



Office of the Medical Examiner

2017 Annual Report



El Paso County, Texas





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PROLOGUE

The information found in this annual report has been gathered from the case management system of the El Paso County Office of the Medical Examiner in El Paso, Texas (EPOME). Our staff strives to serve the citizens of El Paso with empathy, competency, integrity, and professionalism.

The EPOME incorporates the scientific rigor of medicine and forensic science to investigate cases of sudden, unexpected deaths, or those that occur under violent or suspicious circumstances in El Paso County.

We are also very proud to function as an advocate for families by working with them to ensure they are notified of the death, relaying preliminary findings, sharing the final autopsy report in a timely manner, assist families with funeral arrangements, and facilitating communication between the families and other agencies that will assist in the grieving process. Similarly, the EPOME works with organ and tissue procurement organizations whenever possible, to facilitate family wishes regarding postmortem donations.

The public health role of the EPOME includes: to identify potential hazards in the community; to monitor trends in violence and injury; to be adequately prepared for a potential emergency response; and to evaluate areas of concern regarding the health, safety, and welfare of the community. It is our hope that this report helps identify trends in the community that allow public health and policy efforts to enhance death prevention and surveillance efforts that protect the lives of all El Pasoans.



Mario A Rascon, MD, MHCM, D-ABP, D-NBPAS, D-ABMDI, F-CAP, F-NAME

Chief Medical Examiner

El Paso County Office of the Medical Examiner

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INTRODUCTION

The EPOME provides medicolegal death investigation for El Paso County. This includes autopsy services and certification of cause and manner of death in cases of homicides, suicides, accidents and otherwise sudden or unexpected natural deaths. Exceptions to this disposition are areas within the County that arrange for their own death investigations through their own governance bodies or with Federal assistance (*e.g.*, Fort Bliss, Ysleta del Sur Pueblo).

The cause of death is a disease, injury, toxic material, or combination of factors that causes a physiologic derangement severe enough to result in death. The manner of death refers to the circumstances surrounding how the death came about and is divided into five categories: natural, accident, suicide, homicide, and undetermined.

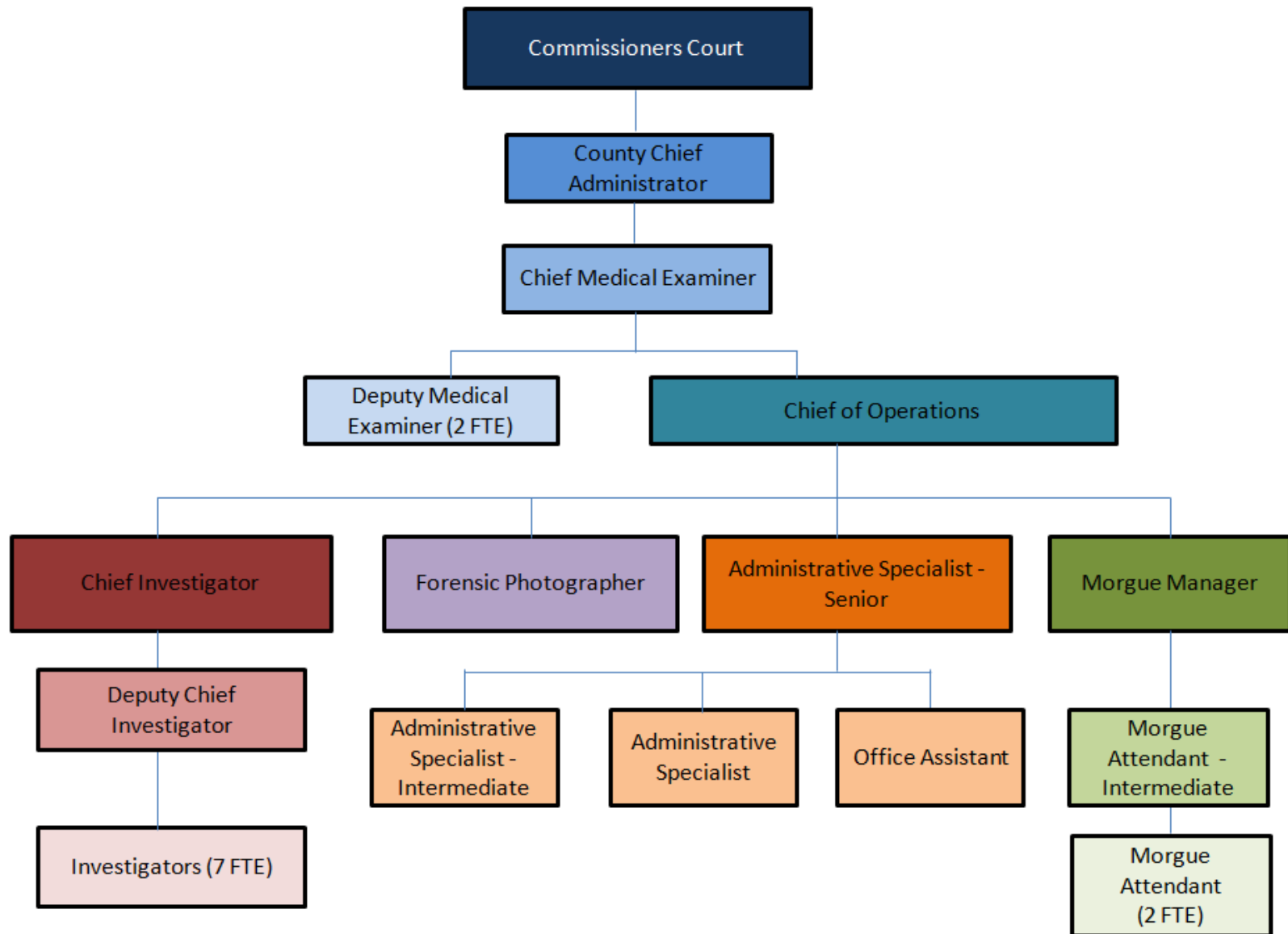
The Texas Code of Criminal Procedure (Chapter 49. 'Inquests Upon Dead Bodies'), stipulates that the EPOME shall conduct an inquest into the death of a person who dies in the County if:

- (1) the person dies in jail or in prison (except under circumstances different than described by Section 501.055(b);
- (2) the person dies an unnatural death from a cause other than a legal execution;
- (3) the body or a body part of a person is found, the cause or circumstances of death are unknown, whether the person is identified or unidentified;
- (4) the circumstances of the death indicate the death may have been caused by unlawful means;
- (5) the person commits suicide or the circumstances of the death indicate that the death may have been caused by suicide;
- (6) the person dies without having been attended by a physician;
- (7) the person dies while attended by a physician who is unable to certify the cause of death and who requests the justice of the peace to conduct an inquest; or
- (8) the person is a child younger than six years of age (few exceptions are part of this provision)

Decisions about autopsies are not mandated and are left to the discretion of the medical examiner. Furthermore, the laws are general enough that jurisdiction may be accepted in a wide variety of cases that are not otherwise specified in law.

In addition, the EPOME services the community by assisting families with funeral arrangements, authorizing cremations, signing death certificates, reporting viable candidates to the local tissue bank for postmortem donation, positively identifying decedents, preparing for a mass disaster, teaching Medical Students (Paul L Foster School of Medicine), and fostering community outreach through different institutions.

EPOME – ORGANIZATIONAL CHART



CASE JURISDICTION

The El Paso Metro area covers an area of 1,015 square miles, and has an estimated population (2017 census) of about 840,410. Countywide, the population is about 92% white (which includes 82% white-hispanic and 10% white non-hispanic), 4% black, 1% American Indian, 1.3% Asian, 1.4% two or more races.

When a local death (one that occurs within the boundaries of El Paso County) is reported to the EPOME, the case is either **accepted** or **released**. If a case is accepted, it means that the medical examiner will be signing the death certificate. A case is **released** when the death is natural (e.g., non-natural contributing factors such as trauma have been ruled out), circumstances are known, the person has extensive and well documented comorbidities/medical history, and a community physician is willing and able to sign the death certificate.

Local deaths that fall under the EPOME jurisdiction are transported to the EPOME for examination by a contract body transport company. In the vast majority of cases, an EPOME investigator attends the death scene in person to perform a preliminary examination of the body and present a written field report to the medical examiner. EPOME investigators usually attend all homicides, suicides, and accidental deaths, and selected natural deaths. Investigators are on staff and available 24 hours/day, 365 days/year. EPOME investigators do not physically perform scene investigations on cases that are reported to them from outside of the physical boundaries of El Paso County.

On accepted cases, the medical examiner uses one of two approaches to obtain information to complete the death certificate:

- **Inquest.** The death certificate is signed without examining the body (review of medical records and other pertinent reports).
- **Exams:** The body is physically transported to the EPOME, and a final written report is produced:
 - External Examination.** Formal external examination, which may or may not include toxicology/chemical testing.
 - Autopsy.** Complete autopsy. A **partial autopsy** (dissection limited to specific anatomic sites) is sometimes performed if there is expressed objection to autopsy or significant health or safety risks exist for staff.



Area served by the EPOME is highlighted in red

EXECUTIVE SUMMARY – 2017

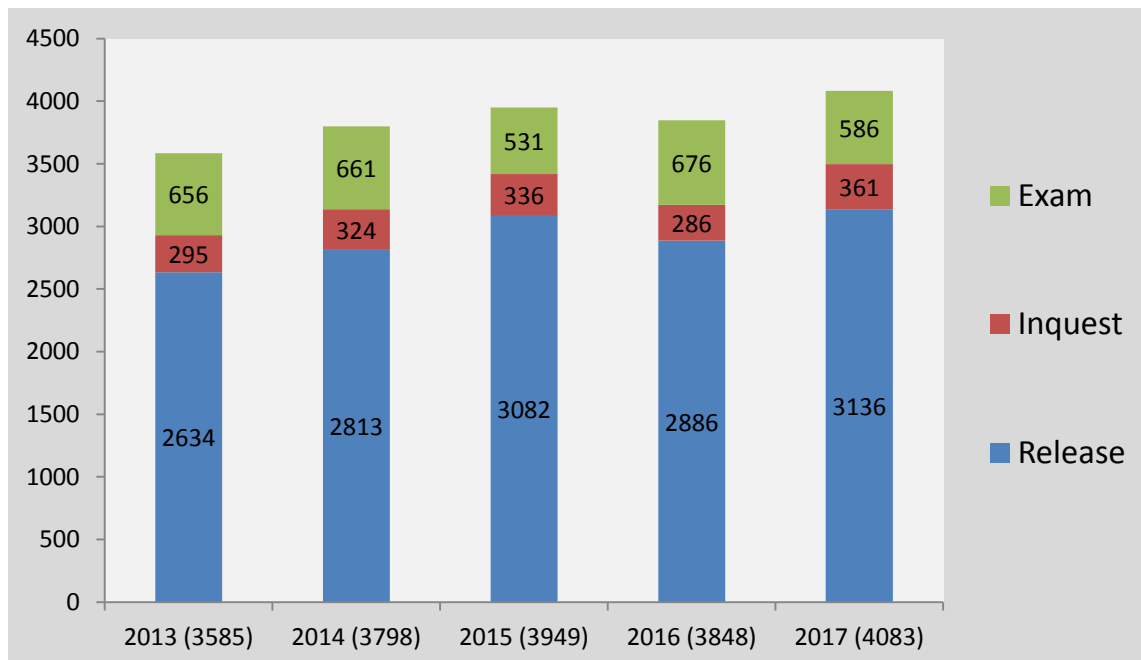
In 2017, the El Paso County had a total of 5897 deaths. Of these, 4437 were reported to the EPOME. Every reported case requires a preliminary screening by EPOME investigative staff to determine if it falls under the jurisdiction of the EPOME. Of those calls, a total of 3136 cases were **released**, with death certificates being signed by primary care physicians in the community. Additionally, 354 additional calls were related to cases that did not meet the guidelines as described above to be reported to the EPOME (**declined jurisdiction** cases). Jurisdiction was **accepted** on a total of 947 cases (361 inquests and 586 exam cases). Nearly half of the exam cases [(48.9% (287))] came from local hospitals. In all the exam cases the bodies were physically examined at the EPOME. Full body autopsies were conducted on 535 cases and 51 underwent an *external examination* only. The EPOME does not perform partial autopsies.

There were a total of 1073 death scenes investigated. This represented a 26% increase from those in 2016 (849). A total of 737 bodies were transported to the EPOME facilities. Note that the number of transported bodies is greater than the exam cases; this is due to the fact that some *release* and some *inquest* cases are transported to the EPOME morgue as a courtesy to families in need of body storage while waiting to finalize funeral arrangements.

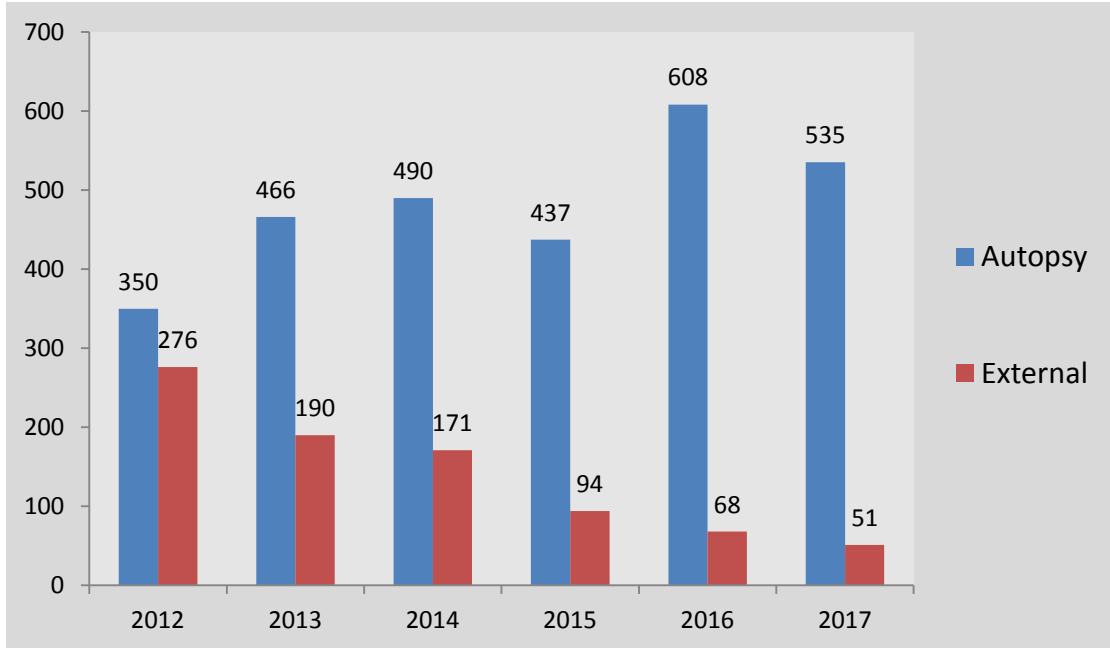
Two cases remained unidentified after examination (human skeleton). There were no exhumations performed and no cases previously autopsied at local hospitals were retained by the EPOME in 2017.

EPOME DATA (2013 - 2017)

TOTAL CASES HANDLED BY THE EPOME – 2013 to 2017

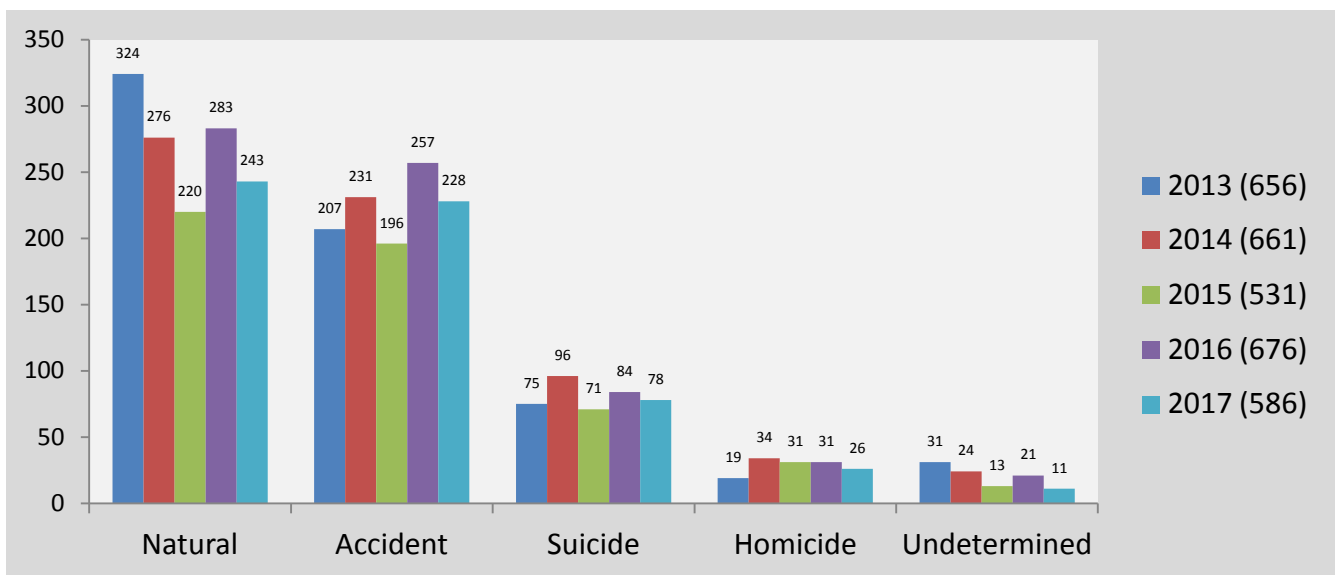


EXAM CASES 2012 to 2017– EXAMINATION TYPE

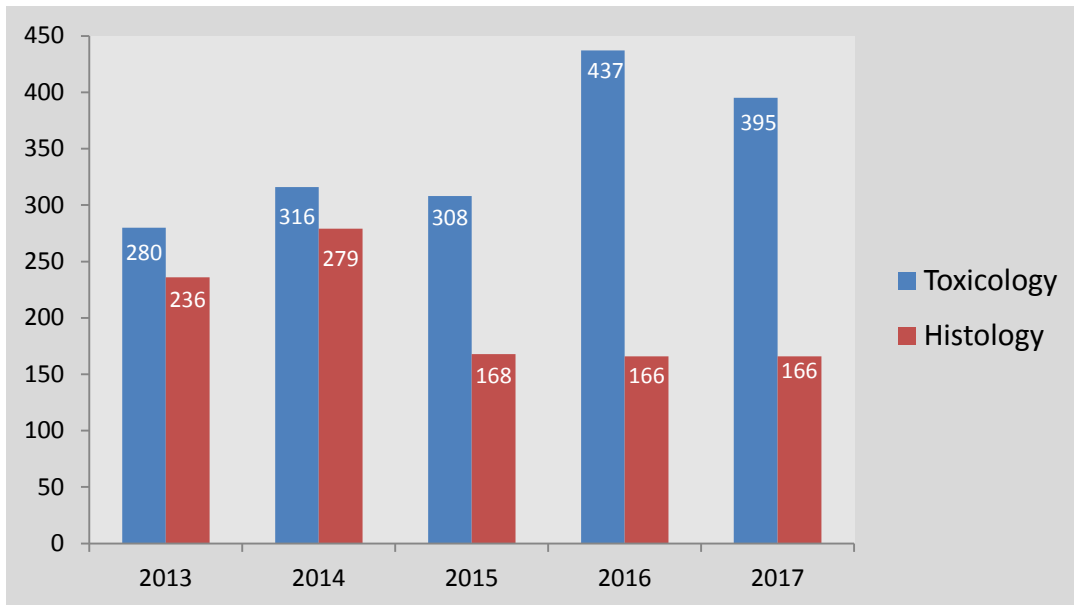


The autopsy to external examination ratio has gone from 1.2:1 in 2012 to 10.5:1 in 2017.

EXAM CASES 2013 to 2017 – MANNER OF DEATH

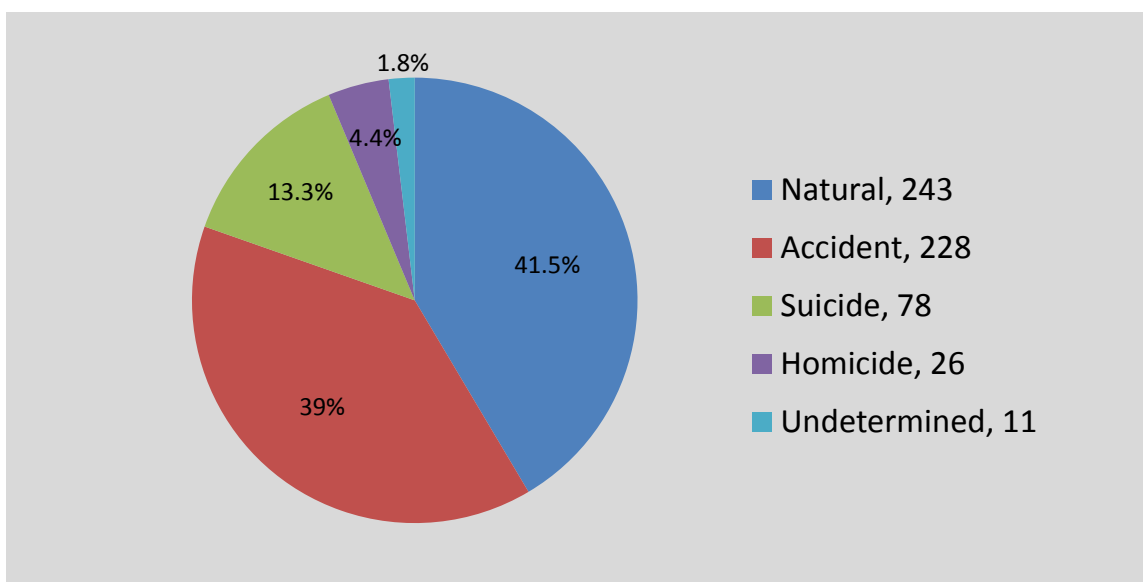


EXAM CASES 2013 to 2017– TOXICOLOGY & HISTOLOGY REQUESTS



EPOME 2017: EXAM CASES

2017 TOTAL EXAM CASES (586) – MANNER OF DEATH



2017 TOTAL EXAM CASES (586) – MANNER OF DEATH & AUTOPSY STATUS

	MANNER OF DEATH					TOTAL (%)
	NATURAL	ACCIDENT	SUICIDE	HOMICIDE	UNDETERMINED	
Full Autopsy (%)	216 (88.8%)	207 (90.7%)	76 (97%)	26 (100%)	10 (90.1%)	535 (91.2%)
Partial Autopsy (%)	0	0	0	0	0	0 (0%)
External Exam (%)	27 (11.2%)	21 (9.3%)	2(3%)	0	1 (9.9 %)*	51 (8.8%)
TOTAL	243	228	78	26	11	586

*Intrauterine Fetal Demise

2017 TOTAL EXAM CASES (586) – GENDER AND AGE GROUP

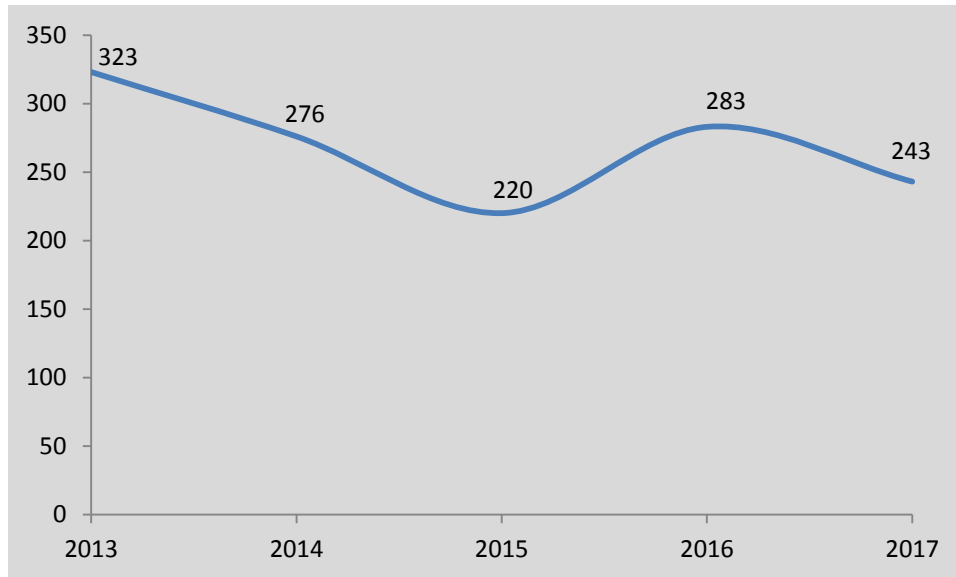
	MANNER OF DEATH										
	NATURAL		ACCIDENT		SUICIDE		HOMICIDE		UNDETERMINED		
Age Group	♂	♀	♂	♀	♂	♀	♂	♀	♂	♀	Unknown
>1	3	-	9	4	-	-	-	1	-	-	1*
1-5	-	-	3	2	-	-	-	-	1	-	-
6-10	2	-	3	1	-	-	-	-	-	-	-
11-18	2	-	10	3	8	4	1	1	-	1	-
19-25	3	-	20	2	8	1	6	1	-	-	-
26-35	6	3	36	10	9	1	2	1	-	-	-
36-45	19	5	17	11	11	5	4	1	4	-	-
46-55	42	9	34	6	6	4	4	1	3	-	-
56-65	71	17	22	10	10	2	2	1	-	-	-
66-75	28	13	8	6	2	1	-	-	-	1	-
76-85	11	3	2	5	3	-	-	-	-	-	-
>85	2	4	1	3	3	-	-	-	-	-	-
TOTAL	189	54	165	63	60	18	19	7	8	2	1
♂: 441											
♀: 144											
Unknown: 1											

♂=male; ♀=female

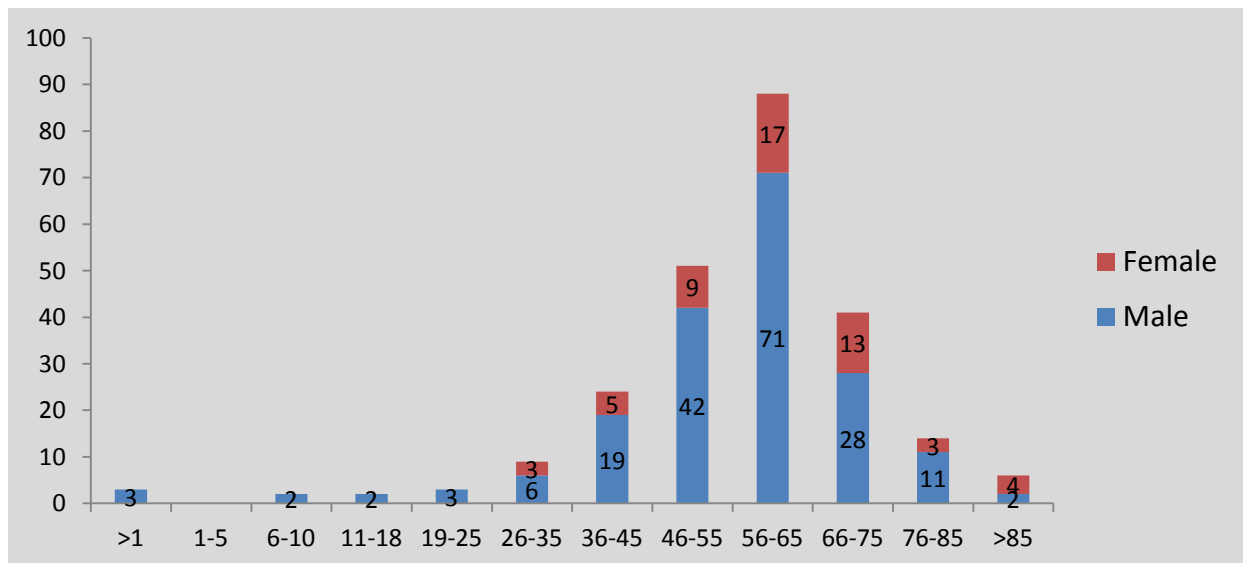
*Intrauterine Fetal Demise

NATURAL DEATHS

NATURAL DEATHS: 2013 - 2017



2017 NATURAL DEATHS (243) – GENDER AND AGE GROUP



Individuals aged 46 - 66 years comprised 61.38% of all people who succumbed to natural deaths in 2017.

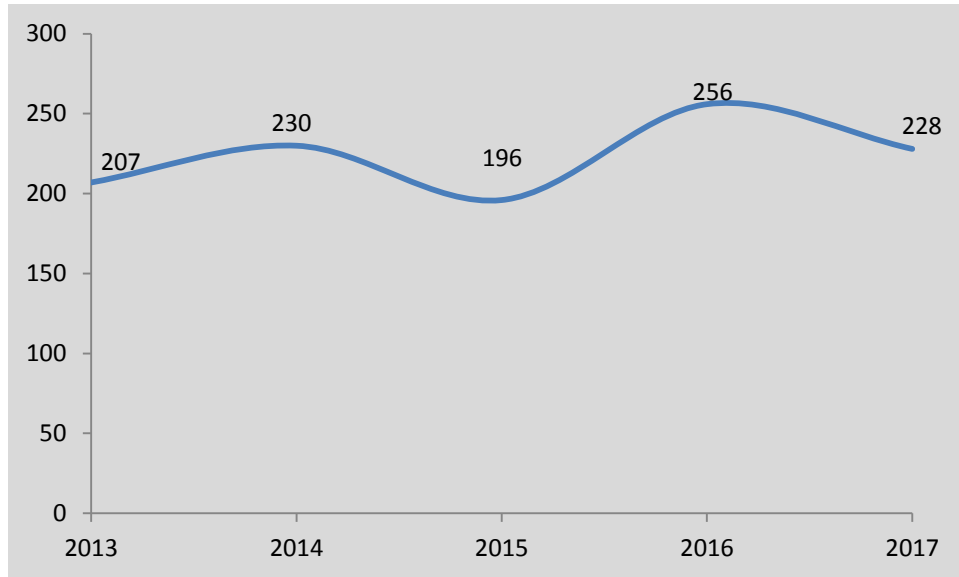
2017 NATURAL DEATHS (243) – CAUSE OF DEATH

Cardiovascular Disease	170
Complications of Chronic Alcohol Abuse	12
Liver Cirrhosis	9
Pulmonary Embolism	8
Diabetes Mellitus	6
Epilepsy	6
Pneumonia	5
Urinary Tract Infection	4
Undetermined Natural Causes	2
Peritonitis – Ruptured Bowel	2
Complications of Prematurity	2
Peptic Ulcer Disease	2
Chronic Obstructive Pulmonary Disease	2
Malnutrition	1
Breast Cancer	1
Lymphoma	1
Hepatocellular Carcinoma	1
HIV/AIDS	1
Arteriovenous Malformation	1
Tuberculosis	1
Encephalitis	1
Complications of Morbid Obesity	1
Asthma	1
Sepsis - Endometritis	1
Mowat-Wilson Syndrome	1
Acute Chorioamnionitis	1
TOTAL	243

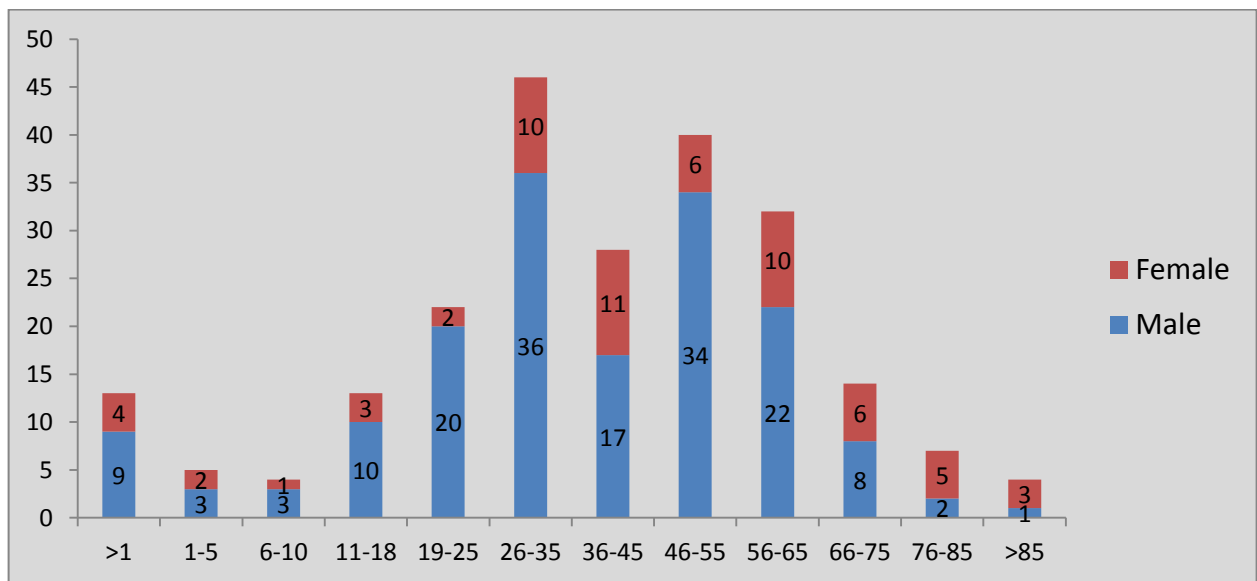
Cardiovascular Disease includes cause of death statements such as: *hypertensive and atherosclerotic cardiovascular disease (110), atherosclerotic cardiovascular disease (29), acute myocardial infarction (11), intracerebral hemorrhage due to systemic hypertension (7) arteriosclerotic cardiovascular disease (4), dilated cardiomyopathy (3), aortic dissection (2), hypertrophic cardiomyopathy (1), ruptured aortic aneurysm (1), bowel ischemia due to peripheral vascular disease (1), and aortic stenosis (1).*

ACCIDENTS

ACCIDENTS: 2013 - 2017



2017 ACCIDENTS (228) – GENDER AND AGE GROUP



Accident victims were most frequently male (72.3%). Individuals between the ages of 24 – 49 years comprised 41% of all accidental fatalities. Accidental deaths decreased by 11% from 2016(256) to 2017 (228).

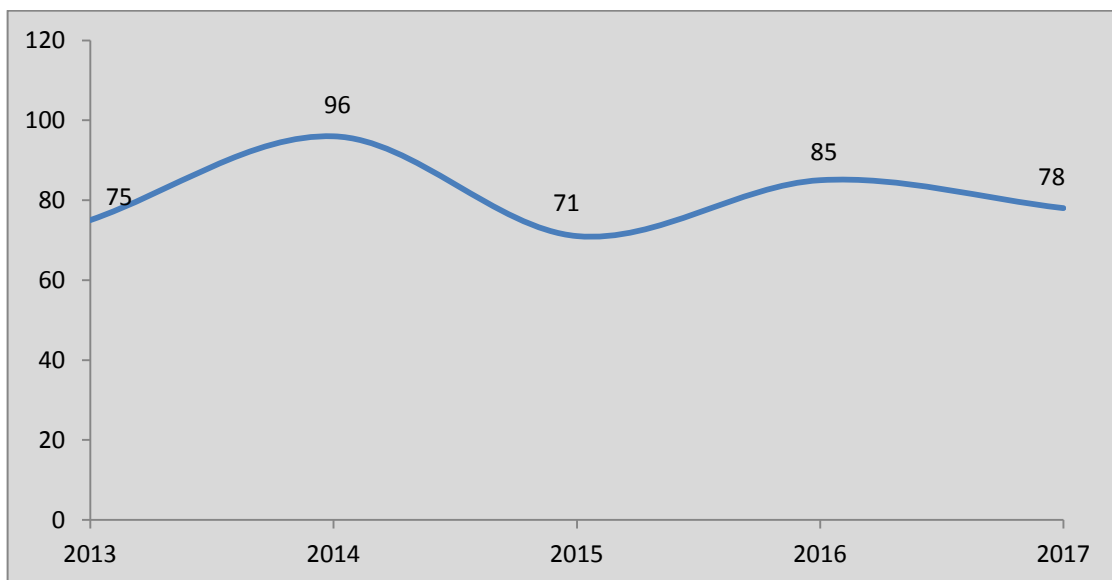
2017 ACCIDENTS (228) – MECHANISM

Blunt Force Injuries	98
Acute Drug and/or Alcohol Toxicity	90
Drowning	9
Asphyxia – Suffocation	9
Asphyxia - Choking	7
Asphyxia – Traumatic	4
Thermal Injuries	4
Aspiration	3
Environmental Cold Exposure	3
Environmental Heat Exposure	1
Gunshot Wound	1
Carbon Monoxide Poisoning	1
Electrocution	1

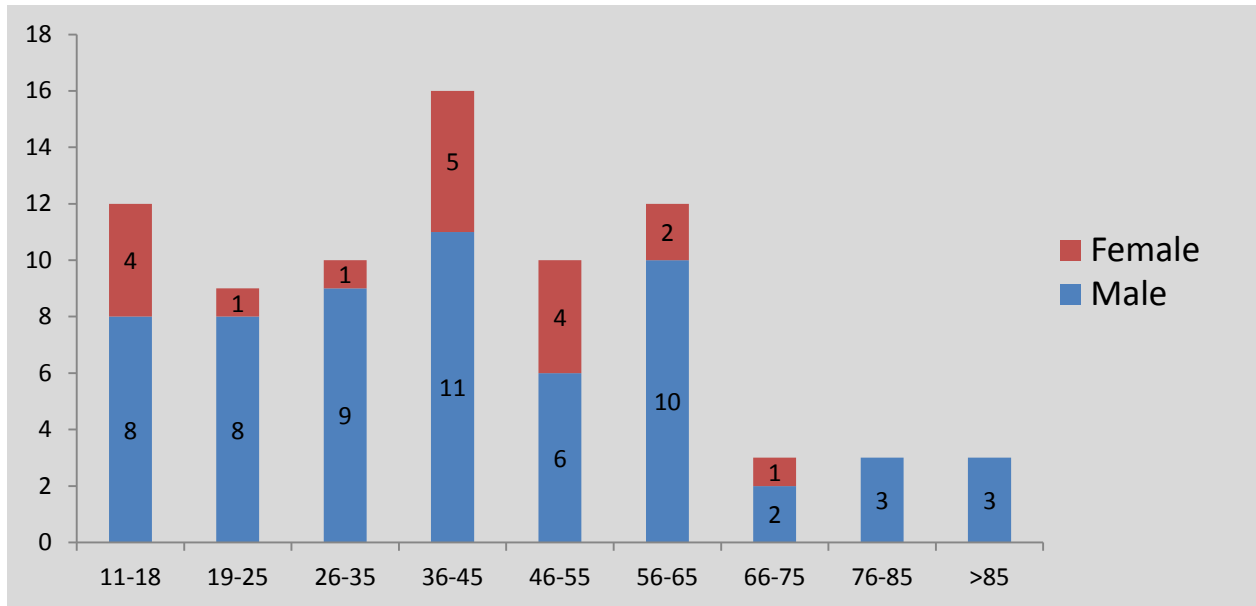
**note that the sum of all cases is >228 due to some cases involving multiple mechanisms (e.g., an intoxicated individual that sustains a lethal head injury after a fall)*

SUICIDES

SUICIDES: 2013 - 2017

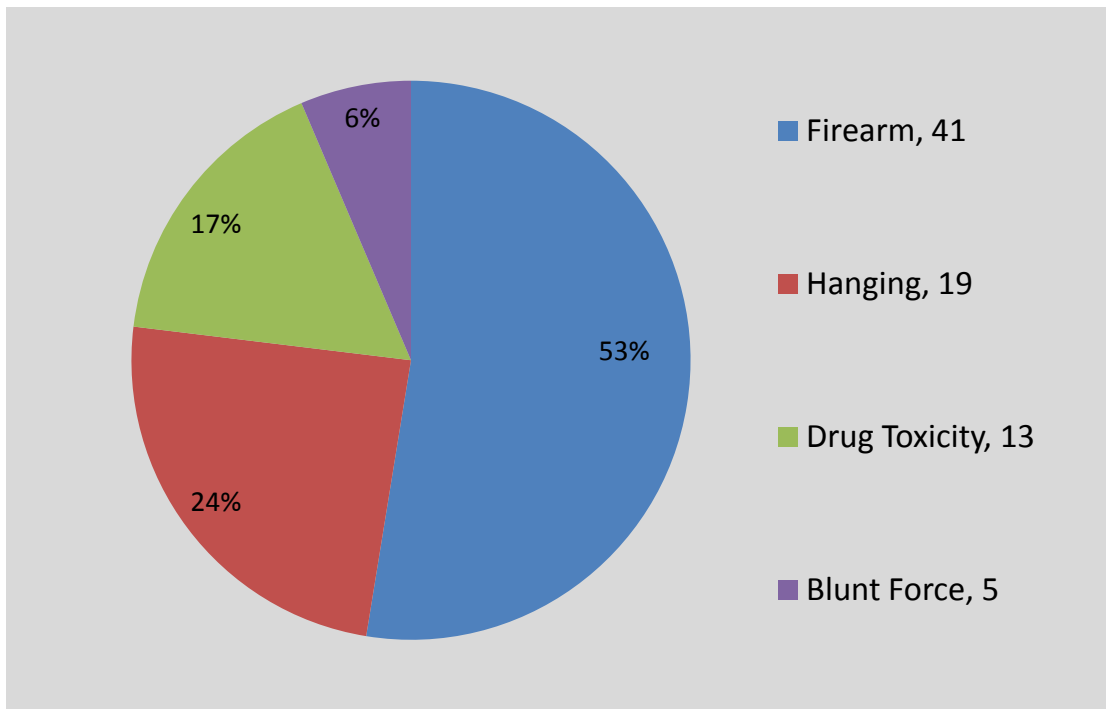


2017 SUICIDES (78) – GENDER AND AGE GROUP



There was a 240% increase in suicide victims ages 11-18 from 2016 (5) to 2017 (12). Furthermore, in 2015 there was only 1 suicide victim within this same age group.

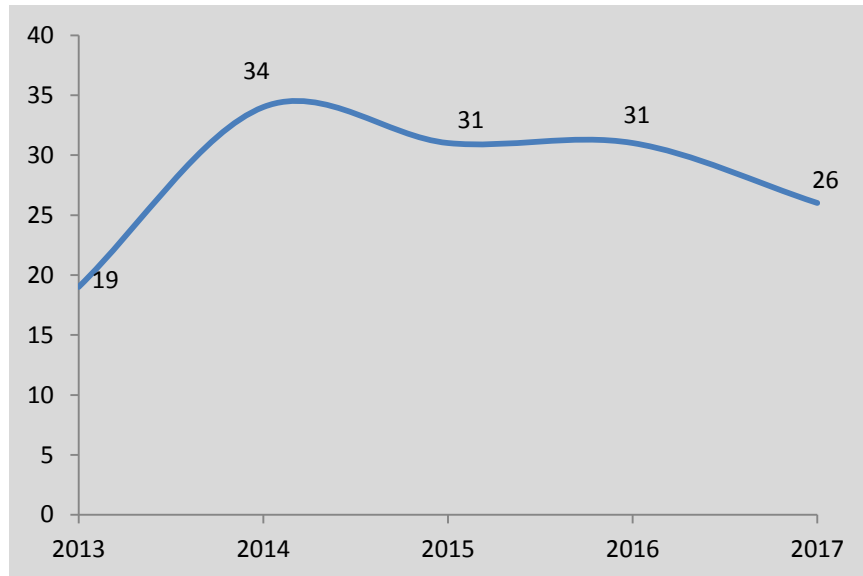
2017 SUICIDES (78) – METHOD



Suicide victims were most frequently male (77%). The vast majority (38 out of 41 [92%]) of suicide by firearm were wounds to the head, followed by the chest (3 out of 41 [8%]).

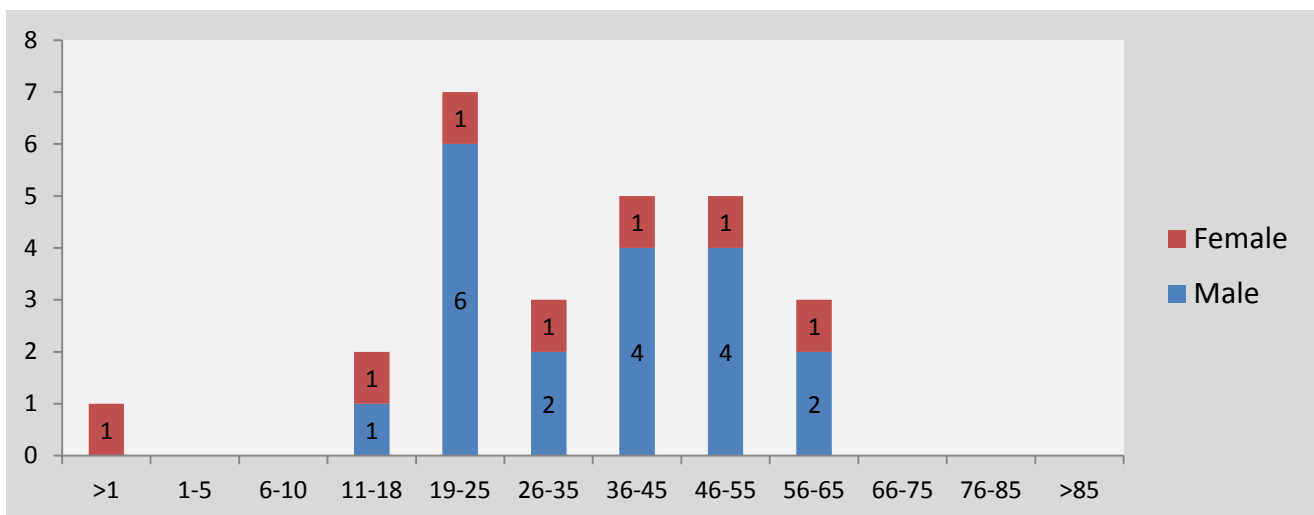
HOMICIDES

HOMICIDES: 2013 - 2017



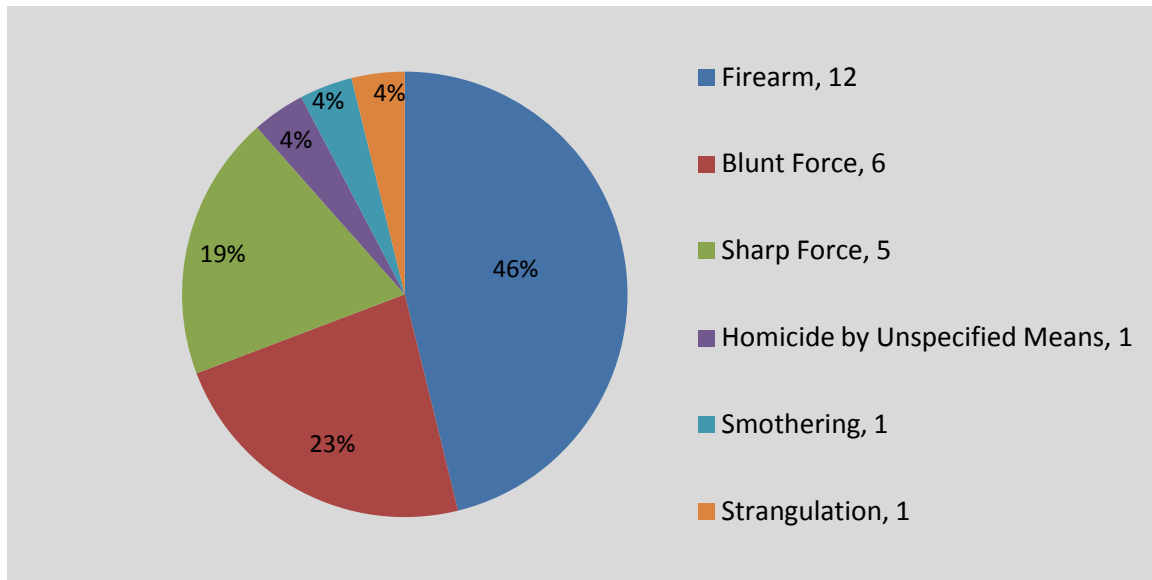
Of note is that 2 of the homicide exam cases (8.5% of the total homicides) from the EPOME in 2017 were instances in which the assault leading to the death took place outside of the El Paso County and, in fact, outside of the State of Texas. The corrected homicide rate for homicides in which the assault took place within the El Paso County geographical circumscription (24 cases) equals 2.8 per 100,000, which ranks amongst the lowest homicide rates in the USA for a city with >500,000 population.

2017 HOMICIDES (26) – GENDER AND AGE GROUP



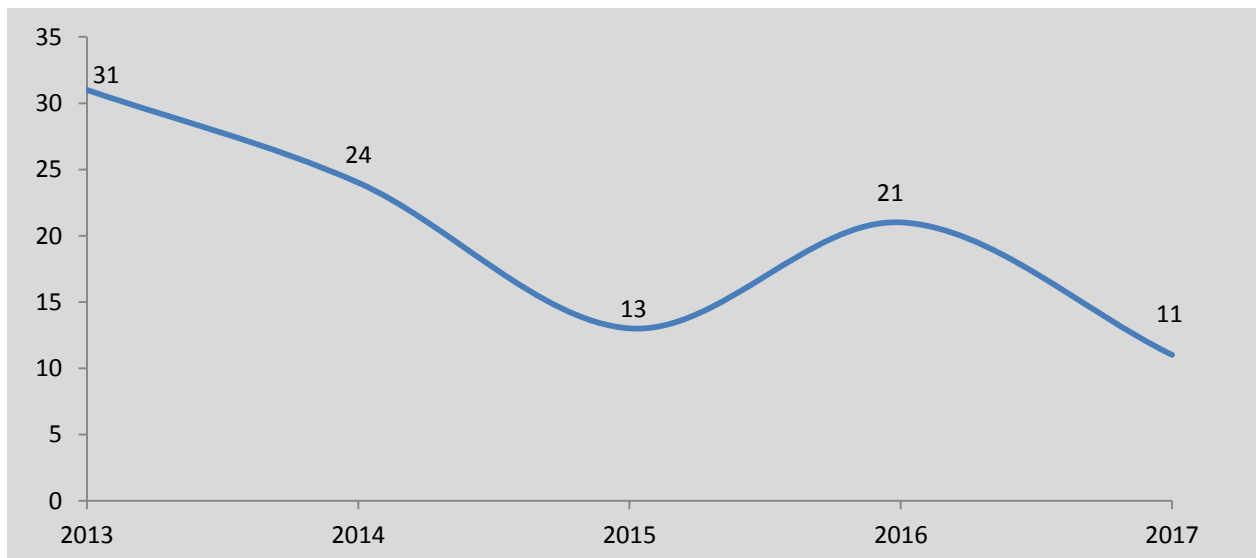
Homicide victims were most frequently male (73%).

2017 HOMICIDES (26) – MODE OF INFLECTION

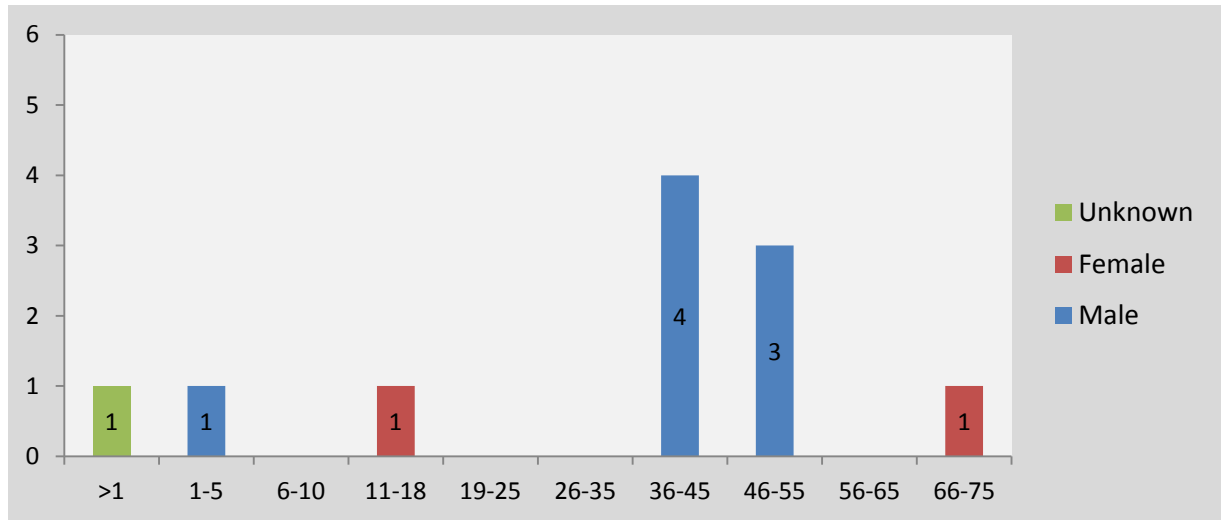


UNDETERMINED

UNDETERMINED MANNER OF DEATH: 2013 - 2017



2017 UNDETERMINED MANNER OF DEATH (11): GENDER AND AGE GROUP



CHILD FATALITY

In 2017, there were 60 deaths of individuals 18 years or age or younger, which included the deaths of 17 infants (a child in the first year of life) and one fetus.

2017 INFANT, AND CHILD DEATHS (59*) – SUMMARY TABLE

Age Group	MANNER OF DEATH									
	NATURAL		ACCIDENT		HOMICIDE		SUICIDE		UNDETERMINED	
	♂	♀	♂	♀	♂	♀	♂	♀	♂	♀
<1	3	-	10	4	-	1	-	-	-	-
1-3	-	-	1	2	-	-	-	-	1	-
4-6	-	-	3	-	-	-	-	-	-	-
7-10	2	-	2	1	-	-	-	-	-	-
11-15	1	-	1	1	-	-	5	-	-	-
16-18	1	-	8	2	1	1	3	4	-	1
TOTAL	7	0	25	10	1	2	8	4	1	1
♂ : 42										
♀ : 17										
total: 59*										

♂=male; ♀=female

*Excluded: One fetal death (intrauterine demise)

2017 CHILD (<18 YEARS) FATALITY CASES (42) – MANNER OF DEATH & AUTOPSY STATUS

	MANNER OF DEATH					TOTAL (%)
	NATURAL	ACCIDENT	SUICIDE	HOMICIDE	UNDETERMINED	
Full Autopsy (%)	4 (100%)	20 (91%)	12 (100%)	2 (100%)	2 (100%)	95%
Partial Autopsy (%)	0	0	0	0	0	0
External Exam (%)	0	2 (9%)	0	0	0	5%
TOTAL	4	22	12	2	2	100%

2017 CHILD DEATHS (AGE: 1-18) – CAUSE OF DEATH (42)

Blunt Force Injury	11*
Firearm	9
Drowning	5
Hanging	4
Thermal Injuries	3
Choking	2
Seizure Disorder	2
Congenital Anomalies	2
Traumatic Asphyxia	1
Acute Alcohol Toxicity	1
Carbon Monoxide Poisoning	1
Acute Drug Toxicity	1
TOTAL	42

*includes: multiple injuries (8) and injuries of head (3).

2017 INFANT (<1Y) DEATHS (17) – CAUSE OF DEATH

Asphyxia – Suffocation/Overlay	11
Complications of Prematurity	2
Blunt Head Trauma	2
Chorioamnionitis	1
Drowning	1
TOTAL	17

CHILD FATALITY – SUMMARY

Childhood deaths represented 10.2% of all the exam cases investigated by the EPOME in 2017. Male decedents comprised 71% of the total deaths in children. The most common manner of death among children was accident (59%). The year 2017 brought the all-time-highest number of suicide victims aged 11-18 (12 cases) in El Paso. An excellent resource for additional information about the deaths of children in El Paso, their circumstances, risk factors, and opportunities for prevention is the Child Fatality Review Team (CFTR) for El Paso County, which consists of volunteers from many state and local agencies. The experts on this team review the circumstances of childhood deaths in order to identify risk factors and develop prevention strategies, and their findings are presented in an annual report.

TOXICOLOGY-RELATED DEATHS

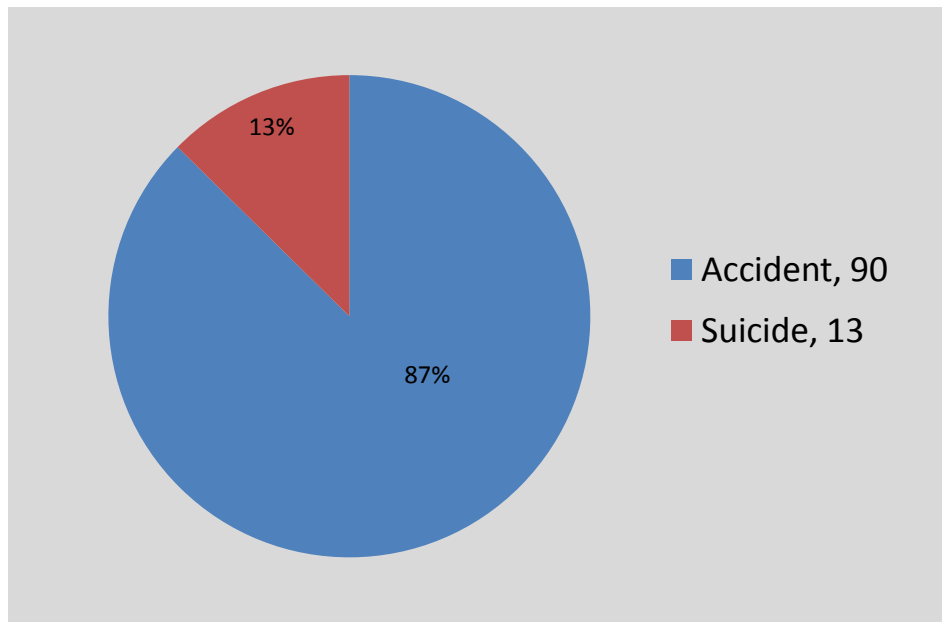
2017 TOXICOLOGY-RELATED DEATHS (103) – SUMMARY

	MANNER OF DEATH				
	ACCIDENT		SUICIDE		
Age Group	♂	♀	♂	♀	Total
14-18	1	-	-	1	2
19-25	6	1	-	-	7
26-35	13	4	1	-	18
36-45	14	10	2	2	28
46-55	17	6	1	3	27
56-65	11	3	2	1	17
66-75	2	1	-	-	3
>75	-	1	-	-	1
TOTAL	64	26	6	7	<u>103</u>
♂: 70					
♀ : 33					

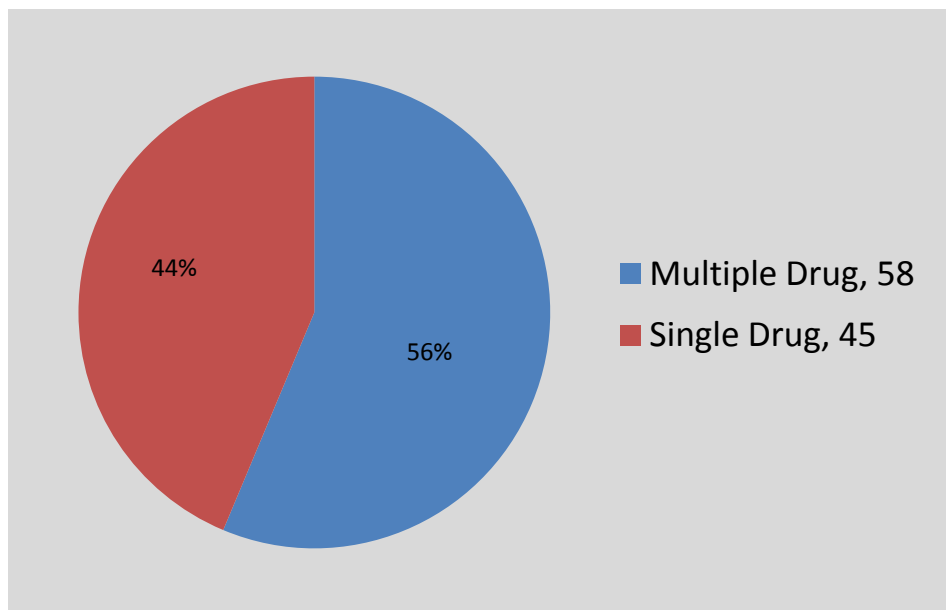
♂=male; ♀=female

By definition, toxicology-related deaths cannot be natural in manner. There were no homicidal or undetermined manner drug-related deaths in 2017. Individuals between the ages of 36-60 years comprised 62% of all toxicology-related deaths. Accidents comprised 87% of all toxicology-related deaths. Regarding accidental toxicology-related deaths, the Male-to-Female ratio is 2.4:1.

2017 TOXICOLOGY-RELATED DEATHS (103) – Manner of Death



2017 TOXICOLOGY-RELATED DEATHS (103) – Single vs. Multiple Drugs



2017 SINGLE DRUG-RELATED DEATHS (45) – Drug Involved

Drug Involved	#cases
Cocaine	17
Heroin	12
Methamphetamine	6
Ethanol	5
Difluoroethane	1
Fentanyl	1
Morphine	1
Oxycodone	1
TOTAL	44

2017 MULTIPLE DRUG-RELATED DEATHS (58) –Most Frequently Involved Drugs

Drug Mentioned	#cases*
Cocaine	16
Methamphetamine	15
Ethanol	14
Alprazolam	13
Hydrocodone	13
Fentanyl	11
Clonazepam	9
Morphine	8
Heroin	8
Quetiapine	6
Oxycodone	6
Tramadol	5
Codeine	5
Diphenhydramine	4
Temazepam	4

**only drugs involved in ≥4 cases are mentioned*

2017 TOXICOLOGY-RELATED DEATHS – Multiple-Drug-Related Deaths (58): Drugs Involved

MANNER	Number of Drugs					
	2	3	4	5	6	8
SUICIDE						
1			1,18, 52, 61			
2	29, 34					
3					6, 9, 11, 15, 19, 41	
4			15, 34, 35, 74			
5		29, 38, 61				
6	4, 23					
7					14, 19, 21, 46, 49, 69	
8					12, 23, 32, 57, 59, 68	
9				3, 12, 17, 34, 61		
10	3, 46					
11		15, 34, 52				
12	3, 34					
ACCIDENT						
1	17, 33					
2		17, 29, 31				
3		42, 53, 54				
4	31, 56					
5		17, 29, 31				
6		3, 29, 56				
7			3, 23, 69, 71			
8		8, 17, 33				
9		17, 29, 46				
10	8, 34					
11	46, 52					
12				4, 31, 34, 64, 69		
13		34, 60, 66				
14			17, 29, 31, 46			
15	17, 31					
16	3, 56					
17		8, 29, 54				
18			17, 29, 31, 46			
19	17, 54					
20		3, 15, 31				
21		15, 25, 68				
22			3, 18, 34, 61			
23		14, 29, 61				
24	17, 46					
25				10, 15, 22, 31, 56		
26	17, 33					
27			22, 45, 55, 66			
28					3, 18, 29, 52, 61, 71	
29		5, 33, 46				
30						13, 15, 23, 45, 46, 56, 59, 64
31			5, 17, 52, 60			
32				3, 17, 22, 31, 34		
33	37, 52					
34			3, 5, 29, 34			
35	18, 29					
36	18, 52					

(continued) 2017 TOXICOLOGY-RELATED DEATHS – Multiple-Drug-Related Deaths (59): Drugs Involved

MANNER	Number of Drugs						8
	2	3	4	5	6	7	
ACCIDENT							
37				3, 14, 15, 66, 74			
38	31, 34						
39	29, 33						
40		17, 33, 46					
41		9, 33, 69					
42	46, 52						
43	18, 34						
44	17, 33						
45				3, 4, 56, 57, 64			
46	15, 56						
TOTAL	22	16	9	6	4	0	1

2017 TOXICOLOGY-RELATED DEATHS – Multiple-Drug-Related Deaths: Medication Key

Acetaminophen	1	Doxylamine	26	Mirtazapine	51
Acetone	2	Duloxetine	27	Morphine	52
Alprazolam	3	Ethane	28	Olanzapine	53
Amitriptyline	4	Ethanol	29	Opiates (NOS)	54
Amphetamine	5	Ethylene Glycol	30	Oxazepam	55
Aripiprazole	6	Fentanyl	31	Oxycodone	56
Bath Salts	7	Fluoxetine	32	Oxymorphone	57
Benzodiazepine (NOS)	8	Heroin	33	Paroxetine	58
Bupropion	9	Hydrocodone	34	Promethazine	59
Butalbital	10	Hydroxychloroquine	35	Pseudoephedrine	60
Buspirone	11	Hydrogen Sulfide	36	Quetiapine	61
Carisoprodol	12	Hydromorphone	37	Risperidone	62
Chlorphenamine	13	Hydroxyzine	38	Salicylates	63
Citalopram	14	Inhalants (NOS)	39	Sertraline	64
Clonazepam	15	Isopropanol	40	Synth. Cannabinoid	65
Clozapine	16	Lamotrigine	41	Temazepam	66
Cocaine	17	Loperamide	42	Tetrafluoroethane	67
Codeine	18	Lorazepam	43	Topiramate	68
Cyclobenzaprine	19	Meclizine	44	Tramadol	69
Desipramine	20	Methadone	45	Trazodone	70
Dextromethorphan	21	Methamphetamine	46	Venlafaxine	71
Diazepam	22	Methane	47	Verapamil	72
Diphenhydramine	23	Methanol	48	Ziprasidone	73
Difluoroethane	24	Metoprolol	49	Zolpidem	74
Doxepine	25	Midazolam	50	Zopiclone	75

MOTOR VEHICLE RELATED DEATHS

2017 MOTOR VEHICLE RELATED DEATHS (88) – SUMMARY TABLE

Age Group	♂	♀
>1	1	-
1-5	1	1
6-10	2	1
11-18	6	1
19-25	14	1
26-35	18	6
36-45	2	1
46-55	13	1
56-65	8	4
66-75	4	2
76-85	-	-
>85	-	1
TOTAL	69	19

♂=male; ♀=female

There were 88 motor vehicle related fatalities in 2017. All but two consisted of accidents (one homicide and one undetermined). Males comprised 78.4% of all motor vehicle related deaths in 2017.

2017 MOTOR VEHICLE RELATED DEATHS – STATUS OF DECEDENT

Motor vehicle – Driver	27
Pedestrian struck by motor vehicle	27
Motorcyclist – operator	16
Motor Vehicle – Front Passenger	7
Motor vehicle – Back Passenger	3
Motor vehicle, non-driver – position unknown	2
Pinned under vehicle – traumatic asphyxia	1
Fell off top of motor vehicle while “car surfing”	1
Bicyclist	1
Pedestrian hit by train	1
All-terrain vehicle - driver	1
All-terrain vehicle - passenger	1
TOTAL	88

FORENSIC CONSULTATIONS

On occasion, a detailed forensic neuropathology consultation is required to further characterize important anatomic findings in selected cases. Likewise, forensic cardiovascular pathology, forensic anthropology, and forensic odontology consultations are readily available to the EPOME.

YEAR	Neuropathology	Cardiovascular	Anthropology
2013	5	4	1
2014	2	0	2
2015	14	0	3
2016	12	0	2
2017	7	0	0

ORGAN AND TISSUE DONATION

The EPOME allows an organ procurement organization (OPO) to approach families who wish to donate tissues from the deceased. These donations include skin, musculoskeletal tissue, and cardiovascular tissue (heart valves). Similarly, the EPOME also works with another OPO, fostering in-hospital postmortem organ donation. In 2017, there were **34 donors**, who impacting the lives of local patients in several El Paso Hospitals, including: University Medical Center, Del Sol Medical Center, El Paso Children's Hospital, Sierra Providence East, and Las Palmas Medical Center. Furthermore, the EPOME started working in coordination with the Southwest Brain Bank (SWBB), a brain tissue repository for research in mental illness, for altruistic postmortem donation. In 2017, there were 15 generous families that donated tissue for this laudable endeavor.

CREMATION AUTHORIZATIONS

In Texas, Medical Examiners are required by law to sign an authorization before a body is cremated. The forensic pathologists at the EPOME review each cremation authorization form and the respective death certificate before authorizing cremation. The table below shows the number of cremation authorizations signed by our forensic pathologists over the recent years.

YEAR	Cremations
2013	2717
2014	2839
2015	3025
2016	3084
2017	3113

UNIDENTIFIED BODIES

The EPOME interacts with law enforcement agencies to positively identify individuals. A commonly used technique for identification is fingerprint comparison. Other scientific methods of identification (ID) include: radiograph comparison (dental or body), medical devices, and DNA extraction. Over the past 5 years, 194 decedents have been positively identified using fingerprints.

YEAR	Fingerprint ID
2013	22
2014	48
2015	24
2016	49
2017	51

UNCLAIMED BODIES

El Paso County General Assistance Program provides financial aid to help families who have lost a loved one pay for the funeral and cremation of the individual's remains. Over the past 5 years, 101 cases have been referred to this program.

YEAR	Unclaimed Bodies
2013	14
2014	19
2015	26
2016	25
2017	17

MEDICAL EXAMINER PERFORMANCE AUDIT

TURNAROUND TIME FOR FINAL AUTOPSY REPORT

The EPOME adopts national standards as set forth by the National Association of Medical Examiners (NAME). Regarding final written autopsy reports, NAME recommends that 90% of all exam cases are finalized within 60 calendar days in order to avoid a phase II (minor) deficiency, and that 90% of all exam cases are finalized within 90 calendar days in order to avoid a phase I (major) deficiency.

2017 EPOME EXAM CASES (586) – TIME FROM AUTOPSY TO FINAL WRITTEN AUTOPSY REPORT

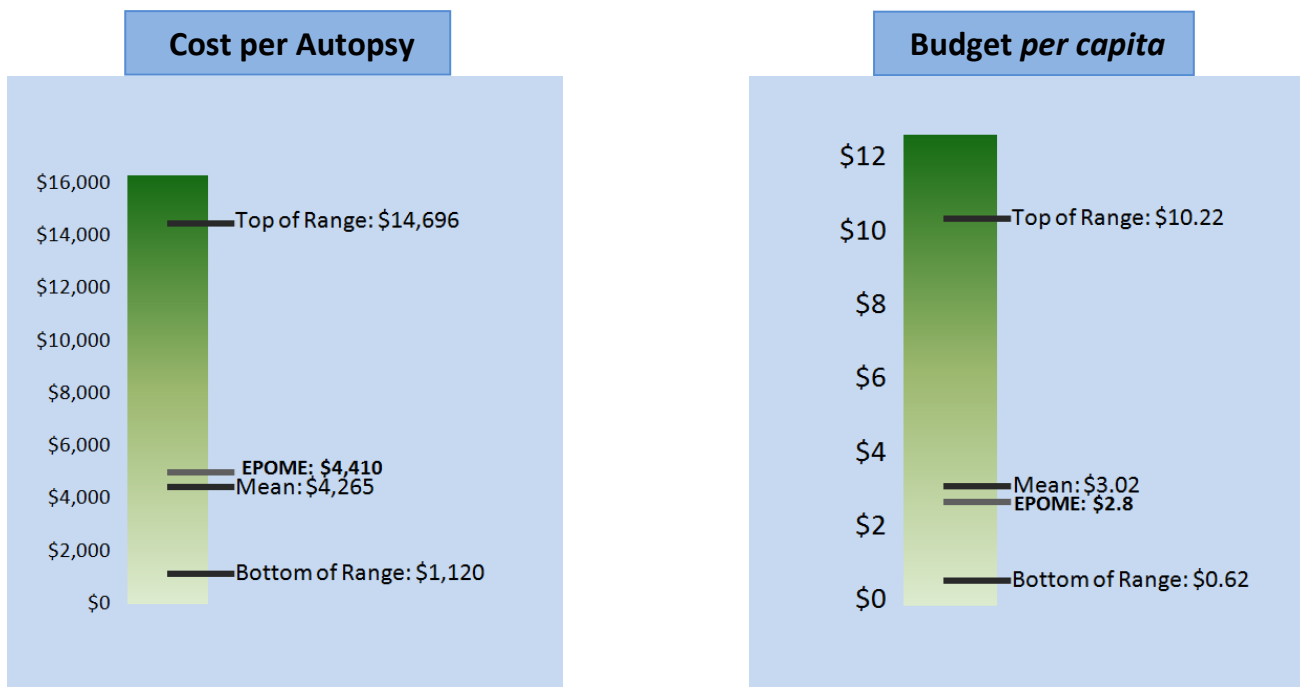
Time for final report	No. of cases (%)
Within 60 days	580 (98.9)
Within 90 days	583 (99.4)
>90 days	3 (0.5)

THE COST OF MEDICOLEGAL DEATH INVESTIGATION

A rule-of-thumb figure for providing quality medicolegal death investigation has been said to be about \$3 per person per year, according to a study that included nearly 60 NAME-accredited offices (*J Forensic Sci*, September 2013, Vol. 58, No. 5). In this study, the average **cost per autopsy** (total budget/total number of autopsies) had a mean of \$4265 per autopsy and ranged from \$1120 to \$14,696. The **budget per capita** (total budget/total number of inhabitants of jurisdiction) had a mean of \$3.02, although there was a very wide range (\$0.62–\$10.22). Another study conducted in the State of Colorado (available at www.denvergov.org/auditor) calculated the **cost per death reported** (total budget/total reported deaths) and found an average cost per death reported of \$755 for the NAME accredited medical examiner offices in their jurisdiction.

In 2017, the EPOME has a *cost per death reported* of **\$531**; a *cost per autopsy* of **\$4410**; and a *budget per capita* of **\$2.8/year**.

EL PASO COUNTY COST OF MEDICOLEGAL DEATH INVESTIGATION (AS COMPARED WITH OTHER 60 NAME-ACCREDITED OFFICES).



ACADEMIC OUTREACH, COMMUNITY INVOLVEMENT, AND PROFESSIONAL DEVELOPMENT

The EPOME regularly interacts with the local community in a variety of ways such as academic outreach (lectures in academic institutions such as local High Schools, Colleges and Universities), inter-agency outreach (local Law enforcement agencies, fire department) and cooperative efforts (invited lectures, County Child Fatality Review Team)

The EPOME also provides teaching in forensic pathology for students at the Paul L Foster School of Medicine, Texas Tech University Health Sciences Center and fulfills, through courtroom testimony as expert witness, the legal obligations related to its involvement in medicolegal death investigation.

ACADEMIC OUTREACH AND COMMUNITY INVOLVEMENT

I. LECTURES

- *Lorenzo Flores - Forensic Photographer*
- 01.27.2017 Harmony School of Innovation-Presentation
- 03.10.2017 Mountain View High School-Career Day
- 04.06.2017 Hanks High School Forensic Science Career day
- 04.07.2017 EPISD Center for Career and Tech. Education-Presentation
- 04.28.2017 Border Challenge Criminal Justice Competition
- 04.29.2017 Border Challenge Criminal Justice Competition
- 05.19.2017 East Montana Middle School-Career Day
- 10.06.2017 Mountain View High School-Presentations
- 10.19.2017 Montwood Middle School-Career Day
- 10.25.2017 SSG M.R. Puentes Middle School-Career Day

Mario A Rascon, MD – Chief Medical Examiner

- Medical Professionals Panel. College of Science. UTEP. 04/17/17.
- "Introduction to Forensic Pathology". UTEP. 11/28/17.

II. INTERNSHIP PROGRAM

Spring

- Kimberly Gonzalez, Investigations, UTEP Forensic Science
- Marlene Contreras, Morgue, Texas State University Forensic Anthropology
- Adilene Chapina-Guizar, Morgue, UTEP Forensic Science
- Valeria Urbina, Morgue, UTEP Forensic biology
- Mayra Medina, Investigations, UTEP Biological Science

Summer

- Andre Sharp, Investigations, UTEP Biochemistry
- Paola Acuna, Morgue, UTEP Microbiology
- Meagan Ortega Neder, Morgue, UTEP Microbiology
- Rebeca Cordero, Morgue, UTEP Biology Bio Med
- Alyssa Cortez, Morgue, St. Mary's University, Biology Pre Med

Fall

- Brianna Lozano, Investigations, UTEP Criminal Justice
- Christopher Gomez, Investigations, UTEP Forensic Biology
- Jessica Helton, Morgue, EPCC Biology
- Vanessa Herrera, Morgue, Texas A & M University Biomedical Science

PROFESSIONAL DEVELOPMENT

I. INVESTIGATIVE STAFF

A. Seminars

Medicolegal Death Investigation Training presented by St. Louis University School of Medicine: attended by Merlin Hay. September, 2017

B. Certifications

American Board of Medicolegal Death Investigators (ABDMI) Registry Certification attained in 2017

- Christina Enriquez

II. PATHOLOGY FACULTY

Juan U Contin, MD

- Mid-Winter Medicine Update Conference in Ruidoso, NM. Presbyterian Healthcare Services. 02/17

Janice Diaz-Cavallieri, MD

- 41st annual review and recent practical advances in pathology. 02/17. Miami, FL
- 21st triennial meeting of the international association of forensic sciences. 08/17. Toronto, Canada.

Mario A Rascon, MD

- Harvard T.H. Chan School of Public Health. Masters in Health Care Management Program (Commencement: May, 2018)
- Child Fatality Review Team (CFTR) Regional Training. El Paso, TX. 02/17/18.
- Member of the Ad hoc-International Relations Committee – The National Association of Medical Examiners.
- Academic Forensic Pathology International. Compliance Officer, Academic Forensic Pathology Journal Oversight Committee.
- Texas Mass Fatality Operations Response Team (TMORT). 06/16/17. Houston, TX
- Lecture Moderator during the National Association of Medical Examiners (NAME) Annual Meeting. 10/13-17/17. Scottsdale, AZ.
- New Performance Management Training. Human Resources Department. El Paso County. 11/01/17.

III. PHOTOGRAPHY DIVISION

A. Workshops

- International Forensic Photography Workshop. Miami-Dade County Medical Examiner: attended by: Lorenzo Flores - Forensic Photographer. 10/30 to 11/03, 2017

GLOSSARY

Abortion - the premature exit of the products of conception (fetus, fetal membranes, or placenta) from the uterus.

Accident – the *manner of death* used when, in other than *natural deaths*, there is no evidence of intent to harm

Autopsy – a detailed postmortem external and internal examination of a body to determine cause of death, collect evidence, determine the presence or absence of injury. The autopsy includes examination of the internal organs and structures after dissection.

Cause of Death – a disease, injury, or poison resulting in a physiological derangement or biochemical disturbance that is incompatible with life. The result of post-mortem examination, including autopsy and toxicological findings, combined with information about the medical history of the decedent serves to establish the *cause of death*. The cause of death can result from different circumstances and *manner* of death. For example, the same cause of death, gunshot wound, can result under suicidal, homicidal, or accidental manners.

Children – individuals 18 years of age and younger.

Ethanol – an alcohol, which is the principal toxicant in beer, liquor, and wine.

External Examination– a detailed postmortem external examination of a body, conducted when a full autopsy is determined to not be required.

Homicide – the *manner of death* in which death results from the harm of one person by another.

Infant - a child in the first year of life

Inquest - an investigation into the cause and circumstances of the death of a person, and a determination, made with or without a formal court hearing, as to whether the death was caused by an unlawful act or omission.

Physician: a practicing doctor of medicine or doctor of osteopathic medicine who is licensed by the Texas State Board of Medical Examiners under Subtitle B, Title 3, Occupations Code.

Jurisdiction – the extent of the Office of the Medical Examiner’s authority over deaths. The EPOME authority covers every death which is due or which might reasonably have been due to a violent or traumatic injury or accident, or is of public health interest and will be investigated by the Medical Examiner.

Manner of Death – the general category of the circumstances of the event which causes the death. The categories are *accident, homicide, natural, suicide, and undetermined*.

Natural – the *manner of death* used when solely a disease causes death. If death is hastened by an injury, the *manner of death* is not considered natural.

Office of the Medical Examiner – the office within the El Paso County that is responsible for the investigation of sudden, violent, or unexpected death.

Opiate – a class of drugs, including morphine, codeine, and heroin, derived from the opium poppy plant (*Papaver somniferum*).

Pending – the *cause of death* and *manner of death* are to be determined pending further investigation (such as toxicological, histological and/or neuropathological testing).

Stillbirth – the death of a fetus after the 20th week of pregnancy. Also known as Intrauterine Fetal Demise (IUFD)

Stimulant: a class of drugs, including cocaine and oral amphetamines, whose principal action is the stimulation of the central nervous system.

Sudden Unexpected Infant Death - the death of an infant less than one year of age in which investigation, autopsy, medical history review and appropriate laboratory testing fail to identify a specific cause of death.

Sudden Infant Death Syndrome – (SIDS) a broad, heterogeneous group of unknown causes of death in infants which, since its creation in 1969, evolved from a descriptor into a diagnosis as if it were a singular disease or disorder. Forensic pathologists are migrating away and abandoning the use of SIDS as a diagnostic phrase.

Suicide – the *manner of death* in which death results from the purposeful attempt to hurt oneself.

Undetermined – the *manner of death* for deaths in which there is insufficient information to assign another manner. An undetermined death may have an undetermined cause and manner of death; an undetermined cause of death and a known manner; or a known cause of death and an undetermined manner.

2017 El Paso County Office of the Medical Examiner Annual Report

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