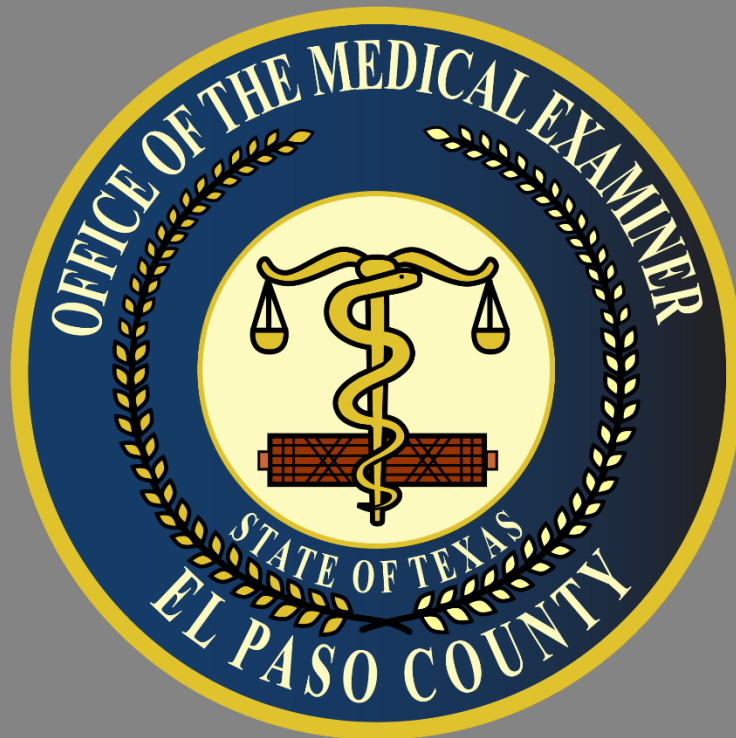




Office of the Medical Examiner

2020 Annual Report



El Paso County, Texas





Office of the Medical Examiner

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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.

The year 2020 brought an unprecedented public health challenge to our community – and the world. The number of cases reported to the OME (6716) represented a **39.9% increase** compared to the usual caseload from previous years. The OME remains committed to helping grieving families through high-quality, compassionate, and timely service during the trying times the families in our community face.



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.

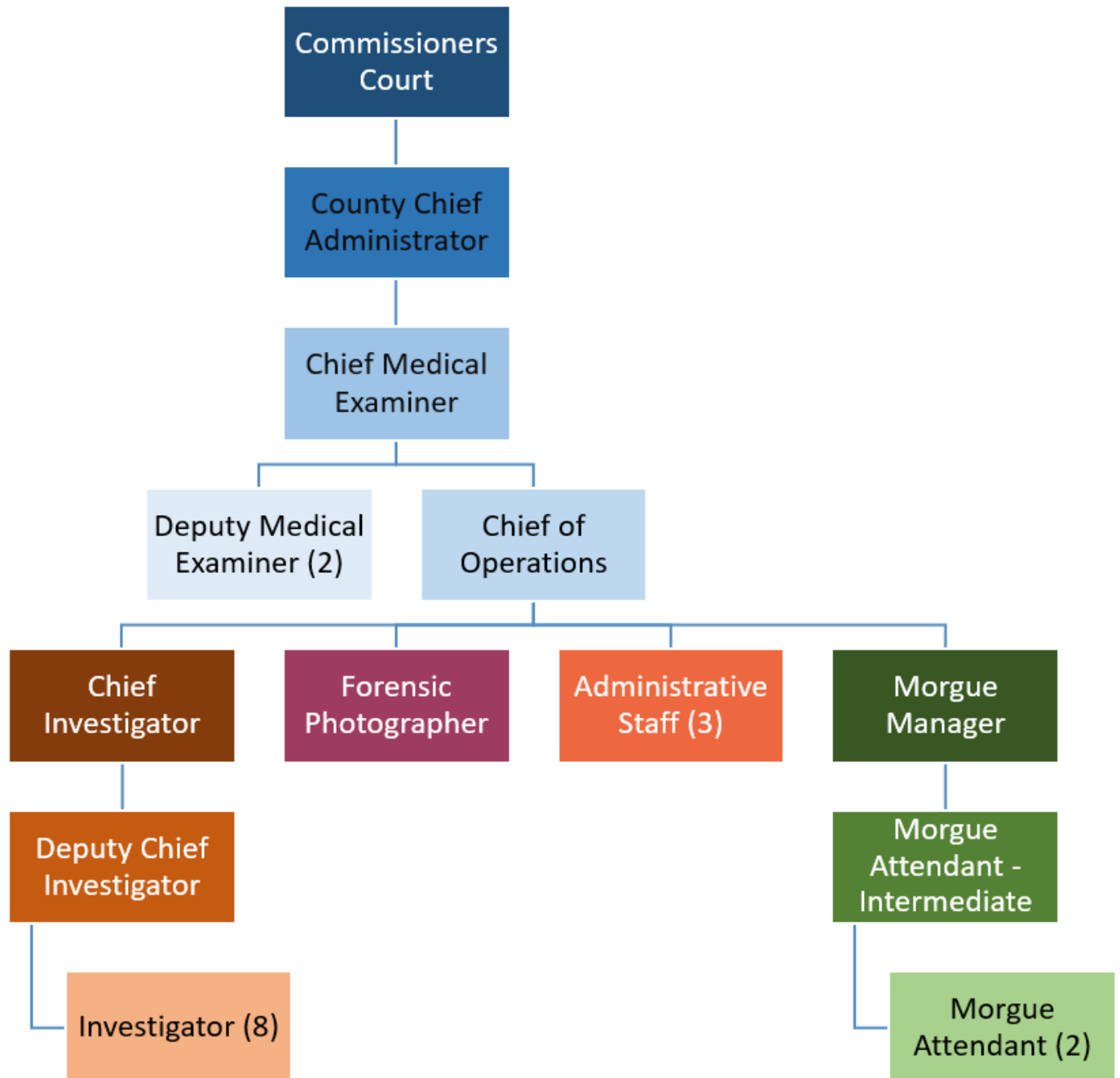
The Texas Code of Criminal Procedure (Chapter 49. 'Inquests Upon Dead Bodies'), stipulates that the EPOME shall conduct an inquest into the death of a person who dies in the County if:

- (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 altruistic donation, positively identifying decedents, preparing for a mass casualty event, academic endeavors (teaching interns and Medical Students), and fostering community outreach through different institutions.

EPOME – ORGANIZATIONAL CHART



CASE JURISDICTION

El Paso covers an area of about 256 square miles, and has an estimated population (2020 census estimate) of about 839,238. Countywide, the population is about 94% white (which includes 83% white-hispanic and 11% white non-hispanic), 4% black, 1% American Indian, 1.4% 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 – 2020

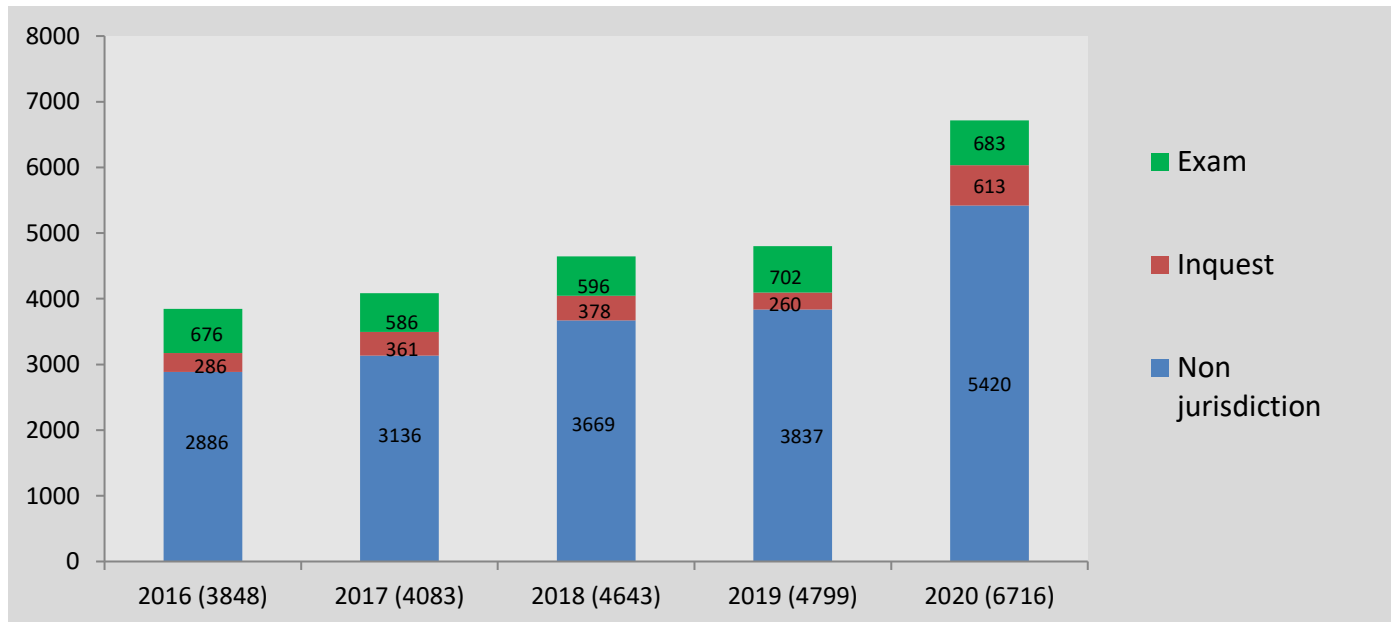
In 2020, the El Paso County had a total of 9020 deaths. Of these, 6716 were reported to the EPOME. Every reported case requires a preliminary screening by EPOME investigative staff to determine if it falls under the jurisdiction of the EPOME. Of those calls, a total of 4536 cases were **released**, with death certificates being signed by primary care physicians in the community. Additionally, 884 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 1296 cases (613 inquests and 683 exam cases). A significant proportion [278 (40.7%)] 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 537 cases and 146 underwent an *external examination* only. The EPOME does not perform partial autopsies.

There were a total of 1309 death scenes investigated. This represented an increase of 4.7% from those in 2019 (1250). A total of 1082 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.

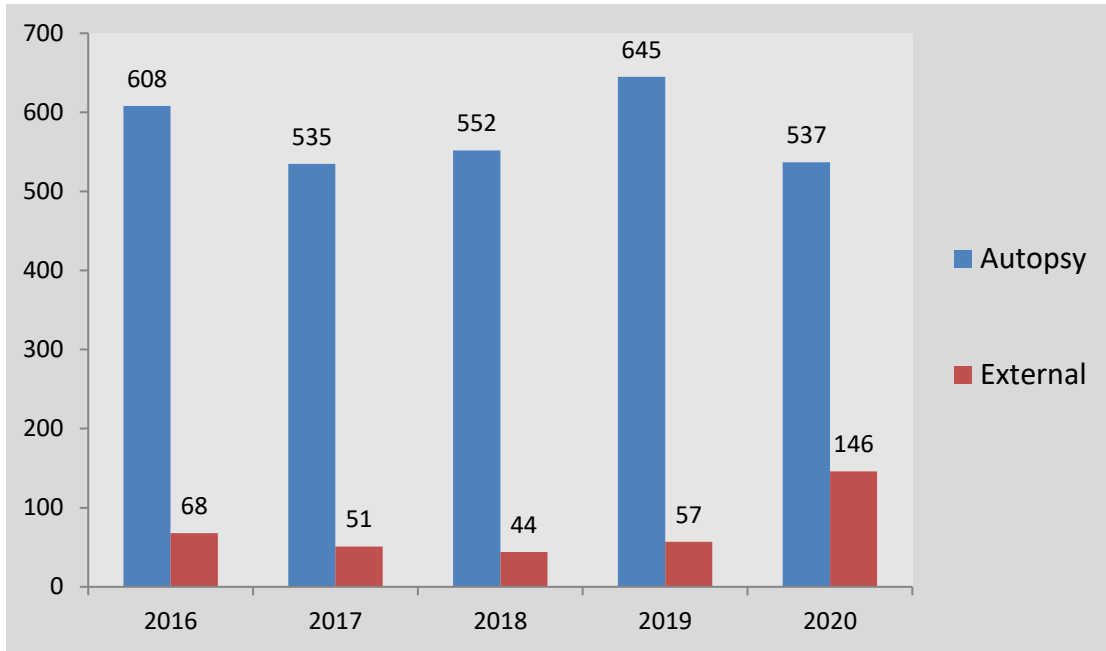
One case remained unidentified after examination (body found in water canal). There were no exhumations performed and no cases previously autopsied at local hospitals were retained by the EPOME in 2020.

EPOME DATA

TOTAL CASES HANDLED BY THE EPOME – 2016 to 2020

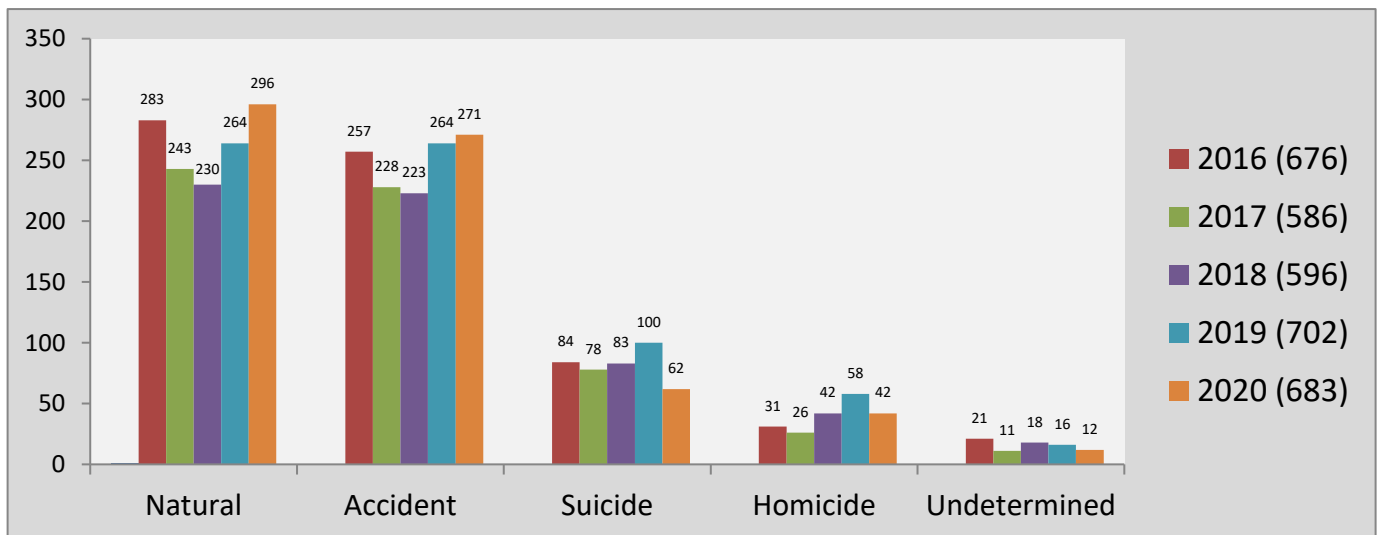


EXAM CASES 2016 to 2020– EXAMINATION TYPE

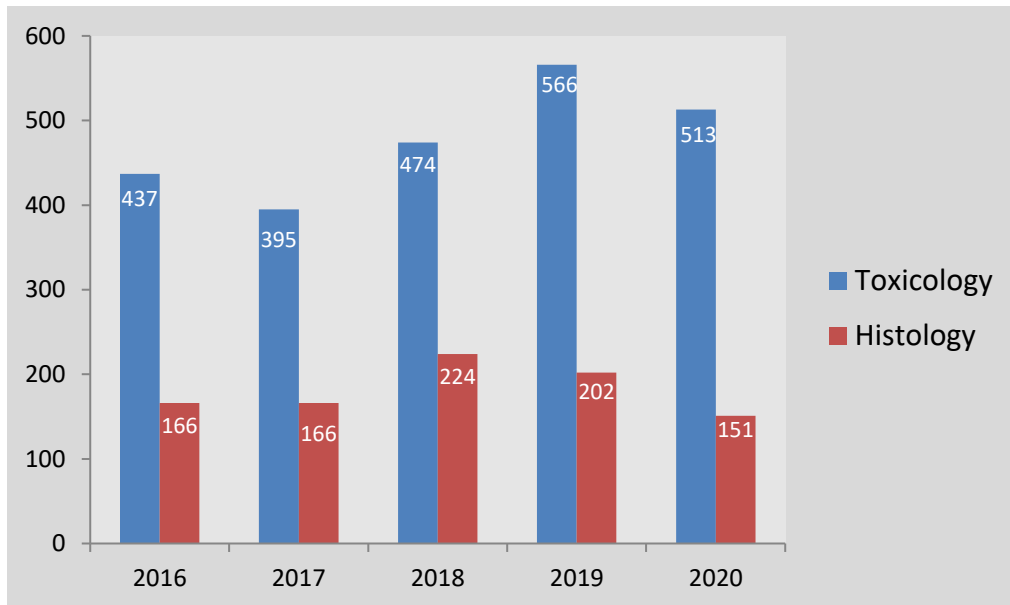


The autopsy to external examination ratio for 2020 was 3.67:1

EXAM CASES 2016 to 2020 – MANNER OF DEATH

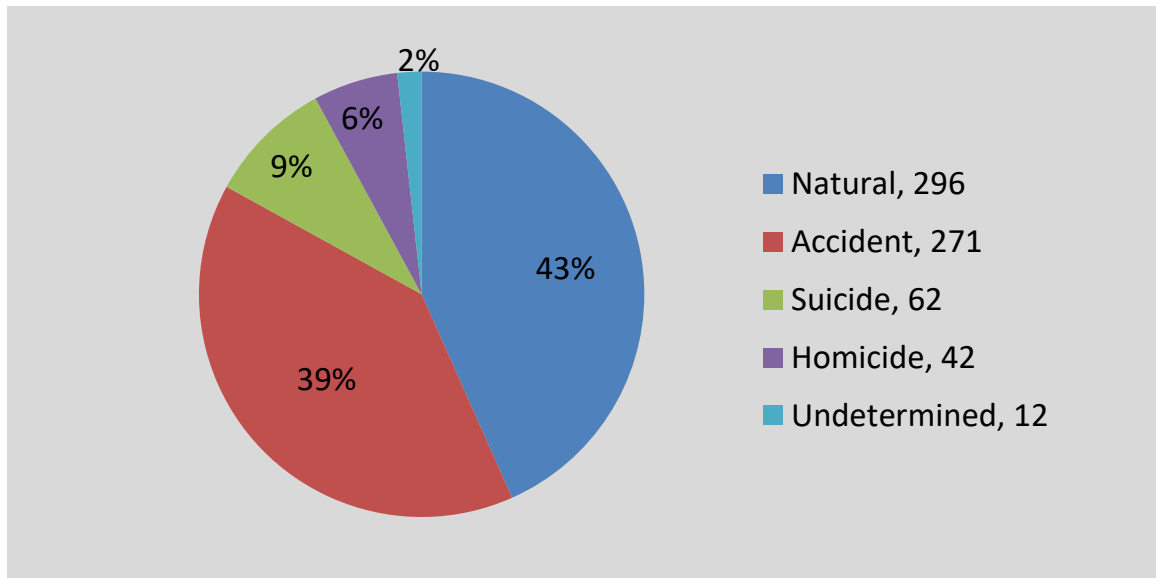


EXAM CASES 2016 to 2020– TOXICOLOGY & HISTOLOGY REQUESTS



EPOME 2020: EXAM CASES

2020 TOTAL EXAM CASES (683) – MANNER OF DEATH



2020 TOTAL EXAM CASES (683) – MANNER OF DEATH & AUTOPSY STATUS

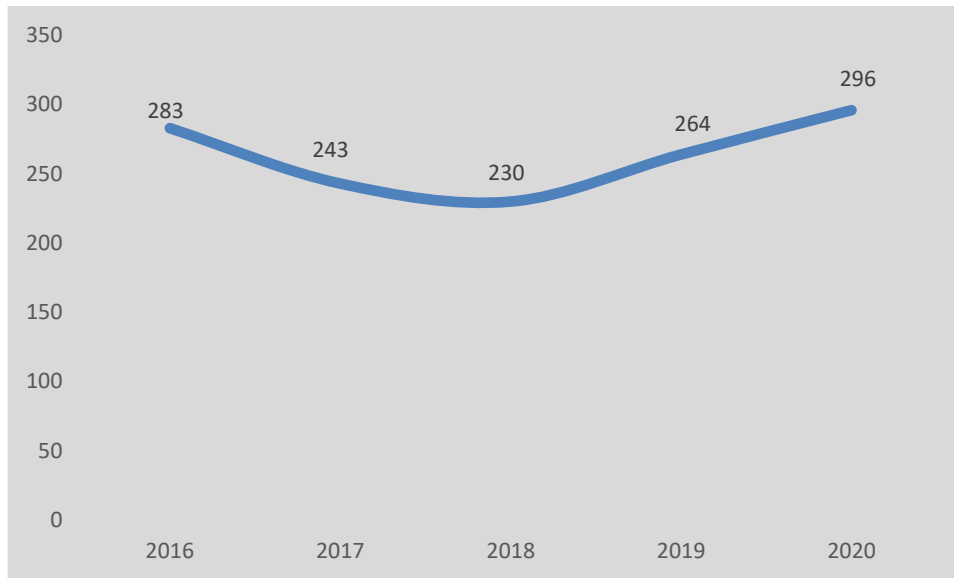
	MANNER OF DEATH					TOTAL (%)
	NATURAL	ACCIDENT	SUICIDE	HOMICIDE	UNDETERMINED	
Full Autopsy (%)	191(64.5%)	239 (88%)	54 (87%)	42 (100%)	11 (91.7%)	537 (78%)
Partial Autopsy (%)	0	0	0	0	0	0
External Exam (%)	105 (35.5%)	32(12%)	8(13%)	0	1(8.3%)	146 (21.4%)
TOTAL	296	271	62	42	12	683

2020 TOTAL EXAM CASES (683) – GENDER AND AGE GROUP

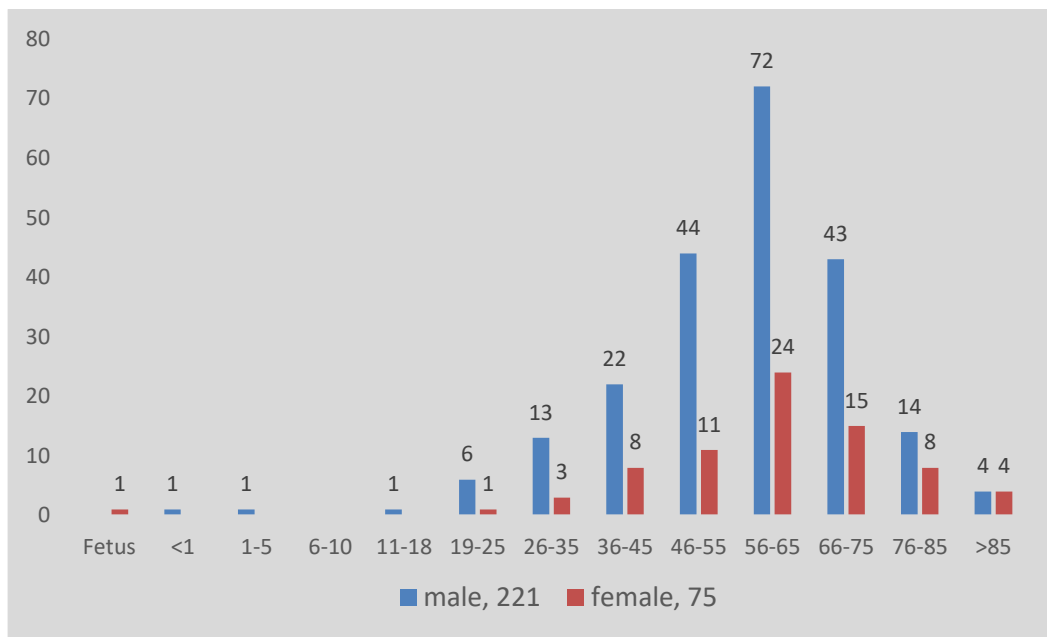
Age Group	MANNER OF DEATH									
	NATURAL		ACCIDENT		SUICIDE		HOMICIDE		UNDETERMINED	
	♂	♀	♂	♀	♂	♀	♂	♀	♂	♀
Unidentified	0	0	0	0	0	0	0	0	1	0
Fetus	0	1	0	0	0	0	0	0	0	0
<1	1	0	8	2	0	0	0	0	1	1
1-5	1	0	2	1	0	0	1	2	1	0
6-10	0	0	1	0	1	0	0	0	0	0
11-18	1	0	8	3	3	3	3	0	0	0
19-25	6	1	35	12	13	0	6	1	3	0
26-35	13	3	38	13	9	3	7	1	2	0
36-45	22	8	24	13	13	1	8	2	0	1
46-55	44	11	36	8	4	1	4	2	0	0
56-65	72	24	26	14	5	1	2	1	2	0
66-75	43	15	11	4	4	1	1	1	0	0
76-85	14	8	8	0	0	0	0	0	0	0
>85	4	4	2	2	0	0	0	0	0	0
TOTAL	221	75	199	72	52	10	32	10	10	2
♂: <u>514</u>	296		271		62		42		12	
♀: <u>169</u>										

♂=male; ♀=female

NATURAL DEATHS
NATURAL DEATHS: 2016 - 2020



2020 NATURAL DEATHS (296) – SEX AND AGE GROUP

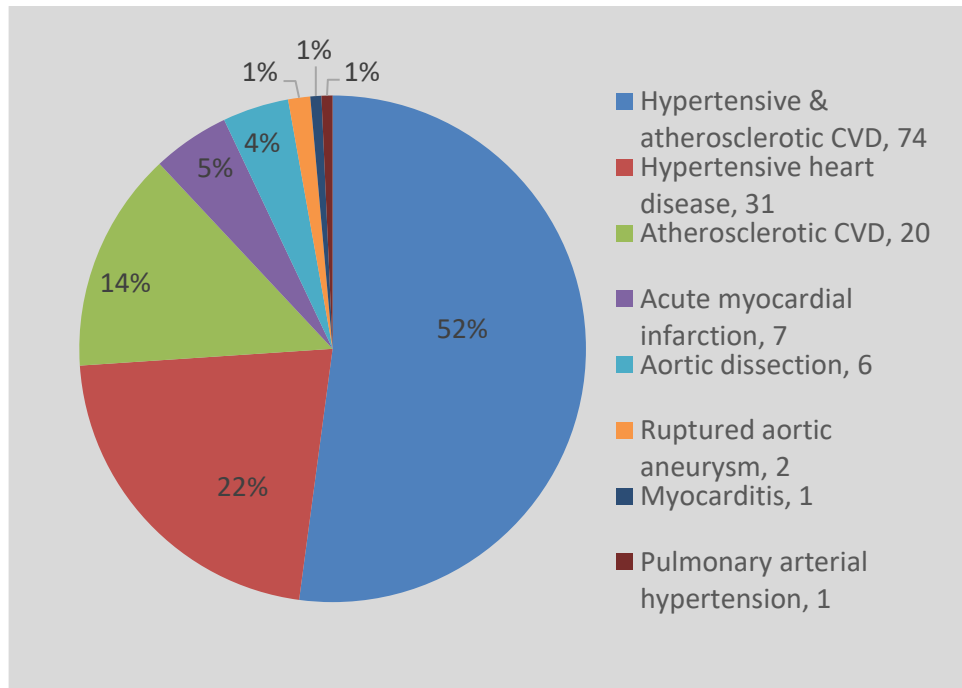


Individuals aged 46 - 72 years comprised more than two thirds (66.9%) of all people who succumbed to natural deaths in 2020. The male:female ratio for natural deaths investigated by the OME was 2.94:1 in 2020.

2020 NATURAL DEATHS (296) – CAUSE OF DEATH

Cardiovascular Disease	142
COVID-19	50
Complications of Chronic Alcohol Abuse	14
Diabetes Mellitus	11
Pulmonary Embolism	10
Liver Cirrhosis	7
Chronic Obstructive Pulmonary Disease	7
Natural Causes, NOS	6
Upper Gastrointestinal Tract Bleeding	6
Pneumonia (non-COVID-19)	4
Complications of Abdominal Hernia	4
Peptic Ulcer Disease	3
Seizure Disorder	3
Cellulitis	2
Intracranial hemorrhage	2
Morbid Obesity	2
End-stage renal disease	2
Pulmonary hemorrhage	2
Aspiration pneumonia	2
Malnutrition	2
Cancer:	
Esophagus	2
Lung	2
Stomach	1
Breast	1
Liver	1
Pancreas	1
Undetermined primary	1
Prematurity	1
Asthma	1
Age-related deconditioning	1
Pericarditis	1
Pancreatitis	1
Peritonitis	1
TOTAL	296

Cardiovascular Disease includes 142 cases with the following cause of death statements: *hypertensive and atherosclerotic cardiovascular disease (74), hypertensive heart disease (31), atherosclerotic cardiovascular disease (20), acute myocardial infarction (7), aortic dissection (6), ruptured aortic aneurysm (2), myocarditis (1), and pulmonary arterial hypertension due to atrial septal defect (1).*

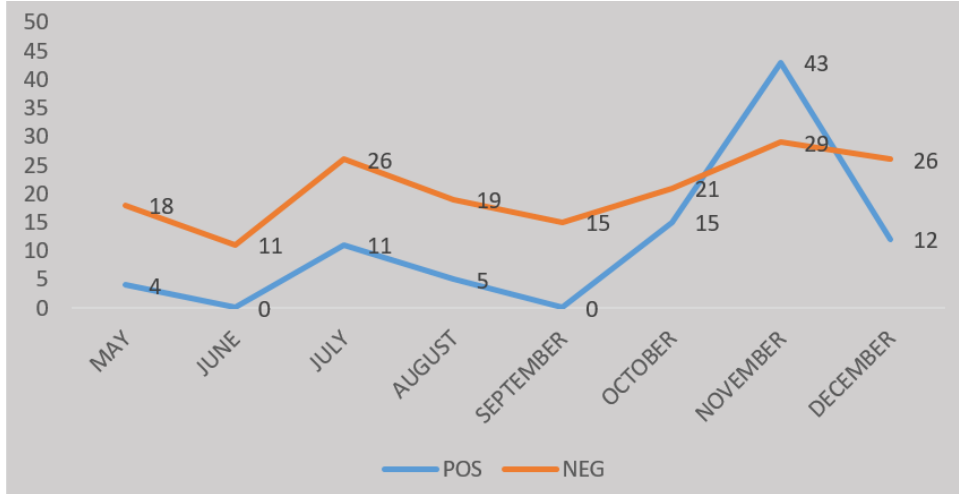


CVD=cardiovascular disease

2020 COVID-19 DEATHS (50)

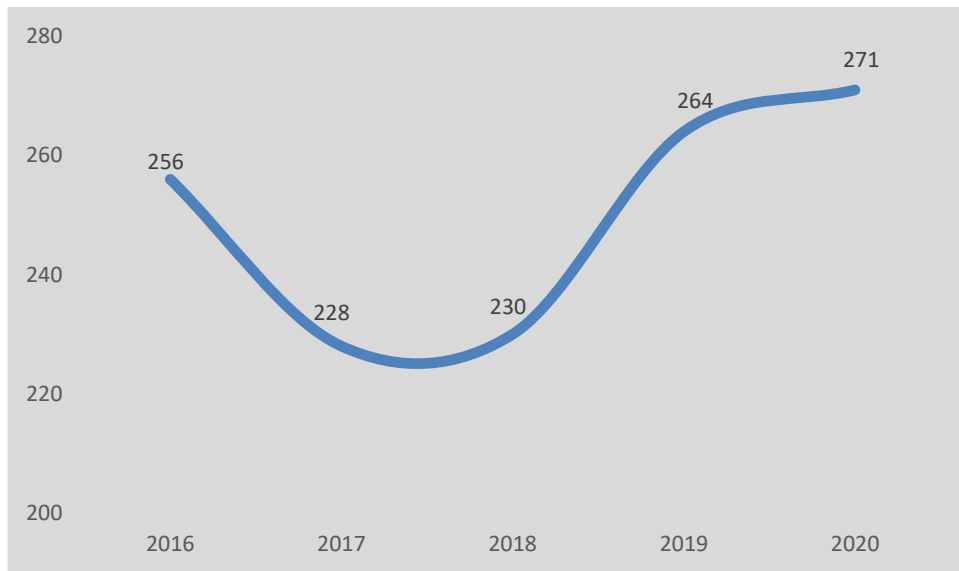
The vast majority (>97%) of COVID-19 deaths are investigated and reported by local primary care physicians. Only 2.3% of COVID-19 deaths (50/2165 as of 12/31/2020) in El Paso were investigated by the OME. Despite this, COVID-19 was the second most common cause of death in natural deaths certified by the OME. Postmortem molecular testing was secured through the Department of Health and The University Medical Center for selected cases, including decedents who complained of flu-like symptoms prior to their death. The OME conducted 255 of such tests between May and December, 2020, with an overall positivity rate of 35% (90/255). Of the 90 COVID-19-positive cases, 58 were brought to the OME for examination. COVID-19 was thought to be the cause of death (or a significant contributing condition) in 50/58 cases.

2020 COVID-19 POSTMORTEM TESTING (255 TESTS)

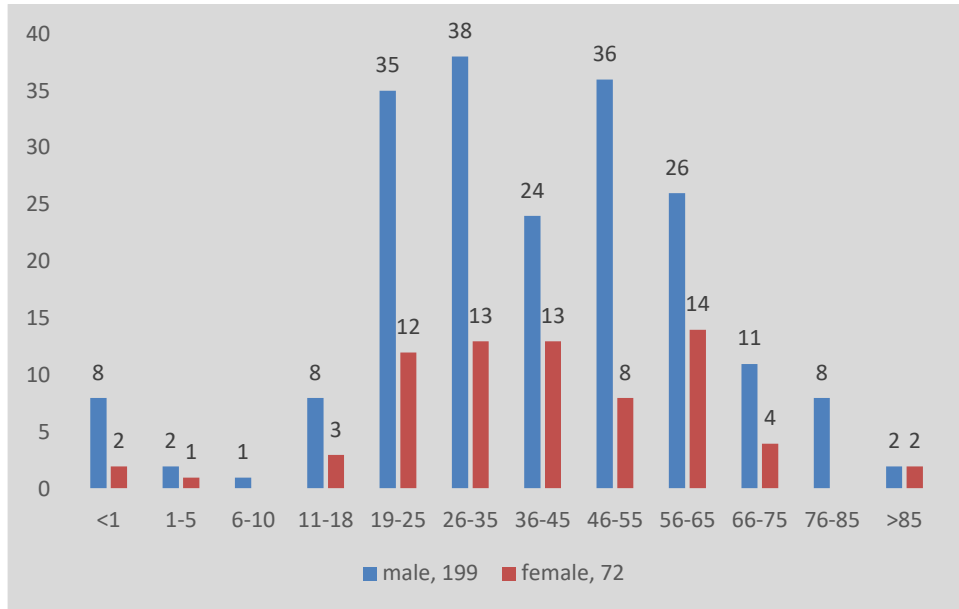


ACCIDENTS

ACCIDENTS: 2016 – 2020



2020 ACCIDENTS (271) – SEX AND AGE GROUP

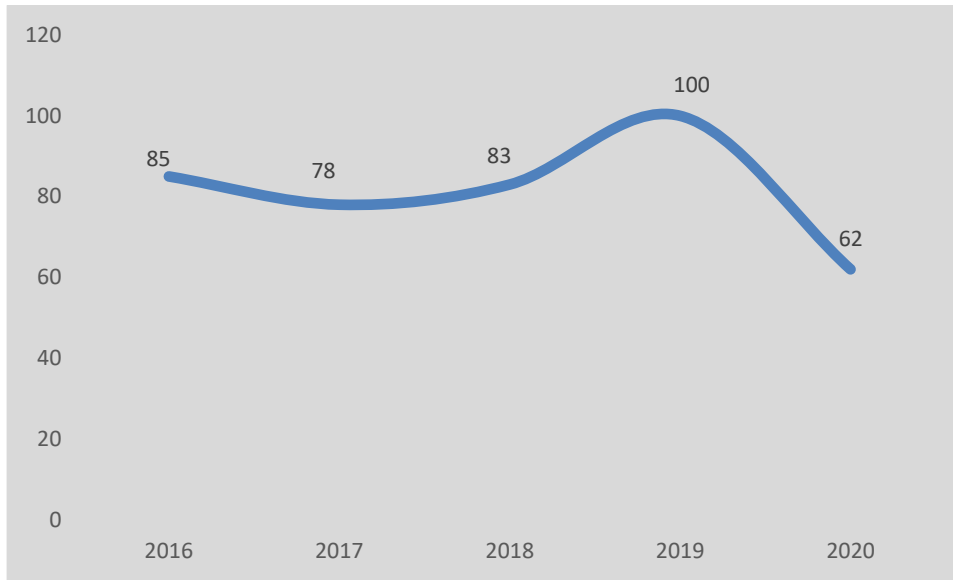


Accident victims were most frequently male (73%). Individuals between the ages of 22 – 49 years comprised 50% of all accidental fatalities.

2020 ACCIDENTS (271) – MECHANISM

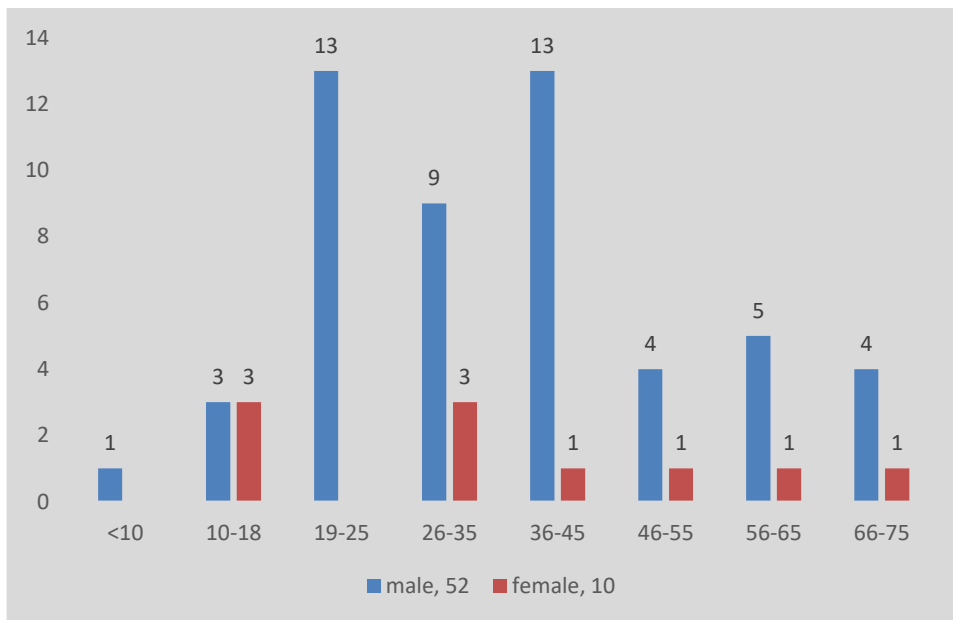
Acute Drug Toxicity	128
Blunt Force Injuries	93
Drowning	24
Asphyxia - Suffocation	6
Carbon Monoxide Poisoning	4
Alcohol Toxicity	4
Asphyxia – Choking/Aspiration	3
Environmental Heat Exposure	2
Asphyxia – Mechanical	3
Gunshot Wound	3
Environmental Cold Exposure	1
TOTAL	271

SUICIDES
SUICIDES: 2016 - 2020



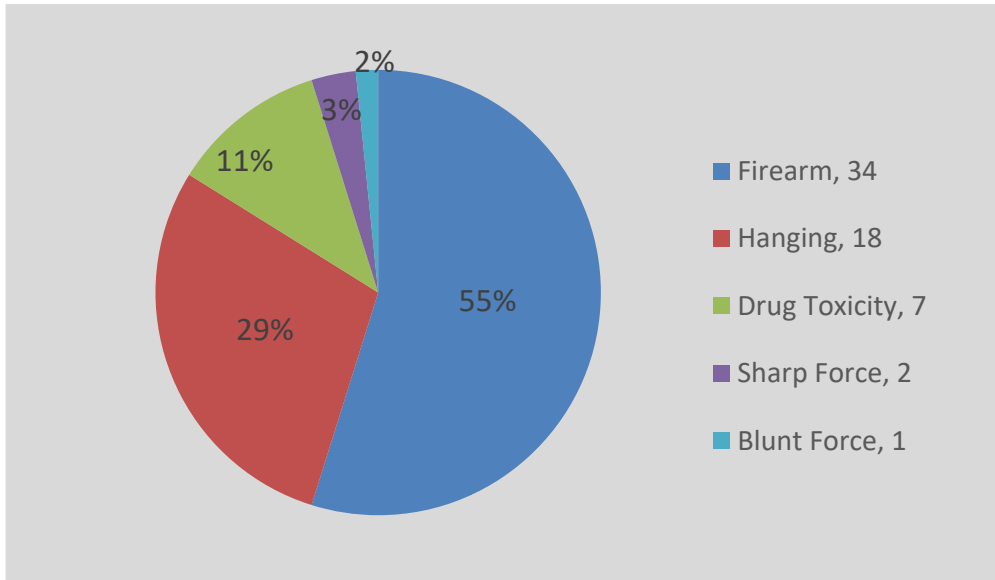
Compared to 2019, there was a decrease of 38% in suicides in 2020

2020 SUICIDES (62) – SEX AND AGE GROUP



Suicide victims were most frequently male (83.8%). Individuals between the ages of 21 – 39 years comprised 45% of all suicides.

2020 SUICIDES (62) – METHOD



The majority (26 out of 34 [82%]) of suicide by firearm involved wounds to the head.

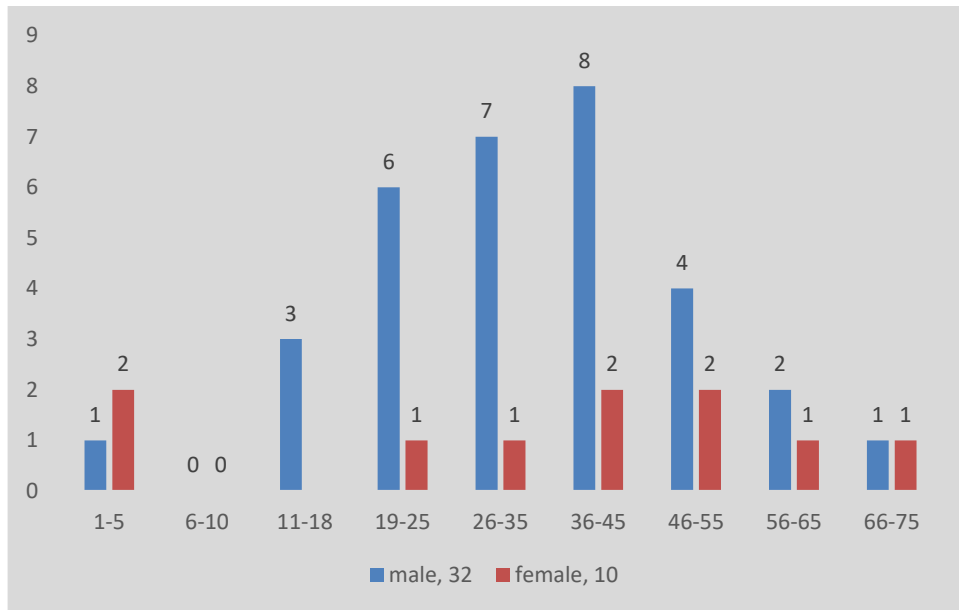
HOMICIDES

HOMICIDES: 2016 - 2020



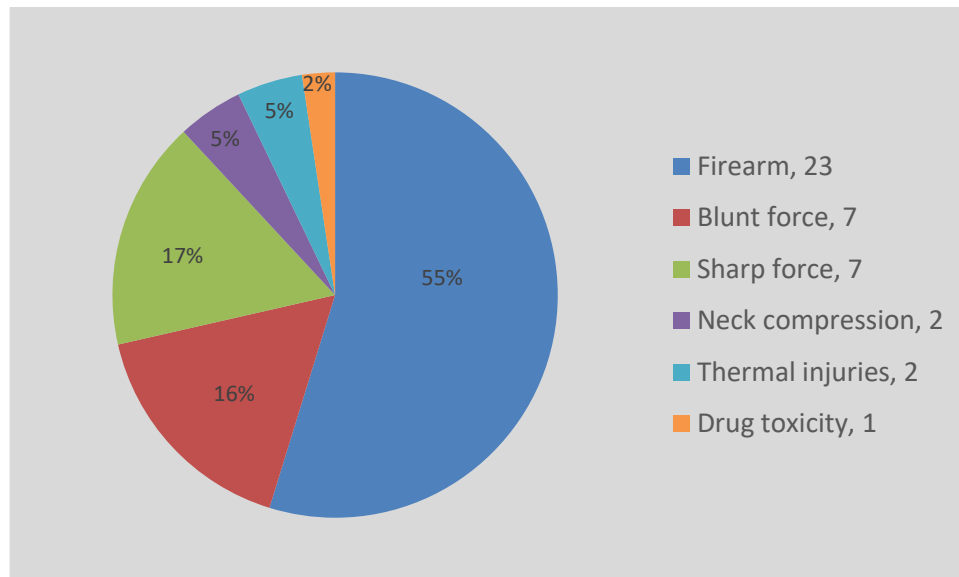
There was a 28% decrease in homicides from 2019 (58 cases) to 2020 (42 cases). The homicide rate for El Paso County in 2020 was to 5 per 100,000 people (compared to 5.8 US National Average [CDC, 2018]).

2020 HOMICIDES (42) – SEX AND AGE GROUP



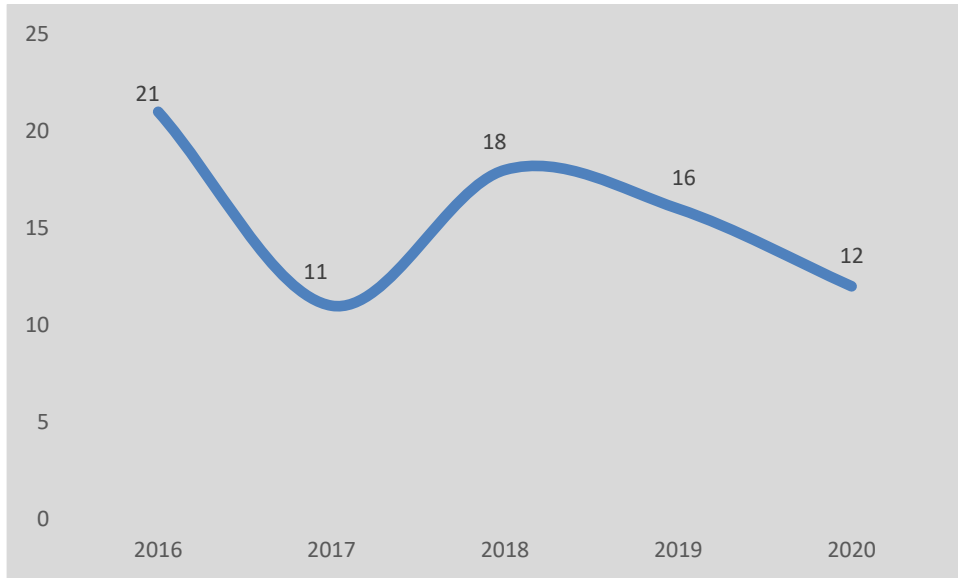
Homicide victims were most frequently male (76%).

2020 HOMICIDES (42) – MODE OF INFLICTION

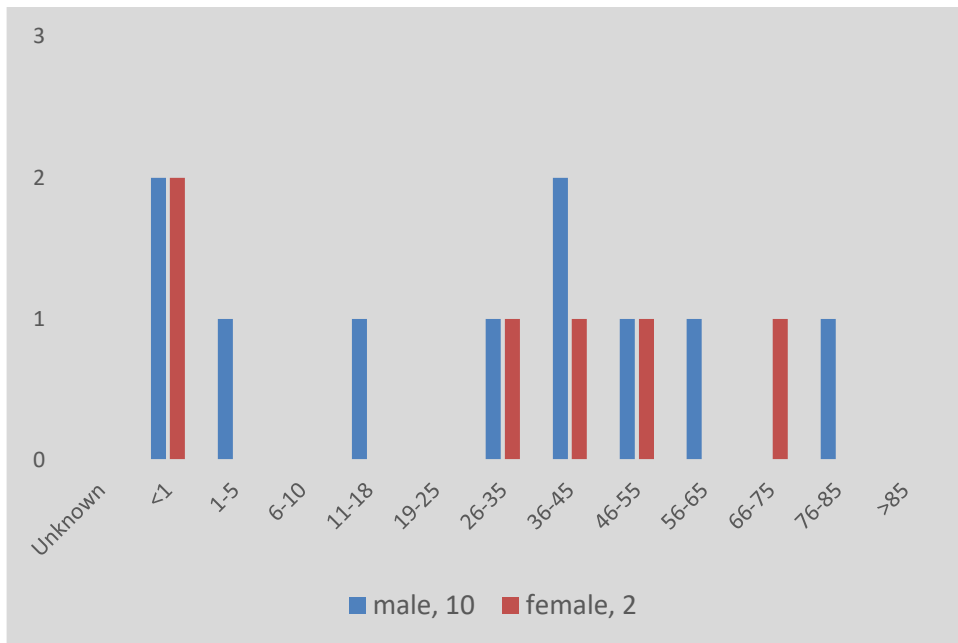


UNDETERMINED

UNDETERMINED MANNER OF DEATH: 2016 - 2020



2020 UNDETERMINED MANNER OF DEATH (12) – SEX AND AGE GROUP



CHILD FATALITY

In 2020, there were 38 deaths of individuals 17 years or age or younger, which included the deaths of 13 infants (a child in the first year of life) and 25 children between the ages of 1 and 17.

INFANT (AGE <1) & CHILD (AGE 1-17) DEATHS: 2016 - 2020



2020 INFANT & AND CHILD DEATHS (38) – SUMMARY TABLE

	MANNER OF DEATH					TOTAL (%)
	NATURAL	ACCIDENT	SUICIDE	HOMICIDE	UNDETERMINED	
Full Autopsy (%)	3 (100%)	20 (95.2%)	4 (66%)	5 (100%)	3 (100%)	98%
External Exam (%)	0	1 (4.8%)	2 (33%)	0	0	2%
TOTAL	3	21	6	5	3	100%

2020 INFANT & CHILD DEATHS (38) – MANNER OF DEATH

Age Group	MANNER OF DEATH									
	NATURAL		ACCIDENT		HOMICIDE		SUICIDE		UNDETERMINED	
	♂	♀	♂	♀	♂	♀	♂	♀	♂	♀
<1	0	1	8	2	0	0	0	0	1	1
1-3	1	0	0	1	0	2	0	0	1	0
4-6	0	0	3	0	1	0	0	0	0	0
7-10	0	1	0	0	0	0	1	0	0	0
11-14	0	0	1	1	0	0	1	0	0	0
15-17	0	0	3	2	2	0	1	3	0	0
TOTAL	1	2	15	6	3	2	3	3	2	1
♂ : 24	3		21		5		6		3	
♀ : 14										
total: <u>38</u>										

♂=male; ♀=female

2020 CHILD (AGE 1-17) DEATHS (25) – CAUSE OF DEATH

Blunt Force Injury	9
Firearm	5
Drowning	2
Hanging	2
Drug Toxicity	2
Aspiration of food	1
Neck compression	1
Myocarditis	1
Epilepsy	1
Undetermined	1
TOTAL	25

includes 5 homicides (neck compression, firearm [2], and blunt force injury [2]).

2020 INFANT (<1Y) DEATHS (13) – CAUSE OF DEATH

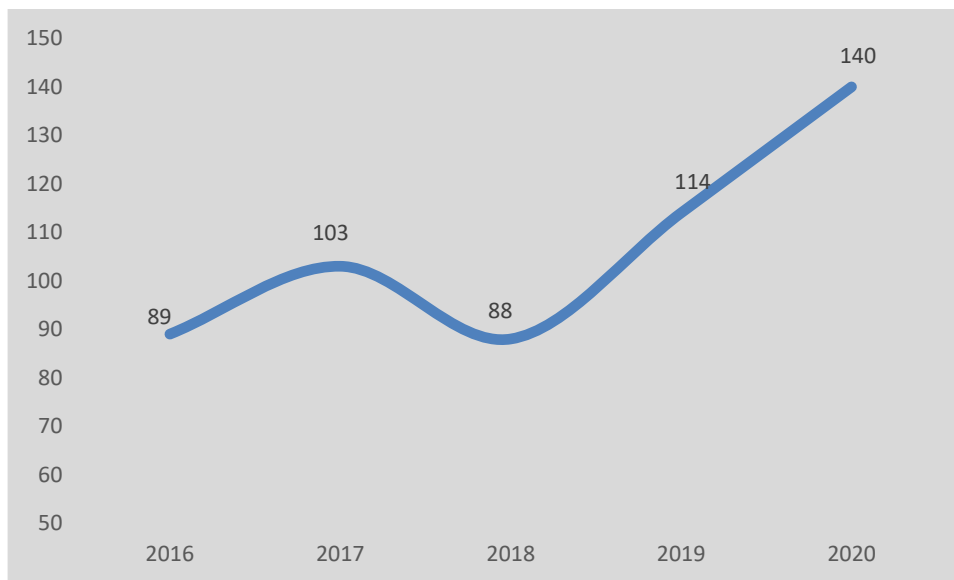
Asphyxia – Suffocation	6
Undetermined	2
Mechanical Asphyxia	1
Maternal Trauma	1
Multiple Dog Bite Injuries	1
Firearm	1
Prematurity	1
TOTAL	13

CHILD FATALITY – SUMMARY

Childhood deaths represented 5.5% of all the exam cases investigated by the EPOME in 2020. Male decedents comprised 63% of the total deaths in children. The most common manner of death among children was accident (55%).

TOXICOLOGY-RELATED DEATHS

TOXICOLOGY-RELATED DEATHS: 2016 - 2020



There was a 22.8% increase in toxicology-related deaths from 2019 (114 cases) to 2020 (140 cases).

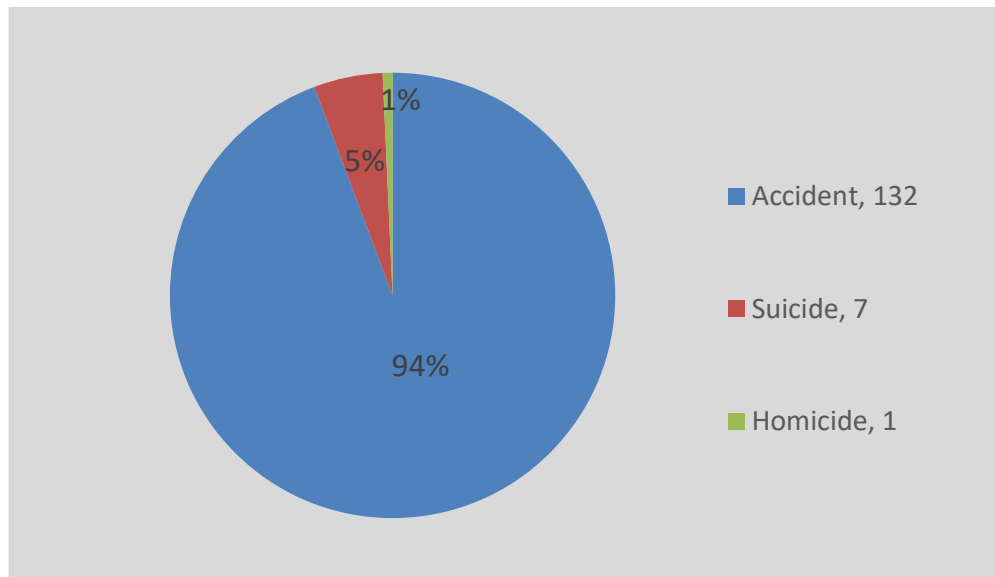
2020 TOXICOLOGY-RELATED DEATHS (140) – SUMMARY

Age Group	MANNER OF DEATH					
	ACCIDENT		SUICIDE		HOMICIDE	
	♂	♀	♂	♀	♂	♀
11-18	2	0	0	1	0	0
19-25	13	7	2	0	0	0
26-35	20	9	2	0	0	0
36-45	11	8	1	0	1	0
46-55	32	2	1	0	0	0
56-65	13	8	0	0	0	0
66-75	5	1	0	0	0	0
76-85	1	0	0	0	0	0
TOTAL	97	35	6	1	1	0
♂: <u>104</u>	132		7		1	
♀: <u>36</u>						

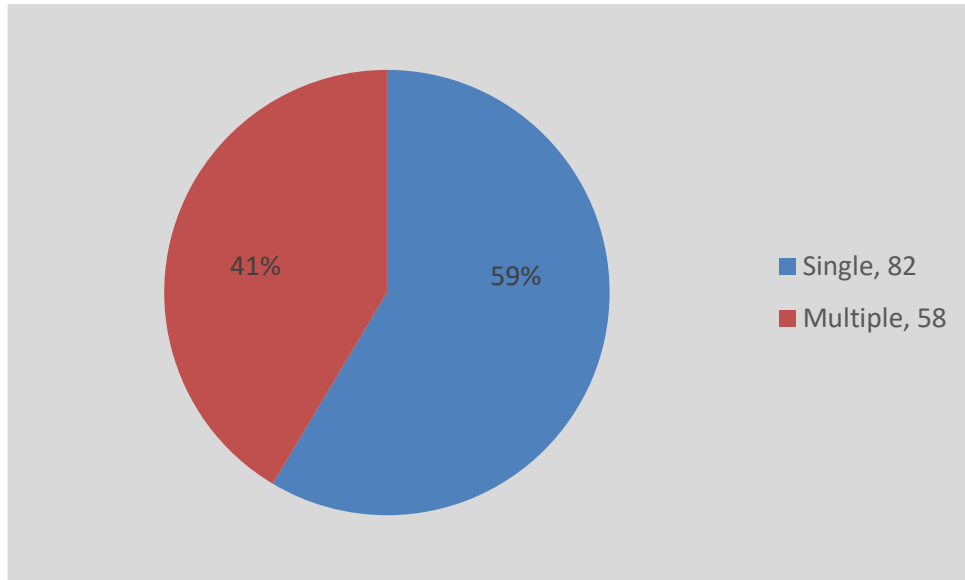
♂=male; ♀=female

By definition, toxicology-related deaths cannot be natural in manner. Accidents comprised 94% of all toxicology-related deaths. Nearly half (45%) of the decedents who succumbed to drug toxicity were between the ages of 26 and 55. Regarding accidental toxicology-related deaths, the male-to-female ratio is 2.7:1.

2020 TOXICOLOGY-RELATED DEATHS (140) – Manner of Death



2020 TOXICOLOGY-RELATED DEATHS (140) – Single vs. Multiple Drugs



2020 SINGLE DRUG-RELATED DEATHS (82) – Drug Involved

Fentanyl	22
Methamphetamine	21
Cocaine	15
Heroin	11
Ethanol	4
Methadone	3
Morphine	2

**only drugs involved in ≥2 cases are mentioned*

2020 MULTIPLE DRUG-RELATED DEATHS (58) –Most Frequently Involved Drugs

Cocaine	26
Fentanyl	23
Methamphetamine	19
Alprazolam	13
Ethanol	8
Heroin	8
Morphine	7
Diphenhydramine	5
Tramadol	5

**only drugs involved in ≥5 cases are mentioned*

2020 TOXICOLOGY-RELATED DEATHS – Multiple-Drug-Related Deaths (58): Drugs Involved

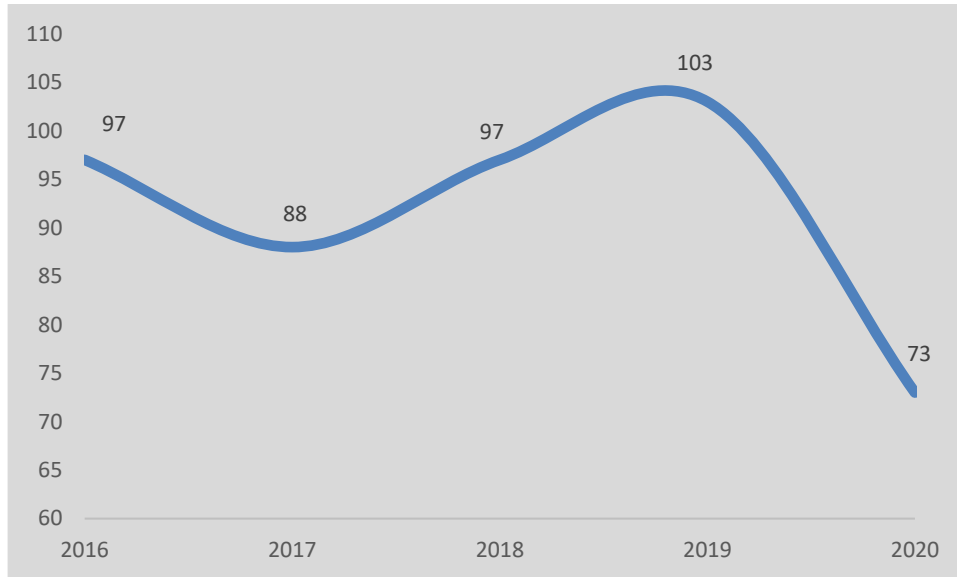
MANNER	Number of Drugs				
	2	3	4	5	6
SUICIDE					
1				24, 38, 41, 81, 86	
2				3, 19, 21, 23, 86	
3	3, 35				
4					10, 17, 26, 45, 65, 72, 81, 91
ACCIDENT					
1				3, 4, 13, 20, 65	
2		19, 40, 58			
3	3, 35				
4				21, 24, 26, 91,93	
5					16, 19, 26, 32, 45, 83
6	19, 35				
7	35, 38				
8	32, 65				
9	58, 70				
10		19, 35, 41			
11	32, 35				
12	19, 35				
13	35, 58				
14	35, 58				
15		19, 35, 58			
16	19, 40				
17	35, 40				
18		3, 35, 58			
19		3, 19, 57			
20				3, 20, 26, 38, 65	
21		3, 35, 58			
22		3, 19, 57			
23		3, 5, 35			
24		3, 19, 40			
25		3, 19, 40			
26	5, 19				
27	9, 19				
28		10, 17, 77			
29	19, 32				
30	19, 32				
31	19, 32				
32	19, 32				
33		19, 35, 58			
34	19, 35				
35	19, 35				
36	19, 35				
37	35, 58				
38	35, 58				
39				21, 41, 84, 86, 91	
40	40, 58				
41	45, 58				
42	40, 58				

MANNER	Number of Drugs				
	2	3	4	5	6+
ACCIDENT					
43	40, 58				
44	19, 58				
45	35, 57				
46			19, 20, 58, 65		
47	19, 58				
48			27, 32, 35, 93		
49	58, 65				
50	19, 65				
51	19, 70				
52	35, 70				
53			4, 26, 38, 91		
54		21, 38, 91			

2020 TOXICOLOGY-RELATED DEATHS – Multiple-Drug-Related Deaths: Medication/Drug Key

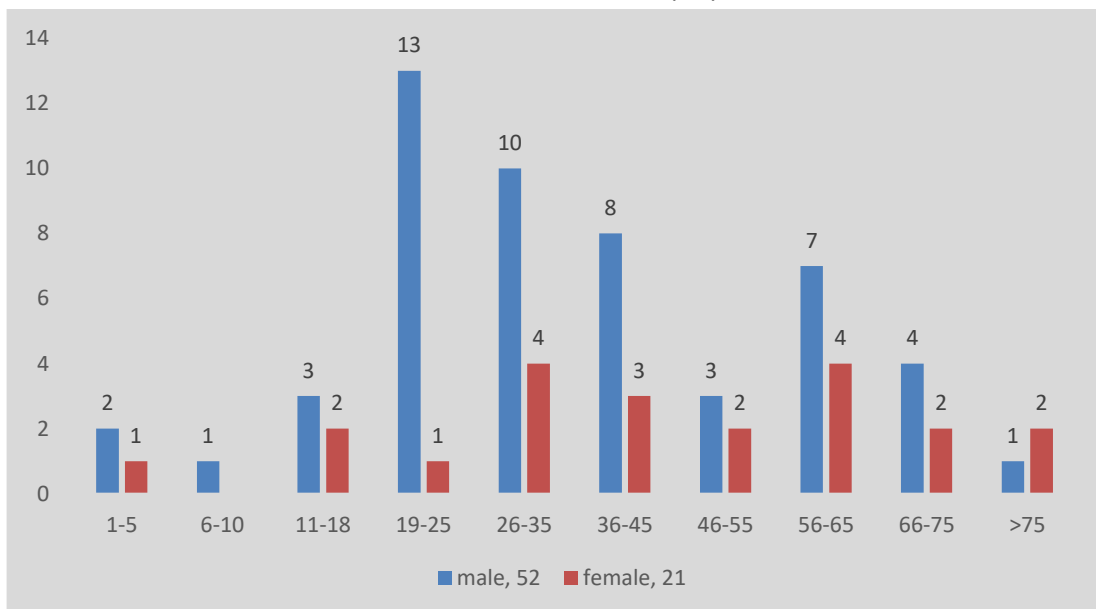
Acetaminophen	1	Etizolam	34	Naproxen	67
Acetone	2	Fentanyl	35	Nordiazepam	68
Alprazolam	3	Fluoxetine	36	Olanzapine	69
Amitriptyline	4	Fluvoxamine	37	Opiates (NOS)	70
Amphetamine	5	Gabapentin	38	Oxazepam	71
Aripiprazole	6	Haloperidol	39	Oxycodone	72
Bath Salts	7	Heroin	40	Oxymorphone	73
Benzodiazepine (NOS)	8	Hydrocodone	41	Paroxetine	74
Buprenorphine	9	Hydroxychloroquine	42	Pentobarbital	75
Butalbital	10	Hydrogen Sulfide	43	Perphenazine	76
Bupropion	11	Hydromorphone	44	Phenobarbital	77
Buspirone	12	Hydroxyzine	45	Phentermine	78
Carisoprodol	13	Inhalants (NOS)	46	Phenylpropanolamine	79
Chlordiazepoxide	14	Insulin	47	Pregabalin	80
Chlorphenamine	15	Isopropanol	48	Promethazine	81
Citalopram	16	Lamotrigine	49	Pseudoephedrine	82
Clonazepam	17	Levamisole	50	Quetiapine	83
Clozapine	18	Loperamide	51	Risperidone	84
Cocaine	19	Lorazepam	52	Salicylates	85
Codeine	20	Meclizine	53	Sertraline	86
Cyclobenzaprine	21	Meperidene	54	Synth. Cannabinoid	87
Desipramine	22	Metaxolone	55	Temazepam	88
Dextromethorphan	23	Metformin	56	Tetrafluoroethane	89
Diazepam	24	Methadone	57	Topiramate	90
Difluoroethane	25	Methamphetamine	58	Tramadol	91
Diphenhydramine	26	Methane	59	Trazodone	92
Donepezil	27	Methanol	60	Venlafaxine	93
Doxepine	28	Methylphenidate	61	Verapamil	94
Doxylamine	29	Metroprolol	62	Ziprasidone	95
Duloxetine	30	Midazolam	63	Zolpidem	96
Ethane	31	Mirtazapine	64	Zopiclone	97
Ethanol	32	Morphine	65		
Ethylene Glycol	33	Mirtazapine	66		

MOTOR VEHICLE RELATED DEATHS
MOTOR VEHICLE RELATED DEATHS: 2016 - 2020



There was a 29% decrease in motor vehicle-related deaths from 2019 (103 cases) to 2020 (73 cases).

2020 MOTOR VEHICLE RELATED DEATHS (73) – SUMMARY TABLE



There were 73 motor vehicle related fatalities in 2020. All but one (1.3%) were accident (undetermined; pedestrian hit by train). Males comprised 71.2% of all motor vehicle related deaths in 2020.

2020 MOTOR VEHICLE RELATED DEATHS (73) – STATUS OF DECEDENT

Motor vehicle – driver*	29
Motor Vehicle – Passenger	17
Pedestrian struck by motor vehicle**	15
Motorcyclist – operator	11
Bicyclist hit by motor vehicle	1
TOTAL	73

*includes 3 decedents operating an all-terrain vehicle, a recreational vehicle, and a trailer, respectively.

**includes one pedestrian hit by a train and one hit by an agricultural sprayer

MISCELLANEOUS DATA - EPOME

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
2016	12	0	2
2017	7	0	0
2018	13	0	1
2019	17	0	1
2020	18	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 2020, there were **23 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 2020, there were 3 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
2016	3084
2017	3113
2018	3278
2019	3392
2020	5020

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, 394 decedents have been positively identified using fingerprints.

YEAR	Fingerprint ID
2016	49
2017	51
2018	85
2019	105
2020	104

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, 97 cases have been referred to this program.

YEAR	Unclaimed Bodies
2016	25
2017	17
2018	14
2019	22
2020	19

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 I (minor) deficiency, and that 90% of all exam cases are finalized within 90 calendar days in order to avoid a phase II (major) deficiency.

2020 EPOME EXAM CASES (683) – TIME FROM AUTOPSY TO FINAL WRITTEN AUTOPSY REPORT

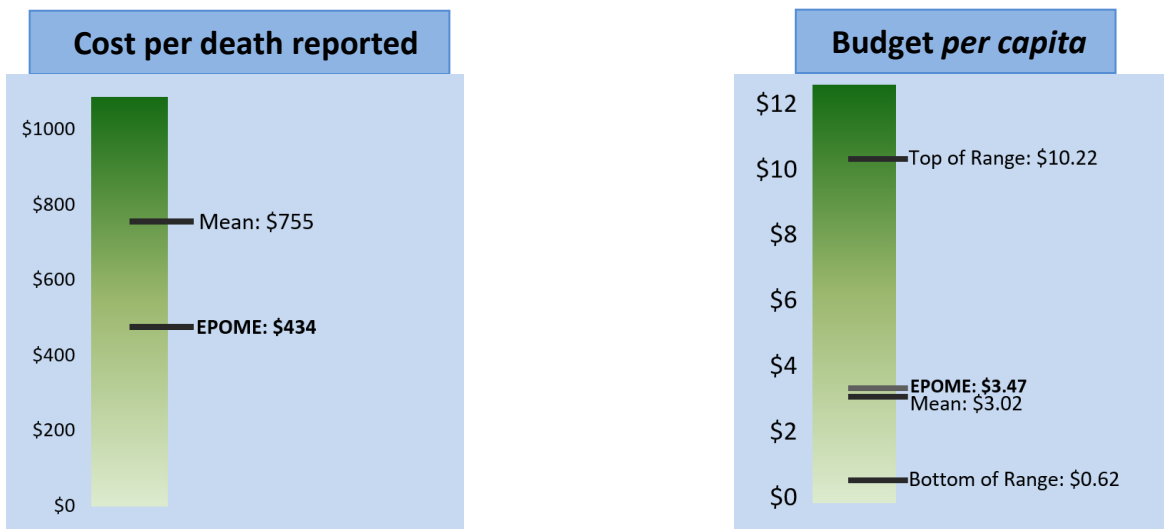
Time for final report	No. of cases (%)
Within 60 days	666 (98)
Within 90 days	675 (99)
>90 days	8 (1.1)

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 **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 2020, the EPOME has a *cost per death reported* of **\$434.5** and a *budget per capita* of **\$3.47/year**.

EL PASO COUNTY COST OF MEDICOLEGAL DEATH INVESTIGATION (AS COMPARED WITH OTHER 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 AND PRESENTATIONS

Lorenzo Flores – Forensic Photographer

- 01/27/2020 Shattered Dreams (Parent Meeting). Franklin High School
- 02/01/2020 SISD Mother Daughter Conference. Americas High School
- 02/19/2020 Center for Career and Technology Education. EPISD

Mario A Rascon, MD, MHCM – Chief Medical Examiner

- 01/16/20 *Responding to tragedy.* The Texas Conference of Urban Counties. El Paso, TX.
- 02/20/20 *The Implementation of a Forensic Pathology Rotation for Medical Students.* AAFS Annual Meeting. Anaheim. CA. 2020.
- 03/01/20 *Suicide in Children in El Paso County.* (Jones H) USCAP Annual Meeting. Los Angeles, CA.
- 09/23/20 *Death Certification & COVID-19 Pandemic.* Internal medicine grand rounds. TTUHSC.
- 10/20/20 *Forensic Pathology and Public Health.* Universidad Autonoma de Ciudad Juarez.

Janice Diaz-Cavallieri – Deputy Medical Examiner

- 11/09/20 Conversations with a Medical Examiner: Cause & Manner of Death. Texas Justice Court.
- February 2020 *Death Certification/Cause and manner of death.* EPOME.

II. INTERNSHIP PROGRAM

Spring

- Leann Rodriguez, Morgue, Texas Tech University Health Sciences Center, Biomedical Sciences.
- Victoria Zaragoza, Morgue, UTEP, Forensic Science.
- Jazmine Jimenez, Investigations, UTEP, Forensic Science.
- Erika Monroy, Investigations, NMSU, Masters in Chemistry.

PROFESSIONAL DEVELOPMENT

I. INVESTIGATIVE STAFF

Seminars

January 2020

Aquatic & Homicidal Drowning Investigation: Team Lifeguard Systems, INC – Ashley Rios.

February 2020

EOC for public officials –El Paso Emergency Management – Annabel Salazar, Irene Santiago.

Investigation of water deaths, Medical Examiner’s Office Review – Ashley Rios, Morgan Riddle, Jose Romero, Christina Enriquez, Kathy Martinez, Gabriela Macias, Miguel Aguirre, Jorge Ordaz, Annabel Salazar.

Stop the Bleed-presented by the Border RAC – Annabel Salazar, Kathy Martinez, Ashley Rios, Christina Enriquez, Morgan Riddle, Miguel Aguirre.

Death Certificate Certification/Cause and manner of death. EPOME, Dr. Janice Diaz – Kathy Martinez, Gabriela Macias.

September 2020

SUIDI Reporting Form Webinar – Miguel Aguirre, Jorge Ordaz, Ashley Rios, Kathy Martinez, Gabriela Macias, Morgan Riddle, Jose Romero, Christina Enriquez, Annabel Salazar.

Asphyxial Deaths-Classifications and Causes/Death Investigation Training Academy – Annabel Salazar.

November 2020

Transportation Accident Investigations: NTSB and FAA Interface with Medicolegal Authorities – Morgan Riddle.

II. PATHOLOGY FACULTY

Janice Diaz-Cavallieri, MD

- National Association of Medical Examiners (NAME) annual meeting (Virtual). October 16-17.

Mario A Rascon, MD, MHCM

- Member of the El Paso United COVID-19 Transition Task Force
- Successfully Navigating the Judicial System as an Expert Witness. Workshop attended during the AAFS 72nd Annual Scientific Meeting. Anaheim, CA. February 25.
- Creative placemaking training. El Paso County & CIVICARTS.org (Virtual). October 7-8.

GLOSSARY

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

Accident – manner in which death results from unintentional injury, poisoning, or intoxication.

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 17 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 – manner in which death stems from a volitional or intentional act of one person against 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 document review, as to whether the death was caused by unnatural events.

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 and/or aging process 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, unexplained, 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 – manner 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.

2020 El Paso County Office of the Medical Examiner Annual Report

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