



Department of Forensic Science Update to the Senate Finance Committee

Linda C. Jackson, Director
Virginia Department of Forensic Science
June 25, 2019

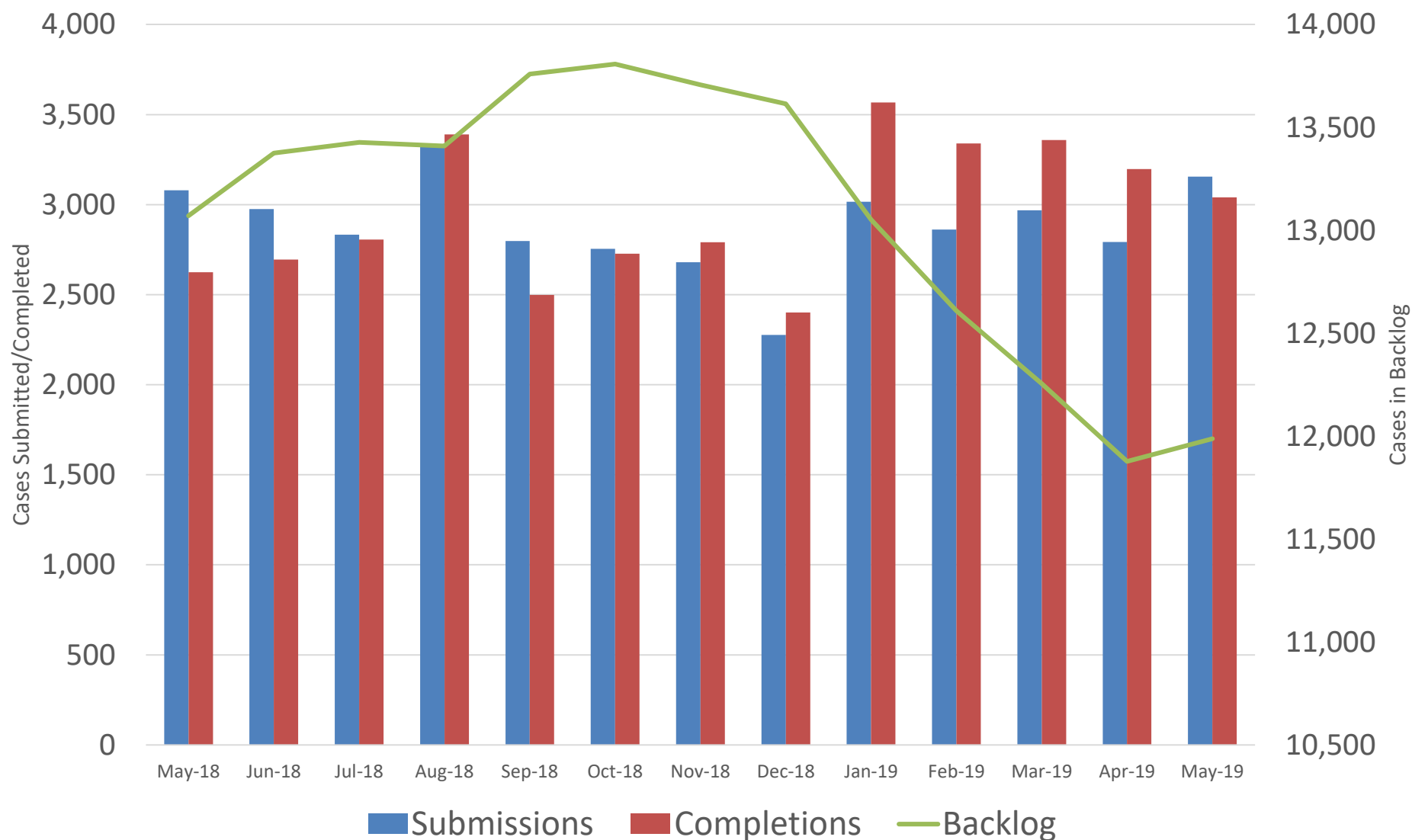
DFS Backlog and Average Turnaround Times (TAT)



| End of May Statistics | Avg. Turnaround Times (days) for Cases Completed in May | Backlog as of June 1, 2019 | Backlog Trend |
|-------------------------------|---|-------------------------------|---------------|
| Controlled Substances | 114 | 11,988 | ↓ |
| Digital & Multimedia Evidence | 228 | 202 | ↑ |
| Firearms & Toolmarks | 76 | 1,395 | ↓ |
| Forensic Biology (DNA) | 118 | 1,907 | ↓ |
| Latent Prints & Impressions | 108 | 675 | ↑ |
| Toxicology | 40 | 1,016 | ↔ |
| Trace Evidence | 39 | 77 | ↔ |



Recent Controlled Substances Statistics



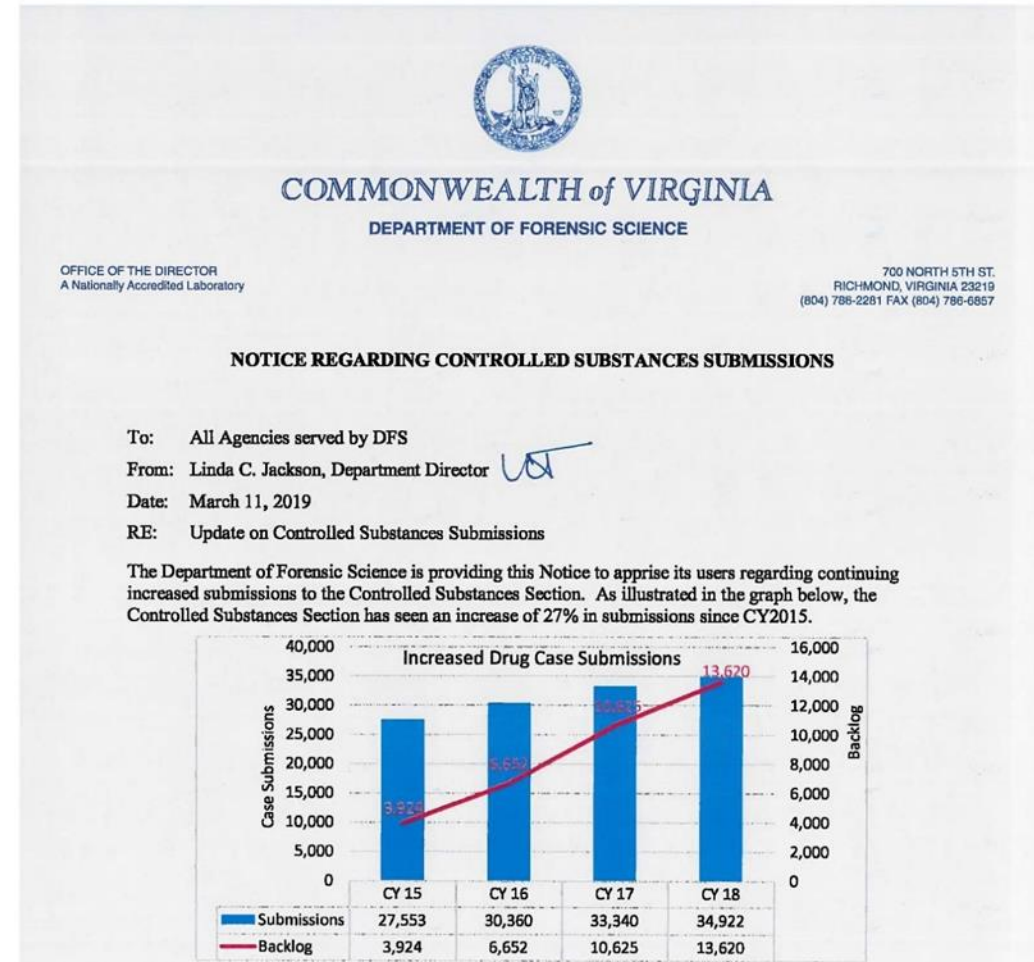
Current Projection:
DFS will reduce to
an overall 60 day
average case
turnaround time by
December 2020,
assuming case
submissions
increase 3% per
year.

Controlled Substances Updates



Actions completed:

- ✓ Purchase additional equipment due to increased staff
- ✓ Hire support staff (2 wage administrative and 2 wage evidence receiving)
- ✓ Hire additional scientists (12)
- ✓ Require mandatory overtime (Jan. – May 2019, 40 hours per scientist)
- ✓ Disseminate Notice Regarding Controlled Substances Submissions – March 11, 2019



Controlled Substances Updates



Actions underway:

- Outsourcing
 - Since February, 907 cases have been sent to contract lab
 - 621 cases completed by contract lab
 - Sending 75 cases per week
 - Reports are sent with explanatory letter
 - Reanalyzing 1% of cases as quality assurance

Training Schedule for Hired Scientists:

1. Complete (2)
 - ✓ Jun 2019 – 2 Central
2. Anticipated training completion (8)
 - ☐ Aug/Sept 2019 – 3 Northern & 3 Western
 - ☐ Nov 2019 – 2 Northern
3. Just beginning in May/June 2019 (5)
 - ☐ 1 Eastern, 1 Northern, 3 Western

Note: Three Controlled Substances Forensic Scientists left through attrition, which is why DFS has 15 positions in the training report.

Industrial Hemp - 2018 Farm Bill



- Removes hemp from the definition of “marihuana” 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, “using post-decarboxylation or other similarly reliable methods.”
 - 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 through the state of lawfully produced hemp or hemp products.
- Signed by the President and effective on 12/20/18.

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 (currently 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 for Industrial Hemp, which is what allowed DFS to remove its fiscal impact from the bills.

VA Affirmative Defense Legislative Language



§ 54.1-3401. Definitions.

- "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. . . . 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
- Supply chain/procurement for law enforcement will need to be established



[CBD] > [THC]

[THC] > [CBD]

DFS Notice Regarding Marijuana Field Tests and Analytical Scheme and Reporting



Disseminated on May 23, 2019

| | |
|----------------|--|
| Plant Material | <ul style="list-style-type: none">• Reported as marijuana with statement indicating “concentration of cannabinoid(s) not determined.”• If labeled as a “hemp product”, the sample will be screened for THC concentration once the 1% semi-quantitative method is implemented. |
| Residues | <ul style="list-style-type: none">• If residue only contains naturally occurring cannabinoids, reported as marijuana with statement indicating “concentration of cannabinoid(s) not determined.”• If non-naturally occurring cannabinoids are present, cannabinoids identified will be reported (no schedule provided). |
| Edibles | <ul style="list-style-type: none">• Cannabinoids identified will be reported (no schedule provided). Certificate will include statement that “The Department of Forensic Science does not currently have a validated method to quantify delta-9 Tetrahydrocannabinol in food products.” |
| Oils | <ul style="list-style-type: none">• If THC concentration is equal to or greater than 12%, reported as hashish oil (Schedule I) with the THC concentration.• If THC concentration is less than 12% with naturally occurring cannabinoids present, reported as marijuana with THC concentration.• If THC concentration is less than 12% with non-naturally occurring cannabinoids present, cannabinoids identified will be reported (no schedule provided).• If only non-naturally occurring cannabinoids present, cannabinoids identified will be reported (no schedule provided). |

Forensic Biology - DNA



- PERK submissions: Increased due to passage of Comprehensive PERK Legislation (July 2016)
 - Six examiner positions provided to coincide with legislation
- 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
- New methodology to increase efficiency:
 - Implementing male DNA screening for PERKs
 - Received training and software to validate new probabilistic modeling (statistical) software



Historical PERK Testing

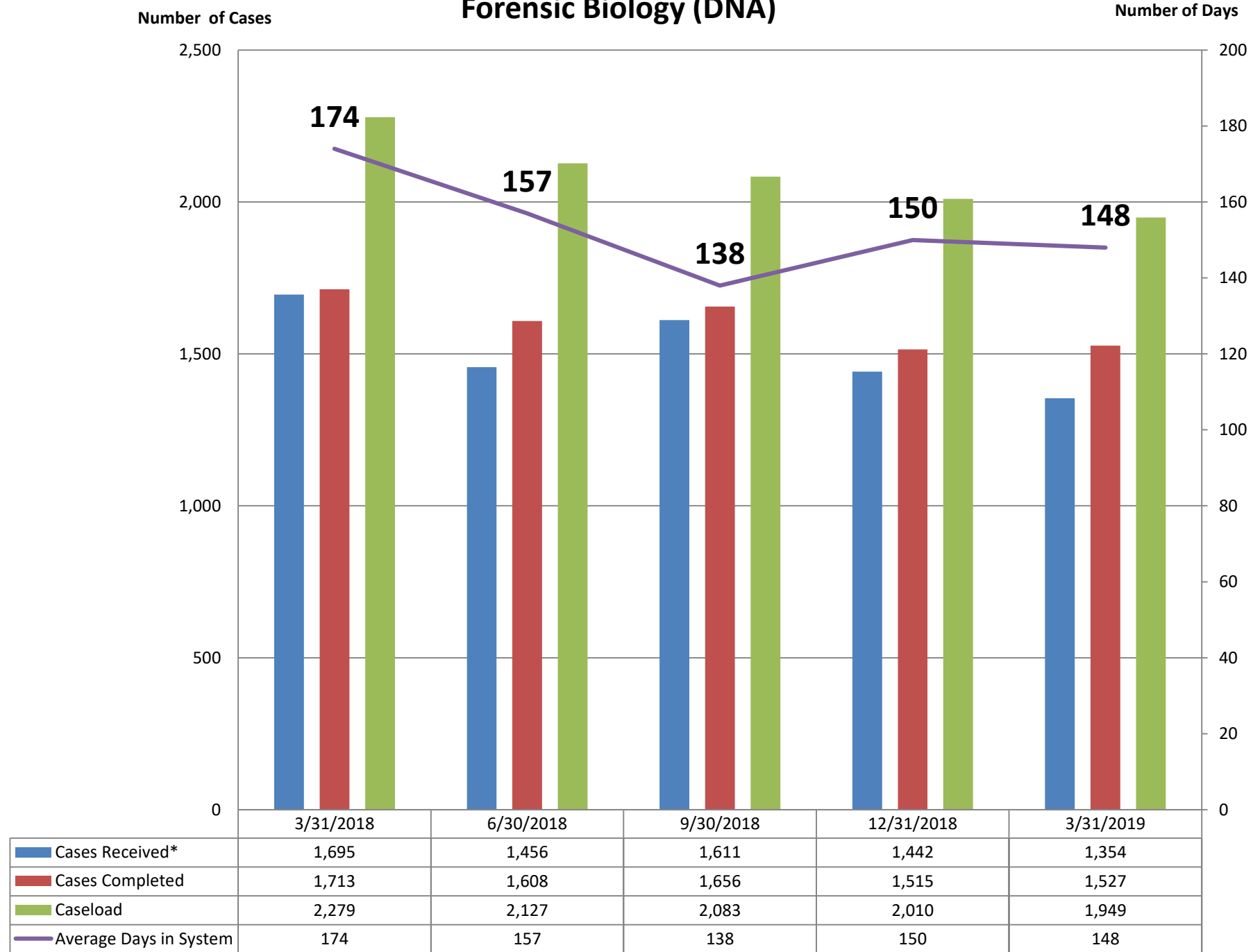
New York County District Attorney's (DANY) Sexual Assault Kit Backlog Elimination Program

- 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
 - 871 kits submitted to Bode as of 5/31/19
 - Testing completed/data received for 570 kits as of 5/31/19
 - Reviews completed by DFS for 313 kits
- PERK Tracking Software
 - Beta testing began June 2019
 - Use of system required on July 1, 2020
- Grant scheduled to end 9/30/19, but OAG seeking extension

Forensic Biology (DNA)



Toxicology



Initiatives Implemented

- Hired six additional forensic scientists (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

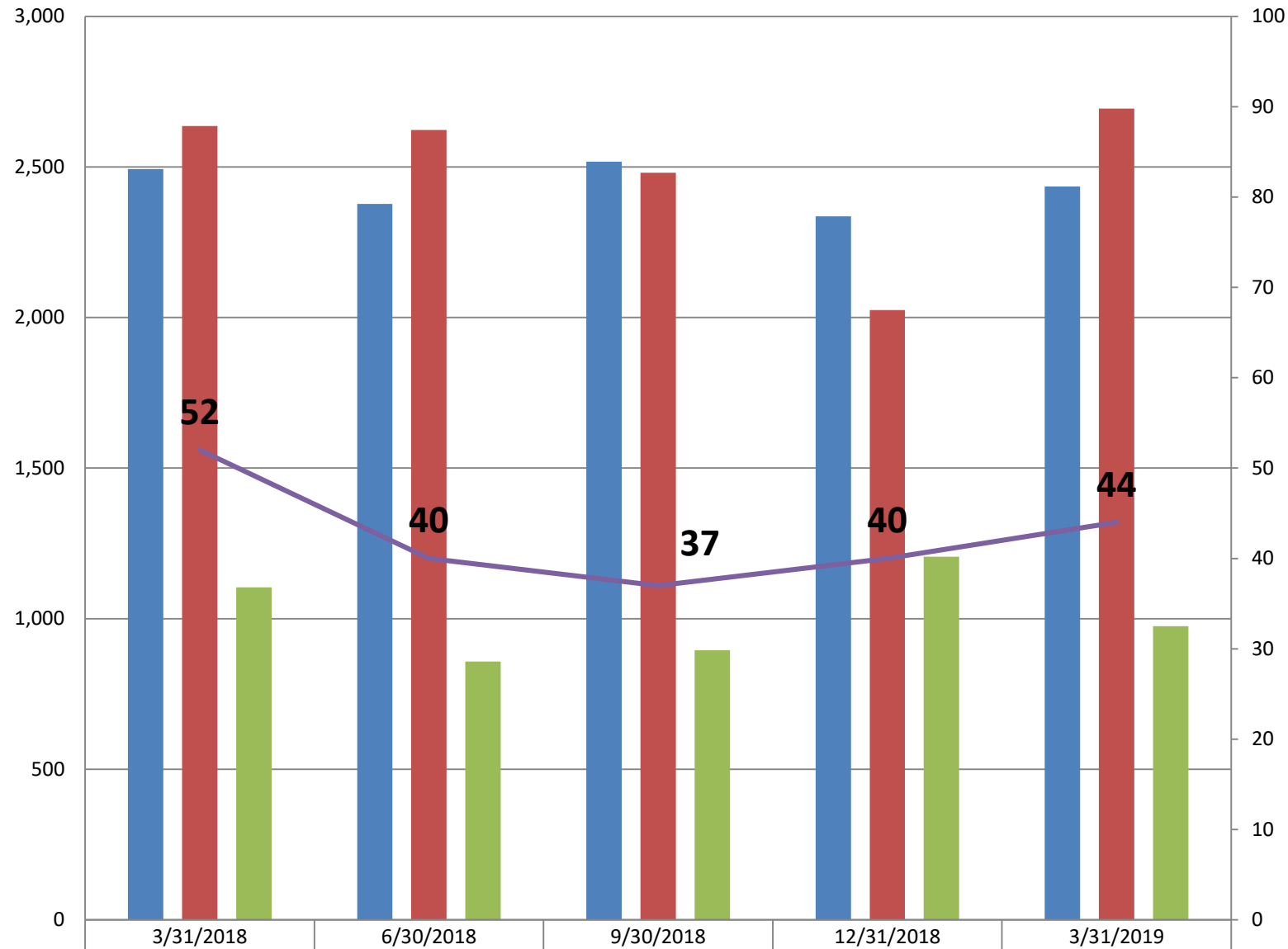
- Developing new methods:
 - More efficient and specific screening method
 - Method for measuring the quantity of fentanyl and synthetic opioids
- Investigating automated sample preparation methods

Toxicology



Number of Cases

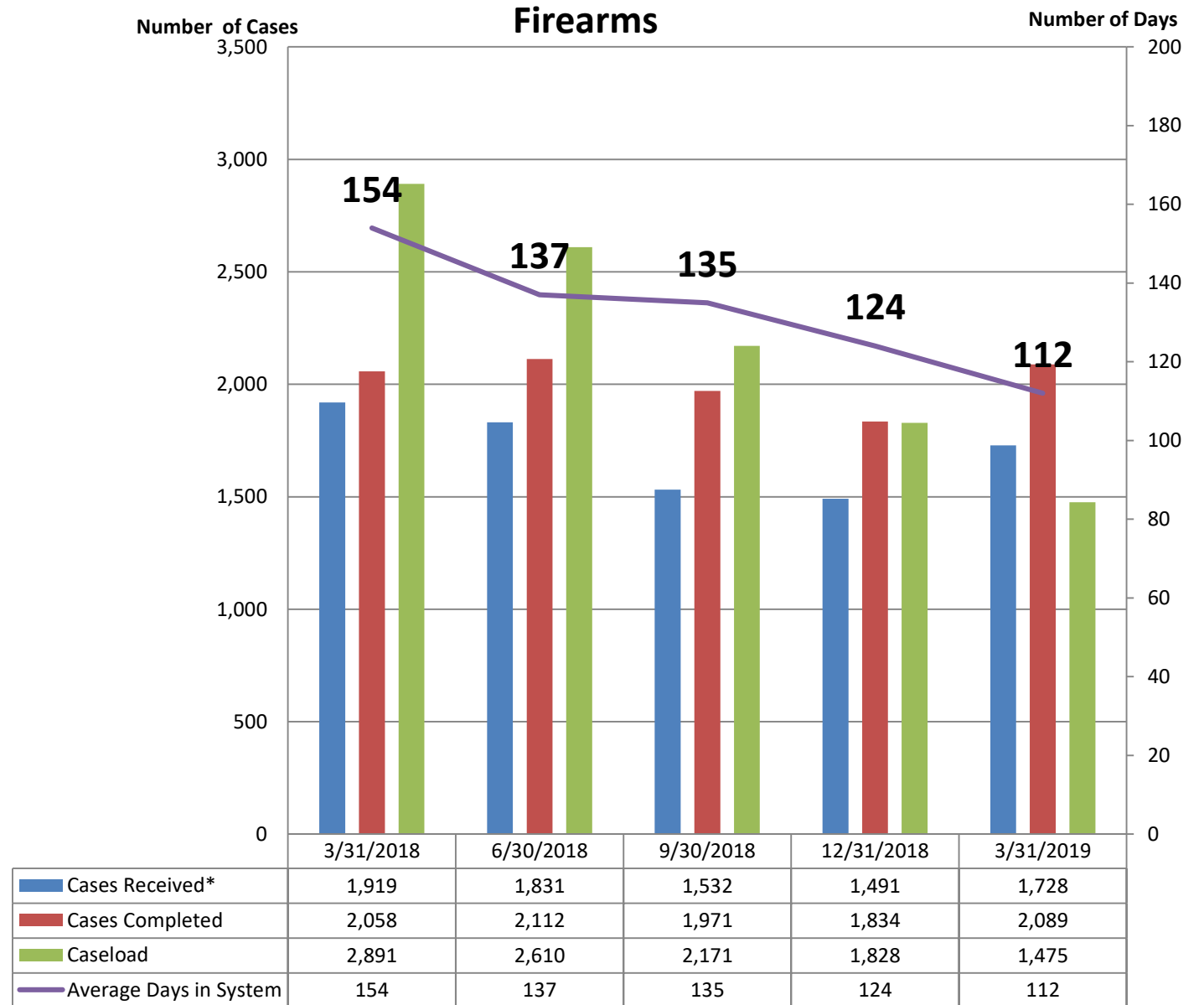
Number of Days



| | | | | | |
|------------------------|-------|-------|-------|-------|-------|
| 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
- Hired 8 Forensic Scientist NIBIN positions
 - Limited scope examiner performing function testing and NIBIN
 - Training: ~ 6 months



Central Facility Update



- Biotech 2 in Richmond houses both DFS and OCME
 - Both DFS and OCME lease additional space
- Construction Manager at Risk
 - SFCS is the Project Architect
 - Skanska is the Construction Manager
- Approved Scope was expanded in FY19/FY20 budget
 - DGS investigating land options for new facility
 - HB2057 (Carr) removes the requirement that the central office and facilities of the Office of the Chief Medical Examiner be located in the City of Richmond (effective July 1, 2019)





QUESTIONS?

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