INTRODUCTION

The Office of State Medical Examiners (OSME) investigated over one-half of the 9,993 deaths that occurred in Rhode Island in 2013. 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 2013, the OSME retained jurisdiction over 1234 deaths and performed 674 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.

Christina Stanley, MD
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.

The OSME is currently directed by a Chief Medical Examiner, who is a licensed physician with postgraduate training and board certifications in pathology and forensic pathology. She is assisted by three Assistant Medical Examiners who are also licensed, board certified forensic pathologists.

The non-physician staff includes: Administrator (1/2 FTE position), one Senior Medicolegal Investigator and four (4) additional Medicolegal Investigators, three (3) Medical Examiner Agents who assist pathologists with 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) 2013, OSME had an enacted budget of $ 2.42 million, which represented an increase from FY 2012. The majority of allocated funds go toward salaries and benefits for the employees.

DEATH INVESTIGATIONS

In 2013 there were 9,993 deaths statewide, and the OSME received notification of over 5,700 (57%) of them. Jurisdiction was accepted and death certified in 1,234 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 947 deaths that required autopsy or external inspection (674 autopsies, 21 partial autopsies, 252 inspections). All but two of the postmortem examinations (autopsies and and inspections) were performed at the OSME Orms Street facility. Formal neuropathology examination was performed in 52 of the autopsies, and microscopic examination was performed in conjunction with 278 of the examinations. Toxicology specimens were submitted from 970 (79%) 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. 30 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.
Jurisdiction was retained “in absentia” (without examination of the body) by the OSME in 285 cases in 2013. 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 14 of 16 cases in 2013 after the filing of an improper death certificate (“after fact”). These deaths generally come to the OSME’s attention after the passage of some 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. None required exhumation for certification, and the OSME did not examine any exhumed remains in 2013.

An OSME physician reviews the death certificate on all requests for cremation in Rhode Island. During 2013, OSME pathologists approved 3830 cremations, including 400 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 2013 the OSME was responsible for certification of 1234 deaths. 590 died as the result of an accident; 430 died of natural causes; 140 were suicides, and 37 were homicide victims. A manner of death could not be determined in 37 cases.

Of the 37 homicide deaths, 2 involved legal intervention by law enforcement. One of these individuals was shot in Connecticut and the other died of complications of wounds he received in 2009. More than half of the remaining homicide victims were also shot. 8 died of inflicted blunt force injuries including two children. One of the homicide victims was found decades after his death.
The number (140) of suicides in 2013 is the highest in at least nine years. 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 2013. 232 of the 590 accidental deaths were the result of an unintentional drug overdose 49% involving only illicit drug(s), 34% involving only pharmaceutical drug(s) and 17% involving both illicit and pharmaceutical drugs. 15 of the deaths from illicit drug use involved the use of acetyl fentanyl a synthetic opioid, which had never been identified as a drug of abuse prior to its identification in Rhode Island in 2013.

Falls were a close second to drug overdoses in the accidental death category. Many of the 210 fatal falls involved older individuals who fell relatively short distances but had significant underlying natural disease, which contributed to their death. 69% of those who died as a result of a fall were over 80 years old and 86% were 65 or older. 83 individuals died in motor vehicle accidents and 14 from alcohol intoxication in the absence of drug abuse. 10 individuals died from accidental drowning and 10 from accidental burns most when their residence caught fire. Other types of accidental death in 2013 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 37 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. However, 6 of 10 infants, who had a fatal event from unknown cause while apparently sleeping in 2013 were classified as of undetermined manner, while 4 were classified as natural deaths. These deaths attributed to “Sudden Unexplained/Unexpected Infant Death” (SUID) or “Sudden Infant Death Syndrome” (SIDS) continue to be the major cause of death for previously healthy infants under a year of age. Many but not all of these deaths are associated with unsafe sleep environments. The 430 natural deaths certified by the OSME are a small percentage of the over 9,000 deaths from natural causes in RI in 2013.

UNIDENTIFIED AND STORED BODIES

None of the 42 non-historical individuals who were unidentified when they arrived at the OSME in 2013 remained unidentified by April 1, 2014. The OSME stored 61 bodies this year. 25 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 most of the 36 as well as the 25 we stored on their behalf.

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 2013, 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 54 decedents under OSME jurisdiction (54 tissue donors, of whom 5 were also organ donors).

**TRANSPORTATION**

Transportation of bodies to OSME is performed by livery service (New England Ambulance) 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 2013, 1006 individuals were transported to OSME for autopsy, inspection and/or storage. Of these cases, 958 were conveyed by livery service. OSME has continued to enjoy a good working relationship with New England Ambulance, which has performed livery service for the agency since late 2007.

**SCENE VISITS**

OSME investigator staff responded to death scenes on 466 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 2013, two 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. Two student interns in the spring and summer of 2013 populated these fields for all deaths certified by the OSME in 2011 and 2012 and the first part of 2013 and for all unnatural deaths in 2009 and 2010, and current staff continue to enter these classifications. 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 2013 was associated with the introduction of acetyl fentanyl, a synthetic opioid that had not previously been seen as a drug of abuse. The Rhode Island Department of Health’s Forensic Toxicology Laboratory was the first laboratory to identify this substance in an autopsy sample. The OSME and DOH with on-site assistance from the CDC dispersed information about this dangerous chemical. Read more at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6234a5.htm.

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

Chief Medical Examiner
Christina Stanley, MD

Assistant Medical Examiners       Case Managers
Priya Banerjee, MD                Carol Capron (Office Manager)
Patricia Ogera, MD                Michaela Balcombe
Carolyn H Revercomb, MD
Alexander Chirkov, MD (part time contractor June-December)

Scene Investigators               Medical Examiner Agents
David DeTora (Senior Scene Investigator)  John Anderson (Senior ME Agent)
Kerry Burke
Angela Harwood
Robert Robinson
Carl Zambrano

Senior Word Processing Typists
Kathleen Martin (effective 11/24/2013)
Betty Potenza (until November 2013)

Roseann Champlin (temp-worked as a Senior Word Processing Typist and as Case Manager)

Administrator (1/2 FTE)
Joseph Catalano