



Central (Richmond)



Northern (Manassas)



Eastern (Norfolk)



Western (Roanoke)

# DEPARTMENT OF FORENSIC SCIENCE UPDATE

Linda C. Jackson, Director

Presented to the Scientific Advisory Committee

October 8, 2024





# Forensic Science Week(s)



## **CERTIFICATE of RECOGNITION**

*By virtue of the authority vested by the Constitution in the Governor of the Commonwealth of Virginia, there is hereby officially recognized:*

### **FORENSIC SCIENCE WEEK**

**WHEREAS**, access to state-of-the-art forensic analysis significantly improves the investigation of criminal activity, aiding in the exoneration of the innocent and the prosecution of the guilty; and

**WHEREAS**, crime scene investigators in law enforcement agencies across the Commonwealth have been trained in the Forensic Science Academy for the past 50 years to locate, recognize, document, collect, preserve, and properly package items of physical evidence for examination; and

**WHEREAS**, scientists at the Department of Forensic Science provide accurate and reliable analysis of recovered evidence and submitted samples in the Controlled Substances, Digital & Multimedia Evidence, Firearms & Toolmarks, Forensic Biology, including the DNA Data Bank, Latent Prints & Impressions, Toxicology, and Trace Evidence Sections; and

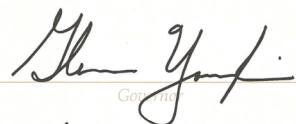
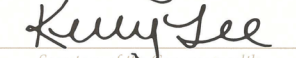
**WHEREAS**, the Department of Forensic Science advances the understanding of forensic science through its discipline-specific trainings for Virginia attorneys and judges, its scientific research, and its Forensic Training and Breath Alcohol Sections, which offer a variety of training programs for law enforcement in crime scene technology and licensure for breath test operators; and

**WHEREAS**, professional organizations across the nation recognize and celebrate National Forensic Science Week; and

**WHEREAS**, the Commonwealth's forensic science community is recognized and appreciated for their hard work, dedication, and commitment to providing quality and unbiased scientific analysis in support of the cause of justice;

**NOW, THEREFORE, I**, Glenn Youngkin, do hereby recognize September 15-21, 2024, as **FORENSIC SCIENCE WEEK** in the COMMONWEALTH OF VIRGINIA, and I call this observance to the attention of all our citizens.



  
Governor  
  
Secretary of the Commonwealth

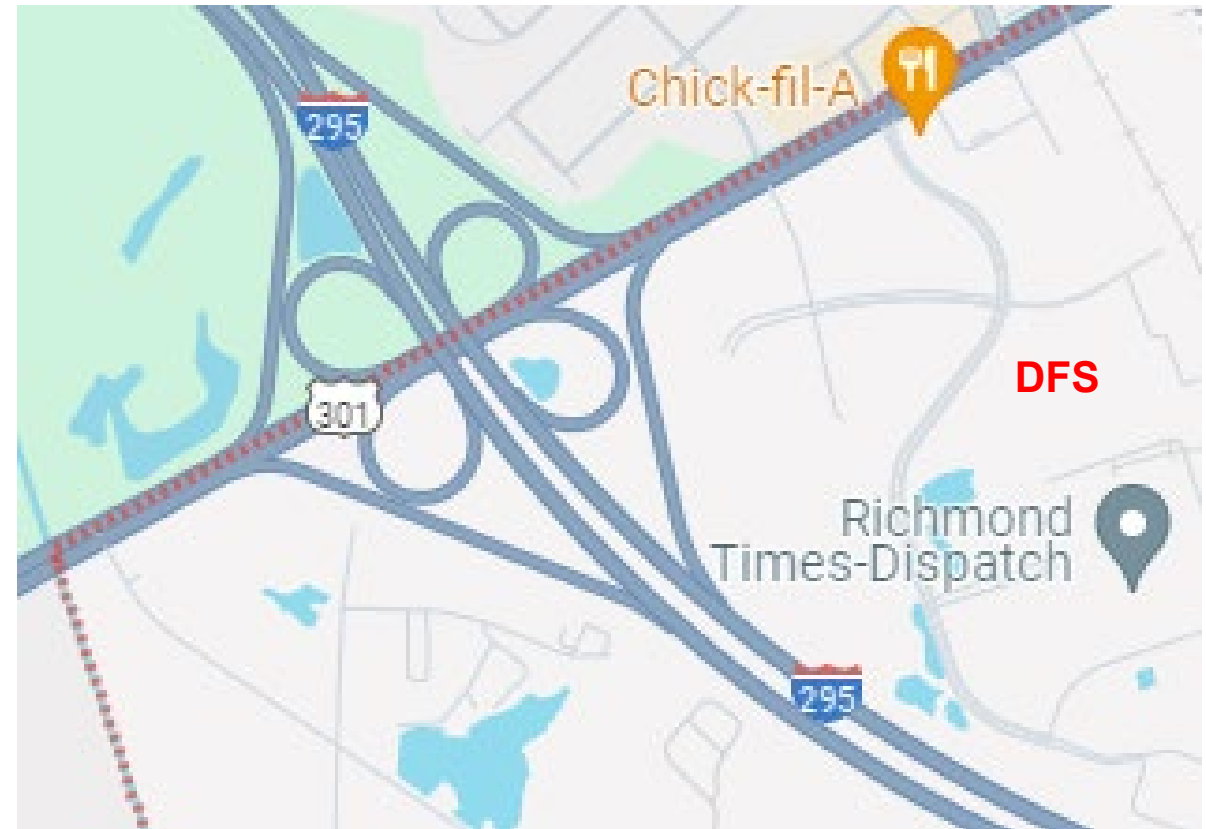
- September 15 – 21, 2024
- Celebrated service milestones of 43 staff members
- Provided tours of Central Lab for state employees
- Held section meetings and trainings for Controlled Substances, Latent Prints & Firearms Sections
- Offered games and recognition activities



# Central Laboratory Capital Project

- On schedule for completion in Q4 2025
- Building updates available online

<https://dfs.virginia.gov/regional-labs/new-central-laboratory-facility/>





<https://www.youtube.com/watch?v=Ea7y3VBTEiw>



# Training for Attorneys and Judges

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- Four sessions in May/June
- No training in Fall 2024

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Join us for

## BREATH ALCOHOL & TOXICOLOGY TRAINING

For Virginia Criminal Attorneys and Judges

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# Request for Laboratory Examination

FS Lab #  Search

## Agency Information

Agency Name \*   
Jurisdiction of Offense

### Officers

Type	Name	Phone	Fax	Email
Investigating	Smith, M. E.			

[Edit](#) / [Delete](#)

[Add](#)

## Case Information

Agency Case #   
Offense Date \*   
Offense \*   
Court   
Court Date   
Return Method

### Parties of Interest

Type	First	Middle	Last	DOB	GENDER	RACE	SID
Suspect	John		Doe		Male		

[Edit](#) / [Delete](#)

[Add](#)

### Business

Type	Name	Address
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(No Businesses)

[Add](#)

## Evidence

Agency Item #	Prelog Item #	Description	Exam	Comment
2		1 zip lock bag	Drugs	

[Edit](#) / [Delete](#)

[Add](#)

## Statement of Facts

Found suspected drugs.

# Prelog Update

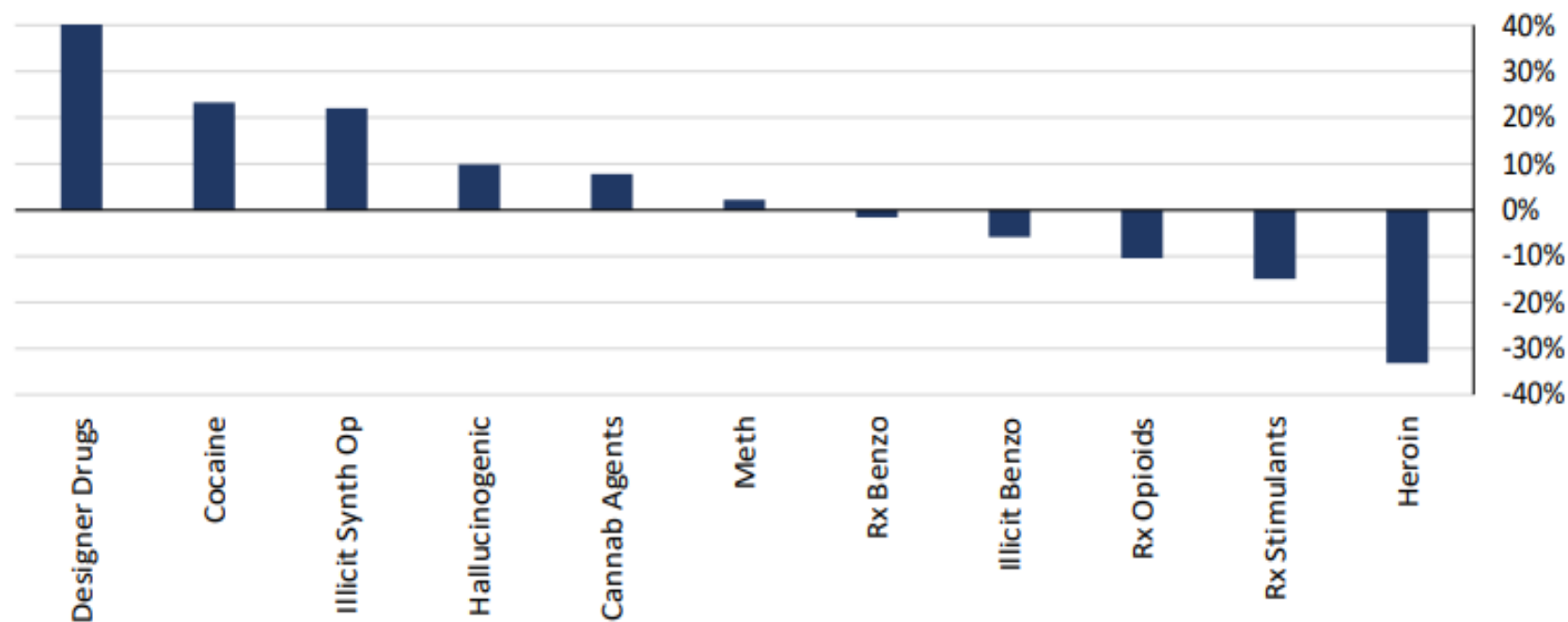


- DFS is moving closer to offering Prelog for evidence submission
- Preliminary beta testing has begun
- New version of FA is scheduled to be released September 10, which will prompt additional testing
- Training will be provided prior to implementation



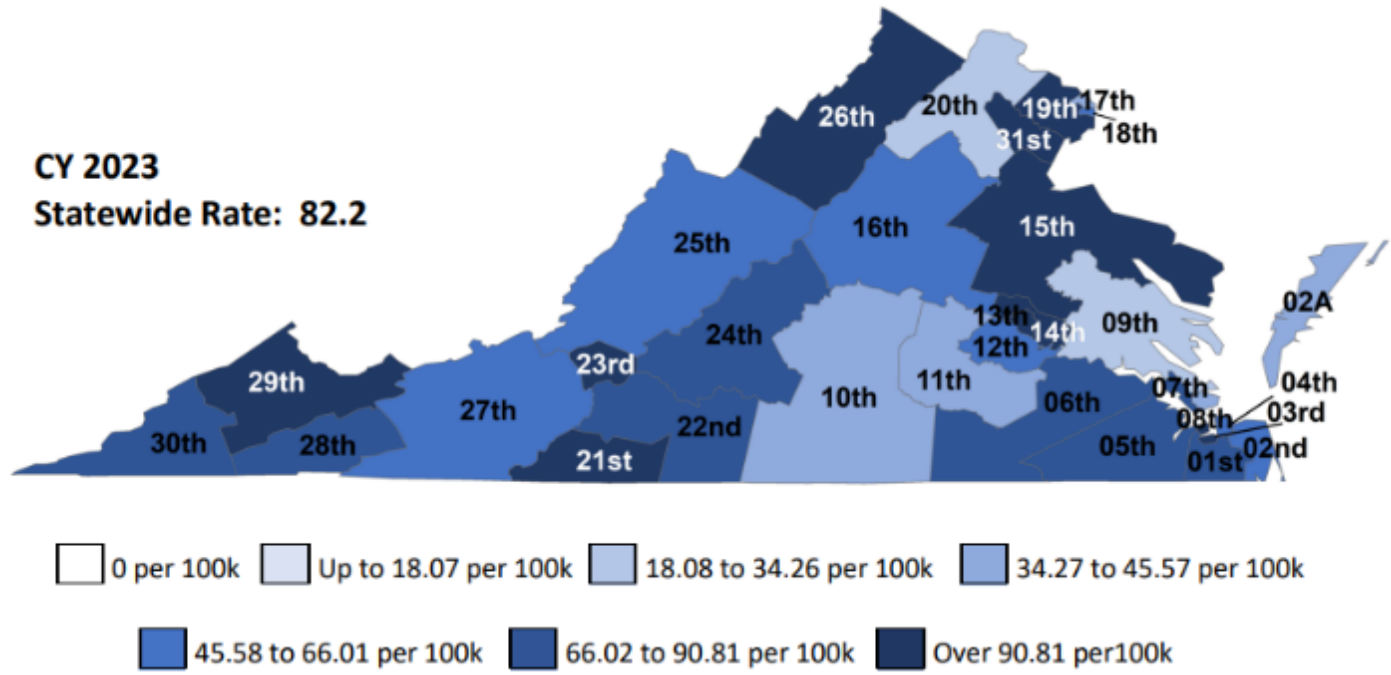
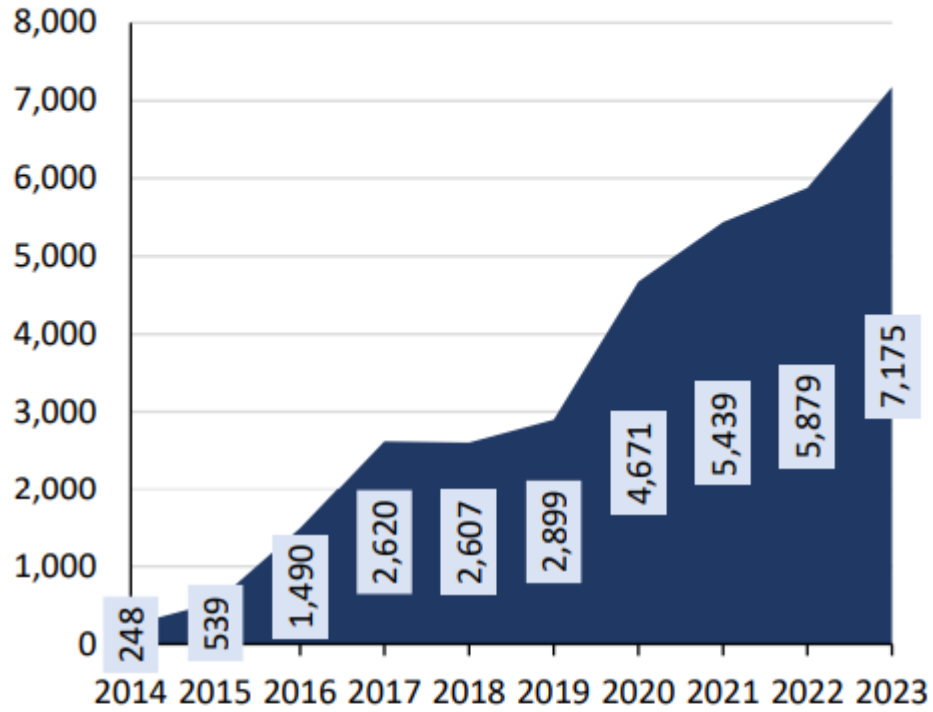
# Drugs Submitted in CY 2023 Report

Change in Submissions—CY 2022 to 2023



<https://dfs.virginia.gov/wp-content/uploads/2023DFSDrugReport.pdf>

## Illicit Synthetic Opioid Submissions CY2014-2023



## Illicit Synthetic Opioids Identified\*

Substance Identified	CY2015-17	CY2018-20	CY2021-23
Fentanyl	3,309	9,783	18,110
<b>Fentanyl Analogs</b>			
Para-Fluorofentanyl	1	24	1,613
Acetyl Fentanyl	82	514	156
Fluoro-isobutyryl fentanyl	400	223	3
Furanyl Fentanyl	766	25	1
Fentanyl Analog - Other	135	158	32
Other Illicit Synthetic Opioids	370	212	145

## Top Ten

The ten most common substances identified in 2023 were:

1. Methamphetamine
2. Cocaine
3. Fentanyl
4. Marijuana\*
5. N,N-dimethylpentylone
6. Buprenorphine
7. Xylazine
8. Naloxone\*
9. Heroin
10. Oxycodone

\*Marijuana and naloxone are not included in this report

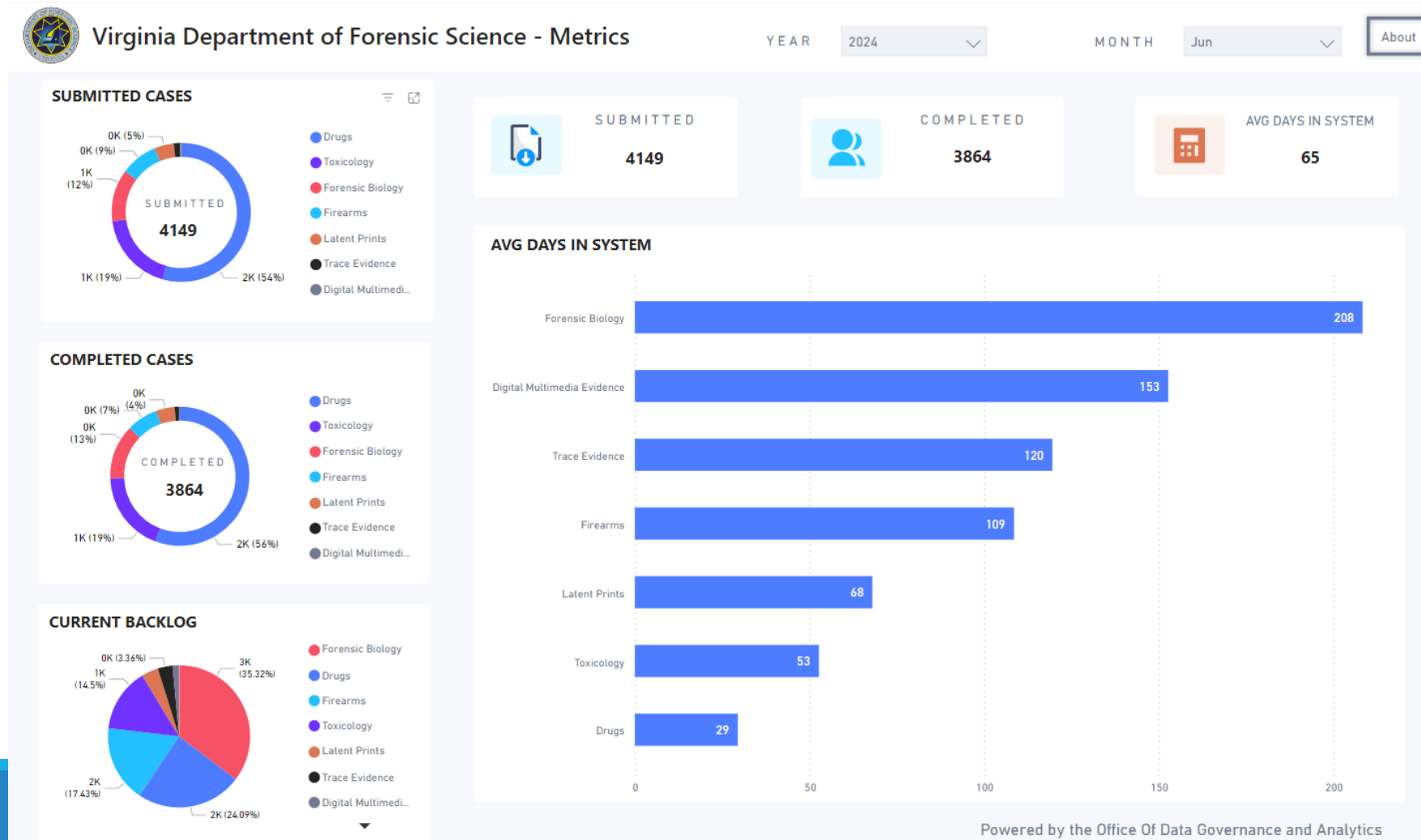




# Working on Drug Dashboard

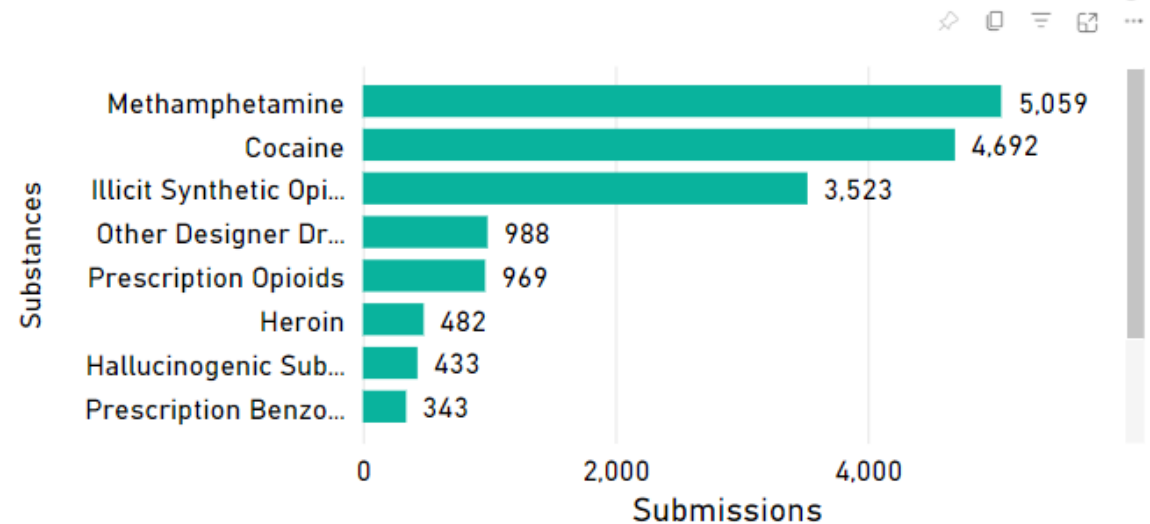
- Project with the Office of Data Governance and Analytics (ODGA)
- Using same data as in annual reports (based on NFLIS data)

<https://dfs.virginia.gov/about-dfs/case-statistics-dashboard/>

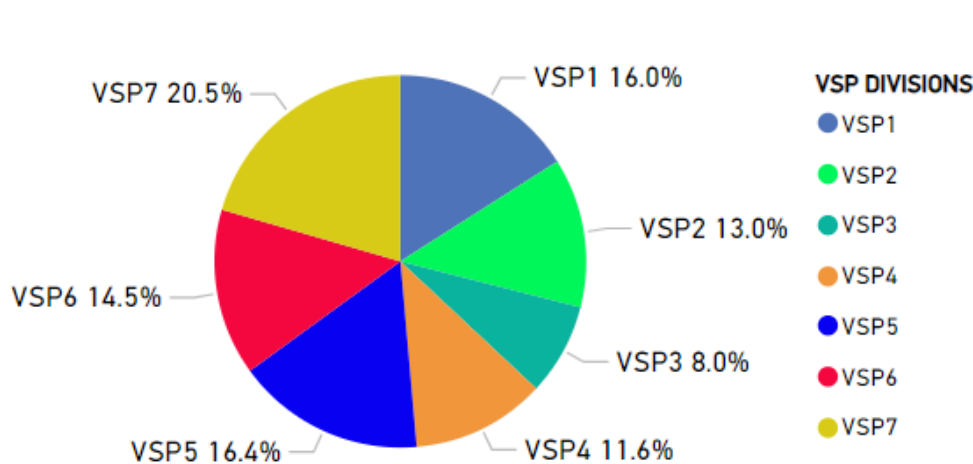




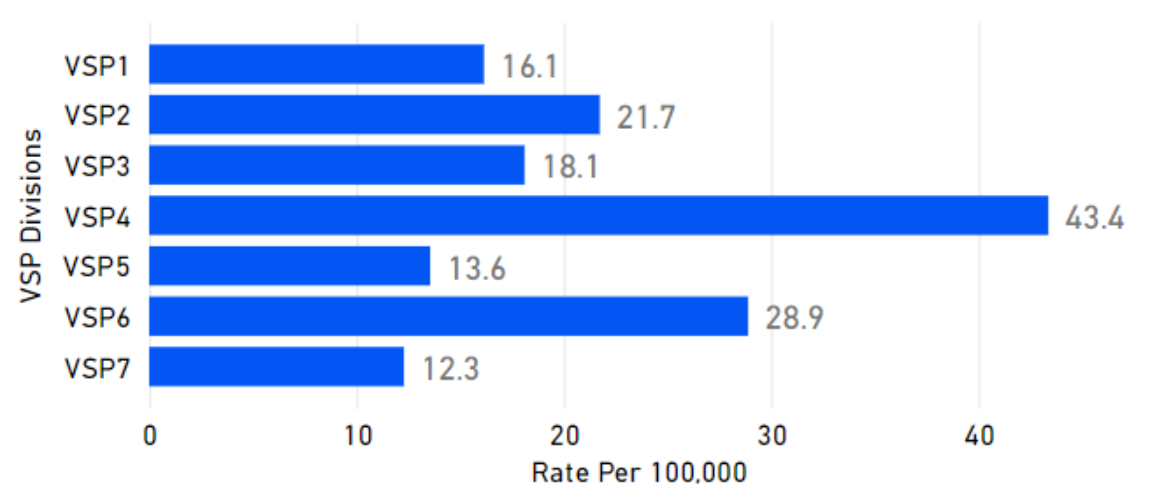
## Submissions by Calendar Year



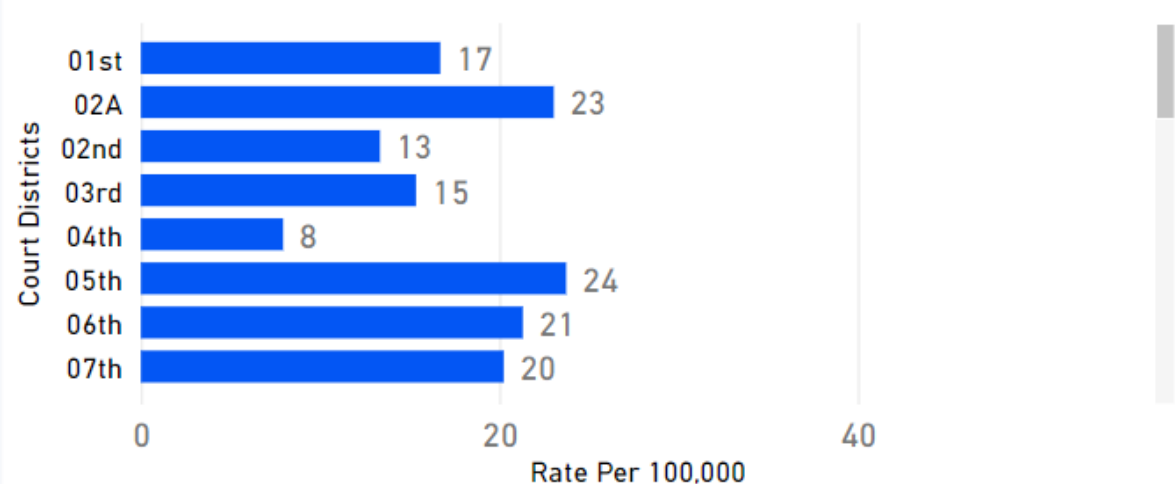
## Submissions Breakdown by VSP Divisions



## Submissions by VSP Divisions



## Submissions by Court Districts



\*Rate = Distribution\*100,000/sum of population

\*Rate = Distribution\*100,000/sum of population

# Case Statistics

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# FY2024 Case Submissions Comparison

Discipline	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	% change (19 to 24)
Controlled Substances	34,787	33,757	27,111	23,997	<b>27,217</b>	<b>28,403</b>	-18%
Digital & Multimedia Evidence	233	119	178	212	254	176	-24%
Firearms & Toolmarks	6,627	<b>7,202</b>	<b>8,169</b>	6,314	6,450	5,341	-19%
Forensic Biology (DNA)	6,027	5,988	6,430	6,450	6,891	6,616	<b>10%</b>
Latent Prints & Impressions	2,558	2,581	2,196	2,143	2,355	2,083	-19%
Toxicology	9,669	10,047	11,384	9,883	10,642	10,196	<b>5%</b>
Trace Evidence	714	679	714	702	725	692	-3%

\*2022 - 2024 Toxicology submissions are artificially low due to OCME outsourcing. Outsourcing was discontinued in March 2024.



# August 2024 Workload Statistics

Section	Ending Backlog As of 08/31/2024	Average TAT (in days) August 2024	Strategic Plan Goal (in days)
Controlled Substances	2,195	30	30
Digital & Multimedia Evidence	120	302	n/a
Firearms & Toolmarks	1,757	147	90
Forensic Biology (DNA)	3,570	185	120
Latent Prints & Impressions	468	86	60
Toxicology	1,441	54	40
Trace Evidence	341	171	n/a



# Plans for Additional DNA Capacity

- PERK Processing Unit in Central Laboratory
  - Five Biologist positions will screen Physical Evidence Recovery Kits (PERKs) for male DNA
  - Complex results will be transferred back to originating laboratory for an examiner to interpret and issue the Certificate of Analysis
- Fill and train two Forensic Scientist positions received in FY25 budget (1 in Northern and 1 in Western)
- Plan to outsource “non-persons” cases from all locations to a private laboratory





# FY24 Court Statistics Summary

Section	Subpoenas	Court Appearances	Times Testified	Hours out of Lab	Days out of Lab	% Testified, if Appeared
Breath Alcohol	71	27	13	161	20	48%
Controlled Substances	5,075	253	93	803	100	37%
Digital & Multimedia Evidence	59	11	5	20	2	45%
Evidence Receiving	14	5	1	11	1	20%
Firearms & Toolmarks	1,374	218	164	611	76	75%
Forensic Biology (DNA)	1,437	190	148	586	73	78%
Latent Prints & Impressions	213	32	27	119	15	84%
Toxicology	5,824	2,889	322	3,459	432	11%
Trace Evidence	197	43	32	168	21	74%
<b>Totals</b>	<b>14,264</b>	<b>3,668</b>	<b>805</b>	<b>5,937</b>	<b>742</b>	<b>22%</b>

# Budget and Resources

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# Carryover Funds from FY23

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- DFS was approved by the Department of Planning and Budget to carryover a balance of \$2,365,142 to FY24 to pay for new evidential Breath Alcohol instruments
- Due to the anticipated dates of delivery for the new instruments, DFS will be requesting to carryover the balance to FY25



# Grant Awards

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## **Virginia Department of Motor Vehicles – Highway Safety Grants**

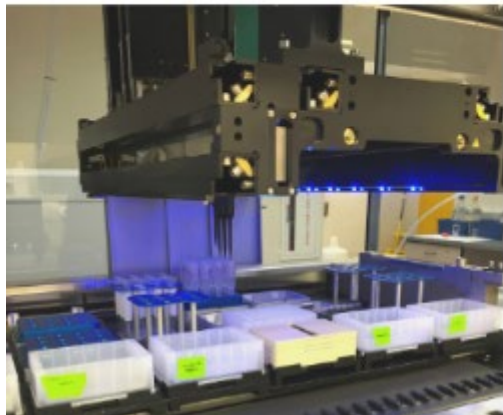
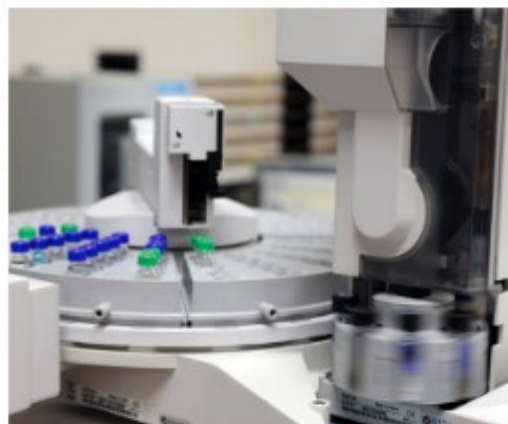
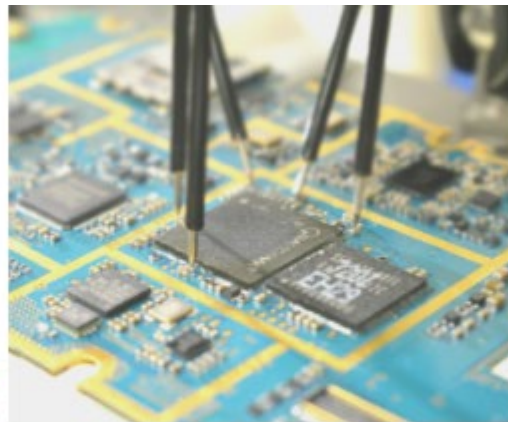
DFS received two awards from DMV under the Highway Safety Grants Program. (October 1, 2024 – September 30, 2025)

Breath Alcohol Training Project – \$311,273 (federal funds) was awarded for travel costs for LEA to attend training, continuing education for BA scientific staff, remote processes for continuity of operations, and classroom supplies.

TREDS Data Project – \$468,760 (federal funds) was awarded for six full-time and two part-time FLS positions in the Toxicology Section statewide.

## **Bureau of Justice Assistance - FY24 Formula DNA Capacity Enhancement for Backlog Reduction (CEBR) Program**

\$2,033,717 was awarded for personnel, equipment, supplies, and continuing education in the Forensic Biology Section statewide. (October 1, 2024 – September 30, 2026)



Thank you!

# Smith v. Arizona

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Amy C. Jenkins  
Department Counsel  
Virginia Department of Forensic Science



# Smith v. Arizona, No. 22-899, 2024 U.S. LEXIS 2712 (June 21, 2024)

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- **Facts:** Smith was charged with several drug offenses. Items seized from a search of his father's property were submitted to the Arizona Department of Public Safety (DPS) for analysis. After she had completed the analysis and prepared the report, but before the trial, the forensic scientist left DPS. A different DPS analyst testified for the state as its expert witness. The new expert witness testified, coming to the same conclusions as the original examiner, in reliance on the original report and notes.
- **Question Presented:** Does the Confrontation Clause of the Sixth Amendment permit the prosecution in a criminal trial to present testimony by a substitute expert conveying the testimonial statements of a nontestifying forensic analyst?

# Smith v. Arizona, No. 22-899, 2024 U.S. LEXIS 2712 (June 21, 2024)

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- **Holding:** When an expert conveys an absent analyst's statements in support of his opinion, and the statements provide that support only if true, then the statements come into evidence for their truth. If the out-of-court statements were also testimonial, their admission violated the Confrontation Clause. The case was remanded to the Arizona Supreme Court to determine if the out-of-court statements were testimonial.
- **Hiccup:** Arizona had (arguably) already conceded that the out-of-court statements were testimonial.

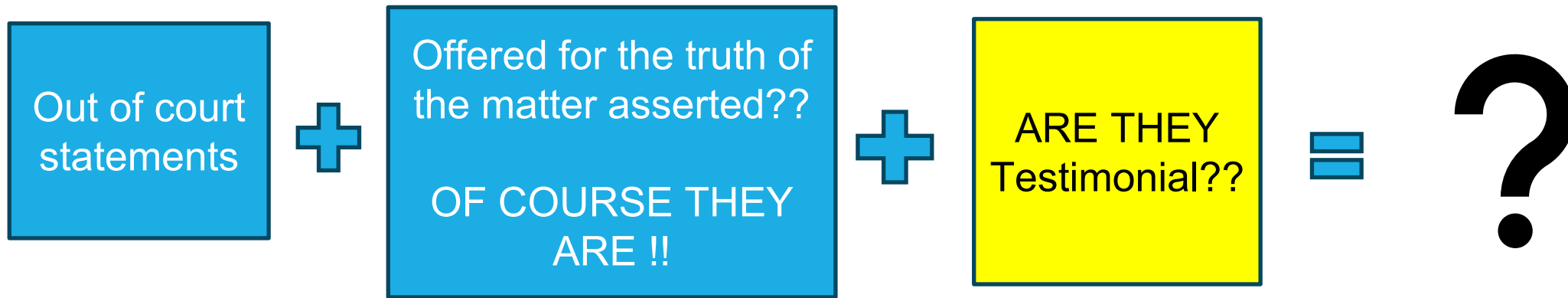


# Hearsay

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- Hearsay is defined as “a statement, other than one made by the declarant while testifying at the trial or hearing, offered in evidence to prove the truth of the matter asserted.”
- Statement can be oral or written
- Can be nonverbal conduct, if intended as an assertion and offered to prove the truth of the matter asserted

**Smith v. Arizona (2024)**: When an expert conveys an absent analyst's statements in support of his opinion, and the statements provide that support only if true, then the statements come into evidence for their truth; if the out-of-court statements were also testimonial, their admission violated the Confrontation Clause.



**“To implicate the Confrontation Clause, a statement must be hearsay (“for the truth”) and it must be testimonial—and those two issues are separate from each other.”**





# Extra guidance on “testimonial”

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- “Primary purpose” is still the test (but Thomas still reiterates his proposed test)
- Statements are testimonial if they have the “primary purpose of creating an out-of-court substitute for trial testimony.” Michigan v. Bryant, 562 U.S. 344, 358 (2011).
- “Consider the range of recordkeeping activities that lab analysts engage in”:
  - Compliance with accreditation requirements
  - Facilitation of internal review and quality control
  - Reminders to self

**“[T]he document’s primary purpose must have a ‘focus on the court.’”**



# What about batch processing?

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- What is batch processing?
- “A batch is a set of samples from multiple cases that are processed together by one or more analysts.” *National Best Practices for Improving DNA Laboratory Process Efficiency (NIJ 2022)*
- A majority of public and private forensic laboratories utilize batch processing as part of their efforts to increase efficiency in response to overwhelming demand.



# The U.S. Supreme Court knows forensic laboratories utilize multiple analysts for certain disciplines:

MELENDEZ-DIAZ MAJORITY OPINION, FOOTNOTE 1: “Contrary to the dissent’s suggestion . . . **we do not hold, and it is not the case, that anyone whose testimony may be relevant in establishing the chain of custody, authenticity of the sample, or accuracy of the testing device, must appear in person as part of the prosecution’s case.** . . . [T]his does not mean that everyone who laid hands on the evidence must be called. It is up to the prosecution to decide what steps in the chain of custody are so crucial as to require evidence . . . .”

SOTOMAYOR’S CONCURRENCE IN BULLCOMING, FOOTNOTE 2: “**This is not to say, however, that every person noted on the BAC report must testify.** As we explained in Melendez-Diaz, it is not the case ‘that anyone whose testimony may be relevant in establishing the chain of custody, authenticity of the sample, or accuracy of the testing device, must appear in person as part of the prosecution’s case . . . . It is up to the prosecution to decide what steps in the chain of custody are so crucial as to require evidence . . . .’”

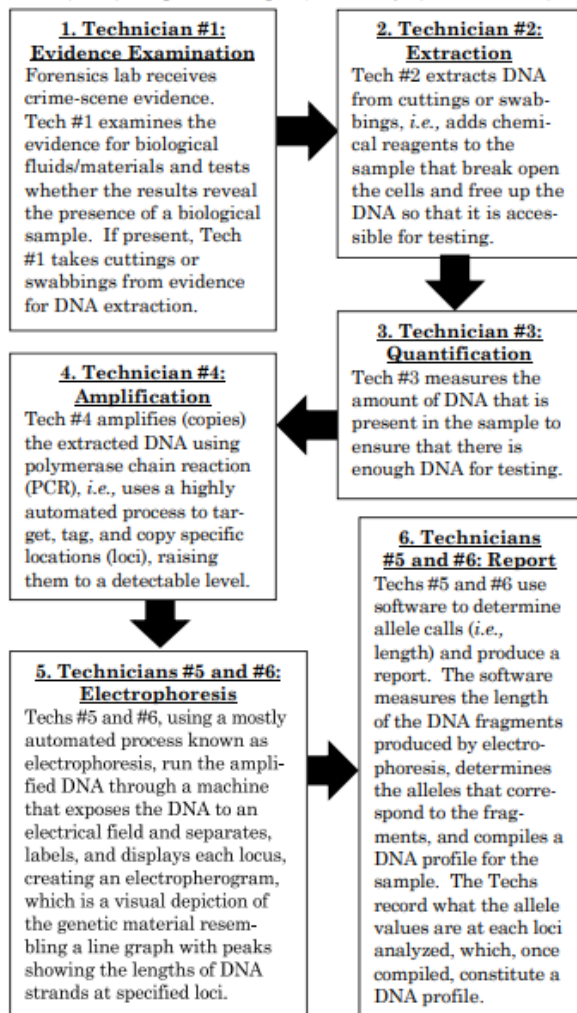
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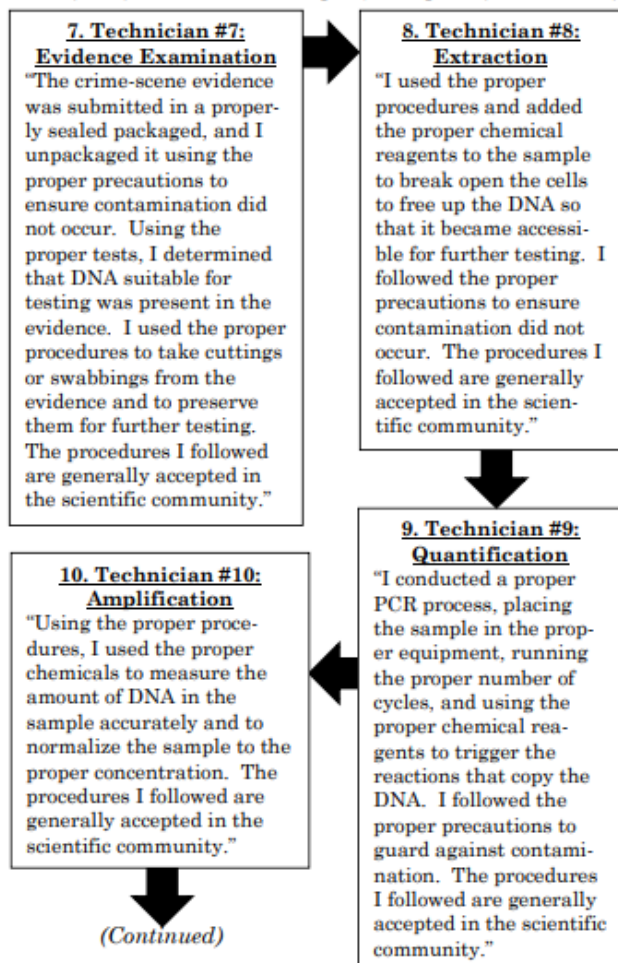


JUSTICE KAGAN’S DISSENT IN WILLIAMS, FOOTNOTE 4: “**But none of our cases—including this one—has presented the question of how many analysts must testify about a given report. (That may suggest that in most cases a lead analyst is readily identifiable.)** The problem in the cases—again, including this one—is that no analyst came forward to testify.”

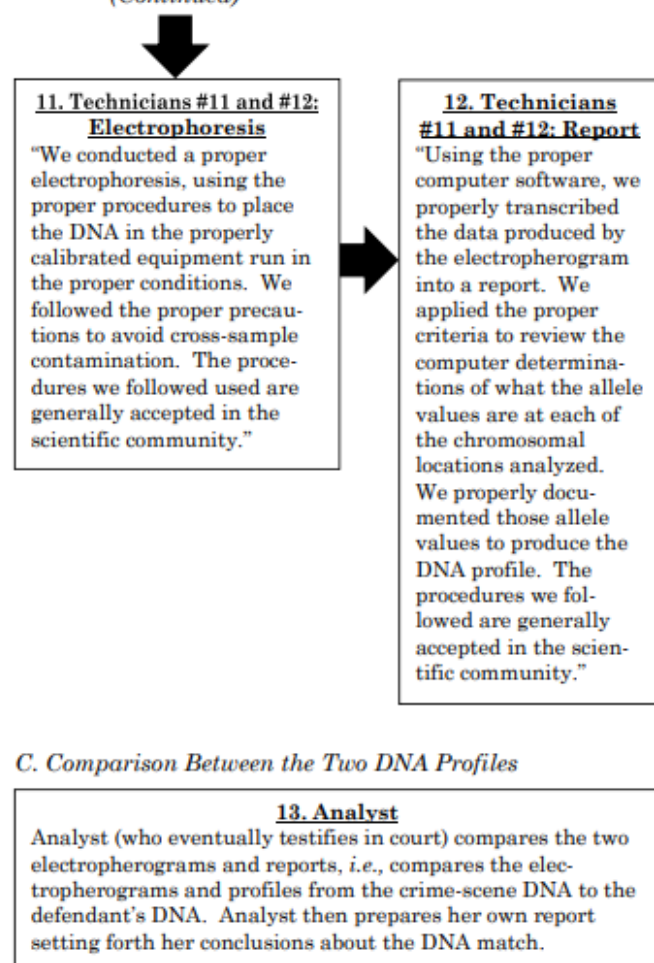
Appendix to opinion of BREYER, J.

*A. Profile of Suspect's Sample (Summary of Lab Process)*

Appendix to opinion of BREYER, J.

*B. Profile of Crime-Scene Sample (Examples of Statements)*

Appendix to opinion of BREYER, J.

*(Continued)**C. Comparison Between the Two DNA Profiles*



# Virginia DFS Response

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- Research on applicable case law
- Conversations with Federal laboratories
- Conversations with other lab counsel
- Education for our staff on the interpretation of Smith
- Advocacy for the laboratory
  - White Paper
  - List of Cases





# Virginia DFS Response

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- Conference presentation on batch processing at prosecutors' annual conference
- Working group with prosecutors to assist with courtroom presentation of evidence
  - Courtroom "Cheat Sheets"
  - Predicate Questions
- Still to come—additional guidance to staff



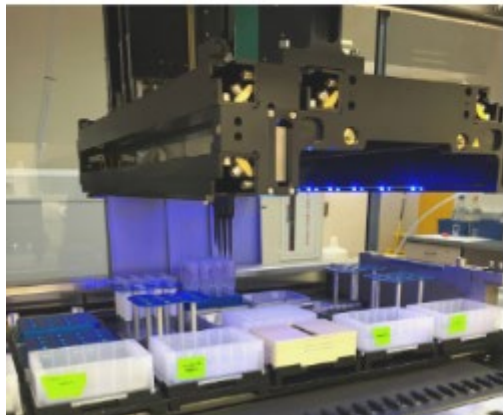
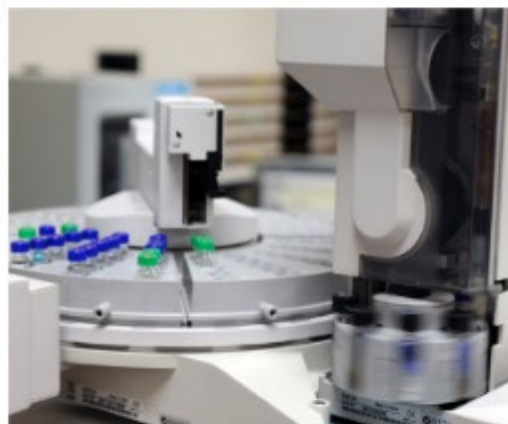
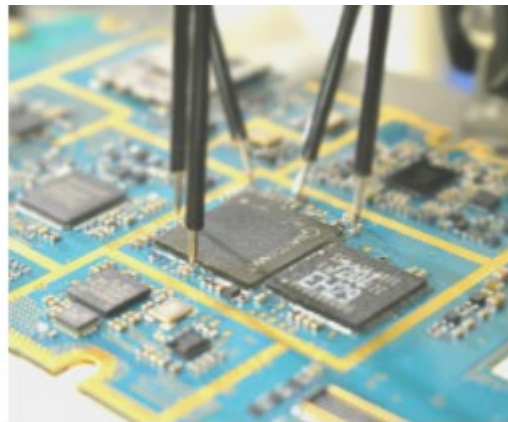


# A Word about Surrogate Testimony

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- Virginia DFS is focused on encouraging examiners to return to testify in support of their prior casework.
- Reexaminations will be undertaken if the examiner cannot/will not come back.
- Those reexams will consist of a complete reanalysis of the resubmitted evidence, or a data reexamination (**with all reports and conclusions of the prior examiner removed from the case file**), or some variation thereof depending on the discipline.
- It may require a case-by-case determination.





Thank you!