STATE OF RHODE ISLAND
DEPARTMENT OF HEALTH

OFFICE OF STATE MEDICAL EXAMINERS

AUTOPSY REPORT REVIEW

August 2005

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Administration
BUREAU OF AUDITS
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August 31, 2005

David R. Gifford, M.D., M.P.H.
Director
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Three Capitol Hill
Providence, Rhode Island 02908-5097

Dear Dr. Gifford:

Pursuant to your request, the Bureau of Audits (the Bureau) completed a review of the Office of State Medical Examiners (OSME). The express purpose of the review was to determine the following for the period beginning January 1, 2000 through June 30, 2005: (1) the number of cases received by the OSME, (2) the number of autopsy reports required to be prepared in accordance with Rhode Island General Laws (RIGL), and (3) the number of autopsy reports that were incomplete as of June 30, 2005.

The Bureau discussed the enclosed findings and recommendations with you and your management team in a closing meeting held on August 30, 2005. In accordance with standard procedure, the Bureau requested that you provide a response to the findings and recommendations in this report. Your response is included in the report.

In accordance with RIGL § 35-7-4 entitled, "*Periodic audits by department of administration*," the Bureau will review the OSME's corrective action plan within six months from the date of issue of this report.

Very truly yours,

H. Chris Der Vartanian, CPA

H. Chris ~~Der~~ Vartanian, CPA
Chief, Bureau of Audits

HCD

OFFICE OF STATE MEDICAL EXAMINERS
AUTOPSY REPORT REVIEW

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EXECUTIVE SUMMARY

The Bureau of Audits (the Bureau), pursuant to an "Agreement to Provide Services," dated June 28, 2005, conducted a review of the Office of State Medical Examiners (OSME) for the period beginning January 1, 2000 through June 30, 2005 as outlined in the "Objectives, Scope, and Methodology" section of this report. The review focused primarily on quantifying autopsy reports that were incomplete as of June 30, 2005 for all years under review. During the review, however, the Bureau noted ancillary issues to the autopsy reporting process and, accordingly, has made those findings a part of this report.

The OSME is a division within the Rhode Island Department of Health and operates under Title 23, Chapter 4 of the R.I. General Laws (RIGL). In accordance with Rhode Island Law, the OSME has numerous responsibilities as outlined in the "Background" section of this report. However, for the purposes of this review, the Bureau focused on the procedures surrounding the preparation and completion of autopsy reports.

The Bureau performed this review at the request of the Director of Health subsequent to the resignation of the Chief Medical Examiner, Elizabeth Laposata, M.D., on June 3, 2005. In brief, the Bureau noted that, in relation to those autopsies performed, there were a substantial number of autopsy reports that were in various stages of completion but, nonetheless, were considered incomplete as of June 30, 2005. Table 1.1 located in the "Findings and Recommendations" section of this report summarizes the total cases by year and identifies those cases requiring the filing of autopsy reports for the years under review. Table 1.2 summarizes the number of incomplete and complete autopsy reports by year under review. Table 1.3 provides pertinent information as to the stage of completion of the incomplete reports. In summary, as for cases received by the OSME for the period January 1, 2000 to June 30, 2005, there were 1,512 incomplete autopsy reports as of June 30, 2005. Of these incomplete reports, approximately twenty-five percent of the case files indicated an autopsy had been performed; however, there was no evidence of the report having been prepared. The remaining seventy-five percent of the reports were in various phases of completion, the specific results of which are detailed in Table 1.3.

Finally, during the planning phase and throughout this engagement, the Bureau reviewed and documented the system for tracking cases and preparing reports. In doing so, the Bureau found that the process is manually intensive and redundant. This manual process results in an inefficient utilization of pathologist and general staff resources, coding errors in the log and report files, and case misfiling. At the time of this review, the OSME was assessing the report preparation process as part of developing a computerized system to streamline this activity. The Bureau recommends that the OSME expedite the development and implementation of this system to eliminate the redundancy and to ensure that incomplete autopsy reports are completed as soon as possible.

INTRODUCTION

Objectives, Scope, and Methodology

Pursuant to an "Agreement to Provide Services," dated June 28, 2005, the Bureau conducted a review of the OSME for the period beginning January 1, 2000 through June 30, 2005. The express purpose of this review was to determine: (1) the number of cases received annually by the OSME for all years under review, (2) the number of autopsy reports that were required to be prepared in accordance with Rhode Island General Laws for all years under review, and (3) the number of autopsy reports that were incomplete as of June 30, 2005 for all years under review. In addition, the Bureau reviewed case files relative to the fire that occurred on the evening of February 20, 2003 at the Station Night Club in West Warwick, Rhode Island (Station Fire) that resulted in one hundred deaths, and case files related to the October 31, 1999 Egypt Airline disaster that occurred off the coast of Nantucket, Massachusetts that resulted in the deaths of 217 passengers. The State Medical Examiner was asked to review and identify the remains of ninety-six victims of the Station fire and the passengers of the crash.

The Bureau performed the review in accordance with the *Standards for the Professional Practice of Internal Auditing* issued by the Institute of Internal Auditors. The review evaluated OSME's administrative practices and procedures. In addition to the objectives of the review discussed above, the Bureau also documented and reviewed the OSME's case documentation and reporting process. To achieve these objectives, the Bureau reviewed relevant policies and procedures, state laws and regulations, interviewed responsible staff, and performed tests of the records and such auditing procedures considered necessary in the circumstances. OSME did not engage the Bureau to review the processes surrounding the performance of autopsies and, accordingly, the Bureau expresses no opinion in this matter.

The Bureau discussed the findings and recommendations included herein with management and considered their comments in the preparation of this report. RIGL § 35-7-4(c) entitled, "*periodic audits by the department of administration*" states, in part, that within sixty (60) days following the date of the audit of each state department or agency, the director of the department or agency audited shall respond, in writing, to all recommendations made by the Bureau of Audits. Accordingly, management submitted its response to the audit findings and recommendations on August 31, 2005. Said response is included in this report.

Background

The Office of State Medical Examiners is a division within the Rhode Island Department of Health and operates under Title 23, Chapter 4 *et seq*. The Chief Medical Examiner is responsible for the office's operation.

The OSME investigates causes of death that involve injuries which are sudden, unexpected, and unexplained; or causes of death which may, in any way, endanger public health and safety. Investigations cover all known or suspected homicides, suicides,

accidents, sudden infant deaths, drug-related deaths, and medically unattended deaths. Investigation techniques include scene investigations, study of medical and police records, autopsy, body inspection, body fluid investigation, and other tests as deemed necessary. The OSME keeps records on all cases and provides expert testimony in criminal cases for state law enforcement agencies and state courts. OSME is also required by statute to approve all cremations performed in Rhode Island.

Other functions of the office include research in forensic pathology; educational training for resident and fellow physicians; training law enforcement personnel in techniques of homicide investigations; review of causes of death resulting from infectious diseases that may present public health concerns; review of death due to an infectious agent capable of spreading an epidemic within the state; facilitation and authorization of donation of organs for transplant; and disseminating public information regarding causes of death in the State.

On June 3, 2005, Elizabeth Laposata, M.D., resigned from her position as Chief Medical Examiner. The Director of Health, shortly after the resignation of the Chief Medical Examiner, contacted the Bureau to investigate issues surrounding incomplete autopsy reports, the results of which are contained in this report.

FINDINGS AND RECOMMENDATIONS

OUTSTANDING AUTOPSY REPORTS

The primary purpose of the Bureau's review of the OSME, as described in the "Objectives, Scope, and Methodology" section of this report, was to determine the number of incomplete autopsy reports as of June 30, 2005, relating to autopsies performed from January 1, 2000 to June 30, 2005. In order to quantify this information, the Bureau first reviewed all cases reported to and logged by the OSME to determine which cases required the preparation of an autopsy report. Accordingly, Table 1.1 below summarizes the total cases by year and identifies those cases requiring the filing of autopsy reports for the years under review. The figures representing "total cases not requiring autopsy reports" include cases which were either outside of the jurisdiction of the OSME[1], or cases for which an autopsy was not necessary in order to determine a cause of death, or cases in which approval for cremation was required in accordance with Rhode Island Law. Table 1.2 below illustrates the total number of autopsies performed by the OSME, the number of complete autopsy reports, and the number of incomplete autopsy reports as of June 30, 2005 for the period reviewed. The Bureau, during its review, also analyzed and quantified the various degrees of report completion. Table 1.3 provides pertinent information as to the stage of completion of the incomplete reports.

Table 1.1 – Total Cases by Year

	2000		2001		2002		2003		2004		1/1/05-6/30/05		Totals	
Total cases reported to OSME	5,446	100%	5,450	100%	5,602	100%	5,216[2]	100%	5,073	100%	2,809[3]	100%	29,596	100%
Total cases requiring autopsies	646	12%	620	11%	623	11%	672[2]	13%	616	12%	369	13%	3,546	12%
Total cases not requiring autopsies	4,800	88%	4,830	89%	4,979	89%	4,544	87%	4,457	88%	2,440	87%	26,050	88%

[1] Outside of the jurisdiction of the OSME means cases where the manner of death was, by law, not of suspicious or unnatural manner, or where there was no concern or evidence of trauma or foul play.

[2] These figures do not include deaths resulting from a fire that occurred on the evening of February 20, 2003 at the Station Night Club located in West Warwick, Rhode Island. The Bureau reviewed ninety-six case files reported to the OSME related to the Station Fire and noted that autopsy reports had been completed for each victim. The remaining four victims of the fire were not reported to the OSME in Rhode Island and, therefore, no reports were issued.

[3] Information relating to 2005 may be misleading in that, for autopsies that have been performed in 2005 year-to-date, the OSME may be awaiting lab and other tests results to complete such reports.

Table 1.2 – Total Autopsy Reports Complete / Incomplete by Year

	2000		2001		2002		2003		2004		1/1/05 - 6/30/05[3]		Totals	
Total cases requiring autopsies	**646**	**100%**	**620**	**100%**	**623**	**100%**	**672[2]**	**100%**	**616**	**100%**	**369**	**100%**	**3,546**	**100%**
Total autopsy reports complete	383	59%	463	75%	427	69%	462	69%	250	41%	49	13%	2,034	57%
Total autopsy reports incomplete	263	41%	157	25%	196	31%	210	31%	366	59%	320	87%	1,512	43%

Table 1.3 – Status of Incomplete Autopsy Reports by Year

	2000		2001		2002		2003		2004		1/1/05-6/30/05		Totals	
No reports or draft reports	212	81%	22	14%	3	1%	2	1%	42	11%	100	31%	381	25%
Autopsy reports in draft form	17	6%	78	50%	171	87%	167	79%	309	85%	217	68%	959	64%
Autopsy reports complete but unsigned	3	1%	51	32%	15	8%	37	18%	15	4%	3	1%	124	8%
Files not found	31	12%	6	4%	7	4%	4	2%	0	0	0	0%	48	3%
Total autopsy reports incomplete	**263**	**100%**	**157**	**100%**	**196**	**100%**	**210**	**100%**	**366**	**100%**	**320**	**100%**	**1,512**	**100%**

As noted in Table 1.3 above, the number of incomplete reports as of June 30, 2005 totaled 1,512 for the period January 1, 2000 to June 30, 2005. Also, aside from information accumulated in 2000, the majority of these incomplete reports are in draft or unsigned status. Finally, as noted in Table 1.3, there were some instances where the Bureau was unable to locate the required files. The Bureau treated these cases as incomplete reports for the purpose of this review.

The Bureau reviewed the results of the October 31, 1999 fatal crash of Egyptair Flight 990 separately; therefore, these results are not included in the above tables.

[2] These figures do not include deaths resulting from a fire that occurred on the evening of February 20, 2003 at the Station Night Club located in West Warwick, Rhode Island. The Bureau reviewed ninety-six case files reported to the OSME related to the Station Fire and noted that autopsy reports had been completed for each victim. The remaining four victims of the fire were not reported to the OSME in Rhode Island and, therefore, no reports were issued.

[3] Information relating to 2005 may be misleading in that, for autopsies that have been performed in 2005 year-to-date, the OSME may be awaiting lab and other tests results to complete such reports.

As noted in the "Objective, Scope, and Methodology" section of this report, the State Medical Examiner was asked to take the lead in reviewing and identifying the remains of the 217 passengers aboard the airplane. Due to the blunt force of the crash into the Atlantic Ocean, the only human remains recovered from the crash site were body fragments. The OSME first prepared data necessary for "presumption of death" so that certificates of presumed death could be issued to families of passengers on board to execute wills and settle estates. The OSME then identified more than 5,000 fragmented remains and provided a letter to each family along with the identified remains. By definition, as delineated in RIGL § 23-4-1(b), "*an 'autopsy' means the dissection of a dead body and the removal and examination of bone, tissue, organs, and foreign objects for the purpose of determining the condition of the body and the cause and manner of death.*" Due to the fact that no corpses were recovered from the crash site and the Medical Examiner could only inspect body fragments, no autopsies could be performed and thus, OSME was not required to prepare autopsy reports.

RECOMMENDATIONS

1. The Bureau recommends that the OSME implement standards, policies, practices, and procedures to assure the timely completion of autopsy reports. The Bureau further recommends that the OSME develop these standards in consultation with the National Association of Medical Examiners (NAME), the national accrediting agency. Additionally, the Bureau recommends that the OSME consult with NAME to develop and implement policies to specifically address the existing backlog of cases in a manner acceptable to the accrediting body.

2. The Bureau recommends that the OSME implement a system to minimize or eliminate the manual process surrounding the documentation of cases received by the OSME and in the preparation of all necessary reports, including autopsy reports.

3. The Bureau recommends that the OSME design and implement a system of internal controls so that the process of preparing autopsy reports is efficient, can be monitored on a real-time basis, and provides accountability at all times to both the Department of Health and all users relying on the accurate and timely preparation of such reports.

CASE LOG MANAGEMENT AND REPORT PROCESS

As part of this review, the Bureau evaluated and documented OSME's system for tracking cases and preparing reports during the planning phase and throughout this engagement. Upon review it was determined that the process is manually intensive and redundant. This manual process results in an inefficient utilization of pathologist and general staff resources, coding errors in the log and report files, and case misfiling. At the time of this review, the OSME was assessing the report preparation process as part of developing a computerized system to streamline this activity.

RECOMMENDATION

4. The Bureau recommends that OSME expedite the development and implementation of this computerized system to eliminate the redundancy and to ensure that incomplete autopsy reports are completed in a timely manner.

AUTOPSY REPORT DESIGN

While conducting the review, the Bureau noticed that the autopsy reports did not include a line item for the completion date to be filled in by the attending pathologist. Without a completion date, it is very difficult, if not impossible, to track the time necessary to complete the autopsy reporting process.

RECOMMENDATION

5. The Bureau recommends that OSME revise the autopsy report to include a line item for the date on which the pathologist completed the report. This will allow the OSME to determine the completion dates of autopsy reports and, more importantly, to track the time necessary to complete the autopsy reporting process.

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF HEALTH

Safe and Healthy Lives in Safe and Healthy Communities

David R. Gifford, MD, MPH
Director of Health

31 August 2005

H. Chris DerVartanian, CPA
Chief, Bureau of Audits
Department of Administration
One Capitol Hill
Providence, RI 02908

Dear Mr. DerVartanian:

I have reviewed the report issued by the Bureau of Audits (the Bureau) regarding the status of autopsy reports in the Office of the State Medical Examiner (OSME). The Department of Health (HEALTH) endorses the methodology and procedures used in the anaylsis and accepts the findings recommendations.

Findings

The report indicates that among cases opened in the OSME from January 1, 2000 through June 30, 2005, roughly 1,500 written autopsy reports remain incomplete. Despite having completed the actual autopsy and associated tests and investigations, there is no final written disposition of the case. It is important to note that the incomplete reports do not impact the medical or legal standing of the cases; however, this figure certainly serves to confirm significant concerns with the historical management practices of the Medical Examiner's office.

Some months ago as this issue came to light, in addition to asking for your review, I also directed a team of staff from throughout HEALTH to perform our own assessment of the policies and practices in the OSME. The team found opportunities for improvement in management and efficiency, customer service and employee safety and training. With the cooperation and support of the staff in the OSME, we have recently implemented a series of management reforms (see attached); many of which coincide with the recommendations contained in your report.

Recommendations

The Bureau's first recommendation is for the OSME to implement standards, policies, practices and procedures to assure the timely completion of autopsy reports in consultation with the National Association of Medical Examiners (NAME), the national accrediting agency. The Bureau further recommends that the OSME consult with NAME to develop and implement policies to specifically address the existing backlog of cases.

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HEALTH accepts this recommendation and will develop standards for the timely completion of autopsy reports in consultation with NAME, as well as policies to address the documented backlog of cases. In anticipation of this input, we have contacted NAME regarding these issues. NAME has indicated that they will provide guidance on standards for report completion going forward. As for the backlog of cases, based upon their experience with similar issues in other jurisdictions, NAME has advised us to develop policies and procedures for prioritizing and completing aging cases as they are requested.

Recommendations 2, 3 and 4 call upon the OSME to implement systems and internal controls to minimize manual processes surrounding the documentation and tracking of cases received by the OSME and the preparation of reports. HEALTH accepts this recommendation. Currently, staff from our own Human Resources office and the state's IT office (DOIT) are conducting a workflow study to improve the overall efficiency of the office. This includes redesigned procedures, protocols, forms and documenting needs for automated tracking and reporting.

The Bureau's final recommendation is for the OSME to designate areas on the report forms for completion dates and sign-off so that this information can be easily determined in future reviews. With the change in leadership in the OSME, staff has already implemented this change in order to improve accountability and quality assurance.

In closing, please know that I appreciate the efforts of you and your staff in developing this report and helping HEALTH bring improvements to the Office of the Medical Examiner. I look forward to sitting down again in the near future to review the corrective action developed in response to this report and the progress we have made in service to the citizens of Rhode Island.

Sincerely,

David R. Gifford, MD, MPH
Director of Health

DRG:bjs

Attachment

Recent Management Reforms in the OSME – 8/31/05

HEALTH has instituted a series of management reforms in the OSME aimed at improving overall efficiency, customer service and staffing. New management and staff continue to work cooperatively in the development and implementation of these important reforms.

Management and Efficiency

- A workflow study is near completion and has helped to streamline the work of the office. This includes redesigned procedures, protocols, forms and documenting system needs for automated tracking and reporting.
- The Department is actively working to consolidate the OSME with the HEALTH laboratories to share support/administrative/budget functions.
- All death certificates are no longer required to be reviewed by the Chief, decreasing the steps and time it takes to release a body to the funeral home.
- A rotation schedule for the pathologists has been implemented, allowing more uninterrupted time to complete required reports.
- A grant proposal has been submitted to gain federal funding for a pre-accreditation evaluation as part of the process for applying for NAME certification. A second proposal has been submitted to gain federal funding for bar-coding/tracking of specimens and for improved office security.

Customer Service

- OSME conducted a survey of incoming telephone calls to improve appropriate triaging of calls and responding to the public.
- A new website is near completion which will provide the public with a better understanding of OSME services, and provide appropriate contact information. It will also help with requests for information and autopsy reports.
- An information brochure is in development on services offered so that families better understand the process and time needed to generate an autopsy report.
- Front office/case manager personnel received training on grief and dealing with grieving families.

Staffing

- Eight staff positions have recently been filled or are or being recruited for:
  - Candidate interviews for the new Chief Medical Examiner are scheduled.
  - Candidate interviews for the new Medicolegal Administrator are scheduled (a vacancy created by the unexpected passing of the former administrator).
  - A contract pathologist has been hired to help with the current exam caseload, and a second one is being recruited.
  - One new Medical Examiner Agent started work in August; two more will come on board in September.
  - All five of the Scene Investigator positions are now filled.
- A new Standard Operating Procedures manual is near completion.
- An office Safety Manual was developed and new and existing employees were trained in its contents.
- A Medical Examiner Agent training manual was developed.