



Office of the Medical Examiner

2015 Annual Report



El Paso County, Texas





Office of the Medical Examiner

Commissioners Court

Mario A Rascon, MD
Chief Medical Examiner

Lorenzo Flores
Forensic Photographer

Veronica Escobar
County Judge

Juan U Contin, MD
Janice Diaz-Cavallieri, MD
Deputy Medical Examiners

Angela Lawrence-Pusey
Senior Administrative Assistant

Carlos Leon
Commissioner, Precinct 1

Irene Santiago
Chief of Operations

Shani Enriquez
Transcriptionist

David Stout
Commissioner, Precinct 2

Annabel Salazar, D-ABMDI
Chief Investigator

Gustavo Luevano
Ana Ramirez
Office Specialists

Vincent Perez
Commissioner, Precinct 3

Jennifer Contreras, F-ABMDI
Deputy Chief Investigator

Olga Chavez
Morgue Manager

Andrew Haggerty
Commissioner, Precinct 4

Christina Enriquez
Maricela Garcia
Merlin Hay
Jorge Ordaz
Morgan Riddle
Jose "Louie" Romero, D-ABMDI
Daniel Salas
Investigators

Sal Tellez
Morgue Supervisor

Adrian Pineda
Denise Romero
Morgue Attendants

El Paso County Office of the Medical Examiner
4505 Alberta Drive
El Paso, TX. 79905
Telephone: (915) 532-1447 Fax: (915) 532-6630
Website: <http://www.epcounty.com/medicalexaminer/>

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 acutely aware that, in many cases, the pursuit of civil or criminal proceedings is in part determined by our ability to determine the cause and manner of death. Thus, in an effort to provide thorough, honest investigations, the EPOME and its investigative medical staff, aside from the autopsy and ancillary testing, rely on witness accounts, law enforcement agencies, medical records review, first responders reports, and a wide variety of sources to certify the cause and manner of death.

The EPOME is also very proud to function as an advocate for families by working with them to insure 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 is 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 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, 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

This Annual Report would not be possible without the dedication and professionalism of the employees who incessantly work for the El Paso County Office of the Medical Examiner (EPOME)

The EPOME provides medicolegal death investigation for the 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.

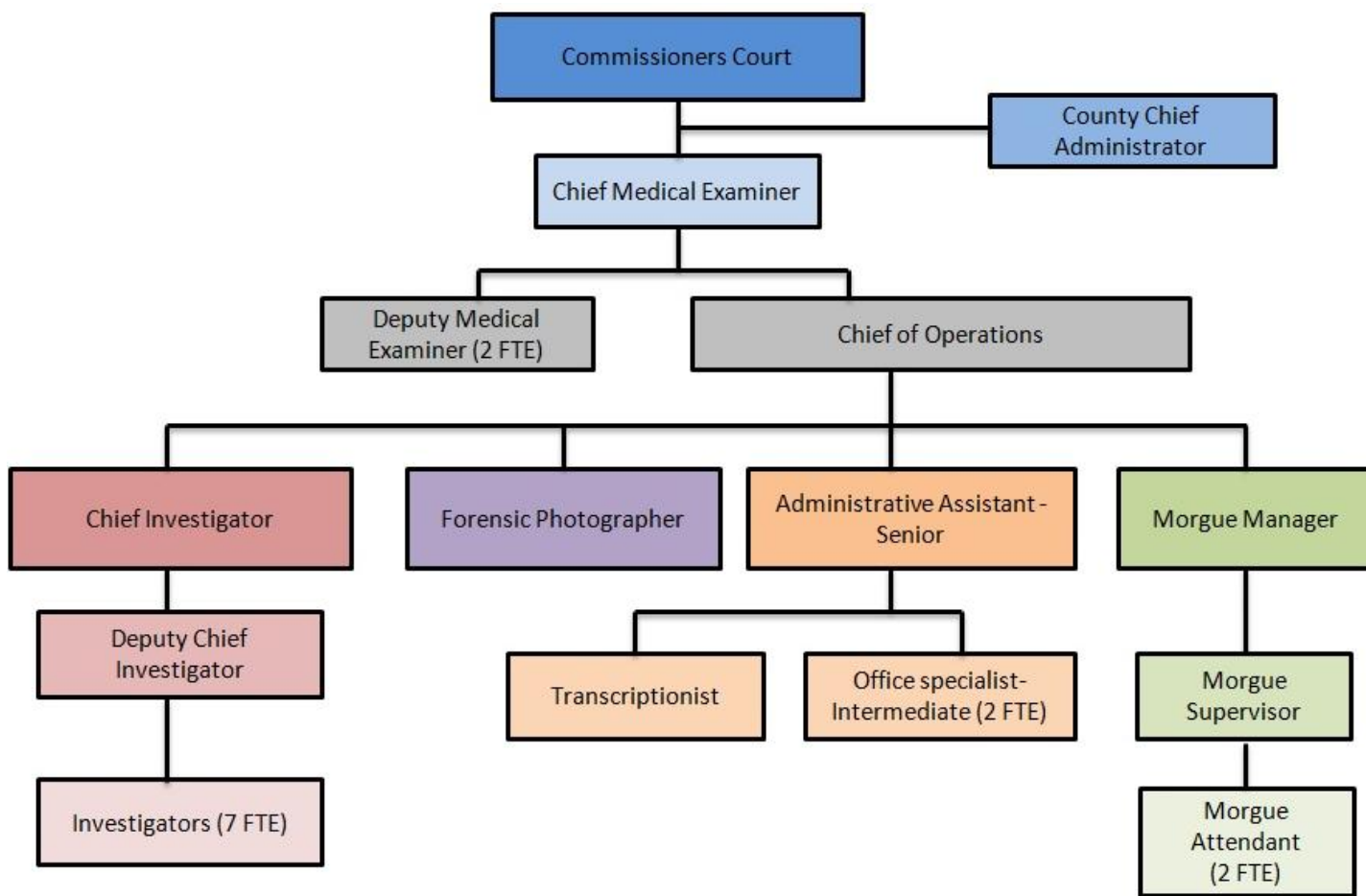
The Texas Code of Criminal Procedure (Chapter 49. Inquests Upon Dead Bodies), stipulates that the EPOME shall conduct an inquest into the death of a person who dies in the County if:

- (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 (2015) of about 835,593. Countywide, the population is about 93% white (which includes 81% white-hispanic and 12% white non-hispanic), 4% black, 1% American Indian, 1% Asian, 1% 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** (not accepted in the EPOME jurisdiction) when the death need not have been reported *and* there is a physician who is willing to sign the death certificate. A case is **accepted** if it meets the criteria specified by law as described above, and the death occurred in El Paso County

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 as well as 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 – 2014

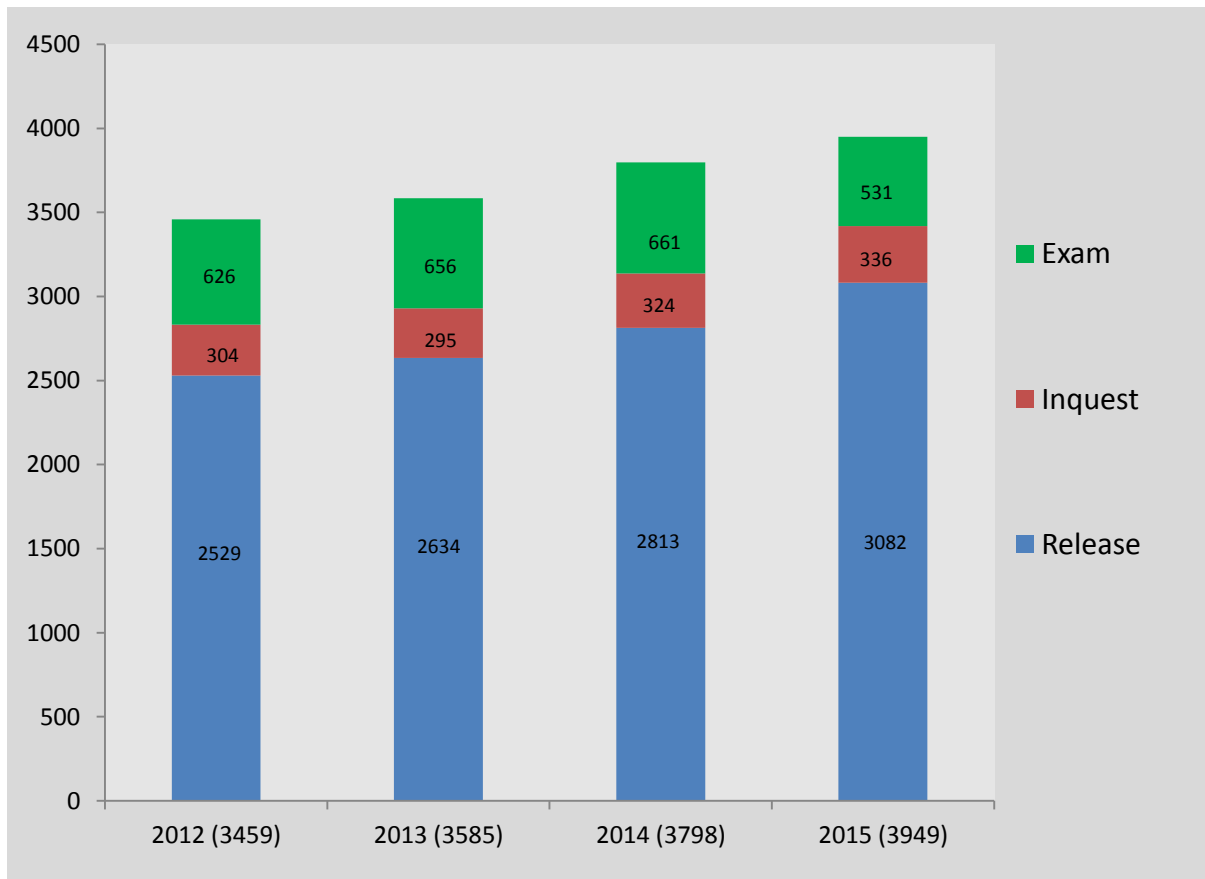
In 2015, the El Paso County had a total of 5676 deaths. Of these, 3949 were reported to the EPOME. Every reported case requires a preliminary screening by EPOME investigative staff to determine if it falls under the jurisdiction of the EPOME. Of those calls, a total of 3082 cases were **released**, with death certificates being signed by primary care physicians in the community. Jurisdiction was **accepted** on a total of 867 cases (336 inquests and 531 exam cases). In all the exam cases the bodies were physically examined at the EPOME. Full body autopsies were conducted on 437 cases and 94 underwent an *external examination* only. There were no partial autopsies performed.

There were a total of 997 death scenes investigated. A total of 688 bodies were transported to the EPOME facilities

A total of 3 cases remained unidentified after examination; they were all skeletal remains that underwent anthropology consultations. There were no exhumations performed in 2015, and no cases previously autopsied at local hospitals were retained by the EPOME in 2015.

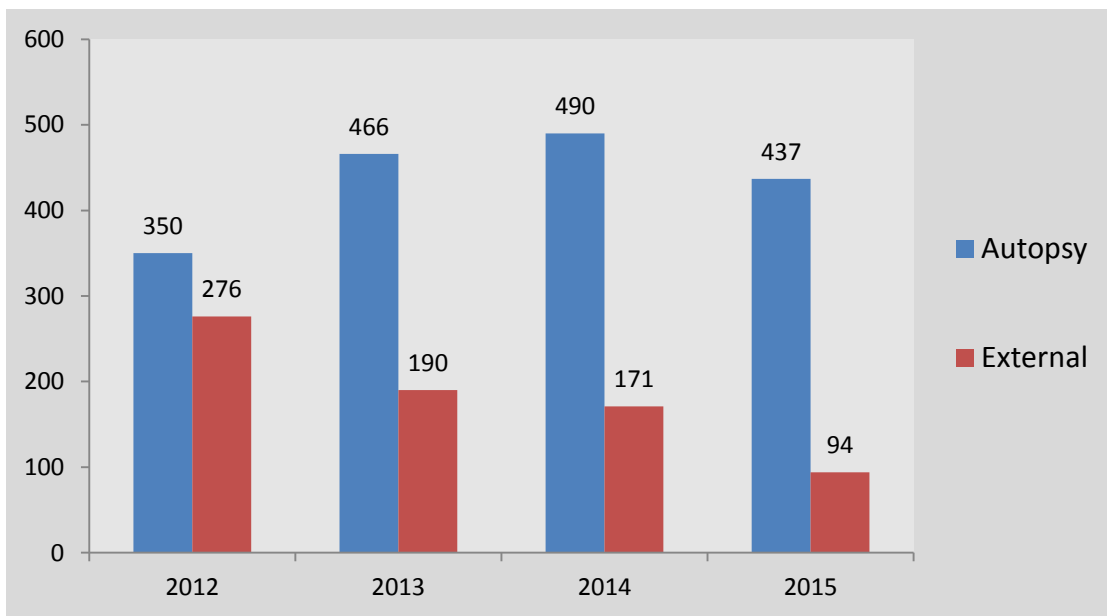
EPOME DATA (2012 – 2015)

TOTAL CASES HANDLED BY THE EPOME – 2012 to 2015



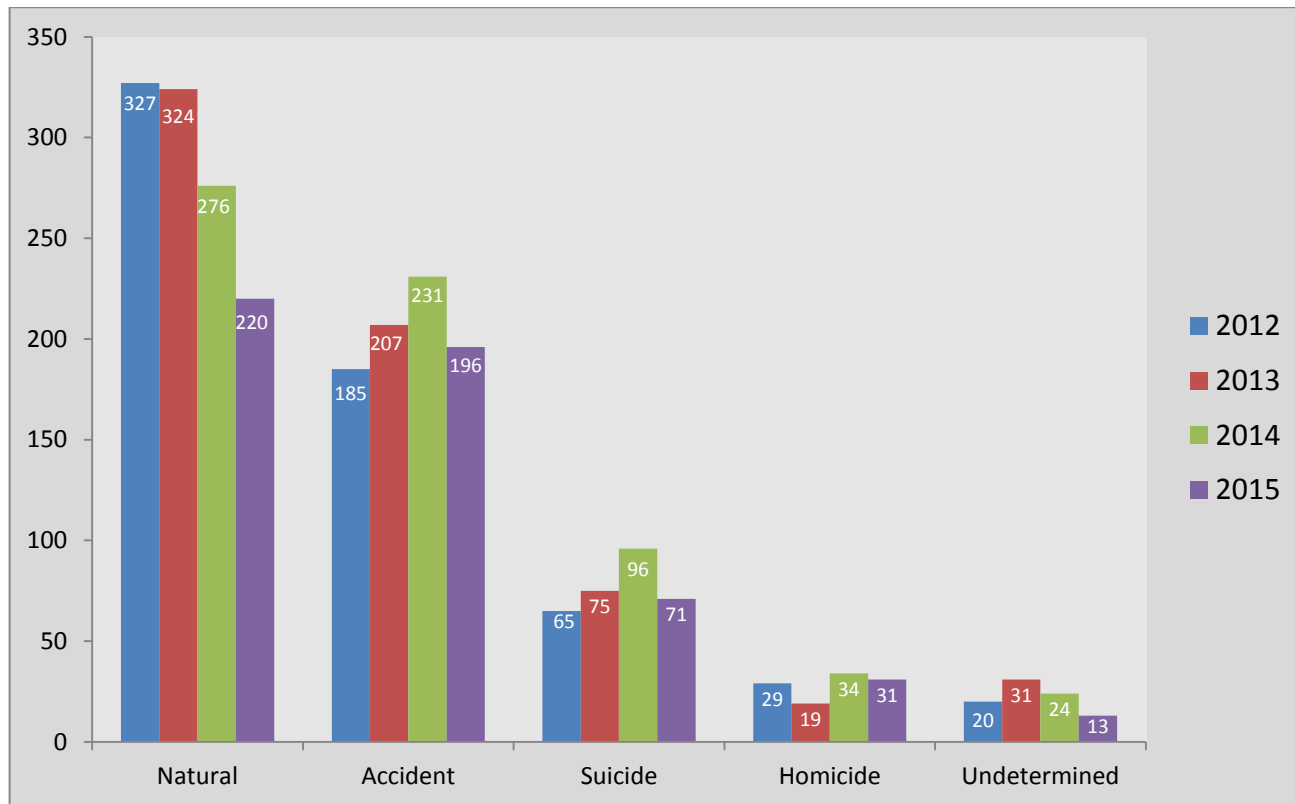
The EPOME has seen a steady increase in the total number of cases handled every year.

EXAM CASES 2012 to 2015 – EXAMINATION TYPE

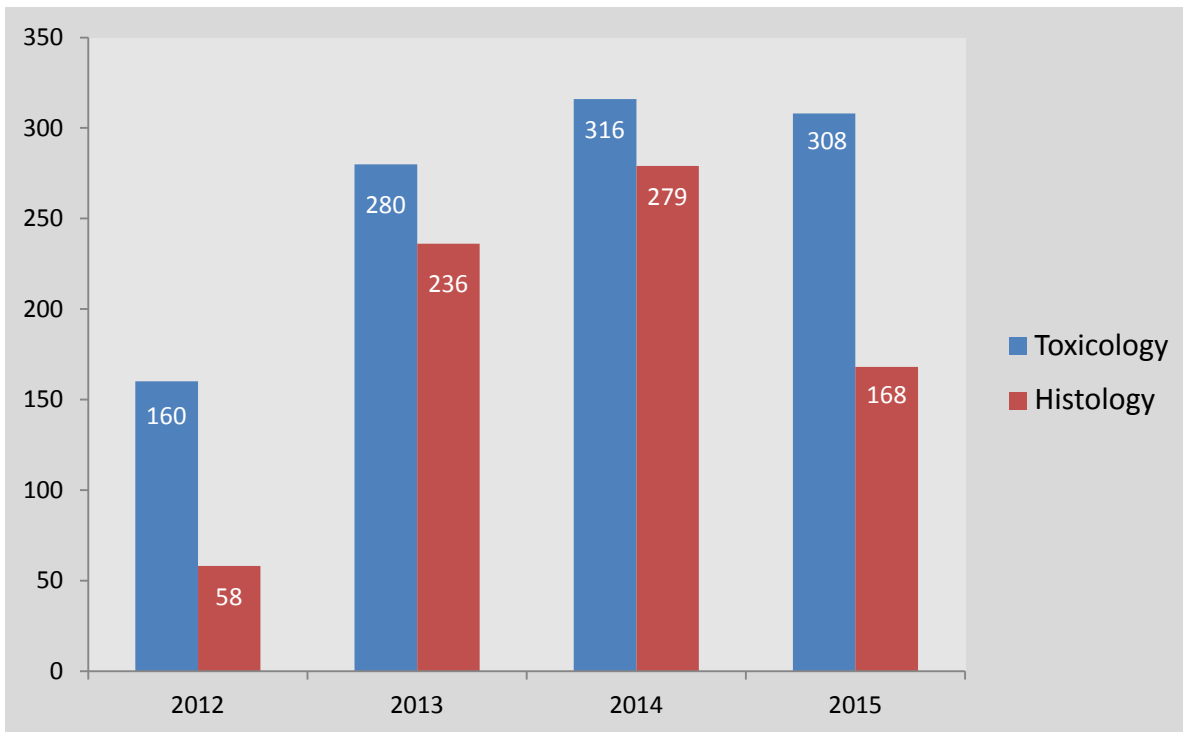


Autopsy examinations have increased from 55.9% of the exam cases in 2012 to 82.2% in 2015.

EXAM CASES 2012 to 2015 – MANNER OF DEATH

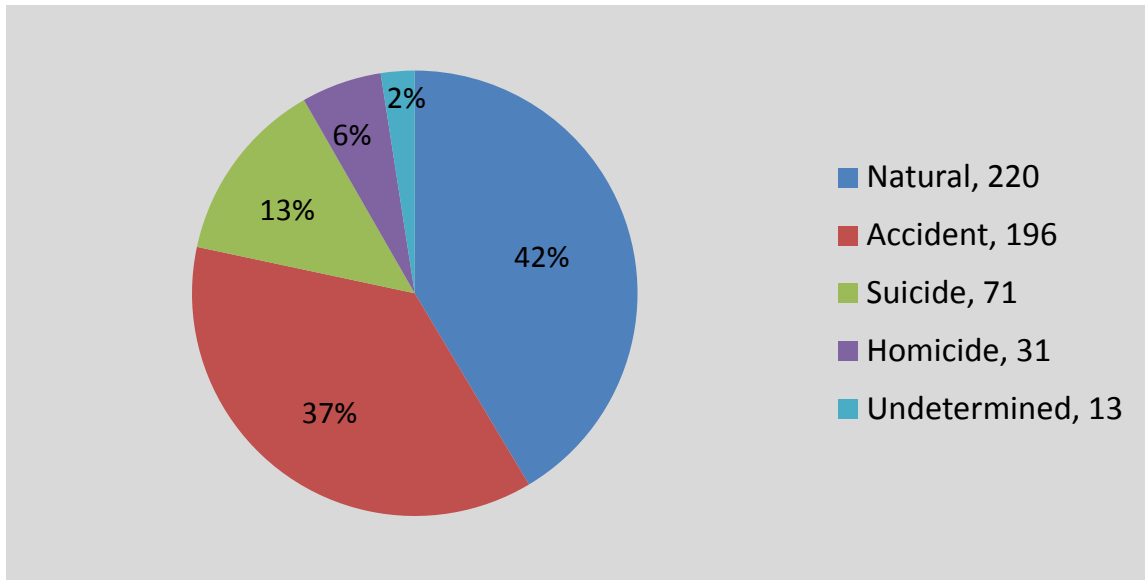


EXAM CASES 2012 to 2015 – TOXICOLOGY & HISTOLOGY REQUESTS



EPOME 2015: EXAM CASES

2015 TOTAL EXAM CASES (531) – MANNER OF DEATH



2015 TOTAL EXAM CASES (531) – MANNER OF DEATH & AUTOPSY STATUS

	MANNER OF DEATH					TOTAL (%)
	NATURAL	ACCIDENT	SUICIDE	HOMICIDE	UNDETERMINED	
Full Autopsy (%)	180 (82%)	158 (80%)	57 (80%)	29 (93%)	13 (100%)	82%
Partial Autopsy (%)	0	0	0	0	0	0
External Exam (%)	40 (18%)	38 (20%)	14(20%)	2 (7%)	0	18%
TOTAL	220	196	71	31	13	

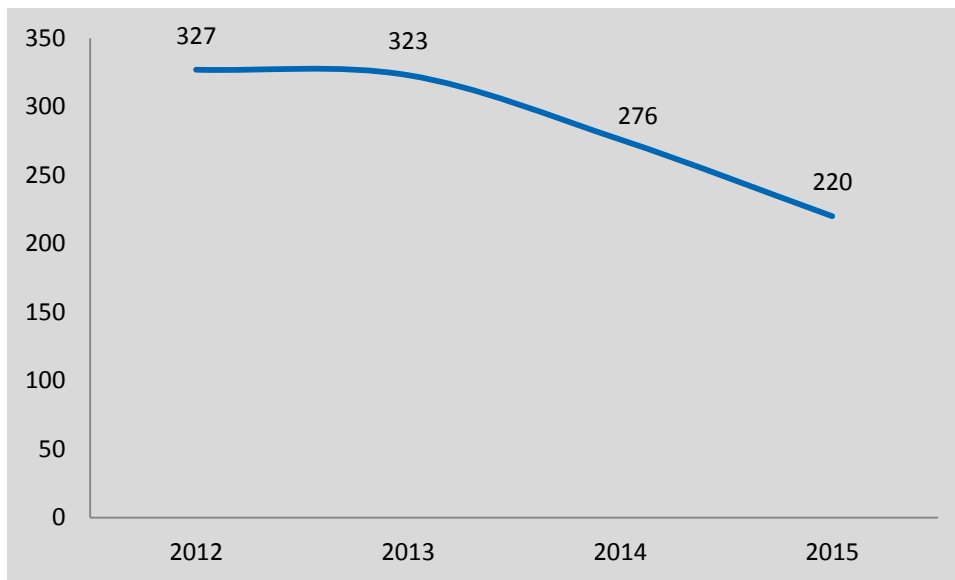
2015 TOTAL EXAM CASES (531) – GENDER AND AGE GROUP

Age Group	MANNER OF DEATH										
	NATURAL		ACCIDENT		SUICIDE		HOMICIDE		UNDETERMINED		
	♂	♀	♂	♀	♂	♀	♂	♀	♂	♀	Unknown
Unknown Age	-	-	-	-	-	-	-	-	2	-	1*
>1	1	-	6	3	-	-	-	-	-	-	-
1-5	1	-	1	2	-	-	-	-	1	-	-
6-10	-	-	3	1	-	-	-	-	-	-	-
11-18	-	-	7	-	1	-	-	1	-	-	-
19-25	1	1	21	3	14	2	6	2	1	1	-
26-35	7	2	18	14	14	2	8	2	1	1	-
36-45	18	3	27	6	9	4	1	3	-	-	-
46-55	43	16	27	6	10	1	1	1	1	-	-
56-65	55	17	18	4	4	2	1	1	1	2	-
66-75	20	12	9	4	3	1	-	1	1	-	-
76-85	12	7	10	4	1	-	1	-	-	-	-
>85	1	3	1	1	3	-	-	2	-	-	-
TOTAL	159	61	148	48	59	12	18	13	8	4	1
♂: 392											
♀: 138											
Unknown: 1											

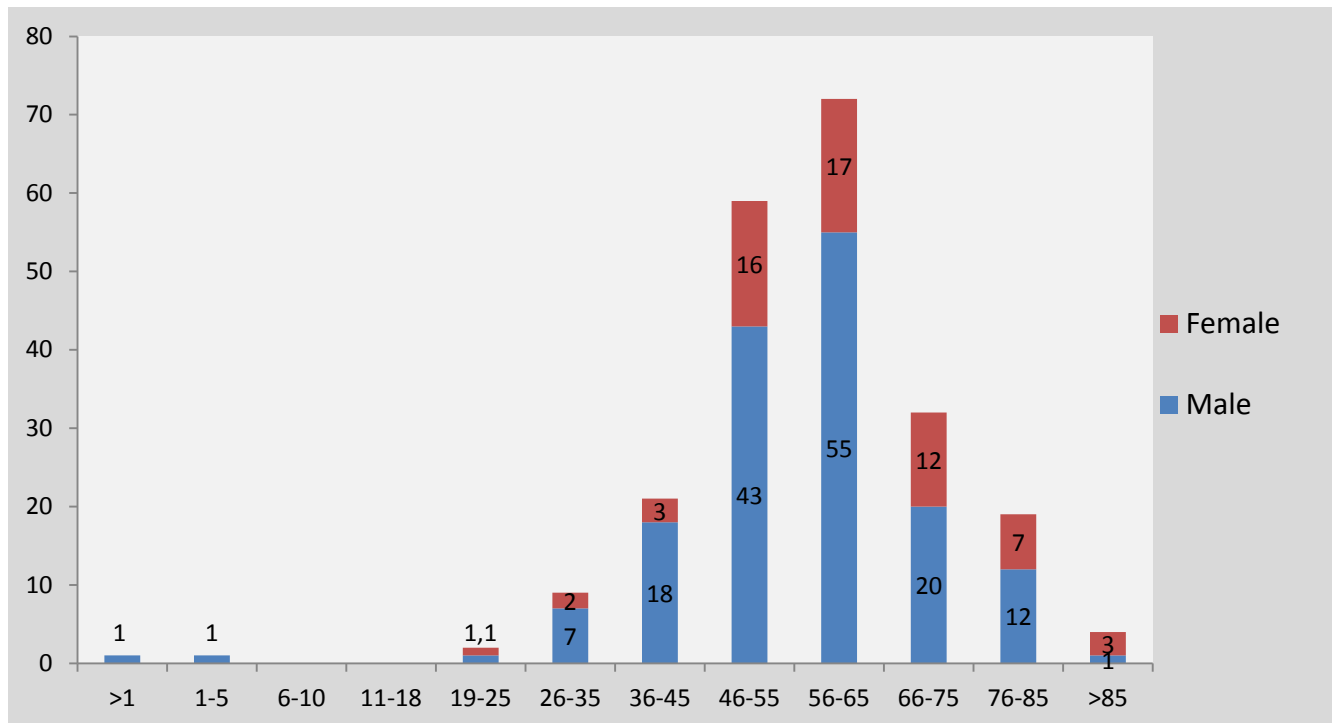
*Comingled skeletal remains. ♂=male; ♀=female

NATURAL DEATHS

NATURAL DEATHS: 2012 – 2015



2015 NATURAL DEATHS (220) – GENDER AND AGE GROUP



Individuals aged 46 - 68 years comprised 67.2% of all people who succumbed to natural deaths.

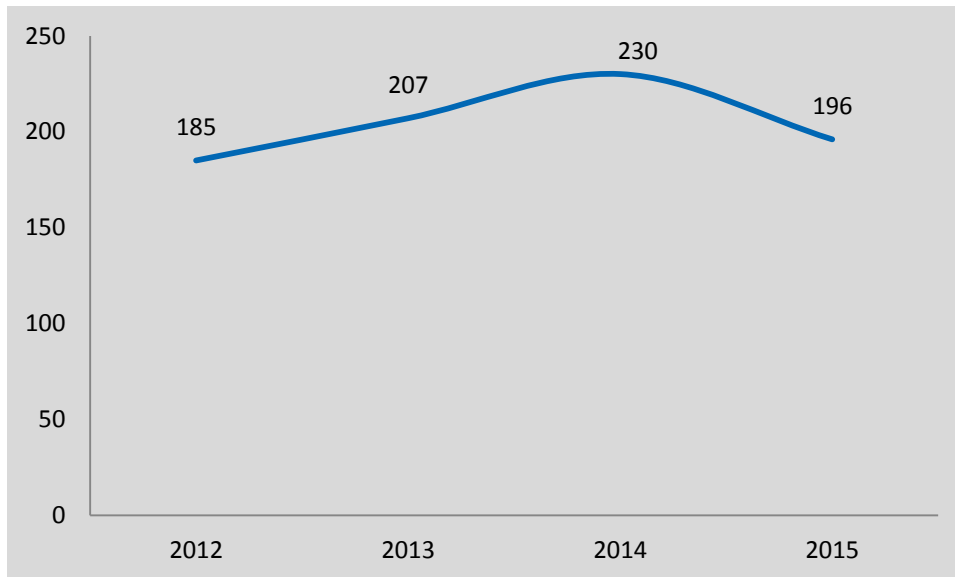
2015 NATURAL DEATHS (220) – CAUSE OF DEATH

Cardiovascular Disease	121
Liver Cirrhosis	18
Pulmonary Embolus	16
Cancer	9
Pneumonia	8
Undetermined Natural Causes	6
Seizure Disorder	5
Chronic Obstructive Pulmonary Disease	4
Diabetes Mellitus	4
Hemorrhagic Stroke	4
Complications of Morbid Obesity	2
Congenital Anomalies	2
HIV/AIDS	2
Morbid Obesity	2
Myocarditis	2
Peptic Ulcer Disease	2
Ruptured Cerebral Aneurism	2
Cerebral Palsy	1
Dementia	1
Ischemic Stroke	1
Large Bowel Volvulus	1
Malnutrition	1
Pyelonephritis	1
Ruptured Pulmonary Cyst	1
Sepsis (colitis)	1
Severe Fatty Metamorphosis of Liver	1
Spontaneous Hemoperitoneum	1
Tuberculosis	1
TOTAL	220

Cardiovascular Disease includes cause of death statements such as: *hypertensive/atherosclerotic cardiovascular disease, coronary artery thrombus, acute myocardial infarction, hypertrophic cardiomyopathy, hypertensive heart disease, ruptured aortic aneurysm, aortic dissection, and coronary atherosclerosis.*

ACCIDENTS

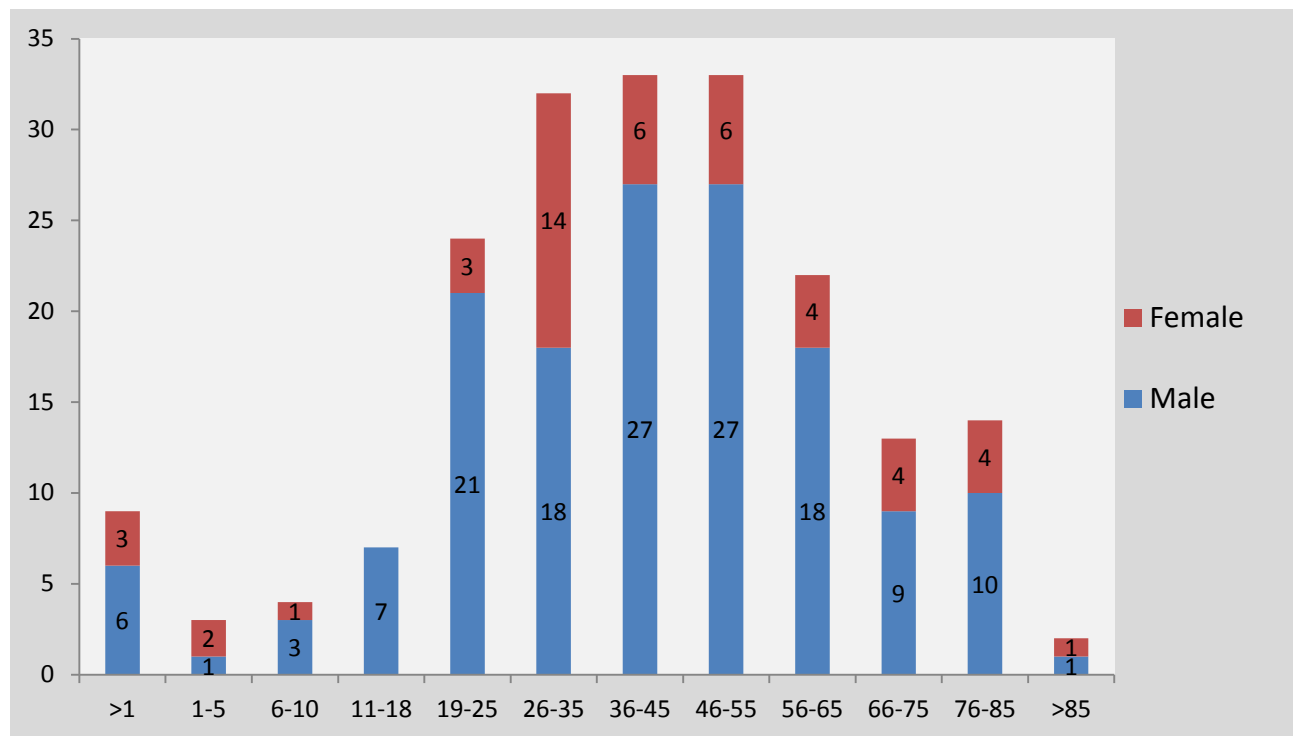
ACCIDENTS: 2012 – 2015



2015 ACCIDENTS (196) – MECHANISM

Blunt Force Injuries	99
Acute Drug Toxicity	56
Suffocation	8
Thermal & Inhalation Injuries	8
Mixed Alcohol and Drug Toxicity	7
Acute Alcohol Toxicity	6
Drowning	4
Environmental Heat Exposure	3
Choking	2
Overlay	1
Electrocution	1
Traumatic Asphyxia	1
TOTAL	196

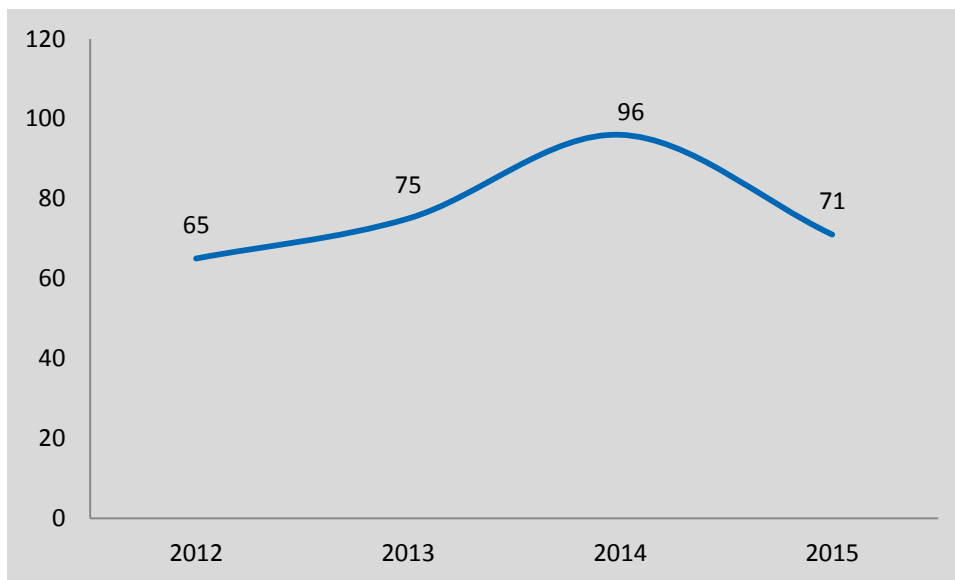
2015 ACCIDENTS (196) – GENDER AND AGE GROUP



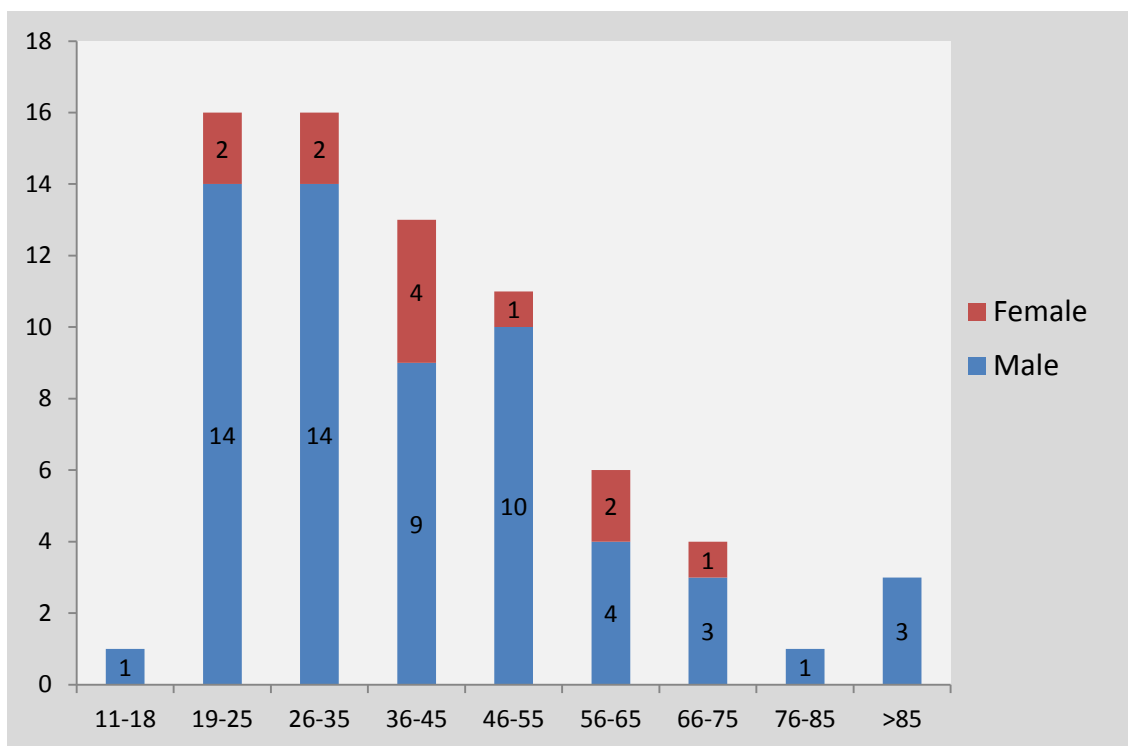
Accident victims were most frequently male (75%). Individuals between the ages of 22 – 49 years comprised 52% of all accidental fatalities. Accidental deaths decreased by 15% from 2014 to 2015.

SUICIDES

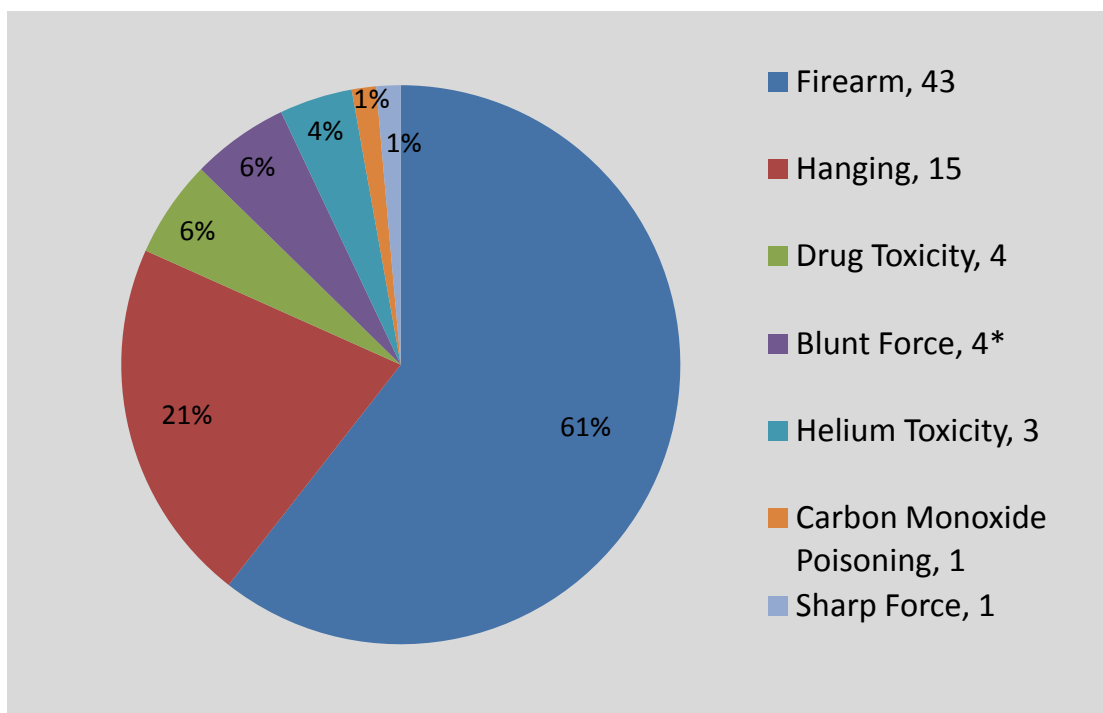
SUICIDES: 2012 – 2015



2015 SUICIDES (71) – GENDER AND AGE GROUP



2015 SUICIDES (71) – METHOD

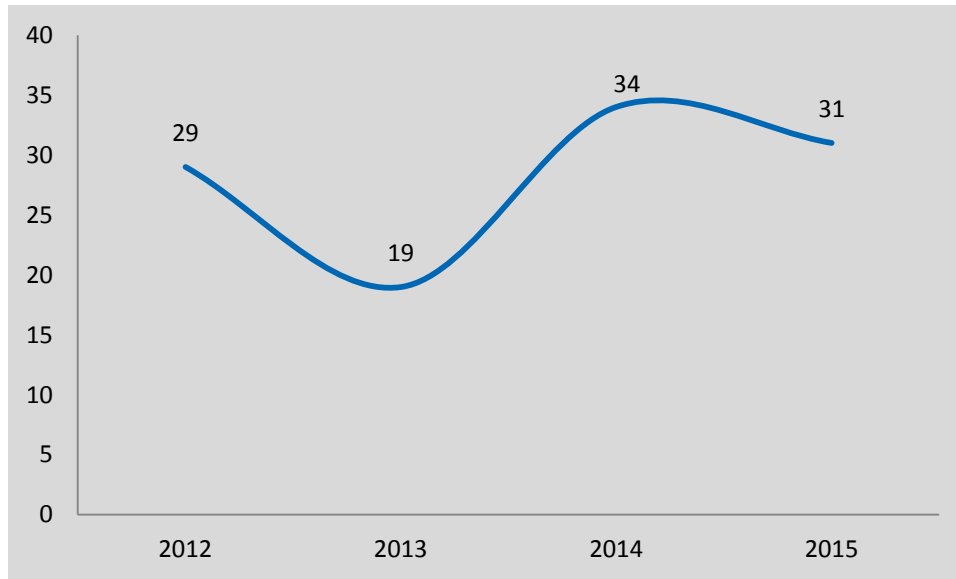


*includes: descend from height (3) and hit by train (1).

Suicide victims were most frequently male (83%). Individuals between the ages of 24-45 years comprised 33% of all suicides. The vast majority (40 out of 43 [93%]) of suicidal gunshot wounds were located on the head, followed by the chest (3 out of 43 [7%]).

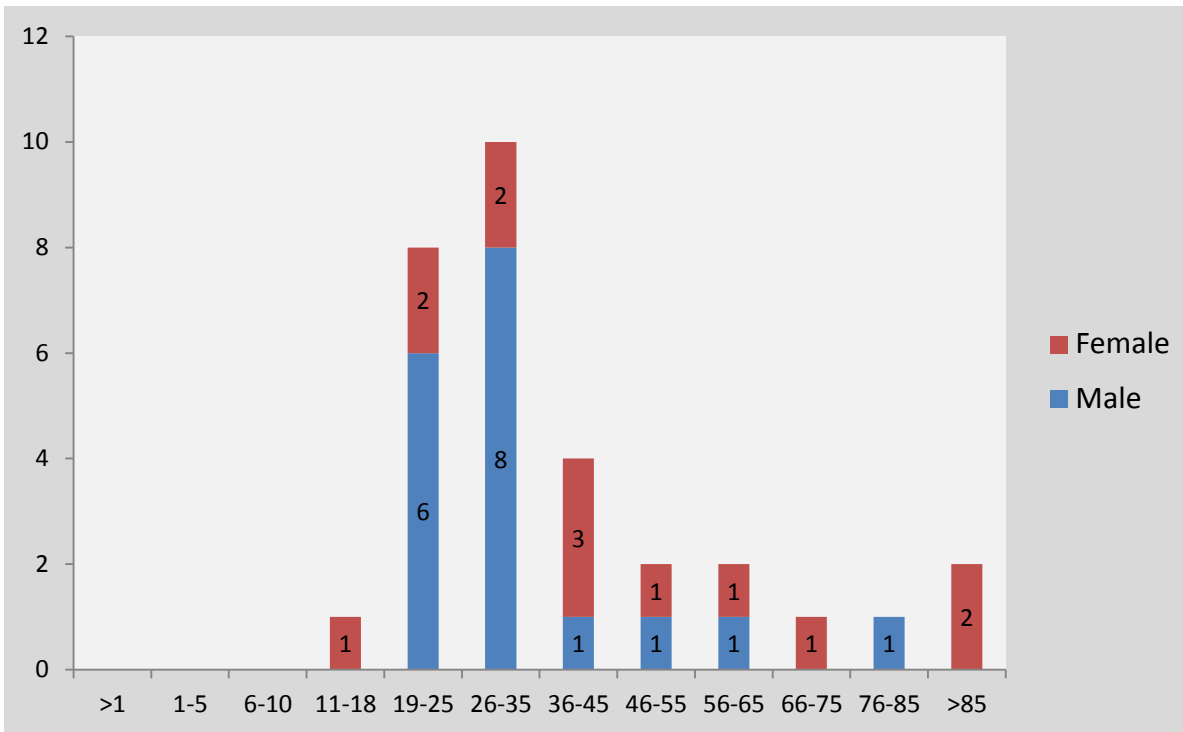
HOMICIDES

HOMICIDES: 2012 – 2015

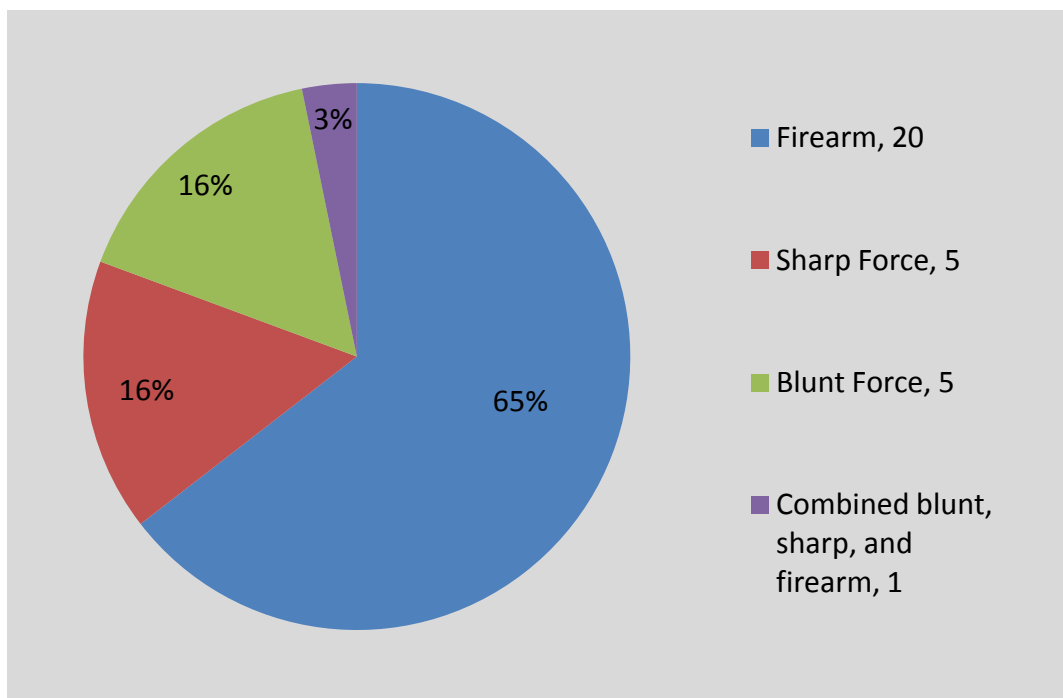


Homicide victims were most frequently male (58%). Of note is that 4 of the homicide exam cases from the EPOME in 2015 (13% of the total homicides), were cases in which the assault leading to the death took place outside of the El Paso County and, in fact, outside of the State of Texas (2 cases from New Mexico and 2 cases from Ciudad Juarez, Mexico). The corrected homicide rate for homicides in which the assault took place within the El Paso County geographical circumscription (27 cases) equals 3.2 per 100,000, which ranks amongst the lowest homicide rate in the USA for a city with >500,000 population.

2015 HOMICIDES (31) – GENDER AND AGE GROUP

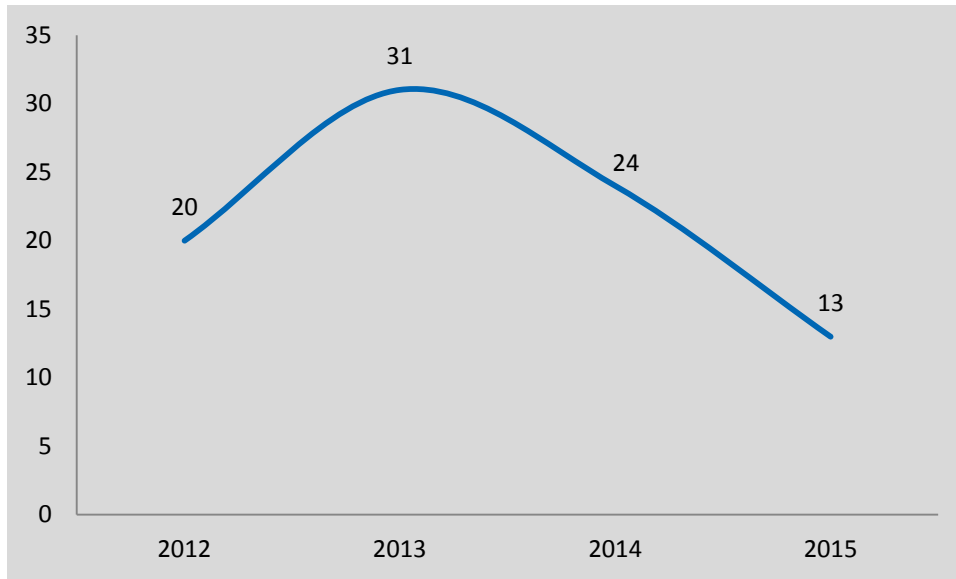


2015 HOMICIDES (31) – MODE OF INFLICTION

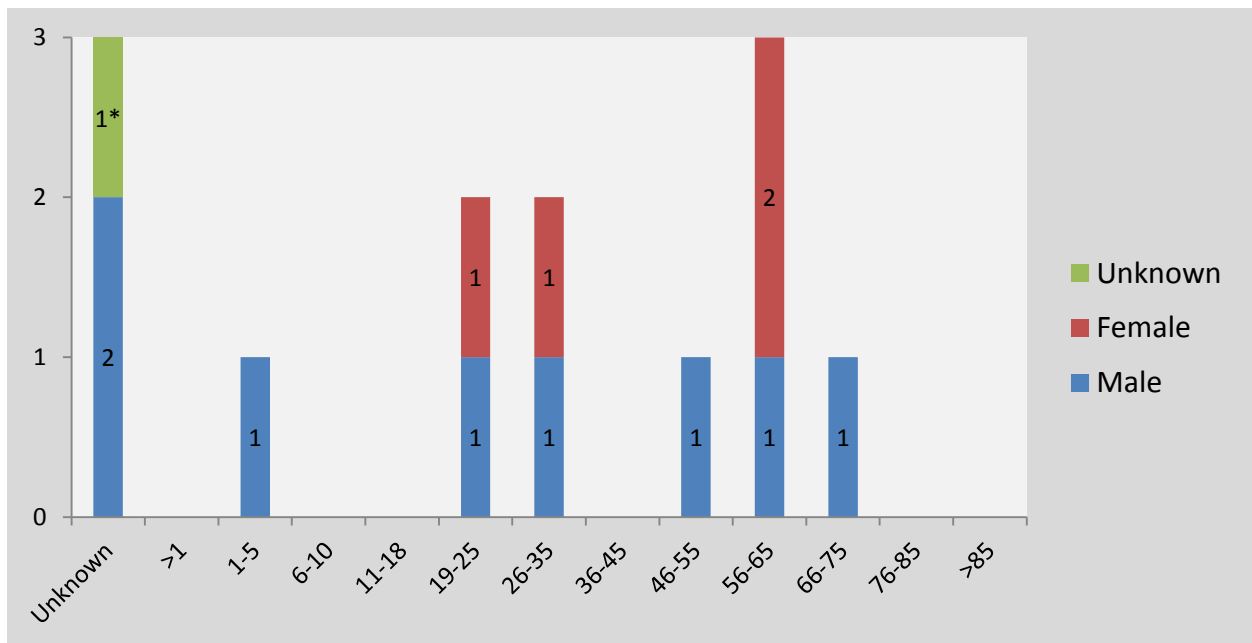


UNDETERMINED

UNDETERMINED MANNER OF DEATH: 2012 – 2015

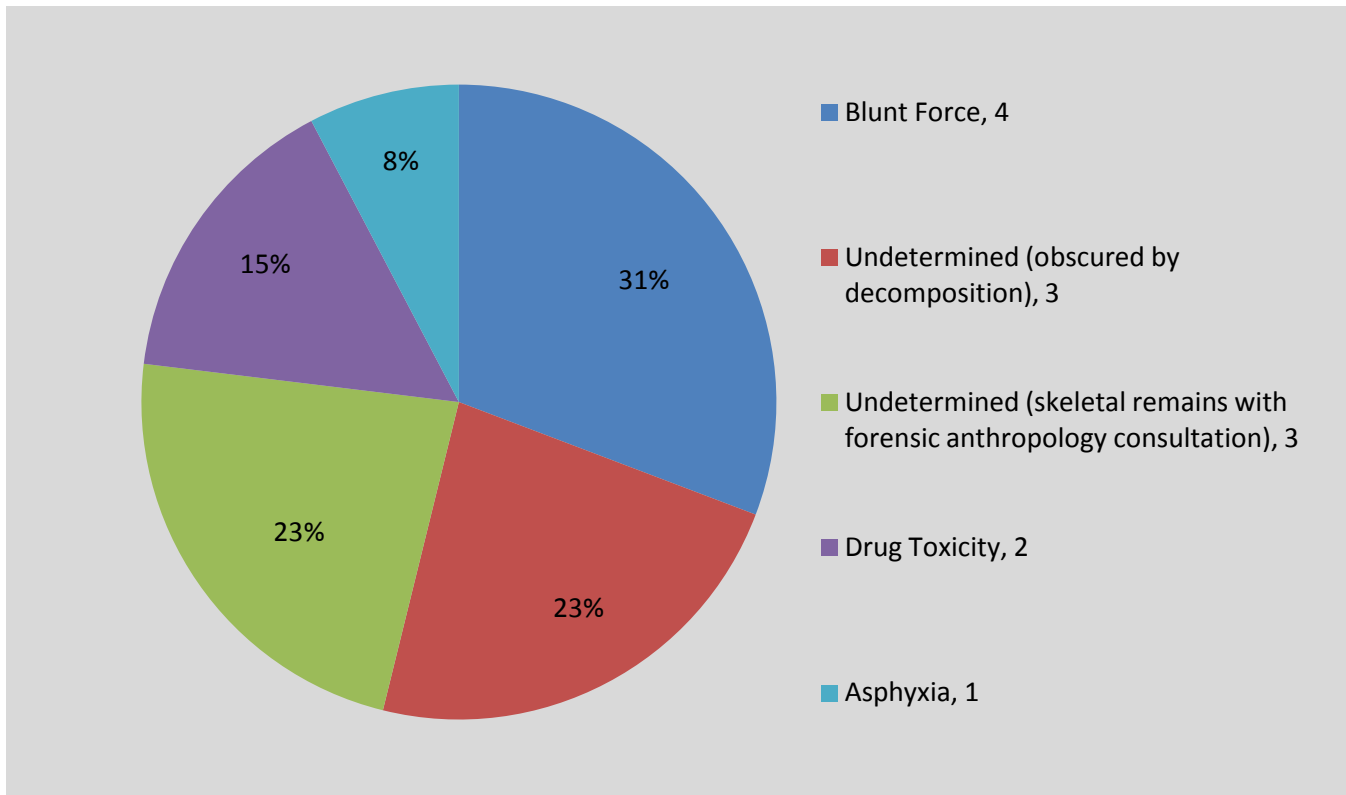


2015 UNDETERMINED MANNER OF DEATH (13): GENDER AND AGE GROUP



*case with comingled skeletal remains identified after forensic anthropology consultation.

2015 UNDETERMINED MANNER OF DEATH: ASSOCIATED CAUSE OF DEATH



CHILD FATALITY

In 2015, there were 28 deaths of children (individuals 18 years or age or younger), which included the deaths of 10 infants (a child in the first year of life).

2015 FETAL, INFANT, AND CHILD DEATHS – SUMMARY TABLE

Age Group	MANNER OF DEATH									
	NATURAL		ACCIDENT		HOMICIDE		SUICIDE		UNDETERMINED	
	♂	♀	♂	♀	♂	♀	♂	♀	♂	♀
Fetus	-	-	-	-	-	-	-	-	-	-
<1	1	-	6	3	-	-	-	-	-	-
1-3	-	-	1	1	-	-	-	-	1	-
4-6	1	-	2	1	-	-	-	-	-	-
7-10	-	-	1	1	-	-	-	-	-	-
11-15	-	-	2	-	-	1	-	-	-	-
16-18	-	-	5	-	-	-	1	-	-	-
TOTAL	2	0	17	6	0	1	1	0	1	0
♂ : 21										
♀ : 7										
Total: 28										

♂=male; ♀=female

2015 CHILD (<18 YEARS) FATALITY CASES (28) – MANNER OF DEATH & AUTOPSY STATUS

	MANNER OF DEATH					TOTAL (%)
	NATURAL	ACCIDENT	SUICIDE	HOMICIDE	UNDETERMINED	
Full Autopsy (%)	2 (100%)	21 91(%)	1 (100%)	1 (100%)	1 (100%)	93%
Partial Autopsy (%)	0	0	0	0	0	0
External Exam (%)	0	2* (9%)	0	0	0	7%
TOTAL	2	23	1	1	1	100%

*both cases were motor vehicle crashes with extensive antemortem injury documentation.

2015 INFANT DEATHS (<1Y) – CAUSE OF DEATH

Asphyxia - Suffocation	8
Asphyxia – Overlay	1
Adenoviral Pneumonia	1
TOTAL	10

2015 CHILD DEATHS (AGE: 1-18) – CAUSE OF DEATH

Blunt Force Injury – Head	6
Blunt Force Injury – Multiple	4
Fire Related	4
Suicidal Hanging	1
Homicidal Gunshot	1
Acute Alcohol Intoxication	1
Myocarditis	1
TOTAL	18

CHILD FATALITY – SUMMARY

Childhood deaths represented 5.2% of all the exam cases investigated by the EPOME in 2015. Male decedents comprised 75% of the total deaths in children. The most common manner of death among children was accident (82%).

There was one suicide (hanging) and one homicide (gunshot wound) among children in 2015.

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

2015 TOXICOLOGY-RELATED DEATHS (68) – SUMMARY TABLE

Age Group	MANNER OF DEATH						Total
	ACCIDENT		SUICIDE		UNDETERMINED		
	♂	♀	♂	♀	♂	♀	
0-17	1	-	-	-	-	-	1
18-25	3	1	-	-	-	-	4
26-35	7	8	-	-	-	-	15
36-45	9	3	-	2	-	-	14
46-55	16	2	-	1	-	-	19
56-65	9	1	-	-	-	2	12
66-75	3	-	-	-	-	-	3
TOTAL	48	15	0	3	0	2	68
♂: 48							
♀: 20							

♂=male; ♀=female

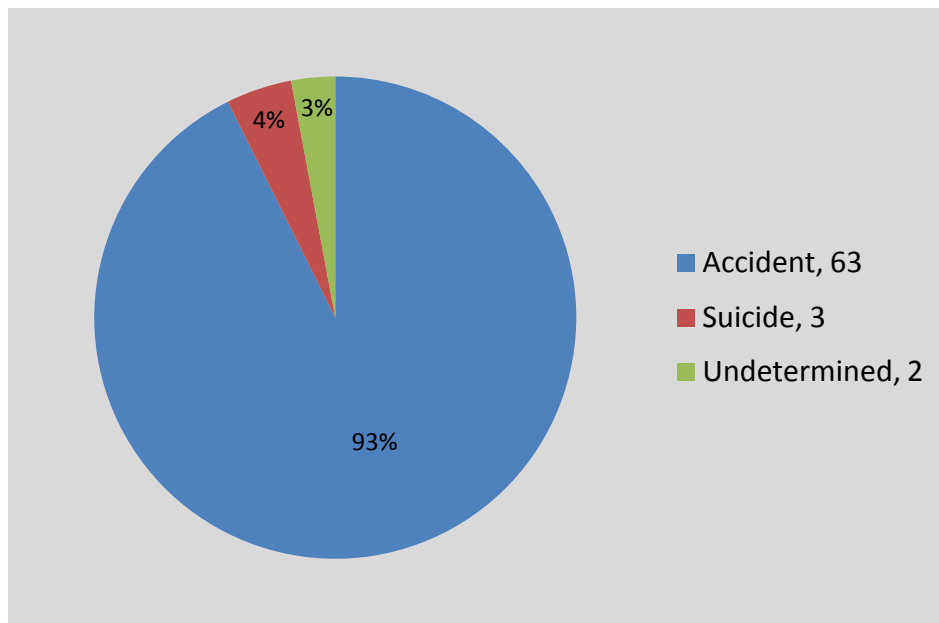
By definition, toxicology-related deaths cannot be natural in manner. There were no homicidal drug-related deaths in 2015.

Individuals between the ages of 41-68 years comprised 60.2% of all toxicology-related deaths. Accidents comprised 93% of all toxicology-related deaths.

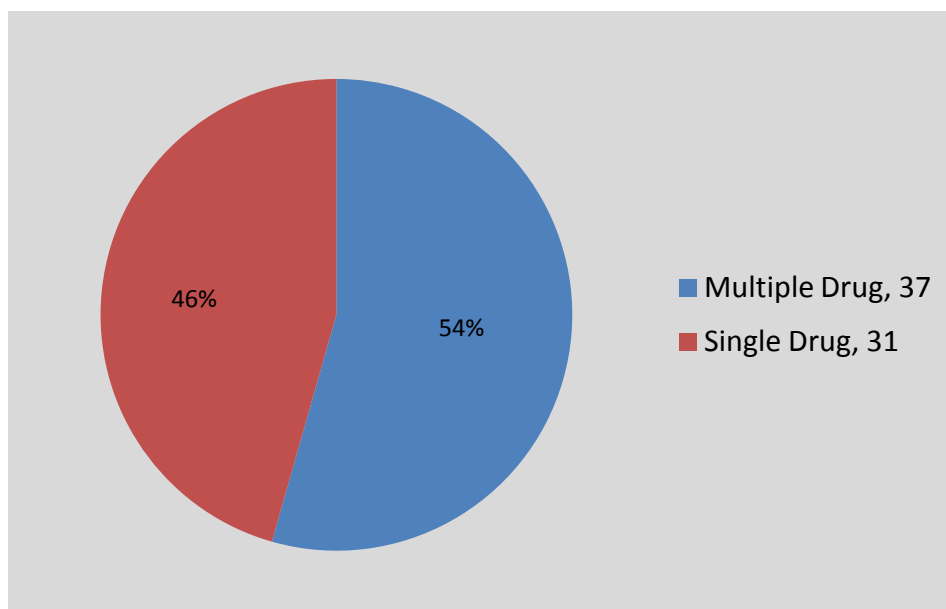
Regarding accidental toxicology-related deaths, the Male-to-Female ratio is 3.2:1. The 3 cases of suicide by drug toxicity occurred in women.

The cases ruled undetermined in manner included cases in which a definite intention to self harm was not established, but at least one aspect of the investigation suggested the death could have conceivably been a suicide.

2015 TOXICOLOGY-RELATED DEATHS – Manner of Death



2015 TOXICOLOGY-RELATED DEATHS – Single vs. Multiple Drugs



2015 SINGLE DRUG-RELATED DEATHS – Drug Involved + Manner of Death

Drug Involved	#cases	Manner
Heroin	16	Accident
Cocaine	7	Accident
Ethanol	5	Accident
Morphine	2	Accident
Methamphetamine	1	Accident
TOTAL	31	

More than half (51%) of the single-drug-related deaths were due to heroin toxicity.

2015 MULTIPLE DRUG-RELATED DEATHS –Most Frequently Involved Drugs

Drug Mentioned	#cases*
Cocaine	15
Heroin	11
Morphine	11
Ethanol	8
Hydrocodone	7
Diazepam	7
Alprazolam	6
Oxycodone	4
Fentanyl	4
Clonazepam	4

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

Cocaine was present in 40% of all multiple drug-related deaths. Opiates (heroin, morphine, hydrocodone, oxycodone, etc.) were present in 81% of the multiple drug-related death cases.

2015 TOXICOLOGY-RELATED DEATHS – Multiple-Drug-Related Deaths: Number of Drugs Involved

MANNER	Number of Drugs						
	2	3	4	5	6	7	8
UNDETERMINED							
1							10,12,13,19,23,24,25,66
SUICIDE							
1						17,20,35,46,50,56,72	
2		13,56,61					
3						17,32,35,51,54,56,62	
ACCIDENT							
1			3,32,35,50				
2							3,11,17,20,29,32,34,46
3			15,27,31,50				
4		14,29,32					
5	3,46						
6	31,40						
7				13,15,32,52,62			
8	8,21						
9	15,31						
10		15,27,44					
11	8,12						
12	15,31						
13	15,27						
14	27,31						
15		15,20,31					
16	4,40						
17					10,21,25,46,60,66		
18		15,27,31					
19			20,32,46,61				
20		16,29,46					
21	20,27						
22	15,27						
23		15,31,41					
24						3,25,29,50,55,58,61	
25	15,41						
26			13,21,46,47				
27	15,31						
28	15,31						
29		20,32,46					
30	15,31						
31		3,20,46					
32	15,46						
33		3,27,46					
TOTAL (37)	16	10	4	1	1	3	2

2015 TOXICOLOGY-RELATED DEATHS – Multiple-Drug-Related Deaths: Medication Key

ACETAMINOPHEN	1
ACETONE	2
ALPRAZOLAM	3
AMITRYPTILINE	4
AMPHETAMINE	5
BATH SALTS	6
BENZODIAZEPINE	7
BUPROPION	8
BUTALBITAL	9
CARISOPRODOL	10
CHLORHPHENAMINE	11
CITALOPRAM	12
CLONAZEPAM	13
CLOZAPINE	14
COCAINE	15
CODEINE	16
CYCLOBENZAPRINE	17
DESIPRAMINE	18
DEXTROMETHORPHAN	19
DIAZEPAM	20
DIPHENHYDRAMINE	21
DIFLUORETHANE	22
DOXEPINE	23

DOXYLAMINE	24
DULOXETINE	25
ETHANE	26
ETHANOL	27
ETHYLENE GLYCOL	28
FENTANYL	29
FLUOXETINE	30
HEROIN	31
HYDROCODONE	32
HYDROGEN SULFIDE	33
HYDROMORPHONE	34
HYDROXYZINE	35
INHALANTS	36
ISOPROPANOL	37
LORAZEPAM	38
MECLIZINE	39
METHADONE	40
METHAMPHETAMINE	41
METHANE	42
METHANOL	43
MIDAZOLAM	44
MIRTAZAPINE	45
MORPHINE	46

OLANZAPINE	47
OPIATES	48
OXAZEPAM	49
OXYCODONE	50
PAROXETINE	51
PROMETHAZINE	52
PSEUDOEPHEDRINE	53
QUETIAPINE	54
RISPERIDONE	55
SERTRALINE	56
SYNTHETIC CANNABIS	57
TEMAZEPAM	58
TETRAFLUROETHANE	59
TOPIRAMATE	60
TRAMADOL	61
TRAZODONE	62
VENLAFAXINE	63
VERAPAMIL	64
ZIPRASIDONE	65
ZOLPIDEM	66
ZOPICLONE	67

MOTOR VEHICLE RELATED DEATHS

2015 MOTOR VEHICLE RELATED DEATHS – SUMMARY TABLE

Age Group	MANNER OF DEATH				
	ACCIDENT		SUICIDE		
	♂	♀	♂	♀	
>1	-	-	-	-	0
1-5	1	1	-	-	2
6-10	1	-	-	-	1
11-18	6	-	-	-	6
19-25	17	1	1	-	19
26-35	10	6	-	-	16
36-45	11	1	-	-	12
46-55	6	2	-	-	8
56-65	4	3	-	-	7
66-75	4	4	-	-	8
76-85	1	3	-	-	4
>85	-	1	-	-	1
TOTAL	61	22	1	0	84
♂ : 62					
♀ : 22					

♂=male; ♀=female

There were 84 motor vehicle related fatalities in 2015. All but one consisted of accidents; one suicide (struck by moving train) was documented. The male:female ratio for motor vehicle related deaths was 2.8:1

2015 MOTOR VEHICLE RELATED DEATHS – STATUS OF DECEDENT*

Motor vehicle – Driver	29
Motor Vehicle – Front Passenger	7
Motor vehicle – Back Passenger	7
Motor vehicle, non-driver – position unknown	2
Motorcyclist – operator	15
Motorcyclist – passenger	1
Pedestrian struck by motor vehicle	18
Pinned under stationary vehicle	2
Operator of motorized wheelchair	1
Pedestrian hit by train (suicide)	1
All-terrain vehicle - passenger	1
TOTAL	84

*all are accidents except otherwise noted

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

ORGAN AND TISSUE DONATION

After a brief hiatus in postmortem tissue donation referrals, the EPOME resumed allowing an organ procurement organization (OPO) to approach families who wished to donate tissues from the deceased. Operations re-started in November, 2015 and within 6 weeks, 3 donations were made possible (tissue obtained included dermis, musculoskeletal tissue, cardiovascular tissue) resulting in 46 grafts distributed to help people in need.

The EPOME also works with another OPO, fostering in-hospital postmortem organ donation. In 2015, there were **23 donors, who gifted 83 organs** that ended impacting the lives of **73 patients receiving organ transplants in local El Paso hospitals**, including: University Medical Center, Del Sol Medical Center, El Paso Children's Hospital, Sierra Providence East, and Las Palmas Medical Center.

2015 ALTRUISTIC ORGAN DONATION FACILITATED BY THE EPOME

Organ	No.
Kidney	43
Liver	18
Heart	12
Lung	7
Pancreas	3
Total	83

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
2012	2585
2013	2717
2014	2839
2015	3025

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 4 years, 109 decedents have been positively identified using fingerprints.

YEAR	Fingerprint ID
2012	15
2013	22
2014	48
2015	24

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 4 years, 69 cases have been referred to this program.

YEAR	Unclaimed Bodies
2012	10
2013	14
2014	19
2015	26

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.

2015 EPOME EXAM CASES (531) – TIME FROM AUTOPSY TO FINAL WRITTEN AUTOPSY REPORT

Time for final report	No. of cases (%)
Within 60 days	520 (97.8)
Within 90 days	529 (99.6)
>90 days	2 (0.003)

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 of \$755 for the NAME accredited medical examiner offices in their jurisdiction.

In 2015, the EPOME has a *cost per death reported* of **\$597**; a *cost per autopsy* of **\$5399**; and a *budget per capita* of **\$2.82/year**.

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*Lorenzo Flores - Forensic Photographer*

SSG. M. R. Puentes Middle School – 01/28	El Paso Vista College – 05/14
Bel Air High School - 02/18	El Paso Vista College – 05/21
El Dorado High School – 02/24	YISD GT Program – 07/14
Mountain View High School – 03/20	El Dorado High School – 08/27
Excel Learning Center - 04/07	Harmony School of Innovation – 10/20
El Paso Vista College – 04/08	SSG. M. R. Puentes Middle School – 10/28
Jefferson High School – 04/14	Montwood Middle School – 11/13
Southwest University – 04/23	Fabens High School – 12/08
Montwood Middle School – 05/01	El Dorado High School – 12/18
El Dorado High School – 05/07	

Mario A Rascon, MD – Chief Medical Examiner

Pediatric Forensic Pathology. Pediatric Grand Rounds. El Paso Children’s Hospital, 4/1
 Medical Professionals Panel. College of Science. UTEP. 4/7.

Criminal Science Investigation and Forensic Science – Youth Super Science. UTEP 6/19.

Powers A, Rascon M. Infective Endocarditis: An Advanced Undiagnosed Case and Its Autopsy Findings. College of American Pathologists, Nashville, TN. Oct 2015

Irene Santiago – Chief of Operations

Family fair: hosted by the Coalition for the Prevention of Child Abuse: 4/11

Cima Hospice:3/27

Cuidado Casero Hospice 3/30

Choice/Monte Cristo/La Mariposa hospice: 4/2

Global Hospice:4/6

Child Protective Services -National Child Abuse Prevention awareness event: 4/11

SWTA-work session: 4/20

1st Choice Hospice:5:19

Mexican Consulate: 10/16

State Dept./Consulate/Governors Office of Emergency Management: 10/19

Interns

- Gabriela Rios: Criminal Justice – UTEP
- Matthew McDorman: Chemistry – UTEP
- Jennifer Rojas: Bachelor of Science - UTSA
- Paulina Dominguez. Bachelor in Forensic Anthropology - Texas State (San Marcos)
- Devin Jones. Bachelor of Science: Forensic Biology – UTEP
- Adriana DeMoss. Bachelor of Science: Biology - UTEP
- Morgan V. Riddle: Forensic Science – St. Mary’s University

PROFESSIONAL DEVELOPMENT**I. Investigative Staff***A. Online training – University of North Dakota*

1. Death investigation: Terminology and Disease
 1. Annabel Salazar-04/07/2015
 2. Christina Enriquez-04/17/2015
 3. Maricela Garcia-06/24/2015
 4. Joe Labrado-02/19/2015
 5. Carlos Lopez-07/25/2015
2. Death Investigation Training Basics
 1. Carlos Lopez 02/24/2015
 2. Christopher Robles
3. Death Investigation Mental Health and First Aid
 1. Annabel Salazar-07/24/2015
4. Death Investigation Training Cultural Competence
 1. Daniel Salas-02/24/2015
 2. Jose Romero-03/03/2015

3. Christina Enriquez-03/05/2015
4. Carlos Lopez-03/05/2015
5. Jorge Ordaz-03/17/2015
6. Joe Labrado-03/31/2015
5. Death Investigation Advanced Topic
 1. Jennifer Contreras-07/14/2015
 2. Joe Labrado-04/28/2015

B. Seminars

1. El Paso County Employment Law Seminar: Attended by Annabel Salazar and Jennifer Contreras. 6/11
2. El Paso County Performance Management Evaluations: attended by Jennifer Contreras on 06/23/2015
3. El Paso County Training for Kronos Approvers: attended by Annabel Salazar on 04/22
4. El Paso County Ethics Training:
 1. Annabel Salazar-02/26/2015
 2. Jennifer Contreras-02/26/2015
 3. Christina Enriquez-02/26/2015
 4. Maricela Garcia-02/26/2015
 5. Jose Labrado-02/26/2015
 6. Jose Romero-02/28/2015
 7. Daniel Salas-02/28/2015
5. Outdoor Human Remains Recovery-Forensic Anthropology Center at Texas State University: attended by Jennifer Contreras and Jose Romero-06/01-05
6. Sudden Death in Epilepsy Patients by NYU School of Medicine and the Epilepsy Foundation: attended by Jennifer Contreras on 04/01/2015
7. Emerging DNA Technology presented by Forensic Technology Center of Excellence: attended by Annabel Salazar on 03/01
8. El Paso Intelligence Center Training by the Drug Enforcement Agency: attended by Joe Labrado on 07/21-07/22
9. Cold Case Safety Net: Missing and Unidentified Persons presented by Forensic Technology Center of Excellence: attended by Jorge Ordaz on 07/26
10. Behavioral Course in Traffic Safety by El Paso County Sheriff's Office:
 1. Annabel Salazar-10/13/2015
 2. Jose Labrado-10/13/2015
 3. Jose Romero-10/13/2015
 4. Christina Enriquez-11/30/2015
 5. Jennifer Contreras-11/30/2015
 6. Daniel Salas-11/03/2015
 7. Maricela Garcia-11/03/2015
 8. Jorge Ordaz-11/03/2015
 9. Morgan Riddle-11/30/2015

11. Medicolegal Death Investigation Training presented by St. Louis University School of Medicine: attended by Daniel Salas. October of 2015

C. Certifications

Annabel Salazar- American Board of Medicolegal Death Investigators (ABDMI) Registry Certification on 11/10/2015

II. Administrative Staff

Irene Santiago:

Ethics training: 2/26

Grant writing course: 7/23

Business writing course: 8/6

Managerial courage and professional maturity: 8/12

Performance-based budget training: 8/20

Hiring and terminating: 8/25

Angela Lawrence-Pusey:

Employee assistance program: 3/17

Setting boundaries: 5/19

Employment law seminar: 6/11

Managerial courage and professional maturity: 6/16

Performance management/evaluations: 6/23

Corrective actions, PIP's and coaching: 7/8

Gustavo Luevano:

The fair labor standards act: 3/3

Harassment prevention training: 3/4

El Paso County code of ethics training: 3/4

Stress management/work-life balance:4/29

Personal financial management course: 7/11

Stress reduction: 7/15

Shani Enriquez:

El Paso Community College spring semester: 1/18-5/16

III. Morgue Staff

Olga Chavez

Straight to the Bone: Advance in Forensic Anthropology: 1/29

Fingerprint ID: Reliability and Accuracy: 2/4

Workplace safety training: 3/4

EAP Orientation for Supervisors: 3/17

Effective Communication: 4/8

Discrimination/Sexual Harassment for Supervisors: 4/15

Death Investigation Basics: 4/16

El Paso County 2015 Employment Law Seminar: 6/11

Forensic Anthropology Methods: 6/15-19

Managerial Courage and Professional Maturity: 8/12

Corrective Actions, PIP's, and Coaching: 11/7

Adrian Pineda

Outdoor human remains recovery workshop. Texas State University. 6/1-5

University of North Dakota. Online basic forensic pathology training: 4/21

El Paso County, Microsoft Excel – Intermediate: 10/13

El Paso County, Microsoft Word – Intermediate: 10/20

Sirchie (online): Understanding gunshot residue: 12/17

Sal Tellez

Outdoor human remains recovery workshop. Texas State University. 6/1-5

University of North Dakota. Online basic forensic pathology training: 3/21

Sirchie (online): Understanding gunshot residue: 12/17

IV. Pathology Faculty

Juan U Contin, MD

February 2015. Mid-Winter Medicine Update Conference in Ruidoso, NM. Presbyterian Healthcare Services.

Janice Diaz-Cavallieri, MD

39th Annual Review and Practical Advances in Pathology Feb 8-13. Miami, FL.

Mario A Rascon, MD

Postmortem Interpretive Toxicology. The Center for Forensic Science Research & Education

Jan 26-30. Philadelphia, PA

Member of the Ad hoc-Study of Quality Improvement by Peer Review in the ME Office Committee – The National Association of Medical Examiners (NAME)

Member of the Ad hoc-International Relations Committee – The National Association of Medical Examiners (NAME)

Inspection and Accreditation Training Session during the National Association of Medical Examiners Annual

Meeting. Charlotte, NC. 10/2-5.

Patient safety course (online) American Society for Clinical Pathology. 4/21-23

Strategic Planning and Governance Session w/ Facilitator Lyle Sumek. El Paso County. 07/14

Performance-Based Budget (PBB) Training. El Paso County. 08/20

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.

EPILOGUE

On behalf of the EPOME I would like to thank the Commissioners Court for offering continued support of the EPOME, an agency that fulfills an irreplaceable duty and a necessary service for the citizens of El Paso.

I also wish to express my deepest gratitude to the EPOME staff: our investigators, a group of professional, committed individuals who are permanently available to reach any scene in any corner of the County and tend to our families' needs in an effort to provide them with answers after the tragic loss of a loved one; our administrative staff members, who competently keep this program running, and our morgue staff, whose skillful and diligent work allow proper documentation of autopsy findings.

This report is dedicated with the utmost respect and gratitude to my mentor, Ross E Zumwalt, MD, for being a beacon of light in my career and life.

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

Chief Medical Examiner

El Paso County Office of the Medical Examiner

2015 El Paso County Office of the Medical Examiner Annual Report

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Mario A Rascon