

The Commonwealth of Massachusetts  
 Executive Office of Public Safety and Security  
 Office of the Chief Medical Examiner



**Maura T. Healey**  
 Governor

*Headquarters*

**Mindy J. Hull**  
 Chief Medical Examiner

**Kimberley Driscoll**  
 Lieutenant Governor

**720 Albany Street  
 Boston, MA 02118-2518**

**General Office Numbers**  
 Tel: (617) 267-6767  
 Tel: (800) 962-7877  
 Fax: (617) 266-6763

**Terrence M. Reidy**  
 Secretary

February 10, 2023

The Honorable Michael J. Rodrigues  
 Chair, Senate Committee on Ways and Means  
 State House, Room 212  
 Boston, MA 02113

The Honorable Aaron Michlewitz  
 Chair, House Committee on Ways and Means  
 State House, Room 243  
 Boston, MA 02113

Dear Chairpersons:

Pursuant to the FY 23 General Appropriation Act, the Office of the Chief Medical Examiner (OCME) is required to submit to the House and Senate Committee on Ways and Means a report, no later than January 16, 2023, detailing: (a) the current caseload of the office and each of its medical examiners and the caseload for fiscal year 2022; (b) the number of procedures performed in fiscal year 2022; (c) the current turnaround time and backlogs; (d) the current response time to scenes; (e) the number of cases completed in fiscal year 2022; (f) the current status of accreditation with the National Association of Medical Examiners; (g) progress in identification and completion of reports; and (h) progress in improving delays in decedent release.

This report highlights the remarkable work accomplished by over 150 highly trained and dedicated OCME professionals who consistently provide the Commonwealth with the highest standards of forensic pathology and death investigation services. I want to commend the unwavering professionalism, service and compassion demonstrated by the OCME team and acknowledge their integral role in solving crimes, identifying trends, and providing answers to grieving loved ones. I am proud to present this detailed report reflecting our agency's achievements and reaffirm the OCME's commitment to delivering the highest quality of medicolegal death investigations in service to communities across the Commonwealth.

Please contact me if you have any questions concerning the information contained in this report or require additional information.

Sincerely,

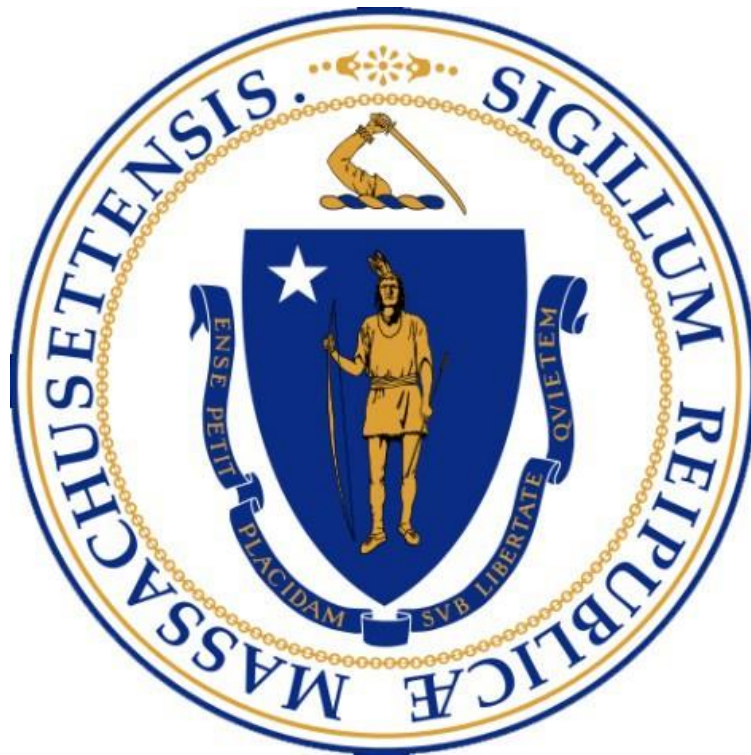
Mindy J. Hull, MD  
 Chief Medical Examiner

cc: Terrence Reidy, Secretary, Executive Office of Public Safety and Security  
 Kerry Collins, Undersecretary for Forensic Science and Technology

**The Office of the Chief Medical Examiner**

**Annual Caseload Report**

**February 2023**



**Governor Maura T. Healey**

**Lieutenant Governor Kimberley Driscoll**

**Secretary of Public Safety Terrence Reidy**

**Chief Medical Examiner Dr. Mindy Hull**

## **Overview**

The Office of the Chief Medical Examiner (OCME) was established through G.L. c. 38 to deliver, under the supervision and control of the chief medical examiner, a comprehensive system of medicolegal investigative services to the citizens of the Commonwealth. The OCME works in collaboration with District Attorneys, the Attorney General, Courts, funeral homes, hospitals, academic centers, insurance companies, organ procurement organizations, fire departments, and local and state police as well as supporting families and friends of decedents.

## **OCME Facilities**

The OCME is comprised of four offices and employs 153 employees representing multiple disciplines; medical examiners (forensic pathologists); a forensic anthropologist and a forensic odontologist; medical examiner assistants; intake specialists; administrative support for medical examiners; medicolegal investigators; cremation specialists; accountants; and managers.

The OCME Headquarters is in Boston and operates twenty-four hours a day, seven days a week. Twelve full-time medical examiners, including the Chief Medical Examiner and one part-time medical examiner, are assigned to the Boston office. There are three regional offices located in Westfield, Worcester, and Sandwich. The Westfield office operates three shifts, twenty-four hours a day, seven days per week and is staffed with four full-time medical examiners, including the Deputy Chief Medical Examiner, and one part-time medical examiner. The Worcester office is located at UMass Memorial Hospital in a space that is shared with the Hospital's pathology department. Normally, this office operates one shift, three days per week, and is staffed with one contract medical examiner. In July 2020, operations in this office were suspended to minimize potential COVID-19 transmission within this shared medical facility and the contract medical examiner was reassigned to the Westfield office to assist with the examination of Worcester cases that are now transported to the Westfield office. The Sandwich office operates seven days per week for mostly two shifts and is staffed with two full time medical examiners and a contract medical examiner.

## **Case Statistics**

The OCME's mission is to determine cause and manner of death for deaths that occur in Massachusetts under violent, suspicious, or unexplained circumstances and to release work products, namely certifications of death and autopsy reports, in a timely fashion. To fulfill its unique mission, the OCME maintains a robust team composed of forensic pathologists, medical examiner assistants, medicolegal investigators, as well as individuals proficient in administrative, fiscal, legal, and managerial functions.

G.L. c. 38 § 3 lists the deaths that must be reported to the Office of the Chief Medical Examiner. Based on the circumstances of the death, the medical examiner will either accept or decline jurisdiction. Table 1 shows the reporting statistics for the past four fiscal years.

**Table 1**  
**Reporting Statistics<sup>1</sup>**

	<b>Number of Cases Reported to the OCME</b>	<b>Number of Cases Accepted</b>	<b>Number of Cases Declined</b>
<b>FY19</b>	16,023	7,020	9,003
<b>FY20</b>	17,584	7,515 <sup>2</sup>	10,069
<b>FY21</b>	18,366	7,947	10,419
<b>FY22</b>	18,355	8,458	9,879

**Number Procedures Performed in Fiscal Year 2022**

Table 2 reports all the procedures for the past four fiscal years.

**Table 2**  
**Number of Procedures Performed**

<b>Fiscal Year</b>	<b>Autopsy</b>	<b>External Examinations</b>	<b>District Medical Examiners Views</b>	<b>Bones/Tissues</b>	<b>Chart Reviews</b>	<b>Total Accepted Cases</b>	<b>Cremation Views</b>
<b>FY19</b>	1,927	4,083	649	105	256	7,020	29,853
<b>FY20</b>	1,947	4,522	234	135	671	7,509 <sup>3</sup>	34,521
<b>FY21</b>	2,177	4,263	229	108	1,170	7,947	32,488 <sup>4</sup>
<b>FY22</b>	1,903	4,708	248	109	1,490	8,458	34,099

In addition to the autopsies and external examinations, staff medical examiners perform chart reviews on cases identified during cremation authorization views where the cause and manner of death are not properly certified, cases where the body is no longer available, or cases where the decedent’s cause and manner of death is obvious from inspection of medical and other records and no further information would be obtained by transporting the body to the OCME. In cases where a decedent’s body is available and a chart review is deemed appropriate by the on-call medical examiner for determining cause and manner of death, the Medicolegal Investigator (MLI) will examine and photograph the decedent, obtain available medical records, and collect toxicology as determined by the attending medical examiners. The results of the MLI Field’s investigation are provided to the attending medical examiner for certification of death.

District Medical Examiner (DME) views are performed by physicians on contract, whose medical training may be something other than forensic pathology. DMEs perform views in hospitals and funeral homes to certify the cause and manner of death when the death was not the result of foul play, and the cause and manner is apparent from the circumstances of the death and available medical history. Historically, DMEs have played an important role in OCME operations, and their contributions have allowed the OCME and decedents’ legal next of kin to avoid the costs associated with transporting the decedent to and from the OCME when an examination by a forensic pathologist is not necessary. The number of DMEs has declined in recent years, and with limited interest from other physicians to work as a DME, the number of DME cases has decreased by 76% from 1,021 cases in

<sup>1</sup> The data reports that support Table 1 and all subsequent tables are generated from the OCME Case Management and Tracking System (CMTS) (Conduent Software) using Adapt Analytics Platform and Microsoft Excel 2010. There are limitations to the capabilities of these software platforms and extensive manual rectification of the data is necessary in order to provide meaningful statistical workload reports. It is usual and expected given the methodology of this process that insignificant calculation errors may be present; these should not be considered erroneous but rather within an unknown but small margin of error.

<sup>2</sup> Six of the accepted cases were recorded as “Surge” cases pursuant to the OCME’s COVID-19 response. Surge cases that were accepted by the OCME were not for the purpose of determining cause and manner of death, but rather in order to provide short term storage.

<sup>3</sup> The 6 surge cases were not included in this number.

<sup>4</sup> The number of cremation views for FY21 were incorrectly reported in last year’s report as 34,488. The correct number of cremation views conducted in FY21 was 32,488. This was a typographical error in the original report.

FY17<sup>5</sup> to 248 cases in FY22. As a result, those deaths which cannot be assigned to a DME are assigned to staff medical examiners and contract medical examiners, assisted by MLI Field Investigators.

Discovered bones are reported to the OCME and brought in for examination by a medical examiner or the forensic anthropologist. Cremation views are performed by medical examiners, DMEs, cremation specialists, or forensic investigators on bodies intended for cremation or burial at sea in accordance with G.L. c. 38 § 14 to determine that no further examination or inquiry into the death is required.

### Postmortem Toxicology

Postmortem toxicology testing is an integral component of medicolegal death investigations. Since July 2013, the analysis has been performed by the Massachusetts State Police Crime Laboratory. Table 3 shows the postmortem toxicology analysis for FY 22. The average turnaround time (TAT) for toxicology analysis in FY22 was 46.1 days.

**Table 3  
Toxicology Analysis**

Month	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
# of Cases Completed	422	443	411	529	681	733	543	443	676	672	556	409
# of Cases Assigned	536	592	584	480	572	583	505	487	566	541	571	573
# of Cases Pending	793	941	1,107	1,058	944	791	751	790	676	538	550	713
Average TAT	43	47	58	62	54	47	44	46	43	36	30	34

### Medical Examiners' Caseload

Table 4 reports the medical examiners' caseloads for the past four fiscal years.

**Table 4  
Medical Examiners' Caseload for FY 19 -FY 21**

	Autopsy	External Examinations	Chart Reviews	Total
Caseload for FY19	1,927	4,083	256	6,266
Caseload for FY20	1,947	4,522	671	7,140
Caseload for FY21	2,177	4,263	1,170	7,610
Caseload for FY22	1,903	4,708	1,490	8,101

<sup>5</sup> OCME chooses to reference FY17 as the number of DME views peaked this year, then declined each year thereafter.

## Current Caseload by Medical Examiner

Table 5 reports each medical examiner's caseload utilizing data from the first five months of FY23.

**Table 5: Current Caseload by Medical Examiner (July 1, 2022 through November 30, 2022)**

Medical Examiner	Autopsy	External Examinations	Chart Reviews	Total Number of Cases (Autopsy + External Examinations + Chart Reviews)
Dr. Atkinson (FT)	44	117	8	169
Dr. Cannon (FT)	0	2	228	230
Dr. Capó-Martinez (FT)	33	128	9	170
Dr. Dedrick (FT)	39	75	8	122
Dr. Elin (FT)	62	106	9	177
Dr. Evans (Contract 0.5FTE)	15	152	29	196
Dr. Grivetti (FT)	50	195	15	260
Dr. Matthews (FT)	41	195	15	251
Dr. Mourtzinis (FT)	73	153	2	228
Dr. Perry (FT)	46	78	4	128
Dr. Sandler (.5 FTE)	18	74	4	96
Dr. Scordi-Bello (FT)	62	80	0	142
Dr. Shah (FT)	37	253	13	303
Dr. Stanley (FT)	35	110	11	156
Dr. Springer (FT)	60	84	9	153
Dr. Stonebridge (FT) <sup>6</sup>	0	0	0	0
Dr. Vidal	62	164	18	244
Dr. Welton, Deputy Chief Medical Examiner (FT)	69	78	10	157
Dr. Yakubu-Owolewa (FT)	36	98	8	142
Dr. Zane (Contract .5FTE)	0	0	165	165
<b>Total</b>	<b>782</b>	<b>2,142</b>	<b>565</b>	<b>3,489</b>

## Number of Cases Completed in FY 22, Current Turnaround Time, and Backlog Cases

### Current Turnaround Time

Since January 1, 2018, OCME leadership focused attention on the active management of the turnaround time of cases. Successful strategies to improve turnaround time include:

1. an improved case assignment system; the development of a new autopsy report format
2. more rapid acquisition of case specific information due to the reliance on the investigative expertise of medicolegal investigators to identify and obtain the needed information
3. a collaborative approach to weekly turnaround time monitoring for the completion of autopsy reports and death certificates, that involves the administrative assistant, medical examiner, and quality assurance teams.

<sup>6</sup> As the Director of Neuropathology and Cardiac Pathology Services, Dr. Stonebridge specializes in performing examinations of the brain and heart. From July 1, 2022 through November 30, 2022, Dr. Stonebridge has conducted 78 neuropathology and 15 cardiac pathology examinations.

Concurrently, a refined approach to OCME caseload data tracking led to the development of monthly workload and turnaround time reports by the Chief Medical Examiner. These efforts continue to be successful in maintaining the national accreditation standard of completing 90% of autopsy reports in 94 days or less, which includes a four-day administrative period to finalize reports. From July 1, 2021 to June 2022, 94% of all work (autopsies, views, and chart reviews) conducted by twenty-one medical examiners was completed in 94 days or less. Nineteen medical examiners<sup>7</sup> completed 91% of their autopsy reports within 94 days or less.

Upon taking office in 2017, current OCME leadership inherited a backlog of 1,612 cases in which an autopsy or examination had been performed but the autopsy report and/or death certificate was not yet complete. Since that time, the OCME has completed the work product associated with more than 76% of these cases, reducing the number of unfinished cases to 381 as of this writing. Furthermore, as of this writing, 99.1% of the 8120 cases examined by staff and contract medical examiners from July 1, 2021 to June 30, 2022 (representing work initially assigned from May 1, 2021 to April 30, 2022), have been completed, thus largely avoiding any contribution to an ongoing backlog. With the OCME backlog now stabilized, the residual historic backlogged cases are currently finalized as the medical examiners are able to with priority given to requested documents.

### **NAME Accreditation**

The OCME was granted full accreditation by the National Association of Medical Examiners (NAME) on July 29, 2018 (effective, December 16, 2017 to December 16, 2021). Accredited offices are required to undergo an on-site inspection every four years and to submit an annual status report for the intervening years. The OCME's required four-year inspection took place on November 9, 2021 and notification of Full Accreditation was received on January 9, 2022, (effective December 16, 2021 to December 16, 2025). This year's status report was submitted to NAME on December 11, 2022 and notification of our Continued Accreditation was received on January 6, 2023.

### **Current Response Time to Scenes**

Current response time was determined by analyzing the OCME's Medical Examiner Assistants (MEAs) response to 325 scenes during the period from November 1, 2022 through November 30, 2022. Deaths that occurred in a medical facility were not considered as scene responses and were excluded from this analysis. The average time from departure from the OCME to arrival at the scene was 45 minutes, which is a slight increase from last year's response time of 42 minutes. The three-year average for scene response time is 44 minutes.

### **Progress in Identification and Improving Delays in Decedent Release**

The majority of decedents are examined within 24 hours of their arrival at the OCME. Many are examined the same day. The time between arrival at the OCME and examination rarely exceeds 48 hours. Either a final or pending death certificate is signed when the examination has been completed with most decedents being ready for release the same day. Delays in release can occur when the decedent must be identified at the OCME.

Identifications at the OCME are necessary:

1. when visual identification is not appropriate due to trauma or decomposition
2. when the death is believed to be a homicide
3. when the death occurred while in police custody or in a jail or correctional facility
4. when the decedent was reported as unknown or is unclaimed.

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<sup>7</sup> The work of two full-time medical examiners has been excluded from the autopsy report turnaround time analysis, having only completed a combined 62 (30%) of the assigned 142 autopsy reports within 90 days or less, far below the percentages of those of their peers. These medical examiners are assigned a very reasonable yearly workload and provided abundant workplace support. The reasons for their deficiencies continues to be personal, confidential, and protected matters and do not reflect a systemic problem within the Massachusetts OCME. It is not unusual in such a large state-wide medical practice to experience individual work performance issues. As an agency, we are committed to fully resolving any performance issues that arise while supporting our staff through difficult times.

The turnaround time for the completion of the identification can be as quick as a day when the decedent is visually identifiable or when dental records are available, but may take months when DNA analysis is the only option. In FY 22, of the 4,221 decedents identified at the OCME, only four were released unidentified.

Delays can also occur for unclaimed or unidentified decedents who are awaiting burial through the Department of Transitional Assistance (DTA), in accordance with G.L. c. 38, § 13. Since January 2016, the OCME has been able to expedite the release of decedents to DTA for burial through an incentive program, improving release time from the OCME, but at a financial cost. This program pays \$1,000, in addition to the DTA-provided stipend, to funeral directors who accept a DTA case for burial, provided the funeral director picks up the decedent within two weeks of being assigned the case by DTA. In FY22, the OCME's incentive program expedited the release of 158 decedents to DTA for burial, at a cost of \$158,000 to the OCME. As discussed below, due to increasing issues associated with DTA assignments to funeral homes and costs associated with DTA cases, the OCME and DTA collaborated on a new burial program for unclaimed and unidentified decedents.

### **New Initiatives and Key Accomplishments**

Since October 2017, accomplishments have been achieved and significant improvements realized in the delivery of medicolegal investigative services to the citizens of Massachusetts. Most notably was the achievement of Full NAME Accreditation on July 29, 2018, effective December 17, 2017 to December 16, 2021 and, following the required four-year inspection on November 9, 2021, the OCME was again granted Full Accreditation, effective December 16, 2021 to December 16, 2025. Notification from NAME on January 6, 2023, of our continuing full accreditation ensured that the OCME's goal of providing timely reports to suit the needs of the citizens of the Commonwealth was being met. Other accomplishments achieved in FY22 were:

- Recruited a full-time medical examiner for the Sandwich office, effective September 1, 2021, the significance of which cannot be overstated in light of the documented shortage of forensic pathologists in the country.<sup>8 9</sup>
- Established a Telepathology Service. Utilizing new imaging and information technology equipment, Medical Examiner Assistants (MEAs) and Medicolegal Investigators (MLIs) capture external documentation of the decedent and upload the images into the system. The medical examiner analyzes the images remotely, along with related case material such as scene reports and medical records, then certifies the death. The goal of this service is to provide continuity of medicolegal investigative services to the Commonwealth by minimizing and buffering the impact of physician shortages and/or attrition, as well as provide for a more mobile and less physically restricted workforce.
- Purchased a Postmortem Computed Tomography (PMCT) Scanner. Studied by the New Mexico Office of the Medical Investigator over a four -year period,<sup>10</sup> the efficacy of the use of the PMCT scanner has been demonstrated in the examination of deaths due to blunt force injury, firearms, pediatric trauma, and drug poisoning deaths. As part of the OCME's Telepathology Services, the PMCT scanner will assist in determining the type of examination to be performed (autopsy versus external examination); radiographic identification of decedents; mass fatalities; anthropology and odontology examinations; and infectious disease deaths where there is a possibility of transmitting infection during examination.
- Initiated MLI Field Examinations as a tool to provide medical examiners additional information on deaths that are accepted for chart reviews, which are also considered a component of the telepathology service. The MLI Field will examine and photograph the decedent, obtain available

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<sup>8</sup> Weedn, VW and Menendez, MJ. *American Journal of Forensic Medicine and Pathology*, 2020;41:242-248.

<sup>9</sup> Mulhausen DB. Report to Congress: Needs Assessment of Forensic Laboratories and Medical Examiner/Coroner Offices. NIJ, OJP, DOJ. NCJ 253626. Released 12/20/2019. Available at: <https://www.justice.gov/olp/forensic-science#needs>

<sup>10</sup> Lathrop, S. and Nolte, K. Utility of Postmortem X-Ray Computed Tomography (CT) in Supplanting or Supplementing Medicolegal Autopsies. NCJ Number 249949. Published: August 2015.



medical records, and collect toxicology as determined by the attending medical examiner. The results of the MLI Field's examination are provided to the attending medical examiner for certification of the death.

- Enhanced medical examiners workflow and archiving capabilities through the establishment of digital histology imaging. Histology is the microscopic examination of tissue specimens taken for ancillary testing. Digital histological imaging utilizes a digital histology scanner to produce digital images of the tissue sections on glass microscopic slides (histology), which can then be viewed by the forensic pathologist on a desktop computer monitor rather than viewing through a microscope. Digital imaging enables the medical examiner to complete postmortem examination paperwork from a location remote from OCME offices, and a workforce capable of working remotely is increasingly necessary for both hardening the OCME from untoward events, as well as providing a highly desired attribute to attract and retain physicians. Digital histology also improves archiving capabilities by eliminating the need for glass slides which are prone to breaking and subject to degradation with time. This initiative should go live in early 2023.
- Established a pilot project to bury five unclaimed or unidentified decedents following examination. G.L. c. 38 §13 entrusts the Department of Transitional Assistance to accept unclaimed and unidentified decedents from the OCME and assigns burial to funeral homes willing to accept these assignments. A \$1,100 DTA stipend is provided to the funeral home for burial costs. In 2016, concerned with the amount of time decedents were awaiting DTA burial due to a diminishing number of engaged funeral homes, the OCME implemented a \$1,000 incentive program to supplement the DTA stipend and assist with out-of-pocket expenses, provided the funeral home would pick-up the decedent from the OCME within 14 days of receiving the DTA assignment. Despite the supplemental payment, fewer and fewer burial service providers accepted the growing number of DTA cases. The number of decedents released to DTA has increased each year from 100 in FY17 to 163 in FY22, with one funeral director accepting nearly all of the DTA assignments.

Recognizing the need to care for our unknown or unidentified decedents, as well as growing concern with the reliance on a single funeral director to accept DTA assignments, the OCME signed a Memorandum of Agreement (MOU) with DTA which established the OCME-DTA Burial Pilot Project. Under the MOU's terms, DTA agreed to assign five decedents directly to the OCME for burial. Using the DTA \$1,100 stipend for each case and the \$1,000 incentive payment the OCME would have provided to a funeral director (for a total of \$2,100 for each decedent), the Agency procured a cemetery plot, casket, and grave marker for a dignified burial – often at a reduced cost. Additionally, OCME's partners at the Department of Public Health Registry of Vital Records and Statistics modified the Electronic Death Registration to allow designated OCME staff to electronically file the death certification record with local city and towns and obtain the burial permit, actions which previously could only be performed by funeral directors. By September 2022, all 5 decedents in the pilot project received appropriate burial.

In light of the new model's success, the OCME will expand the pilot to a permanent Burial Program as one of two major FY23 initiatives. With a new Interdepartmental Service Agreement (ISA) with DTA, the OCME's unclaimed and unidentified decedents will be assigned by DTA back to the OCME for burial. This program will eliminate reliance upon a funeral home for the timely release and burial of unclaimed and unidentified decedents from the OCME.

## **Conclusion**

Providing timely information to the needs of the citizens of the Commonwealth has been the priority of Mindy J. Hull, MD since her appointment as Chief Medical Examiner on October 24, 2017, and her subsequent reappointment on October 24, 2022. During her tenure, the Agency has achieved and maintained the highest

standards of medicolegal investigation services for the Commonwealth by implementing a series of strategic improvements over several years, including:

- Expanding services in the Sandwich office from five to seven days per week (FY19)
- Creating secure digital portals for decedent release, cremation authorizations, and law enforcement information (FY19)
- Dedicating a new Westfield office to serve constituents in Western Massachusetts (FY20)
- Recruiting, training, and promoting two graduating forensic pathology fellows to staff medical examiners (FY20)
- Improving perimeter security in the Sandwich, (FY21)
- Reconfiguring the Intake and Records Department in Boston Headquarters to provide socially distance workspace (FY21)

No measure illustrates the Agency's success more than its commitment to exceed the NAME national accreditation standard that medical examiners complete at least 90% of the death certificates and autopsy reports in 90 days. Massachusetts' OCME reports a 94% completion rate in FY22. This standard of excellence would not be possible without the tremendous support of the Baker-Polito Administration. In addition to their reappointment of Dr. Hull in October 2022, their sustained investments in our team of qualified professionals made our ambitious goals a reality.

With the same spirit of gratitude, we welcome the opportunity to form strong partnerships with the Healey-Driscoll Administration. The OCME looks forward to working with their team, learning from their unique expertise, and building on the aforementioned success.

As we look ahead to delivering medicolegal investigation services in FY23, the OCME will focus on expanding services to southeastern Massachusetts and Cape Cod by expanding Sandwich operations to a 24-hour, 7 day per week schedule (aligned with the standard in Westfield and Boston); as well as the continued implementation of the OCME-DTA Burial Program.