

Department of Forensic Sciences FY2020

Agency Department of Forensic Sciences

Agency Code FRO

Fiscal Year 2020

Mission The mission of the Department of Forensic Sciences (DFS) is to produce high quality, timely, accurate, and reliable forensic science with the use of the best available technology and practices, unbiased science, and transparency with the overall goal of enhancing public health and safety.

Strategic Objectives

Objective Number	Strategic Objective
1	Provide high-quality forensic science and public health laboratory analysis to stakeholders so they can execute their own core services to the public in a timely manner. Our three overarching core services are: crime scene evidence collection, forensic science analysis, and public health laboratory diagnostic, analytical, and emergency response testing.
2	Provide administrative support, training and risk management oversight to our laboratory and technical units by ensuring compliance with the legal mandate to make analysis documents available. The science lab units will each have administrative support services to maintain operational capacity in the form of training, continuing education, safety, risk management, quality and legal support.
3	Create and maintain a highly efficient, transparent, and responsive District government.

Key Performance Indicators

Measure	Directionality	FY 2017 Actual	FY 2018 Actual	FY 2019 Actual	FY 2020 Target
1 - Provide high-quality forensic science and public health laboratory analysis to stakeholders so they can execute their own core services to the public in a timely manner. Our three overarching core services are: crime scene evidence collection, forensic science analysis, and public health laboratory diagnostic, analytical, and emergency response testing. (16 Measures)					
Percent of crime scenes responded to within 30 minutes	Up is Better	New in 2018	69%	84.5%	90%
Percent of priority cases as designated by the contributor and marked in LIMS completed within 60 days from the date the analyst was assigned the case	Up is Better	89.8%	100%	99.5%	90%
Percent of Crime Scene Reports completed within 14 calendar days	Up is Better	New in 2018	75.3%	93.8%	95%
Percent of OCME samples ordered in microbiology will be tested and reported within 12 business days of receipt in the laboratory	Up is Better	100%	100%	94.8%	90%
Percent of all firearms will be transferred to the Evidence Control Branch (ECB) within 21 days after all forensic tests are completed	Up is Better	New in 2019	New in 2019	96.8%	90%
Percent of all drugs will be transferred to Evidence Control Branch (ECB) within 30 days after all forensic testing is completed.	Up is Better	New in 2019	New in 2019	99.5%	90%
Percent of all jewelry received will be transferred to Evidence Control Branch (ECB) within 14 days.	Up is Better	New in 2019	New in 2019	100%	90%
Percent of all rabies STAT specimen with human exposure are tested and reported to the Zoonotic Disease Epidemiologist within 24 hours or 1 business day of receipt in the laboratory	Up is Better	New in 2019	New in 2019	99%	95%
Percent of cases received in the Forensic Chemistry Unit will be tested and reported within 60 days of receipt in the laboratory.	Up is Better	New in 2019	New in 2019	97%	90%

Measure	Directionality	FY 2017 Actual	FY 2018 Actual	FY 2019 Actual	FY 2020 Target
Percent of proficiency tests received in the Biomonitoring and Analytical Chemistry Unit (BACU) will be completed and passed.	Up is Better	New in 2019	New in 2019	95%	80%
Percent of high priority biological terrorism and chemical terrorism samples analyzed and reported within 24 hours	Up is Better	New in 2019	New in 2019	100%	90%
Percent of evidence processing cases completed within three (3) business days of receipt by unit	Up is Better	New in 2019	New in 2019	48.6%	90%
Percent of requested homicide cases completed within 60 days from the date the evidence was received in the unit	Up is Better	94.3%	97.5%	98.9%	90%
Percent of time eligible cartridge casings are entered into NIBIN within two (2) business days of receipt by agency.	Up is Better	New in 2019	New in 2019	55.3%	90%
Percent of digital evidence cases completed within five (5) business days of receipt of legal authority and device(s).	Up is Better	New in 2019	New in 2019	91.5%	90%
Percent of samples ordered in molecular diagnostics will be tested and reported within 72 hours or 3 business days of receipt in the laboratory	Up is Better	New in 2019	New in 2019	91.7%	90%
2 - Provide administrative support, training and risk management oversight to our laboratory and technical units by ensuring compliance with the legal mandate to make analysis documents available. The science lab units will each have administrative support services to maintain operational capacity in the form of training, continuing education, safety, risk management, quality and legal support. (6 Measures)					
Percent of scientists meeting technical competency requirements	Up is Better	99.5%	100%	99.5%	95%
Percent of safety incident reports submitted to DFS Safety Officer within two business days	Up is Better	92.3%	100%	100%	100%
Percent of overtime events preauthorized	Up is Better	New in 2019	New in 2019	Not Available	80%
Percent of FOIA responses returned on time (15 business days)	Up is Better	New in 2019	New in 2019	100%	100%
Percent of QCAR situation and root cause analysis sections completed within 30 business days	Up is Better	New in 2019	New in 2019	98.3%	100%
Percent of FOIA responses returned early (before 15 business days)	Up is Better	New in 2019	New in 2019	73.3%	100%

Core Business Measures

Measure	Directionality	FY 2017 Actual	FY 2018 Actual	FY 2019 Actual
3 - Create and maintain a highly efficient, transparent, and responsive District government. (10 Measures)				
Contracts and Procurement - Percent of Small Business Enterprise (SBE) annual goal spent	Up is Better	New in 2019	New in 2019	Waiting on Data
Financial Management - Percent of local budget de-obligated to the general fund at the end of year	Down is Better	New in 2019	New in 2019	Waiting on Data
Financial Management - Quick Payment Act (QPA) Compliance - Percent of QPA eligible invoices paid within 30 days	Up is Better	New in 2019	New in 2019	100%
Human Resource Management - Average number of days to fill vacancy from post to offer acceptance	Down is Better	New in 2019	New in 2019	Waiting on Data
Human Resource Management - Percent of eligible employee performance evaluations completed and finalized in PeopleSoft	Up is Better	New in 2019	New in 2019	Waiting on Data

Measure	Directionality	FY 2017 Actual	FY 2018 Actual	FY 2019 Actual
Human Resource Management - Percent of eligible employees completing and finalizing a performance plan in PeopleSoft	Up is Better	New in 2019	New in 2019	100%
IT Policy and Freedom of Information Act (FOIA) Compliance - Percent of "open" data sets identified by the annual Enterprise Dataset Inventory published on the Open Data Portal	Up is Better	New in 2019	New in 2019	Not Available
IT Policy and Freedom of Information Act (FOIA) Compliance - Percent of FOIA Requests Processed in more than 25 business days - statute requirements allow 15 business days and a 10 day extension	Down is Better	New in 2019	New in 2019	Waiting on Data
Human Resource Management – Percent of new hires that are DC residents (excludes temporary workers and contractors) (Updated by OCA)	Up is Better	New in 2020	New in 2020	New in 2020
Human Resource Management – Percent of employees that are DC residents (excludes temporary workers and contractors) (Updated by OCA)	Up is Better	New in 2020	New in 2020	New in 2020

*Mayoral agencies include agencies under the Health and Human Services, Education, Public Safety and Justice, Operations and Infrastructure, Economic Development, and Internal Services clusters. It excludes all independent agencies and select EOM agencies. The HR management, Financial Management, IT Policy and FOIA Compliance, and Contracts and Procurement measures were collected for all mayoral agencies in FY 2019. OCA calculates these measure based on summary-level data from various agencies, and cannot verify the accuracy of any calculations that were made to the source data prior to its receipt by OCA. The 2019 DC Enterprise Data Inventory (EDI), which contains data on "open" data sets published on DC's Open Data Portal, is current as of March 9, 2019. Due to data lags, FY 2019 data for the following core business measures will be published in March 2020: Contracts and Procurement - Percent of Small Business Enterprise (SBE) annual goal spent; Financial Management - Percent of local budget de-obligated to the general fund at the end of year; Human Resource Management - Average number of days to fill vacancy from post to offer acceptance; Human Resource Management - Percent of eligible employee performance evaluations completed and finalized in PeopleSoft; and IT Policy and Freedom of Information Act (FOIA) Compliance - Percent of FOIA Requests Processed in more than 25 business days - statute requirements allow 15 business days and a 10 day extension.

Operations

Operations Header	Operations Title	Operations Description	Type of Operations
1 - Provide high-quality forensic science and public health laboratory analysis to stakeholders so they can execute their own core services to the public in a timely manner. Our three overarching core services are: crime scene evidence collection, forensic science analysis, and public health laboratory diagnostic, analytical, and emergency response testing. (4 Activities)			
PUBLIC HEALTH LAB UNIT	Provide timely testing of pathogens of public health significance	The Public Health Laboratory will provide diagnostic, analytical and emergency response testing for biological pathogens and chemical agents from clinical, environmental, or food sources.	Daily Service
FORENSIC SCIENCE LAB UNIT	Conduct timely forensic analysis	The Forensic Science Laboratory division will conduct coordinated and timely forensic analysis in accordance with industry standards and accreditation guidelines.	Daily Service
CRIME SCENE TECHNICAL UNIT	Conduct professional and expedient crime scene responses, collection, and storage of evidence. and evidence collection	The Crime Scene Sciences Division will serve as stewards of evidence by maintaining custody of evidence from collection to storage at DFS.	Daily Service
LABORATORY EXPANSION	Improve laboratory efficiency through technological advances	DFS will continue to expand its capabilities as a top tier forensic and public health laboratory by implementing new scientific programs and investing in laboratory equipment infrastructure.	Key Project
2 - Provide administrative support, training and risk management oversight to our laboratory and technical units by ensuring compliance with the legal mandate to make analysis documents available. The science lab units will each have administrative support services to maintain operational capacity in the form of training, continuing education, safety, risk management, quality and legal support. (3 Activities)			
PROFESSIONAL DEVELOPMENT	Offer training curriculum for professional development	Provide a training curriculum to DFS employees to ensure they maintain skill sets, meet standards of excellence, and deliver high quality, accurate, and reliable services.	Daily Service

Operations Header	Operations Title	Operations Description	Type of Operations
LABORATORY CERTIFICATION	Monitor quality compliance with certification requirements	Assurance that DFS produces products that are fit for stakeholders' purposes by maintaining ISO 17025 accreditation for the agency, maintains Clinical Laboratory Improvement Act (CLIA) certification, as well as, compliance with applicable federal regulations such as the Division of Select Agents and Toxins (DSAT).	Daily Service
RISK MANAGEMENT	Oversee the laboratory environment is both safe and healthy for staff	Establish, manage and ensure compliance of federal, district, and local regulations and policy; and provide medical surveillance to staff, mandates safety training for all staff members, and audits laboratory facilities to ensure a safe work environment.	Daily Service
3 - Create and maintain a highly efficient, transparent, and responsive District government. (6 Activities)			
PERFORMANCE STATISTICS	Strategically forecast, analyze, and present agency data to determine levels of resource efficiency and goal attainment	Analyze raw data and present graphical visuals of real-time workload from data obtained from LIMS, and other databases to better inform strategic leadership decisions to enhance laboratory services.	Key Project
INFORMATION TECHNOLOGY	Ensures all IT systems and databases are operational and secure for scientists and agency personnel to deliver reports and services to stakeholders	Promote and facilitate the effective integration of technology into the DFS divisions by developing, supporting, and maintaining a highly effective, reliable, secure, and innovative information systems to support agency needs.	Daily Service
PROCUREMENT	Efficiently procure vital services and resources	Proactively procure the necessary services, supplies, and equipment for the laboratories to meet the daily needs of scientists and agency personnel.	Daily Service
HUMAN RESOURCES	Responsible for human capital management and recruitment for DFS and serves as liaison to external entities	Supports the hiring of new employees and provides employee data on residency, on-board time, and performance plan completion from data pulled from PeopleSoft.	Daily Service
LEGAL	Provide legal advice to the agency and facilitate stakeholder engagement	Facilitate stakeholder engagement, legally advise director level decision-making, train scientists for court testimony and presentation of scientific expertise, draft contracts and agreements with government and private organizations, and process discovery requests.	Daily Service
EDUCATION AND GRIEF COUNSELING	Education and Grief Counseling Services	Education and Grief Counseling Services	Daily Service

Workload Measures

Measure	FY 2017 Actual	FY 2018 Actual	FY 2019 Actual
1 - Conduct professional and expedient crime scene responses, collection, and storage of evidence. and evidence collection (2 Measures)			
Number of evidence items received	88,683	74,360	77,253
Number of crime scenes processed	7196	5874	6542
1 - Conduct timely forensic analysis (10 Measures)			
Number of service requests from stakeholders	3724	3927	4194
Number of CODIS database hits	156	209	229
Number of NIBIN database hits	385	835	775
Number of AFIS database entries	9035	9179	7238
Number of CODIS database entries	433	581	652

Measure	FY 2017 Actual	FY 2018 Actual	FY 2019 Actual
Number of NIBIN database entries	4136	3667	4257
Number of AFIS database hits	1516	2097	1553
Number of firearms processed for test fire	2226	1995	2229
Number of Gigabytes of data processed	New in 2019	New in 2019	114,140
Number of items processed in Evidence-processing unit	New in 2019	New in 2019	19,805
1 - Provide timely testing of pathogens of public health significance (3 Measures)			
Number of tests performed for each recieved public health sample	3505	4133	9681
Number of validation efforts performed	31	38	28
Number of Proficiency Tests performed	79	167	46
2 - Monitor quality compliance with certification requirements (3 Measures)			
Number of Quality Corrective Action Requests opened	109	60	40
Number of stakeholder complaints received	4	0	0
Number of internal audits	4	5	13
2 - Offer training curriculum for professional development (1 Measure)			
Number of training hours completed by employees	2220	3400	3709
2 - Oversee the laboratory environment is both safe and healthy for staff (1 Measure)			
Number of safety incidents reported	41	23	27
3 - Efficiently procure vital services and resources (1 Measure)			
Number of requisitions submitted into PASS	364	290	323
3 - Ensures all IT systems and databases are operational and secure for scientists and agency personnel to deliver reports and services to stakeholders (1 Measure)			
Number of IT service requests received	3921	3479	2953
3 - Provide legal advice to the agency and facilitate stakeholder engagement (4 Measures)			
Number of Subpoenas received and uploaded to LIMS	New in 2018	926	1544
Number of discovery requests received	New in 2018	1081	1226
Number of MOA/MOUs the agency enters into with other agencies	New in 2018	14	10
Number of FOIA Requests received	New in 2018	16	15
3 - Responsible for human capital management and recruitment for DFS and serves as liaison to external entities (1 Measure)			
Number of employees on-boarded	72	40	28

Strategic Initiatives

Strategic Initiative Title	Strategic Initiative Description	Proposed Completion Date

Strategic Initiative Title	Strategic Initiative Description	Proposed Completion Date
Conduct professional and expedient crime scene responses, collection, and storage of evidence. and evidence collection (1 Strategic Initiative)		
Digitization of Legacy MPD Crime Scene Records	In FY20, the Central Evidence Unit (CEU) will continue working on a digitization process for the preservation, retention, and the retrieval of original MPD crime scene files stored at DFS. In collaboration with the Office of the Secretary, Public Records Section, CEU will review existing laws, rules and retention schedules while creating a database of all the crime scene files.	09-30-2020
Conduct timely forensic analysis (4 Strategic initiatives)		
Develop Firearms Curriculum in Partnership with a local District of Columbia university.	DFS will develop a forensic firearms minor degree curriculum in partnership with a university from the District of Columbia. This initiative is aligned with the Mayor's policy to encourage DC residents to learn about the unique benefits, education, learning modalities, and various degrees and certificates offered through the university partners. Currently there is a significant shortage of qualified firearms examiners in the United States of America. This shortage impacts the ability of DFS to find qualified personnel to fill critical positions within the Firearms Examination Unit. Establishment of this program with a local university will build a reliable and continuous source of future firearms examiners who likely reside within the District of Columbia.	09-30-2020
Implementation of the Next Generation Sequencing (NGS) in casework.	The Forensic Biology Unit will implement Next Generation Sequencing (NGS) in casework in an effort to improve the agency's DNA testing capabilities to make DNA interpretations easier. NGS testing will also provide investigative leads concerning probable, ancestry as well as eye and hair color. These DNA testing capability enhancements will have a direct impact on reduce crime in all neighborhoods and reverse the recent spike in homicides by providing greater forensic intelligence supported by validated scientific data. The Forensic Biology Unit will have a minimum of two (2) full-time analysts complete the NGS training program to include competency testing and participate in the required proficiency testing as outlined by the FBI's Quality Assurance Standards for Forensic DNA Testing. These analysts will become fully qualified to perform Next Generation Sequencing on casework.	09-30-2020
Validate the Evofinder as a virtual comparison microscope for firearms examinations	The Firearms Examination Unit (FEU) will validate the Evofinder Automated Ballistic Identification system to use as a virtual comparison microscope in casework. This system is a scanning device that generates 3 dimensional images of bullets and cartridge cases which examiners use for comparison purposes. This makes comparisons easier compared to the traditional method of using a comparison microscope with a 2 dimensional view. By the end of the fiscal year, all qualified firearms examiners will be able to use the instrument in firearms related cases such as homicides. These test methods will provide valuable information and assist in criminal investigations and court proceedings.	09-30-2020
Crime Gun Intelligence Center (CGIC) 7 District (Ward 8) initiative will broaden in scope to include the 6 District (Ward 7).	The FY19 Crime Gun Intelligence Center (CGIC) 7 District (Ward 8) initiative will broaden in scope to include the 6 District (Ward 7). The Firearms Examination Unit (FEU) will prioritize all fired cartridge cases collected and upload the items into the National Integrated Ballistic Information Network (NIBIN). Searches are conducted with the NIBIN to provide possible leads in firearms related shooting in investigations in the District. The database also contains information of unsolved cases involving firearms. The Department of Forensic Sciences (DFS) will work with Metropolitan Police Department (MPD) to collect all fired cartridge cases to ensure the timely submission of all firearm related evidence.	09-30-2020
Ensures all IT systems and databases are operational and secure for scientists and agency personnel to deliver reports and services to stakeholders (2 Strategic initiatives)		
Selection of new LIMS or Enhanced LIMS for DFS	Based on FY19 initiative for examining the current Laboratory Information Management System (LIMS), DFS will begin the process of consideration and selection of a new or enhanced LIMS.	09-30-2020
Expansion of Forensic Evidence Digital Storage	Augmentation of current FlashBlade storage capability is needed due to increasing demands for digital storage capacity. A load balancing switch will be added and integrated into the DFS architecture.	09-30-2020
Improve laboratory efficiency through technological advances (2 Strategic initiatives)		

Strategic Initiative Title	Strategic Initiative Description	Proposed Completion Date
Expand sexually transmitted disease (STD) testing capabilities and capacity	DC Public Health Laboratory will expand to include syphilis testing in the District. This goal will allow the DC Department of Health (DC Health) to better surveil for sexually transmitted disease (STD) trends in the District. This will also assist DC Health in reducing the cost of outsourced testing and improve turnaround time for reporting results. PHL will follow the Centers for Disease Control and Prevention (CDC) testing recommendations to ensure accurate, reliable, and prompt results to help improve patient care.	09-30-2020
Paperless Laboratory starting with the Latent Fingerprint Unit	Space for the storage of numerous paper files at DFS is limited. This initiative will develop a paperless file approach that could be utilized throughout DFS. The Latent Fingerprint Unit (LFU) will be the pilot unit for this effort that will explore a process to eliminate hardcopy case files and create e-copy case files. By converting all MS Word case work documentation to fillable PDF format. Additionally electronic signatures will be incorporated to achieve all ISO 17025 requirements. All documents would be imported into LIMS as an electronic case record. The initiative will explore any difficulties associated with this approach and will make recommendations for supporting quality assurance and quality control documents as well as standard operating procedures.	09-30-2020
Offer training curriculum for professional development (1 Strategic Initiative)		
Establish DFS Training Strategy	Develop DFS Training Strategy to include Individual Training Plans (IDP) that correlate appropriate training to the designated position descriptions	09-30-2020
Oversee the laboratory environment is both safe and healthy for staff (1 Strategic Initiative)		
Expand DFS Knowledge of the Quality System	Expand and track internal quality specific training to increase employee familiarization with the latest laboratory guidelines and regulations.	09-30-2020
Provide timely testing of pathogens of public health significance (3 Strategic initiatives)		
Improve capacity to respond to biological and chemical terrorism and other emerging infectious disease threats	In FY20, the DC Public Health Laboratory will improve its capacity to be prepared for potential bioterrorism and chemical terrorism events, in addition to emerging or re-emerging highly infectious diseases. The initiative will improve the laboratory's ability to conduct accurate and timely testing of these threat agents to ensure that all residents and visitors to DC are kept safe. Evidence of success will also include implementation of new tests that will help to diagnose highly infectious diseases that may be in the District.	09-30-2020
Expand whole Genome Sequencing (WGS) capabilities to assist in outbreak investigations	The DC Public Health Laboratory will expand its Whole Genome Sequencing (WGS) capabilities to transition from targeted viral detection and phylogenetic analysis to a whole genome approach. Furthermore, the DC Public Health Laboratory will work to expand this capacity to other pathogens. This expansion will allow the use of the maximum data and best technology available to make epidemiological links to outbreaks and disease in the District.	09-30-2020
Implementation of testing for drugs of abuse	The DC Public Health Laboratory will implement testing for drugs of abuse to support the Department of Behavioral Health's (DBH) needs for better diagnostics. This testing will provide the opportunity to offer more accurate and detailed information for the DBH clinics so that better assessments and clinical monitoring can be conducted for their client base. Additionally, drug surveillance trends will be provided to both DBH and the Department of Health (DC Health) that will allow for better intervention programs to be conducted.	09-30-2020
Responsible for human capital management and recruitment for DFS and serves as liaison to external entities (1 Strategic Initiative)		
Analyze DFS Attrition and DC Resident Hiring	Analyze Agency attrition and DC Resident hiring using various methods to try and determine the root cause(s) and conduct appropriate analysis to provide charted data for executive review with recommendations for tangible action as needed.	09-30-2020