

2017 ANNUAL REPORT OFFICE OF STATE MEDICAL EXAMINERS DEPARTMENT OF HEALTH STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

INTRODUCTION

The Office of State Medical Examiners (OSME) investigated 79.4% of the 10,423 deaths that occurred in Rhode Island in 2017. 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 2017, the OSME retained jurisdiction over 1438 deaths and performed 675 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.

> Alexander Chirkov, MD, Ph.D. 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 2017, the OSME was directed by an Acting Chief Medical Examiner, who is a licensed physician with postgraduate training in anatomic pathology and forensic pathology. He was assisted by three Assistant Medical Examiners who are licensed physicians with postgraduate training and board certification in anatomic pathology, forensic pathology, and pediatric pathology. He is also assisted by one contract physician.

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;(2) Case Managers (one of whom is also the Office Manager) 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) 2017, OSME had an enacted budget of 2.807 million dollars, which represented a decrease from FY 2016. The majority of allocated funds go toward salaries and benefits for the employees.

DEATH INVESTIGATIONS

In 2017 there were 10,423 deaths statewide, and the OSME received notification of over 8,272 (79.4%) of them. Jurisdiction was accepted and death certified in 1,438 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 1,036 deaths that required autopsy or external examination (inspection) (675 autopsies, 28 partial autopsies, 333 inspections). All of the postmortem examinations (autopsies and inspections) were performed at the OSME 48 Orms Street facility. Formal neuropathology examination was performed in forty one (41) of the autopsies, and microscopic examination was performed in conjunction with 55 of the examinations. Toxicology specimens were submitted from 1,037 deaths retained under OSME jurisdiction, and approximately 80% of the cases submitted for toxicology testing had at least one medication or drug and/or alcohol detected. Twenty-six examinations of non-human bone were examined, mostly domesticated or wild animals.

Jurisdiction was retained "in absentia" (without examination of the body) by the OSME in 377 cases in 2017. 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 and nursing home 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 27 cases in 2017 after the filing of an improper death certificate ("after fact"). These deaths generally come to the OSME's attention after a delay in 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.

An OSME physician reviews the death certificate on all requests for cremation in Rhode Island. During 2017, OSME pathologists approved 6,730 cremations, including 1,882 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 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 2017, the OSME was responsible for certification of 1,438 deaths. Seven hundred sixty-two (762) died as the result of an accident; 398 died of natural causes; 129 were suicides, and 23 were homicide victims. A manner of death could not be determined in 39 cases.

Of the 23 homicide deaths, one involved legal intervention by law enforcement. Five of these individuals were killed in Massachusetts. More than half of the remaining homicide victims were due to firearms (shot). Eight died of inflicted blunt force injuries, including one child.

The number of suicides in 2017 was 129. 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 2017. Three hundred one (301) of the accidental deaths were the result of an unintentional drug overdose involving both illicit and/or pharmaceutical drugs.

Falls were a close second to drug overdoses in the accidental death category. Many of the 283 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 2017 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 39 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 398 natural deaths certified by the OSME are a small percentage of the over 10,423 deaths from natural causes in RI in 2017.

UNIDENTIFIED AND STORED BODIES

Of the eleven non-historical individuals who were unidentified when they arrived at the OSME in 2017, only one remained unidentified by February 1, 2018. The OSME stored 106 bodies this year. Forty (40) were stored at the request of the Department of Human Services/GPA as they had not otherwise fallen under our jurisdiction. Sixty-six (66) were under OSME jurisdiction because there was no one to claim their bodies at the time of their death. In a few cases, next of kin were quickly found. In rare cases, further investigation or posting a legal notice in the newspaper located family who could make final arrangements. GPA made arrangements at our request for 40 cases.

Note that when individuals arrive at the OSME already positively identified, greater than 95% are usually ready for release within three days.

ORGAN AND TISSUE DONATION

OSME is committed to the facilitation of organ and tissue donation. In 2017, the office worked with the New England Organ Bank (NEOB) and New England Donor Services, the regional organ procurement organization (OPO), to augment donation and improve timeliness of reporting. Procurement procedures were performed on 125 decedents under OSME jurisdiction (112 tissue donors, of whom 22 were also organ donors).

TRANSPORTATION

Transportation of bodies to OSME is performed by livery service (MedTech 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 2017, 1,060 individuals were transported to OSME for autopsy, inspection and/or storage. Of these cases, 1027 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 543 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 2017, we continued to improve our database, which allowed further classification of the deaths certified by the OSME beyond the five manners of death that were used previously and review of statistics for illicit drugs. Those changes were associated with easier retrieval of similar types of deaths from our database for study and generation of quick statistical reports.

We had NO increase in illicit drug deaths in 2017, which is associated with active community involvement and the work of the Governor's Antidrug Task Force. We still have problems with acetyl fentanyl, a synthetic opioid, as a drug of abuse, and combinations of multiple prescription and illicit drugs.

In early 2017, OSME received a federal grant from EOOOS to interface the Toxicology Laboratory database (The Beast) with the OSME database (CME). This will result in updating OSME cases electronically. This interface is planned to go live in the spring of 2018.

PARTNERSHIPS

Rhode Island Violent Death Reporting System (RIVDRS) Rhode Island Child Death Review Team (RICDR) Rhode Island Drug Overdose Prevention and Rescue Coalition

OFFICE OF STATE MEDICAL EXAMINERS 2017 STAFF

Acting Chief Medical Examiner Alexander Chirkov, MD, PhD.

Assistant Medical Examiners Alexander Chirkov, MD, PhD (contractor) Priya Banerjee, MD Patricia Ogera, MD Ariel Goldschmidt, MD Zhongxue Hua, MD (contractor) <u>Case Managers</u> Carol Capron (Office Manager) Susan Daniell

Scene Investigators David DeTora (Supervising Scene Investigator) John Anderson (Senior Scene Investigator) Carl Zambrano (Retired June 2017) Robert Robinson Angela Harwood Kerry Burke George Grande Danny Price Paul Manzi (Hired October 2017 to backfill Carl Zambrano position)

Senior Word Processing Typists Jason Hopkins Alicia Feather

Administrator (1/2 FTE) Joseph Catalano