OFFICE OF THE STATE AUDITOR

DIANA DIZOGLIO

Official Audit Report – Issued December 19, 2024

Office of the Chief Medical Examiner

For the period July 1, 2021 through June 30, 2023

OFFICE OF THE STATE AUDITOR

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December 19, 2024

Dr. Mindy Hull, Chief Medical Examiner
Office of the Chief Medical Examiner
720 Albany Street
Boston, MA 02118

Dear Dr. Hull:

I am pleased to provide to you the results of the enclosed performance audit of the Office of the Chief Medical Examiner. As is typically the case, this report details the audit objectives, scope, methodology, findings, and recommendations for the audit period, July 1, 2021 through June 30, 2023. As you know, my audit team discussed the contents of this report with agency managers. This report reflects those comments.

I appreciate you and all your efforts at the Office of the Chief Medical Examiner. The cooperation and assistance provided to my staff during the audit went a long way toward a smooth process. Thank you for encouraging and making available your team. I am available to discuss this audit if you or your team has any questions.

Best regards,

Diana DiZoglio
Auditor of the Commonwealth

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EXECUTIVE SUMMARY

In accordance with Section 12 of Chapter 11 of the Massachusetts General Laws, the Office of the State Auditor has conducted a performance audit of the Office of the Chief Medical Examiner (OCME) for the period July 1, 2021 through June 30, 2023.

The purpose of our audit was to determine whether OCME did the following:

- completed 90% of autopsy reports within 90 calendar days after the date of the autopsy, in accordance with the Medical Examiners section (3.05[E][4]) of the *Office of the Chief Medical Examiner: Policy Manual*;
- completed death certificates, in accordance with the Medical Examiners section (3.05[E][3–4]) of the *Office of the Chief Medical Examiner: Policy Manual*, that were in effect during the audit period;
- confirmed that the legal next of kin was notified of the decedent's death and that communication was established with investigating agencies in accordance with the Medicolegal Investigators section (3.01[B][1–2]) of the *Office of the Chief Medical Examiner: Policy Manual*;
- ensured that it released decedents' bodies to the people with the proper legal authority to receive them in accordance with Section 13 of Chapter 38 of the General Laws; and
- accounted for COVID-19 funds received in accordance with the Office of the Comptroller of the Commonwealth's "COVID-19 Revenue and Grants" directive that was effective April 1, 2020.

Below is a summary of our finding, the effect of that finding, and our recommendations, with links to each page listed.

Finding 1 **Page 11**	OCME did not complete autopsy reports within policy time frames.
Effect	Delays in autopsy reporting could delay court cases and prevent family members from receiving insurance proceeds and proceeding with other matters, such as estate settlement.
Recommendations **Page 11**	1. OCME should follow the 90-day time frame as stipulated in its medical examiner policy. 2. OCME should work with underperforming medical examiners to ensure that they are meeting reporting time frames.

OVERVIEW OF AUDITED ENTITY

The Office of the Chief Medical Examiner (OCME), established under Chapter 38 of the Massachusetts General Laws, is a state agency within the Executive Office of Public Safety and Security. Its primary mission is to investigate the cause and manner of death in cases that fall under its jurisdiction.[1] The Chief Medical Examiner has jurisdiction over cases in which the death was a result of violence; of another unnatural cause; or of a natural cause that, in the Chief Medical Examiner's opinion, requires further investigation. OMCE is headquartered in Boston with its main regional offices located in Westfield, Sandwich, and Worcester.

OCME Responsibilities

OCME's website states that it does the following:

> *Investigates the cause and manner of death for deaths that occur under violent, suspicious, or unexplained circumstances. . . . We work with families and funeral homes to provide information to those affected by sudden or traumatic loss. We also provide forensic services to assist law enforcement and public health.*

According to its most recent internal control plan, OCME's mission is the following:

> *To release work products, namely certifications of death and autopsy reports in a timely manner. The OCME relies upon forensic pathologists and medical examiner assistants to meet this mission, along with additional support from medicolegal investigators, as well as administrative, fiscal, legal, and managerial staff.*

Autopsy Reports

An autopsy is a comprehensive medical examination of a dead body, including the internal organs, performed by a physician trained in pathology in order to determine how or why a person died. This examination results in a final autopsy report that documents the cause and manner of death.

According to its medical examiner policy guidelines, OCME medical examiners are responsible for finalizing 90% of their cases and issuing an autopsy report within 90 days of an autopsy.

Autopsies are performed at the OCME facility. The Chief Medical Examiner creates a case roster each day for the medical examiners. Typically, autopsy cases are from deaths that occurred the prior day. Each

1. After a review of the facts and circumstances of a reported death, OCME either accepts or declines the assignment (jurisdiction) of a death investigation.

medical examiner performs the autopsy and, depending on the complexity of a case, issues a summary of autopsy findings or a more detailed report for internal records. OCME also discloses autopsy reports to external entities, such as next of kin or law enforcement, if certain conditions are met.

External Views

An external view is an external examination of the body; it includes photographing the front and back of the body and documenting all signs of injury or disease. An external view is done when an autopsy is not required to determine the cause and manner of death to a reasonable degree of certainty.

District Medical Examiner Views

District medical examiner views are performed by physicians on contract, whose medical training may be something other than forensic pathology. District medical examiners 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 the available medical history.

Chart Reviews

Chart reviews are performed on cases identified during cremation authorization views for which the cause and manner of death are not properly certified, the body is no longer available, or the 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 OCME.

Death Certificates

A death certificate is the official document, signed by a physician, attesting to a person's death. It includes the time, place, and cause of death, as well as pertinent identifying information, such as the age and sex of the deceased. In some cases, a pending death certificate is issued initially, and when all test results are available, a final, amended death certificate is prepared. According to OCME policy guidelines, initial death certificates are to be signed on the day of examination with a final death certificate signed 90 days after the examination.

Breakdown of OCME Death Certificate Cases*

	Autopsy	External View	District Medical Examiner View	Chart Review	Total
Fiscal Year 2022	1,897	4,715	209	1,530	8,351
Fiscal Year 2023	1,945	4,713	167	1,782	8,607
Total	3,842	9,428	376	3,312	16,958

* These cases do not include 230 human or non-human bone or tissue cases that OCME accepted, as these cases do not require death certificates.

Next of Kin Communications

OCME medical legal investigators are required to follow the Medicolegal Investigators section (3.01[B][1–2]) of the *Office of the Chief Medical Examiner: Policy Manual* to ensure that legal next of kin have been notified of a decedent's death and that communication has been established with investigating agencies. OCME medicolegal investigators are assigned a case and communicate with the decedent's next of kin to establish the family tree and determine whether a funeral home has been decided on. All communications are logged in the OCME Case Management Tracking System (CMTS).

Decedent Release Responsibilities

In accordance with Section 13 of Chapter 38 of the General Laws, OCME must ensure that the decedents' bodies are released to appropriate parties, such as a surviving spouse or next of kin. There are a number of forms that need to be completed to process a decedent release, including a Statement of Identification and Funeral Home Authorization and Acknowledgment Forms.

During the audit period, there were 36,835 reported[2] deaths in OCME's CMTS. See the Appendix a list of deaths that must be reported to OCME according to Section 3 of Chapter 38 of the General Laws. OCME accepted jurisdiction over 17,188 of these deaths. OCME accepts jurisdiction of a case when it is of the opinion that a death was because of violence, unnatural means, or natural causes that require further investigation.[3] The table below summarizes the reported deaths by fiscal year and total number of accepted cases resulting in a death certificate.

2. A death can be reported by hospitals, medical professionals, or law enforcement.
3. According to OCME, natural causes that require further investigation involves the process of a medical examiner ruling out other contributing factors to a death.

OCME Caseload of Reported Deaths

	Accepted	Declined	Total Reported
Fiscal Year 2022	8,463	9,889	18,352
Fiscal Year 2023	8,725	9,758	18,483
Total	17,188	19,647	36,835

During the audit period, OCME received appropriations of $12,862,676 and $16,971,920 for fiscal years 2022 and 2023, respectively. As of July 1, 2023, OCME employed 169 individuals in its four offices of Boston, Westfield, Sandwich, and Worcester.

Coronavirus Emergency Supplemental Funding Program

In response to the COVID-19 pandemic, OCME was awarded a total of $186,034[4] through the Coronavirus Emergency Supplemental Funding Program and expended $131,300 of these funds during the audit period. The Coronavirus Emergency Supplemental Funding Program was intended to address a department's greatest needs with respect to preventing, preparing for, and responding to the COVID-19 pandemic. OCME was to follow the Office of the Comptroller of the Commonwealth's Revenue and Grants Directive, effective April 1, 2020, when accounting for these funds. The following table provides a breakdown of the four purchases made during the audit period.

Item Purchased	Description	Amount
Call Center Furnishings	Desks, chairs, dividers	$24,287
Call Center Furnishings	Shelfing with heavy-duty roll-out drawers	$58,634
Call Center Furnishings	Office walls and windows	$20,036
Call Center Furnishings	Materials and glass walls for office spaces	$28,343

The following table provides a breakdown of COVID-19 funds received by fiscal year.

Fiscal Year	Amount Received
2021	$ 52,303
2022	131,299
Total	$ 183,602

4. The funds award letter was signed on August 25, 2020.

AUDIT OBJECTIVES, SCOPE, AND METHODOLOGY

In accordance with Section 12 of Chapter 11 of the Massachusetts General Laws, the Office of the State Auditor has conducted a performance audit of certain activities of the Office of the Chief Medical Examiner (OCME) for the period July 1, 2021 through June 30, 2023.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Below is a list of our audit objectives, indicating each question we intended our audit to answer; the conclusion we reached regarding each objective; and, if applicable, where each objective is discussed in the audit findings.

Objective	Conclusion
1. Did OCME ensure that it completed 90% of autopsy reports within 90 calendar days after the date of the autopsy, in accordance with the Medical Examiners section (3.05[E][4]) of the *Office of the Chief Medical Examiner: Policy Manual*?	**No; see Finding 1**
2. Did OCME ensure that death certificates were completed, in accordance the Medical Examiners section (3.05[E][3–4]) of the *Office of the Chief Medical Examiner: Policy Manual*, that were in effect during the audit period?	**Yes**
3. Did OCME confirm that the legal next of kin was notified of the decedent's death and that communication was established with investigating agencies in accordance with the Medicolegal Investigators section (3.01[B][1–2]) of the *Office of the Chief Medical Examiner: Policy Manual*?	**Yes**
4. Did OCME ensure that it released decedents' bodies to the people with the proper legal authority to receive them in accordance with Section 13 of Chapter 38 of the General Laws?	**Yes**
5. Did OCME account for COVID-19 funds received in accordance with the Office of the Comptroller of the Commonwealth's "COVID-19 Revenue and Grants" directive that was effective April 1, 2020?	**Yes**

To accomplish our audit objectives, we gained an understanding of the aspects of the internal control environment relevant to our objectives by reviewing applicable policies and procedures, interviewing OCME management, conducting walkthroughs, and reviewing key processes. In addition, to obtain

sufficient, appropriate evidence to address our audit objectives, we performed the procedures described below.

Autopsy Reporting

To determine whether OCME ensured that 90% of autopsy reports were completed within 90 calendar days after the date of the autopsy, in accordance with the Medical Examiners section (3.05[E][4]) of the *Office of the Chief Medical Examiner: Policy Manual*, we took the following actions.

We chose a random, statistical sample of 60 autopsy cases from our population of 3,842 autopsy cases reported during the audit period, using a 95% confidence level, a 0% expected error rate, and a 5% tolerable error rate. We calculated the amount of time from autopsy date to autopsy sign-off by subtracting the relevant fields in the Case Management Tracking System (CMTS), then tabulated the results.

Death Certificate Reports

To determine whether OCME completed death certificates, in accordance with the Medical Examiners section (3.05[E][3–4]) of the *Office of the Chief Medical Examiner: Policy Manual*, that were in effect during the audit period, we took the following actions.

- We chose a random, statistical sample of 60 cases out of 16,958 cases reported to OCME during the audit period where OCME had accepted jurisdiction over the case and issued a death certificate, using a 95% confidence level, a 0% expected error rate, and a 5% tolerable error rate.
- We verified that an initial death certificate was signed by a medical examiner on the day of examination.
- We calculated the amount of time from the exam date to the final death certificate date by using exam date and death certificate sign-off date fields in CMTS.

Next of Kin Communications

To determine whether legal next of kin was notified of the decedent's death and that communication was established with investigating agencies in accordance with the Medicolegal Investigators section (3.01[B][1–2]) of the *Office of the Chief Medical Examiner: Policy Manual*, we took the following actions.

- We chose a random, statistical sample of 60 cases from our population of 13,270[5] cases reported to OCME during the audit period where OCME had accepted jurisdiction over the case, took custody of the decedent, and issued a death certificate, using a 95% confidence level, a 0% expected error rate, and a 5% tolerable error rate.

- We reviewed notes, intake sections, and communication sections in CMTS to verify that legal next of kin had been notified of the decedents' deaths.

- We reviewed notes, intake sections, and reports in CMTS to verify that communication was established with investigating agencies.

Decedent Releases

To determine whether OCME ensured that it released decedents' bodies to the people with the proper legal authority to receive them in accordance with Section 13 of Chapter 38 of the General Laws, we took the following actions.

- We chose the same sample as the previous objective for our test.

- We verified that the following forms were completed:

  - Statement of Identification Form: We determined whether it was signed by an appropriate party—e.g., a spouse or legal next of kin—(if applicable) or whether OCME completed the identification verification form.

  - Funeral Home Acknowledgment Form: We determined whether it was signed by a funeral home staff member.

  - Release Form (from the funeral home): We determined whether it was signed by an appropriate party—e.g., a spouse or legal next of kin—and whether the person signing the decedent's release form was listed as one of the decedent's contacts in CMTS.

Accounting of COVID-19 Funds

To determine whether OCME accounted for COVID-19 funds received in accordance with the Office of the Comptroller of the Commonwealth's "COVID-19 Revenue and Grants" directive that was effective April 1, 2020, we took the following actions.

- As a result of the small number of expense postings and associated dollar amounts, we tested 100% of the COVID-19 purchases that occurred during the audit period. The total number of expenditures was four. We obtained a list for these four expenditures, totaling approximately $131,000, from OCME.

5. These cases included only autopsy and external views, as these are the only types of cases where OCME takes custody of the deceased person's body.

- We checked all four COVID-19-related invoices identified for the audit period against a Massachusetts Management Accounting and Reporting System (MMARS) query to verify that a separate appropriation was created for these COVID-19 fund expenses.
- We checked that a major program and program code was created in MMARS for these four COVID-19-related expenses.
- We verified that necessary documentation, such as purchase requisition, purchase orders, and MMARS payment request forms, and internal controls were in place to support these four COVID-19-related expenses.
- We also confirmed that overall COVID-19 expenditures did not exceed the awarded amount.

Data Reliability Assessment

CMTS

To assess the reliability of the data, we took the following actions.

We tested selected information system controls (security management, access controls, configuration management, segregation of duties, and contingency planning), interviewed knowledgeable staff members at OCME about this list, and tested for hidden records, duplicate values, and values outside of the audit period. We filtered all reported cases during the audit period from OCME's CMTS in order to identify cases for which OCME had accepted jurisdiction. OCME accepts jurisdiction of a case when it is of the opinion that the death was because of violence, unnatural means, or natural causes that require further investigation. For those cases for which OCME accepted jurisdiction, we identified the four subgroups that make up the accepted case population for which a death certificate is issued. Those groups are autopsies, external views, chart reviews, and district medical examiner views. To verify that the list of these accepted cases was complete, we randomly selected 20 decedent case charts and traced these back to CMTS. To verify that the list of these accepted cases was accurate, we randomly selected 20 case records from CMTS and traced them back to source documents.

MMARS

In 2018 and 2022, the Office of the State Auditor performed a data reliability assessment of MMARS that focused on testing selected system controls (access, security awareness, audit and accountability, configuration management, identification and authentication, and personnel security). We traced two out of the four MMARS COVID-19-related expense postings for the audit period to and from source documentation, such as vendor invoices, and compared the total overall expenses to financial reports.

Finally, we compared COVID-19 funds received by OCME as posted to MMARS to the COVID-19 Funds Award Letter to confirm the source of the COVID-19 funds.

Based on the results of the data reliability assessment procedures described above, we determined that the information we obtained was sufficiently reliable for the purposes of our audit.

DETAILED AUDIT FINDINGS WITH AUDITEE'S RESPONSE

1. The Office of the Chief Medical Examiner did not complete autopsy reports within policy time frames.

The Office of the Chief Medical Examiner (OCME) did not meet the policy target of completing 90% of autopsy reports within 90 days of an autopsy. Out of the 60 cases reviewed, we found that nine autopsy reports (15%) were not completed within 90 days of the autopsy exam. Those reports that took longer than 90 days to complete ranged from 92 to 807 days. Of the 60 cases sampled, we found 1 case for which an autopsy report had not yet been completed. We projected the test results for the completion of autopsy reports from our sample of 60 cases to the population of 3,842 cases during the audit period. Based on this, we are 95% confident that at least 275 cases during the audit period did not have autopsy reports completed within the required 90 days.

Delays in autopsy reporting could delay court cases and prevent family members from receiving insurance proceeds and proceeding with other matters, such as estate settlement.

Authoritative Guidance

The Medical Examiners section (3.05[E][4]) of the *Office of the Chief Medical Examiner: Policy Manual* states, "Autopsy Reports— . . . the medical examiner . . . is responsible for finalizing 90% of cases (with . . . an autopsy report if the case was an autopsy) within 90 days of the examination."

Reasons for Issue

OCME communicated that one reason for the delay in reporting was because of several underperforming medical examiners.

According to OCME, it currently follows a 94-day reporting time frame that allows for a 4-day administrative buffer. This is inconsistent with the policy, which states that the requirement is 90 days. Additionally, only one of the nine exceptions identified was completed in under 94 days. Therefore, OCME only completed 87% of our sample cases within the time frame using 94 days as the criterion.

Recommendations

1. OCME should follow the 90-day time frame as stipulated in its medical examiner policy.

2. OCME should work with underperforming medical examiners to ensure that they are meeting reporting time frames.

Auditee's Response

The Office of the Chief Medical Examiner (OCME) would like to thank the Office of the State Auditor (OSA) for its thoughtful and meticulous review of our Agency. During the audit process we strived to be transparent and thorough in our responses, allowing for a broad and deep look into the identified systems. We are pleased with the results of the OSA's analysis of our work.

Although we of course always have more work to do, we are encouraged that this audit has shown compliance with four of the five stated objectives. While the OSA did find noncompliance with the 90-calendar day deadline for completing autopsy reports established in the Office of the chief Medical Examiner: Policy Manual, we are proud to have achieved an autopsy report turnaround time that falls to within five percentage points or less of the 90% in 90 days completion metric we strive to achieve. This improvement is particularly striking when contrasted against the prior audit of the OCME by the OSA (released in 2017), which found that only 42% of autopsy reports had been completed within 90 days. The OCME has been working hard to improve the turnaround times for the past couple of years and has seen marked improvement in efficiency. We intend to continue this work so that we bridge the gap in achieving this metric.

It is worth pointing out specifically that the OSA found that the OCME completed death certificates consistent with the requirements of the policy. Highlighting this is important because death certificates, more than autopsy reports, are heavily relied upon for resolving end-of-life administrative issues such as obtaining life insurance benefits. By completing more than 90% of death certificates in 90 days or less, the OCME has made great strides in ensuring this end-of-life documentation is completed in a timely manner.

Overall, these audit results demonstrate the OCME's commitment to excellence under its current leadership and executive team, especially when benchmarked against the preceding audit results.

Auditor's Reply

We acknowledge that OCME has taken steps to improve its percentage of completed cases of autopsy reports within 90 days. Moving forward, we encourage OCME to continue to improve this percentage to bring OCME into full compliance with regulations, as families are relying on OCME to conduct autopsies in a timely manner. We encourage OCME to prioritize engagement with the Executive Office of Public Safety and Security and the Legislature to ensure that resources and oversight are adequate to complete this work.

APPENDIX

According to Section 3 of Chapter 38 of the Massachusetts General Laws, the following are the types of deaths that must be reported to the Office of the Chief Medical Examiner.

(1) death where criminal violence appears to have taken place, regardless of the time interval between the incident and death, and regardless of whether such violence appears to have been the immediate cause of death, or a contributory factor thereto;

(2) death by accident or unintentional injury, regardless of time interval between the incident and death, and regardless of whether such injury appears to have been the immediate cause of death, or a contributory factor thereto;

(3) suicide, regardless of the time interval between the incident and death;

(4) death under suspicious or unusual circumstances;

(5) death following an unlawful abortion;

(6) death related to occupational illness or injury;

(7) death in custody, in any jail or correctional facility, or in any mental health or [intellectual disability] institution;

(8) death where suspicion of abuse of a child, family or household member, [older] person or disabled person exists;

(9) death due to poison or acute or chronic use of drugs or alcohol;

(10) skeletal remains;

(11) death associated with diagnostic or therapeutic procedures;

(12) sudden death when the decedent was in apparent good health;

(13) death in any public or private conveyance;

(14) fetal death, as defined in section 202 of chapter 111 [of the General Laws], where the period of gestation has been 20 weeks or more or where fetal weight is 350 grams or more;

(15) death of children under the age of 18 years from any cause;

(16) any person found dead;

(17) death in an emergency treatment facility, medical walk-in center, child care center or under foster care; or

(18) deaths occurring under such other circumstances as the chief medical examiner shall prescribe in regulations promulgated pursuant to chapter 30A [of the General Laws].