



Tennessee
2017
Annual Report
Of
Medical Examiner
Death Investigations

Office of the State
Chief Medical Examiner

2017 Annual Report

Office of the State Chief Medical Examiner

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www.tn.gov/health/health-program-areas/oscme.html

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All Reports of Investigations should be sent to the main office in Nashville. All autopsy and other reports to the satellite office in Johnson City.

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Introduction

Tennessee has a mixed system of death investigation and operates under the authority given by the Post-Mortem Act, *Tennessee Code Annotated § Title 38 Prevention and Detection of Crime, Chapter 7 Post-Mortem Examinations*. Deaths are reported to and investigated by the county medical examiner and their medicolegal death investigators of the county where the death occurred. Physician county medical examiners are appointed by the mayor or other governing body for each of the 95 counties.

Types of deaths to be reported to the county medical examiners include the "death of any person from violence or trauma of any type, suddenly when in apparent health, sudden unexpected death of infants and children, deaths of prisoners or person in state custody, deaths on the job or related to employment, deaths believed to represent a threat to public health, deaths where neglect or abuse of extended care residents are suspected or confirmed, deaths where the identity of the person is unknown or unclear, deaths in any suspicious/unusual/unnatural manner, found dead, or where the body is to be cremated" *Tennessee Code Annotated § 38-7-108*.

The county medical examiner determines the extent of the investigation based on circumstances of the death and following guidelines provided by the state chief medical examiner's office in conjunction with the medical examiner advisory council.

When an autopsy is ordered by the county medical examiner, the autopsy is performed at one of the five regional forensic centers. The regional centers are required by *Tennessee Code Annotated § 38-7-105* to be "accredited by the National Association of Medical Examiners."

The primary role of the Office of the State Chief Medical Examiner is to provide education and training for county medical examiners and county medical investigators. The office also provides support, consultation and guidelines for county medical examiners, their investigators and other local and state departments concerning forensic pathology and death investigation.

The OSCME is responsible for maintaining records of all deaths investigated by county medical examiners and providing copies of autopsy reports and/or reports of investigation by county medical examiners to the public.

The OSCME has "investigative authority for certain types of death that are in the interests of the state, including mass fatality incidents, for the identification, examination and disposition of victims' remains, and instances that represent a threat to the public health or safety, or both" *Tennessee Code Annotated § 38-7-103*.

This report is produced as part of the mission of the Office of the State Chief Medical Examiner. Prior to 2017 reports of investigations performed by county medical examiners were not routinely collected, resulting in a void of statistical information regarding the number and types of deaths being investigated by CMEs and the results of those investigations. In January of 2017 the OSCME began a concentrated effort to collect those reports. A standard report of investigation form was provided to the counties and the CMEs and their investigators were requested to complete the form or a similar form and send to the OSCME as statutorily mandated by *Tennessee Code Annotated § 38-7-109 (a)*. An interim database system was created in which the data could be entered electronically by either the CME or CMEI or the OSCME staff. By the end of the first quarter, approximately 30 of Tennessee's 95 counties were reporting their information. By the date of this publication, information from all but 14 CMEs had been received and entered into the Interim Medical Examiner Database. As this is the first year for the collection and publication of this report, much of the data is incomplete.

The OSCME will continue its efforts to improve report writing, and the collection of information from the CMEs, with a goal of improving the accuracy and completeness of future reports. Even though incomplete, this report illuminates the enormous work load performed by CMEs and their death investigators throughout the state. The county medical examiners, all of whom are physicians and many of whom also have busy practices, provide a tremendous service to the state for which they are either minimally compensated or volunteer their time. The OSCME is grateful for their continued service and their cooperation in helping to make this report possible.

Statistical information derived from death certificates is also included to show the overall number of deaths and those numbers are further categorized by cause and manner of death. The information from death certificates is somewhat incomplete in that some death certificates have only partial information. The Division of Vital Records and Statistics mandated the use of an electronic death registration system in July 2018, which will increase the quality and quantity of data collected from death certificates.

Even though the data presented in this report is incomplete, the OSCME hopes it will be useful.

History of Death Investigation in Tennessee

In **1961** the state passed the **first postmortem examination act**, which abolished the coroner's system and created a system in which:

- Each county would appoint a physician as county medical examiner or CME to whom certain categories of deaths should be reported.
- After notification of a death that falls within the statutory requirements, the CME would investigate and either assign a cause of death or if a homicide was suspected, notify the district attorney general, who could order an autopsy be performed.
- Autopsies were performed by pathologists throughout the state who were willing to provide the service.
- Initially, the state medical examiner was a part-time position, with the responsibilities of developing guidelines and maintaining records of investigation.
- Established a Medical Examiner Advisory Council.

The postmortem act was rewritten and amended first in 2008 and again in 2012:

- Gave authority to the CMEs to order autopsies.
- Authorized the CME to appoint death investigators to assist them in their duties.
- Established that medical examiner autopsies had to be performed in a facility accredited by the National Association of Medical Examiners.

Mission Statement

The mission of the Tennessee Office of the State Chief Medical Examiner (OSCME) is:

To create statewide consistency of high quality medicolegal death investigation and forensic autopsy services. The purpose of the office is to serve its fellow citizens by protecting the public's health and safety, participating in the criminal justice system and providing data for vital statistics.

Tennessee Medical Examiner Advisory Council

The Tennessee Medical Examiner Advisory Council was established in 2017 via *Tennessee Code Annotated § 38-7-201*. This council was given the power and duty to:

- (1) Review candidates and make a recommendation to the commissioner of health on the appointment of the chief medical examiner and deputy state medical examiners;
- (2) Assist the chief medical examiner in the development and updating of guidelines for death investigations and forensic autopsies in this state, to be promulgated as rules through the Department of Health;
- (3) Submit an annual report on the standards and guidelines of the medical examiners' system to the chairs of the Health Committee of the House of Representatives and the Health and Welfare Committee of the Senate;
- (4) Periodically review standards and guidelines promulgated by the Department of Health for the medical examiner system; and
- (5) Provide reports and recommendations to the commissioner on causes of death which may need public health intervention, funding issues, information technology needs and any other issues as the council sees fit.

The advisory council meets on a quarterly basis in Nashville, Tennessee.

Current Membership

| | |
|-----------------------------------|---|
| Darinka Mileusnic, MD, PhD | Forensic Pathologist Regional Forensic Center |
| Bob Batson | Licensed Funeral Director |
| Julia Goodin, MD, MPA | State Chief Medical Examiner |
| Honorable Amy Weirich, JD | District Attorney General |
| Tony R. Emison, MD | County Medical Examiner (West TN) |
| Dewayne Johnson | Assistant Director of the TBI |
| Ed Miller, JD | District Public Defender |
| Lorraine MacDonald, MD | County Medical Examiner (Middle TN) |
| Benjamin Figura, PhD | Administrator Regional Forensic Center |
| Matrina Schmidt, MD | Forensic Pathologist Regional Forensic Center |
| Feng Li, MD, PhD, JD | Forensic Pathologist Regional Forensic Center |
| James Metcalfe, MD | Forensic Pathologist Regional Forensic Center |
| Marco Ross, MD | Forensic Pathologist Regional Forensic Center |
| David Darden, MD | County Medical Examiner (East TN) |
| Mayor Jake Bynum | Weakley County Mayor |

County Medical Examiners

According to *Tennessee Code Annotated § 38-7-104* the county medical examiner must be a physician, hold a license to practice medicine in Tennessee and be appointed by the mayor of the county.

The primary function of the county medical examiner according to *Tennessee Code Annotated § 38-7-109* is "When a death is reported as provided in § 38-7-108, it is the duty of the county medical examiner in the county in which the death occurred to immediately make an investigation of the circumstances of the death. The county medical examiner shall record and store the findings, and transmit copies according to the death investigation guidelines developed by the Tennessee medical examiner advisory council."

The ultimate goal of this investigation is to provide information to determine a truthful, logical and scientifically unbiased statement of the cause and manner of death.

The county medical examiner may issue the death certificate for those deaths within their jurisdiction.

The county medical examiner, or if authorized the county medical examiner investigator, determines if an autopsy is needed and makes a written request. The county medical examiner shall issue permits as required by the county and/or state which are necessary for the disposition of a dead body (to include cremation and embalming permits).

The duties of a county medical examiner can be quite time-intensive, as someone must be available 24 hours per day, seven days per week. When the county medical examiner is temporarily unable to perform his or her duties, the CME should deputize any other physician in the area to act as a county medical examiner during the absence. CMEs may also have medical investigators to assist them in the fulfillment of their duties.

A medical investigator must be a licensed emergency medical technician, paramedic, registered nurse, physician's assistant or a person registered by or a diplomat of the American Board of Medicolegal Death Investigators and approved by the county medical examiner to serve as medical investigator.

"The county medical investigator may conduct investigations when a death is reported, as provided in § 38-7-108, under the supervision of the county medical examiner. The county medical investigator may make pronouncements of death and may recommend to the county medical examiner that an autopsy be ordered. However, the county medical investigator shall not be empowered to sign a death certificate. The county medical examiner may delegate to the county medical investigator the authority to order an autopsy." *Tennessee Code Annotated § 38-7-104 (f) (3)*

Regional Forensic Centers

Autopsies are performed at one of the five regional NAME accredited laboratory facilities:

**West Tennessee Regional Forensic Center
University of Tennessee Health Science Center**

637 Poplar Avenue Memphis, TN 38105

Phone: (901) 222-4600

Fax: (901) 222-4645

uthsc.edu/forensic-center/

**Middle Tennessee Regional Forensic Center
Forensic Medical Management Services**

850 R.S. Gass Blvd.

Nashville, TN 37216

Phone: (615) 743-1800

Fax: (615) 743-1890

www.forensicmed.com

**Southeast Tennessee Regional Forensic Center
Hamilton County Forensic Center**

3202 Amnicola Highway

Chattanooga, TN 37406

Phone: (423) 493-5175

Fax: (423) 493-5176

www.hamiltontn.gov/MedicalExaminer/

**East Tennessee Regional Forensic Center
Regional Forensic Center**

2761 Sullins Street

Knoxville, TN 37919

Phone: (865) 215-8000

Fax: (865) 215-8001

www.knoxcounty.org/rfc/

**Northeast Tennessee Regional Forensic Center
William J. Jenkins Forensic Center**

P.O. Box 70425

Johnson City, TN 37614-1704

Phone: (423) 439-8038

Fax: (423) 439-8070

www.etsu.edu/com/pathology/forensic-center/

Reportable Deaths

Tennessee Code Annotated § 38-7-108 requires that any death which is suspicious, unusual or occurs under unnatural circumstances is to be reported to the county medical examiner. Specifically, the county medical examiner of the county in which the death occurred is to be notified in all cases of:

1. Death resulting from violence or trauma of any type;
2. Sudden death when in apparent good health;
3. Sudden unexpected deaths of infants and children;
4. Deaths of prisoners or persons in state custody;
5. Deaths on the job or related to employment;
6. Deaths believed to represent a threat to public health;
7. Deaths where neglect or abuse of extended care residents are suspected or confirmed
8. Deaths where the identity of the person is unknown or unclear;
9. Deaths in any suspicious/unusual/unnatural manner;
10. Individuals found dead; or
11. Where the body is to be cremated.

Tennessee Code Annotated § 68-3-105 requires investigation by the county medical examiner of a fetal death without medical attendance at or immediately after the delivery or when inquiry is required.

If a body is to be cremated, the county medical examiner is to be notified. Embalming should not be performed until the county medical examiner has been notified and has determined if an autopsy or further investigation is necessary to determine the cause and manner of death.

The medical examiner must be prepared to expeditiously handle authorizations for cremations as required under *Tennessee Code Annotated §38-7-108*. All deaths in which cremation is to be the final disposition of the body must be reported to the county medical examiner in the county where the death occurred.

Death Certification

The medical examiner is responsible for completing the death certificate for cases investigated in accordance with *Tennessee Code Annotated* § 68-3-502 (d). County medical examiners are not responsible for signing death certificates of cases not under their jurisdiction, though they may opt to do so if the certificate would not otherwise be signed. In this case, the medical examiner will complete a Report of Investigation by County Medical Examiner as well as the death certificate and file both as required.

"When a death is reported as provided in *TCA* §38-7-108, it is the duty of the county medical examiner in the county in which the death occurred to immediately make an investigation of the circumstances of the death. The county medical examiner shall record and store the findings, and transmit copies according to the death investigation guidelines developed by the Tennessee medical examiner advisory council." *Tennessee Code Annotated* §38-7-109 (a)

Statutory Duties of State Chief Medical Examiner

Tennessee Code Annotated § 38-7-102 authorizes and empowers the Department of Health to create and maintain a Post-mortem Examination Division.

In accordance with the Post-mortem Examination Division, the duties of the state chief medical examiner are:

1. To develop and provide initial training and regular continuing education to all county medical examiners and medical investigators.
2. To keep full and complete records of all reports on investigations and examinations made by county medical examiners.
3. To promulgate rules through the Department of Health.
4. To establish guidelines for death investigations and forensic autopsies.

In addition, "The state chief medical examiner shall have investigative authority for certain types of death that are in the interests of the state, including mass fatality incidents, for the identification, examination and disposition of victims' remains, and instances that represent a threat to the public health or safety, or both."
Tennessee Code Annotated §38-7-103 (c)

Organ and Tissue Donation Activities

Many deaths requiring investigation by the county medical examiner including those requiring autopsy are also those that would be eligible for organ and tissue donation. Organ and tissue transplantation can often provide lifesaving and life altering benefits to the living.

Tennessee Code Annotated § 68-30-101 to 402 houses the laws associated with anatomical gifts. Of particular interest to county medical examiners is *Tennessee Code Annotated § 38-7-108 (c) (1)* which states, "If a body is subject to post-mortem examination under this part, this part shall be suspended to the extent necessary for the preservation of any body or part of the body, as defined in § 68-30-102, where an anatomical gift of the body or part of the body has been made in accordance with the Uniform Anatomical Gift Act, compiled in title 68, chapter 30, part 1."

There are two primary organ and tissue procurement and transplantation organizations in Tennessee: Mid-South Transplant Foundation providing services primarily in West Tennessee, and Tennessee Donor Services providing services throughout Tennessee.

See the following two pages for organizational information and statistical data.

Mid-South Transplant Foundation

The mission of Mid-South Transplant Foundation is to advocate for all organ and tissue donors and recipients in our community, the state of Tennessee and across the United States. MSTF is designated by the Centers for Medicare and Medicaid Services as an organ procurement organization and regulated by the Food and Drug Administration and the Organ Procurement and Transplantation Network. Their role is to increase organ and tissue donation and ensure that patients with the greatest need receive them. Based on this mission, MSTF supports a proactive alliance among health care professionals, state organizations and members of the community that will increase the donation of organs and tissue for transplantation for those in need.

In an effort to comply with the 2015 vision of the University of Tennessee Health Science Center and the strategy of Dr. Charles Handorf and Dr. Karen Chancellor, then chief medical examiner of Shelby County, Mid-South Transplant Foundation suggested a donor referral program for the West Tennessee Regional Forensic Center.

The goal of the referral program was to increase tissue donation through a cooperative program of communication between the two organizations. Because 52 percent of the deaths in this West Tennessee area occur outside a hospital, without the help of the ME's office those individuals and their families miss the opportunity to help save other lives through donation. Hospitals are mandated to call MSTF on every death, but no such mandate exists for county medical examiners. However, the National Association of Medical Examiners publicly promotes this kind of cooperation to increase donation. Since that endorsement, the number of collaborative programs has increased three-fold.

In light of prior discussions and the mutual missions of the two organizations relating to community service, the Donor Referral Plan for the MSTF/WTRFC attempted to consolidate the goals, direction and processes of the two agencies.

This program was initiated with the support and approval of the Shelby County Health Department on September 10, 2015 and directly inspired by the National Association of Medical Examiners position paper: Medical Examiners Release of Organs and Tissues for Transplantation.

The outcome for 2017:
14 referrals
0 donors
0 family declines
4 medical rule out
7 suitable/not approached
1 case not reported
2 eye-only candidates

Contact Information:
Mid-South Transplant Foundation
8001 Centerview Parkway, Ste 302
Cordova, TN 38018
Phone (901) 328-4438
Toll Free: (877) 228-5433
Fax: (901) 328-4462
<https://midsouthtransplant.org/>

Tennessee Donor Services

Tennessee Donor Services was founded in 1974 and facilitates organ and tissue donation in 84 counties across Tennessee and 10 counties in Southwest Virginia. Corporate headquarters is located in Nashville with additional offices in Knoxville, Chattanooga and Johnson City. TDS also staffs a 24-hour tissue recovery suite in Nashville.

The mission of TDS is simple: to save and improve lives through organ, tissue and eye donation. In 2017, 304 organ donors gave the gift of life, resulting in 943 organ transplants. In addition, 1,431 tissue donors enhanced countless lives through tissue and eye donation. TDS offers all families, regardless of their donation decision, inclusion in their aftercare program which provides follow up information and grief resources.

| Outcomes for 2017 | |
|---|--------------|
| Total number of donors | 1,431 |
| Musculoskeletal Donors | |
| Total | 553 |
| Skin Donors | |
| Total | 1018 |
| Heart Donors | |
| Total | 111 |
| Ocular Donors | |
| Total | 497 |
| Vascular Donors | |
| Saphenous Vein | 78 |
| Femoral Vessels | 25 |
| Total # of donors recovered that were ME cases | |
| Total Pre Autopsy Donors | 75 |
| Total Post Autopsy Donors | 74 |

Contact Information:
Joel Smith, Sr. Director of Tissue Recovery
Tennessee Donor Services
Phone: (510)-612-9410
Fax: (615)-564-3892
joel.smith@dcids.org
1600 Hayes St., Suite 300, Nashville, TN 37203

National Association of Medical Examiners Accreditation

Tennessee Code Annotated § 38-7-105 contains the following language in regard to facilities for performance of autopsies:

(a) Except as provided in subsection (b), all autopsies must be performed at a facility accredited by the National Association of Medical Examiners. An accredited facility must maintain accreditation and operate pursuant to NAME guidelines.

(b) Autopsies may be performed at a non-accredited facility if:

- (1) The facility receives provisional accreditation from NAME within two (2) years of beginning operations;
- (2) The facility receives full accreditation from NAME within three (3) years of beginning operations; and
- (3) The facility operates pursuant to NAME guidelines.

Overview

The information in this report encompasses the period from January 1, 2017 to December 31, 2017.

The statistics in this report, unless otherwise specified, are based on information received by the OSCME from county medical examiners and their investigators using the Interim Medical Examiner Database. It is not complete. Researchers interested in additional mortality statistics may contact the Tennessee Department of Health Office of Data Governance at www.tn.gov/health/health-program-areas/statistics.html

Any suggestions or comments concerning the content, format or clarity of this report are welcomed as the OSCME continues its efforts to improve on data quality and reporting.

Statistical Information:

January 1, 2017 through December 31, 2017

Unless otherwise specified, the information contained in this report is derived from the Reports of Investigation entered into the Interim Medical Examiner Database from 81 of Tennessee's 95 counties and the five regional forensic centers.

OSCME Numbers for the Year 2017

**Total number of cases reported by
county medical examiners:**

22,170

**Total number of autopsies performed
by regional forensic centers (as of
11/01/2018):**

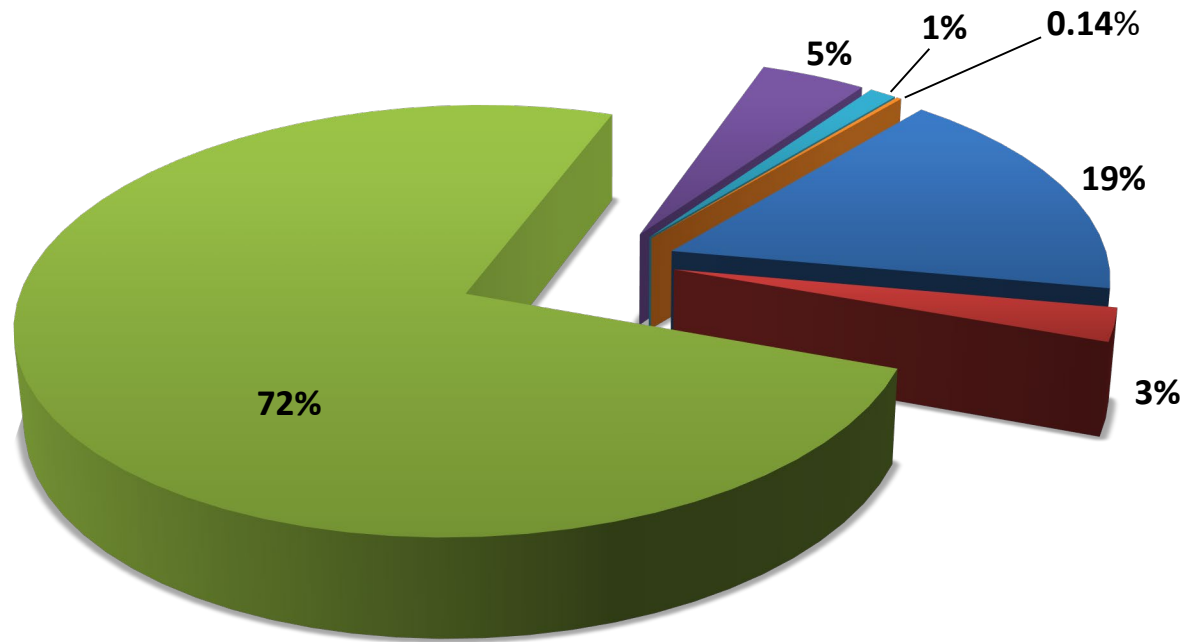
5,019

Those reported by manner of death:

| | |
|--------------------------|---------------|
| Natural..... | 15,890 |
| Accident..... | 4,198 |
| Suicide..... | 1,129 |
| Homicide..... | 636 |
| Undetermined..... | 286 |
| Pending..... | 31 |

Tennessee County Medical Examiners Reported Investigating 22,170 Deaths from January 2017 through December 2017

Manner of Death



■ Accident ■ Homicide ■ Natural ■ Suicide ■ Undetermined ■ Pending

All Deaths Certified in Tennessee By Manner and by Year for past Five Years

(Information Provided by Office of Vital Records and
Statistics)

Manner of Death by Data Year

| Death Manner | Data Year | | | | |
|------------------------------|-----------|--------|--------|--------|--------|
| | 2013 | 2014 | 2015 | 2016 | 2017 |
| Accident | 3,212 | 3,282 | 3,647 | 4,234 | 4,350 |
| Undetermined | 325 | 360 | 360 | 403 | 380 |
| Homicide | 430 | 459 | 487 | 610 | 617 |
| Natural | 51,198 | 53,082 | 55,456 | 61,976 | 66,879 |
| Pending Investigation | 134 | 144 | 160 | 106 | 186 |
| Suicide | 1,043 | 1,056 | 1,104 | 1,135 | 1,206 |
| Blank (Not Indicated) | 10,356 | 9,843 | 9,024 | 3,042 | 81 |
| TOTAL | 66,698 | 68,226 | 70,238 | 71,506 | 73,699 |

Statistics of Death combining Vital Records and IMED Data

73,699 Total Deaths in Tennessee for Calendar Year 2017

| MANNER OF DEATH | Actual # | % of Total | IMED Data | % of Total |
|------------------------|-----------------|-------------------|------------------|-------------------|
| Unknown (Blank Manner) | 81 | 0.11% | | |
| Accident | 4,350 | 5.90% | 4198 | 6% |
| Undetermined | 380 | 0.52% | 286 | 0% |
| Homicide | 617 | 0.84% | 636 | 1% |
| Natural | 66,879 | 90.75% | 15,890 | 22% |
| Suicide | 1,206 | 1.64% | 1,129 | 2% |
| Pending | 186 | 0.25% | 31 | 0% |
| TOTAL | 73,699 | | 22,170 | |

| | | | | |
|-------------------------------------|---------------|------------|-------------|-------|
| #DC Certified by CME | 11,641 | 16% | # Autopsies | 5,223 |
| #DC Certified by Physician | 60,891 | 83% | % ME Cases | 24% |
| #DC Type of Certifier not Indicated | 1,167 | | | |

| | |
|-------------------------|-------|
| # Jurisdiction Declined | 7,426 |
| % ME Cases | 34% |

| | |
|----------------------|-------|
| # Toxicology Ordered | 5,022 |
| % ME Cases | 23% |

Cases in Which an Autopsy was Performed by Manner of Death

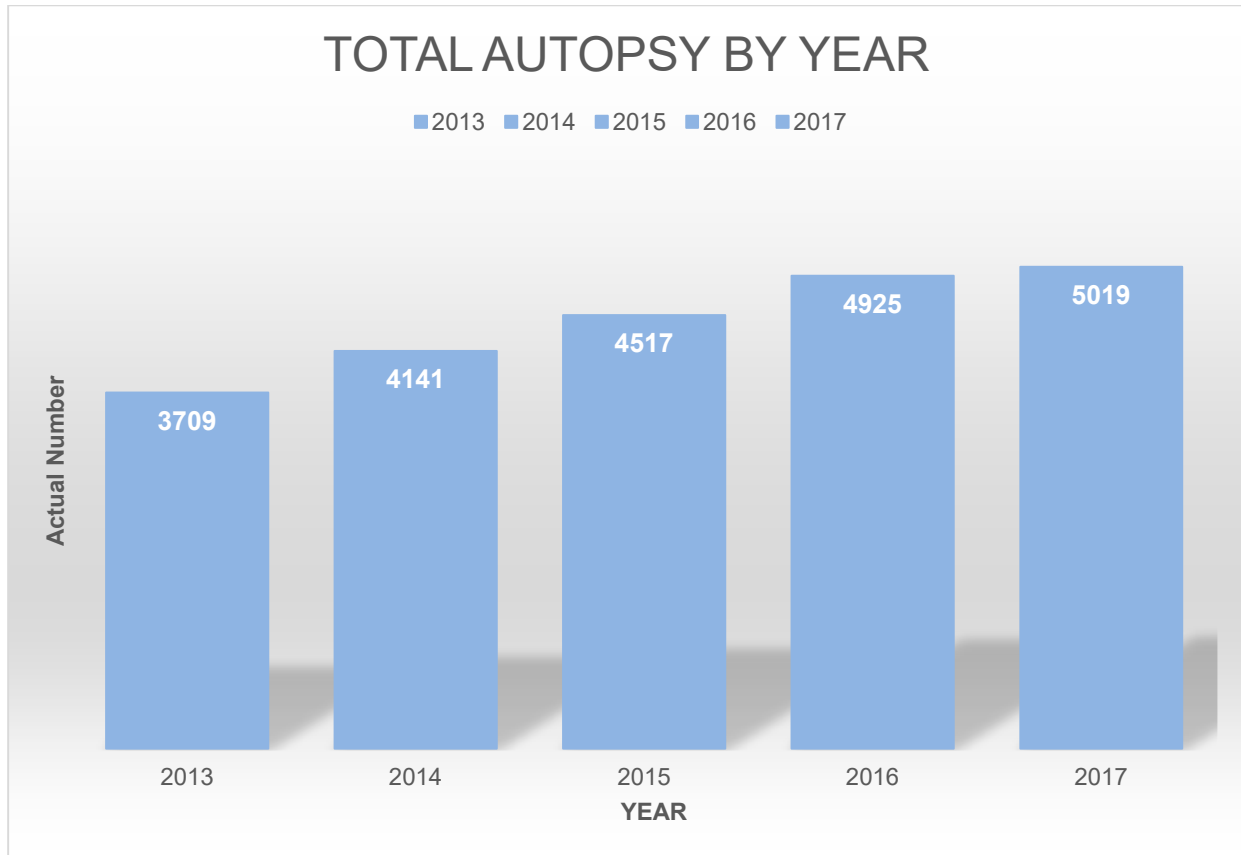
ME Cases by Manner of Death with % Autopsied

Total Cases Reported in IMED 22,170

| | |
|------------------------|----------|
| NATURAL | 19,274 |
| % of ME Cases Reported | 87% |
| Autopsied | 1,556 |
| % Autopsied | 8.07 |
| ACCIDENT | 4,328 |
| % of ME Cases Reported | 20% |
| Autopsied | 2,244 |
| % Autopsied | 51.85 |
| SUICIDE | 1,128 |
| % of ME Cases Reported | 5% |
| Autopsied | 745 |
| % Autopsied | 66.05 |
| HOMICIDE | 666 |
| % of ME Cases Reported | 3% |
| Autopsied | 639 |
| % Autopsied | 95.95 ** |
| UNDETERMINED | 304 |
| % of ME Cases Reported | 1% |
| Autopsied | 267 |
| % Autopsied | 87.83 |

**** 22 cases returned to State of incident for autopsy / 1 case of remote injury****

Autopsies Ordered by County Medical Examiners



Total Reported Medical Examiner Cases by Manner of Death and Cause of Death 2017

| NATURAL | |
|---------------------------|---------------|
| Coronary Artery Disease | 3,576 |
| Cardiac (non-atherogenic) | 2,229 |
| Cerebrovascular | 991 |
| Congenital | 81 |
| Diabetes | 989 |
| Chronic Drug Use | 58 |
| Embolism | 208 |
| GI Hemorrhage | 241 |
| Hypertension | 2,237 |
| Infectious Disease | 718 |
| Neoplasm | 1,586 |
| Pulmonary Disease | 1,561 |
| Renal Disease | 563 |
| Seizure | 91 |
| Other | <u>4,145</u> |
| | 19,274 |

| ACCIDENT | |
|---------------------------|--------------|
| Alcohol | 42 |
| Asphyxia | 100 |
| Blast Injury | 2 |
| Blunt Force Injury | 1,904 |
| Cardiac (non-atherogenic) | 8 |
| Chronic Alcohol | 0 |
| Coronary Artery Disease | 15 |
| Diabetes | 4 |
| Drowning | 92 |
| Drug Use | 1,639 |
| Electrical | 7 |
| Embolism | 1 |
| Exposure | 37 |
| Fire | 127 |
| Firearm | 16 |
| Infectious Disease | 5 |
| Mixed Drug and Alcohol | 8 |
| Poisoning | 8 |
| Other | <u>216</u> |
| | 4,328 |

| SUICIDE | |
|--------------------|--------------|
| Blunt Force Injury | 26 |
| Drowning | 9 |
| Drug Use | 84 |
| Firearm | 706 |
| Hanging | 238 |
| Poisoning | 24 |
| Sharp Force Injury | 12 |
| Other | <u>39</u> |
| | 1,138 |

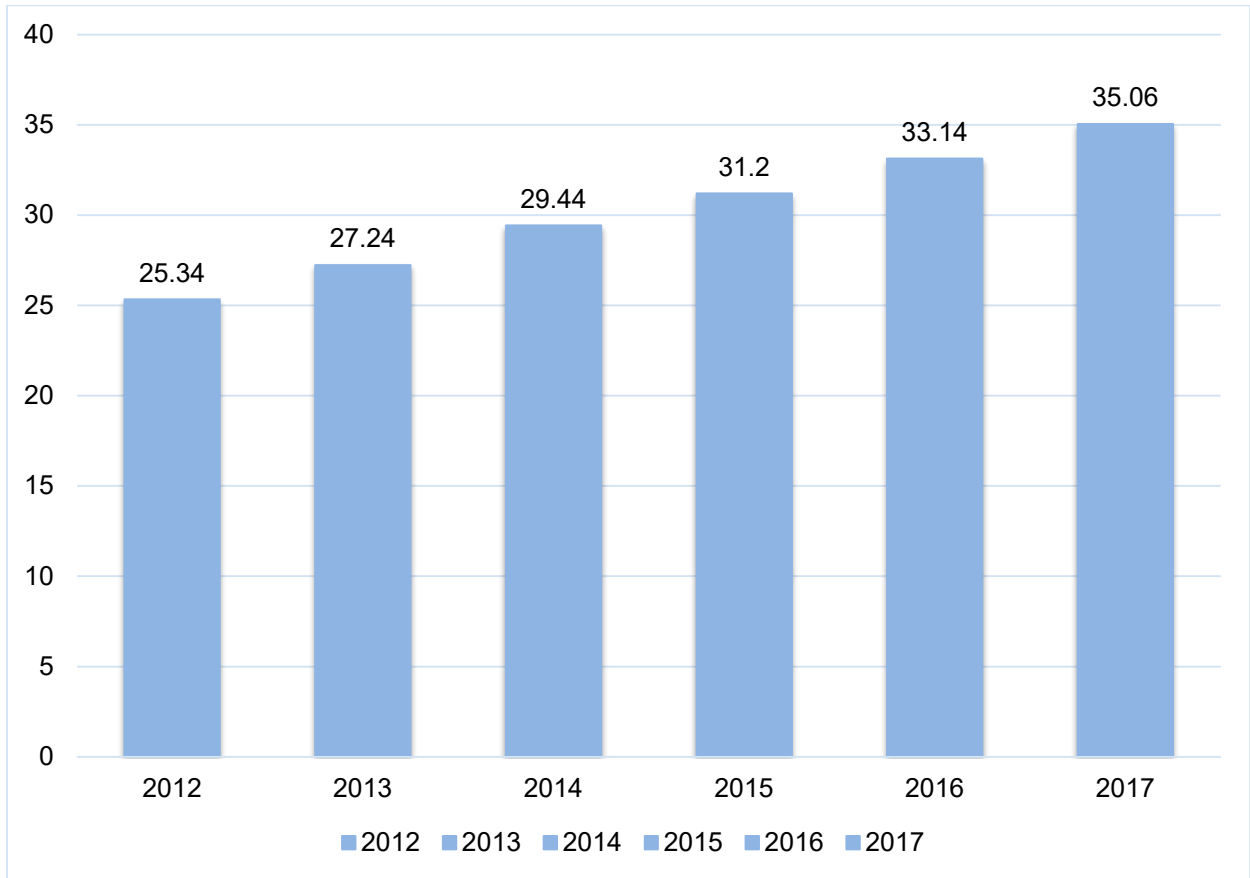
| UNDETERMINED | |
|--------------------|------------|
| Asphyxia | 5 |
| Blunt Force Injury | 20 |
| Drowning | 7 |
| Drug Use | 37 |
| Firearm | 26 |
| Hanging | 2 |
| Hypertension | 1 |
| Mixed Drug/Alcohol | 3 |
| SUID | 81 |
| Undetermined | 41 |
| Other | <u>59</u> |
| | 304 |

| HOMICIDE | |
|------------------------|------------|
| Asphyxia/Strangulation | 13 |
| Blunt Force Injury | 65 |
| Drowning | 1 |
| Fire | 5 |
| Firearm | 524 |
| Narcotics | 1 |
| Sharp Force Injury | 12 |
| Undetermined | <u>45</u> |
| | 666 |

Disposition/Cremation Calendar Years 2012 through 2017

(Information Provided by Office of Vital Records and Statistics)

| Year | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|--|-------|-------|-------|------|-------|-------|
| Percentage of deaths in which cremation was performed. | 25.34 | 27.24 | 29.44 | 31.2 | 33.14 | 35.06 |



Summary

The Office of the State Chief Medical Examiner has made progress in improving the standardization and reporting of death investigations in Tennessee. However there is still much to be done.

The current opioid epidemic has increased the number of deaths that must be investigated by county medical examiners and made it necessary for the regional forensic centers to perform more autopsies. The financial and workload burden continues to overwhelm the system.

The OSCME plans to implement a new statewide case management system beginning in 2019 in order to improve both the accuracy and timeliness of reporting by county medical examiners and regional forensic centers. The OSCME will be working with Quincy Technologies to customize an off-the-shelf medical examiner case management software application. This new system will improve the information provided in this report in future years.

For other information about the medical examiner system and to access resources for the CME/CMEI, the public, clinicians and law enforcement in Tennessee, please visit the OSCME website at:

www.tn.gov/health/health-program-areas/oscme.html