2015 ANNUAL REPORT

BOULDER COUNTY CORONER’S OFFICE

Emma R. Hall
Boulder County Coroner

5610 Flatiron Parkway
Boulder, CO 80301
Phone: 303-441-3535 / Fax: 303-441-4535
www.bouldercounty.org/dept/coroner
To the Citizens of Boulder County,

I am pleased to present the 2015 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 and emerging trends in the county.

The 2015 total caseload continued to gradually increase as it typically does every year. The overall number of scene responses and autopsies for 2014 and again in 2015 was fairly consistent with the dramatic increase first seen in 2013. The sustained increase in cases continued to be a challenge for the office in 2015; however it remains the priority of the office to provide the citizens of Boulder County with the highest quality service.

In 2014 the office noticed a large increase in transient deaths; these deaths remain a concern for the community. The total transient deaths reported to the office in 2015 were 17, down from the 20 reported in 2014. Among this group, suicidal deaths were up from 1 in 2014 to 6 in 2015. On the decline was the number of Accidental and Undetermined deaths, with 1 less blunt trauma (1 total), 3 less Drugs and/or Alcohol cases (2 total), and one less hypothermia case (1 total). More detailed information is contained within this annual report on transient deaths.

In comparison to 2014, child deaths decreased in 2015 by two cases, for a total of 12. While there were more Natural deaths amongst children there were less Accidents, Suicides and Undetermined deaths. The biggest decrease seen in 2015 was fewer Sudden Unexpected Deaths in infants. There were a total of 6 child deaths during sleep in 2014 and only one in 2015. Additionally, the local Child Fatality Review and Prevention Team officially started meeting in 2015. As the coordinator of the team, the office reviewed 11 cases with the mandated members of the team.

The biggest news in 2015 was the opening of the new coroner’s facility. This stand-alone modern facility consolidated all operations in a central location to enhance the services the office provides, and creates a much improved work environment for the staff. Over 100 members of the community attended a ribbon cutting ceremony on May 12th—a cause for great celebration! Tours are held monthly and are open to the public. This year’s annual report highlights the features of the facility. In honor of the new facility’s opening, a commemorative badge was designed and is now the office’s new emblem, the new badge is also featured in this year’s annual report and is included in the header of the Coroner’s Office letterhead.

A continuing priority for 2015 was the office’s community and professional outreach, including: professional presentations, trainings, committee planning boards, and meetings. Particular emphasis in 2015 centered on the Colorado Coroner’s Association, North Central Regional Mass Fatality Planning, Electronic Death Registry, and Boulder County internal programs. This year we were also successful in accomplishing fingerprint training for all staff to ensure proper scientific identifications continue to be made in the office as efficiently as possible.

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

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.
With the opening of the new facility, the Boulder County Coroner’s Badge received a facelift. Much time and effort went into the re-design and meaning of the badge to ensure that the mission and values of the office and the service to the community were fully represented. Below is a full explanation of the badge’s re-design.

**Badge Shape:** Oval Shield

**Border:** Laurel Wreath

**Sun Rays:**

In the background of the badge there are 17 distinctive sun rays. The 13 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 9 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 representing 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 center piece 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.
The 2015 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 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 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 Garnett. 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 sits on the Criminal Justice/Forensics Advisory Board at Arapahoe Ridge High School in Boulder. 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:** 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 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.
**Board Certified Forensic Pathologist:** Dawn B. Holmes, M.D., Forensic Pathologist. Dr. Dawn B. Holmes is a forensic pathologist who moved to Colorado in July 2012. She earned her bachelor’s degree in Food Science and Human Nutrition from the University of Florida in Gainesville, FL; earned her medical degree at the University of South Carolina in Columbia, SC; completed her Anatomic and Clinical Pathology residency at Rush University Medical Center in Chicago, IL; and completed her fellowship in Forensic Pathology at the Office of the Cook County Medical Examiner in Chicago, IL. Dr. Holmes is boarded certified in Anatomic, Clinical, and Forensic Pathology and has been practicing since 2011. In her spare time, she enjoys coin collecting, snow skiing, running, traveling, and spending time with her family.

**Board Certified Forensic Pathologist:** John Carver, J.D., M.D., Forensic Pathologist. Dr. John Carver is a life-long Coloradan who practiced oil and gas law for fourteen years before returning to medical school (C.U., class of 2000). He completed pathology residency training at C.U., and did a fellowship year in forensic pathology in Milwaukee, WI. He is board-certified in anatomic, clinical and forensic pathology, and is an Associate Clinical Professor in the department of pathology at the C.U. School of Medicine. Over the past ten years he has performed autopsies for, and testified in numerous jurisdictions in Colorado, including the Larimer County Coroner’s Office, Denver Office of the Medical Examiner, and Jefferson County Coroner’s Office, and is pleased to have served Boulder County for the past year.

**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:** 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:** Derek Rinaldi. Mr. Rinaldi is a Colorado native, born and raised in Lafayette and Boulder. He attended Metropolitan State University of Denver and graduated with a Bachelor’s degree in Chemistry with a concentration in Criminalistics, where he also worked for the forensic anthropology department of the university updating and streamlining their standard operating procedures. Mr. Rinaldi additionally completed a year-long internship with the Denver Office of the Medical Examiner. Mr. Rinaldi handles a portion of the caseload, as well as, handling various day-to-day operation of the office.

**Deputy Coroner:** Kimberly Seifert. Ms. Seifert has a Bachelor’s Degree in Criminal Justice from the University of Wyoming. Throughout her final year at the university, Ms. Seifert worked as a Deputy Coroner with the Albany County Coroner’s Office. Upon completing her degree in December 2014, Ms. Seifert joined the Boulder County Coroner’s Office. Ms. Seifert 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:**  Cari Gechter. Ms. Gechter 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. Ms. Gechter handles a portion of the caseload, as well as handling various day-to-day operations of the office.

**Deputy Coroner:**  Cody Talbot. Mr. Talbot graduated from Metropolitan State University of Denver in 2012 with a degree in Criminology. After college he worked for the Colorado Department of Corrections as a corrections officer; with supplemental duties as a gang intelligence officer, and as an emergency response team operator. Mr. Talbot has also worked in various Colorado juvenile detention facilities teaching life skills and providing basic mentorship. Mr. Talbot handles a portion of the caseload, as well as handling various day-to-day operation of the office.

**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.

**Administrative Technician:**  Kathy Murray. Mrs. Murray is the Administrative Technician for the Boulder County Coroner’s Office. She has been with the coroner’s office since December of 2014 and prior to that worked at the Addiction Recovery Center within Boulder County Public Health. Her previous experience includes various administrative support positions in the fields of hospice care and behavioral health. Mrs. Murray enjoys crocheting, reading, her two Beagles and being a huge Colorado Rockies and Colorado Avalanche fan.
Groundbreaking for the new 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 held a Ribbon Cutting Ceremony on May 12th, 2015.

“It's incredibly exciting to be here today after so much planning, hard work and collaboration, to finally be celebrating this new facility for Boulder County. The facility was a collaborative effort. When I started advocating for this building back in 2011 there was overwhelming support from the mortuaries, law enforcement, the DA's office and the county departments, and after presenting the business case to the commissioners, we quickly had their support to improve our facilities.

This facility represents a new era for the coroner's office. From my first day in office, I had a vision for a progressive, forward-looking department. This facility is a huge milestone in bringing this office up to the standards that this county needs and deserves. All of our operations will be located together at this facility. This will lead to significant increases in efficiency within our department. We now have a well-designed office space for investigators and administrative staff so that they can carry out their jobs more effectively.

The autopsy suite features state-of-the-art amenities to allow for the most safe work environment possible for the staff and for public health in general. The new facility will also allow for the viewing of a departed loved one by a grieving family in appropriate circumstances. In the case of a mass fatality incident--which I hope we never experience--we will also have much better capacity to handle the number of deaths resulting from such an event. For criminal cases, the new facility will enable us to better ensure the chain of custody for critical evidence.

In addition, to all the things that the new facility means for the functioning of the coroner’s office, we are proud that the sustainability features of the structure will make this building environmentally responsible as this new building will serve for many generations. I am thankful for the opportunity I have had as coroner to be a part of this great milestone in Boulder County.”

~Emma R. Hall, Ribbon Cutting Ceremony, May 12th, 2015~
Reception Area

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. In addition, some of the advantages of the new reception area are:

- The new facility offers an improved level of professionalism with a vast amount of natural light and convenient easy access to the reception area providing a more welcoming environment for all visitors.
- The reception area is limited to a waiting room and public restroom, but offers the comfort of an adjacent and secure family meeting room when needed.
- The reception area is designed to keep the staff and work of the office secure with a card access door to the rest of the facility.
Family Room

This area is utilized as a multi-functional meeting room, below is a list of some of the gatherings this room will accommodate:

- Comforting meeting area to interact with families and public
- Separate waiting area for families and public waiting to meet with Coroner Staff
- Smaller administrative meetings
- Other smaller county meetings scheduled with the Coroner or Chief Deputy

“There are things that we don’t want to happen but have to accept, things we don’t want to know but have to learn, and people we can’t live without but have to let go.”
Conference Room

This area is a multi-functional meeting room, below is a list of some of the regular meetings this room will accommodate:

- Coroner staff meetings
- Child Fatality Review and Prevention Team meetings
- Administrative meetings
- Coroner Investigator meetings
- Overflow meetings for larger groups the Coroner Family Room will not accommodate
- Other county meetings scheduled with the Coroner or Chief Deputy

A large and exciting feature of the Coroner Conference Room is the viewing capability it will provide for autopsy attendees. A few of the benefits provided are:

- Most importantly, autopsy attendees can now view and interact with staff, in the course of an autopsy, in a totally contamination free environment
- View of several different clusters of autopsy cameras at once (eleven cameras in total)
- Zoom capability on all eleven camera views
- Pan Tilt Zoom capability’s on each of the three autopsy tables
- Direct communication with the Forensic Pathologist and Pathologist Technicians performing the examination
Investigator Room

- Large space with high ceilings and great natural lighting
- Large elevated windows to ensure privacy is maintained for sensitive information
- Eight corner workstations for investigators that maximize usable working space in the room
- Two additional fully equipped desks for part-time investigators and interns
- Dual computer monitors at workstations to help maximize efficiency and capability
- New ergonomic and highly adjustable chairs
- Conference area in the middle of the room to aid in collaborative projects and communication
**Evidence Intake Room**

- Property, evidence or medications that are collected are transported to the office for intake into secured storage.
- The intake process first occurs in the evidence intake room, under video surveillance.
- This room offers a safe secure location for staff to process all items collected.
- In this process all items will be inventoried and carefully documented.
- Medications are counted cautiously, using an automated pill counter for accuracy. The counts are documented in detail and inspected for any information pertinent to the death.
- All property, medications and evidence are placed into a plastic bag, and signed dated and sealed.
- The bag is then dropped through a property chute into a separate secure, restricted access, evidence processing room.

**Evidence Processing Room**

- Room Usage: Restricted access for storage of property and evidence
- Over 250 linear feet of storage
- The evidence processing room is a secure holding room within the building that is only accessible by authorized personnel.
- The evidence processing room is under constant video surveillance.
- Property, medication and evidence that are obtained from investigations are inventoried under video surveillance in the evidence intake room and are deposited into the evidence processing room via an intake property chute.
- Inventoried property is maintained securely in the evidence processing room until the family, or the mortuary at the family's request, arrives at the office to retrieve it. It is then accessed by a supervisor and released to the party per protocol.
- Inventoried medications are maintained securely in the evidence processing room until the medication counts can be verified by a second employee and subsequently destroyed through proper medical waste channels.
- Inventoried evidence is maintained securely in the evidence processing room until the involved law enforcement agency advises that there is no longer a need for it. If destruction occurs it is through proper medical waste channels.
- The evidence processing room also houses all toxicology and histology samples (refrigerated if necessary) from autopsies performed and any other pertinent case-related items that need to be stored securely and safely under constant video surveillance and with restricted access.
**Sally Port**

- The Sally Port implements state-of-the-art equipment that allows for the safe handling and inventory of decedents, toxicology, and property/evidence.
- Vehicle Entrance: Key card access ensures the safety and security of the facility, as well as the preservation of the chain of custody. A drive through sally port allows the office to efficiently complete body intake and releases.
- Isolation Cooler: The isolation cooler is a two-unit system that allows the office to safely store decedents that require isolated storage.
- Body Lift System: State of the art remote controlled body lift system with built in scale capable of lifting up to 1000 pounds.
- Cooler and Freezer: Two secured, refrigerated, 30-unit preservation systems with shelves that easily retract for convenient storage and retrieval of bodies. In total they are capable of maintaining 60 decedents. The units are protected by automatic close fire safety doors.
- Conveniently located near the autopsy suite, directly on the opposite side of the refrigerated units, allowing for the easy retrieval and transport of decedents for examination.
Morgue

- 1060 square feet of functional examination space
- Three full function stainless steel autopsy tables with reverse flow fans, disposal systems and suction
- State of the art remote controlled body lift system with built in scale capable of lifting up to 1000 pounds
- State of the art surgical lamps
- Natural light for energy conservation
- State of the art pan/tilt/zoom (PTZ) and fixed zoom security cameras with medical detail zoom capabilities and remote communication with conference rooms
- A 202 square foot Isolation room with independent reverse flow air system
- Automatic door operated walk in freezer and refrigerators capable of storage of up to 30 bodies each
- Safety stations- eyewash and emergency shower in suite
**Viewing Room**

- It’s always recommended for families to view their loved one at the mortuary of their choosing as a mortuary will always be able to provide a more appropriate viewing environment.
- The Boulder County Coroner’s new facility has the capability under rare circumstances to allow families to view their loved one.
- This space was designed to be comforting and allow for privacy during the viewing.
- It was designed with multiple viewing windows to provide two options for viewing in coordination with the use of the autopsy suite.

**Sustainability Features:**

- State-of-the-art Energy Management controls
- High efficiency condensing boilers
- Air handler with energy recovery (unit serving autopsy area)
- Low-wattage LED & T8 lighting
- Light timers and occupancy sensors
- Ample daylighting in work areas
- Low-E insulated windows
- South window sun shading
- High performance EIFS cladding
- R-30 continuous roof insulation
- Low-flow plumbing fixtures
- Recycled paint
- Native drought-tolerant landscaping

**Floodproofing Measures:**

- Building structure designed for 2-foot high flood protection elevation
- Thickened floor slab and two-foot high concrete wall at perimeter
- Exterior electrical and mechanical equipment above flood protection elevation
- Automatic floating flood gates at garage door openings
- Flood-rated doors at pedestrian entries
**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 2015 expenditures for the Boulder County Coroner’s Office was $1,078,034. This is 0.25% of the total adopted 2015 Boulder County budget of $438,840,064.
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.
**YEARLY TRENDS**

**PERCENTAGES OF BOULDER COUNTY DEATHS REPORTED TO THE CORONER**

Per the US Census, the 2015 estimated population of Boulder County was 319,372. 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.
In approximately twelve percent of the deaths that were investigated by the Boulder County Coroner’s Office in 2015, 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.

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 interests 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 234 autopsies in 2015, all of which were 2015 cases; there was one 2015 case in which the autopsy was performed in 2016.
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 235 cases in 2015 that required autopsies; however one of the autopsies was performed in 2016.
CASES REPORTED TO BCCO BY MONTH - 2015
TOTAL CASES REPORTED IN 2015: 1988*

Note: *The total number of cases reported includes 98 cases that were transferred to other coroners. See Transfer of Jurisdiction section of this report for further explanation.
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.
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 2015, the jurisdictions of 98 cases were transferred to other coroners in surrounding counties. Forty-nine cases were natural deaths, eight were traffic accidents, twenty-nine were non-traffic accidents, five were suicides, one was undetermined, five were homicide and one case was a fetal demise where there was no manner of death required. Fifty-six of the cases were transferred to Adams/Broomfield County, twenty-five were transferred to Weld County, fifteen were transferred to Jefferson County, one was transferred to El Paso County and one was transferred to Denver County.

Forty-four of the transferred cases were deaths that occurred in an emergency department. Thirty-nine of them occurred at Exempla Good Samaritan Medical Center, one occurred at Avista Adventist Hospital and four occurred at Longmont United Hospital.

In 80% 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 39 EGSME 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.
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 2015, 366 scene responses were made which was 18% of all of the deaths reported to the Boulder County Coroner’s Office.
BCCO all-terrain response vehicle, equipped for mountain responses.

BCCO RESPONSES BY LOCATION OF DEATH 2015: 366

<table>
<thead>
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<th>Location</th>
<th>Response Count</th>
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</thead>
<tbody>
<tr>
<td>Jail</td>
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<tr>
<td>Jail Building</td>
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<tr>
<td>CU Dorm</td>
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<tr>
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<td>18</td>
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<tr>
<td>Hospital ED</td>
<td>31</td>
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<tr>
<td>Open Area</td>
<td>30</td>
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<tr>
<td>Roadway</td>
<td>12</td>
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<tr>
<td>Hospital</td>
<td>14</td>
</tr>
<tr>
<td>Vehicle (Non–Traffic)</td>
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</table>
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, Exempla Good Samaritan Medical Center, and Avista Adventist Hospital.

Note: *The total number of cases reported includes 44 cases that were transferred to other coroners. See Transfer of Jurisdiction of this report for further explanation.
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 1253 hospice cases reported to the Boulder County Coroner's Office, 1215 (97%) were natural deaths, and 38 (3%) were accidental deaths. Of the 1253 hospice cases, one of them included an autopsy (due to suspicious circumstances reported surrounding the decedent's care).

**Note:** *This total excludes the 13 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 1675 cases, or 88.6% in 2015. Included within these natural deaths were 1215 hospice cases.

Note: *The 98 cases transferred to other coroners are not included in this total.

**There was one traffic related death in 2015 that was ruled as a homicide, it is one of the six homicides listed above, therefore, the actual total of traffic related deaths in 2015 was 22.

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 N/A manner of death includes one fetal demise case.

For statistical purposes accidental deaths due to traffic accidents will be separated from accidental deaths due to other causes.
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:** There were 235 cases in 2015 that required an autopsy, one autopsy was performed in 2016, however the manner of death for that case is included above.
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 49 natural deaths transferred to other coroners.

NATURAL DEATHS BY AGE AND GENDER

BCCO NATURAL DEATHS -2015
BY AGE AND GENDER

Males (817)  Females (858)
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. In 2015 in Boulder County, the most common method used was a firearm, followed by hanging and then by prescription drugs.

**SUICIDES BY YEAR**

![BCCO SUICIDES BY YEAR 2006-2015](image)

**Note:** There were a total of 67 suicides reported to the Boulder County Coroner’s Office in 2015. The Boulder County Coroner’s Office investigated 62 of those cases and transferred jurisdiction of five cases to other coroners.
SUICIDES BY MONTH

Note: Eight of the suicides were non Boulder County residents and 6 of the suicides were transients.

SUICIDES BY MARITAL STATUS AND GENDER

BCCO SUICIDES BY MARITAL STATUS AND GENDER
TOTAL 2015 SUICIDES: 62

- Male 49
- Female 13
SUICIDES BY AGE AND GENDER

BCCO SUICIDES BY AGE AND GENDER
TOTAL 2015 SUICIDES: 62

NUMBER OF DEATHS

AGE IN YEARS

SUICIDES BY METHOD

BCCO SUICIDES BY METHOD
TOTAL 2015 SUICIDES: 62

NUMBER OF DEATHS

METHOD
SUICIDES BY GENDER AND METHOD

BCCO SUICIDES BY GENDER AND METHOD - 2015
TOTAL 2015 SUICIDES: 62

- Male 49
- Female 13

NUMBER OF DEATHS

Firearm: 21
Carbon Monoxide: 1
Prescription Medication: 1
Prescription Over-the-Counter Meds: 3
Over-the-Counter Medications: 1
Hit by Vehicle: 0
Asphyxia/Suffocation: 0
Asphyxia/Hanging: 2
jumped from Height: 2
Cut/Stab Wound: 0
Illicit Drug: 1
Poisoning: 0
Note: In 2015, a total of 169 accidental deaths were reported to the Boulder County Coroner, thirty-seven of those cases were transferred to other coroners.
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 incident deaths.

The Boulder County Coroner’s Office investigated twenty-two deaths resulting from traffic incidents in 2015, all of which occurred in Boulder County. Of the twenty-two cases, seventeen of the victims were male and five were female. Their ages ranged from twenty to eighty-eight years of age. Eleven people died due to injuries or complications from injuries sustained in motor vehicle incidents (including automobiles, pickup trucks, SUVs and vans), five people died in motorcycle incidents, four people died as a pedestrian struck by a motor vehicle, one person died after being backed over by a vehicle while walking down their driveway and one Colorado State Patrol Trooper died as the result of being struck by a fleeing vehicle while engaged in duty outside of his vehicle; there were no deaths involving bicycles. Among the eleven vehicle fatalities, eight were drivers and three were passengers. Three drivers and one passenger were wearing seatbelts. Of the motorcycle deaths, four were drivers and 1 was a passenger. Of the motorcycle deaths, only one driver was wearing a helmet.

Note: There were a total of 30 traffic incident deaths reported to the Boulder County Coroner’s Office in 2015. The Boulder County Coroner’s Office investigated 22 of these cases; the other eight cases were transferred to another coroner’s jurisdiction.
Note: The graph displays the information based on the time of incident, not the death.
In Colorado in 2015, 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.

Notes:

*Both of these decedents also tested positive for THC, one of them was additionally positive for oxycodone.

**This decedent also tested positive for THC.

***One of these decedents also tested positive for THC and prescription drugs.

There were 4 additional cases not shown above where the toxicology findings may have played a role in the death; one driver tested positive for multiple prescription drugs, one motorcycle driver tested positive for THC, one pedestrian tested positive for multiple prescription drugs and another pedestrian tested positive for THC and fentanyl.
There were a total of 140 non-traffic accidents reported to the Boulder County Coroner’s Office in 2015. The Boulder County Coroner’s Office investigated 111 of those cases and transferred jurisdiction of 29 cases to other coroners.
NON-TRAFFIC ACCIDENTS BY MONTH

BCCO ACCIDENTAL DEATHS (NON-TRAFFIC) BY MONTH
2015 - TOTAL: 111

NUMBER OF DEATHS

<table>
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<th>Jan</th>
<th>Feb</th>
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<th>Apr</th>
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</tr>
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</table>

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
NON-TRAFFIC ACCIDENTAL DEATHS BY TYPE OF EVENT

BCCO ACCIDENTS (NON-TRAFFIC) BY TYPE OF EVENT
2015 - TOTAL: 111

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 - Electrocution
I - Fall from Height
J - Aspirated on Food
K - Medical Misadventure
L - Airplane Crash
M - Environmental
N - Thermal Injuries
O - Blunt Force Injuries
P - Injury due to Animal
Q - Unknown
HOMICIDES

HOMICIDES BY YEAR

BCCO HOMICIDES BY YEAR 2006-2015

NUMBER OF DEATHS

Note: In 2015, all six of the victims of homicide were male. Two homicide victims died of stab wounds, three victims died of firearm wounds (2 were officer involved shootings), and the sixth victim was a Colorado State Patrol Trooper who died after sustaining injuries from a fleeing vehicle.
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

BCCO UNDETERMINED MANNER OF DEATH BY YEAR: 2006-2015

Note: There were a total of 4 cases reported to the Boulder County Coroner’s Office in 2015 that were ruled as an undetermined manner of death; one of these cases was transferred to another coroner’s office which made the undetermined ruling for that case. The Boulder County Coroner’s Office investigated the other 3 cases.

While the office ruled undetermined for the manner of death in these 3 cases in 2015, only two of the cases listed an undetermined cause of death as well; one presented multiple possible causes of deaths of which not one was able to be ruled out, in the second case, a specific cause of death could not be interpreted. The third case was determined to be a mixed drug intoxication and hypothermia; however, the manner of death could not be determined as suicide or accident.
**Note:** Boulder County saw a large increase in heroin related deaths starting in 2013 with a total of 15 cases, up from 6 in 2012. In 2014 there were a total of 13 heroin related deaths and in 2015 there were 11. Two of the 2015 cases are listed above in the Multi Drug category. The Multi Drug category is used for cases where a couple of drugs or several drugs are responsible for the death. Of the cases listed in the Multi Drug section the drugs of interest that were present were: Clonazepam (7 cases), heroin (2 cases as already mentioned), methamphetamine (2 cases) and opioids (13 cases).
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 2015, there were twelve total drowning cases. All twelve of the cases were ruled Accidents for the manner of death, two of the twelve were traffic incidents, the other ten cases were non-traffic. Three of the drownings occurred in residential bathtubs (two of which were in combination with ethanol intoxication). Another one of the drownings was due to the consumption of excessive amounts of water. Six of the drownings occurred out doors in various places (private pond, creek, reservoir and lake), four of which were during recreational activities (fishing, tubing and swimming), one of the six was during maintenance and the other was in combination with Dementia. Of these six cases three of them occurred in combination of substance usage/abuse and one occurred in combination of heart disease. Of the two traffic incidents resulting in drownings, one person was ejected from the vehicle into a creek and the other vehicle came to rest in a pond and was partially submerged.
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. 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:

- Each county department
- Local law enforcement agencies
- DA
- School districts
- County public health
- 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 2015, the team reviewed eleven 2014 child death cases.

In Boulder County, a total of twelve child deaths (<18 years of age) were reported to the Coroner’s Office in 2015. Two additional child death cases were transferred to other coroners. Any of the twelve 2015 child death cases selected for review by the state will be reviewed in 2016 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.
CHILD DEATHS BY MANNER OF DEATH

- **Accident:** The one accidental death was due to positional asphyxia associated with unsafe sleep environment (6 months).
- **Suicide:** The one suicide death was a result of an intentional jump from the height of a mountainside (age 17).

CHILD DEATHS BY CAUSE OF NATURAL DEATHS

- **Cancer:** 2 deaths
- **Prematurity:** 4 deaths
- **Heart Disease:** 1 death
- **CNS:** 1 death
- **Genetic:** 1 death
- **Infection:** 0 deaths
- **Lung Disease:** 1 death

TOTAL NATURAL CHILD DEATHS: 10
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.
Ongoing efforts to encourage safe sleep environments are also being made by 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](http://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 24 cases included in this study.
There were four cases that, after a review of the case documentation, the unsafe sleep findings were categorized as none, unknown, not ideal, or undetermined; however the other 20 cases all had at least one finding of an unsafe sleep environment, many of them had more than one finding. The graph below shows the findings, by occurrence, in three types of unsafe sleep categories: position, bedding, and co-sleeping. The non-recommended position the infant was placed in most often was on the stomach.

Of the 24 cases, the investigating law enforcement jurisdictions were as follows: Boulder County Sheriff’s Office – 3, Boulder PD – 3, Lafayette PD – 2, Longmont – 12, and Louisville – 4. There were 11 females and 13 males. The ages were as follows: the youngest case was less than 1 month at 13 days, there were 8 cases from 1-3 months, 11 cases from 3-6 months and 4 cases from 6-9 months (the oldest was just over 8 months). The ethnicities of the children were as follows: Caucasian – 20, African American – 2, Hispanic – 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 are continued 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 11 cases where co-sleeping was a finding, the toxicology levels are unknown of the individual whom the infant was co-sleeping with; however, from 2009 to 2014 (in 4 of the 5 cases) there was suspicion or self-reporting of use of alcohol, drugs, prescription drugs or a combination thereof.
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 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.
Note: Of the transient/homeless deaths tracked from 2011 to 2015, 59 were male and 11 were female, one case was a fetal demise of a transient female. Ages of the decedents over the years ranged from 22 to 78.

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

Note: Of the transient/homeless deaths tracked in 2015, 16 were male and 1 was female. Ages of the decedents in 2015 ranged from 22 to 62.
TYPE OF ACCIDENTAL/UNDETERMINED TRANSIENT DEATHS 2011-2015

- Alcohol and Hypothermia: 2 cases
- Blunt Trauma: 5 cases
- Drowning: 2 cases
- Drugs and/or Alcohol: 13 cases
- Hypothermia: 3 cases
- Undetermined: 1 case

TYPE OF ACCIDENTAL/UNDETERMINED TRANSIENT DEATHS 2015

- Alcohol and Hypothermia: 0 cases
- Blunt Trauma: 1 case
- Drowning: 0 cases
- Drugs and/or Alcohol: 2 cases
- Hypothermia: 1 case
- Undetermined: 0 cases
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**

**BCCO INVESTIGATIONS WITH LAW ENFORCEMENT AGENCIES - 2015 TOTAL: 359**

**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

BCCO INVESTIGATIONS WITH BOULDER PD- 2015
TOTAL INVESTIGATIONS: 101

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BOULDER COUNTY SHERIFF’S OFFICE

BCCO INVESTIGATIONS WITH BCSO- 2015
TOTAL INVESTIGATIONS: 80

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BOULDER COUNTY SHOOT TEAM

BCCO INVESTIGATIONS WITH BC SHOOT TEAM - 2015
TOTAL INVESTIGATIONS: 2

NUMBER OF DEATHS

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COLORADO STATE PATROL

BCCO INVESTIGATIONS WITH CSP - 2015
TOTAL INVESTIGATIONS: 13

NUMBER OF DEATHS

<table>
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<th>Category</th>
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<tr>
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<td>0</td>
</tr>
<tr>
<td>Undetermined</td>
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</table>
Note: *There was one investigation with Longmont Police Department that is not reflected in the above graph, this case was a fetal demise case in which a manner of death is not assigned.

LOUISVILLE POLICE DEPARTMENT
BCCO INVESTIGATIONS WITH NEDERLAND MARSHAL - 2015
TOTAL INVESTIGATIONS: 0

BCCO INVESTIGATIONS WITH RMNP - 2015
TOTAL INVESTIGATIONS: 1
BCCO INVESTIGATIONS WITH CUPD - 2015
TOTAL INVESTIGATIONS: 1

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<tr>
<td>Homicide</td>
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BCCO INVESTIGATIONS WITH WARD MARSHAL - 2015
TOTAL INVESTIGATIONS: 0

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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

**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

**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 CAUCASIAN FEMALE INFANT

**Discovered:** October 12, 2001

**Approximate Age:** Infant

A Caucasian female infant was found placed in a dumpster behind a grocery store. The investigation is ongoing.

UNIDENTIFIED MALE SKELETAL REMAINS

**Reported:** November 8, 2013

**Skeletal Examination Information:**

- **Ancestry:** European descent and/or African 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 interpretation from the Osteological Report states the following:

“The skeletal remains are consistent with a young adult male with antemortem trauma indicating interpersonal violence at some time in the life of the individual. The discoloration of the skeletal remains and root markings on the bones along with the lack of modern medical intervention for fracture repair and absence of evidence of modern dental work suggest the specimen is likely archaeological. The porotic hyperostosis, which was active at death, and linear enamel hypoplasias indicate biological stress during childhood when the adult teeth were forming. The ancestry analysis indicates the individual is not of Native American descent, though an unambiguous ancestry cannot be identified. Additionally, the postmortem breakage of several teeth, postmortem damage to several bones, and the missing elements (ribs and small bones) are consistent with the story told by the VFW "Last Man Standing Club" that the remains were dug up by one of their members many years ago.”

Given that the specimen is likely archeological, it is not probable the identity will be determined, however until such time that an identification or additional information on where the remains originated from, the remains will be kept by the coroner’s office.
REFERENCES


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