New Mexico Office of the Medical Investigator

Annual Report 2017

We investigate deaths to serve the living.

2017 Annual Report
Office of the Medical Investigator
State of New Mexico

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Office of the Medical Investigator (OMI)
2017 Annual Report

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Introduction

The Office of the Medical Investigator (OMI) investigates any death occurring in the State of New Mexico that is sudden, violent, untimely, unexpected or where a person is found dead and the cause of death is unknown. OMI performed services for a total of 7,229 deaths in 2017. A detailed breakout of the case distribution can be found in this report.

This report is presented in two sections. The first section of the report summarizes the activity of the OMI. The second represents data routinely collected by the OMI in a manner that answers questions related to mortality and public health from a medical examiner's perspective. The tables and figures included in the report are designed to be self-explanatory, and we hope you find them easy to read and understand. Definitions can be found in the Glossary and may provide assistance with the terminology encountered in the report. Readers with special interests, needs, or whose questions are not answered by this report may contact the OMI. Additionally, we encourage interested researchers to contact the New Mexico Bureau of Vital Records and Health Statistics (BVRHS) for complete mortality statistics.

Comments or suggestions concerning the content, format, or clarity of the report are always welcome.

Preparation of the Annual Report

The OMI data from which this report was compiled are maintained on a web-based data management system located at the New Mexico Scientific Laboratories in Albuquerque. OMI faculty Sarah Lathrop, DVM, Ph.D., OMI Research Coordinator Garon Bodor, MS, and Kayla Moorman, UNM Research Student using Microsoft Office 2016 Professional, prepared this report. UNM Health Sciences Center – Digital Printing and Document Services printed and bound the final distribution copies. Electronic copies of this report may be downloaded in .PDF format from the OMI website: http://omi.unm.edu.

Overview – Office of the Medical Investigator – 2017

The Office of the Medical Investigator (OMI) was created by the New Mexico State Legislature in 1972 and became operational in 1973. Replacing the county coroner system, the OMI was tasked[1] with investigating all reportable deaths occurring in New Mexico, to subsequently determine the cause and manner of death in such cases, and to provide formal death certification.

[1] NMSA Statute 24-11-1, et seq., and 7-NMAC 3.2.8

Reportable Deaths

Those deaths to be reported to the OMI include all deaths occurring in New Mexico as outlined below, regardless of where or when the initial injuring event occurred.

- Any death that occurs suddenly and unexpectedly, that is, when the person has not been under medical care for significant heart, lung or other disease.
- Any death suspected to be due to violence, i.e., suicidal, accidental or homicidal injury, regardless of when or where the injury occurred.
- Any death suspected to be due to alcohol intoxication or the result of exposure to toxic agents.
- Any death of a resident housed in a county or state institution, regardless of where death occurs. This refers to any ward of the state or individual placed in such a facility by legal authorization.
- Any death of a person in the custody of law enforcement officers.
- Any death of a person in a nursing home or other private institution without recent medical attendance.
- Any death that occurs unexpectedly during, in association with, or as a result of diagnostic, therapeutic, surgical or anesthetic procedures.
- Any death alleged to have been caused by an act of malpractice.
- Any death suspected to be involved with the decedent's occupation.
- Any death unattended by a physician.
- Any death due to neglect.
- Any stillbirth of 20 or more weeks' gestation unattended by a physician.
- Any maternal death to include death of a pregnant woman regardless of the length of the pregnancy, and up to six weeks post-delivery, even where the cause of death is unrelated to the pregnancy.
- Any death of an infant or child where the medical history has not established some pre-existing medical condition.
- Any death, which is possibly, directly or indirectly, attributable to environmental exposure, not otherwise specified.
- Any death suspected to be due to infectious or contagious disease wherein the diagnosis and extent of disease at the time of death are undetermined.
- Any death occurring under suspicious circumstances.
- Any death in which there is doubt as to whether or not it is a medical investigator's case should be reported.

Statutory Duty

The OMI Policy Manual, derived from statute, requires the OMI to perform the following duties in all cases of reportable deaths:

- Receive all reports of sudden, unexpected or unexplained deaths.
- Respond to all sudden, unexpected or unexplained deaths.
- In the absence of a physician, pronounce death.
- Take custody of the body and all articles on or near the body.
- Maintain the chain of custody of the body and all articles obtained there from.
- Conduct an investigation leading to the determination of the cause and manner of death.
- Obtain toxicology samples from the body when indicated, and arrange for necessary tests upon those samples that will aid in the determination of cause and manner of death; maintain the proper chain of custody and evidence on those samples; store those samples for an appropriate period of time.
- Certify the cause and manner of death and forward written certification to designated agencies.
- Properly dispose of human remains through release to family or designated and authorized entities.
- Provide accurate identification of all human remains when possible.
- Cooperate with authorized agencies having involvement with death investigation.
- Provide professional, objective testimony in state and local courts of law.
- Define procedures that establish fees for services and material provided by the OMI.
- Define procedures to reimburse all parties providing services to the OMI.
- Establish and maintain a disaster plan outlining the role of OMI staff.
- Maintain records of each official death investigation and provide reports to official agencies.

The above duties are exclusive of deaths that occur on tribal or federal land. The OMI provides consulting services for requesting agencies such as the Bureau of Indian Affairs (BIA), Federal Bureau of Investigations (FBI), Tribal Law Enforcement, military law enforcement, or neighboring state jurisdictions.

The OMI is designated as a special program within the Department of Pathology at the University of New Mexico School of Medicine. A Board of Medical Investigations comprised of the Dean of the UNM School of Medicine, the Chief of the New Mexico State Police, the Secretary of the Department of Health, the Chairman of the New Mexico Board of Thanatopractice and the Cabinet Secretary of the Indian Affairs Department was established to oversee and develop policy. The Board appoints the Chief Medical Investigator, a physician licensed in New Mexico, trained in Pathology and Forensic Medicine, who has responsibility for operations.

The program operates out of the Central Office located in the UNM Health Sciences Center in Albuquerque, New Mexico. The Central Office directs all investigative activities statewide. Specially trained and certified Field Deputy Medical Investigators (FDMI) conduct field investigations. Every county in New Mexico has FDMIs who conduct investigations at the scene of death to collect information used to determine jurisdiction, possible cause and manner of death, and in the absence of a physician provide the pronouncement of death. The FDMIs contact the Central Office and present the results of each investigation to Central Office Deputy Medical Investigators who work with on-call Medical Investigators (forensic pathologists) to make the ultimate decisions regarding jurisdiction and the need for further medicolegal investigation. All autopsy services are conducted in the Central Office and are performed by forensic pathologists with the assistance of morphology technicians. The Scientific Laboratory Division (SLD) provides some toxicology services, with other

commercial laboratories providing specialized testing. All documentation is archived by the Central Office and is available as provided for by public record statutes and regulations.

Such a strongly defined and professionally staffed system provides investigative agencies, the medical community and the citizens of New Mexico with standardized death investigation protocols and a central repository for the information compiled during those medicolegal investigations. The centralization of these services has proven valuable in many areas of public concern including:

- Criminal investigations such as homicide or child abuse
- Protection of public health from environmental hazards and the spread of infectious disease
- Surveillance and reporting of deaths that may represent bioterrorist activities
- Medical and statistical research contributing to positive preventive measures (such as seat belt laws)
- Expert testimony in court cases
- Proper certification of death
- Services to families of the deceased persons (Grief Services Program)

Program Summary and Highlights for 2017

Investigative Activity

In 2017, New Mexico had 7,229 deaths that met the criteria to become a reportable death. The OMI provided investigative services for each of these 7,229 deaths. OMI's Deputy Medical Investigators conducted 4,604 scene investigations in 2017. Following these investigations, OMI retained jurisdiction of 3,641 deaths and relinquished jurisdiction of 2,653 deaths to private physicians. An additional 917 deaths were investigated as consultations, resulting in a total caseload of 7,229 medicolegal investigations. OMI ordered the transportation of 3,519 decedents who died in 2017. A granular examination of the case distribution is presented in the Total Cases section beginning on page 15.

Examination Types

Of the 7,229 reportable deaths in 2017, OMI performed 1,843 autopsies (1,762 full + 81 partial), 826 pathologist externals, 722 field externals, 14 investigator externals, and 492 decedents did not receive a physical examination of any type. As a department of the UNM Health Sciences Center, OMI performs autopsies for the hospital as a consultant; however, OMI does occasionally take jurisdiction over some of those cases. In 2017, OMI took jurisdiction over 244 cases. Of those cases, 73 received a full or partial autopsy, 78 received an external examination, and 89 cases only needed their records reviewed in order to have a proper cause and manner of death assigned. A granular examination of the examination types is presented in the Total Cases section beginning on page 15.

Identification

Each year OMI receives hundreds of cases where remains are initially unidentified. Approximately 99% of these cases are successfully identified through OMI's investigative efforts. Our staff identifies these cases through fingerprint analysis, postmortem forensic dental examinations, DNA analysis, and x-ray and CT comparisons. The investigative staff dedicates many hours to reviewing "cold cases" and are able to identify many cases with the advancement of DNA technology and by resubmitting fingerprints to the FBI that were originally unmatched. In 2017, the investigative staff identified all but three decedents.

Unclaimed Bodies

OMI makes every effort to identify and contact the next of kin for each decedent. Once identified, OMI helps ensure that the decedent's body is returned to the family according to their wishes. However, in some cases, OMI is unable to contact the next of kin or the next of kin is unable to claim the body. In 2017, there were 139 unclaimed bodies by the end of the year.

Training and Education

At the OMI, the activity of training and education is an integral part of day-to-day operations. The OMI is designated as a special program within the Department of Pathology at the University of New Mexico School of Medicine. The forensic pathologists are faculty members within the School of Medicine and are expected to participate in training of medical students, residents and fellows, as well as conduct research activity to further advance the science of forensic medicine.

Forensic Pathology Fellowship Program

The OMI Forensic Pathology Fellowship Program is considered one of the best in the country. The fellowship is a one-year, in-depth training program in the subspecialty of forensic pathology. Applicants must have completed an accredited pathology residency program. Four positions for this competitive program are available each year and are generally filled two years in advance.

Certification Training

All OMI Central Office deputy medical investigators are required to become certified by the American Board of Medicolegal Death Investigators to perform a death investigation. Additionally, the OMI provides in-house training for the deputy medical investigators throughout New Mexico and in the past year, twenty-eight individuals successfully completed the training and received certification as new Field Investigators. Approximately one hundred experienced Field Investigators traveled to the central office in order to receive training on proper field external examinations. Upon request, OMI will provide the certification training to other medical investigators, coroners and law enforcement agencies for adaptation to the needs of their local systems. (i.e., Native American police officers).

Death Investigation Training

The OMI conducted a Basic Death Investigation course in October that was open to the public. Thirty-one representatives from the medical examiner, law enforcement and health care professions from throughout the nation participated in the training with a curriculum designed to present the most current facets of death investigations. Participants were from Washington, Colorado, and of course, New Mexico. New Mexico personnel included representatives from the various law enforcement agencies, emergency medical services (EMS), and hospitals from around the state.

Law Enforcement Education

Death investigation training is provided at the New Mexico State Police Academy, the New Mexico Law Enforcement Academy, APD Citizen's Police Academy, and the Albuquerque Police Academy. In addition, specialized training is provided to individual police departments at their request.

Public Education

OMI Staff conducts in-service training throughout the state for a wide variety of agencies. Examples of agencies include the New Mexico Department of Health, funeral homes, hospitals, correction facilities, the EMS training site, UNM, CNM, high schools, civic organizations, state search and rescue groups, and tribal authorities.

OMI website

The OMI website at http://omi.unm.edu provides instant access to information concerning OMI, staff, services offered, reports, and record requests.

Center for Forensic Imaging

The Center for Forensic Imaging (CFI) is located within OMI. The CFI is currently the only forensic center in the United States with in-house computed tomography (CT) and magnetic resonance imaging (MRI) facilities, which support forensic research and education, and the clinical service of the OMI.

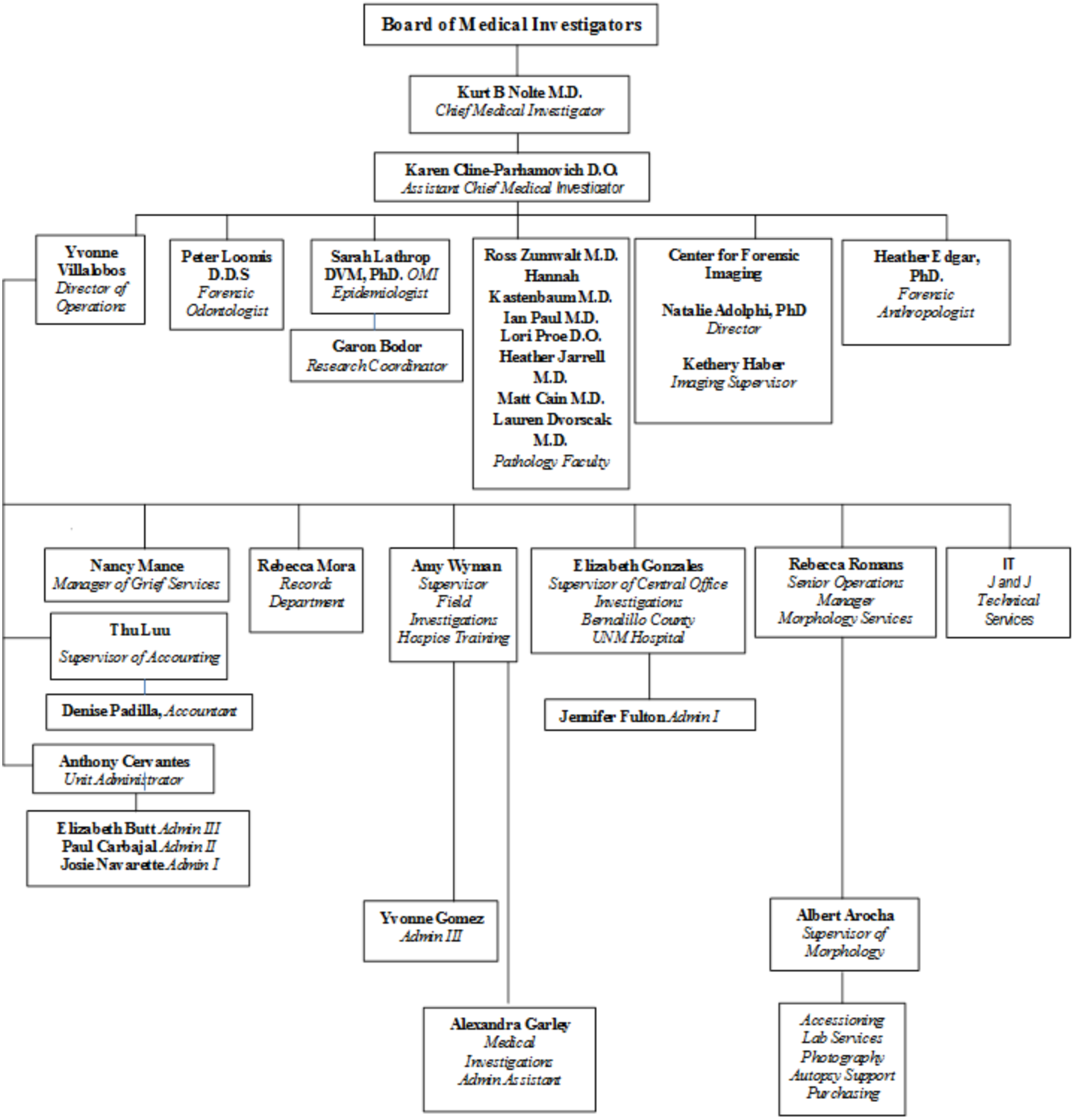
Grief Services Program

The Grief Services Program (GSP) was established in 1975. Initially, the program provided crisis intervention and education to families whose child died as a result of Sudden Infant Death Syndrome (SIDS). The program has continually expanded its mission and now provides its services to all New Mexico families following the sudden and unexpected death of a family member, emphasizing services to victims of crime. These services include: crisis support and traumatic grief counseling, advocacy, and referrals. Additionally, the GSP provides opportunities for consultations as well as traumatic grief education and training throughout New Mexico for agencies such as law enforcement, emergency responders, nurses, mental health providers, teachers and other groups who request such training.

Donor Services

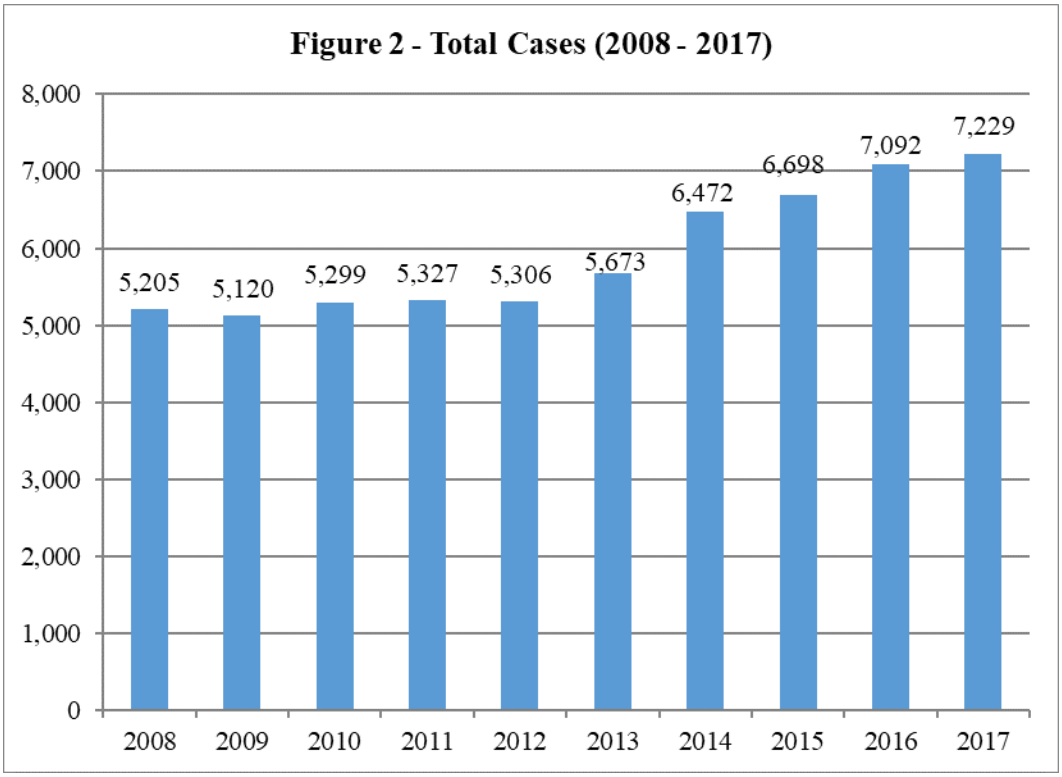
In 2017, OMI ensured that 100% of potential organ donors and their families were allowed to give the gift of life. OMI works closely with Donor Services and Lion's Eye Bank to provide life-saving organs for transplantation, in New Mexico and across the country. Our thanks go to the families whose loved ones became an organ or tissue donor, providing an enhanced quality of life to hundreds of transplant recipients.

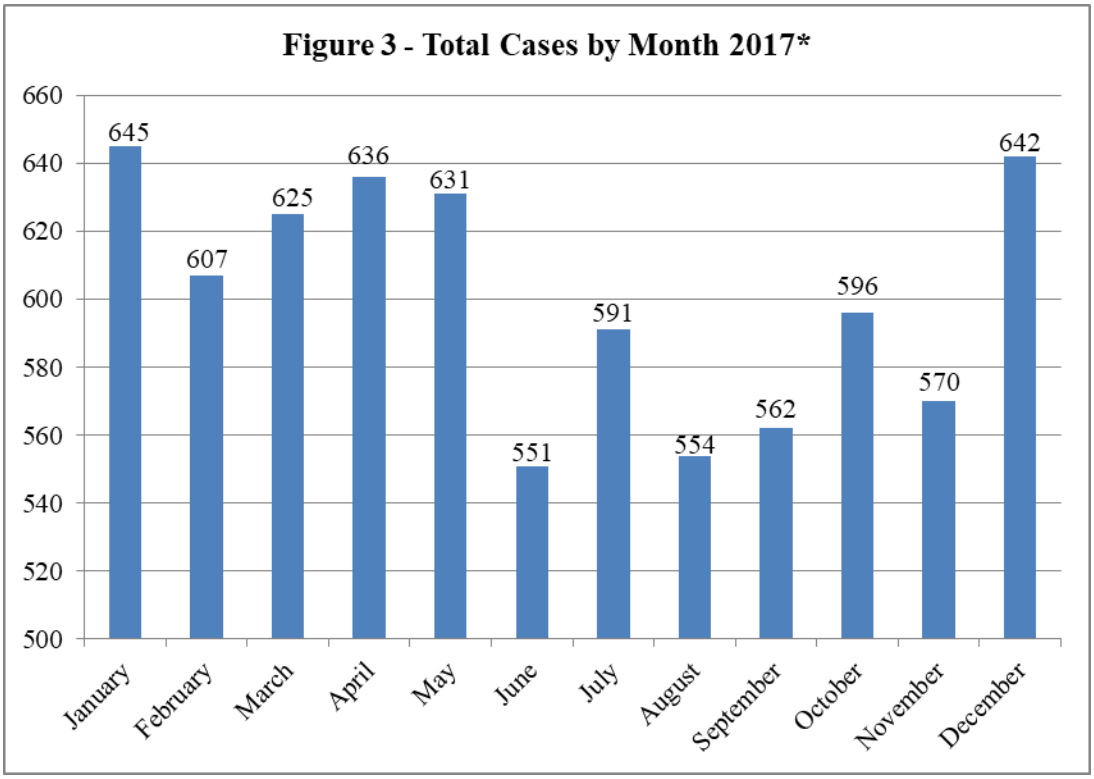
Office of the Medical Investigator
2017 Organizational Chart



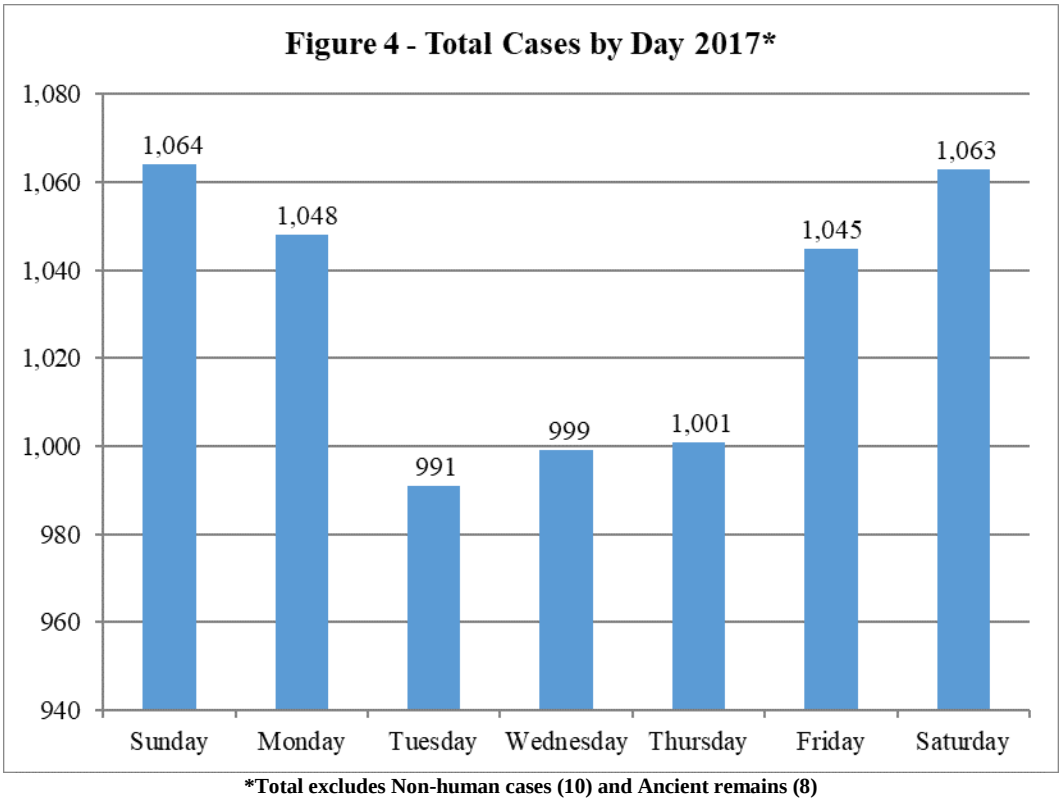
Total Cases

The remainder of this report will present data routinely collected by the OMI in a manner that answers questions regarding mortality and public health. The tables and charts summarize data collected on every medicolegal investigation, including consultation cases that the OMI conducted for this reporting period. The data, a subset of total mortality figures, represent findings on cases that come to the attention of forensic pathology. Readers who need complete mortality figures are encouraged to contact the State Center for Health Statistics – Bureau of Vital Records and Health Statistics, New Mexico Department of Health.





***Total excludes Non-human cases (10), Ancient remains (8), and court ordered death certificate (1)**



***Total excludes Non-human cases (10) and Ancient remains (8)**

Figure 5 - Total Cases by Race/Ethnicity 2017

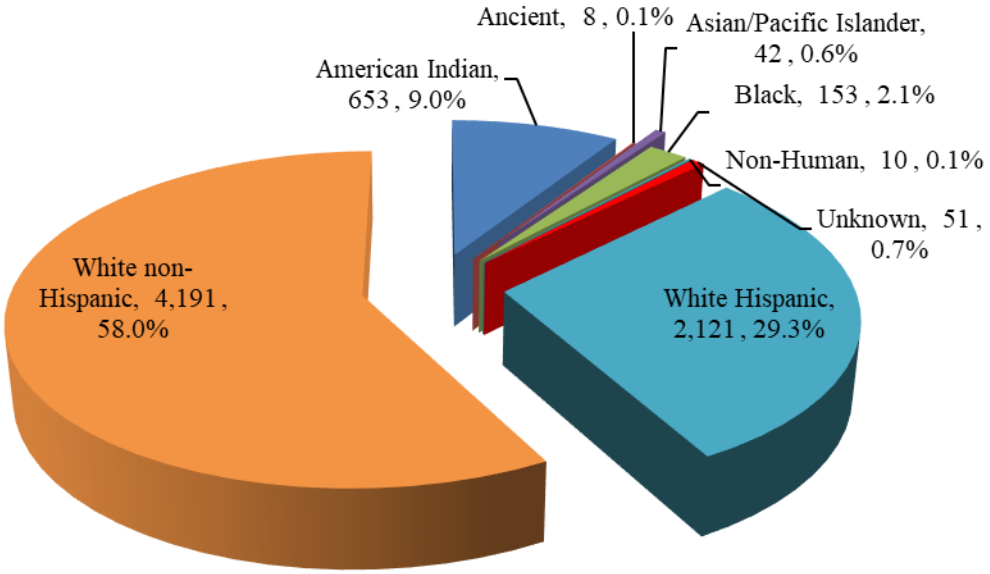
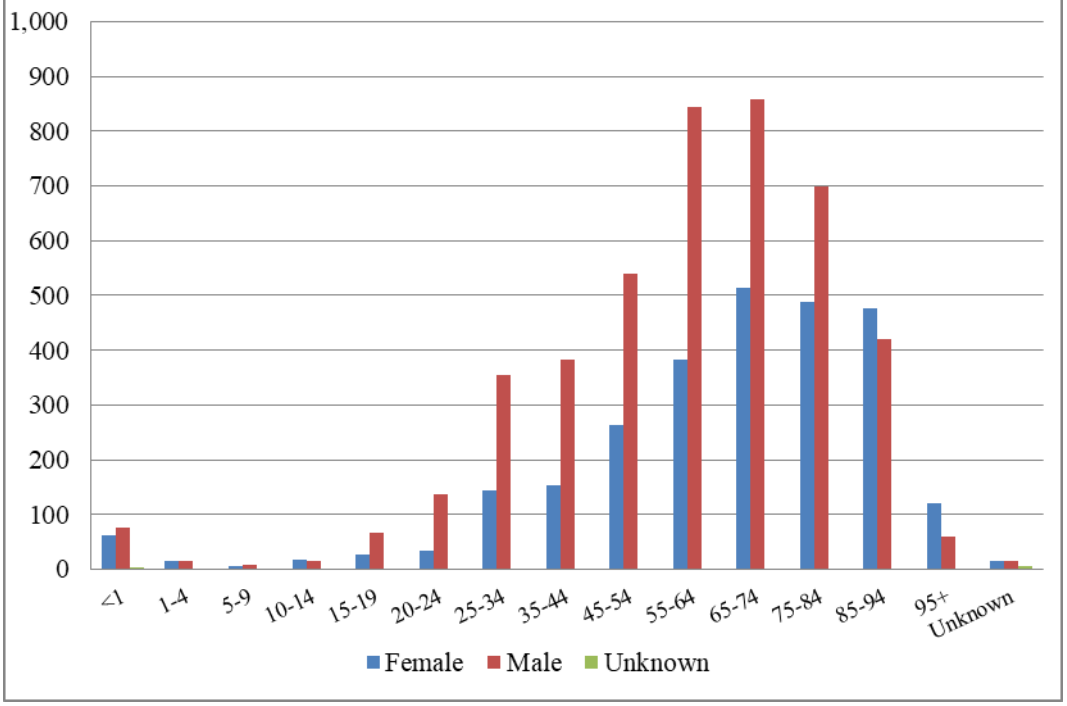


Figure 6 - Total Cases by Age and Gender* 2017



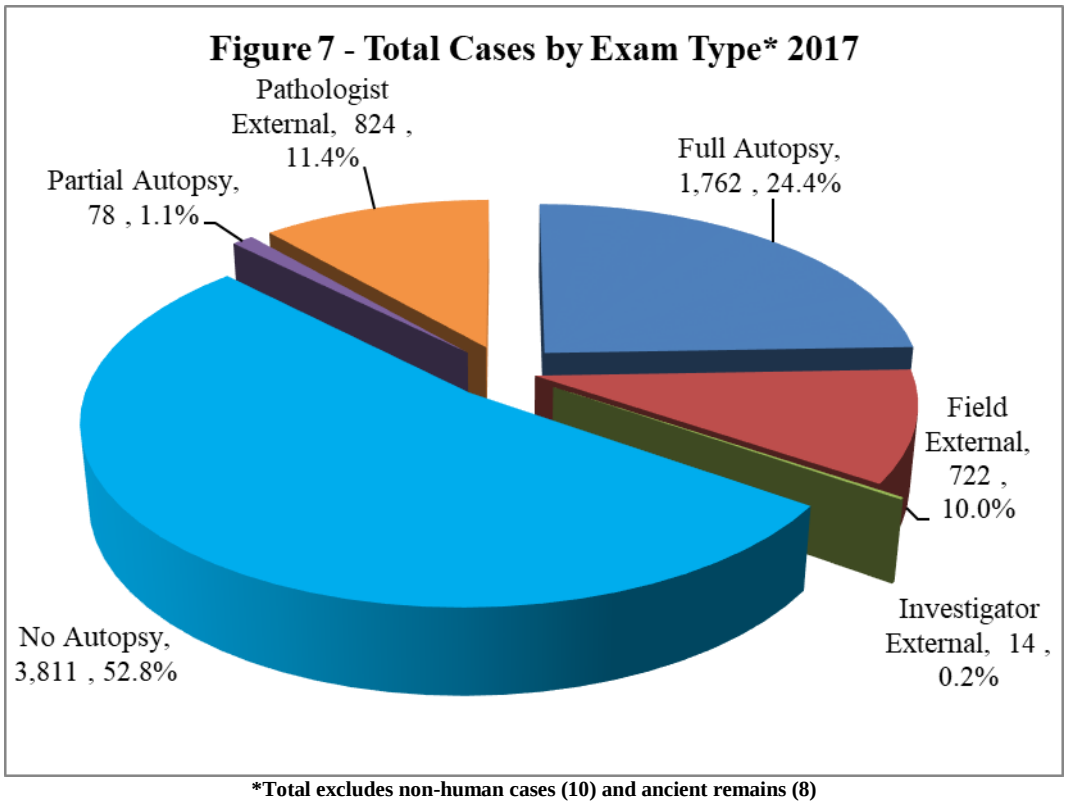
***Total excludes Non-human cases (10) and Ancient remains (8).**

Table 1 – Total Cases – Autopsy Status* – 2017										
Autopsy	**Accident**	**Homicide**	**Jurisdiction terminated**	**Natural**	**Non-Accept**	**Other**	**Pending**	**Suicide**	**Undetermined**	**Total**
Yes	750	221	0	505	0	1	31	238	94	1,840
No	831	2	1,502	1,574	1,151	1	35	257	18	5,371
Total	**1,581**	**223**	**1,502**	**2,079**	**1,151**	**2**	**66**	**495**	**112**	**7,211**

***Total excludes non-human cases (10) and ancient remains (8)**

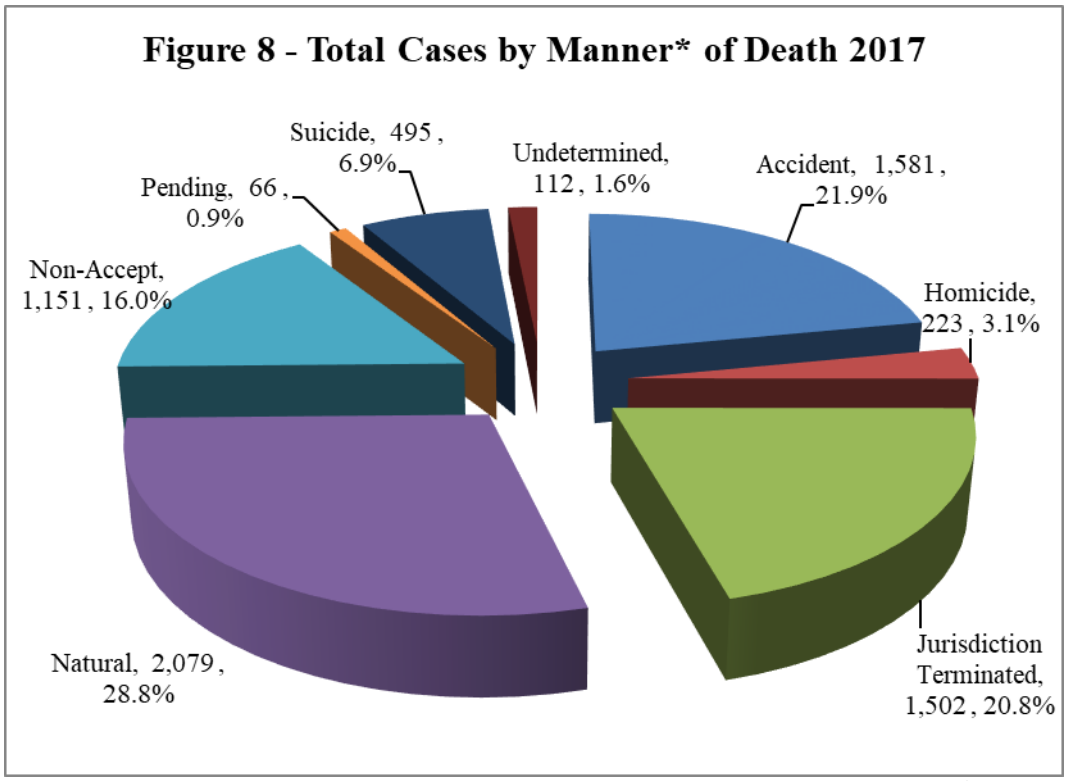
Table 2 – Total Cases – Case Distribution* – 2017					
Jurisdiction	**Manner**	**Autopsy**		**Percent Autopsied**	**Total**
		Yes	**No**		
Medical Investigator	Accident	696	788	46.9%	1,484
	Homicide	191	1	99.5%	192
	Natural	411	943	30.4%	1,354
	Other	1	0	100.0%	1
	Pending	13	16	44.8%	29
	Suicide	229	254	47.4%	483
	Undetermined	82	16	83.7%	98
	Subtotal	**1,623**	**2,018**	**44.6%**	**3,641**
Consultation Cases	Accident	54	43	55.7%	97
	Homicide	30	1	96.8%	31
	Natural	94	631	13.0%	725
	Other	0	1	0.0%	1
	Pending	18	19	48.6%	37
	Suicide	9	3	75.0%	12
	Undetermined	12	2	85.7%	14
	Subtotal	**217**	**700**	**23.7%**	**917**
Jurisdiction Terminated		0%	1,502	0.0%	1,502
Non-Accept		0%	1,151	0.0%	1,151
Reported Deaths		1,840	5,371	25.5%	**7,211**

***Total excludes non-human cases (10) or ancient remains (8)**



***Total excludes non-human cases (10) and ancient remains (8)**

Cause and Manner of Death



***Not included on graph are Other, Non-human, and Ancient Remains where value is less than 1% of total**

Cause and Manner of Death - Overview

In 2017, OMI investigated 7,229 deaths, representing approximately 39% of the estimated total deaths in New Mexico in 2017. Of the deaths investigated by OMI in 2017:

The total number of deaths investigated represents a 1.7% increase from the 2016 total, and a 38.9% increase since 2007.

The ratio of male to female deaths, when gender was clearly determined, was 1.7. Decedents classified as White non-Hispanic represented 58% of the total, White Hispanic 29%, American Indian 9%, Black 2%, and Asian 1%. The racial-ethnic composition of New Mexico was listed in 2017 as: 37.5% non-Hispanic white, 48.8% Hispanic, 10.9% American Indian, 2.5% African-American and 1.9% Asian/Pacific Islander. (Source: https://www.census.gov/quickfacts/fact/table/nm/PST045217?)

While natural deaths contributed the largest portion of OMI deaths investigated (29%), most natural deaths did not fall under the jurisdiction of the OMI. Multiple cases are called into OMI every year in order to verify if OMI has jurisdiction over the case. The physicians then decide if OMI is statutorily obligated to investigate the case and issue the death certificate. If they are not statutorily obligated, the case is considered as jurisdiction terminated (21% of 2017 cases) or non-accept (16% of 2017 cases). Data presented regarding natural deaths should not be interpreted as representative of all natural deaths in New Mexico.

Table 3 - Total Cases by Gender and Manner* 2017					
Manner	**Female**	**Male**	**Non-Human**	**Unknown**	**Total**
Accident	546	1035			1581
Homicide	60	163			223
JT	615	885		2	1502
Natural	775	1303		1	2079
Non-Accept	542	609			1151
Non-Human			10		10
Other	1	1			2
Pending	26	37		3	66
Suicide	107	387		1	495
Undetermined	41	69		2	112
Total	2713	4489	10	9	7221

***Total excludes Ancient remains (8)**

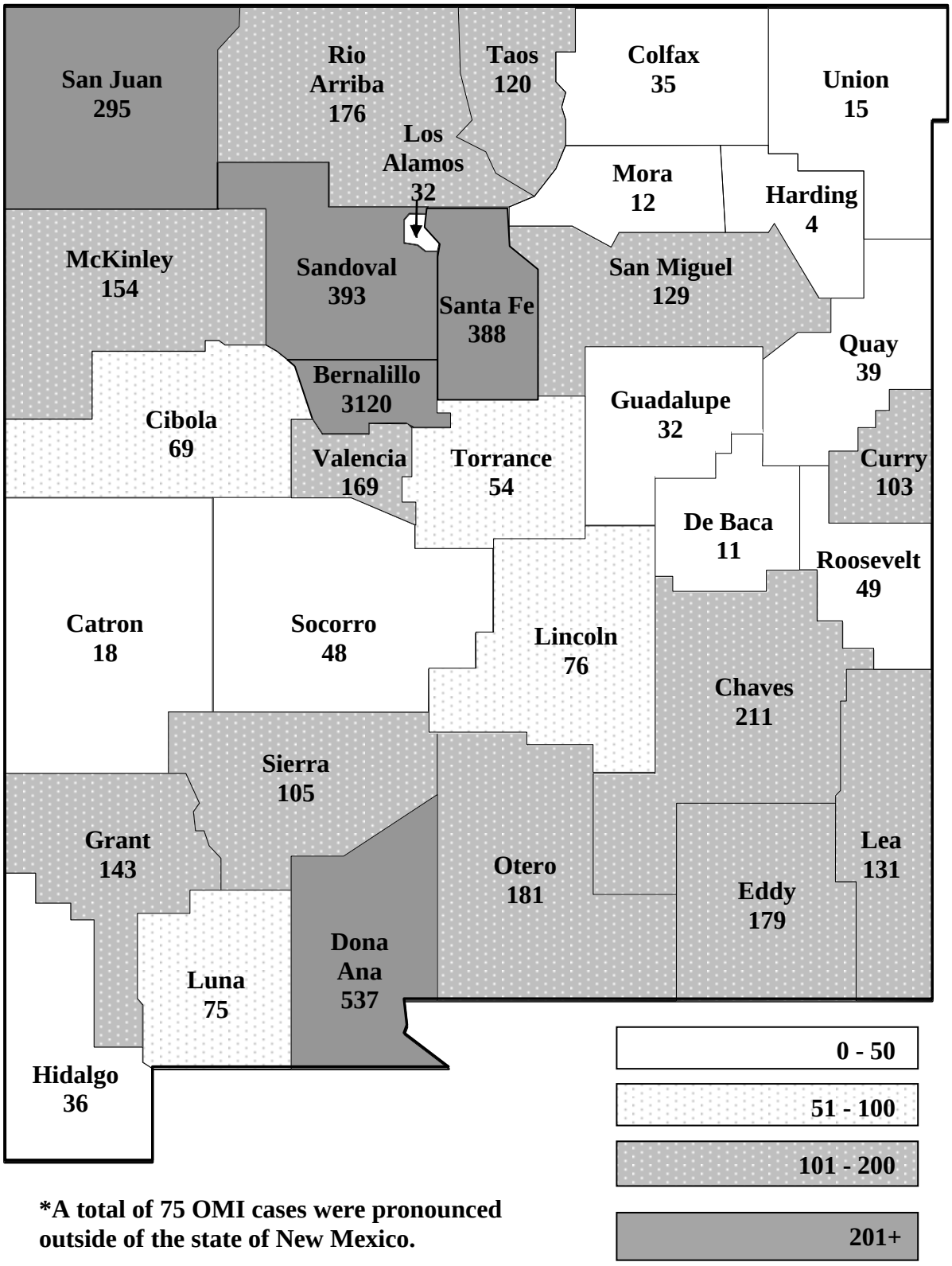
Table 4 - Total Cases by Manner of Death and Race/Ethnicity 2017*

Manner of Death	American Indian	Asian/Pacific Islander	Black	Unknown	White Hispanic	White Non-Hispanic
Accident	219	5	32	10	492	823
Homicide	42		11	2	94	74
Jurisdiction Terminated	33	7	32	9	451	970
Natural	207	21	57	6	576	1,211
Non-accept	78	8	9	9	312	735
Other	1					1
Pending	17			8	15	26
Suicide	34	1	9	1	141	309
Undetermined	22		3	5	40	42
Total	**653**	**42**	**153**	**50**	**2,121**	**4,191**

***American Indian includes 9 Hispanics and Black includes 5 Hispanics**

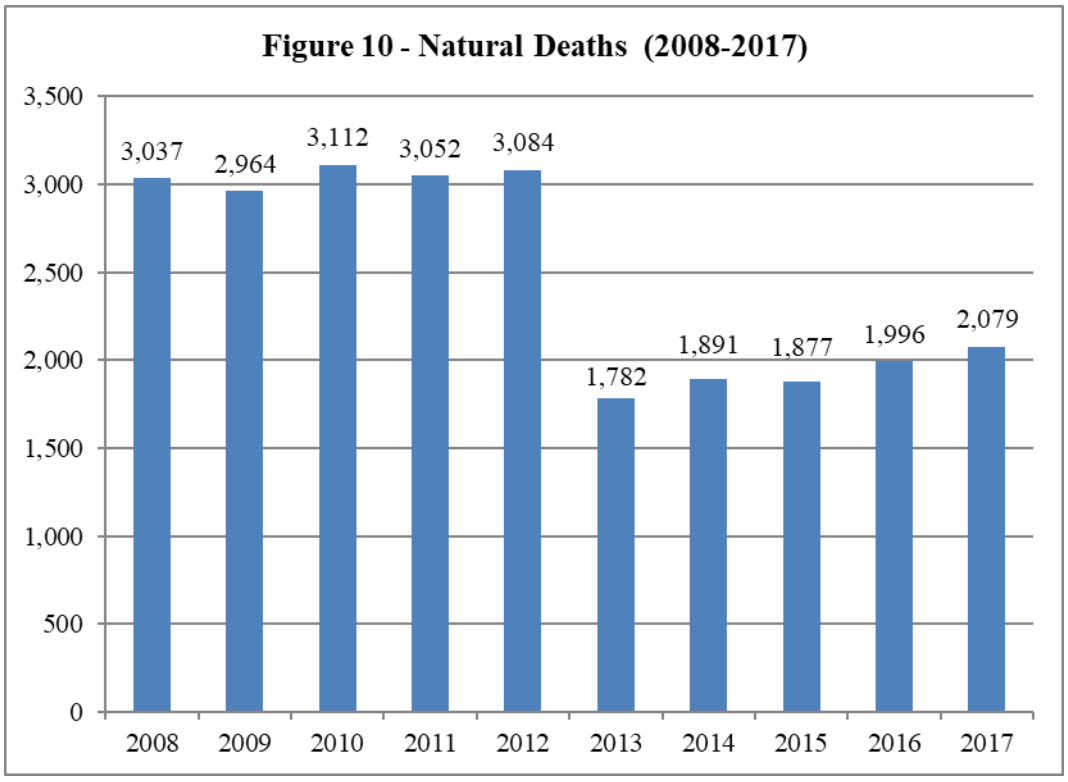
Table 5 - Total Cases - Manner of Death by Age and Gender - 2017 Age at Death										
Gender	Accident	Homicide	Jurisdiction Terminated	Natural	Non-Accept	Other	Pending	Suicide	Undetermined	**Total**
Female										
<1	4	2	1	23	16		2		13	61
1-4	5	3		4			1		3	16
5-9	1	2	1	1						5
10-14	8	3		3				3		17
15-19	12	3		1				9	1	26
20-24	14	6	1	3	1			7	1	33
25-34	65	13	2	30	12		2	14	5	143
35-44	59	5	11	52	16		1	9	1	154
45-54	68	10	29	97	27		3	27	4	265
55-64	55	5	83	162	56	1	1	19	1	383
65-74	49	4	149	171	118		4	14	5	514
75-84	65	1	133	131	145		6	3	3	487
85-94	114	2	158	80	112		6	2	3	477
95+	27	1	41	17	32		1			119
Unknown							2			2
Total	**546**	**60**	**609**	**775**	**535**	**1**	**29**	**107**	**40**	**2,673**
Male										
<1	10	2	2	30	15		5		13	77
1-4	6	1		5	2		2			16
5-9	6						2			8
10-14	2	1		4			2	5		14
15-19	18	8		9				29	2	66
20-24	62	18		5	1		1	44	5	136
25-34	168	45	4	50	4		6	66	12	355
35-44	152	31	23	84	19		2	62	10	383
45-54	173	27	58	179	39		5	53	6	540
55-64	161	21	168	346	96		2	40	11	845
65-74	88	7	220	337	147	1	2	50	6	858
75-84	105	2	232	176	147		9	25	3	699
85-94	72		158	70	107			13		420
95+	12		16	8	23					59
Unknown							1		1	2
Total	**1,035**	**163**	**881**	**1,303**	**600**	**1**	**39**	**387**	**69**	**4,478**
Non-Human										
Non-Human						10				10
Total						**10**				**10**
Unknown										
<1			2	1						3
Unknown							3	1	2	6
Total	**0**	**0**	**2**	**1**	**0**	**0**	**3**	**1**	**2**	**9**

Figure 9 – Deaths by County of Pronouncement – 2017
All Manners of Death



***A total of 75 OMI cases were pronounced outside of the state of New Mexico.**

Overview – Manner of Death – Natural Deaths



Natural Deaths – Overview

Deaths classified as a "natural" manner of death, as compared to suicides, homicides, accidents and undetermined manners of death, represent the largest number of deaths investigated by OMI (29% in 2017). Starting in 2013, cases reported to but not accepted by OMI were no longer assigned a manner of death, resulting in the lower numbers of natural deaths starting in 2013. Most natural deaths that occur in New Mexico do not fall under the jurisdiction of OMI and are therefore not represented in this report. An excellent resource for all mortality statistics in the state is the publication "New Mexico Selected Health Statistics Annual Report," published by the State Center for Health Statistics at the Office of New Mexico Vital Records & Health Statistics, Public Health Division, Department of Health, 1105 St. Francis Dr., PO Box 26110, Santa Fe, NM 87502-6110. The 2013 Annual Report is available online at: http://nmhealth.org/data/view/vital/1132/

Figure 11 - Natural Deaths by Race/Ethnicity 2017

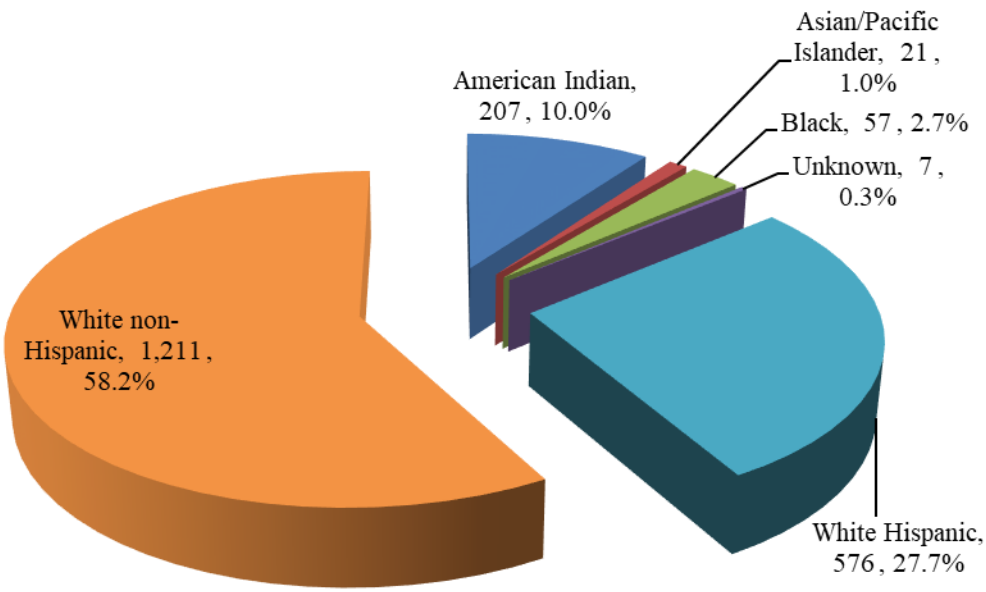
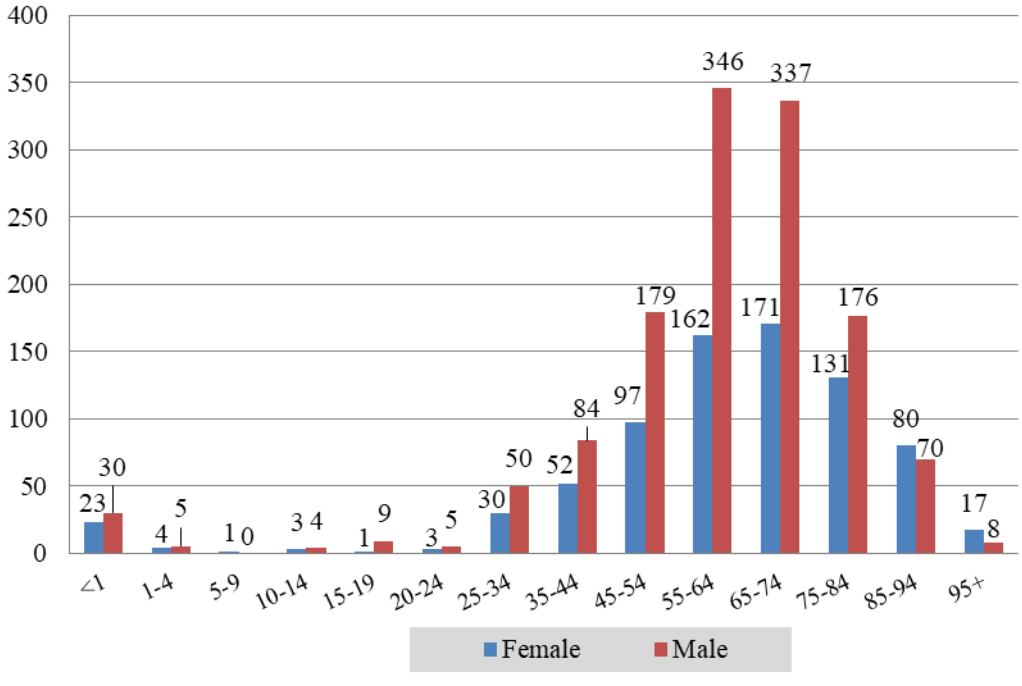
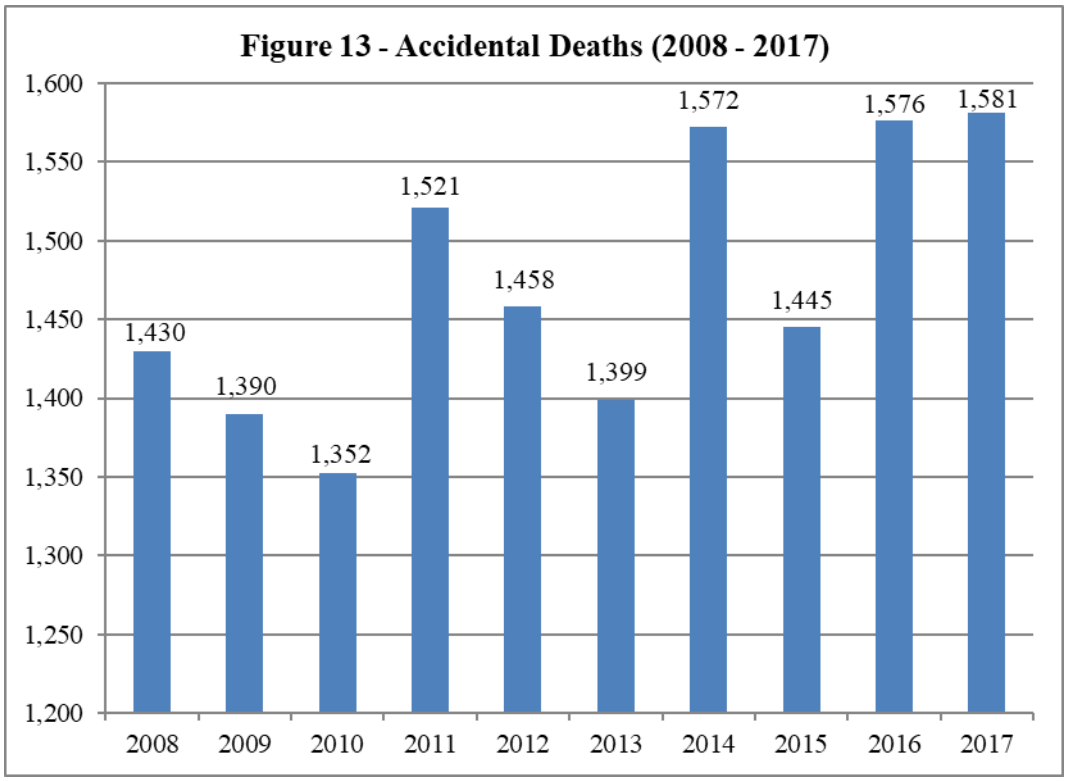


Figure 12 - Natural Deaths by Age and Gender 2017*



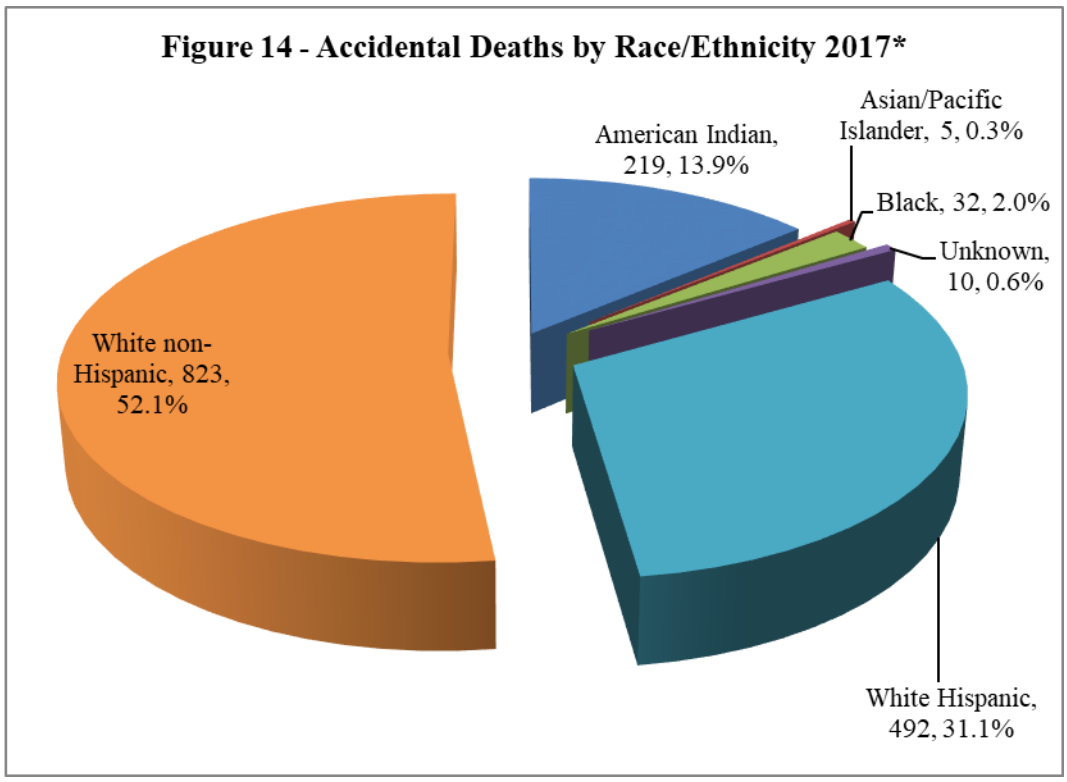
***Does not include 1 unknown gender**

Overview – Manner of Death – Accidental Deaths



Accidental Deaths – Overview

Accidental deaths accounted for 22% of the deaths investigated by OMI in 2017, second only to natural deaths as a manner of death. The highest number of accidental deaths was in males 45 - 54 years of age.



*** American Indian includes 3 Hispanics and Black includes 2 Hispanics**

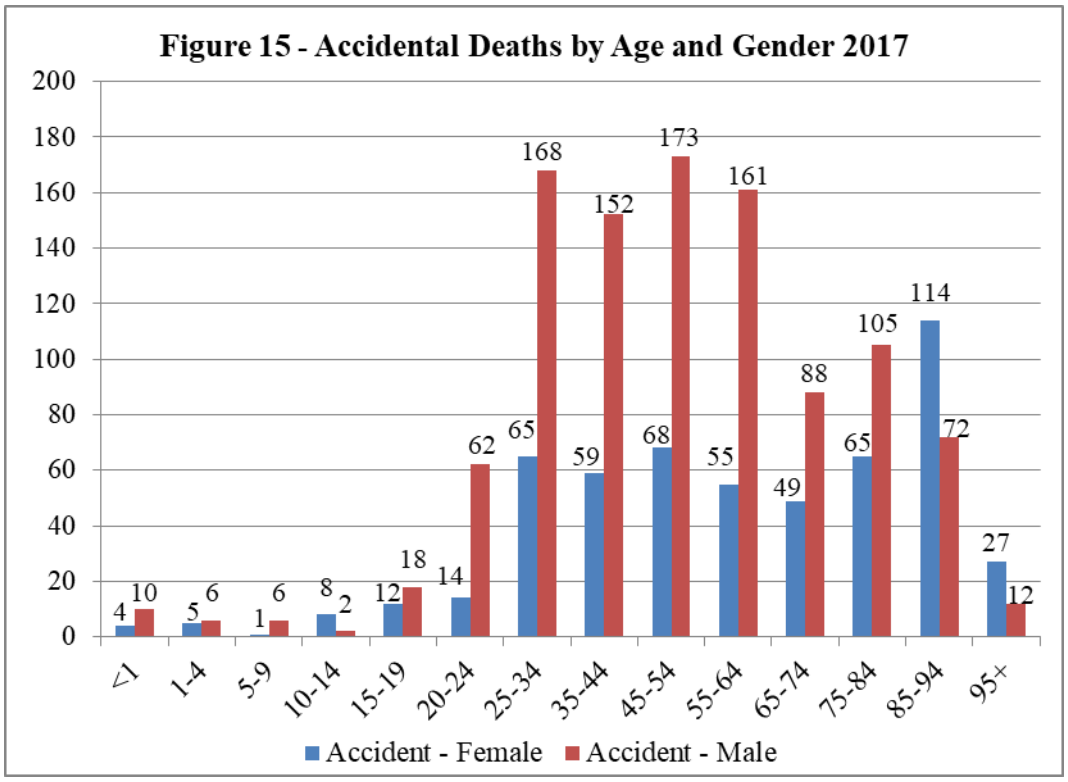
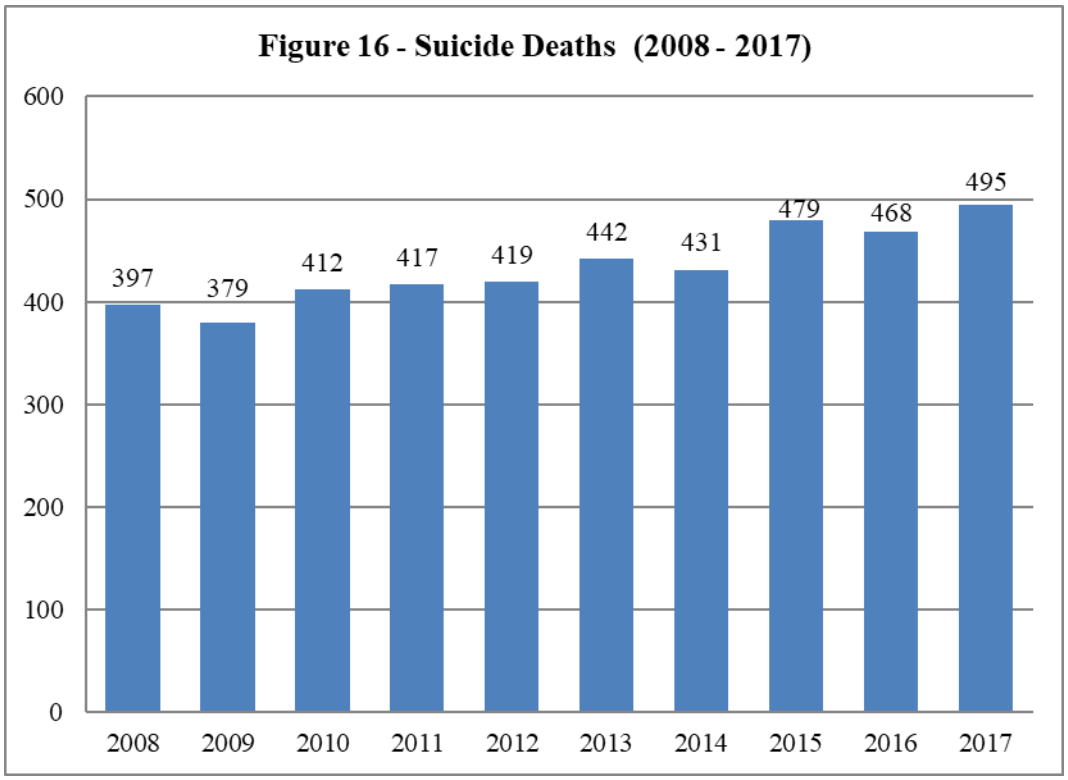


Table 6 – Accidental Deaths – Cause – 2017	
Cause of Death	**Total Cases**
Multiple injuries	687
Substance intoxication	405
Natural disease	65
Cardiovascular Disease	60
Drowning	48
Ethanol (alcohol) intoxication	42
Asphyxia	40
Exposure	37
Sepsis	36
Pneumonia/Bronchitis	28
Thermal Injuries (burns)	23
Ethanolism	17
Head and neck injuries	15
Choking	13
Carbon monoxide intoxication	14
Aneurysm	8
Gunshot wound	7
Alzheimers	6
Emboli	5
Cerebrovascular	4
Hypertension	4
Electrocution	3
Diabetes	3
Carcinoma	2
Dehydration	2
Stab wound	1
Renal Failure	1
Epilepsy	1
Diabetes	1
Complications of peripartum cardiomyopathy	1
Hanging	1
Asthma	1
Snake Bites	1
Dog Bites	1
SCUBA diving	1
Total	**1581**

Table 7 - Accidental Deaths by County of Pronouncement (2008- 2017)										
County of Pronouncement	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Bernalillo	572	549	532	573	523	514	557	606	631	606
Catron	3	0	1	5	5	8	4	2	2	1
Chaves	48	36	49	56	35	35	37	32	33	44
Cibola	20	18	19	20	12	29	16	19	24	20
Colfax	14	8	9	10	5	17	16	12	12	6
Curry	17	21	24	30	23	22	24	22	23	24
De Baca	2	2	0	3	2	2	2	3	5	1
Dona Ana	75	112	90	96	106	80	110	110	97	114
Eddy	40	34	43	38	41	38	51	43	25	42
Grant	29	19	12	18	21	20	29	16	17	35
Guadalupe	17	8	9	8	6	10	14	12	18	12
Harding	0	1	0	2	1	1	1	0	2	0
Hidalgo	5	4	6	8	5	3	13	7	6	15
Lea	35	18	32	33	34	31	56	34	37	37
Lincoln	5	18	11	15	14	10	18	9	23	17
Los Alamos	5	10	9	8	5	5	7	2	7	6
Luna	14	15	13	12	10	15	11	12	17	7
McKinley	51	58	41	43	53	51	73	49	58	55
Mora	4	1	4	6	8	4	4	3	4	4
Otero	25	33	37	33	41	32	42	33	27	30
Quay	15	4	18	7	11	8	16	12	7	5
Rio Arriba	41	43	35	55	55	52	57	50	50	64
Roosevelt	9	5	9	10	9	5	9	9	11	14
San Juan	79	67	68	92	88	86	96	75	87	80
San Miguel	31	23	25	30	30	23	15	14	23	26
Sandoval	47	58	48	59	62	64	68	49	67	99
Santa Fe	108	94	89	122	127	109	119	110	121	102
Sierra	13	20	19	22	17	19	11	15	19	12
Socorro	17	22	7	13	9	11	18	10	22	4
Taos	26	29	29	22	28	24	23	23	23	21
Torrance	14	14	8	16	13	20	13	12	14	6
Union	3	5	4	4	4	4	3	0	1	4
Valencia	27	24	29	15	29	25	33	19	33	33
Out of State	19	17	23	37	26	22	6	21	30	35
Totals	**1,430**	**1,390**	**1,352**	**1,521**	**1,458**	**1,399**	**1,572**	**1,445**	**1,576**	**1,581**

Overview – Manner of Death – Suicide Deaths



Suicide Deaths – Overview

New Mexico's suicide rate is consistently higher than the national average, comprising 2.6% of all deaths in New Mexico, compared to 1.6% of all deaths in the U.S. The rate in 2016 (most recent data available) was 22.2 per 100,000 people, compared to a rate of 13 per 100,000 people in the rest of the U.S. (2016 New Mexico Selected Health Statistics, State Center for Health Statistics, Department of Health).

Deaths from suicide in 2017 occurred most frequently among White non-Hispanics (62%) and males (78%). More men between the ages of 25 and 34 years (13% of all suicides) committed suicide than any other age group by gender. More people committed suicide on Monday (16.6%) than any other day of the week. More suicides occurred in August than any other month (10%). The fewest occurred in January (6.8%). The total number of suicides increased from 468 in 2016 to 495 in 2017 (5.8% increase).

Figure 17 - Suicide Deaths by Race/Ethnicity 2017

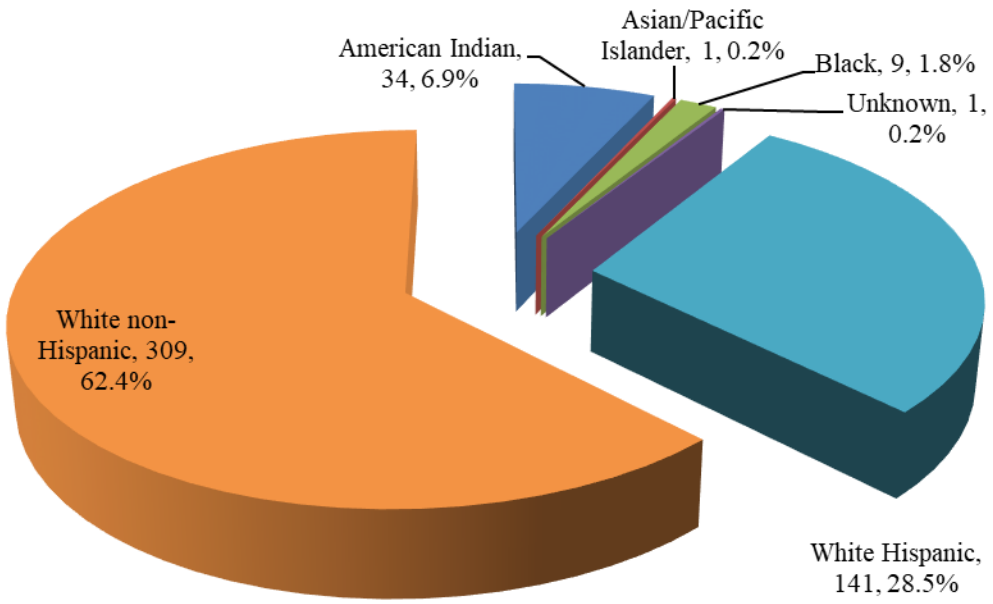
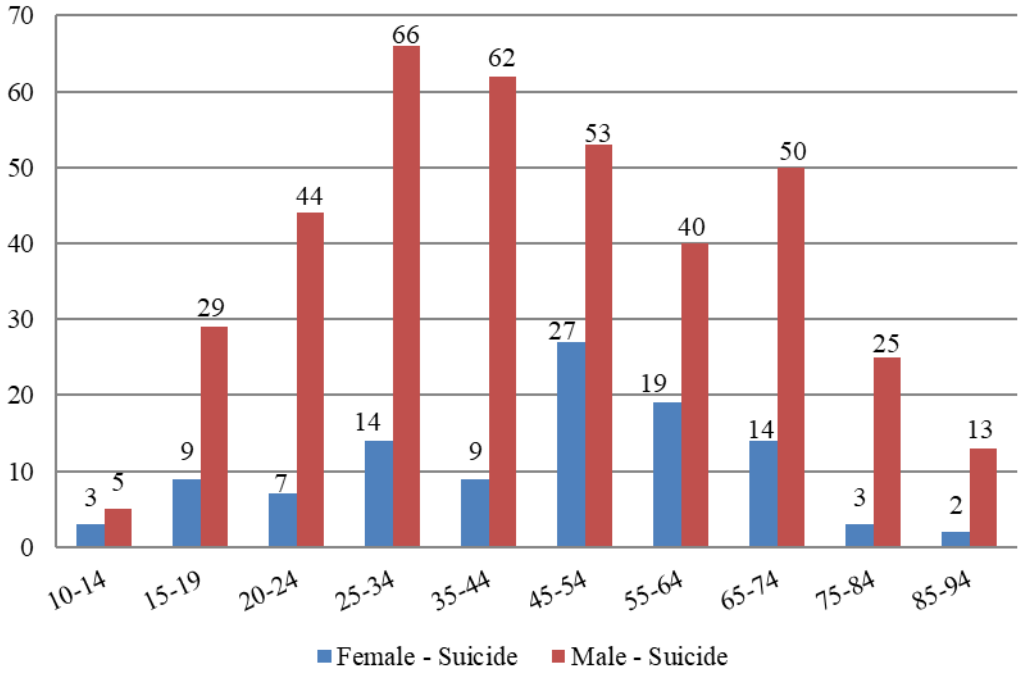


Figure 18 - Suicide Deaths by Age and Gender 2017*



***Does not include 1 unknown age and gender;**
Age groups not represented had no suicide deaths in 2017

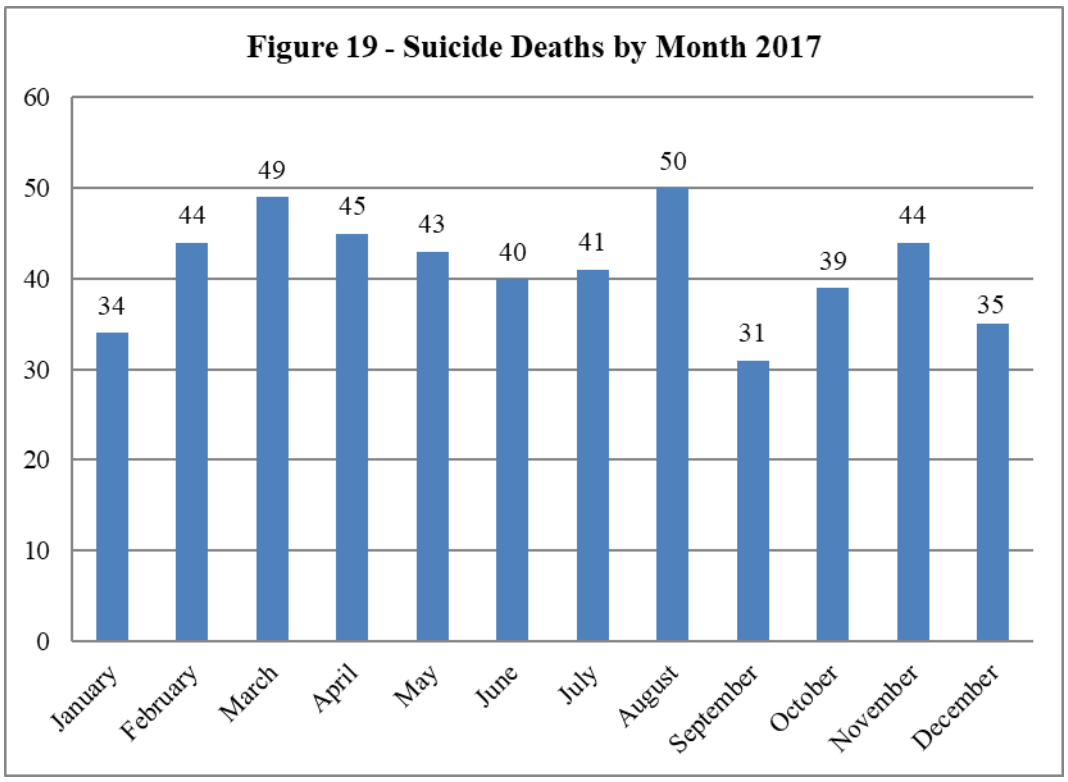


Figure 19 - Suicide Deaths by Month 2017
60
50
40
30
20
10
0
34
44
49
45
43
40
41
50
31
39
44
35
January
February
March
April
May
June
July
August
September
October
November
December

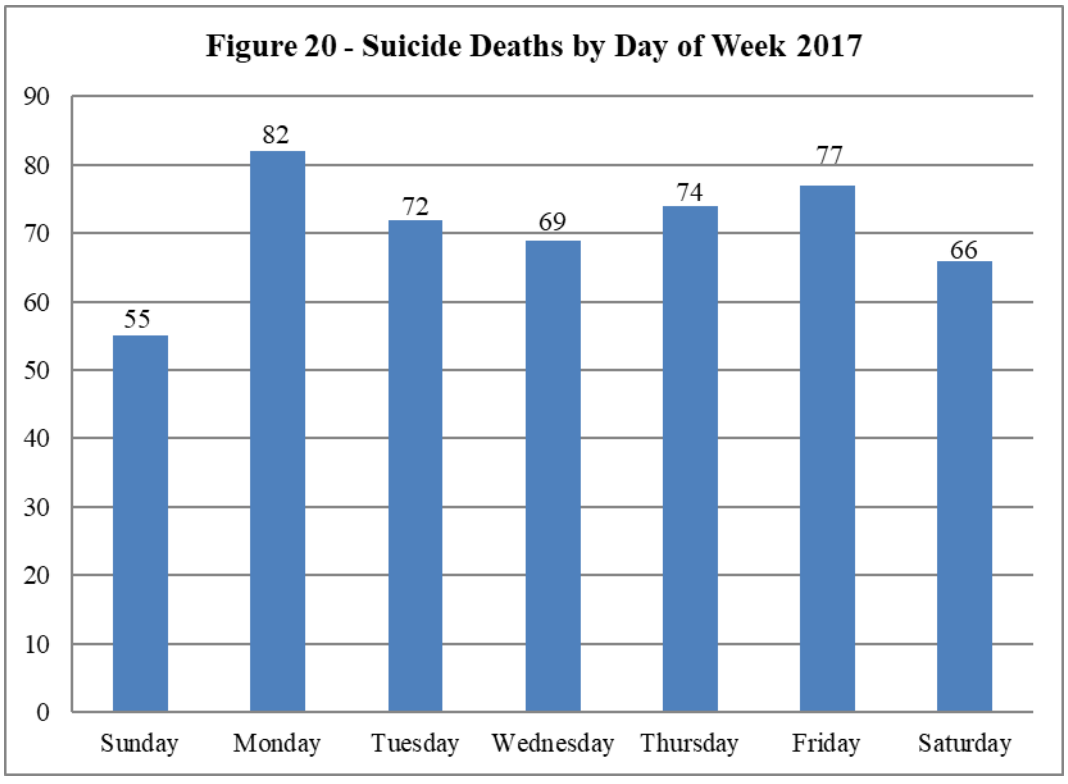
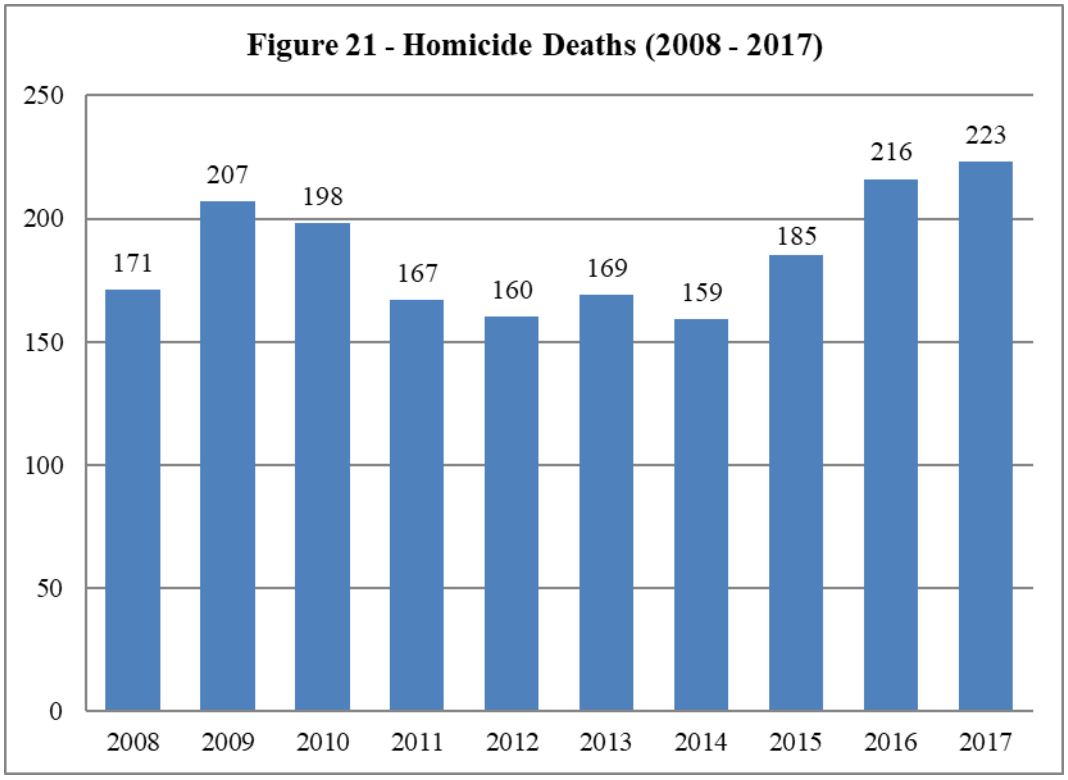


Figure 20 - Suicide Deaths by Day of Week 2017
90
80
70
60
50
40
30
20
10
0
55
82
72
69
74
77
66
Sunday
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday

Table 8 – Suicide Deaths – Cause – 2017	
Cause of Death	**Total**
Gunshot Wound	266
Hanging	121
Substance Intoxication	67
Multiple Injuries	19
Asphyxia	8
Stab Wound	6
Carbon Monoxide	2
Drowning	2
Thermal Injuries	2
Cardiac Arrythmia	1
Head and Neck Injuries	1
Total	**495**

Table 9 – Suicide Deaths by County of Pronouncement (2008 – 2017)										
County of Pronouncement	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Bernalillo	134	142	127	137	146	147	147	160	149	167
Catron	2	2	2	1	8	2	1	2	2	1
Chaves	10	11	9	12	17	18	14	13	9	10
Cibola	6	9	4	5	6	9	5	10	4	4
Colfax	2	3	3	2	5	0	5	3	5	4
Curry	3	4	6	4	6	6	5	13	10	6
De Baca	0	0	2	0	1	2	0	1	0	1
Dona Ana	34	30	38	35	34	24	30	43	33	38
Eddy	9	11	12	9	14	7	13	15	14	17
Grant	12	9	14	7	9	9	11	6	12	8
Guadalupe	4	0	2	1	3	1	2	1	0	2
Harding	0	1	0	0	0	0	0	0	0	0
Hidalgo	3	2	0	2	0	1	0	5	0	3
Lea	7	5	14	8	9	10	11	14	12	12
Lincoln	5	3	2	3	6	3	11	5	6	9
Los Alamos	2	1	1	3	0	2	1	1	3	1
Luna	5	2	6	3	4	6	3	3	10	7
McKinley	7	12	5	16	10	9	7	3	12	14
Mora	1	2	3	2	1	2	1	2	3	0
Otero	16	15	20	20	11	21	10	13	16	21
Quay	2	1	5	0	2	3	1	3	5	3
Rio Arriba	9	9	6	10	12	13	7	18	12	4
Roosevelt	4	0	1	3	1	2	2	4	4	5
San Juan	24	23	36	21	22	18	27	33	27	34
San Miguel	7	3	7	6	5	7	8	7	10	10
Sandoval	20	18	25	30	21	26	26	27	21	22
Santa Fe	38	24	23	31	31	38	34	34	46	40
Sierra	2	4	2	7	2	6	6	4	4	4
Socorro	1	5	6	2	4	4	6	7	3	5
Taos	6	8	6	13	13	13	15	9	17	19
Torrance	4	6	9	3	3	6	4	7	5	5
Union	0	2	2	2	0	0	2	0	3	3
Valencia	15	9	8	14	8	20	15	13	11	12
Out of State	3	3	6	5	5	7	1	0	0	4
Total	397	379	412	417	419	442	431	479	468	495

Overview – Manner of Death – Homicide Deaths



Homicide Deaths – Overview

Homicides increased by 3.2% from 2016 to 2017. Homicide victims were most frequently male (73%) and White Hispanic (42%). As with suicide rates, homicide rates in New Mexico tend to be higher than the national rate, 9.4 per 100,000 in 2016 compared to a national rate of 4.9 per 100,000 (2016 New Mexico Selected Health Statistics, State Center for Health Statistics, Department of Health).

Figure 22 - Homicide Deaths by Race/Ethnicity 2017

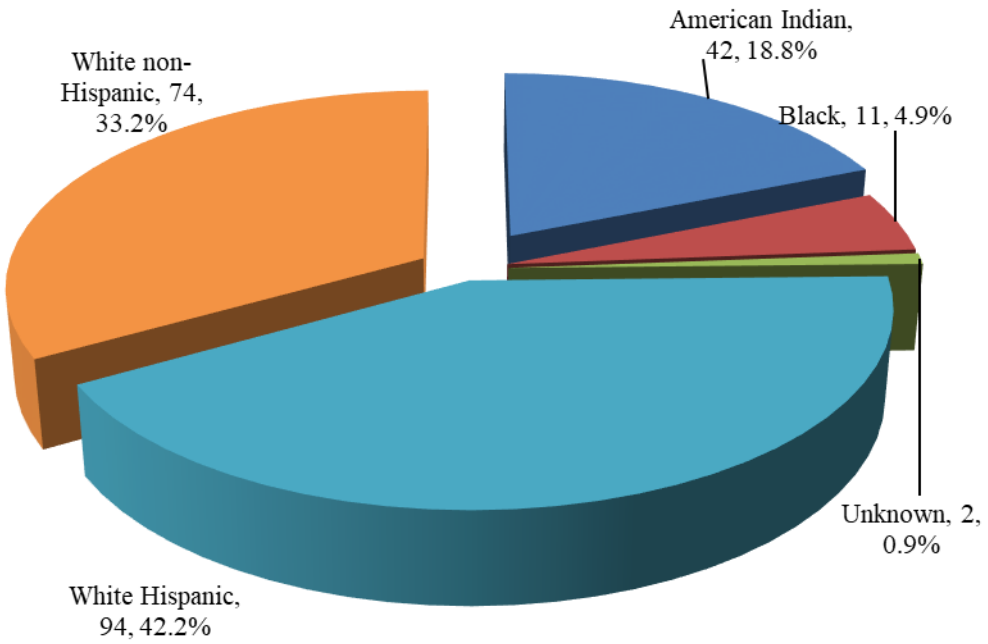


Figure 23 - Homicide Deaths by Age and Gender 2017

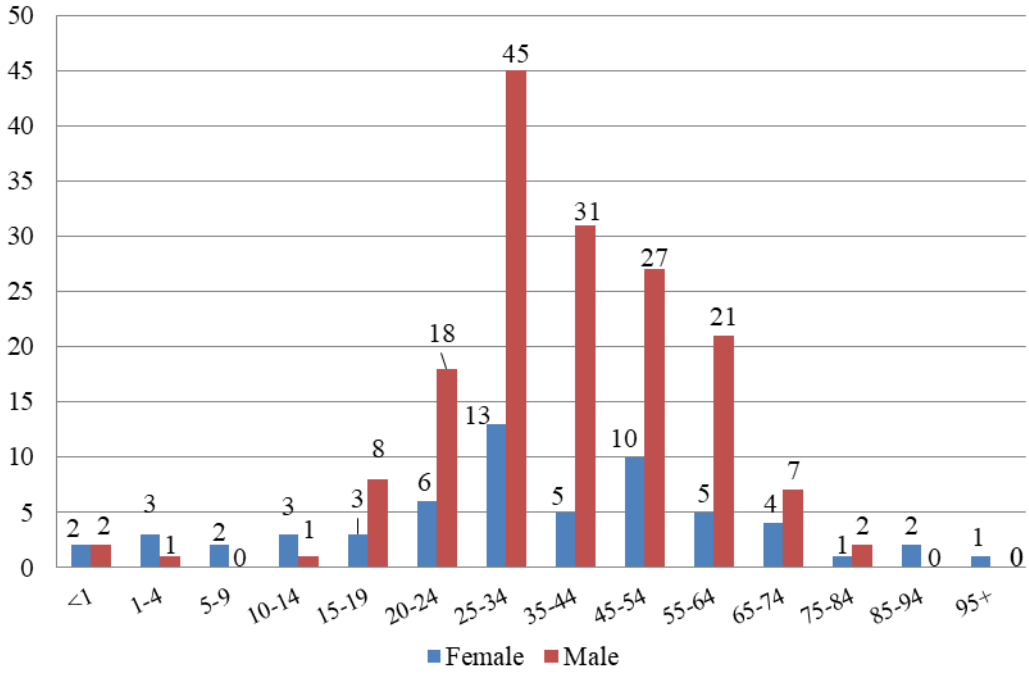
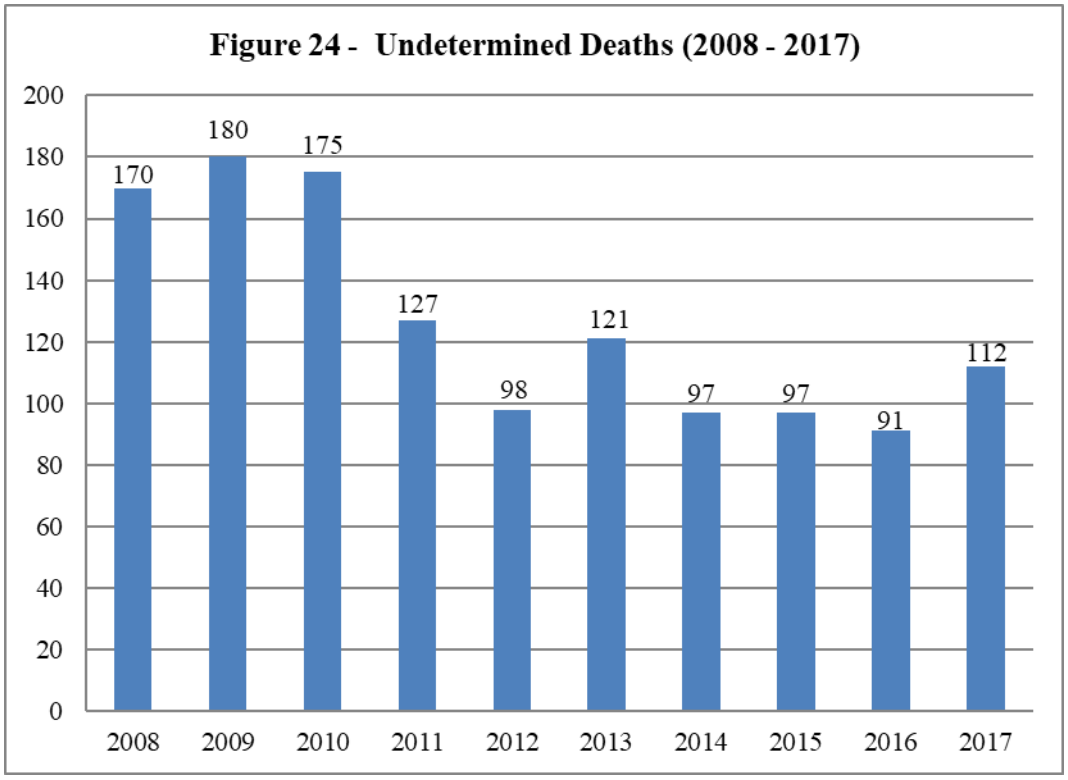


Table 10 – Homicide Deaths – Cause – 2017	
Cause of Death	**Total**
Gunshot Wound	125
Multiple Injuries	43
Stab Wound	35
Asphyxia	5
Undetermined	3
Exposure	3
Head and Neck Injuries	2
Sepsis	1
Emboli	1
Hypertension	1
Carbon Monoxide	1
Substance Intoxication	1
Cardiac Arrythmia	1
Pneumonia	1
Total	**223**

Table 11 – Homicide Deaths – County of Pronouncement (2008 – 2017)										
County of Pronouncement	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Bernalillo	61	81	74	50	56	55	55	73	87	97
Catron	0	0	0	0	0	0	0	0	0	0
Chaves	8	10	6	6	10	13	10	11	12	7
Cibola	0	3	5	3	4	1	4	3	2	5
Colfax	0	1	1	0	1	3	1	2	3	0
Curry	3	4	2	3	3	3	2	3	4	6
De Baca	0	0	0	0	0	1	0	0	0	1
Dona Ana	9	9	13	6	7	7	10	9	10	13
Eddy	2	6	3	3	7	4	3	3	9	8
Grant	2	1	1	4	1	3	1	3	4	5
Guadalupe	0	0	2	0	0	0	0	0	0	0
Harding	0	0	0	0	0	0	0	0	0	0
Hidalgo	0	0	0	1	0	0	1	0	0	0
Lea	4	8	10	10	4	7	5	8	7	2
Lincoln	1	1	0	3	1	1	0	2	2	2
Los Alamos	1	0	0	0	0	0	0	0	0	0
Luna	4	2	1	1	0	2	0	3	0	2
McKinley	7	10	8	9	11	10	11	7	13	8
Mora	0	2	0	0	0	0	0	2	1	0
Otero	4	5	4	3	0	5	2	3	4	1
Quay	1	0	1	4	3	0	0	0	2	2
Rio Arriba	0	4	8	8	9	5	1	4	1	6
Roosevelt	5	1	1	1	0	0	1	0	2	0
San Juan	0	10	11	11	11	14	13	10	11	13
San Miguel	11	5	2	4	0	3	2	3	3	3
Sandoval	2	11	3	5	3	1	7	5	9	8
Santa Fe	7	8	12	12	11	4	6	6	5	8
Sierra	10	0	1	0	1	0	1	3	2	0
Socorro	0	2	0	0	1	1	0	2	3	2
Taos	2	1	6	2	2	3	2	2	2	4
Torrance	1	0	2	0	0	1	4	3	1	1
Union	2	0	0	0	0	0	1	0	0	0
Valencia	0	4	1	6	4	4	5	5	6	3
Out of State	9	18	20	12	10	18	11	10	11	16
Totals	**156**	**207**	**198**	**167**	**160**	**169**	**159**	**185**	**216**	**223**

Overview – Manner of Death – Undetermined Deaths



Undetermined Deaths – Overview

All possible efforts are made to determine both a manner (accident, suicide, homicide, natural) and a cause of death for all deaths investigated by OMI. In a very small percentage of cases (less than 1% most years) neither the manner nor cause of death can be determined, even with a complete autopsy, scene investigation, and laboratory testing. In other cases, only skeletal or mummified remains were found, or a request for an autopsy was withdrawn.

Figure 25 - Undetermined Deaths by Race/Ethnicity 2017

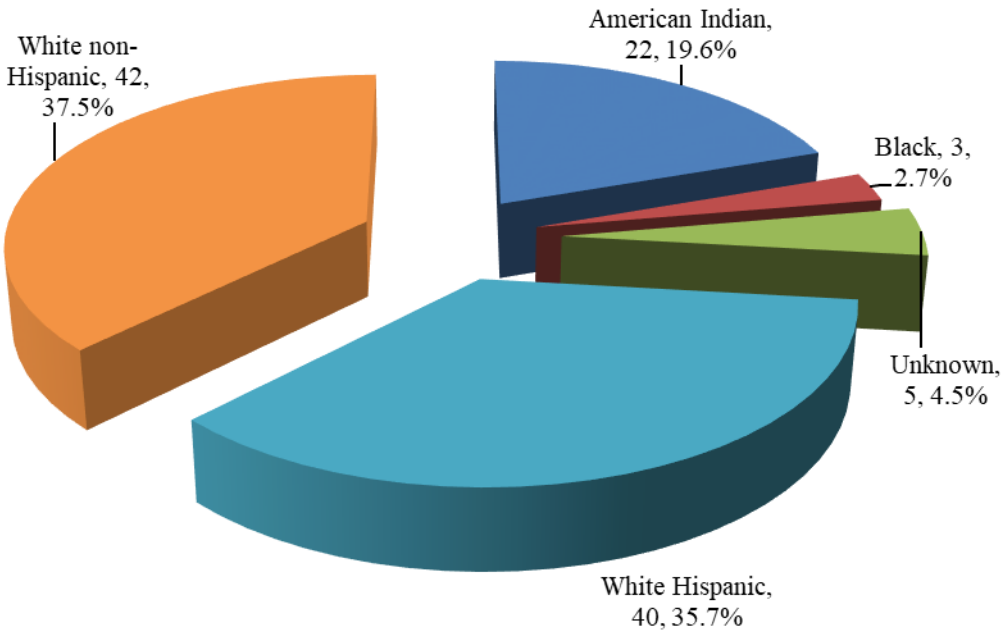
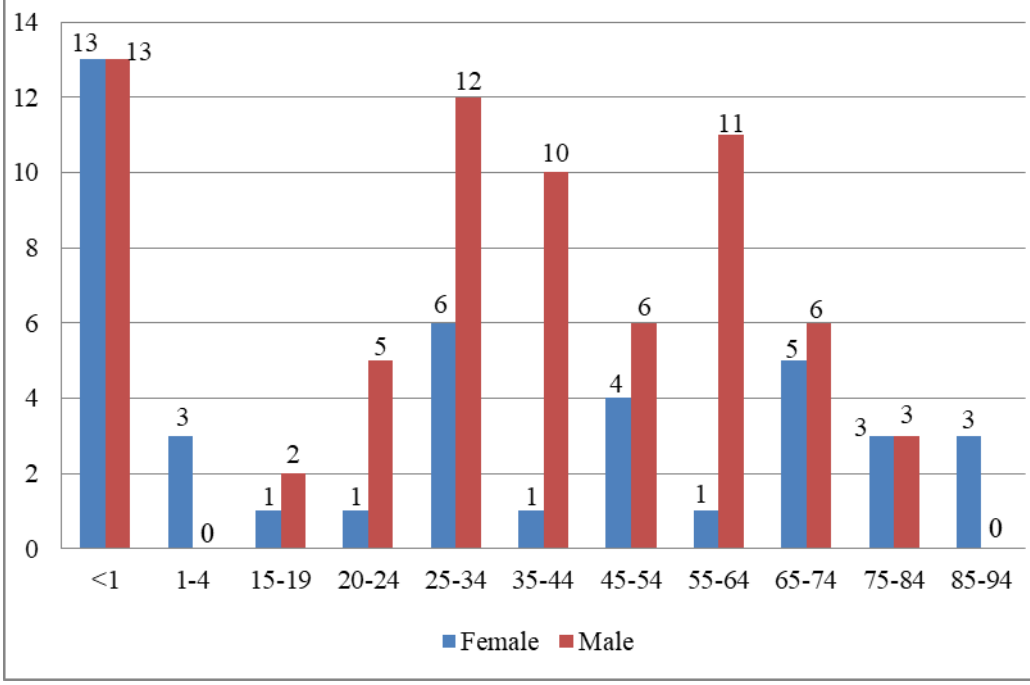
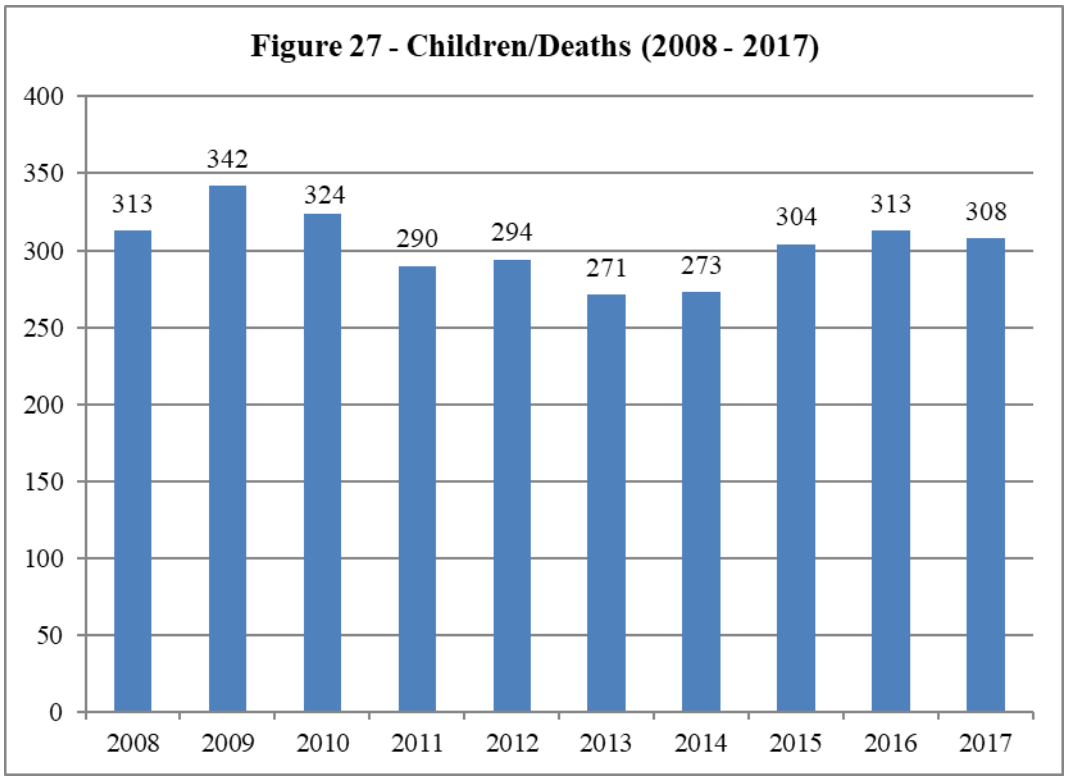


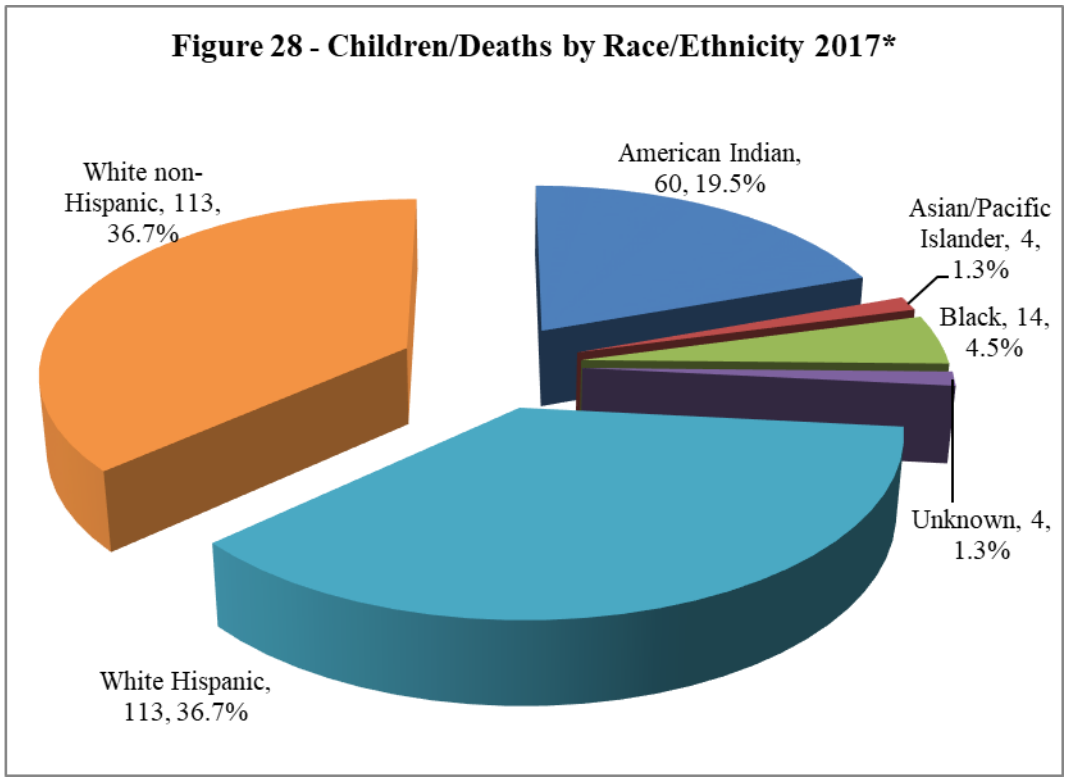
Figure 26 - Undetermined Deaths by Age and Gender 2017*



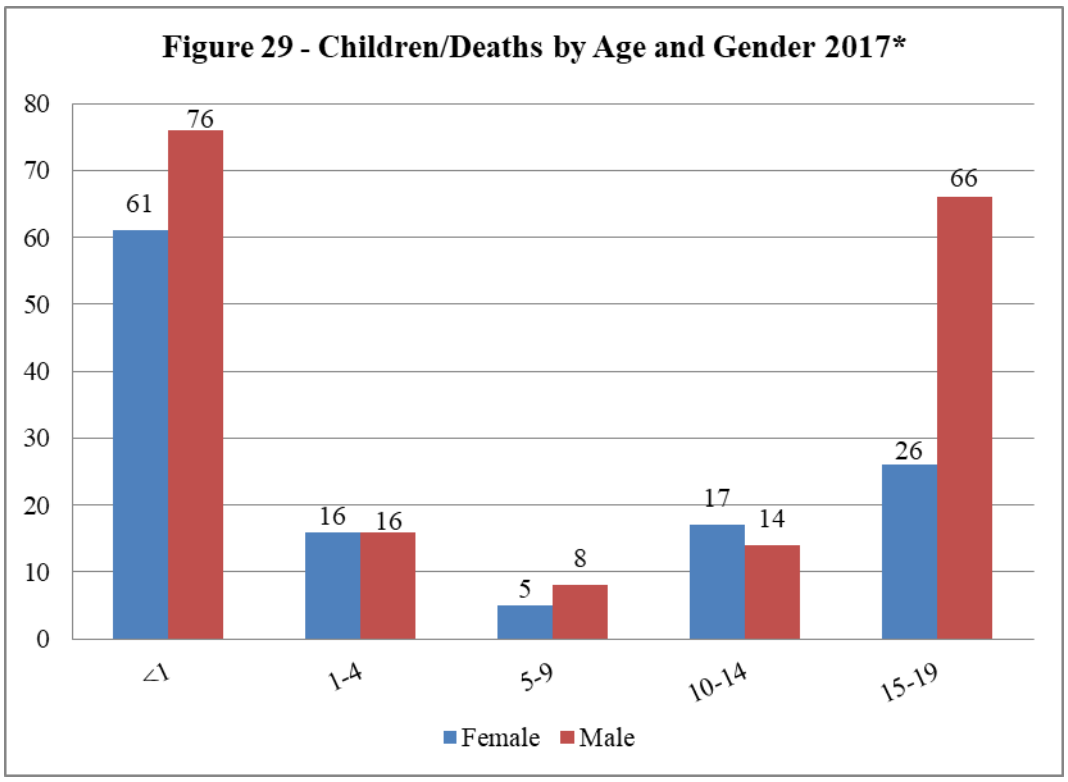
***1 male of unknown age, 2 unknown age and gender;**
Age groups not included had no undetermined deaths in 2017

Deaths of Children (19 years of age and younger)

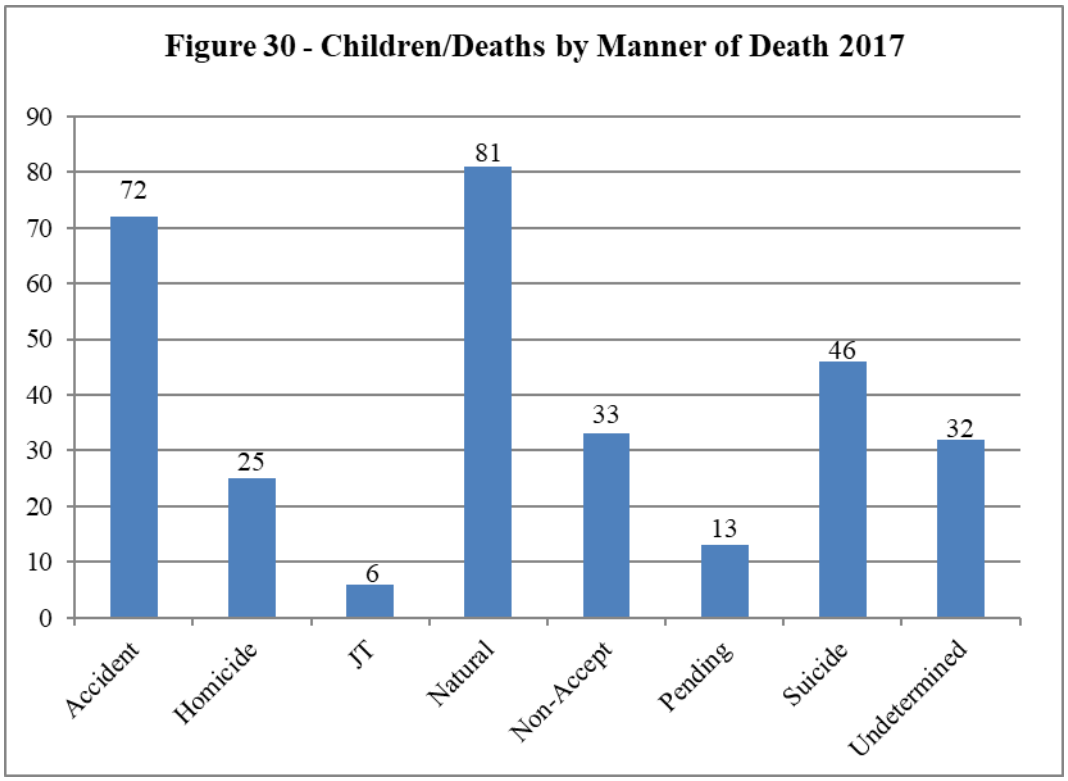




***Black includes 2 Hispanics**



***Does not include 3 unknown age and gender**



Overview – Children – Manner of Death – Natural Deaths

Figure 31 - Children /Natural Manner Deaths (2008 - 2017)

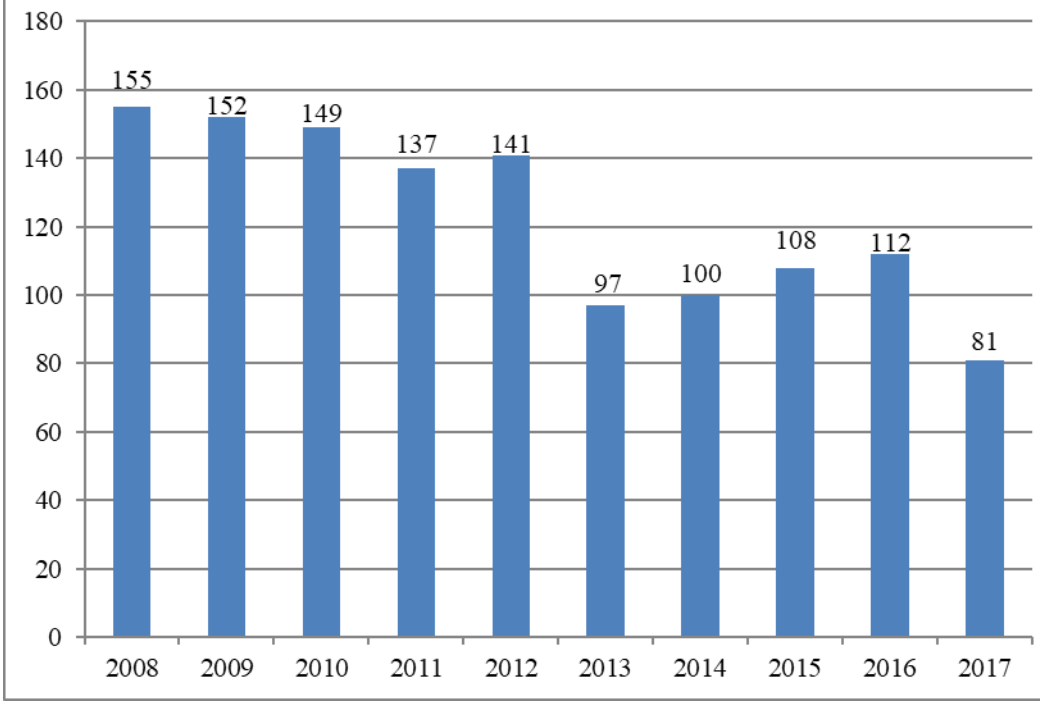
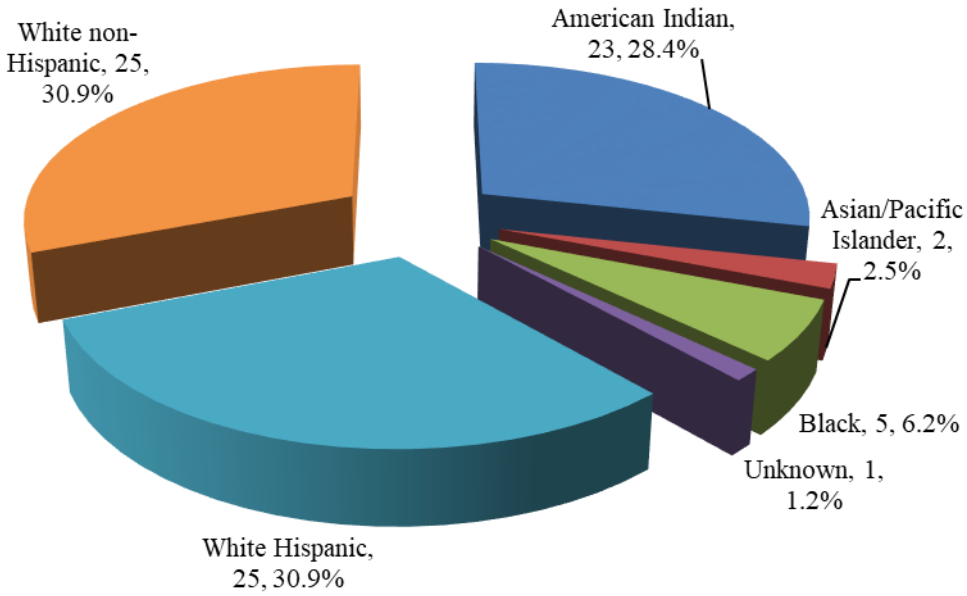
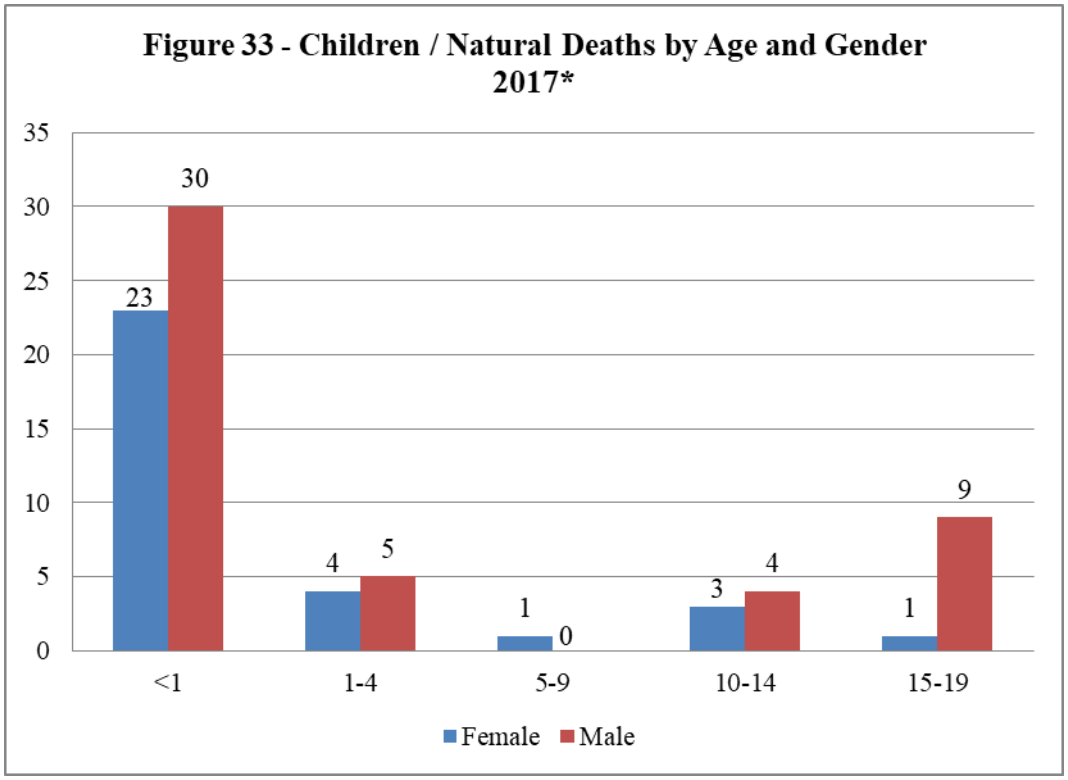


Figure 32 - Children/Natural Deaths by Race/Ethnicity 2017





***Does not include 1 unknown gender**

Overview – Children – Manner of Death – Accidental Deaths

Figure 34 - Children/Accidental Deaths (2008 - 2017)

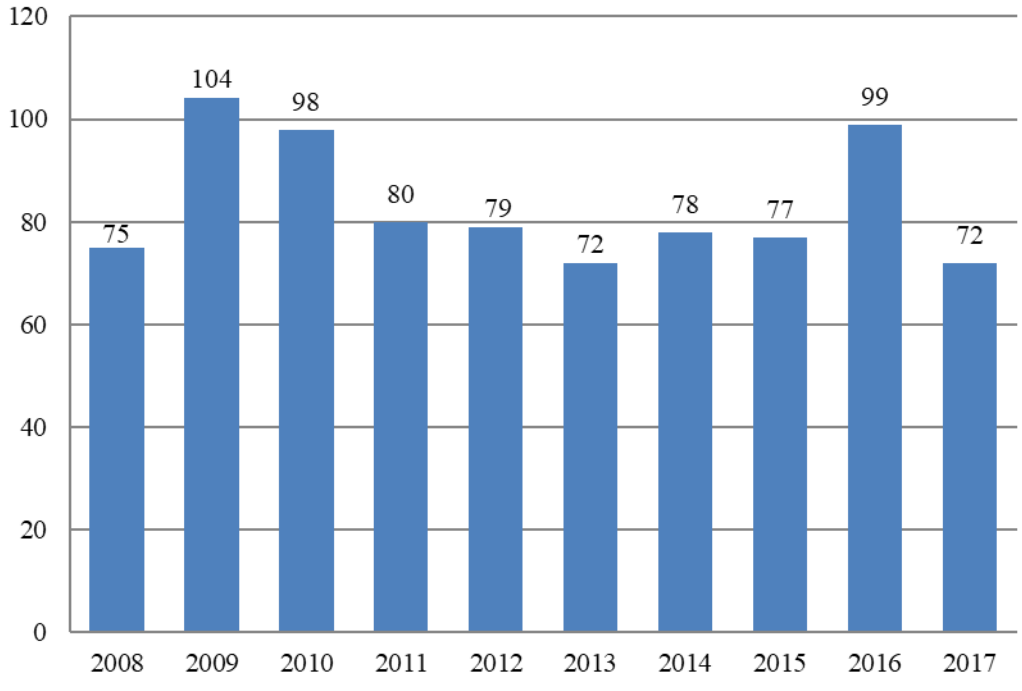
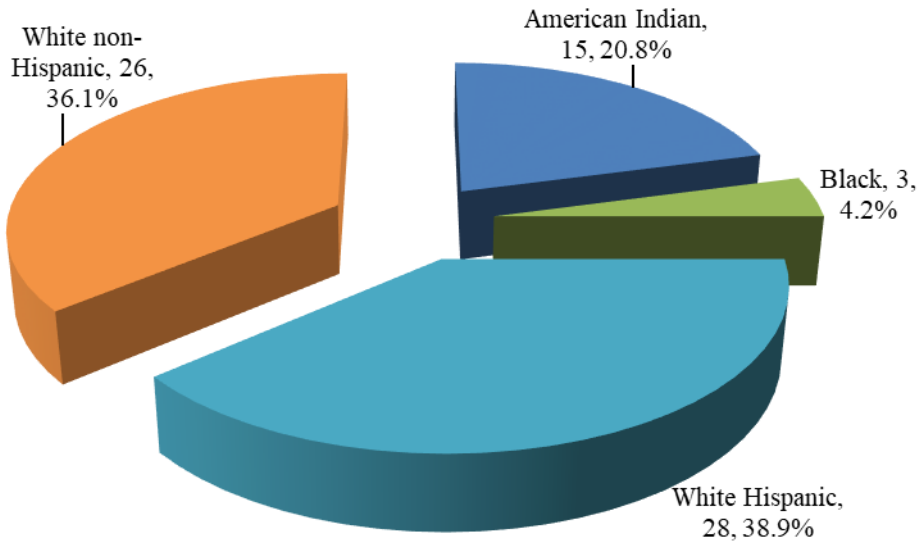


Figure 35 - Children/Accidental Deaths by Race/Ethnicity 2017*



***Black race/ethnicity includes 2 Hispanics**

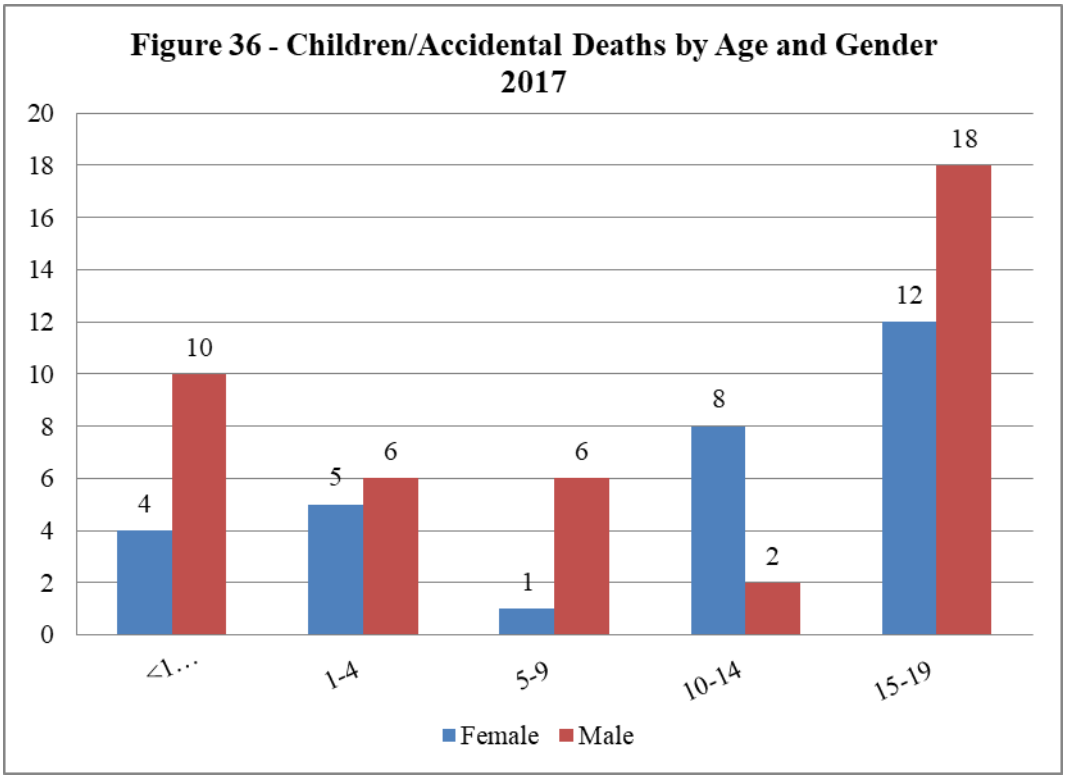
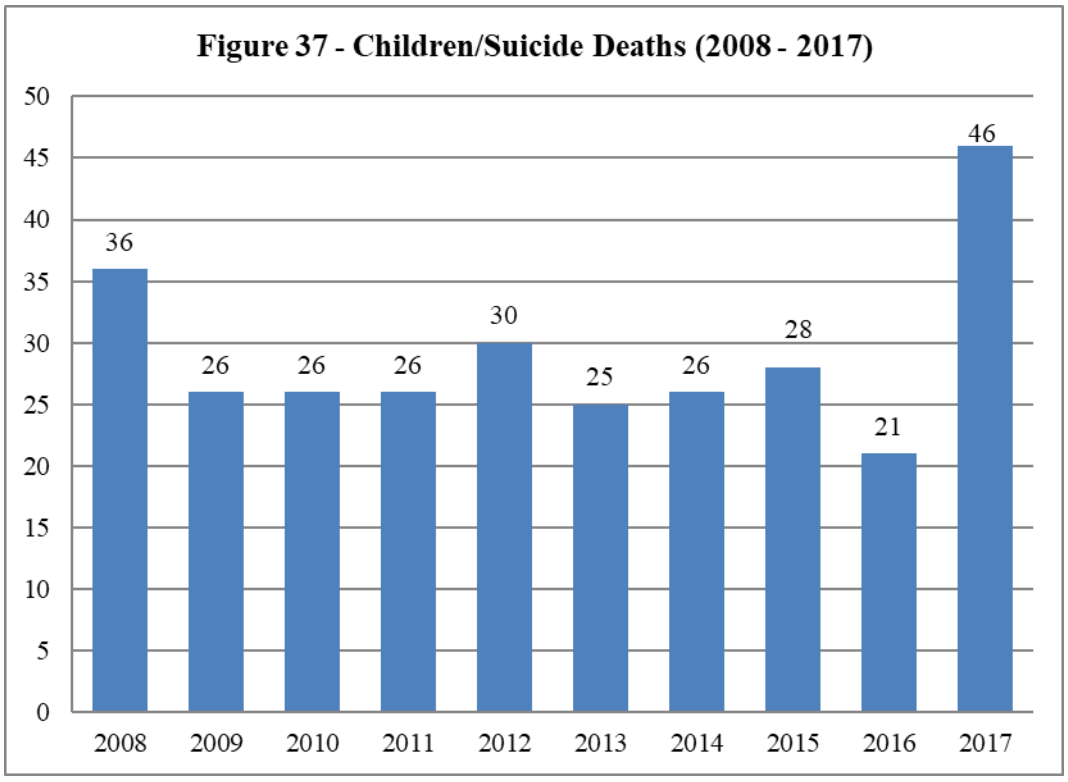
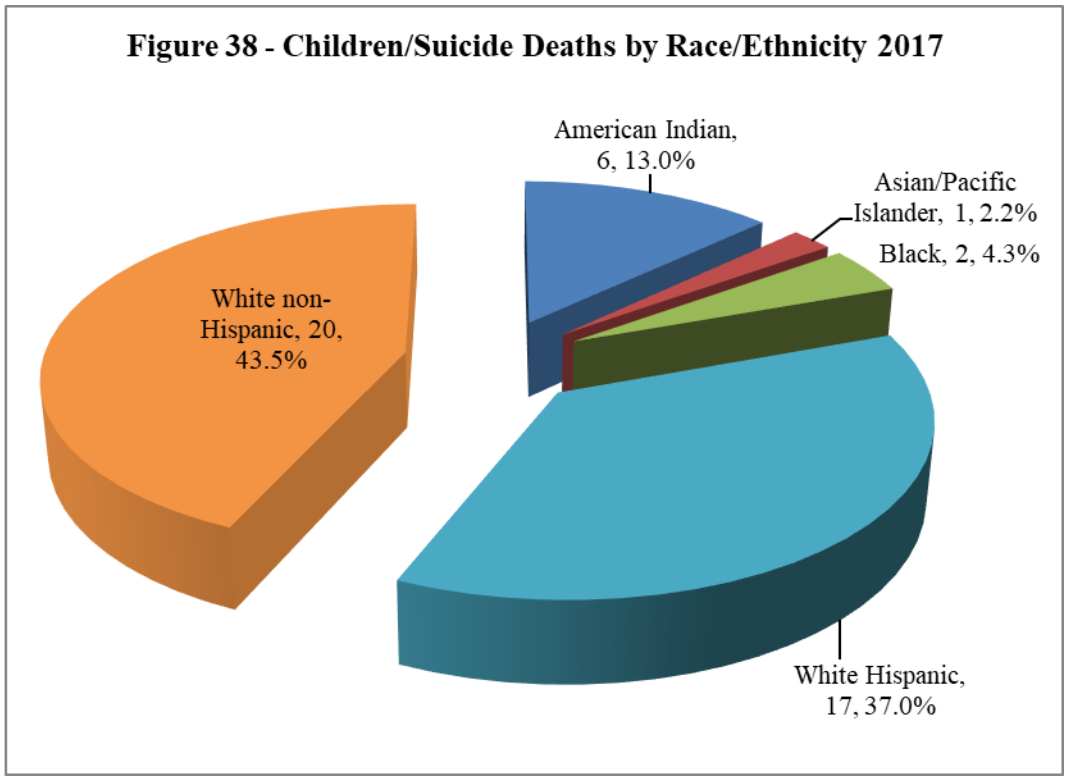
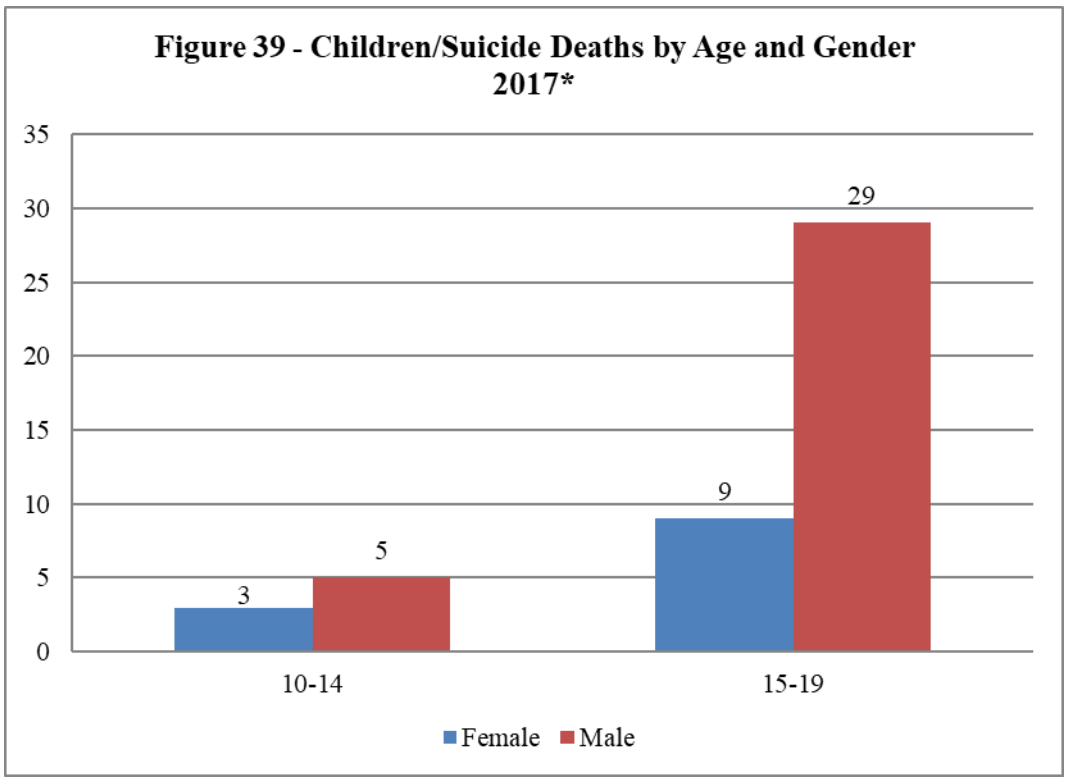


Table 12 – Children – Accidental Deaths – Cause – 2017	
Cause of Death	**Total Cases**
Multiple injuries	32
Asphyxia	15
Drowning	7
Substance Intoxication	6
Thermal injuries	3
Head and neck injuries	2
Exposure	2
Carbon Monoxide	2
Electrocution	1
Stab Wound	1
Gunshot Wound	1
Total	**72**

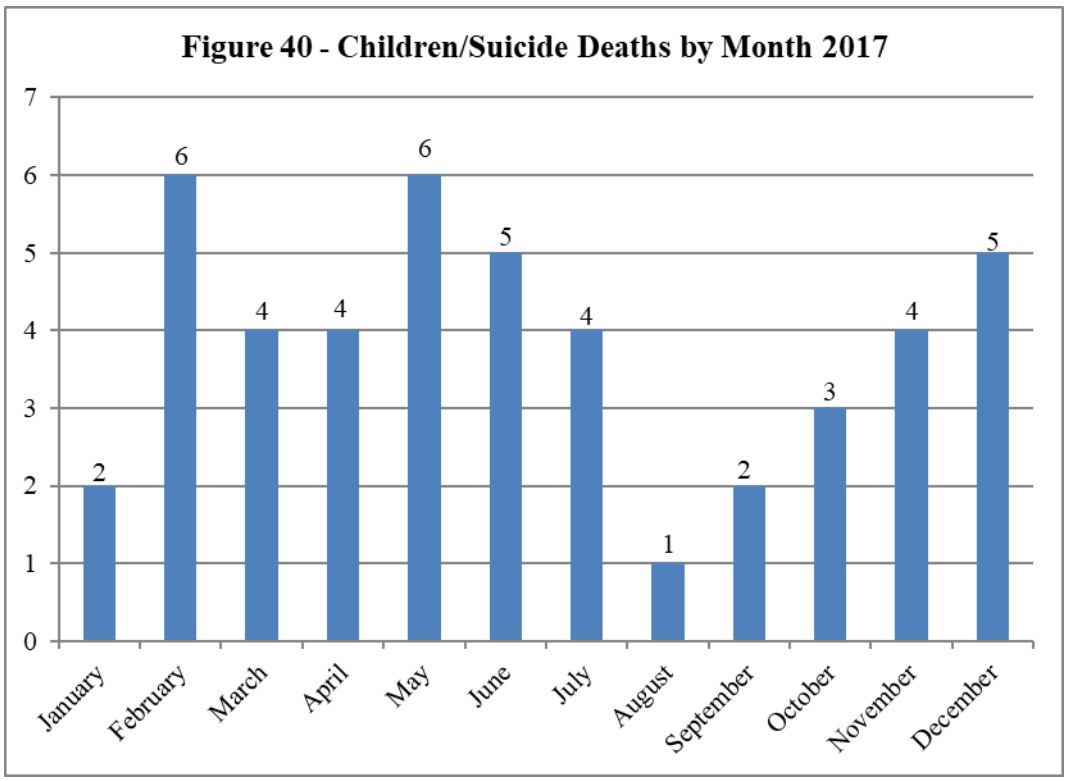
Overview – Children – Manner of Death – Suicide Deaths







***Age groups not included above had no deaths by suicide in 2017**



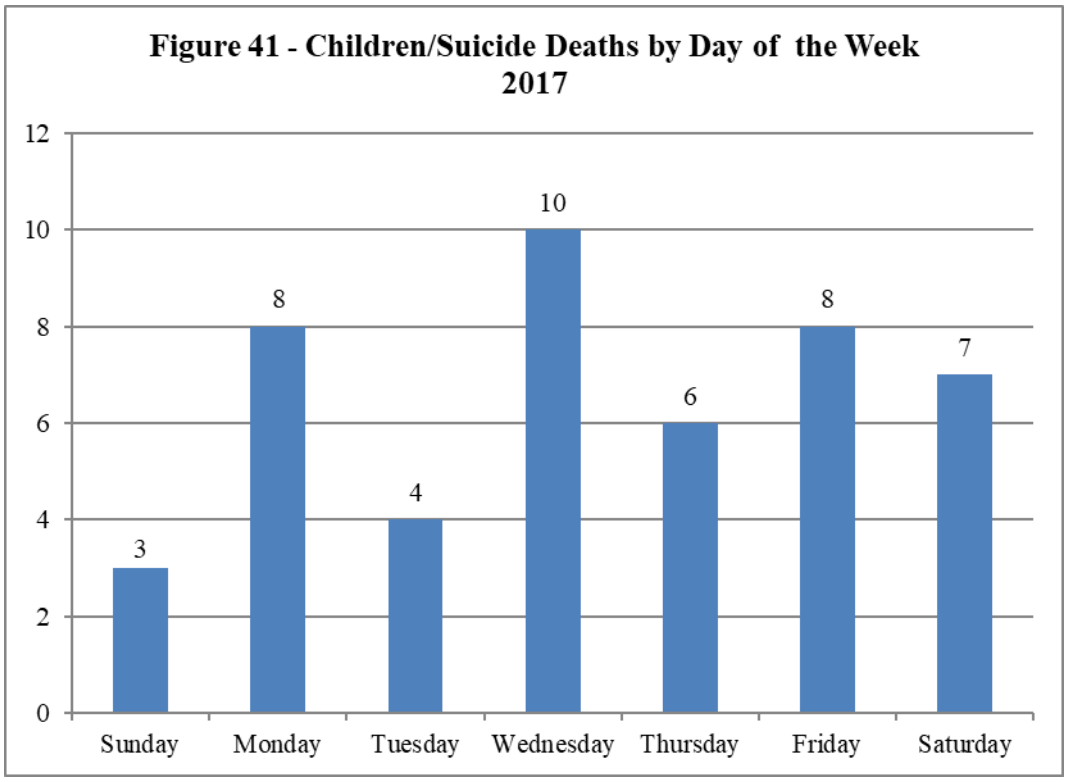
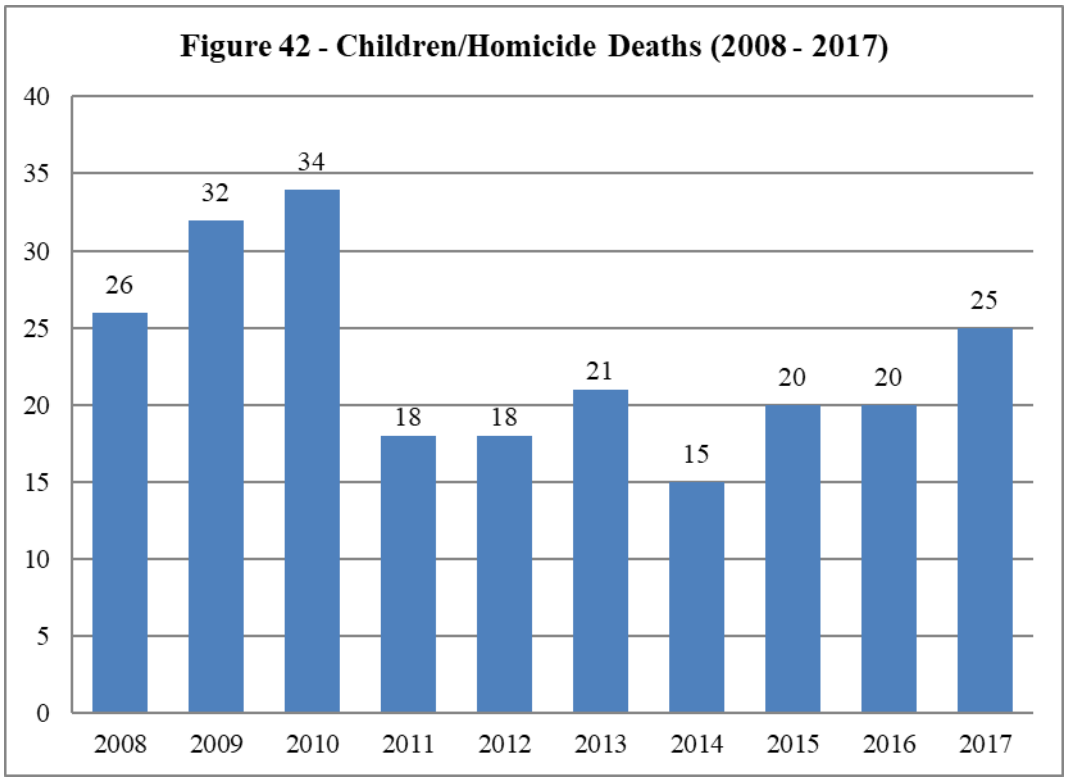
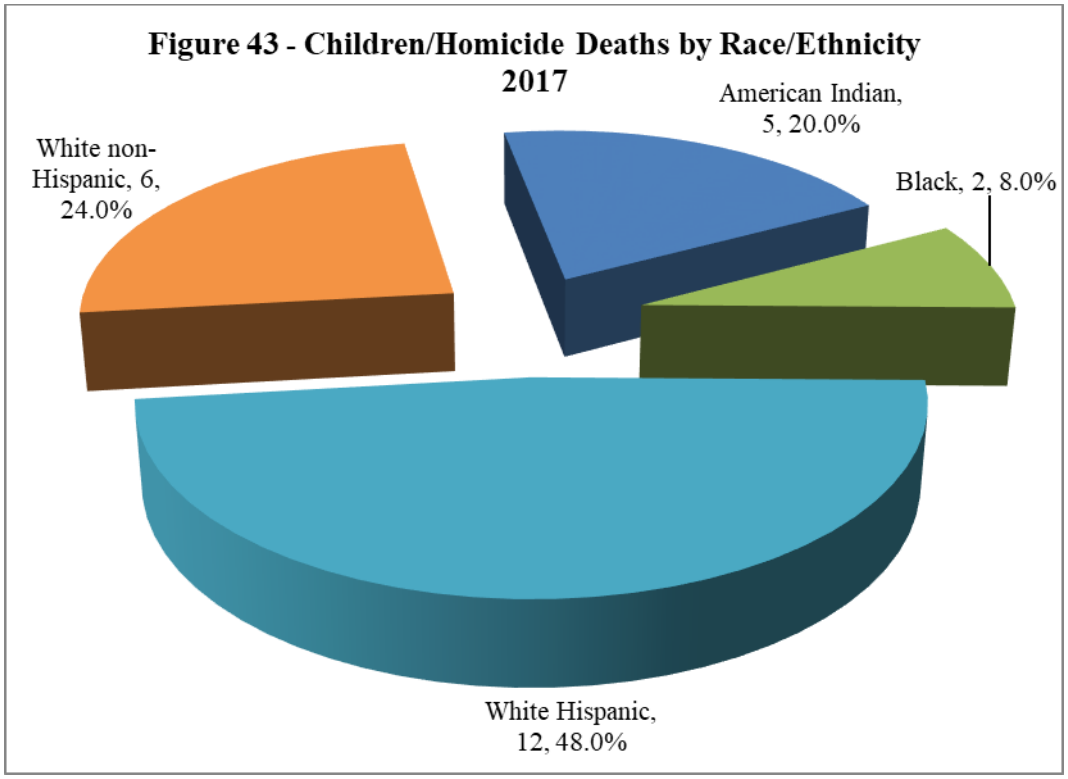


Table 13 - Children/Suicide Deaths by Cause 2017

Cause of Death	Total Cases
Hanging	22
Gunshot wound	16
Substance intoxication	5
Blunt Trauma	2
Suffocation	1
Total	**46**

Overview – Children – Manner of Death – Homicide Deaths





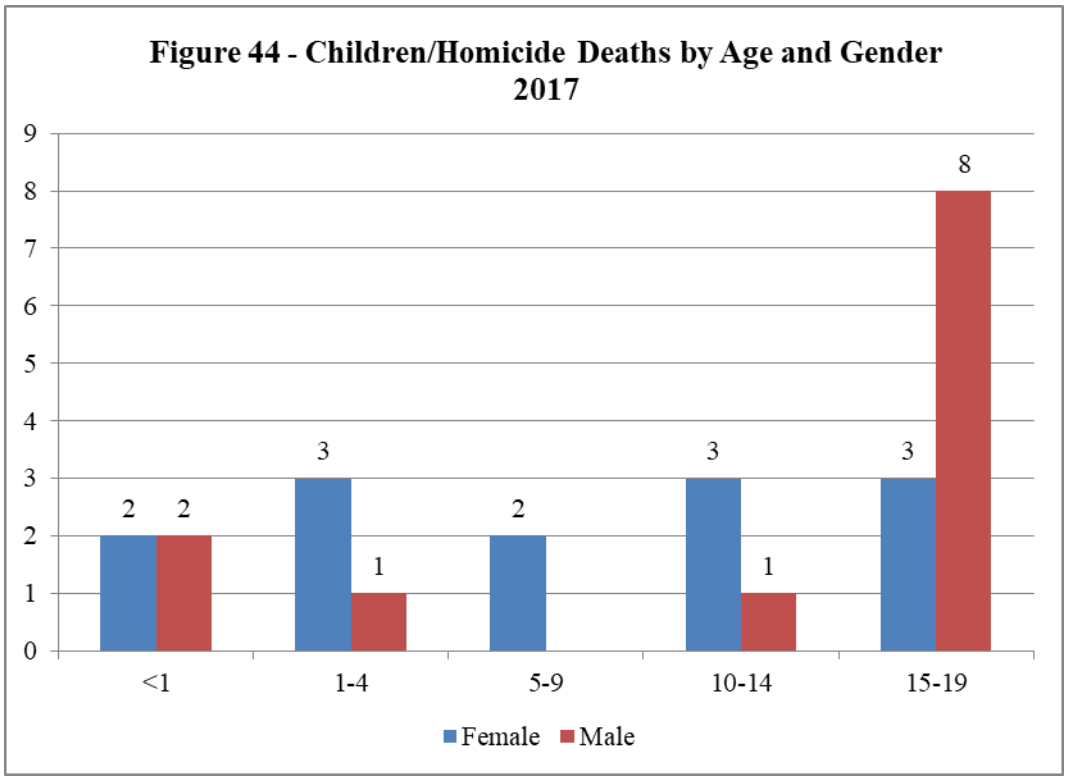
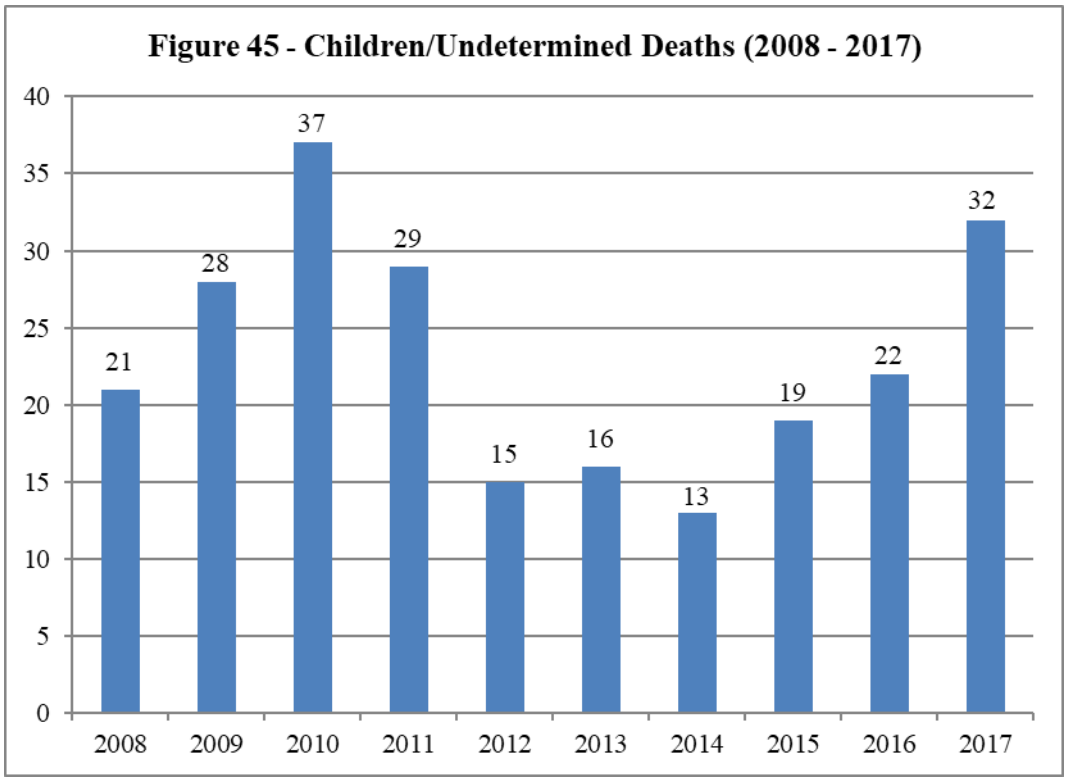
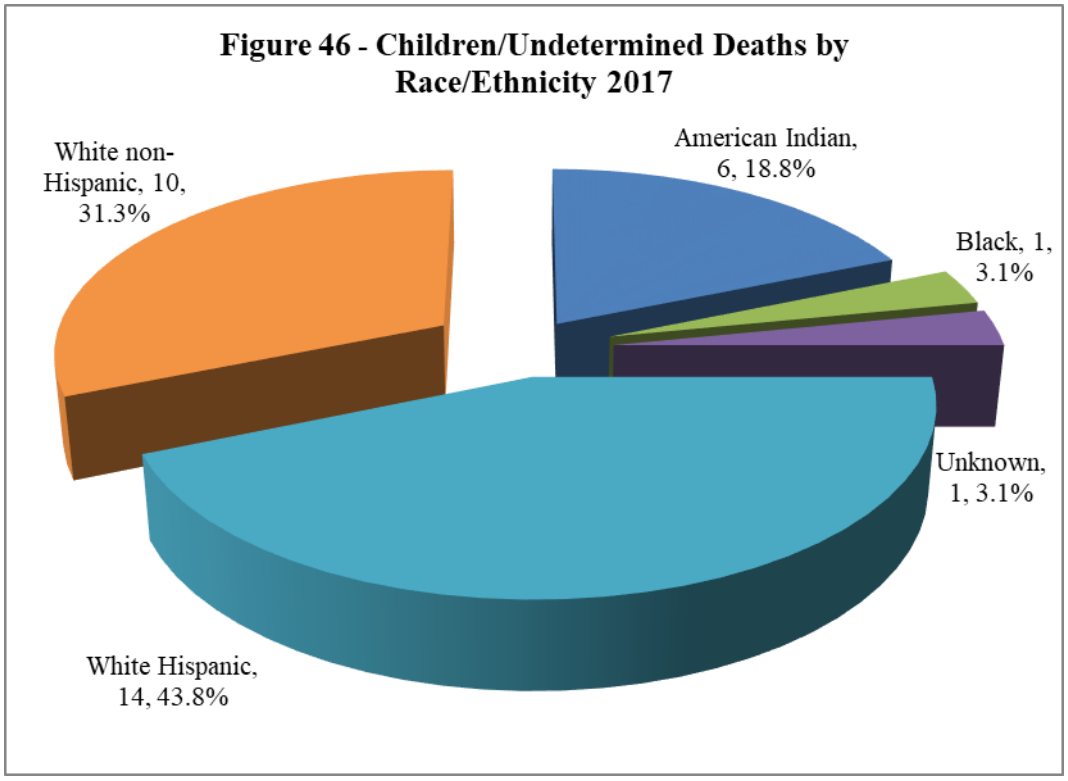
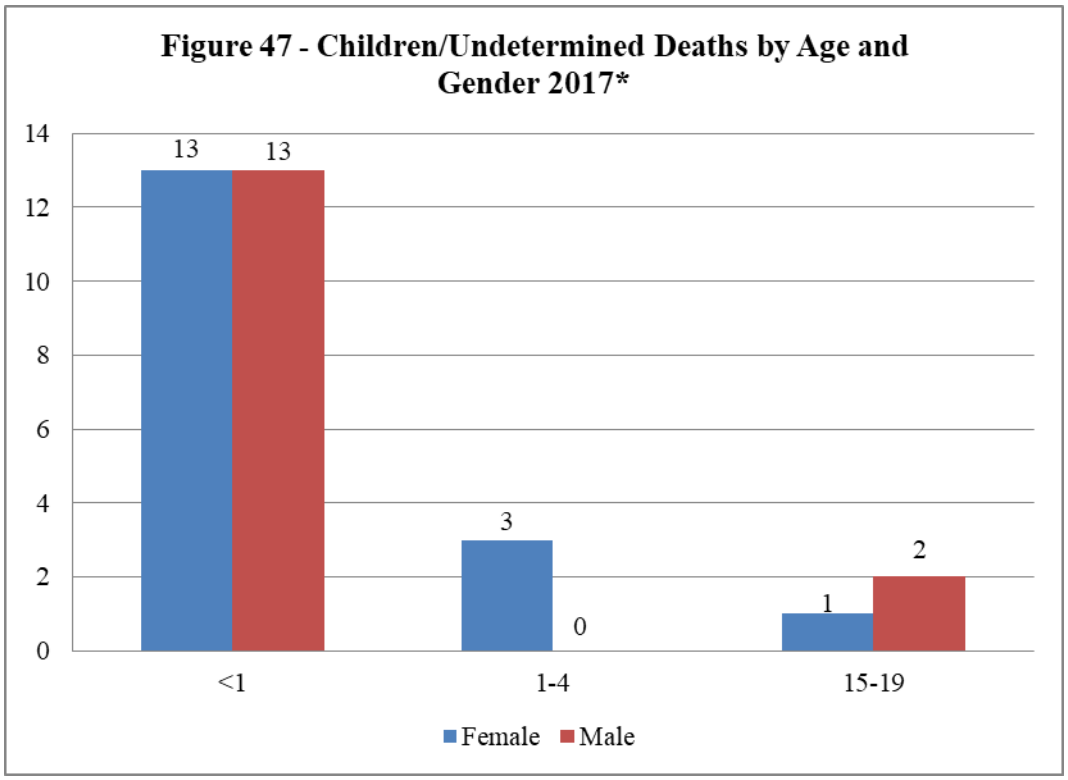


Table 14 - Children/Homicide Deaths by Cause 2017	
Cause of Death	**Total Cases**
Gunshot wound	13
Multiple injuries	5
Exposure	3
Undetermined	2
Asphyxia	1
Pneumonia	1
Total	**25**

Overview – Children – Manner of Death – Undetermined Deaths







***Age groups not included had no undetermined deaths in 2017**

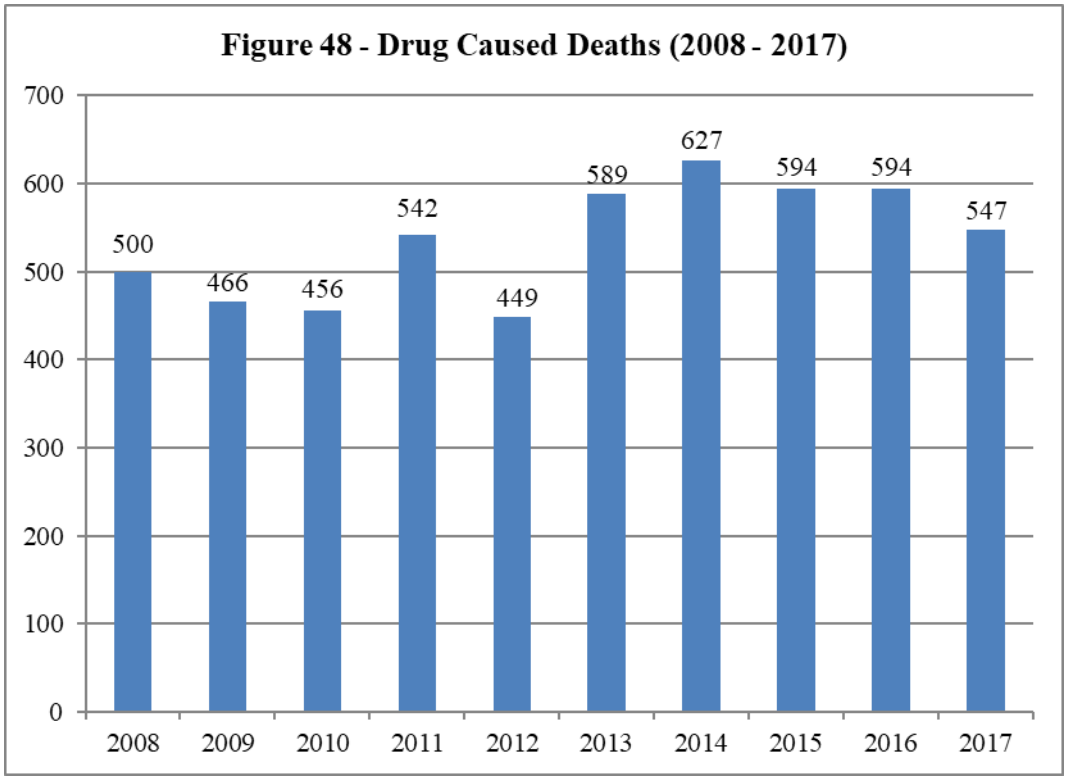
Table 15 - Children/Undetermined Deaths by Cause 2017	
Cause of Death	**Total Cases**
Undetermined	29
Fetal demise	1
Gunshot wound	1
Substance Intoxication	1

Deaths of Children in New Mexico – Summary

The 10-year summaries presented in this report for childhood deaths all include ages 19 and younger. The 308 deaths of people aged 19 and younger represented 4.27% of all deaths investigated by the OMI in 2017. Male decedents comprised 58% of the total deaths in children. The most common manner of death among children was natural, contributing 26% of the total. There were 46 suicides among children in 2017. Suicide deaths were more common among young males (74%) than females (26%), and hanging was the most common method of suicide in children. The total number of childhood homicides increased from 20 homicides in 2016 to 25 in 2017. Homicide deaths among children tended to be female (52%), White Hispanic (48 %) and killed by a firearm (52%). The majority of childhood homicide victims (44%) were between the ages of 15 and 19. Firearms played a role in 16 suicides (34.8% of total child suicides) and 13 homicides (52% of child homicides). Hanging deaths increased by 175% in 2017. Homicide rates increased as well from 30% in 2016 to 44% in 2017 with the largest homicide population moving from the age group 1 – 4 years to the age group 15 – 19 years.

An excellent resource for additional information about the deaths of children in New Mexico, their circumstances, risk factors, and opportunities for prevention is the Annual Report of the New Mexico Child Fatality Review (NMCFR), published by the New Mexico Department of Health Public Health Division, Maternal and Child Health Epidemiology Program. NMCFR consists of volunteers from many state and local agencies organized into four panels: Suicide, Sudden Unexplained Infant Death (SUID), Unintentional Injury, and Child Abuse and Neglect. The experts on these panels review the circumstances of childhood deaths in order to identify risk factors and develop prevention strategies, and their findings are presented in their annual report.

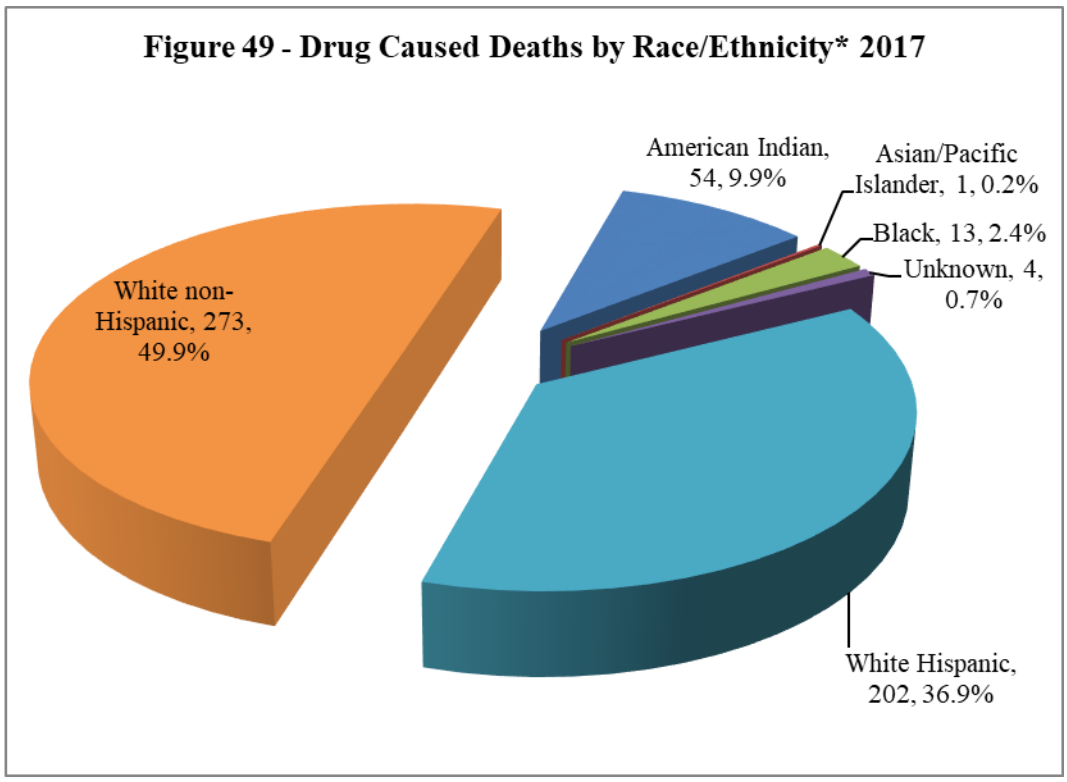
Drug Caused Deaths



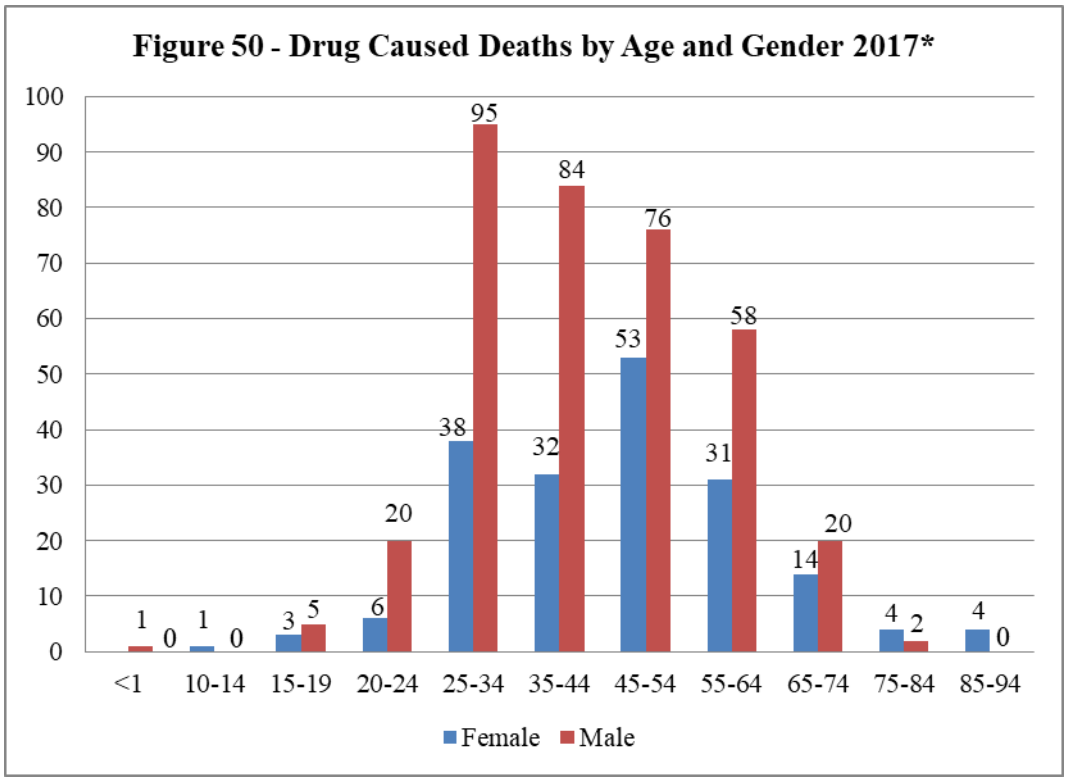
Drug Caused Deaths – Overview

Drug overdose deaths continue to be a problem in New Mexico. A wide variety of drugs, both illegal and prescription, contributed to the 547 drug-caused deaths. Many decedents had more than one drug present at the time of death. The most drug-caused deaths being seen in males ages 25-44 years (32.7%). The OMI designation of 'drug-caused deaths' includes both intentional (suicide, homicide) and unintentional (accidental) drug overdoses.

Additional information regarding unintentional drug overdose deaths in New Mexico is available annually in the newsletter New Mexico Epidemiology, published by the New Mexico Department of Health.



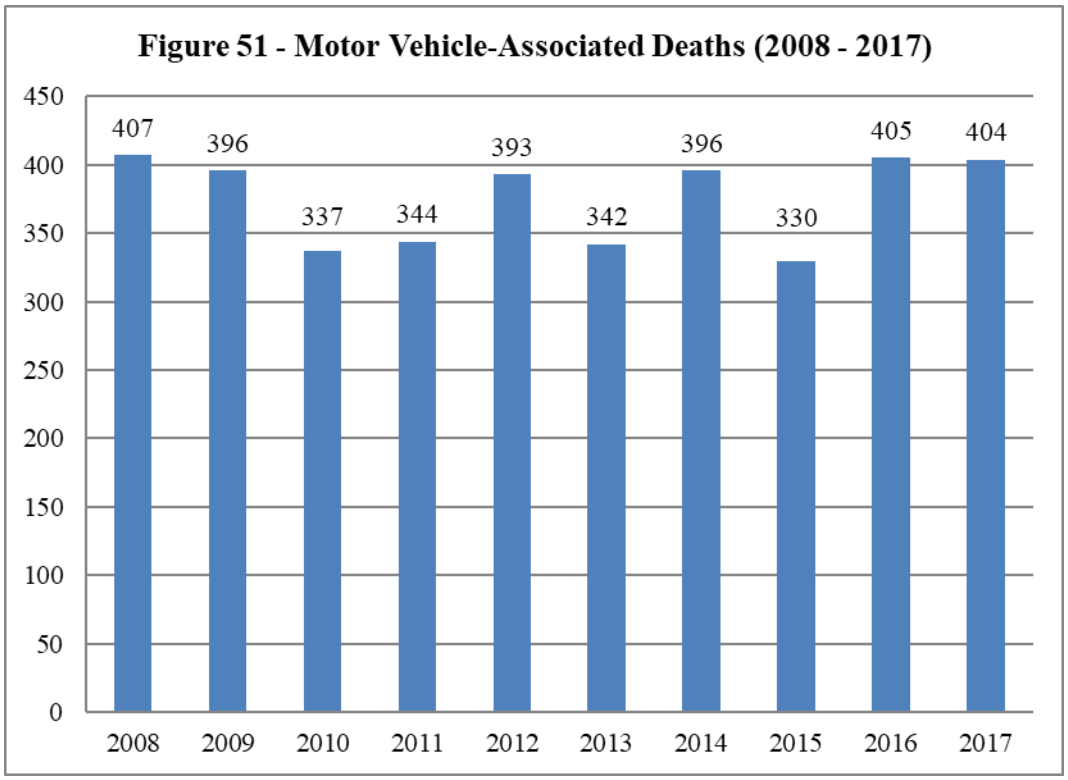
***American Indian includes 1 Hispanic**



***Age groups and genders not depicted above had no drug caused Manner assigned deaths.**

Table 16 – Drug Caused Deaths – County of Pronouncement – 2017	
County of Pronouncement	**Total Cases**
Bernalillo	208
Catron	0
Chaves	19
Cibola	2
Colfax	2
Curry	6
De Baca	0
Dona Ana	38
Eddy	13
Grant	13
Guadalupe	2
Harding	0
Hidalgo	4
Lea	15
Lincoln	7
Los Alamos	3
Luna	2
McKinley	9
Mora	0
Otero	11
Quay	1
Rio Arriba	33
Roosevelt	2
San Juan	35
San Miguel	10
Sandoval	29
Santa Fe	46
Sierra	3
Socorro	3
Taos	5
Torrance	3
Union	0
Valencia	18
Out of State	5
Total	**547**

Motor Vehicle-Associated Deaths



Motor Vehicle-Associated Deaths – Overview

In 2017, OMI investigated 404 motor-vehicle associated deaths, 26% of all accidental deaths investigated by OMI in 2017. Included in this classification are deaths of drivers and passengers of cars, trucks, and motorcycles, as well as deaths occurring when a motor vehicle struck a pedestrian or a bicyclist. American Indian decedents were over-represented, with 23% of motor-vehicle accidental deaths. Males ages 25-34 years had the highest number (14.6%) of motor vehicle-associated accidental deaths. May saw the highest number of motor vehicle deaths (11.6%), while January had the lowest number (5%). More motor vehicle deaths occurred on a Saturday (17%) than any other day of the week.

Figure 52 - Motor Vehicle Accident vs. Non-Motor Vehicle Accidents 2017

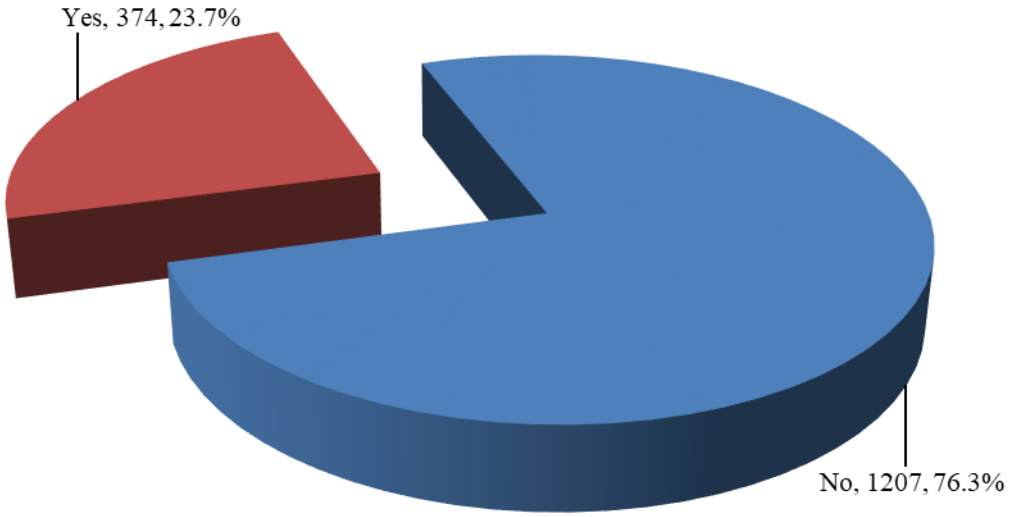
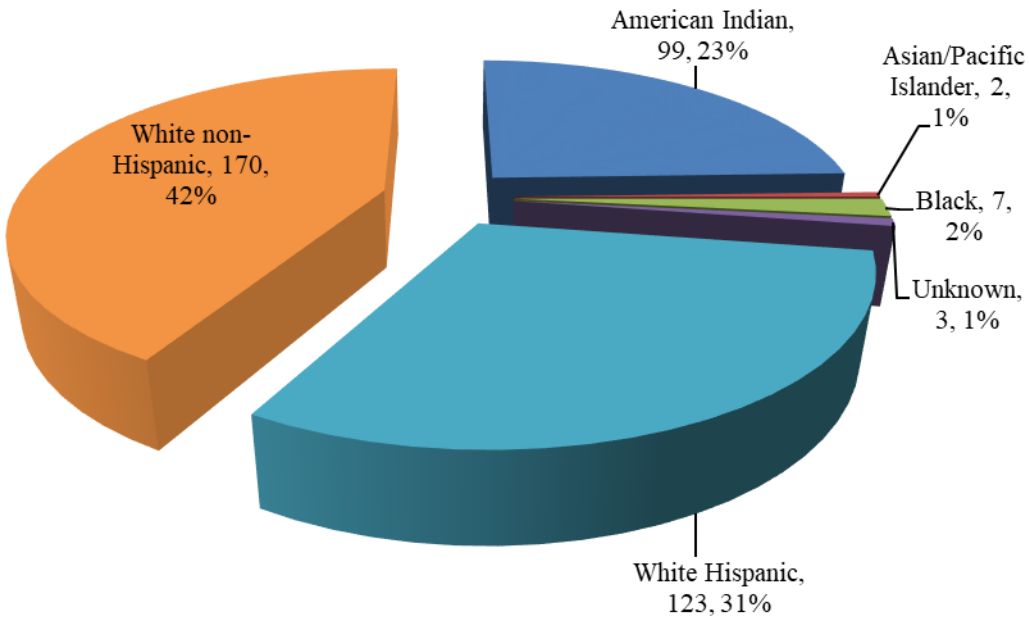


Figure 53 - Motor Vehicle-Associated Deaths by Race/Ethnicity* 2017



***Black includes 2 Hispanics, American Indian includes 2 Hispanics**

Figure 54 - Motor Vehicle-Associated Deaths by Age and Gender 2017

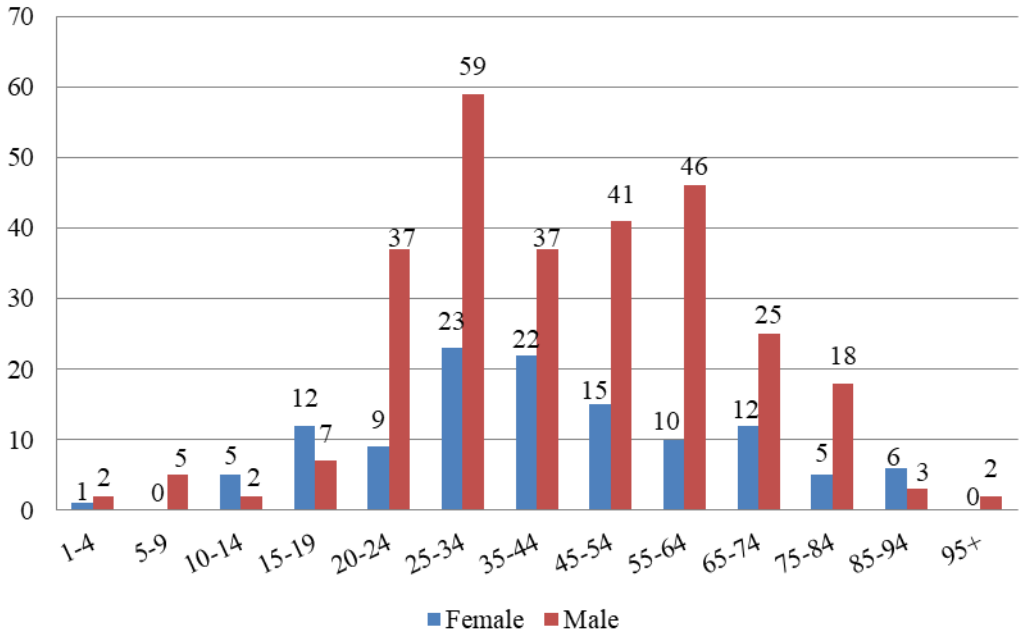
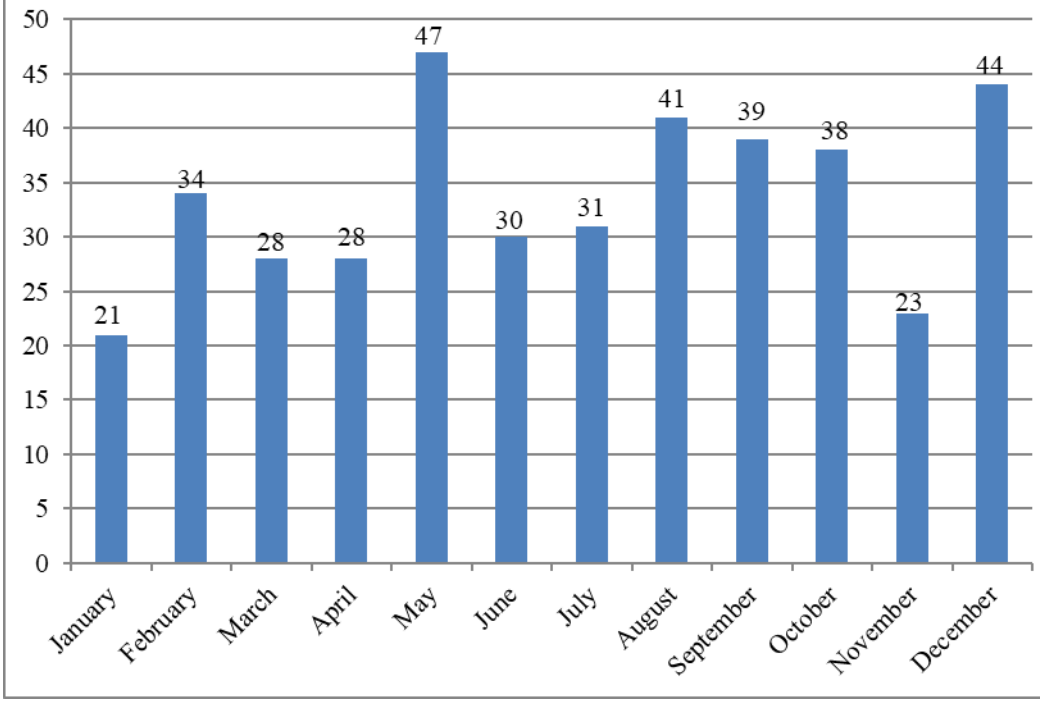


Figure 55 - Motor Vehicle-Associated Deaths by Month 2017



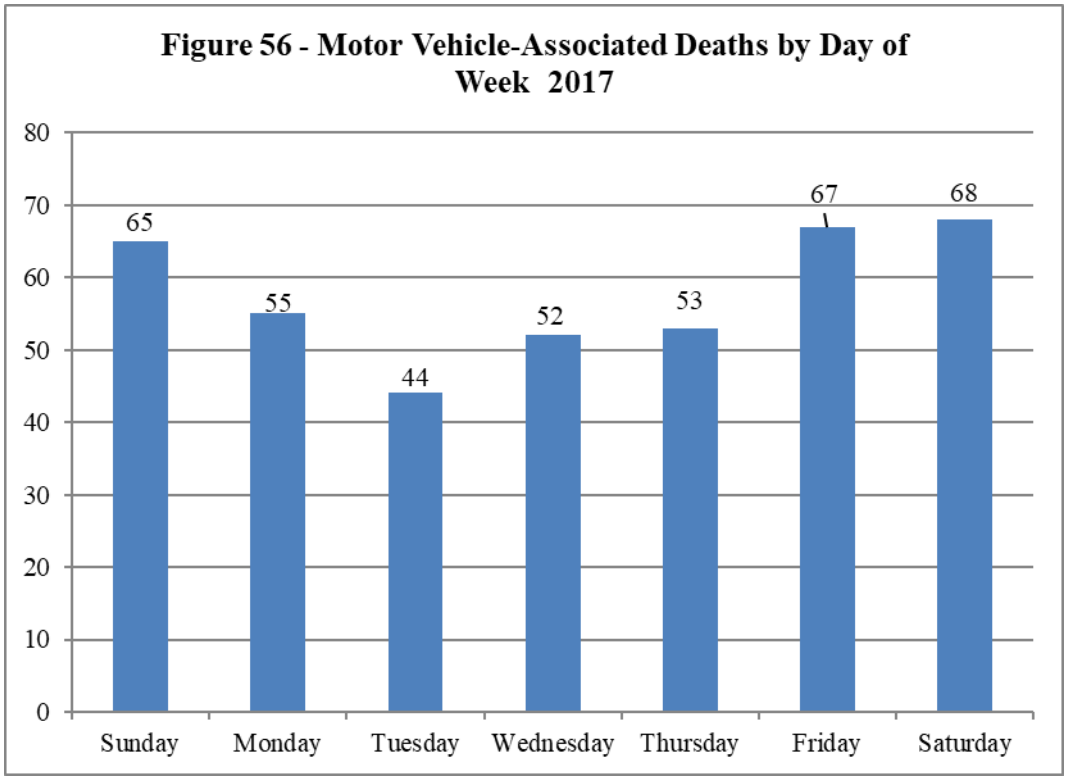


Figure 56 - Motor Vehicle-Associated Deaths by Day of Week 2017
80
70
60
50
40
30
20
10
0
65
55
44
52
53
67
68
Sunday
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday

Table 17 – Motor Vehicle-Associated Deaths by County of Pronouncement – 2017	
County of Pronouncement	**Total Cases**
Bernalillo	138
Catron	1
Chaves	5
Cibola	10
Colfax	1
Curry	3
De Baca	0
Dona Ana	24
Eddy	12
Grant	9
Guadalupe	9
Harding	0
Hidalgo	11
Lea	10
Lincoln	4
Los Alamos	0
Luna	2
McKinley	33
Mora	2
Otero	6
Quay	2
Rio Arriba	8
Roosevelt	6
San Juan	25
San Miguel	4
Sandoval	13
Santa Fe	15
Sierra	5
Socorro	1
Taos	6
Torrance	3
Union	3
Valencia	9
Out of State	24
Total	**404**

Glossary

Accident – The *manner of death* used when, in other than *natural deaths*, there is no evidence of intent.

Autopsy – A detailed postmortem external and internal examination of a body to determine *cause of death*. An autopsy may be either 'full', with complete dissection and examination of internal structures, or 'partial', dissecting only a select portion of the body, such as the brain or abdomen.

Cause of Death – The agent of effect that results in a physiological derangement or biochemical disturbance that is incompatible with life. The results of postmortem 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, drowning, can result from the accidental immersion of a child in a swimming pool or from the homicidal immersion of a child in a bathtub.

Children – Individuals 19 years of age or younger. (Normally this is 18 years of age or younger, but to keep with industry standard age divisions, 19 year-olds are included in our tables.)

Circumstances of Death – The situation, setting, or condition present at the time of injury or death.

Consultation – Autopsies paid for by families, hospitals or investigating agencies, such as the Federal Bureau of Investigations (FBI); these autopsies are not under OMI jurisdiction and are done by request and payment.

County of Pronouncement – The county where the decedent was pronounced dead.

Deputy Medical Investigator – An investigator, not necessarily a physician, appointed by the *State Medical Investigator* to assist in the investigation of deaths in the *jurisdiction* of the OMI. There is at least one deputy medical investigator in each county in New Mexico.

Exhumation – To remove a deceased body from a pre-existing grave site in order to examine the body and assign a *cause* and *manner of death* or to identify the remains using current information and/or technology.

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

Drug Caused Death – A death caused by a drug or combination of drugs. Deaths caused by *ethanol*, poisons and volatile substances are excluded.

Ethanol – An alcohol, which is the principal intoxicant in liquor, beer, and wine. A person with an alcohol concentration in blood of 0.08 grams/100 milliliters (0.08 g/100mL) is legally intoxicated in New Mexico.

Ethanol Present – Deaths in which toxicological tests reveal a reportable level of *ethanol* (0.005% or greater) at the time of death.

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

Jurisdiction – The extent of the Office of the Medical Investigator's authority over deaths. The OMI authority covers reportable deaths that occur in New Mexico, except for those occurring on federal reservations (American Indian and military) and in hospitals. New Mexico Statute *24-11-5NMSA 1978* and descriptions in the OMI policy manual define reportable deaths. The OMI may be invited to consult or investigate cases over which it has no jurisdiction.

Jurisdiction Terminated – Jurisdiction terminated cases are reported to OMI, which is statutorily obligated to review the cases. However, after review proves that there was no foul play and if the decedent's physician agrees that the death was an expected natural death, the case is then assigned a *cause* and *manner* of death by their physician. The OMI is still obligated to make sure the decedent's remains are properly cared for.

Field External Examination – An investigation and external examination conducted at the scene to determine cause of death, with no autopsy conducted but under OMI jurisdiction.

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

Non-accept – Non-accept cases are decedents who have died under the care of a physician, but are reported into the OMI to verify that there is no statutory obligation to investigate the case.

Office of the Medical Investigator – The state agency in New Mexico that is responsible for the investigation of sudden, violent or untimely deaths. The Office of the Medical Investigator was created by legislation in 1973 to replace the county coroner system (see also, *Deputy Medical Investigator*).

Pending – The *cause of death* and *manner of death* are to be determined pending further investigation and/or toxicological, histological and/or neuropathological testing at the time of publication.

State Medical Investigator – The head of the *Office of the Medical Investigator*. The State Medical Investigator must be a licensed physician licensed in New Mexico and may appoint Assistant Medical investigators, who must be physicians and *Deputy Medical Investigators.*

Undetermined – The *manner of death* for deaths in which there is insufficient information to assign another manner.