



Department of Forensic Science

2019 Trends

Linda C. Jackson, Director
Virginia Department of Forensic Science
June 5, 2019

DFS Backlog and Average Turnaround Times (TAT)



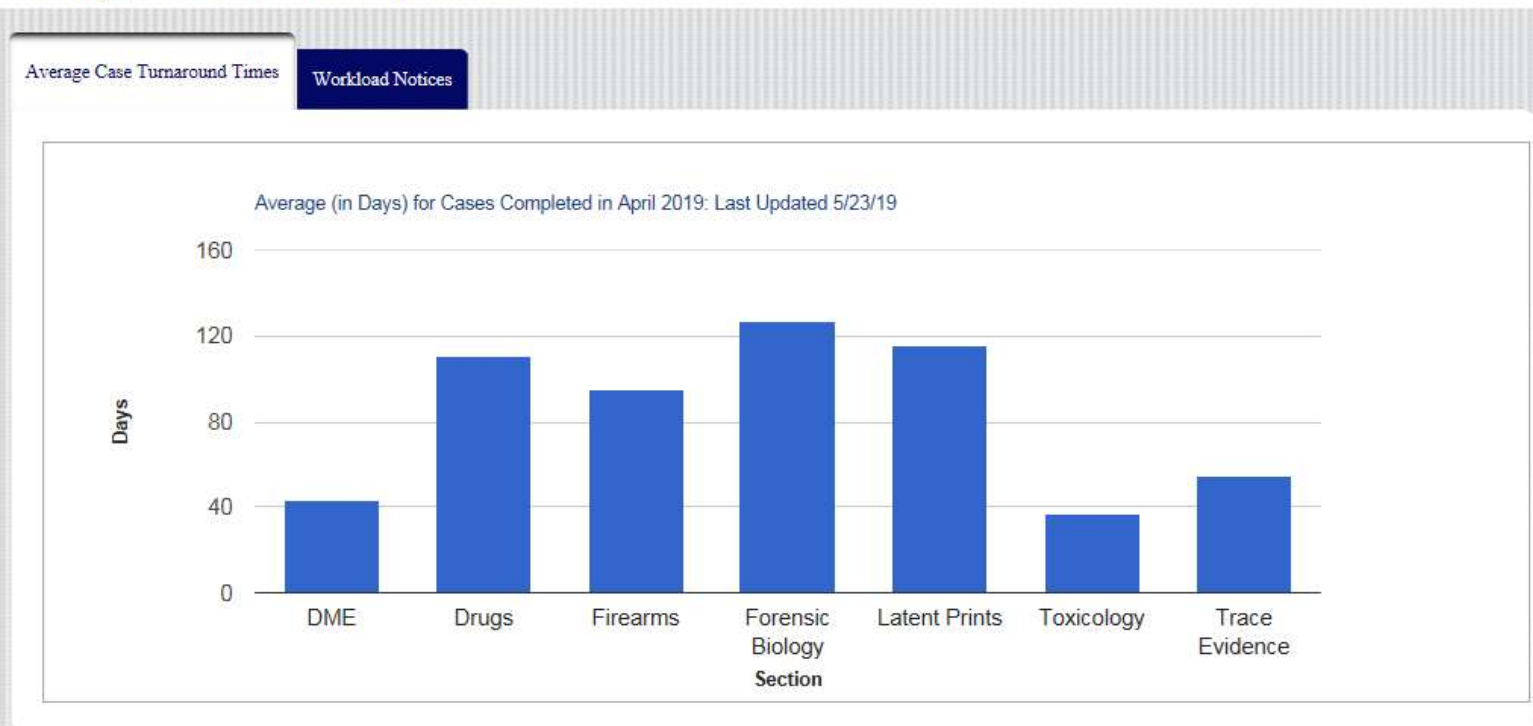
End of December Statistics	Backlog as of May 1, 2019	Average TAT for Cases Completed in April	Backlog Trend
Controlled Substances	11,877	111	↓
Digital & Multimedia Evidence	199	43	↑
Firearms & Toolmarks	1,429	95	↓
Forensic Biology (DNA)	1,947	127	↓
Latent Prints & Impressions	663	115	↑
Toxicology	981	37	↓
Trace Evidence	79	54	↓

Monthly Case Statistics Online



Virginia.gov > Department of Forensic Science > About DFS > Average Case Turnaround Times

Average Case Turnaround Times

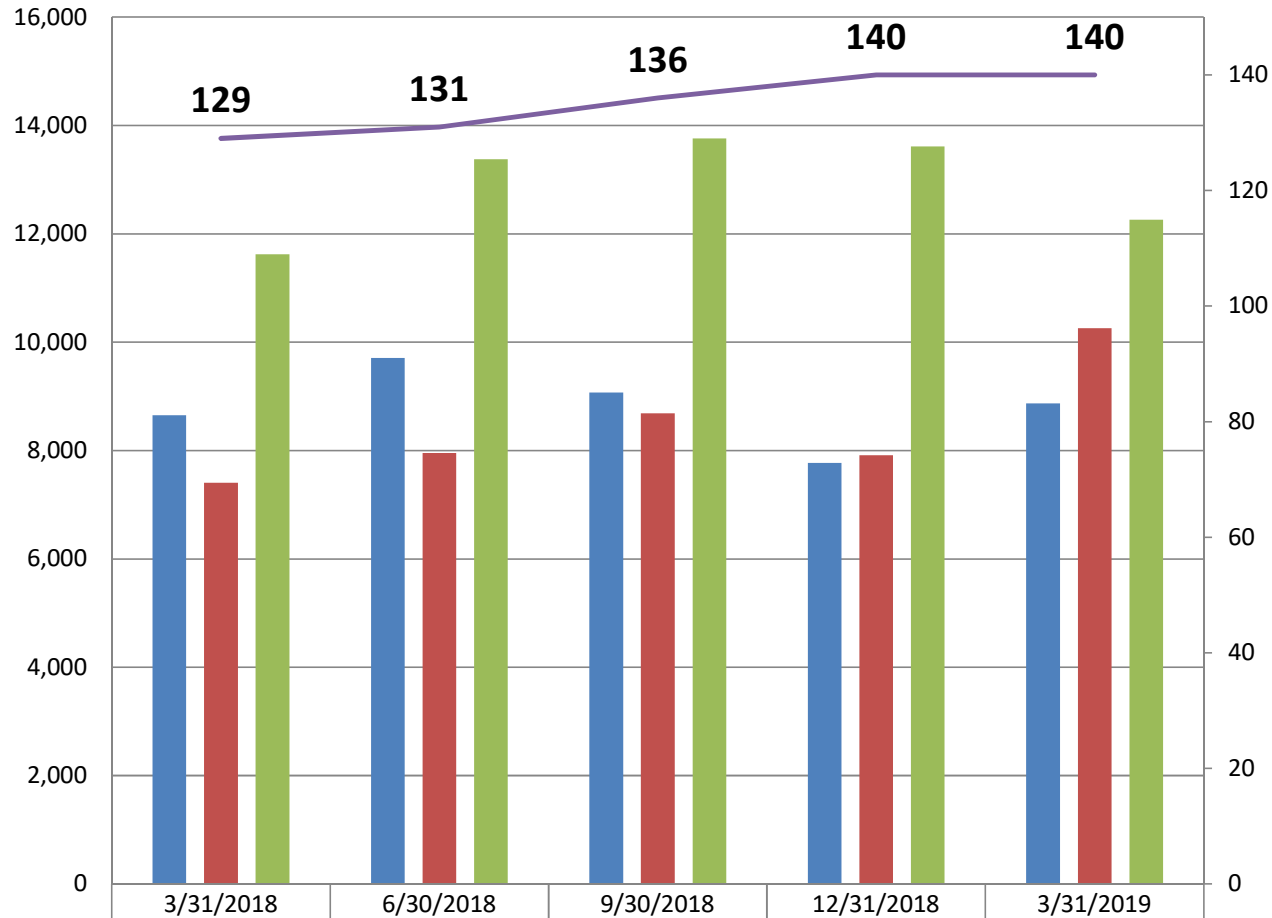


<http://www.dfs.virginia.gov/about-dfs/current-turnaround-times/>

Controlled Substances

Number of Cases

Number of Days

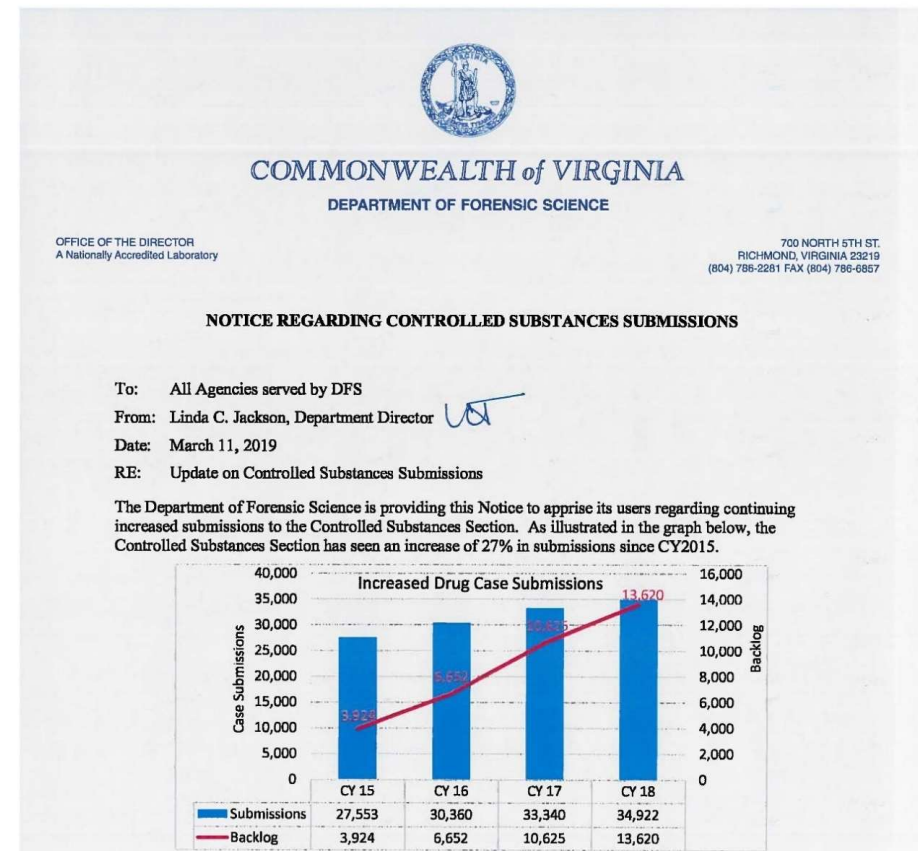


■ Cases Received*	8,648	9,707	9,069	7,767	8,870
■ Cases Completed	7,401	7,951	8,685	7,913	10,254
■ Caseload	11,619	13,375	13,759	13,613	12,260
— Average Days in System	129	131	136	140	140

Controlled Substances Submission Notice



- Update from initial 2017 notice
- Case Submissions
- New positions / training
- Overtime
- Outsourcing
- Transferring cases to normalize case turnaround times

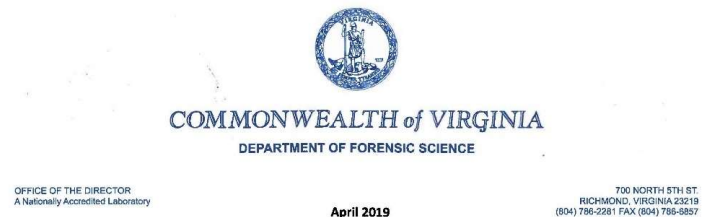


Controlled Substances Updates



Actions underway:

- Outsourcing
 - Have sent 681 cases to contract lab
 - Sending 75 cases per week
 - Reports are sent with explanatory letter
 - Reanalyzing 1% of cases as quality assurance



Re: Controlled Substances Cases Outsourcing

The Department of Forensic Science (DFS or the Department) has contracted with NMS Labs (NMS) for the outsourced testing of selected controlled substances cases. The attached Certificate of Analysis was prepared by NMS as a result of its analysis of the submitted controlled substances evidence in this case. Virginia Code §§ 19.2-187 and 19.2-187.01 provide for the admissibility of certificates of analysis and evidence of chain of custody when such analyses are performed by a laboratory authorized by the Department of Forensic Science. Authenticated copies of the Notice of Contract Award and associated contract documents are available upon request. To request authenticated copies of the Notice of Contract Award and contract with NMS, please contact Department Counsel, Amy M. Curtis, at (804) 786-2281.

If the Commonwealth's Attorney's Office receives notification that the defendant will object to the admissibility of the Certificate of Analysis from NMS and the case is going forward to trial, the evidence may be resubmitted to the Department for reanalysis. DFS will reanalyze the evidence on an expedited basis and provide a Certificate of Analysis prepared by DFS so that a DFS examiner will be available to testify at trial to the results of the reanalysis. For evidence submitted to the Western Laboratory, the Commonwealth's Attorney's Office may request reanalysis by contacting the Controlled Substances Section Supervisor listed below.

For general questions about the outsourcing of Controlled Substances cases, please contact:

- Chemistry Program Manager Scott Maye @ (804) 588-4168.

For case specific questions, please contact:

- Western Controlled Substances Section Supervisor Chris Bryant @ (540) 283-5927.

Please contact the Western Evidence Receiving Section at (540) 283-5906 regarding the availability of the submitted evidence for pickup.

Sincerely,


Linda C. Jackson
Director



NMS Labs
 Integrated Forensic Services
 850 Eagle Boulevard, Warminster, PA 18974
 e-mail: BUX@nmsslabs.com Phone: (844) 276-1182 Fax: (215) 366-1501
 Barry K. Logan, Ph.D. F-ABFT, Laboratory Director

CONFIDENTIAL



Drug Chemistry Final Report
 Report Issued 04/19/2019 13:26

To: 147971
 Virginia DFS - Central Lab, Richmond
 700 North 5th Street
 Suite 300
 Richmond, VA 23219

Case ID Number 19-WLG-004731
 Agency Number C19-20190215

Name(s)/(DOB):
 NOT GIVEN
 RICHMOND POLICE

NMS Reports

- Contain all information required for accreditation

Item(s) Received:

Lab Item #	Agency Item #	Description
1	(1)	Four knot-sealed colorless plastic bags containing white solid material

Received Date	Delivery Method Description	Name/Airbill
4/1/2019	FedEx	7748 1988 7770

Results and Conclusions:

Lab Item #	Compound/Comment	Result
1	Cocaine	Confirmed
	Weight	0.37 g (gross)
	4 sample(s) tested	

Method of Analysis:

Lab Item #	Analysis Reported Name
1	Color Test, Gas Chromatography/Mass Spectrometry (GC/MS), Weight/Volume Determination

Reference Comment(s):

Cocaine is a Virginia Schedule II substance.

The remainder of the submitted evidence is scheduled to be returned unless alternate arrangements are made by you prior thereto.

I certify that I performed the above analysis or examination as an employee of NMS Labs and that the above is an accurate record of the results and interpretations of that analysis or examination.



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 e-mail: BUX@nmsslabs.com Phone: (844) 276-1182 Fax: (215) 366-1501
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CONFIDENTIAL

I affirm that I have reviewed all data used to produce this report.

Case 19-WLG-004731 was electronically signed on
 04/19/2019 13:26

Melanie F. Liston

Melanie F. Liston, B.S., F-ABC, Forensic Chemist

Controlled Substances Updates



Actions underway:

- Hire additional staff based on projections
 - All positions are filled
 - Anticipated training completion (10)
 - Jun 2019 – 2 Central
 - Aug/Sept 2019 – 3 Northern & 3 Western
 - Nov 2019 – 2 Northern
 - Just beginning in May/June 2019 (5)
 - 1 Eastern, 1 Northern, 3 Western

Industrial Hemp - 2018 Farm Bill



- Removes hemp from the definition of marijuana in the federal Controlled Substances Act (21 U.S.C. § 812(c)).
- Establishes regulatory framework for the commercial production of hemp.
- Allows states to apply to USDA for primary regulatory authority over the production of hemp.
 - State must have procedure for testing THC levels.
 - State must have procedure for disposal of plants where THC concentration is too high.
- State can restrict the cultivation of hemp or prohibit its cultivation altogether, but it cannot prohibit the transportation or shipment of hemp or hemp products lawfully produced through the state.
- Signed by the President and effective on 12/20/18.

Federal Hemp Definition



“Section 297A. Definitions.

In this subtitle:

(1) HEMP.—The term ‘hemp’ means the plant *Cannabis sativa* L. and any part of that plant, including the seeds thereof and all derivatives, extracts, cannabinoids, isomers, acids, salts, and salts of isomers, whether growing or not, with a delta-9 tetrahydrocannabinol concentration of not more than 0.3 percent on a dry weight basis.”

HB1839/SB1692 Industrial Hemp Bills



- HB1839 (Marshall) and SB1692 (Ruff)
- Signed by Governor as emergency legislation effective 3/21/19
- The definition of marijuana was amended to exclude:
(1) industrial hemp that is in the possession of registered person or his agent; and (2) any “hemp product.”



HB1839/SB1692 Industrial Hemp Bills



- Industrial hemp is defined as any part of the plant *Cannabis sativa* that has a THC concentration that is no greater than that allowed by federal law (which is currently a THC concentration of no greater than 0.3%)
- “Hemp product” means any finished product “that is otherwise lawful and that contains industrial hemp, including rope, building materials, automobile parts, animal bedding, animal feed, cosmetics, oil containing an industrial hemp extract, or food or food additives for human consumption.”
- The affirmative defense in § 3.2-4113 remains.

VA Affirmative Defense Legislative Language



§ 54.1-3401. Definitions.

- "Marijuana" means any part of a plant of the genus Cannabis whether growing or not, its seeds, or its resin; and every compound, manufacture, salt, derivative, mixture, or preparation of such plant, its seeds, or its resin. Marijuana shall not include any oily extract containing one or more cannabinoids unless such extract contains less than 12 percent of tetrahydrocannabinol by weight, nor shall marijuana include the mature stalks of such plant, fiber produced from such stalk, or oil or cake made from the seeds of such plant, unless such stalks, fiber, oil, or cake is combined with other parts of plants of the genus Cannabis. Marijuana shall not include (i) industrial hemp, as defined in § 3.2-4112, **that is possessed by a person registered pursuant to subsection A of § 3.2-4115 or his agent**, or (ii) a hemp product, as defined in § 3.2-4112, containing a tetrahydrocannabinol concentration of no greater than 0.3 percent that is derived from industrial hemp, as defined in § 3.2-4112, that is grown, dealt, or processed in compliance with state or federal law.

§ 3.2-4113. Production of industrial hemp lawful.

- A. It is lawful for a grower or his agent to grow, a dealer or his agent to deal in, or a processor or his agent to process industrial hemp in the Commonwealth for any lawful purpose. No grower or his agent, dealer or his agent, or processor or his agent shall be prosecuted ...for the possession, growing, dealing, or processing of industrial hemp. In any complaint, information, or indictment, and in any action or proceeding brought for the enforcement of any provision of Article 1 (§ 18.2-247 et seq.) of Chapter 7 of Title 18.2 or the Drug Control Act (§ 54.1-3400 et seq.), **it shall not be necessary to negate any exception, excuse, proviso, or exemption contained in this chapter or the Drug Control Act, and the burden of proof of any such exception, excuse, proviso, or exemption shall be on the defendant.**

Hemp and Marijuana



- “Hemp” is Marijuana in Virginia unless possessed by a registered grower, processor or dealer
- Duquenois-Levine field tests cannot differentiate
- DEA and VA are working together to validate a Cannabis Typification test used in Europe
- Evaluates the ratio of THC and CBD concentrations
- Full identification may require quantitative analysis



[CBD] > [THC]

[THC] > [CBD]

Forensic Biology



- PERK submissions: Increased due to passage of Comprehensive PERK Legislation (July 2016)
- Northern, Eastern and Western labs are fully staffed; Central Lab has 3 examiners in training and 1 in hiring process
- Grant-funded overtime: PERK data analysis and CODIS upload/searching for PERK grant cases analyzed by private laboratory
- Implementing male DNA screening for PERKs
- Received training and software to validate new probabilistic modeling (statistical) software

Historical PERK Testing



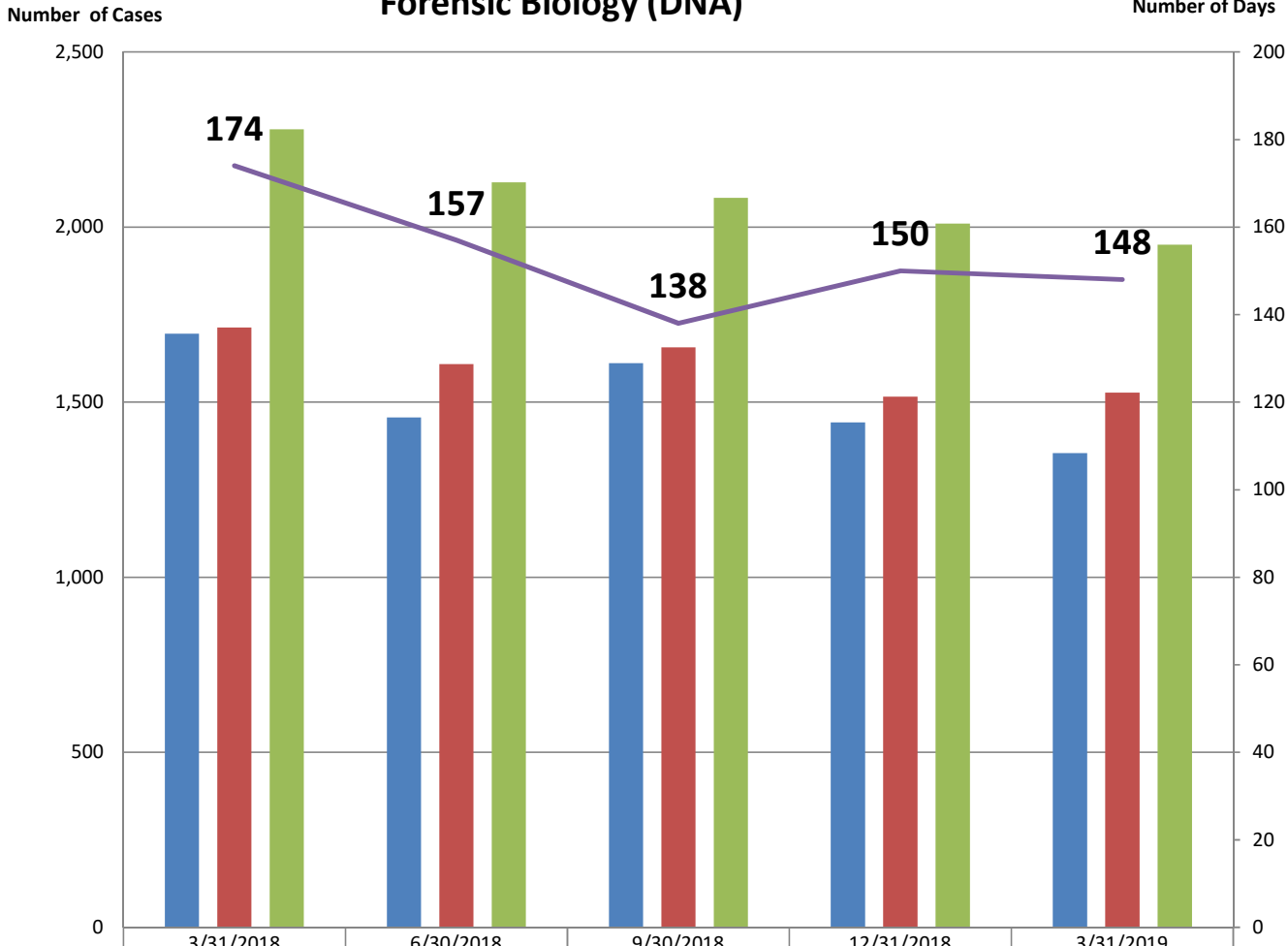
New York County District Attorney's (DANY) Sexual Assault Kit Backlog Elimination Program

- Testing for kits collected prior to 7/1/14
- Award period: Ended 9/30/18
- 1,805 kits were submitted to Bode from 99 agencies
- Testing completed by Bode for all submitted kits
- Reviews completed by DFS for all submitted kits

National Sexual Assault Kit Initiative Competitive Grant (SAKI) FY 2016

- Testing for kits collected 7/1/14 – 6/30/16
 - 1,232 kits were identified in the inventory
 - 772 kits submitted to Bode as of 5/1/19
 - Testing completed/data received for 468 kits as of 5/1/19
 - Reviews completed by DFS for 158 kits
- PERK Tracking Software
 - Beta testing begins June 2019
 - Use will be required on July 1, 2020

Forensic Biology (DNA)



Cases Received*	1,695	1,456	1,611	1,442	1,354
Cases Completed	1,713	1,608	1,656	1,515	1,527
Caseload	2,279	2,127	2,083	2,010	1,949
Average Days in System	174	157	138	150	148



Toxicology



Initiatives Implemented

- Created six additional forensic scientist positions (FY17)
- Created research section for method development and validation
- New methodology for novel psychoactive substances (NPS)
- New methodology for fentanyl and synthetic opioids

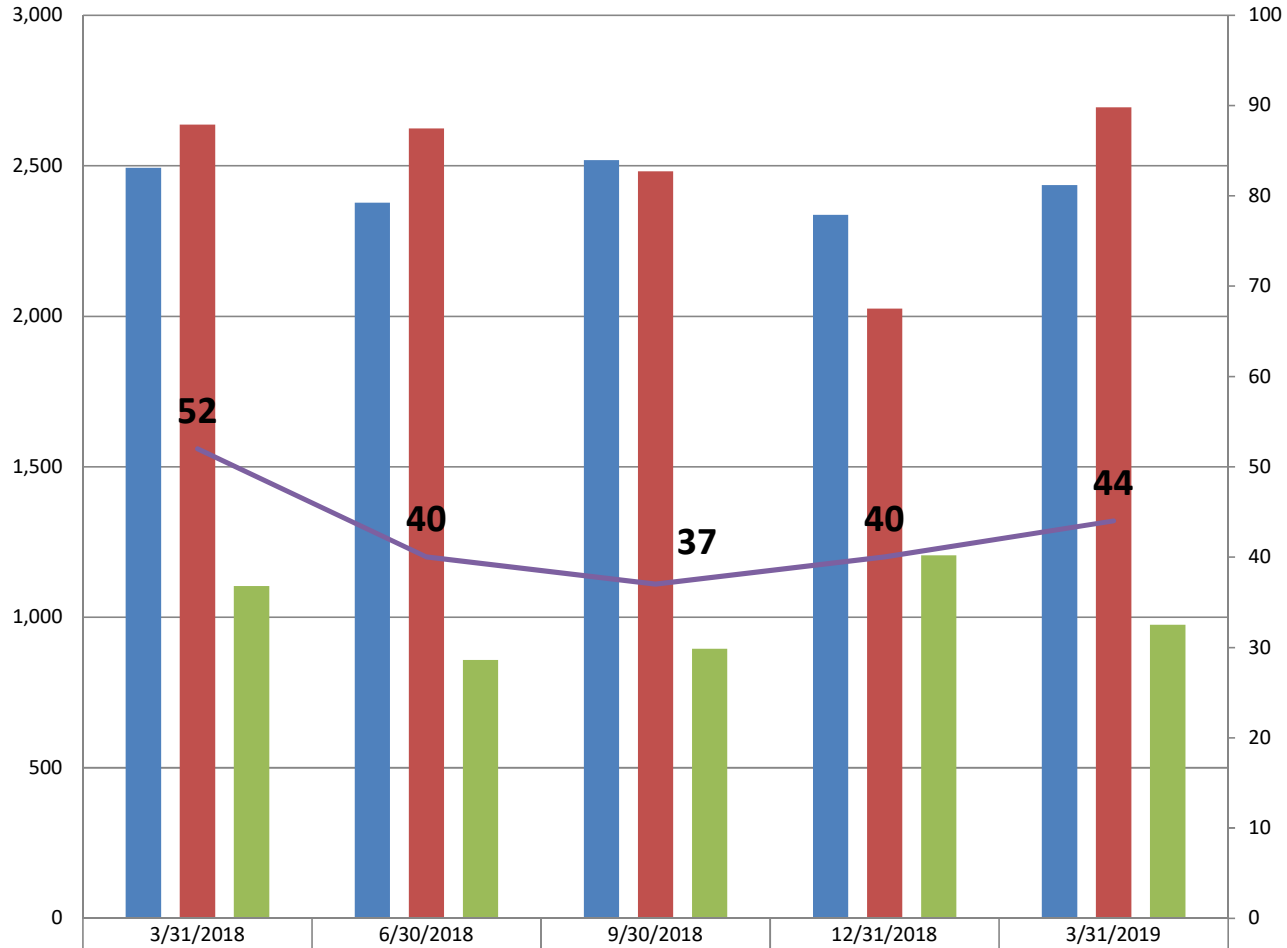
Initiatives in Process

- Developing new methods:
 - More efficient and specific screening method
 - Method for measuring the quantity of fentanyl and synthetic opioids
- Investigating automated sample preparation methods

Toxicology

Number of Cases

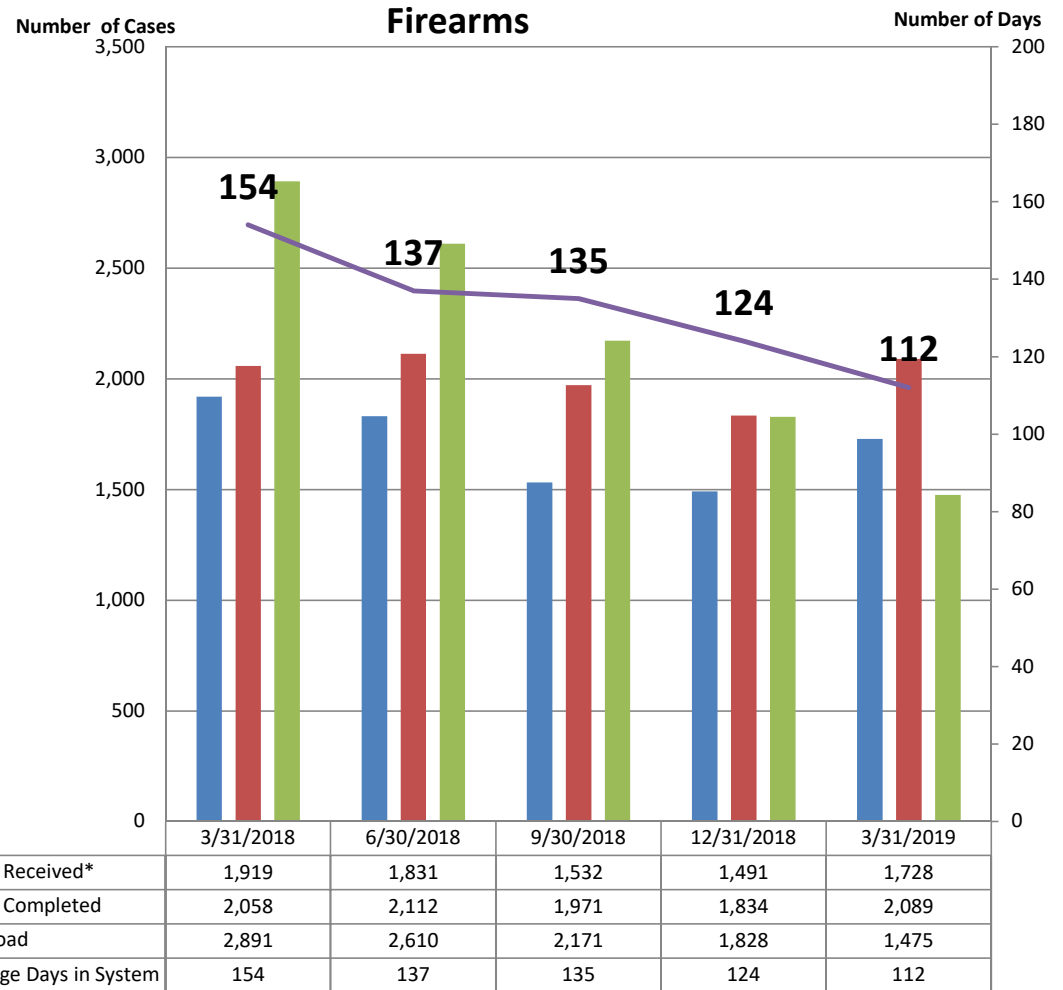
Number of Days



Cases Received*	2,493	2,377	2,518	2,336	2,435
Cases Completed	2,636	2,623	2,481	2,025	2,694
Caseload	1,104	858	895	1,206	975
Average Days in System	52	40	37	40	44

Firearms

- Provided additional resources for personnel and equipment in FY17 / FY18
- Created 8 Forensic Scientist NIBIN positions
 - Limited scope examiner performing function testing and NIBIN
 - Training: ~ 6 months

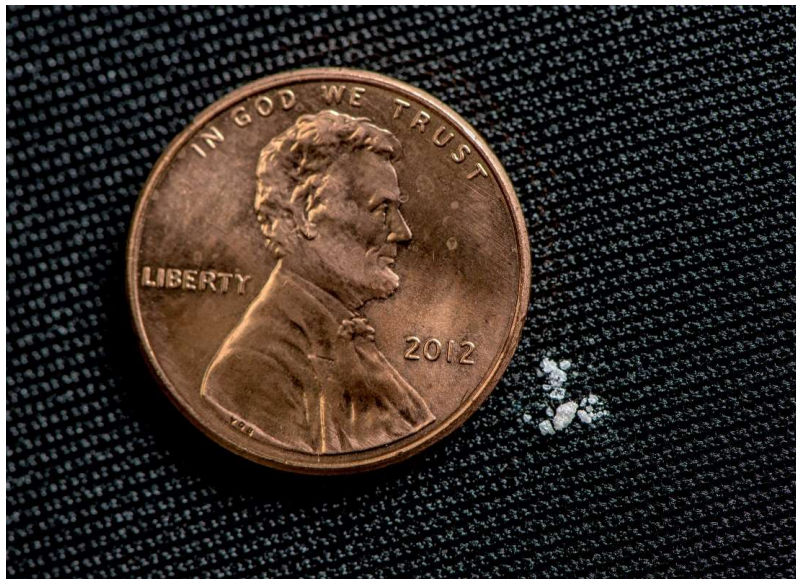




QUESTIONS?

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WWW.VIRGINIA.GOV



Lethal Dose of Fentanyl in Most People



Controlled Substances Examiner using Safety Snorkel