Boulder County Coroner’s Office

2022 Annual Report

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.

The 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 inquiries regarding the cause and manner of death of any person under their jurisdiction. The cause of death is the underlying disease, injury, or poison that caused the cessation of life. The manner of death is a description of the circumstances surrounding the death.

Manner of death is classified as natural, accident, suicide, homicide, undetermined, and pending. The manner of death is a medicolegal term that describes the circumstances of an individual's death, and is an opinion based on the “reasonable medical or investigative probability.” When a natural disease process causes death, the manner of death would be classified as Natural. The manner of death is classified as Accident when the death is caused by an event that is not expected, foreseen, or intended. The manner of death is classified as Suicide when a person dies due to the volitional acts one takes. 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 medicolegal 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. Pending is a manner of death which is used when a determination cannot be made upon the initial investigation; pending death certificates are generally used while awaiting laboratory results or further investigation. Next of kin are generally allowed to proceed with final arrangements with a pending death certificate.
The 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 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
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, bloodstain 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 the District Attorney.

Ms. Hall attends several 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 Examiners, the Colorado Coroner’s Association, the Criminal Justice/Forensics Advisory Board at Arapahoe Ridge High School in Boulder, and the Inn Between of 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.
Marshall Fire

On December 30, 2021, shortly before 10:30 a.m. MST, a grass fire broke out in Boulder County. By the evening of January 1, 2022, the fire had become the most destructive fire in Colorado history in terms of structures lost with an estimated 1084 structures burned. Almost immediately, the Boulder County Coroner’s Office was notified and activated staff to prepare for a possible mass fatality incident.

Until a briefing held by the Boulder County Sheriff’s Office on January 02, 2022, the possibility of a major fatality incident was high. Remarkably, preliminary loss of life reports included only two individuals that had been reported missing. Two search teams were formed and responded to two separate locations.

At one of the locations, over 100 fragments ranging in size from 1mm to 5cm were recovered from an area covering approximately 3,000 cubic feet of ash and debris. Immediately it was determined that only 5 of the fragments were believed to be of human origin. On March 22, 2022, a sample of the fragments that were initially identified by a Board-Certified Forensic Anthropologist from Metropolitan State University of Denver as being possibly human were sent to the University of West Florida’s Forensic Anthropology Department where a second Board-Certified Forensic Anthropologist confirmed the beliefs of the local anthropologist. On April 20, 2022, a final anthropology report was issued indicating that 1 of the 5 fragments was in fact human.

Rapid DNA technology and various laboratory examinations were used in an effort to identify the victims of the fire. Based on the investigation of the Boulder County Sheriff’s Office and the Boulder County Coroner’s Office, in addition to the circumstantial evidence, the single bone fragment was officially classified as presumed to be that of one of the missing individuals.

The efforts of search, recovery, and identification of remains in the Marshall Fire would not have been possible without the tireless effort, sacrifice and assistance of many partner agencies and volunteers. An estimated number of effort hours reached nearly 1,000.

ANDE DNA of Longmont
Boulder County - OEM
Federal Bureau of Investigations
Longmont Police Department
CU Boulder Police Department
MSU of Denver – Forensic Anthropology

Boulder County Sheriff’s Office
20th Judicial District Attorney’s Office
Front Range Rescue Dogs
Rocky Mountain Rescue Group
Louisville Fire Department
University of West Florida
The Boulder County Coroner’s Office, Family Assistance Coordinator (FAC) position was funded in 2022. In the first year of conception, the FAC focused on the development of the service model for the new position. The Boulder County Coroner’s Office (BCCO) is 1 of 3 Coroners in the State of Colorado to provide FAC services.

The mission of the Family Assistance Division is to provide assistance to the families, relatives, and friends of those affected by sudden or unexpected death. The division offers assistance by explaining the role of the coroner’s office and by helping individuals find resources for any identified needs. The core values of the division are serving with care, communication, and dedication for as long as needed.

Highlights of the FAC include the creation of a resource guide for individuals to help answer questions entitled “After the Loss”, fostering the development of a pathway to make referrals to community resources, and authored policies and procedures.

It is the goal of the BCCO to be inclusive of all individuals who have suffered a loss, therefore language access to receive resources from the FAC has been identified as a major goal. Vital forms and resources have been translated into Spanish with the intent of translation into other prominent languages found within Boulder County within the next year.

The FAC has made a significant impact on the individuals who have suffered a loss. 99 deaths during the last 6 months of the year met the criteria for FAC involvement. 193 individuals were contacted, and 60 of the 193 individuals accepted resources provided by the FAC.
Reportable Deaths

Colorado Revised Statutes §30-10-606

- 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 the 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.

Per the US Census, the 2022 estimated population of Boulder County was 327,468. 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. In 2022, 88% of all deaths in Boulder County were reported to the coroner’s office compared to 76% of all deaths being reported in 2021.

- **2,568 Boulder County Deaths**
  - 2,683 in 2021
  - **4.5%**

- **2,263 Deaths Reported**
  - 2,401 in 2021
  - **5.8%**

- **399 Death Investigations**
  - 409 in 2021
  - **2.5%**
Deaths reported to the coroner are handled in one of three ways:
1. If the death is due to a natural disease and there is a treating physician, the physician in attendance is required by law to certify the death, therefore, the coroner will decline jurisdiction.
2. The coroner accepts the jurisdiction of the death and conducts an investigation and/or an examination to determine the cause and manner of death for death certification.
3. The coroner may transfer jurisdiction 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 jurisdiction transfer 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 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 may transfer jurisdiction (subsequent investigation and certification) to the coroner of the county in which the “initiating event” occurred.

In 2022, the jurisdictions of 104 cases were transferred to other coroners in surrounding counties. 63 cases were natural deaths, 14 were traffic incidents, 22 were non-traffic accidents, 4 were suicides, and 1 was a homicide.

The above cases were transferred to the following counties: Adams/Broomfield County (43), Weld County (32), and Jefferson County (26), Larimer (1), Denver (1), and Lincoln (1).
104 of the 2,263 total deaths reported were transferred to other county coroners.

Natural Death

Natural deaths comprise most of all deaths nationwide and this holds true for the deaths handled by the Boulder County Coroner’s Office. Of the 1,823 natural deaths reported to the office, 1,262 were hospice agency deaths. Of the 1,262 hospice deaths, 97% were natural, 3% were accidental.

*For statistical purposes transferred cases will not be counted among the deaths investigated by the Boulder County Coroner’s Office unless otherwise noted.
Accidental Death – Traffic Related

- 57 traffic deaths were reported in 2022
  - 16 traffic deaths were transferred to other county coroners
- 41 deaths were investigated by the Boulder County Coroner’s Office
  - 32 of the decedents were male
  - 9 of the decedents were female
  - Ages ranged from 17 to 93 years of age
- 27 individuals died due to injuries or complications from injuries sustained in motor vehicle incidents (including automobiles, pickup trucks, SUVs, and vans)
  - 22 occupants were drivers
    - 11 of the 23 drivers were seat belted
  - 5 occupants were passengers
    - 4 of the 5 passengers were seat belted
- 3 individuals died as a pedestrian struck by a motor vehicle
- 1 individual died as a bicyclist involved in a collision
  - The bicyclist was not wearing a helmet
- 10 individuals died as a motorcyclist
  - 4 motorcyclists were wearing a helmet
152 non-traffic accidents were reported to the Boulder County Coroner’s Office. 20 of these accidents were transferred to other county coroners.

58 Drug Intoxications  
4 Environmental Exposures  
1 Industrial  
50 Falls (Non-recreational)  
5 Blunt/Sharp Force Injury  
1 Medical Misadventure  
7 Airplane Crashes  
2 Asphyxiation  
4 Drowning

Drowning as a cause of death is a diagnosis of exclusion; a 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, to exclude all other causes of death.

In 2022, there were a total of 4 drowning deaths. 3 of the deaths were ruled accidents and 1 was ruled a suicide. Alcohol was present in 2 of the 4 deaths.
Suicide Death

69 suicides were reported to the Boulder County Coroner’s Office. 4 of these suicides were transferred to other county coroners.

Nationally, men are 3.90 times more likely to commit suicide than women\(^2\) but women attempt suicide more frequently than men. Nationwide, the most common method of suicide is with a firearm, followed by hanging, and ingestion of poisons. In Boulder County, there were 30 firearm-related, 22 asphyxiation-related, and 9 drug-related suicides.

The most common method of suicide for men in Boulder County was firearm-related and for women it was asphyxiation related.
Homicide Death

11 homicides were reported to the Boulder County Coroner’s Office in 2022. 1 case was transferred to another county coroner. Of the 10 homicides reported, 7 were due to gunshot wounds, 1 was due to strangulation, and 2 were due to complications of blunt force head injuries.

Undetermined Death

Occasionally, coroners and medical examiners encounter cases that, despite a complete autopsy, comprehensive toxicology tests, and a thorough scene investigation, no cause of death can be determined. Coroners and medical examiners also encounter cases where the cause of death is quite apparent, but the evidence supporting the manner of death is insufficient to make a determination.

The determination of the manner of death is an opinion based on “reasonable medical or investigative certainty.” An example might be a case in which the cause of death is drug intoxication, but from the information available, it is not certain whether the death was due to accidental or suicidal actions.

6 deaths in Boulder County fell in the category of not being able to determine a manner of death.
When a death occurs that falls under Colorado Revised Statute 30-10-606, the coroner’s office shall be notified as soon as practicable: however, a scene response is not always necessary.

In 2022, the Boulder County Coroner’s Office made a total of 431 scene responses.
COVID-19

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. The 182 deaths included deaths where the cause of death was due to COVID-19 or listed COVID-19 as a contributing cause. 67 of those that died were not registered as Boulder County residents.
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.

In addition to following the “Forensic Autopsy Performance Standards” adopted by NAME, the coroner weighs many factors in order to determine whether an autopsy should be performed. Autopsies are generally performed on all homicides, suicides, accidents, or where no apparent cause of death can be established.
Manner of Death

MANNER OF DEATH BY NUMBER AND PERCENTAGE
TOTAL - 2,263

- Natural: 1,823 (83.00%)
- Suicide: 65 (2.50%)
- Accident (Traffic): 41 (1.82%)
- Accident (Non-Traffic): 132 (5.85%)
- Homicide: 10 (0.44%)
- Undetermined: 6 (0.27%)
- N/A: 82 (3.65%)

N/A – Represents Out of County (non-transfer) and Fetal Demise Deaths.

AUTOPSY BY MANNER
TOTAL - 258

- Natural: 55
- Accident: 122
- Suicide: 65
- Homicide: 10
- Undetermined: 6
Drug Related Death

Boulder County had a total of 74 directly drug-related deaths. These deaths are broken into 3 categories: multi-drug death, opioid-only death, and stimulant-only death.

Multi-Drug Death

Many drug-related deaths are listed with multi-drug intoxication as the cause of death; this is due to the complications that come from interpreting the use or misuse of more than one drug at a time, their levels, and the combined effects of the varying levels. The chart below indicates the drugs that were found in the 51 multi-drug deaths the county had in 2022.

Opioid Only Death

“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.
Stimulant-Only Death

Stimulants (also known as psychostimulants) is a broad term that covers many drugs including those that increase the 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, Bath Salts, Focalin, Adderall, and Ritalin.

Commonly Found Drugs

These drugs represent the most commonly found substances in deceased persons.
Fentanyl is a synthetic opioid that is 50 to 100 times more potent than heroin or morphine. Fentanyl is often mixed into other substances or marketed as a substance other than Fentanyl, such as Xanax, Oxycodone, etc. Street names include 30’s, M30’s, & Blues.

Due to its potency, as little as 2mg, about the size of 5 grains of salt, can be fatal. Since illicit Fentanyl mimics the appearance of other prescribed medication. The only safe medications are those dispensed directly by a licensed pharmacist.

| 5 Fentanyl Only |
| Boulder County Deaths |
| 8 in 2021 |

| 24 |
| Mixed with Fentanyl |
| 19 in 2021 |

| 29 |
| Fentanyl Deaths |
| 27 in 2021 |
Fentanyl Related Death

In 2022, the Drug Enforcement Administration (DEA) seized more than 57.9 million fentanyl-laced fake pills and more than 13,400 pounds of fentanyl powder. The 2022 seizures are equivalent to more than 400 million lethal doses of fentanyl. The DEA Laboratory found that, of the fentanyl-laced fake prescription pills analyzed in 2022, six out of ten pills contain a potentially lethal dose of fentanyl.

According to the Centers for Disease Control and Prevention (CDC), drug overdoses are the leading cause of death for Americans under 50 years of age, and the death rate continues to rise due to the opioid crisis, which has been declared a national emergency.
Child Death

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). The local review teams are required to review fatalities of children up to the age of 17, who died from unintentional injury, violence, motor vehicle crash, 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 the 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 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 2022, the team reviewed four child death cases.

In Boulder County, a total of 36 child deaths (<18 years of age) were investigated by the Coroner’s Office in 2022. 5 of these cases were transferred to other county coroners. The State may select any of the 2022 child death cases for review in 2023 by the Boulder County Child Fatality Review and Prevention Team.

<table>
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<tr>
<th>Child Death by Manner</th>
<th>Total - 31</th>
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<tbody>
<tr>
<td>Natural</td>
<td>7</td>
</tr>
<tr>
<td>Suicide</td>
<td>4</td>
</tr>
<tr>
<td>Traffic</td>
<td>1</td>
</tr>
<tr>
<td>Other Accidents</td>
<td>2</td>
</tr>
<tr>
<td>Homicide</td>
<td>2</td>
</tr>
<tr>
<td>Undetermined</td>
<td>1</td>
</tr>
<tr>
<td>N/A</td>
<td>14</td>
</tr>
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10-Year Child Death (under the age of 1)

The Boulder County Coroner’s Office studies deaths of children under the age of 1 year. 10 cases were included in this study. The following graph displays the findings, by occurrence, in three types of unsafe sleep categories:

- Position
- Bedding
- Co-sleeping

Of the 10 cases included in this 10-year child death study, all cases had at least one finding of an unsafe sleep environment. Several cases had multiple category findings. In most of the cases, the infant’s sleep position was on the stomach.

The 10 cases were investigated within the following jurisdictions of Boulder County:
- Unincorporated Boulder County - 1
- Lafayette – 1
- Longmont – 6
- Louisville – 2

There were 6 females and 4 males. The ages ranged from 5 ½ weeks to 9 months old.

The ethnicities of the children were as follows:
- Caucasian – 9
- Indian – 1

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.
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 is not immediately obvious prior to investigation. While the CDC has a definition for this term, the classification of the manner of death and written description of the cause of death in this type of case do vary throughout the nation.

In most infant-related deaths, it is common to use a diagnosis of exclusion approach by eliminating all other diagnoses. Therefore, to determine the cause of death a coroner or medical examiner must conduct a thorough case investigation which includes an examination of the death scene, including the sleeping environment and bedding, a review of the medical history, 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 SUID 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 a “Back to Sleep” campaign in 1992, more recently referred to as “Safe to Sleep”, to inform the public of its recommendation that infants be placed for sleep in a non-prone position on their back to prevent sleep-related deaths. The AAP reported that approximately 3,500 infants die of sleep-related deaths each year in the United States alone. Sudden unexpected infant death (SUID) is a term used to describe any sudden infant death, whether explained or unexplained. The Center for Disease Control and Prevention (CDC) makes ongoing efforts to prevent SUID deaths.

The AAP recently expanded its recommendations to focus on safe sleep environments that can reduce the risk of all sleep-related infant deaths. Their recommendations include supine positioning, use of a firm sleep surface, breastfeeding, non-inclined sleep surfaces, room-sharing without bed-sharing, short-term emergency sleep locations, routine immunization, consideration of a pacifier, 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 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. Examples are provided below.

Place your baby to sleep safely

Your baby needs only a few things to have a safe, cozy, and happy sleep. With just a flat surface in a crib or bassinet, you can create a safe space for your baby to sleep.

- Babies should always be placed on their back to sleep. Research shows this is the safest.
- Babies should sleep on a firm sleep surface that does not incline.
- Remove all toys, pillows, blankets, and bumpers from the crib.
- It’s OK to swaddle a baby, but stop swaddling as soon as they start learning to roll.
- If the baby falls asleep in a car seat, stroller, swing or infant carrier, move them as soon as you can.
- It’s dangerous for babies to sleep on a couch, armchair or nursing pillow.
- Try giving your baby a pacifier at nap time and bedtime.
- Room share: Keep the baby’s bassinet or crib in your bedroom for at least the first 6 months.

About bed-sharing

Bed-sharing significantly raises a baby's risk of injury or death. The risk is even higher if:
- The baby is younger than 4 months
- The baby was born early or with low birth weight
- A person in the bed is a smoker
- A person in the bed took drugs that make it harder to wake up
- Someone in the bed drank alcohol
- Someone in the bed is not the baby’s parent
- The surface is soft (a waterbed, old mattress, sofa, or armchair)
- Pillows or blankets are on the bed

Need help?

It's normal for infants to wake up frequently. We know this can be very tiring, but it's temporary. Talk to your pediatrician about challenges you are having. They can help you problem solve.

American Academy of Pediatrics
Dedicated to the health of all children

Safe Sleep for Babies

Eliminating hazards

There have been dramatic improvements in reducing baby deaths during sleep since the 1990s, when recommendations were introduced to place babies on their back to sleep. However, since the late 1990s, deaths have slowed. Often recommended safe sleep practices today include eliminating hazards, such as keeping blankets, pillows, bumper pads, and soft toys out of the sleep area. Recommendations also include room sharing but not bed-sharing. These practices can help lower the risk of sleep-related infant deaths, including sudden infant death syndrome (SIDS), accidental suffocation, and death from unknown causes. Not all caregivers follow these recommendations. Healthcare providers can counsel caregivers on safe sleep practices during pregnancy and baby care visits.

Healthcare providers can:

- Advise caregivers to place babies on their back for every sleep.
- Keep soft bedding such as blankets, pillows, bumper pads, and soft toys out of the baby’s sleep area, and room share but not bed share with babies.
- Ask caregivers how they place the baby to sleep, challenge to following recommendations, and help them find solutions.
- Model safe sleep practices in hospitals.
- Follow the latest recommendations from the American Academy of Pediatrics for safe sleep.

Visit www.cdc.gov/Vitalsigns

3,500
There are about 3,500 sleep-related deaths among US babies each year.

22%
22% of mothers reported not placing their baby on his or her back to sleep, as recommended.

39%
39% of mothers reported using soft bedding (not recommended) when placing babies to sleep.

1 in 5
1 in 5 babies have suffocation as the cause of death.
Unhoused Death

The Boulder County Coroner’s Office started to notice an increase in the number of unhoused deaths in the county and due to the increase has made efforts to provide statistical data to city and county leaders as well as the public on these types of deaths. While the office is diligent in tracking unhoused 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 hospital after 24 hours after being admitted, the death may not be reported if the person dies of natural causes. One challenge we face is knowing that not all unhoused that die are reported as having lived on the streets at the time of their death. Unhoused that die while in a nursing home, under hospice care, or in a care facility are considered housed at the time of death. It is difficult to collect data on those who may or may not have been unhoused before their admission, therefore, the total number of unhoused deaths on file at the coroner’s office may vary from the numbers on file with other organizations.

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<td>Totals</td>
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</table>

- Of the unhoused deaths identified in 2022, 20 individuals were male, and 5 individuals were female.
- The ages of the decedents in 2022 ranged from 21-78.
- 64% of unhoused individuals died with drugs and or alcohol present.
- 4% of unhoused individuals died as the result of blunt force trauma.
- 4% of unhoused individuals died as the result of environmental exposure.
Law Enforcement

The Boulder County Coroner’s Office works separately but in conjunction with the law enforcement agencies that serve and protect Boulder County. This section covers the number of cases investigated with these agencies. Please note that the number of investigations listed may differ from others in 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., vehicle-related incidents).

![Law Enforcement Investigations Chart]

![Manner of Death by Law Enforcement Agency Table]
Unidentified Decedents

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 sweatpants, brand name “Pro Spirit,” overlaying a pair of long white sweatpants, brand name “Jerzees”; a white windbreaker-type shell with a hood and blue trimmed with zippers halfway 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 the 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.
Unidentified Caucasian or Mixed-Race Male

**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).**”
Unidentified Caucasian Male

**Discovered:** August 21, 1971

**NamUs Case Number:** UP61120

**Ancestry:** Caucasian

**Approximate Age:** 25

**Height:** 5’11”

**Weight:** 175 lbs.

**Eye Color:** Brown

**Hair:** Shoulder-length brown/black hair

**Scars/Tattoos:** No identifying marks

**Clothing:** “Male” brand bell-bottom jeans, blue and white striped long-sleeved shirt, white Keds, gray crew socks with a red stripe on top, “Shapely” 2-button cuff L 16-16 ½

**Dental:** Right upper central incisor was chipped

A Caucasian male was found by a hiker on the north rim of Blue Mesa, approximately half a mile north of the shelter house in Bluebell Canyon, in Chautauqua Park, Boulder, CO. It was estimated that the decedent had been dead for three to five days. The cause and manner of death are unknown. He may have been associated with Seabrook, TX. All identification attempts at the time were unsuccessful. He was buried in Green Mountain Cemetery on October 1, 1971.

Antemortem photo, believed to be the decedent.
Unidentified Caucasian Male

**Discovered:** June 6, 1971

**NamUs Case Number:** UP61119

**Ancestry:** Caucasian

**Approximate Age:** 25

**Height:** 5’8”

**Weight:** 170-175 lbs.

**Eye Color:** Brown

**Hair:** Neck/shoulder-length brown hair. Brown beard and mustache

**Scars/Tattoos:** ½”-1” circular scar on the left forearm

**Clothing:** Levi jeans, leather belt, one desert boot

**Dental:** Both upper central incisors were chipped; it is possible this happened postmortem

A Caucasian male was found in Boulder Creek, near the 28th Street bridge, in Boulder, CO. It was estimated that the decedent had been dead for two to three days and had accidentally drowned. All identification attempts at the time were unsuccessful. He was buried in Green Mountain Cemetery on July 23, 1971.
10 YEAR TRENDS

TOTAL BOULDER COUNTY DEATHS VS. DEATHS REPORTED TO BCCO BY YEAR: 2013-2022

- **Boulder County Deaths**
- **Deaths Reported to BCCO**

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AUTOPSY BY YEAR
2013-2022

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### UNHOUSED DEATH BY YEAR: 2013-2022

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UNHOUSED DEATH BY YEAR:
2013-2022
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References


3 Published online Pediatrics Vol. 150 No. 1 e2022057990.