



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



Charles D. Baker
Governor

Headquarters

Mindy J. Hull, MD
Chief Medical Examiner

Karyn E. Polito
Lieutenant Governor

720 Albany Street
Boston, MA 02118-2518

Thomas A. Turco, III
Secretary

General Office Numbers

Tel: (617) 267-6767

Tel: (800) 962-7877

Fax: (617) 266-6763

February 26, 2020

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

The Honorable Aaron Michlewitz
House Committee on Ways and Means
State House, Room 243
Boston, MA 02133

Dear Chairpersons:

Pursuant to the FY20 General Appropriations Act, the Office of the Chief Medical Examiner (OCME) is required to submit to the House and Senate Committees on Ways and Means a report detailing: (a) the current caseload of the office and each of its medical examiners and the caseload for fiscal year 2019; (b) the number of procedures performed in fiscal year 2019; (c) current turnaround time and backlogs; (d) the current response time to scenes; (e) the number of cases completed in fiscal year 2019; (f) the current status of accreditation with the National Association of Medical Examiners (NAME); (g) progress in identification and completion of reports; and (h) progress in improving delays in decedent release.

The OCME was established through MGL Chapter 38 to deliver, under the supervision and control of the chief medical examiner, a comprehensive system of medico-legal investigative services to the citizens of the Commonwealth. The OCME's mission is to determine cause and manner of death in suspicious, unnatural, and potentially unnatural deaths that occur in Massachusetts, and to release accurate work product, namely death certificates and autopsy reports, in a timely fashion. 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 located across the state and employs 105 employees representing the following disciplines: medical examiners (forensic pathologists), medical examiner assistants, intake specialists, administrative support for medical examiners, medico-legal investigators, cremation specialists, accountants, and managers.

The OCME Headquarters is located in Boston and operates 24 hours per day, seven days per week. Ten full-time medical examiners are assigned to the Boston office, including the Chief and Deputy Chief Medical Examiners, one part-time medical examiner, one forensic pathology fellow, and one contract medical examiner.

There are three regional offices located in Sandwich, Worcester, and the new state-of-the-art Western Massachusetts facility in Westfield. The Sandwich office is a stand-alone OCME facility that operates seven days per week for mostly two shifts and is staffed with two full-time medical examiners and one contract medical examiner. The Worcester office is located at UMass Memorial Hospital in space that is shared with the hospital's pathology department. This office operates one shift, three days per week, and is staffed with one contract medical examiner.

On November 17, 2019, the OCME opened the new state-of-the-art regional office in Westfield. This facility replaced the Holyoke office, which had operated in rented space at the Providence Behavioral Health Hospital. The Westfield office operates two shifts, seven days per week, and is staffed with four full-time medical examiners.

Current Caseload of the Office

Table 1 reports each medical examiner's caseload utilizing data from the two most recent fiscal quarters.

Table 1: Current Caseload by Medical Examiner (July 1, 2019, through December 31, 2019)¹

Medical Examiner	Autopsy	External Examinations	Total Number of Cases (Autopsy + External Examinations)
Dr. Hull (Chief)	5	2	7
Dr. Atkinson (Deputy Chief) (FT)	47	163	210
Dr. Cannon (FT)	27	156	183
Dr. Capo-Martinez (FT)	46	150	196
Dr. Dedrick (FT)	51	118	169
Dr. Elin ((FT)	43	124	167
Dr. Evans (Contract .5FTE)	19	175	194
Dr. Grivetti (FT)	57	122	179
Dr. Lindstrom (FT)	91	85	176
Dr. Matthews (Fellow .5FTE)	104	12	116
Dr. Perry (FT)	55	123	178
Dr. Sandler (.5FTE)	22	79	101
Dr. Scordi-Bello (FT)	75	97	172
Dr. Shah (FT)	38	196	234
Dr. Stanley (FT)	55	120	175
Dr. Springer (FT)	68	91	159
Dr. Stonebridge (Contract 2 days/month)	13	61	74
Dr. Welton (FT)	35	112	147
Dr. Yakubu-Owolewa (FT)	69	131	200
Dr. Zane (Contract .5FTE)	43	126	169
Total	1,067	2,303	3,370

As Table 1 illustrates, the current participant in the OCME's forensic pathology fellowship takes an active part in addressing in the Boston office's caseload. All work performed by the fellow is closely supervised by full-time forensic pathologists. While supervising pathologists report that supervising a fellow's case involves as much or more time than performing the work themselves, the OCME's forensic pathology fellowship program provides a substantial long-term benefit to the Commonwealth. The fellowship program provides ongoing training of forensic pathologists accustomed to Massachusetts practices, which creates a pipeline of potential qualified employees at a time when they are in high demand and short supply. The National Academy of Sciences, the Scientific Working Group for Medicolegal Death

¹ The data reports that support Table 1 and all subsequent tables are generated from the OCME Case Management and Tracking System (CMTS)(Consilience 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.

Investigation, and the *American Journal of Forensic Medicine and Pathology* have all identified a scarcity of medical examiners in the United States. While an estimated 800 to 1000 full-time forensic pathologists are required to meet needs across the nation, only about 300 to 400 are actually practicing – and of 17,000 medical school graduates each year, fewer than 40 pursue forensic pathology.² The OCME’s fellowship program is a local answer to the national question of how to recruit and retain qualified forensic pathologists whose work is critically important to the interests of justice.

Number of Procedures Performed in Fiscal Year 2019

The work of the OCME is not limited to autopsies and external examinations. This section identifies additional procedures for which the OCME is responsible.

Physicians on contract with the OCME, known as district medical examiners (DMEs), perform views in some instances at hospitals and funeral homes. In each of these cases, the death was not the result of foul play and the cause and manner of death is clear and apparent from external examination and available medical history. The DMEs play an important role in OCME operations, and their contributions allow the OCME to avoid incurring the costs of transporting and storing these decedents at OCME facilities when autopsy is unnecessary.

By statute and regulation, OCME personnel must perform a view of every decedent intended for cremation or burial at sea in order to confirm the cause and manner of death prior to final disposition. These views are performed by a medical examiner, DME, medico-legal investigator, cremation specialist, or forensic investigator in accordance with M.G.L. c. 38, § 14 and 505 CMR 4.03.

Medical examiners perform chart reviews on cases identified during a cremation authorization as not properly certified. For example, a chart review may be necessary if new or additional information is learned during the cremation view. A chart review requires the medical examiner to obtain and review pertinent medical documentation, and then amend the death certificate with the proper cause and manner of death, if necessary.

Finally, discovered bones are reported to the OCME and are brought in for examination by a medical examiner or the forensic anthropologist.

Table 2 reports the number of reported and accepted cases and the number of procedures performed in FY19.

Table 2: Number of Cases Reported, Accepted, and Number of Procedures Performed in FY19

Fiscal Year	Number of Cases Reported	Number of Cases Accepted	Number of Autopsies	Number of External Examinations	District Medical Examiner Views	Bones	Chart Reviews	Cremation Views
2019	16,023	7,020	1,927	4,083	649	105	256	29,853

Postmortem Toxicology

Postmortem toxicology testing is an integral component of medico-legal death investigations and since July 2013 has been performed by the Massachusetts State Police Crime Laboratory. Table 3 shows the postmortem analysis for FY19. The average turnaround time (TAT) for toxicology analysis for FY19 was 29.6 days.

² Hanzlick, et al. "Selecting Forensic Pathology as a Career: A Survey of the Past with an Eye on the Future." *Am J Forensic Med Pathol* 2008; 29; 114-122.

Table 3: Toxicology Analysis in FY19

Month	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
# of Cases Completed	563	438	449	509	399	367	519	438	490	421	517	389
# of Cases Assigned	507	486	422	418	447	421	483	433	442	480	443	446
# of Cases Pending	459	499	467	377	424	477	436	425	369	422	345	398
Average TAT	31	29	34	31	31	31	36	28	26	26	28	25

Number of FY19 Cases Completed and Current Turnaround Time

The OCME’s foremost goal is accuracy. Nonetheless, OCME staff strive to minimize turnaround time and are mindful of the people, families, and agencies that depend on them for information. Beginning January 1, 2018, OCME leadership focused attention on the active management of the turnaround time of cases, achieving significant improvements over the year that followed. Successful strategies to improve turnaround time included improved case assignment system, the development of a new autopsy report format, more rapid acquisition of case specific information, and an administrative assistant-medical examiner partnership approach to weekly monitoring of turnaround time for the completion of autopsy reports and death certificates. These efforts have allowed the OCME to make significant improvements in turnaround times compared to past years, especially during the third and fourth quarters of FY19. Table 4 reports the total number of completed FY19 cases as well as the number and percent completed within the target timeframe.

Table 4: Case Turnaround Time in FY19³

	Number of Autopsies	Number of Autopsy Reports Completed On Time (%)	Number of External Views	Number of External View Death Certificates Completed On Time (%)	Total Work Product (Autopsies + External Views)	Completed Work Product (Completed Autopsies + Completed Views)
Jul 1, 2018 to Dec 31, 2018	949	822 (86.6%)	2083	2057 (98.8%)	3032	2879 (95%)
Jan 1, 2019 to June 30, 2019	967	873 (90.3%)	2211	2188 (99%)	3178	3061 (96.3%)

NAME Accreditation Status

The National Association of Medical Examiners (NAME) is a major accrediting body for medical examiners’ offices throughout the country. Although there is no requirement that the OCME be accredited by NAME or any other body, the OCME affirmatively undertook successful, voluntary efforts toward accreditation in the interests of identifying areas for improvement, obtaining outside review, and earning the “endorsement of the quality, integrity, and credibility of the office”⁴ that NAME accreditation bestows. Following the required on-site inspection on May 14-15, 2018, the OCME was

³ OCME observes the NAME accreditation standard requiring 90% of autopsy reports to be completed within 90 days of the postmortem examination. As noted to NAME in 2019 prior to receiving continued accreditation, OCME allows physicians a four-day procedural window to account for administrative processing. Differences in autopsy and external view totals between Tables 1, 2 and 4 are due to utilization of different analytical methodology. Tables 1 and 2 were compiled from CMTS data which has previously noted limitations. Table 4 involves the weekly monitoring of assigned cases. These differences reflect the limits of the OCME’s data analysis software.

⁴ <https://www.thename.org/assets/NAME%20International%20Accreditation%20%20Flyer%20Final%202019.pdf>

granted Full NAME Accreditation, effective December 16, 2017, through December 16, 2021. Maintenance of Full Accreditation requires the submission of an annual status report to NAME. This year's report was submitted as required and the OCME was granted Continued Accreditation, effective December 16, 2019.

Open/Ongoing Cases

In January 2018, OCME leadership took steps to prioritize cases from 2012 to 2017 with unfinished autopsy reports and external examinations (death certificates), identifying 1,612 such cases. Within six months, OCME staff had reduced the number of these open/ongoing cases to 1,181. As of this writing, the number has been reduced even further to 708.

Any case accepted after 2017 that is not completed within 90 days is considered open/ongoing. Of cases examined between January 1, 2018, and December 31, 2018, there are 49 (approximately 0.8%) in open/ongoing status.⁵

Current Response Time to Scenes

Current response time was determined by analyzing the OCME's Medical Examiner Assistants (MEAs) response to the 249 scenes from December 1, 2019, through December 30, 2019. Deaths that occurred within a medical facility were not considered as scenes and were excluded from the analysis. OCME practice is to send a MEA from the nearest open OCME facility. In the event of an after-hours call in a region without a 24-hour facility, MEAs may have to travel greater distances (from Boston to Cape Cod, for example). The average time from departure from the OCME facility to arrival at the scene was 51 minutes. The opening of the 24-hour facility in Westfield is expected to further reduce average response time.

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. The death is certified when the examination has been completed, with most decedents being ready for release the same day.

Delays in release can occur when the decedent has to be identified at the OCME. Identifications at the OCME are necessary when decedents are decomposed, have sustained facial trauma, or are victims of homicide. In FY19, the OCME's Identification Unit facilitated the identification of 2,341 (38.9%) of the 6,010 decedents who were brought to the OCME for examination, 388 of whom were decomposed. 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.

Delays can also occur for unclaimed or unidentified decedents who are awaiting burial through the Department of Transitional Assistance (DTA), in accordance with M.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 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 FY19, the OCME's incentive program expedited the release of 132 decedents to DTA for burial, at a cost of \$132,000 to the OCME.

Concluding Comments

Providing accurate and timely information to meet the needs of those we serve has been the OCME's priority since my appointment as Chief Medical Examiner on October 24, 2017. Since then, we have made significant improvements to the delivery of medico-legal investigative services to the Commonwealth and its residents, from the availability of services to the efficiency of operations, and we have received and maintained full NAME accreditation.

⁵ Because the identification of open/ongoing cases began under new OCME leadership in January 2018, they are tracked by calendar year rather than fiscal year for ease of organization and consistency in data sets.

The FY19 budget enabled the OCME to recruit a full-time medical examiner for the Sandwich office; expand services in that office to seven days per week; convert three part-time medical examiners to full-time status; deploy a funeral home portal that expedited the release of decedents to funeral homes following the examination; and purchase 12 new vehicles to replace the aging decedent transportation fleet.

This year's funding has enabled the OCME to promote the two graduating fellows to staff medical examiners and expand services in Western Massachusetts to seven days per week for two shifts. Expanding services to 24 hours a day, seven days per week, in the new Westfield office and developing a cremation portal to streamline the cremation authorization process and enhance accountability are initiatives that will be realized this fiscal year. The OCME will continue to strive towards meeting the expectations of the citizens of the Commonwealth by achieving its mission of producing accurate and timely determination of cause and manner of death.

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

Sincerely,

A handwritten signature in black ink, appearing to read 'M. Hull', with a long, sweeping horizontal line extending to the right.

Mindy J. Hull, MD
Chief Medical Examiner

cc: Thomas A. Turco, III, Secretary, Executive Office of Public Safety and Security
Kerry Collins, Undersecretary for Forensic Science and Technology