

**Marin County Sheriff's Office  
Coroner Division  
Annual Report  
2016**



**Robert T. Doyle  
Sheriff-Coroner**

# Table of Contents

Introduction.....	3
Coroner Division Staff.....	4
Reportable Criteria.....	5
Statistics for Calendar Year 2016.....	8
General Classifications of Death by Month for 2016.....	9
Historical Statistics (from 2011-2015).....	11
Natural Deaths.....	15
Suicide Deaths.....	17
Accidental Deaths.....	19
Motor Vehicle Fatalities.....	22
Homicide Deaths.....	25
Undetermined Deaths .....	26
Primary Medical Doctor Sign Out Cases.....	27
In Custody Deaths.....	28
Indigent Burials.....	29
Types of Toxicology Tests Run in 2016.....	30

# Introduction

The Coroner's Division is a component of the Sheriff's Office Administration and Support Services Bureau. The Coroner's Division, located at 1600 Los Gamos Drive, Suite 205 in San Rafael, consisted of one Chief Deputy Coroner, three Coroner Investigators, one Extra Hire Investigator, one Forensic Pathologist, one Coroner Forensic Technician, and two part-time volunteer interns.

It is the mission of the Coroner's Division to provide competent and timely medicolegal investigations into deaths occurring within the County of Marin and to provide timely and accurate answers to survivors with regard to the death of their loved ones. The Coroner's Division conducts their investigations to determine the cause, manner, and circumstances of deaths meeting criteria as defined in 27491 of the California Government Code.

According to the Census Bureau in 2014, Marin County was estimated to have a population of 260,750. There were approximately 1,960 deaths recorded in Marin County in 2016. Of these, 630 were reported to the Sheriff's Office, Coroner's Division. These deaths were reported pursuant to California Government Code Section 27491 and California Health and Safety Code Section 102850 which direct the Coroner to inquire into and determine the circumstances, manner and cause of those deaths. After initial investigation, 260 were determined to be full Coroner cases with the final cause of death signed by the Coroner, or his designated authority.

This Annual Report of the Coroner's Division provides a summary of the cases reported and investigated by the Marin County Sheriff's Coroner's Division and provides a statistical breakdown of the types of deaths that occurred within Marin County for the year.

# Marin County Sheriff-Coroner 2016 Staff

**Sheriff Robert T. Doyle**

**Sheriff-Coroner**

**Undersheriff Michael Ridgway**

**Undersheriff**

**Captain Doug Endy**

**Captain**

**Darrell Harris**

**Chief Deputy Coroner**

**Emily Schum**

**Coroner Investigator** (from Jan. to May)

**Kenneth Advincula**

**Coroner Investigator**

**Roger Fielding**

**Coroner Investigator**

**Sandra Potter**

**Coroner Investigator** (from Jan. to Oct.)

**Stewart Cowan**

**Deputy Sheriff, Extra Hire**

**Doctor Joseph Cohen**

**Forensic Pathologist, Contracted**

**Alexandra Torres**

**Coroner Forensic Technician**  
(from Oct. to present)

**Marilyn Kwuan**

**Office Assistant, Extra Hire**  
(from Jan.-Oct.)

**Alexandra Torres**

**Office Assistant, Extra Hire**  
(from Jan.-Oct.)

**Jaclyn Vaishville**

**Intern**

**Gladys Tumbaga**

**Intern**

**Emily Morris**

**Intern**

# Reportable Criteria

## Part 1 of 3

The Coroner Division is responsible for investigating the cause and manner of death of all sudden or unexpected deaths, natural deaths when the deceased has not been under a physician's care, as well as homicide, suicide, and accidental deaths.

The Coroner Division is also responsible for the identification of unknown decedents, for locating next-of-kin, and preserving all criminal or civil evidence, personal assets, and estates.

The State of California Government Code Section 27491 and Section 102850 of the Health and Safety Code direct the Coroner to inquire into and determine the circumstances, manner, and cause of the following deaths which are immediately reportable:

1. Unattended deaths: No physician in attendance or during the continued absence of the qualifying physician. This includes all deaths outside hospitals and nursing care facilities. This includes all deaths which occur without the attendance of a physician. The Coroner will proceed to conduct an investigation of the death. If, during or after the investigation, it is ascertained that the death is due to natural causes and if there is an attending physician who is qualified and willing, the Coroner will waive the case to the attending physician for his certification and signature and the custody of the body will be retained by the family for removal to a private mortuary of the family's choice. In order to qualify, the attending physician must have professionally seen the decedent during the 20 days prior to death. (See #2 below).

A patient in a hospital is always considered as being in attendance. Cases where the physician is unavailable for reasons of vacation or when attending conventions, etc., the Coroner should be called. It is not necessary that the physician attend the patient for a period of 24 hours prior to death in order to sign the death certificate. On natural deaths, a physician may be qualified to sign a death certificate provided he attended the patient for a sufficient time to properly diagnose the case and subsequent cause of death. If he only saw the patient for matter of minutes but was able to determine the cause, he can certify the death and sign the certificate. If a hospital has an administrative policy of reporting cases to the Coroner when a patient dies within 24 hours after admittance, the Coroner will discuss the case with the attending physician; however, may not accept the case for investigation.

2. Wherein the deceased has not been attended by a physician in the 20 days prior to death. The word "attended" means that the patient must have been professionally seen by the physician. A telephone conversation between the physician and patient IS NOT considered "in attendance". After the events and circumstances at the time of death are investigated by the Coroner, the Coroner or his deputy may order an autopsy or may consult with one qualified and licensed to practice medicine and determines the cause of death, providing such information affords clear grounds to establish the correct medical cause of death. For example, a heart condition and the patient dies at home. The doctor may give the cause of death from his knowledge of the patient with the Coroner signing the certificate. Another example would be a rest home patient who is routinely seen once a month but would die at a time when the doctor had not attended him during the prior twenty days. Cooperation and consultation between the physician and the Coroner may provide the cause; however, if the doctor's prior knowledge of the subject could not be applied to the death, then an autopsy would be performed.

## Reportable Criteria

### Part 2 of 3

3. Physician unable to state the cause of death (unwillingness DOES NOT APPLY). This includes all sudden, unexpected and unusual deaths and fetal deaths when the underlying cause is unknown. This would apply to a hospital, for example, where the prior knowledge of the deceased and knowledge gained while deceased was a patient at the hospital would not be sufficient to give the cause of death. This is strictly a matter of knowledge of the subject's condition.
4. Known or suspected homicide (Self Explanatory).
5. Known or suspected suicide (Self Explanatory).
6. Involving any criminal action or suspicion of a criminal act (includes child and dependent adult negligence and abuse). This would cover deaths under such circumstances as to afford reasonable grounds to suspect that the death was caused by the criminal act of another.
7. Related to or following known or suspected self-induced or criminal abortion (Self Explanatory).
8. Associated with a known or alleged rape or crime against nature (Self Explanatory).
9. Following an accident or injury (primary or contributory). Deaths known or suspected as resulting (in whole or part) from or related to accident or injury, EITHER OLD OR RECENT. This section covers a lot of ground and the key word is FOLLOWING an injury or accident. Of course this would include any accident: traffic, at home, at work, etc. It would include such cases as where an elderly person would fall at home incurring a fracture of his hip, then taken to the hospital, confined to bed and would later die of bronchopneumonia or any other natural cause. On the basis that had the individual not fallen and fractured his femur with the fatal consequences there from, he, it must be assumed, would still be alive despite various infirmities. There are certain cases obviously where, because of the time lapse between the injury and the death, that a great deal of difficulty ensues when one attempts to determine whether the death be attributed to the injury or whether it be a natural one in the aged person. A simple "rule of thumb" method is to carefully investigate this type of case in response to the clinical course. For example, if the fracture occurred three months ago and the individual is not returned to ambulation, even in a limited sense, and he dies suddenly, it would be a fair statement to list the death as natural rather than an accidental one relating to the previous treatment. It is not necessary that the fracture be directly related to the immediate terminal cause of death. If it contributed to a degree, it may be shown as a significant condition contributing to, but not related, to the terminal condition. If it is felt that the fracture did contribute, the Coroner must make an investigation into the facts about how the injury occurred. The actual wording for the cause of death will either be determined by consultation with the physician or by an autopsy. SPONTANEOUS PATHOLOGICAL FRACTURES DO NOT NEED TO BE EVALUATED BY THE CORONER.
10. Drowning, fire, hanging, gunshot, stabbing, cutting, starvation, exposure, alcoholism, drug addiction, strangulation or aspiration (parts of this section are self explanatory). In respect to the question of certifying a death from aspiration, whether it be accidental or not, this is one of the most difficult problems in the field of forensic pathology. Aspiration pneumonia may be treated as a natural death and therefore proper for the private physician to sign the death certificate provided that the antecedent medical conditions do not warrant making it a Coroner's case. Aspiration of stomach contents, if from disease, should be treated as natural causes. All questionable aspiration cases should be referred to the Coroner. Exposure in this section includes heat prostration.

## **Reportable Criteria**

### **Part 3 of 3**

11. Accidental poisoning (food, chemical, drug, therapeutic agents) – Self explanatory.
12. Occupational diseases or occupational hazards. Examples would be Silicosis and other pneumoconiosis, radiation resulting from x-ray equipment, and injuries produced by changes in atmospheric pressure such as with aviation or with deep underground tunnels or in deep-sea diving (Caisson Disease).
13. Known or suspected contagious disease and constituting a public hazard. If there was not sufficient time to diagnose and confirm a case in the hospital, then the death should be referred to the Coroner. All other deaths from a contagious disease will be reported to the Coroner.
14. All deaths in operating rooms and all deaths where a patient has not fully recovered from an anesthetic, whether in surgery, the recovery room or elsewhere. This mainly applies to surgical operations performed for the purpose of alleviating or correcting natural disease conditions and does not include illegal abortions or any type of illegal operations or operations performed because of complications following traumatic injury. (Traumatic injury cases are covered in Section 9). Post-operative deaths should be reported to the Coroner for evaluation and discussion. Lacking a cause of death, such as in idiosyncrasy to an anesthetic agent, the Coroner will usually “waive” the case to the attending physician for his certification and signature.
15. In prison or while under sentence (includes all in-custody and police involved deaths).
16. All deaths of unidentified persons. Where a physician can qualify and certify the cause of death, the death of an unidentified person may not require a Coroner’s investigation as indicated in the previous comments. However, the case should be referred to the Coroner so an attempt can be made to identify the remains and proper internment made as provided by the Health and Safety Code.
17. All deaths of state hospital patients.
18. Suspected SIDS deaths. These are unexpected deaths of apparent healthy, thriving infants.
19. All deaths where the patient is comatose throughout the period of the physician’s attendance (includes patients admitted to hospitals unresponsive and expire without regaining consciousness). These deaths are reportable for evaluation by the Coroner. In addition, the deaths of patients who are admitted to hospitals unresponsive and have not regained consciousness before death ,are reportable to the Coroner for evaluation. Normally this evaluation will consist of confirming a medical history and treatment and whether or not the attending physician can furnish a cause of death and will sign the death certificate.
20. All fetal deaths when gestation period is 20 weeks or longer (Self Explanatory).
21. All deaths where the decedent was in a hospital less than 24 hours (Self Explanatory)

## Statistics for the 2016 Calendar Year

<b>Number of deaths reported:</b>	630
<b>Number of cases for full investigation:</b>	277
<b>Number of cases by manner of death:</b>	
<b>Natural</b>	85
<b>Accident</b>	77
<b>Suicide</b>	66
<b>Homicide</b>	5
<b>Undetermined</b>	14
<b>Primary Doctor Sign Out</b>	17
<b>Indigent</b>	7
<b>Non-Forensic (Bones)</b>	2
<b>Pending</b>	4
<b>Number of decedents transported:</b>	231
*Some cases moved to Napa and back to Marin	
<b>Forensic Examinations</b>	
<b>Autopsy</b>	68
<b>External Examination</b>	120
<b>Medical File Review</b>	72
<b>Total Amount of Toxicological Tests Run:</b>	152
*for a breakdown of test type see page 30	
<b>Number of cases reported as "unidentified":</b>	14
<b>Identified after investigation</b>	13
<b>Remain unidentified</b>	1
<b>Organ and tissue donations:</b>	
<b>Total organs transplanted</b>	6
<b>Total tissue donors</b>	33

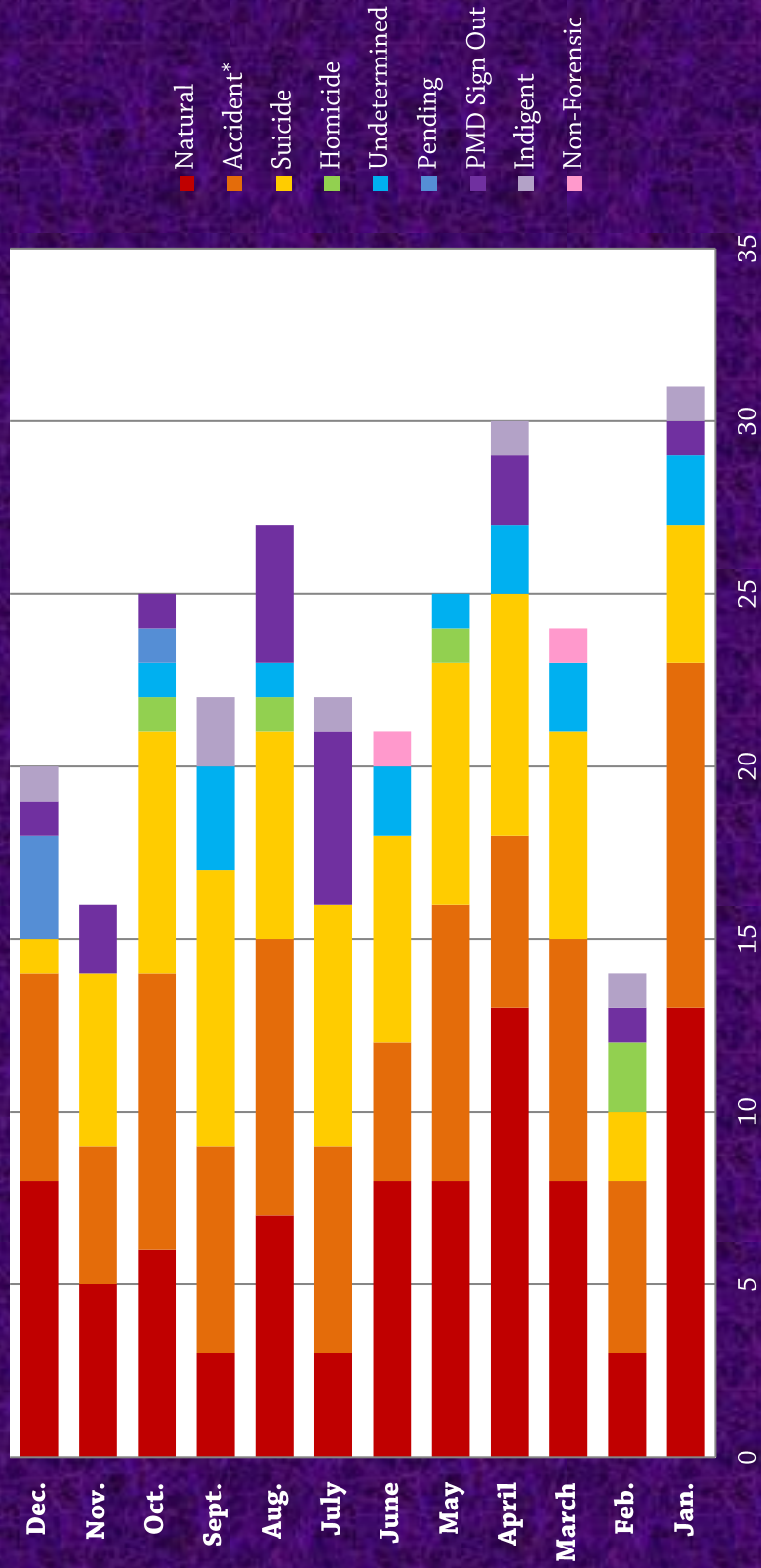


## General Classifications of Death by Month for 2016

<b>Coroner Case Statistics for 2016 by Month</b>					
	<b>Natural</b>	<b>Accident</b>	<b>Suicide</b>	<b>Homicide</b>	<b>Undetermined</b>
<b>January</b>	13	10	4	0	2
<b>February</b>	3	5	2	2	0
<b>March</b>	8	7	6	0	2
<b>April</b>	13	5	7	0	2
<b>May</b>	8	8	7	1	1
<b>June</b>	8	4	6	0	2
<b>July</b>	3	6	7	0	0
<b>August</b>	7	8	6	1	1
<b>September</b>	3	6	8	0	3
<b>October</b>	6	8	7	1	1
<b>November</b>	5	4	5	0	0
<b>December</b>	8	6	1	0	0
<b>Total</b>	85	77	66	5	14
<b>%</b>	30%	28%	24%	2%	5%

<b>Coroner Case Statistics for 2016 by Month (cont.)</b>					
	<b>PMD Sign Out</b>	<b>Indigent</b>	<b>Non-Forensic</b>	<b>Pending</b>	<b>Total</b>
<b>Jan.</b>	1	1	0	0	31
<b>Feb.</b>	1	1	0	0	14
<b>March</b>	0	0	1	0	24
<b>April</b>	2	1	0	0	30
<b>May</b>	0	0	0	0	25
<b>June</b>	0	0	1	0	21
<b>July</b>	5	1	0	0	22
<b>Aug.</b>	4	0	0	0	27
<b>Sept.</b>	0	2	0	0	22
<b>Oct.</b>	1	0	0	1	25
<b>Nov.</b>	2	0	0	0	16
<b>Dec.</b>	1	1	0	3	20
<b>Total</b>	17	7	2	3	277
<b>%</b>	6%	3%	1%	2%	100%

## Manner of Death by Month for 2016



## Historical Statistics 2011-2015

Coroner Case Statistics for 2011 by Month							
	Natural	Accident	Suicide	Homicide	Undetermined	Pending	Total
<b>Jan.</b>	24	6	10	0	1	0	41
<b>Feb.</b>	12	5	3	0	1	0	21
<b>March</b>	14	6	6	0	0	0	26
<b>April</b>	11	6	2	0	0	0	19
<b>May</b>	7	6	12	1	0	0	26
<b>June</b>	8	8	3	0	0	0	19
<b>July</b>	15	8	5	0	0	0	28
<b>Aug.</b>	11	5	6	0	0	0	22
<b>Sept.</b>	8	11	5	1	0	0	25
<b>Oct.</b>	8	2	3	0	0	0	13
<b>Nov.</b>	11	14	1	0	1	1	28
<b>Dec.</b>	8	8	5	0	0	0	21
<b>Total</b>	137	85	61	2	3	1	289
<b>%</b>	47%	29%	21%	0.7%	1%	0.3%	100%

Coroner Case Statistics for 2012 by Month							
	Natural	Accident	Suicide	Homicide	Undetermined	Pending	Total
<b>Jan.</b>	13	7	6	1*	0	0	27
<b>Feb.</b>	11	7	5	0	0	0	23
<b>March</b>	10	14	2	0	1	0	27
<b>April</b>	13	10	5	0	1	0	29
<b>May</b>	8	13	6	0	0	0	27
<b>June</b>	15	8	4	0	1	0	28
<b>July</b>	11	14	3	0	1	0	29
<b>Aug.</b>	10	17	9	0	0	1	37
<b>Sept.</b>	5	9	4	0	1	0	19
<b>Oct.</b>	9	7	4	0	0	2	22
<b>Nov.</b>	10	12	5	0	0	1	28
<b>Dec.</b>	10	18	7	0	0	3	38
<b>Total</b>	125	136	60	1	5	7	334
<b>%</b>	37%	41%	18%	0.3%	1%	2%	100%

## Historical Statistics 2011-2015

Coroner Case Statistics for 2013 by Month							
	Natural	Accident	Suicide	Homicide	Undetermined	Pending	Total
<b>Jan.</b>	10	11	5	1	1	0	28
<b>Feb.</b>	5	10	5	0	0	0	20
<b>March</b>	9	11	4	0	1	0	25
<b>April</b>	8	16	9	0	0	1	34
<b>May</b>	11	6	2	0	1	0	20
<b>June</b>	11	10	4	0	1	1	27
<b>July</b>	5	6	8	0	1	0	20
<b>Aug.</b>	8	8	16	1	3	1	37
<b>Sept.</b>	10	8	6	0	1	0	25
<b>Oct.</b>	10	8	6	0	0	0	24
<b>Nov.</b>	14	15	5	1	0	0	35
<b>Dec.</b>	16	9	3	0	3	0	31
<b>Total</b>	117	118	73	3	12	3	326
<b>%</b>	36%	36%	22%	1%	4%	1%	100%

Coroner Case Statistics for 2014 by Month							
	Natural	Accident	Suicide	Homicide	Undetermined	Pending	Total
<b>Jan.</b>	7	8	6	0	0	0	21
<b>Feb.</b>	8	4	3	0	0	0	15
<b>March</b>	11	4	6	1	0	0	22
<b>April</b>	5	15	7	1	0	0	28
<b>May</b>	8	9	5	0	1	0	23
<b>June</b>	10	12	6	0	0	0	28
<b>July</b>	6	10	7	1	0	0	24
<b>Aug.</b>	10	6	5	0	1	1	23
<b>Sept.</b>	6	4	7	0	3	0	20
<b>Oct.</b>	7	10	5	1	0	0	23
<b>Nov.</b>	6	8	6	1	0	0	21
<b>Dec.</b>	12	8	5	1	1	0	27
<b>Total</b>	96	98	68	6	6	1	275
<b>%</b>	35%	36%	25%	2%	2%	0.4%	100%

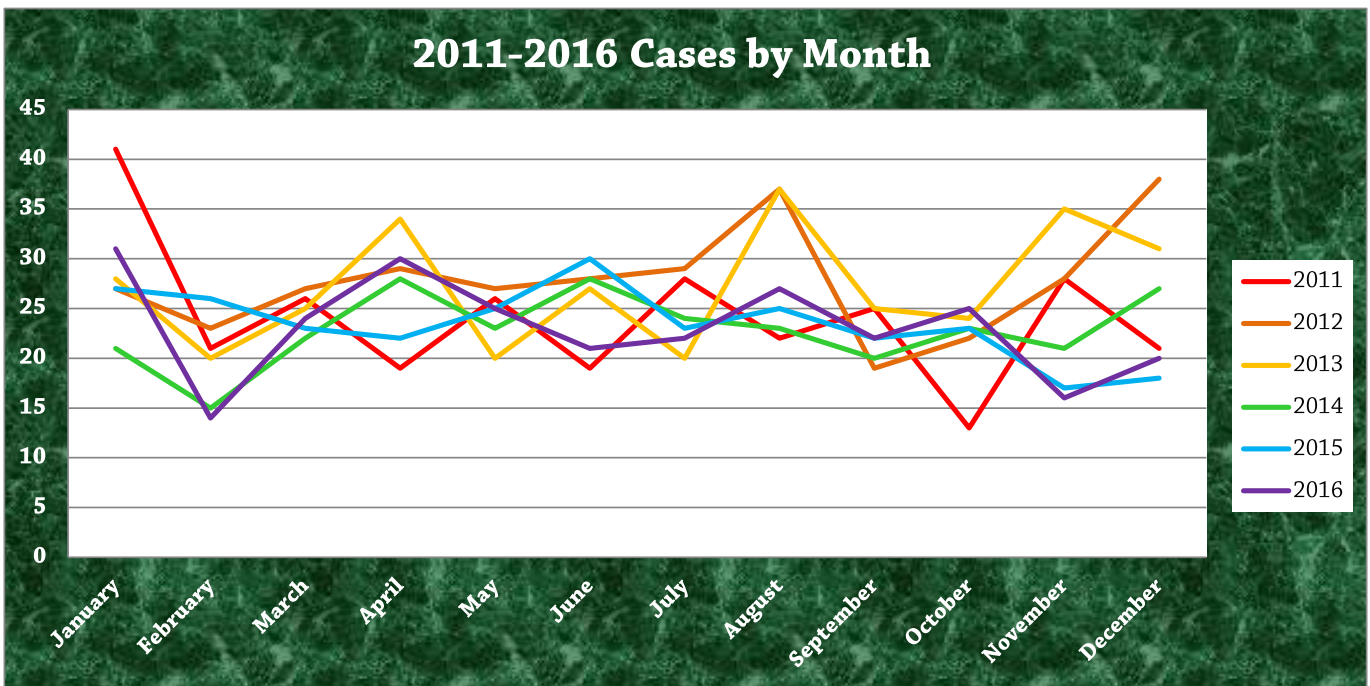
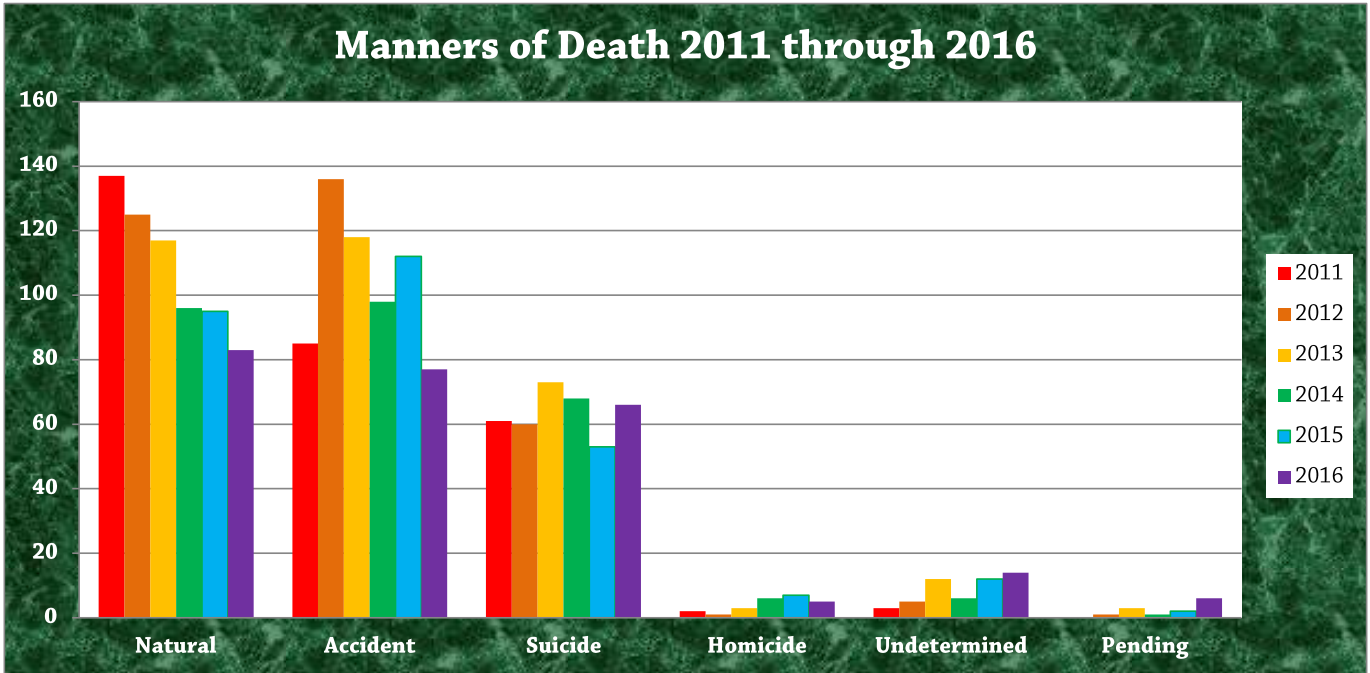
## Historical Statistics 2011-2015

Coroner Case Statistics for 2015 by Month							
	Natural	Accident	Suicide	Homicide	Undetermined	Pending	Total
<b>Jan.</b>	11	12	4	0	0	0	27
<b>Feb.</b>	9	8	6	1	2	0	26
<b>March</b>	10	5	7	0	1	0	23
<b>April</b>	4	10	6	2	0	0	22
<b>May</b>	8	9	5	1	2	0	25
<b>June</b>	13	6	6	1	3	1	30
<b>July</b>	6	10	5	0	2	0	23
<b>Aug.</b>	13	5	5	1	1	0	25
<b>Sept.</b>	7	12	3	0	0	0	22
<b>Oct.</b>	5	14	2	1	1	0	23
<b>Nov.</b>	5	9	3	0	0	0	17
<b>Dec.</b>	4	12	1	0	0	1	18
<b>Total</b>	95	112	53	7	12	2	281
<b>%</b>	34%	40%	19%	2%	4%	0.7%	100%

Average Cases by Month (2011-2016)	
January	29
February	20
March	25
April	27
May	24
June	26
July	24
August	29
September	22
October	22
November	24
December	26

Average Cases by Manner (2011-2016)	
Natural	109
Accident	104
Suicide	64
Homicide	4
Undetermined	9
Pending	2

# Manners of Death 2011-2016



## Natural Deaths in 2016

Deaths are classified as natural due to the sudden and unexpected nature of the death in an apparently healthy individual. This includes deaths by disease or by old age. If a natural death is hastened by an injury such as a fall, the manner of death is classified as an accident instead of a natural.

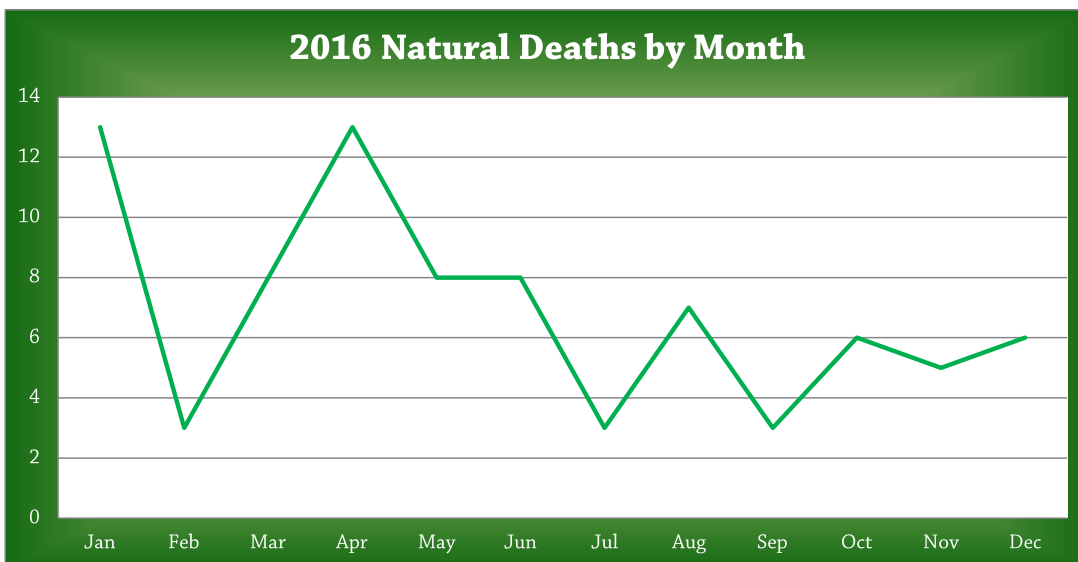
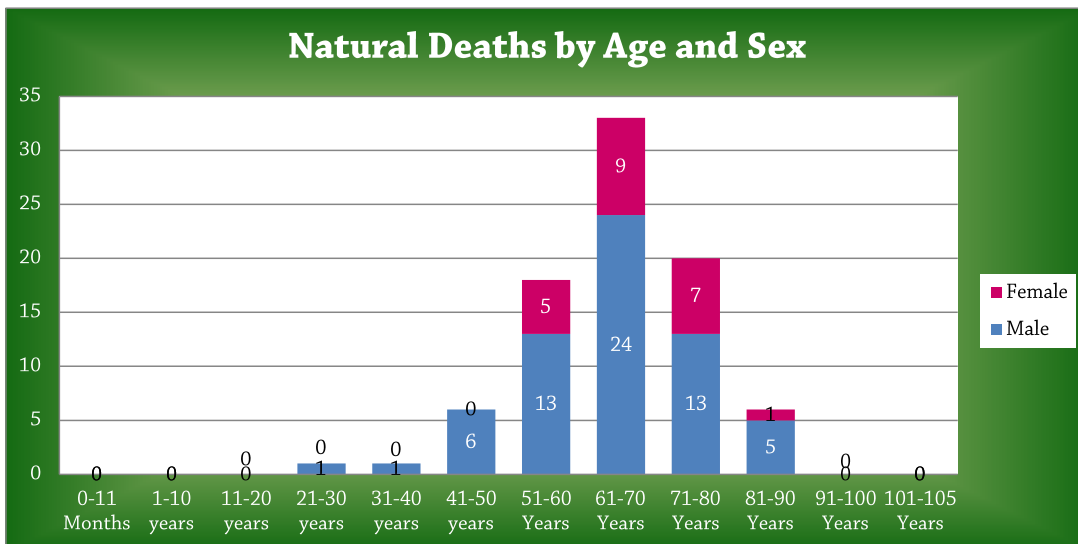
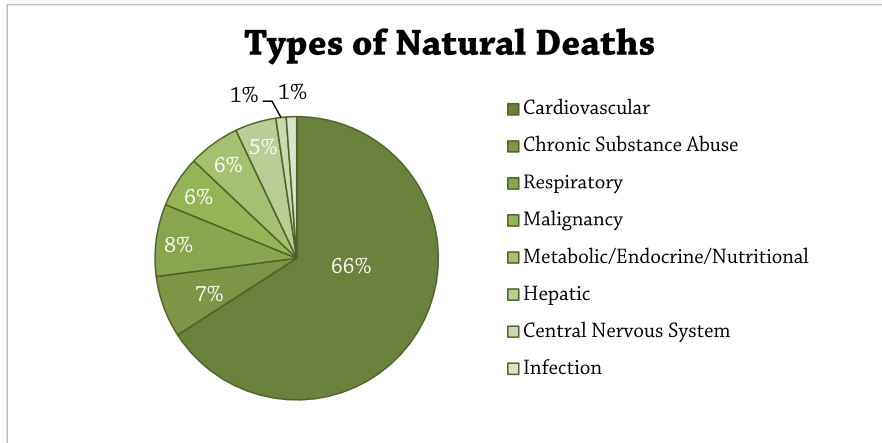
### Total Natural Deaths for 2016: 85

Types of Natural Deaths	
Cardiovascular	56
Chronic Substance Abuse	6
Respiratory	7
Malignancy	5
Metabolic/Endocrine/Nutritional	5
Hepatic	4
Central Nervous System	1
Infection	1

Natural Deaths by Age and Sex			
Age	Male	Female	Total
0-11 Months	0	0	0
1-10 years	0	0	0
11-20 years	0	0	0
21-30 years	1	0	1
31-40 years	1	0	1
41-50 years	6	0	6
51-60 Years	13	5	18
61-70 Years	24	9	33
71-80 Years	13	7	20
81-90 Years	5	1	6
91-100 Years	0	0	0
101-105 Years	0	0	0

Natural Deaths by Month	
Month	Number
January	13
February	3
March	8
April	13
May	8
June	8
July	3
August	7
September	3
October	6
November	5
December	8

# Natural Deaths in 2016





## Suicide Deaths in 2016

Suicide deaths are those caused by self-inflicted injuries with evidence of intent to end one's life. Evidence of intent includes an explicit expression, such as a suicide note or verbal threat, or an act constituting implicit intent such as deliberately placing a gun to one's head or rigging a vehicle exhaust.

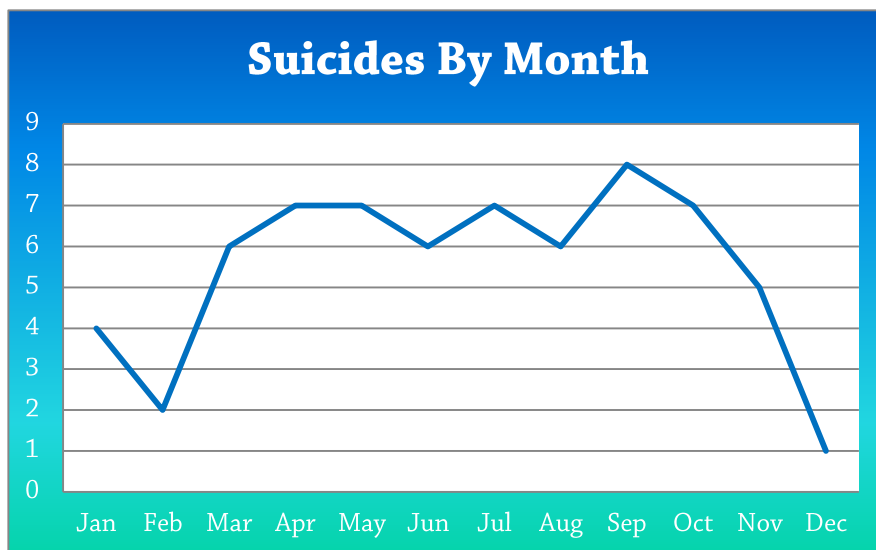
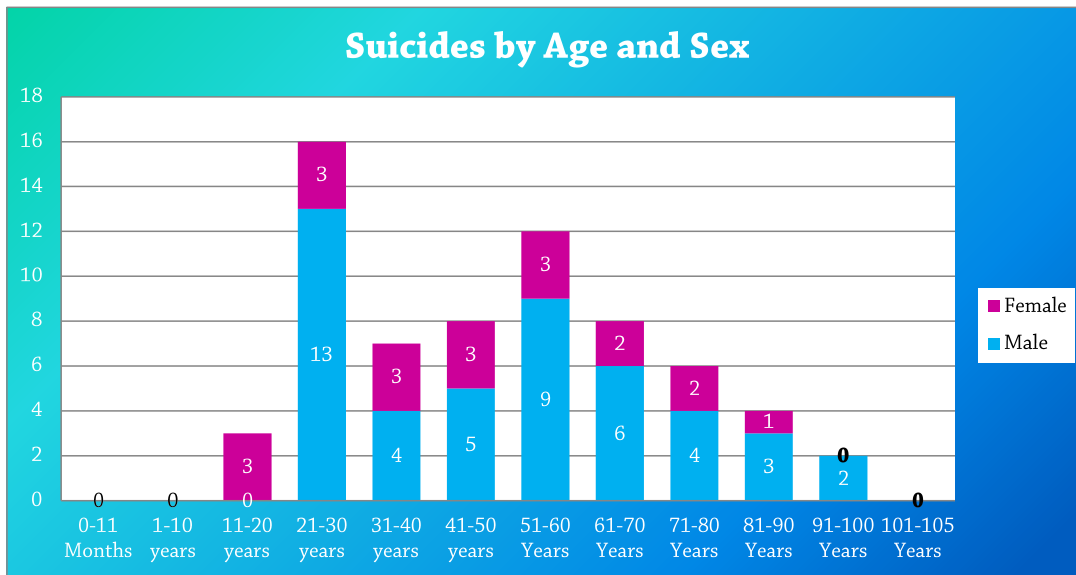
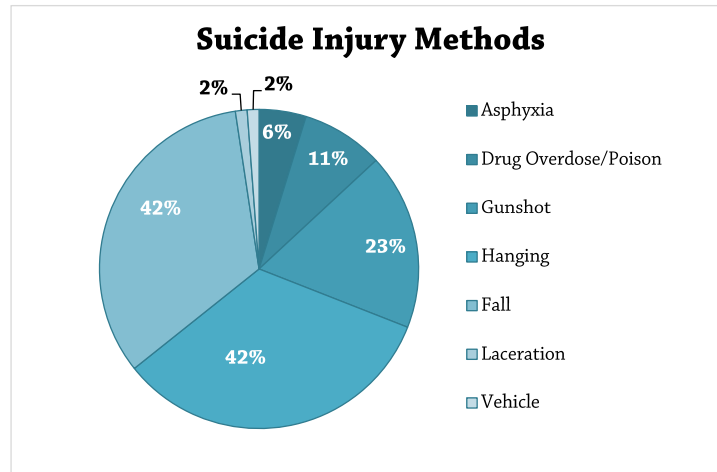
**Total Number of Suicides in 2016: 66**

Suicide Injury Methods	
Asphyxia:	4
Drug Overdose/Poison:	7
Gunshot:	15
Hanging:	10
Fall:	28
Laceration:	1
Vehicle:	1
<b>Total:</b>	<b>66</b>

2016 Suicide by Age & Sex			
Age	Male	Female	Total
0-11 Months	0	0	0
1-10 years	0	0	0
11-20 years	0	3	3
21-30 years	13	3	16
31-40 years	4	3	7
41-50 years	5	3	8
51-60 Years	9	3	12
61-70 Years	6	2	8
71-80 Years	4	2	6
81-90 Years	3	1	4
91-100 Years	2	0	2
101-105 Years	0	0	0

Suicide by Month	
Month	Number
<b>January</b>	4
<b>February</b>	2
<b>March</b>	6
<b>April</b>	7
<b>May</b>	7
<b>June</b>	6
<b>July</b>	7
<b>August</b>	6
<b>September</b>	8
<b>October</b>	7
<b>November</b>	5
<b>December</b>	1

# Suicide Deaths in 2016



## Accidental Deaths in 2016

An accidental death is a death, other than natural, where there is no evidence of intent.

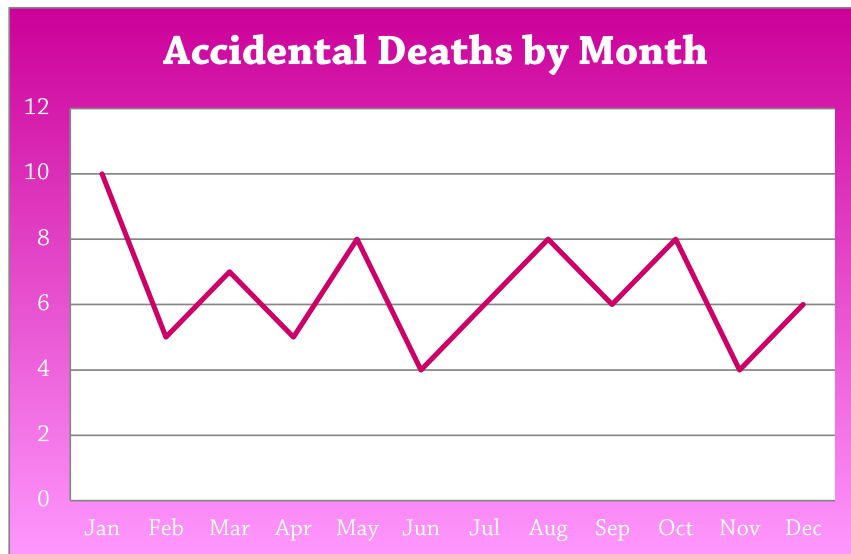
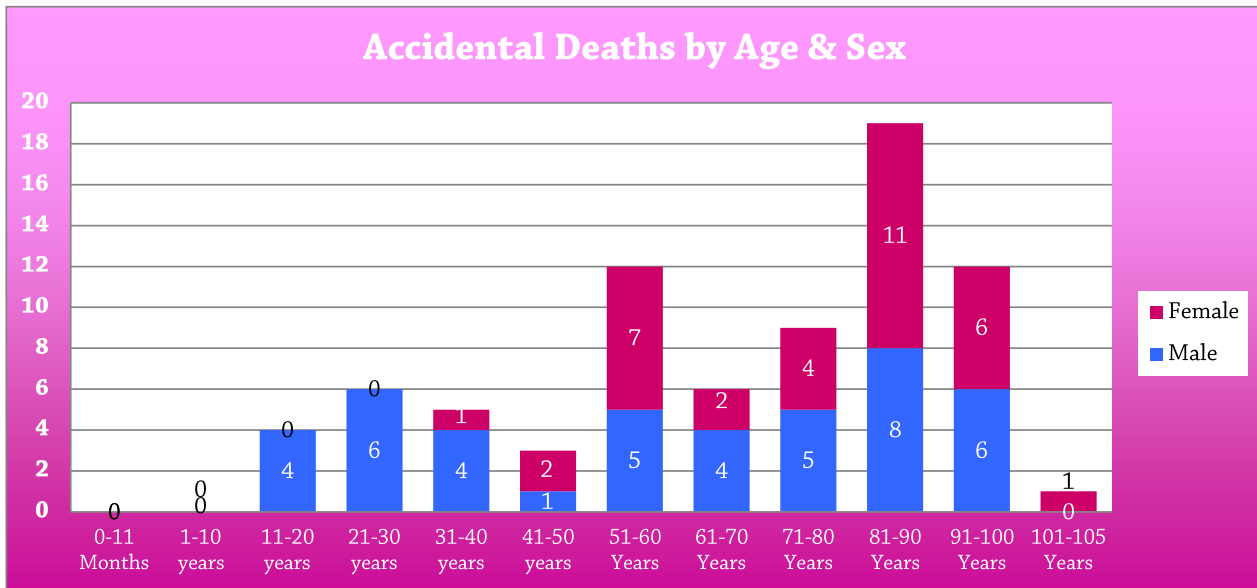
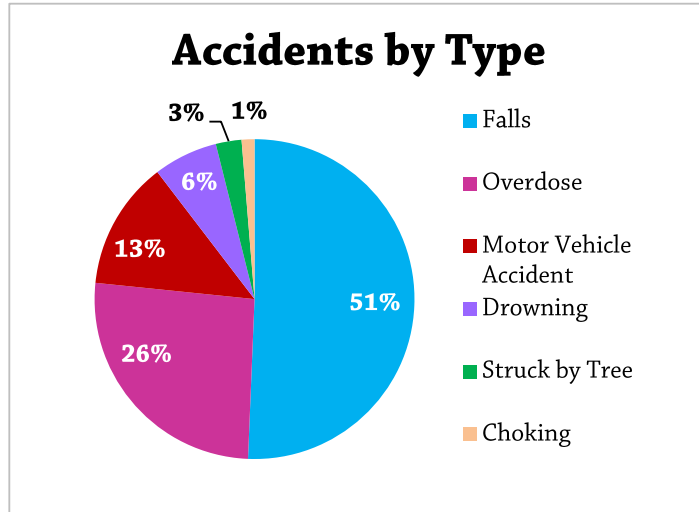
**Total Accidental Deaths= 77**

Accidents by Type	
Falls	39
Overdose	20
Motor Vehicle Accident	10
Drowning	5
Struck by Tree	2
Choking	1

Accidental Deaths by Age & Sex			
Age	Male	Female	Total
0-11 Months	0	0	0
1-10 years	0	0	0
11-20 years	4	0	4
21-30 years	6	0	6
31-40 years	4	1	5
41-50 years	1	2	3
51-60 Years	5	7	12
61-70 Years	4	2	6
71-80 Years	5	4	9
81-90 Years	8	11	19
91-100 Years	6	6	12
101-105 Years	0	1	1

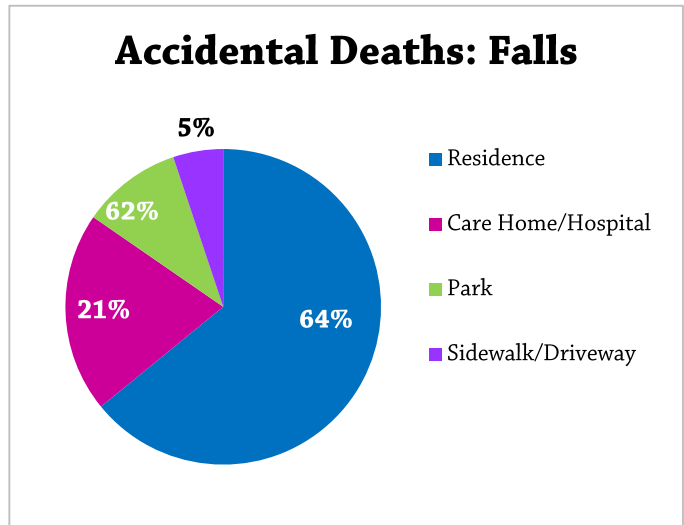
Accidental Deaths	
Month	Number
January	10
February	5
March	7
April	5
May	8
June	4
July	6
August	8
September	6
October	8
November	4
December	6

# Accidental Deaths in 2016

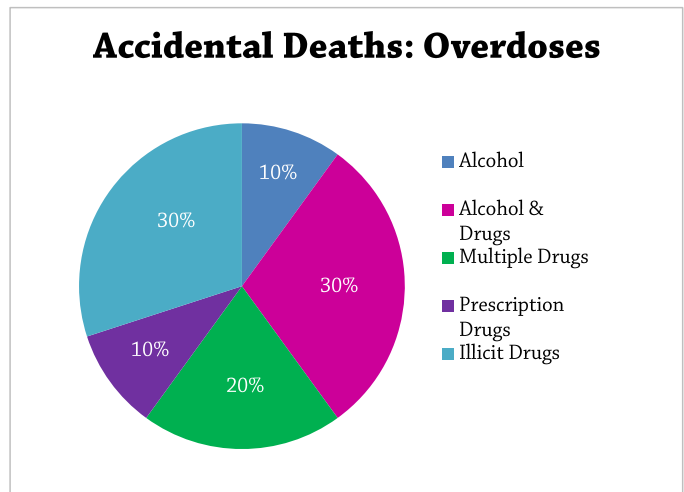


# Breakdown of Accidental Deaths in 2016 by Type of Accident

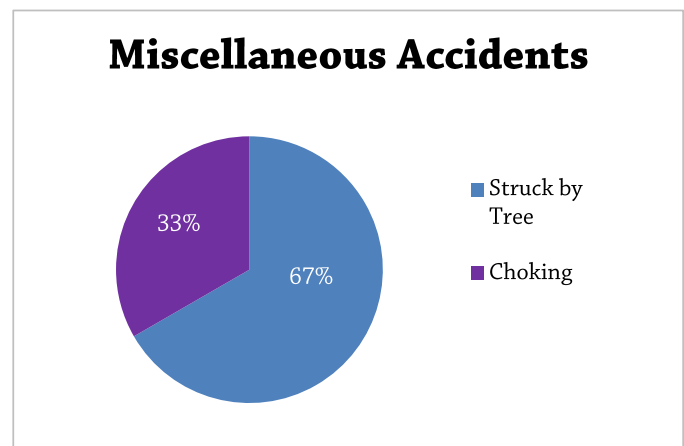
<b>Falls:</b>	<b>39</b>
Residence	25
Care Home/Hospital	8
Park	4
Sidewalk/Driveway	2



<b>By Overdose:</b>	<b>20</b>
Alcohol	2
Alcohol & Drugs	6
Multiple Drugs	4
Prescription Drugs	2
Illicit Drugs	6



<b>Miscellaneous:</b>	<b>3</b>
Struck by Tree	2
Choking	1



## Motor Vehicle Fatalities in 2016

The Coroner Division, as well as other law enforcement agencies within the jurisdiction of the motor vehicle fatality, conducts a thorough investigation of any accident involving a motor vehicle. A suspected traffic fatality can sometimes be the end result of natural causes which, in many cases, can be determined at the time of autopsy. The death may then be determined to be a “natural” death due to a natural cause (for example, a heart attack), as opposed to a crash. A traffic fatality may also be ruled as a suicide, an accident, or even a homicide.

### Total Number of Motor Vehicle Fatalities in 2016: 14

2016 Motor Vehicle Fatalities	
Automobile Operator	6
Automobile Passenger	3
Pedestrian	3
Motorcycle	1
Bicyclist	1
<b>Total</b>	<b>14</b>

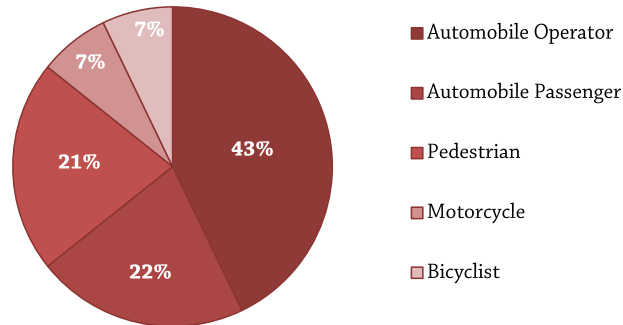
Manner of Death	
Accident	10
Suicide	1
Homicide	1
Pending	1

Motor Vehicle Fatalities by Age & Sex			
Age	Male	Female	Total
0-11 Months	0	0	0
1-10 years	0	0	0
11-20 years	3	0	3
21-30 years	1	0	1
31-40 years	2	0	2
41-50 years	0	1	1
51-60 Years	1	0	1
61-70 Years	1	1	2
71-80 Years	1	2	3
81-90 Years	0	1	1
91-100 Years	0	0	0
101-105 Years	0	0	0

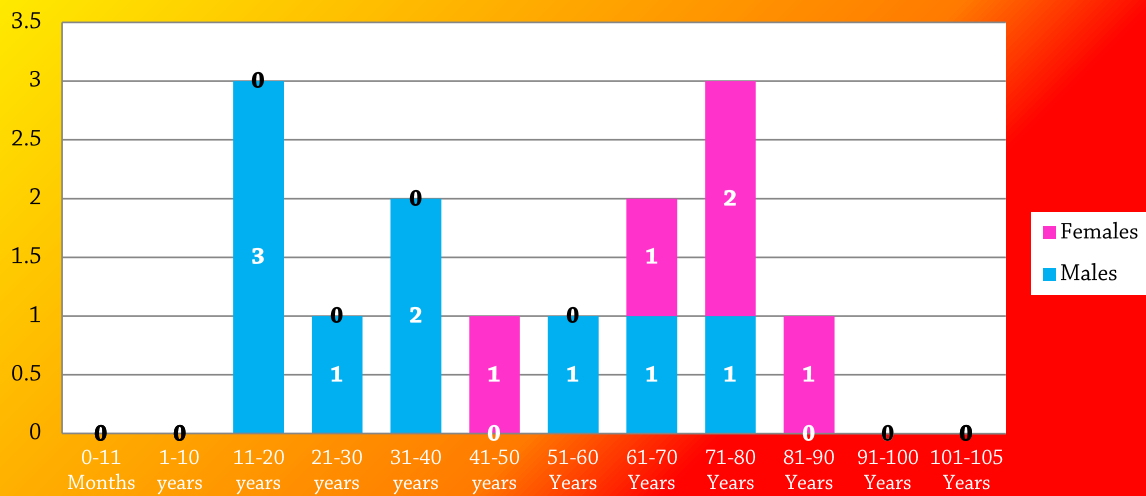
Motor Vehicle Fatalities by Month	
Month	Amount
<b>January</b>	1
<b>February</b>	1
<b>March</b>	0
<b>April</b>	1
<b>May</b>	1
<b>June</b>	1
<b>July</b>	0
<b>August</b>	3
<b>September</b>	0
<b>October</b>	6
<b>November</b>	0
<b>December</b>	0

# Motor Vehicle Fatalities in 2016

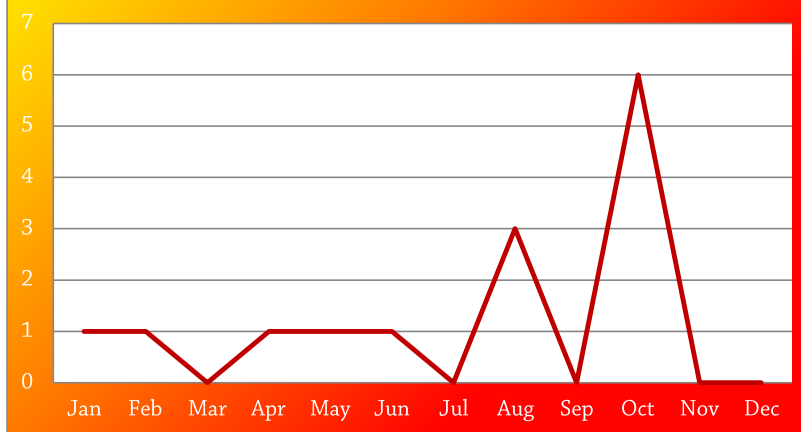
## Types of Motor Vehicle Fatalities 2016



## 2016 Motor Vehicle Fatalities by Age and Sex



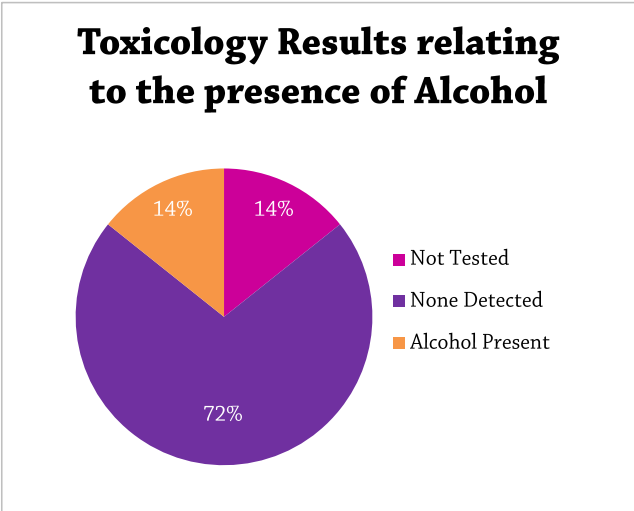
## Motor Vehicle Fatalities by Month



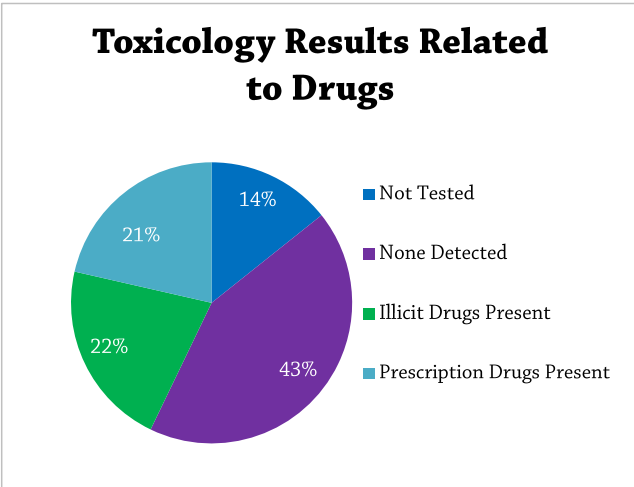
# Motor Vehicle Fatalities Involving Alcohol and/or Drugs in 2016

The coroner investigates suspected motor vehicle fatalities. Pursuant to California Government Code Section 27491.25 the Coroner’s pathologist takes available blood and urine samples from the deceased to make appropriate related chemical tests. These samples are used to determine the alcohol and/or drug related derivative contents, if any, in the body. In some cases, the traffic victims are hospitalized for a lengthy period of time prior to death and therefore, relevant blood and urine samples are unavailable for testing.

Toxicology Results Relating to Alcohol	
Not Tested	2
None Detected	10
Alcohol Present	2



Toxicology Results Related to Drugs	
Not Tested	2
None Detected	6
Illicit Drugs Present	3
Prescription Drugs Present	3





## Homicide Deaths in 2016

A death is considered a homicide when it is caused by the intentional harm (explicit or implicit) of one person by another. These include acts of grossly reckless behavior. In this context, the word “homicide” does not necessarily imply the existence of criminal intent behind the action of the other person.

### Total Number of Homicides in 2016: 5

Types of Homicides	
Gunshot:	2
Motor Vehicle Accident:	2
Sharp Force Trauma:	1

Homicides by Age and Sex			
Age	Male	Female	Total
0-11 Months	0	0	0
1-10 years	0	0	0
11-20 years	1	0	1
21-30 years	1	0	1
31-40 years	0	0	0
41-50 years	0	0	0
51-60 Years	1	0	1
61-70 Years	1	1	2
71-80 Years	0	0	0
81-90 Years	0	0	0
91-100 Years	0	0	0
101-105 Years	0	0	0

Homicides by Month	
Month	Number
<b>January</b>	0
<b>February</b>	2
<b>March</b>	0
<b>April</b>	0
<b>May</b>	1
<b>June</b>	0
<b>July</b>	0
<b>August</b>	1
<b>September</b>	0
<b>October</b>	1
<b>November</b>	0
<b>December</b>	0

## Undetermined Deaths in 2016

Although a cause of death may be ascertained, there are times when the manner of death remains undetermined. A death is certified as undetermined when available information regarding the circumstances of death is insufficient to manner the death as a natural, an accident, a suicide, or a homicide. Sometimes information concerning the circumstances of death may be inadequate due to lack of witnesses, a lack of background information, or because of a lengthy delay between the occurrence of the death and the discovery of the body. In other instances, the state of decomposition may hinder a determination of cause of death, and subsequently, a determination of a manner of death is not possible. If an extensive investigation and autopsy cannot clarify the circumstances which led to a death, the death is then classified as undetermined.

Many of the undetermined manners in Marin County over the last five years are associated with remains that wash ashore from ocean or Bay waters. A portion of these cases displayed hallmarks found in other known Golden Gate Bridge jumper scenarios. However, subsequent investigations were unable to confirm these suspicions and therefore the manner was classified as undetermined. In deaths related to prescription and/or illicit drug toxicity, intentional overdose versus accidental over utilization cannot be definitively determined, therefore, the manner of death is certified as undetermined. In cases of severe post mortem decomposition, a cause of death may not be identified, which also leads to an undetermined manner. In other instances, a cause of death may be identified, such as, a traumatic injury, but the mechanism of said injury may not be determined. The lack of evidence to determine the mechanism of trauma may require the manner to remain undetermined. An example of this would be a person found in an open environment with traumatic injuries of which the mechanism of injury was unwitnessed.

**Number of undetermined causes of death in 2016: 13**

Scenario Types Related to Undetermined Manners of Death	
Bodies found in Ocean/Waterways	8
Severe Decomposition	2
Prescription Related Fatalities	2
Mechanism of Injury Unknown	1

## **Primary Doctor (PMD) Sign Out**

These cases are initially investigated by the Coroner's Division and ultimately deemed natural deaths. Decedents under this category have documented medical history and a civilian physician is authorized to provide cause of death.

Although initially investigated by the Coroner, their cause and manners of death are not included in our final statistics, as an outside physician provided the cause of death.

**Number of PMD Sign Out Cases: 17**

## **In Custody Death**

The Coroner Division investigates all in custody deaths with the exception of those that occur at the Marin County Jail. All deaths occurring at the Marin County Jail are investigated by the Sonoma County Sheriff-Coroner's office to avoid the potential for bias. When requested, the Marin County Sheriff Coroner Division will investigate in custody deaths for the Sonoma County Sheriff's Office.

<b>San Quentin Inmates</b>	
<b>Manner</b>	<b>Amount</b>
Natural	6

## **Indigent Cremation Program Statistics 2016**

Decedent approved for disposition through the Marin County's Indigent Disposition Program	11
Marin County's Public Administrator's Office accepted the case	4
Decedent's handled by another county due to their residence	3
Family handled disposition after Coroner Division assisted them	5

## Types of Toxicology Tests Run in 2016

Type of Toxicological Test	Number of Tests Run
Postmortem, Basic, Blood (Forensic)	58
Postmortem, Expanded, Blood (Forensic)	30
Postmortem, Expert, Blood (Forensic)	15
Ethanol - Title 17, Blood - Send Out	13
Electrolytes and Glucose Panel (Vitreous), Fluid (Forensic)	8
Postmortem, Basic w/o Alcohol, Blood (Forensic)	7
Postmortem, Basic to Expanded Upgrade, Blood (Forensic)	5
Ethanol - Title 17, Urine - Send Out	2
Drug Screen (GC/MS), Blood	2
Alcohol Panel, Fluid	1
Alcohol Panel, Urine	1
Carbon Monoxide Profile, Blood (Forensic)	1
GC/MS Drug Screen (Acid/Neutral), Blood (Forensic)	1
Postmortem, Urine Screen Add-on (6-MAM Quantification only)	1
Postmortem, Basic, Fluid (Forensic)	1
Postmortem, Basic, Tissue (Forensic)	1
Postmortem, Expanded, Fluid (Forensic)	1
Postmortem, Expert, Serum/Plasma (Forensic)	1
6-Monoacetylmorphine - Free (Unconjugated), Blood	1
6-Monoacetylmorphine - Free (Unconjugated), Urine	1
Novel Psychoactive Substances (NPS) Screen 1, Blood	1
<b>Total Tests Run</b>	<b>152</b>