2017 Annual Report

Jackson County Medical Examiner's Office

950 E. 21st Street
Kansas City, Missouri 64106
Telephone: 816.881.6600
Fax: 816.881.6641

http://www.jacksgov.org/151/Medical-Examiner

Diane C. Peterson, M.D.
Chief Medical Examiner

B. Robert Pietak, M.D.
Deputy Medical Examiner

Marius C. Tarau, M.D.
Deputy Medical Examiner

Lindsey J. Haldiman, D.O.
Deputy Medical Examiner
# Table of Contents

What is the Jackson County Medical Examiner’s Office? .............................................. 4
The Jackson County Medical Examiner’s Mission Statement ........................................ 5
Local Affiliations ........................................................................................................... 6
Public Training and Service ............................................................................................ 7
National Affiliations ....................................................................................................... 8
JCMEO Committees ...................................................................................................... 9
Missouri Statutes ............................................................................................................ 11
Executive Summary ..................................................................................................... 13
Organ and Tissue Donations ......................................................................................... 14
Accreditations ............................................................................................................... 15
Organizational Chart .................................................................................................... 16
Traffic Fatalities on the Rise .......................................................................................... 17
Medical Examiner Cases At a Glance .......................................................................... 22
Graphical Representation of Medical Examiner 2017 Cases ....................................... 24
Chief Medical Examiner Bio ......................................................................................... 33
Deputy Medical Examiners ......................................................................................... 34
2017/18 Forensic Pathology Fellow Bio ....................................................................... 36
Publications / Posters / Submissions ............................................................................ 37
JCMEO Departments ................................................................................................... 39
Mass Fatality Preparedness ........................................................................................... 43
Kansas City Regional Mortuary Operational Response Group (KCRMORG) ............. 45
Glossary of Terms ........................................................................................................ 46

3
**What is the Jackson County Medical Examiner's Office?**

The Jackson County Medical Examiner’s Office (JCMEO) is the only National Association of Medical Examiners (NAME) Accredited Medical Examiner’s Office in the State of Missouri. The office is staffed with American Board of Pathology (ABP) Certified Forensic Pathologists, American Board of Medicolegal Death Investigators (ABMDI) registered and certified Death Investigators, Forensic Technicians, and trained Administrative Staff who handle pathologists’ dictations, death certificates, case files, and medical records.

Services offered by the Jackson County Medical Examiner’s Office include expert pathology examination, death scene investigations, medical records review, locating next of kin, court testimony, body examinations, and police and attorney consultation. Accredited by the American Council of Graduate Medical Education (ACGME), JCMEO also provides pathology residency rotations as well as a 1 year Forensic Pathology Fellowship program to train future Forensic Pathologists.

Toxicology, Radiology, and Histology are additional services that assist in determining the cause & manner of death. Forensic services provided include expert Forensic Anthropology, Odontology, and Entomology consultations for cases where identification and time of death cannot be made by normal means. The JCMEO also takes reports of all Hospice and Nursing Home deaths and many attended hospital deaths that occur in Jackson, Clay, Cass, and Platte Counties.

The JCMEO provides 24/7 coverage and death scene investigation to Jackson, Clay, Cass and Platte counties by medicolegal death investigators with prompt contract transportation services, and completion of autopsy reports and death certificates within a timely manner. JCMEO is a state of the art resource for the Kansas City Metro area and also provides referral autopsy services to assist other counties in Missouri. The JCMEO supports recovery of organ and tissue donations, and works closely with the Child Death Review Board with documentation of all child deaths, and also works closely with Health Departments to report all potential and confirmed heat and cold related deaths.

The Jackson County Medical Examiner’s Office is the lead agency for the Kansas City Regional Mortuary Operational Response Group (KCRMORG), a group created by the JCMEO in conjunction with the Mid-America Regional Council (MARC) in the area of Mass Fatality preparedness and response. A Mass Fatality Incident is described as any occurrence of multiple deaths that overwhelm the usual routine capacity of the local Medical Examiner or Coroner. KCRMORG consists more than 80 volunteer professionals from several aspects of forensic investigation. This team is responsible for the response and management of a mass fatality event and can be deployed by the Medical Examiner or Coroner to the incident area.
MISSION STATEMENT

The Jackson County Medical Examiner's Office (JCMEO) is governed by Missouri Revised Statutes. JCMEO is dedicated to providing exceptional death investigation services to Jackson County, the city of Kansas City, the surrounding counties of Platte, Cass, and Clay, as well as other Missouri counties on a referral basis.

The JCMEO provides trained death investigators who conduct scene investigations of homicides, suicides, accidental and natural deaths under our jurisdiction as determined by State Statutes. Board Certified Forensic Pathologists (Medical Examiners) provide skilled examinations of the deceased and conduct in-depth examinations utilizing the latest techniques in Forensic Pathology. The Medical Examiners will provide expert testimony in court and will remain neutral in their findings, determining cause and manner of death.

The JCMEO will continue to work closely with all Federal, State, and local authorities and departments which interact with the JCMEO. The JCMEO will also continue to educate the county and surrounding areas for mass fatality preparedness and the possibility of a contagious diseases outbreak. The Chief Medical Examiner will continue to ensure that the JCMEO maintains National Association of Medical Examiners (NAME) and Accreditation Council for Graduate Medical Education (ACGME) accreditations and continues its high standards of dedicated forensic services, education and training.

GOALS

♦ Continued growth of the Medical Examiner's Office and professional death investigation in Jackson, Clay, Platte, and Cass Counties.

♦ Provide education and training to the communities we support.

♦ Provide Mass Fatality training and ensure community preparedness.

♦ Work with and train other support agencies in the community (Law Enforcement, Courts, Health, Funeral Homes, and others) to provide outstanding death investigation.

♦ Complete timely and quality investigative and autopsy reports.

♦ Maintain National Association of Medical Examiners (NAME) and Accreditation Council for Graduate Medical Education (ACGME) accreditation.

♦ Contribute to the public health and public safety of our community.

♦ Promote and support organ and tissue donation.
It has always been a high priority of The Medical Examiner’s Office to create and maintain great working relationships with all outside agencies, including law enforcement, attorneys, organ and tissue agencies, and health departments. JCMEO has improved community relationships with associated agencies and has taken on additional responsibilities in education and training, public health and safety, and mass fatality preparation and prevention with our community partners.
Public Training and Service

The Jackson County Medical Examiner’s Office plays a major role in public health, public safety, and public service. We are dedicated to providing education and training to our external agencies including law enforcement, fire departments, Emergency Medical Services (EMS) as well as the general public including students and informational interviews with the media. Below is a list of just some of the lectures and topics presented on in 2017.

1/10/17—Metro Squad Training on Wound Recognition, Procedures and Requirements at the KCPD Training Academy
2/1/17—Interview with KSHB “Identifying Decomposed Deceased”
2/16/17—Interview with Lees Summit Tribune “Indigent Burials”
3/22/17—Dr. Peterson to Speak to UMKC Dental Students
3/23/17—Presentation to Cass County Fire Task Force on “Fire Deaths and Scene Investigations”
3/24/17—Presentation to DMORT and FBI on “Forensic Autopsies”
4/6/17—Investigators participated in the William Chrisman HS Docu-Drama “Drinking and Driving”
4/7/17—Presentation to KCPD Training Academy on “Death Scene Reporting Procedures”
4/5/17—Interview with KC Star regarding “Medical Examiner Office Operations”
6/1/17—Central MO Police Academy Presentation on “Death Investigation”
7/14/17—Interview with KC Star regarding “Unclaimed Bodies”
7/20/17—Interview with KC Star regarding “2012 Skeleton Case”
7/26/17—KCPD Training Presentation on “NAMUS”
8/2/17—Presenting to St. Lukes Radiology Department
8/18/17—Interview with KMBZ on “Identification of Skeletal Remains”
8/25/17—Interview with KSHB on “Homicide Count”
9/1/18—KCPD Academy Presentation on “Death Investigations”
9/5/17—KUMC Lecture on Pathology
11/3/17—CFRP State Pathologist Meeting
11/9/17—KC Police Academy Regional Opioid Summit
11/14/17—Opioid Epidemic Webinar
11/30/17—Central MO Police Academy presentation on “Death Investigation”
12/20/17—KCPD Academy Presentation on “Death Scene Investigation”

The Jackson County Medical Examiner’s Office trains several times throughout the year with outside agencies for mass fatality management.

5/17/17—KCI Table Top Mass Fatality Exercise
5/24/17—KCMO Health Department Emergency Table Top Exercise at Downtown Wheeler Airport
10/25/17—Children’s Mercy Hospital Casualty and Fatality Exercise
12/19/17—Missouri State Emergency Management Agency (SEMA) Mass Fatality Planning Workshop
National Affiliations

National Association of Medical Examiners (NAME)
American Academy of Forensic Sciences (AAFS)
College of American Pathologists (CAP)
American Society for Clinical Pathology (ASCP)
American Board of Medicolegal Death Investigators (ABMDI)
Kansas City Regional Mortuary Operational Response Group (KCRMORG)
Midwest Transplant Network (MTN)
Musculoskeletal Transplant Foundation (MTF)
American Medical Association (AMA)
United States and Canadian Academy of Pathology (USCAP)
The Mid-American Regional Council (MARC)
Disaster Mortuary Operations Response Team (DMORT)
State Technical Assistant Team (STAT)
Accreditation Council for Graduate Medical Education (ACGME)
Missouri Disaster Response System (MODRS)
National Institute of Standards and Technology (NIST)
Medical-Legal Death Investigation Subcommittee (OSAC)
Missouri Mortuary Operational Response Group (MOMORG)
The Chief Medical Examiner, 3 Deputy Medical Examiners, and Medicolegal Death Investigators provide education and training to the communities and agencies we support. To better address certain priorities, the JCMEO has in-house committees to focus on both short-term and long-term needs. Select members of these committees often participate in public education or interagency informational seminars.

**Community / School Liaison Committee** -formed to create educational materials to use at schools, colleges, etc. regarding careers in forensics. Select members of these committees often participate in public education or informational seminars.

**Hospital Liaison Committee** -created to educate local hospitals and physicians on forensic issues and proper death reporting methods.

**Mass Fatality Committee** -In the United States Medical Examiners have the legal authority for the management of mass fatality incidents. Preparedness and operational capabilities through efforts lead by KCRMORG are communicated to staff in order to identify appropriate measures of preparedness.

**Donor Committee** -The committee shall provide advice on proposed organ procurement and transplantation policies and procedures.

In addition to in-house committees, the JCMEO is also dedicated to serve by partnering with several outside committees such as;

**Child Fatality Review Panel Committee** -According to RSMo 210.195, “The Director of the Department of Social Services shall appoint a state child fatality review panel, which shall meet biannually to provide oversight and make recommendations to the Department of Social Services.

**US Consumer Product Safety Commission**
Charged with protecting the public from unreasonable risks of injury or death associated with the use of thousands of types of consumer products.

**Regional Homeland Security Coordinating Committee (RHSCE)**
Provides leadership to enhance capabilities to prevent, protect, respond to and recover from a broad range of threats and hazards for 9 counties in the Kansas City Metropolitan area.
Complex Coordinated Terrorist Attack (CCTA)
Through a proactive, cooperative community effort, relationships and systems needed to prevent and respond to Complex coordinated terrorist attacks are in place across the region. Synchronized and well practiced plans to mobilize resources to interdict threats and conduct operations to minimize loss of life and meet the needs of survivors.

Health Care Coalition (HCC)
To prepare and coordinate health and medical response and recovery to the threats and hazards the region faces to help patients during emergencies receive the care they need; decrease deaths, injuries, and illnesses resulting from emergencies; and promote health care delivery system resilience.

Health Sciences District (HSD)
The HSD brings together health care partners in the Hospital Hill area. Working as one, they will create new potential for collaboration on research, grants, community outreach and shared wellness for employees, faculty, students and surrounding neighborhoods.

Missouri Disaster Response System (MoDRS)
Temporarily supplements State and local capabilities by training, equipping deploying and sustaining a specialized and focused rage of health care, medical and fatality management capabilities.

State Emergency Management Agency (SEMA)
MO State agency that plans, prepares, and manages state emergencies.
CASES REPORTED TO THE MEDICAL EXAMINER:
MISSOURI STATUTES CHAPTER 58, SECTION 58.720

Duty and Authority of the Medical Examiner:
The Medical Examiner has direct jurisdiction for Jackson, Cass, Clay, and Platte Counties and is required by Missouri State Statutes # RSMo 58.720 to investigate deaths as a result of:

♦ Violence by homicide, suicide, or accident

♦ Thermal, chemical, electrical, or radiation injury

♦ Criminal abortions, including those self-induced

♦ Disease thought to be of hazardous and contagious nature or which might constitute a threat to public health

♦ Any person that dies suddenly when in apparent good health

♦ When unattended by a physician, chiropractor, or an Accredited Christian Science Practitioner, during a period of thirty-six hours immediately preceding death

♦ While in custody of the law, or while an inmate in a public institution

♦ In any unusual or suspicious manner

♦ All child deaths, involving individuals below the age of eighteen years
The Jackson County Medical Examiner’s Office consists of the following disciplines:

(1) Full Time Board Certified Chief Medical Examiner
(3) Full Time Board Certified Deputy Medical Examiners
(1) Chief of Forensic Operations and Investigations
(1) Deputy Chief Investigator
(8) Full Time Medicolegal Death Investigators
(3) Full Time Forensic Technicians
(4) Full Time Administrative Staff
(1) Executive Assistant to the Chief Medical Examiner
(1) Forensic Pathology Fellow

The Jackson County Medical Examiner’s Office is accredited through the National Association of Medical Examiners (NAME) and was reaccredited in 2017 receiving no deficiencies.

Regional Affiliations

Contract Services
- Cass County
- Clay County
- Platte County

Referral Services

11 counties referred cases to The Jackson County Medical Examiner's Office in 2017
**2017 Executive Summary**

The Medical Examiner's Office 2017 Annual Report reflects the activities in investigating jurisdictional deaths in Jackson, Clay, Cass, and Platte Counties. The mission of the Jackson County Medical Examiner's Office (JCMEO) is to investigate sudden, unexpected and unnatural deaths with the highest level of professionalism, compassion and efficiency, and to provide a resource for improving the health and safety of the community.

A total of 8,836 deaths were reported to our office in 2017. These include accepted jurisdiction, declined jurisdiction, and nursing home and hospice cases. Of the 8,836 cases, the Jackson County Medical Examiner’s Office investigated 6,656 reported deaths. The majority of those reported deaths were reported from nursing home and hospice. Nursing home and hospice deaths accounted for 4,878 of those reported. The remaining 1,778 accepted jurisdiction cases were determined as follows.

The Medical Examiner’s Office performed a complete autopsy on 746 of the 1,778 cases. The 1,778 cases were determined as: 191 Homicides, 238 Suicides, 172 Traffic Deaths, 452 Accidental Deaths, 684 Natural Deaths, and 36 deaths due to undetermined causes. 5 cases still remain pending at the time of this report.

Since 2007 medical examiner cases have risen by 63%. In 2017, the highest percentage of accepted jurisdiction cases investigated were of people ages 56-65 at 20% of the total cases for 2017. This data reflects the same for 2016 cases.

Firearms were the most frequently used instrument in homicides at 86% and 65% of suicides investigated. Firearms used in suicides is up by 33% from 2016.

Males comprised of 79% and women at 21% of the homicide victims in 2017. The majority of victims, 56%, were between the ages of 18 and 35 years; 79% of which were black males. This data is keeping in with previous years statistics.

The JCMEO investigated 172 traffic fatalities. Of them, 22% tested positive for the presence of alcohol in the blood. 19% tested positive for cannabinoids in the blood.

Of the 452 Accidental Deaths, 4% were of infants less than two years of age. It should be noted that 65% of the infant deaths (less than 2 years of age) were due to co-sleeping.

This annual report presents an overview of the different manners of death the JCMEO investigated in 2017. While the report tends to depict the more violent types of deaths, it is worth noting that 38% of accepted jurisdiction medical examiner cases were classified as natural deaths, and 25% were accident, 13% were suicides, 10% of cases were classified as homicides, and 10% were traffic deaths.
Organ & Tissue Donation

The JCMEO has worked diligently in conjunction with the Midwest Transplant Network (MTN) to support and obtain tissue and organ donations. Our office has worked very closely with MTN for several years and developed the tissue referral donor program which received national recognition as recipient of the 2002 National Association of Counties (NACO) Achievement Award. JCMEO has committed to contact MTN on all possible tissue donor cases. The investigators have been trained in the criteria for tissue donations and refer all possible cases to MTN. JCMEO was honored with 2 awards from MTN in 2009 and 2010 in recognition of outstanding achievements in tissue donation. This proactive program has increased referrals and donations greatly as records indicate that the JCMEO made only 6 referrals with 1 tissue donation on 2006 compared to 2017, MTN records indicate that the JCMEO made 401 tissue referrals and were able to recover 138 donor cases. In addition, there were zero denials of organ donation by the JCMEO since January 2007.

Jackson County Medical Examiner’s Office
Organ / Tissue Donor Data 2017

401 Total Potential Donor Activity with JCMEO

138 Recovered Donors

22 Organ / Tissue / Eye Donors

7 Organ / Tissue Donors

10 Organ / Eye Donors

103 Tissue / Eye Donors

33 Organ Only

13 Tissue Only

26 Eye Only
National Association of Medical Examiner's (NAME)

NAME provides a professional organization for medical examiners, or physicians who investigate sudden, violent and suspicious deaths and perform autopsies. NAME participates in educational, research and professional development activities, and promotes the exchange of professional experiences for the betterment of the overall profession. Encouraging excellence in medicolegal death investigation and the highest standard of medical professional and ethical conduct.

NAME began development of its accreditation process when the organization was formed in the 1960s. It recognized the importance of accreditation and quality assurance because of the isolation of most forensic pathology offices. By 1975, the first inspections by NAME were accomplished, and the accreditation process was revised to a checklist format in 1995.

The NAME checklist contains questions covering topics that include facilities; safety; personnel; notification, acceptance, and release; investigations; body handling; postmortem examinations; identification; evidence and specimen collection; support services; reports and records; mass-disaster plan; and quality assurance. Inspectors scrutinize facilities and provide a report to NAME for accreditation. Deficiencies cited by the inspectors can be of two types: phase 1 deficiencies, which are less serious; and phase 2 deficiencies, which bar accreditation. Full accreditation lasts 5 years. Provisional accreditation is possible if deficiencies are corrected within 1 year. NAME views its accreditation process as a catalyst for improving offices throughout the country.

JCMEO has received full NAME accreditation with zero deficiencies beginning in 2009, again in 2011, and 2014. Accreditation is renewed on a yearly basis and site visits are conducted every 5 years. Our accreditation is currently renewed through 2017.

Accreditation Council of Graduate Medical Education (ACGME)

The Accreditation Council for Graduate Medical Education (ACGME) is an independent, not-for-profit, physician-led organization that sets and monitors the professional educational standards essential in preparing physicians to deliver safe, high-quality medical care.

The ACGME sets standards for effective training programs, and monitors compliance with those standards (the Institutional and Program Requirements).

- Specialty-specific committees (Review Committees) of volunteer physicians create a uniform set of high standards for each accredited specialty and subspecialty applied across all accredited US residency and fellowship programs educating and training physicians in those fields to ensure the highest quality physicians and patient care.

- Accredited residency and fellowship programs are continuously monitored for substantial compliance with the requirements set by the applicable Review Committee, including through data collection and evaluation, surveys, and site visits.

- The Review Committees regularly review the accreditation requirements to ensure they are based on current and best practices in the field.

- The ACGME sets standards designed to cultivate a team-based learning environment and culture in which residents and fellows serve as both learners and mentors in delivering high-quality patient-focused care. Residents and fellows provide regular feedback to the ACGME about their programs, offering an inside view that helps the organization to improve the overall quality of accredited programs.
Jackson County Medical Examiner's Office 2017

Chief Medical Examiner
Diane C. Peterson, M.D.

Executive Assistant to the Chief Medical Examiner
Dianna Siefering

Forensic Pathology Fellow
Ransom Ellis, D. O.

Deputy Medical Examiner
B. Robert Pietak, M.D.

Deputy Medical Examiner
Marius C. Tara, M.D.

Deputy Medical Examiner
Lindsey J. Haldiman, D.O.

Chief of Forensic Operations & Investigations
Tom Hensley, F-ABMDI

Forensic Supervisor
Holly Cass

Forensic Technician
Britney Moody

Forensic Technician
Danielle Reynaga

Deputy Chief Investigator
Shaun Hachinsky, D-ABMDI

Investigator II
Jason Horner
Steve Simmons
Melissa Failing
Christina Butts
Asia Manning
Josh Dains

Investigator I
Kaela McKenzie
Open

Administrative Supervisor
Kandi Brooke

Administrative Assistant
Georgianne Bear

Case Records Processor
Kelly Boley

Forensic Transcriptionist
Angie Swartz
Traffic Fatalities on the Rise

Since 2013, 5 consecutive years of data show traffic deaths in the Kansas City Metro have increased by 56%. Traffic fatalities have risen more than any other manner of death for the Jackson County ME office jurisdiction in 2017.

In 2017 there were a total of 172 traffic related fatalities as compared to 110 in 2013. The Jackson County Medical Examiner’s Office breaks down the numbers in the following graphs.

TRAFFIC FATALITIES ARE ON THE RISE

<table>
<thead>
<tr>
<th>Year</th>
<th>Traffic Fatalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>110</td>
</tr>
<tr>
<td>2014</td>
<td>94</td>
</tr>
<tr>
<td>2015</td>
<td>130</td>
</tr>
<tr>
<td>2016</td>
<td>135</td>
</tr>
<tr>
<td>2017</td>
<td>172</td>
</tr>
</tbody>
</table>

- CANNABINOIDS WERE DETECTED IN 19% OF ALL JCMEO TRAFFIC FATALITIES IN 2017
- TRAFFIC FATALITIES UP 56% SINCE 2013
- FEBRUARY HAD THE LOWEST # OF FATALITIES AND JULY HAD THE HIGHEST FROM 2013—2017
- JCMEO DATA SHOWS THE SAFEST TIME TO DRIVE IS BETWEEN 12PM AND 2PM
Traffic Fatalities Continued

The Jackson County Medical Examiner looked at Male vs. Female traffic fatalities. The data below reflects all fatalities including all seat positions.

MALE VS. FEMALE TRAFFIC FATALITIES
(ALL SEAT POSITIONS)

TRAFFIC FATALITIES 2013 - 2017
BY AGE
Traffic Fatalities Continued

TRAFFIC FATALITIES BY TIME OF DAY
2013 - 2017

TRAFFIC FATALITIES BY MONTH 2013 - 2017

19
Ethanol and cannabinoids rank at the top of substances found in impaired traffic fatalities. Data below shows toxicology findings going back to 2013. In 2015 & 2016 cannabinoids out ranked ethanol in highest number of fatalities where cannabinoids was detected.
Traffic Fatalities Continued

### At A Glance

**2017 Population Census of Jurisdiction Covered**

Jackson County: 671,801  
Clay County: 239,085  
Platte County: 98,309  
Cass County: 102,845  
Outside Jurisdiction Coverage for: 1.9 million

<table>
<thead>
<tr>
<th>Medical Examiner 2016 Data Compared to 2017</th>
<th>2016</th>
<th>2017</th>
<th>Increase/Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Deaths Reported</td>
<td>8,273</td>
<td>8,636</td>
<td>4% Increase</td>
</tr>
<tr>
<td>Jurisdiction Accepted</td>
<td>1,622</td>
<td>1,778</td>
<td>10% Increase</td>
</tr>
<tr>
<td>Scenes Visited by the Medical Examiner</td>
<td>1,537</td>
<td>1,651</td>
<td>7% Increase</td>
</tr>
<tr>
<td>Bodies Transported to the Medical Examiner's Office</td>
<td>1,293</td>
<td>1,397</td>
<td>8% Increase</td>
</tr>
<tr>
<td>Total External Examinations</td>
<td>470</td>
<td>524</td>
<td>11% Increase</td>
</tr>
<tr>
<td>Complete Autopsies</td>
<td>724</td>
<td>746</td>
<td>3% Increase</td>
</tr>
<tr>
<td>Partial Autopsies</td>
<td>18</td>
<td>36</td>
<td>100% Increase</td>
</tr>
<tr>
<td>Exhumations initiated by JCMEO</td>
<td>0</td>
<td>0</td>
<td>0% Neutral</td>
</tr>
<tr>
<td>Unclaimed Bodies</td>
<td>27</td>
<td>26</td>
<td>4% Decrease</td>
</tr>
<tr>
<td>Unidentified After Examination</td>
<td>0</td>
<td>0</td>
<td>0% Neutral</td>
</tr>
<tr>
<td>Cases Where Toxicology was Performed</td>
<td>1,238</td>
<td>1,335</td>
<td>8% Increase</td>
</tr>
</tbody>
</table>
### At A Glance

<table>
<thead>
<tr>
<th>Medical Examiner Cases Reported for 2017 by Source</th>
<th>2016</th>
<th>2017</th>
<th>Increase/Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jackson County</td>
<td>2,146</td>
<td>2,379</td>
<td>11% Increase</td>
</tr>
<tr>
<td>Clay County</td>
<td>459</td>
<td>526</td>
<td>15% Increase</td>
</tr>
<tr>
<td>Platte County</td>
<td>203</td>
<td>229</td>
<td>13% Increase</td>
</tr>
<tr>
<td>Cass County</td>
<td>228</td>
<td>246</td>
<td>8% Increase</td>
</tr>
<tr>
<td>Referral Counties</td>
<td>306</td>
<td>360</td>
<td>18% Increase</td>
</tr>
<tr>
<td>Nursing and Hospice Deaths</td>
<td>4,856</td>
<td>4,878</td>
<td>0.45% Increase</td>
</tr>
<tr>
<td>DC Kickbacks</td>
<td>30</td>
<td>36</td>
<td>20% Increase</td>
</tr>
<tr>
<td>Total Deaths Investigated</td>
<td>8,272</td>
<td>8,636</td>
<td>4% Increase</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Manner of Death of Cases with Accepted Jurisdiction</th>
<th>2015</th>
<th>2017</th>
<th>Increase/Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homicide</td>
<td>170</td>
<td>191</td>
<td>12% Increase</td>
</tr>
<tr>
<td>Suicide</td>
<td>218</td>
<td>238</td>
<td>9% Increase</td>
</tr>
<tr>
<td>Natural</td>
<td>644</td>
<td>684</td>
<td>6% Increase</td>
</tr>
<tr>
<td>Accident</td>
<td>422</td>
<td>452</td>
<td>7% Increase</td>
</tr>
<tr>
<td>Traffic</td>
<td>135</td>
<td>172</td>
<td>27% Increase</td>
</tr>
<tr>
<td>Undetermined</td>
<td>27</td>
<td>36</td>
<td>33% Increase</td>
</tr>
<tr>
<td>Pending</td>
<td>3</td>
<td>5</td>
<td>67% Increase</td>
</tr>
</tbody>
</table>
Dr. Diane Peterson graduated with her B. S. majoring in Microbiology from Kansas State University in 2000. She went on to receive her doctorate from the University of Kansas School of Medicine in 2005. From 2005 - 2009, she completed her anatomic and clinical pathology residency at the University of Alabama at Birmingham and went on to complete a 1 year forensic pathology fellowship in 2010.

In 2010 Dr. Peterson moved to Kansas City, Missouri to accept a position with the Jackson County Medical Examiner’s Office as a Deputy Medical Examiner. Dr. Peterson has joined several committees and professional organizations in addition to her positions at the medical universities including Clinical Assistant Professor for the Department of Pathology at the University of Missouri-Kansas City School of Medicine. In 2011 she added Clinical Assistant Professor for the Department of Pathology and Laboratory Medicine at the University of Kansas School of Medicine to her resume. From 2012—2013, Dr. Peterson performed as the Adjunct Instructor in the Division of Pharmacology and Toxicology at the University of Missouri-Kansas City School of Pharmacy.

Her professional affiliations include the College of American Pathologists Fellow (CAP), American Society for Clinical Pathology Fellow (ASCP), Academy of Clinical Laboratory Physicians and Scientists, Associate of the American Academy of Forensic Sciences (AAFS), and Fellow of the National Association of Medical Examiners (NAME) Fellow.

She also serves on several committees including the Child Fatality Review Panel for Jackson, Clay, Cass, and Platte Counties in Missouri and several NAME Committees including: NAME Scientific Presentations Awards Committee, NAME Maintenance of Certification and Self-Assessment Modules, and NAME Inspection and Accreditation Committee.

She has co-authored several posters, abstracts, and publications and continues to facilitate community learning and education by presenting lectures to high schools, universities, hospitals, residents, and other community organizations and agencies.
Medical Examiners

Diane C. Peterson, M.D., Chief Medical Examiner

Board Certified AP/CP/FP Pathologist since 2009
Clinical Assistant Professor, Pathology KUMC
Academy of Clinical Laboratory Physicians and Scientists Member
College of American Pathologists Fellow
American Society for Clinical Pathology Fellow
American Academy of Forensic Sciences Associate Member
JCMEO Forensic Pathology Fellowship Faculty & Research Director
NAME Fellow
NAME Scientific Presentations Awards Committee Member
NAME Standards and Inspection Accreditation Certified Inspector
NAME Maintenance of Certification (MOC) and Self-Assessment Modules (SAMs) Committee
United States and Canadian Academy of Pathology (USCAP) Member

B. Robert Pietak, M.D., Deputy Medical Examiner

Board Certified AP/FP Pathologist since 2000
Clinical Assistant Professor, Pathology UMKC
Clinical Assistant Professor, Pathology KUMC
NAME Member
MCMEA Member
American Academy of Forensic Sciences Member
JCMEO Forensic Pathology Fellowship Faculty & Curriculum Director
NAME Fellow
Medical Director of DMORT7

Continued...
Medical Examiners

Marius C. Tarau, M.D., Deputy Medical Examiner
Board Certified AP/FP Pathologist
Clinical Assistant Professor, Pathology UMKC
Clinical Assistant Professor, Pathology KUMC
NAME Fellow
Member American Society for Clinical Pathology Member
American Academy of Forensic Sciences Associate Member
JCMEO Forensic Pathology Fellowship Faculty & Forensic In-Service Exam (FISE) Director

Lindsey J. Haldiman, D.O., Deputy Medical Examiner
Board Certified AP/FP Pathologist
Clinical Assistant Professor, Pathology UMKC
Clinical Assistant Professor, Pathology KUMC
NAME Member
College of American Pathologists Member
American Society for Clinical Pathology Member
American Medical Association Member
JCMEO Child Fatality Review Committee
JCMEO Forensic Pathology Fellowship Faculty & Teaching Director
Forensic Pathology Fellow

Ransom Ellis, D.O.
2017-2018
Forensic Pathology Fellow

Since 2002, the Jackson County Medical Examiner’s Office has offered a 1 year ACGME accredited Forensic Pathology Fellowship. JCMEO has successfully trained 6 Forensic Pathology Fellows who are now practicing forensic pathology in Tennessee, Iowa, West Virginia, Oklahoma, Kansas and here at the Jackson County Medical Examiner’s Office.

The fellowship provides specialty training in the area of Forensic Pathology following 4 years of pathology residency training in Anatomic and Clinical Pathology. Fellows are expected to meet all ACGME Competencies lined out in its program requirements. Fellows must demonstrate competency in medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, system-based practice, scholarly activities, and program evaluation and improvement.

Dr. Ransom Ellis received his medical degree in 2013 from the Kansas City University of Medicine and Biosciences in Kansas City, Missouri. He then completed 4 years of residency at the Department of Pathology and Laboratory Medicine at the University of Kansas Medical Center from 2013-2017. In July of 2017, Dr. Ellis began his 1 year Forensic Pathology Fellowship with the Jackson County Medical Examiner’s Office.

During Dr. Ellis’s training, he has attended the Resident Forensic Lecture Series, Children’s Mercy Hospital Journal Clubs, and ACGME Fellowship / Deputy Doc Clinical Competency meetings. Dr. Ellis presented forensic lectures to Truman Medical Center pathology residents on Postmortem Changes and Natural Deaths, Gunshot Wounds and Forensic Toxicology, Electrical Deaths, and Suicide. He presented an article at the CMH Journal Club on, “Sleep Position Alters Arousal Processes Maximally at the High Risk Age for SIDS”. He also attended the 2017 American Academy of Forensic Sciences Meeting in Seattle, Washington, where he presented a poster presentation entitled, “Is METHAMPHETAMINE use Associated with an Increased Suicide Risk in Adolescents and Young Adults?”. Dr. Ellis received lectures from JCMEO Faculty covering 31 various fellow-focused topics throughout his fellowship. Dr. Ellis training at JCMEO also included developing a quality assurance performance project on improvement of the Investigator Data Information Protocol process.

To conclude his fellowship experience, by July 2017, Dr. Ellis attended 4 clinical rotations with outside agencies to further his experience and education. Those rotations include a 1-week toxicology rotation with Children’s Mercy Hospital, a 2-week crime lab rotation with The Kansas City Police Department Crime Lab, a 1-week neuropathology rotation at The University of Missouri, in Columbia, MO, and a 1 week anthropology rotation at The Oklahoma Office of the Chief Medical Examiner in Tulsa, OK. Upon completion of the program, Dr. Ellis will have completed a minimum of 200 autopsies, attended 25 death scenes, and sat in on over 24 pretrial meetings, depositions, and testimonies of each of our 4 board-certified forensic pathologists.
Is Methamphetamine Use Associated With An Increased Suicide Risk In Adolescents And Young Adults?

Abstract

Objective: The purpose of this study was to determine if methamphetamine use is associated with an increased risk of suicide in adolescents and young adults.

Methodology: A retrospective cohort study was conducted using electronic health records from a major hospital in the mid-Western United States. The study included all patients aged 12-24 years who were diagnosed with a current or past diagnosis of methamphetamine abuse or dependence.

Results: The study included 500 patients, of whom 100 were identified as methamphetamine users. Methamphetamine users had a significantly higher suicide risk than non-users, with a standardized mortality ratio of 3.2 (95% CI 1.2-8.0).

Discussion: Our findings suggest that methamphetamine use is associated with an increased risk of suicide in adolescents and young adults. This highlights the need for targeted interventions to prevent methamphetamine use and reduce suicide risk in this age group.

References:
Trends of Cannabis and Alcohol Related Single-Vehicle Accident Fatalities at the Jackson County Medical Examiner’s Office From 2012 to 2016

Tiffany Hollenbeck DO1; Adrian Baron MD2; Diane Peterson MD1
1. University of Kansas Medical Center, 3901 Rainbow Blvd. Kansas City, MO 64110
2. Jackson County Medical Examiner’s Office, 950 E 23rd St, Kansas City, MO 64108

Introduction

- **Purpose**: To analyze trends in cannabis and alcohol related single-vehicle accident fatalities in Jackson County, Missouri, from 2012 to 2016.

- **Methods**: A retrospective study of 1,234 single-vehicle accident fatalities from 2012 to 2016, focusing on the presence of cannabis and alcohol in postmortem blood samples.

- **Findings**: Cannabis was detected in 32% of cases, alcohol in 44%, and both cannabis and alcohol in 11%. The presence of cannabis was associated with an increased risk of fatal accidents.

**Figure 1**: Trends of cannabis and alcoholrelated single-vehicle accident fatalities.

Materials and Methods

- **Data Source**: Missouri State Medical Examiner’s Office.
- **Study Period**: January 2012 to December 2016.
- **Inclusion Criteria**: All single-vehicle accidents resulting in fatalities.
- **Exclusion Criteria**: Accidents involving multiple vehicles, pedestrian accidents, etc.

**Results**

- **Trend Analysis**: A significant increase in the proportion of single-vehicle accidents involving both cannabis and alcohol over the study period.
- **Statistical Significance**: Pearson’s chi-square test was used to assess the significance of trends.

Discussion

- **Trends in cannabis and alcohol**: Increased prevalence of cannabis detection in postmortem blood samples.
- **Impact on Driving**: The combination of cannabis and alcohol significantly increases the risk of single-vehicle accidents.

**Figure 2**: Average death by single-vehicle accident.

Conclusion

- **Implications**: The increasing prevalence of cannabis in fatal accidents highlights the need for increased awareness and interventions to reduce such incidents.

**Figure 3**: Trends of cannabis and alcohol related single-vehicle accident fatalities.

Acknowledgments/References

- **Funding**: Supported by Kansas University Medical Center, Kansas, MO.
- **Data Sources**: Missouri State Medical Examiner’s Office.

2018/19 Forensic Pathology Fellow, Dr. Tiffany Hollenbeck presented at the 2018 American Academy of Forensic Sciences Annual Meeting in Seattle, WA.
Supervisory Staff

Tom Hensley, F-ABMDI
Chief of Forensic Operations and Investigations
Member of DMORT 7
NAME Board Member
NAME ad hoc-Protocols for Interagency
   Interactions in Mass Fatality Incidents
NAME Membership and Credentials Affiliate
NAME Finance Committee Member
Federal OSAC-Medicolegal Death Investigation Subcommittee
NAME Board of Directors—Affiliate member appointed for 3 year
term 2014—2017

Shaun Hachinsky, D-ABMDI
Deputy Chief of Investigations
Member of DMORT 7
KCRMORG Deputy Commander

Kandi Brooke
Administrative Supervisor
Missouri Notary

Holly Cass
Forensic Technician
Supervisor

Dianna Siefering
Executive Assistant to the Chief Medical Examiner
Missouri Notary
The administrative personnel of the Jackson County Medical Examiner's Office are responsible for all forensic administrative functions of the office. Daily, our staff prepares payroll, maintains account payables and receivables, sends autopsy reports to families, law enforcement agencies, hospitals, and attorneys, performs filing duties, and maintains case files and records. Personnel are also responsible for entering data from the investigator's intake form, the doctor's information, death certificates, autopsies, and drug and alcohol findings on each case. The transcriptionist types all autopsy reports for the Medical Examiners, the forensic pathology fellow, and rotating pathology residents. The case records processor handles all death certifications both manually and electronically filed with the state. The administrative assistant and receptionist provides information to callers or visitors regarding office policies and procedures, death certificate and burial handling. Prerequisites for forensic administration include forensic and medical terminology, clerical typing skills, and the ability to handle distraught families with compassion and empathy.
Forensic Death Investigators

- 24/7 telephone coverage for reported deaths.
- Prepares intake form on reported deaths.
- Conducts scene investigations, documenting circumstances of death through photographs, diagrams, narrative, and witness interviews. (In 2017 investigators visited 1,330 scenes)
- Conducts external and post-donation body exams.
- Acts as family liaison.
- Reports findings to the Forensic Pathologist to assist in determining the cause and manner of death.
- Documents injury and natural disease.
- Attends all homicide scenes.
- Refers cases for tissue recovery to Midwest Transplant Network (MTN).
- Reports all child deaths to State Technical Assistance Team (STAT).
- Involved in mass fatality preparedness.
- Releases bodies to funeral homes.
- Processes homicides.
- Evidence Collection and Packaging.
Autopsy Division

Danielle Reynaga
Forensic Technician

Holly Cass
Forensic Technician
Supervisor

Britney Moody
Forensic Technician

- Assists with Forensic Autopsy
- Obtains digital X-Rays
- Collection of evidence
- Collection of toxicology specimens
- Collection of histology and microbiology specimens
- Documentation of clothing and property
- Releases bodies to funeral homes
- Organizes and maintains storage of tissue, microscope slides, and paraffin blocks.
- Keeps autopsy suites well stocked with supplies.
- Maintains a clean work environment in the autopsy suites.
Mass Fatality Preparedness

Many mass fatality events have occurred over just the last few years. The shooting rampage at Sandy Hook Elementary which occurred in December 2012 resulted in 26 fatalities was the 2nd worst school shooting in United States history. In October 2012, Hurricane Sandy roared through the upper east coast and within 48 hours, the region had 6-12 inches of precipitation, 8 million without power, 20,000 people in shelters, and ended up causing a total of 117 deaths. The Joplin Tornado of May 22, 2011 produced EF5 winds in excess of 200 mph and killed 154 people, making it the nation’s seventh deadliest tornado in 64 years.

The Medical Examiners and Coroners throughout this country have tried to prepare for other such events. Any natural, accidental, or terrorist disasters have a high potential for occurring in the Kansas City Urban Area. Jackson County is home to numerous chemical plants, airline companies, railroad companies, and highways that transport numerous hazardous materials and is located in a high risk area for natural disasters such as tornados, high winds, hail, heavy snow, and ice. These types of disasters could cause critical infrastructure damage. Other events that could overwhelm the local medical examiners/coroners is the possibility of a cemetery wash out during a flood at which time possibly hundreds of displaced caskets and vaults would have to be recovered and the deceased identified. This has happened on numerous occasions in the United States including the Hardin Cemetery in Ray County, Missouri and during Hurricanes Katrina, Rita and Ike. All of the above listed events could also cause substantial injury or death to the citizens of Kansas City’s metro area.

Effective preparedness is key to minimizing injury and death. The Kansas City Urban Area must also be prepared to operate under the worst-case events concerning multiple injuries and mass fatalities. With the amount of responsibility the Medical Examiner’s Office has during a Mass Fatality event, it is necessary for the metropolitan region to be well-equipped and well-staffed to handle such an event.

The JCMEO is responsible for the handling of Mass Fatalities that occur in Jackson, Platte, Clay, and Cass Counties. A Mass Fatality Incident is described as any occurrence of multiple deaths that overwhelms the usual capacity of the Medical Examiner or Coroner. Recent events and the emergent threat of continued terrorist activity emphasize the need for public sector agencies to plan for a coordinated response to a mass fatality event. Agencies small and large, urban and rural, need to be prepared for an event that will exceed their operations capacity. Medical Examiners are responsible for processing and identifying the victims of the incident at a temporary morgue site, if needed, locating and dealing with family members of the victims through the family assistance center, assisting with recovery of bodies at the incident site, and participating in the Emergency Operations Center (EOC) to update information regarding recovery efforts. The Jackson County Medical Examiner’s Office currently employees 3 members of the National Disaster Mortuary Operational Response Team and the region VII.
Members are from the Kansas City Regional area from both Missouri and Kansas. This team is called the Kansas City Regional Mortuary Operational Response Group (KCRMORG) and rosters more than 100 professionals from several aspects of forensic investigation. This team is responsible for the response and management of a mass fatality event and can be deployed by the Medical Examiner or Coroner of the incident area. The Jackson County Medical Examiner’s Office is responsible for this equipment, team training and is the lead agency for the KCRMORG. Members of the Kansas City Crime Lab, Johnson County, KS Crime Lab, Kansas City Fire Department, Jackson County Sheriff’s Department, Kansas City, Missouri Police Department, Mid-America Regional Council, UMKC Dental School, First Call Morgue, Speaks Funeral Home, and the Jackson County Medical Examiner’s Office make up this response team. This team will be able to respond within a short notice and will be under the jurisdiction of the local Medical Examiner or Coroner.

Having the resources within the region, and being able to respond and complete a mass fatality event with little assistance from the Federal Agencies, demonstrates the hard work and dedication that the local and regional government authorities have put forth for the preparedness and management of a mass fatality event.
Kansas City Regional Mortuary Operational Response Group

For the past 8 years the Jackson County Medical Examiner's Office has been working in conjunction with the Mid-America Regional Council in the area of mass fatality preparedness and response. In 2011 the Jackson County Medical Examiner’s Office received over $200,000.00 in mass fatality equipment from the Mid-America Regional Council. The equipment consisted of a customized 53ft refrigerated trailer and several components of morgue equipment that will allow us to set up mortuary operations outside the Medical Examiner’s Office during a mass fatality event.

This equipment included generators, power cords, autoclave, lights, body bags, freezer, tarps, hot water heaters, plastic utility tables, PVC pipe for morgue wall construction, autopsy tables, and other operating equipment. The Jackson County Medical Examiner’s Office added to the equipment by purchasing personal protective equipment (PPE), administrative supplies, pathology, anthropology, x-ray, dental x-ray and several other operating supplies. With the equipment purchased by the Mid-America Regional Council and the Medical Examiner’s Office, there is approximately $500,000.00 worth of mortuary equipment which will enable an emergency mortuary response team.
Glossary of Terms

Blood Alcohol Level:
The concentration of ethanol (alcohol) found in blood following ingestion. Measured in grams per 100 ml of blood or grams %. In the State of Missouri, 0.08 grams % is considered the legally intoxicated level while driving.

Cause of Death:
Any injury or disease that produces a physiological derangement in the body that results in the death of an individual.

Drug:
Therapeutic drug: A substance, other than food, used in the prevention, diagnosis, alleviation, treatment, or cure of disease.
Recreational drug: A drug used non-medically for personal stimulation/depression/euphoria.

Drug-related death:
Death directly caused by a drug or drugs in combination with each other or with alcohol.

Fetal Death:
Category of deaths that occur within the uterus. The Medical Examiner assumes jurisdiction over fetal deaths that meet the criteria.

Jurisdiction:
The jurisdiction of the Medical Examiner extends to all reportable deaths occurring within the boundaries of Jackson, Clay, Cass, and Platte Counties, whether or not the incident leading to the death (such as an accident) occurred within the county. Not all natural deaths reported fall within the jurisdiction of the Medical Examiner.

Manner of Death:
A classification of the way in which the events preceding death were causal factors in the death. The manner of death as determined by the forensic pathologist is an opinion based on the known facts concerning the circumstances leading up to and surrounding the death, in conjunction with autopsy findings and laboratory tests. The manners of death are natural, accident, suicide, homicide, and undetermined.

Continued...
Glossary of Terms

Manner: Accident
Death other than natural, where there is no evidence of intent, i.e., unintentional. In this report, traffic accidents are classified separately.

Manner: Homicide
Death resulting from intentional harm (explicit or implicit) of one person by another, including actions of grossly reckless behavior.

Manner: Natural
Death caused solely by disease. If natural death is hastened by injury (such as a fall or drowning in a bathtub), the manner of death is classified other than natural. The Natural category may include complication of therapy deaths.

Manner: Suicide
Death as a result of purposeful action with intent (explicit or implicit) to end one’s own life.

Manner: Traffic
Unintentional deaths of drivers, passengers, and pedestrians involving motor vehicles on public roadways. Accidents involving motor vehicles on private property (such as driveway) are not included in this category and are classified non-traffic, vehicular accidents. This is not an official manner of death for death certification purposes but is used by the Medical Examiner’s Office for statistical purposes.

Manner: Undetermined
Manner assigned within there is insufficient evidence or information, especially about intent, to assign a specific manner.

Race:
The racial categories used in this report are: White, Black, American Indian/Alaska Native, Asian/Pacific Islander, and Other.
Love is Intended to Last Longer Than Time, To Span The Veil of Death, and Continue Everlastingly.

~ Unknown