INTRODUCTION

The Office of State Medical Examiners (OSME) investigated 77.9% of the 10,020 deaths that occurred in Rhode Island in 2016. Investigation by the OSME ranges from review of death certificates in order to issue permits for cremation to scene investigations and full autopsy examination with additional laboratory testing. In 2016, the OSME retained jurisdiction over 1384 deaths and performed 705 full autopsy examinations.

The OSME has continued its commitment to provide the best possible service to the citizens of Rhode Island while investigating an increasing number and percentage of the deaths in the state. By statute the Medical Examiner retains jurisdiction, investigates and signs the death certificates for all individuals whose deaths that are known or suspected to be the result of an accident, homicide or suicide as well as those whose deaths were from sudden and unexpected natural causes.

While this report is made up of many numbers and statistics, each case represents the death of an individual who is mourned and will forever be remembered by family and loved ones. By learning as much as we can about each of these deaths, it is my hope that the OSME can help individual grieving families and also provide information that will help make Rhode Island a safer and healthier place to live.

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Acting Chief Medical Examiner
**BACKGROUND**

The Office of State Medical Examiners (OSME) is an agency within the Rhode Island Department of Health whose mission is to investigate and certify sudden, unexplained or unnatural deaths; to facilitate organ donation; to provide expert testimony; and to promote and protect public health by surveillance of mortality trends across Rhode Island. Although the staff at the OSME is relatively small, OSME personnel work in conjunction with many agencies, organizations and individuals in the course of fulfilling this mission.

In 2016, the OSME was directed by an Acting Chief Medical Examiner, who is a licensed physician with postgraduate training and board certifications in pathology and forensic pathology. He was assisted by two Assistant Medical Examiners with similar qualifications, and two contract physicians.

The non-physician staff includes: Administrator (1/2 FTE position), one Supervising Medicolegal Investigator, one Senior Medicolegal Investigator, and six (6) additional Medicolegal Investigators, who assist pathologists with scene and body examinations; two (2) Case Managers who coordinate case information, and two (2) Senior Word Processing Typists who provide customer service and reception duties as well as cremation certificate processing and transcription.

In fiscal year (FY) 2016, OSME had an enacted budget of $2.942 million, which represented an increase from FY 2015. The majority of allocated funds go toward salaries and benefits for the employees.

**DEATH INVESTIGATIONS**

In 2016 there were 10,020 deaths statewide, and the OSME received notification of over 7,806 (77.9%) of them. Jurisdiction was accepted and death certified in 1,384 cases. Cases referred to the OSME in which jurisdiction is declined are all reviewed by an OSME staff physician prior to final closure.

OSME retained jurisdiction in 1,002 deaths that required autopsy or external inspection (705 autopsies, 44 partial autopsies, 253 inspections). All of the postmortem examinations (autopsies and inspections) were performed at the OSME Orms Street facility. Formal neuropathology examination was performed in 44 of the autopsies, and microscopic examination was performed in conjunction with 135 of the examinations. Toxicology specimens were submitted from 1,059 of deaths retained under OSME jurisdiction, and approximately 80% of the cases submitted for toxicology testing had at least one drug and/or alcohol detected. Four examinations of non-human bone were also performed along with the examination of a near full skeleton that was determined to be of historic origin and one old homicide.
Jurisdiction was retained “in absentia” (without examination of the body) by the OSME in 288 cases in 2016. These deaths fell under OSME jurisdiction but did not require a postmortem examination for the OSME to determine the cause and manner of death. These cases consist nearly entirely of hospital deaths from the delayed effects of documented trauma. They are certified on the basis of review of information contained in medical records, police reports, witness interviews and other sources. The majority are accidental deaths.

Jurisdiction was accepted by the OSME in 21 cases in 2016 after the filing of an improper death certificate (“after fact”). These deaths generally come to the OSME’s attention after the passage of time and cannot be investigated by postmortem examination. Fortunately, most are hospital, nursing home or hospice deaths resulting from the delayed effects of accidental trauma and can be investigated as “in absentia” deaths. The OSME corrects the original death certificate with an amendment, if the doctor cannot or if the death is due to other than natural causes. Two cases required exhumation for certification, and the OSME did examine two exhumed remains in 2016.

An OSME physician reviews the death certificate on all requests for cremation in Rhode Island. During 2016, OSME pathologists approved 6,251 cremations, including 1,684 individuals who died out of state but were to be cremated in Rhode Island. When an improper death certificate is submitted with a cremation request, a follow-up investigation is conducted by the OSME prior to approval, and guidance for proper certification is made to the certifier when needed for them to generate a proper certificate. Approximately 5% of the cremation requests are for deaths that should have been reported to OSME (e.g. hip fracture, head trauma or drug overdose). The OSME assumes jurisdiction over these deaths. Sometimes the body must be examined at the OSME.

DEATH CERTIFICATIONS
The OSME must accept jurisdiction, determine cause and manner of death and sign a Medical Examiner’s death certificate for all deaths known or suspected to be the result of anything other than completely natural causes as well as for sudden unexpected apparent natural deaths from unknown cause. In 2016 the OSME was responsible for certification of 1,384 deaths. 685 died as the result of an accident; 423 died of natural causes; 130 were suicides, and 29 were homicide victims. A manner of death could not be determined in 30 cases.

Of the 29 homicide deaths, one involved legal intervention by law enforcement. One of these individuals was killed in Massachusetts and the other one died of complications of wounds he received in 2009. More than half of the remaining homicide victims were also shot. Eight died of inflicted blunt force injuries, including two children. One of the homicide victims was found decades after his death.
The number of suicides in 2016 was 130. More information about suicides in our state can be found in this report from the Rhode Island Violent Death Reporting System (RIVDRS), which collects data from a variety of sources including the OSME and is located within the OSME office space http://rimed.org/rimedicaljournal/2013/06/2013-06-36-health-suicide.pdf

Accidents made up almost half of the deaths certified by the OSME in 2016. 685 of the accidental deaths were the result of an unintentional drug overdose involving both illicit and pharmaceutical drugs.

Falls were a close second to drug overdoses in the accidental death category. Many of the 250 fatal falls involved older individuals who fell relatively short distances but had significant underlying natural disease, which contributed to their death. Also, individuals died from accidental drowning and accidental burns, most when their residence caught fire. Other types of accidental death in 2016 included choking, exposure to cold or hot environments, blunt force injuries due to incidents other than falls or motor vehicle accidents, electrocution and carbon monoxide poisoning.

In most of the 30 deaths in which a manner of death could not be determined, it was because it was not possible to differentiate between two or more of the above manners of death, not because the cause of death was unknown. The 423 natural deaths certified by the OSME are a small percentage of the over 10,020 deaths from natural causes in RI in 2016.

UNIDENTIFIED AND STORED BODIES

None of the 29 non-historical individuals who were unidentified when they arrived at the OSME in 2016 remained unidentified by April 1, 2016. The OSME stored 48 bodies this year. 48 were stored at the request of the Department of Human Services/GPA as they had not otherwise fallen under our jurisdiction. 36 were under OSME jurisdiction either due to the apparent manner of their death or because there was no one to claim their bodies at the time of their death. In a few cases next of kin was quickly found. In a rare additional case further investigation or posting a legal notice in the newspaper located family who could make final arrangements. GPA made arrangements at our request for all of the 48 cases.

Note that when individuals arrive at the OSME already positively identified, greater than 95% are ready for release within 3 days.
ORGAN AND TISSUE DONATION

OSME is committed to the facilitation of organ and tissue donation. In 2016, the office worked with New England Organ Bank (NEOB), the regional organ procurement organization (OPO) to augment donation and improve timeliness of reporting. Procurement procedures were performed on 105 decedents under OSME jurisdiction (105 tissue donors, of whom 17 were also organ donors).

TRANSPORTATION

Transportation of bodies to OSME is performed by livery service (Med Tech Ambulance Service) and on occasion by OSME personnel, funeral homes or the New England Organ and Tissue Bank after donation. No bodies were transported from outside jurisdictions. In 2016, 1,052 individuals were transported to OSME for autopsy, inspection and/or storage. Of these cases, 992 were conveyed by livery service. OSME has enjoyed a good working relationship with Med Tech Ambulance Service, which has performed livery service for the agency since Spring 2015.

SCENE VISITS

OSME investigator staff responded to death scenes on 506 occasions. The medical examiners responded to death scenes in cases of homicide, suspicious deaths and recovery of skeletal remains. The presence of a forensic pathologist at these death/recovery scenes continues to be beneficial and positively received by law enforcement agencies.

HIGHLIGHTS AND CHANGES

In early 2016, four fields were added to our database which allowed further classification of the deaths certified by the OSME beyond the five manners of death that were used previously. Having these fields and an associated export report has lead to easier retrieval of similar types of deaths from our database for study and generation of quick statistical reports.

Some of the increase in illicit drug deaths in 2016 was associated with the introduction of acetyl fentanyl, a synthetic opioid that had not previously been seen as a drug of abuse, and combinations of multiple prescription and illicit drugs.

PARTNERSHIPS

Rhode Island Violent Death Reporting System (RIVDRS)
Rhode Island Child Death Review Team
Rhode Island Drug Overdose Prevention and Rescue Coalition
OFFICE OF STATE MEDICAL EXAMINERS 2013 STAFF

**Acting Chief Medical Examiner**
Ariel Goldschmidt, MD

**Assistant Medical Examiners**
Priya Banerjee, MD
Patricia Ogera, MD
Zhongxue Hua, MD (contractor)
Alexander Chirkov, MD (contractor)

**Case Managers**
Carol Capron (Office Manager)
Susan Daniell

**Scene Investigators**
David DeTora (Supervising Scene Investigator)
Kerry Burke
Angela Harwood
Robert Robinson
Carl Zambrano
John Anderson (Senior Scene Investigator)
George Grande
Danny Price

**Senior Word Processing Typists**
Jason Hopkins
Alicia Feather

**Administrator (1/2 FTE)**
Joseph Catalano