in Maryland collect samples.
 - Covering 12 jurisdictions

RAD Sampling by Jurisdiction, OCT 2021- MAY 2025



Note: Data is preliminary and subject to change.

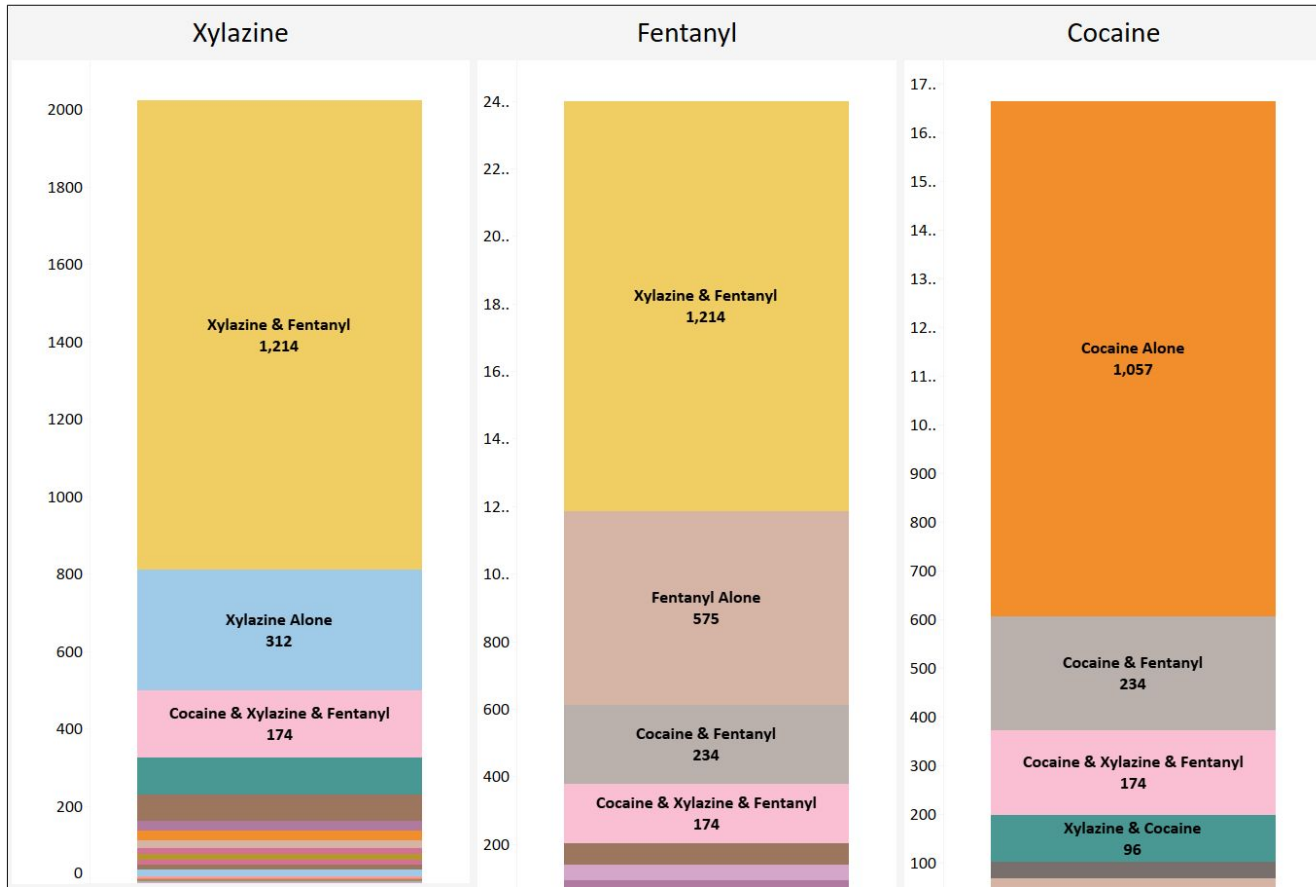
RAD Compounds, JAN 2022 - MAY 2024



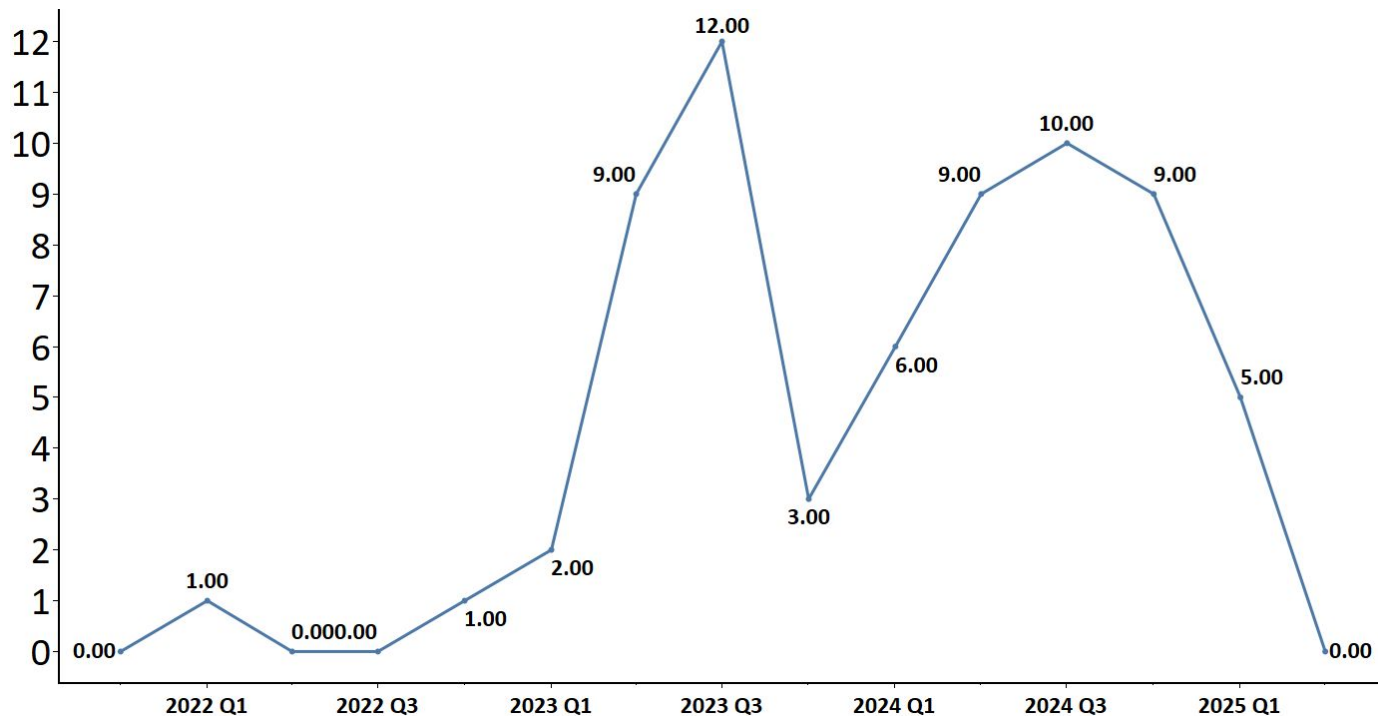
Note: Data is preliminary and subject to change.

Polysubstance in RAD Samples

Polysub All Combos	
Xylazine & Fentanyl	1,214
Cocaine Alone	1,059
Fentanyl Alone	575
Xylazine Alone	312
Amphetamines Alone	299
Cocaine & Fentanyl	234
Cocaine & Xylazine & Fentanyl	174
Null	107
Xylazine & Cocaine	96
Fentanyl & Xylazine & Amphetamines	66
Fentanyl & Amphetamines	44
Cocaine & Amphetamines	34
Other Opioids & Xylazine & Fentanyl	27
Xylazine Detected & Amphetamines	24
Xylazine & Cocaine & Fentanyl & Heroin	20
Other Opioids & Cocaine & Fentanyl & Xylazine	16
Other Opioids & Xylazine & Cocaine & Fentanyl &...	15
Cocaine & Xylazine & Amphetamines	12
Other Opioids & Fentanyl	12
Xylazine & Cocaine & Fentanyl & Amphetamines	12
Xylazine & Heroin	12
Cocaine & Heroin	10
Heroin Alone	9
Cocaine & Fentanyl & Heroin	6
Other Opioids & Xylazine	6
Other Opioids Detected & Cocaine & Fentanyl	6
Xylazine & Cocaine & Fentanyl & Amphetamines ..	5
Cocaine & Fentanyl & Amphetamines & Heroin	4
Other Opioids & Amphetamines	4
Other Opioids & Fentanyl & Heroin & Xylazine	4
Other Opioids Alone	4
Amphetamines & Fentanyl & Heroin	3
Cocaine & Xylazine & Heroin	3
Other Opioids & Xylazine & Cocaine	3
Other Opioids & Xylazine & Heroin	3



Bromazepam, OCT 2021 - MAY 2025

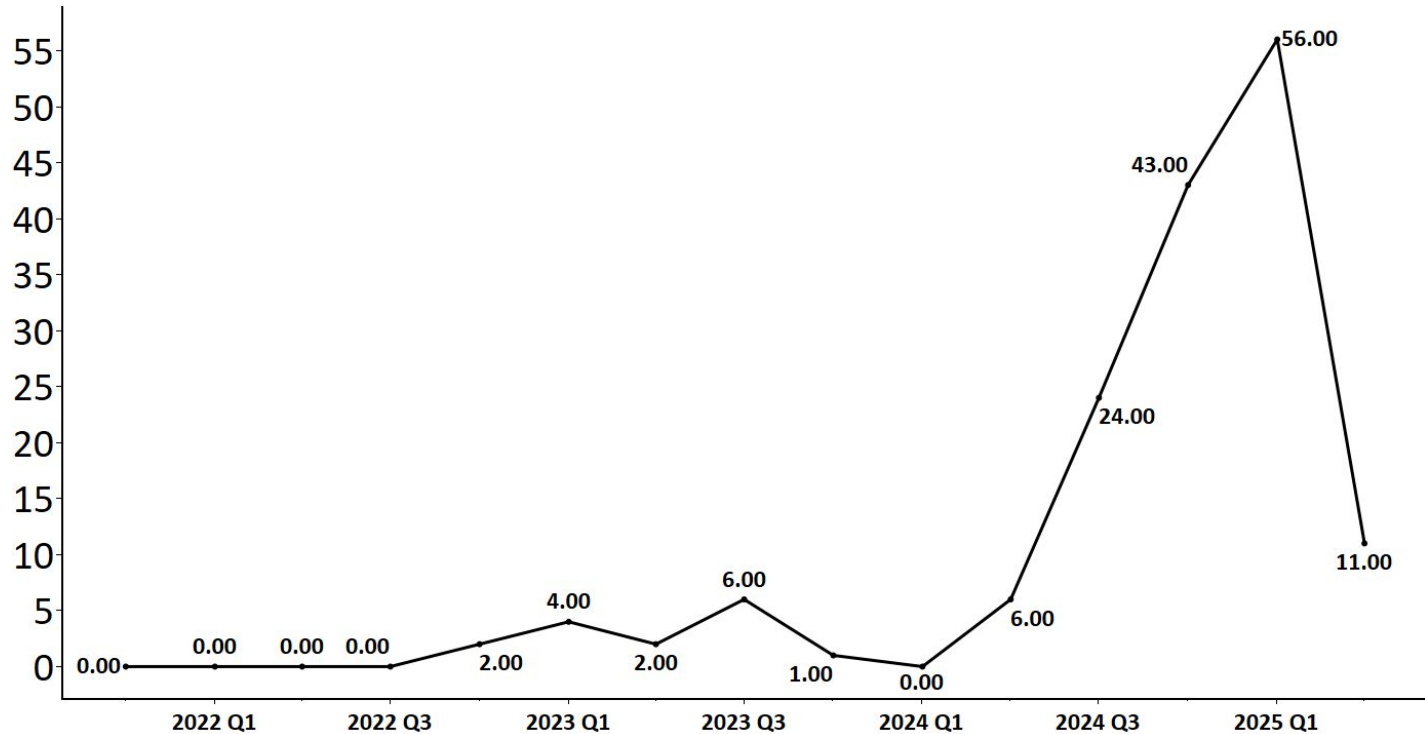


SFY24 Counties:

- Allegany County
- Baltimore City
- Baltimore County
- Calvert County
- Cecil County
- Frederick County
- Harford County
- Howard County
- St. Mary's County
- Washington County
- Wicomico County

Bromazepam is a type of benzodiazepine (sedative)

Medetomidine, OCT 2021 - MAY 2025



SFY25 Counties:

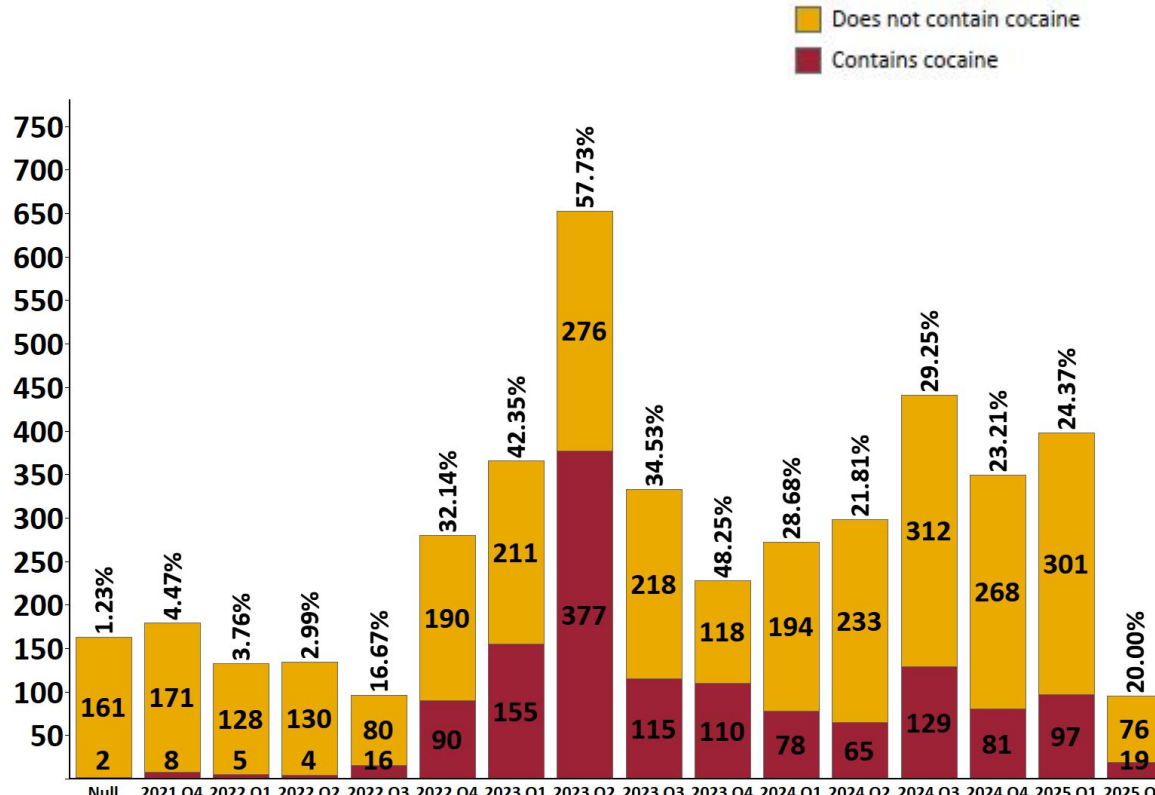
- Allegany County
- Baltimore City
- Calvert County
- Cecil County
- Frederick County
- Harford County
- St. Mary's County
- Washington County
- Wicomico County

ryland

DEPARTMENT OF HEALTH

Samples Containing Cocaine

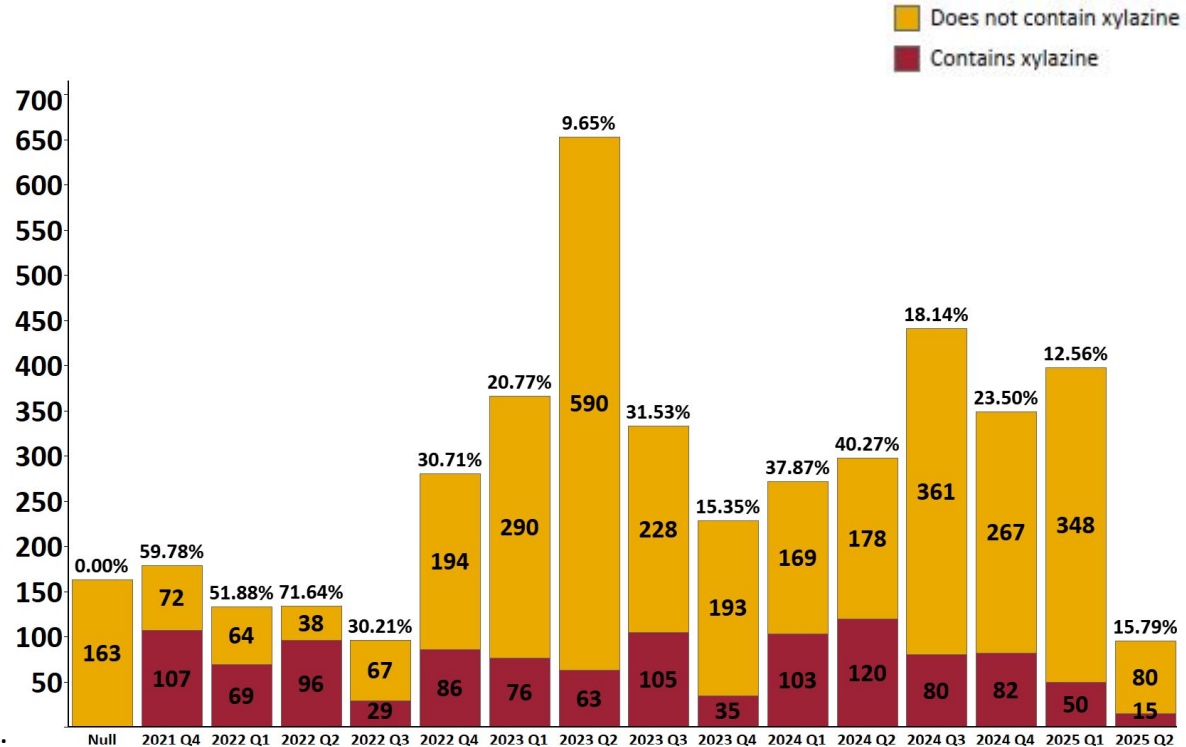
- 23.41% of samples tested in Jan-April of CY 25 contained cocaine
- There were a total of 114 samples that contained cocaine in this time period
- So far in Q2 of CY 2025 19 samples have contained cocaine.
- Comparing Q1 of CY 2025 to Q1 of CY 2024 there was a 24.4% increase in samples that contained cocaine.



Note: Data is preliminary and subject to change.

Samples Containing Xylazine

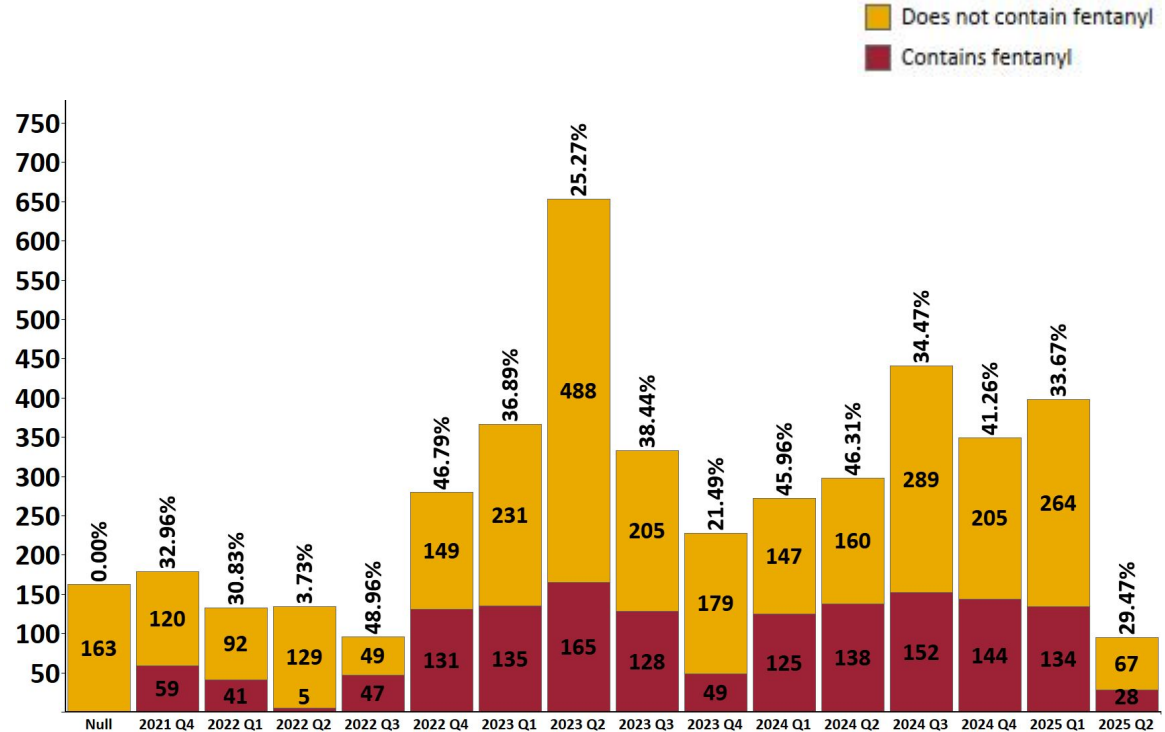
- 13.14% of samples tested in Jan-April of CY 25 contained xylazine
- There were a total of 64 samples that contained xylazine in this time period
- So far in Q2 of CY 2025 15 samples have contained xylazine.
- Comparing Q1 of CY 2025 to Q1 of CY 2024 there was a 51.5% decrease in samples that contained xylazine.



Note: Data is preliminary and subject to change.

Samples Containing Fentanyl & Fentanyl Analogs

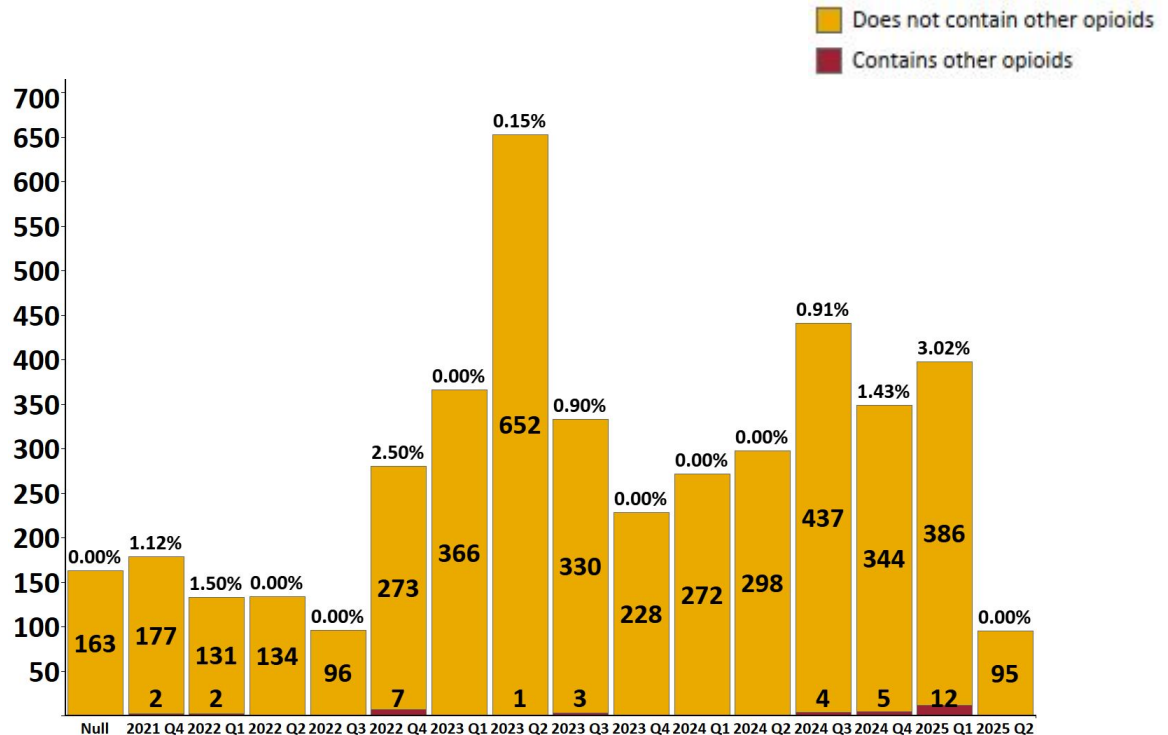
- 33.26% of samples tested in Jan-April of CY 25 contained fentanyl & fentanyl analogs.
- There were a total of 162 samples that contained fentanyl & fentanyl analogs in this time period
- So far in Q2 of CY 2025 28 samples have contained fentanyl & fentanyl analogs.
- Comparing Q1 of CY 2025 to Q1 of CY 2024 there was a 7.2 % increase in samples that contained fentanyl & fentanyl analogs.



Note: Data is preliminary and subject to change.

Samples Containing Other Opioids

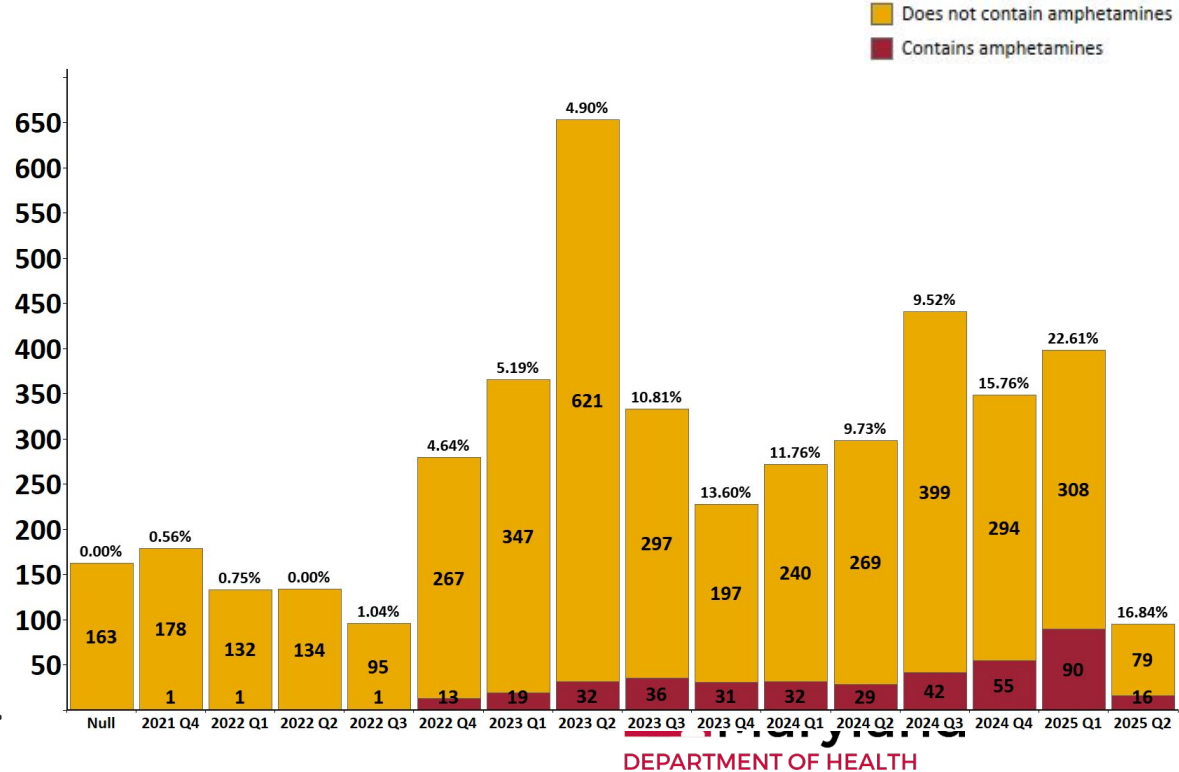
- 2.46% of samples tested in Jan-April of CY 25 contained other opioids.
- There were a total of 12 samples that contained other opioids in this time period
- So far in Q2 of CY 2025 no samples have contained other opioids.



Note: Data is preliminary and subject to change.

Samples Containing Amphetamines

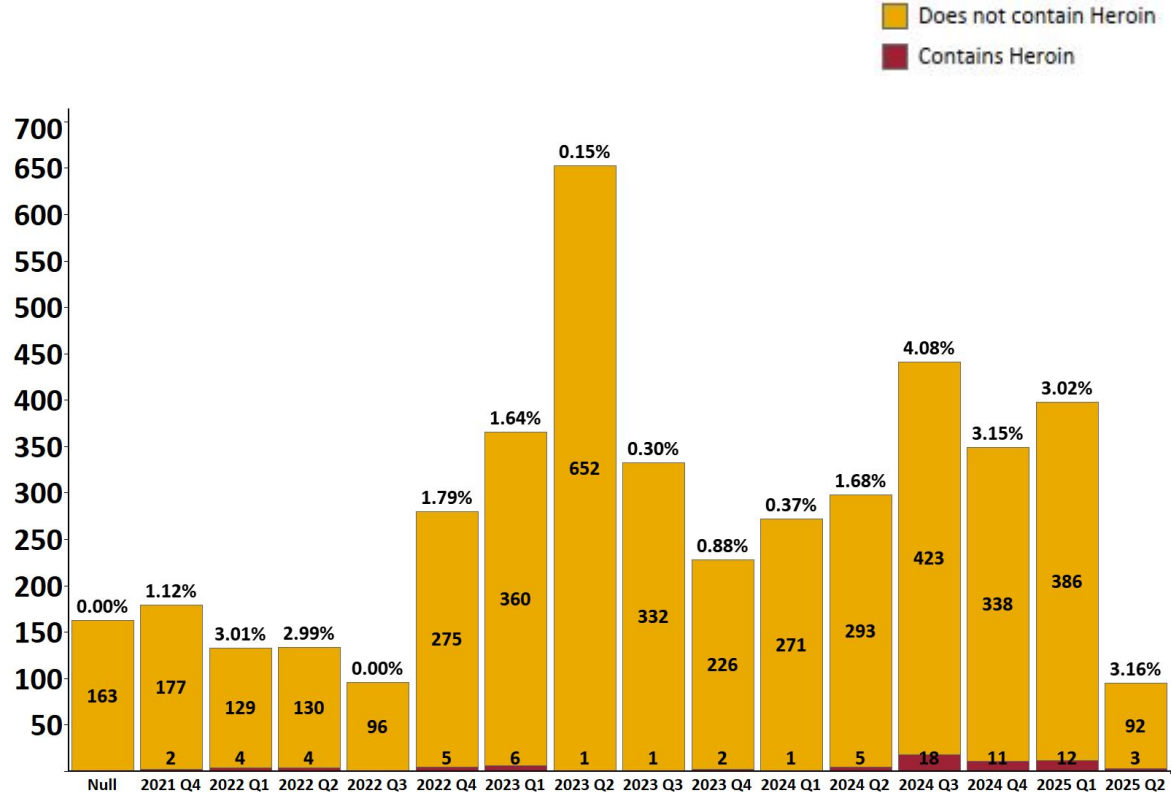
- 21.77% of samples tested in Jan-April of CY 25 contained amphetamines
- There were a total of 106 samples that contained amphetamines in this time period
- So far in Q2 of CY 2025 16 samples have contained amphetamines
- Comparing Q1 of CY 2025 to Q1 of CY 2024 there was a 181.25% increase in samples that contained amphetamines.



Note: Data is preliminary and subject to change.

Samples Containing Heroin & Related Compounds

- 3.08 % of samples tested in Jan-April of CY 25 contained heroin & related compounds
- There were a total of 15 samples that contained heroin in this time period
- So far in Q2 of CY 2025 3 samples have contained heroin
- Comparing Q1 of CY 2025 to Q1 of CY 2024 there was a 1100% increase in samples that contained heroin.



Note: Data is preliminary and subject to change.

Emerging Trends Discussion

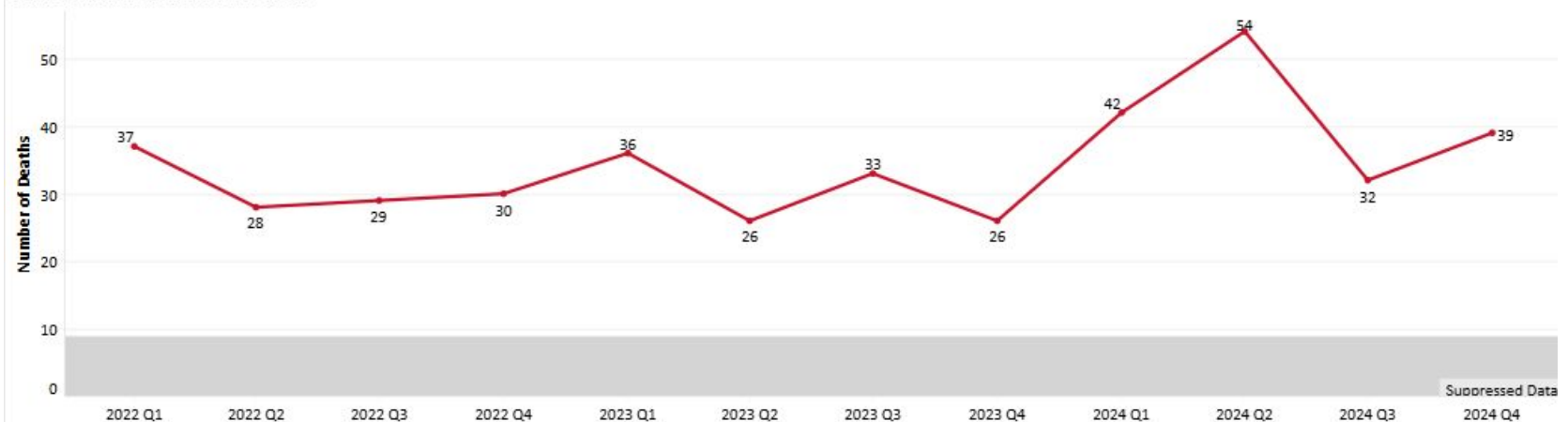
Medetomidine Increase

- Medetomidine is a sedative similar to xylazine that has been increasing in prevalence across the east coast in 2024.
 - Medetomidine seems to be replacing xylazine in the drug market, likely as a result of efforts to schedule xylazine
 - Seen in 9 of the 12 jurisdictions that sample for RAD.
- Philly continues to see a similar trend in medetomidine
 - [Here is an article](#) they put out on worsening withdrawal symptoms
 - [Here is an article on overdose response](#) in the wake on medetomidine
- Monitoring the RAD trend and investigate other data sources - still not being seen in fatal overdose data as of April.
- We encourage emphasis on still administering naloxone and responding with rescuing breathing/ CPR.

Heroin Increase

- RAD has seen an increase in heroin in samples in 2024.
- Heroin is now present in 2-4% of the sample (previously always less than 2%).
- This is being seen in fatal overdose trends in Maryland as well.

Total Overdose Deaths Over Time



Bis (2,2,6,6-tetramethyl-4-piperidyl) sebacate (BTMPS)

- BTMPS has been seen emerging in the drug markets around the US.
- BTMPS is a hindered amine light stabilizer used in plastics manufacturing, as an adhesive, and as a sealant.
- NIST put out a report [available here](#), specifically focusing on the LA and Philly outbreaks.
- UNC Drug Checking - [BTMPS page](#) and CFSRE [BTMPS chemical page](#)
- Maryland currently has 116 confirmed samples containing BTMPS
 - AHEC West (Allegany)
 - Calvert
 - Howard
 - OOH (Baltimore City)
 - VOH (Cecil)
 - VOH (Harford)
 - Wicomico
 - Washington
 - St. Mary's
 - Frederick

Bromazepam and Carfentanil

- We are continuing to use RAD to monitor Bromazepam and Carfentanil
 - We continue to see low but variable growth in numbers of Bromazepam.
 - Carfentanil has not been seen in RAD samples
- All of these substances are often seen in combination of a opioid (mainly fentanyl) and naloxone should still be administered.

5-fluoro ADB (Synthetic Cannabinoid)

RAD has seen 3 samples of 5-fluoro ADB:

- 2 in Frederick County - submitted 4/30/2025
- 1 in St. Mary's County - submitted 11/26/2024

One of the Frederick County samples also contained Oleamide.

The other two samples only had 5-fluoro ADB present.

We will continue monitoring this emergence. Please reach out if you have additional information.

**Have you heard of any other
emerging trends?**

Program Report Out

How are things going?

How is testing going?

- Any new barriers?
- Any new successes?
- How can we support?

Future Collaborative Call Schedule

The next call will be Wednesday, July 16th at 11 a.m.

CHRS Contacts

Maggie Rybak - margaret.rybak@maryland.gov (programmatic)

Janelle Acevedo Hodgson - janelle.hodgson@maryland.gov (data)

Thank you! We appreciate you!