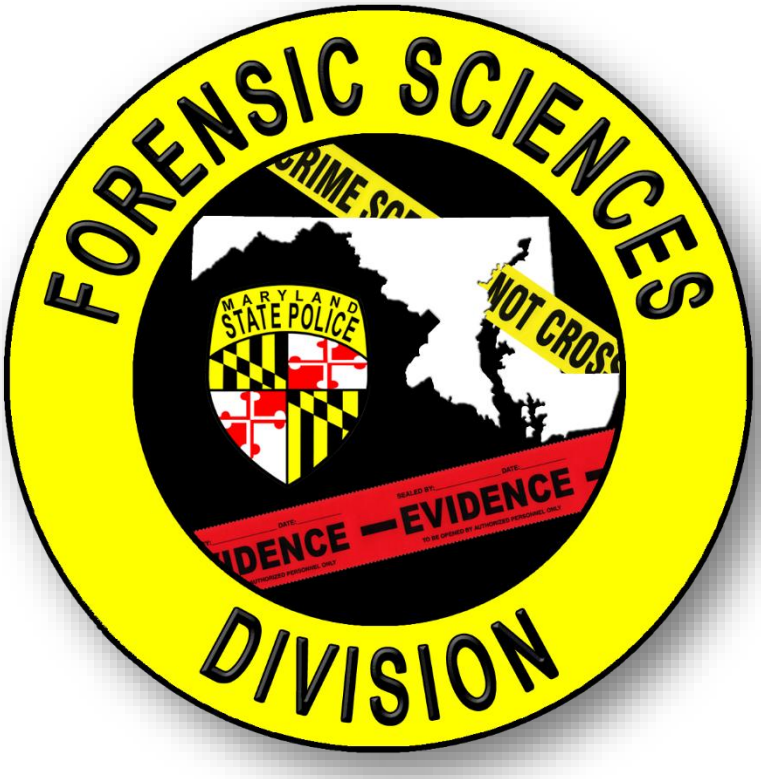

2025

ANNUAL REPORT

MARYLAND STATE POLICE

FORENSIC SCIENCES DIVISION

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2025 FORENSIC SCIENCES DIVISION TEAM MEMBERS

Matt Abbott	Matthew Franzman	Rebecca Levine	Stephanie Roe
Shelly Adams	Alla Frenkil	Jennifer Lewis	Caitlin Roy
Whitley Abrams	Alexis Garloff	Michelle Lewis	Cat Rust
Kris Amspacker	Danielle Goodnow	Deniece Lobban	Cathy Savage
Jose Ayala	Laura Gossard	Ross Lowe	Liz Schneider
Annabella Bair	Michelle Groves	Roshell Mack	Adonia Sedore
Tina Bankard	Amy Hager	Dana Mack-Marcus	Kelly Sexton
Tanya Baker	Arnetta Haith	Argi Magers	Rebecca Shembari
Estoria Bantner	Melissa Harvey	Jayna Margerum	Wayne Shu
Carrie Barthel	Bruce Heidebrecht	Amber McConnell	Joshua Smith
Heather Baxivanos	Debbie Heller	Delaney McGinnis	Tiffany Smith
Kevin Beardsley	Jeanine Hotchkin	Natalie Meixsell	Barbara Solomon
Laura Beck	Alicia Houser	Corrie Mellott	Angie Spessard
Jason Befus	Annette Howard-Jackson	C.R. Miller	Darby Stemple
Jim Betts	Jennifer Hsueh	Jamie Miller	Zach Suber
Laurel Bobka	David Iden	Shawn Miller	Bruce Tanner
Jamie Brunner	Linda Idso	Gary Moore	Kinday Toto
Megan Buck	Ikenna Ikpeama	Leslie Mounkes	Dawn Trusty
Tristan Buckley	Maggie Iman	Haley Mulder	Tianna Warner
Jessica Bullis	Valerie Imschweiler	Jaimie Myer	Laura Waters
Kathy Busch	Jenn Jeudy	Noelle Neff	Rosalie Weimer
Myrna Canales	Dan Katz	Mya Nicholson	Brooke Welsh
Michelle Cataldo	Tiffany Keener	Alexa Orlando	Michael Whitmore
Habibah Cisse	Amy Kelly	Jade Osaw	Heath Wilkins
Theresa DeAngelo	Susan Kim	Nicholas Palmer	Stacey Wise
Brooke Demby	Angela Kortchak	Jim Patrick	Lauren Wolfe
Mitch Dinterman	Eva Kouka	Kenedy Patterson	Sam Woods
Lindsey Domonoski	Wanda Kuperus	Rita Phillips	Annie Wright
Jason Dry	Subha Kuriakose	Kaya Powell	Carol Young
Tony Edoga	Stephanie Laufert	Sadhana Ramkissoon	Teresa Zambotti
Keyana Faith	Diane Lawder	Ying Ren	Keffene Zeleke
Jessie Fisher	Nicholas Lawrence	Tristan Rice	Teri Zerbe
Sierra Fleegle	La Juan Lee	Pat Rogers	
Christina Fraling	Sara Lee	Richard Russell	
Patricia Frantz	Taylor Lentz	Stephanie Roberg	

FORENSIC SCIENCES DIVISION DESCRIPTION

The Maryland State Police Forensic Sciences Division (MSP-FSD) is an accredited, full-service forensic laboratory system offering analysis in the following disciplines: Crime Scene, Latent Prints/Impressions, Firearms/Toolmarks, Controlled Dangerous Substances (CDS), Toxicology, Biology, Trace Evidence, and Forensic Document Examination. Although the MSP-FSD operates under the administration of the Maryland State Police, the laboratory is available to provide services to all law enforcement agencies in Maryland and partners outside of the state. The MSP-FSD is accredited by ANSI National Accreditation Board (ANAB) and licensed by the Maryland Department of Health, Office of Health Care Quality. As such, the laboratory utilizes generally accepted practices and procedures and conforms to *ISO/IEC 17025 - General requirements for the competence of testing and calibration laboratories*.

The MSP-FSD employs approximately 120 personnel who work out of three laboratories in 2025 located in Pikesville, Hagerstown, and Berlin, as well as 14 Crime Scene Offices located strategically throughout the state. The MSP-FSD is comprised of the Office of the Director, the Crime Scene, Materials, and Human ID Branch, the Evidence and Toxicology Branch, and the QA/Safety Office. The Office of the Director consists of the Director, Deputy Director, Chief Toxicologist and Quality Assurance/ Safety Manager. This administrative unit is responsible for the overall management of the Division. The Director oversees the management of the entire Division, the Deputy Director oversees the Crime Scene, Materials, and Human ID Branch, the Chief Toxicologist oversees the Evidence and Toxicology Branch, and the Quality Assurance/ Safety Manager oversees the QA/Safety Office. The Crime Scene, Materials, and Human ID Branch consists of Crime Scene, Chemistry, Pattern Evidence and Biology Sections. The Evidence and Toxicology Branch consists of the Central Receiving Units (CRU) and the MSP Toxicology Operations that include the FSD Toxicology Units with support from the MSP Chemical Test for Alcohol Unit (CTAU). The personnel within all branches provide scientific support services to the criminal justice community.

The MSP-FSD operates under the following principles:

Core Values

Our dedication to integrity, fairness, and service ensures that our clients are always provided with reports and expert testimony that are informative, ethical, impartial, reliable, and scientifically valid.

Mission Statement

The mission of the Forensic Sciences Division is to serve as the model laboratory for the analysis of forensic evidence in the State of Maryland by employing the following elements:
Promotion of employee morale through a respectful, inclusive, equitable, unified, and safe work environment.
Meeting the forensic science needs of Maryland and its citizens.
Maintaining ISO 17025 accreditation and compliance with all oversight requirements.
Minimizing backlogs and turnaround time.
Operating in a planned, prepared, and proactive manner.

Vision Statement

- To respect, acknowledge, value, challenge, and retain our employees within a diverse workplace.
- To collaborate with other laboratories and agencies and maximize the forensic services available to Maryland and its citizens.
- To promote state of the science operations through continuing education and the routine evaluation of current procedures.
- To eliminate backlogs and initiate cases upon submission.
- To maximize the public's return on investment by ensuring that sufficient resources are always available to the FSD and that those resources are always procured in the most fiscally responsible manner possible.

DIRECTOR'S MESSAGE

The year 2025 saw growth and change for FSD - where expansions, new technologies, new IT projects, unique opportunities for outreach, and shifts in staffing all transpired throughout the year.

FSD had numerous construction and development projects which has helped broaden the lab's ability to provide additional forensic services in both the east and west of Maryland. The brand-new Berlin Barrack officially opened its doors in September of 2025. Historically, FSD had only a three-person Controlled Dangerous Substances (CDS) Unit and one-person Central Receiving Unit (CRU) operating within the Berlin Barrack. The new Berlin Barrack includes a state-of-the-art crime laboratory that has allowed FSD to expand the services provided there. Alongside FSD's CRU and CDS Unit, the new Berlin lab now includes Crime Scene, Toxicology, and Latent Prints/Impressions, with a NIBIN workstation on the horizon. CRU, CDS, Crime Scene and Latent Prints/Impressions are already up and running, with Toxicology forthcoming in 2026.

Beyond Berlin, in the Fall of 2025, the Hagerstown Toxicology Unit opened and accepted cases for Blood Alcohol Concentration (BAC). A new scientist was hired in that unit in September, and the first case was tested in October 2025. It is expected that the Unit will expand to accept Blood Drug casework by the end of 2026.

In addition to this important expansion, staffing expansion to support both casework and DNA Database operations was initiated in the Pikesville lab location. Existing space within the Pikesville facility was reconfigured to accommodate Biology's current personnel and operational needs while long-term facility planning continues. This interim expansion was made possible through the collaboration of multiple FSD units and coordinated use of multiple grant funding sources.

FSD implemented new software and equipment in 2025 to enhance its forensic analysis capabilities to better serve our customers. In January 2025, The Biology Section implemented probabilistic genotyping analysis of evidentiary autosomal DNA profiles. The software chosen for this purpose at the MSP-FSD is STRmix™. This change enhances our capabilities in forensic DNA analysis by making a higher proportion of complex DNA mixtures amenable to interpretation. In February 2025, the Crime Scene Section brought online 13 Ballistics IQ (BIQ) systems for investigative use. BIQ is an automated ballistics imaging triage system that allows for expeditious scanning of cartridge case evidence. BIQ is intended to assist with the investigation of shooting incidents by providing rapid crime gun intelligence to criminal investigators as quickly as possible after an incident. In August 2025, a new resource tool, NIST's Lower Confidence Bounds for Seized Material Sampling App was adopted by SWG DRUG (The Scientific Working Group for the Analysis of Seized Drugs) thanks to the collaboration of FSD and NIST scientists. This new app has a novel approach to statistical sampling of CDS evidence, and allows chemists to make a statement about how many specimens in a population are presumed to be positive for a drug at a certain confidence level. The CDS Units plan to use this sampling app to report statistical sampling results for Possession with the Intent to Distribute (PWID) casework in the near future.

After years of anticipation and preparation, FSD procured and kicked off the installation of a new Laboratory Information Management System (LIMS), known as 'The BEAST'. Installation, configuration and training is a major project that is headed by a contractual project manager and will take approximately two years. This milestone marks the beginning of an exciting initiative that will enhance efficiency, streamline operations, and modernize workflows across FSD and the Department.

In August 2025, the Maryland State Police took an important step forward with the hiring of Teresa Zambotti as MSP's first permanent Forensic Intelligence Analyst. This position was created as part of the MSP Forensic Intelligence Initiative, a forward-looking effort designed to use forensic information earlier and more strategically in criminal investigations. A major focus of the initiative is improving how CODIS hits are tracked. Historically, when a 'hit' was issued by FSD, there was no formal mechanism to track investigative or prosecutorial outcomes. Using grant funding, MSP became the first agency in the nation to purchase Forensic Science Hit Outcome Tracking system (FSHOT), an innovative software platform that allows forensic hits to be tracked from investigation through prosecution, helping ensure accountability and consistent follow-up. FSHOT is currently in the process of being implemented to track CODIS hits, with future plans to expand the system to include NIBIN and AFIS hits.

FSD also continued its outreach efforts to customers and the community in 2025. FSD initiated the Allied Crime Scene Training Program in which allied agency employees complete the MSP-FSD Crime Scene Technician training program under the guidance of MSP-FSD trainers. Once the Crime Scene Technician completes our training program, they are released back to their own agency to work crime scenes in their jurisdiction utilizing their own agency's policies and procedures. A pilot of this program is underway with two technicians: one from Laurel PD and the other from Cecil County SO. In early July 2025, the Maryland Highway Safety Office held a joint press conference with the State Police Impaired Driving Reduction Effort (S.P.I.D.R.E) team and FSD at the Pikesville Laboratory as part of their safe driving initiative ahead of the July 4th holiday weekend. Members of FSD participated in this press event, highlighting the role that multiple units within the Division play in Crash Investigation/Crash Reconstruction cases.

Finally, FSD had several personnel changes in 2025. FSD welcomed 14 new members to the team, including an Allied Biologist from Charles County Sheriff's Office. This is the first time the Biology Section has an Allied Scientist dedicated to a single county's casework. FSD experienced the unexpected passing of one of its Contractual Administrative Officers, Dana Mack-Marcus, who passed away on August 17, 2025. Dana was a beloved friend and an invaluable member of FSD's administration staff. The impact of the loss of Dana affected many at FSD.

FSD saw many retirements as well in 2025. Biology Technical Leader Bruce Heidebrecht retired in August 2025 after more than 29 years of service. At the end of December 2025, Crime Scene Supervisor, Kristina Amspacker, retired after over 24 years of service with MSP FSD, and Forensic Scientist Advanced Matthew Abbott, retired after over 40 years of service with MSP FSD.

Last but not least, FSD saw the resignation of Director Daniel Katz at the end of December 2025. Dan served MSP FSD for over 19 years; first as the Biology Section Manager for 2 years, then as Deputy Director for 5 years, and finally as Director for the past 12 years. FSD would like to thank Dan for his many contributions to FSD over the years and for his dedication and resilience during his time with MSP FSD. FSD will carry on and continue to succeed moving forward from the foundation Dan built. Dr. Wanda Kuperus was serving as Acting Director as the lab ushered in 2026.

STATISTICAL SUMMARY

Activity Summary – Crime Scene, Photography and Central Receiving				
	2022	**2023**	**2024**	**2025**
Crime Scene Section				
Crime Scenes Processed	678	673	754	690
Photography Unit				
Special Assignments	239	229	202	224
VeriPic Requests Processed	816	545	489	409
Color Prints	4,188	4,249	2,307	1,888
ID Cards	865	739	702	644
Central Receiving Units				
CDS cases submitted for destruction	7,881	7,896	3,859	1,822
Forensic Cases Received	10,757	10,071	9,748	9,261

Activity Summary – Biology, Chemistry, Pattern Evidence and Toxicology				
	2022	2023	2024	2025
Latent Prints/Impressions				
Cases Received	824	923	707	601
Cases Completed	717	903	752	589
MAFIS Latent Hits	308	584	447	335
Case Uploads to MAFIS	326	443	391	284
Latent Print Uploads to MAFIS	907	1,754	1,332	899
Firearms/Toolmarks				
Cases Received	1,233	1,114	871	792
Cases Completed	1,086	1,039	1,162	863
Number of Firearms for Handgun Roster Board	79	82	77	42
Exhibit Uploads to NIBIN	1,075	969	1,215	1,204
Number of NIBIN Leads Generated	205	226	342	171
Number of NIBIN Hits Confirmed	12	12	17	24
Operation Test Shot Samples Completed	752	729	531	555
Walk-In Test Fires (# of Firearms)	85	72	57	28
CDS				
Cases Received in Pikesville	2,764	2,705	3,152	2,320
Cases Received in Berlin	1,012	839	906	755
Cases Received in Hagerstown	1,335	1,247	800	1,160
Subtotal Cases Received	5,111	4,791	4,858	4,235
Cases Received by Allied Forensic Scientists[1]	1,722	1,206	1,437	1,838
Total Cases Received	6,833	5,997	6,295	6,073
Cases Completed in Pikesville	2,980	2,721	2,869	2,476
Cases Completed in Berlin	1,095	992	938	693
Cases Completed in Hagerstown	1,732	1,421	788	926
Subtotal Cases Completed	5,807	5,134	4,595	4,095
Cases Completed by Allied Forensic Scientists[1]	1,923	1,286	1,306	1,980
Total Cases Completed	7,730	6,420	5,901	6,075
Toxicology				
Blood Alcohol Cases Received	547	559	445	472
Blood Drug Cases Received	355	388	316	276
Total Cases Received	902	947	761	748
Blood Alcohol Cases Completed	608	598	470	472
Blood Drug Cases Completed	576	402	326	280
Total Cases Completed	1,184	1,000	796	751
Biology				
Submitted Cases Received	636	607	557	584
Directly Outsourced Cases Received	210	370	412	366
Total Cases Received	846	977	917	950
Submitted Cases Completed	651	511	498	517
Directly Outsourced Cases Completed	212	305	401	419
Total Cases Completed	864	816	883	931
Maryland Case CODIS Hits	1,107	1,279	1,376	1,451
Arrested/Charged CODIS Hits	137	449	475	535
Convicted Offender Uploads to CODIS	3,462	3,767	4,375	4,014
Arrested/Charged Uploads to CODIS	3,380	3,566	3,734	3,228
Case Uploads to CODIS	1,250	1,434	1,726	1,529

Activity Summary – Biology, Chemistry, Pattern Evidence and Toxicology				
	2022	2023	2024	2025
Trace Evidence				
Cases Received	111	105	110	77
Cases Completed	102	88	105	70
Question Documents				
Cases Received	8	8	7	20
Cases Completed	11	8	8	15

1 - Allied Forensic Scientists = Forensic Scientists hired by allied agencies or other governmental entities who are authorized to perform CDS analysis in FSD facilities under the provisions provided for in a Memorandum of Understanding.

Unit	Cases Received[2]		Cases Completed	
	2024	2025	2024	2025
Latent Prints/Impressions	707	601	752	589
Firearms/Toolmarks	871	792	1,162	863
CDS-Pikesville	3,152	2,320	2,869	2,476
CDS-Berlin	906	755	938	693
CDS-Hagerstown	800	1,160	788	926
CDS-Allied[1]	1,437	1,838	1,306	1,980
Toxicology	761	748	796	751
Biology- Submitted	557	584	498	517
Biology- Direct Outsourcing	412	366	401	419
Trace Evidence	110	77	105	70
Questioned Documents	7	20	8	15
Totals	**9,668**	**9,261**	**9,623**	**9,299**

CDS-Allied = Forensic Scientists hired by allied agencies or other governmental entities who are authorized to perform CDS analysis in FSD facilities under the provisions provided for in a Memorandum of Understanding.
Cases that are routed to multiple units are counted as a unique case for each unit.

Biology, Chemistry, Pattern Evidence and Toxicology Backlogs and Turn Around Times				
Casework Type	**Pending Caseload (Cases)[1]**	**Backlog (Cases pending >30 days)[1]**	**2025 Turn Around Time (Calendar Days)[2]**	**4th Quarter Turn Around Time (Calendar Days)[3]**
Latent Prints/Impressions	148	116	51	57
Firearms/Toolmarks	348	308	135	181
CDS-Pikesville	206	106	45	36
CDS-Berlin	60	15	56	40
CDS-Hagerstown	318	228	61	100
CDS-Allied	221	138	79	77
Toxicology	106	58	52	28
Biology-Submitted	403	349	180	240
Biology-Directly Outsourced	119	103	147	113
Trace Evidence	52	49	232	297
Question Documents	8	5	107	170
Totals	**1,989**	**1,475**	**73***	**121***

1- Number of cases as of last day of calendar year.
2- Average turnaround time for cases completed throughout the calendar year.
3- Average turnaround time for cases completed during the 4th quarter.
*- Average turnaround time for all casework types

Quantity of FSD Requests by County*						
County	2024			2025		
	Cases Submitted to Lab	Crime Scenes	Total	Cases Submitted to Lab	Crime Scenes	Total
Cecil	955	100	1055	985	96	1081
Frederick	794	23	817	798	25	823
Wicomico	869	73	942	795	66	861
Harford	665	22	687	617	15	632
Allegany	623	58	681	549	64	613
Carroll	592	49	641	529	26	555
Charles	472	12	484	436	7	443
St. Mary's	495	10	505	404	15	419
Calvert	419	7	426	370	7	377
Washington	397	20	417	362	22	384
Dorchester	316	16	332	351	14	365
Anne Arundel	403	36	439	349	28	377
Worcester	477	11	488	345	6	351
Baltimore	328	39	367	332	59	391
Baltimore City	242	26	268	264	27	291
Caroline	244	6	250	260	22	282
Howard	264	16	280	218	13	231
Prince George's	228	64	292	196	53	249
Somerset	168	37	205	175	26	201
Queen Anne's	230	28	258	173	28	201
Talbot	148	61	209	168	49	217
Garrett	130	6	136	126	6	132
Montgomery	122	22	144	105	6	111
Kent	118	8	126	88	10	98
Statewide/Not Determined**	48	0	48	53	0	53
Out of State	1	4	5	1	0	1
Totals	**9,748**	**754**	**10,502**	**9,049**	**690**	**9,739**

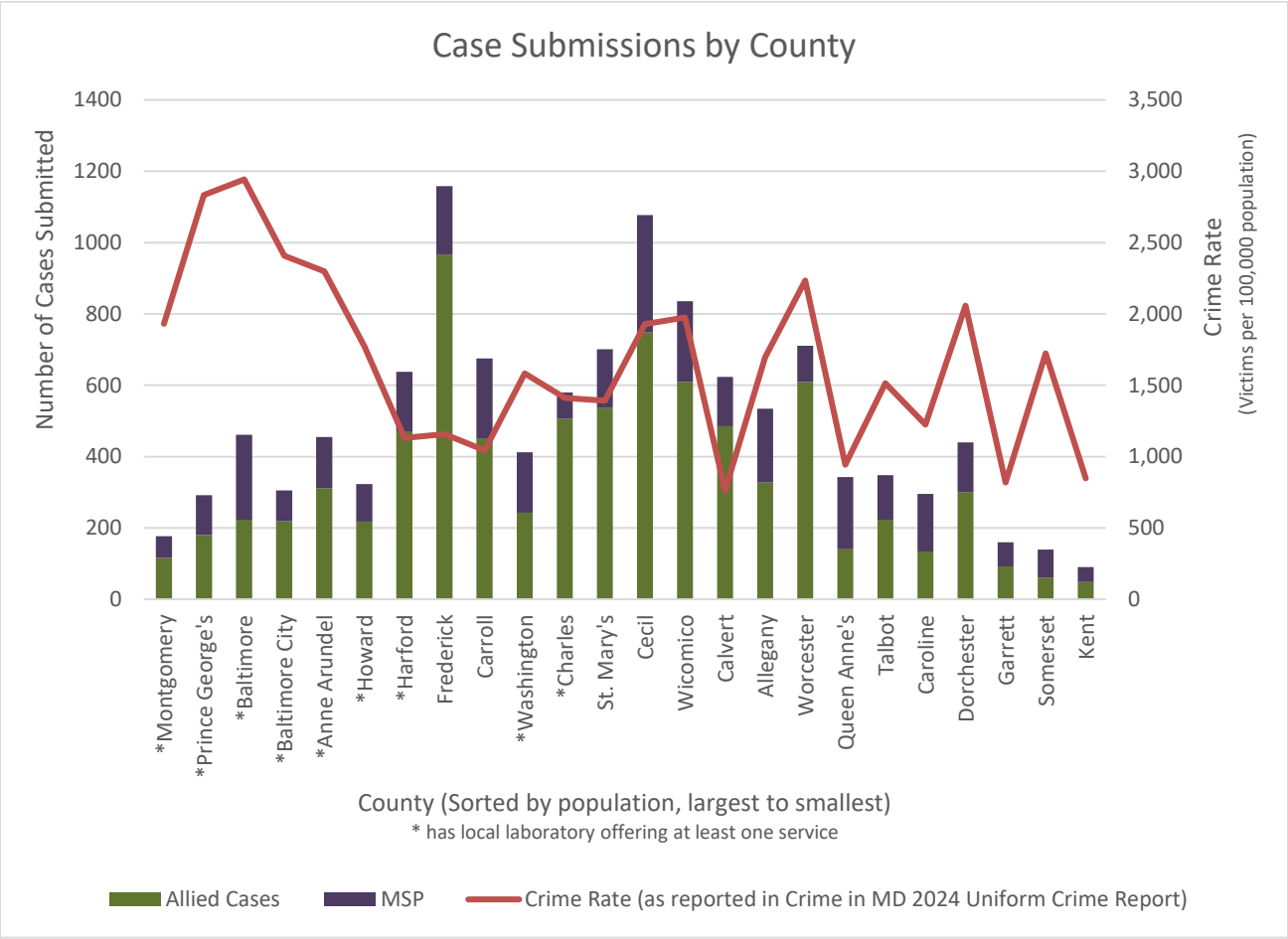
*Cases are counted more than one time when submitted to different FSD Units.
**County where offense occurred was not provided to FSD.

Quantity of Laboratory Submissions to FSD Ranked by MSP Installation*			
2025 Rank	**2024 Rank**	**MSP Installation**	**Counties Served**
1	1	MSP-CED	Statewide
2	3	MSP-Easton	Caroline, Dorchester, Talbot
3	2	MSP-Cumberland	Allegany
4	4	MSP-Golden Ring	Baltimore
5	5	MSP-North East	Cecil
6	9	MSP-Salisbury	Wicomico
7	7	MSP-Frederick	Frederick
8	8	MSP-Centreville	Kent, Queen Anne's
9	12	MSP-College Park	Prince George's
10	13	MSP-Bel Air	Harford
11	10	MSP-Westminster	Carroll
12	19	MSP-Homicide	Statewide
13	11	MSP-Glen Burnie	Anne Arundel
14	6	MSP-Hagerstown	Washington
15	16	MSP- JFK Highway	Cecil, Harford, Baltimore
16	23	MSP-Princess Anne	Somerset
17	14	MSP-Waterloo	Howard
18	18	MSP-Forestville	Prince George's
19	22	MSP-Berlin	Worcester
20	21	MSP-Prince Frederick	Calvert
21	15	MSP-Leonardtown	St. Mary's
22	20	MSP-McHenry	Garrett
23	27	MSP-C3I	Allegany
24	17	Office of State Fire Marshal	Statewide
25	25	MSP-Rockville	Montgomery
26	24	MSP-Annapolis	Anne Arundel
27	26	MSP-La Plata	Charles
28	28	MSP-Crash Team	Statewide
29	29	MSP-CVED	Statewide

*This does not include Crime Scene Submissions

Quantity of Laboratory Submissions to FSD Ranked by Allied Agency County*		
2025 Rank	**2024 Rank**	**County**
1	1	Cecil
2	2	Frederick
3	3	Wicomico
4	4	Harford
5	11	Allegany
6	5	Carroll
7	6	Charles
8	8	St. Mary's
9	9	Calvert
10	12	Washington
11	13	Dorchester
12	10	Anne Arundel
13	7	Worcester
14	17	Baltimore
15	14	Baltimore City
16	19	Caroline
17	15	Howard
18	23	Prince George's
19	20	Somerset
20	16	Queen Anne's
21	18	Talbot
22	21	Garrett
23	24	Montgomery
24	22	Kent
25	25	Statewide/Not Determined**
26	26	Out of State

*This does not include Crime Scene Submissions
**County where offense occurred was not provided to FSD.


Case Submissions by County
Number of Cases Submitted
Crime Rate
(Victims per 100,000 population)
1400
1200
1000
800
600
400
200
0
3,500
3,000
2,500
2,000
1,500
1,000
500
0
*Montgomery
*Prince George's
*Baltimore
*Baltimore City
*Anne Arundel
*Howard
*Harford
Frederick
Carroll
*Washington
*Charles
St. Mary's
Cecil
Wicomico
Calvert
Allegany
Worcester
Queen Anne's
Talbot
Caroline
Dorchester
Garrett
Somerset
Kent
County (Sorted by population, largest to smallest)
* has local laboratory offering at least one service
Allied Cases
MSP
Crime Rate (as reported in Crime in MD 2024 Uniform Crime Report)

QUALITY ASSURANCE/SAFETY OFFICE

The Quality Assurance/Safety Office (QA/SO) provides quality assurance and safety guidance as well as administrative support throughout the MSP-FSD. The staff within this office provide the oversight of quality assurance and safety for the laboratory system as well as office management functions. This office includes FSD's QA/Safety Manager, two FS Advanced (each serves as the Technical Leader of the Biology and Toxicology Sections), Administrative staff for FSD, and the FSD Photography Unit.

The laboratory's QA functions include coordinating, planning and managing the QA activities of FSD. In order to ensure the accuracy and reliability of the lab's work, QA tasks include overseeing quality control systems, managing audits, developing and reviewing Standard Operating Procedures (SOPs), handling all corrective actions and nonconformances, ensuring staff are trained appropriately, and overseeing the lab's compliance with ISO/IEC 17025 and FBI QAS standards. The safety functions of this office include conducting day-to-day safety monitoring of FSD and staff to ensure workplace health/safety by identifying hazards, enforcing regulations, conducting training, and investigating incidents.

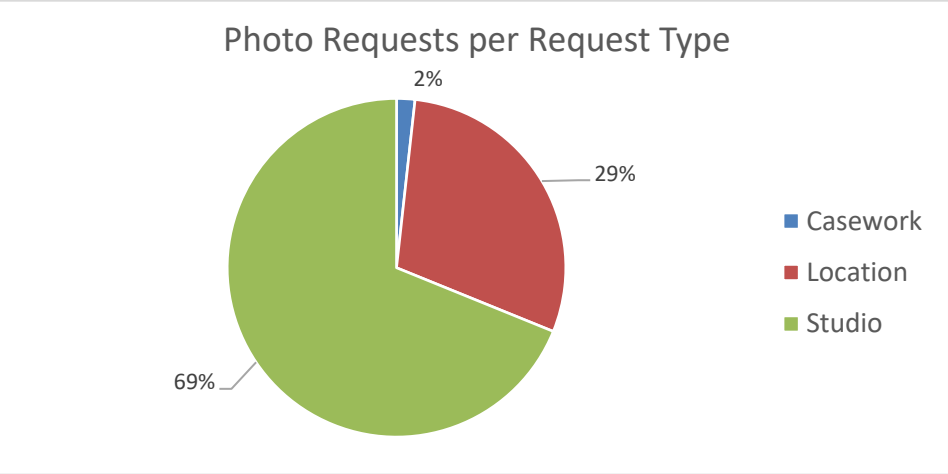
The administrative functions include recruiting for civilian vacancies, coordinating expungement efforts, ordering laboratory supplies, conducting capital inventory, various administrative duties involving the laboratory budget, personnel inquiries, and maintaining service agreement contracts. These functions are essential in providing the MSP-FSD staff with what they need to do their jobs in the field and in the laboratory.

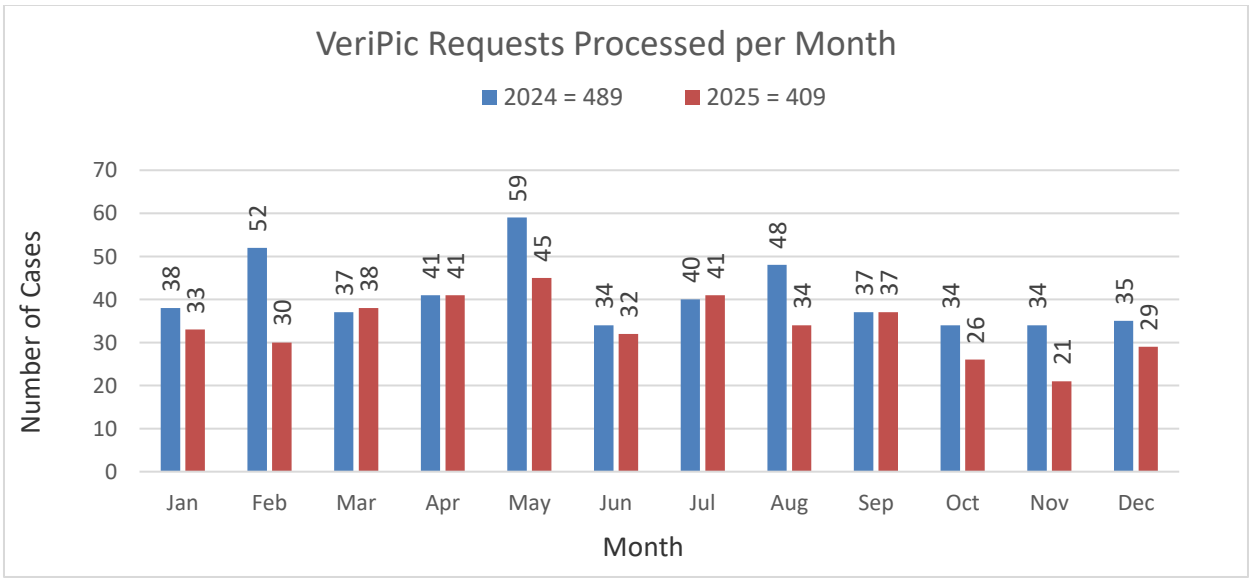
In addition to the MSP-FSD administrative staff, a contractual employee that is sub-contracted through Falcon is assigned to provide security/reception coverage for the MSP-FSD front lobby security desk. This contracted employee also provides clerical assistance to various units when feasible.

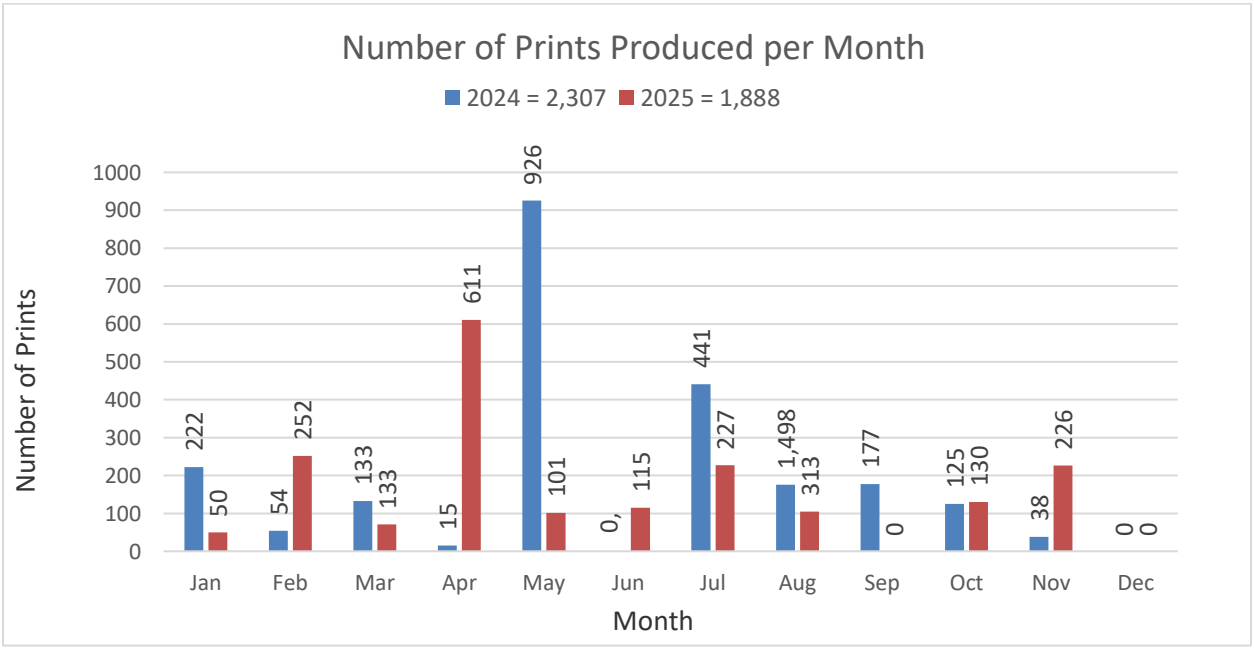
The FSD Photography Unit provides photographic services to the Maryland State Police. Duties within the unit include the acquiring and printing of images related to crime scenes and motor vehicle accidents for the Maryland State Police and other agencies. This unit also serves as the VeriPic system administrator. Reprints or CDs are provided to various divisions and units throughout the Department as well as State's Attorney's Offices upon request. Other duties include public relations photos, expungement requests relating to the digital Barrack Identification Photo System, ID card production, and the support of other units within the Department. The Photography Unit also assisted in creating the annual MSP Safety Calendar. Photography Unit personnel serve as members of the Disaster Identification Team and provide technical training and equipment recommendations in photography.

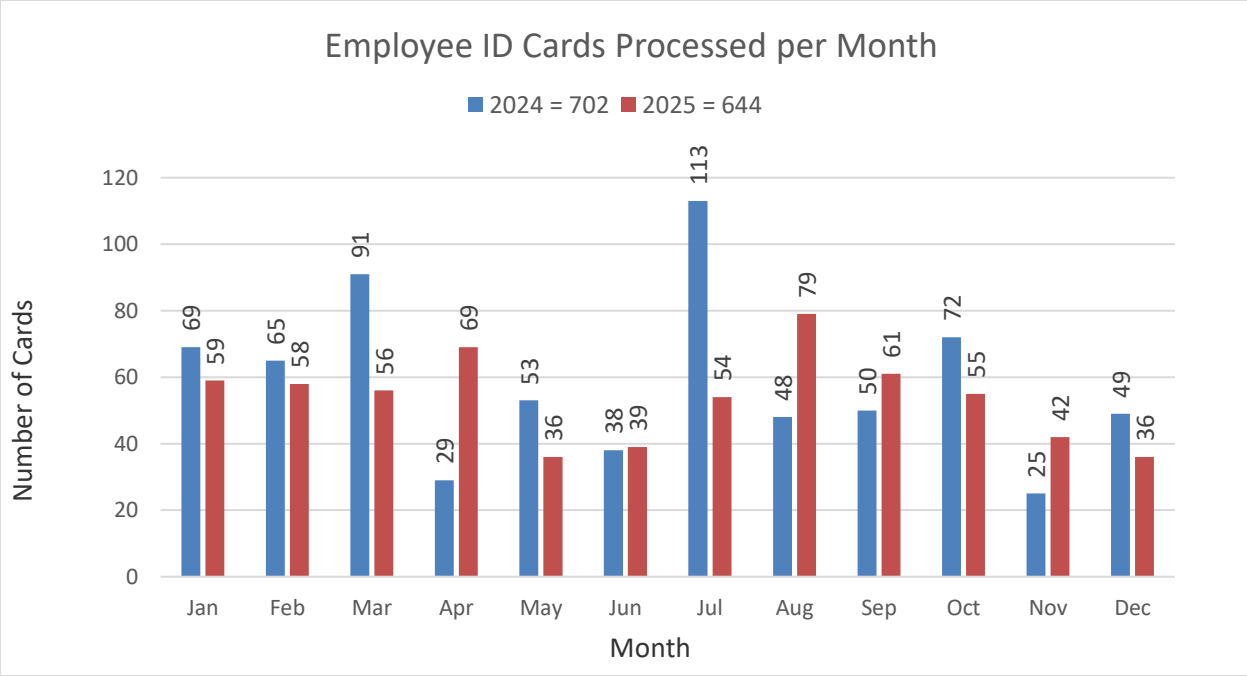
PHOTOGRAPHY UNIT STATISTICS

Photography Special Assignments	
MSP Requestors	**Requests**
Portraits *(by # of days, not requestors)*	157
Headquarters	18
SSB	21
CIB	11
FOB	13
Casework	4
TOTAL	**224**




VeriPic Requests Processed per Month
2024 = 489
2025 = 409
Number of Cases
70
60
50
40
30
20
10
0
38 33
52 30
37 38
41 41
59 45
34 32
40 41
48 34
37 37
34 26
34 21
35 29
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
Month


Number of Prints Produced per Month
2024 = 2,307
2025 = 1,888
Number of Prints
1000
900
800
700
600
500
400
300
200
100
0
222 50
54 252
133 133
15 611
926 101
0, 115
441 227
1,498 313
177 0
125 130
38 226
0 0
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
Month


Employee ID Cards Processed per Month
2024 = 702
2025 = 644
Number of Cards
120
100
80
60
40
20
0
69
59
65
58
91
56
29
69
53
36
38
39
113
54
48
79
50
61
72
55
25
42
49
36
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month

CRIME SCENE, MATERIALS and HUMAN ID BRANCH

The Crime Scene, Materials, and Human ID Branch of MSP-FSD is comprised of the Crime Scene, Chemistry, Pattern Evidence and Biology Sections. The Deputy Director of MSP-FSD is responsible for the planning, organization, direction, and control of this branch.

CRIME SCENE SECTION

The Crime Scene Section (CSS) is responsible for processing crime scenes and all crime scene evidence to include; identifying, collecting, preserving, photographing, sketching, as well as facial composite generation and transporting evidence to and from the laboratory facilities. In an effort to better assist investigators, the Section has recently added three specialized Units to the Section to perform more advanced analyses to include; the Bloodstain Pattern Analysis Unit, the Bullet Trajectory Analysis Unit, and the Shoe Print and Tire Track Classification Unit. Crime Scene Technicians (CSTs) work closely with criminal investigators, processing crime scenes and providing technical assistance, thereby allowing investigators the opportunity to conduct thorough investigations. Technicians are available to Maryland's law enforcement community twenty-four hours a day, seven days a week. The CSS also provides assistance to neighboring states upon request. The Section Manager oversees the overall operations of the Crime Scene Section. When fully staffed, there are four Regional Supervisors (Northern, Eastern, Western and Southern Regions) with five Crime Scene Technicians assigned to the Western and Eastern Regions and four Crime Scene Technicians assigned to the Northern and Southern Regions.

The CSS is also tasked with aiding with all Independent Investigation Division (IID) cases. Under the Maryland Office of the Attorney General, the IID is charged with investigating all alleged or potential police-involved deaths of civilians. CSTs respond to these scenes and are responsible for processing these scenes as well as collecting the evidence from these scenes.

A large portion of the evidence examined by the MSP-FSD is transported by CSTs. They not only transport evidence for the majority of the Department's installations, but also for many of the local police and sheriff's departments. These transports are to and from the Pikesville Laboratory as well as the satellite laboratories located in Hagerstown and Berlin.

The CSS is involved in the MSP-FSD Disaster Identification Team (DIT), which is available to assist the Office of the Chief Medical Examiner in locating, marking, photographing, and identifying disaster victims.

The technical abilities and expertise of the CSTs are often utilized for training. They provide instruction at the Maryland State Police Academy, Natural Resources Police Academy, various in-service law enforcement agency programs, Grand juries and provide lectures during training and seminars hosted by allied police departments.

Law enforcement personnel provided valuable feedback to the CSTs and their supervisors by submitting Technician Evaluation Forms in 2025. These evaluations were consistently highly rated and praised CSS personnel for their exemplary service and performance. It should be noted that the CSS handled 9% fewer cases in 2025 in comparison to 2024.

In 2025, the CSS brought online 13 Ballistics IQ (BIQ) systems for investigative use. BIQ is an automated ballistics imaging triage system that allows for immediate scanning of cartridge case evidence. BIQ is intended to assist with the investigation of shooting incidents by providing rapid crime gun intelligence to criminal investigators as quickly as possible after an incident. The BIQ system is routinely used at all shooting scene incidents where cartridge cases have been collected by MSP Crime Scene Section personnel. Investigators are provided with a BIQ Crime Scene Analysis (CSA) Triage Report which provides the following preliminary information:

- The number of firearms potentially involved
- If any of the weapons can be associated with another shooting scene previously processed using BIQ
- Identifies the best cartridge case(s) for entry into the National Integrated Ballistic Information Network (NIBIN)

CRIME SCENE SPECIALIZED UNITS

- **Bloodstain Pattern Analysis Unit**- the examination of bloodstains in order to determine the physical events that occurred during a crime.

- **Bullet Trajectory Analysis Unit**- the examination of bullet strikes at a scene in order to determine the physical events that occurred during a crime

- **Shoe Print and Tire Track Classification Unit**- the examination of characteristics from shoe print and tire track evidence to determine shoe and tire classifications

CRIME SCENE REGIONAL UNITS

Western Region Unit: Allegany, Carroll, Frederick, Garrett, and Washington Counties

Northern Region Unit: Baltimore, Cecil, Harford, and Howard Counties as well as Baltimore City (Maryland Port Authority, Maryland Transportation Authority, DOC)

Southern Region Unit: Anne Arundel, Calvert, Charles, Montgomery, Prince George's, and St. Mary's Counties

Eastern Region Unit: Caroline, Dorchester, Kent, Queen Anne's, Somerset, Talbot, Wicomico, and Worcester Counties

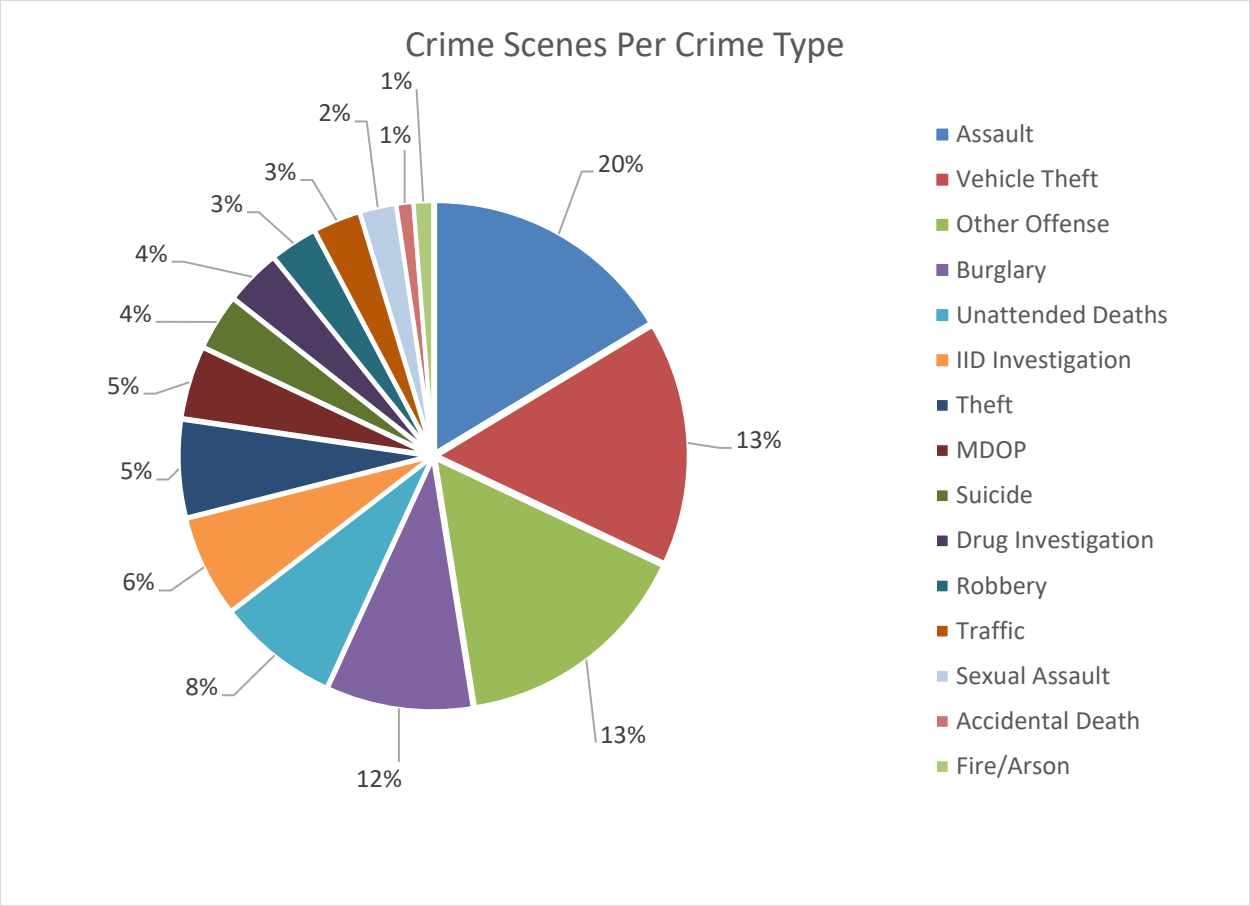
Crime Scenes Processed*		
Crime Scene Region	**2024**	**2025**
Northern	204	212
Southern	152	114
Eastern	241	221
Western	157	143
Totals	**754**	**690**

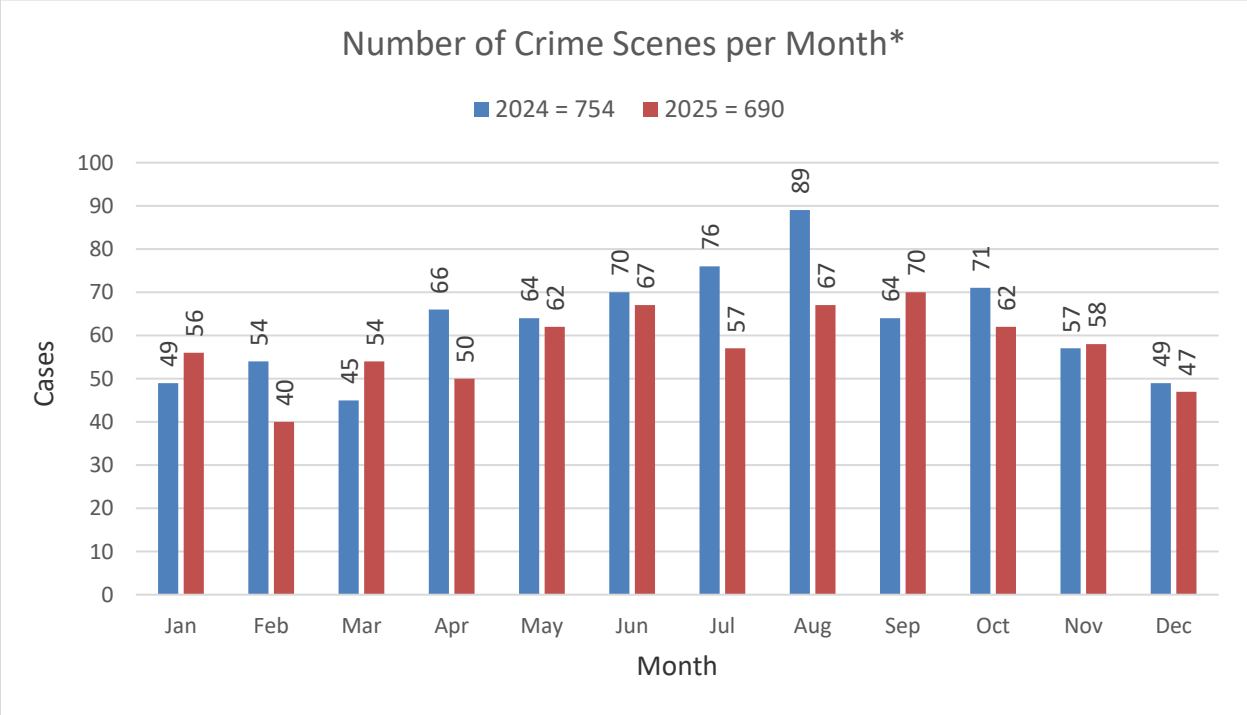
*Does not include Scene Assists or Out of State Crime Scenes

Crime Scene Summary				
Agency	**2024**		**2025**	
	Number	**%**		
MSP Scenes	502	67%	441	64%
Allied Agency Scenes	252	33%	249	36%
Total	**754**	**100%**	**690**	**100%**
Scene Assists	**38**	N/A	**41**	N/A

Total Number of Crime Scenes Processed per County*	
County	**Total Crime Scenes**
Allegany	64
Anne Arundel	28
Baltimore	59
Baltimore City	27
Calvert	7
Caroline	22
Carroll	26
Cecil	96
Charles	7
Dorchester	14
Frederick	25
Garrett	6
Harford	15
Howard	13
Kent	10
Montgomery	6
Prince George's	53
Queen Anne's	28
Saint Mary's	15
Somerset	26
Talbot	49
Washington	22
Wicomico	66
Worcester	6
Out of State	0
TOTAL	**690**

*Does not include Scene Assists





*Does not include Scene Assists

NOTEWORTHY CASES

Western Region

In September of 2025 a crime scene technician responded to a suspicious death scene in Allegany County. Upon arrival it was learned that a family member had contacted law enforcement to check on the welfare of the homeowner who had not been heard from in several days. Upon arrival, law enforcement determined the residence was secure, however, there was a large amount of blood located in the first-floor bathtub of the home. Upon further investigation, the owner of the home was located deceased in the detached garage. There were many unanswered questions and details surrounding the circumstances of how the deceased could have been located in the garage, when a large amount of blood letting occurred in the bathroom. Through the technician's specific bloodstain training, knowledge and experience, the crime scene technician was able to observe the bloodstains in the bathroom room and theorize that the victim inflicted self-harm to their body, rather than someone causing the harm to the victim. This information helped dictate how the scene was processed and how the investigation would proceed.

During the late summer and early fall months of 2025, there were a number of vehicles in the Cumberland area tampered with and several others stolen. A crime scene technician processed the vehicles as they were recovered. The suspects were believed to be a group of juveniles. Investigators were running into issues of tying individual suspects to specific cases for charging purposes. Fingerprint identification from one of the vehicles' interiors processed allowed investigators to charge one of the suspects to a vehicle they did not even know the suspect had been involved with stealing. This strengthened the case against the individual and allowed for an arrest warrant for that specific case.

On December 2, 2025, a crime scene technician was requested to process a recovered stolen vehicle. The truck in question was reported stolen from a construction site on 12/2/25 on Sharpsburg Pike and later found at a boating dock in Washington County. On 12/6/25 the crime scene technician processed the vehicle with photographs, DNA swabs, and sterile black powder. The latent prints collected from the truck were submitted to the Latent Print Unit in Hagerstown. The prints collected resulted in the identity of a suspect.

Northern Region

On January 31, 2025, a crime scene technician was requested to the District Court for Baltimore City for a police-involved shooting case. The suspect entered the courthouse with a handgun. A bailiff fired at the suspect hitting him, and then the suspect shot himself in the head. After the technician processed the scene, the firearms evidence was submitted to the Firearms Section. One of the cartridges resulted in a NIBIN lead connected to a Baltimore City Police Department case.

In June 2025, a crime scene technician was notified of an armed carjacking in which a child was abducted from the vehicle. After further investigation and interviews of the mother, the

carjacking was determined to be unfounded. The technician arrived at a residence in Cecil County where the child and parents both lived. The house and the vehicle in the garage were processed and the scene cleared. Later the mom confessed that the child was killed inside the house. The case was now a homicide and the technician and two other crime scene personnel returned to the residence for further investigation with the Homicide Unit. The house was photographed and documented using multiple methods and the entire house was looked over for fluids and other types of evidence using an alternate light source. The stepfather drew a map leading directly to where the body was found. The technician collected multiple DNA swabs from the scene and through additional processing of items collected on scene, along with the saran wrap from the autopsy. These DNA swabs had multiple items connecting the mom and step father to the crime.

On July 19, 2025, a crime scene technician was requested by the MSP Crash Team to process a vehicle involved in a single-vehicle fatal crash. Although the death was initially believed to have resulted from the crash, witnesses reported observing another individual exit the vehicle and flee the scene. Based on bloodstain evidence observed within the vehicle, the technician and investigating personnel determined that the victim had likely sustained injuries prior to the crash, prompting further investigation. The vehicle was processed for latent prints and DNA evidence. DNA swabs were collected from the vehicle and additional items recovered from a nearby wooded area. The Biology Section analyzed two blood swabs from the vehicle and three swabs from evidence recovered near the scene. The victim's DNA was identified on all five items analyzed, along with DNA from at least three unidentified male contributors.

In August 2025, a crime scene technician processed two vehicles for the Golden Ring Barrack following a crash in which a suspect allegedly brandished a handgun before fleeing the scene in a second vehicle. The technician examined both vehicles for latent prints and DNA evidence, recovering numerous latent print lifts from both the interior and exterior surfaces. Subsequent examination by the Latent Print Unit resulted in the identification of four individuals who had been in contact with the vehicles, including the suspect involved in the incident.

Southern Region

On March 26, 2025, a crime scene technician was requested to process a vehicle at the Annapolis Barrack. The vehicle was recovered in Anne Arundel County and towed to the Annapolis Barrack for processing. The technician recovered 53 latent print lift cards total and numerous other items of evidence for latent print examination for the case resulting in three suspects being identified by the Latent Print Unit.

On April 1, 2025, a crime scene technician was requested to process a homicide scene for Laurel PD. The technician collected various types of evidence including the victim’s cellphone, latent prints, swabs of DNA from the residents of the home where the victim was found, and other miscellaneous items. At a later date the technician processed the suspect’s vehicle and collected swabs of possible DNA and latent lift prints. After the latent prints were submitted for examination, there was a latent print match from the victim’s phone as well as an AFIS match from the latent prints that were collected from the suspect’s vehicle.

Eastern Region

In January 2025, a vehicle was processed for DNA and latent prints in reference to a Vehicle Theft investigation by a crime scene technician for the Wicomico County Sheriff's Office. Four (4) latent lifts and ten (10) swabs were obtained from the vehicle. The MSP FSD LPIU identified an individual not previously identified as a suspect from the rear driver door exterior.

In May of 2025, a DNA hit was confirmed by FSD after evidence from a 2024 case was tested by FSD's DNA outsourcing vendor. The DNA profile obtained matched the suspect from the October 2024 case. In this case, an item of clothing was processed in reference to a sexual assault investigation by a crime scene technician for the MSP Centreville Barrack. A female victim claimed to have been sexually assaulted. One (1) swab had been collected from the garment and submitted for DNA analysis.

In June 2025, a crime scene technician responded to a bank robbery investigation for Easton PD. The suspect came in, approached a teller and slid them a note saying "This is a stick up". The suspect brandished a firearm through his purse, took the money from the teller and exited through the front glass door. The video surveillance of the incident showed that as the suspect was leaving, he placed his left hand on the interior side of the glass front door. The note, still behind the teller's desk, was collected for fingerprint processing. The interior side glass front door and the note were processed for latent prints with positive results. The LPIU examined the latent prints and they were able to identify the suspect.

In August 2025, a jail cell and suspect were processed for DNA in reference to a homicide by a crime scene technician for the MSP Homicide Unit. A male victim was found in his bunk with suspected blood on his shirt and unresponsive by corrections officers. (4) swabs of suspected blood for DNA and clothing were collected from the cell. (4) swabs for DNA were collected from an article of clothing in the cell. (3) swabs for DNA were collected from the clothing on the victim. (5) swabs for DNA were collected from the clothing of the suspect. The MSP FSD Biology Section was able to determine the presence of the suspect's DNA on the victim's clothing.

CHEMISTRY SECTION

The Chemistry Section is comprised of two disciplines: Controlled Dangerous Substances (CDS) and Trace Evidence. The CDS Units operate out of Pikesville, Hagerstown, and Berlin. The scientists in these units analyze seized powders, pills, plant material, and other evidence for the presence of Controlled Dangerous Substances (CDS), and obtain accurate net and gross weights of the suspected CDS material. The Trace Evidence Unit operates out of Pikesville and offers trace evidence analysis and forensic document examination.

CONTROLLED DANGEROUS SUBSTANCES UNITS

Controlled Dangerous Substances (CDS) consists of the following three units: CDS-Pikesville, CDS-Berlin, and CDS-Hagerstown. The CDS Units focus on identifying submitted evidence as being a specific type of drug. The Chemistry Section Manager oversees the work of all three units.

The CDS-Pikesville Unit consists of one Forensic Scientist Supervisor, and four Forensic Scientist III's. In addition, four Allied Forensic Scientists work in the CDS-Pikesville laboratory. Allied Forensic Scientists follow the same procedures as MSP Chemists, but they are employees of specific counties and work on cases submitted from those counties. The Allied Forensic Scientists are employed by the Cecil County State's Attorney's Office, the St. Mary's State's Attorney's Office, the Howard County Police Department, and the Charles County Sheriff's Office.

The CDS-Berlin Unit consists of one Forensic Scientist Supervisor and two Forensic Scientist III. The CDS-Berlin Unit operates out of the Berlin Regional Laboratory located at the MSP-Berlin Barrack.

The CDS-Hagerstown Unit consists of one Forensic Scientist Supervisor, one Forensic Scientist Advanced, and one Forensic Scientist III. In addition, one Allied Forensic Scientist is employed by the Frederick County State's Attorney's Office. The CDS-Hagerstown Unit operates out of the Hagerstown Regional Laboratory located at the MSP-Hagerstown Barrack.

In order to confirm the presence of CDS in a sample, several different types of analyses are performed in the CDS Units, including microscopy, color tests, microcrystalline tests, gas chromatography (GC), gas chromatography/mass spectrometry (GC/MS), Fourier transform infrared (FTIR) spectroscopy, Direct Analysis in Real Time-Time of Flight Mass Spectrometer (DART-TOF MS) and Liquid Chromatography-Tandem Mass Spectrometer (LC-MS/MS). Another important component of CDS analysis is obtaining accurate net and gross weights of the suspected CDS material through the use of analytical balances, precision balances, bench top balances, and bulk scales.

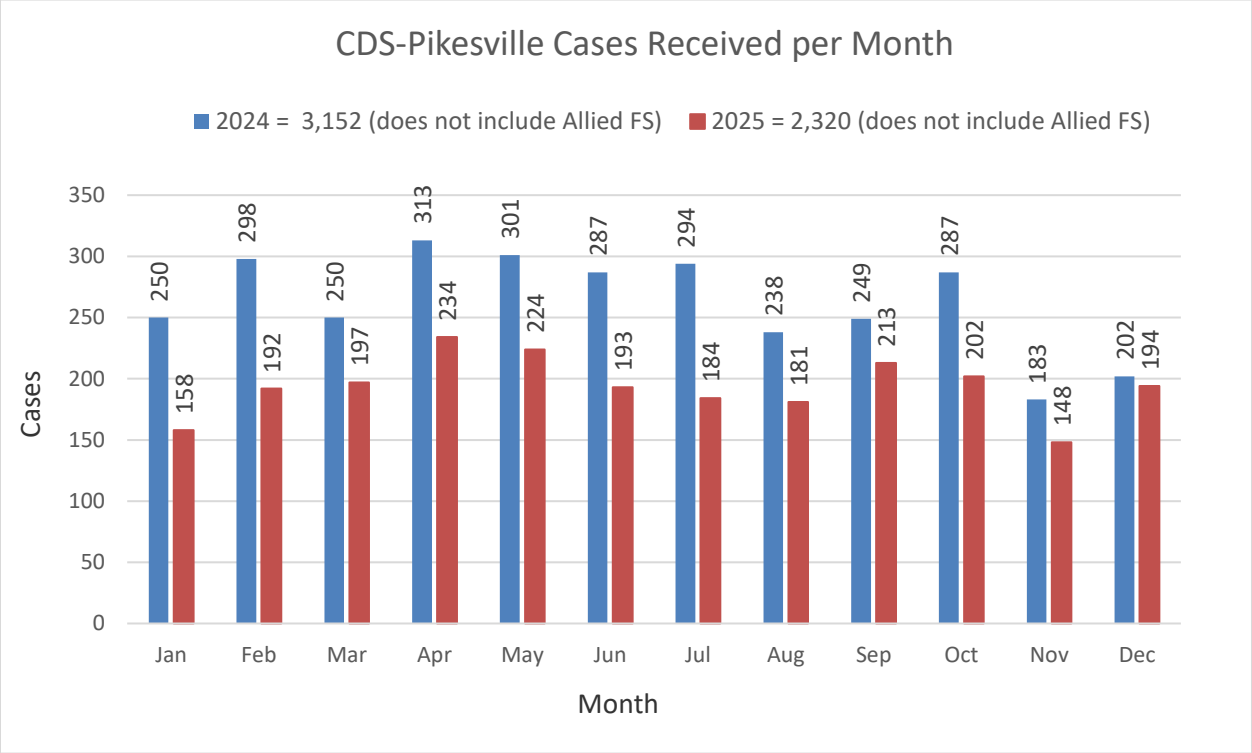
The CDS unit continues to work with the National Institute of Standards and Technology (NIST) to produce a sampling app that can be used to make statistical inferences in cases where a large number of containers, bags, tablets, etc. are submitted. Representatives from the CDS Unit and

NIST offered a workshop at the AAFS meeting in Baltimore, MD in February 2025 regarding this app and its use in the analysis of Seized Drugs.

The CDS Units submit monthly reports to the National Forensic Laboratory Information System (NFLIS) that document the type and number of drugs detected in casework. These reports provide the DEA with current and accurate trends that can be used by law enforcement and policy makers to address the nation's drug problem. This data is also shared with the Washington/Baltimore High Intensity Drug Trafficking Area (HIDTA) program to track trends of which drugs are being identified in casework throughout the state and region.

CDS-PIKESVILLE UNIT

The Pikesville CDS laboratory services primarily the Central Maryland counties including Baltimore City, Baltimore County, Cecil County, Anne Arundel County, Prince George's County, St. Mary's County, Calvert County, Carroll County, Charles County, Kent County, Harford County, Howard County, Queen Anne's County, Caroline County, Dorchester County, and Talbot County.

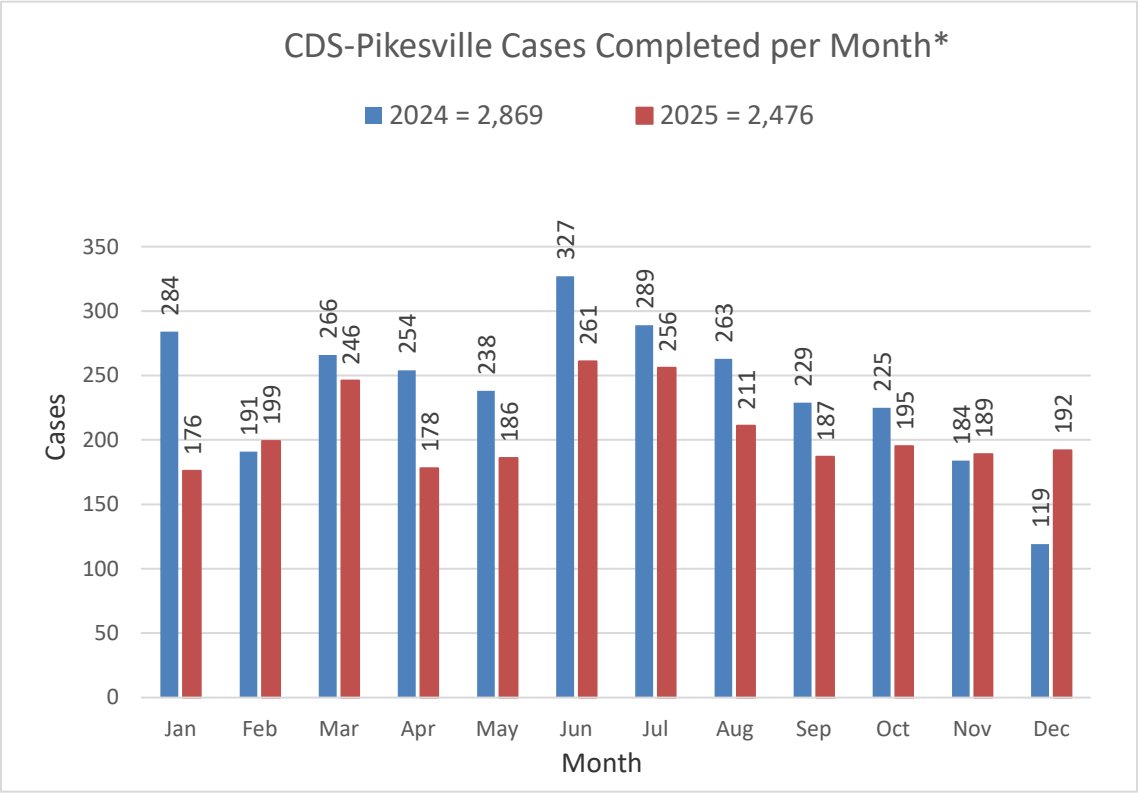


CDS-Pikesville Cases Received per MSP Installation*		
	Counties Served	**Submissions**
MSP-Easton	Talbot, Caroline, Dorchester	285
MSP-CID/CED	Statewide	245
MSP-Golden Ring	Baltimore	86
MSP-Centreville	Kent, Queen Anne's	64
MSP-JFK Highway	Cecil, Harford, Baltimore	37
MSP-Bel Air	Harford	30
MSP-College Park	Prince George's	29
MSP-Glen Burnie	Anne Arundel	28
MSP-Prince Frederick	Calvert	28
MSP-Annapolis	Anne Arundel	12
MSP-Forestville	Prince George's	7
MSP-La Plata	Charles	5
MSP-North East	Cecil	0
MSP-Leonardtown	St. Mary's	0
MSP-Westminster	Carroll	0
MSP- Waterloo	Howard	0
	TOTAL	**856**

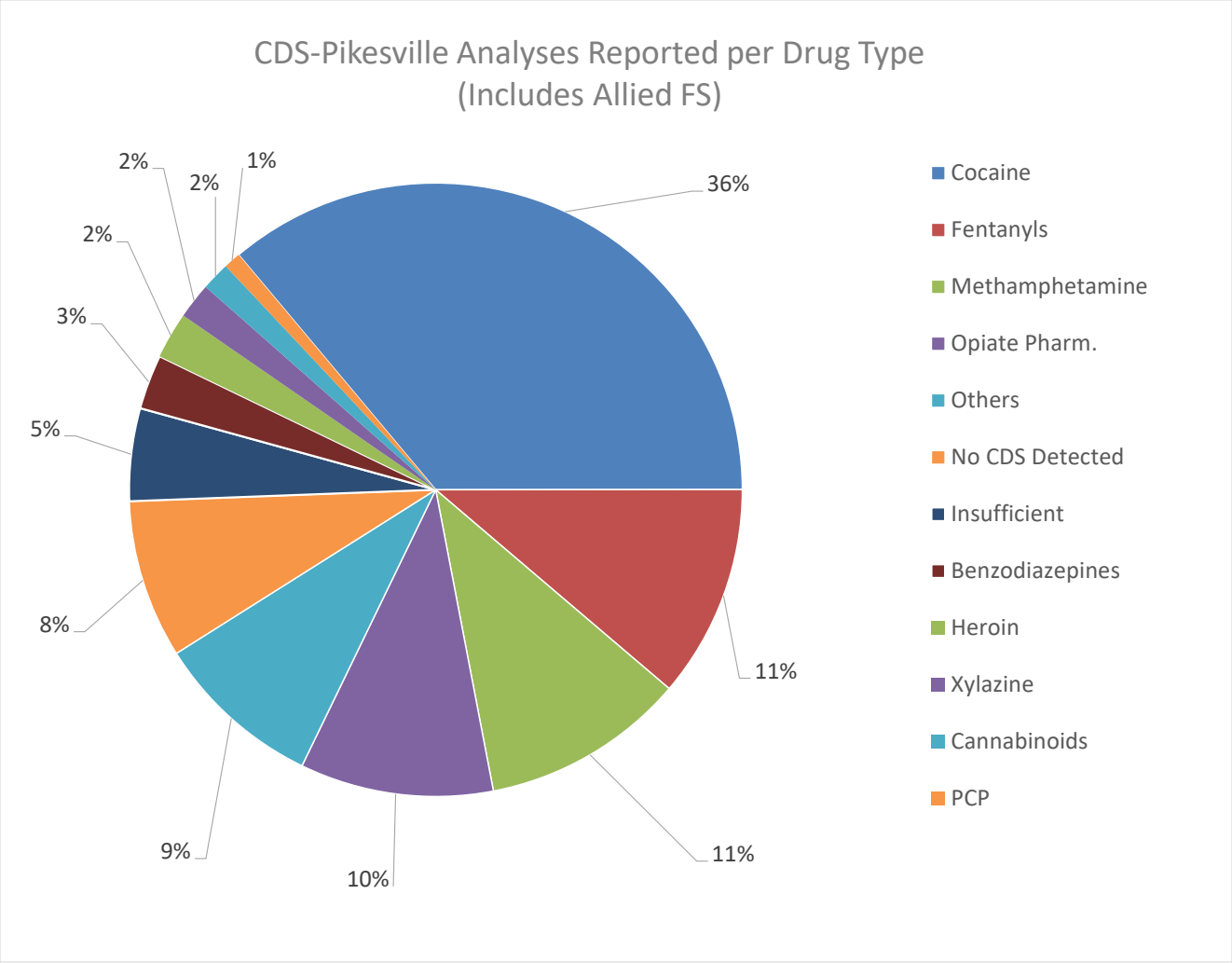
* Does not include Allied FS except Charles County

Allied Agency Cases Received by CDS-Pikesville per County*	
County	**Submissions**
Harford	435
Charles	324
Calvert	275
Dorchester	152
Baltimore City	96
Queen Anne's	80
Talbot	73
Anne Arundel	59
Kent	35
Caroline	34
Baltimore	24
Prince George's	13
Montgomery	3
Garrett	2
Carroll	1
Allegany	1
Cecil	0
Howard	0
TOTAL	**1,607**

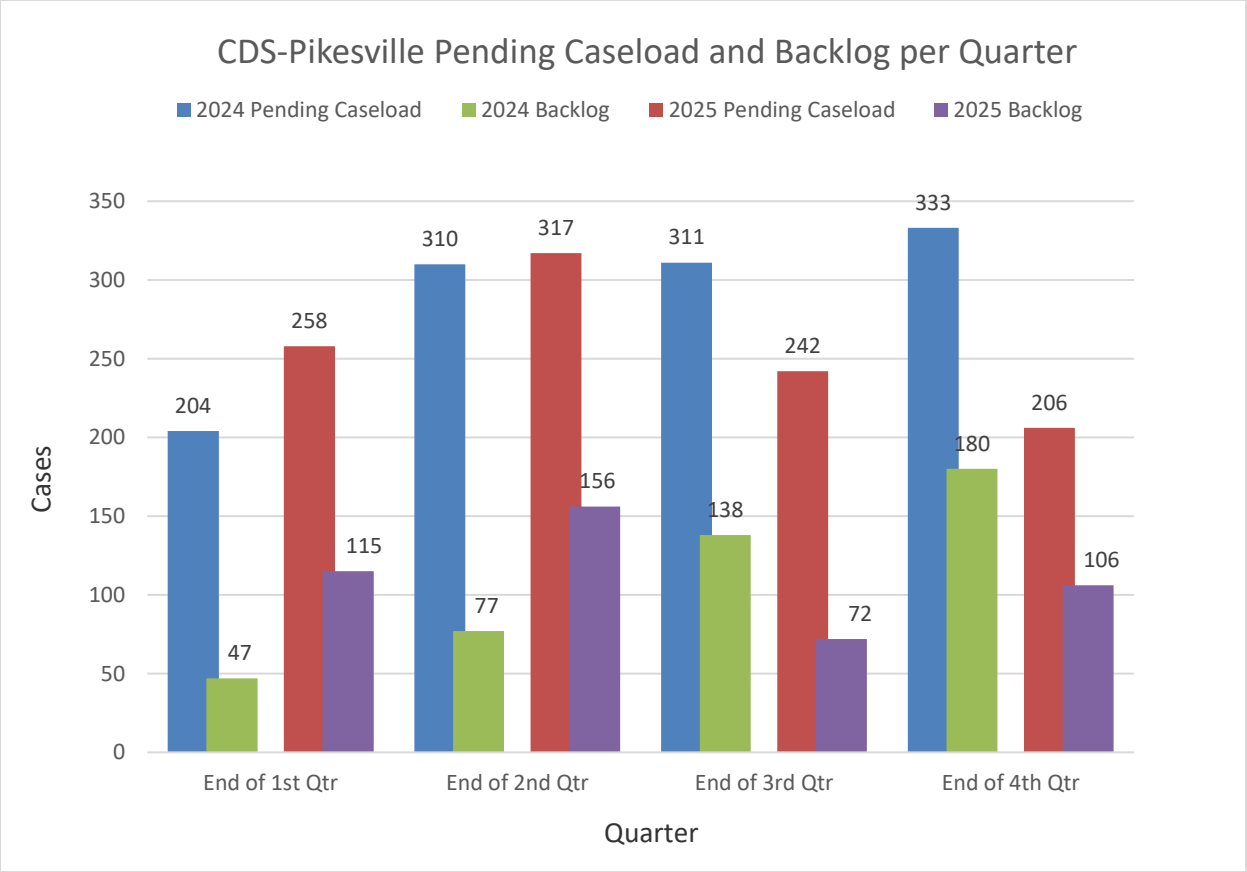
* Does not include Allied FS except Charles County

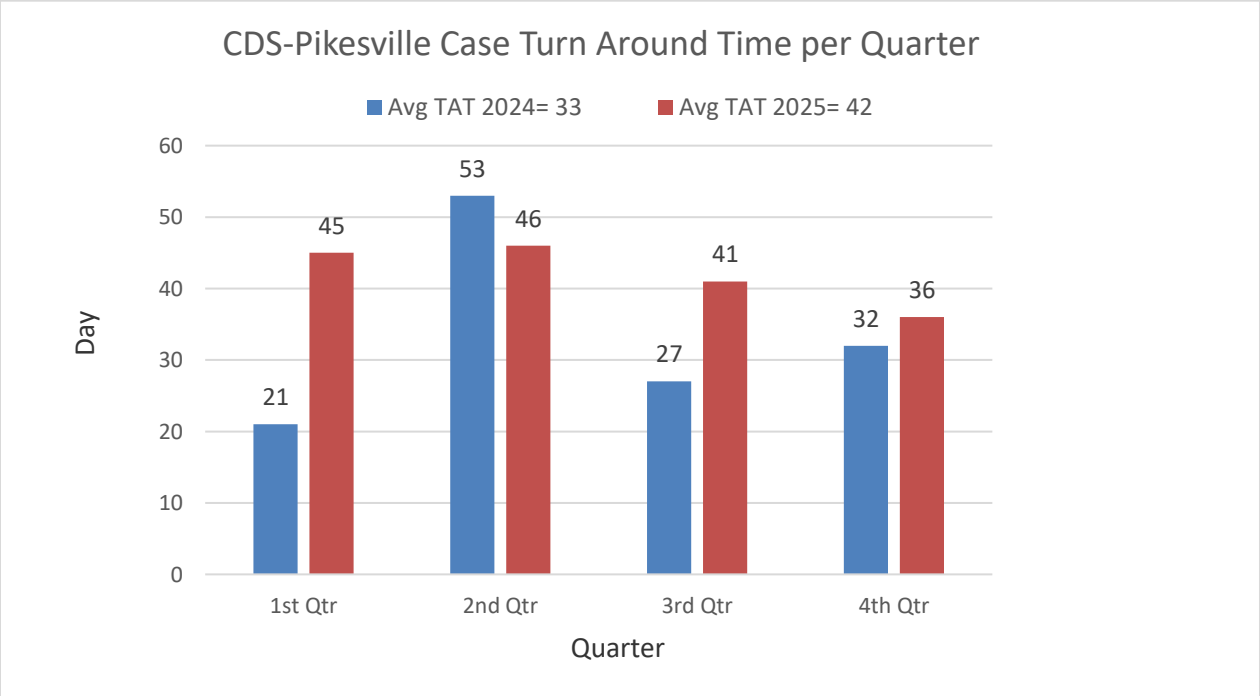


* Does not include Allied FS except Charles County


CDS-Pikesville Analyses Reported per Drug Type
(Includes Allied FS)
36%
11%
11%
10%
9%
8%
5%
3%
2%
2%
2%
1%
Cocaine
Fentanyls
Methamphetamine
Opiate Pharm.
Others
No CDS Detected
Insufficient
Benzodiazepines
Heroin
Xylazine
Cannabinoids
PCP

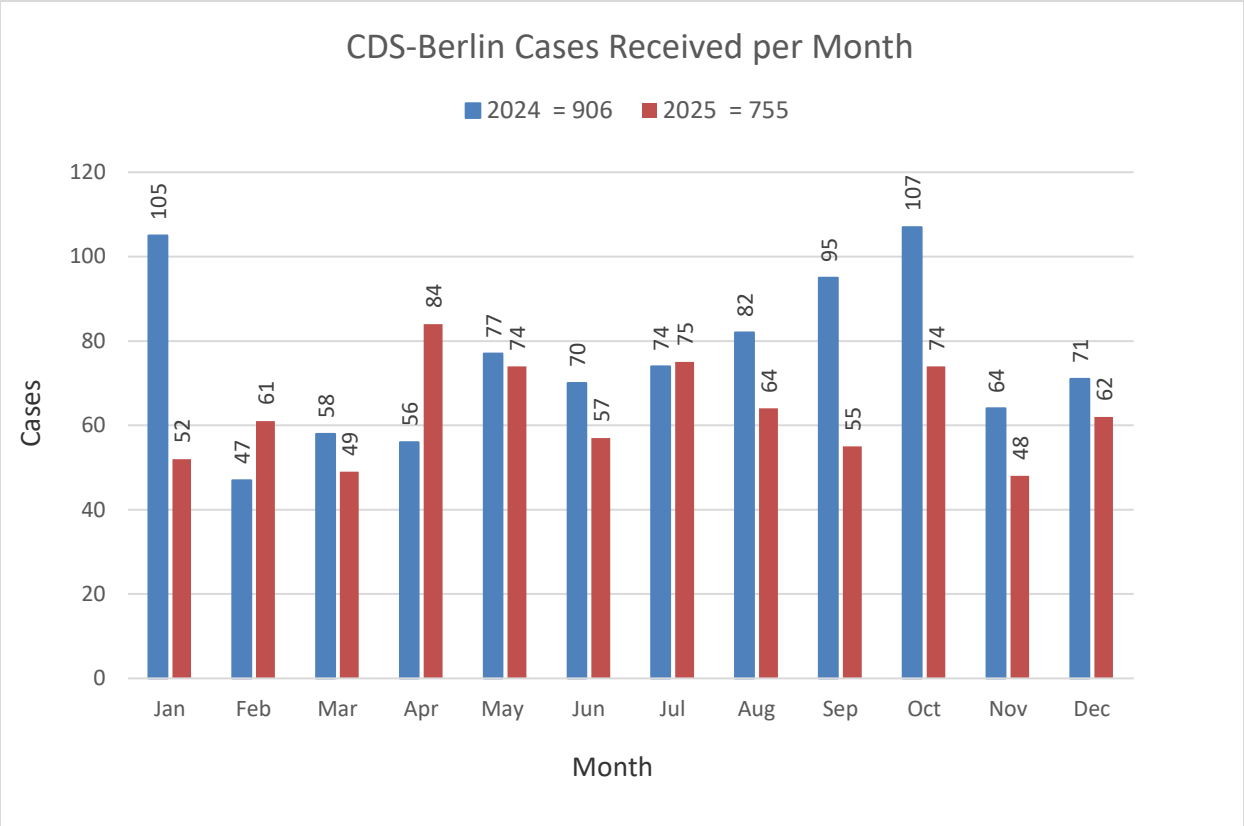
+


CDS-Pikesville Pending Caseload and Backlog per Quarter
2024 Pending Caseload
2024 Backlog
2025 Pending Caseload
2025 Backlog
Cases
350
300
250
200
150
100
50
0
204
47
258
115
310
77
317
156
311
138
242
72
333
180
206
106
End of 1st Qtr
End of 2nd Qtr
End of 3rd Qtr
End of 4th Qtr
Quarter


CDS-Pikesville Case Turn Around Time per Quarter
Avg TAT 2024= 33
Avg TAT 2025= 42
Day
60
50
40
30
20
10
0
21
45
53
46
27
41
32
36
1st Qtr
2nd Qtr
3rd Qtr
4th Qtr
Quarter

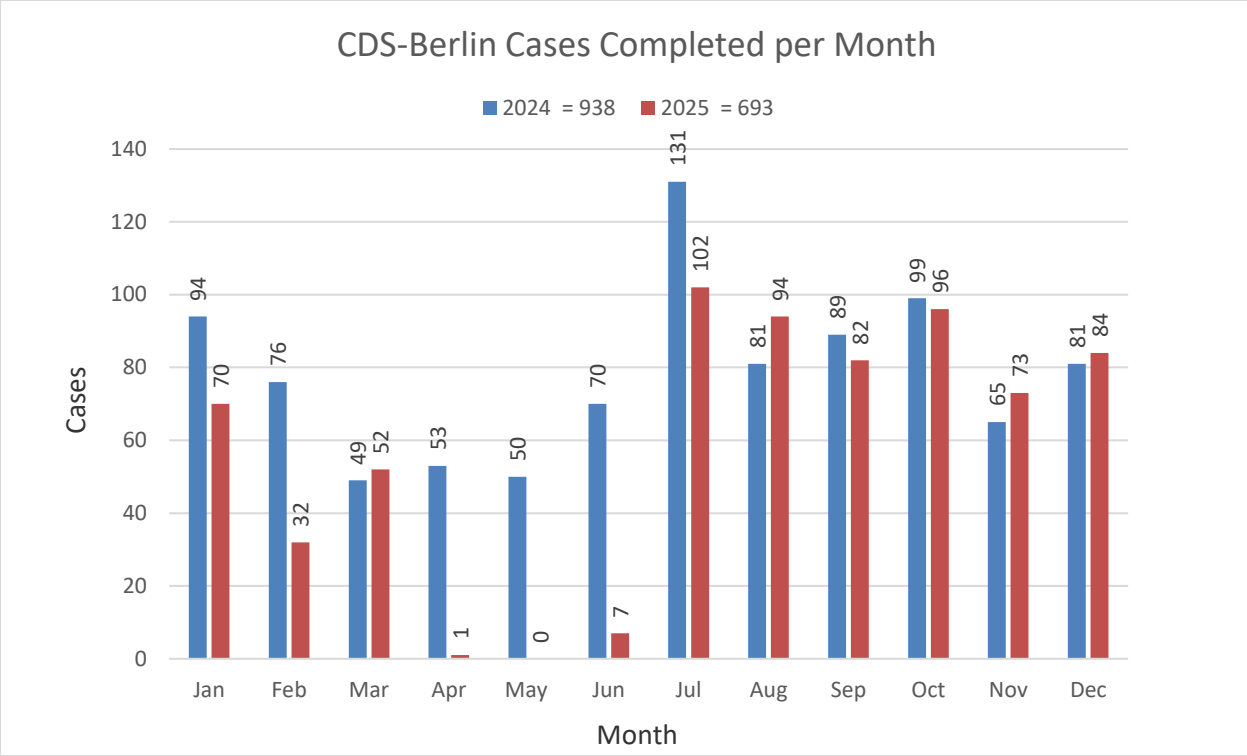
CDS-BERLIN UNIT

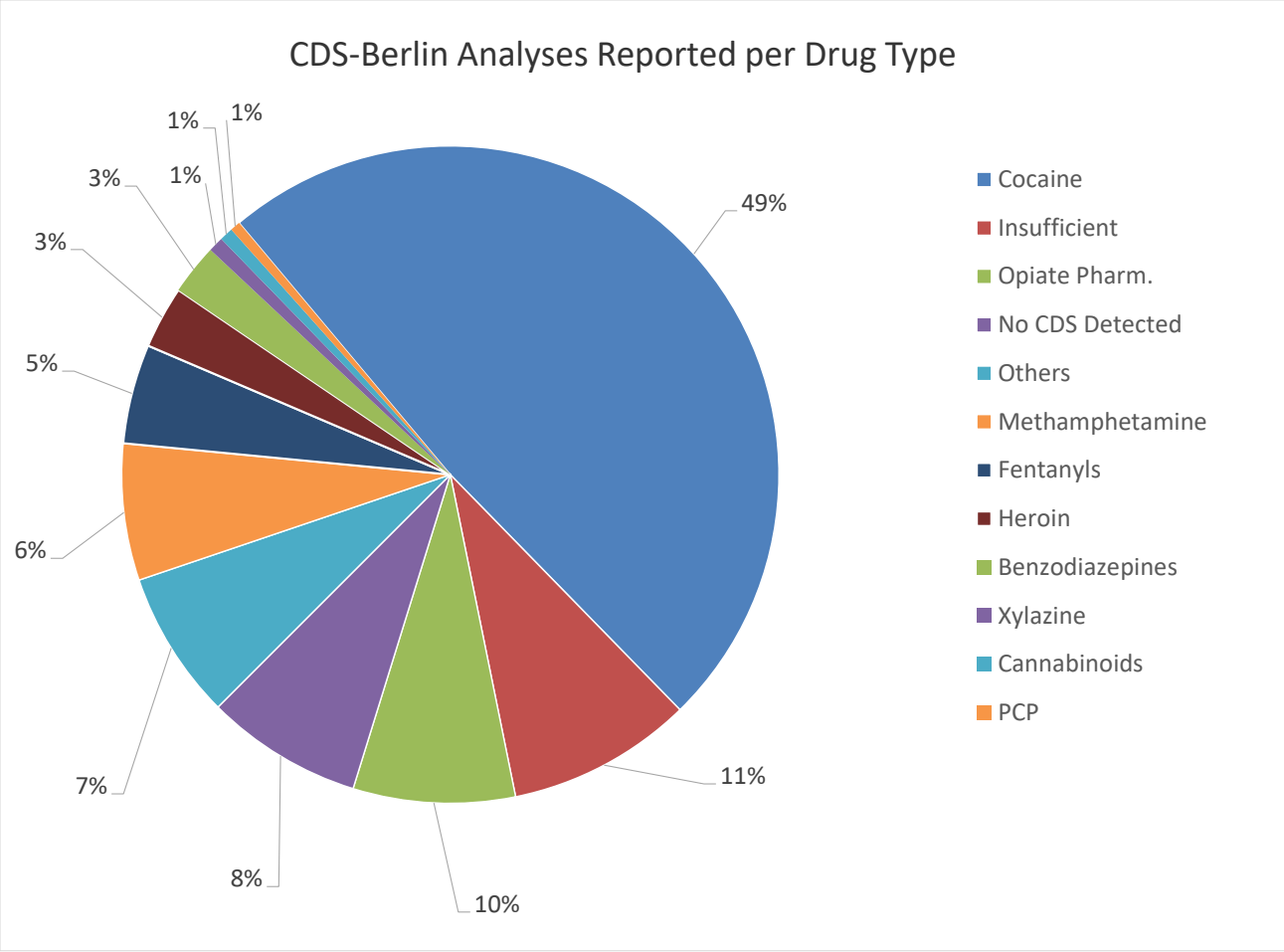
The CDS-Berlin laboratory services primarily the Eastern Maryland counties including Somerset County, Wicomico County and Worcester County.

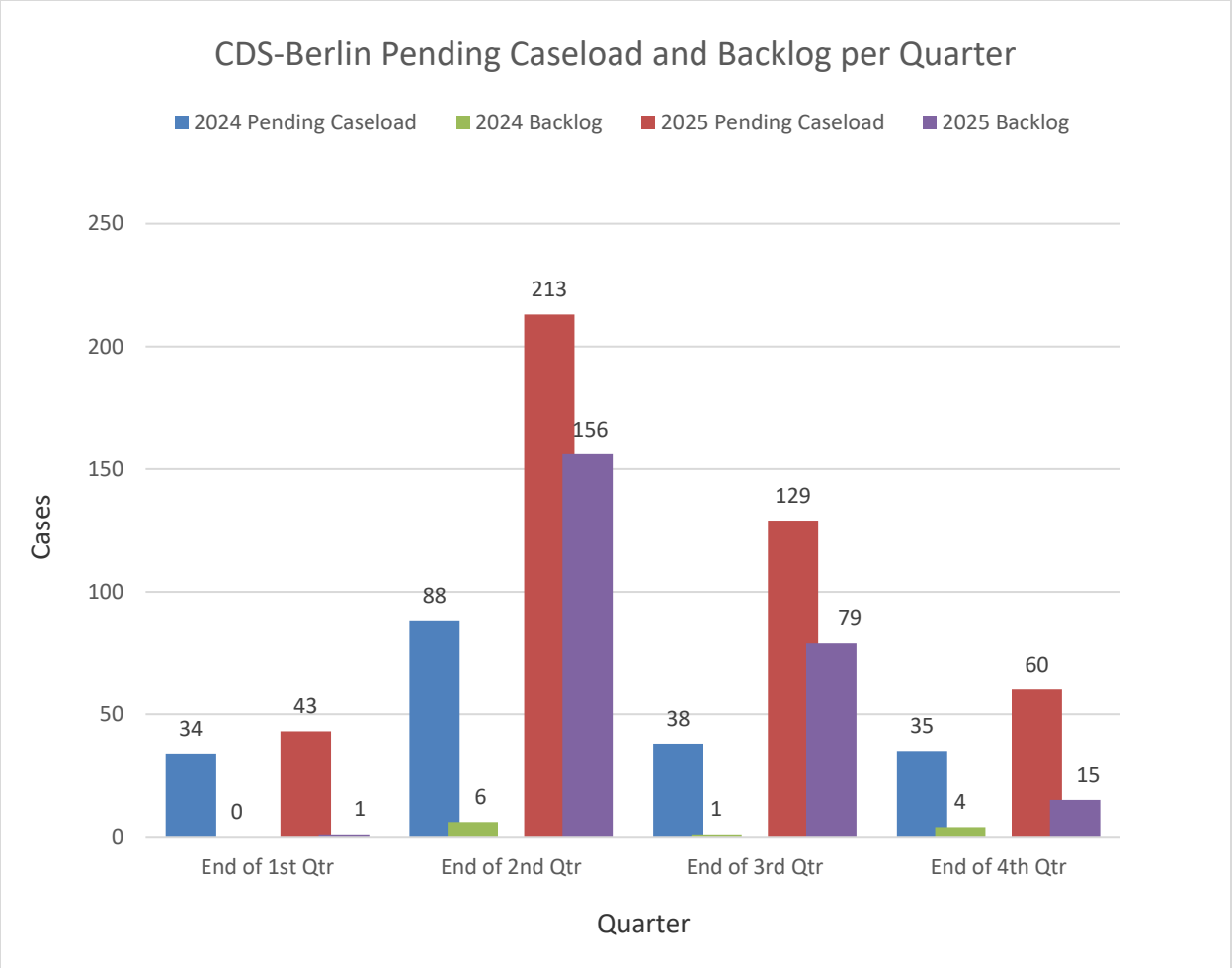


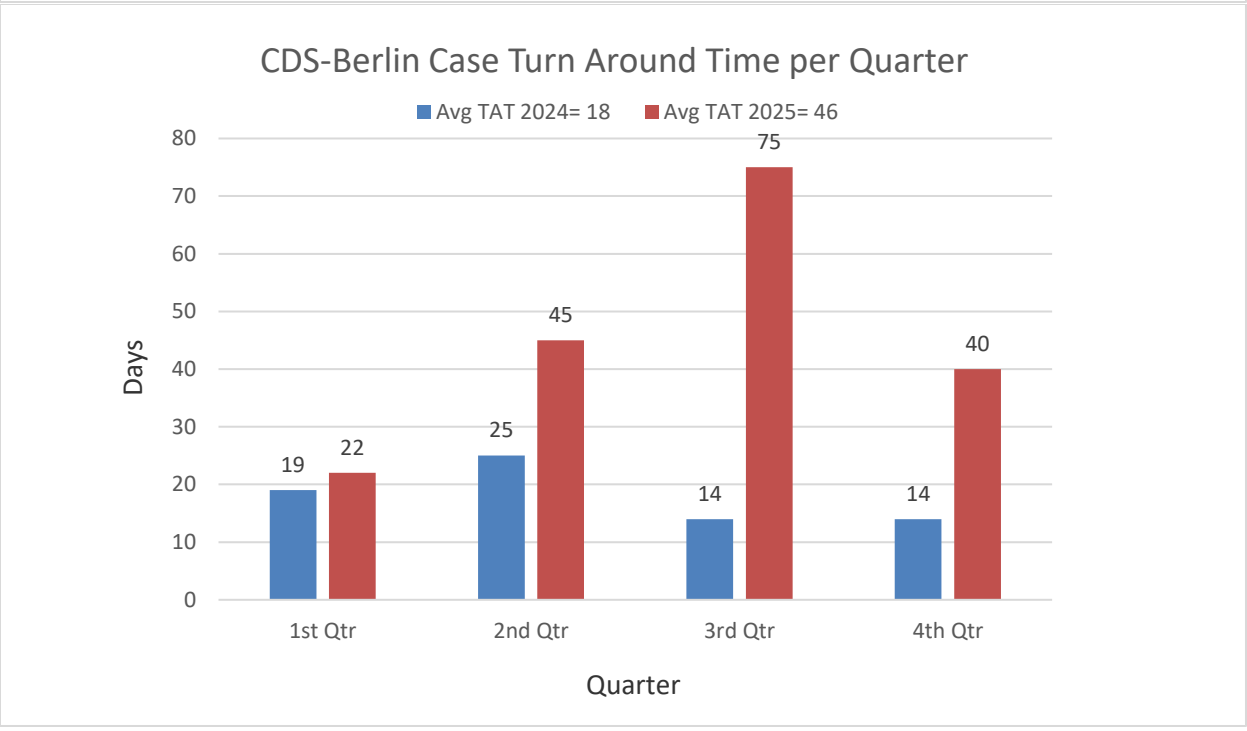
CDS-Berlin Cases Received per MSP Installation		
MSP Installation	**Counties Served**	**Submissions**
MSP-Salisbury	Wicomico	58
MSP-Princess Anne	Somerset	34
MSP-Berlin	Worcester	29
MSP-CID/CED	Statewide	26
	TOTAL	**147**

Allied Agency Cases Received by CDS-Berlin per County	
County	**Submissions**
Wicomico	384
Worcester	148
Somerset	76
TOTAL	**608**


CDS-Berlin Cases Completed per Month
2024 = 938
2025 = 693
Cases
Month
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
94
70
76
32
49
52
53
1
50
0
70
7
131
102
81
94
89
82
99
96
65
73
81
84


CDS-Berlin Analyses Reported per Drug Type
49%
11%
10%
8%
7%
6%
5%
3%
3%
1%
1%
1%
Cocaine
Insufficient
Opiate Pharm.
No CDS Detected
Others
Methamphetamine
Fentanyls
Heroin
Benzodiazepines
Xylazine
Cannabinoids
PCP

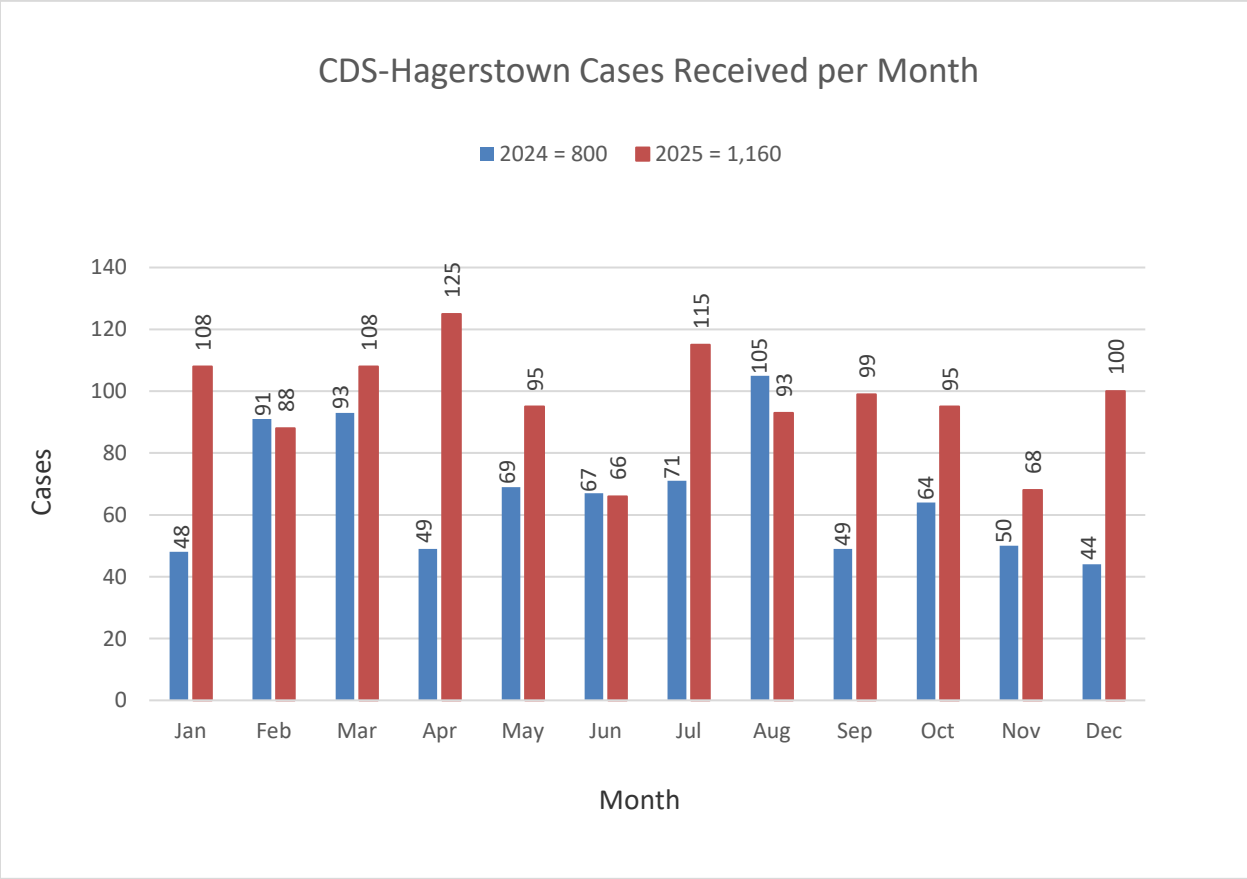

CDS-Berlin Pending Caseload and Backlog per Quarter
2024 Pending Caseload
2024 Backlog
2025 Pending Caseload
2025 Backlog
250
200
150
100
50
0
Cases
34
0
43
1
88
6
213
156
38
1
129
79
35
4
60
15
End of 1st Qtr
End of 2nd Qtr
End of 3rd Qtr
End of 4th Qtr
Quarter


CDS-Berlin Case Turn Around Time per Quarter
Avg TAT 2024= 18
Avg TAT 2025= 46
80
70
60
50
40
30
20
10
0
Days
19
22
25
45
14
75
14
40
1st Qtr
2nd Qtr
3rd Qtr
4th Qtr
Quarter

CDS-HAGERSTOWN UNIT

The Hagerstown CDS laboratory services primarily the Western Maryland counties including Washington County, Allegany County, Garrett County, Montgomery County and Frederick County.

Where indicated, the data shown below does not include cases which were assigned to the Allied Forensic Scientist (Allied FS).

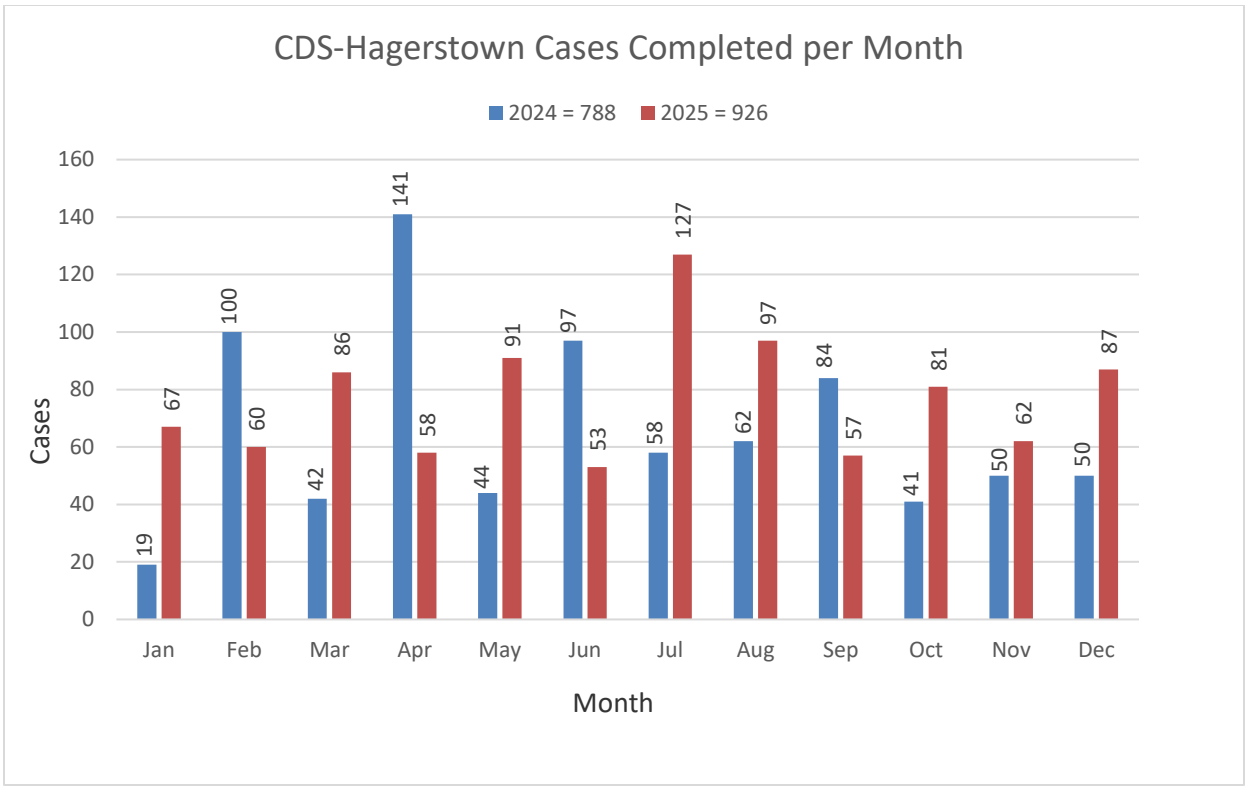


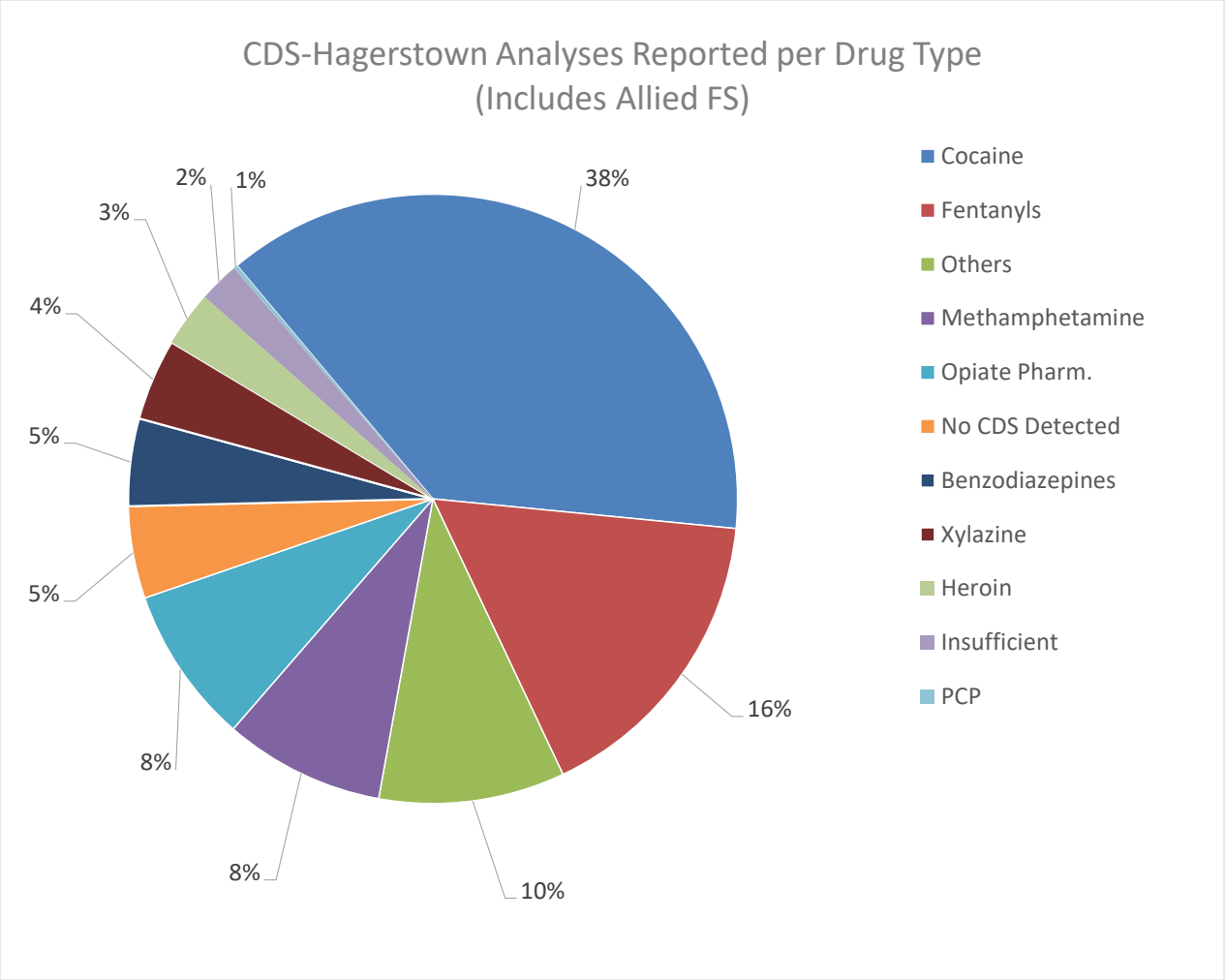
CDS-Hagerstown Cases Received per MSP Installation*		
MSP Installation	**Counties Served**	**Submissions**
MSP-Cumberland	Allegany	214
MSP-CID/CED	Statewide	82
MSP-Hagerstown	Washington	60
MSP-Westminster	Carroll	35
MSP-McHenry	Garrett	13
MSP-Rockville	Montgomery	10
MSP-DED/C3I	Allegany	8
	TOTAL	**422**

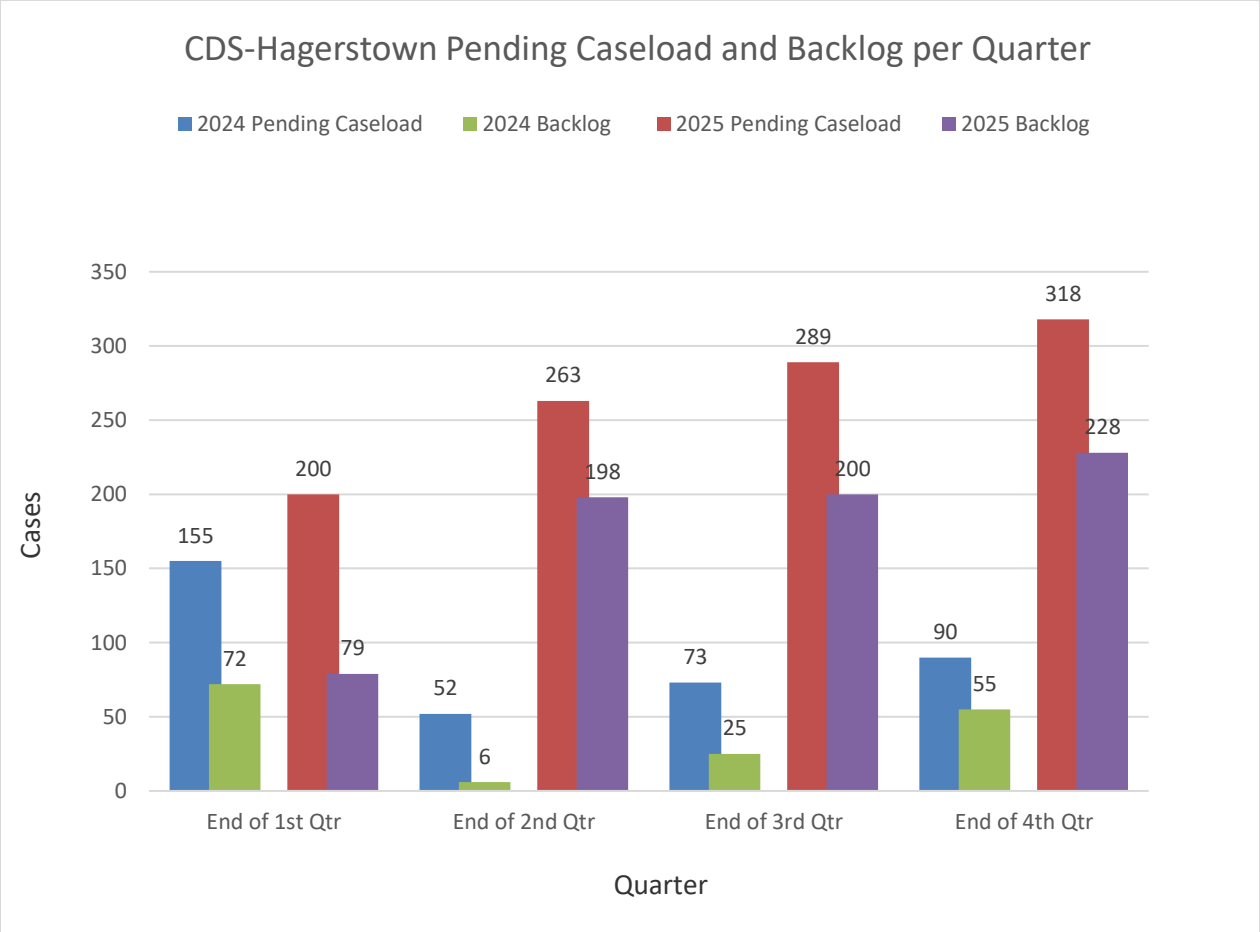
* Does not include Allied FS

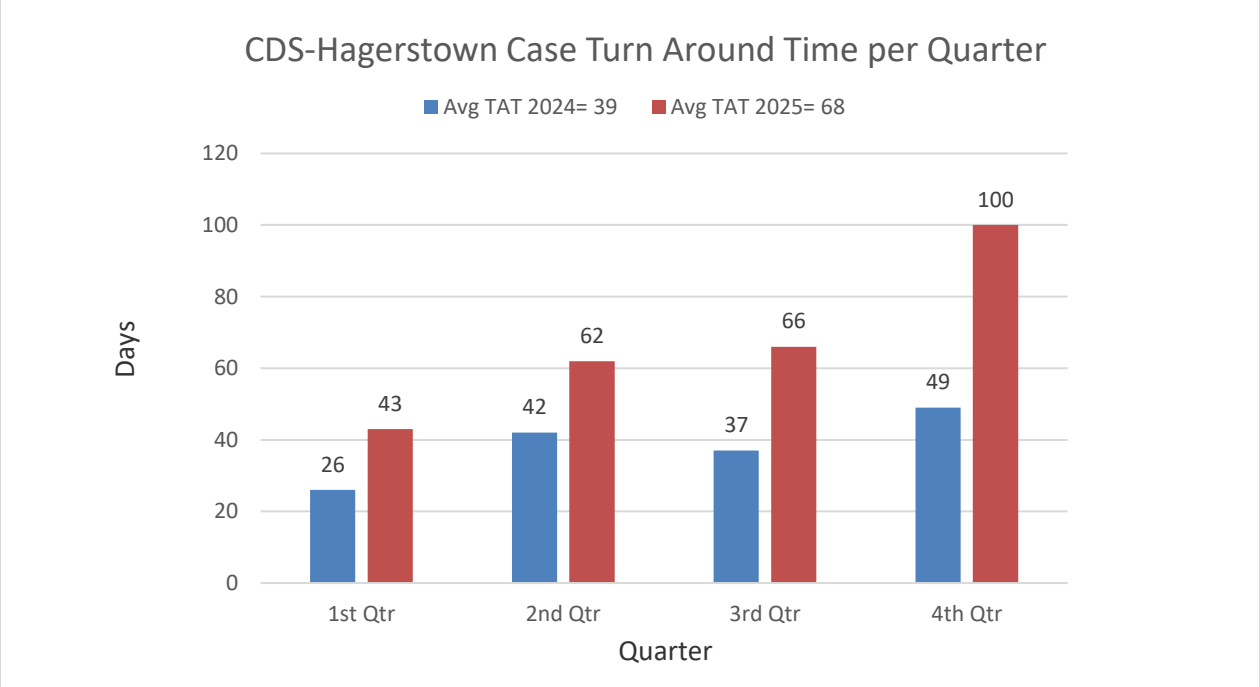
Allied Agency Cases Received by CDS-Hagerstown per County*	
County	**Submissions**
Carroll	363
Allegany	252
Garrett	81
Washington	30
Baltimore	11
Baltimore City	1
TOTAL	**738**

* Does not include Allied FS


CDS-Hagerstown Cases Completed per Month
2024 = 788
2025 = 926
Cases
Month
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
19
67
100
60
42
86
141
58
44
91
97
53
58
127
62
97
84
57
41
81
50
62
50
87


CDS-Hagerstown Analyses Reported per Drug Type
(Includes Allied FS)
38%
16%
10%
8%
8%
5%
5%
4%
3%
2%
1%
Cocaine
Fentanyls
Others
Methamphetamine
Opiate Pharm.
No CDS Detected
Benzodiazepines
Xylazine
Heroin
Insufficient
PCP

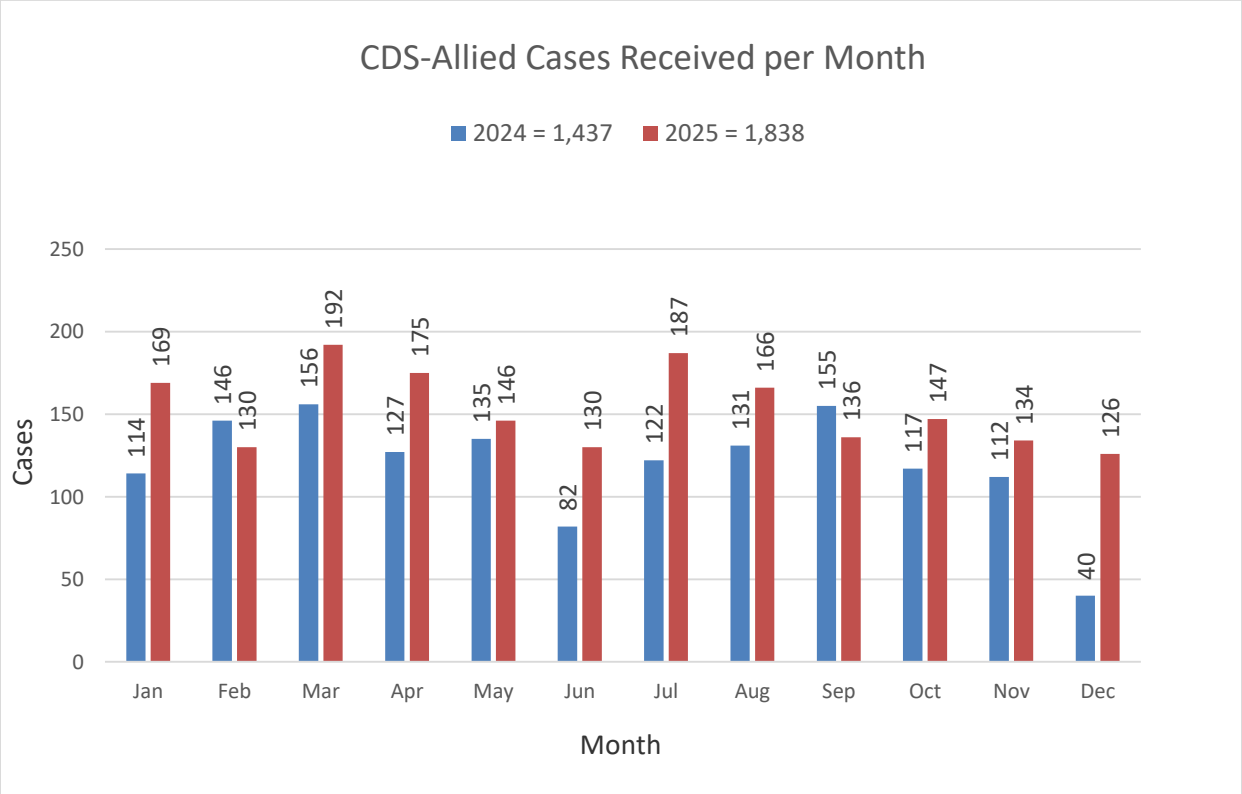

CDS-Hagerstown Pending Caseload and Backlog per Quarter
2024 Pending Caseload
2024 Backlog
2025 Pending Caseload
2025 Backlog
Cases
350
300
250
200
150
100
50
0
155
72
200
79
52
6
263
198
73
25
289
200
90
55
318
228
End of 1st Qtr
End of 2nd Qtr
End of 3rd Qtr
End of 4th Qtr
Quarter


CDS-Hagerstown Case Turn Around Time per Quarter
Avg TAT 2024= 39
Avg TAT 2025= 68
Days
120
100
80
60
40
20
0
26
43
42
62
37
66
49
100
1st Qtr
2nd Qtr
3rd Qtr
4th Qtr
Quarter

CDS-ALLIED FORENSIC SCIENTIST PROGRAM

The Allied Forensic Scientists working in the CDS Units are employees of allied agencies or other governmental entities. These scientists are authorized to perform CDS analysis in MSP-FSD facilities under the provisions provided for in a Memorandum of Understanding. Even though these scientists are not MSP employees, they perform forensic testing in accordance with the MSP-FSD management system by complying with the MSP-FSD Quality Assurance Manual and following the MSP-FSD standard operating procedures.

Five Allied Forensic Scientists, representing the following agencies, work in the CDS Units: Howard County Police Department, Cecil County State's Attorney's Office, Frederick County State's Attorney's Office, Charles County Sherriff's Office, and St. Mary's County State's Attorney's Office.

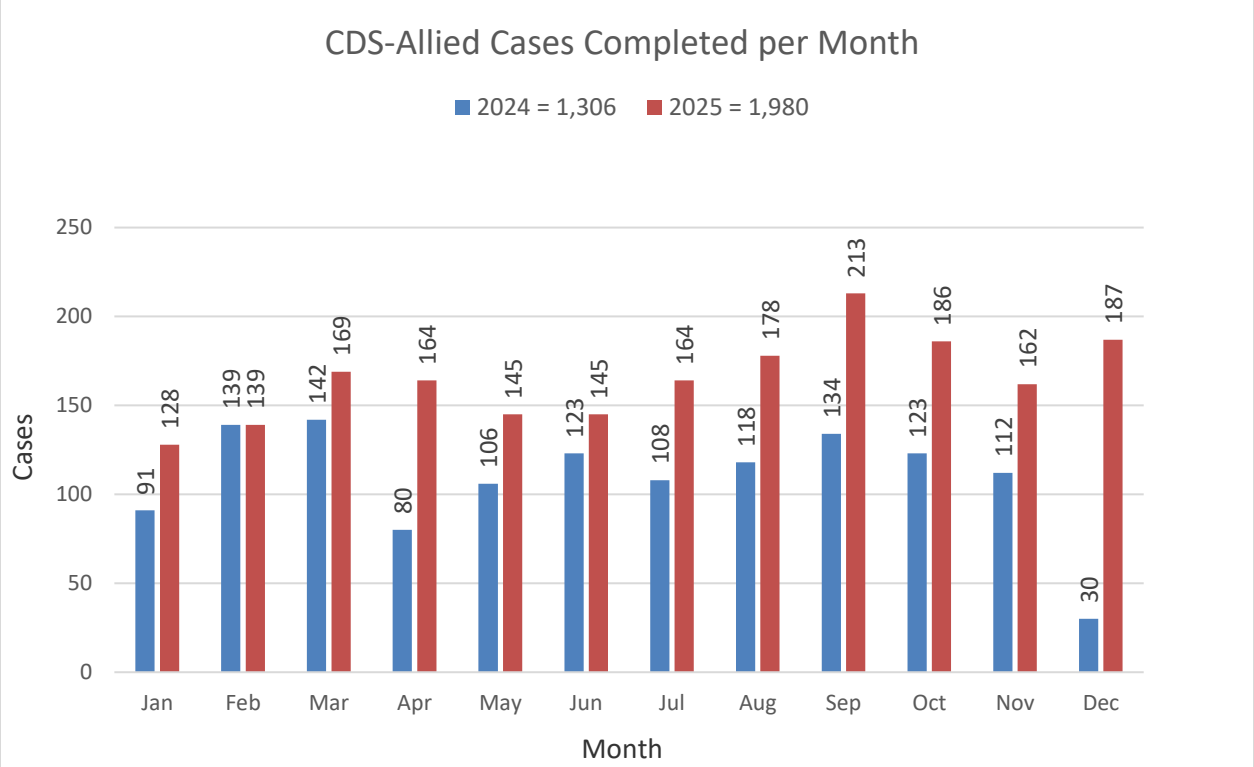


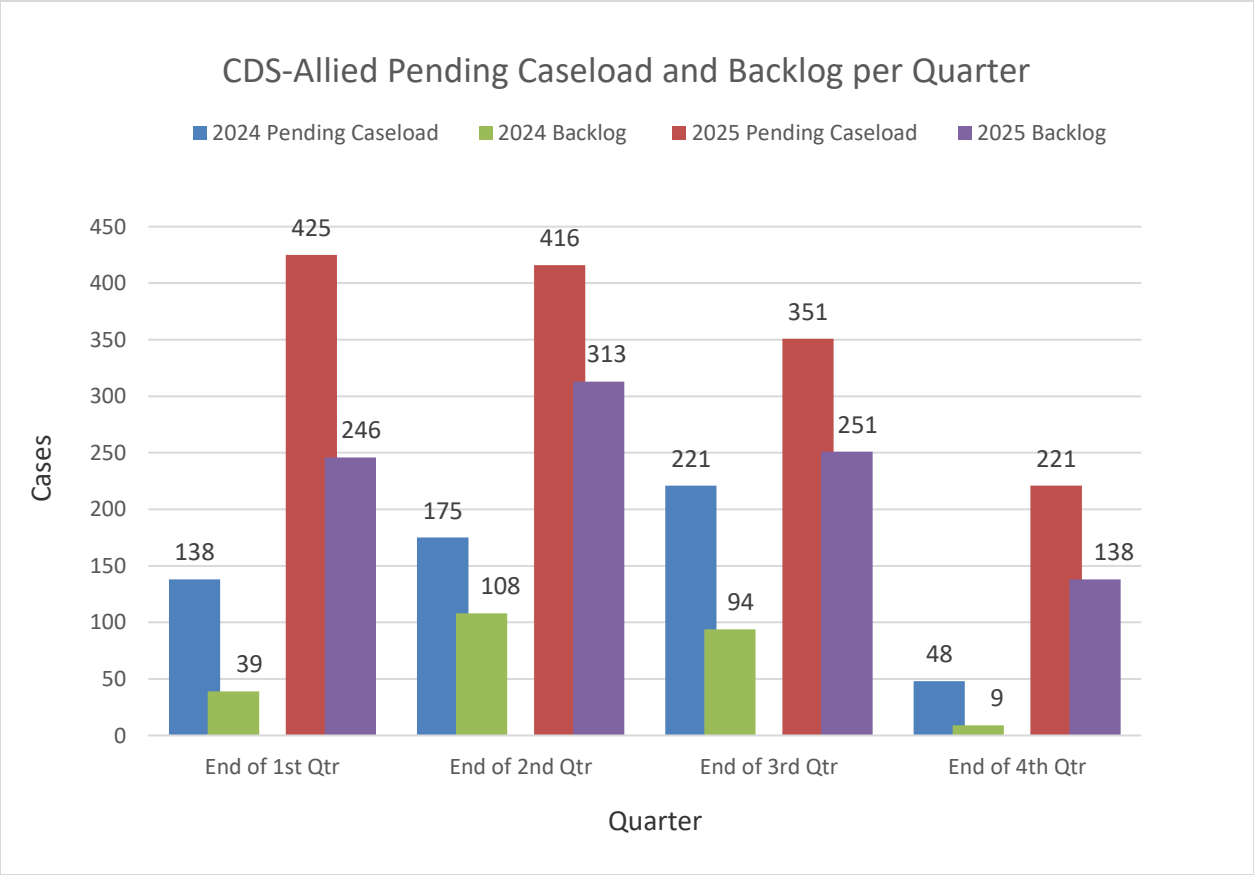
CDS Cases Received by Allied Forensic Scientists per MSP Installation		
MSP Installation	**Counties Served**	**Submissions**
MSP-North East	Cecil	49
MSP-Frederick	Frederick	34
MSP-Waterloo	Howard	28
MSP-Leonardtown	St. Mary's	19
MSP-JFK Highway	Cecil, Harford, Baltimore	16
	TOTAL	**146**

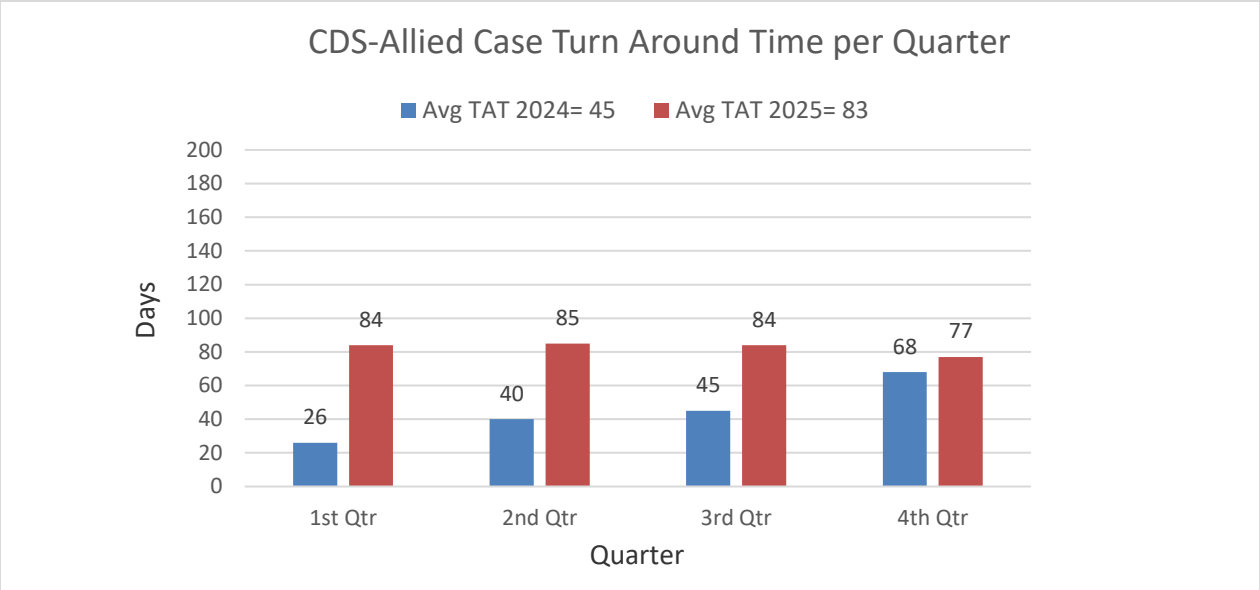
Note: Cases designated above are received by FSD from an Allied Forensic Scientist's County, but cases may be completed by FSD staff or outsourced.

CDS Cases Received by Forensic Scientists from Allied Agencies per County	
County	**Submissions**
Cecil	754
Frederick	509
St. Mary's	264
Howard	165
TOTAL	**1,692**

Note: Cases designated above are received by FSD from an Allied Forensic Scientist's County, but cases may be completed by FSD staff or outsourced.


CDS-Allied Cases Completed per Month
2024 = 1,306
2025 = 1,980
Cases
Month
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
91
128
139
139
142
169
80
164
106
145
123
145
108
164
118
178
134
213
123
186
112
162
30
187


CDS-Allied Pending Caseload and Backlog per Quarter
2024 Pending Caseload
2024 Backlog
2025 Pending Caseload
2025 Backlog
Cases
Quarter
End of 1st Qtr
End of 2nd Qtr
End of 3rd Qtr
End of 4th Qtr
138
39
425
246
175
108
416
313
221
94
351
251
48
9
221
138


CDS-Allied Case Turn Around Time per Quarter
Avg TAT 2024= 45
Avg TAT 2025= 83
Days
200
180
160
140
120
100
80
60
40
20
0
26
84
40
85
45
84
68
77
1st Qtr
2nd Qtr
3rd Qtr
4th Qtr
Quarter

CDS UNIT/ HIDTA DATA ANALYSIS

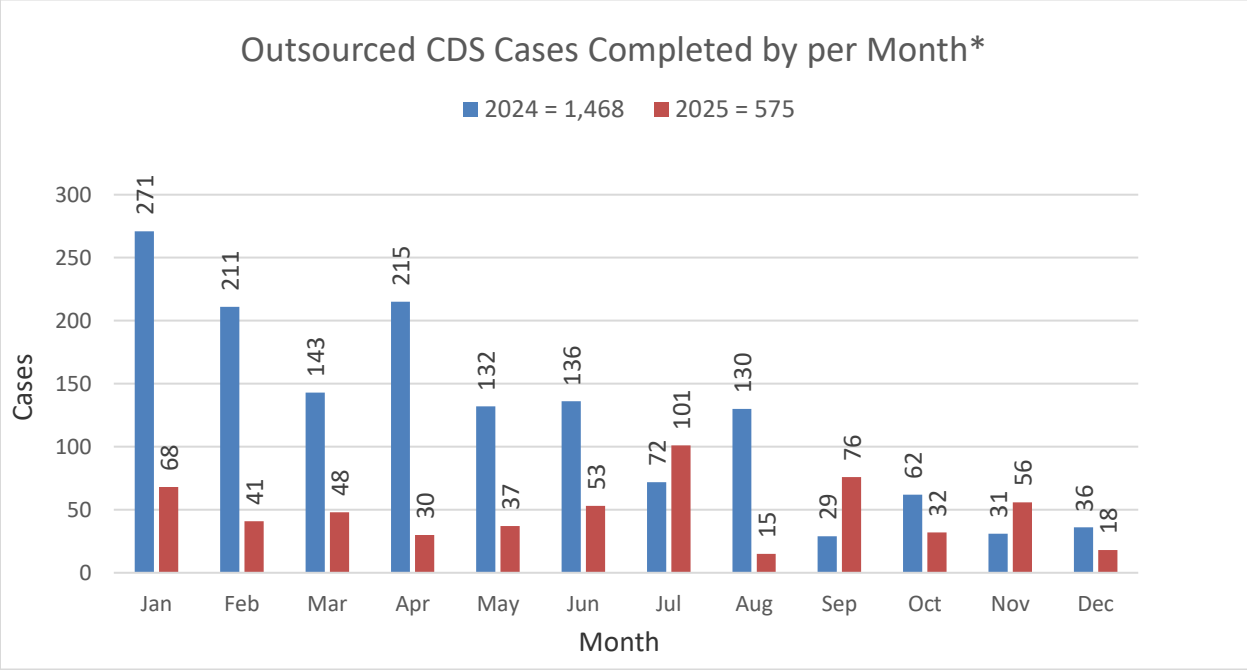
Drug Categories Identified in 2025*

Quarter	Cocaine	Cannabis	Heroin	Fentanyl	Fentanyl Analogs	Other Opioids**	Methamphetamine	Phenethylamine***	Synthetic Cannabinoid	Non-Opioid Controlled Rx	Non-Controlled Rx	Over-the-Counter	PCP/Analogs	Psychedelic	Cathinones	Designer Benzodiazepines	Xylazine	Other	Drug Positive Total
Total 1Q	**1061**	**139**	**85**	**342**	**55**	**261**	**255**	**69**	**29**	**98**	**51**	**46**	**22**	**24**	**-**	**23**	**155**	**38**	**2753**
%	38.5	5.1	3.1	12.4	2	9.5	9.3	2.5	1.1	3.6	1.9	1.7	0.8	0.9	-	0.8	5.6	1.4	-
Total 2Q	**989**	**138**	**73**	**345**	**18**	**255**	**232**	**79**	**22**	**106**	**61**	**36**	**33**	**19**	**-**	**7**	**96**	**2**	**2511**
%	39.4	5.5	2.9	13.7	0.7	10.2	9.2	3.2	0.9	4.3	2.4	1.4	1.3	0.8	-	0.3	3.8	0.1	-
Total 3Q	**1247**	**213**	**55**	**385**	**25**	**301**	**328**	**93**	**32**	**139**	**73**	**74**	**30**	**29**	**-**	**11**	**90**	**13**	**3139**
%	39.7	6.8	1.8	12.3	0.8	9.6	10.4	3	1	4.4	2.3	2.4	1	0.9	-	0.4	2.9	0.4	-
Total 4Q	**1096**	**177**	**59**	**352**	**16**	**256**	**300**	**74**	**19**	**100**	**63**	**52**	**34**	**23**	**110**	**5**	**50**	**6**	**2792**
%	39.3	6.3	2.1	12.6	0.6	9.2	10.7	2.7	0.7	3.6	2.3	1.9	1.2	0.8	3.6	0.2	1.8	0.2	-

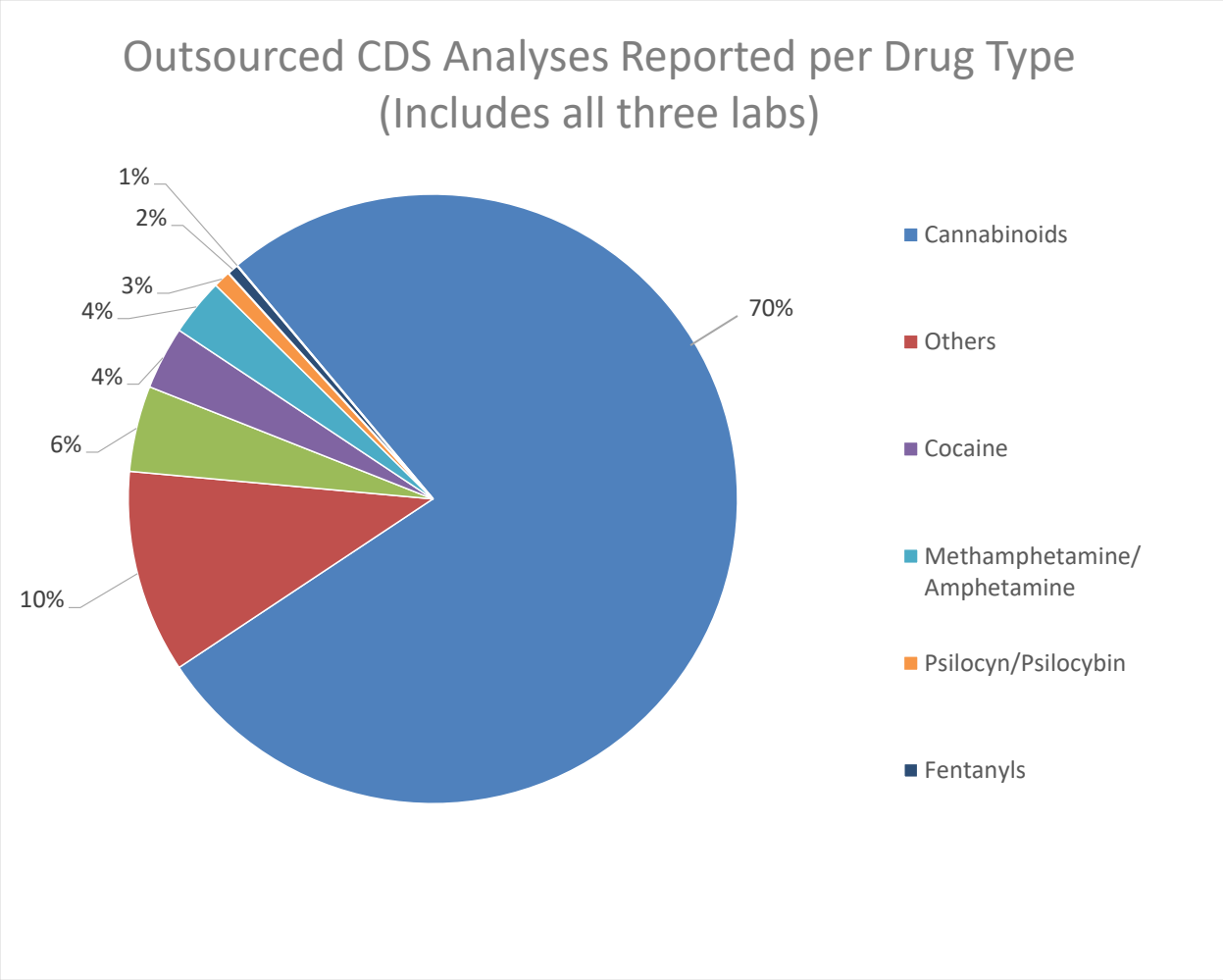
*****This is an overview of samples submitted to the MSP labs only, and does not represent all drugs seized in the State of Maryland.
**The Other Opioids group includes oxycodone, tramadol, methadone, hydrocodone, morphine, oxymorphone, codeine mixtures, tapentadol, a fentanyl precursor 4-Anilino-N-phenethyl-4-piperidine (ANPP) and other less common opioids. The Designer Benzodiazepines group may include Etizolam, Deschloroetizolam, Bromazolam, Clobromazolam, Clonazolam, Flualprazolam, or Flubromazolam, if any of the listed drugs are identified as positive.
***The Phenethylamines group includes amphetamine and MDMA.

CDS OUTSOURCING

In an effort to eliminate the CDS case backlog and allow for MSP scientists to bring on new technologies, FSD continued outsourcing CDS cases for analysis to accredited private laboratories. Using multiple US DOJ Office of Community Oriented Policing Services grants under the Anti-Heroin Task Force Program to fund CDS cases, the three Units were able to successfully minimize backlogs in 2025.



*These numbers are also counted in the individual Unit totals for competed cases per month


Outsourced CDS Analyses Reported per Drug Type
(Includes all three labs)
1%
2%
3%
4%
4%
6%
10%
70%
Cannabinoids
Others
Cocaine
Methamphetamine/
Amphetamine
Psilocyn/Psilocybin
Fentanyls

CDS NOTEWORTHY CASES

Several cases that the CDS Pikesville Unit completed in 2022 and 2024 had the final indictment sentencing for the defendant in March 2025. These CDS cases started in June 2022 following an investigation conducted by the Cecil County Drug Task Force, where a search warrant was executed at a hotel room in which the defendant, Elkton resident Nakia Pollard, was staying. In May 2024, the Cecil County Sheriff's Office executed another search warrant, this time on the defendant's home as result of a separate investigation. The search of the home yielded the same results as the search warrant on a hotel room attached to defendant, in which Sheriff's deputies recovered fentanyl, cocaine, U.S. currency, and drug paraphernalia. Upon this defendant entering a guilty plea for both cases, a Cecil County Judge ordered a pre-sentence investigation to be conducted prior to sentencing. On March 7, 2025 the sentencing hearing was conducted in which the same Judge sentenced the defendant to 7 years for the first charge of Possession with Intent to Distribute Fentanyl, 5 years for Possession with Intent to Distribute Cocaine, and another 7 years for the second charge of Possession with Intent to Distribute Fentanyl totaling 19 years to be served consecutively in the Division of Corrections.

In October 2025, the Pikesville CDS Unit analyzed an exhibit with fake alprazolam tablets that had AB-MDMSBA, a new synthetic cannabinoid, in the sample that the lab had not identified previously. It is not common to find synthetic cannabinoids in fake pharmaceutical tablets.

Also in October and November 2025, the Hagerstown CDS Unit completed two large rush cases with exhibits obtained from a search warrant conducted by the U.S. Postal Inspection Service. One case contained an exhibit that weighed over 236 grams (about 0.6 lbs) which tested positive for Fentanyl. The other case contained exhibits that weighed almost 4,000 grams (almost 9 lbs.) which tested positive for Fentanyl and other exhibits weighing almost 6,600 grams (almost 14.6 lbs.) which tested positive for Fentanyl and Heroin. Both cases will be going to Federal Court in 2026 for prosecution.

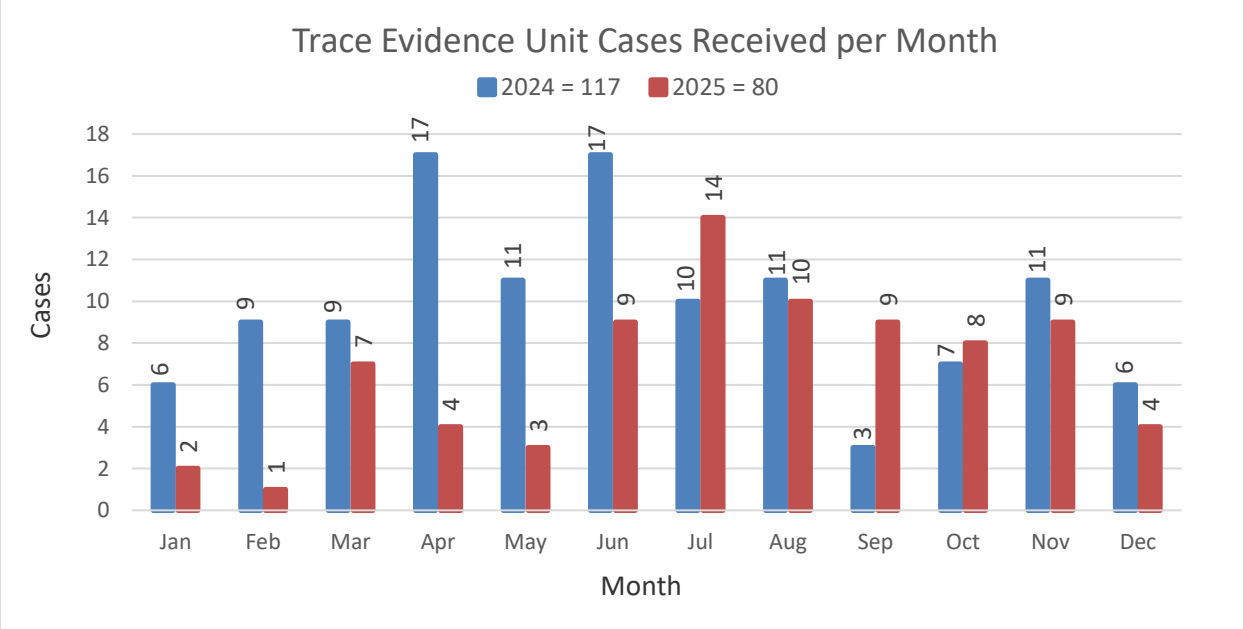
TRACE EVIDENCE UNIT

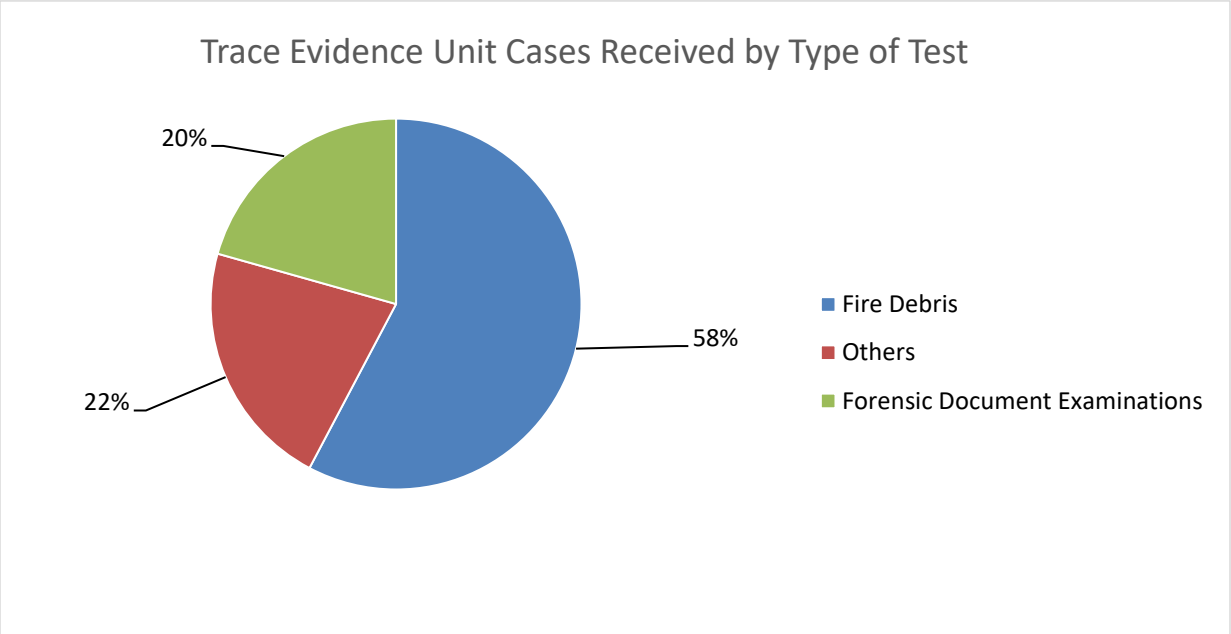
The Trace Evidence Unit offers trace evidence analysis as well as forensic document examination and consists of one Forensic Scientist Supervisor, one Forensic Scientist Advanced, and one Forensic Scientist I and a vacant Forensic Scientist I position.

The Trace Evidence Unit performs analyses on evidence that either contains or produces unique characteristics that provide beneficial information to the investigators of the case. These include analyses in the areas of Fire Debris, Paint, Fibers/Textiles, Tapes and Adhesives, Physical Matches/Fracture Matches, Hair to determine suitability for DNA analysis, and the identification of miscellaneous liquids, powders and solids.

The Forensic Document Unit performs analyses and comparisons of handwriting as well as hand-printed and machine-printed materials. This unit also performs examinations of obliterated and indented writing. The MSP-FSD has one Forensic Document examiner.

Being the only laboratory in Maryland to provide trace evidence and forensic document examinations, the TES works closely with our allied agencies so that the various types of examinations included in this discipline are available to the citizens of Maryland.

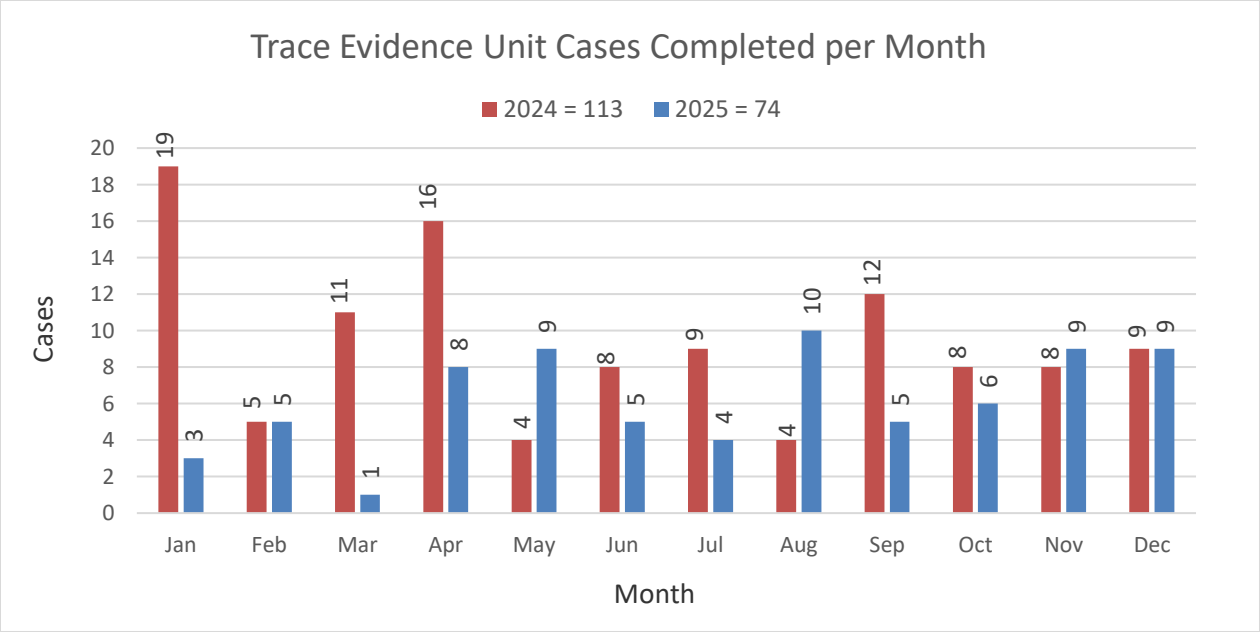


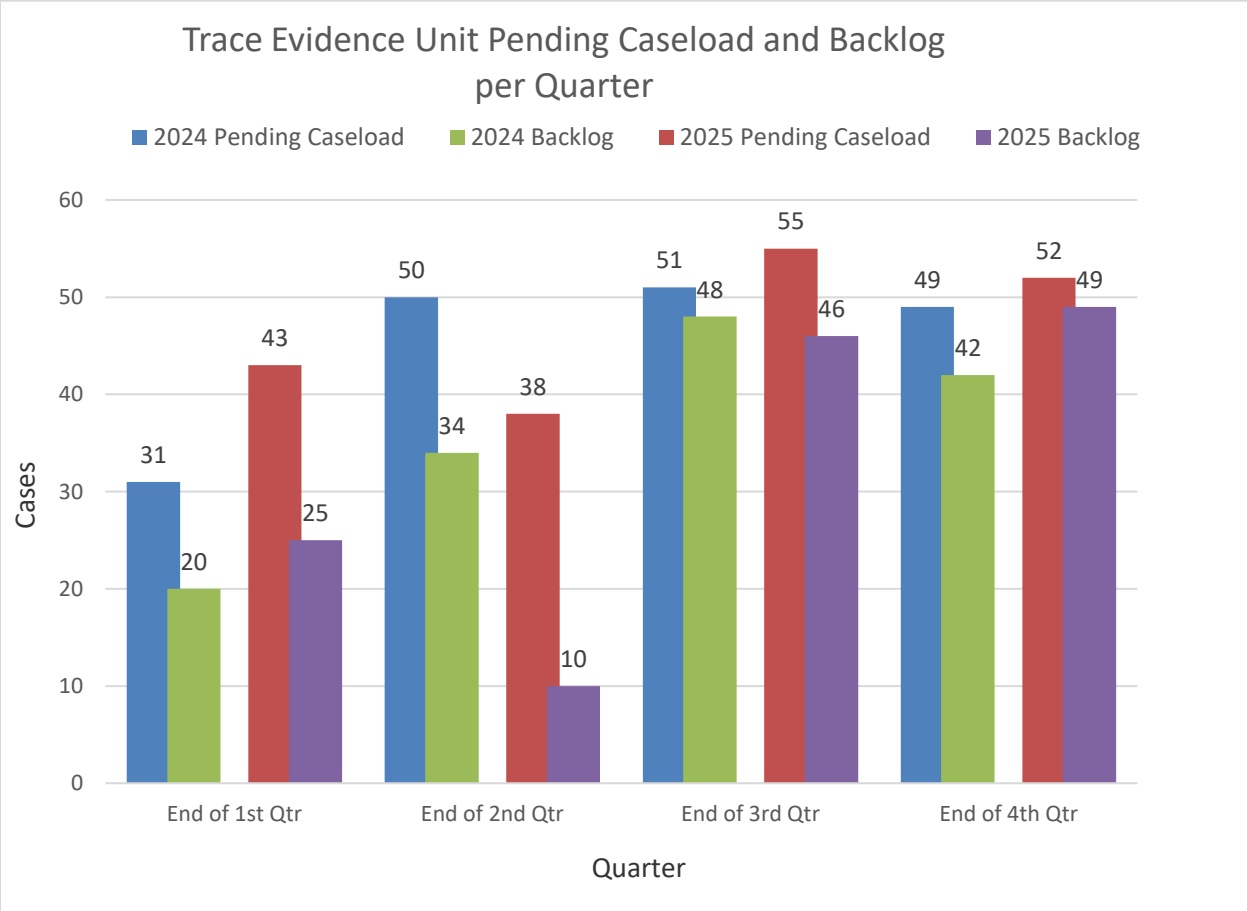


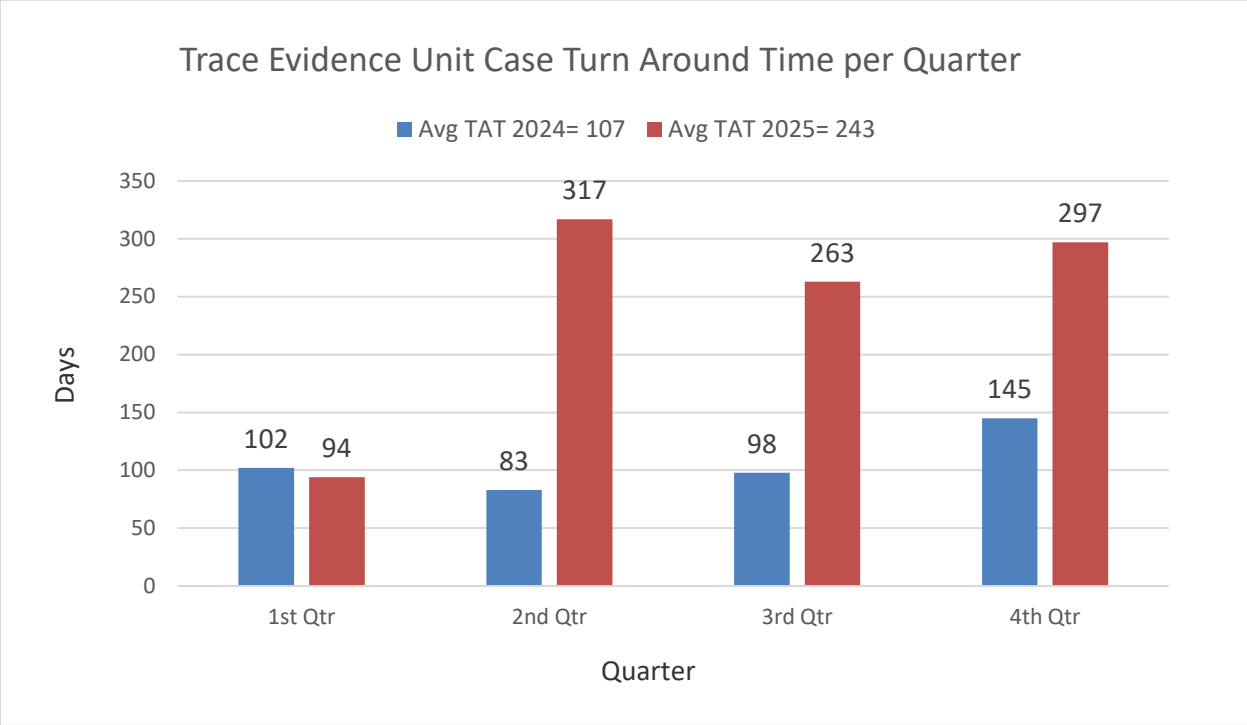
Trace Evidence Unit Cases Received per MSP Installation		
Installation	**Counties Served**	**Submissions**
OSFM	Statewide	24
MSP-Homicide Unit	Statewide	4
MSP-CID/CED	Statewide	3
MSP-Crash Team	Statewide	2
MSP- North East	Cecil	1
	TOTAL	**34**

OSFM Cases Received by the Trace Evidence Unit per OSFM Region		
Region	**Counties Served**	**Submissions**
OSFM – North East	Baltimore, Harford, Cecil	5
OSFM – Upper Shore	Caroline, Kent, Queen Anne's, Talbot	5
OSFM – Western	Allegany, Carroll, Garrett, Washington	5
OSFM – Lower Shore	Dorchester, Somerset, Wicomico, Worcester	5
OSFM – Southern	Calvert, Charles, St. Mary's	4
	TOTAL	**24**

Allied Agency Cases Received by TES per County	
County	**Submissions**
Montgomery	12
Anne Arundel	10
Baltimore	10
Prince George's	8
Baltimore City	3
Cecil	2
Talbot	2
Howard	1
Allegany	1
Caroline	1
Carroll	1
Charles	1
Dorchester	1
Harford	1
St. Mary's	1
Worcester	1
Washington	0
Queen Anne's	0
TOTAL	**56**


Trace Evidence Unit Cases Completed per Month
2024 = 113
2025 = 74
Cases
Month
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
19
3
5
5
11
1
16
8
4
9
8
5
9
4
4
10
12
5
8
6
8
9
9
9


Trace Evidence Unit Pending Caseload and Backlog per Quarter
2024 Pending Caseload
2024 Backlog
2025 Pending Caseload
2025 Backlog
Cases
Quarter
End of 1st Qtr
End of 2nd Qtr
End of 3rd Qtr
End of 4th Qtr
31
20
43
25
50
34
38
10
51
48
55
46
49
42
52
49



TRACE NOTEWORTHY CASE

In January of 2025, Howard County Police Department submitted evidence in reference to a fatal hit and run that occurred in September of 2024. A pedestrian was crossing Washington Blvd in a crosswalk and was struck by a vehicle, thrown into the roadway and struck by a second vehicle. The second striking vehicle stopped and remained on scene; the initial striking vehicle fled the scene leaving a debris field. Police responded and the crash team recovered the debris field, and held the evidence until a suspect vehicle was identified. Police were able to locate the initial striking vehicle and submitted a bumper from the vehicle and pieces of foam debris collected from the scene. The analyst was able to complete a physical fit/match of the foam piece from the scene back to the foam on the bumper of the vehicle. The Trace Evidence Examiners were able to confirm that the pieces of the foam debris on scene, were once part of the bumper of the car. This type of examination is important, because it puts the car at the scene when the subject was struck.

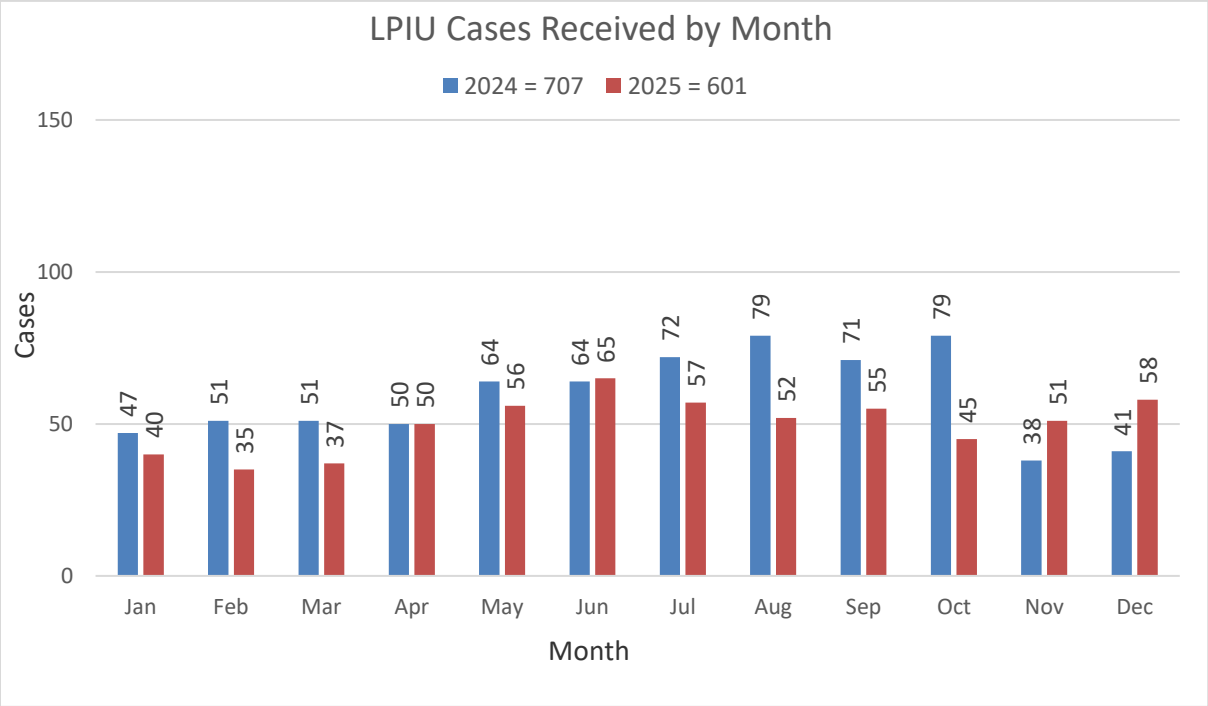
PATTERN EVIDENCE SECTION

The Pattern Evidence Section is comprised of two disciplines: Latent Prints/Impressions and Firearms/Toolmarks. Both disciplines operate out of the Pikesville laboratory and there are two additional Latent Print Impressions Units (LPIU) in Hagerstown and Berlin. The three Firearms/Toolmarks Units (FATMU) perform analysis on firearms and toolmarks using comparison microscopy, conduct serial number restoration, and utilize the National Integrated Ballistics Network (NIBIN). The LPIUs perform analysis of latent friction ridge impression evidence. One Forensic Scientist Manager oversees all 6 Units for both disciplines. The section shares one contractual Administrative Specialist II. The LPIUs consist of three supervisors (Pikesville/Hagerstown/Berlin), one Forensic Scientist Advanced position, three Forensic Scientist IIIs and one Forensic Scientist I (vacant). The FATMUs consist of three supervisors, one Forensic Scientist III, two Forensic Scientist Is (one vacant), two FICOs and one Administrative Officer I.

LATENT PRINTS/IMPRESSIONS UNITS

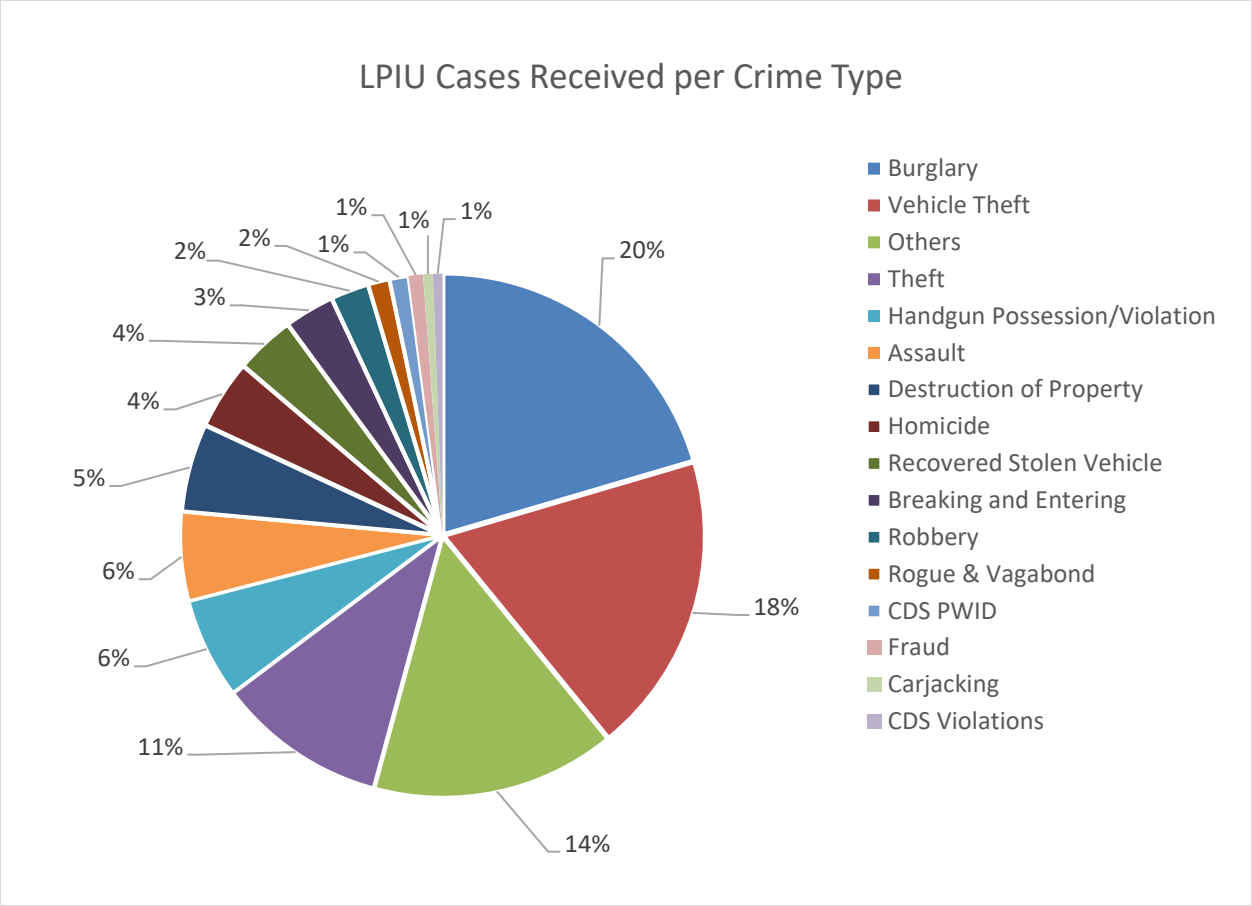
The LPIUs perform examination of latent friction ridge impressions. Various methods involving chemicals, powders and illumination techniques are used for the visualization of latent prints. The unit records developed friction ridge impressions using digital capture processes as well as gel and adhesive lifts. Comparisons between latent prints and known prints are conducted to determine if they originated from the same source. In cases where an identification is made, a second examiner completes an independent verification. Any unidentified latent prints meeting the system requirements are searched through the Maryland Automated Fingerprint Identification System (MAFIS) and, when warranted, through the FBI database (NGI). The LPIUs also attempt to identify unknown deceased individuals. An additional duty of the examiners is to verify the fingerprints submitted on CODIS cards for the Biology section.

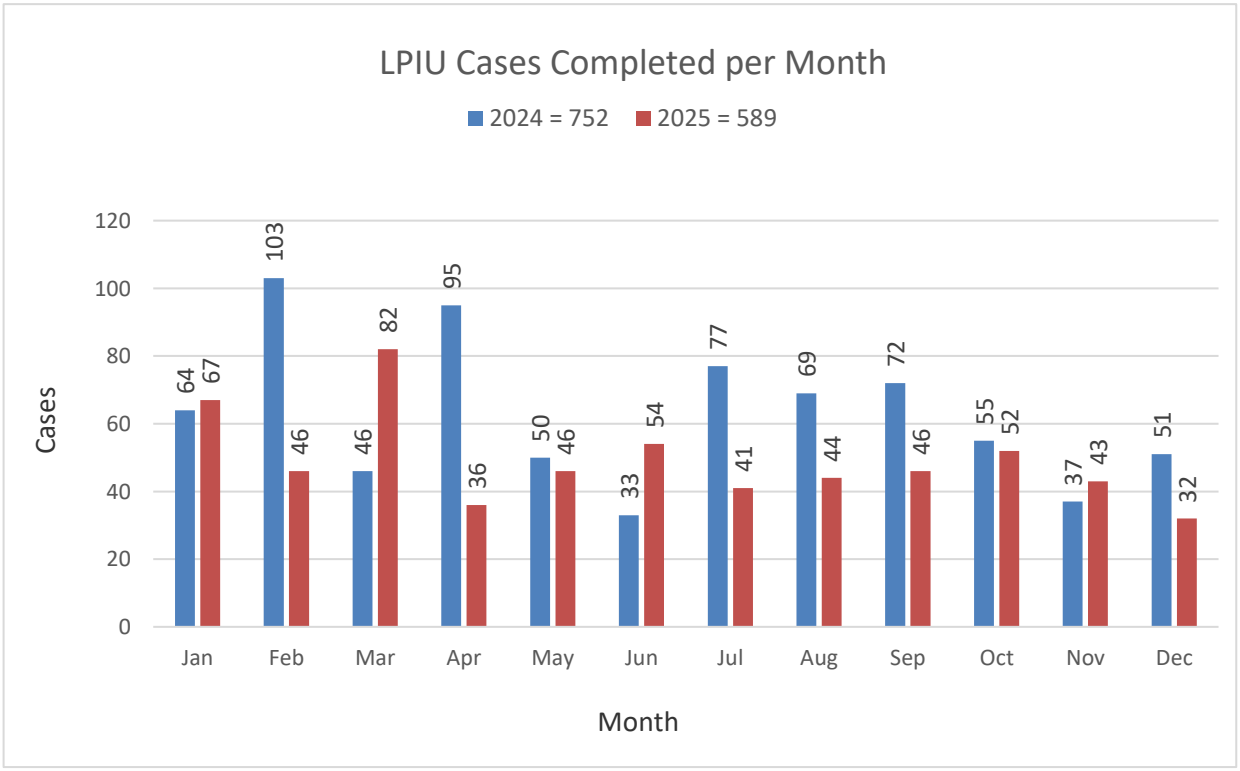
Latent Prints/Impressions Casework Statistics

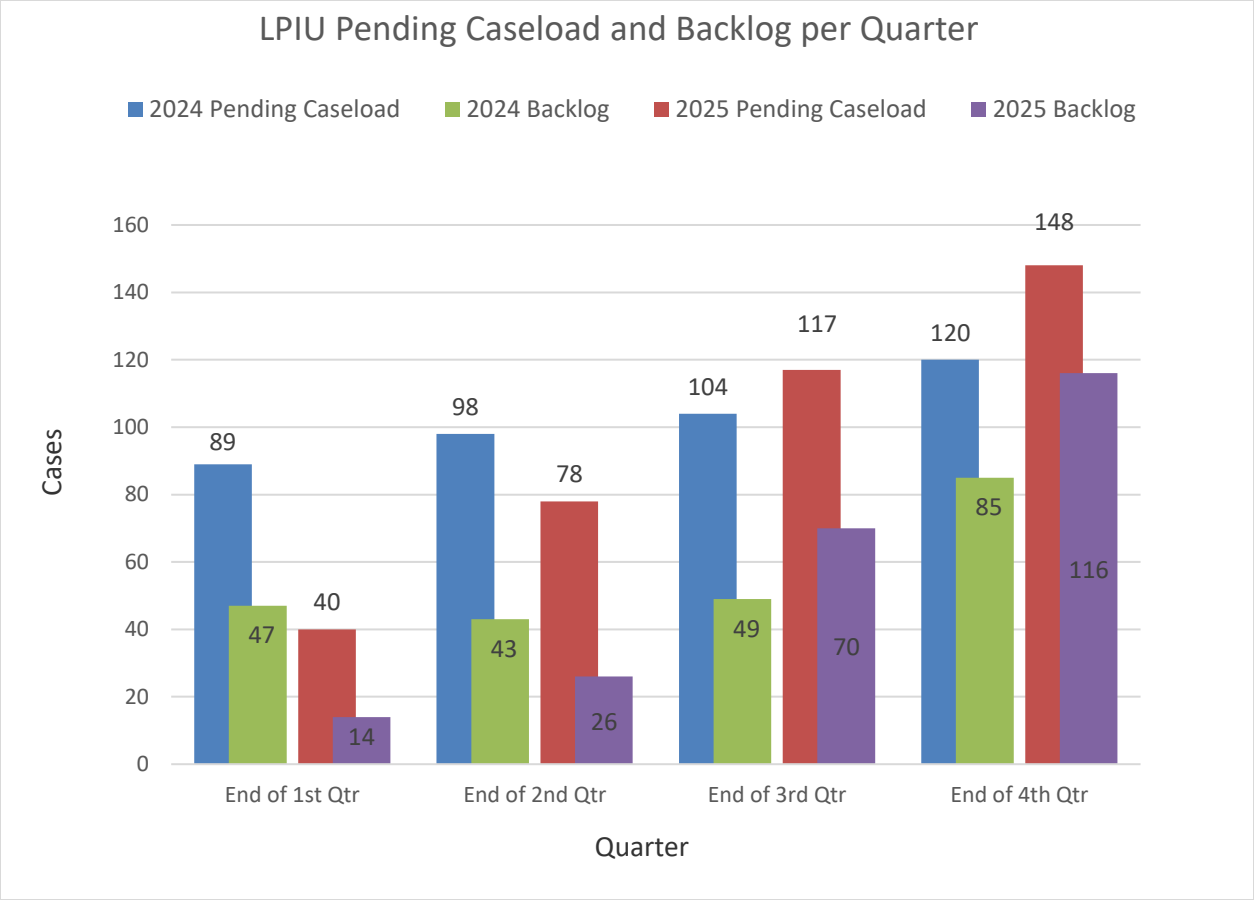


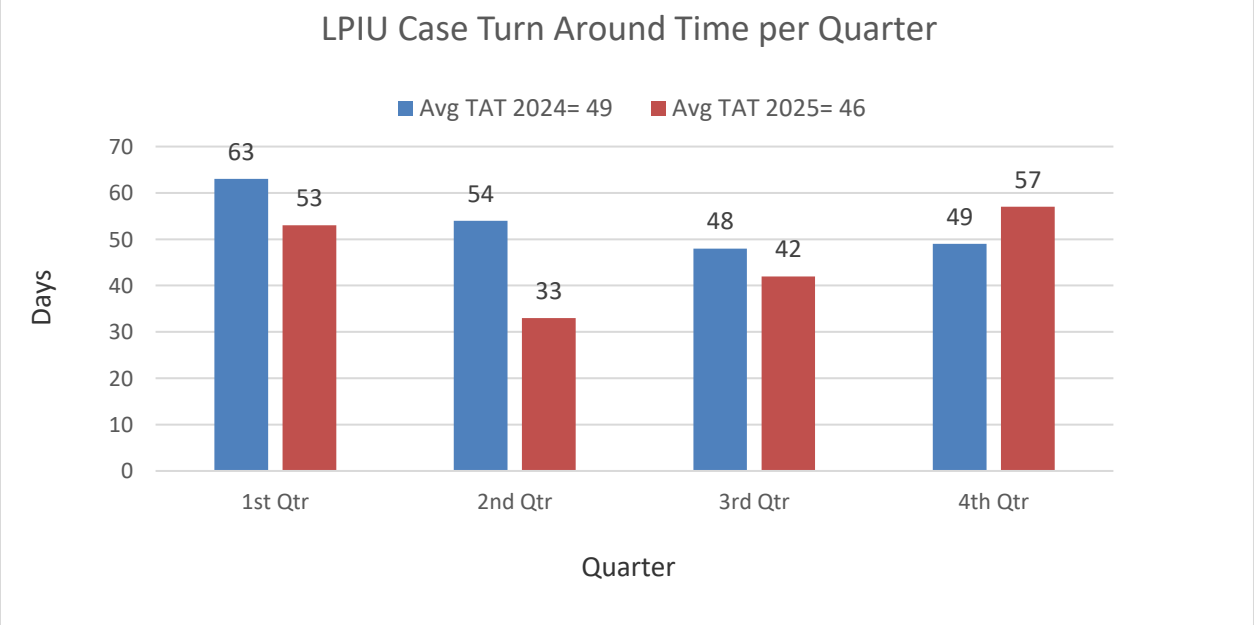
LPIU Cases Received per MSP Installation		
MSP Installation	**Counties Served**	**Submissions**
MSP-CID/CED	Statewide	31
MSP-North East	Cecil	20
MSP-Homicide	Statewide	12
MSP-Golden Ring	Baltimore	10
MSP-DED/C3I	Allegany	9
MSP-Centreville	Kent, Queen Anne's	8
MSP-Crash Team	Statewide	7
MSP-Frederick	Frederick	6
MSP-Hagerstown	Washington	6
MSP-Westminster	Carroll	5
MSP-Salisbury	Wicomico	5
MSP-Bel Air	Harford	4
MSP-Forestville	Prince George's	4
MSP-Leonardtown	St. Mary's	3
OSFM	Statewide	3
MSP-Easton	Talbot, Caroline, Dorchester	3
MSP-Glen Burnie	Anne Arundel	2
MSP-Berlin	Worcester	2
MSP-Cumberland	Allegany	2
MSP- College Park	Prince George's	2
MSP-La Plata	Charles	2
MSP-Waterloo	Howard	1
MSP-Rockville	Montgomery	1
MSP-Annapolis	Anne Arundel	1
MSP-McHenry	Garrett	1
MSP-Prince Frederick	Calvert	1
MSP-Princess Anne	Somerset	0
MSP-JFK Highway	Cecil, Harford, Baltimore	0
	TOTAL	**151**

Allied Agency Cases Received by LPIU per County	
County	**Submissions**
Worcester	65
St. Mary's	53
Frederick	44
Carroll	38
Wicomico	37
Dorchester	34
Talbot	29
Cecil	22
Anne Arundel	16
Calvert	14
Allegany	13
Washington	12
Prince George's	12
Queen Anne's	10
Baltimore City	9
Baltimore	8
Somerset	8
Kent	7
Caroline	6
Harford	5
Charles	4
Garrett	3
Howard	1
TOTAL	**450**

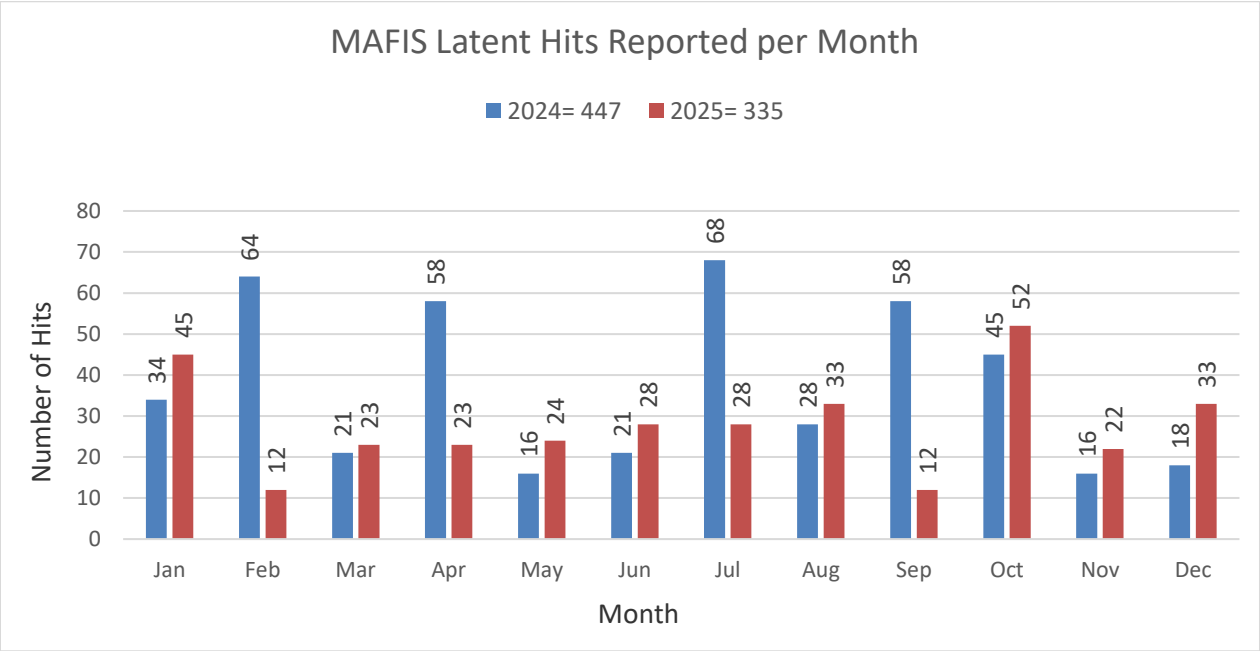

LPIU Cases Received per Crime Type
20%
18%
14%
11%
6%
6%
5%
4%
4%
3%
2%
2%
1%
1%
1%
Burglary
Vehicle Theft
Others
Theft
Handgun Possession/Violation
Assault
Destruction of Property
Homicide
Recovered Stolen Vehicle
Breaking and Entering
Robbery
Rogue & Vagabond
CDS PWID
Fraud
Carjacking
CDS Violations

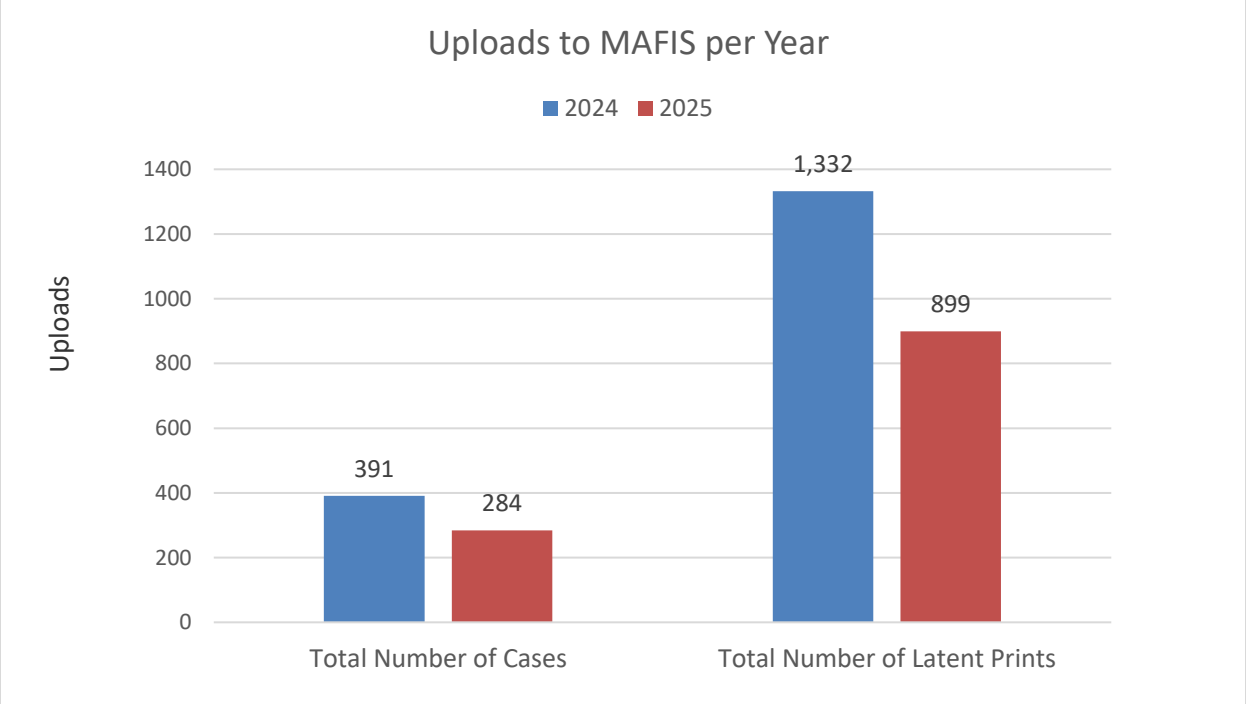

LPIU Cases Completed per Month
2024 = 752
2025 = 589
Cases
Month
0
20
40
60
80
100
120
Jan 64 67
Feb 103 46
Mar 46 82
Apr 95 36
May 50 46
Jun 33 54
Jul 77 41
Aug 69 44
Sep 72 46
Oct 55 52
Nov 37 43
Dec 51 32


LPIU Pending Caseload and Backlog per Quarter
2024 Pending Caseload
2024 Backlog
2025 Pending Caseload
2025 Backlog
Cases
160
140
120
100
80
60
40
20
0
89
47
40
14
98
43
78
26
104
49
117
70
120
85
148
116
End of 1st Qtr
End of 2nd Qtr
End of 3rd Qtr
End of 4th Qtr
Quarter


LPIU Case Turn Around Time per Quarter
Avg TAT 2024= 49
Avg TAT 2025= 46
Days
70
60
50
40
30
20
10
0
63
53
54
33
48
42
49
57
1st Qtr
2nd Qtr
3rd Qtr
4th Qtr
Quarter

Latent Prints/Impressions Database Statistics





LPIU NOTEWORTHY CASES

St. Mary's County Sheriff's Office deputies were called September 27, 2025, to a house in Lexington Park for a stabbing. A man was found suffering from multiple stab wounds to the torso. A preliminary investigation indicated the man and assailant knew each other and had an ongoing fight throughout the day. The suspected weapon used in the assault was located at the scene, submitted by investigators to the MSP Pikesville lab, then ultimately transferred to the MSP Hagerstown lab for processing. The latent print examiner observed and recovered one print of value from the blade of the knife, which was uploaded to AFIS. The print hit to the named suspect in AFIS. The latent print examiner is set to testify at the trial in St. Mary's County Circuit Court in 2026.

In November 2025, The State Fire Marshal's Office responded to a fatal structure fire in Clear Spring. There were 3 deceased individuals whose injuries were inconsistent with being fire related. Postmortem prints from the 3 deceased individuals were submitted to the Pikesville unit and all 3 individuals were able to be identified. Subsequently, evidence to include latent lifts cards, lighter, eyeglass case, comb, clipper case, bottle of water and pool cues was submitted to the Hagerstown unit for analysis. Latent prints were recovered and 1 suspect, 1 victim and 1 additional individual were identified.

Highlighting a cold case from October 14, 2012, where a crime scene technician processed a residence in reference to a burglary investigation for the MSP Centreville Barrack. A suspect entered a residence through the laundry room and woke a male victim. The victim confronted the suspect in the kitchen. The suspect and the victim had a struggle in the kitchen. The suspect shot at the victim in the den and in the driveway. The laundry room and driveway were processed for firearms and latent print evidence. Two (2) cartridge cases and two (2) latent lifts were collected from the residence. The latent lifts were entered into the Maryland AFIS System at that time. On April 24, 2025, an examiner within the Pikesville LPIU was notified of a potential lead on a suspect generated in response to a preliminary comparison. This suspect had not been identified prior.

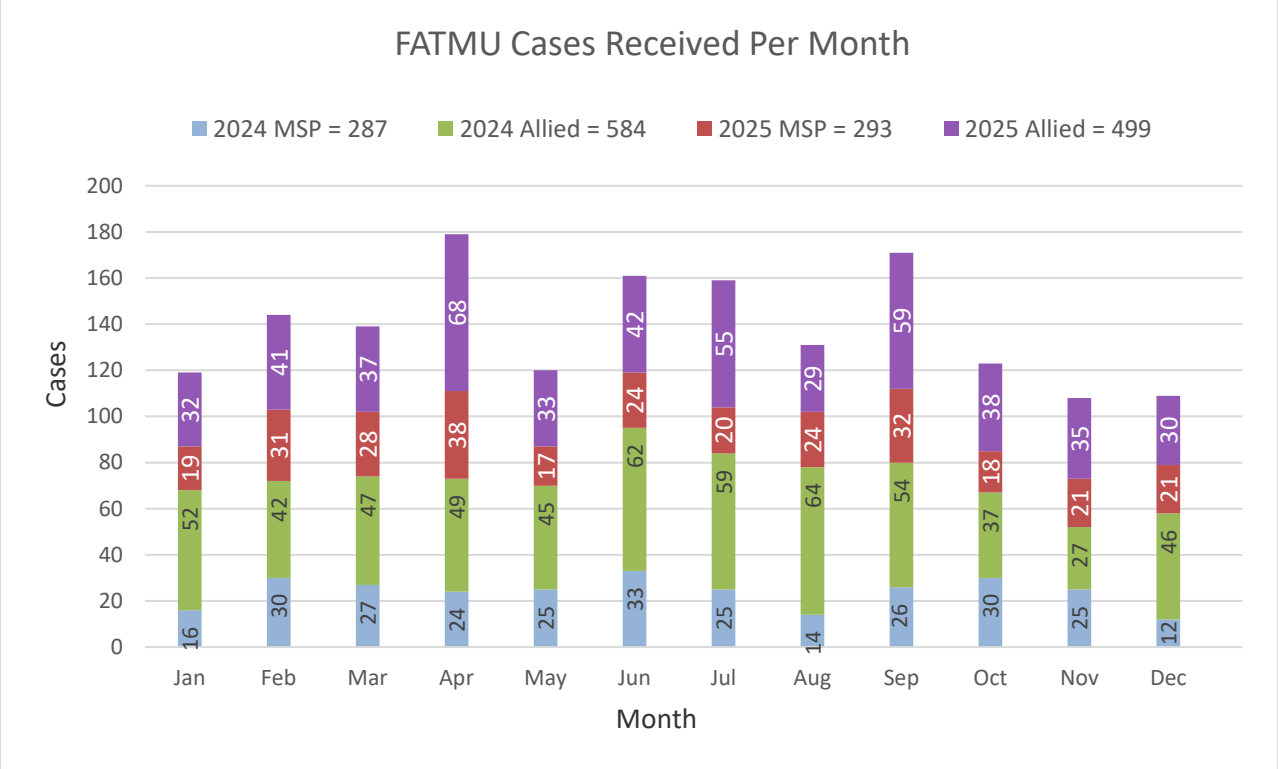
FIREARMS/TOOLMARKS UNIT

The Firearms/Toolmarks Units (FATMU) provide microscopic and functional examination of firearms and firearm-related evidence. The firearms/toolmarks operation is sectioned into three sub-units: NIBIN, Allied Casework and MSP Casework units. The NIBIN Unit is tasked with triage of fired evidence, entering samples into the ATF National Integrated Ballistic Information Network (NIBIN), reporting NIBIN leads, and confirming NIBIN leads. The NIBIN Unit oversees the Operation Test Shot and Walk-In Test Fire programs which are designed to expedite the collection of test fired cartridge casings from firearms for the purpose of entry into NIBIN. The Allied Casework unit oversees casework received from Allied Law Enforcement Agencies, and the MSP Casework unit oversees casework received from MSP including Independent Investigation Division (IID) cases. Examiners in the Allied and MSP Casework units also perform restoration of obliterated serial numbers and toolmark examinations. Cartridge case evidence from both the Allied and MSP units that meet system requirements are entered into NIBIN and searched against the regional and/or national database.

Currently, the NIBIN unit has one supervisor and two Forensic Inventory Control Officers. The Allied Casework unit has one supervisor and one examiner, and the MSP Casework unit has one supervisor, one examiner trainee, and one Forensic Inventory Control Officer.

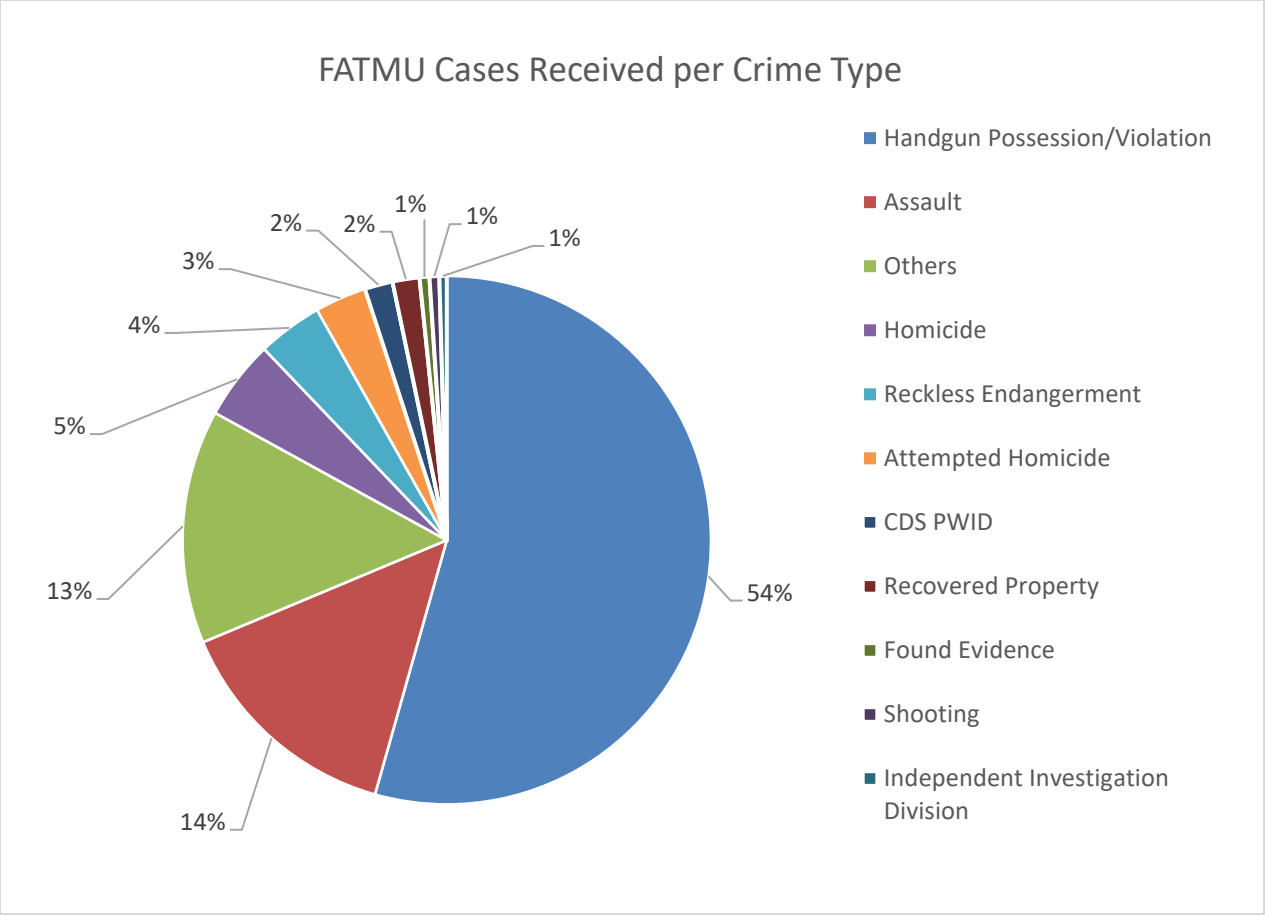
FATMU also provides a service to the Maryland Handgun Roster Board (HRB) which is responsible for evaluating new firearms for compliance with Maryland regulations and approval for sale in Maryland. Examiners perform non-forensic examination of the petitioned firearms specifically for the qualifying criteria established in COMAR.

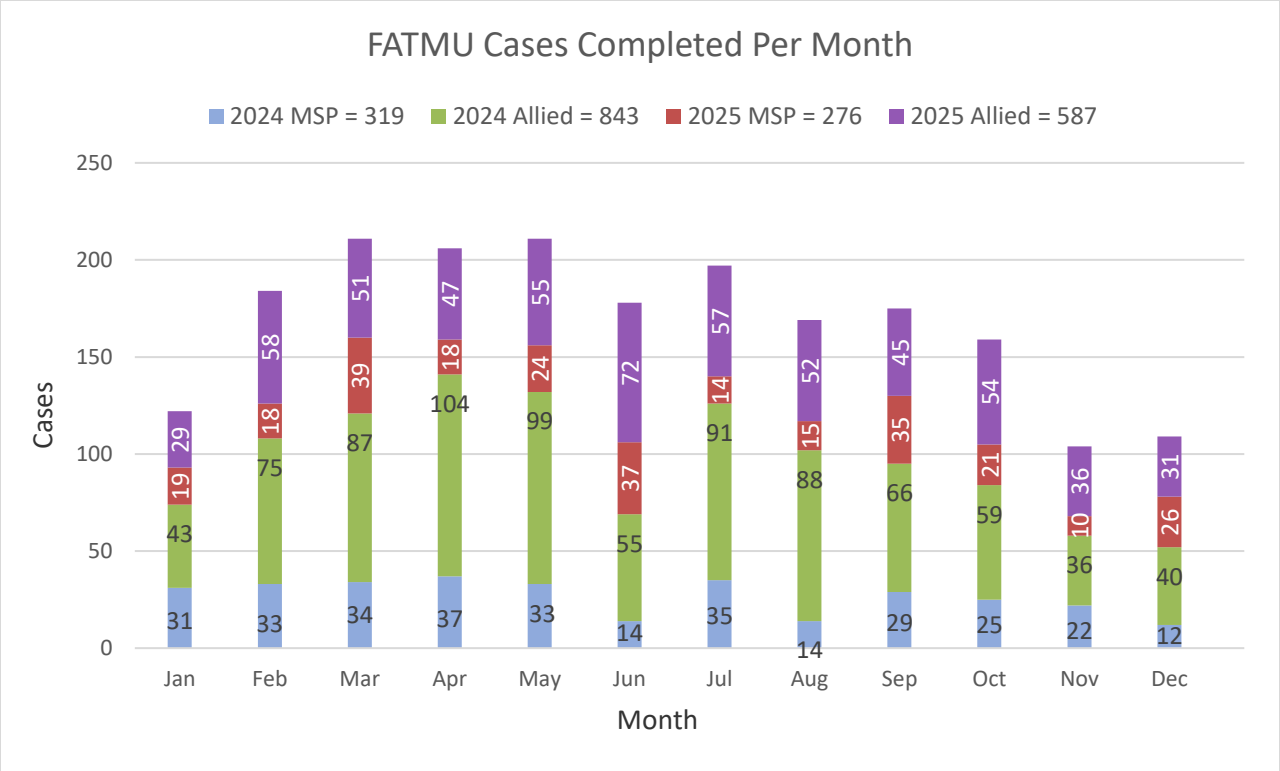
Firearms/Toolmarks Casework Statistics

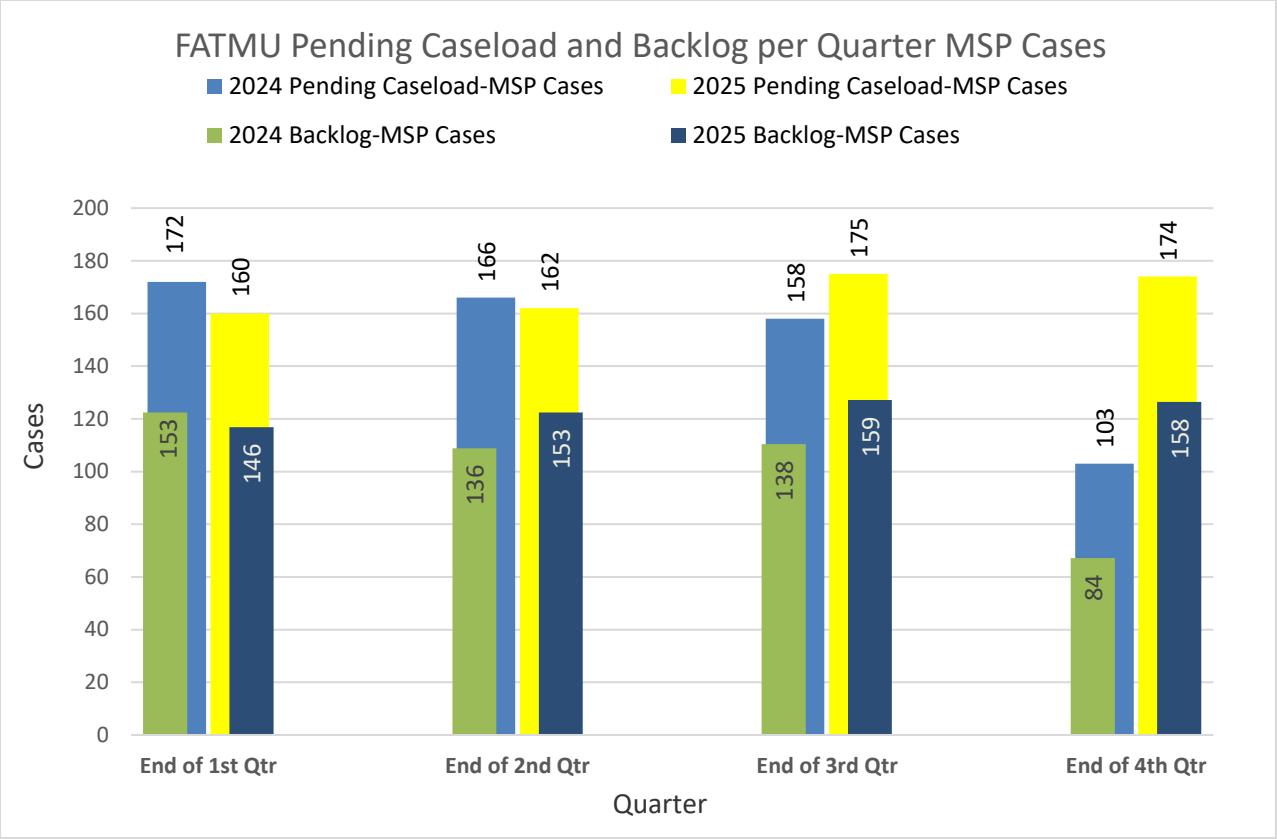


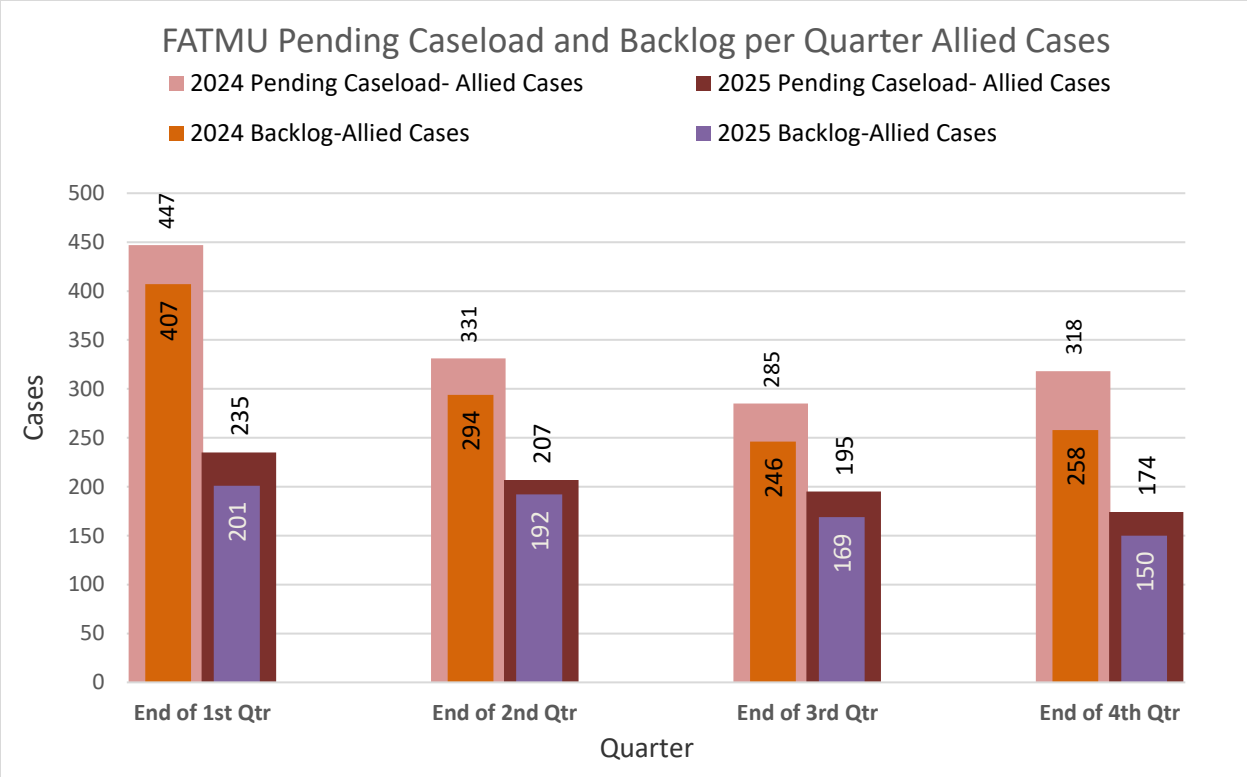
FATMU Cases Received per MSP Installation		
Installation	**Counties Served**	**Total**
MSP-CID/CED	Statewide	85
MSP-Golden Ring	Baltimore	38
MSP-College Park	Prince George's	27
MSP-Homicide	Statewide	24
MSP-North East	Cecil	17
MSP-Forestville	Prince George's	15
MSP-Frederick	Frederick	12
MSP-Bel Air	Harford	11
MSP-Glen Burnie	Anne Arundel	8
MSP-Princess Anne	Somerset	7
MSP-Prince Frederick	Calvert	6
MSP-Hagerstown	Washington	6
MSP-Waterloo	Howard	5
MSP-Leonardtown	St. Mary's	5
MSP-Salisbury	Wicomico	4
MSP-Westminster	Carroll	4
MSP-Cumberland	Allegany	3
MSP-Easton	Talbot, Caroline, Dorchester	3
MSP-Centreville	Queen Anne's	2
MSP-JFK Highway	Cecil, Harford, Baltimore	2
MSP-Annapolis	Anne Arundel	2
MSP-DED/C3I	Allegany	2
MSP-Rockville	Montgomery	2
MSP-La Plata	Charles	1
MSP-McHenry	Garrett	1
MSP-Berlin	Worcester	1
	TOTAL	**293**

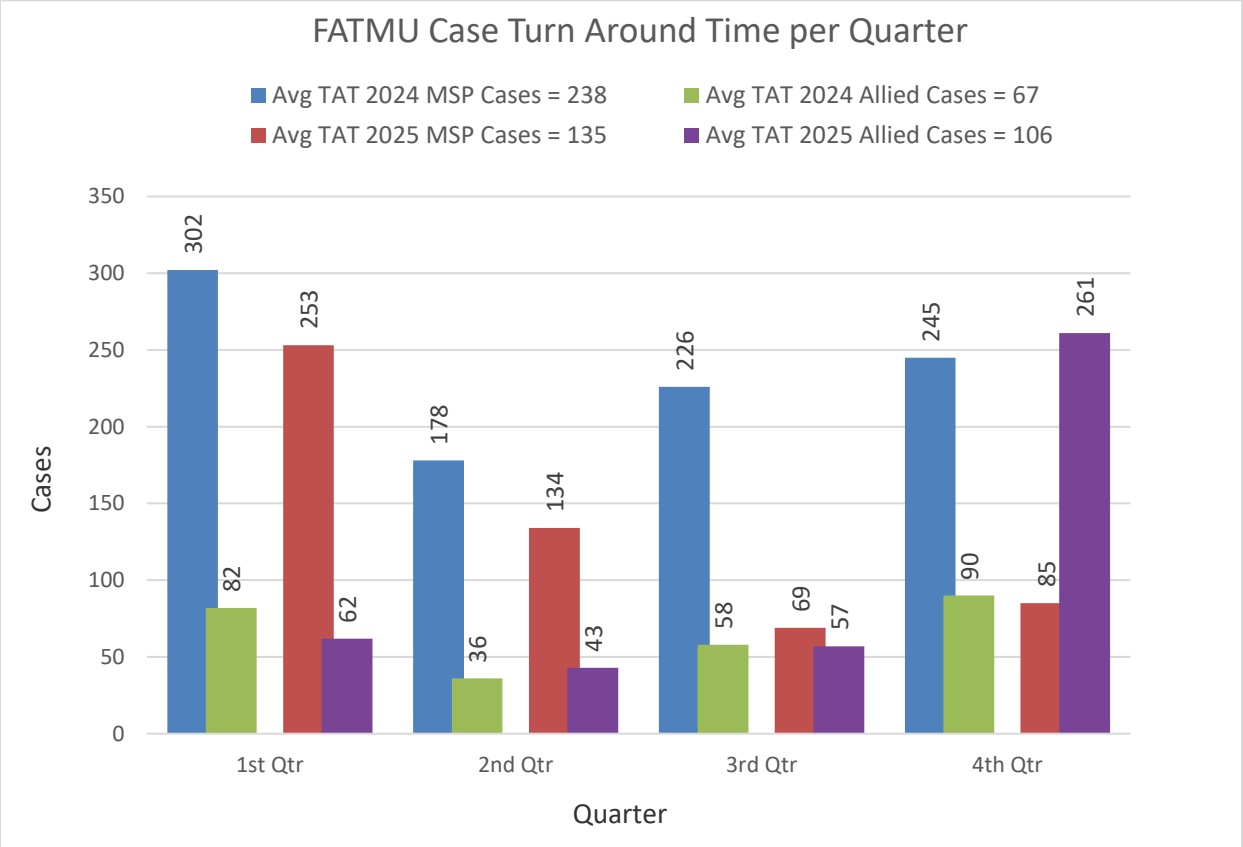
Allied Agency Cases Received by FATMU per County	
County	**Total**
Washington	96
Wicomico	64
Anne Arundel	56
Worcester	49
Baltimore City	43
St. Mary's	39
Cecil	29
Carroll	28
Calvert	18
Baltimore	16
Somerset	9
Charles	8
Howard	7
Harford	7
Frederick	6
Dorchester	6
Queen Anne's	6
Prince George's	4
Caroline	3
Talbot	2
Kent	2
Allegany	1
Garrett	0
TOTAL	**499**

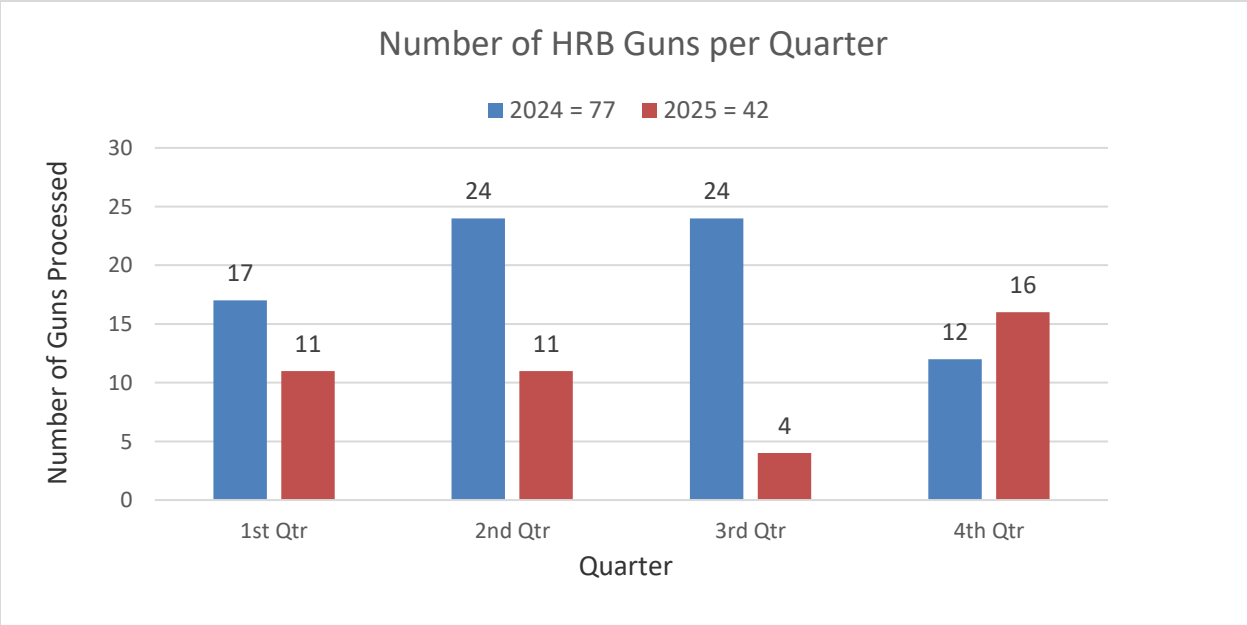

FATMU Cases Received per Crime Type
54%
14%
13%
5%
4%
3%
2%
2%
1%
1%
1%
Handgun Possession/Violation
Assault
Others
Homicide
Reckless Endangerment
Attempted Homicide
CDS PWID
Recovered Property
Found Evidence
Shooting
Independent Investigation Division


FATMU Cases Completed Per Month
2024 MSP = 319
2024 Allied = 843
2025 MSP = 276
2025 Allied = 587
Cases
Month
250
200
150
100
50
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
31
43
19
29
33
75
18
58
34
87
39
51
37
104
18
47
33
99
24
55
14
55
37
72
35
91
14
57
14
88
15
52
29
66
35
45
25
59
21
54
22
36
10
36
12
40
26
31

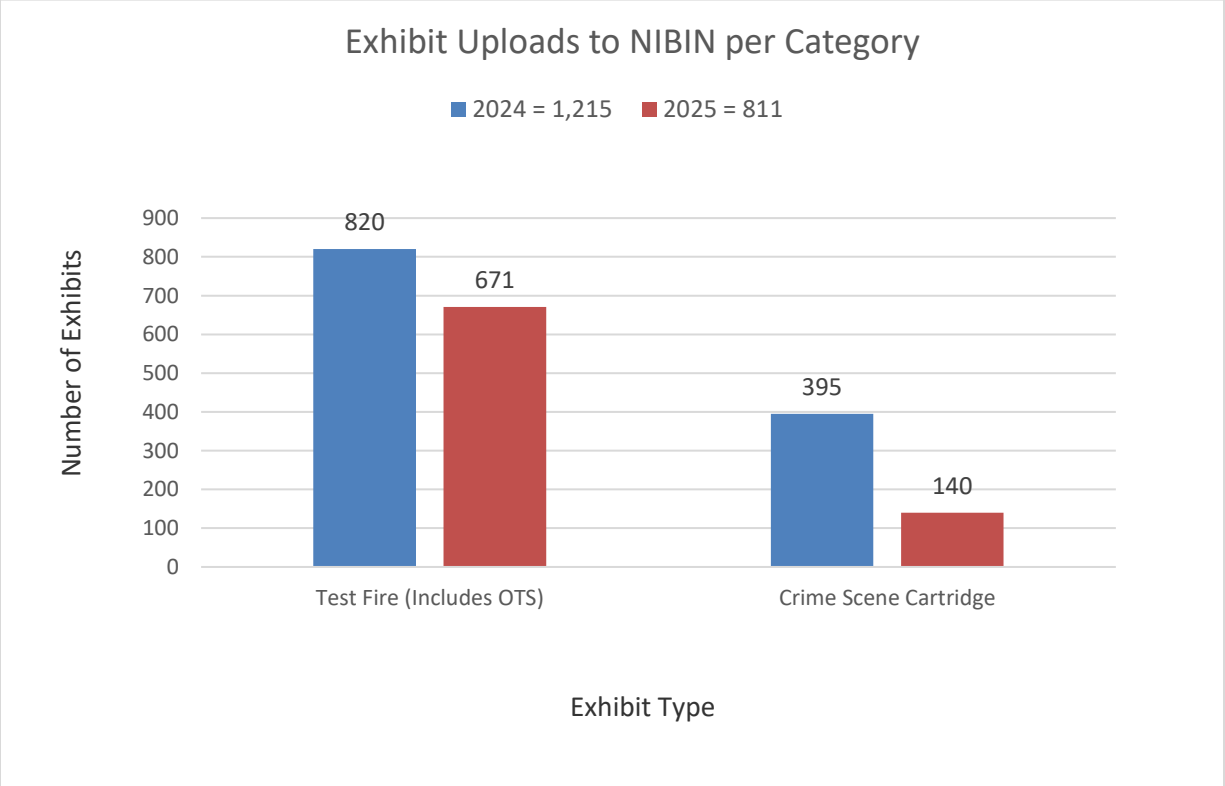

FATMU Pending Caseload and Backlog per Quarter MSP Cases
2024 Pending Caseload-MSP Cases
2025 Pending Caseload-MSP Cases
2024 Backlog-MSP Cases
2025 Backlog-MSP Cases
Cases
200
180
160
140
120
100
80
60
40
20
0
172
160
153
146
166
162
136
153
158
175
138
159
103
174
84
158
End of 1st Qtr
End of 2nd Qtr
End of 3rd Qtr
End of 4th Qtr
Quarter

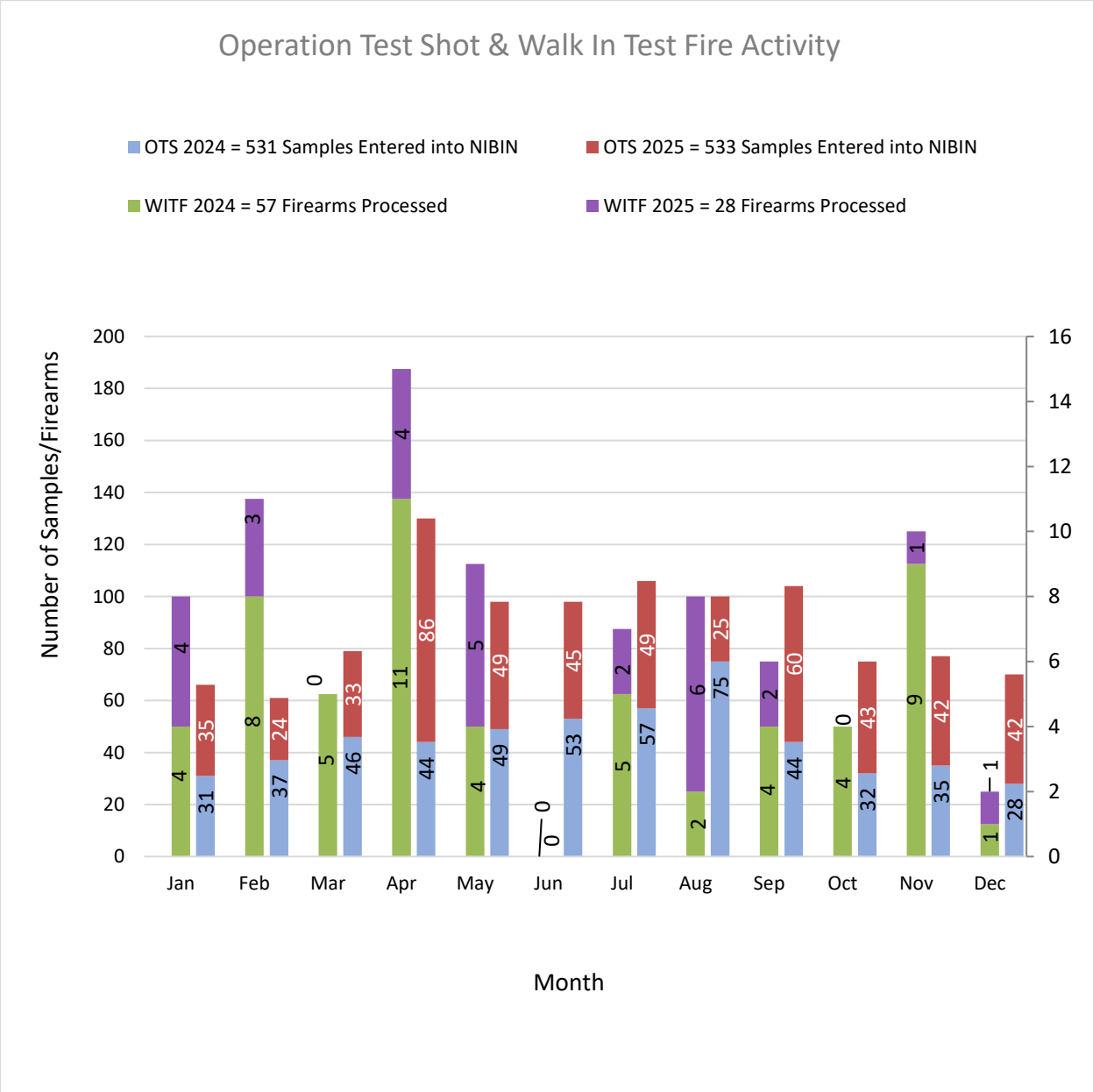

FATMU Pending Caseload and Backlog per Quarter Allied Cases
2024 Pending Caseload- Allied Cases
2025 Pending Caseload- Allied Cases
2024 Backlog-Allied Cases
2025 Backlog-Allied Cases
Cases
500
450
400
350
300
250
200
150
100
50
0
447
407
235
201
331
294
207
192
285
246
195
169
318
258
174
150
End of 1st Qtr
End of 2nd Qtr
End of 3rd Qtr
End of 4th Qtr
Quarter


FATMU Case Turn Around Time per Quarter
Avg TAT 2024 MSP Cases = 238
Avg TAT 2024 Allied Cases = 67
Avg TAT 2025 MSP Cases = 135
Avg TAT 2025 Allied Cases = 106
Cases
350
300
250
200
150
100
50
0
302
82
253
62
178
36
134
43
226
58
69
57
245
90
85
261
1st Qtr
2nd Qtr
3rd Qtr
4th Qtr
Quarter



Firearms/Toolmarks Database Statistics





Note: The y-axis on the left side is for OTS numbers and the y-axis on the right side is for WITF numbers

NIBIN Associations			
Associated Agencies		**Number of Leads**	**Number of Confirmed Hits**
Aberdeen PD	Aberdeen PD	0	1
Aberdeen PD	Harford CO SO	0	1
Calvert Co So	DC-Metropolitan PD	1	0
Calvert Co So	St. Mary's Co SO	2	0
Cambridge PD	Cambridge PD	2	1
Caroline County SO	Baltimore City PD	2	0
Carroll Co SO	DC-Metropolitan PD	10	0
Cecil County SO	Baltimore City PD	2	0
Cecil County SO	DE- State Police HQ Dover	1	0
Cecil County SO	Elkton PD	4	0
Charles County SO	Charles County SO	0	2
Elkton PD	Delaware state police	1	0
Elkton PD	DE- Wilmington City PD	1	0
Elkton PD	Elkton PD	2	1
Elkton PD	Harford CO SO	2	0
Elkton PD	MSP CED	1	0
Elkton PD	MSP Pikesville	2	0
Elkton PD	MSP Northeast	3	0
Elkton PD	New Castle CO PD (DE)	1	0
Elkton PD	VA- Virginia Beach PD	1	0
Frederick PD	Frederick PD	0	3
Hagerstown PD	ATF Baltimore	1	0
Hagerstown PD	Baltimore City PD	3	0
Hagerstown PD	Baltimore County PD	1	0
Hagerstown PD	DC-Metropolitan PD	1	0
Hagerstown PD	Frederick Co SO	1	0
Hagerstown PD	Hagerstown PD	10	1
Hagerstown PD	WV- ATF Martinsburg	1	0
Harford County SO	Baltimore PD	0	1
Harford County SO	Harford CO SO	0	4
Howard County SO	Howard County SO	0	2
MDTA Police	Annapolis PD	1	0
MDTA Police	Baltimore City PD	12	0
MDTA Police	Baltimore County PD	2	0
MSP CED	DC-Metropolitan PD	1	0

NIBIN Associations			
Associated Agencies		**Number of Leads**	**Number of Confirmed Hits**
MSP CED	MSP CED	1	0
MSP CED	Accomack Co SO	1	0
MSP CED	Cambridge PD	1	0
MSP CED	DE- Wilmington City PD	7	0
MSP CED	VA- Virginia Beach PD	1	0
MSP College Park	Montgomery Co PD	1	0
MSP Forestville	DC-Metropolitan PD	5	0
MSP Forestville	VA- Newport News PD	3	0
MSP Forestville	VA- Virginia Beach PD	1	0
MSP Glen Burnie	Montgomery Co PD	1	0
MSP Golden Ring	Baltimore City PD	4	0
MSP Golden Ring	Baltimore County PD	4	0
MSP Hagerstown	Baltimore City PD	2	0
MSP Homicide	ATF Norfolk	1	0
MSP Homicide	Baltimore City PD	1	0
MSP Homicide	Prince Georges County PD	2	0
MSP Leonardtown	St. Mary's Co SO	2	0
MSP Pikesville	DC-Metropolitan PD	1	0
MSP Pikesville	MSP Pikesville	1	0
MSP Princess Anne	MSP CED	1	0
MSP Princess Anne	MSP Homicide	1	0
MSP Princess Anne	MSP Princess Anne	1	0
MSP Princess Anne	Princess Anne PD	2	0
MSP Princess Anne	Somerset Co SO	1	0
MTA PD	Baltimore City PD	2	0
Ocean City PD	Baltimore City PD	1	0
Ocean City PD	Delaware state police	1	0
Princess Anne PD	MSP Pikesville	1	0
Princess Anne PD	Princess Anne PD	1	0
Princess Anne PD	Worchester CO SO	2	0
Princess Anne PD	Salisbury PD	1	0
Princess Anne PD	Wicomico Co SO	1	0
Queen Anne's Co SO	Chestertown PD (MD)	1	0
Queen Anne's Co SO	DE- Dover PD	1	0

NIBIN Associations			
Associated Agencies		**Number of Leads**	**Number of Leads**
Salisbury PD	Cambridge PD	1	0
Salisbury PD	MSP CED	1	0
Salisbury PD	Salisbury PD	6	0
Salisbury PD	Wicomico Co SO	4	0
St. Mary's Co SO	Baltimore City PD	1	1
St. Mary's Co SO	DC-Metropolitan PD	4	0
St. Mary's Co SO	DOJ/ATF	0	1
St. Mary's Co SO	MSP CED	1	0
St. Mary's Co SO	MSP Prince Frederick	1	0
St. Mary's Co SO	St. Mary's Co SO	11	5
U of M College Park	Prince Georges County PD	2	0
Washington Co SO	Baltimore City PD	1	0
Washington Co SO	Montgomery Co PD	2	0
Wicomico Co SO	Baltimore City PD	5	0
Wicomico Co SO	Wicomico Co SO	1	0
	TOTAL	**171**	**24**

Note: NIBIN leads are developed through a correlation review of NIBIN data. Confirmed hits have been verified microscopically by an examiner.

FATMU NOTEWORTHY CASES

Fired cartridge cases from a double homicide of two teenagers outside a Howard County shopping mall were submitted for analysis after a NIBIN lead was developed that linked the casings to a handgun recovered at the suspect's home. A Maryland teenager was found guilty of two counts of first-degree murder in the deaths of two other teenagers.

In 2024 a man in Salisbury kicked down his step daughter's door and proceeded to shoot her 8 times. She survived the shooting. Between 2024 and 2025, FATMU conducted a test fire of the recovered weapon from the scene, triaged cartridge cases and entered test fires into NIBIN. Microscopic comparisons were conducted as well. FATMU examiners testified in September of 2025, and the defendant was convicted of first-degree attempted murder, firearm use in a crime of violence, illegal possession of a regulated firearm, and other charges. The defendant was sentenced to fifty years in prison.

BIOLOGY SECTION

The Biology Section is responsible for performing Serological and DNA analyses associated with criminal casework as well as maintaining and operating the State's DNA Database in conjunction with the FBI's Combined DNA Index System (CODIS). In order to efficiently address these functions, the Biology Section consists of five units overseen by one Forensic Scientist Manager The section is heavily supported through both State and Federal grant funding, which is administered and managed by the section's manager.

There are two casework units: the Investigative Casework Unit and the Trial Casework Unit. The Investigative Casework Unit is staffed by six individuals, including one Forensic Scientist Supervisor, one Forensic Scientist Advanced, one Forensic Scientist III, two Forensic Scientist II's, and one Forensic Inventory Control Officer (vacant). The Trial Casework Unit is staffed by six forensic scientists, including one Forensic Scientist Supervisor, one Forensic Scientist Advanced, one Contractual Forensic Scientist Advanced, one Forensic Scientist III, one Forensic Scientist II and one allied Forensic Scientist I.

The Database Unit are two units staffed by nine individuals, including two Forensic Scientist Supervisors (CODIS Administrator and Alternate CODIS Administrator), three Forensic Scientists Advanced, two Forensic Scientist III's, one Forensic Scientist I, and two contractual paralegal II's.

The Technical/Validation Unit is staffed by five individuals, including one Forensic Scientist Supervisor (Technical Leader), two Forensic Scientist Advanced, and a Forensic Laboratory Technician I.

In addition to the Forensic Scientists, the Biology Section has one Research Statistician IV and one Contractual Administrative Specialist II to aid with statistical and administrative duties. In addition to its core casework and DNA database responsibilities, the Biology Section plays an important role in statewide forensic program implementation, legislative support, and multidisciplinary collaboration. In addition to the multiple State and Federal grants, the section oversees DNA-related contracts and outsourcing initiatives, and provides support on policy and legislative matters and programs affecting DNA analysis, database operations, and sexual assault evidence. Biology Section personnel also participate in numerous internal and external committees and working groups, including substantial involvement in Sexual Assault Evidence Kit (SAEK) and Sexual Assault Kit Initiative (SAKI) efforts. This work requires ongoing coordination with a wide range of stakeholders, including law enforcement, prosecutors, victim advocacy organizations, healthcare and forensic nursing partners, local laboratories, and State and Federal entities.

BIOLOGY CASEWORK UNITS

The Trial Casework Unit performs serology and/or DNA testing on cases that have resulted in an arrest and are being tested in support of the adjudication of the arrestee. While the primary responsibility of this unit is cases with pending trial dates, it also assists with the analysis of investigative and cold cases, the preparation and review of outsourced casework, and training of new analysts, as necessary.

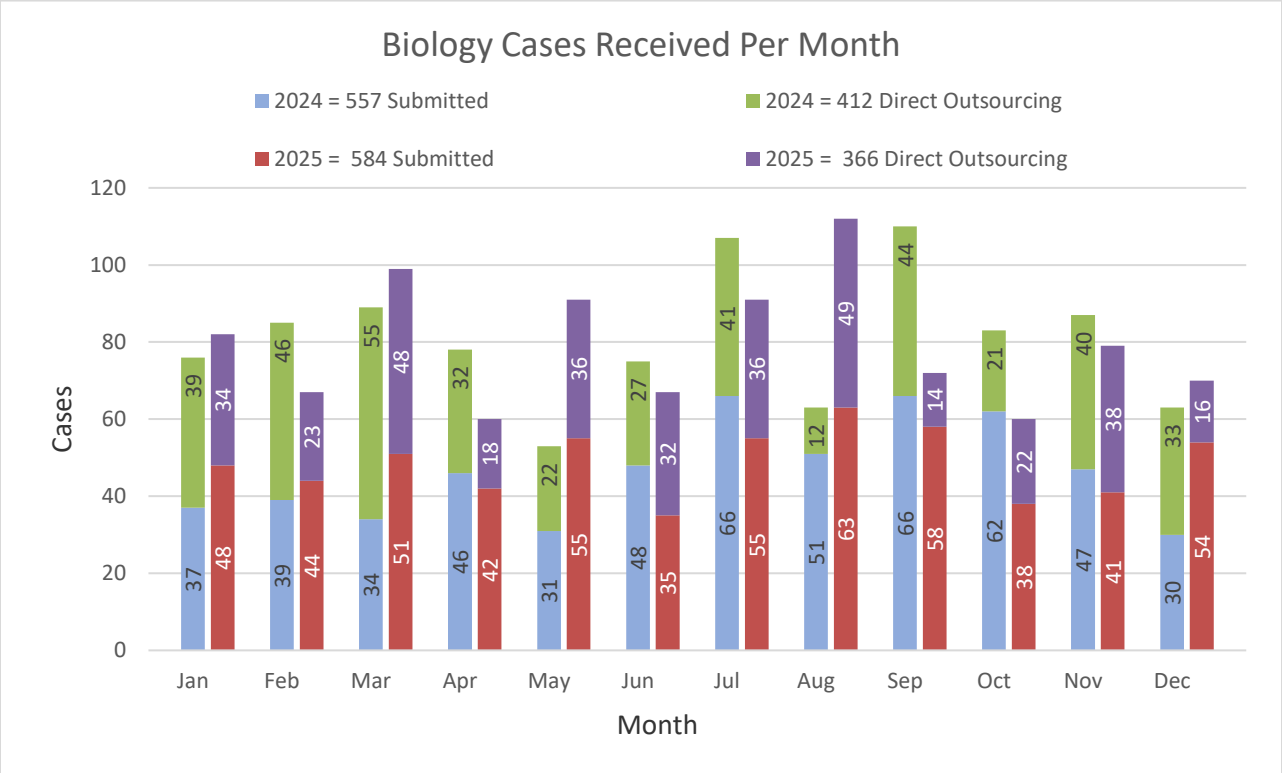
The Investigative Casework Unit performs serology and/or DNA testing on cases without pending court dates, which have not resulted in an arrest but are being tested in support of an investigation or making an arrest. This unit is responsible for handling high-priority/high-profile investigative cases, routine investigative cases, cold cases, and Independent Investigation Division (IID) cases. The Investigative Casework Unit is also responsible for the management and processing of outsourced casework to the contract vendor laboratory and training of new analysts, as necessary.

The overall number of case submissions to the Biology Section increased in 2025. There were 584 cases received in the Biology Section, which is approximately an 4.8% increase from 2024. There was a 11% decrease in the number of cases that were directly outsourced in 2025. Between in-house outsourcing and direct outsourcing 54% of total cases received in 2025 were outsourced. Even though directly outsourced cases are directly sent for outsourcing from the investigating agency to the contract lab, they were still monitored and tracked by Biology Section staff.

Upon completion of all outsourced cases, the data is reviewed and suitable profiles are uploaded to the CODIS database. When considering both in-house cases and directly outsourced cases, the total number of cases completed within the Biology Section increased by 3.5% in 2025. By utilizing a combination of direct outsourcing, in-house outsourcing (evidence is received at MSP-FSD and then either the entire case or a portion of it is forwarded to a contracted laboratory for analysis), and in-house casework, the casework units have been able to continue to monitor and address an increasing backlog.

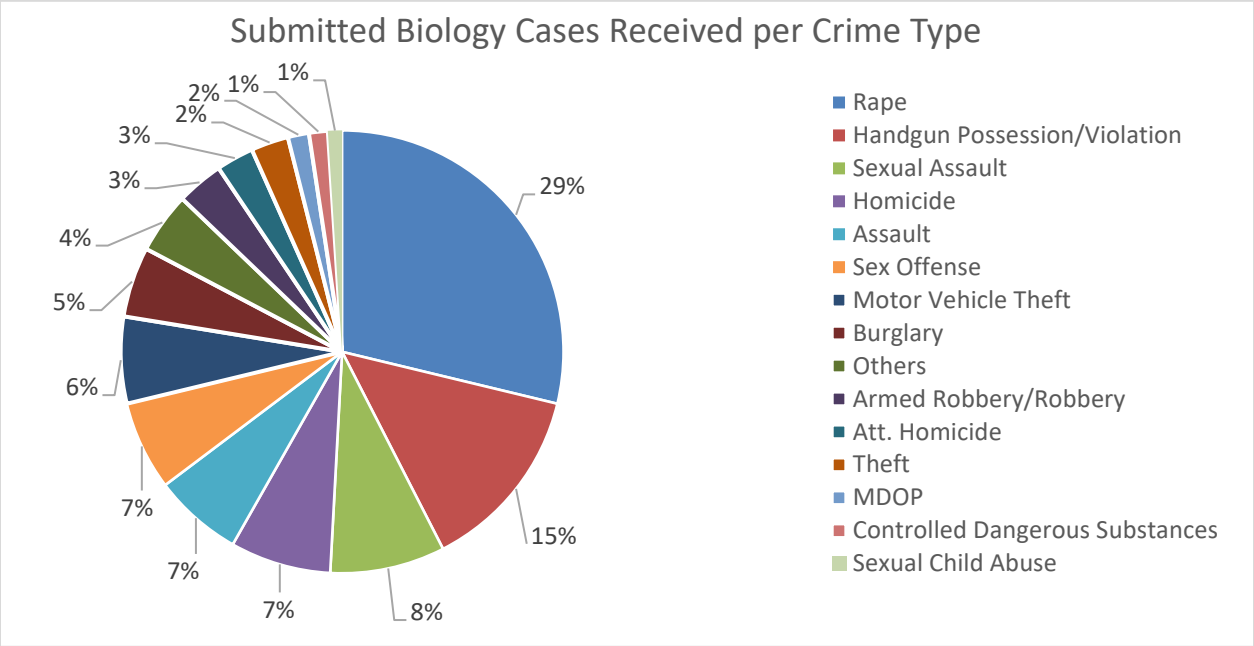
The Biology Section is also committed to continuous progress in regards to new technologies and methodologies, which are constantly being evaluated and implemented as applicable. To that end, after a multi-year validation, the Biology Section will be implementing STRmix DNA analysis software starting in 2025. STRmix software can resolve mixed DNA profiles by combining sophisticated biological modelling and standard mathematical processes to interpret a wide range of complex DNA profiles. The software allows for the analysis of DNA mixtures that were previously too complex to analyze using manual interpretation procedures.

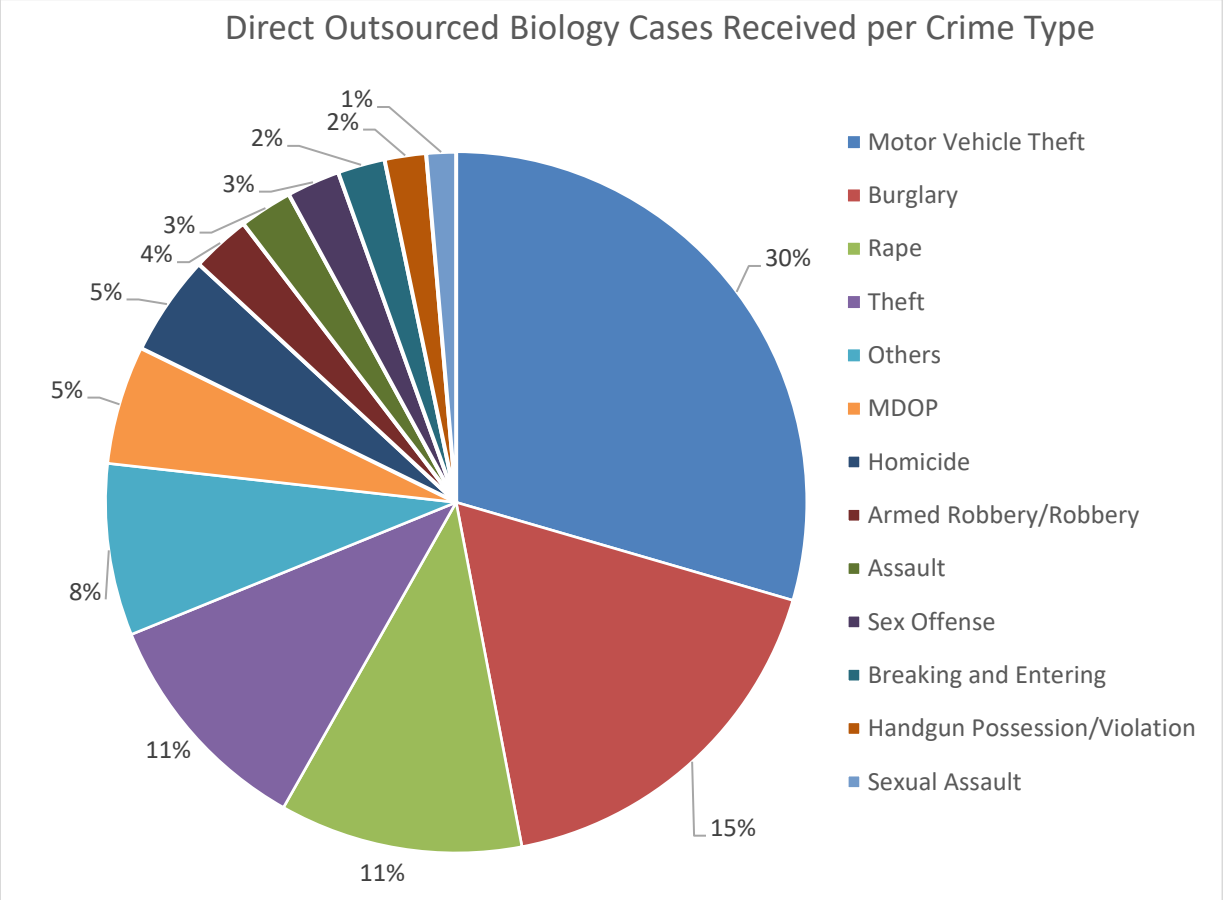
Another future project for the Biology Section is validating and implementing the RapidHIT instrument, which is a Rapid DNA System that allows for the fully automated processing and analysis of database reference samples in under two hours. This instrument will be able to be used by the Database Units to confirm CODIS hits within hours of receipt of a reference sample, providing police agencies nearly immediate feedback to their investigations. The Section plans to implement the RapidHIT instrument in 2025.

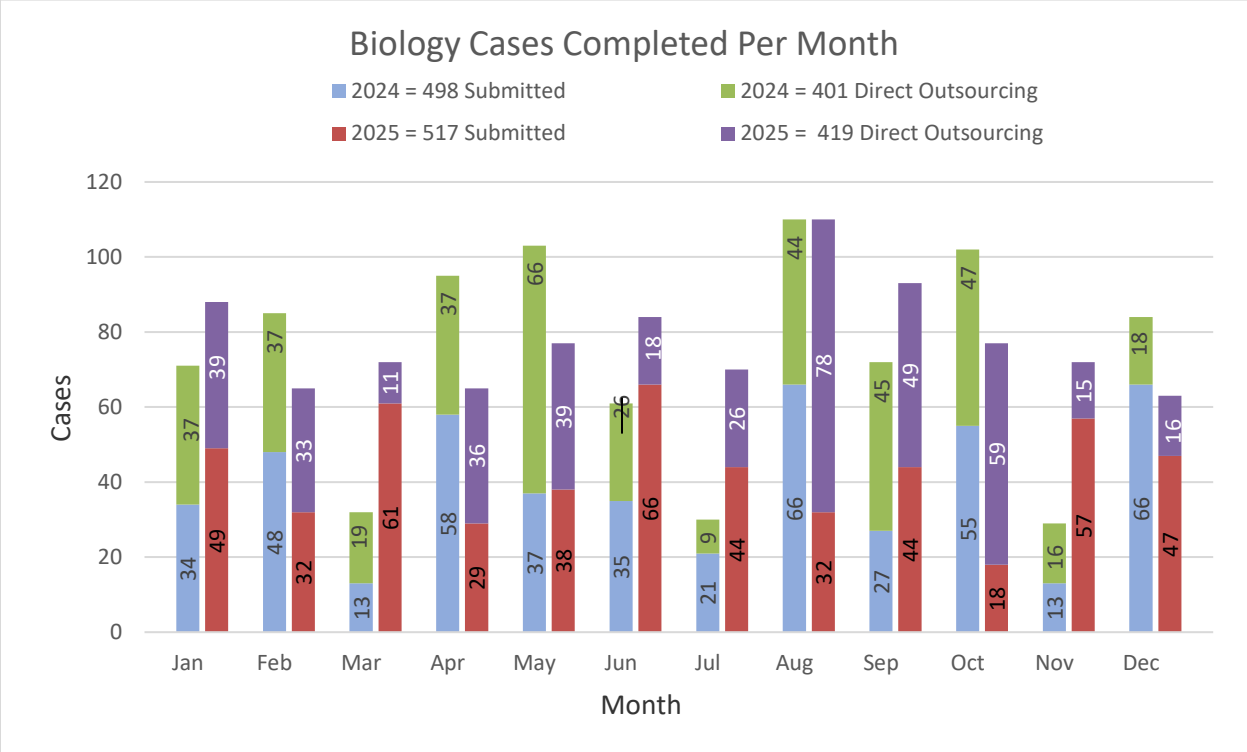

Biology Cases Received Per Month
2024 = 557 Submitted
2024 = 412 Direct Outsourcing
2025 = 584 Submitted
2025 = 366 Direct Outsourcing
Cases
Month
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
0
20
40
60
80
100
120
37
48
39
34
39
44
46
23
34
51
55
48
46
42
32
18
31
55
22
36
48
35
27
32
66
55
41
36
51
63
12
49
66
58
44
14
62
38
21
22
47
41
40
38
30
54
33
16

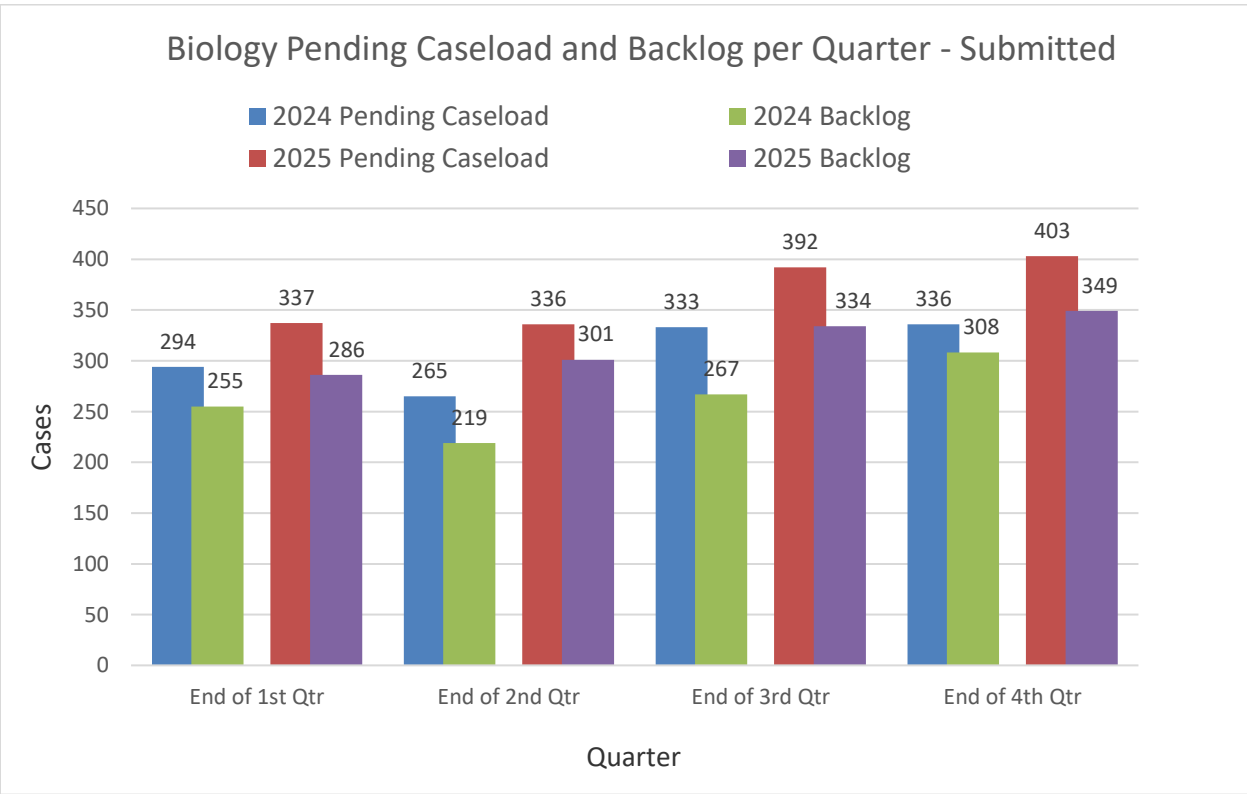
Biology Cases Received per MSP Installation				
MSP Installation	**Counties Served**	**Case Type**		
		Submitted	**Directly Outsourced**	**Combined**
MSP-CID/CED	Statewide	50	15	65
MSP-Homicide	Statewide	17	4	21
MSP-DED/C3I	Allegany	17	0	17
MSP-North East	Cecil	7	2	9
MSP-Westminster	Carroll	2	1	3
MSP-Crash Team	Statewide	4	1	5
MSP-Centreville	Kent, Queen Anne's	0	0	0
MSP-La Plata	Charles	0	0	0
MSP-Easton	Talbot, Caroline, Dorchester	2	0	2
MSP-Salisbury	Wicomico	3	0	3
MSP-Cumberland	Allegany	0	0	0
MSP-Prince Frederick	Calvert	1	0	1
MSP-Frederick	Frederick	3	0	3
MSP-Golden Ring	Baltimore, Baltimore City	0	1	1
MSP-Princess Anne	Somerset	0	0	0
MSP-McHenry	Garrett	2	0	2
OSFM	Statewide	0	0	0
MSP-Leonardtown	St. Mary's	1	1	2
MSP-Berlin	Worcester	0	0	0
MSP-Hagerstown	Washington	1	0	1
MSP-Bel Air	Harford	0	0	0
MSP-Rockville	Montgomery	0	0	0
MSP-Waterloo	Howard	0	0	0
MSP-Forestville	Prince George's	2	0	2
	TOTAL	**112**	**25**	**137**

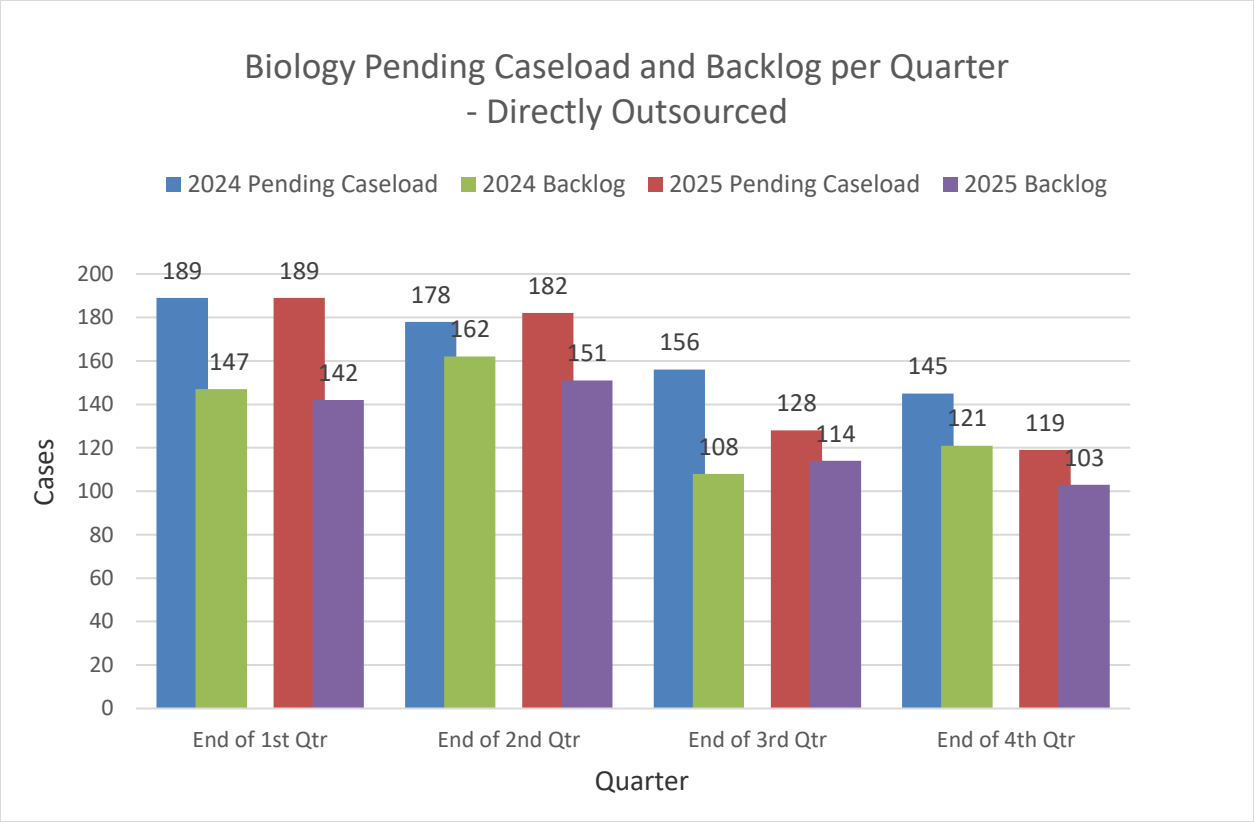
Allied Agency Cases Received by Biology per County			
County	**Case Type**		
	Submitted	**Directly Outsourced**	**Combined**
Wicomico	65	8	73
Harford	35	10	45
Frederick	43	11	54
Cecil	35	7	42
Charles	64	207	271
Talbot	15	1	16
Washington	25	9	34
Carroll	18	6	24
St. Mary's	24	60	84
Statewide/Not Determined*	34	0	34
Dorchester	37	0	37
Queen Anne's	2	0	2
Caroline	9	0	9
Kent	12	0	12
Worcester	26	18	44
Somerset	9	2	11
Calvert	12	0	12
Prince George's	4	0	4
Garrett	0	0	0
Out of State	0	0	0
Baltimore City	1	1	2
Anne Arundel	0	1	1
Baltimore	0	0	0
Howard	0	0	0
TOTAL	**472**	**341**	**813**

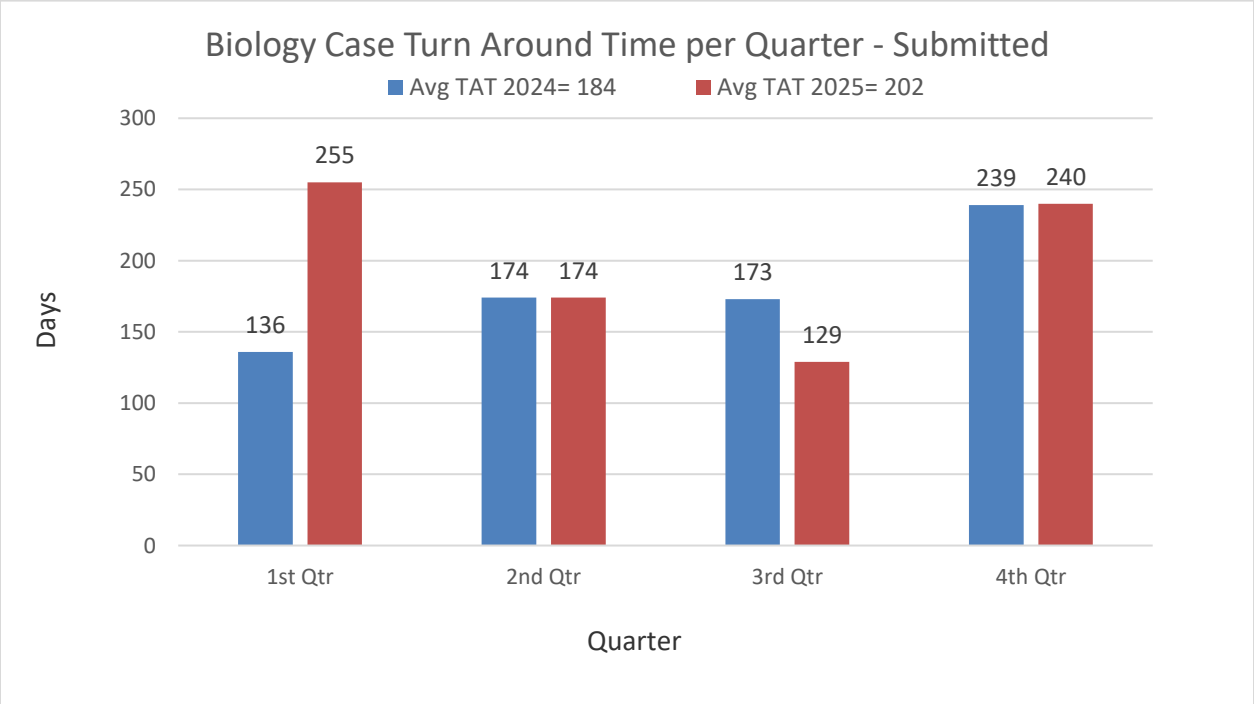

Submitted Biology Cases Received per Crime Type
29%
15%
8%
7%
7%
7%
6%
5%
4%
3%
3%
2%
2%
1%
1%
Rape
Handgun Possession/Violation
Sexual Assault
Homicide
Assault
Sex Offense
Motor Vehicle Theft
Burglary
Others
Armed Robbery/Robbery
Att. Homicide
Theft
MDOP
Controlled Dangerous Substances
Sexual Child Abuse

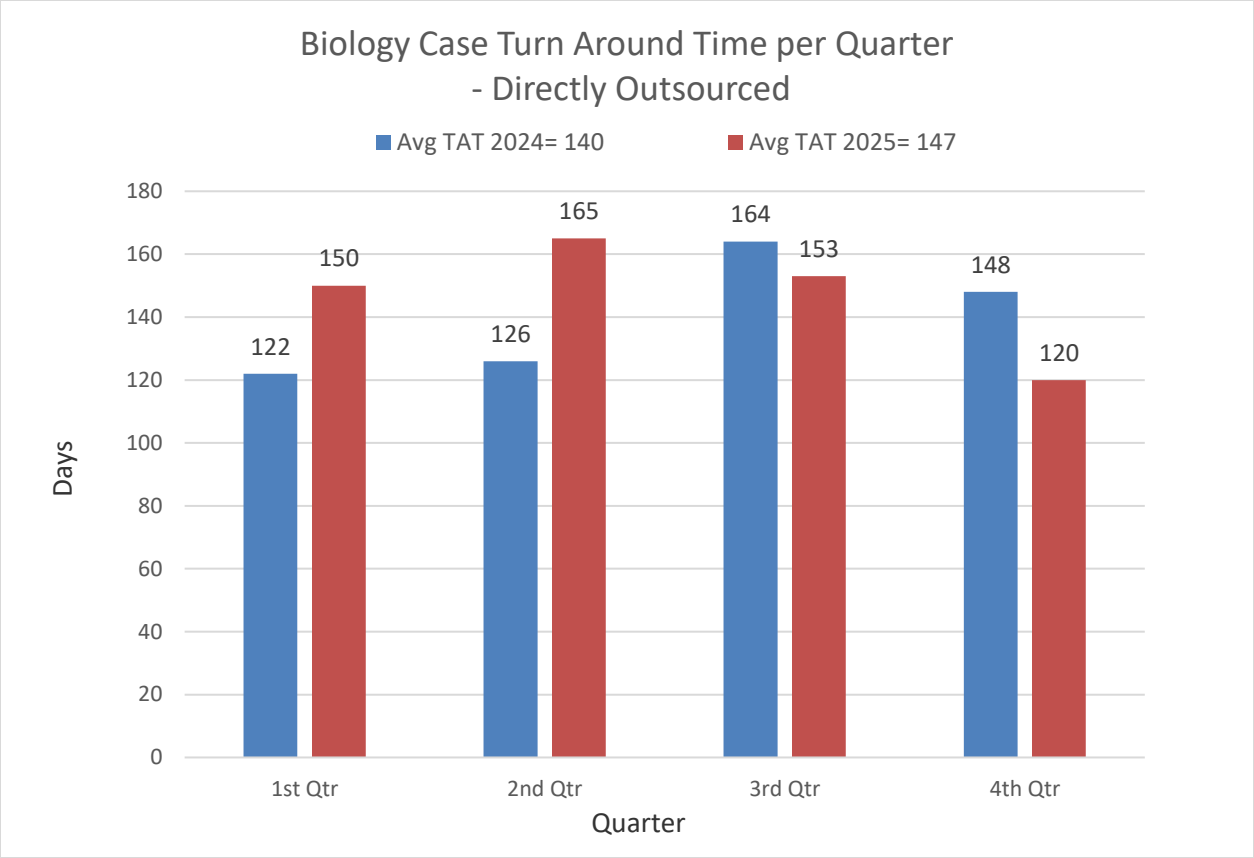

Direct Outsourced Biology Cases Received per Crime Type
30%
15%
11%
11%
8%
5%
5%
4%
3%
3%
2%
2%
1%
Motor Vehicle Theft
Burglary
Rape
Theft
Others
MDOP
Homicide
Armed Robbery/Robbery
Assault
Sex Offense
Breaking and Entering
Handgun Possession/Violation
Sexual Assault


Biology Cases Completed Per Month
2024 = 498 Submitted
2024 = 401 Direct Outsourcing
2025 = 517 Submitted
2025 = 419 Direct Outsourcing
Cases
Month
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
34
37
49
39
48
37
32
33
13
19
61
11
58
37
29
36
37
66
38
39
35
26
66
18
21
9
44
26
66
44
32
78
27
45
44
49
55
47
18
59
13
16
57
15
66
18
47
16


Biology Pending Caseload and Backlog per Quarter - Submitted
2024 Pending Caseload
2024 Backlog
2025 Pending Caseload
2025 Backlog
Cases
Quarter
End of 1st Qtr
End of 2nd Qtr
End of 3rd Qtr
End of 4th Qtr
294
255
337
286
265
219
336
301
333
267
392
334
336
308
403
349


Biology Pending Caseload and Backlog per Quarter
- Directly Outsourced
2024 Pending Caseload
2024 Backlog
2025 Pending Caseload
2025 Backlog
Cases
200
180
160
140
120
100
80
60
40
20
0
189
147
189
142
178
162
182
151
156
108
128
114
145
121
119
103
End of 1st Qtr
End of 2nd Qtr
End of 3rd Qtr
End of 4th Qtr
Quarter

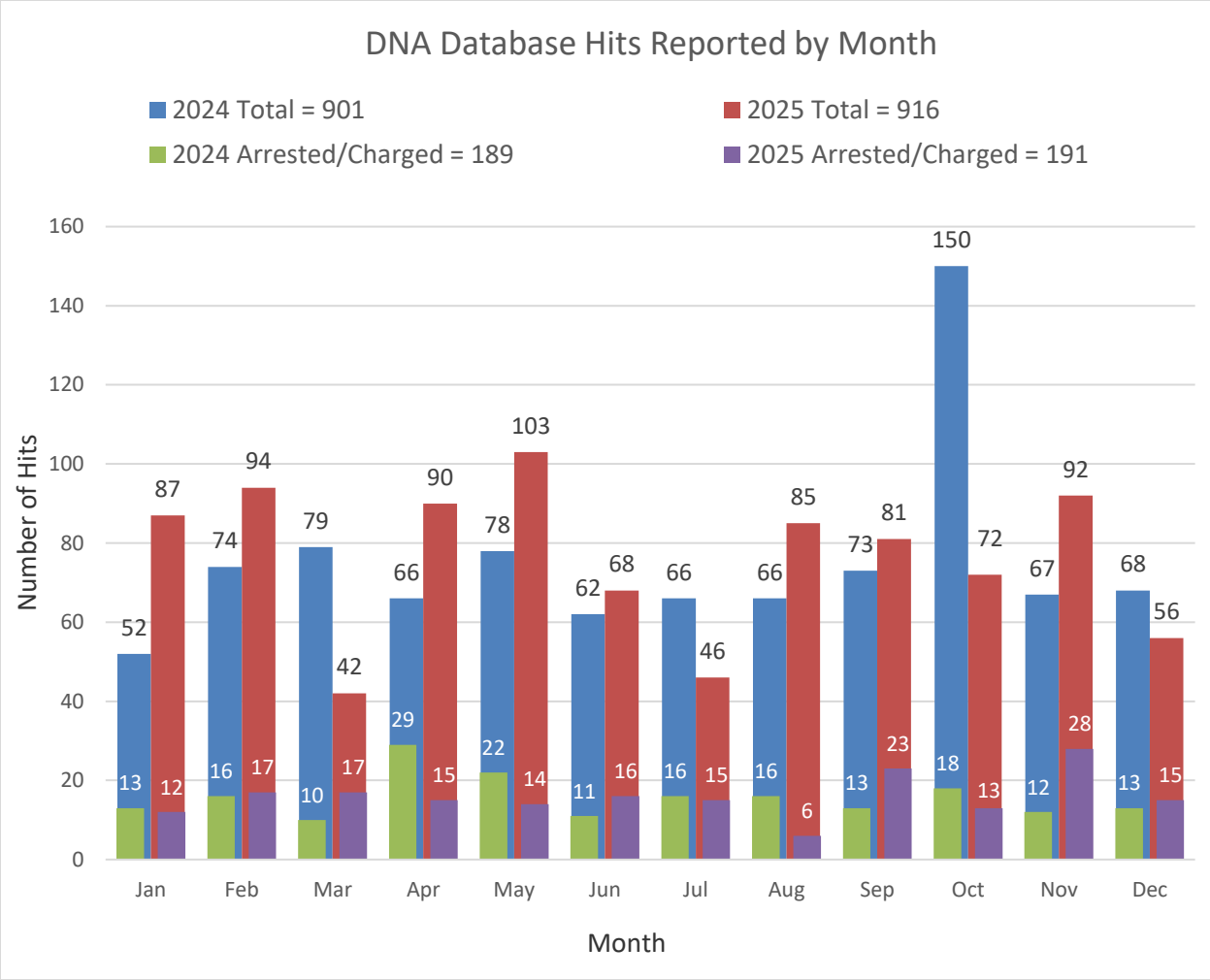

Biology Case Turn Around Time per Quarter - Submitted
Avg TAT 2024= 184
Avg TAT 2025= 202
Days
300
250
200
150
100
50
0
136
255
174
174
173
129
239
240
1st Qtr
2nd Qtr
3rd Qtr
4th Qtr
Quarter


Biology Case Turn Around Time per Quarter
- Directly Outsourced
Avg TAT 2024= 140
Avg TAT 2025= 147
180
160
140
120
100
80
60
40
20
0
Days
122
150
126
165
164
153
148
120
1st Qtr
2nd Qtr
3rd Qtr
4th Qtr
Quarter

BIOLOGY DATABASE UNITS

The Biology Database Units are responsible for processing DNA Database samples from individuals required under Maryland law to provide a sample. The law was expanded in 2009 to include individuals arrested and charged with crimes of violence, burglary, and attempts of these crimes. The law was further updated on October 1, 2025 to address testing and sample collection gaps. The modified law authorizes samples to be tested once probable cause has been established rather than at the time of the first scheduled arraignment as was in the previous version. This change not only ensures samples are tested earlier in the judicial process, but also eliminates the creation of "limbo" samples (i.e. samples that neither qualify for testing or expungement). Furthermore, the law provides a legal basis to address the backlog of such samples that have accumulated since 2009. The modifications also tighten sample collection procedures by directing our various partner agencies to ensure qualifying samples have been collected before release from custody or supervision; this will help minimize missed sample collections.

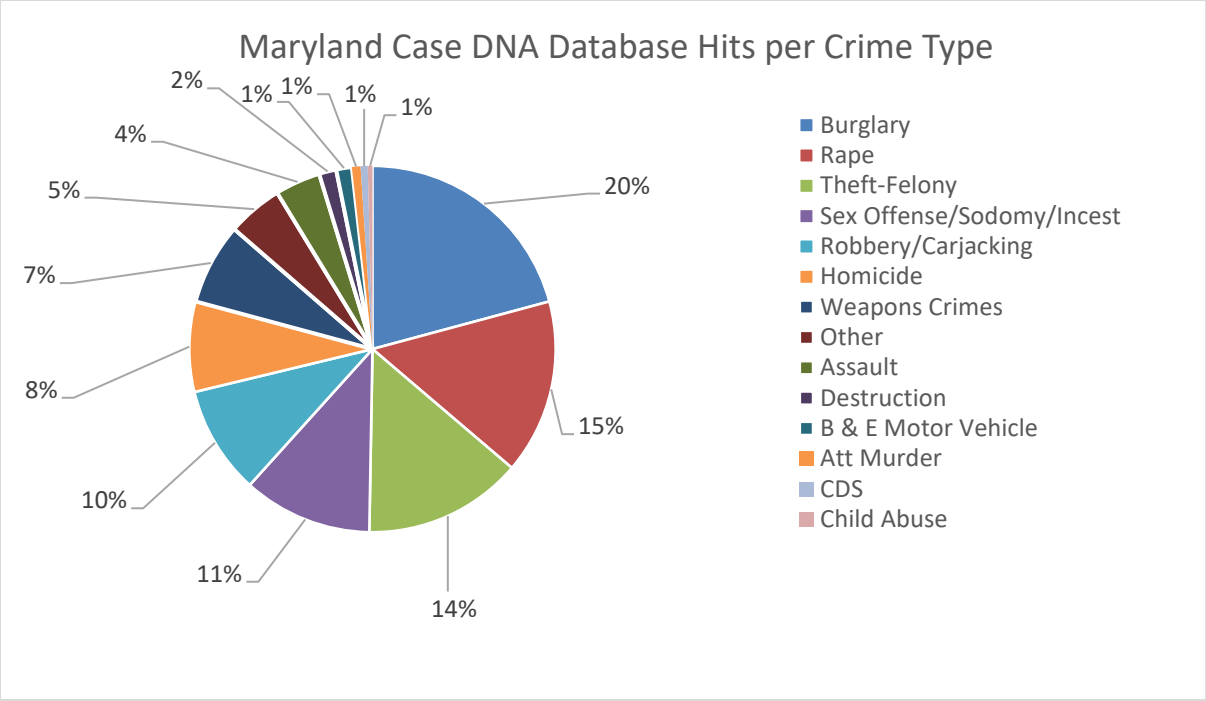
While the majority of samples are collected by Allied Agencies, the Biology Database Units are responsible for ensuring that all samples that were collected are received. The Biology Database Units are also responsible for analyzing the DNA Database samples received (as per Maryland law), entering and searching those samples in the Database, and reporting Database hits. The Biology Database Units additionally oversee the entry of DNA profiles from casework evidence into the Database.



Maryland Case DNA Database Hits	
	Hits
Hits to Offenders/Arrestees (MD or National)	535
Hits to Cases (MD or National)	916
Total	**1,451**

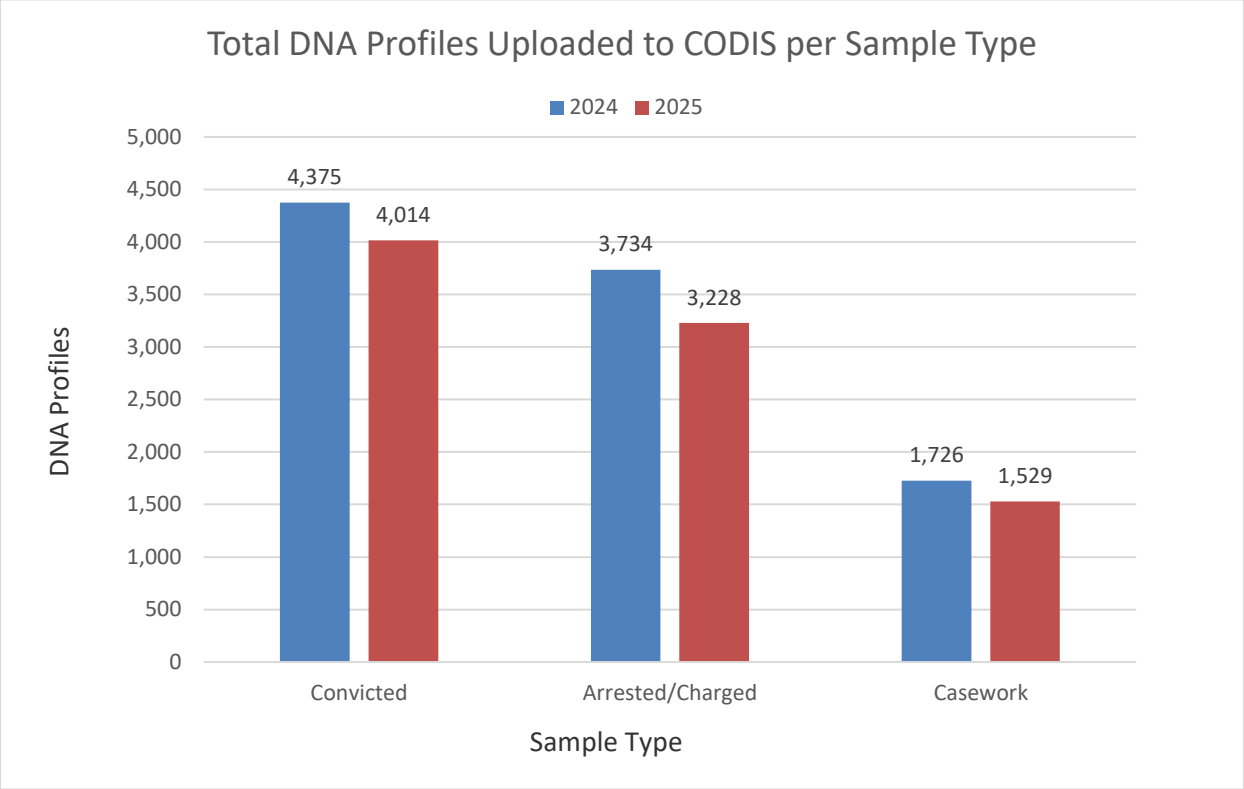
Note: Maryland case hits include a Maryland case hitting to a Maryland offender/arrestee, a Maryland case hitting a National offender/arrestee, a Maryland case hitting a Maryland case, and a Maryland case hitting a National case. A Maryland case hitting a Maryland case is considered as two Maryland case hits (this is not consistent with how hits are reported for the National DNA Index System (NDIS)). A Maryland case hitting to a Maryland offender/arrestee is counted as both a Maryland offender/arrestee hit and a Maryland case hit.

Maryland Case DNA Database Hits by County	
County	**Hits**
Baltimore City	311
Prince George's County	253
Anne Arundel County	148
Montgomery County	175
Charles County	215
Baltimore County	104
Howard County	72
Wicomico County	15
Harford County	5
Somerset County	11
Frederick County	12
Dorchester County	14
Statewide	3
Saint Mary's County	50
Carroll County	8
Cecil County	15
Talbot County	13
Washington County	8
Worcester County	4
Allegany County	3
Caroline County	3
Calvert County	5
Queen Anne’s County	3
Garret County	1
TOTAL	**1,451**



Maryland Offender/Arrestee DNA Database Hits per Crime Jurisdiction*	
Jurisdiction	**Number of Hits**
Maryland	422
FBI	6
Virginia	24
Pennsylvania	9
Texas	3
District of Columbia (Metro PD)	73
Delaware	2
Florida	2
California	1
New Jersey	6
US Army - Georgia	1
Illinois	2
Utah	1
Wisconsin	1
ATF	4
Total	**557**

*Includes both Convicted Offender and Arrestee/Charged DNA Database Hits


Total DNA Profiles Uploaded to CODIS per Sample Type
2024
2025
DNA Profiles
5,000
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
4,375
4,014
3,734
3,228
1,726
1,529
Convicted
Arrested/Charged
Casework
Sample Type

Maryland DNA Database Case Hits by Crime Year	
Crime Year	**Hits**
1974	1
1977	1
1978	10
1979	1
1980	4
1981	3
1982	2
1983	2
1984	2
1985	3
1986	4
1988	2
1989	5
1990	9
1991	3
1992	4
1993	6
1994	6
1995	4
1996	5
1997	21
1998	23
1999	10
2000	9
2001	6
2002	7
2003	7
2004	9
2005	16
2006	9
2007	11
2008	14
2009	13
2010	14
2011	8
2012	14
2013	11
2014	20
2015	32
2016	22
2017	30
2018	35

Maryland DNA Database Case Hits by Crime Year Cont.	
Crime Year	**Hits**
2019	40
2020	39
2021	91
2022	62
2023	203
2024	399
2025	160
Unknown	39
Total	**1,451**

BIOLOGY TECHNICAL UNIT

The Technical Unit of the Biology Section is responsible for the evaluation of new technologies to determine if they are appropriate to implement into the Section, validation of new technologies, training of personnel on new and current technologies, and quality assurance / quality control aspects of the Biology Section.

In 2025, the Technical Unit:

- The technical unit was reorganized to split the supervisor/technical leader position into two positions. Leslie Mounkes was promoted to the technical leader, FSA position. She worked hard to complete the following FBI QAS requirements (QAS 17.1.1); 2025 QC annual review, 2025 annual case file review (independent), qualified analyst educational requirements, review of all current manuals/SOPs. This includes the annual review and documentation of Bode's compliance with QAS standards and accreditation requirements (QAS 17.1.1). The only remaining requirement is review of all current validations (to be completed by 7/14/26);
- A new technical unit trainer position was created (FSA). Angela Spessard was promoted to this position which will train all analysts in newly validated techniques, as well as other new duties;
- Brought STRmix probabilistic genotyping software online. Training continued in the form of meetings to discuss results & reporting;
- Completed performance check for FTA cards, SOP and training for the RHID Rapid DNA System. Just after this, information came out from the FBI (Doug Hares) stating RHID is only approved for use with swabs. Planning for RHID to be validated with both ACE and INTEL cartridges for use with hit confirmations on FTA cards. Validations will continue to bring in evidence samples in preparation for potential mass destruction capabilities.
- The validation for the QIACube Connect instruments was completed. The SOP was updated and all analysts were trained. The extraction instruments will be brought online early 2026;
- A STRmix suitability validation was approved. New guidelines for identifying low-level DNA mixtures not suitable for comparisons will be added to the STRmix SOP to be brought online early 2026.
- Worked with the CODIS Administrator to assist the Howard County Police Department in outsourcing over 150 DNA analysis cases to a vendor laboratory, while maintaining compliance with the FBI Quality Assurance Standards;
- ANAB Surveillance visit, including STRmix implementation (validation, training & new SOP’s) with no findings;
- Prepared for and participated in an internal audit against the FBI Quality Assurance Standards with no findings.

NOTEWORTHY CASES

The Database Units released the 13,000th CODIS hit in July 2025. The hit involved a 2011 Prince George's County P.D. second degree rape case matching to a Maryland convicted offender. The case involved a 22 year-old female who was sexually assaulted at a party. This hit occurred approximately nine months after releasing the 12,000th hit, which highlights the benefit and power of a growing Database.

St. Mary's County Sheriff's Office submitted a burglary case which was related to approximately 50 other cases in St. Mary's County, Charles County, PG County, and Howard County involving theft of Maryland Lottery scratch off tickets. On June 8, 2025, Canopy Liquors in St. Mary's County was burglarized. Officers responded to the scene and a chase ensued when the suspects fled. Ultimately, four vehicles were apprehended and multiple suspects were detained.

Eight evidence items were collected from three different vehicles, including swabs of a steering wheel, gloves, sweatpants, sweatshirts/jackets, and a suspected blunt, and five suspect standards. Each suspect was included as a contributor on different items of evidence (there was very strong support for inclusion of at least one suspect on each item of evidence). In addition, three of the five suspects were included as contributors on the suspected blunt (all with very strong support for inclusion).

EVIDENCE AND TOXICOLOGY BRANCH

The Evidence and Toxicology Branch consists of the Central Receiving Units (CRU) and the MSP Toxicology Operations that include the FSD Toxicology Section and the MSP Chemical Test for Alcohol Unit (CTAU). The Chief Toxicologist of MSP-FSD is responsible for the planning, organization, direction, and control of this branch.

CENTRAL RECEIVING UNITS

The Central Receiving Units (CRU) function as the liaison between the MSP-FSD and agencies that submit evidence for scientific analysis and CDS destruction. All the laboratory sites have a Central Receiving Unit that controls the security of evidence while awaiting analysis and again while pending return to the submitting agency. Personnel assigned to the unit ensure the integrity and protection of each item of evidence while in their custody. Regularly scheduled inventories of the evidence within Central Receiving and the laboratory units are coordinated through the unit. Previously, the unit reported directly to the MSP-FSD Assistant Commander. In July of 2025, the unit began reporting directly to the Chief Toxicologist.

Berlin Satellite Location

This location has an MSP Forensic Inventory Control Officer (MSP-FICO) who manages the evidence submitted for analysis. The MSP-FICO assigns casework to the forensic scientists, manages rush requests, and distributes laboratory reports to the local State's Attorney's Offices. The MSP-FICO also performs administrative tasks for the site such as logging subpoenas, completing requisitions, scheduling evidence transfer appointments, and distributing mail.

Hagerstown Satellite Location

This location has two MSP Forensic Inventory Control Officers (MSP-FICO) who manage evidence submissions for the CDS Unit and Latent Prints Unit at this site. Hagerstown FICOs also assists with the Department's CDS destruction process. Additionally, the MSP-FICOs at this location perform administrative tasks for the site such as logging subpoenas, completing requisitions, scheduling evidence transfer appointments and distributing mail.

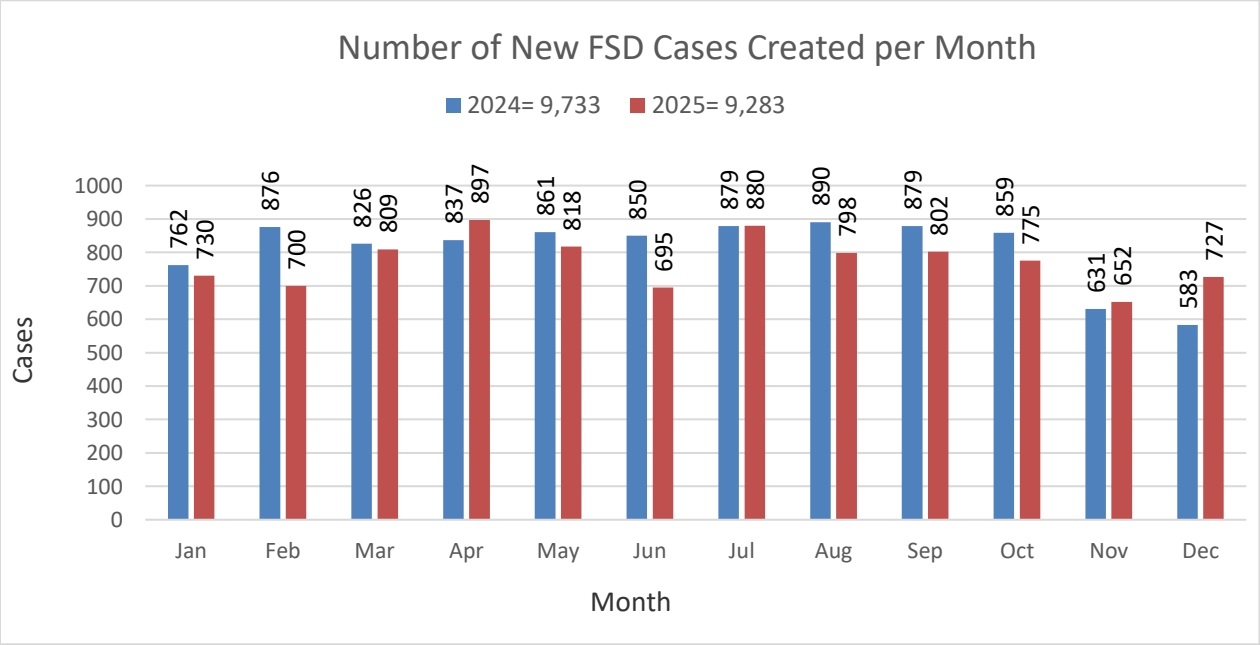
Pikesville Headquarters Location

This location has one Administrative Officer III (CRU Supervisor) and two MSP-FICOs. The Pikesville location manages evidence submissions for the Chemistry, Toxicology, Trace Evidence, Biology, and Pattern Evidence sections. In addition to evidence handling responsibilities, the Pikesville CRU administers and carries out the Department's CDS destruction process. During this process, MSP-FICOs randomly select a number of cases to be re-tested for quality control. The CRU also coordinates with various MSP Divisions for the local destruction of marijuana plants and confiscated parcels.

The Pikesville CRU is also responsible for archiving case records and other documents for all sections of the MSP-FSD and coordinates the transmittal of files to and from the State Records Management Center. The CRU maintains expunged records for the Division.

Additionally, the CRU plays an essential role in the use of StarLIMS, the laboratory information management system, utilized by MSP-FSD. The CRU Supervisor functions as a StarLIMS Administrator and acts as the primary liaison between FSD end users and MSP ITD.

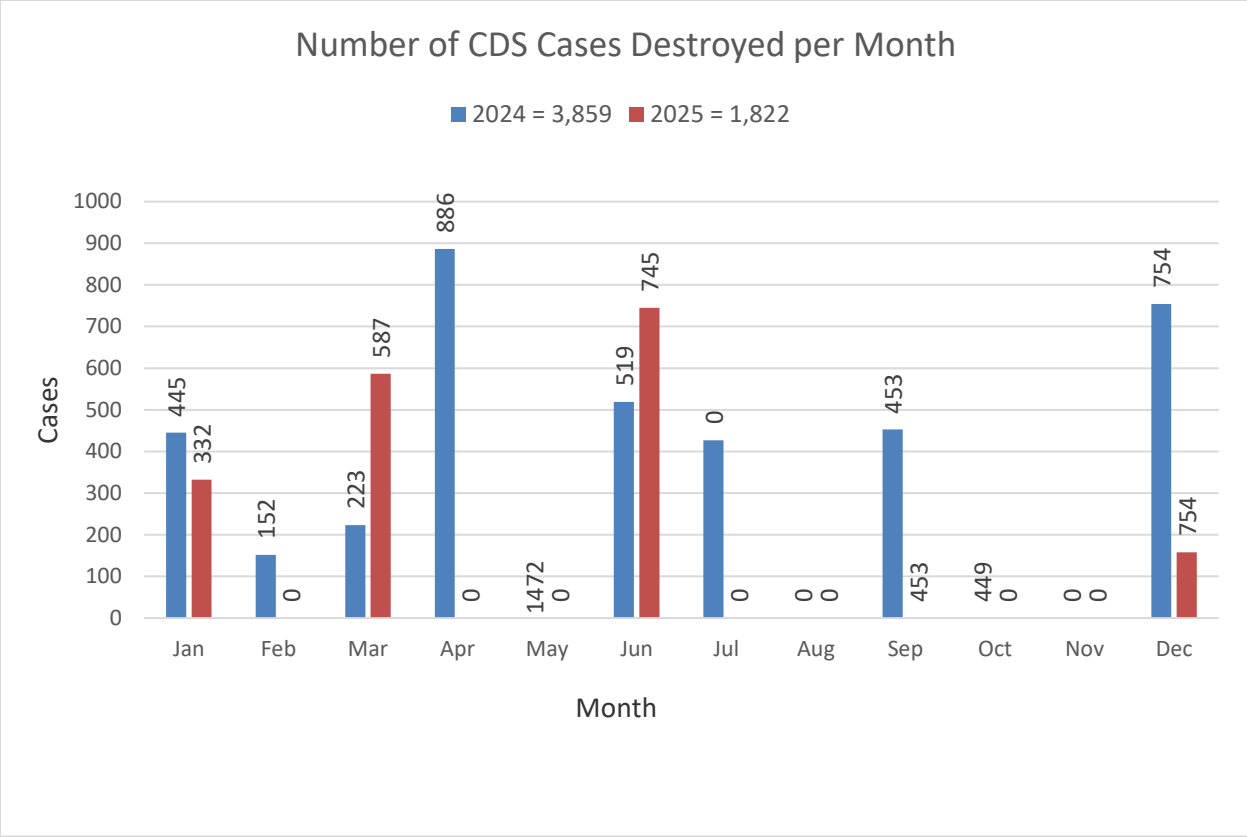
The CRU Supervisor oversees the FICOs located at the Berlin, Hagerstown and Pikesville locations.



Number of Cases Received by Lab in 2025			
	Berlin	**Hagerstown**	**Pikesville***
Jan	52	118	560
Feb	61	95	544
Mar	49	114	646
Apr	84	139	674
May	74	109	635
Jun	57	79	559
Jul	75	126	679
Aug	64	110	624
Sep	55	115	632
Oct	74	115	586
Nov	48	82	522
Dec	62	115	550
Total	**755**	**1,317**	**7,211**

*Includes CDS Allied Cases

Note: A case can consist of one or more containers, depending on the amount or type of evidence. Cases are counted more than one time when submitted to different FSD Units.

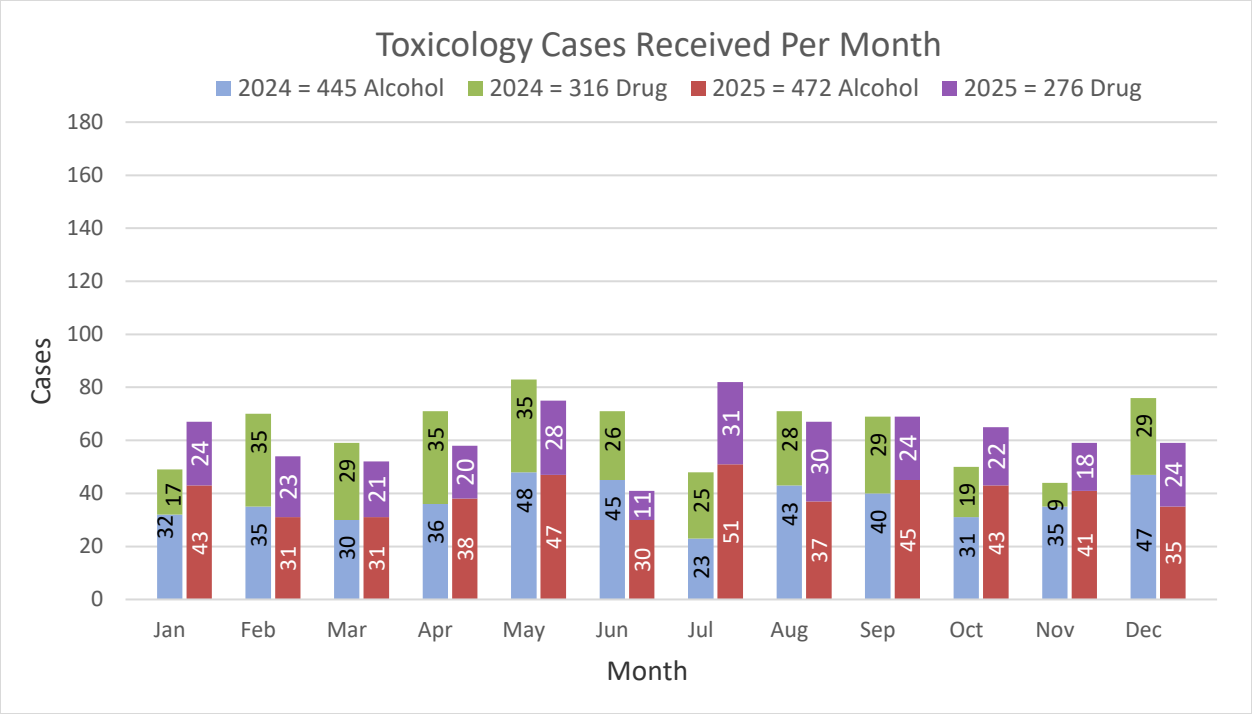

Number of CDS Cases Destroyed per Month
2024 = 3,859
2025 = 1,822
Cases
1000
900
800
700
600
500
400
300
200
100
0
445
332
152
0
223
587
886
0
1472
0
519
745
0
0
0
0
453
453
449
0
0
0
754
754
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month

TOXICOLOGY SECTION

The Toxicology Section at MSP is the only public laboratory within the state approved to analyze blood samples for alcohol and drugs in cases related to Driving While Impaired (DWI) arrests. Blood is collected from suspected impaired drivers after being taken to hospital for injury, or at the request of a Drug Recognition Expert Officer when drug impairment is suspected. Many cases, therefore, involve serious personal injury and manslaughter/vehicle homicide charges that require the Forensic Scientist's expert testimony at trial. Testing for alcohol and drugs is performed for both the Maryland State Police and allied law enforcement agencies requiring laboratory support for impaired driving programs.

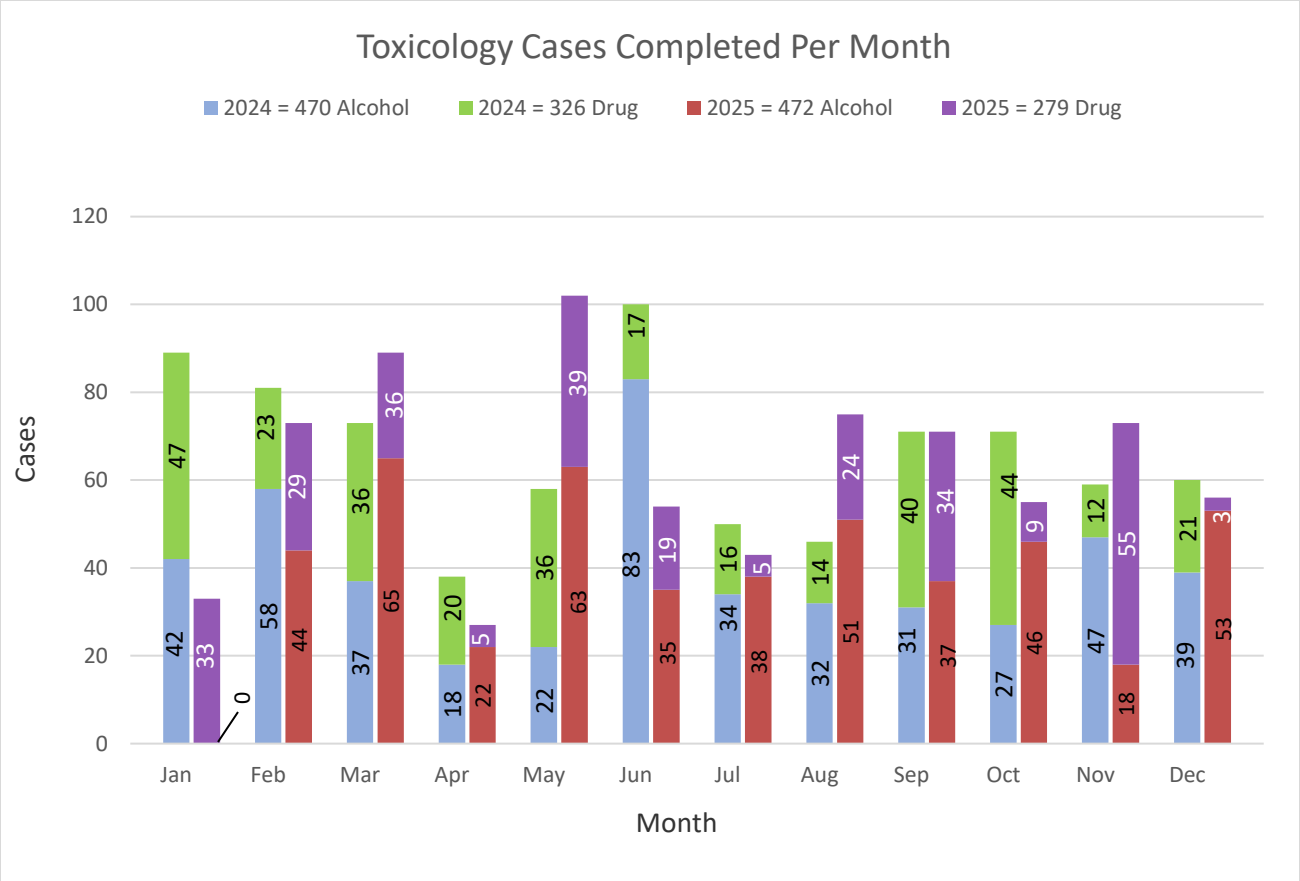
The Toxicology Section has officially expanded to two locations and is anticipating its third location at the end of 2026. In August of 2025 the Hagerstown location became accredited for blood alcohol analysis and filled the vacant Forensic Scientist I position in early September. The Berlin laboratory also officially opened in September of 2025. A Forensic Scientist Advanced has transferred down to Berlin and a vacant Forensic Scientist Supervisor position is expected to be filled.

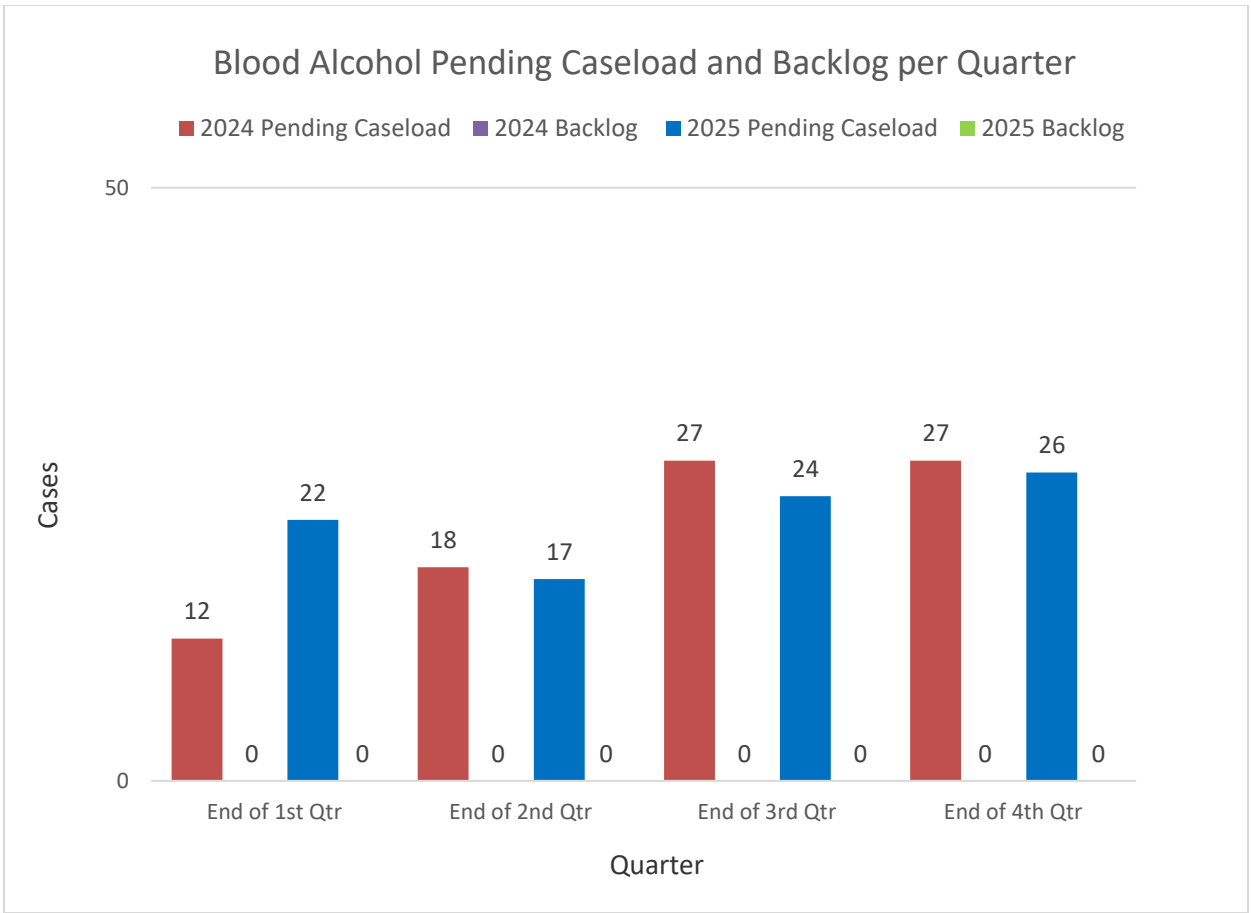
The unit continues to stay on top of caseload and reporting. In 2025 the toxicology backlog remained under 100 cases. The highest month for backlog was October with 75 cases for drug analysis. Additionally, the blood alcohol turn-around-time continue to stay under 30 days from receipt to report. Blood drug analysis, a much more complicated process has an average turn-around-time of 100 days. In 2026 the toxicology section anticipates significant upgrades to their methodology to streamline DRE testing while also adding 7 additional analytes to the scope of testing.

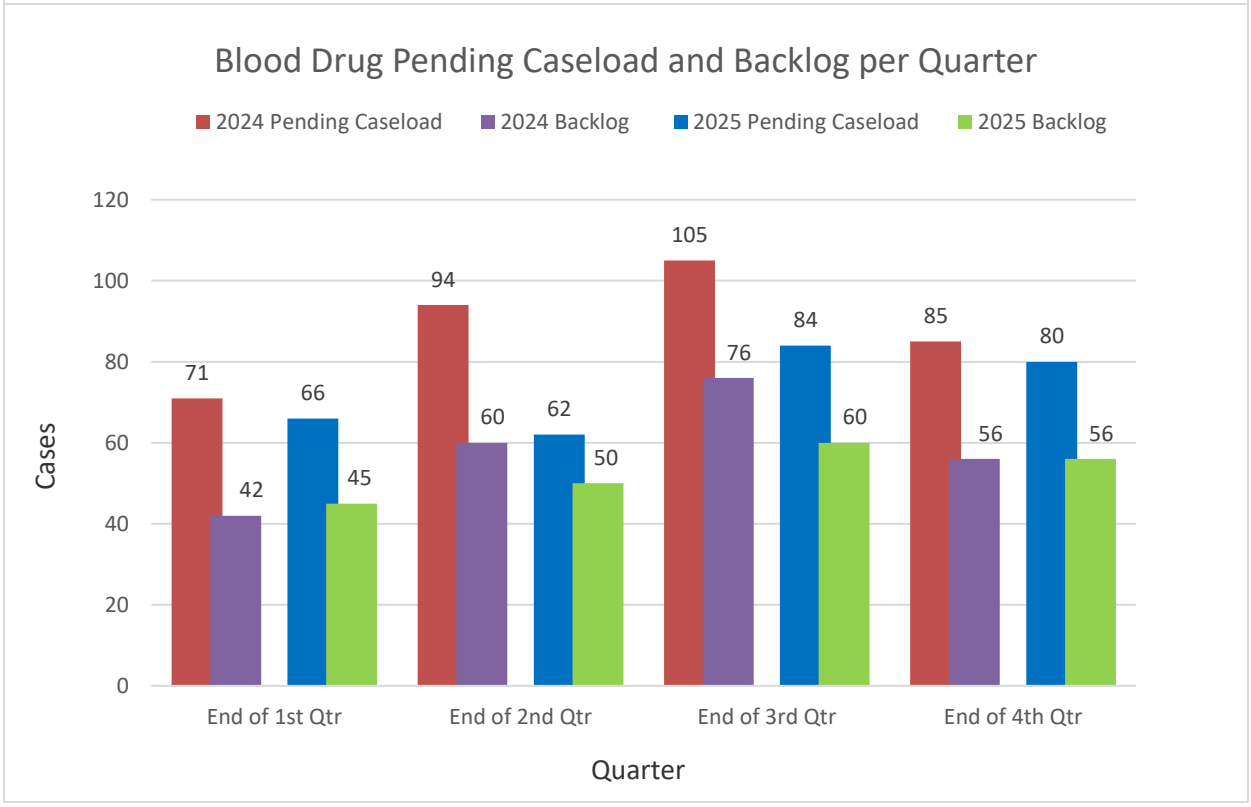

Toxicology Cases Received Per Month
2024 = 445 Alcohol
2024 = 316 Drug
2025 = 472 Alcohol
2025 = 276 Drug
Cases
Month
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
32 17 43 24
35 35 31 23
30 29 31 21
36 35 38 20
48 35 47 28
45 26 30 11
23 25 51 31
43 28 37 30
40 29 45 24
31 19 43 22
35 9 41 18
47 29 35 24

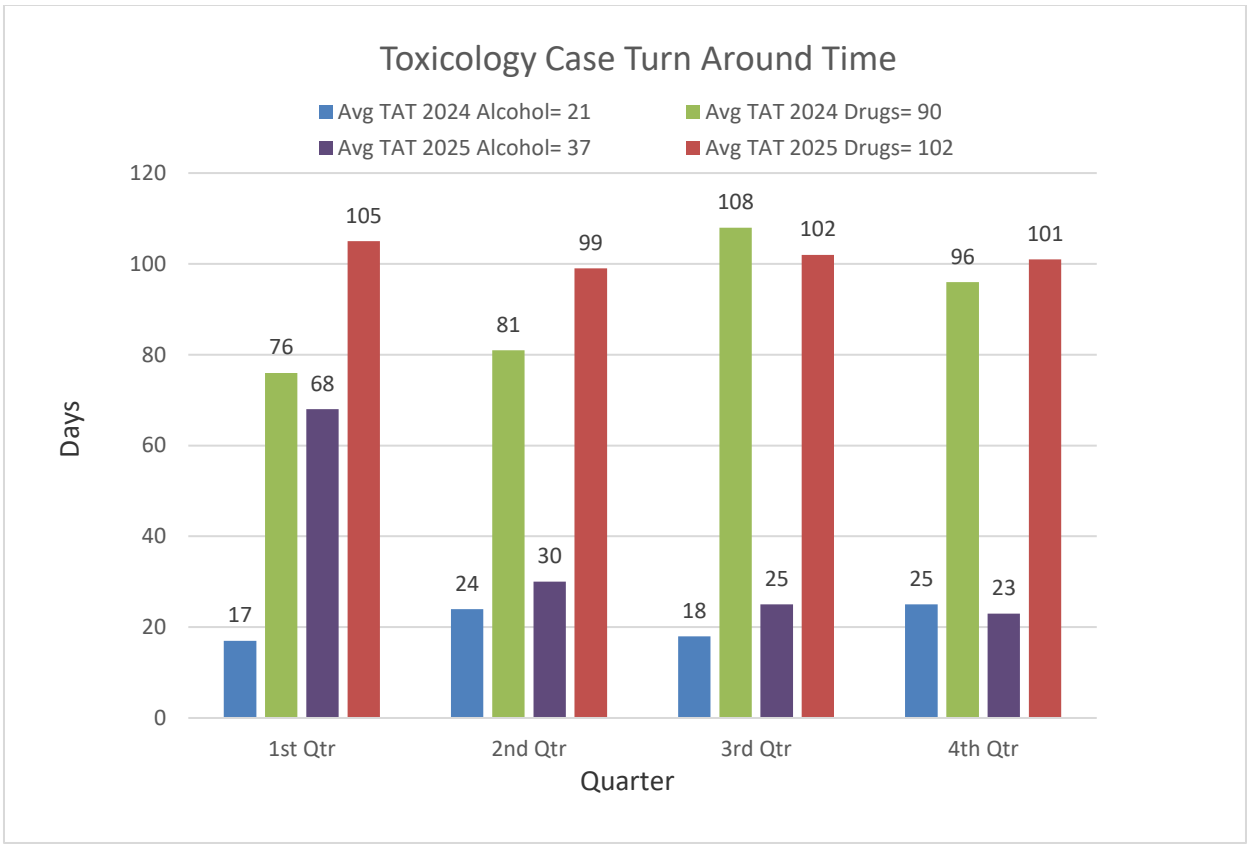
Toxicology Cases Received per MSP Installation		
MSP Installation	**Counties Served**	**Submissions**
MSP-Golden Ring	Baltimore	31
MSP-Westminster	Carroll	17
MSP-Frederick	Frederick	27
MSP-College Park	Prince George's	22
MSP-Rockville	Montgomery	10
MSP-Easton	Caroline, Dorchester, Talbot	16
MSP-Forestville	Prince George's	9
MSP-Bel Air	Harford	28
MSP-Waterloo	Howard	5
MSP-Annapolis	Anne Arundel	2
MSP-Berlin	Worcester	9
MSP-Centreville	Kent, Queen Anne's	7
MSP-Salisbury	Wicomico	16
MSP-Hagerstown	Washington	8
MSP-North East	Cecil	4
MSP-JFK Highway	Cecil, Harford, Baltimore	12
MSP-La Plata	Charles	11
MSP-Glen Burnie	Anne Arundel	10
MSP-Cumberland	Allegany	9
MSP-Prince Frederick	Calvert	3
MSP-Princess Anne	Somerset	3
MSP-McHenry	Garett	2
MSP-Leonardtown	St. Mary's	5
	TOTAL	**266**

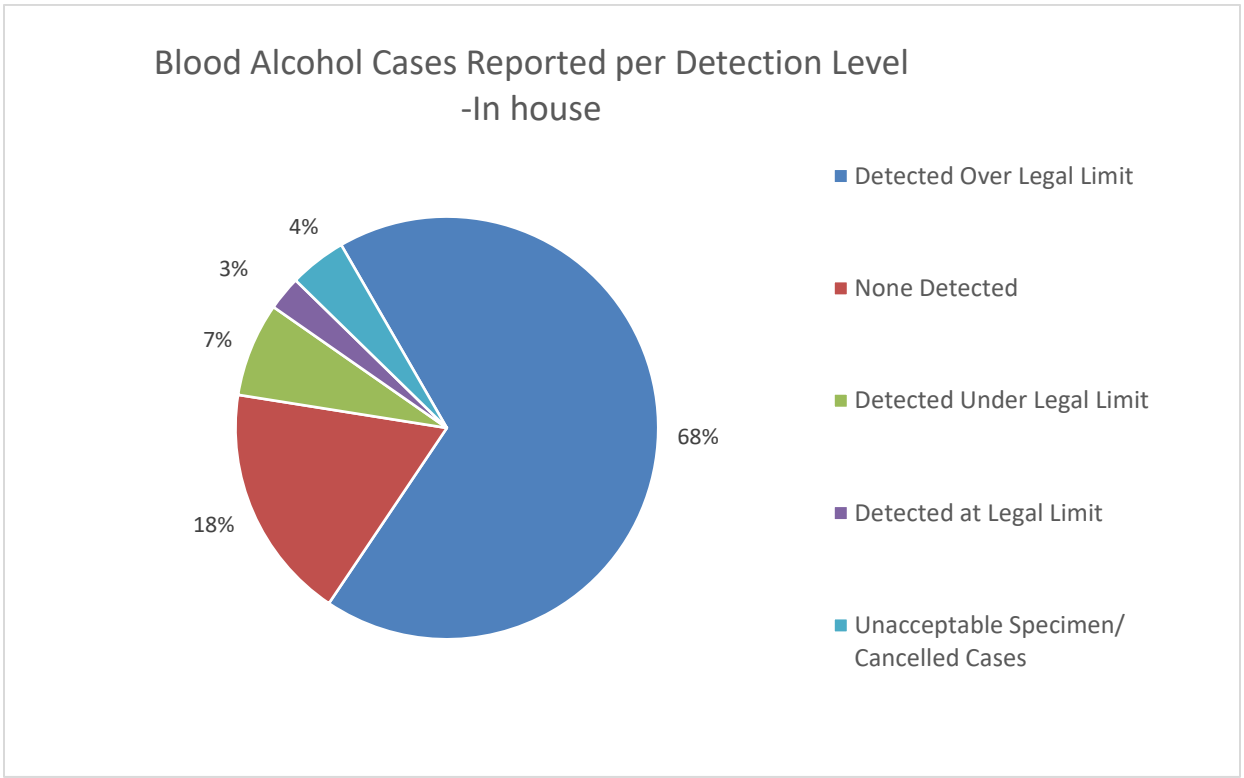
Toxicology Cases Received from Allied Agencies by County	
County	**Submissions**
Baltimore	64
Anne Arundel	74
Montgomery	56
Harford	33
Frederick	41
Carroll	28
Washington	17
Howard	31
Baltimore City	29
Worcester	8
St. Mary's	10
Prince George's	7
Allegany	6
Wicomico	11
Caroline	3
Charles	12
Calvert	10
Garrett	3
Dorchester	3
Queen Anne's	2
Cecil	10
Talbot	5
Somerset	1
Kent	0
TOTAL	**464**

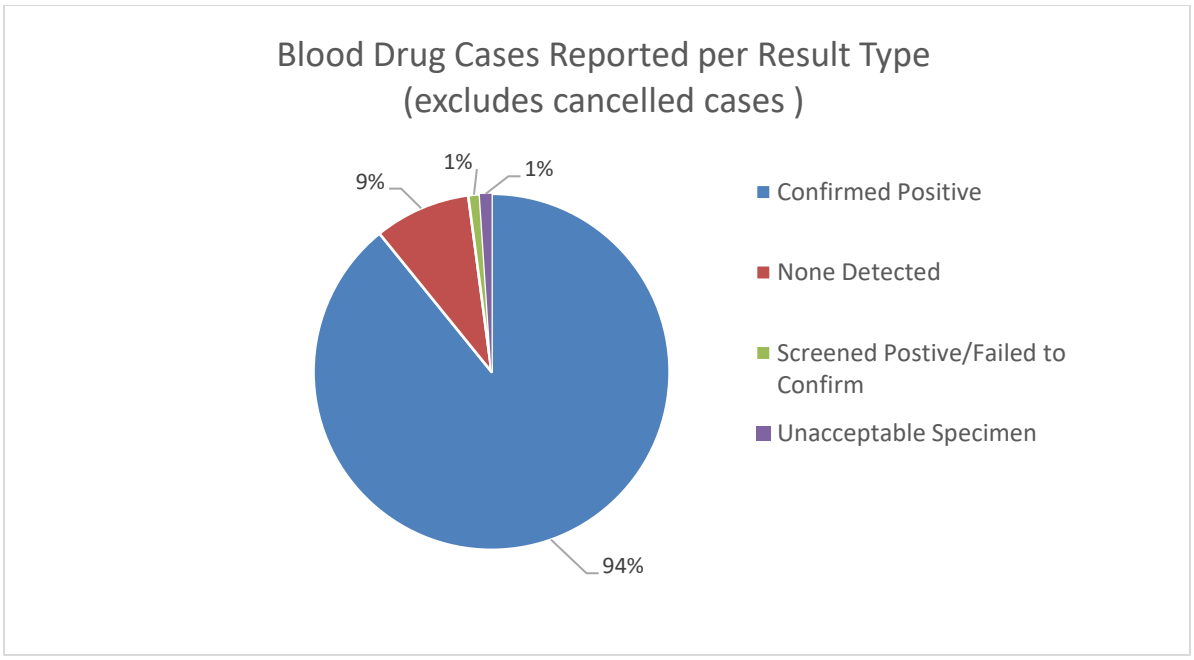

Toxicology Cases Completed Per Month
2024 = 470 Alcohol
2024 = 326 Drug
2025 = 472 Alcohol
2025 = 279 Drug
Cases
120
100
80
60
40
20
0
Jan 42 47 33 0
Feb 58 23 44 29
Mar 37 36 65 36
Apr 18 20 22 5
May 22 36 63 39
Jun 83 17 35 19
Jul 34 16 38 5
Aug 32 14 51 24
Sep 31 40 37 34
Oct 27 44 46 9
Nov 47 12 18 55
Dec 39 21 53 3
Month

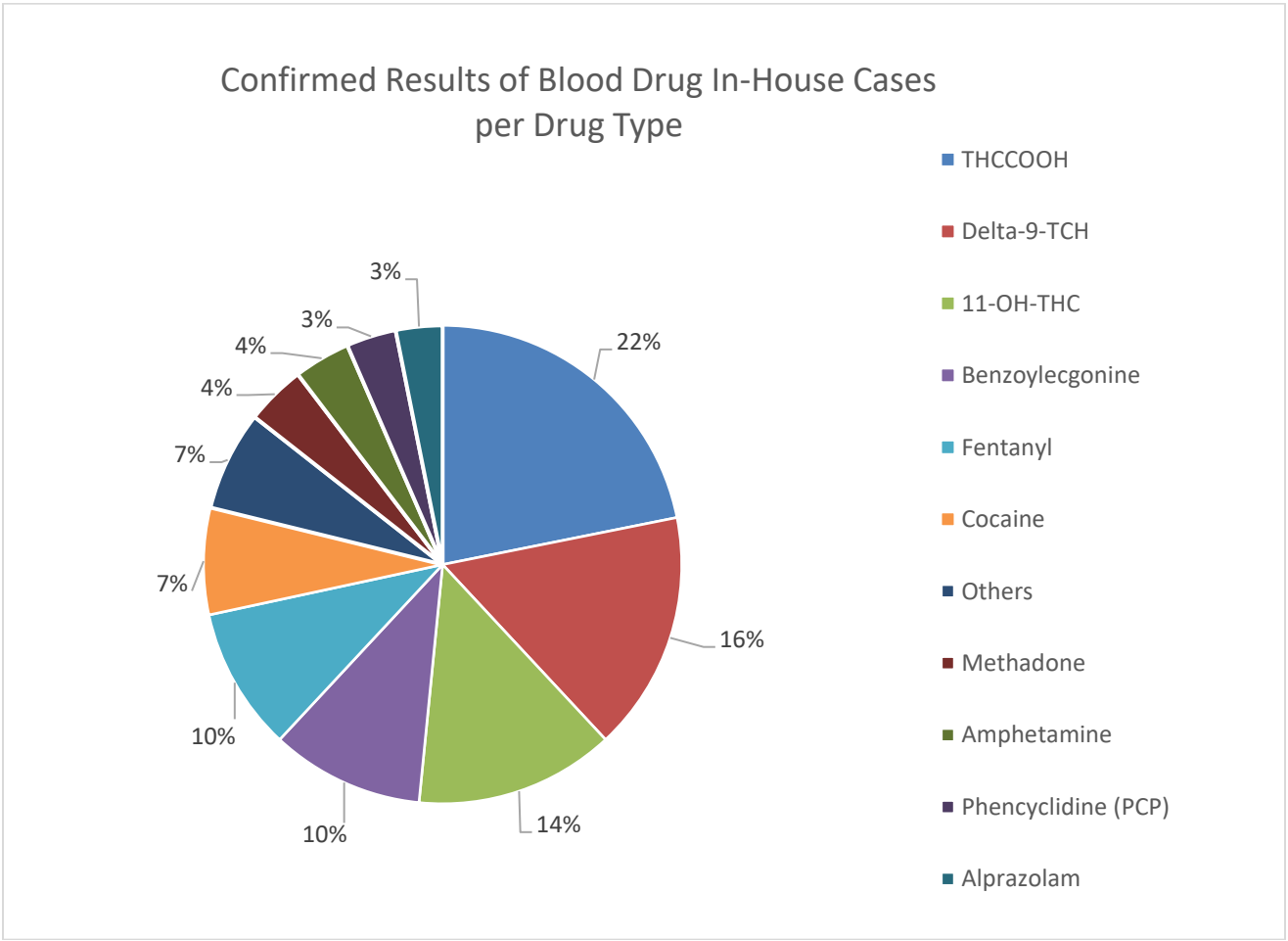

Blood Alcohol Pending Caseload and Backlog per Quarter
2024 Pending Caseload
2024 Backlog
2025 Pending Caseload
2025 Backlog
50
0
Cases
12
0
22
0
18
0
17
0
27
0
24
0
27
0
26
0
End of 1st Qtr
End of 2nd Qtr
End of 3rd Qtr
End of 4th Qtr
Quarter


Blood Drug Pending Caseload and Backlog per Quarter
2024 Pending Caseload
2024 Backlog
2025 Pending Caseload
2025 Backlog
120
100
80
60
40
20
0
Cases
71
42
66
45
94
60
62
50
105
76
84
60
85
56
80
56
End of 1st Qtr
End of 2nd Qtr
End of 3rd Qtr
End of 4th Qtr
Quarter


Toxicology Case Turn Around Time
Avg TAT 2024 Alcohol= 21
Avg TAT 2024 Drugs= 90
Avg TAT 2025 Alcohol= 37
Avg TAT 2025 Drugs= 102
Days
120
100
80
60
40
20
0
17
76
68
105
24
81
30
99
18
108
25
102
25
96
23
101
1st Qtr
2nd Qtr
3rd Qtr
4th Qtr
Quarter


Blood Alcohol Cases Reported per Detection Level
-In house
4%
3%
7%
18%
68%
Detected Over Legal Limit
None Detected
Detected Under Legal Limit
Detected at Legal Limit
Unacceptable Specimen/
Cancelled Cases


Blood Drug Cases Reported per Result Type
(excludes cancelled cases)
9%
1%
1%
94%
Confirmed Positive
None Detected
Screened Postive/Failed to Confirm
Unacceptable Specimen


Confirmed Results of Blood Drug In-House Cases per Drug Type
22%
16%
14%
10%
10%
7%
7%
4%
4%
3%
3%
THCCOOH
Delta-9-TCH
11-OH-THC
Benzoylecgonine
Fentanyl
Cocaine
Others
Methadone
Amphetamine
Phencyclidine (PCP)
Alprazolam

TOXICOLOGY NOTEWORTHY CASES

In March of 2025 District Heights Police attempted to pull over an Infiniti SUV driven by a male subject. The subject initially stopped before speeding away and becoming engaged in a police chase. The chase came to an end when the subject crashed into four cars. The crash resulted in the death of 3-year-old, an occupant of one of the vehicles, and the injury of a woman. The subject's blood was negative for alcohol, but positive for THC. Following the death of the 3-year old, Prince George's County passed Zoey's Law, which enacted mandatory pursuit reporting for police agencies.

On July 21, 2025 in Montgomery County, authorities responded to the aftermath of a rollover collision that left one person dead. One driver was determined to be at fault for the collision and was arrested under suspicions of impairment and a blood kit was sent to the toxicology unit for blood alcohol testing. The blood alcohol result was reported as 0.20 g/100 mL. The results from MSP lead to the driver being charged with manslaughter by vehicle due to gross negligence, negligent homicide by vehicle while under the influence, and other related offenses.

On December 19, 2025 a three-vehicle crash resulted in the death of an individual who had been stopped in the left lane of 695 when his vehicle had become inoperable. Another car had pulled over to assist when a third driver struck the stopped cars and hit the owner of the stopped vehicle and the person assisting him. The third driver was arrested under suspicions of impairment and a blood kit was sent to the toxicology section for both alcohol and drug testing. The blood alcohol result was a 0.02 g/100 mL and the blood drug was none-detected.

EMPLOYEE RECOGNITION

Special Appointments

Theresa DeAngelo, Quality Assurance/Safety Manager, served as the Chair for the Ethics Subdivision of the American Chemical Society's Division of Professional Relations and also served on Stevenson University's Forensic Advisory Board for 2025. Theresa was also appointed to the OSAC Seized Drug Subcommittee in 2025.

Mitchell Dinterman, Crime Scene Section Manager, continued to serve on Loyola University's Forensic Studies Advisory Board in 2025.

Michelle Groves, Forensic Scientist Supervisor and CODIS State Administrator, continued to serve on the Maryland Sexual Assault Evidence Kit Policy and Funding Committee for 2025.

Bruce Heidebrecht, Forensic Scientist Supervisor and Technical Leader in the Biology Section, continued to serve as the Vice-Chair of the Scientific Working Group on DNA Analysis Methods, Autosomal STR Interpretation Committee in 2025.

Daniel Katz, Director, a founding member of the National Association of Forensic Science Boards (NAFSB), was a member of their Executive Committee for 2025. Dan was a member of the American Society of Crime Laboratory Director (ASCLD) Board of Directors in 2025. He also is a member of the North Carolina Forensic Science Advisory Board as well as the ASCLD Membership Resource Committee. Dan also continued to serve on the Maryland Sexual Assault Evidence Kit Policy and Funding Committee as well as the Maryland Forensic Laboratory Advisory Committee for 2025.

Amy Kelly served on the Mid-Atlantic Cold Case Homicide Investigators Association (MACCHIA) Executive Board in 2025.

Dr. Wanda Kuperus, Deputy Director, continued to serve on Towson University's MSFS Academic Advisory Board and Loyola University's Forensic Studies Advisory Board for 2025.

Argi Magers, Forensic Scientist Manager for the Biology Section, continued to serve on the Maryland Sexual Assault Evidence Kit Policy and Funding Committee, the Mid-Atlantic Cold Case Homicide Investigators Association (MACCHIA) Executive Board, as well as the FBI Rapid DNA Task Force for 2025. She also became a member of the Forensic Nursing Consensus Body (CB) of the American Academy Forensic Sciences Standards Board (ASB).

Catherine Savage, Forensic Scientist Supervisor in CDS-Pikesville, served as the ABC Representative for MAAFS in 2025.

Angela Spessard, Forensic Scientist III in the Biology Section, served on the NIJ/NIST Expert Working Group on Human Factors in DNA Interpretation in 2025.

Lauren Wolfe, Forensic Scientist III in the Toxicology Section, served on the Young Forensic Toxicologist Committee with the Society of Forensic Toxicologists in 2025.

Dr. Haley Mulder, Chief Toxicologist, was appointed to the National Safety Council's Alcohol Drugs, and Impairment Division (NSC ADID) and the Publications Committee with the Society of Forensic Toxicologists in 2025. She continued to serve on the Liberty University's Forensic Advisory Board.

Promotions

Several MSP-FSD staff members were promoted in 2025. Angela Spessard was promoted from Forensic Scientist III to Forensic Scientist Advanced within the Biology Section. Natalie Meixsell was promoted from Forensic Scientist II to Forensic Scientist III. Lindsey Domonoski and Noelle Neff were promoted from Forensic Scientist I to Forensic Scientist II. Crime Scene Technicians Melissa Harvey, Jennifer Jeudy, and Jaimie Myer, were promoted from CST II to CST III and Crime Scene Technician Estoria Bantner was promoted from a CST I to a CST II.

Presentations at Regional/National Conferences

In February 2025, Theresa DeAngelo was co-presenter for the workshop on "Artificial Intelligence (AI) in Forensic Education: The Good, the Great, and the Truth" at the American Academy of Forensic Sciences (AAFS) Annual Conference in Baltimore, MD.

Also at AAFS in February 2025, Angela Spessard was co-presenter for the workshop "Implementing Recommendations from the NIST/NIJ Expert Working Group on Human Factors in Forensic DNA Interpretation Report" in Baltimore, MD.

There was also a group from FSD's CDS Units that presented a workshop at AAFS in February 2025. Laurel Bobka, Catherine Savage, and Joshua Smith presented with Jack Prothero and William Guthrie from NIST on the "NIST/MSP Hypergeometric Sampling Software for Seized-Drug Analysis" in Baltimore, MD.

In April 2025, Dr. Ying Ren presented "Going up in Smoke: A Retrospective Analysis of THC Concentration in Blood in Pre- and Post-Legalization Maryland" at the International Association for Chemical Testing (IACT) Annual Conference in Las Vegas, NV.

In May 2025, Theresa DeAngelo co-presented a workshop "Justice v. Ethics: How forensic scientists can navigate ethical dilemmas in the courtroom" for the Mid-Atlantic Association for Forensic Scientists (MAAFS) held in Richmond, VA.

In June 2025, Dr. Haley Mulder presented a seminar titled "Charm City Science: How Maryland State Police Pursues Impaired Driving Cases" during the American Society for Mass Spectrometry (ASMS) Conference in Baltimore, MD.

Also in June 2025, Jennifer Jeudy presented “Wellness in Forensics” during the 2025 Chesapeake Bay Division of the International Association of Identification (CBD-IAI) Educational Conference in McHenry, MD.

Stephanie Roberg also presented in June 2025 at the CBD-IAI Educational Conference, Stephanie presented "Implementing New Technology- Recover LFT" at the conference in McHenry, MD.

In November 2025, Dr. Haley Mulder presented a seminar titled “The One Lab to Rule Them All: An Overview of the Maryland State Police DUI/DUID Program” during the International Association of Forensic Toxicologists Annual Conference in Auckland, New Zealand.

Also in November 2025, Angela Spessard presented at the 36th International Symposium on Human Identification Technical Leader’s Meeting held in West Palm Beach, FL.

Commander's Award for Outstanding Performance

Forensic Scientist Supervisor Valerie Imschweiler

Director Katz awarded the FSD Commander's Award in December 2025 to Forensic Scientist Supervisor, Valerie Imschweiler. Ms. Imschweiler has been with MSP-FSD for twenty years. She started as a Forensic Scientist within the Controlled Dangerous Substances Unit at the Berlin laboratory. Two years into her career, she transferred to the Pikesville CDS Unit where she worked for the next eight years. Then in 2015, Val returned to Berlin as the CDS Unit Supervisor and has continued in that role for the past 10 years. MSP broke ground for the new Berlin Barrack and Laboratory on 4/7/23. Between then and the ribbon cutting on 9/9/25, Val functioned as FSD Top Management's eyes, ears, and voice throughout the build. She made herself available whenever needed and provided guidance to the on-site team in regard to all aspects of the new FSD Berlin. Her unwavering reliability, relentless persistence, professional demeanor, and "team above self" attitude serves as an example for all of MSP-FSD.

FS Supervisor Valerie Imschweiler with Lt. Starner

FSD's Civilian of the Year Nominee

The Forensic Sciences Division (FSD) proudly nominated Kevin Beardsley for 2025 Civilian of the Year in recognition of his extraordinary ingenuity, resilience, and impact on public safety during a very challenging year for Maryland's Trace Evidence program.

FSD is the only laboratory in the State of Maryland capable of analyzing trace evidence and fire debris—evidence that is often critical in identifying suspects, reconstructing crimes, and prosecuting arson, homicide, and other serious offenses. In 2025, this vital statewide capability was sustained almost entirely by one person: Kevin Beardsley. After the Trace Evidence Unit lost its only other analyst early in the year, Kevin carried the overwhelming majority of Maryland's trace and fire debris workload on his own, ensuring that law enforcement agencies across the state continued to receive timely, reliable forensic results.

Despite this critical staffing shortage, Kevin maintained the scientific rigor required in forensic work. In 2025 he successfully completed the entire complement of proficiency tests required for the unit—a burden typically shared by multiple scientists—demonstrating not only exceptional technical skill but also an unwavering commitment to quality and accreditation standards, even under extreme operational pressure.

At the same time, the Trace Evidence Unit was required to relocate its entire laboratory and reporting operations within the Pikesville facility. This was not a simple office move - it involved the disassembly, relocation, recalibration, and verification of more than ten highly sensitive forensic instruments used in criminal casework. These instruments required extensive post-move testing to ensure they could continue to produce legally defensible results. Kevin personally conducted these performance checks, allowing the unit to resume operations as quickly and safely as possible. Without his expertise and persistence, Maryland's trace and fire debris testing capability would have been offline for a prolonged period, delaying investigations and prosecutions statewide.

In his role as Technical Leader, Kevin also led the validation and implementation of new forensic instruments, including FTIR and EDS systems, allowing the unit to resume doing full examinations of fibers, paints and general chemical unknowns - services that MSP had not been able to offer in-house for some time due to lack of instrumentation. He successfully navigated the rigorous accreditation process to ensure these tools were officially added back to the laboratory's scope of accreditation in November 2025, protecting the admissibility and credibility of forensic results in court.

As if these responsibilities were not enough, Kevin also assumed the role of trainer for the unit's newly hired analyst late in the year. To balance training with urgent case demands, he developed a triage workflow for fire debris evidence that will allow the new analyst to begin contributing to case processing much earlier in her training by handling the initial evidence preparation, while Kevin completes the complex analytical testing. At the same time, the new workflow will improve evidence preservation by ensuring fire debris is transferred out of metal cans promptly, reducing the risk of degradation or loss.

Through all of this—casework, laboratory relocation, instrument validation, accreditation, and training—Kevin ensured that the Trace Evidence Unit never stopped serving Maryland's law enforcement agencies or its citizens. His efforts preserved a mission-critical forensic capability for the entire state during a period when it was most at risk.

Kevin Beardsley did far more than meet expectations in 2025; he single-handedly kept a statewide forensic program operational. His dedication, leadership, and professionalism make him exceptionally deserving of recognition as Civilian of the Year.

Superintendent Colonel Michael Jackson with FS III Kevin Beardsley


MARYLAND STATE POLICE
FORENSIC SCIENCES DIVISION
is celebrating
National Forensic Science Week

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