2019 ANNUAL REPORT

BOULDER COUNTY CORONER'S OFFICE

Emma R. Hall

Boulder County Coroner

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Office of the Boulder County Coroner

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To the Citizens of Boulder County,

It is my pleasure to present the 2019 annual report for the Boulder County Coroner's Office. This report highlights statistical information from the office over the past calendar year and the last 10 years and serves as a valuable resource to understand our responsibility within Boulder County. Our case load, total scene responses, and total autopsies have grown substantially over the last 10 years. Providing the citizens of Boulder County with the highest quality service continues to be the priority of this office.

Implementing a case management system two years ago has enabled the office to function more electronically. This year we were able to expand our ability to gain medical information through a secure web-based portal that allows our staff access to medical records and drug tracking information efficiently that ensures strict security and privacy protocols are followed. Combined with our case management system, this enhances our continuity of operations especially while working in the field.

The Historical Committee has been up and running for two years now. As a reminder, the goal of this committee was to review, organize, and electronically preserve all legacy data in the Coroner's Office. The goal is to eventually have all records digitized up to present time. Thanks to this committee and our wonderful staff, we have made great progress in the last year with scanning case files and uploading them into the case management system for more secure and permanent retention. In addition to the electronic preservation, this committee is continuing to find ways to identify and share information of historical significance with the county. All very exciting things for the office and Boulder County.

Collaboration and planning is always a priority for the office. With lots of hard work and collaboration with the Boulder Office of Emergency Management and many oher great agencies within the Boulder County and City of Boulder, we updated and implemented the Boulder Mass Fatality Plan. Additionally, we also continued a great collaboration with the Colorado Coroner's Association (CCA). I served on the Board for the CCA, and had many of the staff volunteer during the summer conference. This is something we are proud of as we believe it enhances our office, progresses working relationships within the state, and helps to improve the overall Coroner's system in Colorado. We have been very proud of the work out of our office this year.

I am happy to share all of these great accomplishments, and am honored and proud to have had the opportunity to serve the citizens of Boulder County for another great year.

Boulder County Coroner,

ERHall

EMMA R. HALL
Coroner

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INTRODUCTION

MISSION STATEMENT

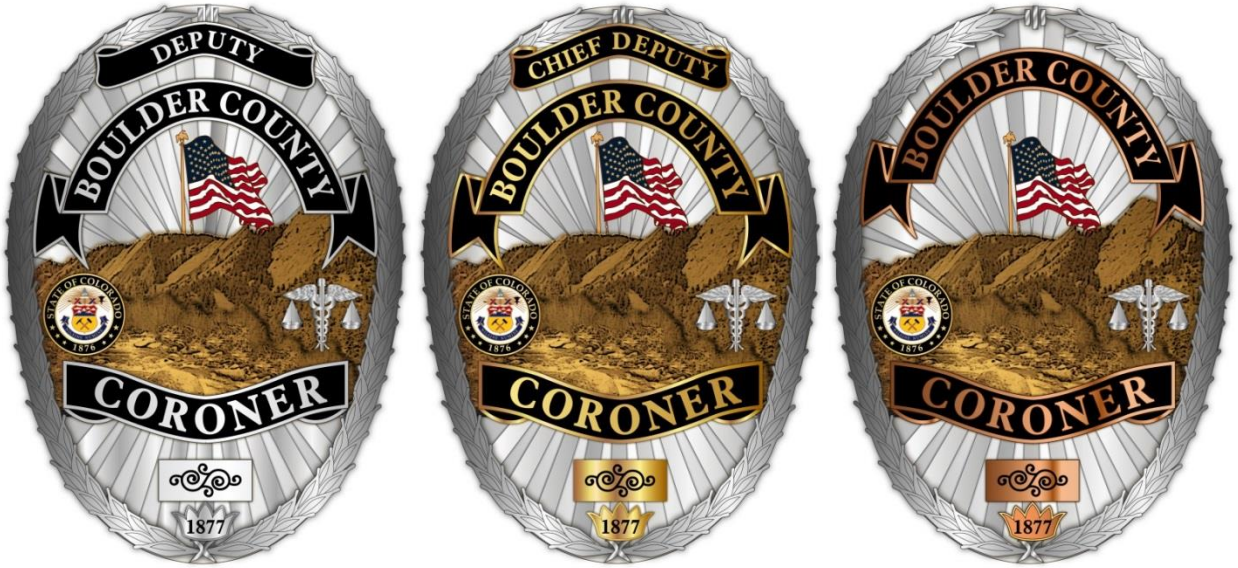
The mission of the Boulder County Coroner's Office is to conduct thorough and fair investigations into deaths falling under its jurisdiction with professionalism and integrity to determine the manner and cause of death in a timely manner. The core values of the office are integrity, excellence and compassion; 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 §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.

BOULDER COUNTY CORONER BADGE



Badge Symbolism: The Boulder County Coroner badge is displayed to symbolize the authority to act under public trust and the duty to serve. The oval shaped shield dates back to medieval times and the laurel wreath is made of connected branches and leaves of the bay laurel, it is used as a symbol of honor.

Sun Rays: In the background of the badge there are twenty-two distinctive sun rays. The thirteen upper rays are a reminder of the responsibilities and the qualities the office holds in the search for the truth. The office has a responsibility to investigate deaths for the deceased, their families and community as a whole. The office serves with professionalism, integrity, excellence, compassion, accountability, confidentiality, dignity and respect. All of these qualities are also represented in the Coroner's mission statement. The lower nine rays represent the cities within Boulder County: Lyons, Longmont, Louisville, Boulder, Superior, Lafayette, Erie, Nederland and Ward.

Banners:

- All banners are black in color.
- The deputy's rank is proudly denoted on a banner at the top of the badge.
- A second banner near the top of the badge prominently displays BOULDER COUNTY.
- A third banner near the bottom of the badge prominently displays CORONER.
- The bottom banner personalizes each badge with a badge number assigned by the Coroner.

Crown: In Middle English, the word "coroner" referred to an officer of the crown, derived from the French *couronne* and Latin *corona*, meaning "crown". The crown is represented at the base of the badge with 5 points demonstrating the branches of death investigation every coroner and deputy serves to investigate: Natural, Accident, Suicide, Homicide and Undetermined. The year 1877 is inscribed into the crown to represent the year the first Coroner took office in Boulder County, Seth D. Bowker, who served from 1877-1881.

Center Piece: The centerpiece of the badge is an image of Boulder Creek for which the county was named after; in the background are the Boulder Flatirons which are a popular icon of the Boulder area. There is an American flag atop the flatirons. On the left side of the center piece is the Colorado state symbol and on the right side is a medical legal symbol.

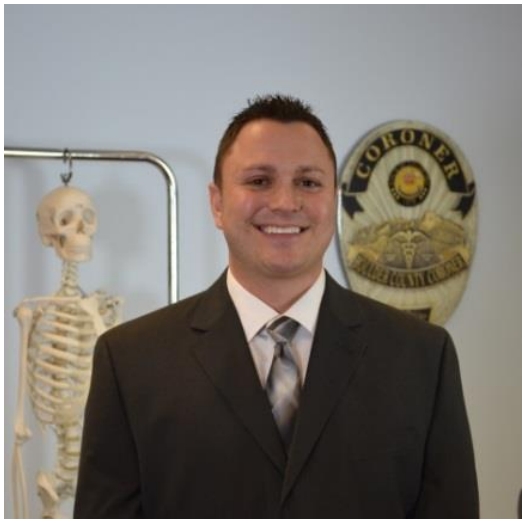
Rank Designation:

- *Deputy:* Silver Borders on each rocker/banner, silver lettering.
- *Chief Deputy:* Gold border on each rocker/banner, gold lettering.
- *Coroner:* Copper border on each rocker/banner, and copper lettering.

STAFF

The 2019 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 lived 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. 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 registered Medicolegal Death Investigator with The American Board of Medicolegal Death Investigators. Ms. Hall is additionally a Certified Death Investigator with the Colorado Coroner's Association as well as a member of the Colorado Coroner's Association. She co-chairs the Elder Abuse Fatality Review Team with District Attorney. 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. Additionally, Ms. Hall has served on many boards including the International Association of Coroner's and Medical Examiner's, the Colorado Coroner's Association, the Criminal Justice/Forensics Advisory Board at Arapahoe Ridge High School in Boulder and the Inn Between on Longmont. Ms. Hall'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 and pathology staff. Mr. Bueno has over 15 years of combined experience working in, and managing, the field of medico-legal death investigation and private investigations. Mr. Bueno was previously at the Adams County Coroner's Office where he held positions as a Deputy Coroner, a Supervisor and a Chief Deputy; as a supervisor and field training officer he created a death investigation training program and wrote numerous office policies and procedures still in use today. He has managed and participated in the conception and implementation of two, state of the art, Coroner Facilities in Colorado. Mr. Bueno is experienced in assisting with autopsy procedures and has extensive training in toxicology, radiography, latent fingerprint collection and identification, and photography to name a few. Mr. Bueno has produced numerous educational presentations for law enforcement and the community, and he has taught on numerous career related topics as well as trained many Deputy Coroner's currently employed across the state of Colorado. Mr. Bueno and his wife are both Colorado natives with three wonderful children. He loves the outdoors and anything involving the Rocky Mountains.

Board Certified Forensic Pathologist: Daniel C. Lingamfelter, D.O., Forensic Pathologist. Dr. Daniel Lingamfelter is a 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 Southwestern Medical Center. Dr. Lingamfelter is board certified by the American Board of Pathology in Forensic Pathology, Anatomic and Clinical Pathology and served for a year as a deputy medical examiner in Kansas City, MO, before moving to Colorado in 2010. He has taught at the University of Missouri School of Medicine and at Texas Christian University, currently he is a clinical assistant professor for Rocky Vista University Medical School in Parker, CO. Dr. Lingamfelter has published many journal articles and has given many presentations throughout the nation. Dr. Lingamfelter is a Fellow of the College of American Pathologists, National Association of Medical Examiners, and the American Society for Clinical Pathology.

Board Certified Forensic Pathologist: Meredith Frank, M.D., Forensic Pathologist. Dr. Frank obtained her medical doctorate at the University of Texas in San Antonio and completed her residency training at the University of Colorado Denver. She then completed a Forensic Pathology fellowship at the Southwestern Institute of Forensic Sciences in Dallas, Texas. Dr. Frank is board certified by the American Board of Pathology in Anatomic and Clinical Pathology and Forensic Pathology. Since 2010, she has served as a Medical Examiner in Dallas TX, Anchorage AK, and Denver, CO. Dr. Frank is Faculty and Director for the Forensic Pathology Fellowship program at the University of Colorado Denver School of Medicine. She is active with the American Academy of Forensic Sciences and National Association of Medical Examiners and serves on the Colorado Maternal Morbidity and Mortality Review Committee.

Investigations Supervisor: 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 spent five years working in the private sector doing financial and insurance based investigative work prior to joining the coroner's office in 2012. Mr. Dixon is responsible for operational oversight of the investigations department, as well as, handling various day-to-day operations of the office and general managerial duties.

Lead Death Investigator: Laurissa Lampi. Mrs. Lampi has a Bachelor's Degree and Master's Degree in Criminal Justice with a minor in Forensic Science. During her studies, she interned for the Bexar County Medical Examiner's Office. After completion of her undergraduate studies, she worked for the Texas Department of Family and Protective Services. She served six years in the United States Air Force as an Arabic Linguist and has two Associate's Degrees in Arabic and Cryptologic Language Analysis. Mrs. Lampi handles a portion of the caseload, as well as handling various day-to-day operations of the office.

Lead Death Investigator: Jordan Steiner. Mr. Steiner has a Bachelor's Degree in Anthropology and a minor in Mathematics from the University of Colorado, Boulder. Following college, he attended the Red Rocks Community College Law Enforcement Academy where he graduated with academic and arrest control honors. Mr. Steiner handles a portion of the caseload, as well as handling various day-to-day operations of the office.

Deputy Coroner: Cari Lehl. Mrs. Lehl has a Bachelor's Degree and Master's Degree in Forensic Science and a minor in psychology. During her studies, she interned with the Weld County Coroner's Office, the Arapahoe County Coroner's Office, the Miami-Dade Medical Examiner's Office, and the Denver Police Department. Mrs. Lehl handles a portion of the caseload, leads the Child Fatality Prevention and Review Team meetings, as well as handling various day-to-day operations.

Deputy Coroner: Tahlia Cristobal. Ms. Cristobal has a Bachelor's Degree in Biology and a Minor in Criminalistics from Metropolitan State University of Denver. She started her forensic education at a young age and went through a Forensic Science vocational school while in high school. While in college, Ms. Cristobal completed an internship with the Boulder County Coroner's Office. This experience then led to her full time employment

with Boulder County as a Deputy Coroner. Ms. Cristobal handles a portion of the caseload, as well as handling various day-to-day operations of the office.

Deputy Coroner: Andy Melvin. Mr. Melvin has a Bachelor's Degree in Psychology and a minor in History from Colorado State University. Following college, he spent time developing his investigative skills in the private sector with a focus on financial and insurance-based work across the state of Colorado. Mr. Melvin handles a portion of the caseload, as well as handling various day-to-day operations of the office.

Pathology Supervisor: Katie Becker. Ms. Becker grew up in the Thornton area and attended college at Colorado State University. She graduated with a Bachelor's Degree in Sociology with an emphasis in Criminal Justice. Following her graduation Ms. Becker started with the Coroner's office as a part time Pathology Technician. This experience then led to her full-time employment as the Pathology Supervisor, where she is responsible for the operational oversight of the pathology department. In addition, Ms. Becker assists with autopsies and is responsible for the day-to-day operations of the morgue. Ms. Becker is also the office representative for the North Central Region Mass Fatality Committee.

Pathology Assistant: Kayci Vigil. Ms. Vigil has Bachelor's Degrees in Anthropology and Sociology with emphases in Biology and Criminal Justice from Colorado State University. While in college, Ms. Vigil completed an internship with the Boulder County Coroner's Office. This experience then led to her full-time employment with Boulder County as a Pathology Technician. Ms. Vigil assists with autopsies, as well as handling various day-to-day operations of the morgue.

Administrative Supervisor: Noelle Mockler. Ms. Mockler has a Master's Degree in Forensic Psychology from Marymount University in Arlington, VA and Bachelor's Degree in Criminal Justice and Criminology from Metropolitan State University. After completion of her graduate degree, she worked primarily in the human service field in the DC area for approximately 5 years before moving back to Colorado. Noelle is the Assistant to the Coroner as well as the operational oversight of the administrative department

Administrative Technician: Kristina Mahoney. Ms. Mahoney is the Administrative Specialist for the Boulder County Coroner's Office. She joined the coroner's office in April of 2018 after previously working as a law enforcement-based victim advocate. She is responsible for administrative and accounting duties as well as working closely with families and mortuaries. Originally from Nebraska, Ms. Mahoney has lived in Colorado since 2014 and has an Associate's Degree in Human Services from Southeast Community College in Lincoln.

HISTORICAL COMMITTEE

Boulder County Coroner's Office established a Historical Committee in 2018. The objective of this committee is to review, organize, and electronically preserve paper files and all legacy data in the Coroner's Office. In addition to electronic preservation, the Committee is reviewing all data for historical significance to Boulder County. The Historical Committee is comprised of both volunteers and hourly employees both aiding to the overall goal of the project. This year the volunteer committee members worked on cases between 1950-1965, while staff committee members worked on case files from present back to 2013, as well as digitizing 35mm photos for historical cases.

FACILITIES

Groundbreaking for the Boulder County Coroner Facility located at 5610 Flatiron Parkway occurred in March of 2014. The facility was completed in the spring of 2015. The office is designed to welcome and assist those coming to the Boulder County Coroner's Office. The staff is available to law enforcement personnel, community partners and family members, from 8:00 A.M. to 4:30 P.M. (Closed for lunch from 12 P.M. to 1 P.M.). After hours coroner's office staff is available 24/7 through Boulder County Dispatch.

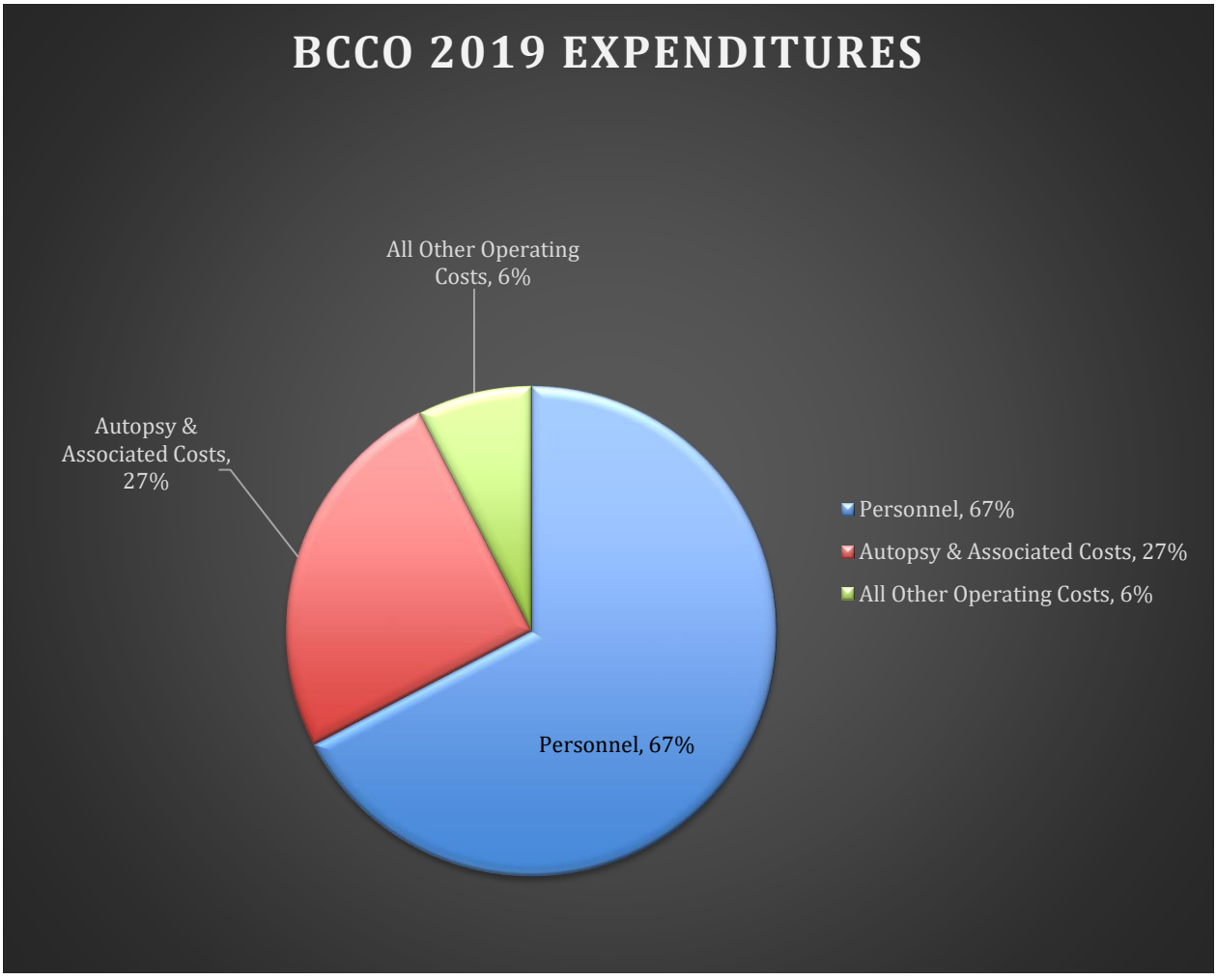
The building is a stand-alone facility which includes a 1060 square foot autopsy suite featuring state-of-the-art amenities to allow for the most safe work environment possible for the staff and for public health in general. The suite includes two full function stainless steel autopsy tables in addition to a 202 square foot isolation room with an independent reverse flow air system. The morgue features a remote controlled body lift system, surgical lamps, natural light for energy conservation, pan/tilt/zoom (PTZ) and fixed security cameras with medical detail zoom capabilities and remote communication with conference rooms, and a walk in freezer and refrigerator capable of storing up to 30 bodies each.

FUNDING

The funding for the coroner's office comes from the general fund. The general fund is the common 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, motor 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 2019 expenditures for the Boulder County Coroner's Office was $1,391,270. This is 0.32% of the total adopted 2019 Boulder County budget of $432,547,691.



DESCRIPTION OF REPORTABLE CASES

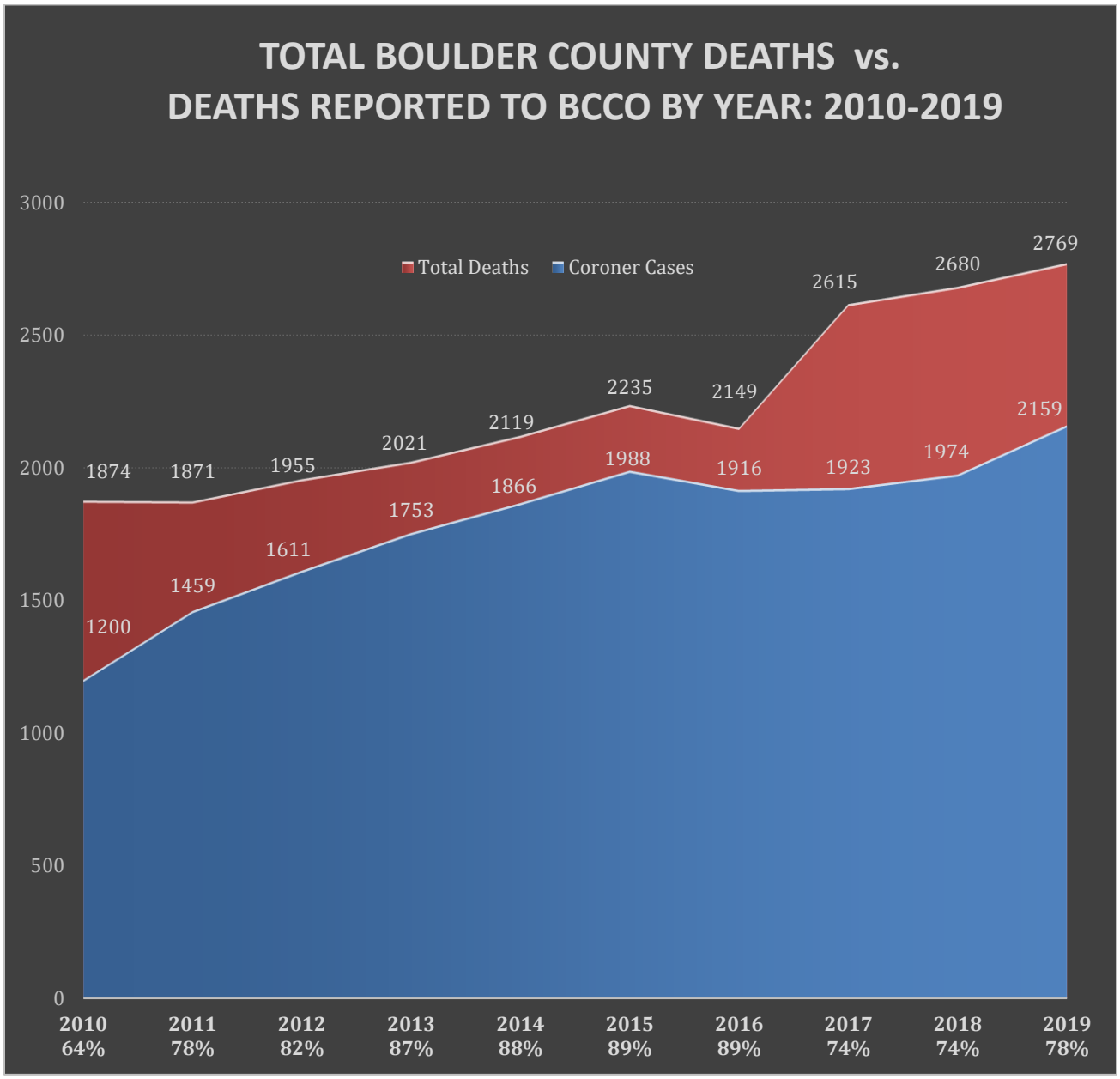
In accordance with Colorado Revised Statute §30-10-606, the following deaths are **reportable** to the Boulder County Coroner's Office:

- 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 2019 estimated population of Boulder County was 326,196. 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 twelve percent of the deaths that were investigated by the Boulder County Coroner's Office in 2019, an autopsy or skeletal 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.

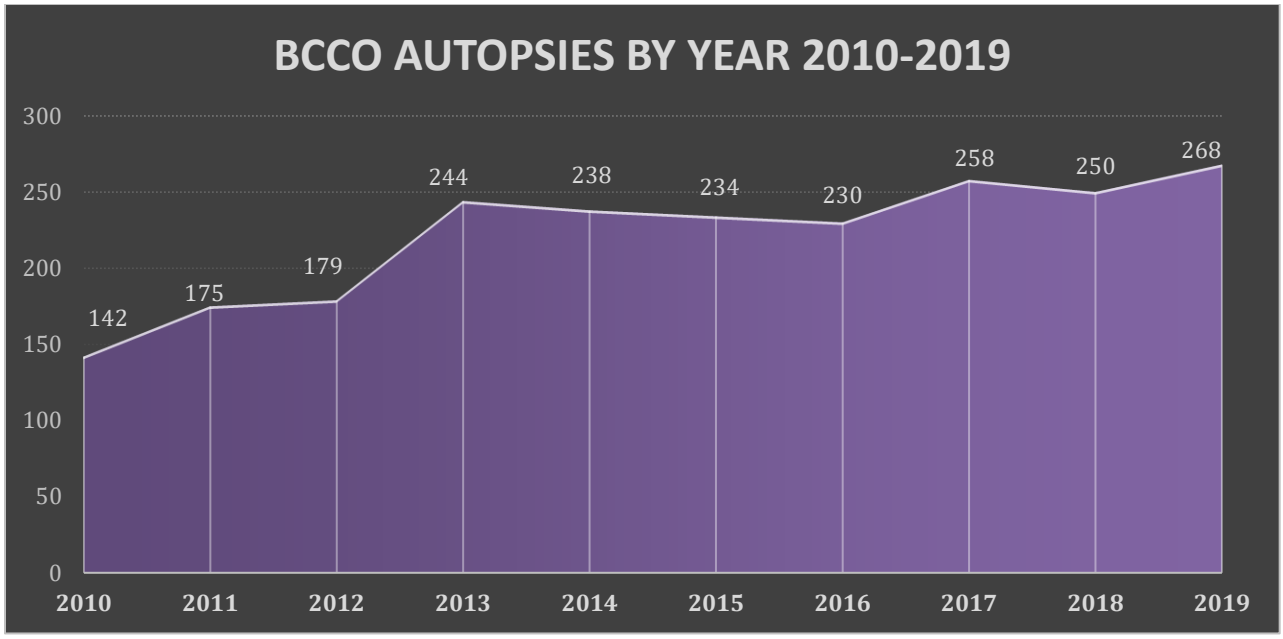
In 2011, House Bill 11-1258 was passed. The bill states that the coroner shall perform forensic autopsies with the most recent version of the "Forensic Autopsy Performance Standards" adopted by the National Association of Medical Examiners (NAME). And that all forensic autopsies must be performed by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

The "Forensic Autopsy Performance Standards" listed by NAME are as follows:

Medicolegal death investigation officers are appointed or elected to safeguard the public interest. Deaths by criminal violence, deaths of infants and children, and deaths in the custody of law enforcement agencies or governmental institutions can arouse public interest, raise questions, or engender mistrust of authority. Further, there are specific types of circumstances in which a forensic autopsy provides the best opportunity for competent investigation, including those needing identification of the deceased and cases involving bodies of water, charred or skeletonized bodies, intoxicants or poisonings, electrocutions, and fatal workplace injuries. Performing autopsies protects the public interest and provides the information necessary to address legal, public health, and public safety issues in each case. For categories other than those listed below, the decision to perform an autopsy involves professional discretion or is dictated by local guidelines. For the categories listed below, the public interest is so compelling that one must always assume that questions will arise that require information obtainable only by forensic autopsy.

A forensic pathologist shall perform a forensic autopsy when:

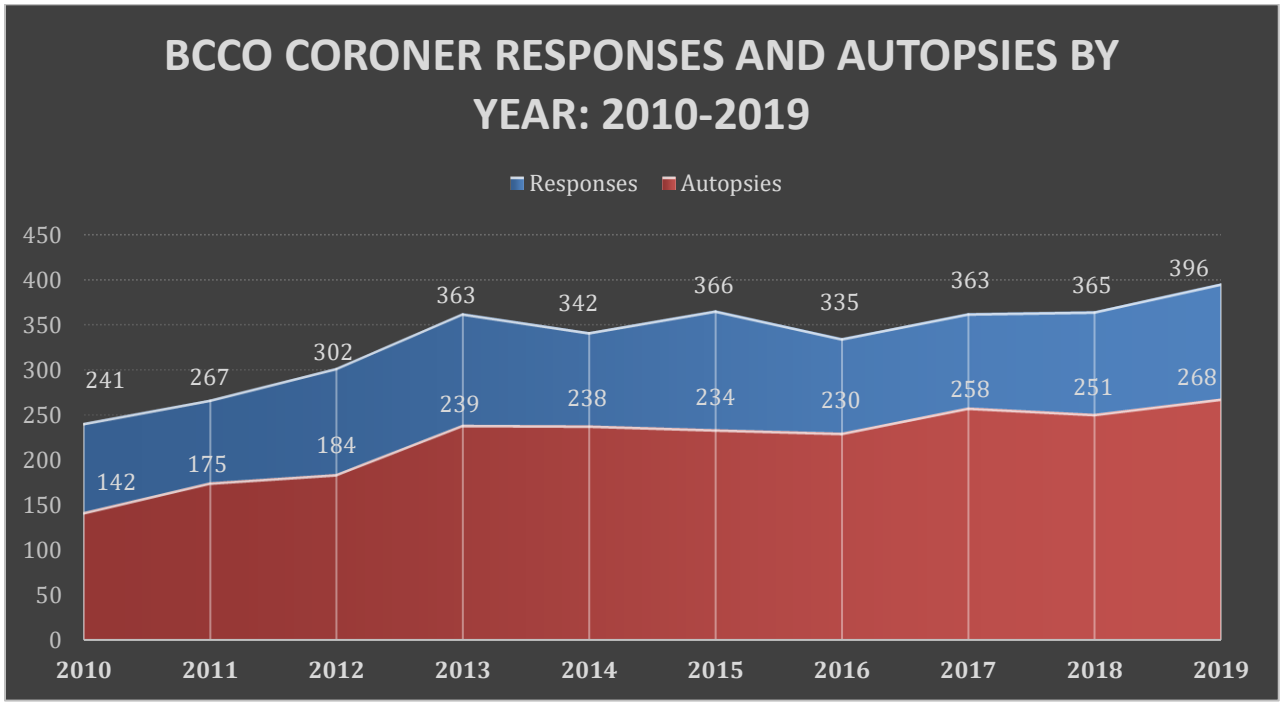
- The death is known or suspected to have been caused by apparent criminal violence.
- The death is unexpected and unexplained in an infant or child.
- The death is associated with police action.
- The death is apparently non-natural and in custody of a local, state, or federal institution.
- The death is due to acute workplace injury.
- The death is caused by apparent electrocution.
- The death is by apparent intoxication by alcohol, drugs, or poison, unless a significant interval has passed, and the medical findings and absence of trauma are well documented.
- The death is caused by unwitnessed or suspected drowning.
- The body is unidentified, and the autopsy may aid in identification.
- The body is skeletonized.
- The forensic pathologist deems a forensic autopsy is necessary to determine cause or manner of death, or document injuries/disease, or collect evidence.
- The deceased is involved in a motor vehicle incident and an autopsy is necessary to document injuries and/or determine the cause of death.



Note: *The Boulder County Coroner's Office performed 268 autopsies (including three skeletal examinations and one autopsy for a 2018 case) in 2019.

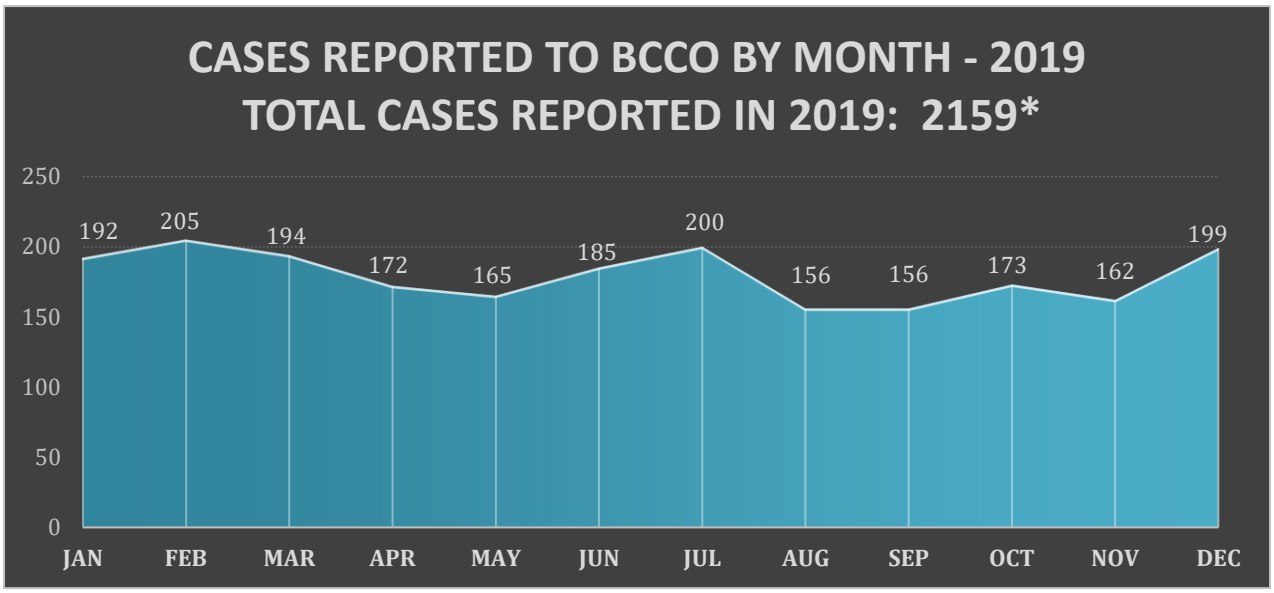
CORONER RESPONSE AND AUTOPSY TOTALS

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



Note: * There were 267 cases in 2019 that required autopsies; there was one 2018 case in in which the autopsy was performed in 2019.

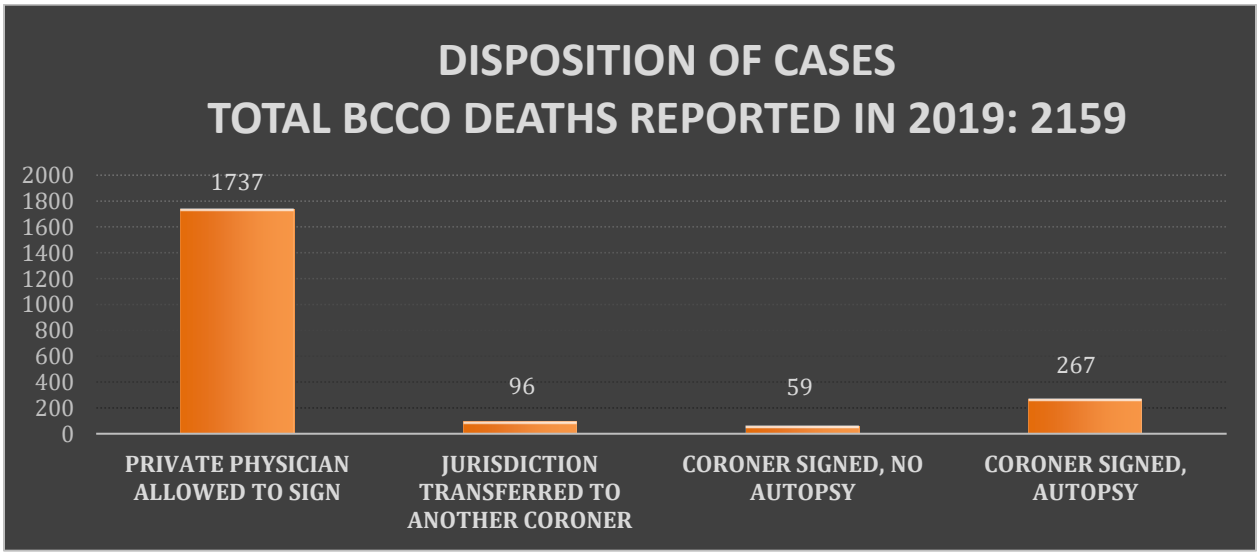
CASES BY MONTH



Note: *The total number of cases reported includes 96 cases that were transferred to other coroners. See **Transfer of Jurisdiction** section of this report for further 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 from (i.e. by ambulance) prior to death. The transfer of jurisdiction is allowed according to Colorado Revised Statute §30.10.606.



TRANSFER OF JURISDICTION

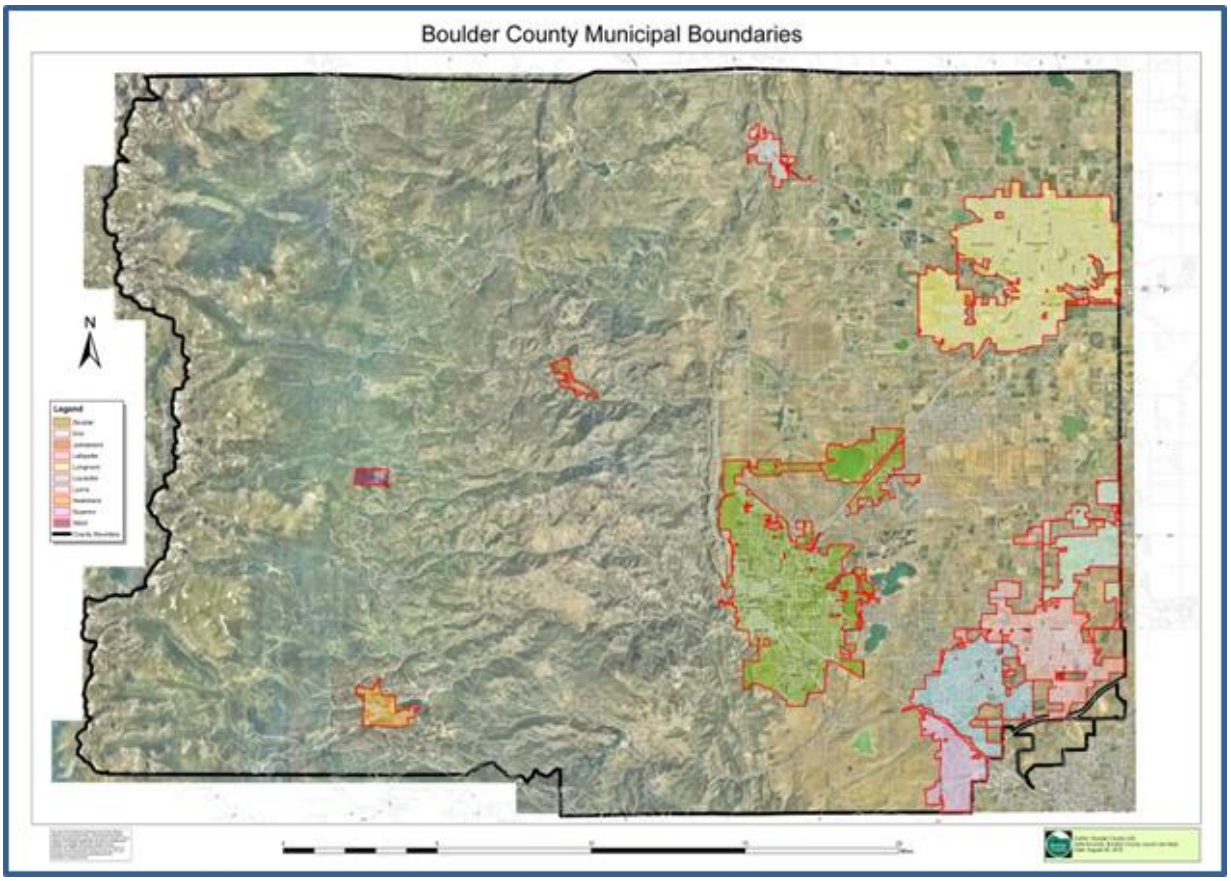
Occasionally, deaths that occur in Boulder County are due to an "initiating event" that occurred in another county. For example, an individual may die in a hospital from injuries that they sustained in an incident that occurred in another county, or an individual may collapse at their residence (in another 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 2019, the jurisdictions of 96 cases were transferred to other coroners in surrounding counties. Forty-five cases were natural deaths, eleven were traffic incidents, twenty-seven were non-traffic accidents, four were suicides, three were undetermined, and six were homicide. Fifty-eight of the cases were transferred to Adams/Broomfield County, twenty were transferred to Weld County, fifteen were transferred to Jefferson County, one was transferred to Larimer County, one was transferred to Denver County and one was transferred to El Paso County.

Forty-four of the transferred cases were deaths that occurred in an emergency department. Thirty-seven of them occurred at Good Samaritan Medical Center (GSMC), one occurred at Longmont United Hospital, and six occurred at Longs Peak Hospital in Longmont.

In 81% of the cases (78 total) 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 37 GSMC 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.

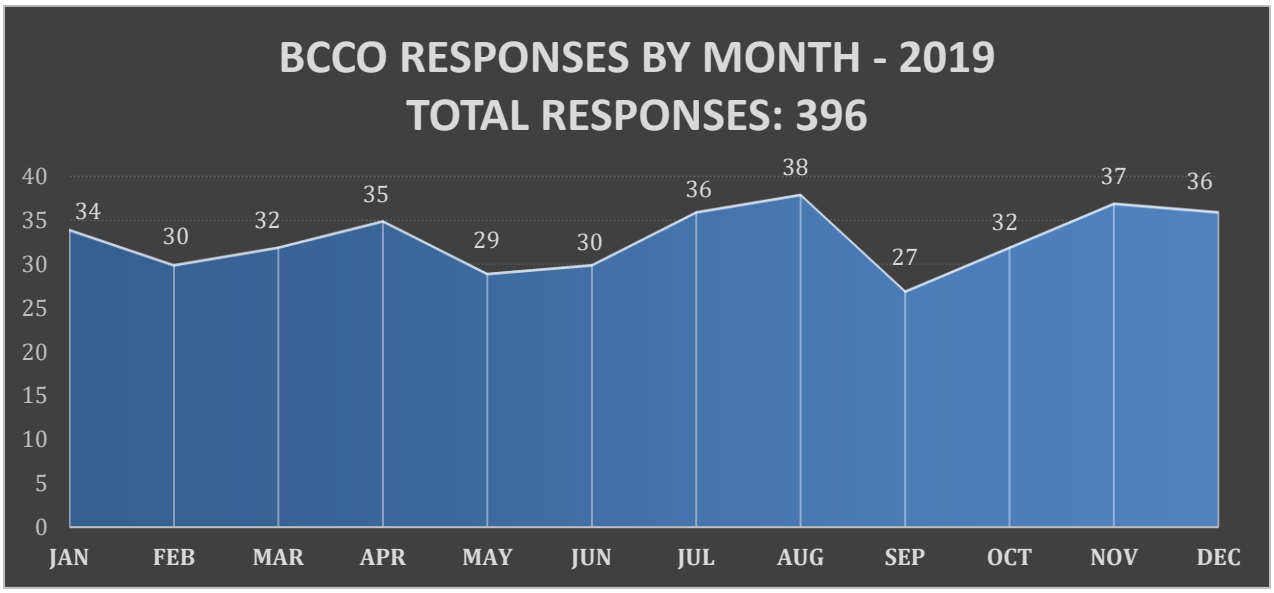


CORONER RESPONSES BY MONTH

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.

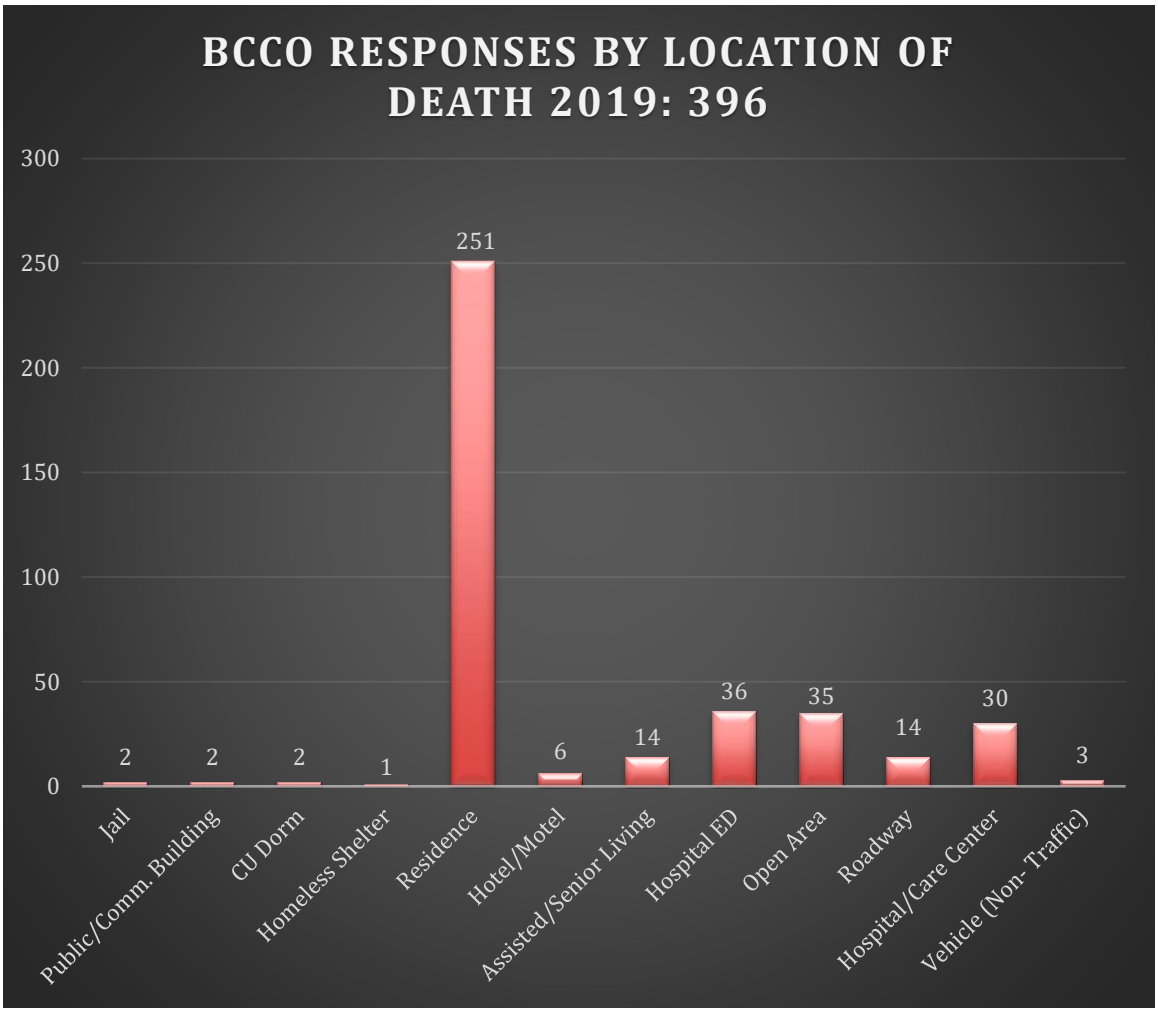
Most responses made by the coroner's office are to death scenes where law enforcement was notified and requested the coroner's office. Law enforcement has jurisdiction over the scene, while the coroner's office has jurisdiction over the body, therefore, both agencies work together to accomplish their 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 2019, 396 scene responses were made which was 18% of all the deaths reported to the Boulder County Coroner's Office.



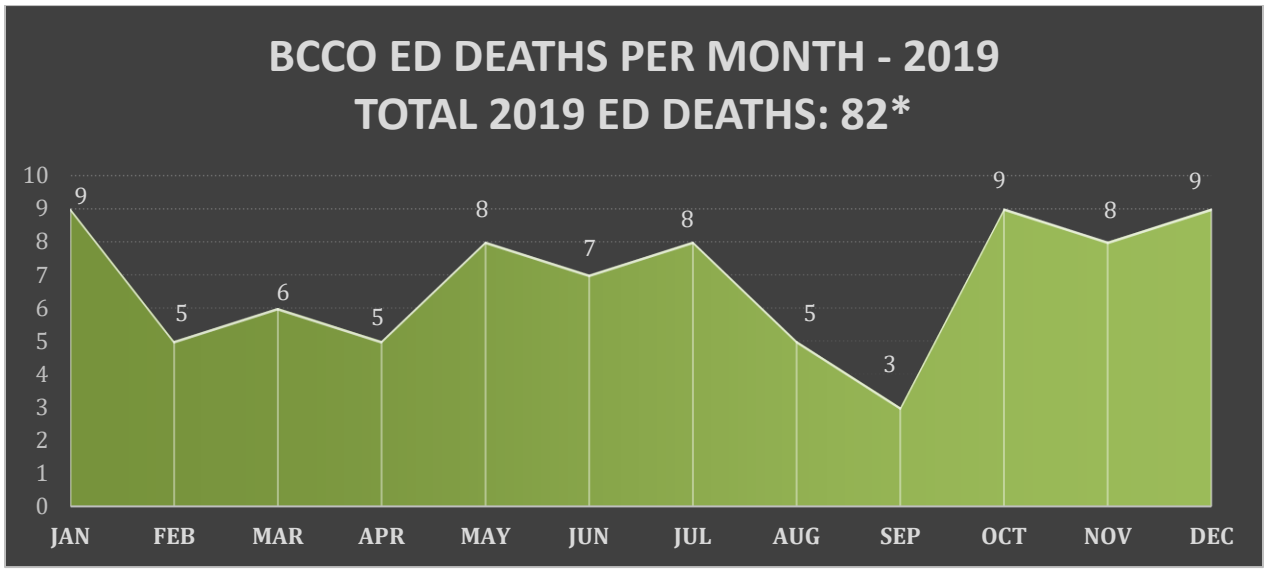
CORONER REPONSES BY LOCATION OF DEATH

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



EMERGENCY DEPARTMENT CALLS BY MONTH

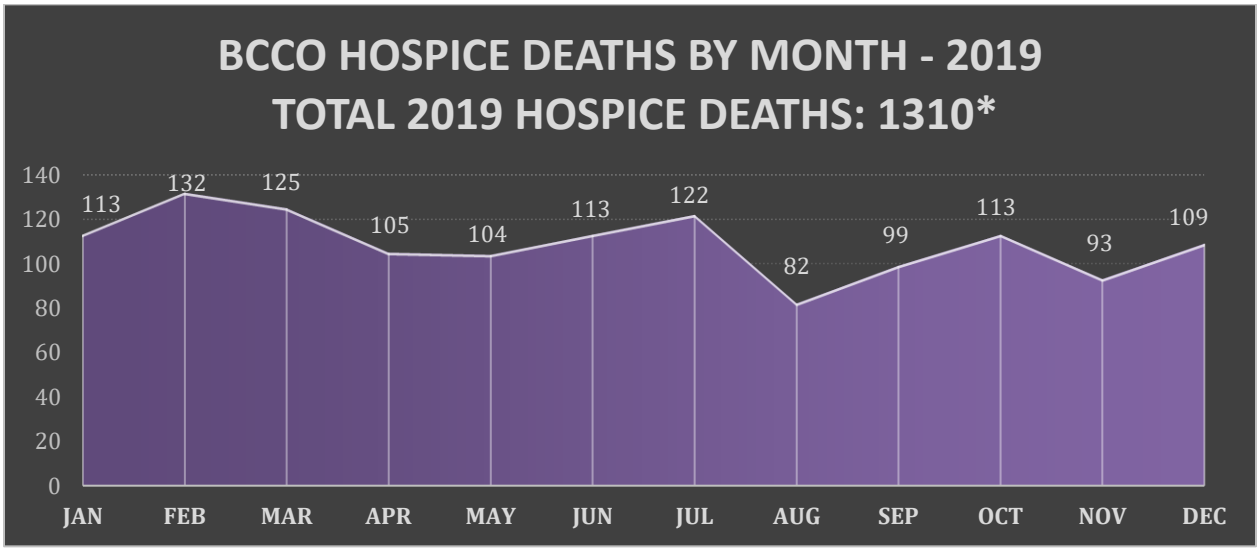
Deaths that occur in an emergency department are required to be reported to the coroner's office. Hospitals in Boulder County include Boulder Community Hospital Foothills, Longmont United Hospital, Good Samaritan Medical Center, Avista Adventist Hospital, and Longs Peak Hospital.



Note: *The total number of cases reported include 44 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 1310 hospice cases, reported to the Boulder County Coroner's Office, 1286 (98%) were natural deaths, 24 (2%) were accidental deaths. Of the 1310 hospice cases, none of the cases involved an autopsy.



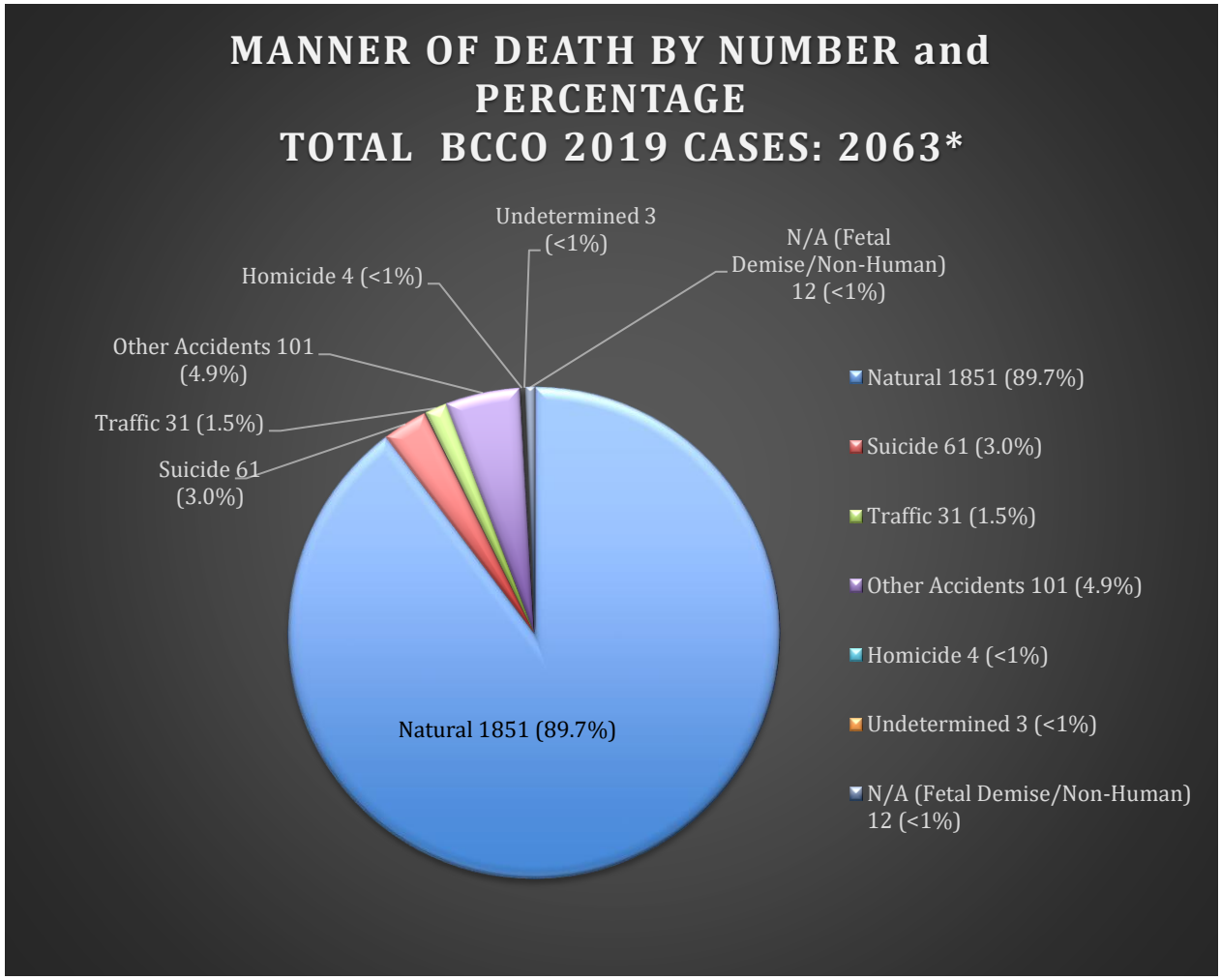
Note: *This total excludes the 4 hospice cases that were transferred to other coroners.

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 medicolegal 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

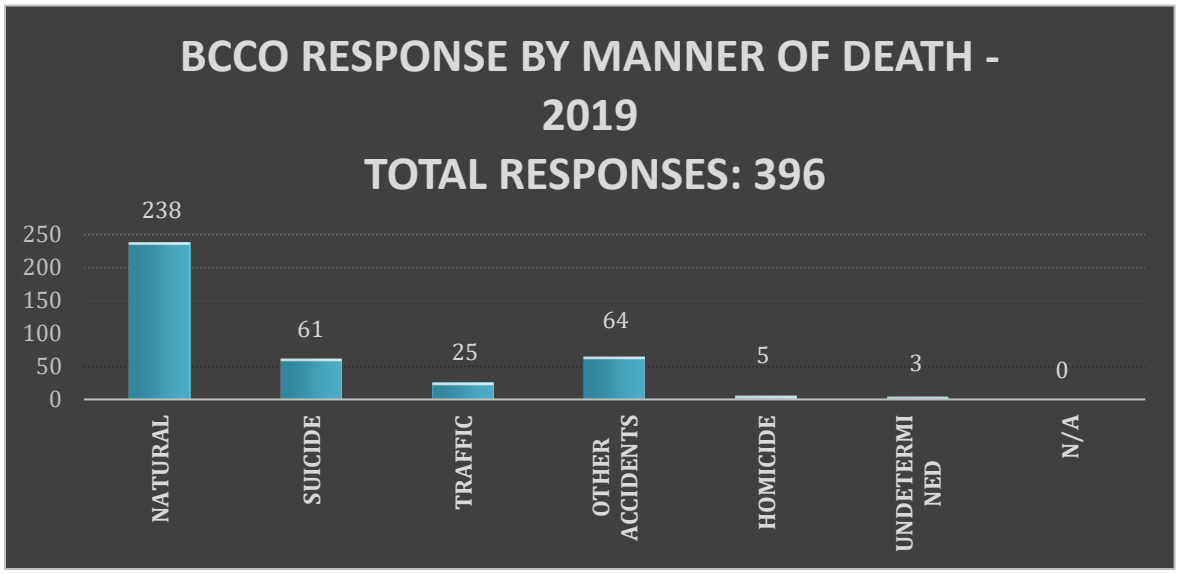
A large majority of the cases investigated by any medical examiner or coroner's office are natural deaths. In Boulder County that figure was 1851 cases, or 89.7% in 2019. Included within these natural deaths were 1286 hospice cases.



Note: *The 96 cases transferred to other coroners are not included in this total.

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.

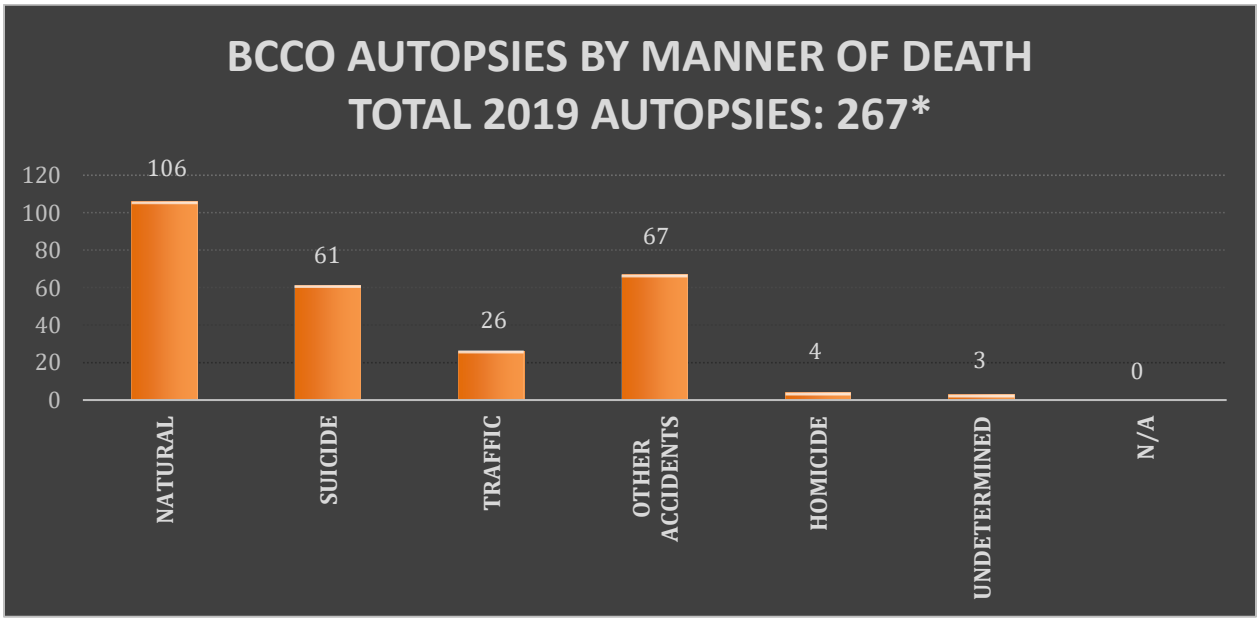
CORONER RESPONSE BY MANNER



Note: The apparent absence of a scene investigation in some suicides, motor vehicle, and other accident cases may be due to the 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.

AUTOPSIES BY MANNER OF DEATH

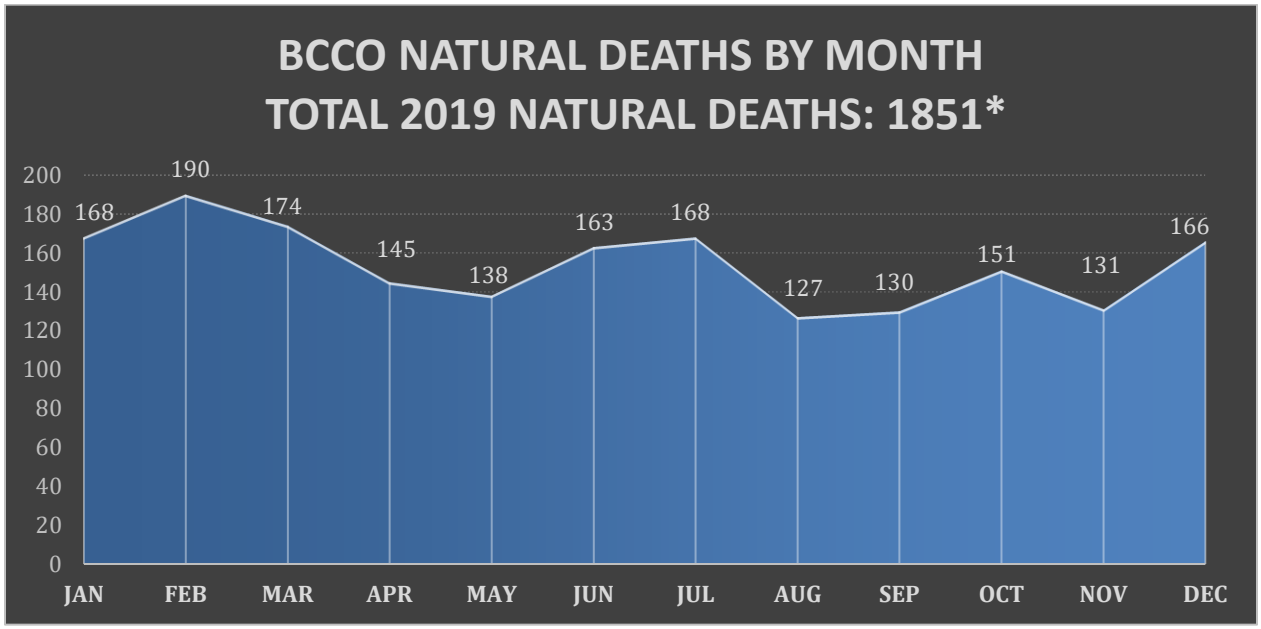
In addition to following the "Forensic Autopsy Performance Standards" adopted by the National Association of Medical Examiners (NAME), the Coroner weighs many factors in order to determine whether an autopsy should be performed. Autopsies are performed in all homicides, most infant deaths, most deaths of individuals without an established medical history, deaths involving possible criminal action, most motor vehicle accident deaths, and most suicides.



Note: This does not include the 2018 case that was autopsies in 2019.

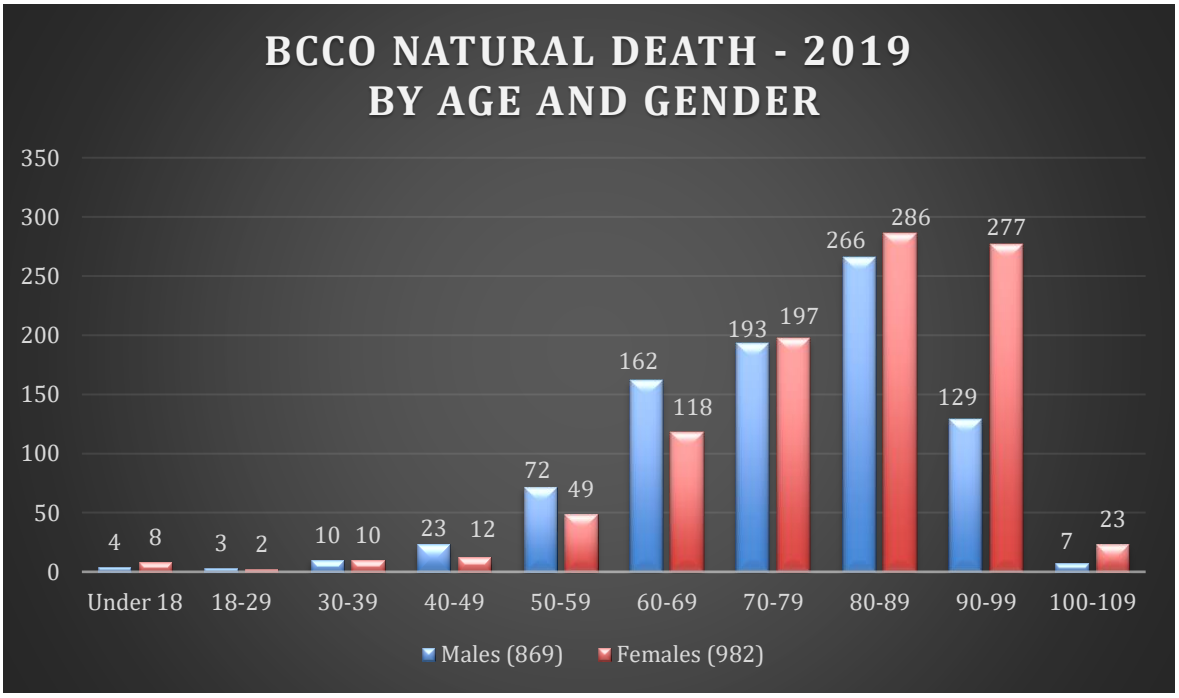
NATURAL DEATHS BY MONTH

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 45 natural deaths transferred to other coroners.

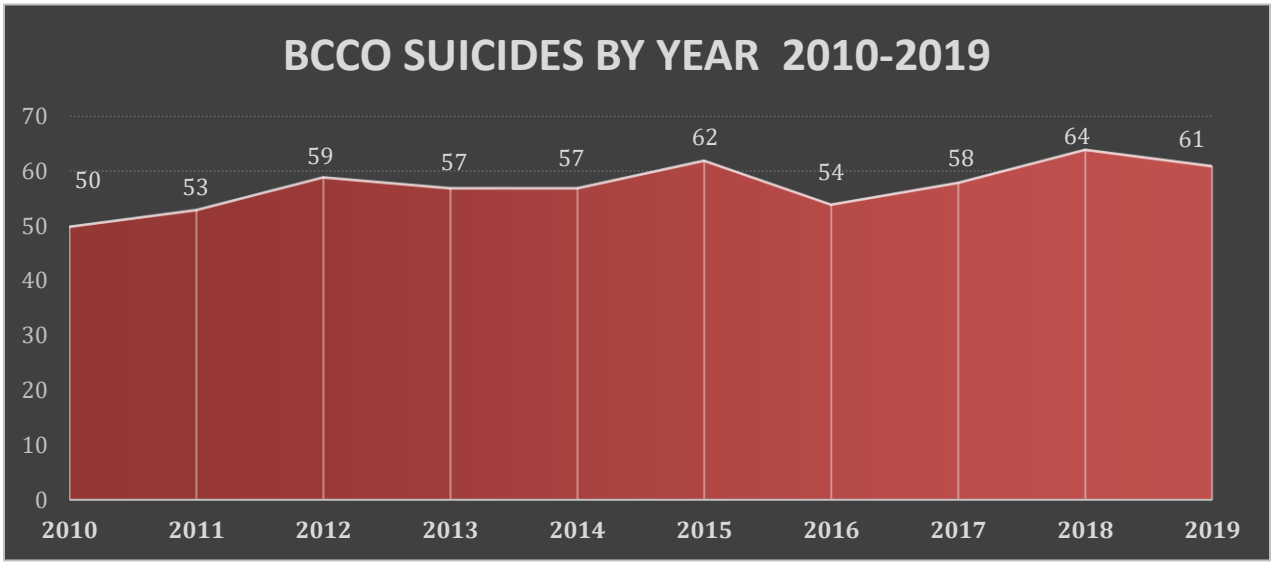
NATURAL DEATHS BY AGE AND GENDER



SUICIDES

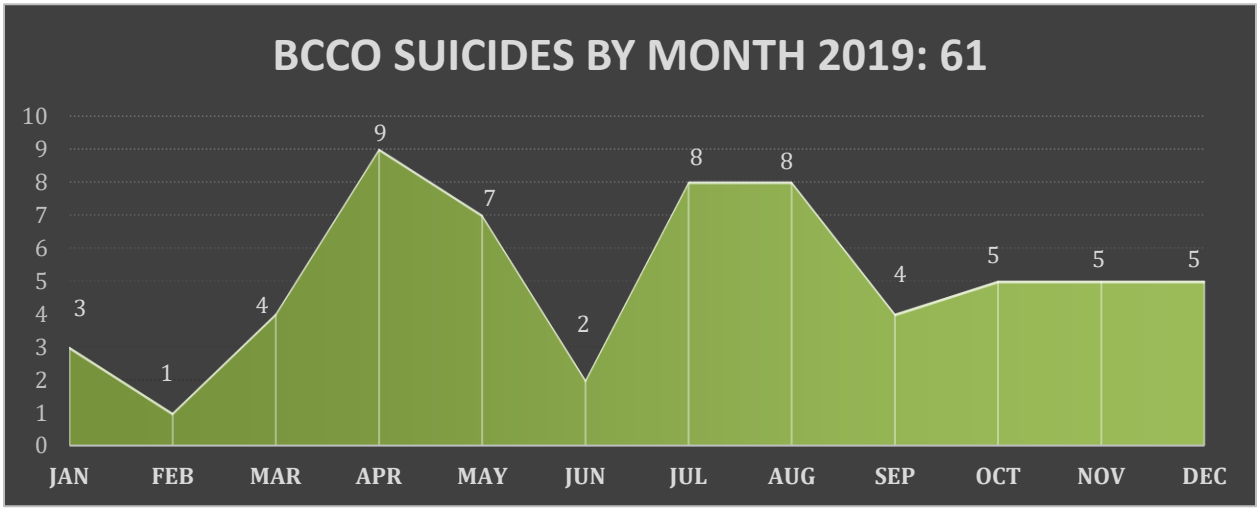
Suicide is defined as the intentional act of killing oneself. Nationally, men are 3.56 times more likely to commit suicide than women.[2] but women attempt suicide more frequently than men. The most common method of committing suicide is with firearms, followed by hanging, suffocation, and ingestion of poisons.[3] In 2019 in Boulder County, the most common method used was a firearm, followed by hanging and then by prescription medication.

SUICIDES BY YEAR



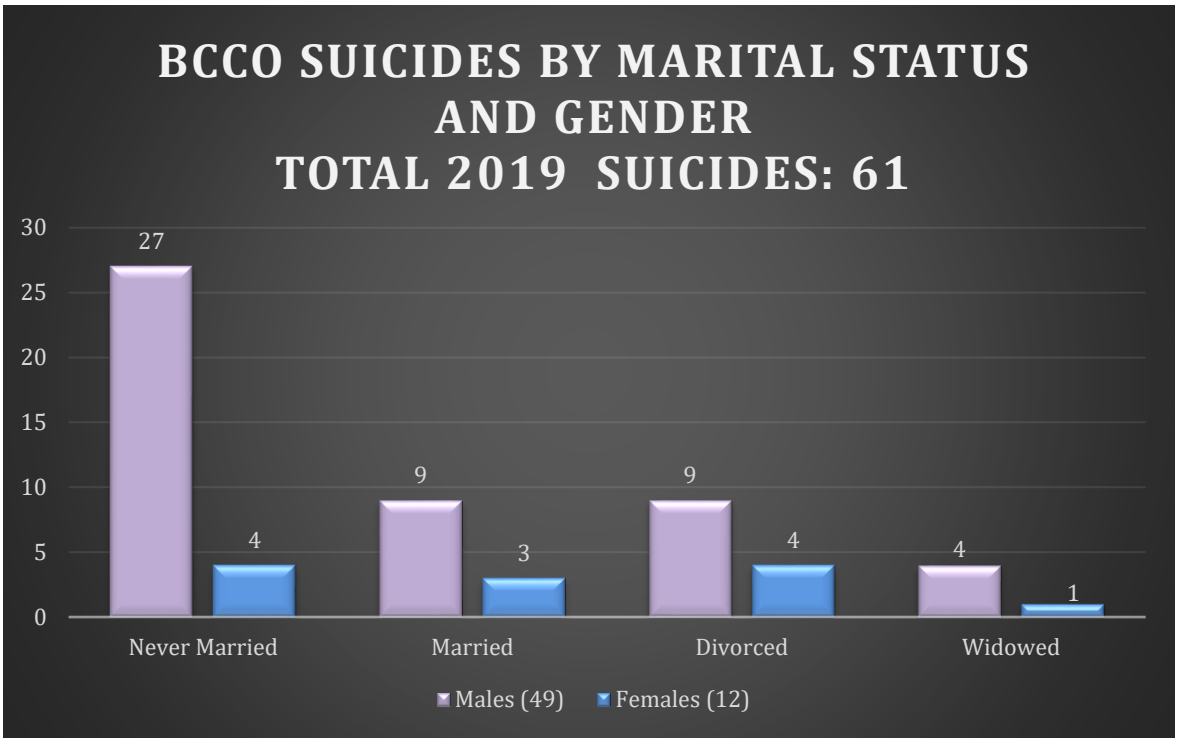
Note: There were a total of 65 suicides reported to the Boulder County Coroner's Office in 2019. The Boulder County Coroner's Office investigated 61 of those cases and transferred jurisdiction of 4 cases to other coroners.

SUICIDES BY MONTH

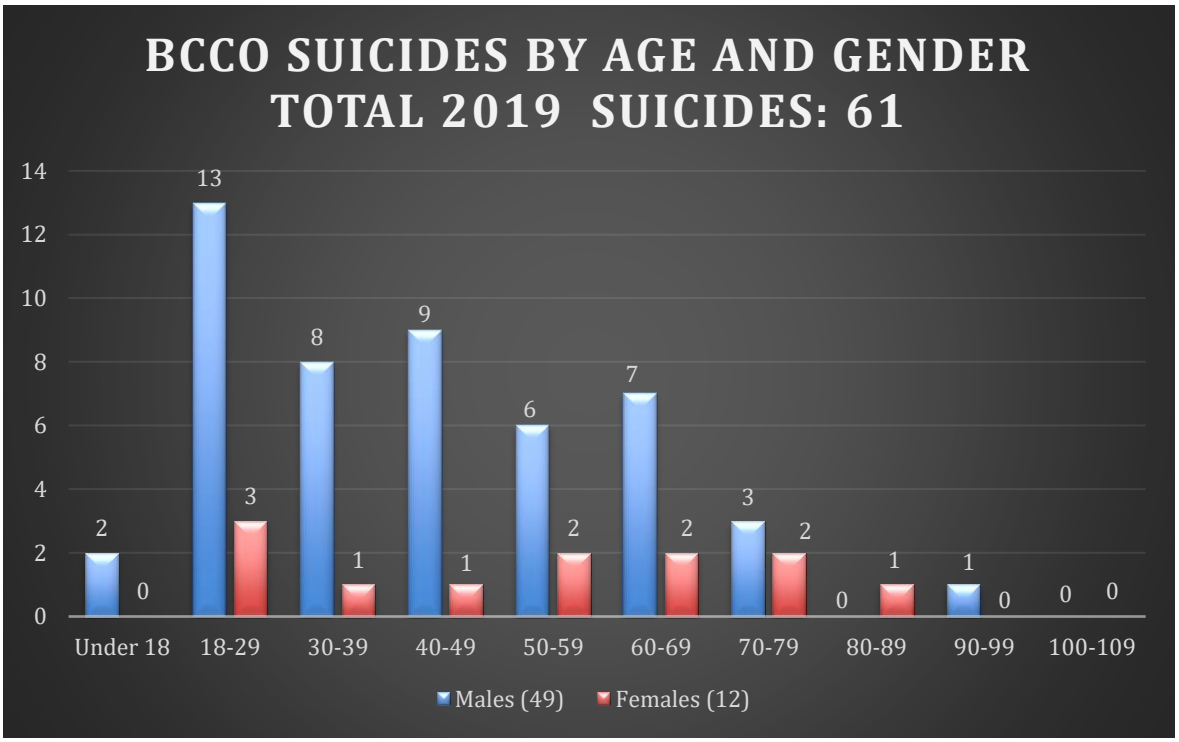


Note: Thirteen of the suicides were non-Boulder County residents.

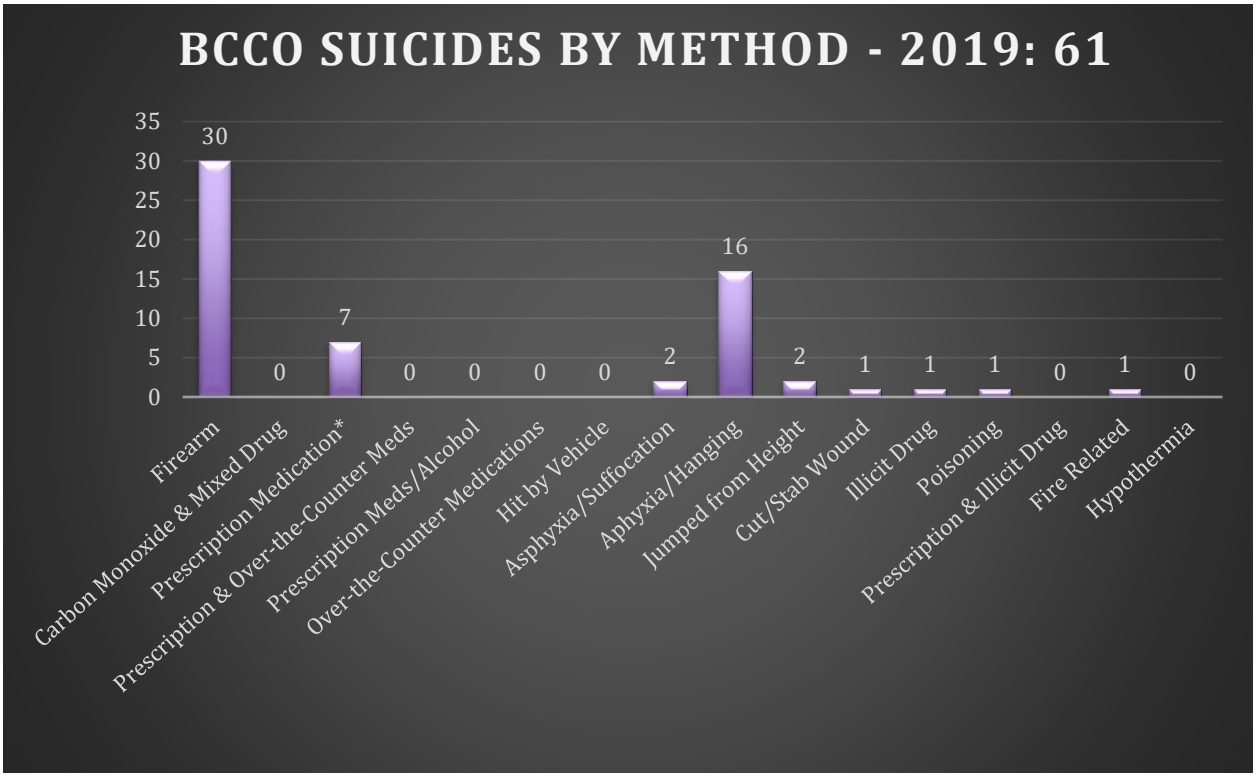
SUICIDES BY MARITAL STATUS AND GENDER



SUICIDES BY AGE AND GENDER

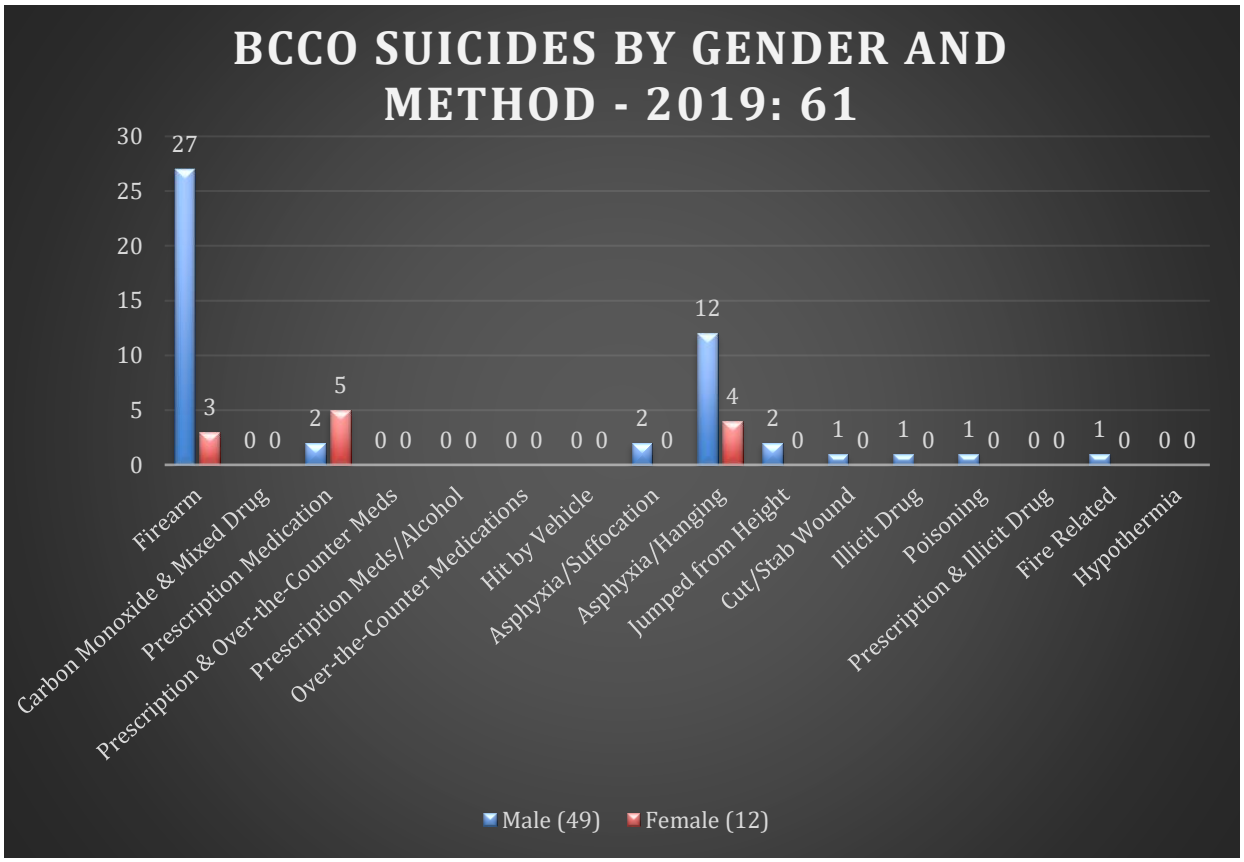


SUICIDES BY METHOD

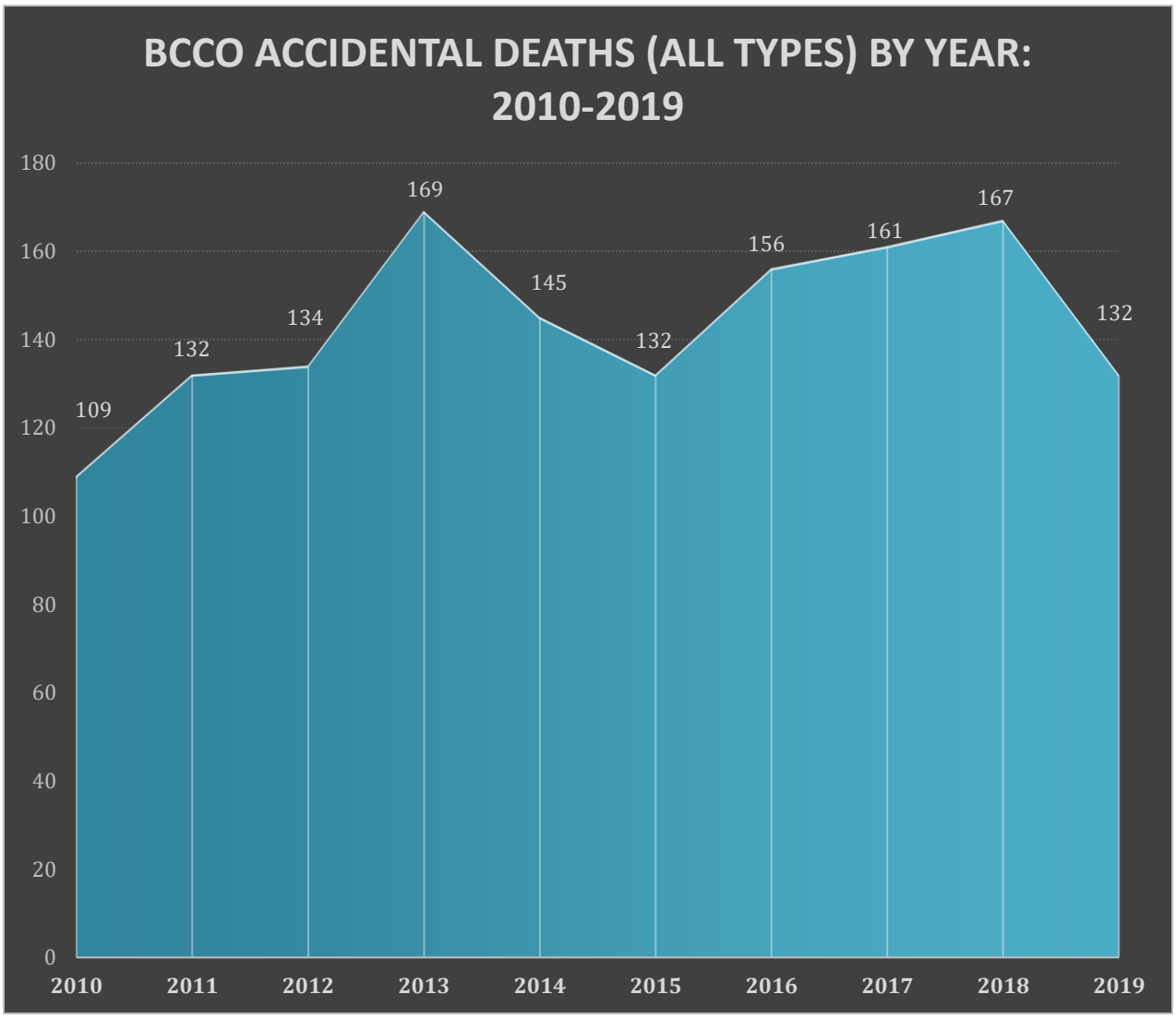


Note: *One of these cases was in the setting of drowning.

SUICIDES BY GENDER AND METHOD



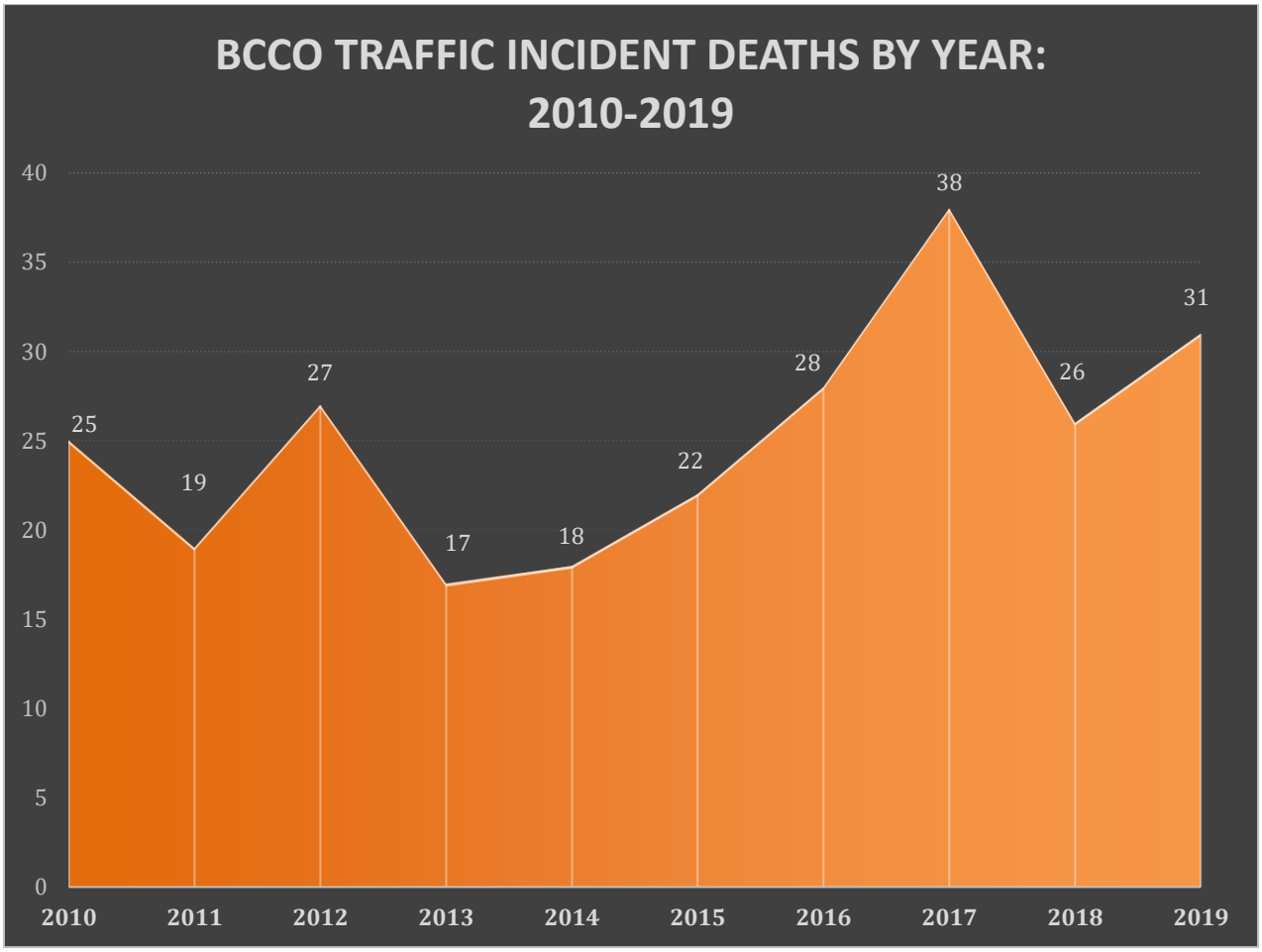
ACCIDENTAL DEATHS BY YEAR, ALL TYPES



Note: In 2019, a total of 170 accidental deaths were reported to the Boulder County Coroner, 38 of those cases were transferred to other coroners.

TRAFFIC INCIDENT DEATHS BY YEAR

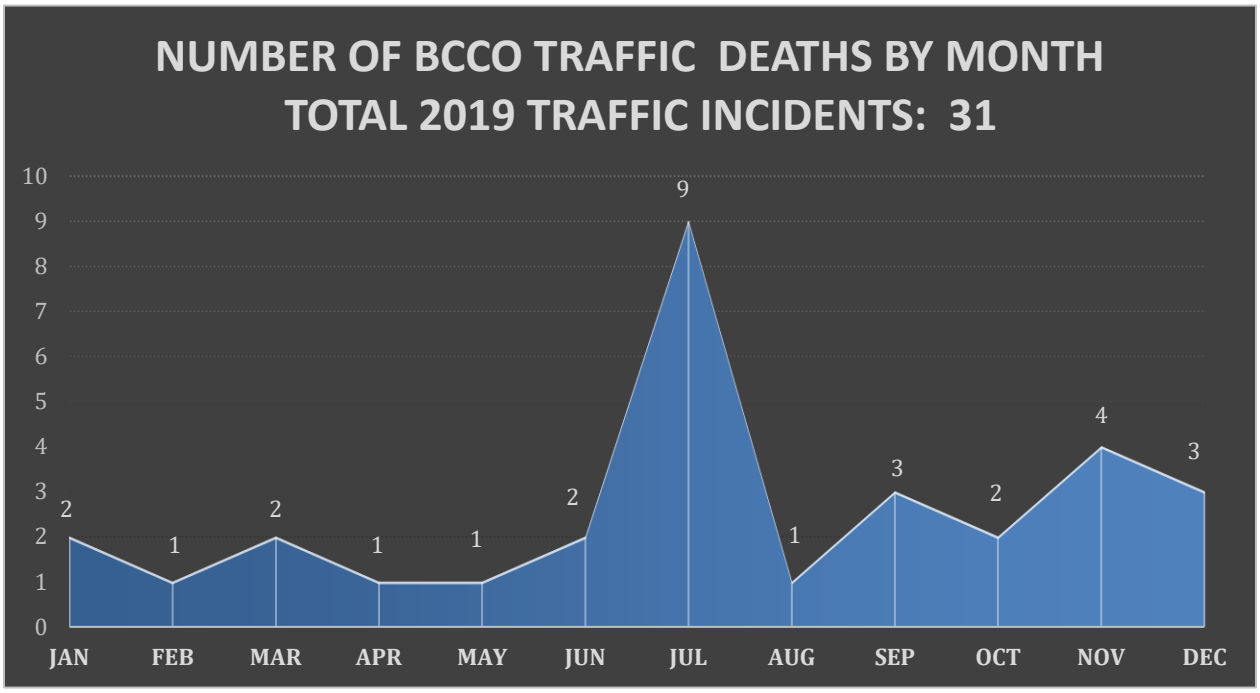
For the purpose of this report, deaths of occupants of a motor vehicle, motorcycle, bicycle-vehicle incidents, or all-terrain vehicle, and vehicle-pedestrian incidents, are considered to be traffic incident deaths.



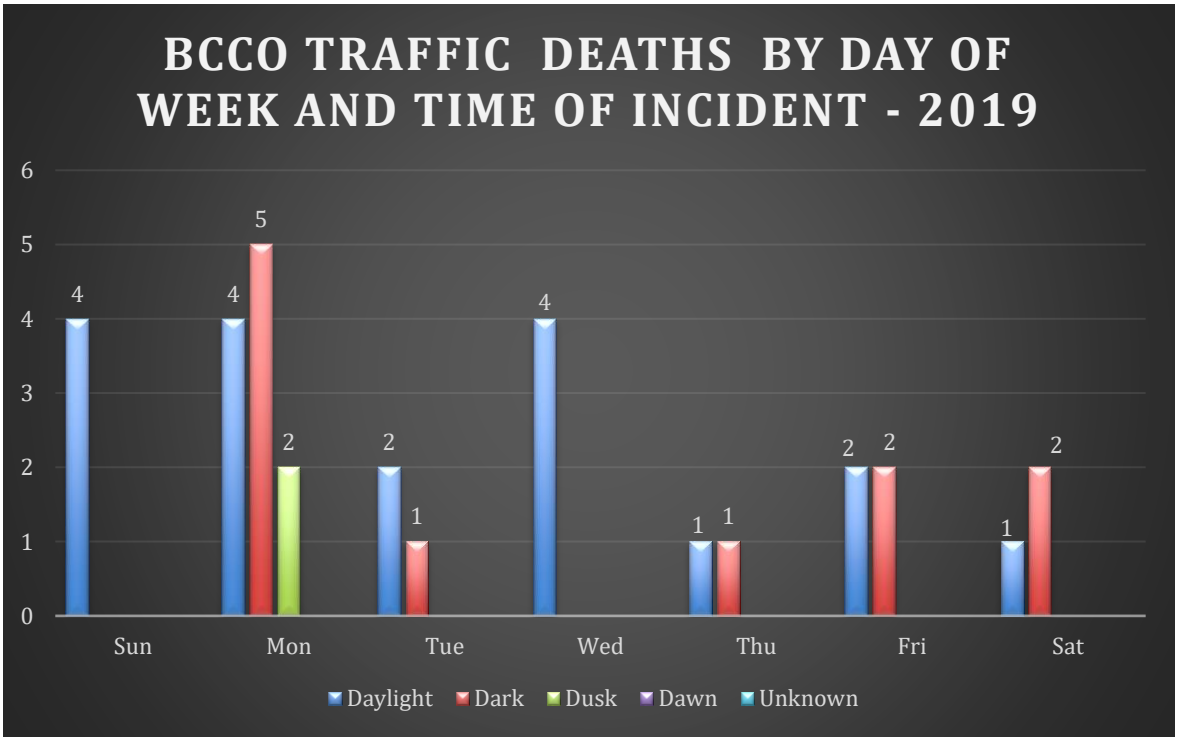
The Boulder County Coroner's Office investigated thirty-one deaths resulting from traffic incidents in 2019, all of which occurred in Boulder County. Of the thirty-one cases, twenty-six of the victims were male and five were female. Their ages ranged from 17 to 91 years of age. Nineteen people died due to injuries or complications from injuries sustained in motor vehicle incidents (including automobiles, pickup trucks, SUVs and vans), 4 people died in motorcycle incidents, 4 people died as a pedestrian struck by a motor vehicle, 3 people that died were bicyclists involved in a collision. Among the 19 vehicle fatalities, 16 were drivers and 3 were passengers. Six of the drivers were wearing seatbelts. Of the motorcycle deaths, all 4 were drivers, 2 of which were wearing a helmet.

Note: There were a total of 43 traffic incident deaths reported to the Boulder County Coroner's Office in 2019. The Boulder County Coroner's Office investigated 31 of these cases; the other 11 cases were transferred to another coroner's jurisdiction.

TRAFFIC DEATHS BY MONTH

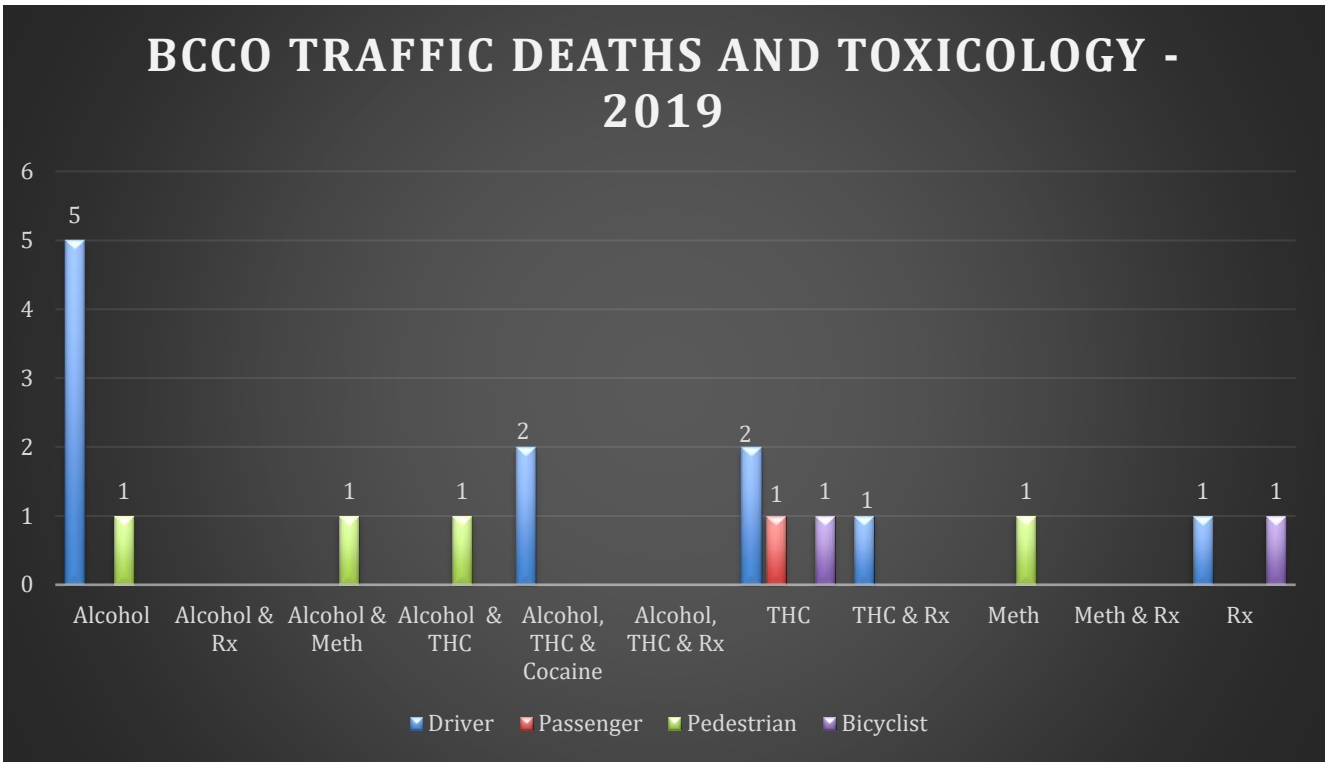


TRAFFIC DEATHS BY DAY OF WEEK AND TIME OF INCIDENT



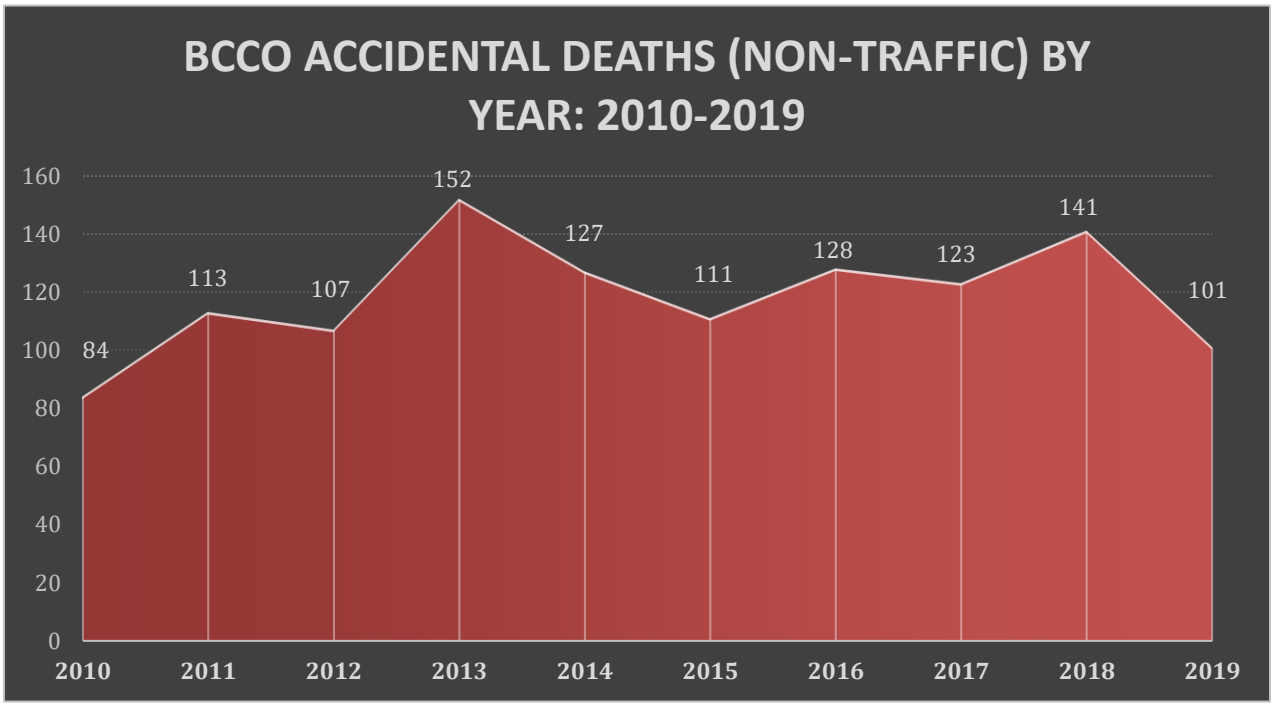
Note: The graph displays the information based on the time of incident, not the death.

ALCOHOL AND TRAFFIC DEATHS



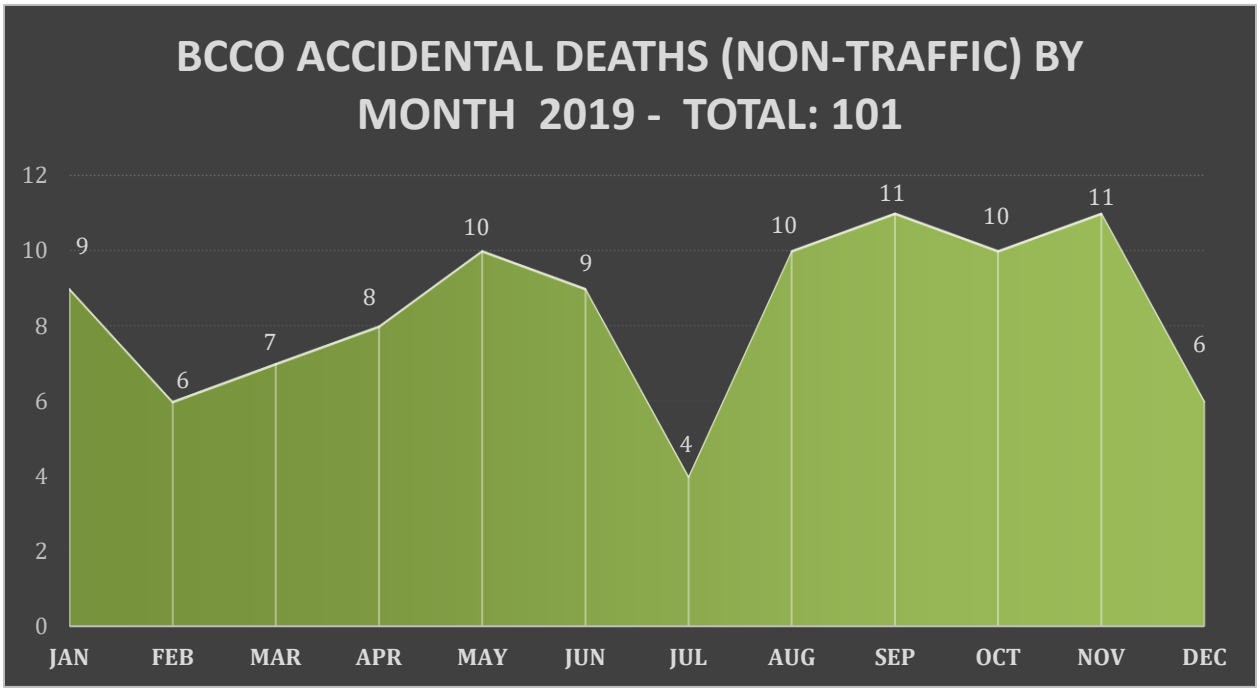
In Colorado in 2019, a driver is presumed to be Driving While Ability Impaired (DWAI) when a blood alcohol or breath concentration (BAC) is between .050% and .079%. Prior to July 1, 2004, the blood alcohol concentration threshold was .10% to be considered Driving Under the Influence (DUI). As of July 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.

NON-TRAFFIC ACCIDENTAL DEATHS

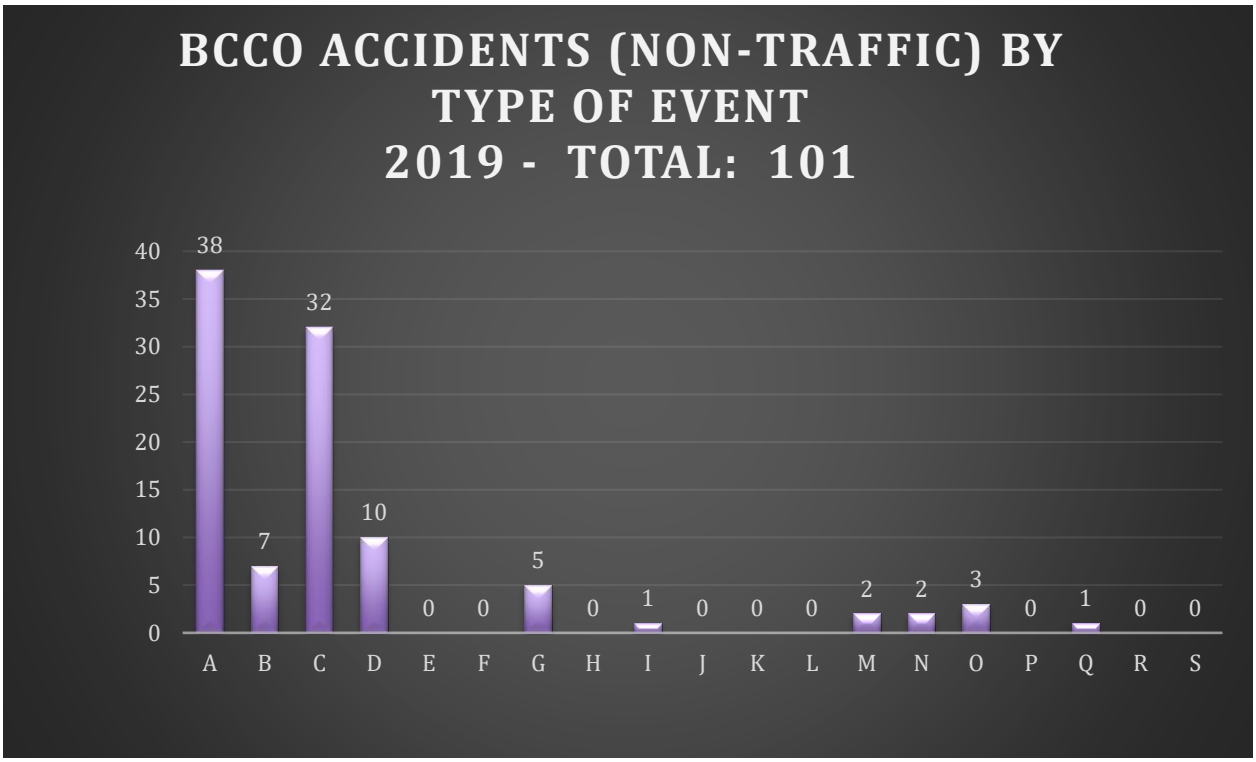


Note: There were a total of 128 non-traffic accidents reported to the Boulder County Coroner's Office in 2019. The Boulder County Coroner's Office investigated 101 of those cases and transferred jurisdiction of 27 cases to other coroners.

NON-TRAFFIC ACCIDENTS BY MONTH



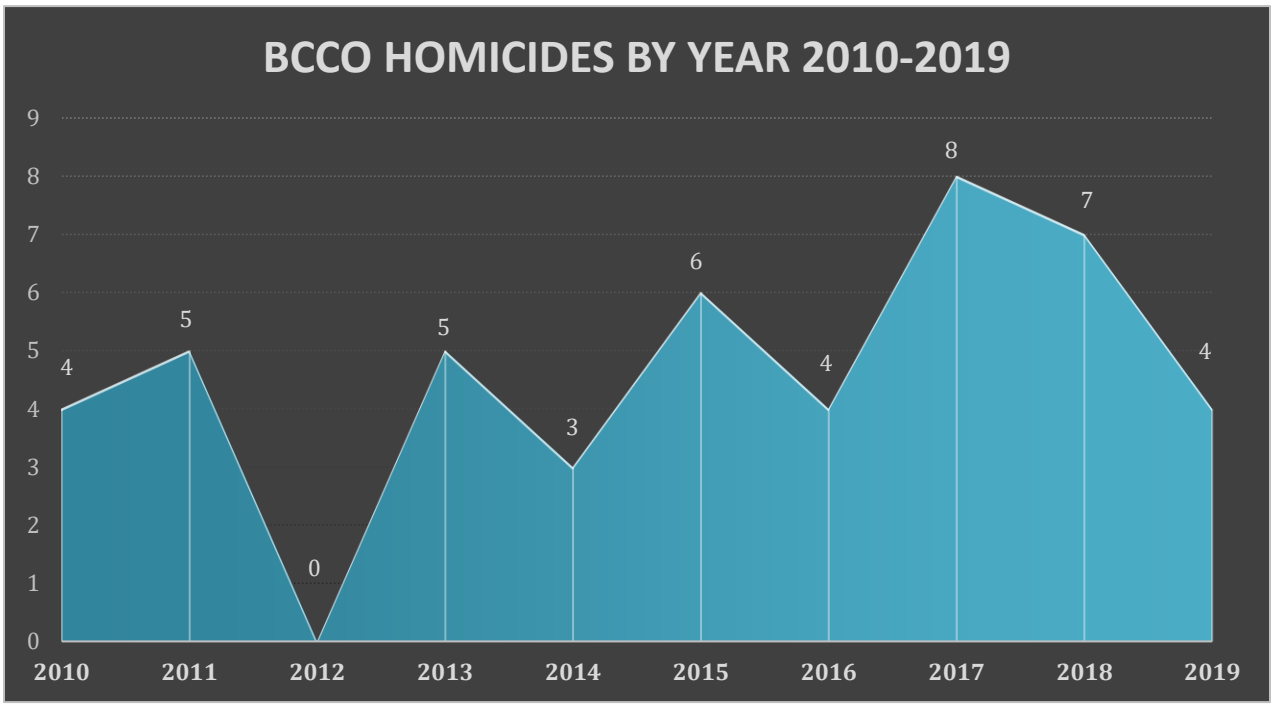
NON-TRAFFIC ACCIDENTAL DEATHS BY TYPE OF EVENT



LEGEND:

A - Fall (Non-Recreational)
B - Fall/Recreational
C - Drug Overdose/Intoxications (All Types)
D - Drug Overdose in combination with Alcohol
E - Alcohol
F - Asphyxia
G - Drowning
H - Electrocution
I - Fall from Height
J - Aspirated on Food
K - Medical Misadventure
L - Airplane Crash
M - Environmental
N - Thermal Injuries
O - Blunt Force/Sharp Force Injuries
P - Injury due to Animal
Q – Industrial
R – Firearms Related
S - Unknown

HOMICIDES BY YEAR



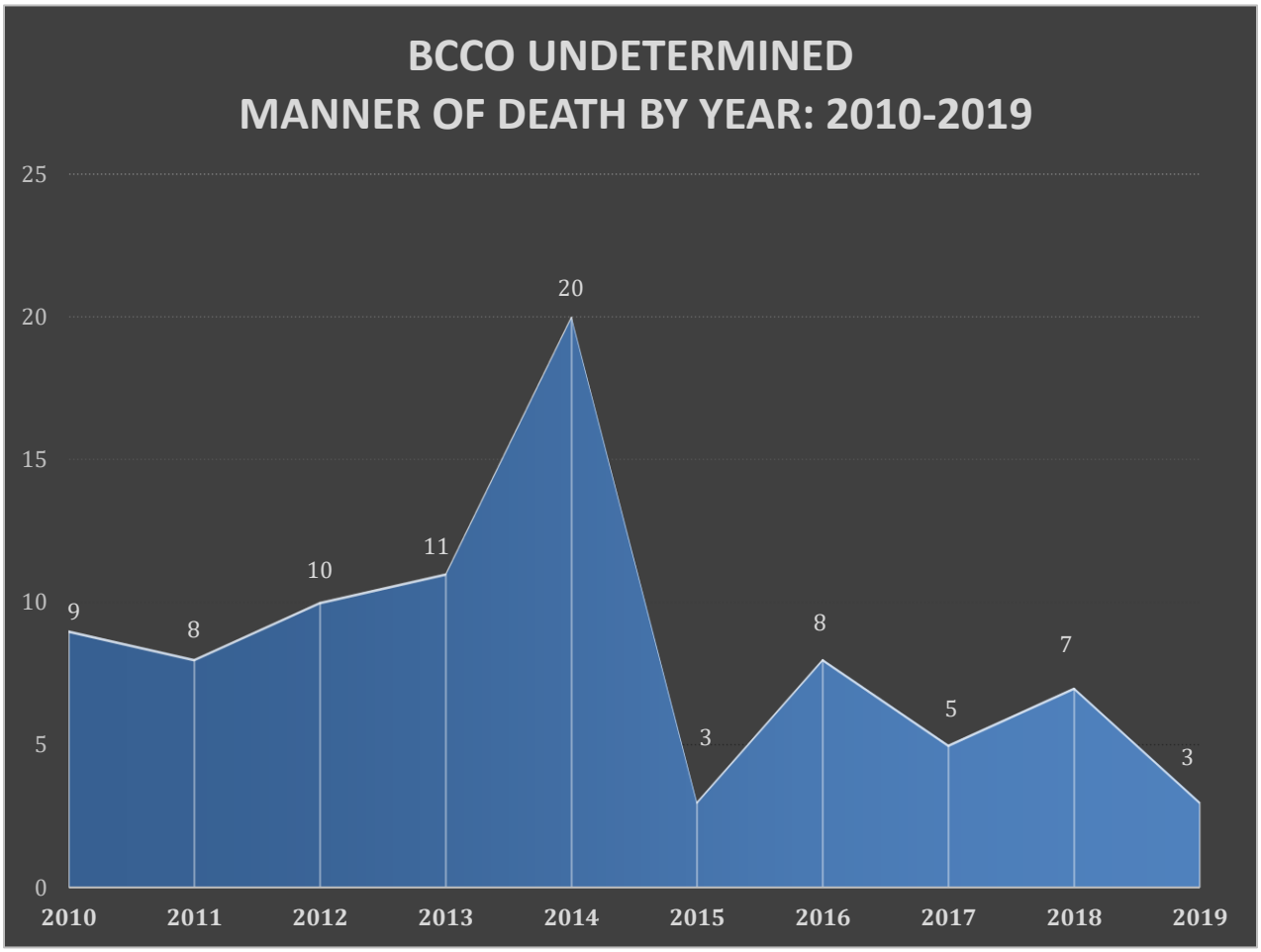
HOMICIDES BY MONTH

Note: In 2019, 3 of the victims of homicide were male, and 1 was female. Three of the victims died of blunt and/or sharp force injures, the forth victim died of homicidal violence. There was a total of 10 homicides reported to the Boulder County Coroner's Office in 2019. The Boulder County Coroner's Office investigated 4 of these cases; there were 6 cases that were transferred to another coroner's jurisdiction.

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.

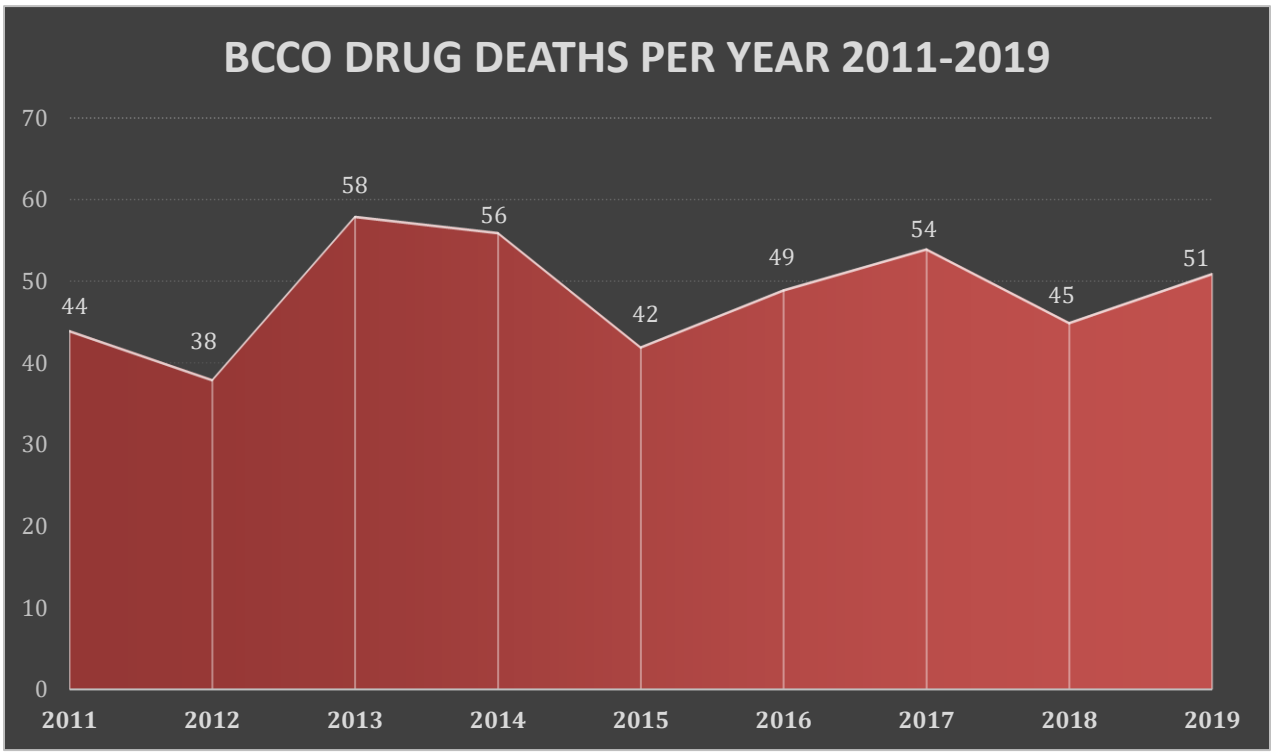
UNDETERMINED MANNER BY YEAR



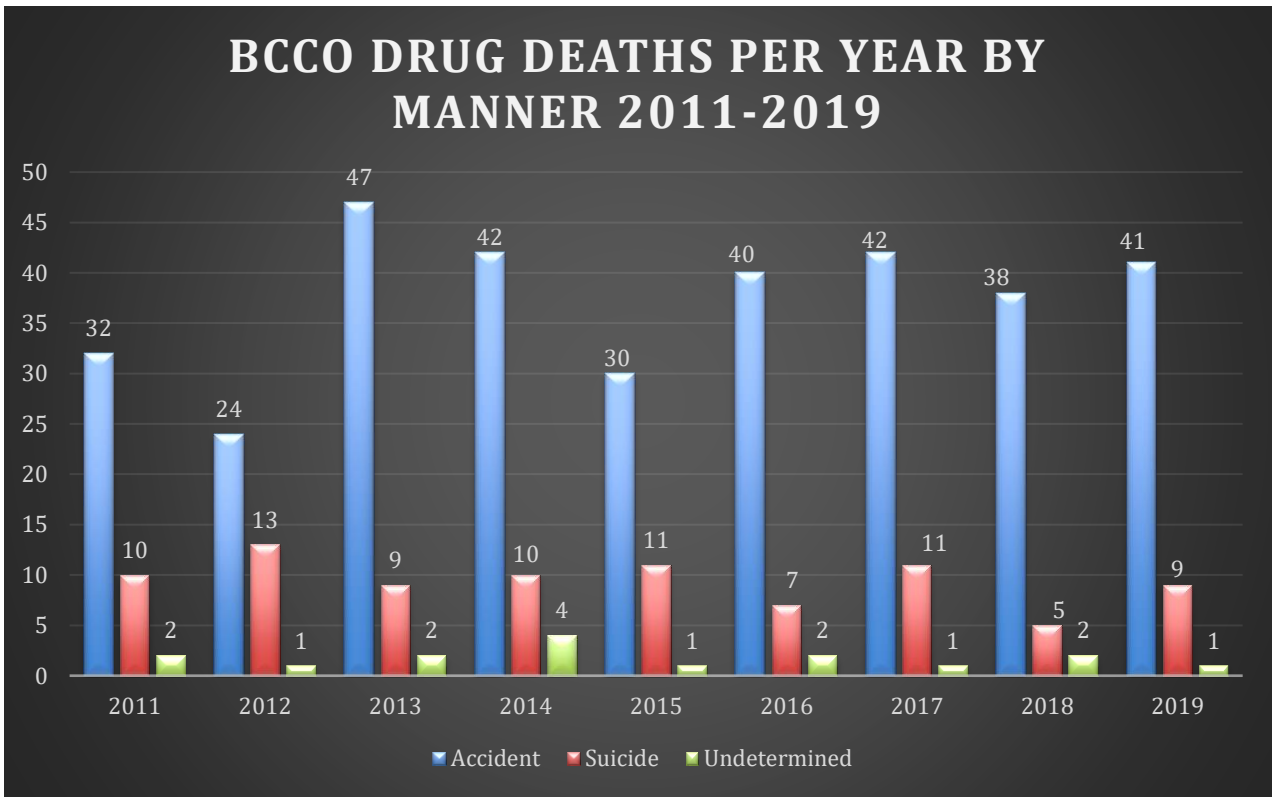
Note: There were a total of 6 cases reported to the Boulder County Coroner's Office in 2019 that were ruled with an undetermined manner of death; 3 of the cases transferred to another coroner's office were ruled undetermined in 2019.

While the office ruled undetermined for the manner of death in these 3 cases in 2019, 1 of the cases listed an undetermined cause of death as well because a specific cause of death could not be interpreted.

DRUG DEATHS BY YEAR 2011-2019

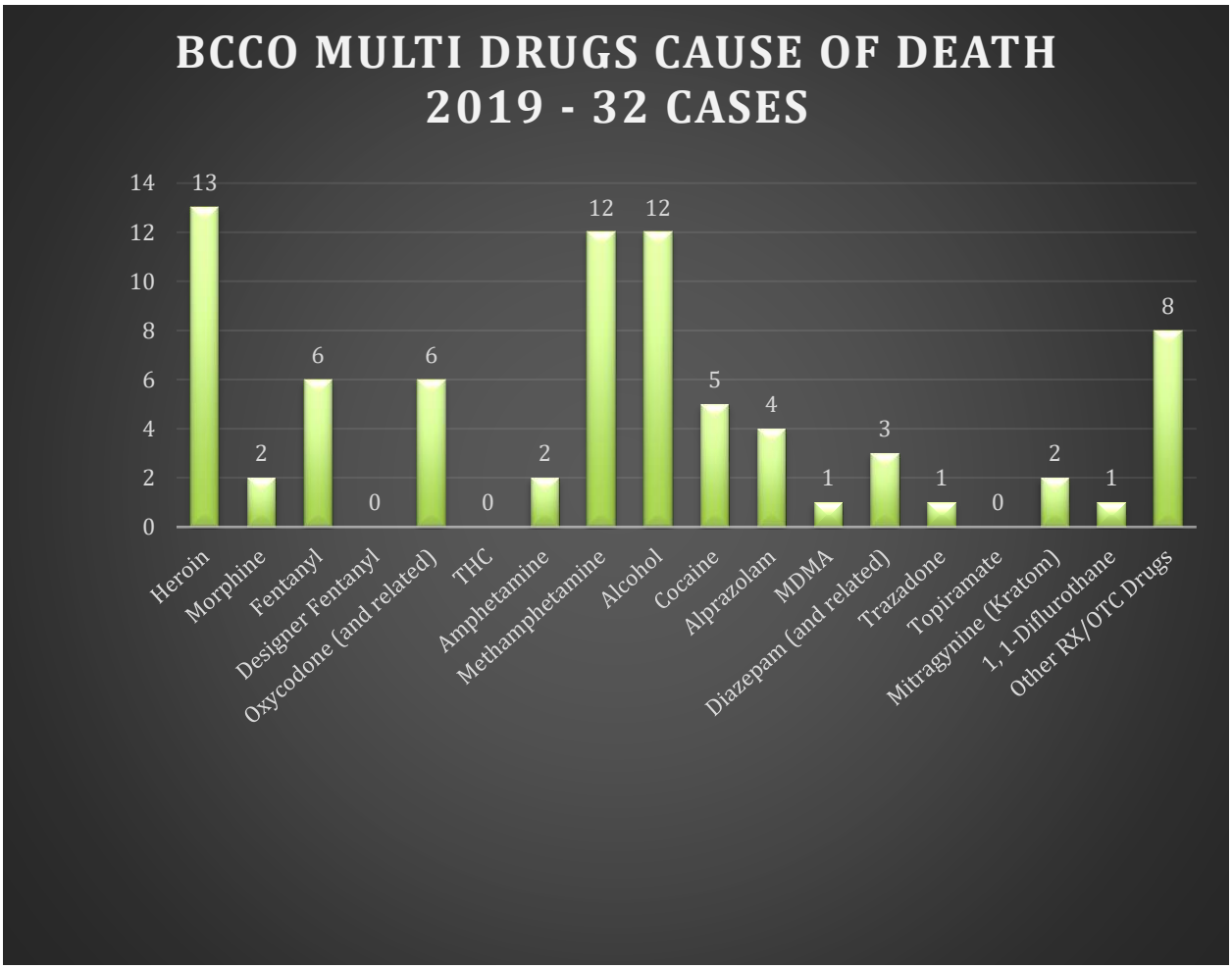


DRUG DEATHS BY MANNER 2011-2019



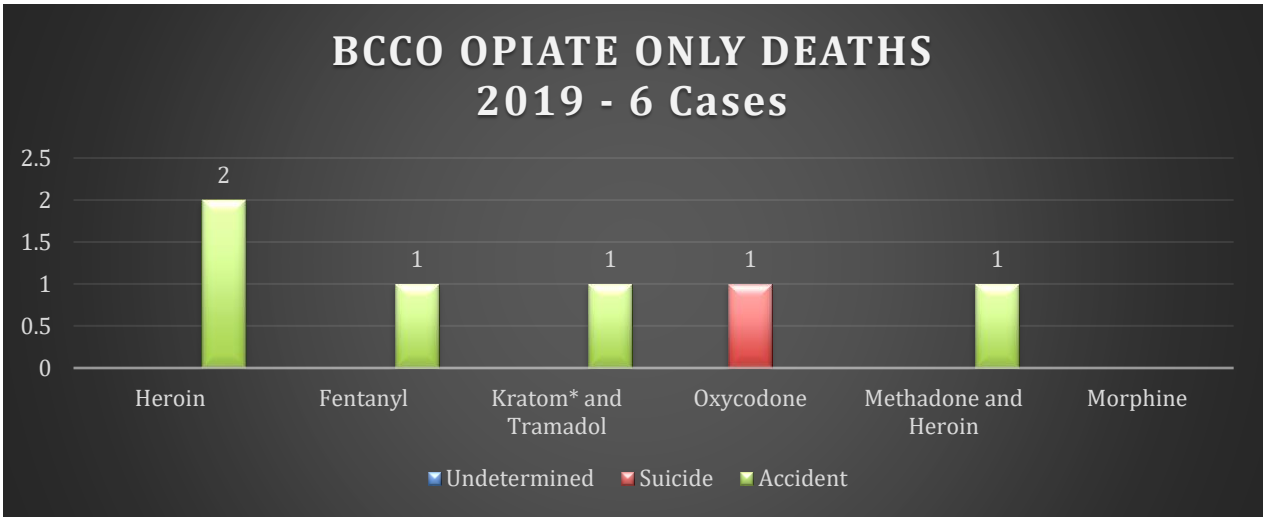
DRUGS OF ABUSE: MULTI DRUG DEATHS

Many drug abuse deaths are listed with multi drug intoxication for the cause of death; this is due to the complications that come from interpreting the use of more than one drug at a time, their individual levels and the combined effects of the varying levels. The chart below indicates the drugs that were found in the 32 multi drug deaths the county had in 2019.



DRUGS OF ABUSE BY OPIATES

Opioid is used to designate all substances, both natural and synthetic, that bind to opioid receptors in the brain. The psychoactive compounds found in the opium plant include morphine and codeine. Heroin is one of several semi-synthetic opioids derived from the morphine. Examples of opioids include Heroin, Morphine, Methadone, Merpidine, Codeine, Tramadol, Oxycodone, Hydrocodone, Hydromorphone, and Fentanyl.

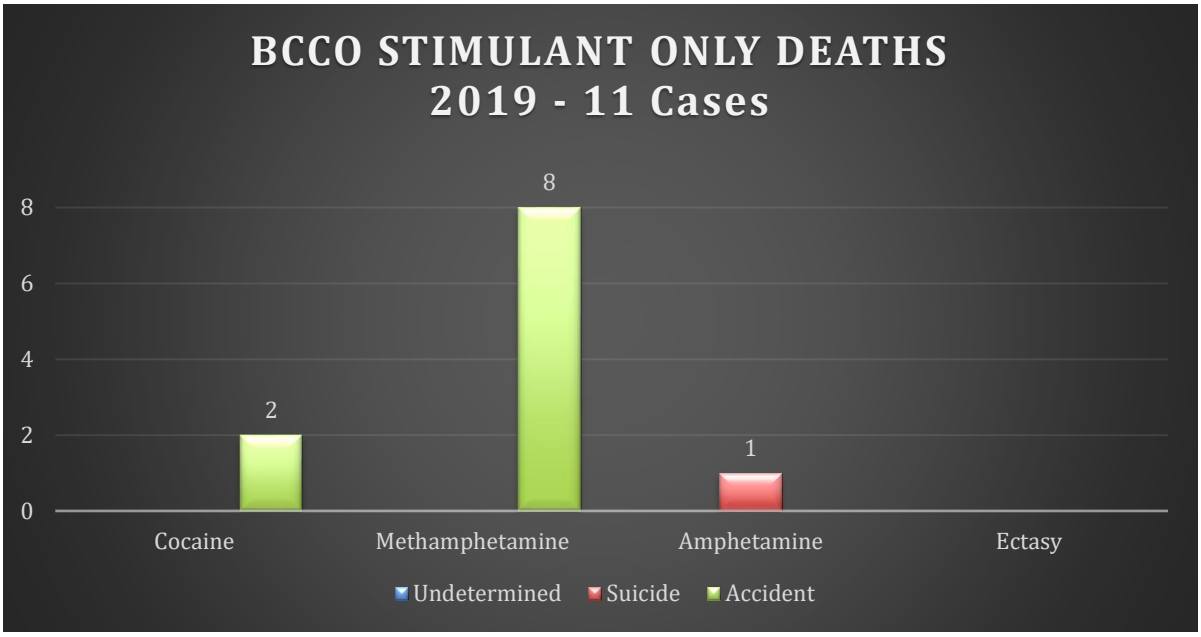


Note: * Mitragynine is an alkaloid found in the plant Kratom which originates from Asia. The leaves of the plant are consumed for their stimulant and analgesic effects and these effects are attributed to mitragynine. Mitragynine interacts with opioid receptors in the brain and can cause similar effects to those of more well-known pharmaceutical opioids. However, mitragynine has reportedly been known to act as a stimulant as well depending upon dosage. At this time the substance is being researched and investigated by the DEA along with the greater medical community to better understand its potential uses, classification, and any concerns it may pose to the general public.

In addition to the 6 opiate only deaths listed in the chart above, there were an additional 24 cases where the death was a result of opiates mixed with additional substances and are considered a Multi Drug Death.

DRUGS OF ABUSE BY STIMULANTS

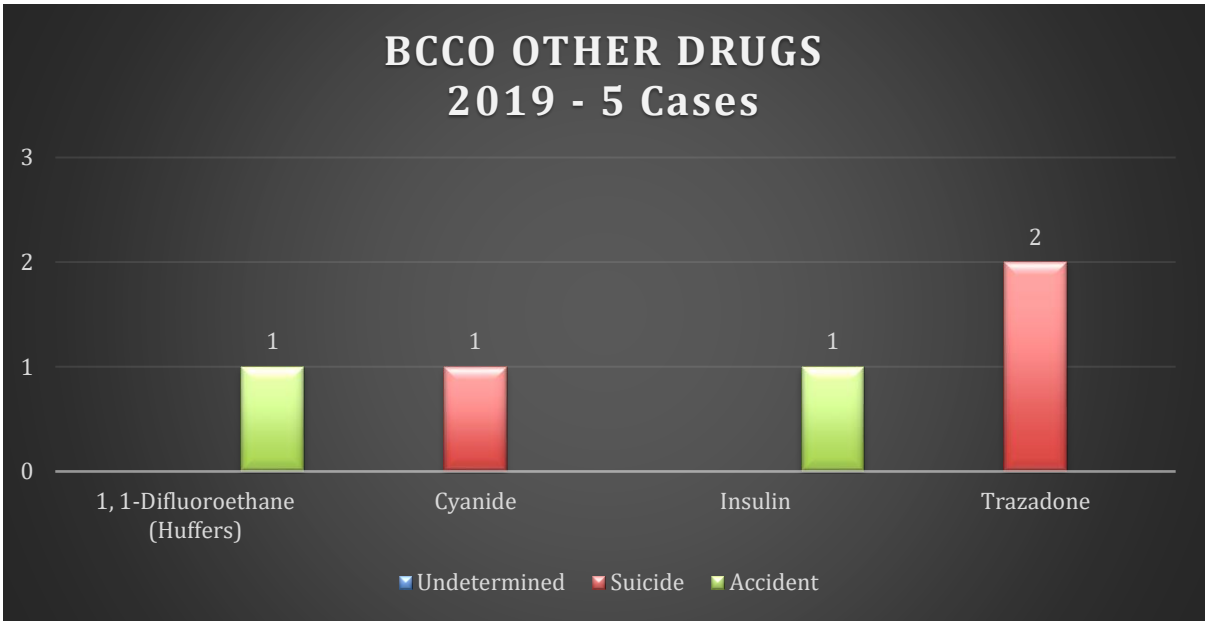
Stimulants (also known as psychostimulants) is a broad term that covers many drugs including those that increase activity of the body, drugs that are pleasurable and invigorating, and drugs that have sympathomimetic effects. Due to their characteristic "up" feeling, stimulants are also occasionally referred to as "uppers". Stimulants are widely used throughout the world as prescription medicines as well as without a prescription (either legally or illicitly) as performance-enhancing or recreational drugs. Examples of stimulants include Cocaine, Amphetamine, Methylene-3,4 dixoy-Methamphetamine (MDMA), Methamphetamine, ecstasy, bath salts, Focalin, Adderall and Ritalin.



Note: In addition to the 11 stimulant only deaths listed in the chart above, there were an additional 20 cases where the death was a result of stimulants mixed with additional substances and are considered a Multi Drug Death.

DRUGS OF ABUSE: OTHER CATEGORIES

These drugs represent a wide variety of substances abused in Boulder County. Some can be purchased at liquor stores, some require prescriptions from a medical doctor and some are manufactured or purchased elsewhere.



1, 1-Difluoroethane (DFE) is a colorless and essentially odorless gas that is used as a non-ozone depleting propellant. It is most commonly found in dust-off cans and electronics cleaners. It may also be found as a refrigerant and chemical intermediate. Inhalation may result in a feeling of light-headedness and disorientation; however in higher concentrations, abuse may lead to cardiac dysrhythmias and sudden death. The death noted above was also considered a Multi Drug Death.

Cyanide is a rapidly acting, potentially deadly chemical that can exist in various forms. Cyanide can be a colorless gas or a crystal form. Cyanide is sometimes described as having a "bitter almond" smell but it does not always give off an odor, and not everyone can detect this odor. The extent of poisoning caused by cyanide depends on the amount of cyanide a person is exposed to, the route of exposure, and the length of time that a person is exposed. Breathing cyanide gas causes the most harm, but swallowing cyanide can be toxic as well. Cyanide gas is most dangerous in enclosed places. Cyanide prevents the cells of the body from using oxygen. When this happens, the cells die. Cyanide is more harmful to the heart and brain than to other organs because the heart and brain use a lot of oxygen.

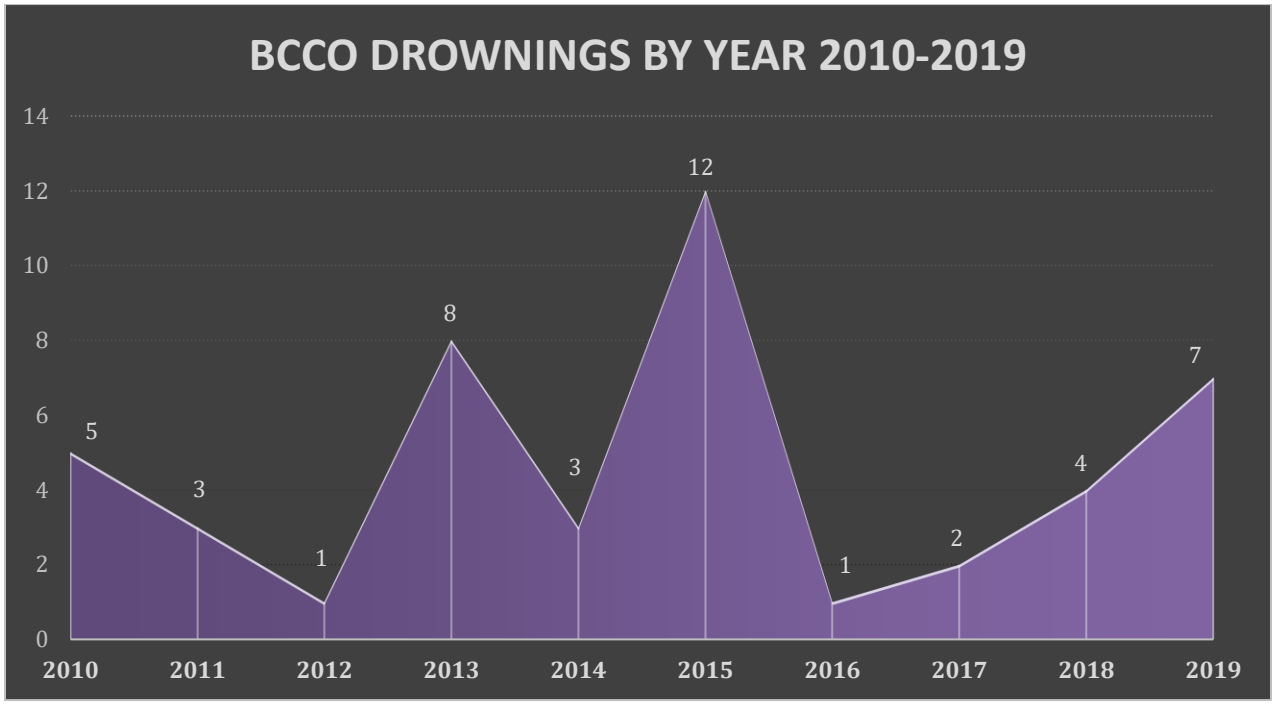
Insulin is a naturally occurring hormone in the human body secreted by the pancreas. Many people with diabetes are prescribed insulin, either because their bodies do not produce insulin or do not use insulin properly. Misuse of insulin can be potentially deadly and may be ruled accidental or suicidal depending upon circumstances.

Trazodone is an antidepressant that belongs to a group of drugs called selective serotonin reuptake inhibitors. It affects chemicals in the brain that may be unbalanced in people with depression. Trazodone is used to treat major depressive disorder. It may help to improve your mood, appetite, and energy level as well as decrease anxiety and insomnia related to depression. Trazodone works by helping to restore the balance of a certain natural chemical (serotonin) in the brain.

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 2019, there were seven total drowning cases. Six of the cases were ruled as accidents, and one was ruled a suicide. Two of the drownings occurred in residential bathtubs, one of which was in combination with cocaine, THC and a history of epilepsy and the other of which was in combination with THC only. The other five drownings occurred outdoors in various places (pond, creek), one of which occurred in combination with cocaine, THC and OTC medications, two were in combination with alcohol and prescription drugs, one was in combination with THC only and one was in combination with prescription drugs, alcohol and THC (ruled a suicide).



Note: Four of the drowning deaths from 2013 were from the September flood.

CHILD DEATHS

In 2013 Senate Bill 13-255 passed mandating that starting January 1st, 2015 each county form a local Child Fatality Review and Prevention Team (CFRPT). Moving the reviews to local teams from the state team would create a broader scope, with the state mandating which cases would be reviewed (birth – 17) that involve unintentional injury, violence, motor vehicle incident, child abuse/neglect, sudden unexpected infant death, suicide or undetermined cases. The teams provide the state with individual case findings to develop a community approach to issues surrounding child deaths. They review manner and cause of death and evaluate the means by which the fatality might have been prevented. The teams report case findings to public/private agencies that have responsibilities for children and make prevention recommendations to reduce the number of child fatalities.

Each team must consist of the following:

- County department(s) of public health
- Local law enforcement agencies
- District attorney's office
- School districts
- County department(s) of human services
- Coroner's office
- County attorney's office

Additional agencies that may be included are: hospitals or other emergency medical services, social services, mental health professionals, pediatricians, child advocacy centers, and victim advocates.

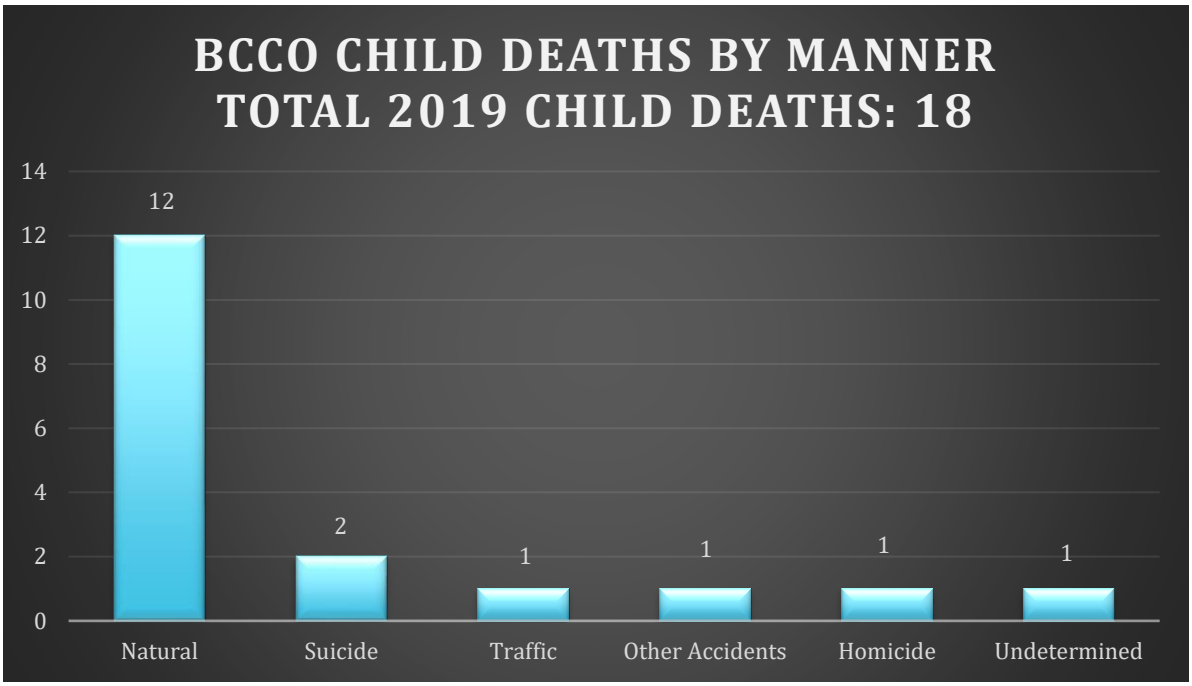
In 2014, the office worked closely with the Public Health Department to bring the agencies together so that the team could start reviewing the 2014 child deaths starting in January of 2015. Public Health asked the Coroner's Office to become the coordinator for the team; currently Boulder County is the only county in Colorado to participate in this way as the coordinator. In 2019, the team reviewed five 2018 child death cases.

In Boulder County, a total of 18 child deaths (<18 years of age) were investigated by the Coroner's Office in 2019. Four additional child death cases were transferred to other coroners. Any of the eighteen 2019 child death cases selected for review by the state will be reviewed in 2020 by the Boulder County Child Fatality Review and Prevention Team.

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.

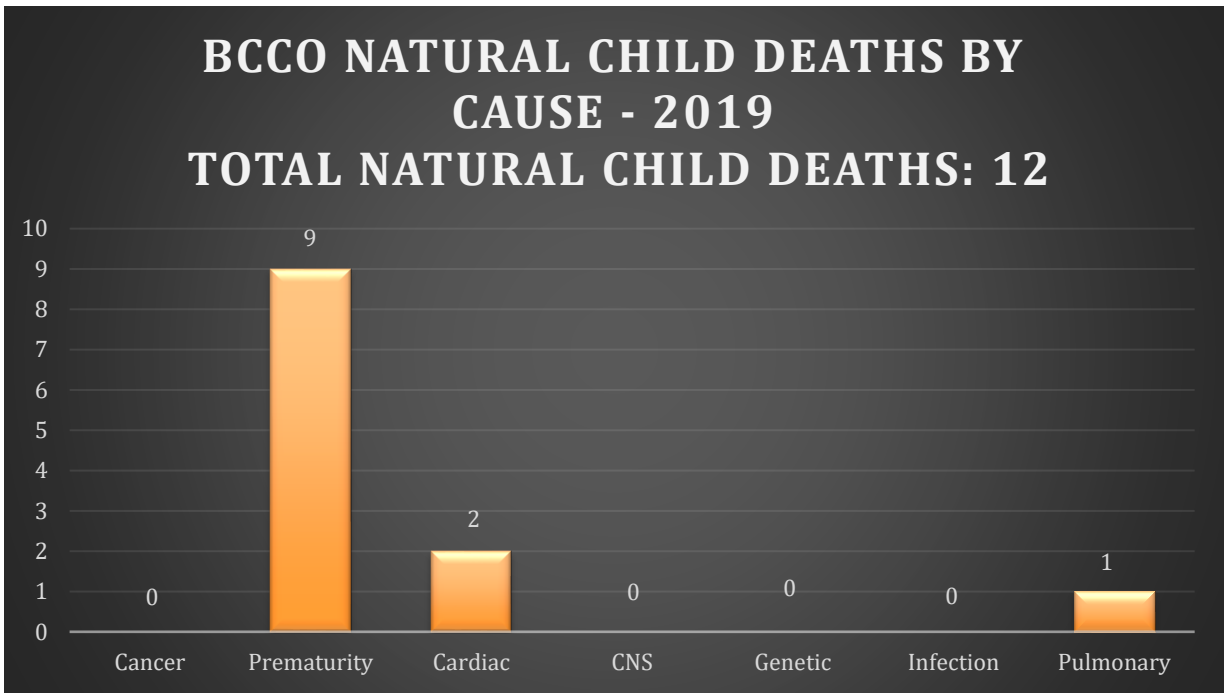
BCCO Conference room where CFRPT meetings are held.

CHILD DEATHS BY MANNER OF DEATH



- **Suicide:** The suicide deaths were a result of: shotgun wound of the head (age 16) and blunt force injuries sustained in a jump (age 17).
- **Traffic:** The traffic death was due to blunt force injuries sustained in a motor vehicle incident (age 17).
- **Accident:** The accidental death was due to blunt force injuries sustained during an ATV incident (age 10).
- **Homicide:** The homicide was due to blunt force injuries (age 1 year, 4 months).
- **Undetermined:** One undetermined case was ruled a Sudden Unexplained Death while bedsharing with 2 adults (age 1 month).

CHILD DEATHS BY CAUSE OF NATURAL DEATHS



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

The Center for Disease Control and Prevention (CDC) defines sudden unexplained infant death (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 sudden infant death syndrome (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. While the CDC has separate definitions for these two terms, the classification of the manner of death and written description of the cause of death in these types of cases do vary throughout the nation.

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. Other times, there may be signs of potential issues but no clear and obvious reason for death, most often the finding of an unsafe sleep environment is found. At times, there may be no indication of potential issues and the cause of death is truly unknown.

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 deaths 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]

American Academy of Pediatrics

Organizational Principles to Guide and Define the Child Health Care System and/or Improve the Health of all Children

POLICY STATEMENT

SIDS and Other Sleep-Related Infant Deaths: Expansion of Recommendations for a Safe Infant Sleeping Environment

abstract

FREE

Despite a major decrease in the incidence of sudden infant death syndrome (SIDS) since the American Academy of Pediatrics (AAP) released its recommendation in 1992 that infants be placed for sleep in a nonprone position, this decline has plateaued in recent years. Concurrently, other causes of sudden unexpected infant death that occur during sleep (sleep-related deaths), including suffocation, asphyxia, and entrapment, and ill-defined or unspecified causes of death have increased in incidence, particularly since the AAP published its last statement on SIDS in 2005. It has become increasingly important to address these other causes of sleep-related infant death. Many of the modifiable and nonmodifiable risk factors for SIDS and suffocation are strikingly similar. The AAP, therefore, is expanding its recommendations from focusing only on SIDS to focusing on a safe sleep environment that can reduce the risk of all sleep-related infant deaths, including SIDS. The recommendations described in this policy statement include supine positioning, use of a firm sleep surface, breastfeeding, room-sharing without bed-sharing, routine immunizations, consideration of using a pacifier, and avoidance of soft bedding, overheating, and exposure to tobacco smoke, alcohol, and illicit drugs. The rationale for these recommendations is discussed in detail in the accompanying "Technical Report—SIDS and Other Sleep-Related Infant Deaths: Expansion of Recommendations for a Safe Infant Sleeping Environment," which is included in this issue of *Pediatrics* (www.pediatrics.org/cgi/content/full/128/5/e1341). *Pediatrics* 2011;128:1030–1039

INTRODUCTION

Sudden infant death syndrome (SIDS) is a cause assigned to infant deaths that cannot be explained after a thorough case investigation, including a scene investigation, autopsy, and review of the clinical history.[1] Sudden unexpected infant death (SUID), also known as sudden unexpected death in infancy, is a term used to describe any sudden and unexpected death, whether explained or unexplained (including SIDS), that occurs during infancy. After case investigation, SUIDs can be attributed to suffocation, asphyxia, entrapment, infection, ingestions, metabolic diseases, arrhythmia-associated cardiac channelopathies, and trauma (accidental or nonaccidental). The distinction between SIDS and other SUIDs, particularly those that occur during an observed or unobserved sleep period (sleep-related infant deaths), such as ac-

TASK FORCE ON SUDDEN INFANT DEATH SYNDROME

KEY WORDS

SIDS, sudden infant death, infant mortality, sleep position, bed-sharing, tobacco, pacifier, immunization, bedding, sleep surface

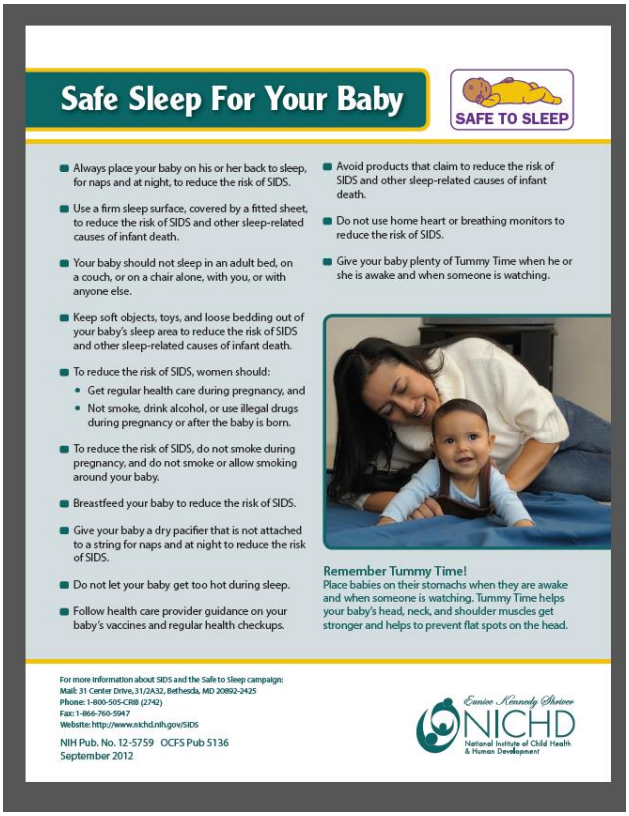
ABBREVIATIONS

SIDS—sudden infant death syndrome
SUID—sudden unexpected infant death
AAP—American Academy of Pediatrics

www.pediatrics.org/cgi/doi/10.1542/peds.2011-2284
doi:10.1542/peds.2011-2284

PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).

Ongoing efforts to encourage safe sleep environments are also being made by the CDC and the National Institute of Child Health and Human Development (NICHD). The NICHD among other literature has published brochures advertising safe sleep. Many of these resources can be found on the CDC's website www.cdc.gov. An example is provided below.



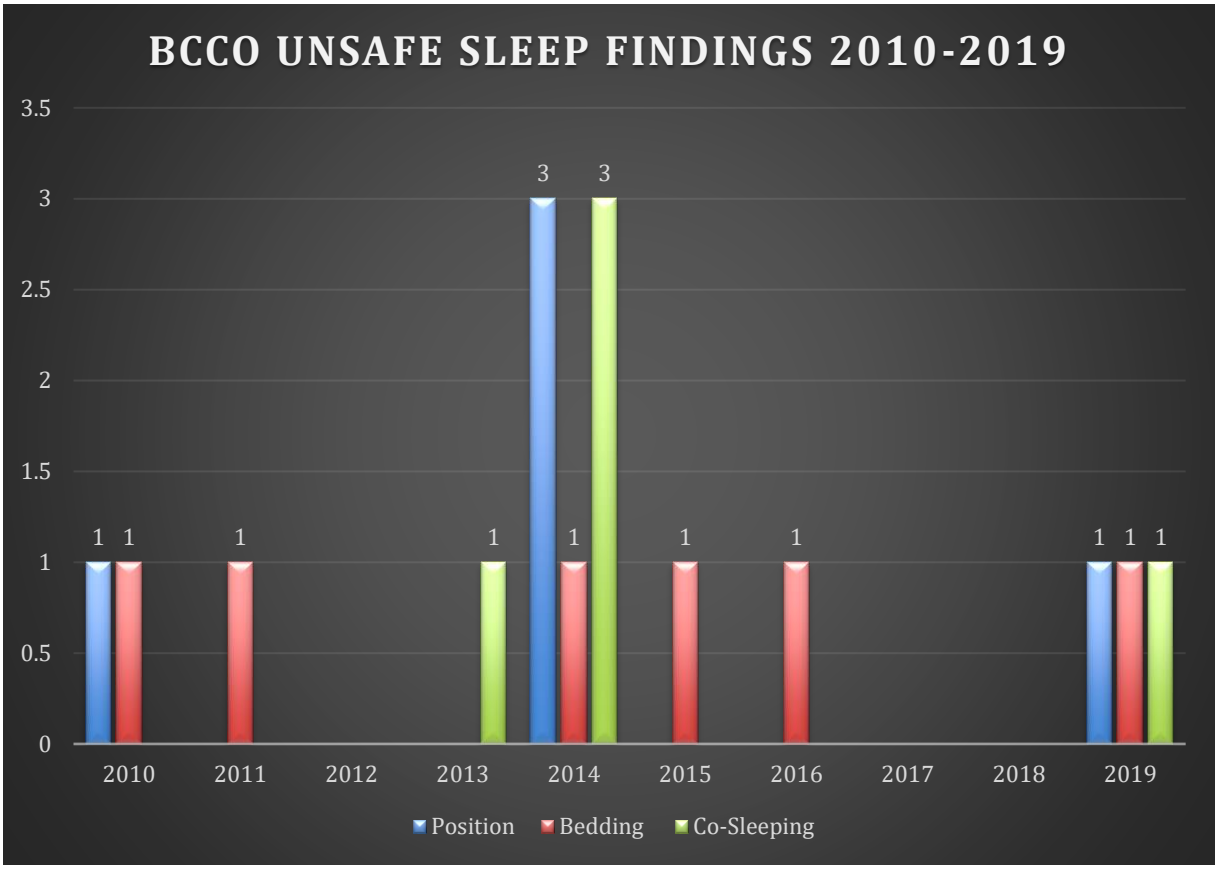
10 YEAR CHILD DEATH STUDY

The cases that were included in this study were children under the age of 1 year that died in their sleep. There were a total of 14 cases included in this study.

UNSAFE SLEEP FINDINGS IN 10 YEAR CHILD DEATH STUDY

The graph below shows the findings, by occurrence, in three types of unsafe sleep categories: position, bedding, and co-sleeping. Of the 14 cases included in this 10 year child death study, there were 12 cases that had at least one finding of an unsafe sleep environment, many of them had more than one finding. The non-recommended position the infant was placed in most often was on the stomach.

Of the 14 cases, the investigating law enforcement jurisdictions were as follows: Boulder County Sheriff's Office – 2, Boulder PD – 0, Lafayette PD – 1, Longmont PD – 7, and Louisville PD – 4. There were 7 females and 7 males. The ages were as follows: the youngest case was less than 1 month at 13 days, there were 4 cases from 1-3 months, 6 cases from 3-6 months and 3 cases from 6-9 months (the oldest was 9 months). The ethnicities of the children were as follows: Caucasian – 12, African American – 1, and Indian – 1.



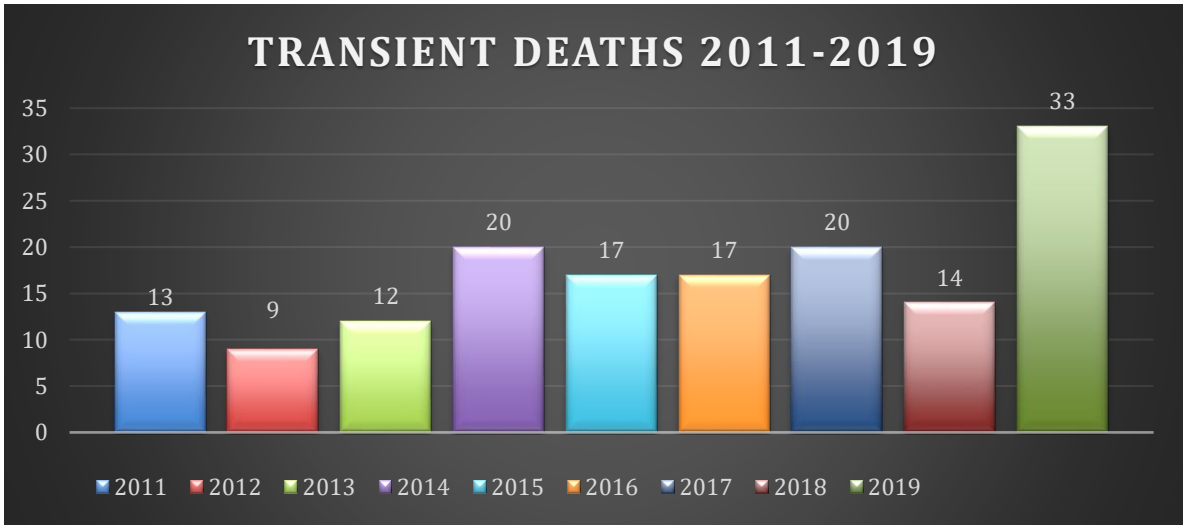
Based on the cases included in this 10 year child death study, Boulder County is a prime location for additional support and promotion of safe sleep environments for infants. As these cases continue to be reviewed by the local Boulder County Child Fatality and Prevention Team, more recommendations will be made to the state on preventing these types of child fatalities.

In the 5 cases where co-sleeping was a finding, the toxicology levels are unknown of the individual whom the infant was co-sleeping with; however, in 3 of the 5 cases there was suspicion or self-reporting of use of alcohol, drugs, prescription drugs or a combination thereof.

TRANSIENT/HOMELESS DEATHS

The Boulder County Coroner's Office started to notice an increase in the amount of transient/homeless deaths in the city of Boulder mid-year 2014. Due to the increase, a mid-year detailed report was created to offer information to city and county leaders as well as the public on these types of deaths. While the office did its' best to track these kinds of deaths to ensure the best possible information, it should be noted that not all deaths that occur in Boulder County are reported to the Coroner's Office. An example of this would be if a person dies at a nursing home or a person who dies more than 24 hours after being admitted to a hospital, the death may not be reported if the person dies of natural causes. Also, not all transients that die are reported as having lived on the streets at the time of their death. For example, a nurse reporting the death of a person who dies under hospice care or in a care facility may not necessarily know that the person was homeless at a point prior to their admission. Therefore, the total number of transient deaths on file at the coroner's office may vary from numbers on file with other organizations. That being said, the following covers a few statistics on what information is available.

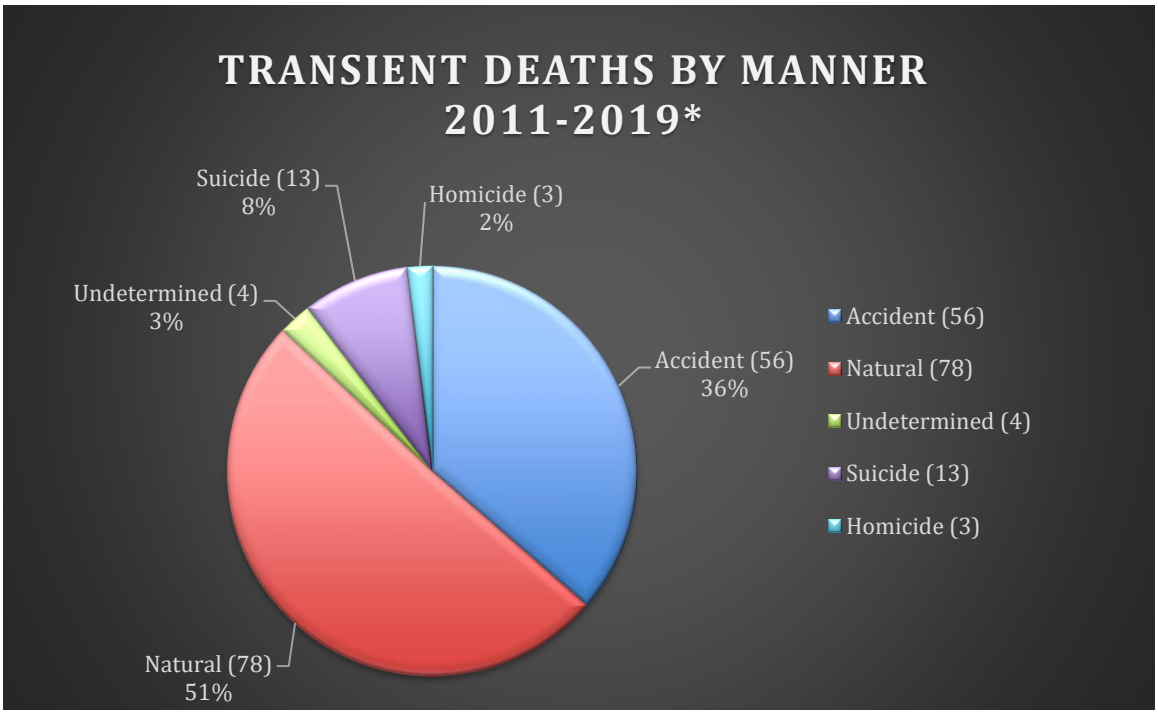
TRANSIENT DEATHS BY YEAR



TRANSIENT DEATHS PER MUNICIPALITY

	2011	2012	2013	2014	2015	2016	2017	2018	2019
Boulder	9	4	5	19	12	12	12	8	15
Jamestown		1							
Lafayette	1				2		1	1	2
Longmont	2	4	6	1	3	4	7	4	13
Louisville	1		1						2
Nederland						1		1	1
Totals	**13**	**9**	**12**	**20**	**17**	**17**	**20**	**14**	**33**

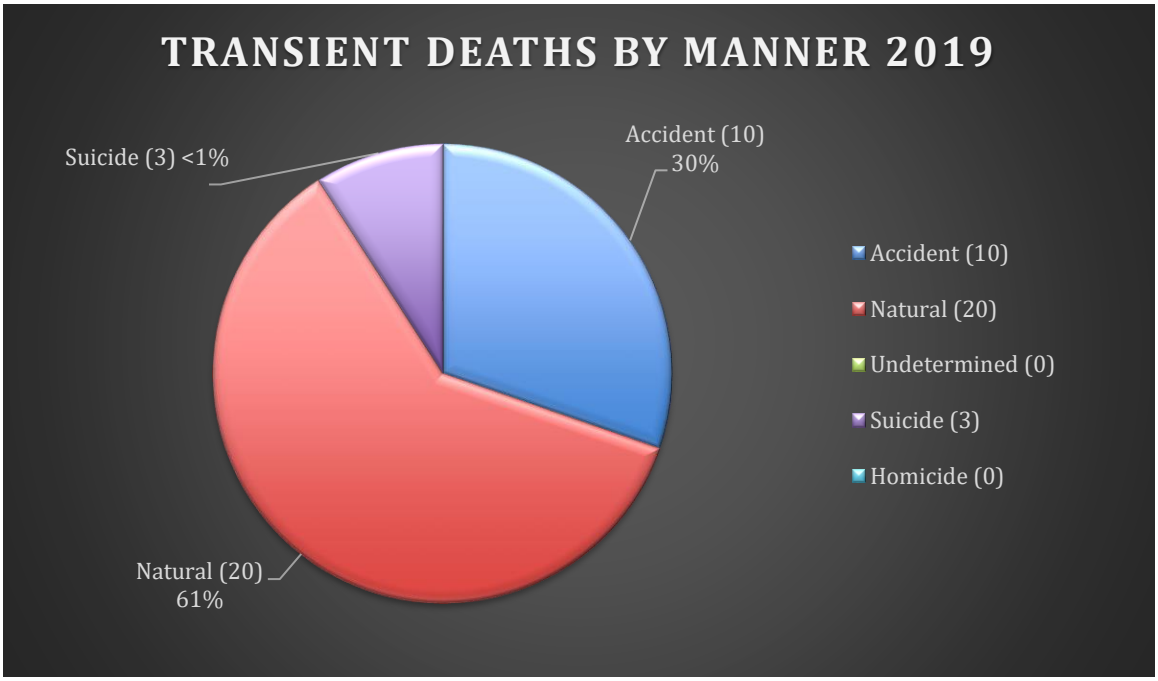
TRANSIENT DEATHS BY MANNER OF DEATH 2011-2019



Note: Of the transient/homeless deaths tracked from 2011 to 2019, 133 were male and 21 were female, one case was a fetal demise of a transient female. Ages of the decedents over the years ranged from 22 to 86.

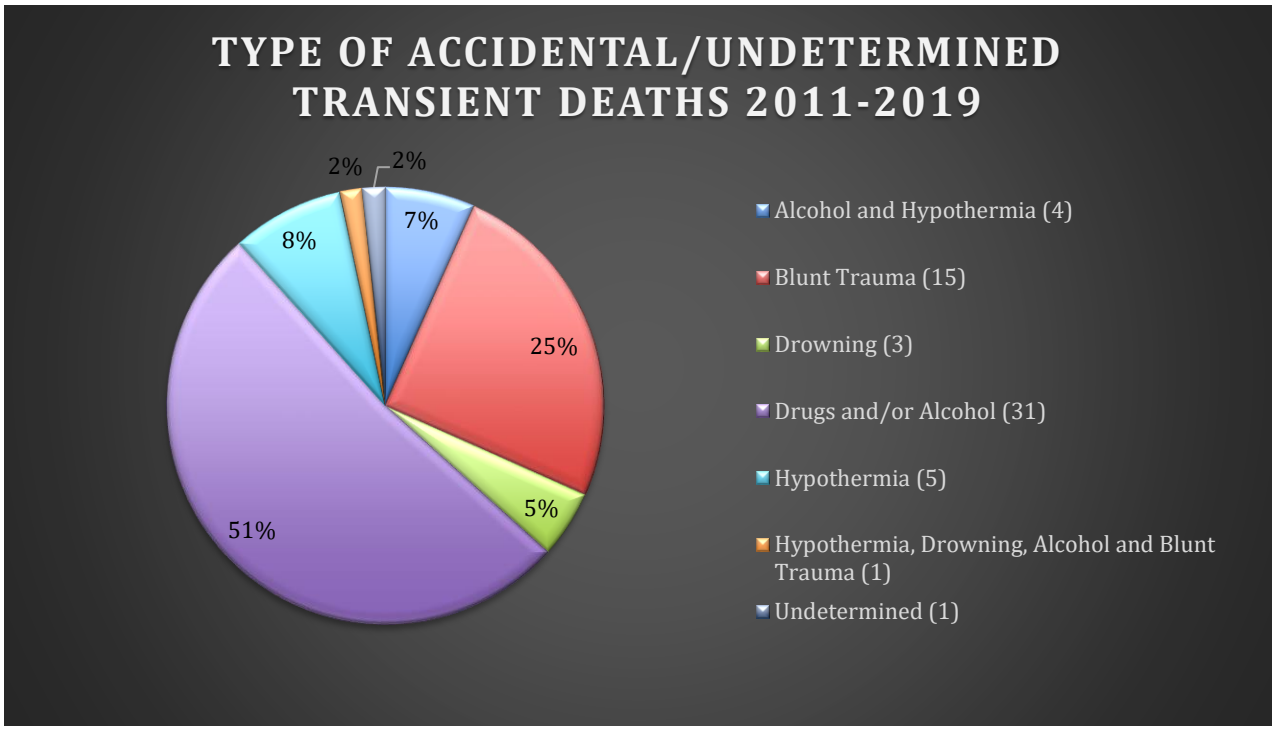
*One case from 2014 was a fetal demise; therefore, no manner of death was assigned.

TRANSIENT DEATHS BY MANNER OF DEATH 2019

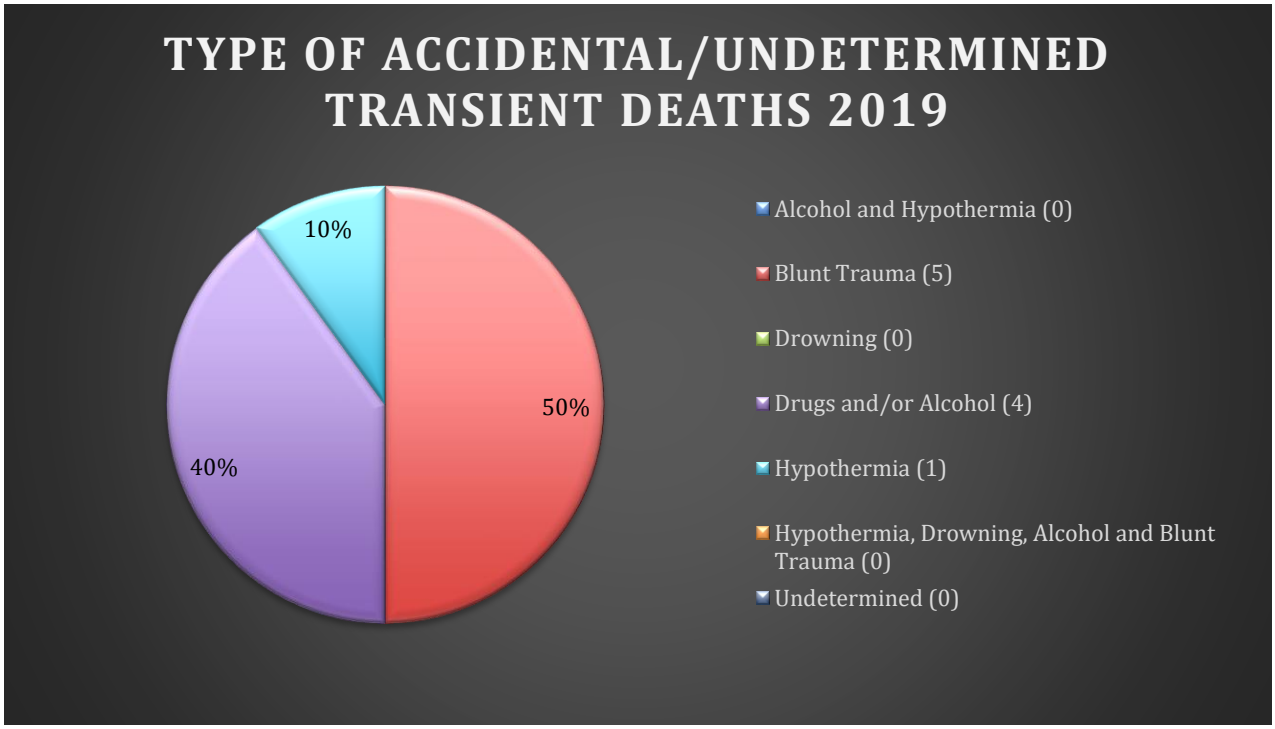


Note: Of the transient/homeless deaths tracked in 2019, 32 were male and 1 was female. Ages of the decedents in 2019 ranged from 33-74.

TYPE OF ACCIDENTAL/UNDETERMINED TRANSIENT DEATHS 2011-2019



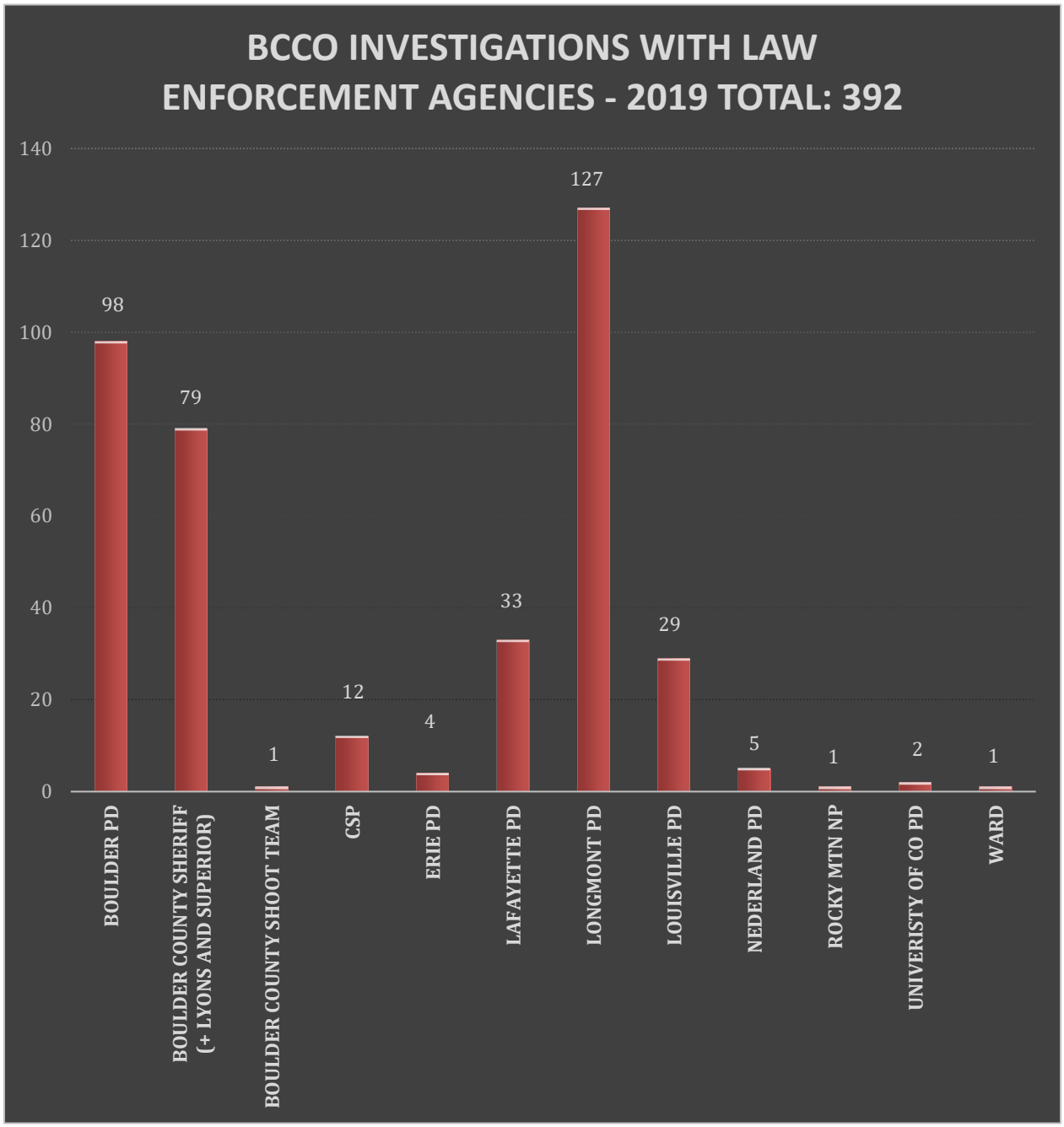
TYPE OF ACCIDENTAL/UNDETERMINED TRANSIENT DEATHS 2019



LAW ENFORCEMENT

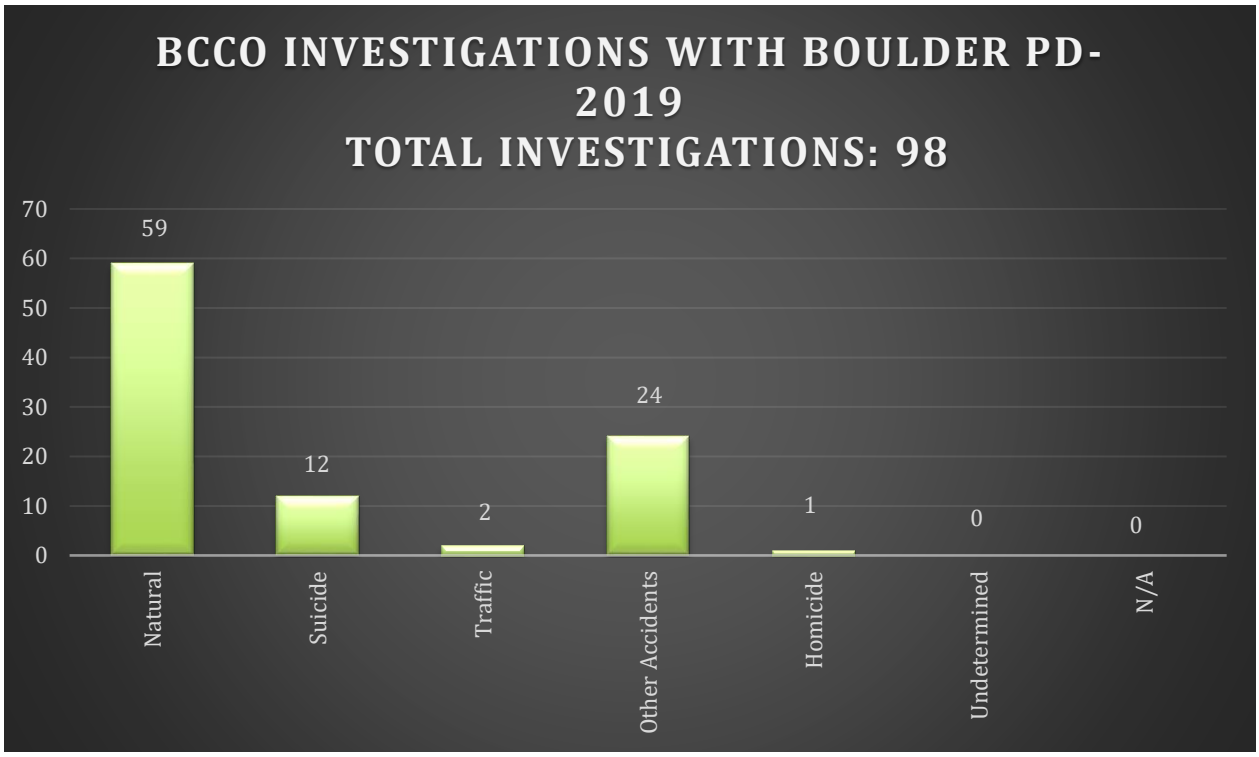
The Boulder County Coroner's Office works with the law enforcement agencies that cover jurisdiction in Boulder County. The charts in this section show the number of cases investigated with these agencies. Please note that the number of investigations listed may differ from those in the "Coroner Response" 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

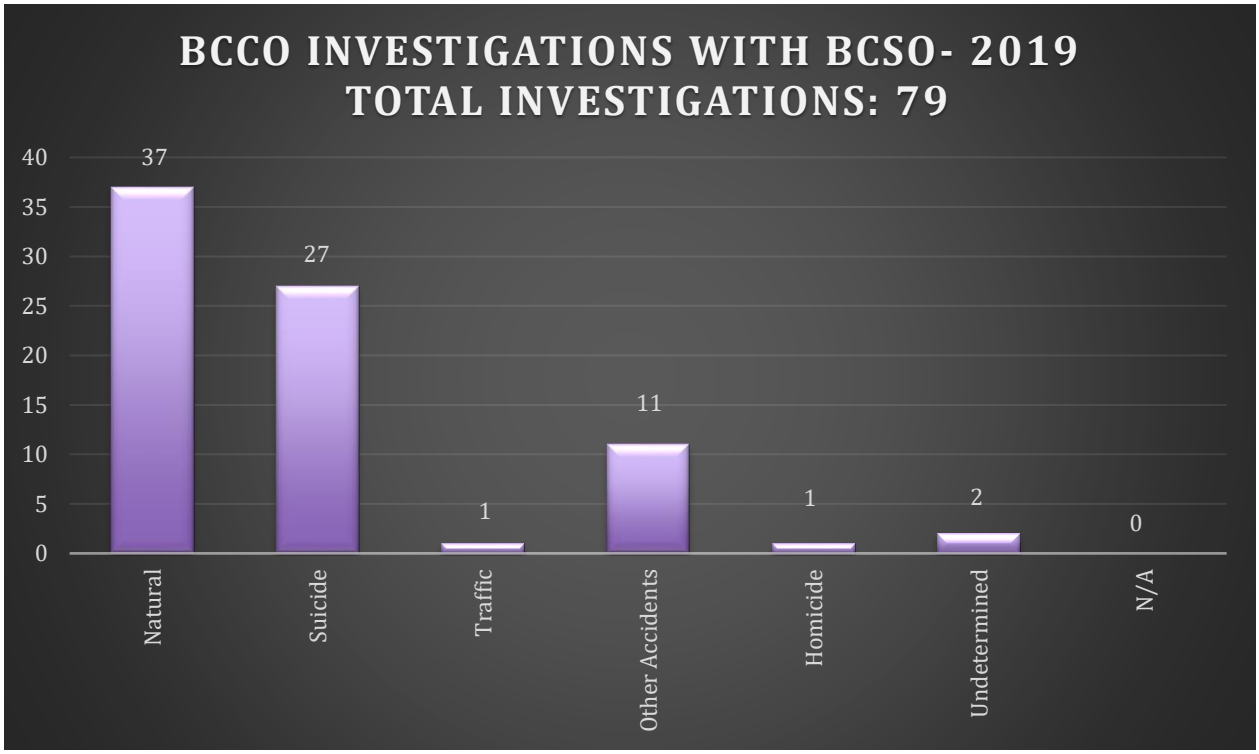


Note: The jurisdiction of the Boulder County Sheriff's Department includes unincorporated areas of Boulder County and the towns of Superior and Lyons.

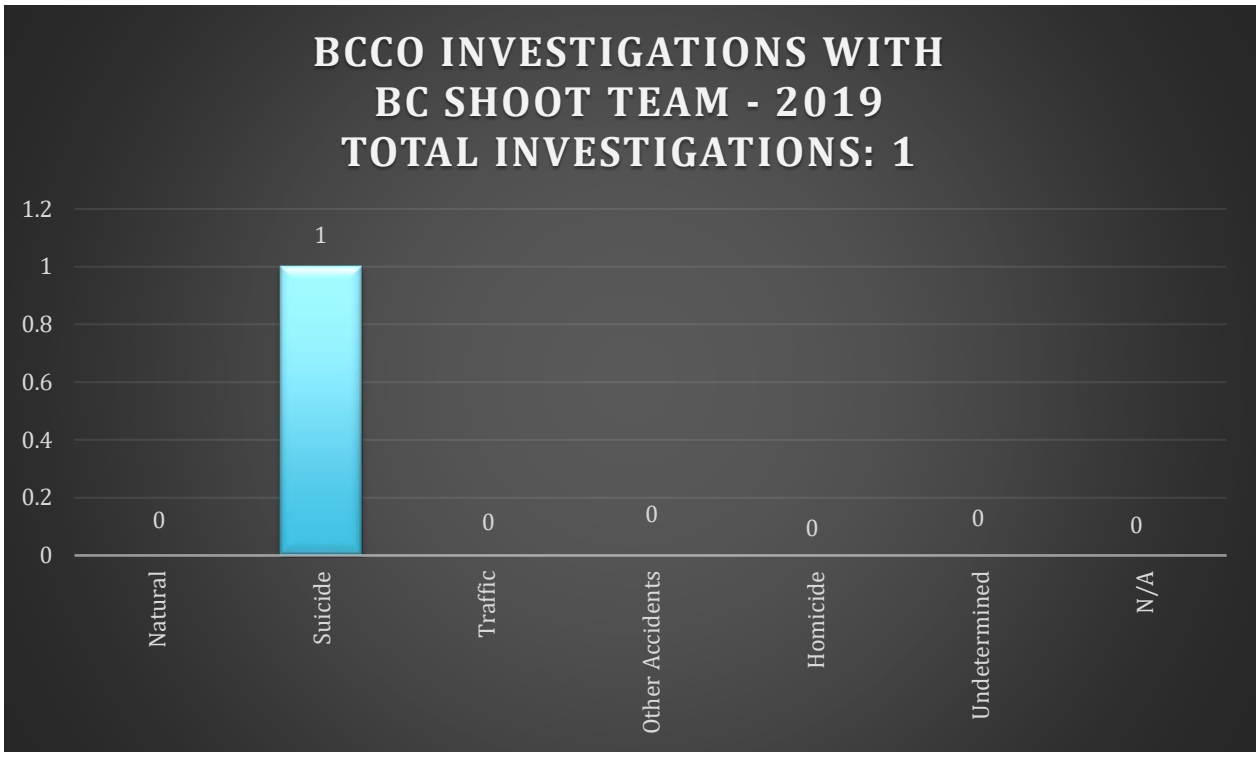
BOULDER POLICE DEPARTMENT



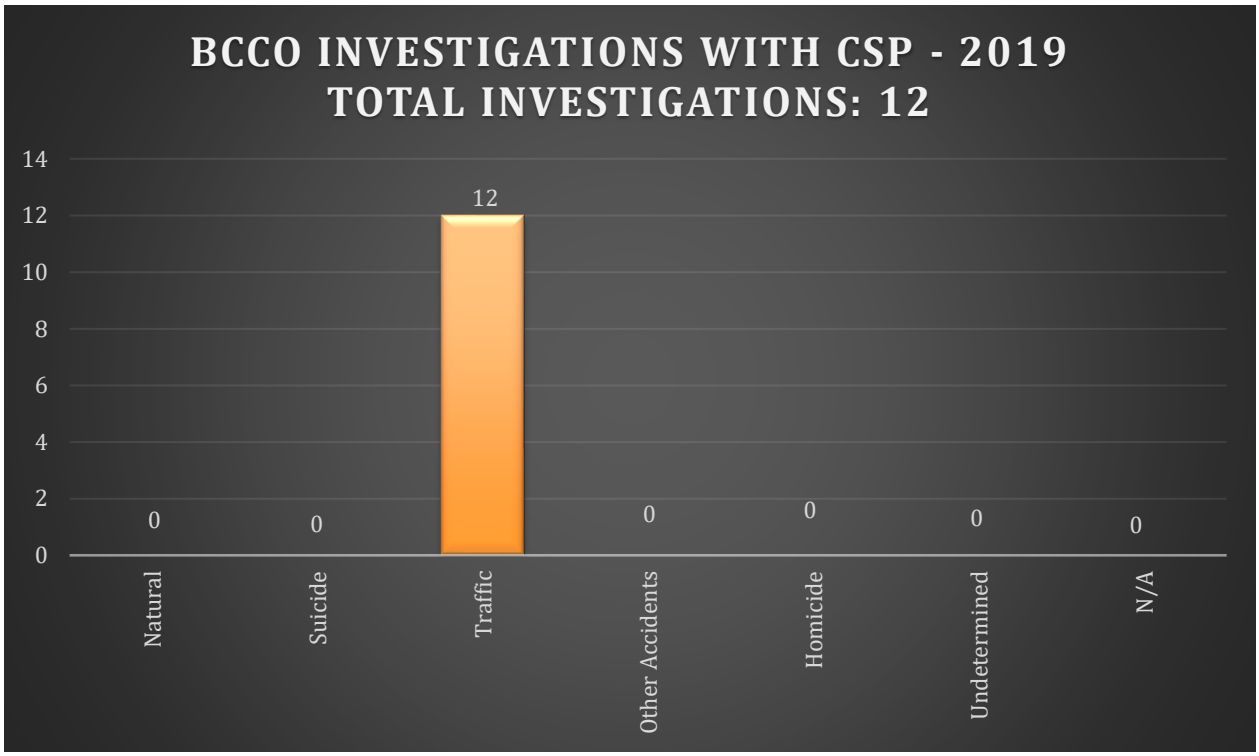
BOULDER COUNTY SHERIFF'S OFFICE



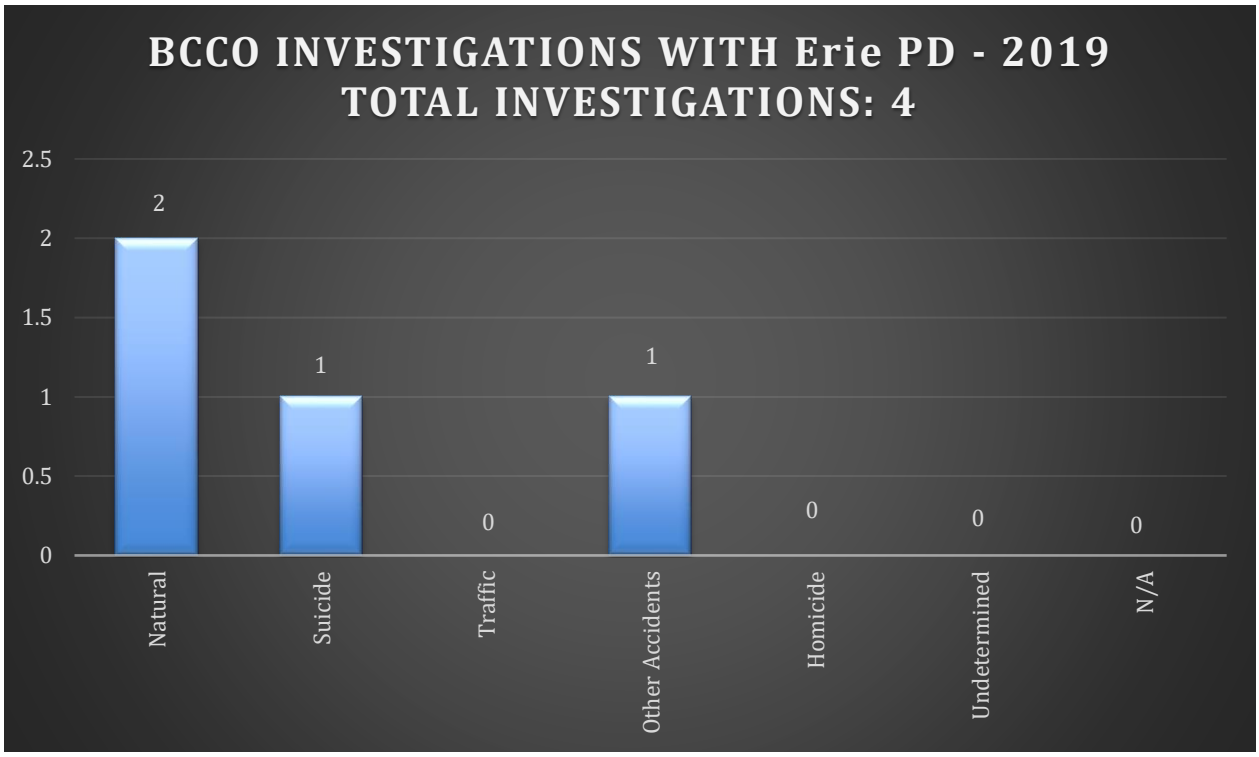
BOULDER COUNTY SHOOT TEAM



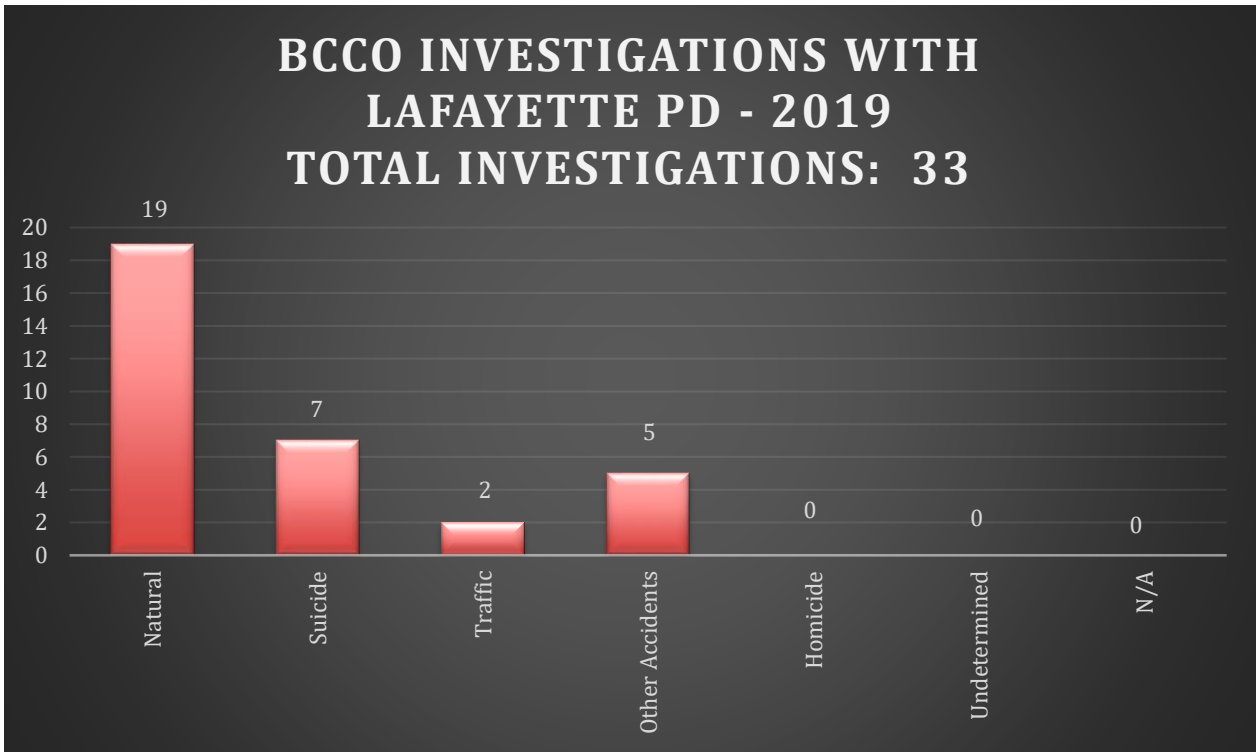
COLORADO STATE PATROL



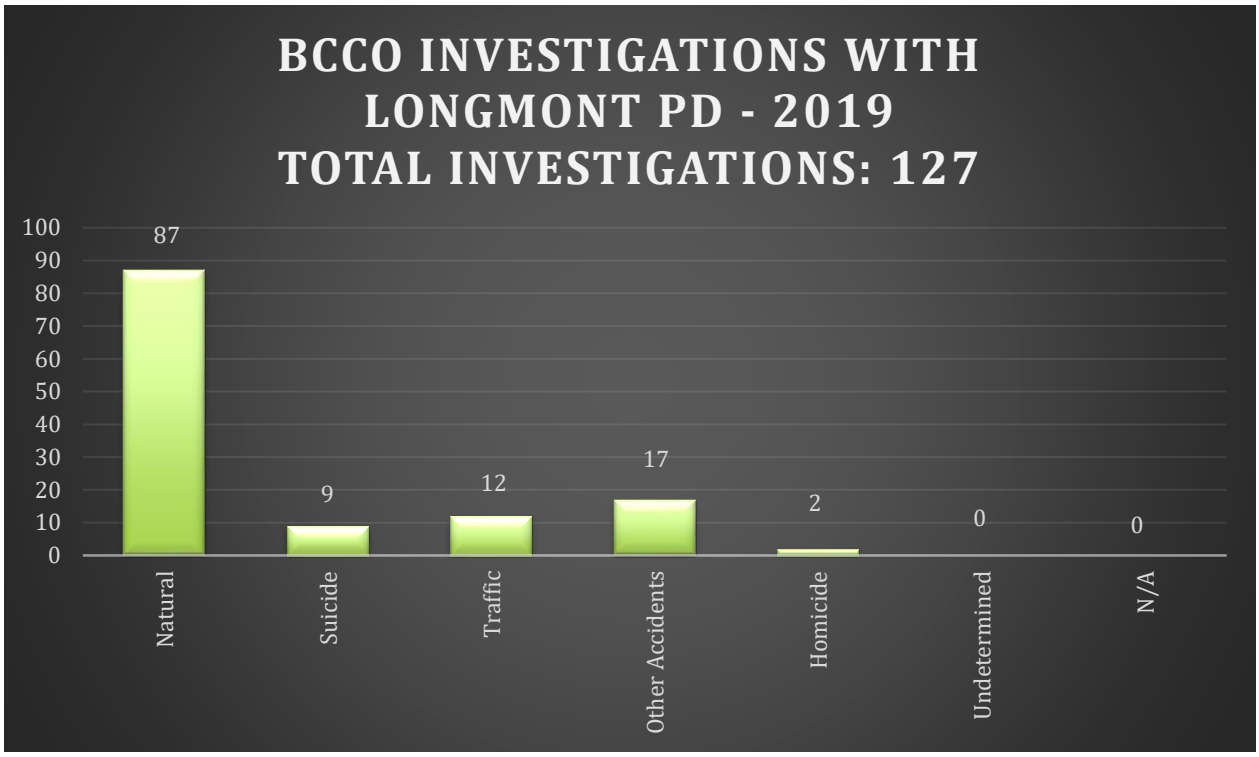
ERIE POLICE DEPARTMENT



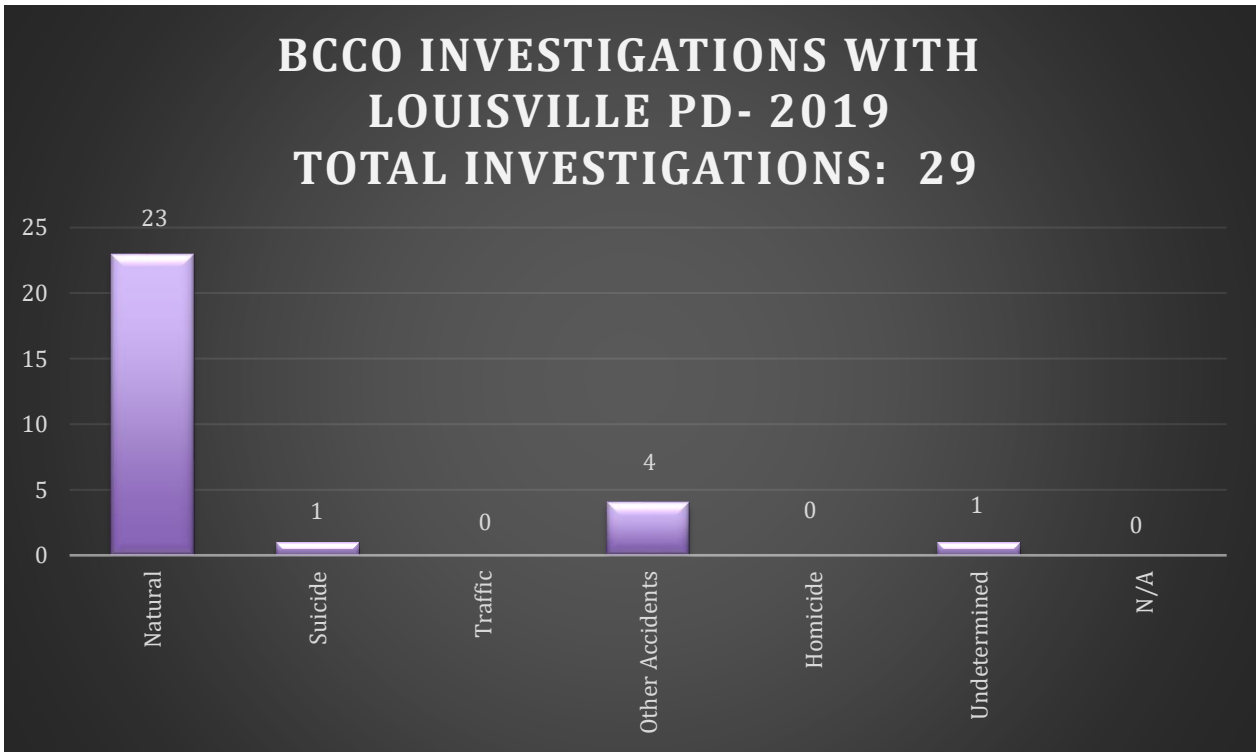
LAFAYETTE POLICE DEPARTMENT



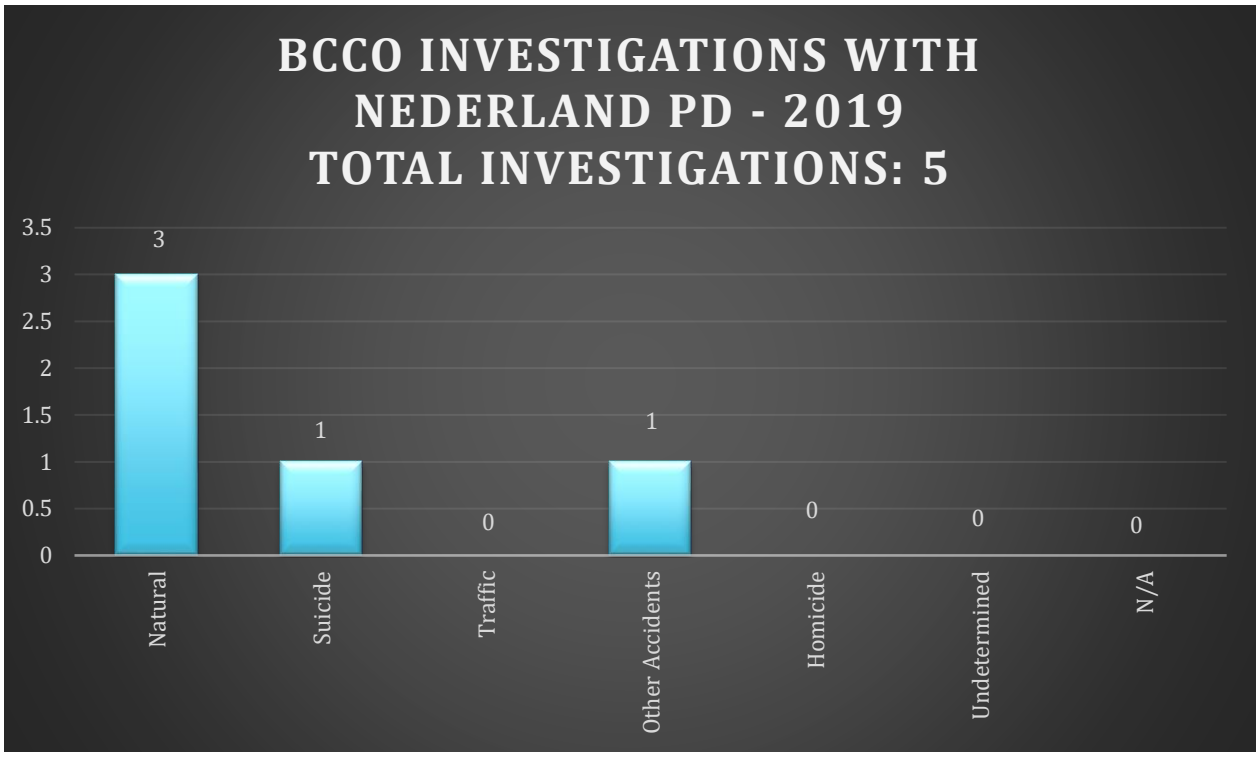
LONGMONT POLICE DEPARTMENT



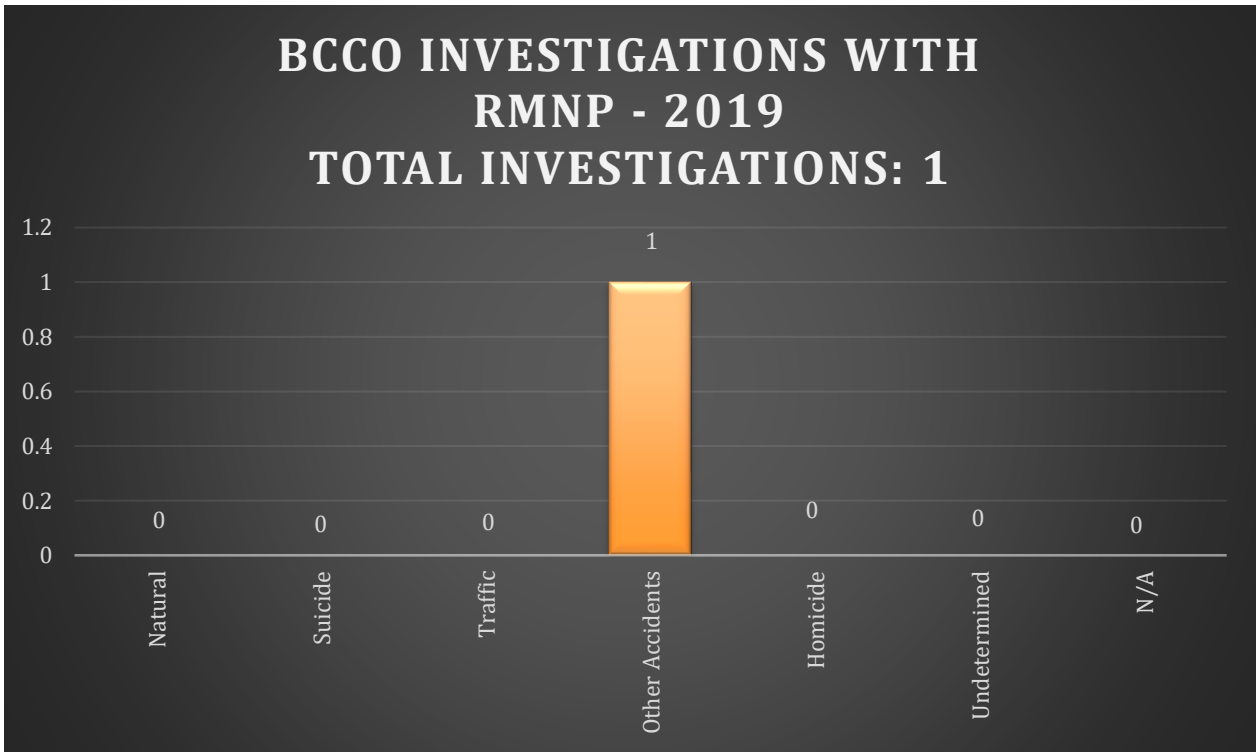
LOUISVILLE POLICE DEPARTMENT



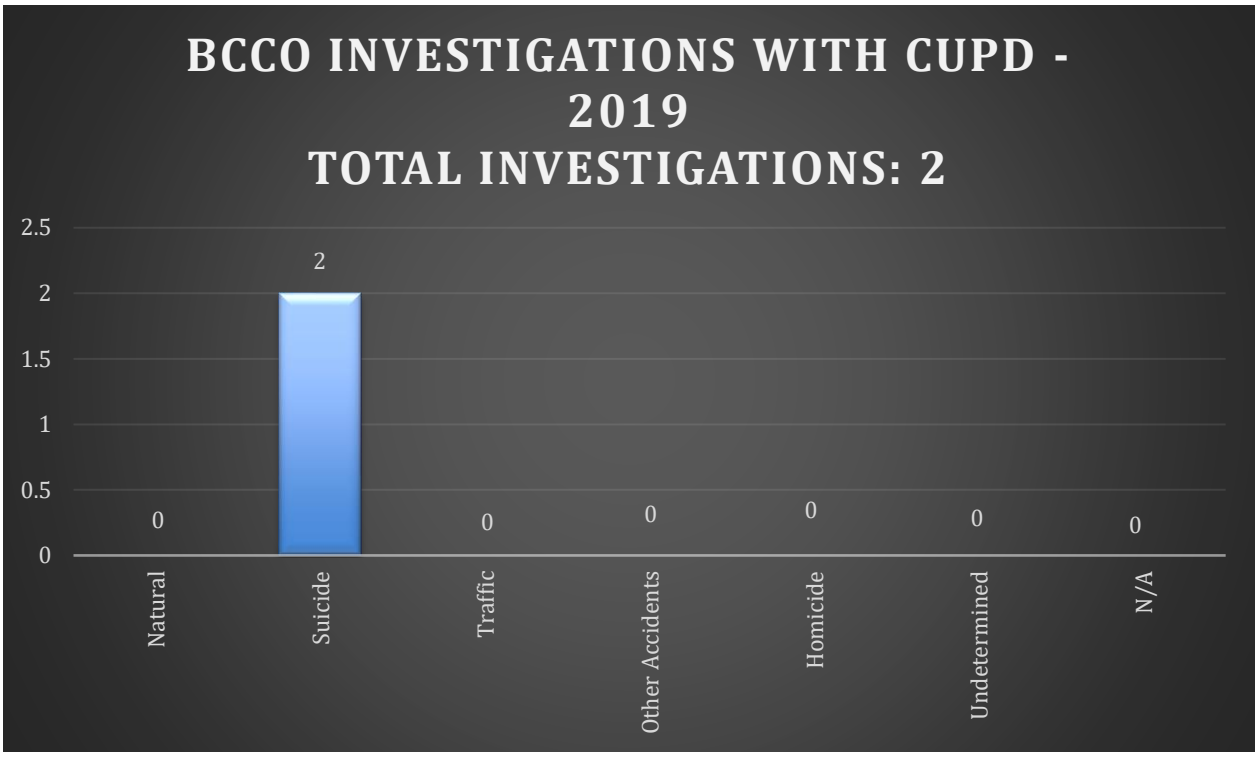
NEDERLAND POLICE DEPARTMENT



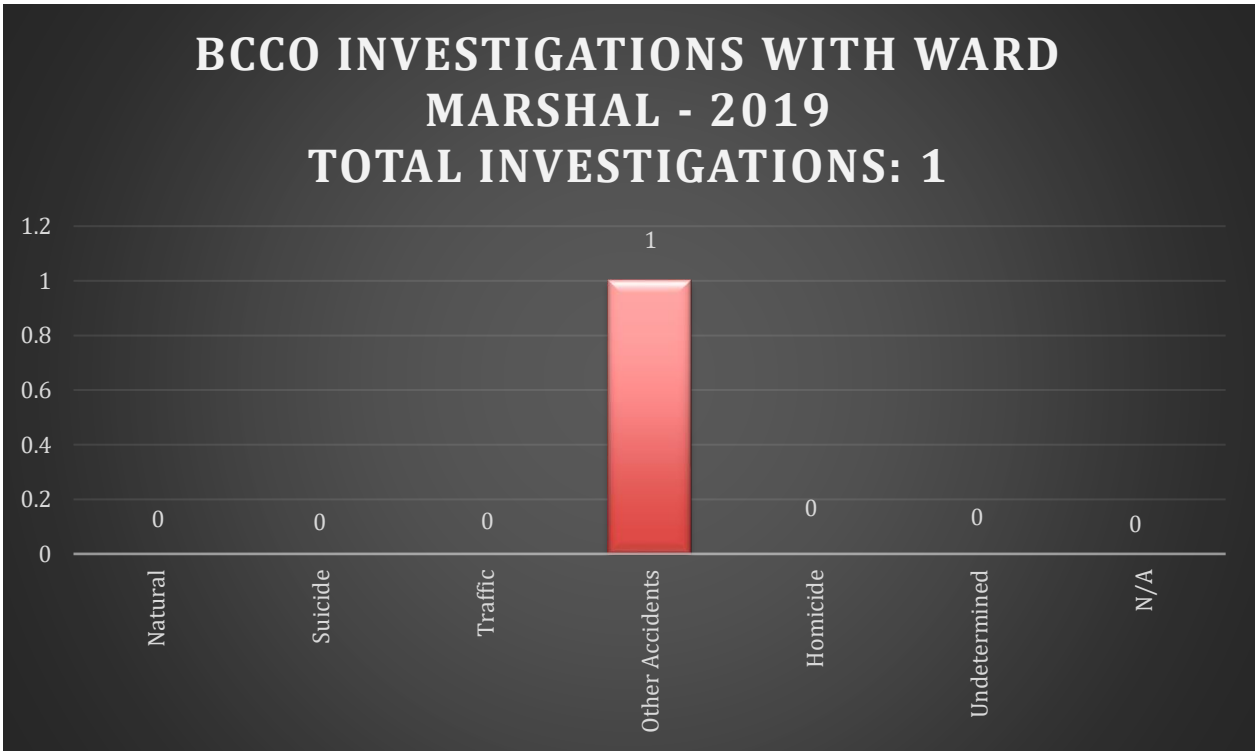
ROCKY MOUNTAIN NATIONAL PARK



UNIVERSITY OF COLORADO POLICE DEPARTMENT



WARD MARSHAL



UNIDENTIFIED REMAINS

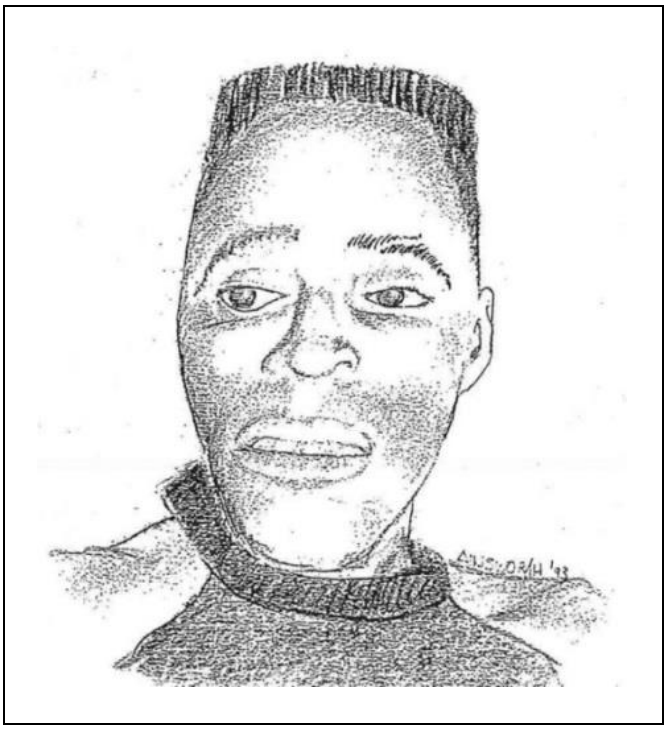
Boulder County Coroner's Office has investigated the deaths of the following individuals whose identities remain unknown.

UNIDENTIFIED BLACK MALE

Discovered: October 10, 1993

NamUs Case Number: UP516
Ancestry: African Descent
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 male of African descent 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.

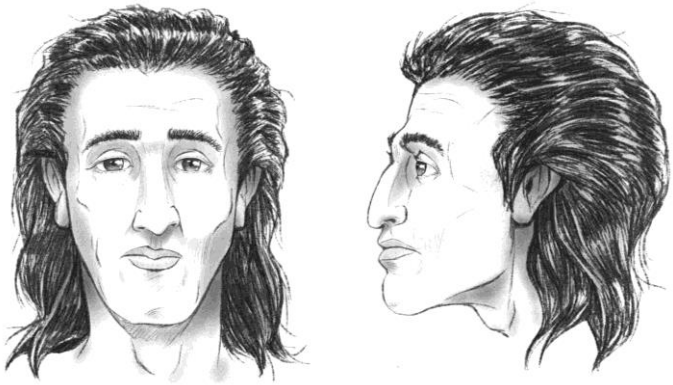


UNIDENTIFIED CAUCASIAN MALE

Discovered: November 21, 1993

NamUs Case Number: UP517
Ancestry: Caucasian
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.



Facial Approximation

UNIDENTIFIED CAUCASIAN FEMALE INFANT

Discovered: October 12, 2001

IDENTIFIED

NamUs Case Number: Not applicable
Approximate Age: 30-34 weeks gestation
Height/Measurements: Crown-rump length: 2 cm; heel-toe length: 6.3 cm
Weight: 1670 gm
Eye Color: Blue
Hair: Fine blond hair

A Caucasian female infant was found wrapped and placed in a box behind a grocery store in Louisville. Manner and cause of death are undetermined pending additional information. The investigation is ongoing. On November 15, 2001, the decedent was buried at the Sacred Heart of Mary Catholic Cemetery and is sometimes referred to as "Baby Mary Louise" or "Baby M" by the local community.

UNIDENTIFIED CAUCASIAN OR MIXED RACE MALE REMAINS

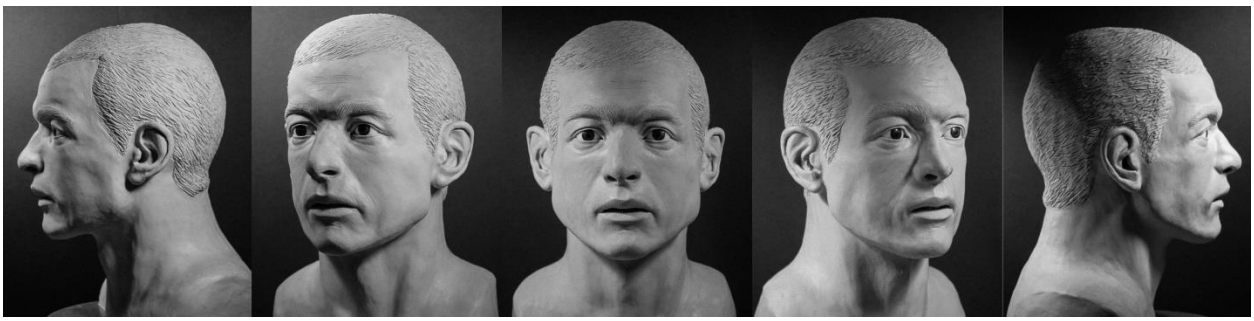
Discovered: October 2, 2017

NamUs Case Number: UP17188
Ancestry: Indeterminate
Approximate Age: 30-60
Height: Unknown
Weight: Unknown
Eye Color: Unknown
Hair: Unknown
Scars/Tattoos: Unknown
Clothing: None found with remains
Dental: Teeth in fair repair with dental work and antemortem extractions.

The human skull of a male was found in the area of Mudd Lake in Boulder County, CO. An anthropological examination did not reveal a cause of death. The human mandible of a male was later found in the same general area. The mandible and skull were compared to each other and were found to be from the same decedent.

The interpretation from the Anthropological Report states the following:

"Biological profile: likely male, indeterminate ancestry, broadly estimated at 30-60 years, indeterminate stature. Healed antemortem fractures are noted (left nasal bone, left maxillary frontal process)."



REFERENCES

1 National Association of Medical Examiners, A Guide for Manner of Death Classification First Edition, February 2002, p. 3.

2 American Foundation of Suicide Prevention. (2020, March 1st). *Suicide Statistics*. https://afsp.org/suicide-statistics

3 Colorado Dept. of Public Health and Environment, Violence in Colorado: Trends and Resources, University of Colorado, 1994, p. 123.

4 Published online October 17, 2011 Pediatrics Vol. 128 No. 5 November 1, 2011 pp e1341-e1367 (doi: 10.1542/peds. 2011-2285).