The seal of the Marin County Sheriff-Coroner is a seven-pointed star with a gold border. Inside the star is a circular emblem featuring a red bridge over a blue body of water, with a sun rising over green hills in the background. The words "SHERIFF-CORONER" are written in a semi-circle above the emblem, and "Marin County" is written in a semi-circle below it.

Marin County Sheriff's Office
2013 Coroner Division
Annual Report

Robert T. Doyle, Sheriff-Coroner

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Introduction

The Coroner's Division is a component of the Sheriff's Office Administration and Support Services Bureau. The Coroner's Division, located in Room 241 of the Marin County Civic Center* in San Rafael, consists of one Lieutenant, three Coroner Investigators, one Extra Hire Investigator, one Forensic Pathologist, one Forensic Assistant, one Office Assistant and three 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.

Marin County has a population of 254,007 (Census Bureau 2013). There were approximately 1,956 deaths recorded in Marin County in 2013. Of these, 774 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, 326 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.

*Please note our new address effective June 2014 is 1600 Los Gamos Rd., Suite 205, San Rafael.

2013 Staff

The seal of the Marin County Sheriff-Coroner is a large, faint watermark in the background. It features a central circular emblem with a bridge (the Golden Gate Bridge) and a sun, surrounded by the words "SHERIFF-CORONER" and "Marin County".

Sheriff Robert T. Doyle	Sheriff-Coroner
Undersheriff Michael Ridgway	Undersheriff
Captain David Augustus	Captain
Lieutenant Keith Boyd	Assistant Chief Deputy Coroner
Darrell Harris	Coroner Investigator
Emily Schum	Coroner Investigator
Kenneth Advincula	Coroner Investigator
Karen Leong	Coroner Investigator Extra Hire
Stewart Cowan	Coroner Investigator Extra Hire
Susan Medina	Office Assistant
Dr. Joseph Cohen	Forensic Pathologist, Contracted
Karen Leong	Forensic Assistant, Contracted
Alex Torres	Forensic Assistant, Contracted
Marilyn Kwuan	Intern
Amy Schnittger	Intern
Kyle Lorenz	Intern

Reportable Criteria

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

Reportable Criteria

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.

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

Reportable Criteria

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.

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 interment 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 Calendar Year 2013

Number of deaths reported: 774
 Number of cases for full investigation: 326

Number of cases by manner of death:

Natural 117
 Accident (including Motor Vehicle Fatalities) 118
 Suicide 73
 Homicide 3
 Undetermined 12
 Cremain Recovery/Bones Found 1
 Pending 2

Number of decedents transported: 280

*Some cases moved to Napa and back to Marin

Forensic Examinations

Autopsy 138
 External Examination 106
 Medical File Review 66
 Released to Outside Physician 16

Number of toxicology cases conducted: 156

Number of cases reported as "unidentified": 28

Identified after investigation 24

Remain unidentified after investigation* 4

*3 are non-forensic historical skeletal remains

Organ and tissue donations

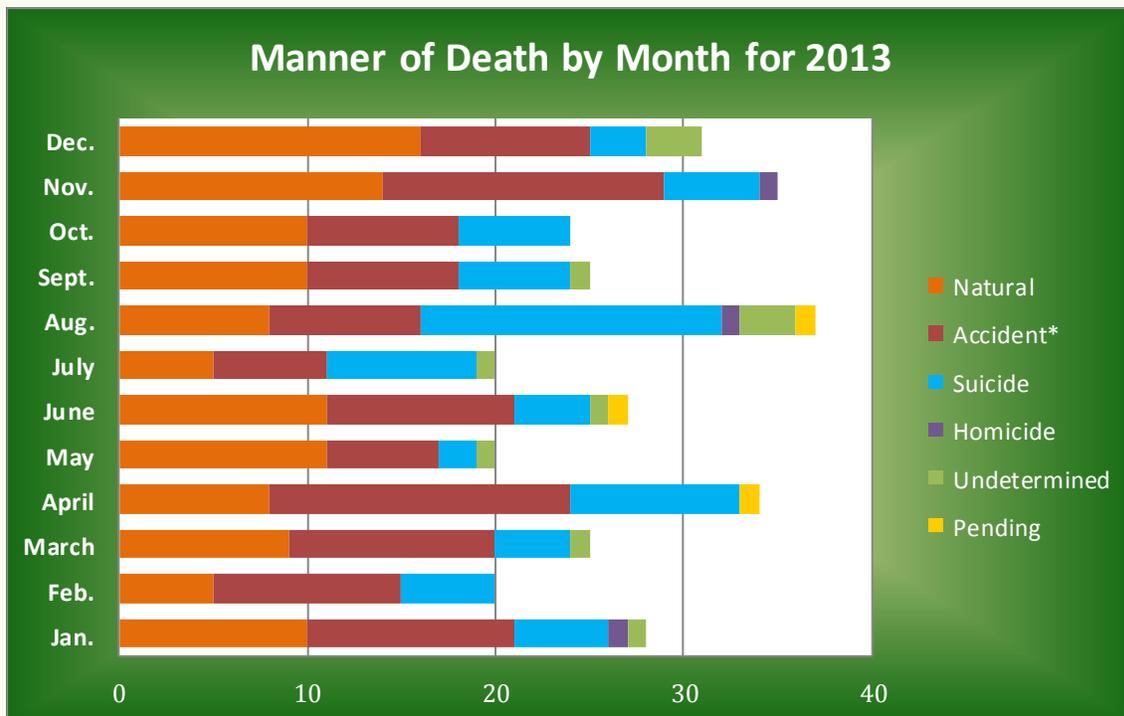
Total transplant organs 5
 Total tissues donated 44
 Total lives impacted 1



2013 Statistics by Month

	Natural	Accident*	Suicide	Homicide	Undetermined	Pending	Total
January	10	11	5	1	1	0	28
February	5	10	5	0	0	0	20
March	9	11	4	0	1	0	25
April	8	16	9	0	0	1	34
May	11	6	2	0	1	0	20
June	11	10	4	0	1	1	27
July	5	6	8	0	1	0	20
August	8	8	16	1	3	1	37
September	10	8	6	0	1	0	25
October	10	8	6	0	0	0	24
November	14	15	5	1	0	0	35
December	16	9	3	0	3	0	31
Total	117	118	73	3	12	3	326

* includes motor vehicle fatalities





Historical Statistics

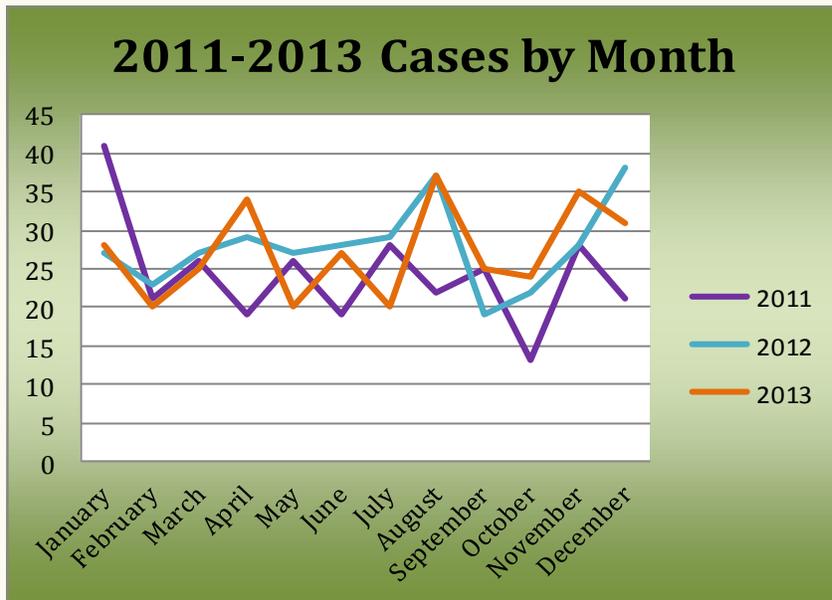
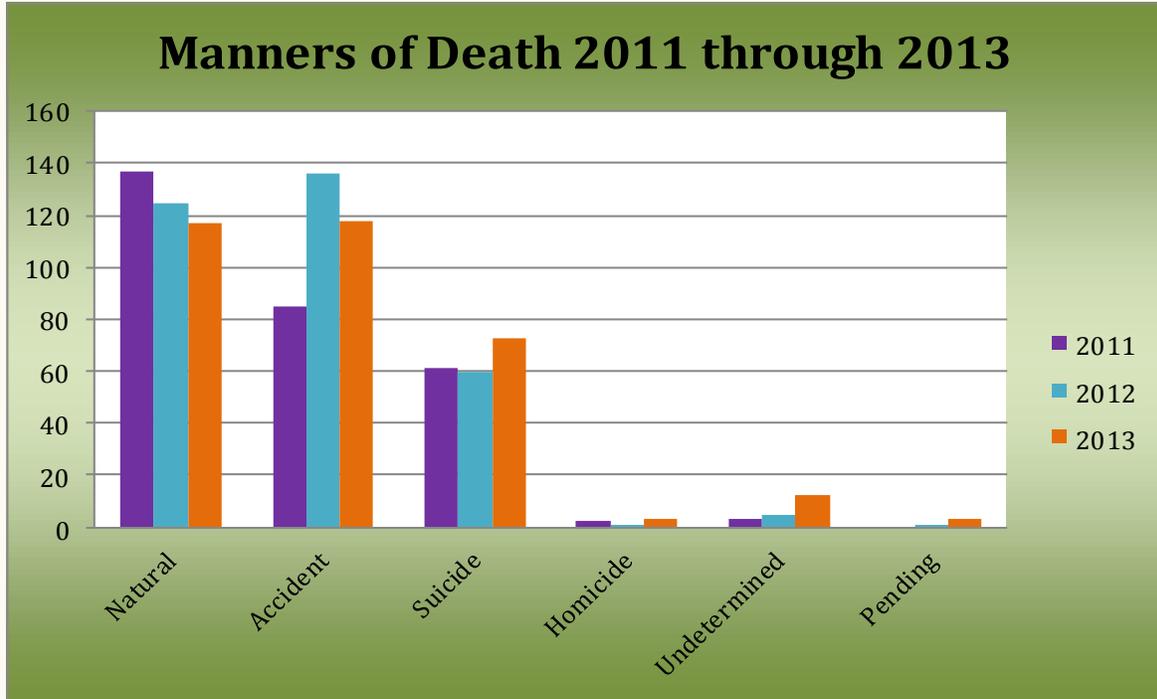
Coroner Case Statistics for 2013 by Month							
	Natural	Accident	Suicide	Homicide	Undetermined	Pending	Total
January	10	11	5	1	1	0	28
February	5	10	5	0	0	0	20
March	9	11	4	0	1	0	25
April	8	16	9	0	0	1	34
May	11	6	2	0	1	0	20
June	11	10	4	0	1	1	27
July	5	6	8	0	1	0	20
August	8	8	16	1	3	1	37
September	10	8	6	0	1	0	25
October	10	8	6	0	0	0	24
November	14	15	5	1	0	0	35
December	16	9	3	0	3	0	31
Total	117	118	73	3	12	3	326

Coroner Case Statistics for 2012 by Month							
	Natural	Accident	Suicide	Homicide	Undetermined	Pending	Total
January	13	7	6	1*	0	0	27
February	11	7	5	0	0	0	23
March	10	14	2	0	1	0	27
April	13	10	5	0	1	0	29
May	8	13	6	0	0	0	27
June	15	8	4	0	1	0	28
July	11	14	3	0	1	0	29
August	10	17	9	0	0	1	37
September	5	9	4	0	1	0	19
October	9	7	4	0	0	2	22
November	10	12	5	0	0	1	28
December	10	18	7	0	0	3	38
Total	125	136	60	1	5	7	334

Coroner Case Statistics for 2011 by Month							
	Natural	Accident	Suicide	Homicide	Undetermined	Pending	Total
January	24	6	10	0	1	0	41
February	12	5	3	0	1	0	21
March	14	6	6	0	0	0	26
April	11	6	2	0	0	0	19
May	7	6	12	1	0	0	26
June	8	8	3	0	0	0	19
July	15	8	5	0	0	0	28
August	11	5	6	0	0	0	22
September	8	11	5	1	0	0	25
October	8	2	3	0	0	0	13
November	11	14	1	0	1	1	28
December	8	8	5	0	0	0	21
Total	137	85	61	2	3	1	289



Manners of Death 2011 through 2013



Average Cases by Month (2011-2013)	
January	24
February	16
March	19.5
April	20.5
May	18.25
June	18.5
July	19.25
August	24
September	17.25
October	14.75
November	22.75
December	22.5



2013 Death by Natural Causes

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 accidental instead of a natural.

Total Natural Deaths for 2013: 117

Types of Natural Deaths	
Cardiovascular	72
Gastrointestinal	2
Central Nervous System	2
Hepatic	13
Malignancy	5
Endocrine/Metabolic/Nutritional	2
Substance Abuse	1
Respiratory	8
Renal	1
Cases released to Primary MD as "Natural"	11

Natural Deaths by Age and Sex

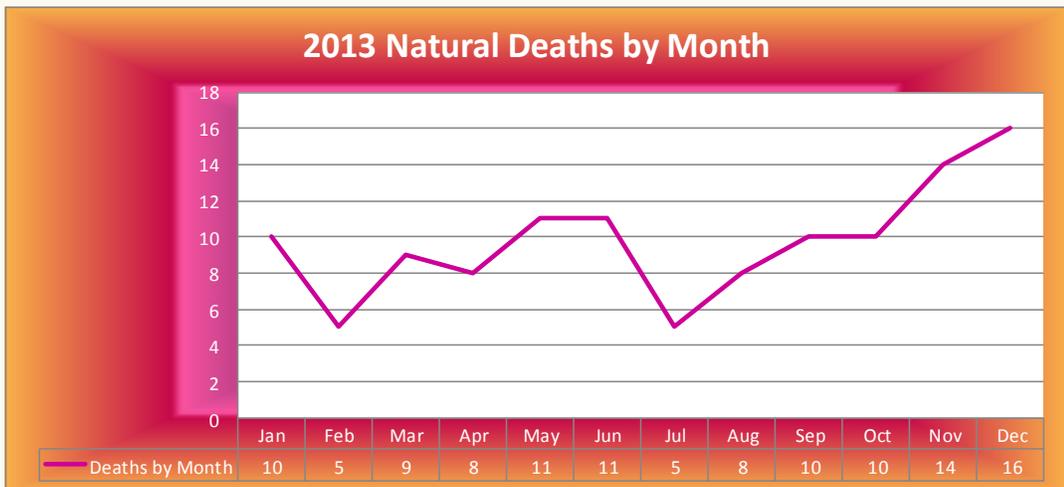
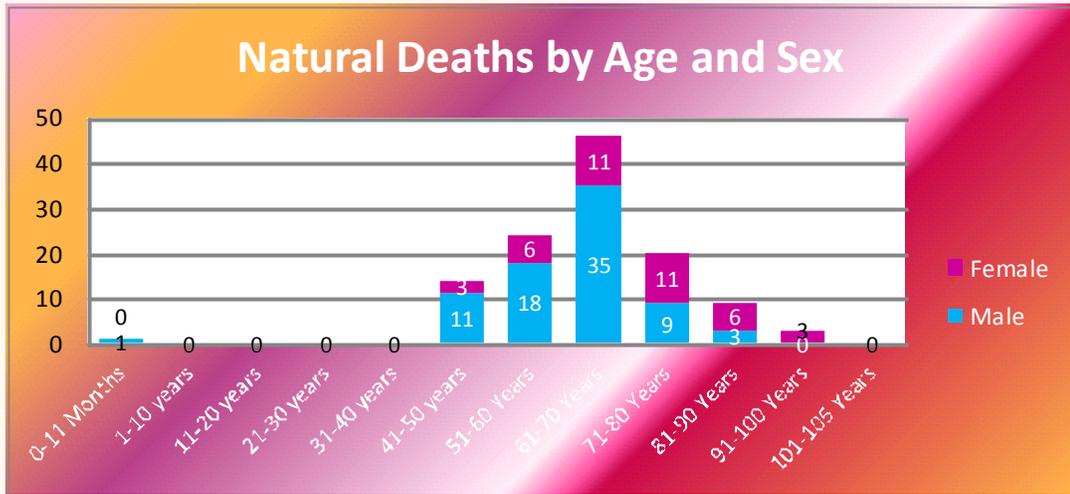
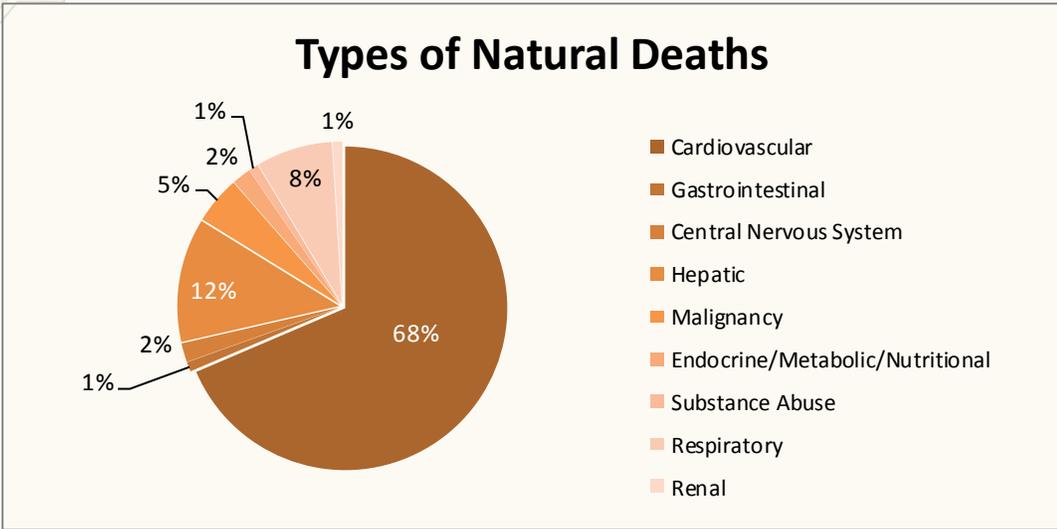
Age	Male	Female	Total
0-11 Months	1	0	1
1-10 years	0	0	0
11-20 years	0	0	0
21-30 years	0	0	0
31-40 years	0	0	0
41-50 years	11	3	14
51-60 Years	18	6	24
61-70 Years	35	11	46
71-80 Years	9	11	20
81-90 Years	3	6	9
91-100 Years	0	3	3
101-105 Years	0	0	0

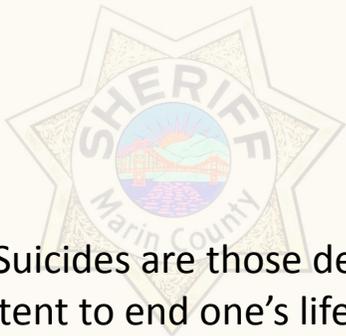
Natural Deaths by Month

Month	Number
Jan	10
Feb	5
Mar	9
Apr	8
May	11
Jun	11
Jul	5
Aug	8
Sep	10
Oct	10
Nov	14
Dec	16



2013 Death by Natural Causes





2013 Death by Suicide

Suicides are those deaths 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 2013: 73

Suicide Injury Methods	
Asphyxia:	4
Drug Overdose/Poison:	9
Gunshot:	5
Hanging:	13
Fall:	37
Vehicle:	1
Laceration:	1
Drowning:	3

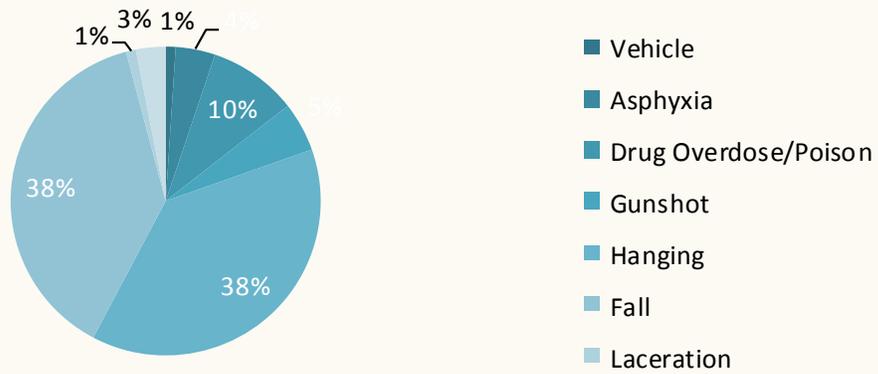
Suicide by Age & Sex			
Age	Male	Female	Total
0-11 Months	0	0	0
1-10 years	0	0	0
11-20 years	2	2	4
21-30 years	13	2	15
31-40 years	10	4	14
41-50 years	8	6	14
51-60 Years	6	4	10
61-70 Years	4	1	5
71-80 Years	6	3	9
81-90 Years	0	2	2
91-100 Years	0	0	0
101-105 Years	0	0	0

Suicide by Month	
Month	Number
Jan	5
Feb	5
Mar	4
Apr	9
May	2
Jun	4
Jul	8
Aug	16
Sep	6
Oct	6
Nov	5
Dec	3

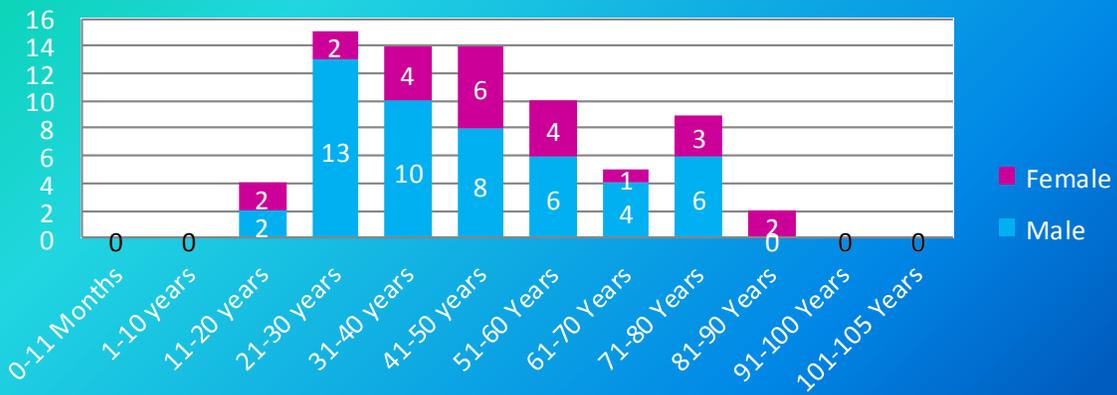


2013 Death by Suicide

Suicide Injury Methods



Suicides by Age and Sex



Suicides by Month





2013 Death by Accident

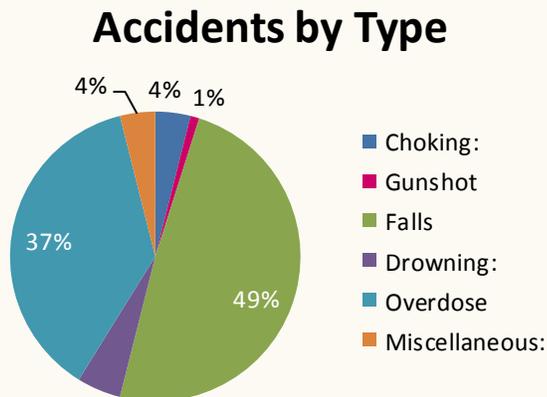
An accidental death is a death, other than natural, where there is no evidence of intent.

Motor Vehicle Accidents are not included in the statistics below.

Total Accidental Deaths* = 102

*not including motor vehicle ac-

By Accident Type	
Choking:	4
Gunshot:	1
Falls:	50
Drowning:	5
Overdose:	38
Miscellaneous:	4



Accidental Deaths by Age & 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	6	0	6
31-40 years	4	1	5
41-50 years	9	5	14
51-60 Years	10	11	21
61-70 Years	5	4	9
71-80 Years	6	1	7
81-90 Years	7	15	22
91-100 Years	8	10	18
101-105 Years	0	0	0

Accidental Deaths by Month	
Month	Number
Jan	12
Feb	8
Mar	9
Apr	14
May	5
Jun	9
Jul	4
Aug	8
Sep	7
Oct	6
Nov	12
Dec	8

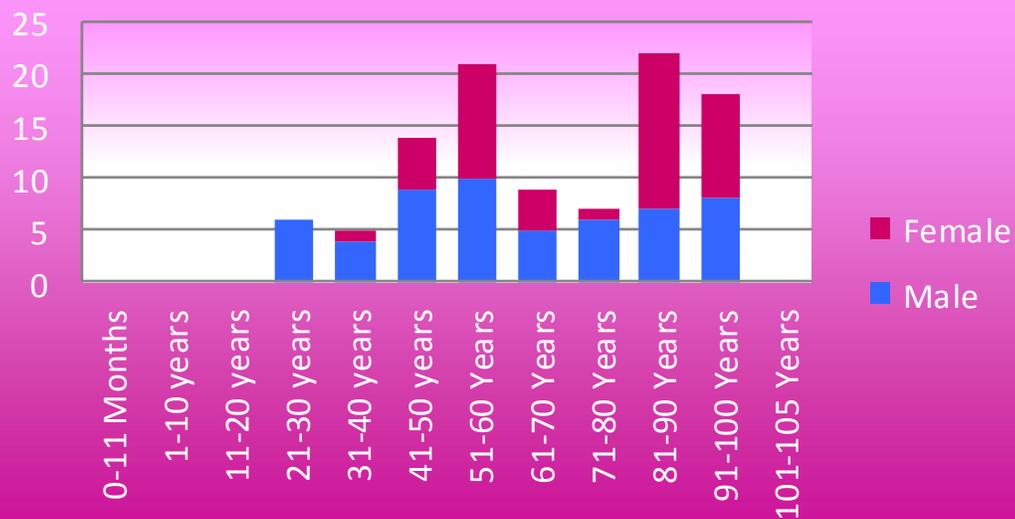


2013 Death by Accident

Accidental Deaths by Month



Accidental Deaths by Age & Sex

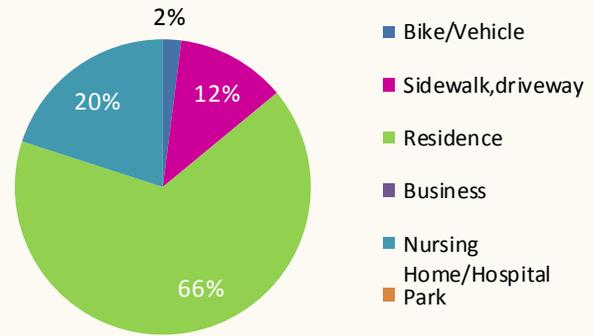




Breakdown of Accidental Deaths by Type of Accident

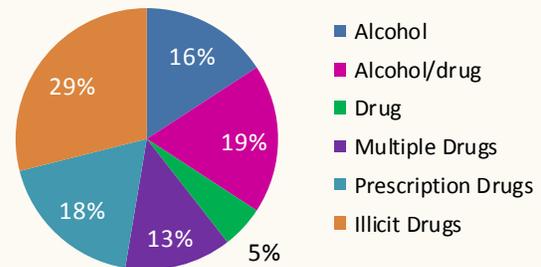
Falls:	50
Bike/Vehicle	1
Sidewalk,driveway	6
Residence	33
Business	0
Nursing Home/Hospital	10
Park	0
Horse	0
Scaffolding	0

Accidental Deaths: Falls



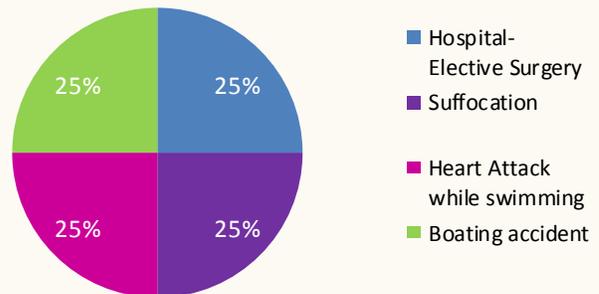
By Overdose:	38
Alcohol	6
Alcohol/drug	7
Drug	2
Multiple Drugs	5
Prescription Drugs	7
Illicit Drugs	11

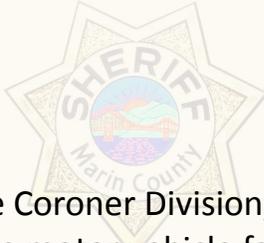
Accidental Deaths: Overdoses



Miscellaneous	4
Hospital- Elective Surgery	1
Suffocation	1
Heart Attack while swimming	1
Boating accident	1

Miscellaneous Accidents





2013 Motor Vehicle Fatalities

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: 16

2013 Motor Vehicle Fatalities	
Operator of Motor Vehicle	7
Passenger of Motor Vehicle	1
Pedestrian	4
Motorcycle/Scooter	3
Plane Crash	0
Boating Accident	0
Bicyclist	1
Total	16

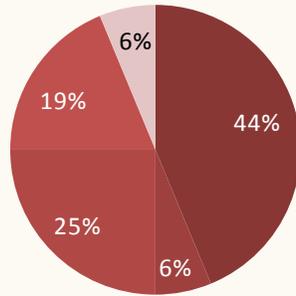
Motor Vehicle Fatalities by Age			
Age	Male	Female	Total
0-11 Months	0	0	0
1-10 years	0	0	0
11-20 years	0	0	0
21-30 years	5	0	5
31-40 years	1	1	2
41-50 years	2	0	2
51-60 Years	0	0	0
61-70 Years	2	0	2
71-80 Years	3	1	4
81-90 Years	0	1	1
91-100 Years	0	0	0
101-105 Years	0	0	0

Motor Vehicle Fatalities by	
Month	Number
Jan	0
Feb	1
Mar	2
Apr	2
May	1
Jun	1
Jul	2
Aug	0
Sep	1
Oct	2
Nov	2
Dec	2



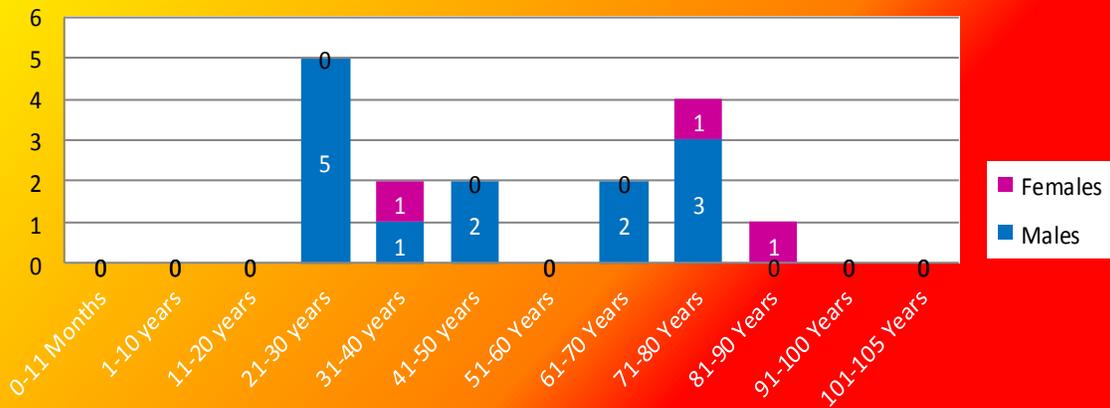
2013 Motor Vehicle Fatalities

Motor Vehicle Accidents 2013



- Operator of Motor Vehicle
- Passenger of Motor Vehicle
- Pedestrian
- Motorcycle/Scooter
- Plane Crash
- Boating Accident

2013 Motor Vehicle Accidents by Age and Sex



Motor Vehicle Fatalities by Month



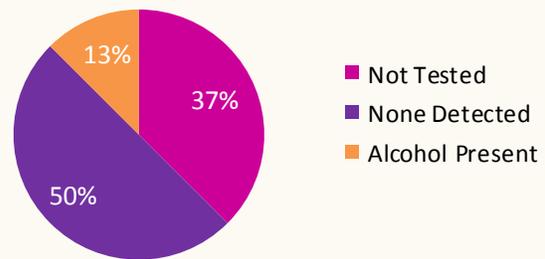


2013 Motor Vehicle Fatalities Involving Alcohol and/or Drugs

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.

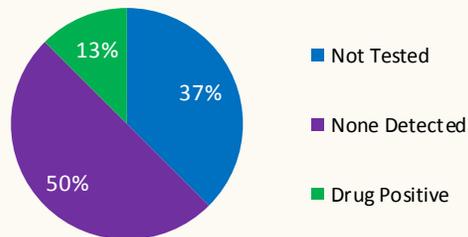
Toxicology results relating to Alcohol	
Not Tested	6
None Detected	8
Alcohol Present	2

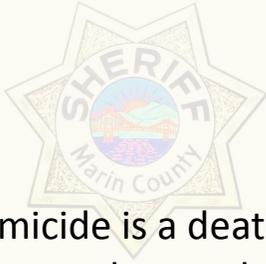
Toxicology Results relating to the presence of Alcohol



Toxicology Results Related to Drugs	
Not Tested	6
None Detected	8
Drug Positive	2

Toxicology Results Related to Drugs





Homicide

A homicide is a death 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 2013: 3

Types of Homicides	
Gunshot:	1
Blunt Trauma:	1
Stab Wound:	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	0	0	0
31-40 years	0	0	0
41-50 years	0	1	1
51-60 Years	0	0	0
61-70 Years	1	0	1
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
Jan	1
Feb	0
Mar	0
Apr	0
May	0
Jun	0
Jul	0
Aug	1
Sep	0
Oct	0
Nov	1
Dec	0



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. If an extensive investigation and autopsy cannot clarify the circumstances which led to a death, the death is then classified as undetermined.

Number of undetermined deaths in 2013: 12

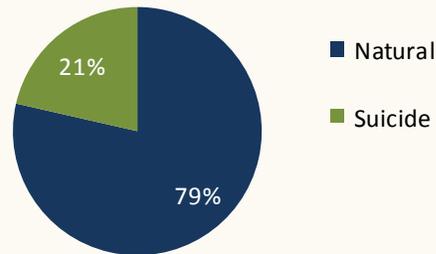


In Custody Death

The Coroner Division investigates all in custody death 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.

San Quentin Inmates	
Manner	Amount
Natural	11
Suicide	3

San Quentin State Penitentiary Inmate Deaths



Marin County Jail Inmate Deaths*: 2

*Death Investigation Conducted by an outside agency



2013 Indigent Cremation

19 Application Packets Received

15 Indigent Applications Accepted and Cremations Authorized

4 Indigent Applications Denied