Office of the Medical Examiner

2018 Annual Report

El Paso County, Texas

Office of the Medical Examiner

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David Stout
Commissioner, Precinct 2

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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. Our mission statement is: "We help the community be safer and healthier through efficient and timely medicolegal death investigation". This translates into an important public health role played by the EPOME, which included: 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.

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.

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.

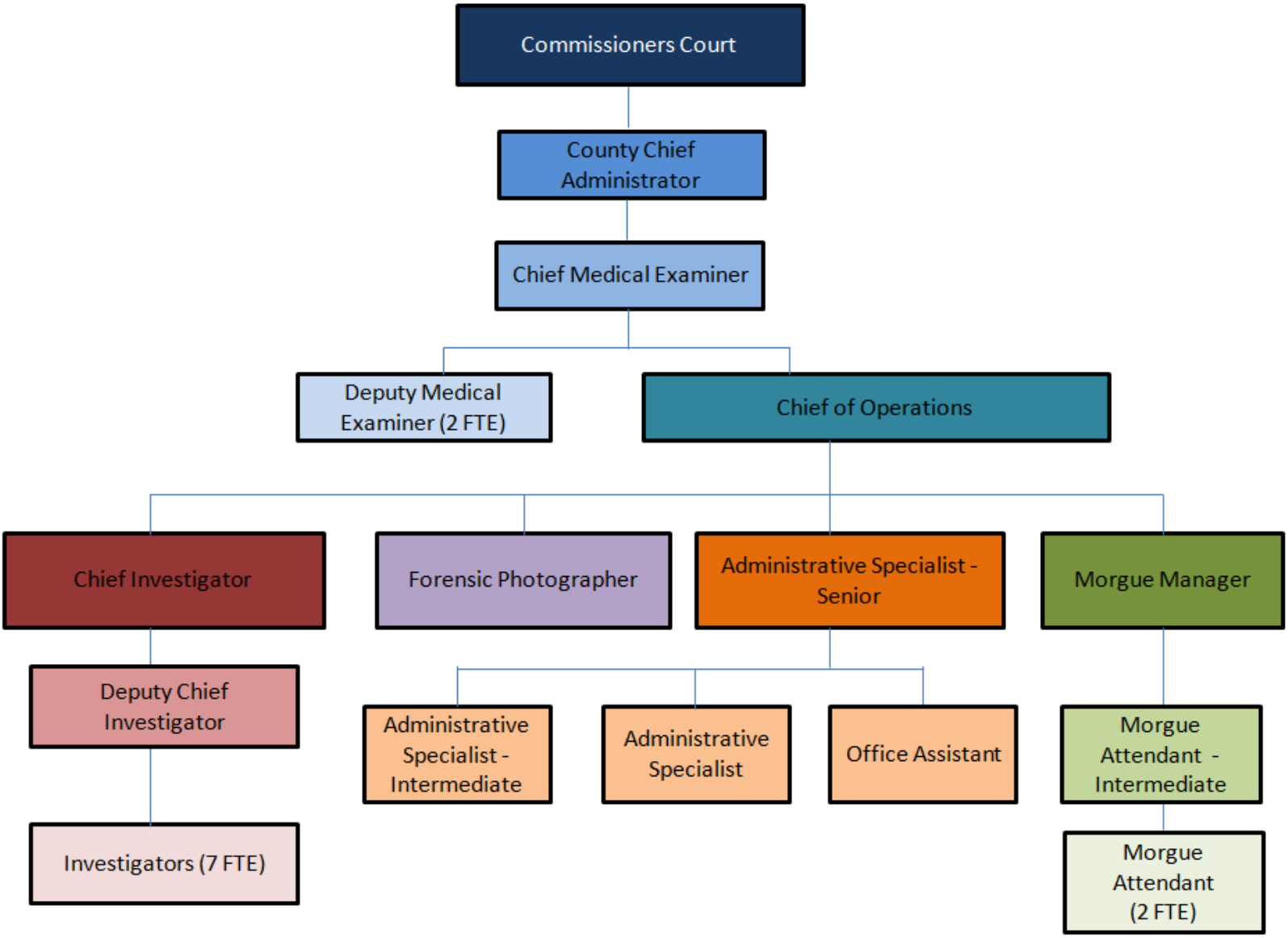
The Texas Code of Criminal Procedure (Chapter 49. 'Inquests Upon Dead Bodies'), stipulates that the EPOME shall conduct an inquest into the death of a person who dies in the County if:

(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

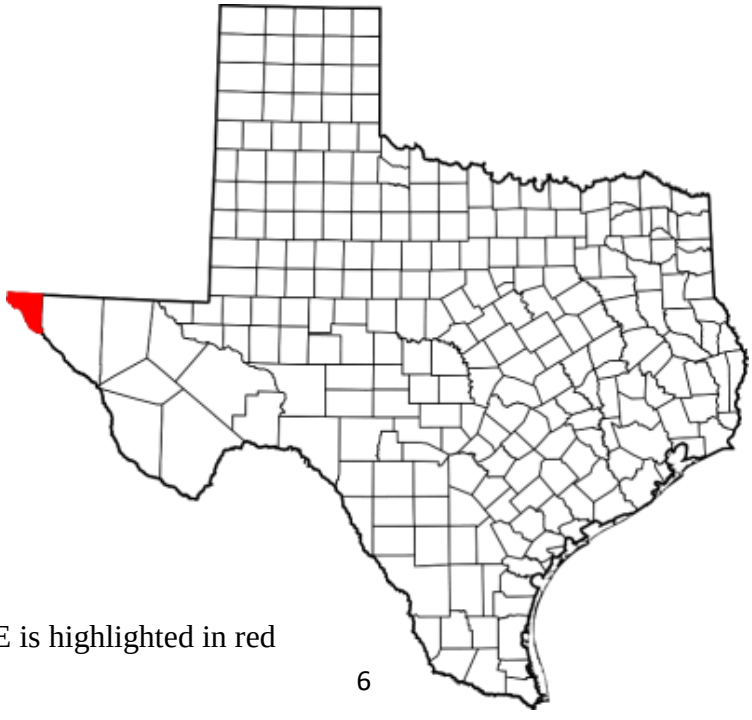
The El Paso Metro area covers an area of 1,015 square miles, and has an estimated population (2018 census) of about 840,758. Countywide, the population is about 92% white (which includes 82% white-hispanic and 10% white non-hispanic), 4% black, 1% American Indian, 1.3% Asian, 1.5% two or more races.

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. There are two types of exam cases: 1) **External Examination**. Formal external examination, which may or may not include toxicology/chemical testing. 2) **Autopsy**. Complete autopsy, which may or may not include toxicology/chemical testing, histology, and/or other ancillary tests.



Area served by the EPOME is highlighted in red

EXECUTIVE SUMMARY – 2018

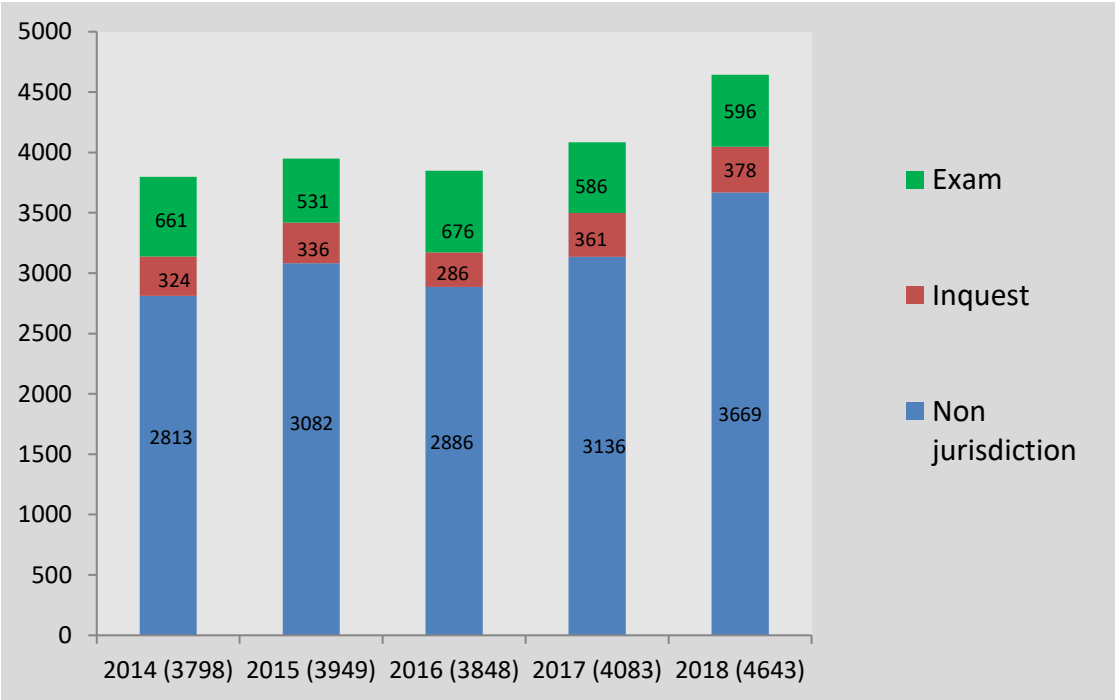
In 2018, the El Paso County had a total of 6112 deaths. Of these, 4643 were reported to the EPOME. Every reported case requires a preliminary screening by EPOME investigative staff to determine if it falls under the jurisdiction of the EPOME. Of those calls, a total of 3274 cases were **released**, with death certificates being signed by primary care physicians in the community. Additionally, 395 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 974 cases (*378* **inquests** and *596* **exam** cases). A significant proportion [(39.6% (236)] of the exam cases came from local hospitals. In all the exam cases the bodies were physically examined at the EPOME. Full body autopsies were conducted on 552 cases and 44 underwent an *external examination* only. The EPOME does not perform partial autopsies.

There were a total of 1192 death scenes investigated. This represented an increase of 11% from those in 2017 (1073). A total of 782 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.

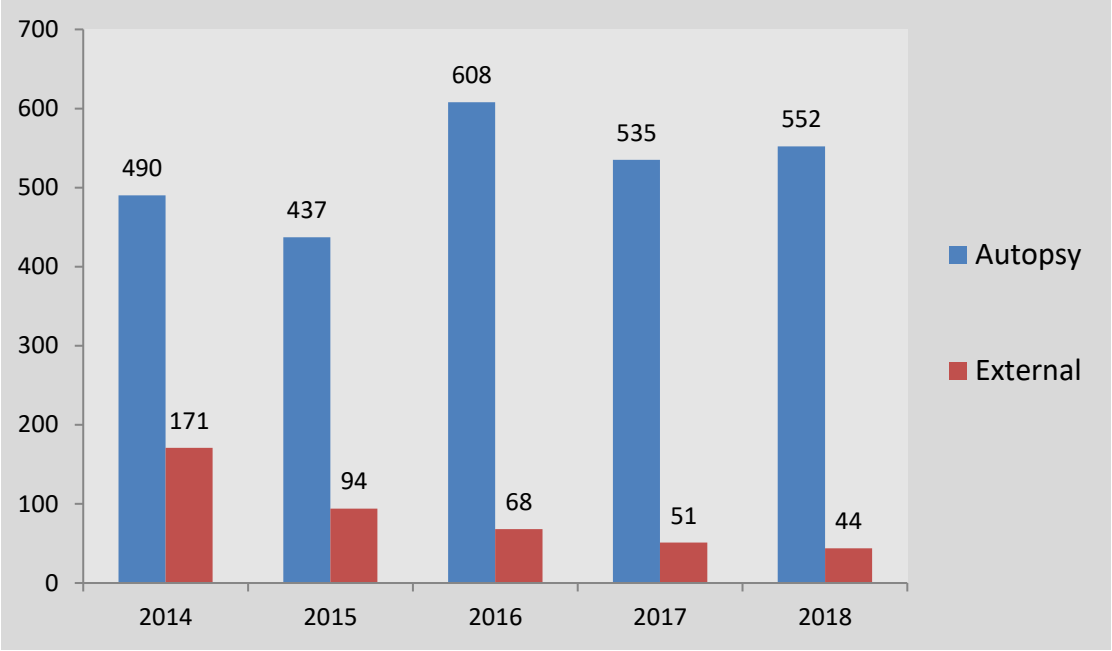
One case remained unidentified after examination (human skeleton). There were no exhumations performed and no cases previously autopsied at local hospitals were retained by the EPOME in 2018.

EPOME DATA

TOTAL CASES HANDLED BY THE EPOME – 2014 to 2018

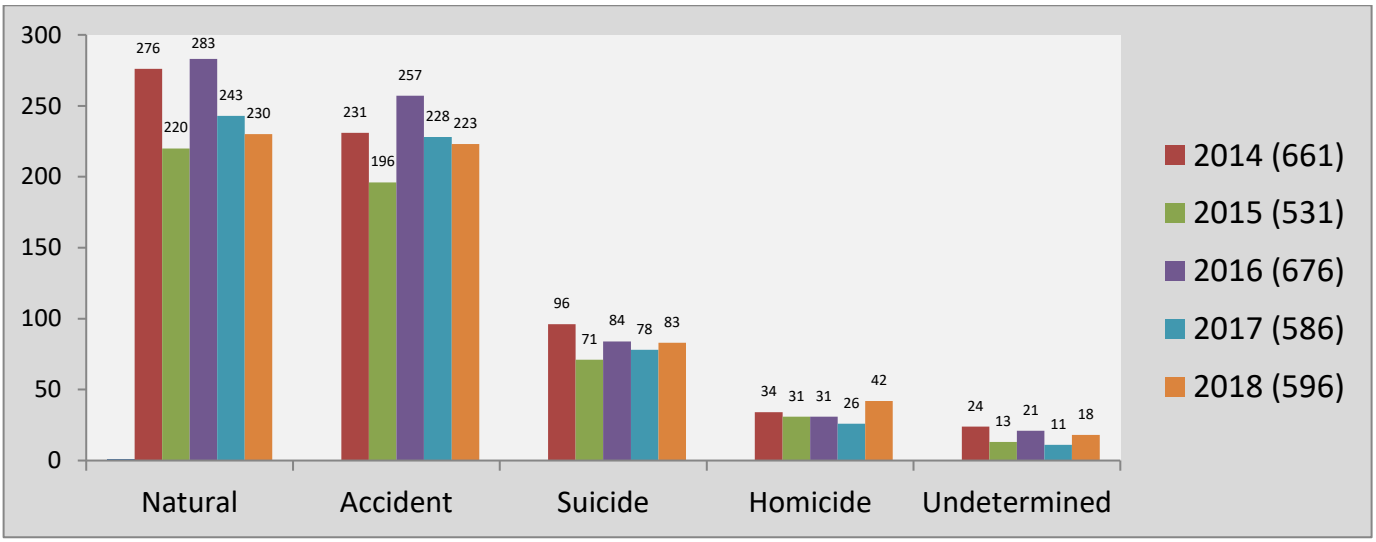


EXAM CASES 2014 to 2018– EXAMINATION TYPE

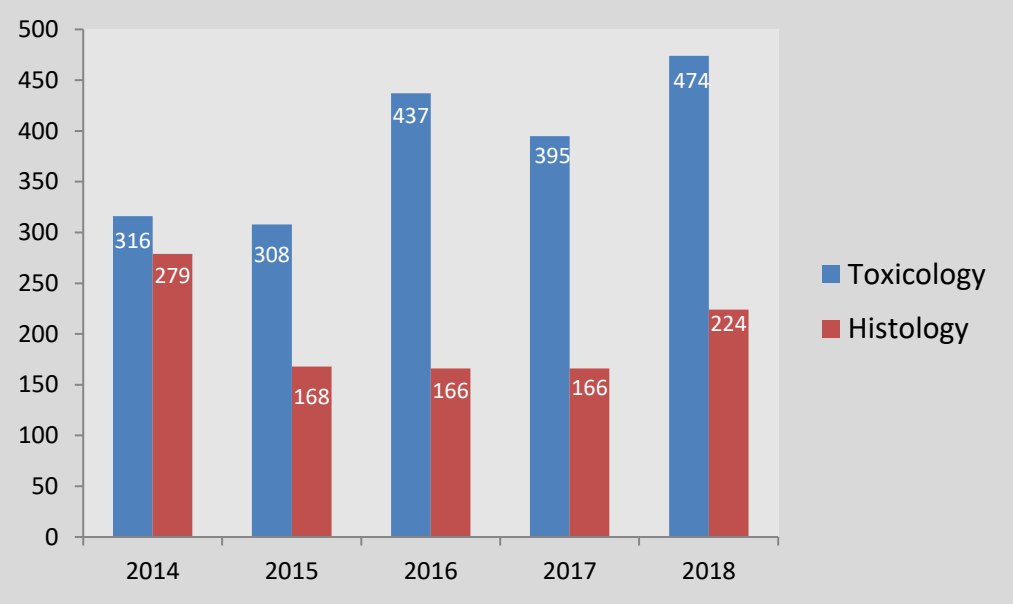


The autopsy to external examination ratio has gone from 2.8:1 in 2014 to 12.5:1 in 2018.

EXAM CASES 2014 to 2018 – MANNER OF DEATH



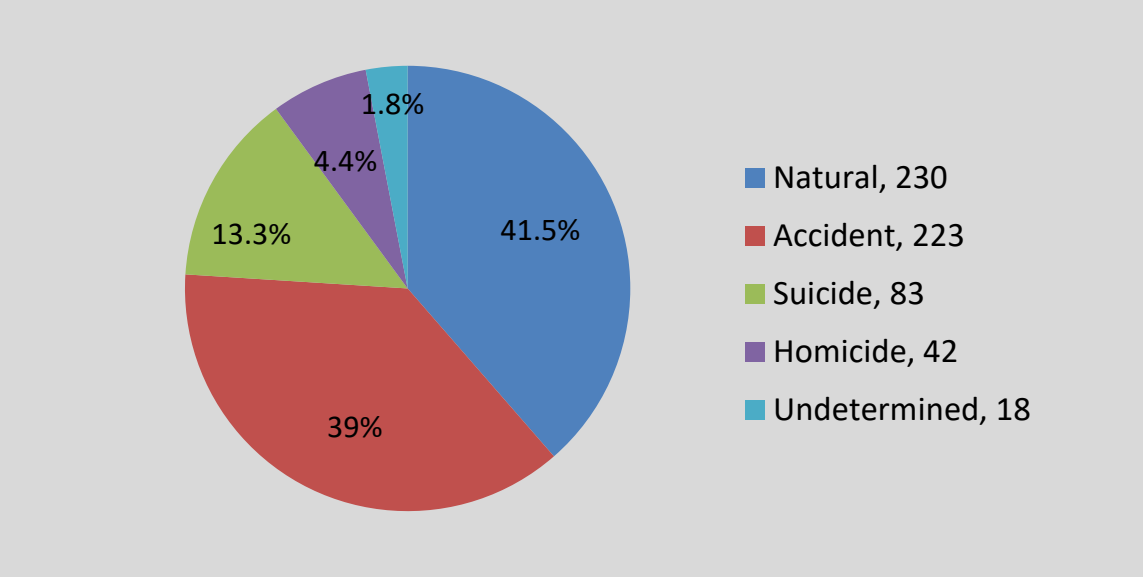
EXAM CASES 2014 to 2018– TOXICOLOGY & HISTOLOGY REQUESTS



Compared to 2017, there was an increase of 20% in toxicology studies and of 35% in histology studies in 2018.

EPOME 2018: EXAM CASES

2018 TOTAL EXAM CASES (596) – MANNER OF DEATH



2018 TOTAL EXAM CASES (596) – MANNER OF DEATH & AUTOPSY STATUS

	MANNER OF DEATH					
	NATURAL	ACCIDENT	SUICIDE	HOMICIDE	UNDETERMINED	**TOTAL (%)**
Full Autopsy	206 (89%)	205 (92%)	81 (97%)	42 (100%)	18 (100%)	552 (92%)
Partial Autopsy	0	0	0	0	0	0
External Exam	24 (11%)	18 (8%)	2(3%)	0	0	44 (8%)
TOTAL	**230**	**223**	**83**	**42**	**18**	596

2018 TOTAL EXAM CASES (596) – SEX AND AGE GROUP

	M A N N E R O F D E A T H									
	NATURAL		**ACCIDENT**		**SUICIDE**		**HOMICIDE**		**UNDETERMINED**	
Age Group	♂	♀	♂	♀	♂	♀	♂	♀	♂	♀
Unknown	-	-	1	-	-	-	-	-	1*	-
<1	1	-	1	3	-	-	-	2	3	3
1-5	3	-	1	3	-	-	1	-	0	-
6-10	-	1	-	-	-	-	-	-	-	-
11-18	-	-	7	3	3	1	5	1	1	-
19-25	3	2	23	2	12	4	9	2	2	1
26-35	5	1	25	4	19	4	6	1	-	2
36-45	13	4	33	7	11	2	4	-	-	-
46-55	45	15	33	10	9	-	4	-	2	-
56-65	59	24	30	12	6	2	4	1	1	-
66-75	24	7	8	3	6	1	-	1	1	1
76-85	12	5	5	5	-	1	1	-	-	-
>85	2	4	2	2	2	-	-	-	-	-
TOTAL	**167**	**63**	**169**	**54**	**68**	**15**	**34**	**8**	**11**	**7**

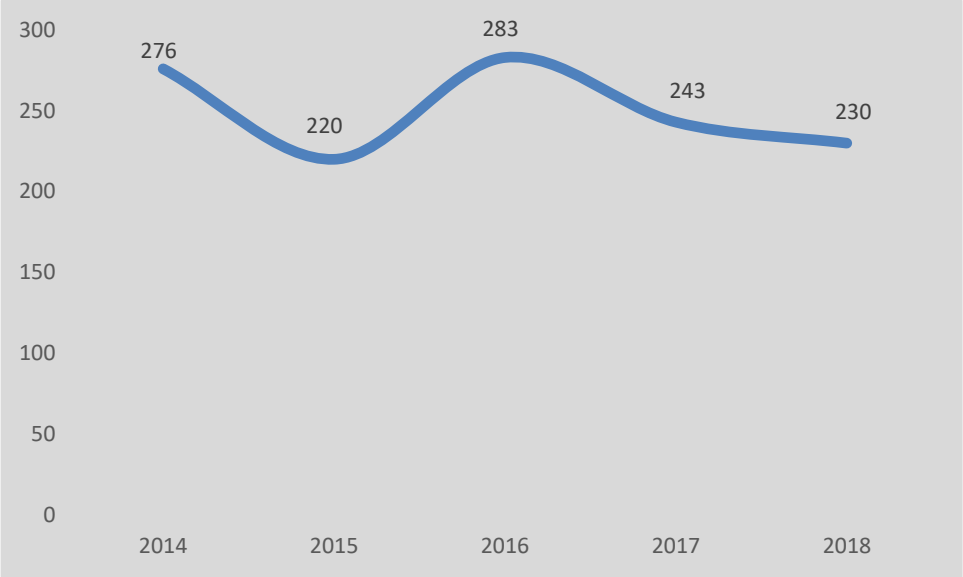
♂: 449
♀: 147

♂=male; ♀=female

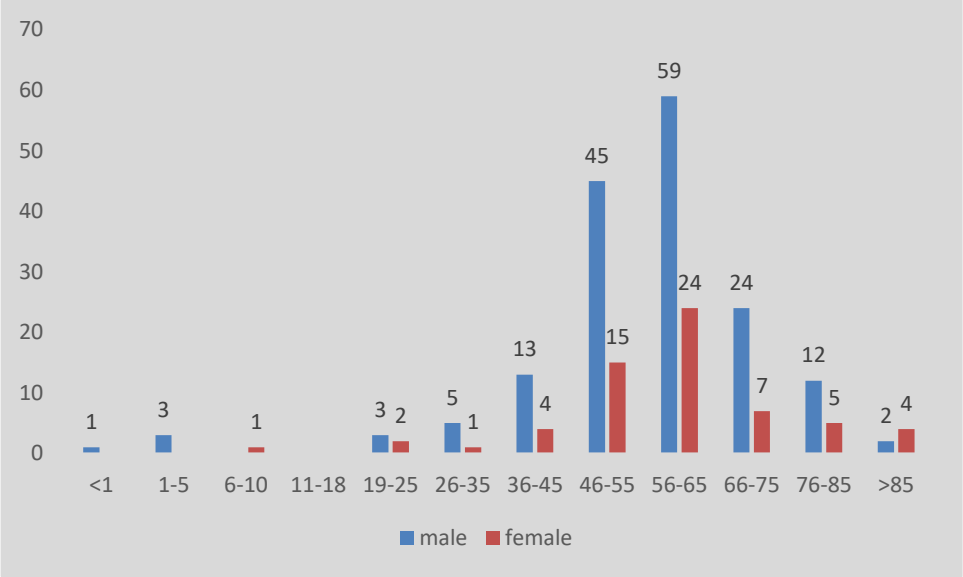
*skeletal remain (skull)

NATURAL DEATHS

NATURAL DEATHS: 2014 - 2018



2018 NATURAL DEATHS (230) – SEX AND AGE GROUP



Individuals aged 47 - 66 years comprised 62.6% of all people who succumbed to natural deaths in 2018.

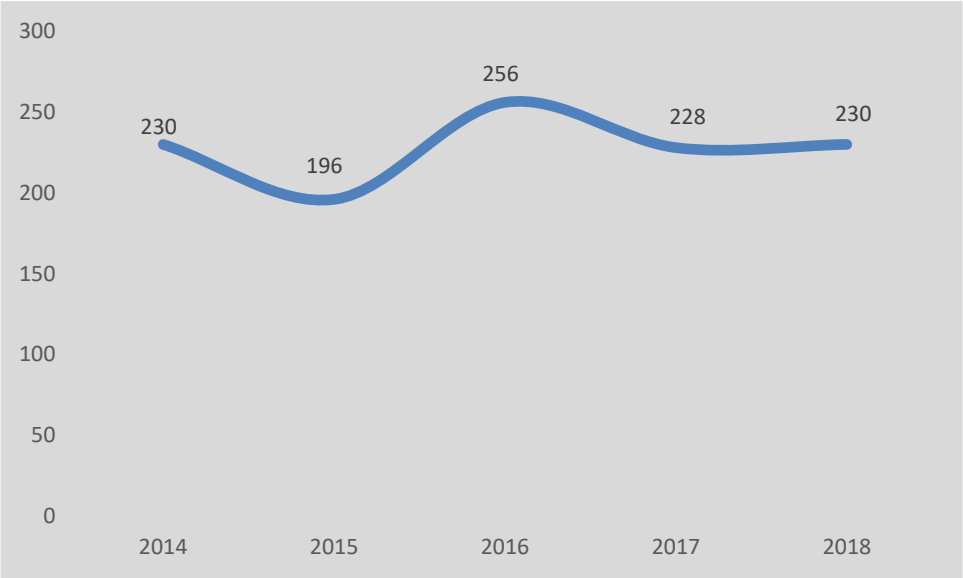
2018 NATURAL DEATHS (230) – CAUSE OF DEATH

Cardiovascular Disease	130
Complications of Chronic Alcohol Abuse	19
Liver Cirrhosis	11
Chronic Obstructive Pulmonary Disease	9
Diabetes Mellitus	7
Pneumonia/Bronchopneumonia	6
Pulmonary Embolism	5
Seizure Disorder	3
Peptic Ulcer Disease	3
Influenza B infection	3
Fatty Metamorphosis of Liver	3
Complications of Abdominal Hernia	3
Septic Complications	2
Morbid Obesity	2
Necrotizing Fasciitis	2
Asthma	2
Prematurity/Congenial Anomalies	2
Probable Thyrotoxic Crisis	1
Spontaneous Intracerebral Hemorrhage	1
Pyelonephritis	1
HIV/AIDS	1
Pancreatitis	1
Neuroleptic Malignant Syndrome	1
Senescence	1
Cellulitis	1
Autoimmune Disorders	1
Undetermined Natural Causes	1
Cancer:	8
Lung	2
Rectum	1
Stomach	1
Breast	1
Colon	1
Pancreas	1
Undetermined primary	1
TOTAL	**230**

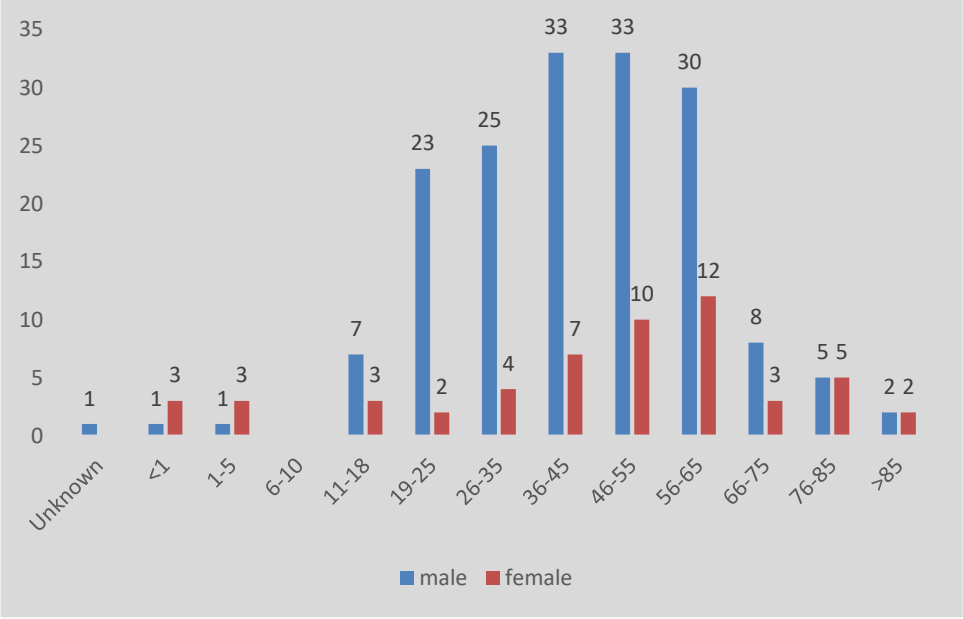
Cardiovascular Disease includes cause of death statements such as: *hypertensive and atherosclerotic cardiovascular disease (83), atherosclerotic cardiovascular disease (17), intracerebral hemorrhage due to systemic hypertension (8), arteriosclerotic cardiovascular disease (5), congestive heart failure due to hypertension (3), acute myocardial infarction (3), aortic and mitral stenosis (2), aortic stenosis (1), dilated cardiomyopathy (1), aortic dissection (1), hypertrophic cardiomyopathy (1), ruptured aortic aneurysm (1), ruptured internal carotid aneurysm (1), coronary thrombosis (1), ruptured berry aneurysm (1), and anomalous origin of right coronary artery (1).*

ACCIDENTS

ACCIDENTS: 2014 – 2018



2018 ACCIDENTS (223) – SEX AND AGE GROUP



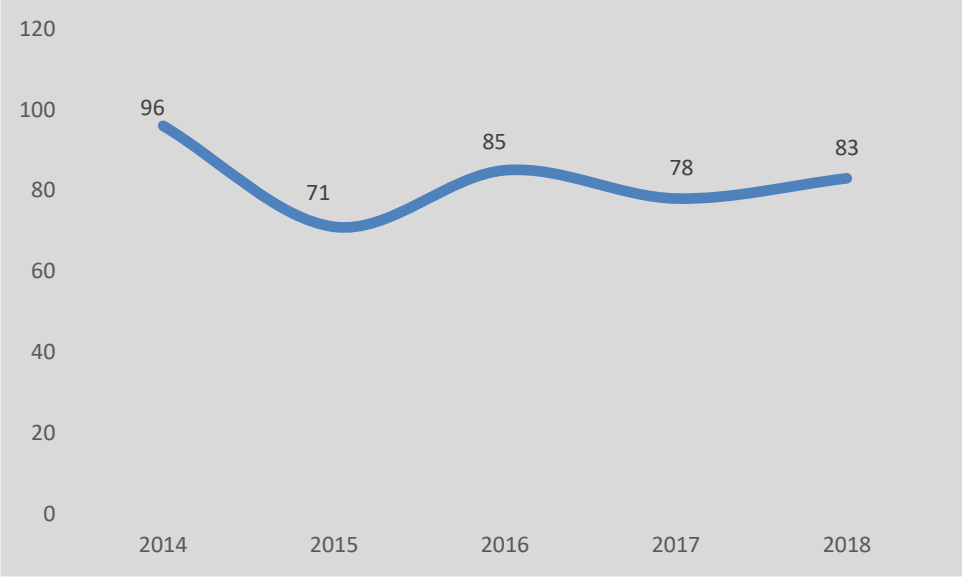
Accident victims were most frequently male (75.3%). Individuals between the ages of 24 – 49 years comprised 44.8% of all accidental fatalities.

2018 ACCIDENTS (223) – MECHANISM

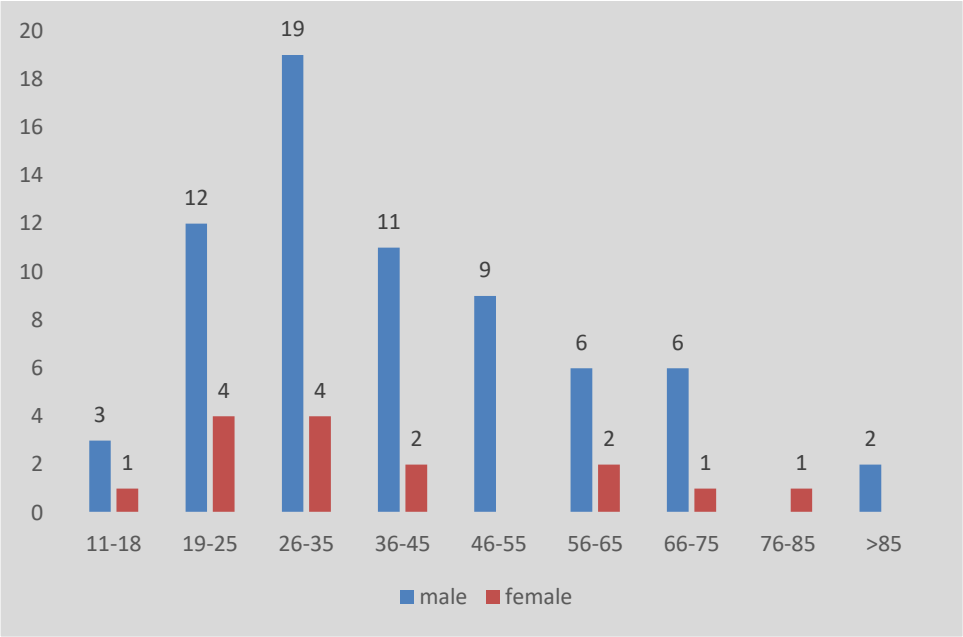
Blunt Force Injuries	108
Acute Drug Toxicity	78
Mixed Drug/Alcohol Toxicity	8
Environmental Heat Exposure	6
Drowning	5
Asphyxia – Suffocation	4
Thermal Injuries	4
Asphyxia - Choking	3
Asphyxia – Traumatic	2
Gunshot Wound	2
Environmental Cold Exposure	1
Blunt and Sharp Force Injuries	1
Electrocution	1
TOTAL	**223**

SUICIDES

SUICIDES: 2014 - 2018

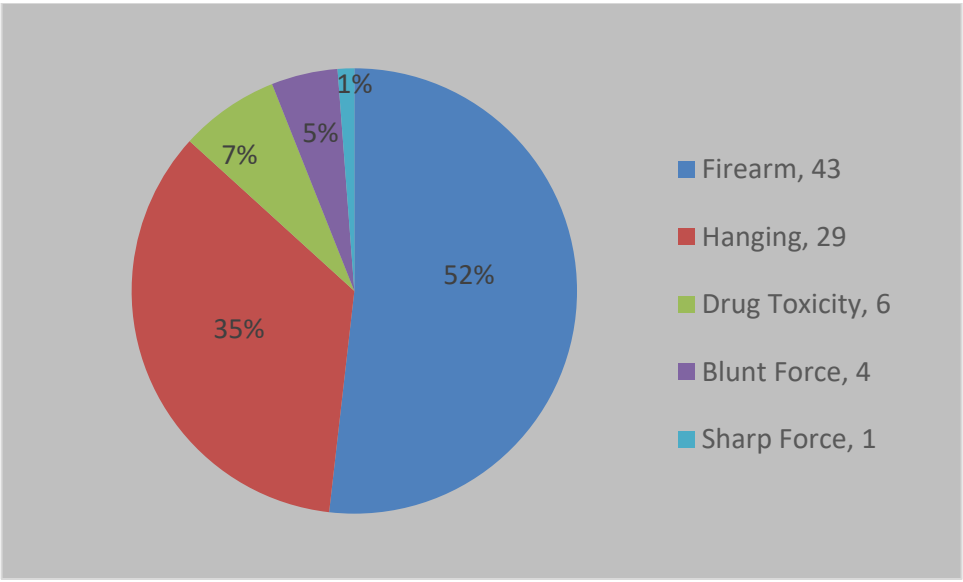


2018 SUICIDES (83) – SEX AND AGE GROUP



Suicide victims were most frequently male (82%). Individuals between the ages of 22 – 47 years comprised 62% of all suicides.

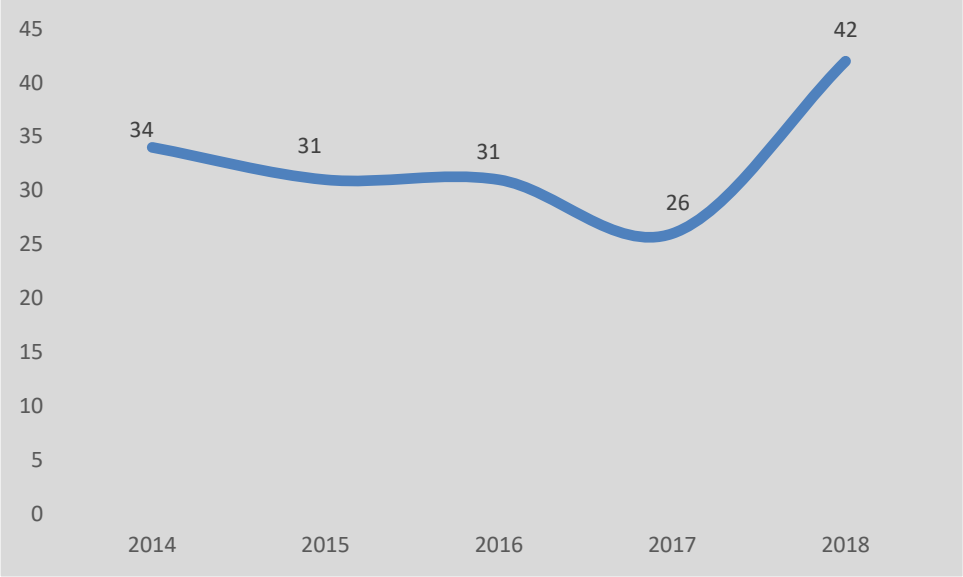
2018 SUICIDES (83) – METHOD



The vast majority (40 out of 43 [93%]) of suicide by firearm involved wounds to the head.

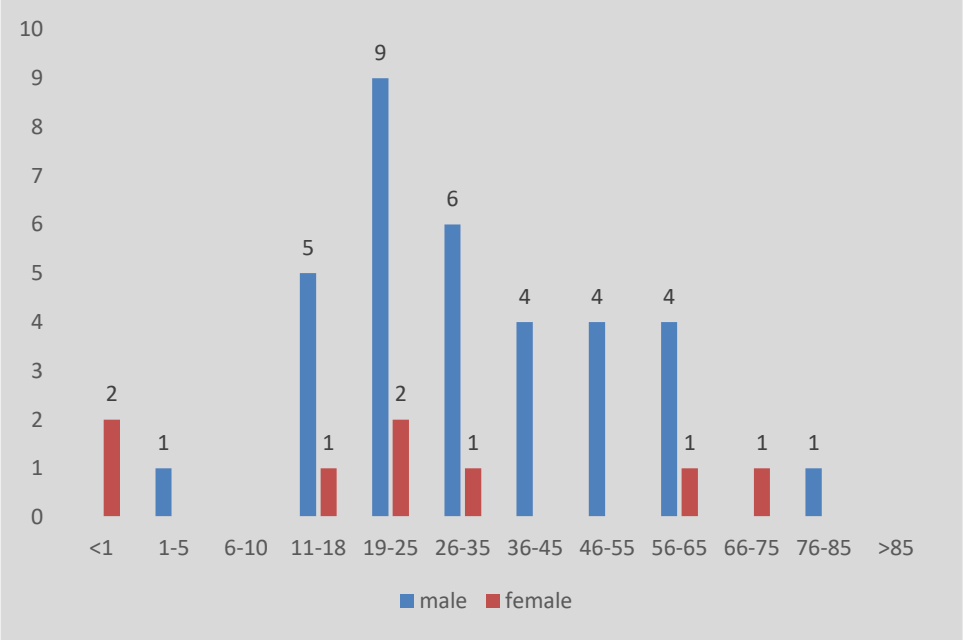
HOMICIDES

HOMICIDES: 2014 - 2018



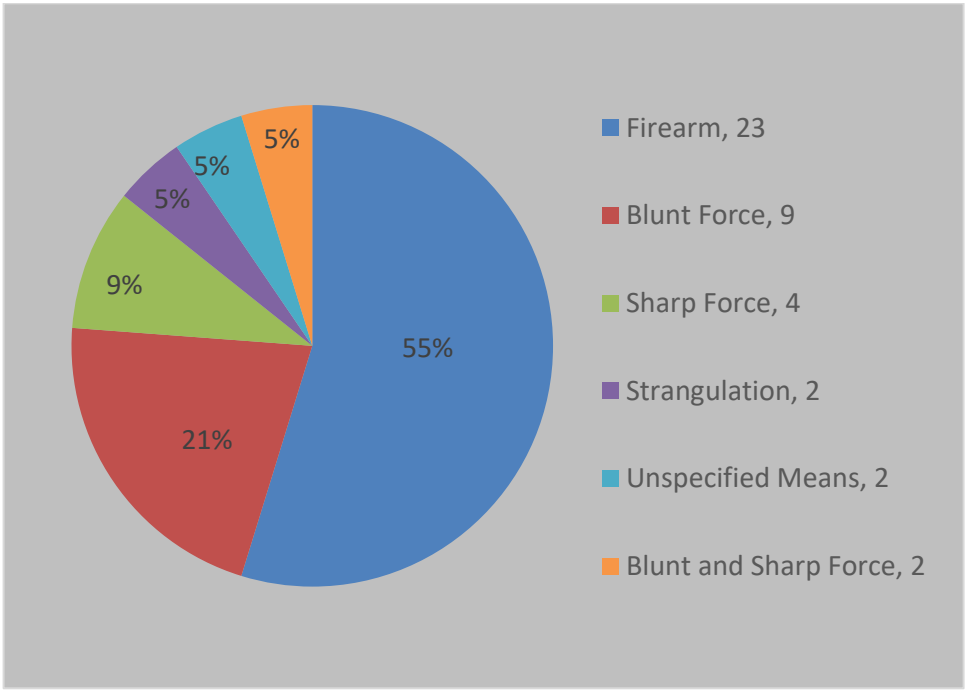
There was a 61% increase in homicides from 2017 (26 cases) to 2018 (42 cases). Despite this, the homicide rate for El Paso County in 2018 equals 5 per 100,000, which ranks amongst the lowest homicide rates in the USA for a city with a population >500,000.

2018 HOMICIDES (42) – SEX AND AGE GROUP



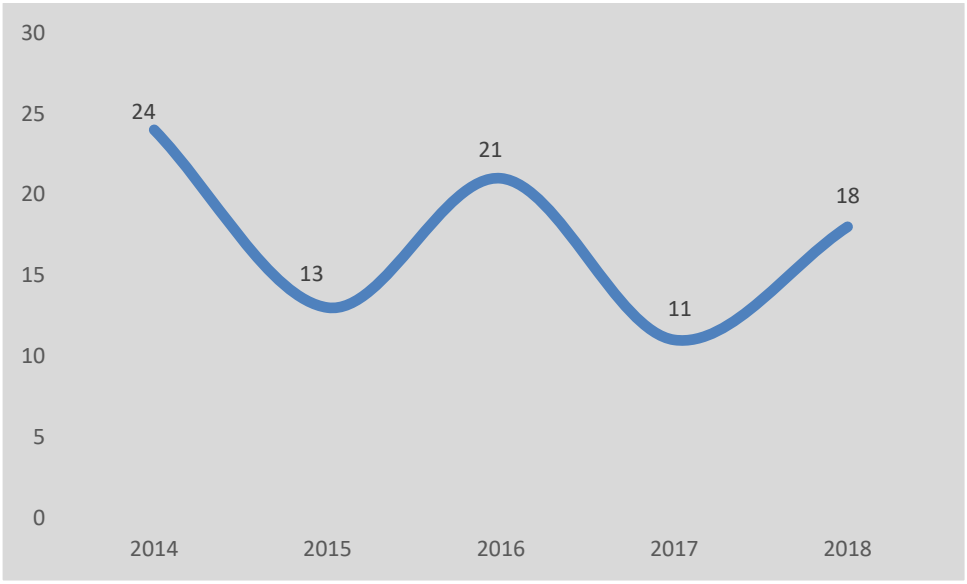
Homicide victims were most frequently male (81%).

2018 HOMICIDES (42) – MODE OF INFLICTION

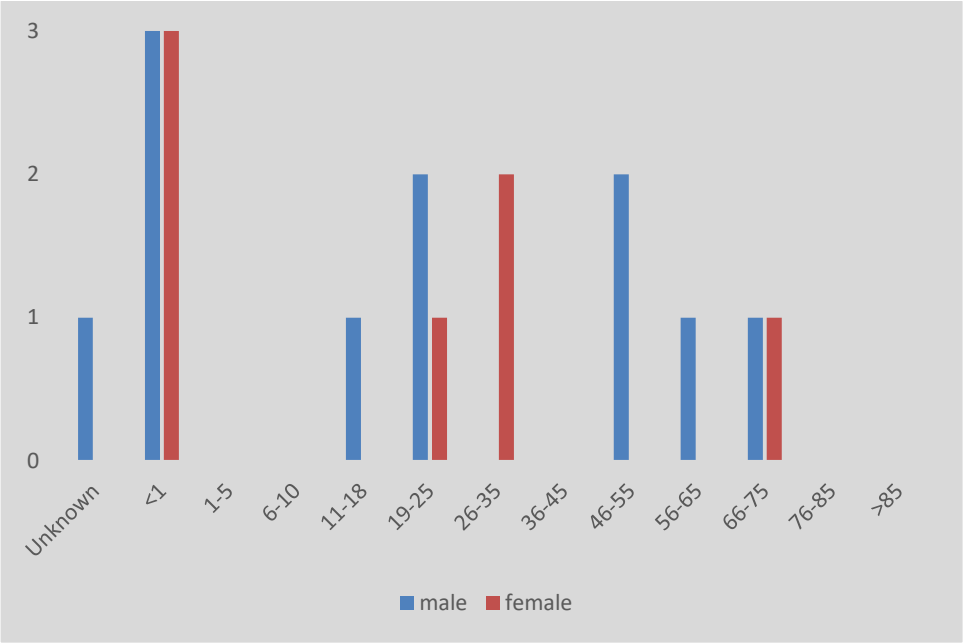


UNDETERMINED

UNDETERMINED MANNER OF DEATH: 2014 - 2018



2018 UNDETERMINED MANNER OF DEATH (18) – SEX AND AGE GROUP



CHILD FATALITY

In 2018, there were 43 deaths of individuals 18 years or age or younger, which included the deaths of 13 infants (a child in the first year of life).

2018 INFANT, AND CHILD DEATHS (43) – SUMMARY TABLE

	MANNER OF DEATH									
	NATURAL		**ACCIDENT**		**HOMICIDE**		**SUICIDE**		**UNDETERMINED**	
Age Group	♂	♀	♂	♀	♂	♀	♂	♀	♂	♀
<1	1	-	1	3	-	2	-	-	3	3
1-3	2	-	-	2	1	-	-	-	-	-
4-6	1	-	1	1	-	-	-	-	-	-
7-10	-	1	-	-	-	-	-	-	-	-
11-15			4	2	-	-	3	1	-	-
16-18			3	1	5	1	-	-	1	-
TOTAL	**4**	**1**	**9**	**9**	**6**	**3**	**3**	**1**	**4**	**3**

♂ : **26**
♀ : **17**
total: 43

♂=male; ♀=female

2018 CHILD (<18 YEARS) FATALITY CASES (43) – MANNER OF DEATH & AUTOPSY STATUS

	MANNER OF DEATH					
	NATURAL	**ACCIDENT**	**SUICIDE**	**HOMICIDE**	**UNDETERMINED**	**TOTAL (%)**
Full Autopsy (%)	4 (80%)	17 (94%)	4 (100%)	9 (100%)	7 (100%)	95%
Partial Autopsy	0	0	0	0	0	0
External Exam (%)	1 (20%)	1 (6%)	0	0	0	5%
TOTAL	**5**	**18**	**4**	**9**	**7**	**100%**

2018 CHILD DEATHS (AGE: 1-18) – CAUSE OF DEATH (30)

Blunt Force Injury	11*
Firearm	8
Hanging	3
Drug Toxicity	1
Traumatic Asphyxia	1
Prematurity/Congenital	1
Blunt and Sharp Force Injury	1
Asthma	1
Drowning	1
Streptococcal Sepsis	1
Influenza B	1
TOTAL	**30**

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

2018 INFANT (<1Y) DEATHS (13) – CAUSE OF DEATH

Undetermined	6
Asphyxia – Suffocation/Overlay	4
Complications of Prematurity	1
Blunt Head Trauma	1
Homicide by Unspecified Means	1
TOTAL	**13**

CHILD FATALITY – SUMMARY

Childhood deaths represented 7.2% of all the exam cases investigated by the EPOME in 2018. Male decedents comprised 60% of the total deaths in children. The most common manner of death among children was accident (42%).

TOXICOLOGY-RELATED DEATHS

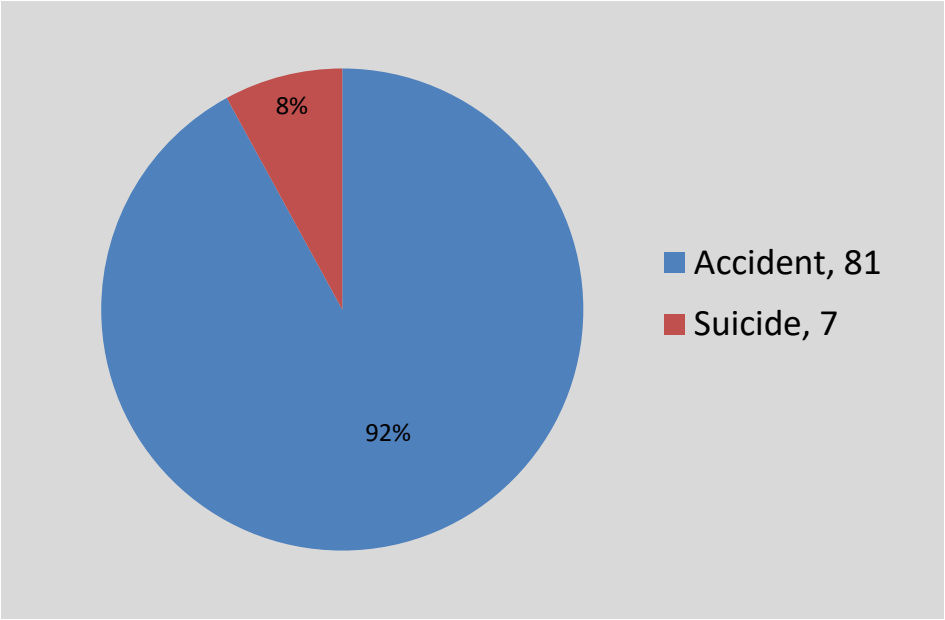
2018 TOXICOLOGY-RELATED DEATHS (88) – SUMMARY

	MANNER OF DEATH				
	ACCIDENT		**SUICIDE**		
Age Group	♂	♀	♂	♀	**Total**
14-18	1	-	-	-	1
19-25	6	1	2	1	10
26-35	15	1	-	1	17
36-45	16	3	-	-	19
46-55	16	3	1	-	20
56-65	13	4	1	1	19
66-75	2	-	-	-	2
>75	-	-	-	-	-
TOTAL	**69**	**12**	**4**	**3**	**88**
♂: 73					
♀ : 15					

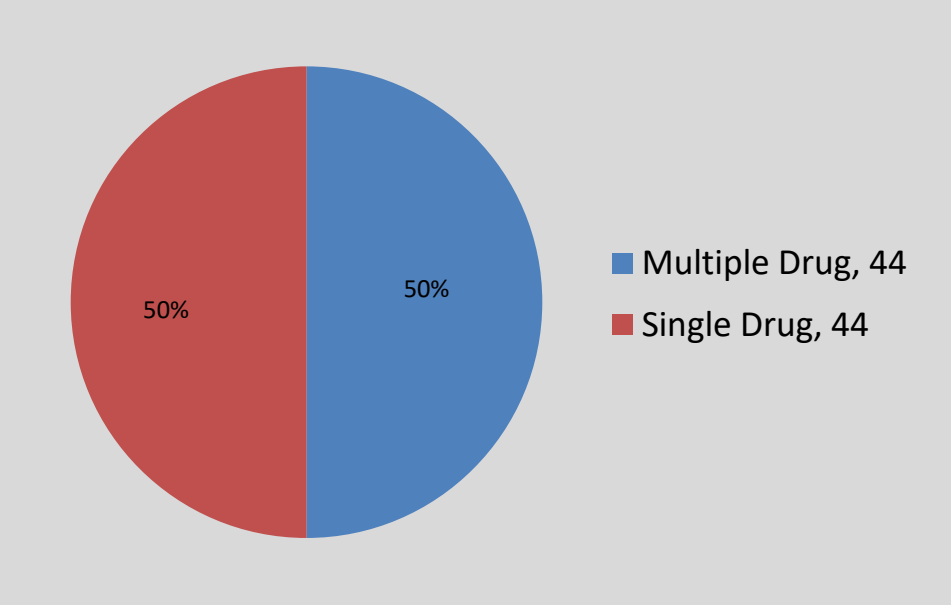
♂=male; ♀=female

By definition, toxicology-related deaths cannot be natural in manner. There were no homicidal or undetermined manner drug-related deaths in 2018. Individuals between the ages of 35-59 years comprised 62% of all toxicology-related deaths. Accidents comprised 92% of all toxicology-related deaths. Regarding accidental toxicology-related deaths, the Male-to-Female ratio is 4.8:1.

2018 TOXICOLOGY-RELATED DEATHS (88) – Manner of Death



2018 TOXICOLOGY-RELATED DEATHS (88) – Single vs. Multiple Drugs



2018 SINGLE DRUG-RELATED DEATHS (44) – Drug Involved

Drug Involved	#cases
Heroin	11
Cocaine	11
Methamphetamine	9
Ethanol	3
Methadone	3
Fentanyl	1
Morphine	1
Oxycodone	1
Difluoroethane	1
Tramadol	1
Gabapentin	1
Sertraline	1
TOTAL	**44**

2018 MULTIPLE DRUG-RELATED DEATHS (44) –Most Frequently Involved Drugs

Drug Mentioned	#cases*
Cocaine	20
Alprazolam	15
Heroin	13
Morphine	10
Methamphetamine	9
Ethanol	8
Fentanyl	6
Hydrocodone	6
Diazepam	4
Amphetamine	4
Clonazepam	3
Cyclobenzaprine	3

**only drugs involved in ≥3 cases are mentioned*

2018 TOXICOLOGY-RELATED DEATHS – Multiple-Drug-Related Deaths (44): Drugs Involved

	Number of Drugs					
MANNER	2	3	4	5	6	>7
SUICIDE						
1	30, 58					
2		1, 23, 30				
3	33, 66					
4			1, 3, 10, 35			
ACCIDENT						
1	17, 56					
2	22, 32					
3		17, 36, 50				
4	17, 50					
5	3, 37					
6	8, 17					
7	17, 36					
8			3, 17, 22, 50			
9				3, 30, 47, 56, 62		
10		3, 30, 36				
11	30, 50					
12		17, 30, 36				
13					3, 19, 22, 34, 56, 82	
14	37, 49					
15	17, 56					
16		22, 36, 50				
17	5, 50					
18	17, 36					
19	5, 50					
20	3, 37					
21	17, 50					
22		17, 36, 50				
23				15, 33, 41, 46, 61		
24						3, 14, 18, 19, 22, 36, 56, 69, 82
25	17, 36					
26	17, 36					
27	17, 50					
28		30, 37, 56				
29		3, 17, 32				
30	17, 36					
31	17, 36					
32			3, 17, 32, 45			
33	3, 32					
34			3, 15, 17, 32			
35	30, 56					
36			3, 32, 56, 74			
37	17, 36					
38		3, 18, 36				
39				3, 4, 19, 37, 56		
40	15, 49					

2018 TOXICOLOGY-RELATED DEATHS – Multiple-Drug-Related Deaths: Medication/Drug Key

Acetaminophen	1	Ethane	29	Mirtazapine	57
Acetone	2	Ethanol	30	Naproxen	58
Alprazolam	3	Ethylene Glycol	31	Olanzapine	59
Amitriptyline	4	Fentanyl	32	Opiates (NOS)	60
Amphetamine	5	Fluoxetine	33	Oxazepam	61
Aripiprazole	6	Fluvoxamine	34	Oxycodone	62
Bath Salts	7	Gabapentin	35	Oxymorphone	63
Benzodiazepine (NOS)	8	Heroin	36	Paroxetine	64
Bupropion	9	Hydrocodone	37	Phenylpropanolamine	65
Butalbital	10	Hydroxychloroquine	38	Pentobarbital	66
Buspirone	11	Hydrogen Sulfide	39	Promethazine	67
Carisoprodol	12	Hydromorphone	40	Pseudoephedrine	68
Chlorphenamine	13	Hydroxyzine	41	Quetiapine	69
Citalopram	14	Inhalants (NOS)	42	Risperidone	70
Clonazepam	15	Isopropanol	43	Salicylates	71
Clozapine	16	Lamotrigine	44	Sertraline	72
Cocaine	17	Levamizole	45	Synth. Cannabinoid	73
Codeine	18	Loperamide	46	Temazepam	74
Cyclobenzaprine	19	Lorazepam	47	Tetrafluoroethane	75
Desipramine	20	Meclizine	48	Topiramate	76
Dextromethorphan	21	Methadone	49	Tramadol	77
Diazepam	22	Methamphetamine	50	Trazodone	78
Diphenhydramine	23	Methane	51	Venlafaxine	79
Difluoroethane	24	Methanol	52	Verapamil	80
Donepezil	25	Metroprolol	53	Ziprasidone	81
Doxepine	26	Midazolam	54	Zolpidem	82
Doxylamine	27	Mirtazapine	55	Zopiclone	83
Duloxetine	28	Morphine	56		

MOTOR VEHICLE RELATED DEATHS

2018 MOTOR VEHICLE RELATED DEATHS (97) – SUMMARY TABLE

Age Group	♂	♀
<1	-	-
1-5	1	2
6-10	-	-
11-18	4	3
19-25	14	1
26-35	6	4
36-45	13*	2
46-55	15	4
56-65	14	3
66-75	2	2
76-85	5	1
>85	1	-
TOTAL	**75**	**22**

♂=male; ♀=female

**includes one suicide*

There were 99 motor vehicle related fatalities in 2018. All but one consisted of accidents (one suicide). Males comprised 77% of all motor vehicle related deaths in 2018.

2018 MOTOR VEHICLE RELATED DEATHS (97) – STATUS OF DECEDENT

Pedestrian struck by motor vehicle	41
Motor vehicle – Driver	32
Motorcyclist – operator	8
Motor Vehicle – Front Passenger	4
Pedestrian struck by train	4
Motor Vehicle – Back Passenger	3
Motorcycle - Passenger	1
Fell off motor vehicle while on bed of pick-up	1
Scooter – Operator	1
All-terrain vehicle - driver	1
All-terrain vehicle - passenger	1
TOTAL	**97**

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
2014	2	0	2
2015	14	0	3
2016	12	0	2
2017	7	0	0
2018	13	0	1

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 2018, there were **38 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 2018, there were 7 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
2014	2839
2015	3025
2016	3084
2017	3113
2018	3278

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, 257 decedents have been positively identified using fingerprints.

YEAR	Fingerprint ID
2014	48
2015	24
2016	49
2017	51
2018	85

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
2014	19
2015	26
2016	25
2017	17
2018	14

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.

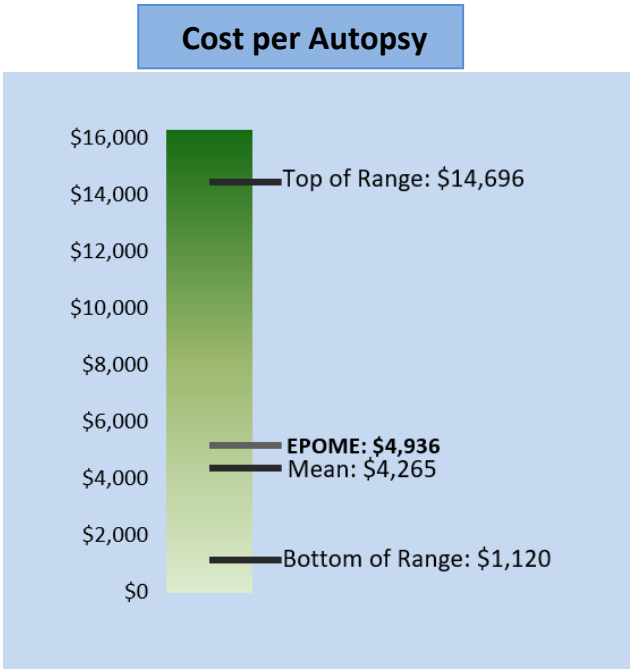
2018 EPOME EXAM CASES (596) – TIME FROM AUTOPSY TO FINAL WRITTEN AUTOPSY REPORT

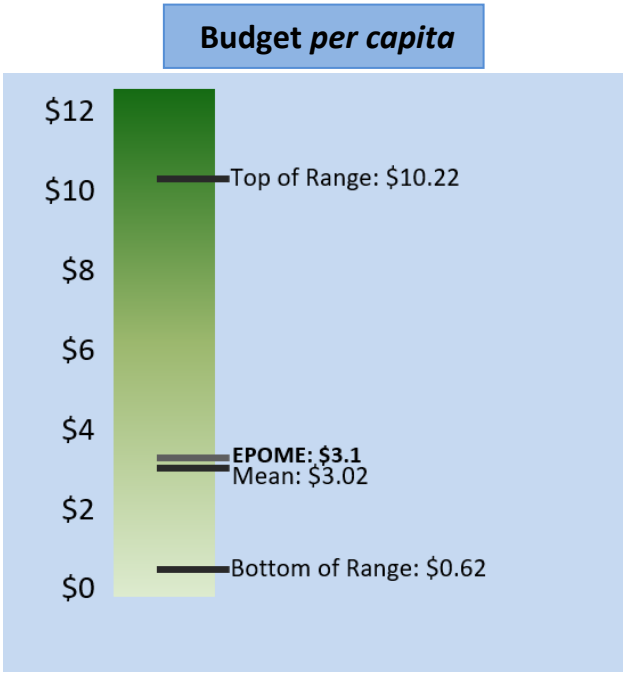
Time for final report	No. of cases (%)
Within 60 days	587 (98.4)
Within 90 days	592 (99.3)
>90 days	4 (0.6)

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 2018, the EPOME has a *cost per death reported* of **$586**; a *cost per autopsy* of **$4936**; and a *budget per capita* of **$3.1/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 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

- 01.23.2018 Western Technical College-Presentation
- 01.30.2018 Vista College-Presentation
- 01.31.2018 USBP Explorer LE Program Ysleta Station-Presentation
- 02.23.2018 East Montana Middle School-Career Day
- 03.28.2018 Western Technical College-Presentation
- 04.27.2018 Border Challenge Criminal Justice Competition
- 04.28.2018 Border Challenge Criminal Justice Competition
- 05.03.2018 Pebble Hill H.S.-Presentation
- 05.23.2018 Hanks H.S.-Presentation
- 10.17.2018 Jefferson H.S. Shattered Dreams Program-Presentation
- 10.18.2018 Montwood Middle School-Career Day
- 11.14.2018 Salvador H. Sanchez Middle School-Career Day
- 11.20.2018 Eastwood Middle School-Career Day

Mario A Rascon, MD – Chief Medical Examiner

- 02/07/18 *Positive Role Models*. El Paso County Courthouse 120th district court.
- 04/18/18 *Forensic Science Club*. UTEP. El Paso, TX

II. INTERNSHIP PROGRAM

Summer

- Magda McClendon, Morgue
- Katlyn Gabalis, Morgue

Fall

- Jerricho Tipo, Morgue

PROFESSIONAL DEVELOPMENT

I. INVESTIGATIVE STAFF

A. Seminars

- 01/26/18 Jennifer Contreras-Recognizing and combating secondary traumatic stress-death investigation
- 07/26/18 Jennifer Contreras and Christina Enriquez- International Association of Coroners and Medical Examiners (IAC&ME) 2018 Annual Training Symposium, Basic Medicolegal Death Investigation
- 04/22/18 Jose R. Romero: IPTES Series-Fingerprint Image Complexity
- 09/20/18 Annabel Salazar, Jennifer Contreras, Christina Enriquez-Web EOC Training/Emergency Management
- 10/01/18 Jorge Ordaz-Public Training Council Death and Homicide Investigation
- 10/18/18 Ashley Rios-University of North Dakota Death Investigation Training (DIT)-Basics-online course-MGT-346 Emergency Operation Center-Operations for all Hazard Events.
- 10/28/18 Morgan Riddle-Crimes Against the Elderly Workshop
- 12/12/18 Merlin Hay, Jose R. Romero, Christina Enriquez, Annabel Salazar-El Paso Regional Opioid Workshop

B. Certifications

American Board of Medicolegal Death Investigators (ABDMI) Registry Certification attained in 2018

- Miguel Aguirre, D-ABMDI and Merlin Hay, D-ABMDI

II. PATHOLOGY FACULTY

Juan U Contin, MD

- Mid-Winter Medicine Update Conference in Ruidoso, NM. Presbyterian Healthcare Services. 02/18

Janice Diaz-Cavalliery, MD

- 42nd annual review and recent practical advances in pathology. 02/18. Miami, FL
- National Association of Medical Examiners (NAME) 2018 Annual Meeting. 10/18 West Palm Beach, Fl

Mario A Rascon, MD

- Harvard T.H. Chan School of Public Health. Masters in Health Care Management Program (Commencement: May, 2018)
- Moderator: Pathology/Biology Section (Imaging Lectures). *American Academy of Forensic Sciences*. Seattle, WA. 02/18
- Co-Moderator: Pathology/Biology Section (Forensic Potpourri). *American Academy of Forensic Sciences*. Seattle, WA. 02/18

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 pathologist 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.

2018 El Paso County Office of the Medical Examiner Annual Report

Digital copies of this publication can be found online at: *epcounty.com/medicalexaminer/stats.htm*
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