

Rhode Island Department of Health  
Office of State Medical Examiners

Status Report  
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Status Report

The RI Department of Health's Office of Medical Examiners (OSME) operates under RI General law Title 23 Chapter 4 and Title 23 Chapter 1-1. The primary function of the OSME is to determine or certify both the cause and manner of death of approximately 6000 deceased persons reported to the OSME per year (NOTE: there are approximately 10,000 deaths per year in Rhode Island). The cause of death determination requires the thorough investigation of the medical history and events surrounding a death; which may include review of medical records, witness interviews, law enforcement records, inspection of the scene of death, and in some circumstances an autopsy. The manner of death is classified as either natural or unnatural. Unnatural causes of death include suicide, homicide, trauma, and undetermined; all of which require an autopsy under RIGL 23-4.

Investigations into the cause and manner of death related to law enforcement and criminal investigations are often of high profile, which generate media coverage. This may result in the public perception that the OSME's principle role is to assist in law enforcement investigations related to potential homicides. Recent television shows such "CSI" have only reinforced that perception. However, in addition to assisting law enforcement, the OSME performs numerous other public health functions. These public health functions include:

1. Screen deaths for public health significance related to:
  - a. Adverse reactions to medications;
  - b. Infant mortality such as SIDS or genetic abnormalities, which provides; Invaluable information to families about their child's death and future actions to prevent reoccurrence with other children;
  - c. Infectious diseases of public health concern (such as West Nile virus, Triple EEE virus, or HANTA virus) and that are capable of creating a statewide epidemic (e.g. meningitis);
  - d. Chemical agents that may of public health concern; or
  - e. Medical errors (e.g. following obesity surgery).
2. Approve organ/tissue donation for transplants
  - a. Donation of organs, such as heart, lung, liver, and kidney to a living patient for transplant. Commonly referred to as a "beating heart" donations; or
  - b. Donations of skin, bones, tendons, and cornea from a deceased individual. Commonly referred to as a cadaveric donation, which makes up the majority of organ donation through the OSME.
3. Certify death certificates prior to cremation to ensure the cause of death and that there are no public health or safety implications.
4. Refer health professionals to HEALTH's Board of Medical Licensure and Discipline for possible unprofessional conduct based on death investigation.
5. Testify in court regarding:
  - a. civil matters

- b. criminal matters
- 6. Issue Death Certificates in a timely fashion.
  - a. Assist the next of kin with life insurance claims by verifying the death and providing documentation required by the insurance company.
- 7. Burial of deceased when there are no next of kin, legal authority or state agencies available.
- 8. Perform epidemiologic studies related to cause of death to help medical professionals and public policy decision makers. Examples include:
  - a. Suicide review (completed)
  - b. Child fatality review (nearing completion)
  - c. Elder death review (under development)
- 9. Conduct and participate in training programs for public health professionals
  - a. Pathology residents
  - b. Neuropathology fellows
  - c. Summer internships
  - d. Community Health and Public Health Masters Program
- 10. Provide educational material to public and families
  - a. Suicide
  - b. Genetic causes of death
  - c. Grief Counseling and support groups
  - d. Autopsy Process (under development)
- 11. Provide information to help health professionals provide better care
  - a. RI Cancer Registry (with HEALTH's Office of Disease Prevention and Control)
  - b. HIV workgroup (with HEALTH's Office of Disease Prevention and Control)
  - c. Statewide death trends (with HEALTH's Offices of Vital Records and Health Statistics)
  - d. Verify accuracy and completion of information on death certificates, which is used by state and federal agencies, as well as researchers to help answer important public policy questions.

## **VOLUME OF INVESTIGATIONS**

Overall, the OSME responds to approximately 6000 calls for service per year (see Table 1). The OSME determines the cause and manner of death through approximately 1000 death investigations per year, with two-thirds requiring an autopsy and the remainder “in absentia” (e.g. not requiring an autopsy; rather a review of information such as the medical records, law enforcement records, inspection of the death scene and witness interviews). A small fraction of all investigations occur after the fact (e.g. after the death certificate has been filed by a non-medical examiner physician) and has been decreasing from about 50 per year to 37 this past year due in part to improved reporting practices by physicians and law enforcement. In 2004, 497 deaths were classified as unnatural. There were 83 classified as suicide, 36 due to homicide and 296 as result of other trauma including 100 motor vehicle accidents and 73 drug related deaths and nine undetermined causes of death.

Table 1. Death investigations by HEALTH’s Office of State Medical Examiners.

Case Type	2000	2001	2002	2003	2004
Autopsy	518	697	688	865 <sup>4</sup>	699
In absentia <sup>1</sup>	135	196	271	286	296
After the fact <sup>2</sup>	46	54	47	24	37
Cremation review <sup>3</sup>	2161	3026	3043	2684	2613
Investigation report only	1681	2140	2249	2146	2040
Total OSME Cases	4541	6113	6298	6005	5685
Total Deaths in RI	10142	10119	10450	10219	9921

<sup>1</sup> *In absentia* refers to deaths investigated by review of available information where the medical examiner determines that no autopsy is required

<sup>2</sup> *After the fact* refers to deaths requiring investigation after a death certificate filed in error by a non-medical examiner physician

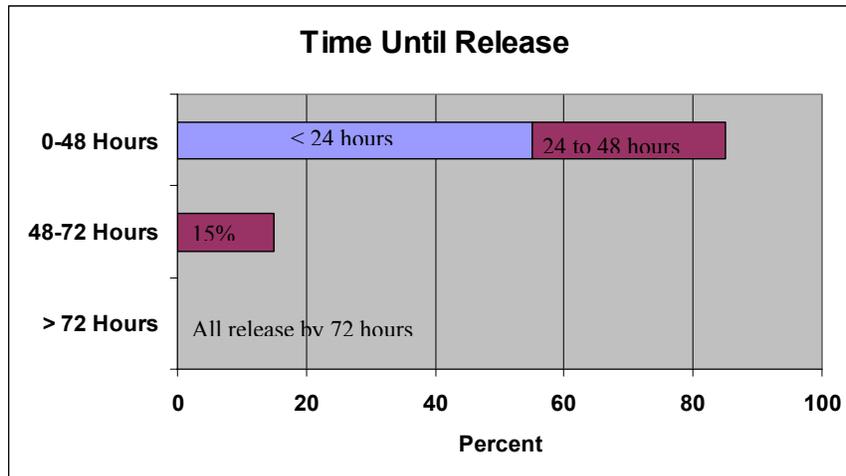
<sup>3</sup> Cremation review includes certifying the death certificate prior to cremation to ensure a natural manner of death or cause of death that may be of public health concern (e.g. infectious disease or chemical release).

<sup>4</sup> 96 autopsies related to “Station night club fire” – Feb 20, 2003

### TURNAROUND TIME FOR INVESTIGATIONS

HEALTH’s OSME is committed to meeting the needs of the family and friends of the deceased, particularly investigations requiring an autopsy. The goal of the OSME is to ensure both a thorough and accurate investigation into the cause/manner of death and the timely release of the individual/remains to the family. The goal of the OSME is to release the individual/remains within 48 hours of arrival as long as it does not jeopardize HEALTH’s ability to establish the cause and manner of death. In 2004, 85% of all individuals sent to the OSME for investigation were released within 48 hrs; the remaining 15% were released within 72 hours (see Figure 1). Reasons for the delay in the releasing an individual after 48 hours include: no next of kin available, unable to identify the individual, body is frozen delaying autopsy, and the volume of deaths exceed the OSME’s capacity of perform autopsies. The OSME has a limited ability to perform autopsies on weekends and potential homicide investigations are always given priority.

Figure 1



Once the individual/remains are released, the OSME continues its investigation into the cause and manner of death. This requires the careful testing of tissue and specimens collected during the autopsy and correlating the findings with medical and law enforcement records. The written autopsy report often requires a review of the medical literature, case histories, relevant medical-legal case reports and in some cases consultation with experts before a final report can be issued. This process often competes with the pathologists' time required to complete additional investigations of new deaths referred to the OSME (average 2-3 per day). The goal of the OSME is to issue the final written autopsy report within 6 months of releasing the individual/remains to the next of kin. As of Jan 31, 2005, the OSME had 19 (5.2%) out of a total of 364 final reports exceeding six months. Eight cases exceed six months due to the continued testing and investigation into the cause of death and 11 due to the written reports still being in draft form.

### **ORGAN/TISSUE DONATION ACTIVITIES**

The OSME also reviews all deaths prior to both organ and tissue donation for transplants. The OSME review focuses on ensuring that organ donation does not jeopardize an investigation into any unnatural causes of death, such as those due to homicide or those that may be harmful to the transplant recipient (e.g. death due to infectious causes). In the second half of 2004, the OSME received 80 requests for tissue donation to New England Organ and Tissue Transplant Bank Data (NEOTTB). Only 4 (5%) were for "beating heart" donations, all were approved. The last "beating heart" donation denied for transplant was in 2003 from an individual physically thrown from a moving vehicle and thus involved in a homicide investigation. The remaining denials in 2004 were for cadaveric tissue donation, of which only 6 (7.5%) were denied donation. The reasons for denial of cadaveric tissue donation included 3 cases involving children where there was insufficient information to rule out unnatural death from physical abuse and 3 cases involving adults where homicide was a possible cause of death (e.g. run over by car).

During 2005, the New England Organ Bank has reported to HEALTH that Rhode Islanders have contributed 22 organs for transplant, compared to 66 organs from Massachusetts residents. When adjusting for population, this means Rhode Islanders donate organs at twice the rate for transplant as Massachusetts. Furthermore, Rhode Islanders successfully donated tissue from cadaveric harvesting nine times in the same time period, as compared to 30 donations from Massachusetts residents. Again this represents a population-adjusted rate twice that of neighboring Massachusetts.

### **SUCSESSES & RECOGNITION**

HEALTH's OSME has had several notable successes and recognitions for its services and staff including:

- Titan Report (Annex E – Part IV, Page E-72):
  - *Although the OME staff competently and compassionately deals with death everyday it became evident very early that this was no ordinary incident. Working around-the-clock over the course of the next 5 days, the OME completed positive forensic identification investigations and performed autopsies on all 96 bodies recovered from the ruins of the*

*Station club. This phenomenal accomplishment required the complete commitment of the OME staff, a Federal DMORT, and scores of volunteers, including funeral directors, dentists, and administrative personnel.*

- Successful investigation and identification of over 5,000 fragmented remains from the 1999 Egypt Air 990 crash.
- Never has had a case overturned in criminal court.
- Elizabeth Laposata, MD, the Chief Medical Examiner has been recognized as
  - Board of Directors – National Association of Medical Examiners
  - Nationally recognized as one of the top 25 public health figures in *Face of Public Health* – 2004
  - Service Award, Brown Medical School –2004
  - Woman of the Year, The Rhode Island Commission on Women – 2003
  - Victims’ Rights and Services Award, Rhode Island Victims’ Advocacy & Support Center – 2002
  - Recognition Certificate, Chevra Kadisha of Rhode Island – 2000
  - Recognition Certificate, Kenyon International Emergency Services for work after the Egypt Air tragedy – 2000
  - Recognition of Service, Rhode Island Funeral Directors Association for work after the Egypt Air tragedy – 1999
  - Honoree, Outstanding Women in Public Service, YMCA of Greater Providence – 1996

There are approximately 260 medical examiners offices nationwide, only 47 are accredited through the National Association of Medical Examiners (NAME). HEALTH’s Chief Medical Examiner is a board member of NAME, which requires the evaluation and inspection of medical examiners offices seeking accreditation. HEALTH is currently determining the benefits of accreditation, as there is a monetary fee and staff time associated with this effort.

#### **EXTERNAL REVIEWS OF THE OFFICE OF STATE MEDICAL EXAMINER**

The OSME has been involved in several external reviews including: a review by the Occupational Health and Safety Administration and an after-action review of the Station Night Club Fire (e.g. “titan report”). HEALTH welcomes external reviews to improve the quality, safety, and effectiveness of OSME.

#### **OHSA REVIEW**

In a letter to HEALTH, the Occupational Health and Safety Administration (OHSA) identified 10 concerns with the physical plant and written procedures. The four physical plant violations involved an un-cleaned areas (a computer in the hallway), an overhead storage unit obstructing a sprinkler, an uncovered electrical junction box, and an overhead light fixture was missing a guard. The remaining six violations were for a lack of documentation for procedures already in place. All violations were corrected in a timely manner and HEALTH has received a letter from OSHA on February 4, 2005 stating all concerns “have been abated.”

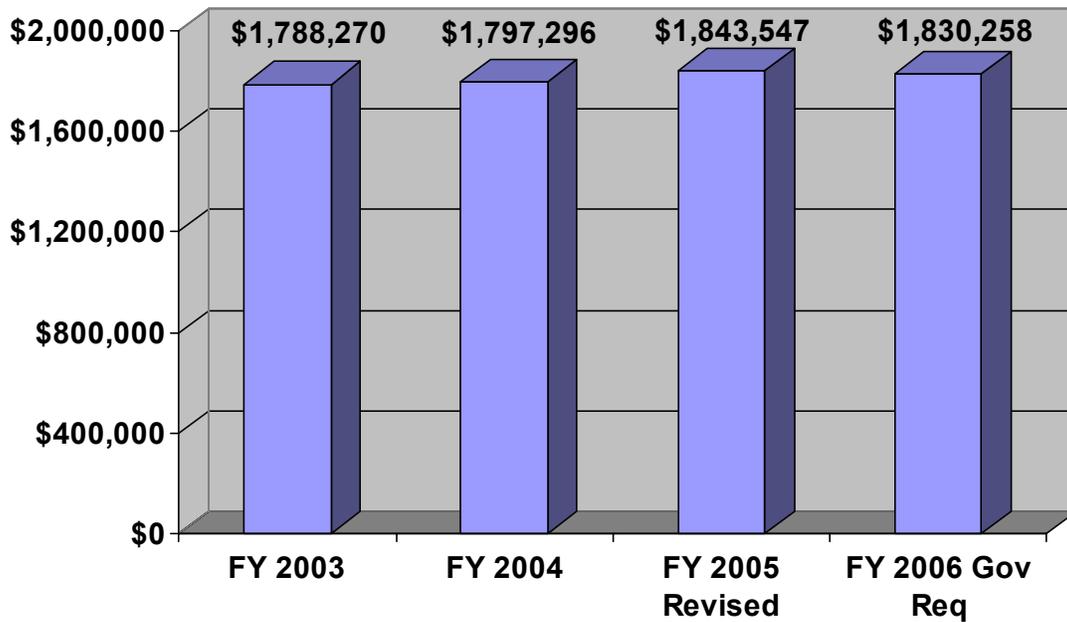
### **AFTER-ACTION REVIEW – STATION NIGHT CLUB FIRE.**

The Titan Report following the Station Night Club fire recognized the OSME for performing over 96 autopsies and identifications in under 5 days, utilizing 35 personnel working in 12 hour shifts around the clock until all victims were identified and families notified. The Titan report stated “This phenomenal accomplishment required the complete commitment of the OME staff, a Federal DMORT, and scores of volunteers, including funeral directors, dentists, and administrative personnel” (Titan Report, Annex E – Part IV, Page E-72). The final report contained over 379 detailed specific recommendations covering all state Departments and Agencies of which 18 recommendations applied to the OSME. These recommendations focused on improving the retrieval bodies from a mass causality event through the development or revision of existing plans, securing appropriate equipment, and the development or revision of communication and coordination plans with rescue personnel and emergency management agency staff. All 18 Titan Report recommendations have been addressed. HEALTH’s mass fatality plan has been written, distributed to EMA, and is updated and reviewed regularly to improve the department’s preparedness to respond to an emergency.

### **BUDGET AND STAFFING**

HEALTH’s OSME currently receives nearly 100% of its support from the general revenue. The OSME currently has a total staff of 17 FTEs. The budget for the past three years and proposed budget for 06 has remained nearly level (see Figure 2. Annual Budget from General Revenue). Since fiscal 2003 the ME’s budget from general revenue has increased 2.4% from 1.79 million in FY ‘03 to 1.83 in FY ’06. Core staffing at the OSME has been below professional staffing levels until the recent hiring of an Assistant Medical Examiner. Currently, there are 3 Pathologists (excluding the Chief Medical Examiner), 5 Scene Investigators (1 position is vacant), and 3 Medical Examiner Agents (e.g. autopsy assistants).

## ME Office Budget Trends 2003-2006



### PLANS FOR IMPROVING PERFORMANCE

While the OSME meets all requirements of the General Laws and HEALTH's regulations and feedback on the OSME performance in general has been positive, there are areas that can be improved. Even though meetings with RI morticians and funeral directors association have provided positive feedback, we continue to hear second hand about delays in releasing individuals/remains and providing autopsy reports in a timely manner. Based on the review of current performance, external reviews, and these comments plans for improving performance in the OSME include the following:

#### A. Decrease turnaround time.

We plan to improve turnaround time for the release of individuals/remains and issuing of autopsy reports by

1. Improving workflow to decrease needed time to complete autopsy reports. Currently 95% of written autopsy reports are completed within 6 months. Our goal is to achieve 98% of reports available within 6 months and at least 65% available within 3 months. To avoid building a backlog in current cases, the OSME will complete old cases at a rate of one per week and ensure all incomplete medical records and/or law enforcement reports are completed before dedicating physician review time to a new case. HEALTH plans to update the OSME tracking database to better document progress and more easily identify delays.
2. Keep families informed of progress in completing autopsy reports when they exceed three months.

3. We plan to update our database for tracking release of individuals or remains and completing of autopsy reports. This will enable us to track different time points in the process to identify reasons for delays and to help reallocate resources when delays are occurring. It will also help HEALTH to evaluate our ability to achieve desired objectives.
4. Increase scheduling of autopsies on Saturdays and holidays to avoid backlog occurring over weekends.

**B. Initiate feedback evaluation from families, law enforcement and funeral directors.** We are in the process of designing feedback evaluation questionnaires that will be sent to

- families with each autopsy report,
- funeral directors with each individual body, and
- law enforcement personal following completing of investigation referred to ME office by law enforcement.

**C. Allow families and funeral home directors easier access to information.**

- Develop a website with general information on actions of the OSME
- Provide information on death certificate
  - Pending death certificates and insurance
  - How to obtain a death certificate
- Inform customers of the process of an autopsy (why, when will the report be completed, etc.)

**D. Increasing emergency preparedness.**

Using recommendations from the “Titan Report” we will review our process for mass casualty on scene assistance and ability to marshal necessary resources quickly to handle large mass casualties. Incorporation of these recommendations has been underway since the release of the Titan Report. HEALTH will continue to work with EMA, state and local law enforcement and rescue personnel to ensure effective and timely communication and to ensure a current mass fatality plan. This process is already well underway as part of the bioterrorism preparedness grant received by HEALTH.