



2013 ANNUAL REPORT

BOULDER COUNTY CORONER'S OFFICE



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To the Citizens of Boulder County,

I am pleased to present the 2013 annual report from the Boulder County Coroner's Office. The report highlights the activities of the office and offers a valuable resource to understand the work we do, emerging trends in the county and other information helpful to both citizens and organizations.

In 2013, the office experienced a sudden and dramatic increase in caseload. That increase created challenges, especially in terms of staffing. Because of the increased caseload and the significant additional stresses on the people in my department, I worked with my staff throughout the year to adjust their schedules. Working together, we managed to maintain a healthy work/life balance, while still providing the best service to the community. In order to balance the caseload in the pathology department, we welcomed an additional Forensic Pathologist, Dr. Daniel Lingamfelter.

After examining the 2013 data and comparing it with the 2012 data, there are some interesting trends that can be seen. The office had a 20% increase in the number of deaths we made a physical response to. Residential deaths and emergency room deaths were the biggest factors in this increase. With regard to the manner of death, the largest increases were seen in non-traffic accidental deaths and natural deaths. Accidental death drug overdoses doubled and natural deaths in males from age 50-99 also experienced a significant increase. By law enforcement jurisdiction, we saw significant increases in total cases for Boulder PD—40%, Longmont—39% and Lafayette—52%. All of these increases resulted in 30% more autopsies for the year.

Despite the great increase in cases, the office continued to move forward with the large projects that were already underway. This year a lot of time was spent focusing on the building plans for the previously approved new coroner's facility. My staff and I worked closely with the County Architects office and Building Services to fine-tune the building plans, features and requirements. While dealing with a dramatic increase in cases and working on the plans for the new building took the bulk of our time in 2013, the office also moved ahead on many other important initiatives. The office worked to stabilize our internship program, improve our information technology program, and reduce our overtime budget.

In May of this year the office assisted in a mortuary fire investigation in Longmont involving 7 bodies. The office provided expertise to successfully manage the investigation, process the bodies, make positive identifications and work with the families—all in a timely manner. In September, Boulder County experienced a historic and devastating flood. The coroner's office was positioned to handle a mass fatality event, but thankfully, that did not happen. The office handled four cases related to the flood and was able to successfully manage the investigations of each of these cases, recovery the bodies and make positive identifications.

One of the greatest achievements that came in 2013 was solving the identity of a 2002 John Doe case. Many efforts were made between my office and law enforcement to re-examine the case in hopes of discovering the identity. 2013 saw those efforts come to fruition.

As always, I am honored and proud to have served another year for the citizens of Boulder County.

ER Hall

EMMA R. HALL
Coroner

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INTRODUCTION

MISSION STATEMENT

The mission of the Boulder County Coroner's Office is to conduct thorough and fair investigations into deaths falling under its jurisdiction with professionalism and integrity to determine the manner and cause of death, in a timely manner. The core values of the office are integrity, excellence and compassion; the office is committed to maintaining the integrity of the investigations it conducts by setting high standards of accountability and preserving confidentiality, the office is committed to serving with excellence by establishing and preserving community trust through professional conduct, the office is committed to providing compassion, dignity and respect for the deceased and their families.

FUNCTION OF THE OFFICE

The Office of the Boulder County Coroner is a creation of the Colorado Constitution and the Colorado Revised Statutes (C.R.S.) 30-10-601 through 621. Under those statutes the Coroner is required to make all proper inquiry regarding the cause and manner of death of any person under his/her jurisdiction.

The cause of death may be defined as the disease or injury that resulted in the death of an individual. Examples of causes of death may include: "heart disease", "pneumonia", "gunshot wound", or "blunt force trauma". The manner of death is a medico-legal term that describes the circumstances of an individual's death, and is an opinion based on the "preponderance of evidence". When a natural disease process, such as heart disease or diabetes, causes death, the manner of death typically would be classified as **Natural**. The manner of death is classified as **Accident** when the death is the result of a hostile environment, and the event is not expected, foreseen, or intended. The manner of death is classified as **Suicide** when the person acts with the intent of causing his or her own death. When the death is the result of the killing of one human being by another, the manner of death is classified as **Homicide**. Homicide is a medico-legal term and should not be confused with such terms as "murder" or "manslaughter" which are used by the criminal justice system to describe the degree of criminal intent in a particular homicide. When there is insufficient evidence to determine the cause and/or manner of death, both the cause and manner of death may be classified as **Undetermined**. In other instances, the cause of death may be readily apparent, but the evidence that indicates manner of death may be equivocal, thereby leading to a manner of death of Undetermined. The manner of death is classified primarily to aid survivors in understanding the events surrounding an individual's death and for statistical purposes.

STAFF

The 2013 staff of the Boulder County Coroner's Office consisted of the following:



Elected Coroner: Emma R. Hall. Ms. Hall is a Boulder County native who grew up in Lyons on Hall Ranch, she comes from a pioneer family that has been in the county since the 1870s. Ms. Hall is responsible for the day to day administration of the office as well as the daily management of cases. She is ultimately responsible for the determinations of cause and manner of death for the cases in which the office takes jurisdiction of. Ms. Hall is a graduate of Niwot High School and Metropolitan State College of Denver, with a degree in Criminalistics (the study of evidence). Her background includes experience and training in death investigation, autopsies and forensic pathology, crime scene investigation, evidence analysis, elder abuse, child death investigation, blood stain pattern analysis, forensic anthropology, mass fatalities and emergency management, aquatic death and homicidal drowning. Ms. Hall is a certified Death Investigator and a member of the Colorado Coroner's Association. She co-chairs the Elder

Abuse Fatality Review Team with District Attorney Stan Garnet. Ms. Hall attends a number of meetings throughout the county and state to include Boulder County Elected Official/Department Head meetings, mass fatality planning meetings, fire and flood planning meetings, Boulder County Child Fatality Review Team meetings, Boulder County Law Enforcement Chiefs meetings, Metro Area Coroner meetings, and the Colorado Forensic Investigators meetings. Emma's true passion in the field is being able to provide answers to as many questions as possible to the family in each investigation and to help the family in their healing process.

Chief Deputy Coroner: Dustin Bueno. Mr. Bueno is responsible for the day to day administration of the office and the management of the investigations staff. Mr. Bueno has several years of experience working in the field of medico-legal death investigation and private investigations. Mr. Bueno was previously a Deputy Coroner at Adams County Coroner's Office; as a supervisor and field training officer he created a death investigation training program, and wrote numerous office procedures. Mr. Bueno is experienced in assisting at autopsy procedures and has extensive training in toxicology, radiography, latent fingerprint collection and identification, and photography. Mr. Bueno has produced numerous educational presentations for law enforcement and the community, and he has taught on numerous career related topics.



Board Certified Forensic Pathologist: Michael F. Arnall, M.D., P.C., Forensic Pathologist. Dr. Mike Arnall is a triple board certified forensic pathologist with 30 years experience in autopsies and death investigations. Dr. Arnall attended medical school in St. Louis, Missouri at the Washington University School of Medicine. He completed a fellowship in forensic pathology at the Denver County Coroner's Office, as well as a fellowship in surgical pathology at the Baylor College School of Medicine in Houston, Texas. Dr. Arnall has worked as a medical examiner and forensic pathologist in Florida, Massachusetts, New Zealand and multiple counties in Colorado. He has performed over 3000 autopsies and has testified as an expert in forensic pathology in over 200 homicide trials.

Board Certified Forensic Pathologist: Robert A. Kurtzman, D.O., FCAP Forensic Pathologist. Dr. Robert Kurtzman is a 1980 graduate of the Des Moines University College of Osteopathic Medicine and has been practicing medicine for 34 years. He is board certified by the American Osteopathic Board of Pathology in Anatomic Pathology, Laboratory Medicine and Forensic Pathology. He received his Forensic Pathology training under the direction of Dr. Werner Spitz at the Office of the Medical Examiner of Wayne County in Detroit, Michigan and continued to work in Southeast Michigan until he relocated to Grand Junction, Colorado in 1992. While in Colorado he has served as elected Coroner for Mesa County for two terms and as a contract Forensic Pathologist providing service to over 14 counties. His involvement in notable cases includes: the Northwest Airlines Flight 255 air disaster at the Detroit International Airport in 1987, Aspen ski accident death investigation of Michael Kennedy in 1998, Storm King Mountain fire forensic team in 1994 and the sudden death investigation of former Enron CEO Kenneth Lay.

Board Certified Forensic Pathologist: Daniel C. Lingamfelter, D.O., Forensic Pathologist. Dr. Daniel Lingamfelter is 2004 graduate of University of North Texas Health Science Center. His post graduate training consisted of an Anatomic and Clinical Pathology Residency at the University of Missouri-Kansas City, and a Forensic Pathology Fellowship at the University of Texas Southwest Medical Center. Dr. Lingamfelter is board certified by the American Board of Pathology in Forensic Pathology, Anatomic and Clinical Pathology and has taught at the University of Missouri School of Medicine and at Texas Christian University. Dr. Lingamfelter has published many journal articles and has given many presentations throughout the nation and Canada.

Deputy Coroner: Wendy Kane. Ms. Kane has a Bachelor's Degree in Business Management and an Associate's Degree in Criminal Justice and Applied Sciences. She has over 9 years of experience in investigations as a police officer and is also a certified massage therapist. Ms. Kane previously worked for the Colorado Bureau of Investigations Unit and is trained in fingerprint identifications. Ms. Kane handles a portion of the caseload, as well as handling various day-to-day operations.

Deputy Coroner: Angel Luehring. Ms. Luehring is an army veteran who worked for the U.S. Army as a certified Medical Laboratory Technician and is currently finishing her Bachelor's Degree in Health Administration with an emphasis in Bio-med. Angel handles a portion of the caseload, as well as handling various day-to-day operations of the office.

Deputy Coroner: Kayla Wallace. Ms. Wallace recently received her Master's Degree in Forensic Psychology, prior to coming to Boulder County. During her studies, she interned with the Denver Office of the Medical Examiner for two years and was the Volunteer Coordinator for the Colorado Human Extraction and Recovery Team. Ms. Wallace handles a portion of the caseload, as well as, handling various day-to-day operation of the office.

Deputy Coroner: Brandon Dixon. Mr. Dixon grew up in the Golden area and attended college at the University of Colorado at Denver. He graduated with a degree in history and has worked in the investigative field ever since. Mr. Dixon has five years experience working in the private sector doing financial and insurance based investigative work prior to joining the coroner's office. Mr. Dixon handles a portion of the caseload, as well as, handling various day-to-day operation of the office.

Deputy Coroner: Melinda Rose. Ms. Rose is a Colorado native who was born and raised in Littleton. She graduated from Metropolitan State College of Denver in 2007 with a degree in Chemistry with a Concentration in Criminalistics. Ms. Rose completed an internship with the Denver Office of the Medical Examiner where she worked as an intern for the pathology department assisting with autopsies.

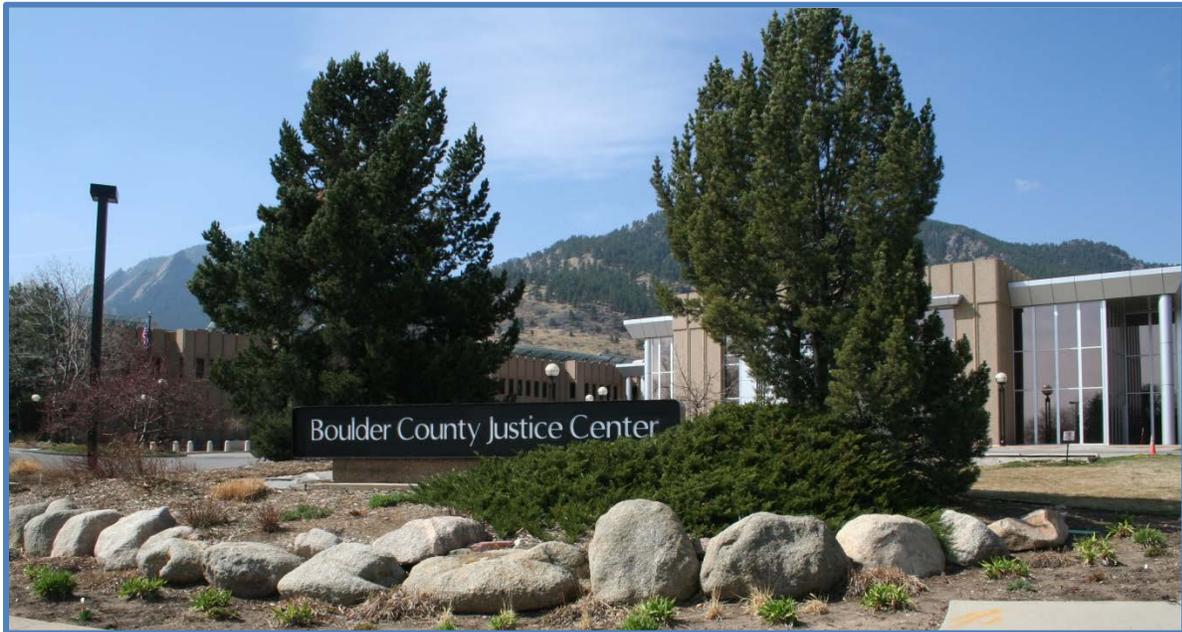
Deputy Coroner: Andrew Muck. Mr. Muck grew up in the Thornton area and is a Colorado native. Mr. Muck came from the field of mortuary science where he had experience with managing cremations, funeral services and performing as a funeral director. Mr. Muck's has a strong background in working with families who have lost a loved one.

Pathology Assistant: Cory Martin. Ms. Martin joined the Boulder County Coroner's office in September of 2011 as an Autopsy Technician Intern and was subsequently hired upon completion of her internship. Ms. Martin holds degrees in opera performance from Indiana University, Bloomington, gemological certifications from the Gemological Institute of America and most recently, in 2012, she completed her bachelor's degree in biology from Metropolitan State University, Denver. Ms. Martin is responsible for the day to day operation of the morgue and assists at autopsies.

Administrative Supervisor: Lorraine Dickes. Mrs. Dickes has been active in the field of office management for twenty years. Her concentration has been in small companies managing accounting and payroll; she is content in the element of numbers. She has owned her own businesses including industries in farming, retail, construction and bookkeeping. Mrs. Dickes has had training with the US State Department in exporting, State of Colorado for Notary and Boulder County for Supervisor Certificate and Office Pro Certificate. She has received excellence awards and recognition from the United States Post Office.

FACILITIES

The administrative offices of the Boulder County Coroner are located in the Criminal Justice Center at 6th Street and Canyon Boulevard in Boulder.



Location of Boulder County Coroner's Office.

The Boulder County Coroner's Office utilizes the morgue and autopsy facility at Boulder Community Hospital on a contract basis.



Location of Boulder County Coroner's morgue.

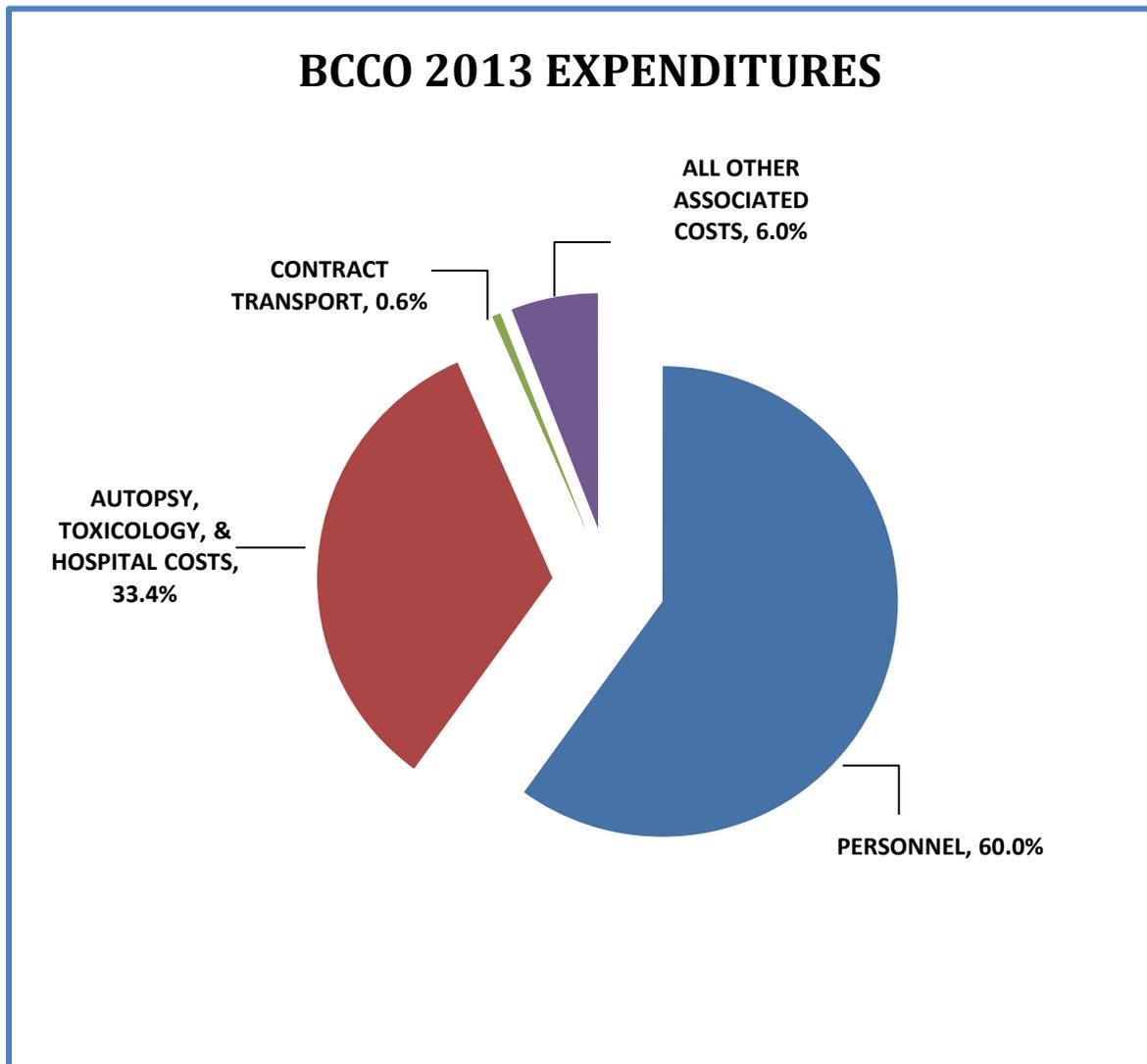
BUDGET

FUNDING

The funding for the coroner's office comes from the general fund. The general fund is a general use fund where the majority of the county's core services are funded. The coroner's office has an appropriation which is split between personnel and operating expenditures. The majority of the revenues that go into the general fund, include property tax, mother vehicle fees, recording fees, other fees and charges for service, interest on investments, and intergovernmental revenues. Additional information is available through the Boulder County Budget Office.

EXPENDITURES

The 2013 expenditures for the Boulder County Coroner's Office was \$993,423.97. This is 0.31% of the total adopted 2013 Boulder County budget of \$319,584,517.



DESCRIPTION OF REPORTABLE CASES

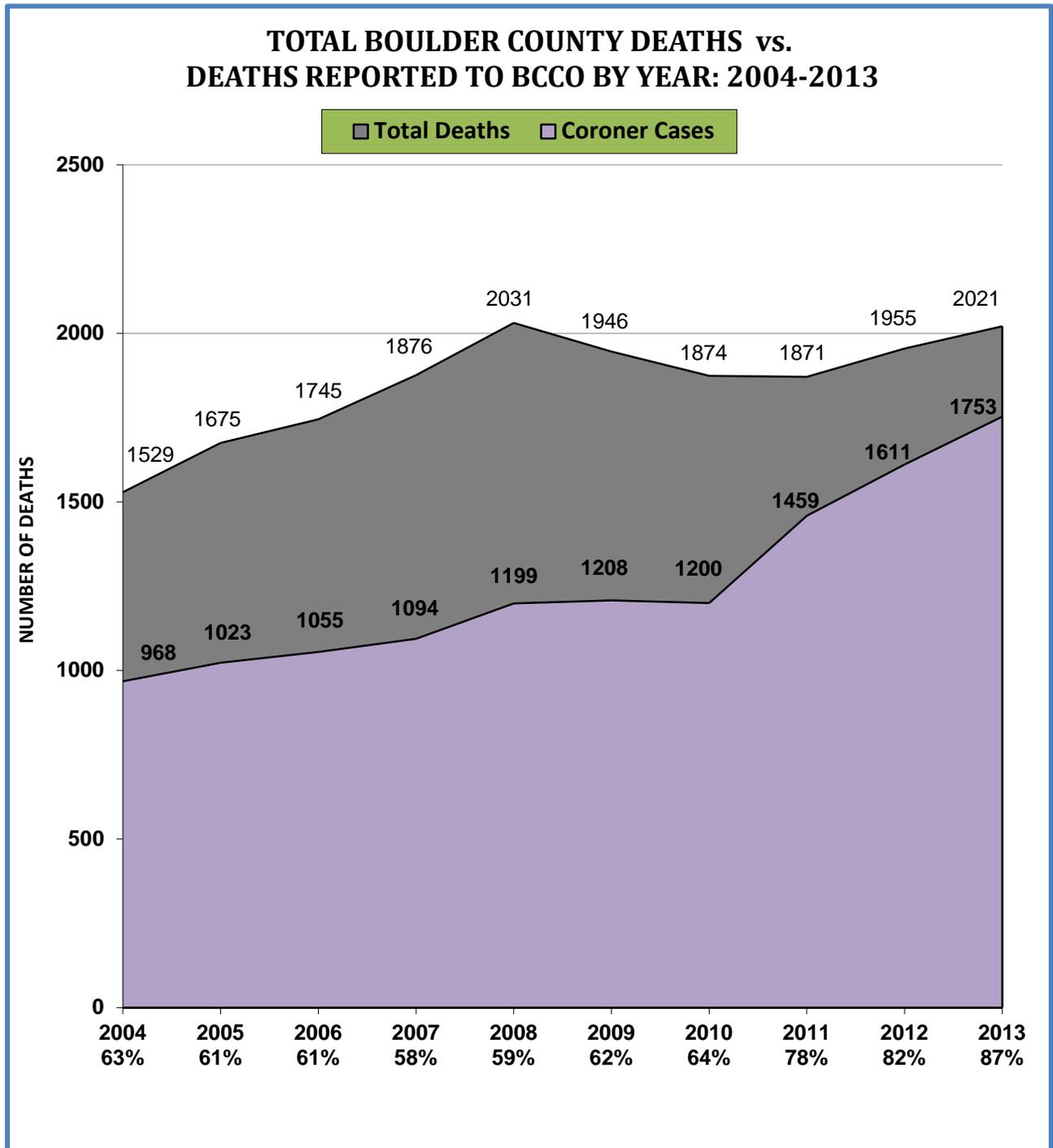
In accordance with CRS 30-10-606, the following deaths are **reportable** to the Boulder County Coroner's Office:

- If the death is or may be unnatural as a result of external influences, violence or injury;
- Death due to the influence of or the result of intoxication by alcohol, drugs or poison;
- Death as a result of an accident, including at the workplace;
- Death of an infant or child is unexpected or unexplained;
- Death where no physician is in attendance or when, though in attendance, the physician is unable to certify the cause of death;
- Death that occurs within twenty-four hours of admission to a hospital;
- Death from a disease which may be hazardous or contagious or which may constitute a threat to the health of the general public;
- Death occurs from the action of a peace officer or while in custody of law enforcement officials or while incarcerated in a public institution;
- Death was sudden and happened to a person who was in apparent good health;
- When a body is unidentifiable, decomposed, charred or skeletonized;
- Circumstances that the coroner otherwise determines may warrant further inquiry to determine cause and manner of death or further law enforcement investigation.

It should be emphasized that, although a particular death may be "reportable" to the coroner's office; an autopsy may not be necessary depending upon the circumstances.

PERCENTAGES OF BOULDER COUNTY DEATHS REPORTED TO THE CORONER

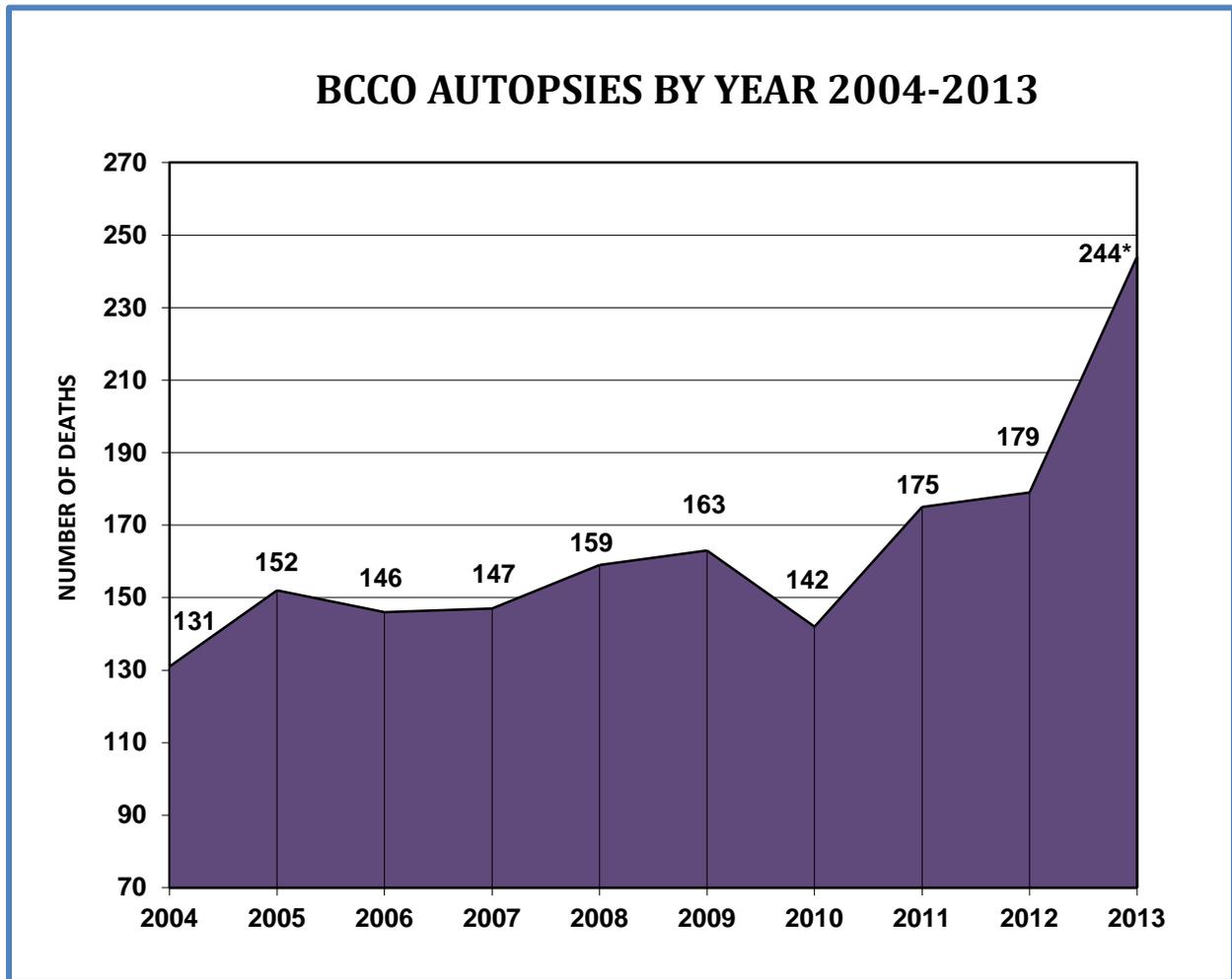
Per the US Census the 2013 estimated population of Boulder County was 310,396. A death certificate is filed with the Boulder County Public Health Department for each death that occurs in Boulder County. The Public Health Department keeps track of the total number of deaths that occur in Boulder County. A portion of the deaths that occur in Boulder County are reported to the Boulder County Coroner's Office. The chart below shows a yearly total of all deaths that occurred in Boulder County and a yearly total of all deaths reported to the Boulder County Coroner.



AUTOPSIES BY YEAR

In approximately fourteen percent of the deaths that were investigated by the Boulder County Coroner's Office in 2013, an autopsy or skeletal postmortem examination was performed to aid in the determination of the cause and manner of death, to document disease, to identify injury patterns, or to recover evidence. Included in almost all autopsies are toxicology tests that may be helpful in determining the cause and manner of death. Toxicology testing and histology review is performed on various specimens collected at autopsy. Several laboratories are used for drug testing. Screening tests include alcohol, illicit drugs, commonly abused prescription and non-prescription drugs, and other substances as needed.

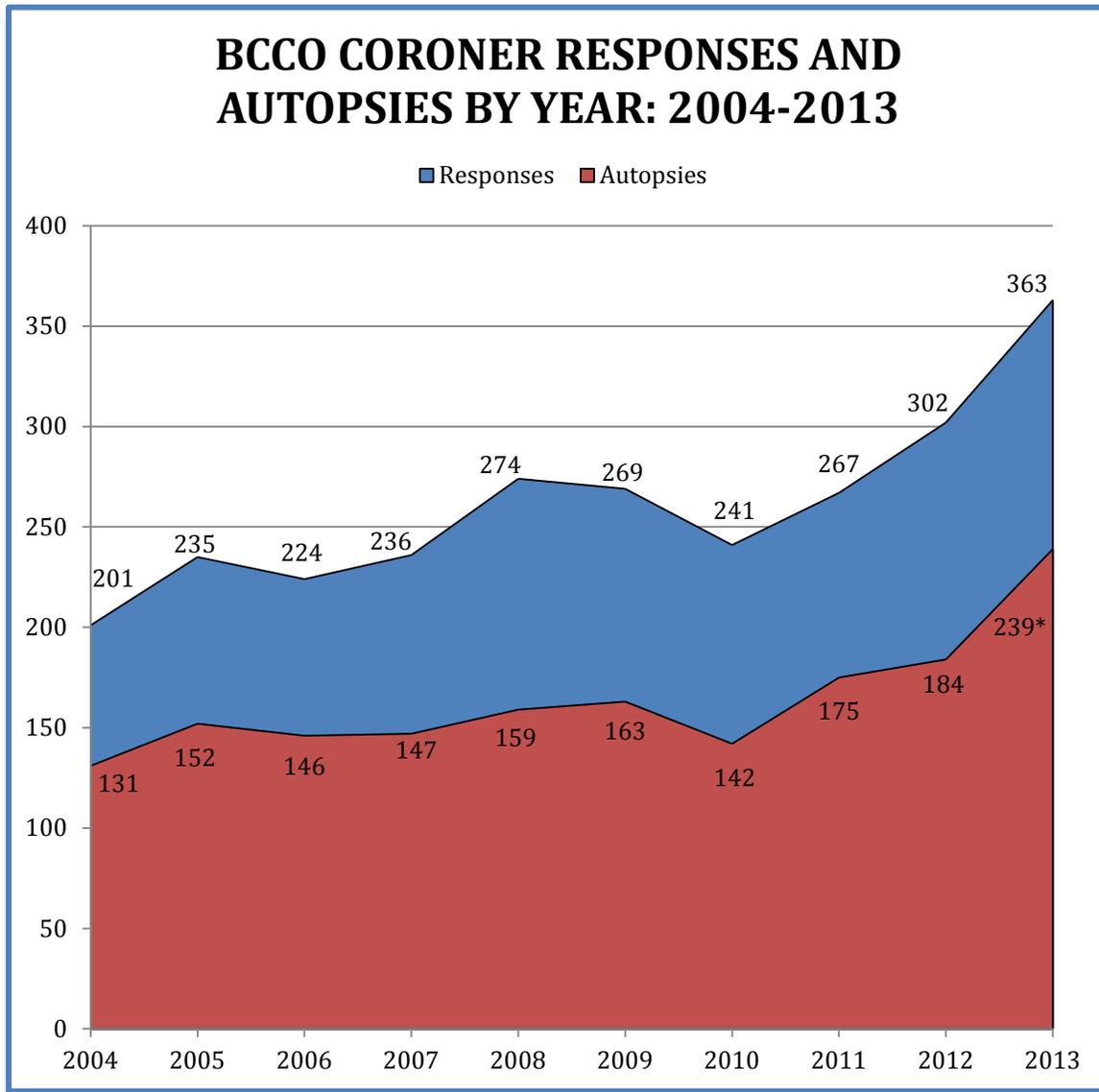
In 2011 House Bill 11-1258 was passed. The bill states that the coroner shall perform forensic autopsies with the most recent version of the "Forensic Autopsy Performance Standards" adopted by the National Association of Medical Examiners (NAME). And that all forensic autopsies must be performed by a board-certified forensic pathologist.



Note: *The Boulder County Coroner's Office performed 244 autopsies in 2013, this included two hundred thirty-eight 2013 cases and six 2012 cases. There was one 2013 case which required an autopsy that was completed in 2014. There was one additional case in which a postmortem skeletal examination was completed.

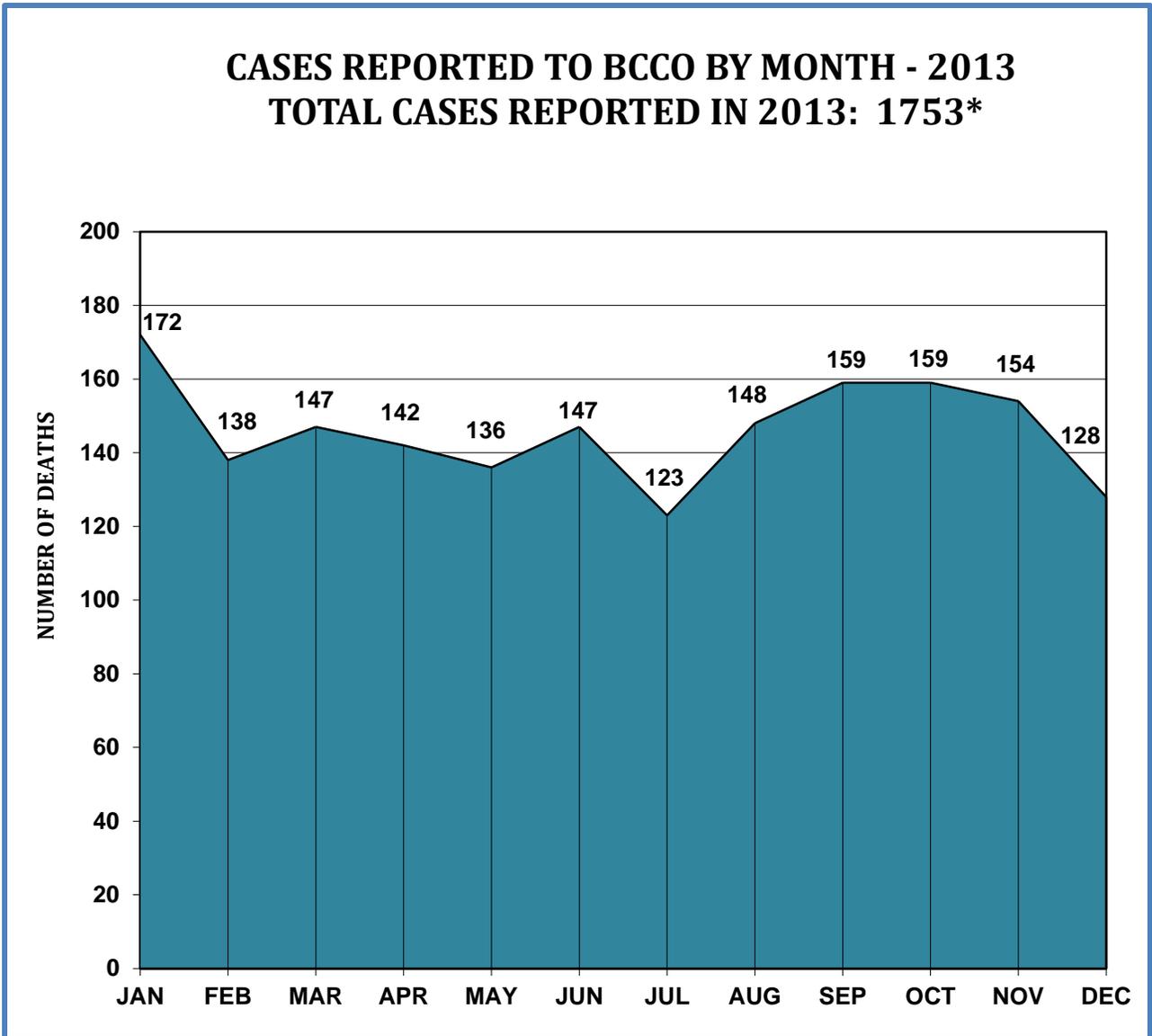
CORONER RESPONSE AND AUTOPSY TOTALS

The Boulder County Coroner's Office makes a physical response to a low percentage of its total case load and performs an autopsy on a low percentage of its total case load. The chart below shows the annual trend lines for the total of each the responses and the autopsies.



Note: * There were 239 cases in 2013 that required autopsies, 238 of the autopsies were completed in 2013 and the remaining one case was completed in 2014. There was one additional case in which a postmortem skeletal examination was completed.

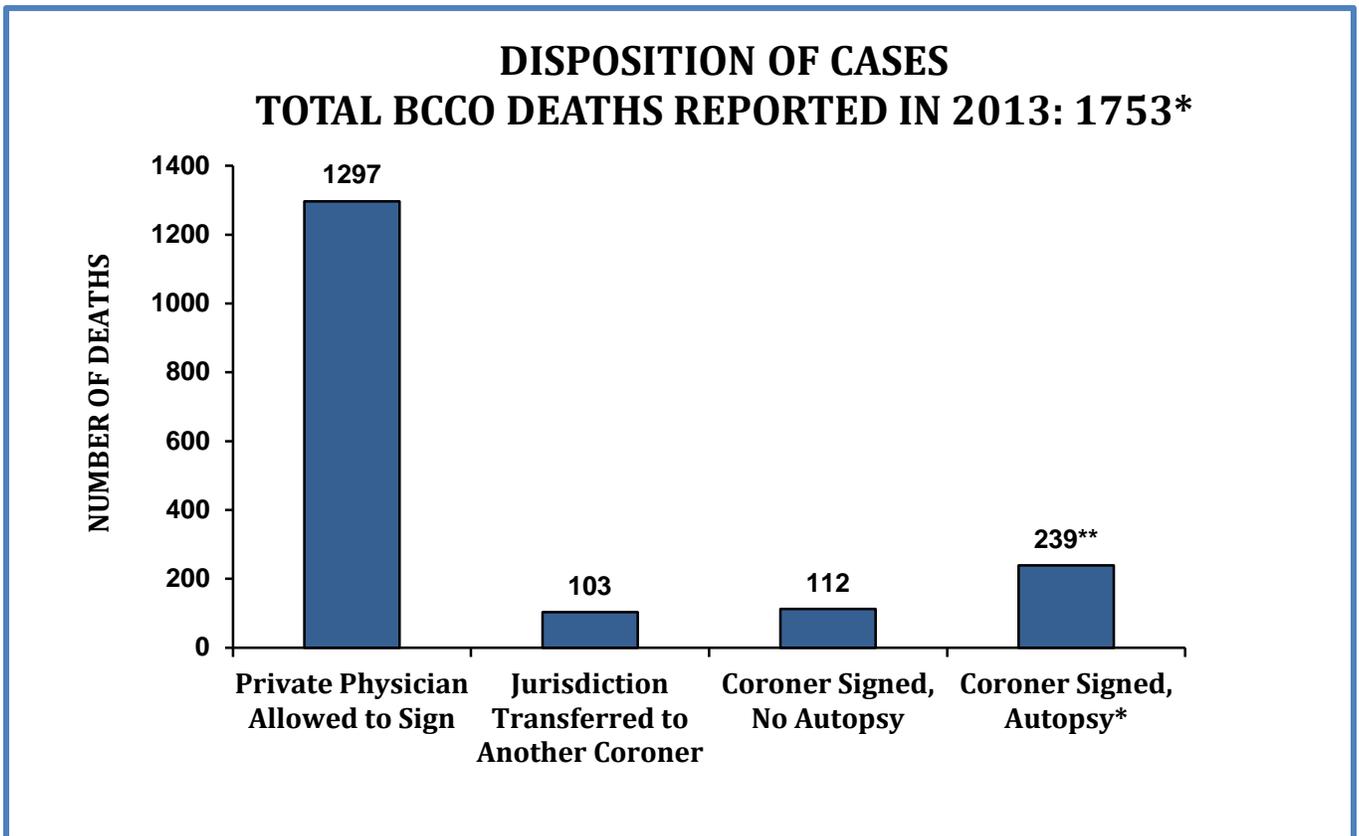
CASES BY MONTH



Note: *The total number of cases reported includes 103 cases that were transferred to other coroners. See **Transfer of Jurisdiction** of this report for explanation.

DISPOSITION OF CASES

Deaths that fall under the jurisdiction of the coroner are handled in one of four ways. Most commonly, if the death is due to natural disease and if a private physician who has treated the decedent is able to certify the cause of death, the coroner may allow the private physician to sign the death certificate. Or the coroner may assume jurisdiction over the death and conduct an investigation and an autopsy to determine cause and manner of death and then issue a death certificate. Or the coroner may assume jurisdiction of a death and conduct an investigation, but not perform an autopsy. Or, even though a death may have occurred in the county, a “transfer of jurisdiction” may occur to the coroner of the county where the initiating event causing death occurred or where the decedent was transported (i.e. by ambulance) from prior to death. The transfer of jurisdiction is allowed according to Colorado Revised Statute §30.10.606.



Note: *While the total number of cases was 1753 for 2013, there are two cases in which a death certificate was not signed, one was found to be non-human remains and the other is unidentified remains. **The total number of “Coroner Signed, Autopsy” includes one case in which the death occurred in 2013 and the autopsy was performed in 2014, this case was not counted in the 2013 total BCCO Autopsies by Year 2004-2013.

TRANSFER OF JURISDICTION

Occasionally deaths that occur in Boulder County are due to an “initiating event” that occurred in another county. For example, an individual may die in a hospital from injuries that he/she sustained in an accident that occurred in another county, or an individual may collapse at his/her residence (in another county), be transported to a hospital in Boulder County, and subsequently die in that hospital. In these cases, the Boulder County Coroner will transfer jurisdiction (subsequent investigation and certification) to the coroner of the county in which the “initiating event” occurred.

In 2013, the jurisdictions of 103 cases were transferred to other coroners in surrounding counties. Seventy-seven cases were natural deaths, two were traffic accidents, twenty-one were non-traffic accidents, two were suicides, one was undetermined, and there were no homicides. Sixty-two of the cases were transferred to Adams /Broomfield County, twenty-seven were transferred to Weld County, nine were transferred to Jefferson County, one was transferred to Larimer County, one was transferred to Denver County, two were transferred to Gilpin County and one was transferred to Arapahoe County.

Forty-two of the transferred cases were deaths that occurred in the emergency departments at Exempla Good Samaritan Medical Center (36) and Longmont United Hospital (6).

In 73% (75 of the 103) of the cases that were transferred to other coroners, the decedents were transported to Exempla Good Samaritan Medical Center from areas outside of Boulder County (this includes the 36 EGSMC ED deaths).

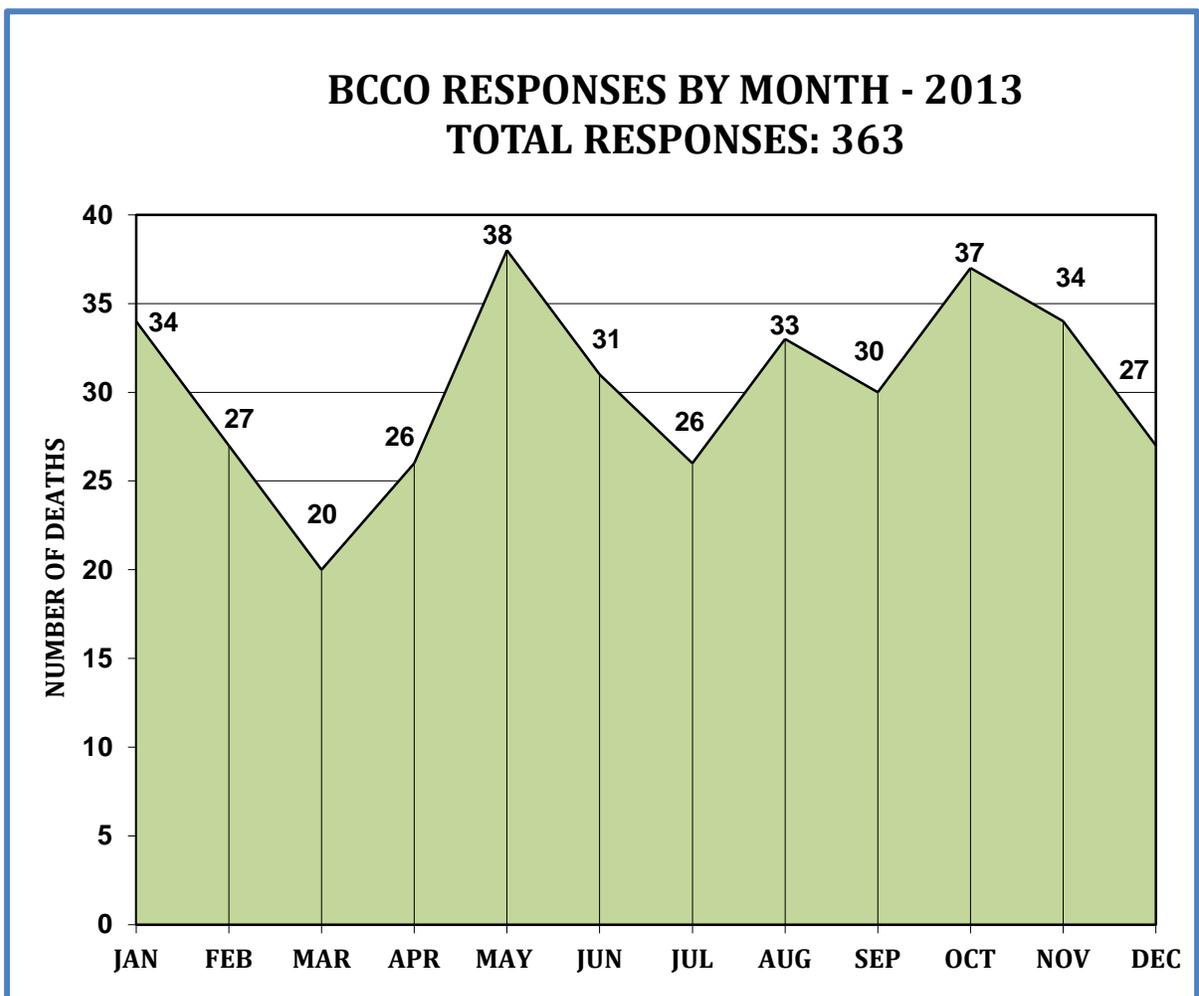
For statistical purposes, in the sections to follow, transferred cases will not be counted among the deaths investigated by Boulder County, unless otherwise noted.

CORONER RESPONSES BY MONTH

The Boulder County Coroner's Office is called to action by either receiving a phone report of a death or by receiving a notification and response request from law enforcement. When a death is reported to the office by phone it is typically being reported by a hospice agency, a care center or a hospital. The coroner's office will make a determination if a response is necessary, if not a phone report is taken and the office may follow up with attaining additional medical records and conducting further interviews as needed. A response is made by the coroner's office to the care center or hospital if further information is needed at the time of death.

Most responses made by the coroner's office are to death scenes where law enforcement has notified and requested the coroner's office. Law enforcement has jurisdiction over the scene, while the coroner's office has jurisdiction over the body, therefore both agencies work together to accomplish their individual responsibilities. The coroner's office is responsible for determining manner and cause of death, identifying the decedent and notifying the next of kin. Law enforcement's responsibility is to determine and document any crime that may have occurred or the lack thereof.

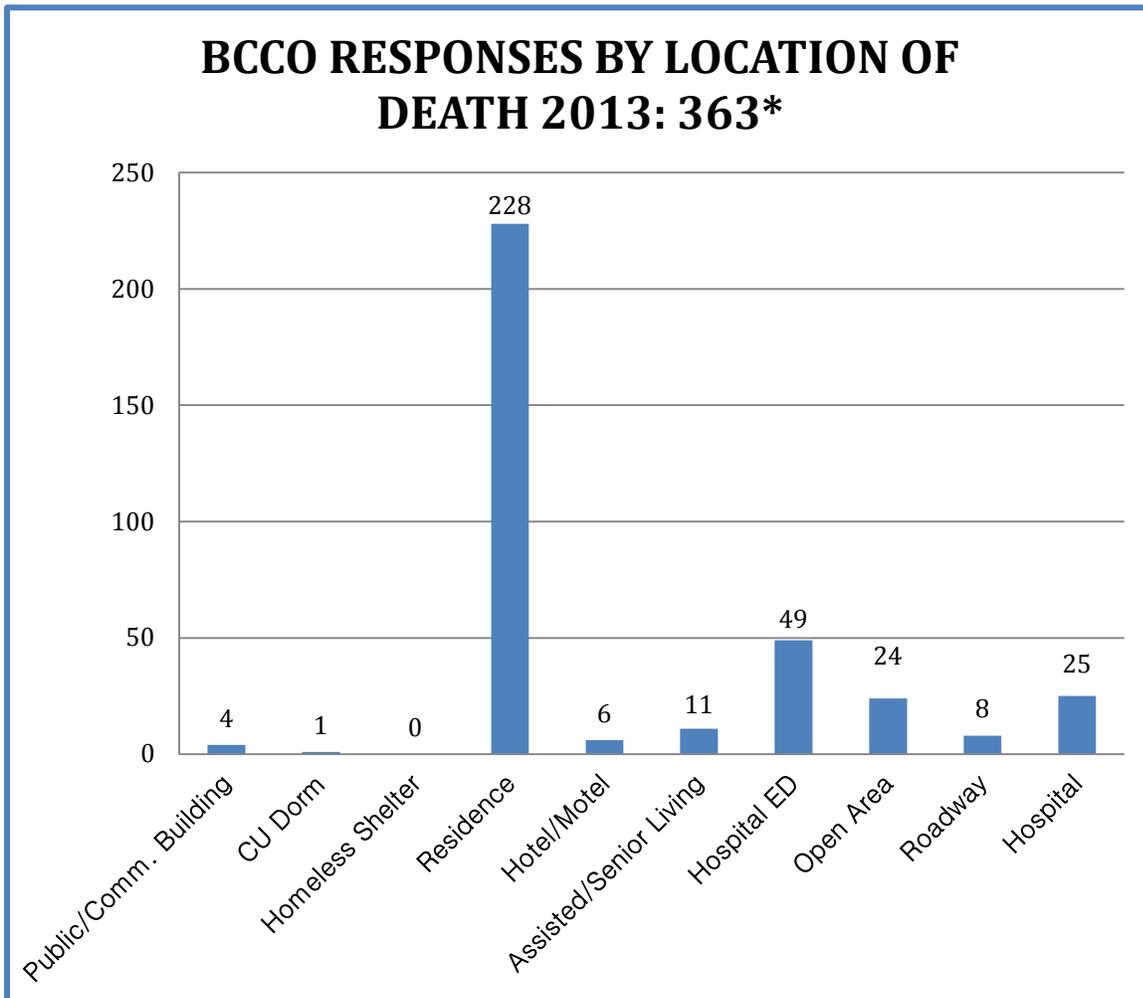
In 2013, 363 scene responses were made which was 21% of all of the deaths reported to the Boulder County Coroner's Office.



CORONER REPOSSES BY LOCATION OF DEATH



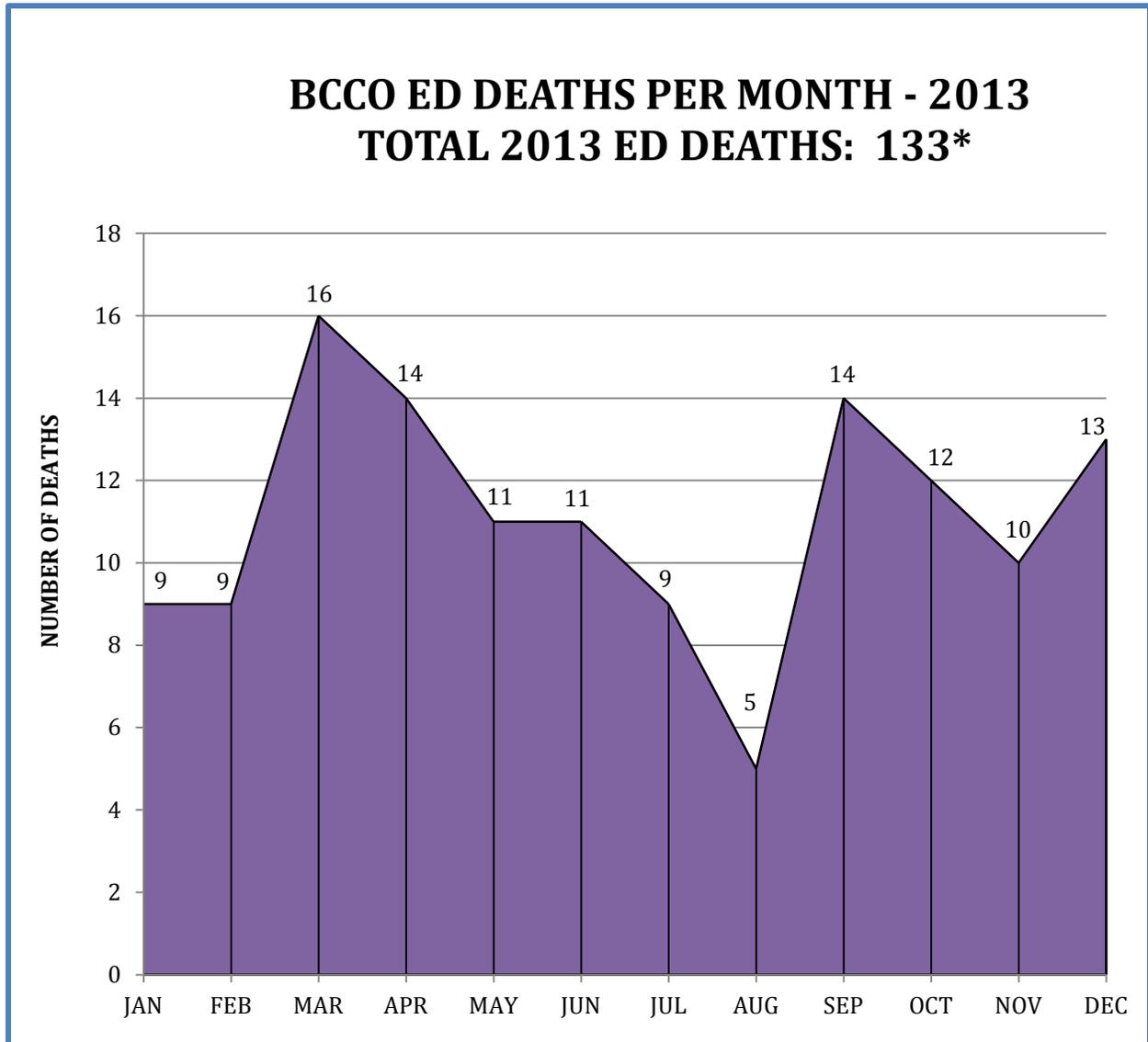
BCCO all-terrain response vehicle, equipped for mountain responses.



Note: *Seven of the 363 responses for 2013 were to Howe Mortuary following a fire that involved 7 bodies.

EMERGENCY DEPARTMENT CALLS BY MONTH

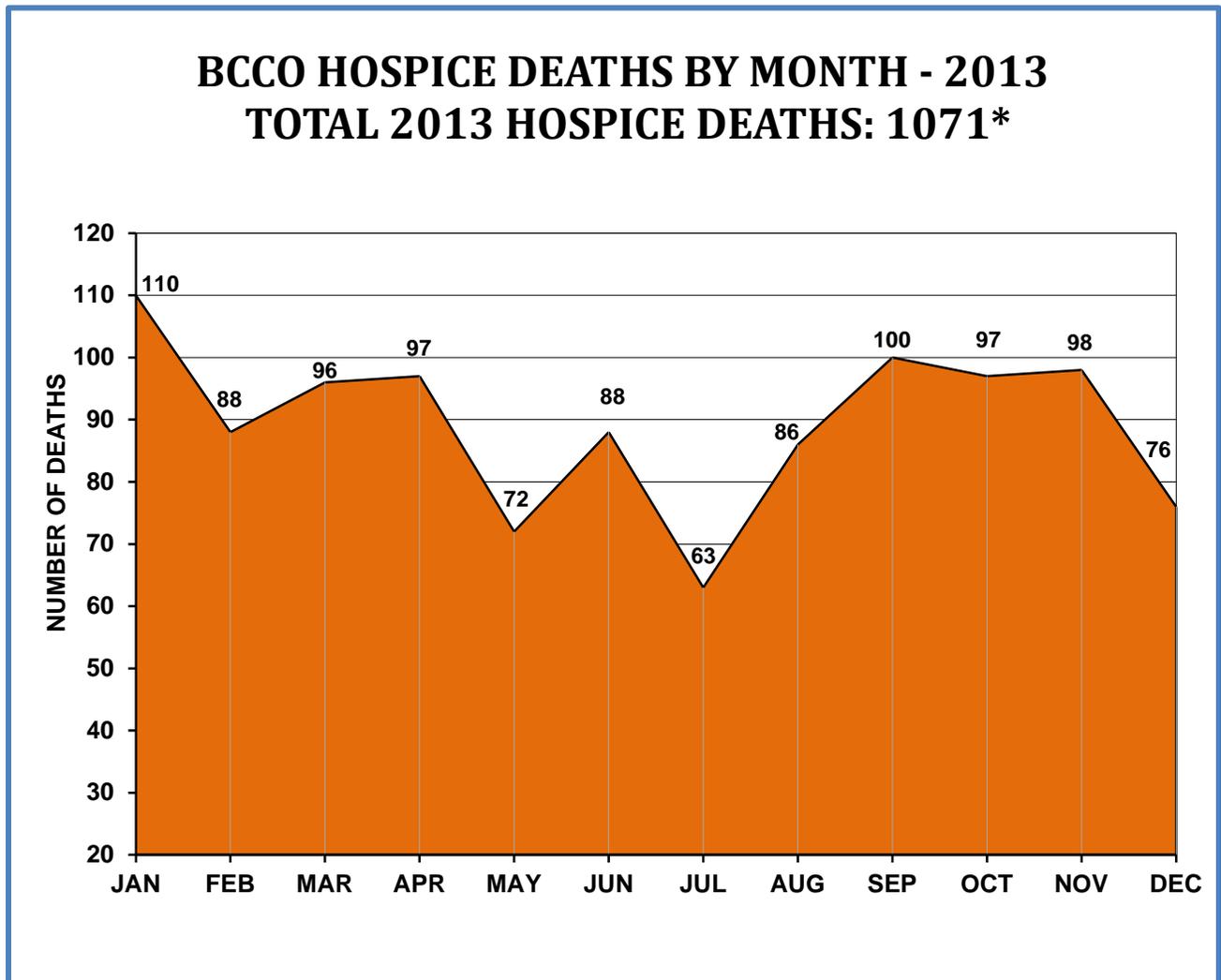
Deaths that occur in an emergency department are required to be reported to the coroner's office. Hospitals in Boulder County include Boulder Community Hospital, Boulder Community Hospital Foothills, Longmont United Hospital, Exempla Good Samaritan Medical Center, and Avista Adventist Hospital.



Note: *The total number of cases reported includes 42 cases that were transferred to other coroners. See **Transfer of Jurisdiction** of this report for further explanation.

HOSPICE CASES BY MONTH

Deaths occurring under hospice care in Boulder County are reported to the Boulder County Coroner's Office. There are several hospice organizations operating throughout Boulder County. Of the 1071 hospice cases reported to the Boulder County Coroner's Office 1013 (94.5%) were natural deaths, 57 (5.3%) were accidental deaths, and one (<0.1%) was undetermined.



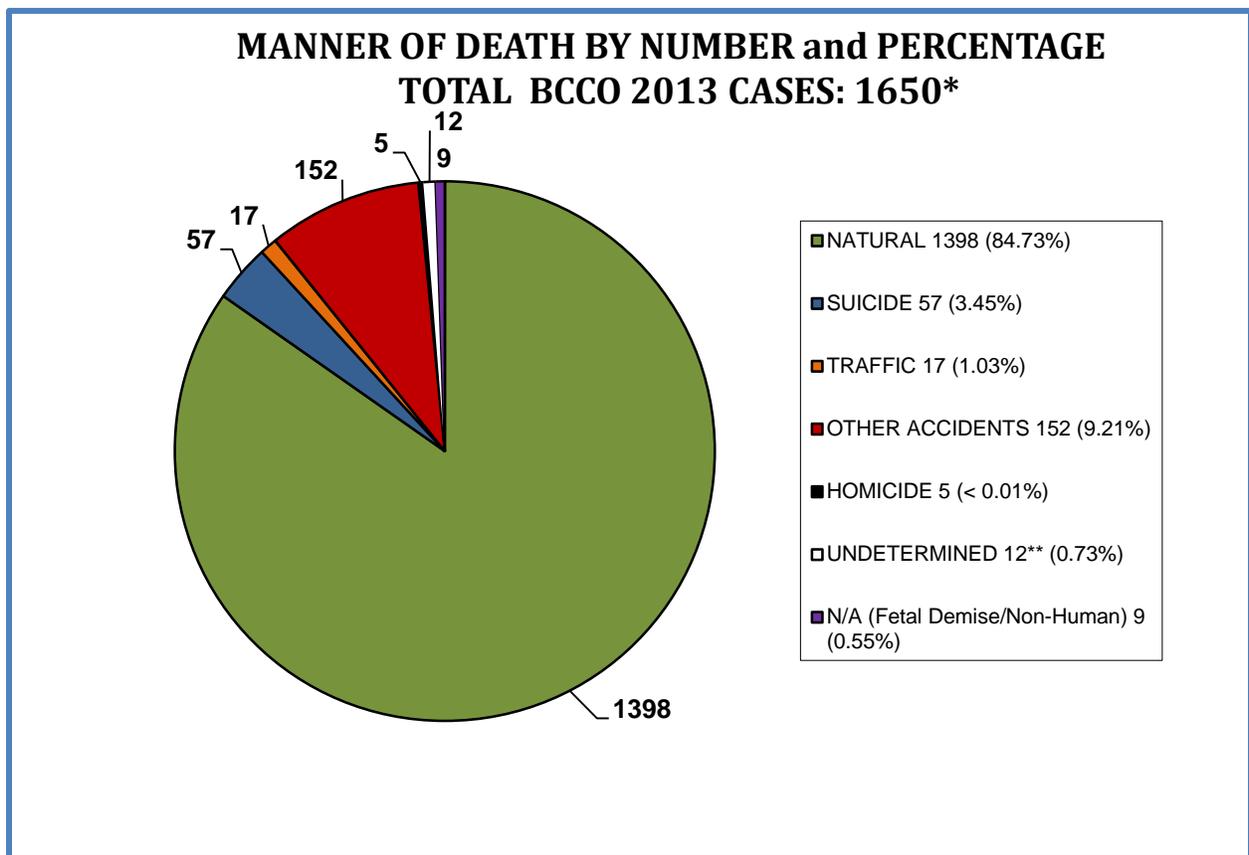
Note: *This total excludes the 14 hospice cases that were transferred to other coroners.

MANNER OF DEATH

One of the main responsibilities of the coroner's office is to determine the manner of death. The manner of death is a classification of death based on the circumstances surrounding the cause of death and how that cause came to be. There are five manners of death: Natural, Suicide, Accident, Homicide and Undetermined. The manner of death is one of the items that must be reported on the death certificate. The manner of death was added to the US Standard Certificate of Death in 1910, it was added by public health officials as a way to code and classify cause of death information for statistical purposes. It should be noted that the medical-legal definition of Homicide means death caused by another, and is not based on intent. A ruling of Homicide does not indicate or imply criminal intent.¹

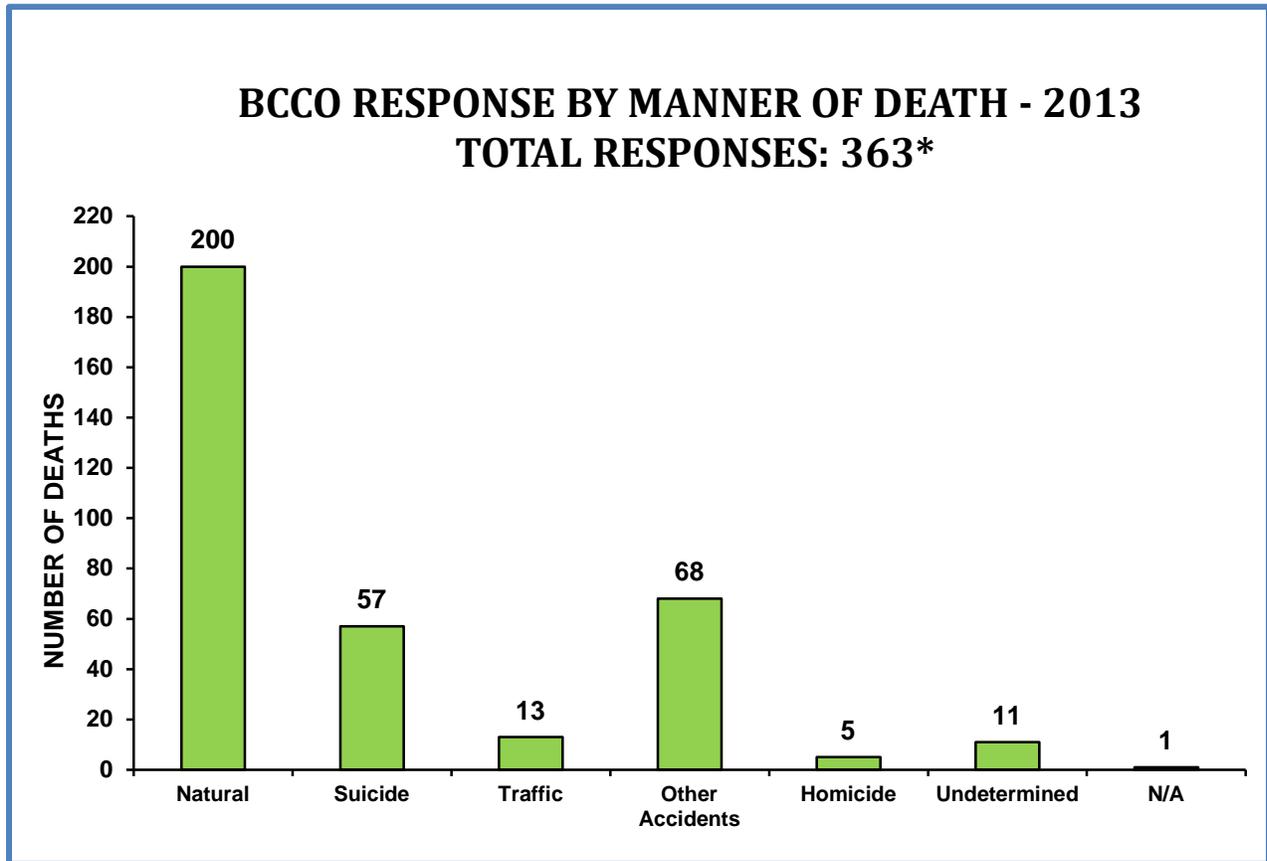
MANNER OF DEATH BY NUMBER AND PERCENTAGE

A large majority of the cases investigated by any medical examiner or coroner's office are natural deaths. In Boulder County that figure was 1398 cases, or 84.7% in 2013. Included within these natural deaths were 1071 hospice cases.



Note: *The 103 cases transferred to other coroners are not included in this total. **The total number of Undetermined cases includes one case in which a death certificate has not been signed for unidentified remains.

Note: Statistical information may not coincide with information available from the Colorado Health Department. The State Health Department tracks death statistics by the county of residence, not by the county where the injury or death occurred.

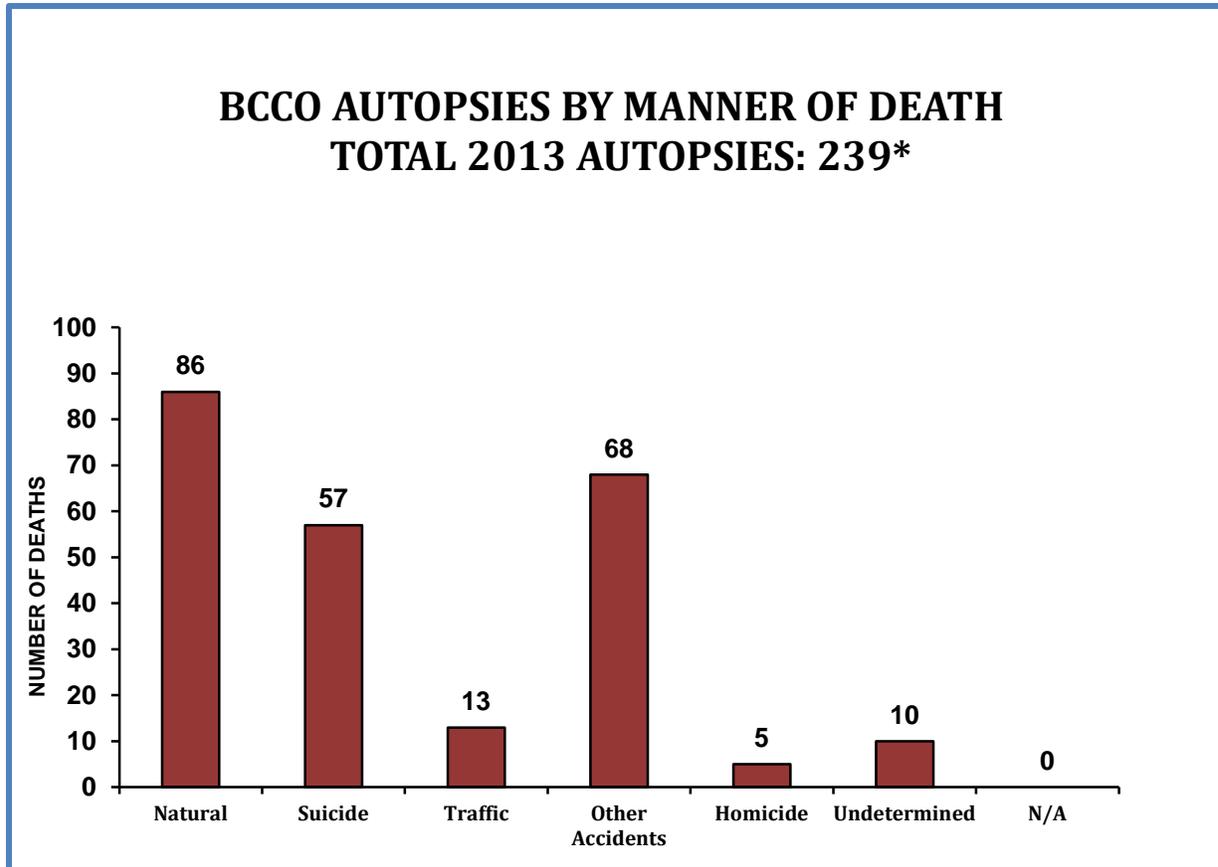


Note: The apparent absence of a scene investigation in some suicides, motor vehicle, and other accident cases may be due to extended survival of the victim in a hospital, or because the victim was transported by emergency personnel to a hospital outside the county and subsequently died away from the scene.

*The total number of cases in which a response was made includes one ED death that resulted in a jurisdictional transfer to another coroner's office and seven cases in which the response was in regards to a mortuary fire where all decedent's were found to have died prior to the fire.

AUTOPSIES BY MANNER OF DEATH

The Coroner weighs many factors in order to determine whether an autopsy should be performed. Autopsies are performed in all homicides, most infant deaths, most deaths of individuals without an established medical history, deaths involving possible criminal action, most motor vehicle accident deaths, and most suicides.



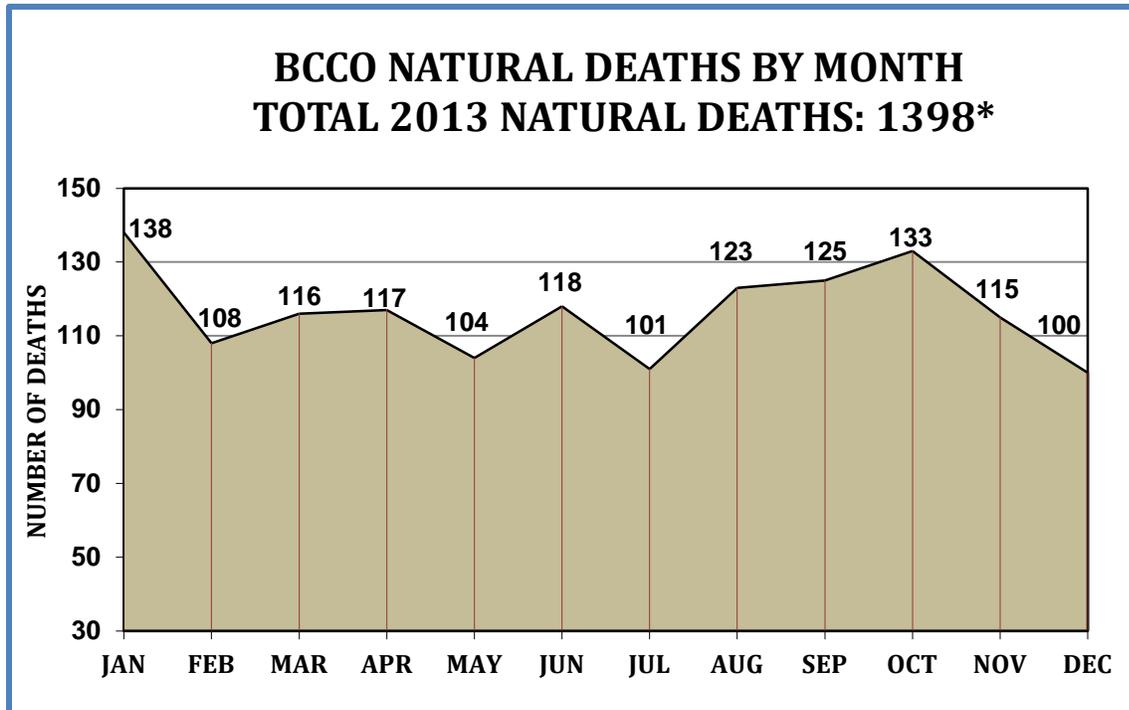
Note: *Although not all 239 autopsies were performed in 2013, all cases in which an autopsy was required are listed in this chart.

For statistical purposes accidental deaths due to traffic accidents will be separated from accidental deaths due to other causes.

NATURAL DEATHS

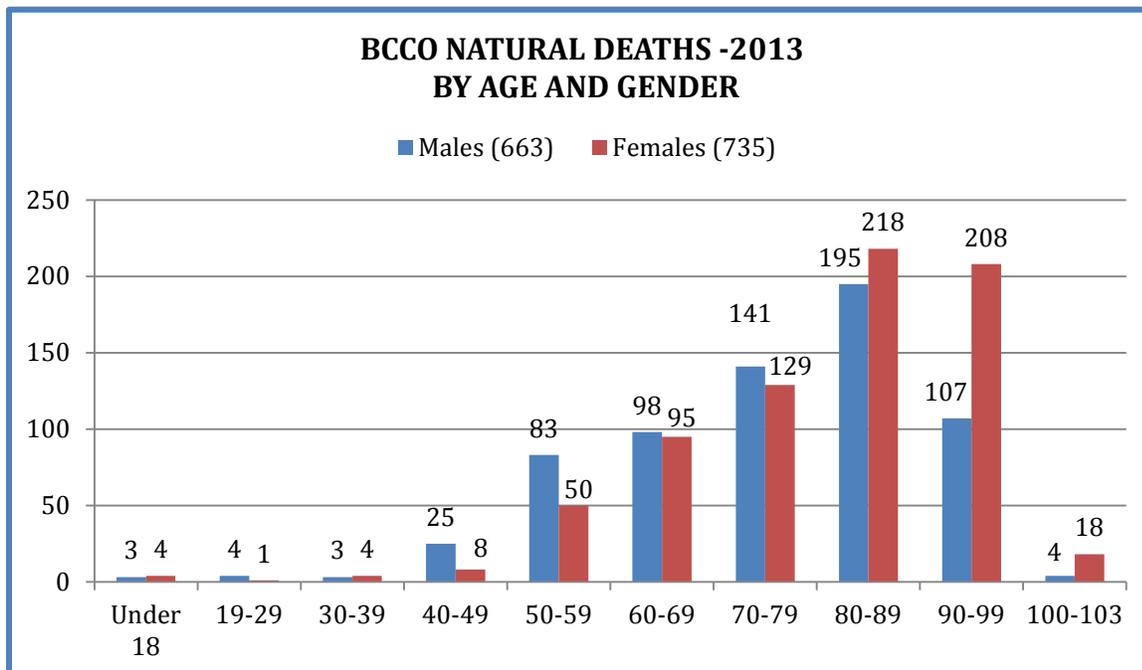
NATURAL DEATHS BY MONTH

Natural deaths comprise the majority of all deaths nationwide and holds true for the cases handled by the Boulder County Coroner's Office.



Note: *This total does not include the 77 natural deaths transferred to other coroners.

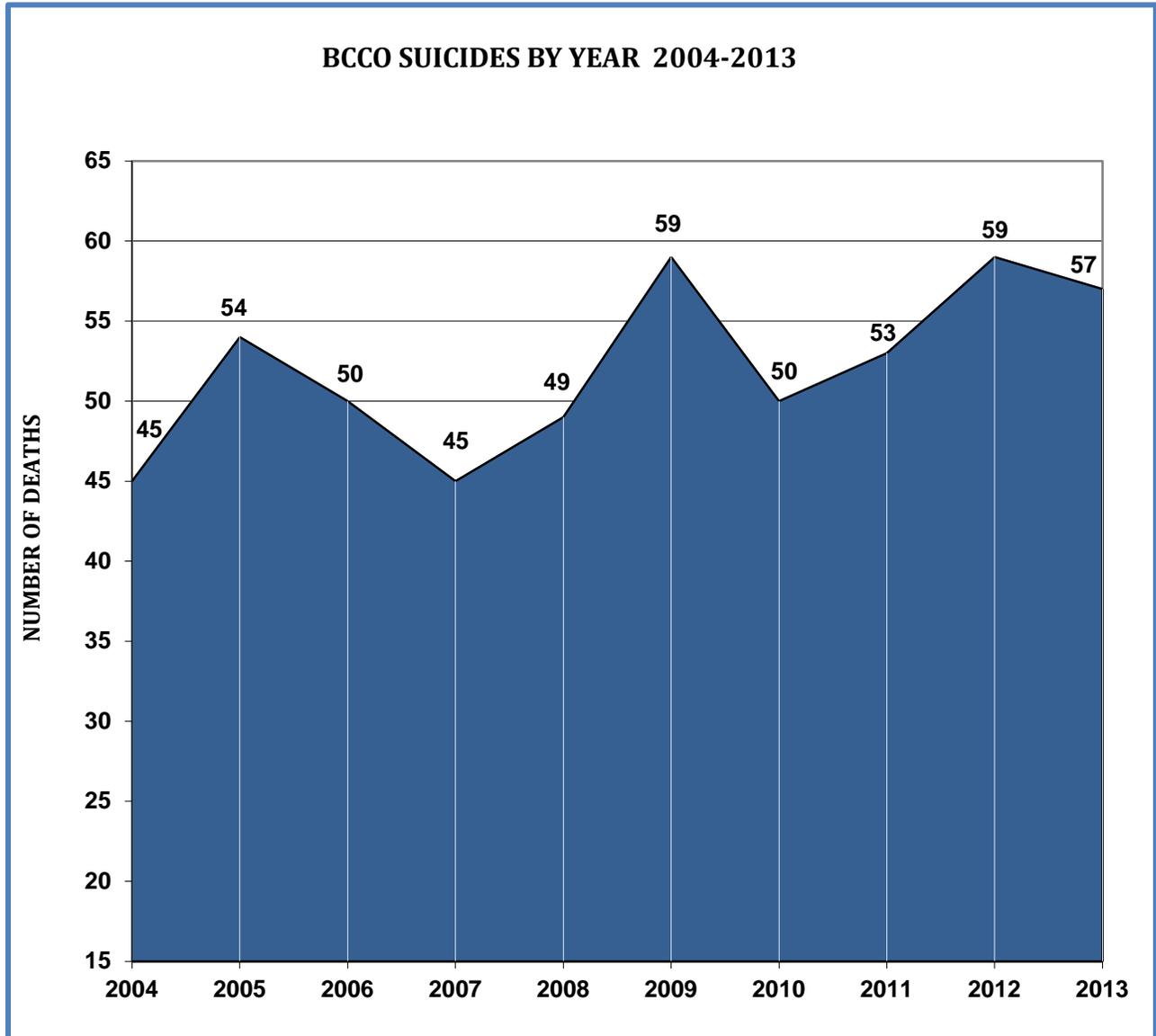
NATURAL DEATHS BY AGE AND GENDER



SUICIDES

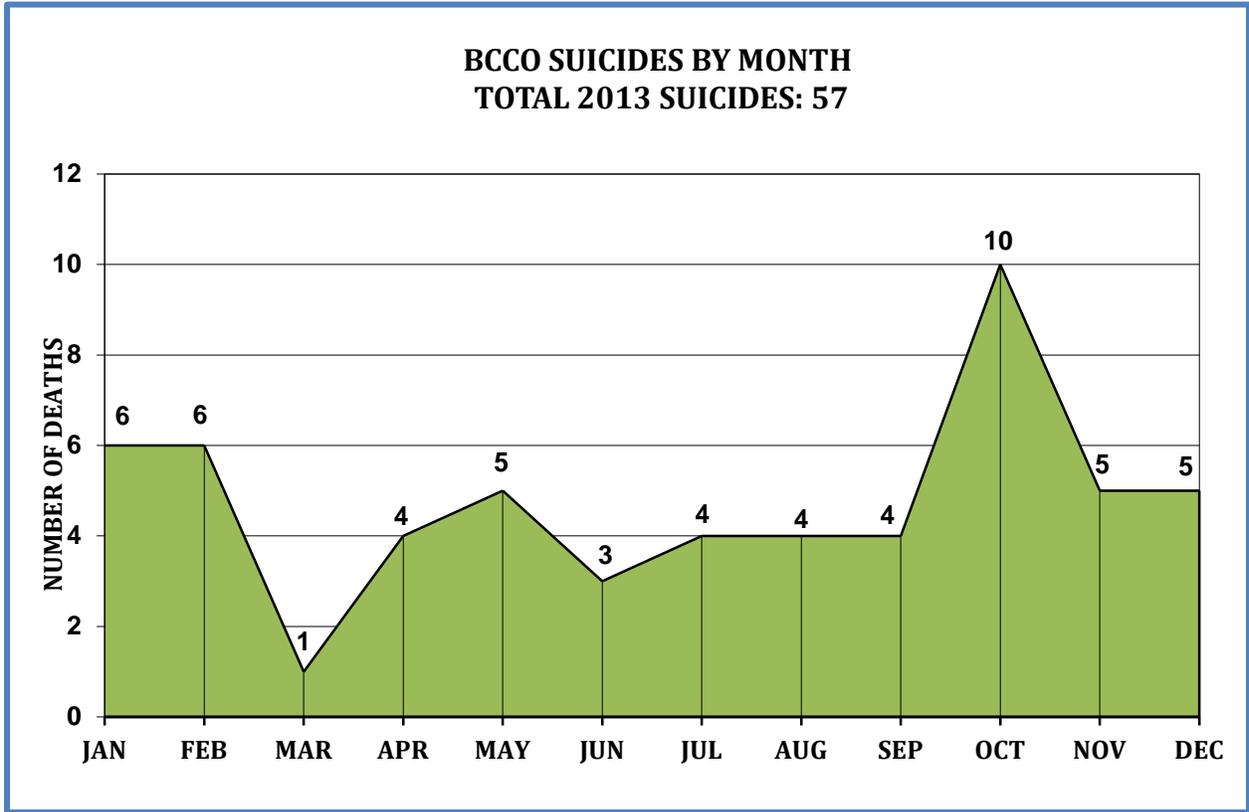
Suicide is defined as the intentional act of killing oneself. Nationally, men are three to five times more likely to commit suicide than women, but women attempt suicide more frequently than men. The most common method of committing suicide is with firearms, followed by hanging, suffocation, and ingestion of poisons.² In 2012 in Boulder County, the most common method used was a firearm, followed by hanging and then by prescription drugs.

SUICIDES BY YEAR



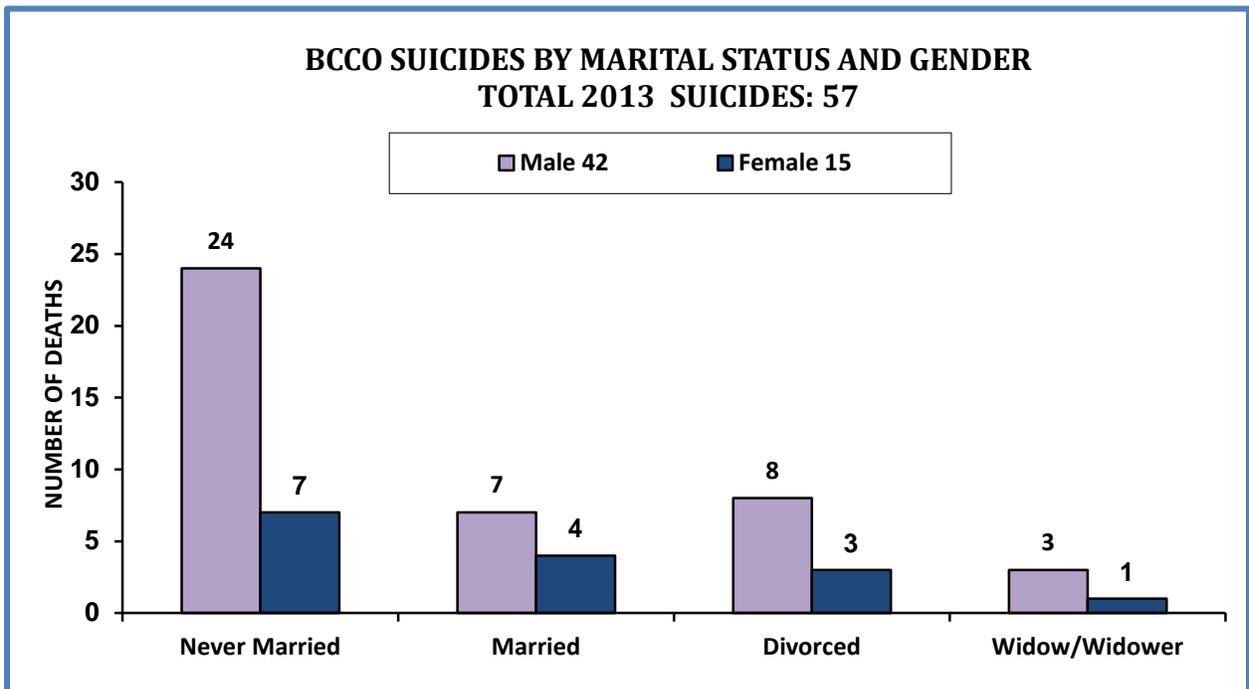
Note: There were a total of 59 suicides reported to the Boulder County Coroner's Office in 2013. The Boulder County Coroner's Office investigated 57 of those cases and transferred jurisdiction of two cases to other coroners.

SUICIDES BY MONTH

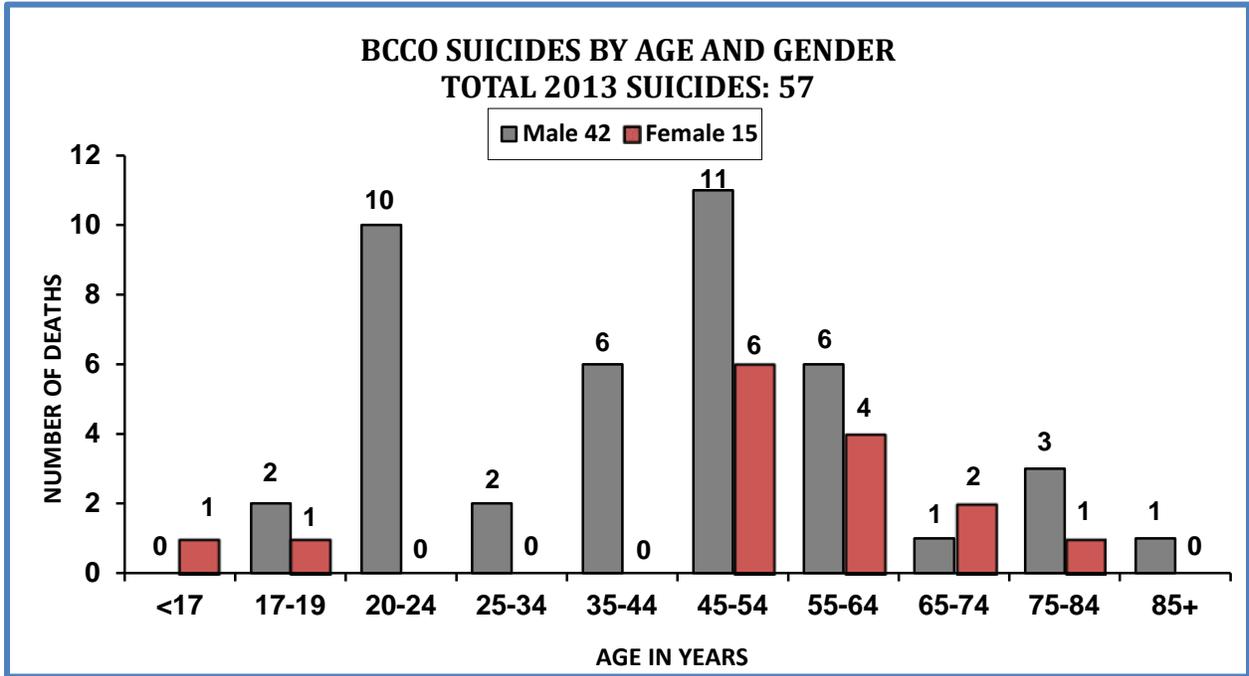


Note: Six of the suicides were non Boulder County residents.

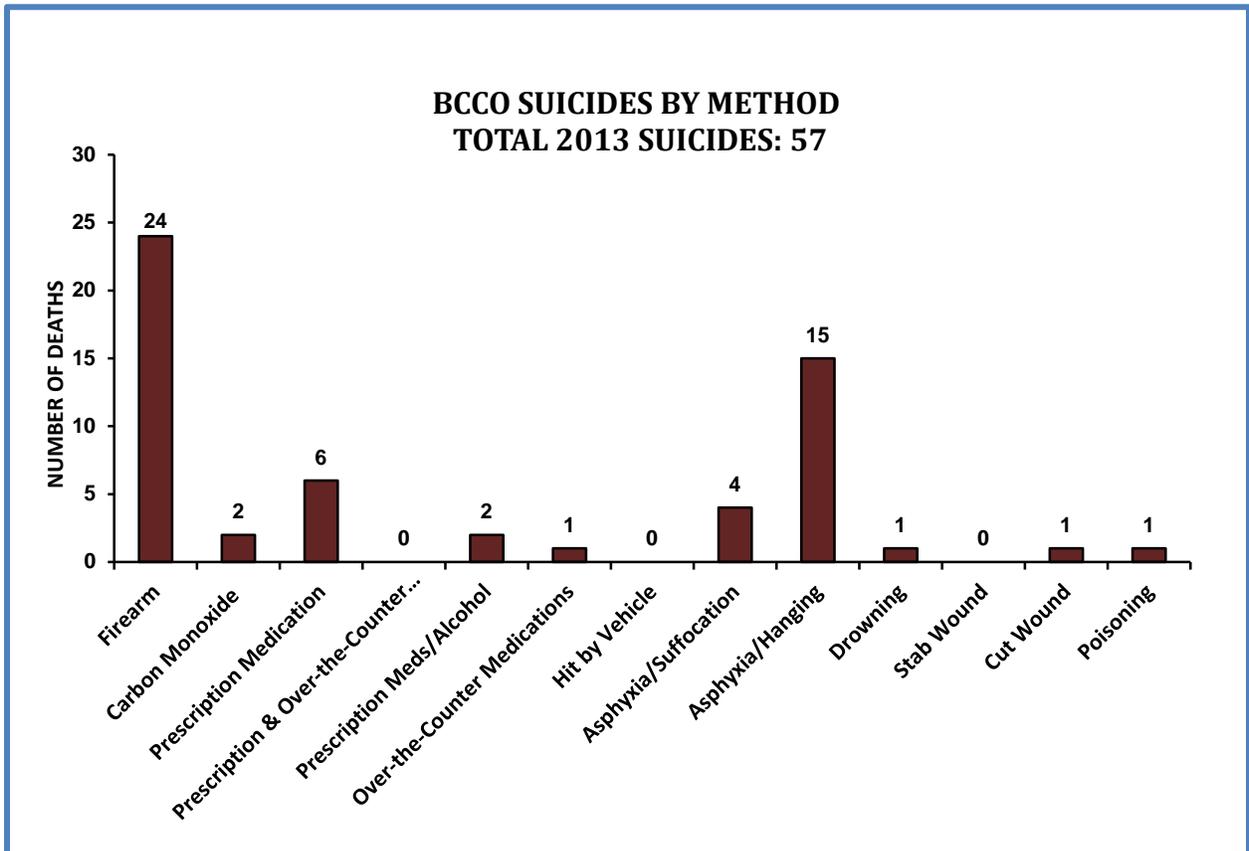
SUICIDES BY MARITAL STATUS AND GENDER

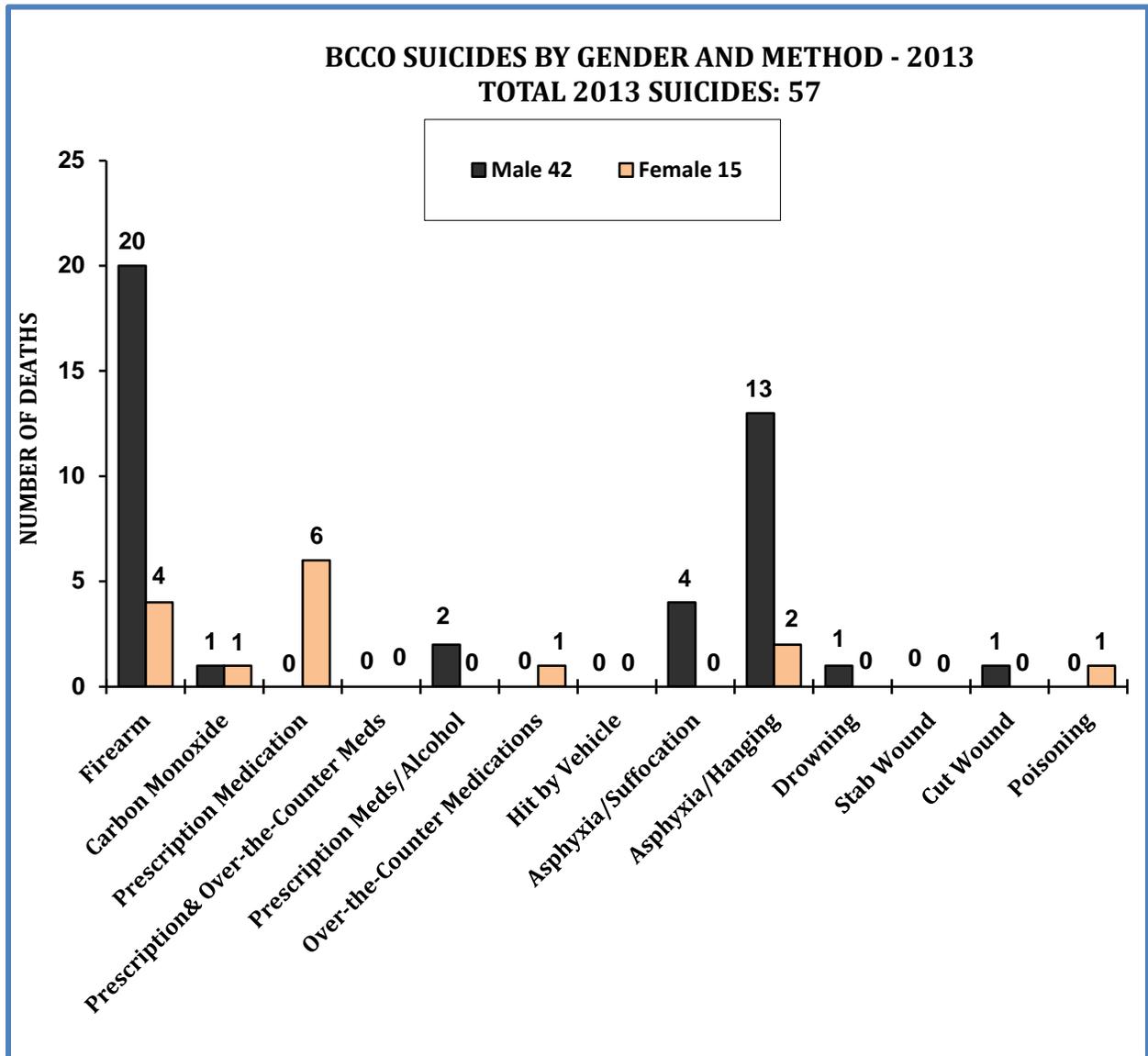


SUICIDES BY AGE AND GENDER



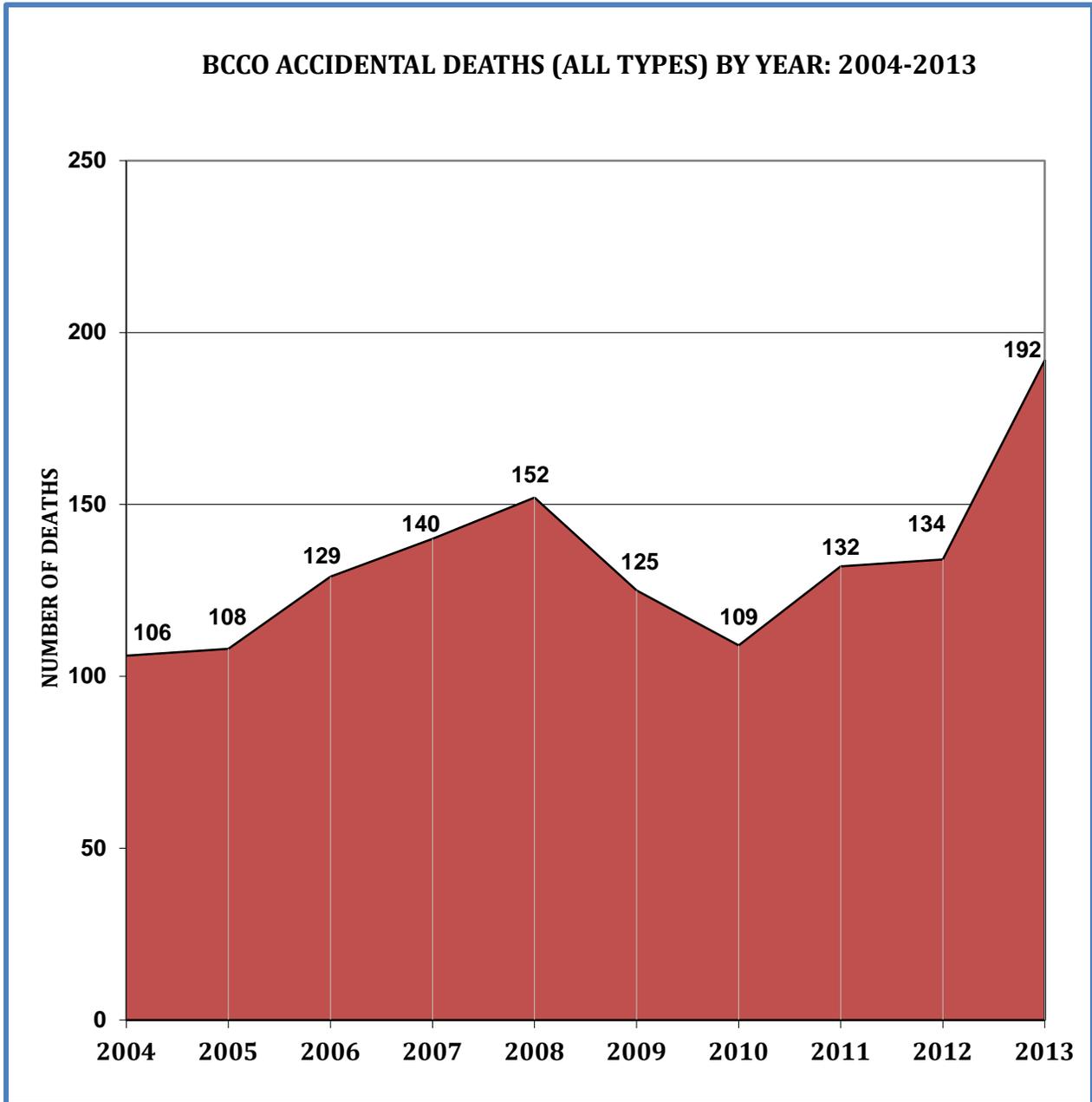
SUICIDES BY METHOD





ACCIDENTAL DEATHS

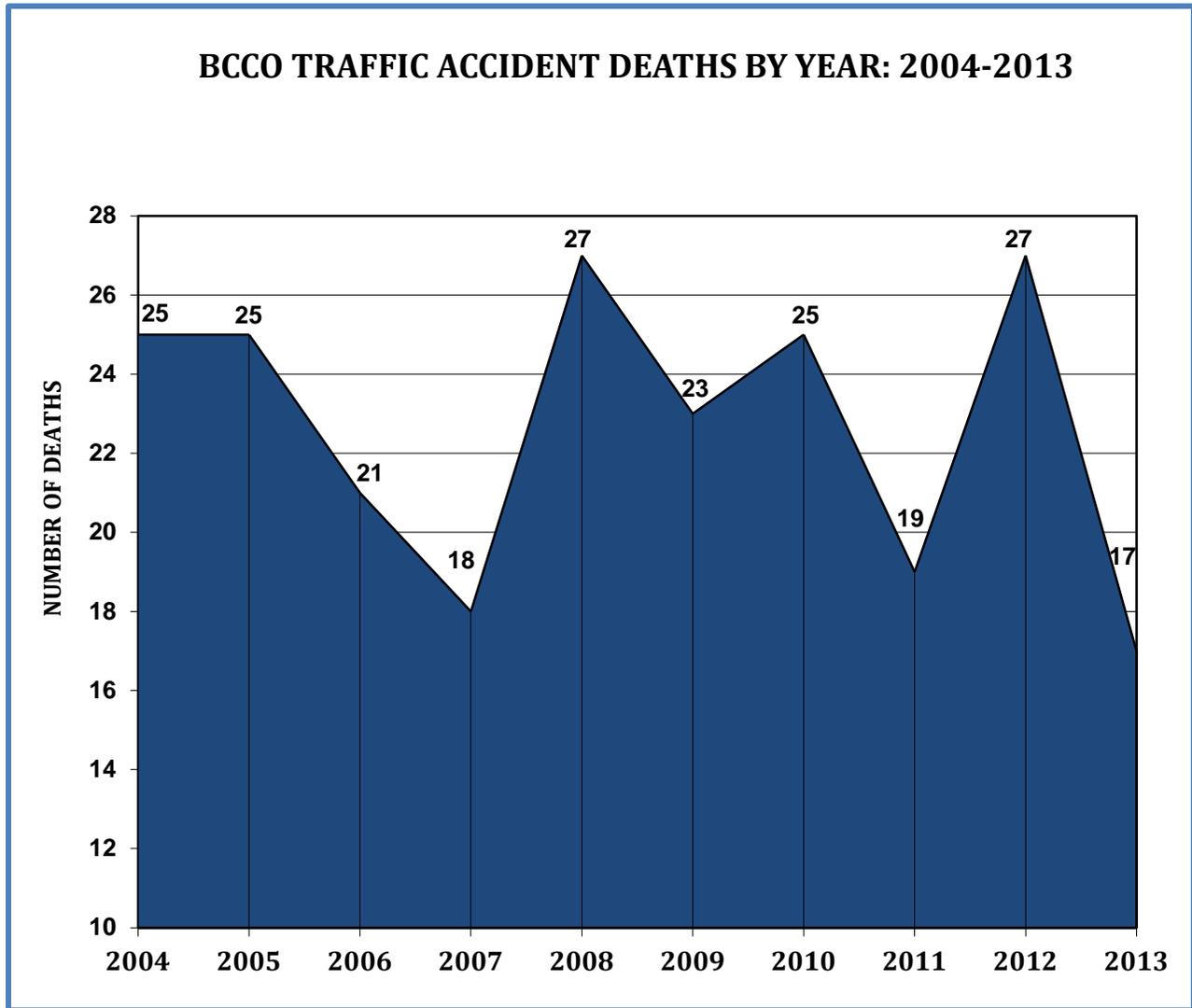
ACCIDENTAL DEATHS BY YEAR, ALL TYPES



Note: In 2013, a total of 192 accidental deaths were reported to the Boulder County Coroner, twenty-three of those cases were transferred to other coroners.

TRAFFIC INCIDENT DEATHS BY YEAR

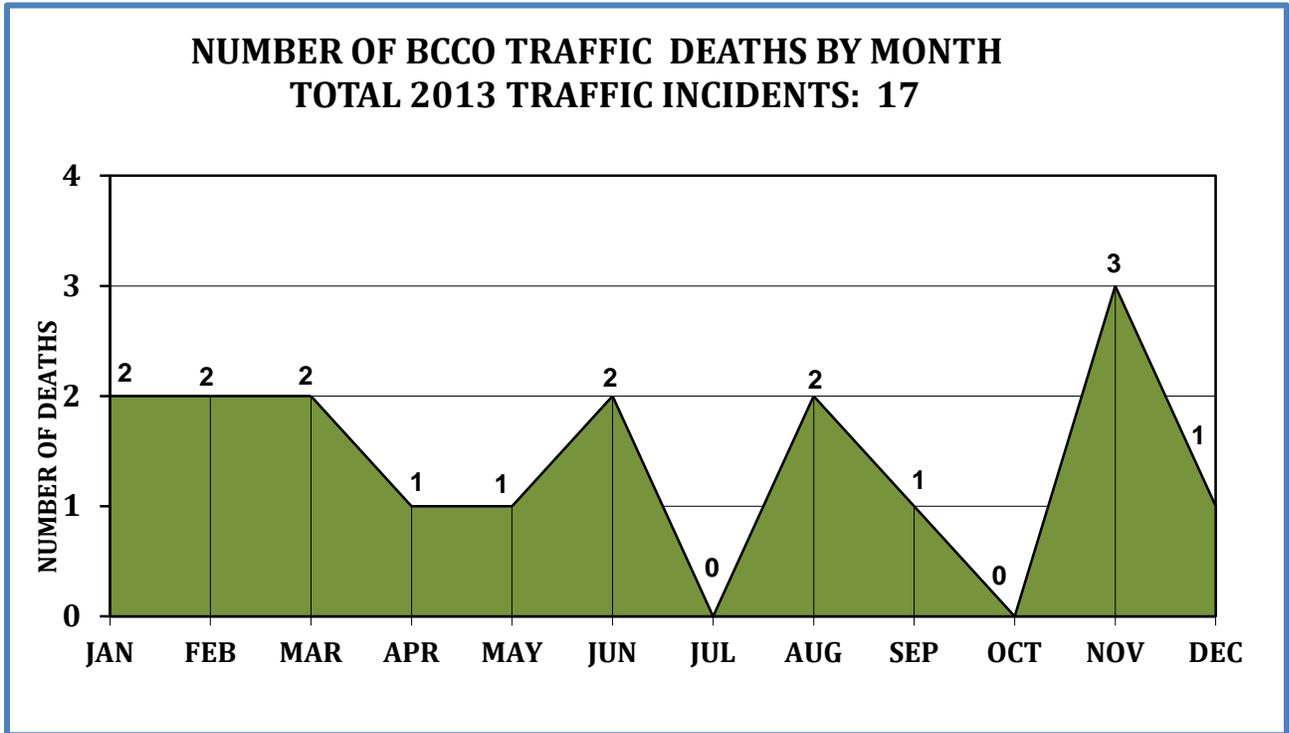
For the purpose of this report, deaths of occupants of a motor vehicle, motorcycle, bicycle, or all-terrain vehicle, and vehicle-pedestrian accidents, are considered to be traffic accident deaths.



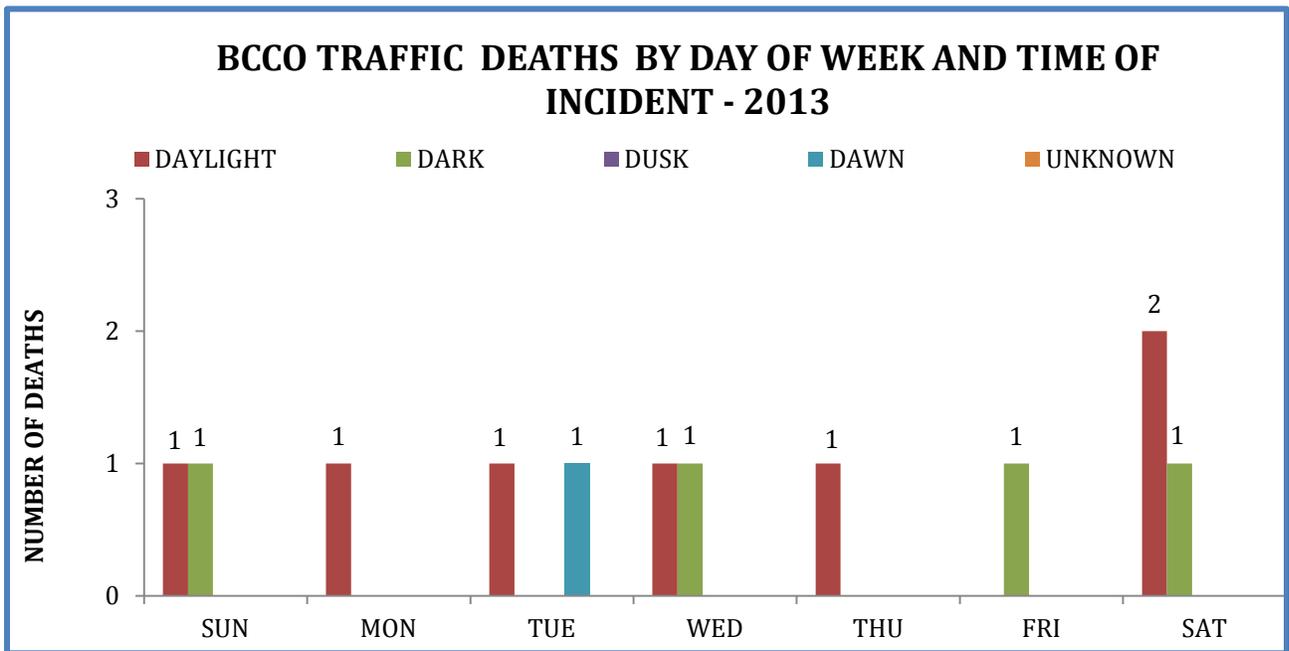
The Boulder County Coroner's Office investigated seventeen deaths resulting from traffic incidents in 2013. All of these incidents occurred in Boulder County. Of the seventeen deaths, fourteen of the victims were male and three were female. Their ages ranged from seven to seventy-one years of age. Twelve people died due to injuries or complications from injuries sustained in motor vehicle accidents (including automobiles, pickup trucks, SUVs and vans), one victim died in a motorcycle accident, three died in bicycle accidents and one person was a pedestrian struck by motor vehicle. Among the seventeen vehicle fatalities that occurred in Boulder County, nine were drivers and four were passengers. Two drivers and two passengers were wearing seatbelts. The motorcyclist was not wearing a helmet. Two of the bicyclists were wearing a helmet.

Note: There were a total of 19 traffic incident deaths reported to the Boulder County Coroner's Office in 2013. The Boulder County Coroner's Office investigated 17 of these cases; the other cases were transferred to another coroner's jurisdiction.

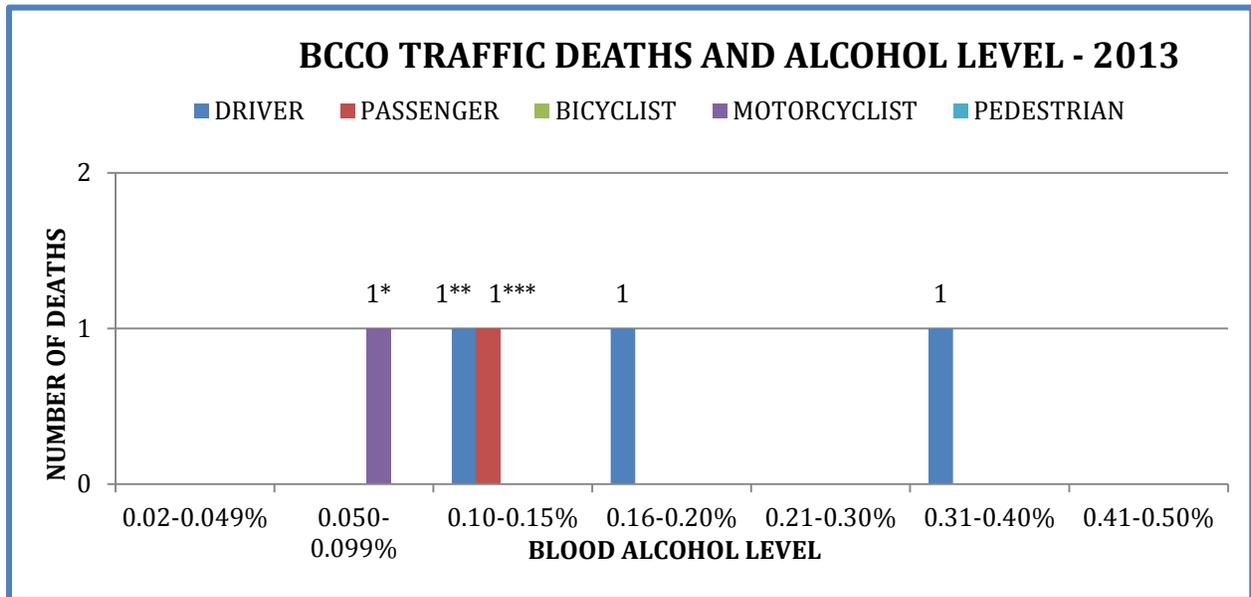
TRAFFIC DEATHS BY MONTH



TRAFFIC DEATHS BY DAY OF WEEK AND TIME OF INCIDENT

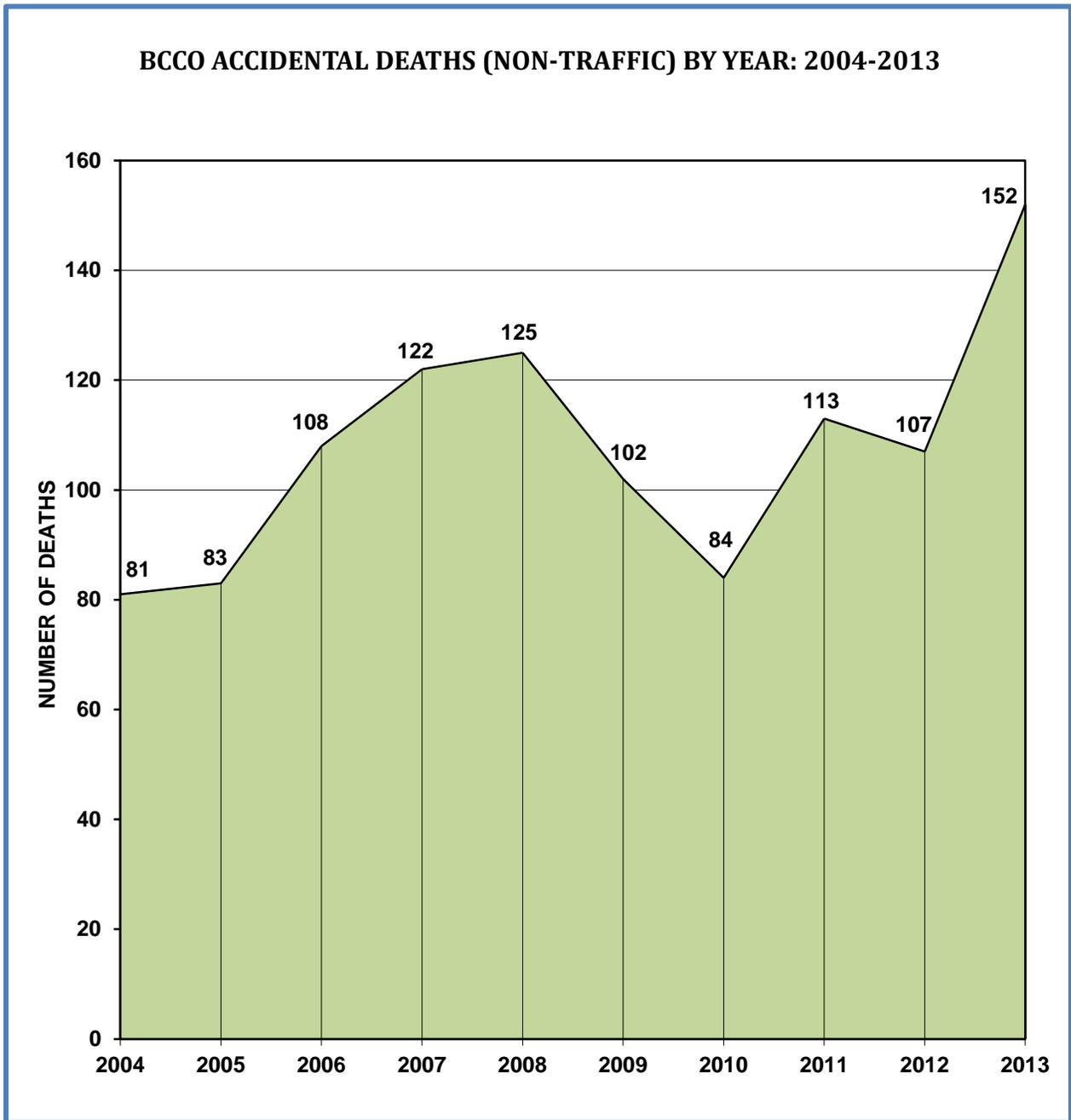


Note: The graph displays the information base on the time of incident, not the death. Three of the cases are not represented in this graph due to significant time in survival of the victim. A fourth case is not represented in this graph because the time and date of the incident are unknown.



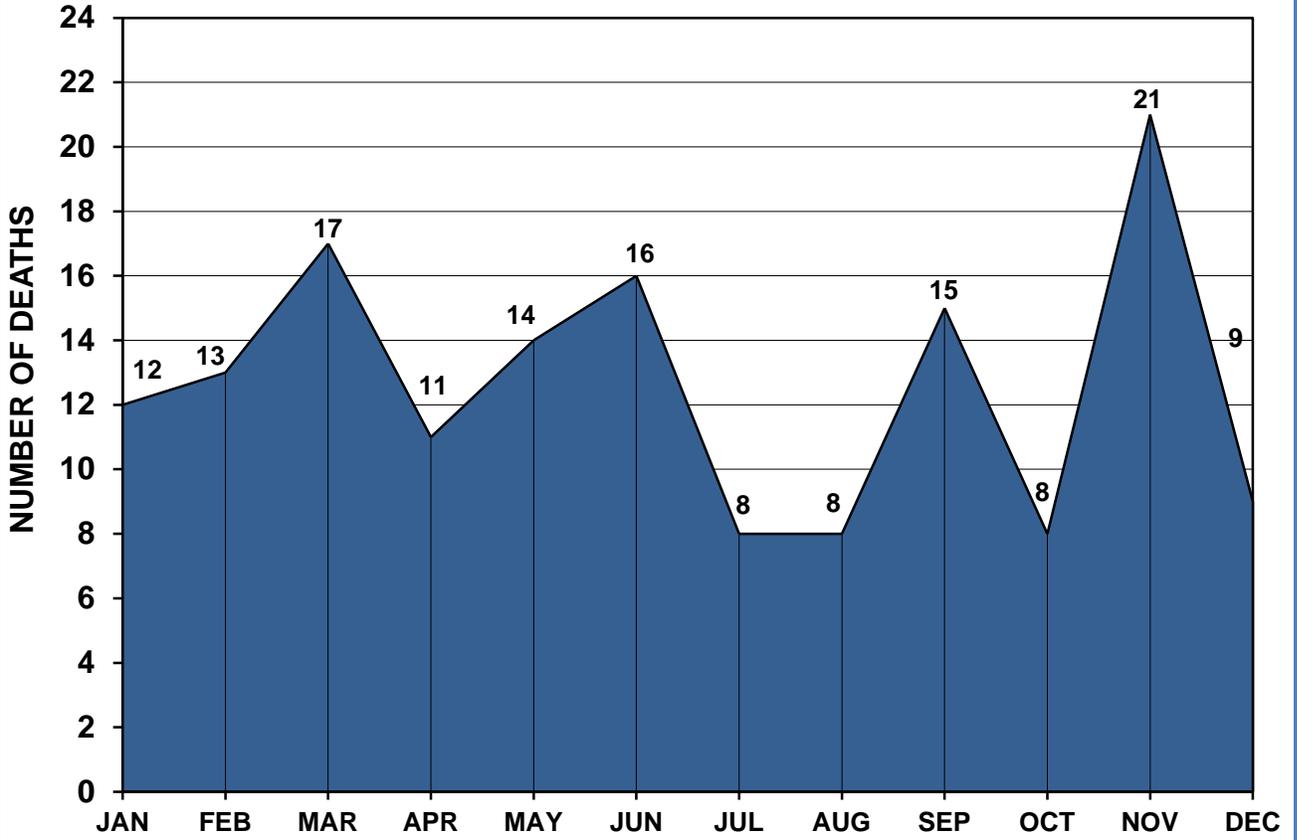
In Colorado in 2012, a driver is presumed to be Driving While Ability Impaired (DWAI) when a blood alcohol or breath concentration (BAC) is between .050% and .079%. Prior to July 1, 2004 the blood alcohol concentration threshold was .10% to be considered Driving Under the Influence (DUI). As of July 1, 2004, a driver is presumed to be Driving Under the Influence when the BAC is 0.080% or higher. The legal drinking age is 21.

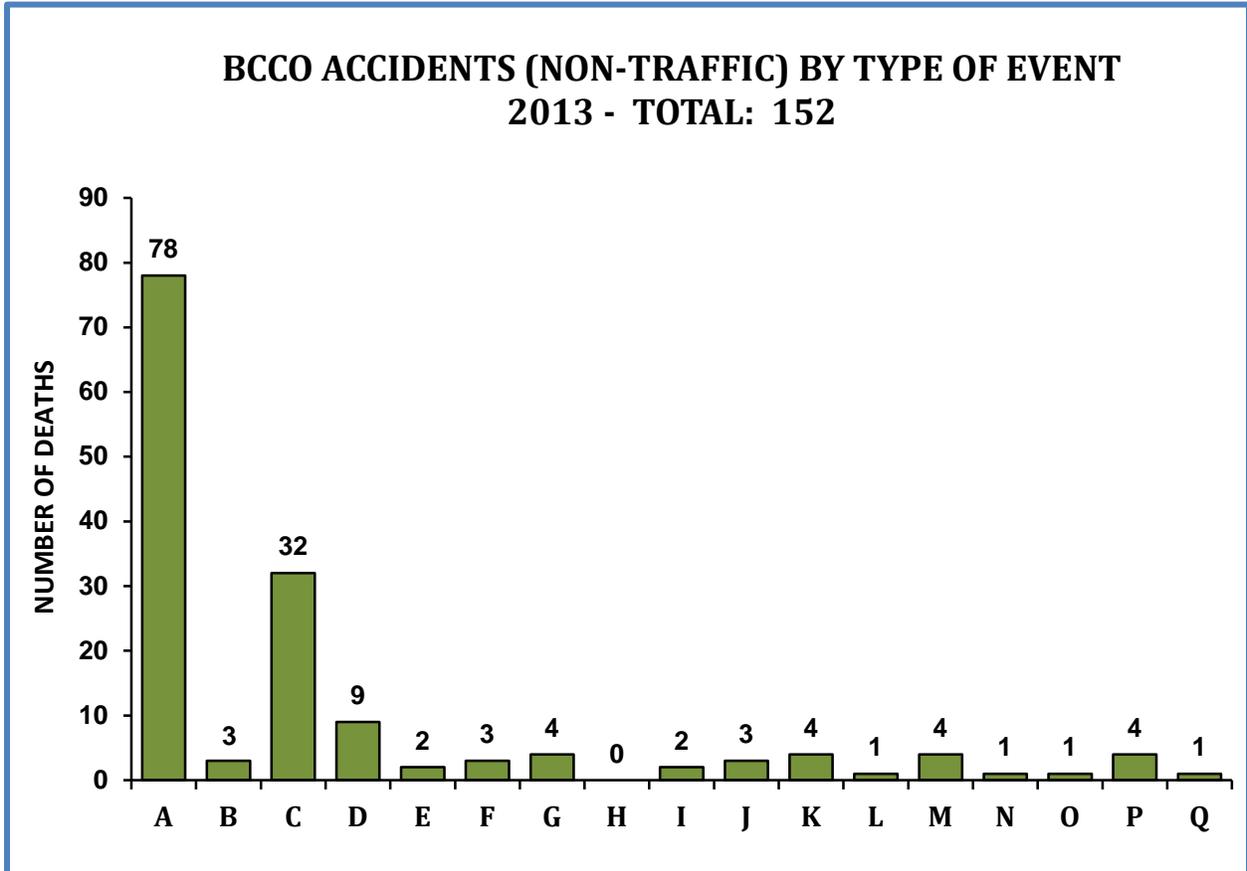
Note: *This decedent also tested positive for methamphetamine. **This decedent also tested positive for THC. ***This decedent also tested positive for TCH. There was one additional case not displayed in this chart that the decedent tested positive for TCH but not ethanol.



Note: There were a total of 173 non-traffic accidents reported to the Boulder County Coroner's Office in 2013. The Boulder County Coroner's Office investigated 152 of those cases and transferred jurisdiction of 21 cases to other coroners.

**BCCO ACCIDENTAL DEATHS (NON-TRAFFIC) BY MONTH
2013 - TOTAL: 152**

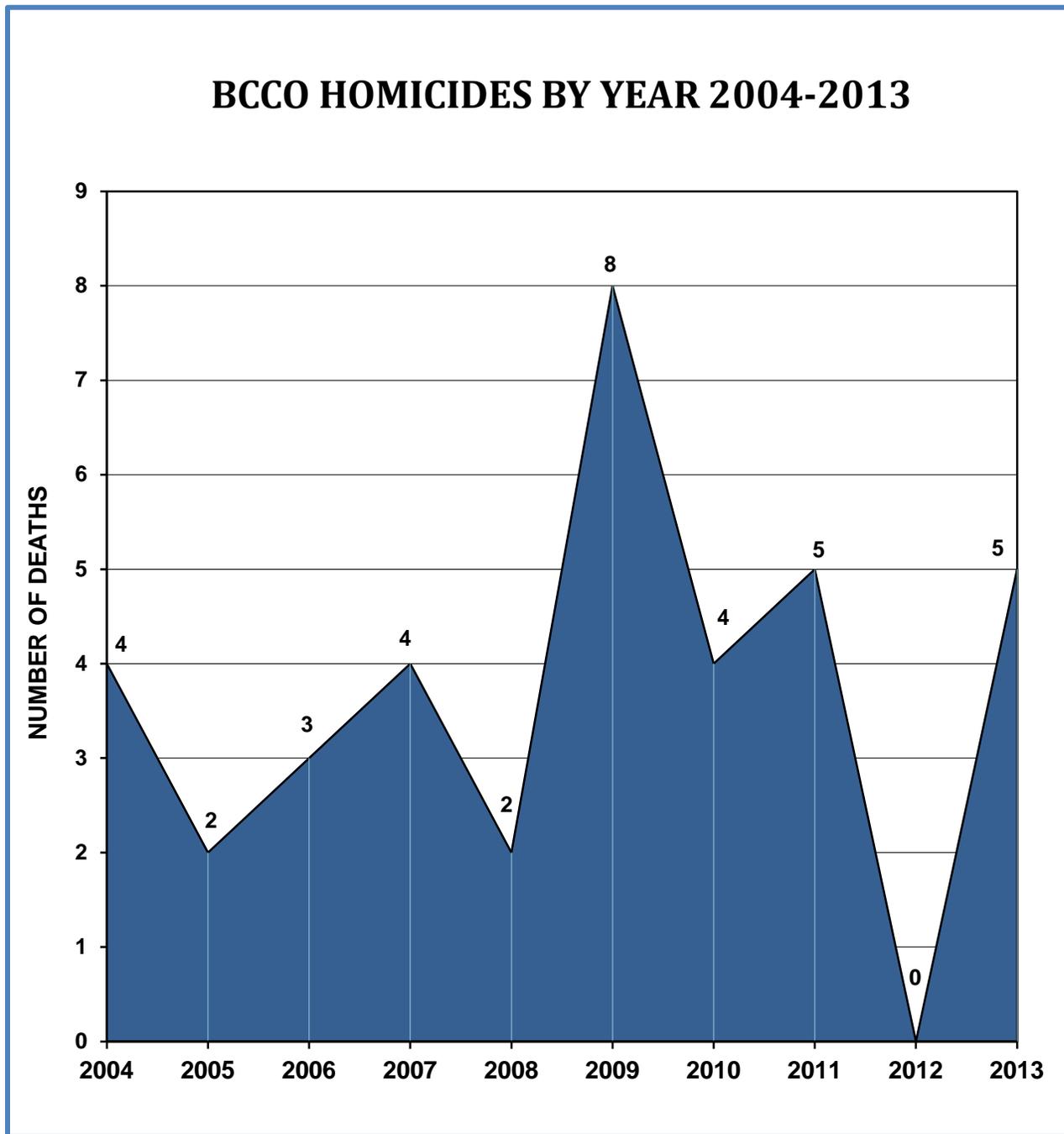


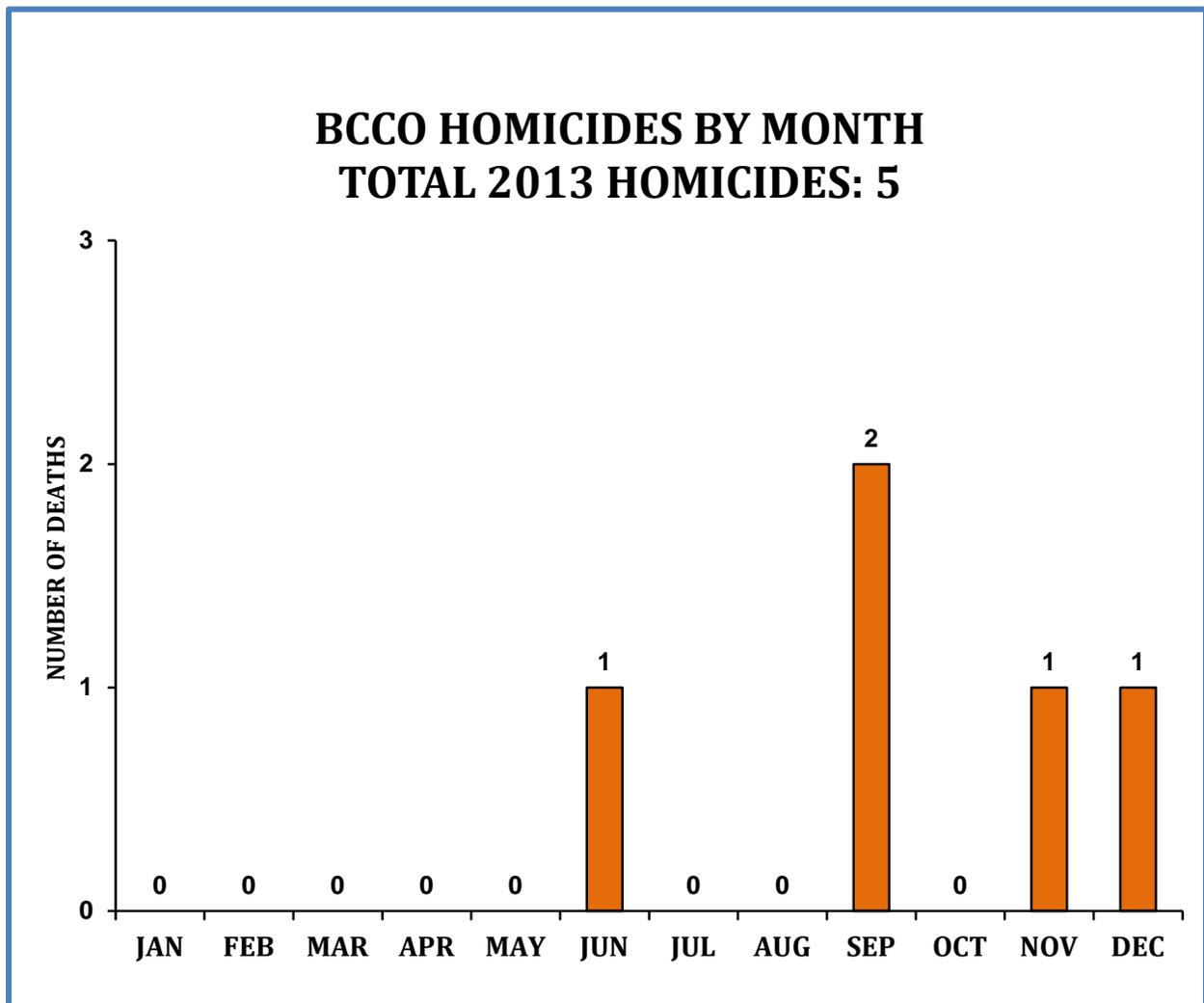


LEGEND:

A - Fall (Non-Recreational)
B - Fall/Recreational
C - Drug Overdose (All Types)
D - Drug Overdose in combination with Alcohol
E - Alcohol
F - Positional Asphyxia
G - Drowning
H - Electrocutation
I - Fall from Height
J - Aspirated on Food
K - Medical Misadventure
L - Airplane Crash
M - Environmental
N - Thermal Injuries
O - Blunt Force Injuries
P - 2013 Flood Victims
Q - Unknown

HOMICIDES BY YEAR



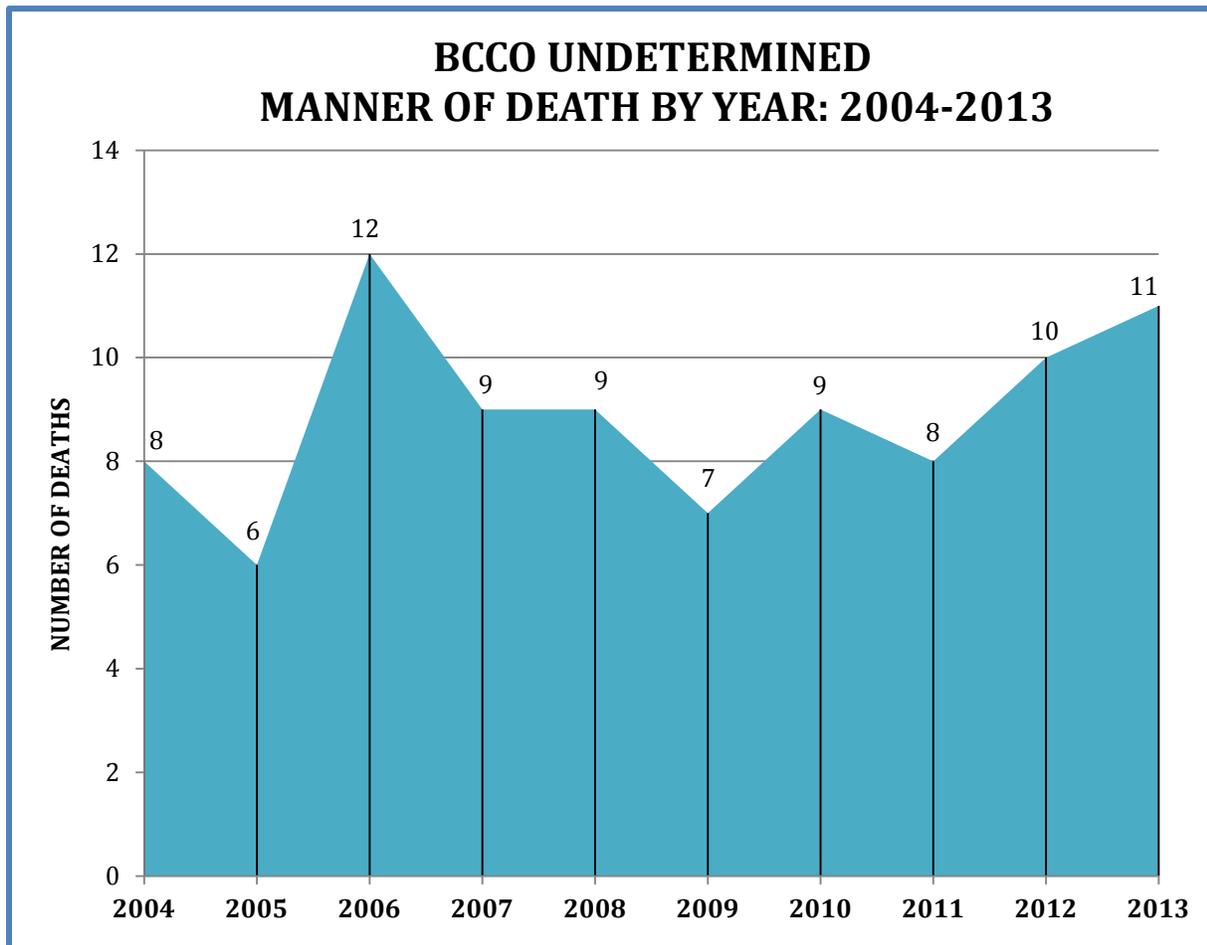


Note: In 2013, three of the victims of homicide were male, two were female. Four homicide victims died of a gunshot wound or wounds, the fifth victim died of a stab wound.

DEATHS OF UNDETERMINED MANNER

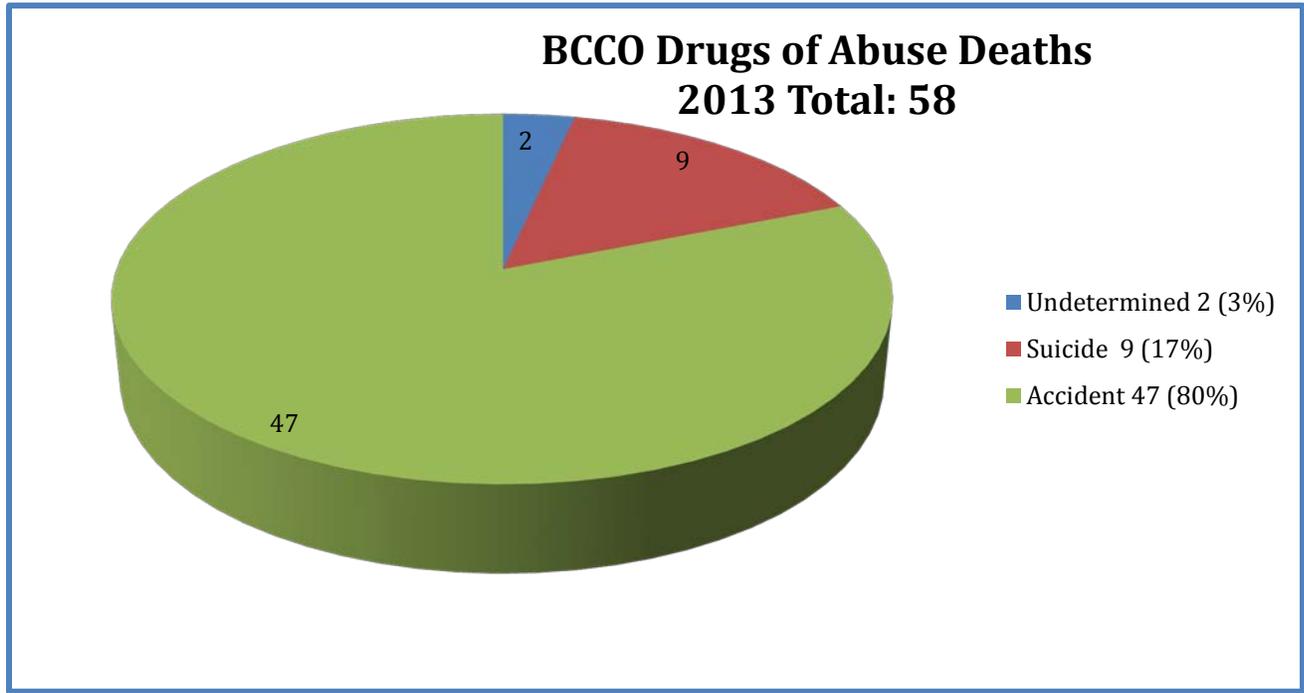
Occasionally, medical examiners and coroners encounter cases that, despite a complete autopsy, comprehensive toxicology tests, and a thorough scene investigation, no cause of death can be determined. Medical examiners and coroners also encounter cases where the cause of death is quite apparent; but the evidence supporting the manner of death is equivocal or insufficient to make a determination. The determination of manner of death is an opinion based on the “preponderance of evidence”. An example might be a case in which the cause of death is a drug overdose, but, from the information available, it is not certain whether the manner of death is accident or suicide. Therefore, the manner of death may be certified as undetermined.

UNDETERMINED MANNER BY YEAR

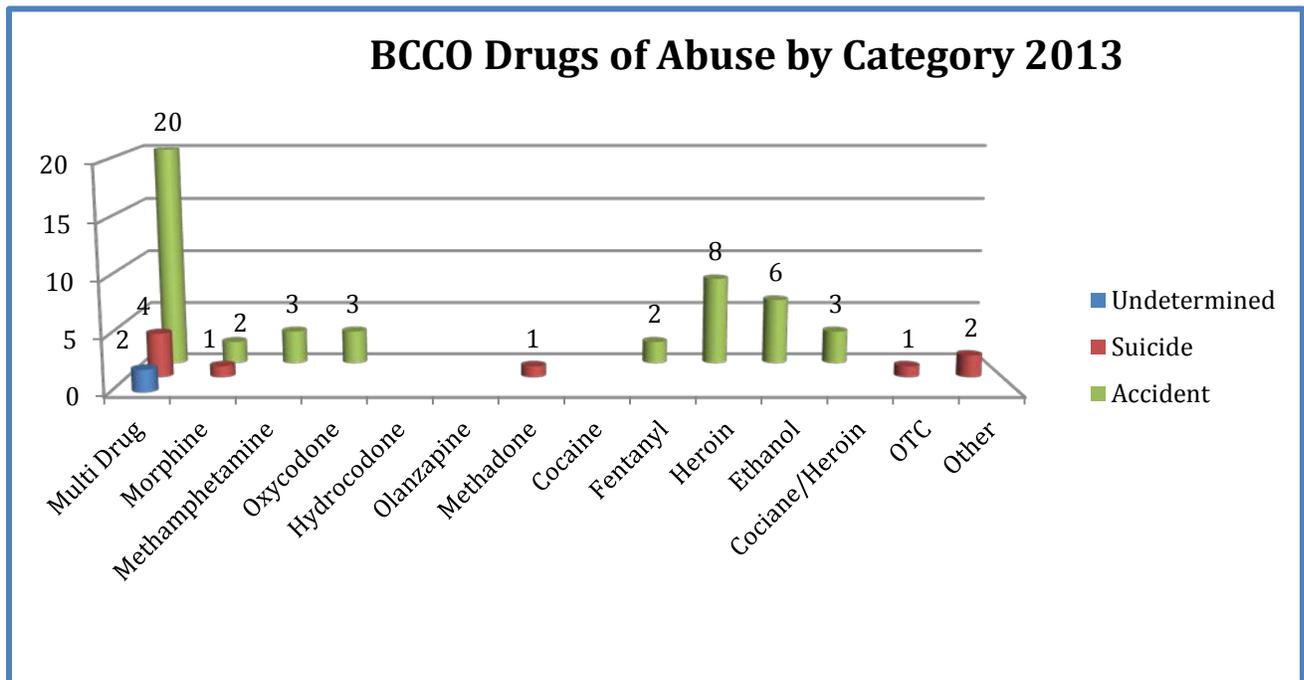


DRUG DEATHS

DRUG DEATHS BY MANNER



DRUGS OF ABUSE BY CATEGORY



Note: There was a large increase seen in heroin related deaths in 2013 with 15 total (some of these are grouped as Multi Drug above), in comparison to 6 heroin related deaths in 2012 and 7 in 2011.

DROWNINGS

Drowning as a cause of death is a diagnosis of exclusion, diagnosis of exclusion is described as a diagnosis of a medical condition that is reached by eliminating all other possible diagnoses. If an individual is found in water and all other possible causes of death have been excluded, one *may* be able to conclude the cause of death is drowning. Presumed drowning cases require complete autopsies, in order to exclude all other causes of death.

In 2013 there were eight total drowning cases, three of which were from the 2013 Flood (the fourth flood victim died as a result of blunt trauma injuries sustained during the flood). Seven of the cases were ruled as Accidents, one was ruled as a Suicide. Three of the non-flood related Accidents were drownings that occurred in combination with substance usage/abuse, the fourth one was in combination of cold weather exposure and consumption of ethanol.

CHILD DEATHS

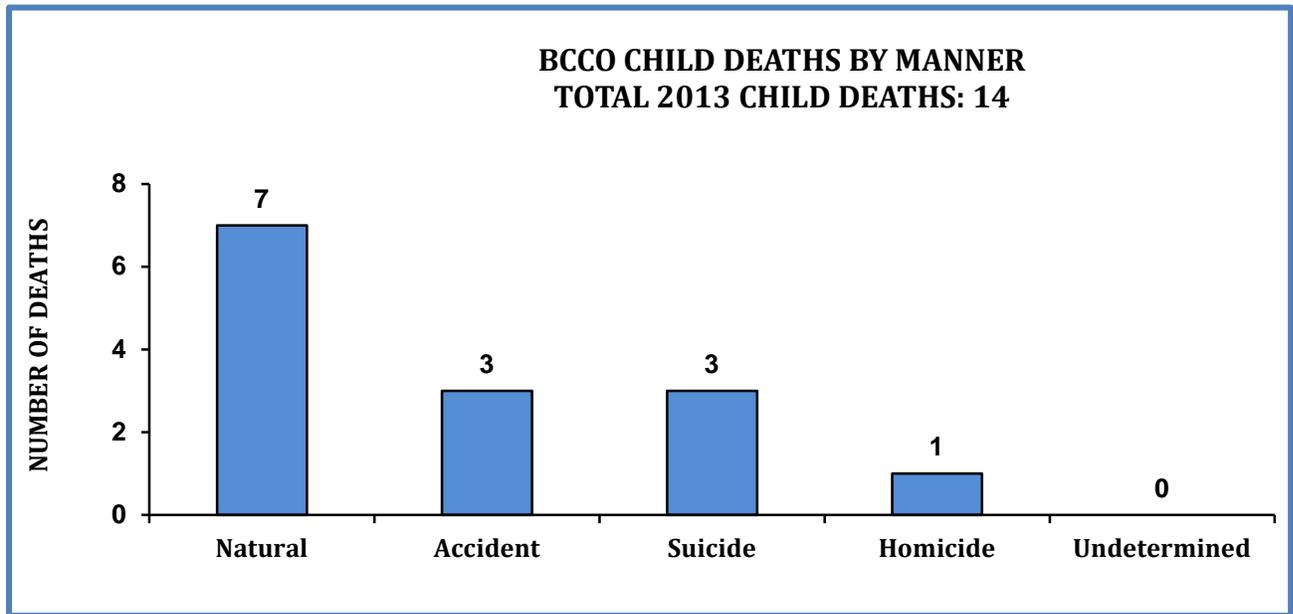
The Boulder County Coroner's Office participates in the Colorado Child Fatality Review Committee. This committee reviews deaths of children under 18 years of age. The goals of the committee are:

- *To describe trends and patterns of child deaths in Colorado.*
- *To identify and investigate the prevalence of risk factors for child death.*
- *To characterize high risk groups in terms that is compatible with the development of public policy.*
- *To evaluate the service and system responses to children and families who are at high risk and to offer recommendations for improvement in those responses.*
- *To improve the quality and scope of data necessary for child death investigation and review.* ³

In Boulder County a total of nineteen child deaths (<18 years of age) were **reported** to the Coroner's Office in 2013. Five additional child death cases were transferred to other coroners.

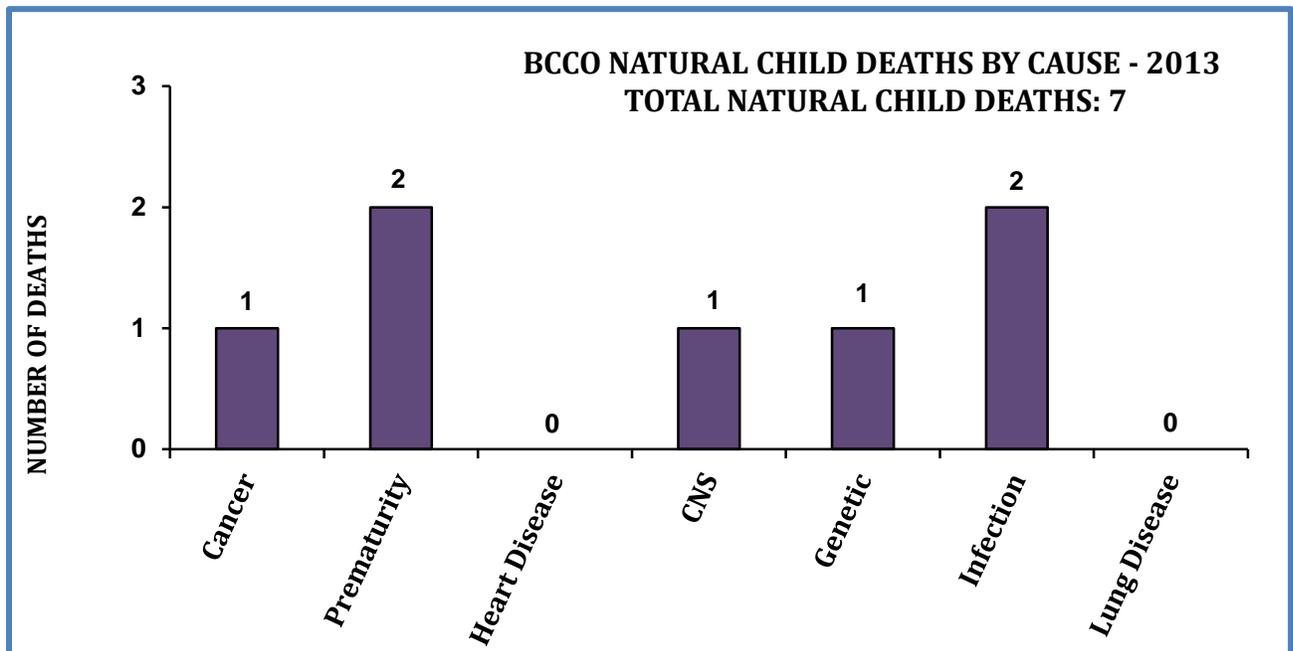
Note: Statistical information may not coincide with information available from the Colorado Health Department. The State Health Department tracks death statistics by the county of residence, not by the county in which the injury or death occurred.

CHILD DEATHS BY MANNER OF DEATH



- **Accident:** One of the accidental deaths was from a vehicle collisions (age 7); one accidental death was from a prescription drug overdose (age 15); and one accidental death was from a co-sleeping incident (age 6 weeks).
- **Suicide:** One of the undetermined deaths was a result ingesting methanol (age 17), and the other was a result of a self-inflicted gunshot wound (age 17).
- **Homicide:** The homicide death was a result of a stab wound (age 17).

CHILD DEATHS BY CAUSE OF NATURAL DEATHS

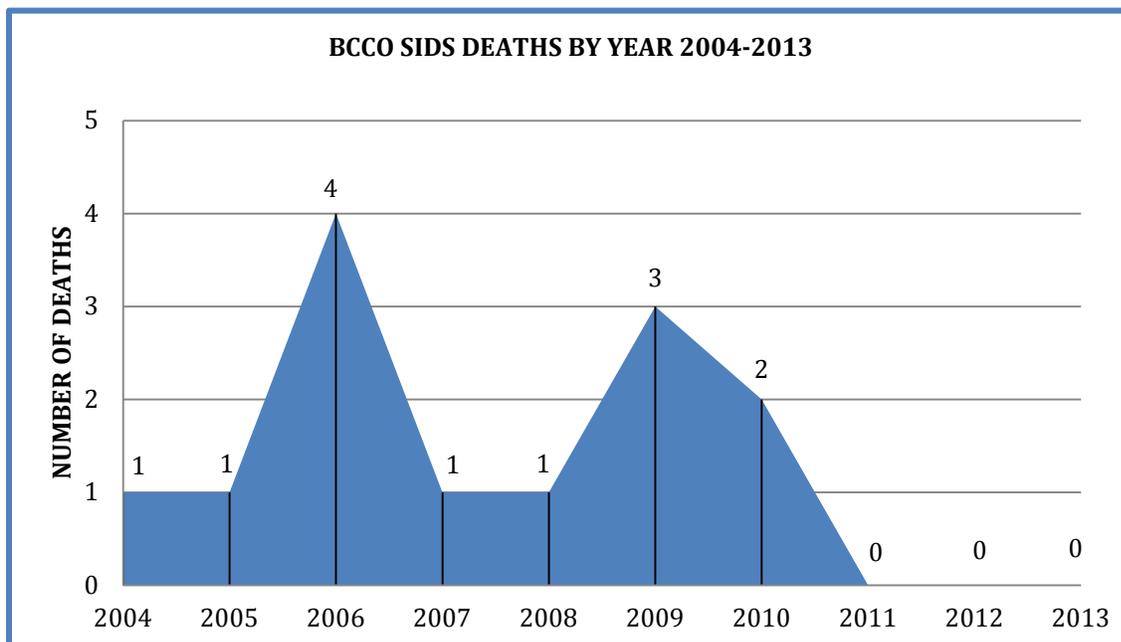


SUDDEN UNEXPLAINED INFANT DEATH (SUID) AND SUDDEN INFANT DEATH SYNDROME (SIDS)

The Center for Disease and Prevention defines SUID as deaths in infants less than 1 year of age that occur suddenly and unexpectedly, and whose cause of death are not immediately obvious prior to investigation. The CDC defines SIDS as the sudden death of an infant less than 1 year of age whose cause of death cannot be explained after a thorough investigation is conducted, including a complete autopsy, examination of the death scene, and review of the clinical history.

SIDS is a diagnosis of exclusion, diagnosis of exclusion is described as a diagnosis of a medical condition that is reached by eliminating all other diagnoses. Therefore to determine the cause of death is SIDS, a coroner or medical examiner must conduct a thorough case investigation which includes examination of the death scene, including the sleeping environment and bedding, a review of the medical history, perform a complete autopsy and further testing. These cases are a collaborative effort with law enforcement and at times the District Attorney's Office. Once a thorough investigation is conducted and no other possible cause of death is determined only then *may* a determination of SIDS be made. Many times when a thorough case investigation is conducted an explanation is found, such as natural disease or disorder, positional asphyxia, suffocation, hyper or hypothermia, neglect, homicide, etc.

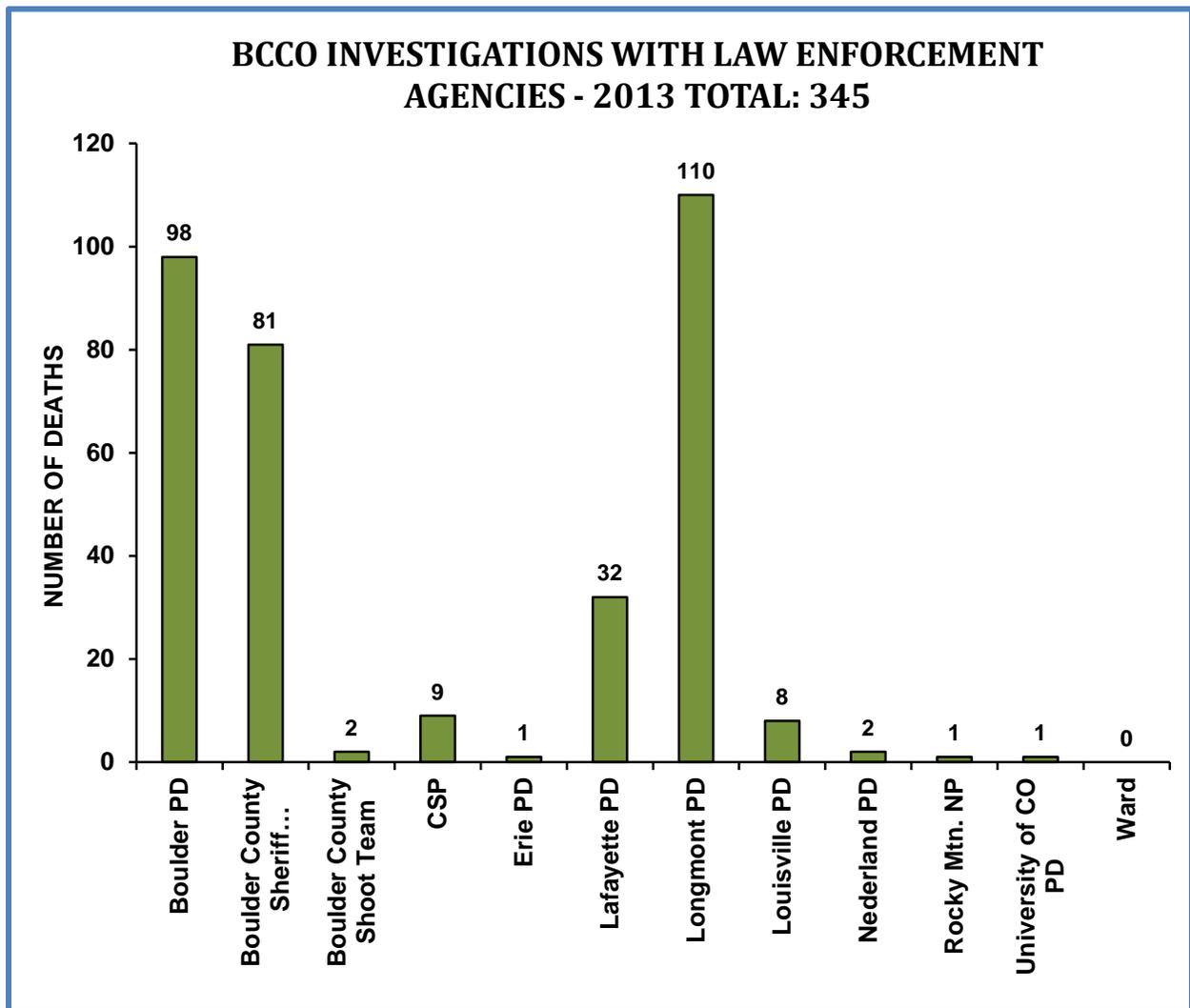
The American Academy of Pediatrics (AAP) started its "Back to Sleep" campaign in 1992 informing the public of its recommendation that infants be placed for sleep in a non-prone position on their back, in an effort to prevent SIDS deaths. The CDC makes ongoing efforts to prevent SUID and SIDS death and on October 17, 2011 they published a new statement on SIDS, which stated that there has been a major decrease in the incidence of SIDS since 1992, however the decline has plateaued in recent years. In the 2011 statement AAP reported that since their previous statement on SIDS in 2005 they have seen an increase in SUID deaths occurring during sleep. Therefore the AAP expanded its recommendations to focus on safe sleep environments that can reduce the risk of all sleep-related infant deaths including SIDS. Their recommendations include: supine positioning, use of a firm sleep surface, breastfeeding, room-sharing without bed-sharing, routine immunization, consideration of a pacifier, and avoidance of soft bedding, overheating, and exposure to tobacco smoke, alcohol, and illicit drugs.⁴



LAW ENFORCEMENT

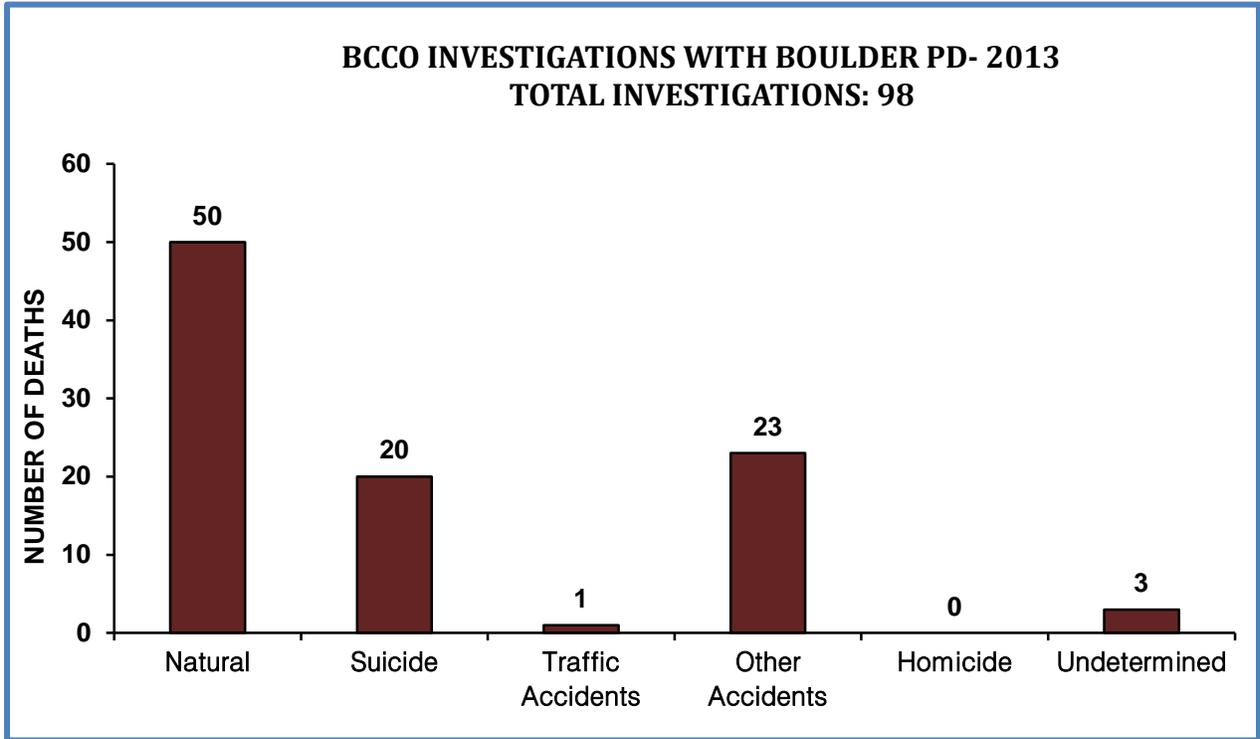
The Boulder County Coroner's Office works with the law enforcement agencies that cover jurisdiction in Boulder County. The charts in this section show the number of cases investigated with these agencies. Please note that the number of investigations listed may differ from those in the "Coroner Response" section of this report because the coroner's office also works with law enforcement on cases in which people die in the hospital as a delayed result of non-natural circumstances (i.e. auto incidents).

INVESTIGATIONS WITH LAW ENFORCEMENT AGENCIES



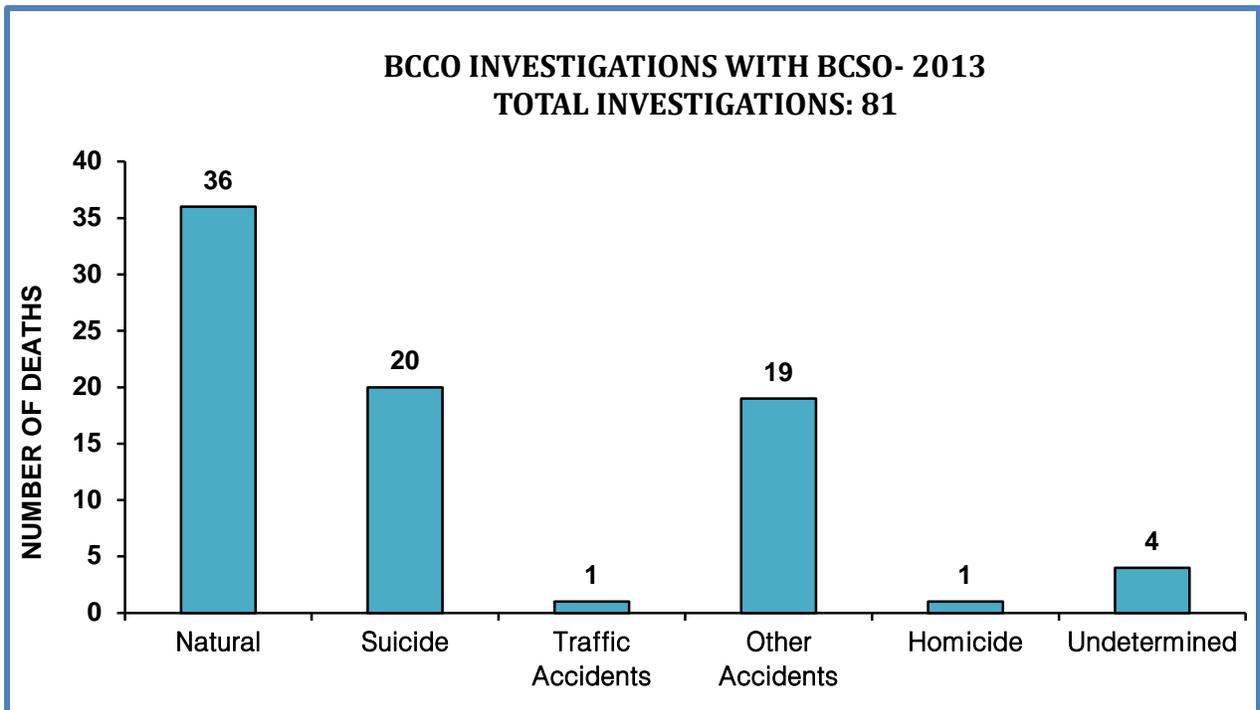
Note: The jurisdiction of the Boulder County Sheriff's Department includes unincorporated areas of Boulder County and the towns of Superior and Lyons.

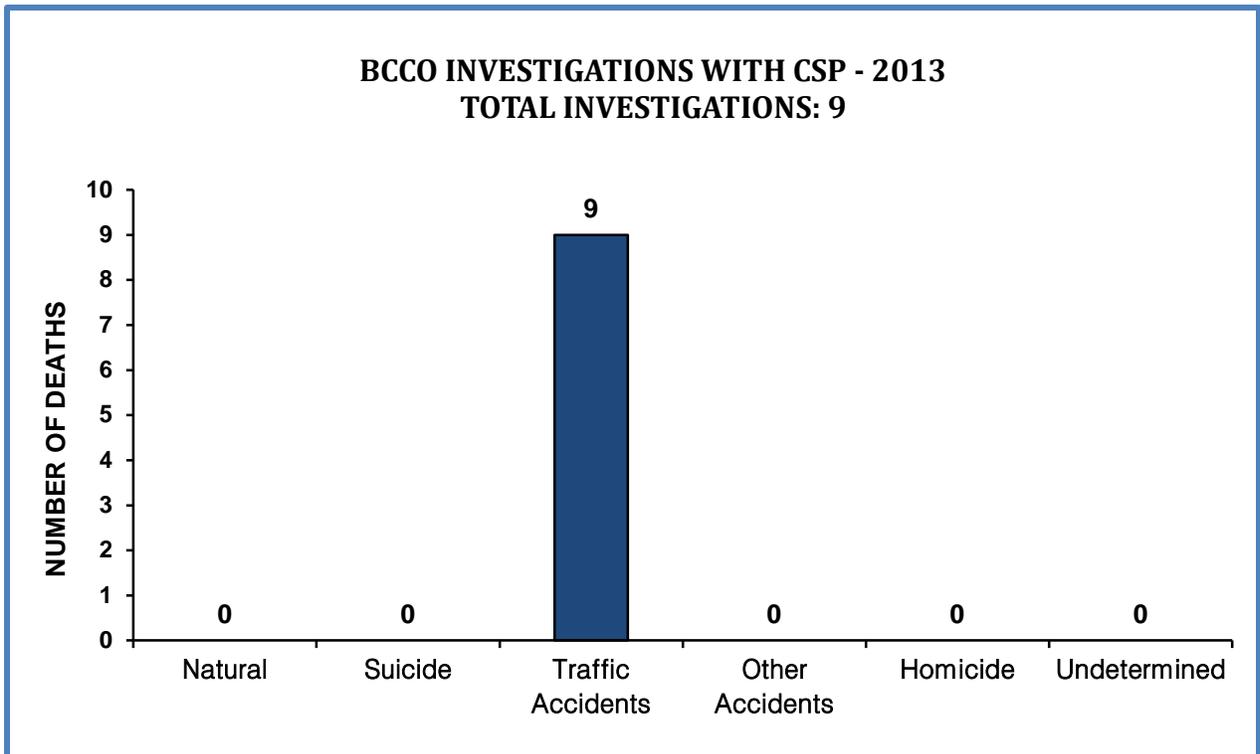
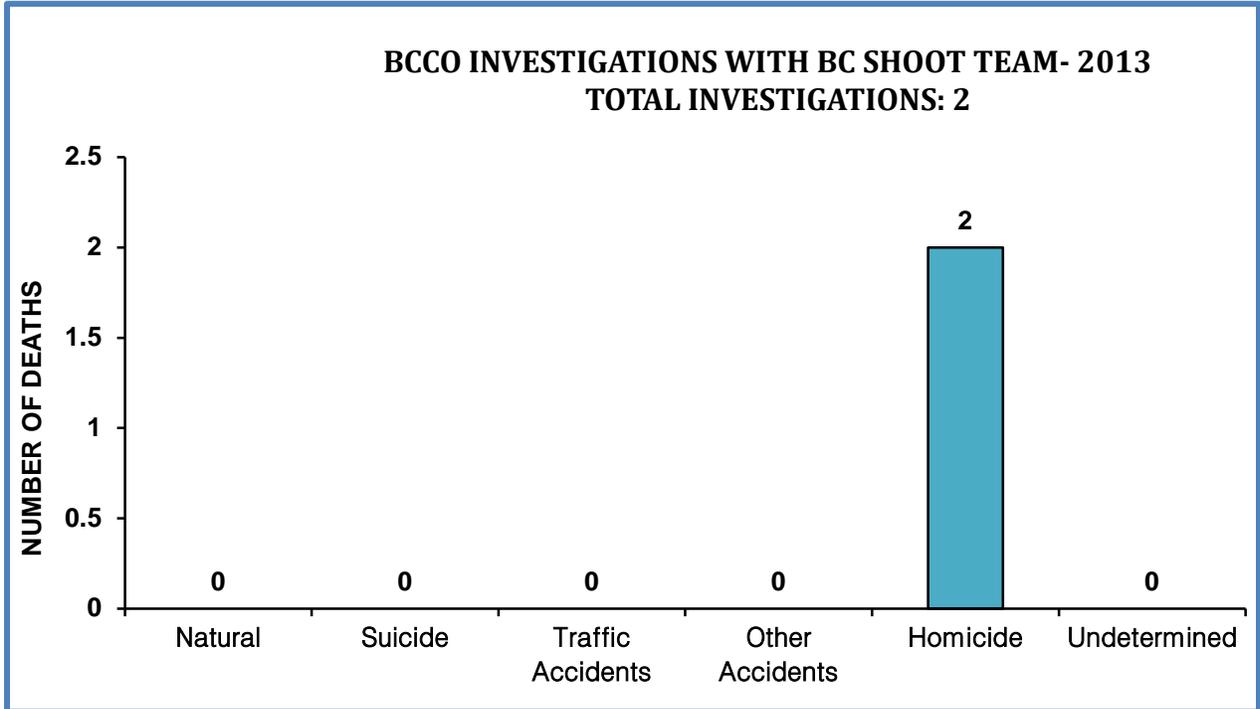
BOULDER POLICE DEPARTMENT



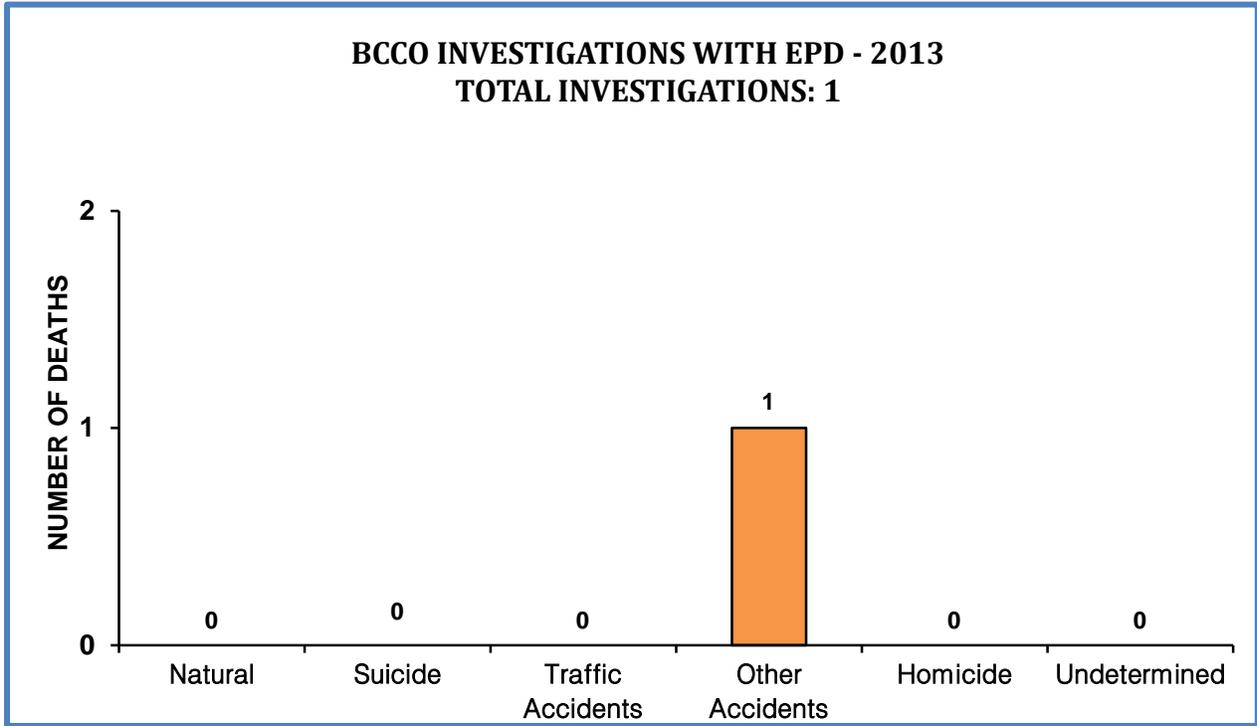
Note: There is one investigation with Boulder Police Department that is not reflected in the above graph, it was determined to be non-human remains, therefore did not receive a manner of death.

BOULDER COUNTY SHERIFF'S OFFICE

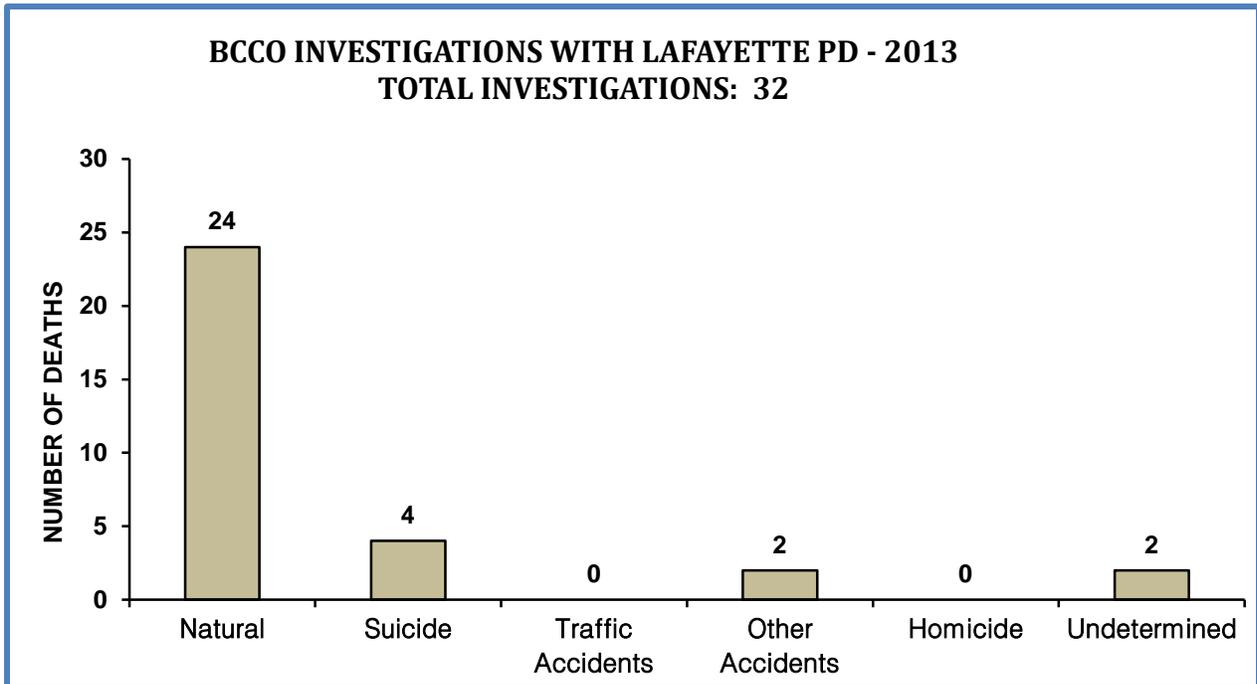




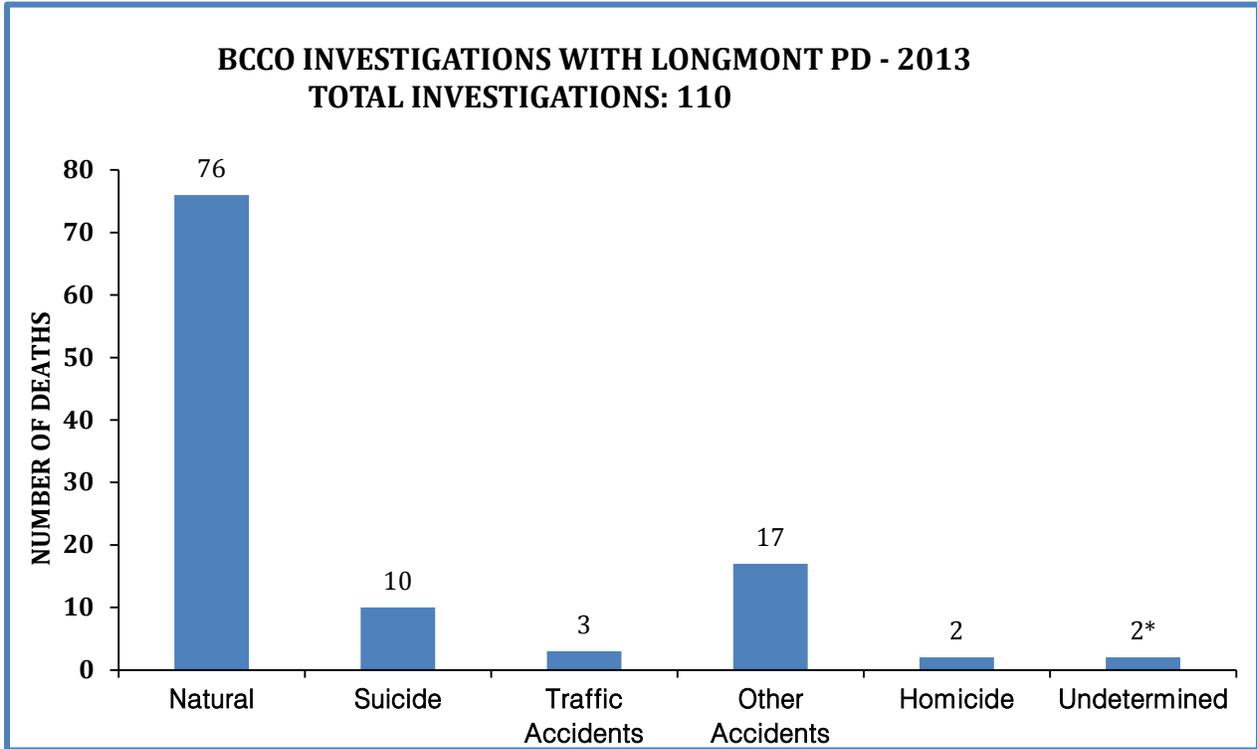
ERIE POLICE DEPARTMENT



LAFAYETTE POLICE DEPARTMENT

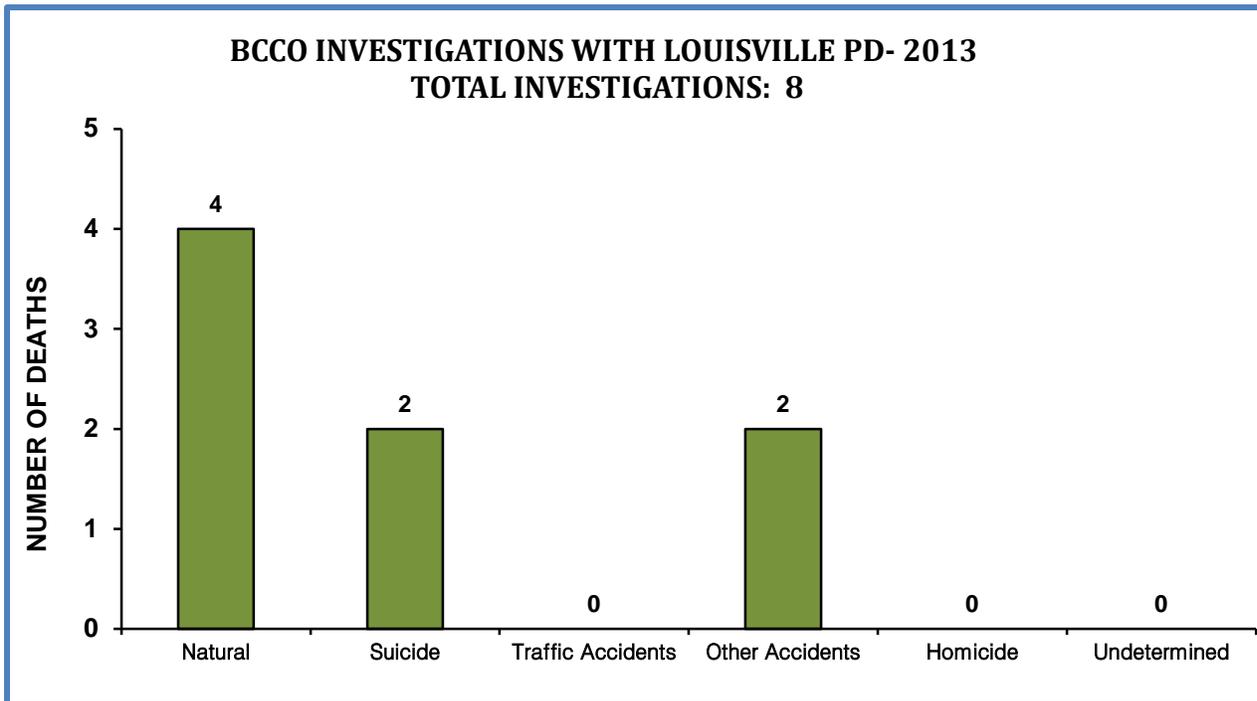


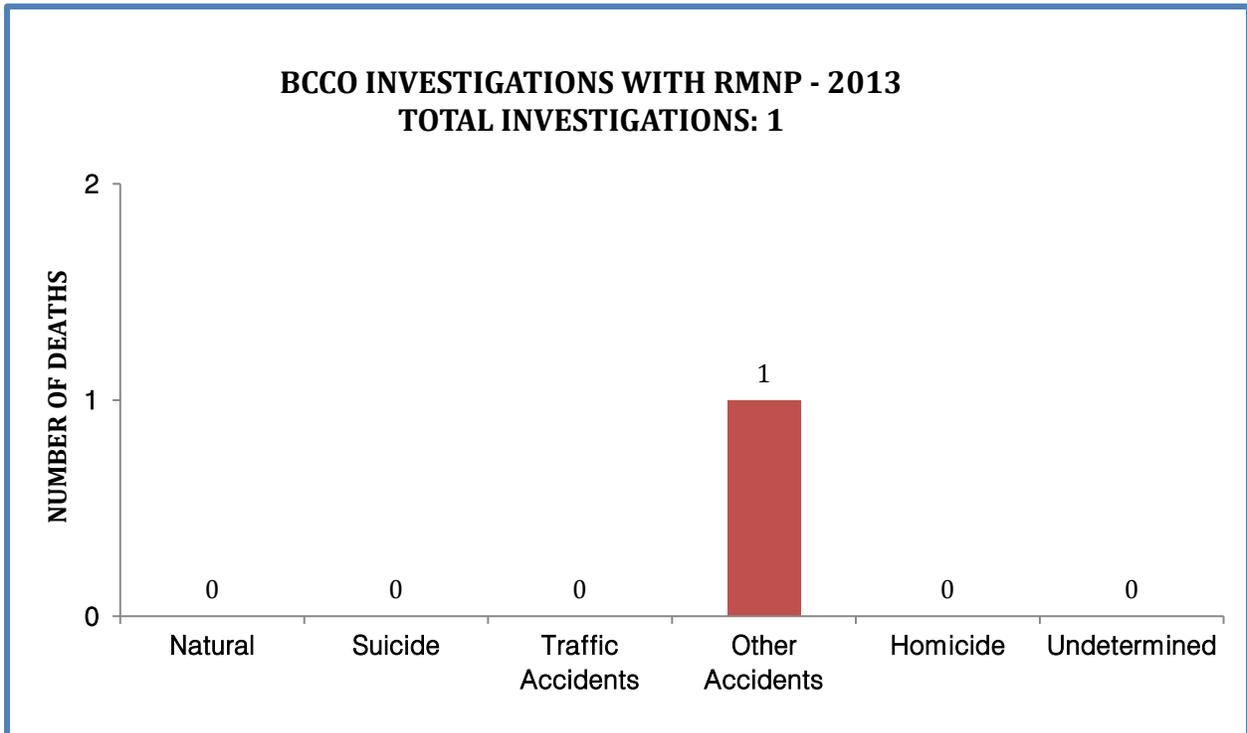
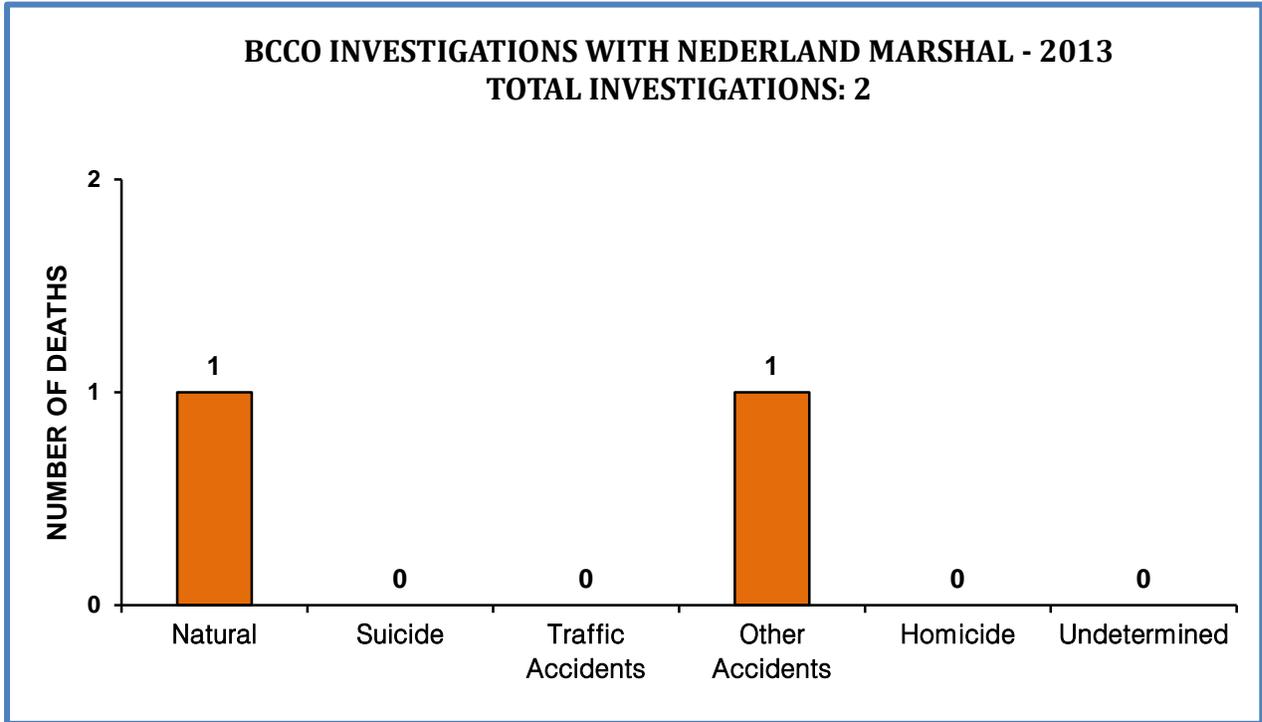
LONGMONT POLICE DEPARTMENT

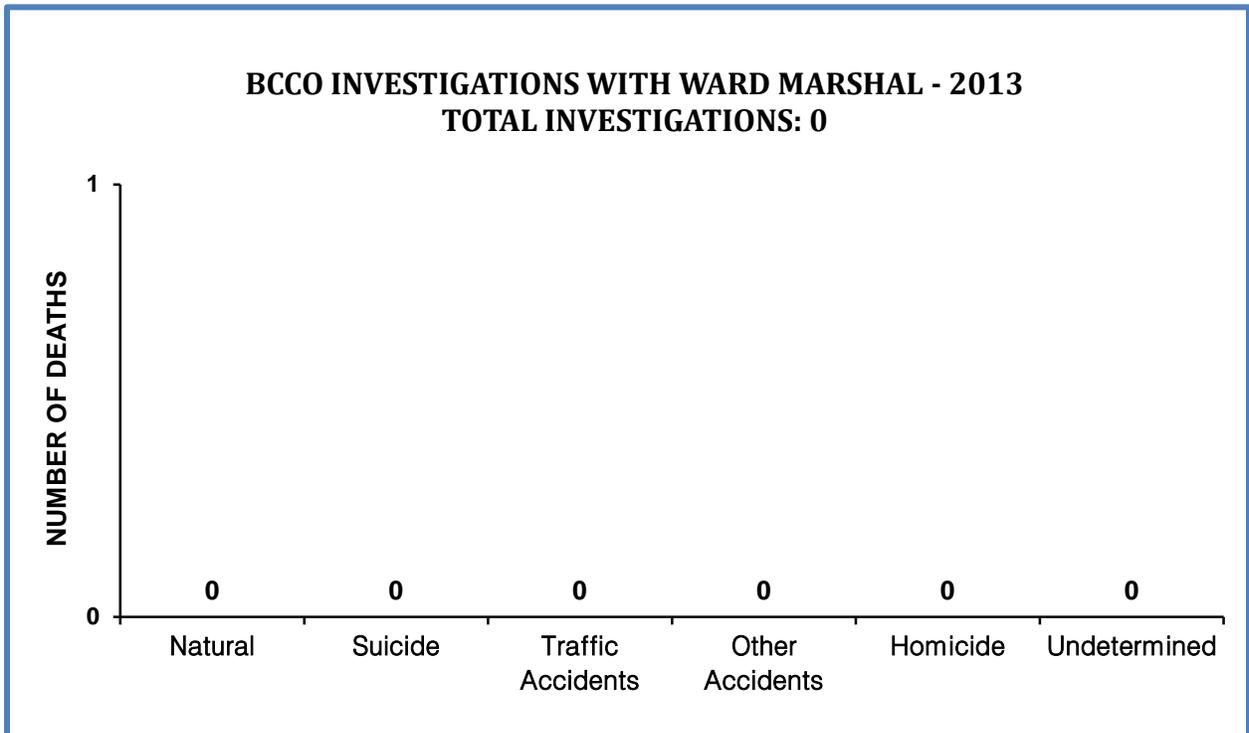
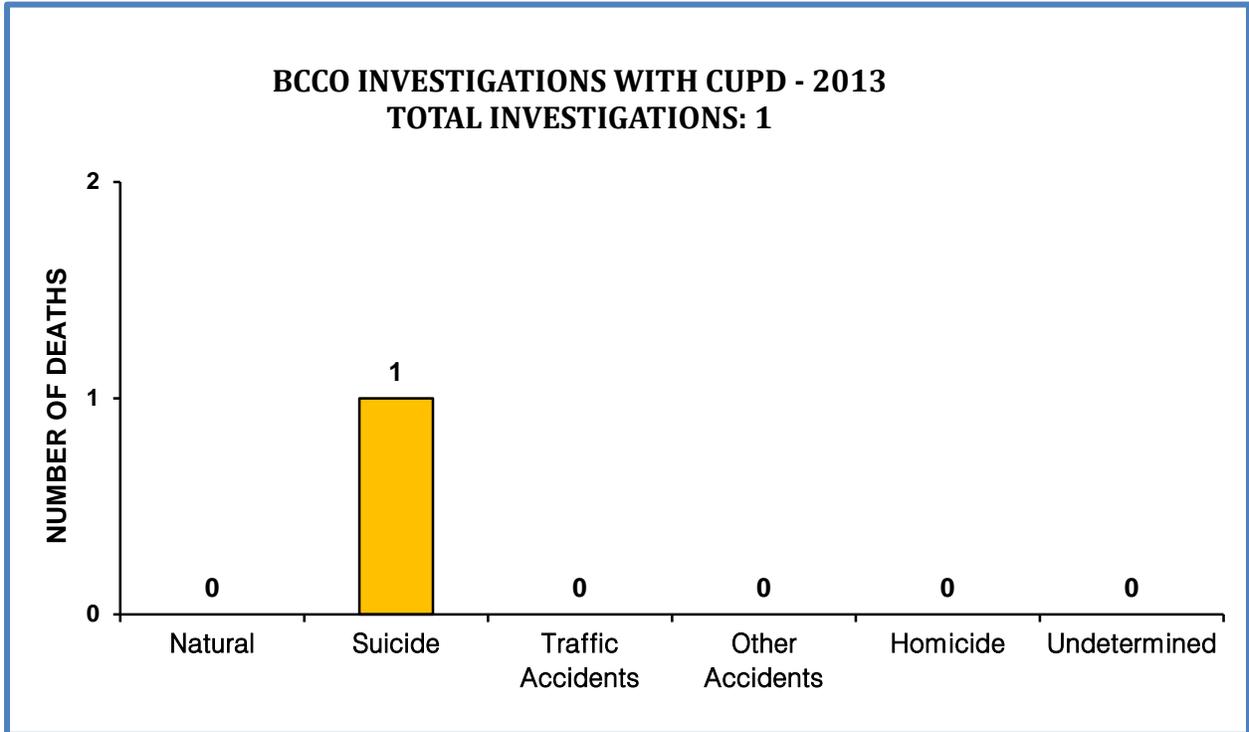


Note: Includes the unidentified human remains that a DC has not been filed for.

LOUISVILLE POLICE DEPARTMENT







UNIDENTIFIED REMAINS

Boulder County Coroner's Office has investigated the deaths of the following individuals whose identities remain unknown.

UNIDENTIFIED BLACK MALE

Date of Death: October 10, 1993

Approximate Age: 25-35

Height: 5'7"

Weight: 165-175 lbs

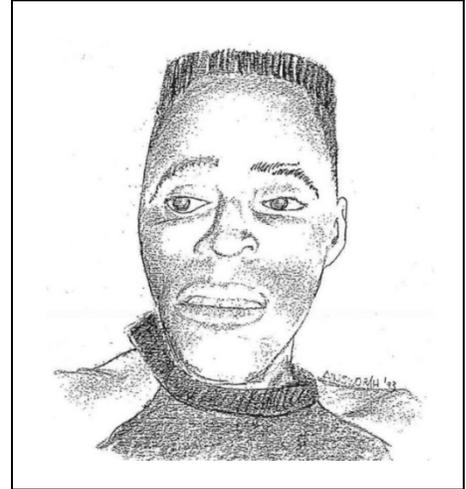
Eye Color: Brown

Hair: short curly black hair with bi-frontal balding.

Scars/Tattoos: On left eyebrow, obliquely oriented, well healed 17mm scar.

Clothing: Black socks; Short black sweat pants, brand name "Pro Spirit", overlaying a pair of long white sweat pants, brand name "Jerzees"; a white windbreaker-type shell with a hood and blue trimmed with zippers half way up front, brand name "Windcrest"; ankle length black hiking-type boots; and a blue mesh baseball cap with a New York Mets logo. Napkin with the logo "Dujour's Casual Café" was also found in his pocket.

Dental: Teeth in excellent repair with no dental work.



A well-nourished Black male was found near the base of the second Flatiron in Boulder, CO. Forensic Anthropology and Dentistry suggest he might have been a recent immigrant to America from North Africa. No obvious injury was found. An autopsy did not reveal cause of death. Some clothing and personal effects were found near him, but no camping gear or identification was present. He had a pair of thick-rimmed red prescription glasses.

UNIDENTIFIED CAUCASIAN MALE

Discovered: November 21, 1993

Approximate Age: 25-32

Height: 5'3" - 5'6"

Weight: 150-165 lbs

Eye Color: Unknown

Hair: Shoulder-length coarse straight dark blond to light brown hair

Scars/Tattoos: None

Clothing: T-shirt, blue denim jeans, white socks and white athletic-type shoes.

Dental: Teeth in extremely poor repair with dental work.

The remains of a mostly skeletonized Caucasian male were found on the North Slope of Gregory Canyon in Boulder County, CO. An autopsy did not reveal a cause of death, but the man may have been suffering from Chronic Iron Deficiency Anemia.

UNIDENTIFIED MALE SKELETAL REMAINS

Reported: November 8, 2013

Skeletal Examination Information:

Ancestry:

Approximate Age: 32.59 +/- 5 years

Height: 5' 7.2" +/- 3.3 inches

Weight: N/A

Eye Color: Unknown

Hair: Unknown

Scars/Tattoos: Unknown

Clothing: Unknown

Dental: Maxillary left second premolar and mandibular left second premolar missing post mortem. The right mandibular third molar and both maxillary third molars appear to have never formed. Linear striations indicating possible biological stress during childhood when the adult teeth were forming.

These are skeletal human remains that were turned over to the Boulder County Coroner's Office from the Longmont VFW. The remains were reported to be that of a Native American Female, however an osteological analysis completed by Metropolitan State University of Denver-Human Identification Laboratory has concluded that the remains are that of an adult male approximately 32.59 +/- 5 years at the time of death and that the ancestry analysis indicates that the individual is not of Native American descent, although analysis is not able to definitively identify the ancestry. Analysis suggests that the remains are likely archaeological, although there is no definitive answer as to how long ago the individual died.

The identity of the individual is unknown, and given that the specimen is likely archeological, it is not likely the identity will be determined, however until such time that an identification or additional information on where the remains originated from they will be kept by the coroner's office.

UNIDENTIFIED CAUCASIAN MALE WITH SOME HISPANIC ADMIXTURE

Skeletal Remains Discovered: 8/30/2002

Approximate Age Range: 18-33 years

Estimated Height: 5'6"

Weight: Unknown

Eye Color: Unknown

Hair: Dark Brown/black with blonde tips, wavy length

Scars/Tattoos: Unknown

Clothing: Unknown

Dental: Teeth in good repair with 3 amalgam fillings and a supernumerary tooth behind the anterior mandibular teeth.

The remains of a skeletonized Caucasian/Hispanic male were found just west of Boulder, approximately .25 miles south of 90 Arapahoe Ave. in a transient camping area. An examination of the remains by an anthropologist did not reveal a cause or manner of death.

REMAINS EXHUMED

The remains of this John Doe were exhumed from the burial plot located at Sacred Heart of Mary Cemetery for re-examination and aid in identification purposes. A CT of the skull was taken and sent to the National Center for Missing and Exploited Children in order for a 3D reconstruction to be completed. The 3D reconstruction sketches were pending completion at the end of 2012.

REFERENCES

- 1 National Association of Medical Examiners, A Guide for Manner of Death Classification First Edition, February 2002, p. 3.
- 2 Colorado Dept. of Public Health and Environment, Violence in Colorado: Trends and Resources, University of Colorado, 1994, p. 123
- 3 Colorado Department of Public Health & Environment, Colorado Department of Human Services Child Fatalities in Colorado, 1990-1994, June 1998, pp. 2-3
- 4 Published online October 17, 2011 Pediatrics Vol. 128 No. 5 November 1, 2011 pp e1341-e1367 (doi: 10.1542/peds.2011-2285)