This report provides a summary and statistical analysis of the deaths that were investigated by the Mesa County Coroner’s Office in the year 2018. Mesa County encompasses an area over 3300 square miles, which consists of desert, agricultural, and mountain areas. Mesa County is home to approximately 153,207 people in 12 communities per the United States Census Bureau (https://www.census.gov/quickfacts/mesacountycolorado). The largest of these is Grand Junction, followed by Fruita and Palisade. Other towns and unincorporated areas of the County include Clifton, Fruitvale, De Beque, Collbran, Mesa, Mack, Loma, Gateway, Glade Park, and Whitewater.

The Coroner and/or Deputy Coroner are on duty 24 hours a day, 365 days a year. The Coroner’s mission is to satisfy the legal requirements of the office in an expeditious manner. The primary task of the Coroner’s Office is to determine the cause and manner of death of those who have died in Mesa County or in those whose traumatic event originated in Mesa County. An autopsy may be required depending upon the circumstances of the death. Not all deaths that the Coroner’s Office investigates requires a full autopsy.

The Coroner’s Office investigates sudden, unexpected deaths, especially those that occur under violent or suspicious circumstances. The deaths to be reported to the Mesa County Coroner’s Office include all deaths occurring in Mesa County as outlined below regardless of where or when the initial injuring event occurred. In addition, all deaths in which the initiating injuring event occurred in Mesa County shall be reported to Mesa County Coroner’s Office.

The deaths to be reported to Mesa County Coroner’s Office are as follows:

- From disease which may be hazardous, contagious, or may constitute a threat to the health of the general public
- From external violence, an unexplained cause, or under suspicious circumstances
- Where no physician is in attendance, or where, though in attendance, the physician is unable to certify the cause of death
- From thermal, chemical, or radiation injury
- From criminal abortion
- While in the custody of law enforcement officials or while incarcerated in a public institution
- When the death was sudden and happened to a person who was in good health
- From an industrial accident or any death suspected to involved with the decedent’s occupation
- When death occurs in a hospital less than 24 hours after admission to a hospital or after any invasive procedure
- Any death suspected to be due to alcohol intoxication or the result of exposure to drugs or toxic agents
- Any death due to neglect or suspected neglect
- Any stillbirth of 20 or more weeks gestational age unattended by a physician
- Any maternal death to include death of a pregnant woman regardless of the length of the pregnancy, and up to six weeks (or one year) post-delivery, even where the cause of death is unrelated to the pregnancy
- Any death of an infant or child where the medical history has not established a significant pre-existing condition

**Staff for 2018**

Dean Havlik, M.D.  Coroner & Forensic Pathologist
Victor Yahn, D-ABMDI  Chief Deputy Coroner
Chuck Nelson, D-ABMDI  Deputy Coroner
Nina Strayhorn  Deputy Coroner
Jody Hudson  Deputy Coroner
Shaye Schottel  Deputy Coroner

**General Statistics** (Including deaths transferred to the county of origin)

- Mesa County population in July 2018 per census data: 153,207
- Total Mesa County deaths: 1783
- Percentage of Mesa County citizens who died in 2017: 1.16%
- Number of deaths investigated: 670
  - Scene Investigations: 297
    - Victor Yahn: 118
    - Chuck Nelson: 123
    - Nina Strayhorn: 42
    - Jody Hudson: 10
    - Shaye Schottel: 04
  - Facility Investigations: 373
    - Victor Yahn: 150
    - Chuck Nelson: 145
    - Nina Strayhorn: 48
    - Jody Hudson: 24
    - Shaye Schottel: 06
- Percentage of total deaths investigated: 37.6%
- Number of deaths originating in other counties: 62
- Jurisdiction declined: 38
- Number of postmortem examinations (Mesa County) 136
  - Percentage of deaths having an examination: 7.6%
    - Complete Autopsies: 129
    - Partial Autopsies: 02
    - External Examinations: 05
- Toxicology performed (Mesa County): 108
- Gender of those deaths investigated (2018 Total Cases)
  - Males: 401
Females 269

Race of those deaths investigated (2018 Total Cases)
- Caucasian 606
- Hispanic 46
- Native American 05
- Black 07
- Asian 06
- Other/Unknown 0

Body Transport (2018 Total Cases)
- Coroner’s Office 310
- Mortuaries – from scene 22
- Mortuaries – from facilities 338

Additional Information (2018 Total Cases)
- Unidentified bodies 0
- Organ and Tissue referrals 79
- Donated to CMU Forensic Investigation Research 6
- Unclaimed bodies 0
- Exhumations 0
The following information pertains only to deaths that were not transferred back to the county of origin.

Age

In the 0 to 19 years old age group, there were ten deaths which included six males and four females. Of these, four were natural deaths from complications during or shortly after birth. Three deaths were accidents. One death was a homicide. Two deaths were undetermined. The three accidental deaths were a 17-month-old from hyperthermia, an 18-year-old from mixed drug intoxication, and a 19-year-old from a motorcycle crash. There was a 2-month-old homicide from complications of blunt force chest injuries. There were no suicides within the 0 to 19 year old age group in 2018. The two undetermined deaths did not have sufficient information to conclude what the cause or manner of death was.

Manner of Death

<table>
<thead>
<tr>
<th>Manner</th>
<th># of cases</th>
<th># of postmortem exams</th>
<th>% receiving a postmortem exam **</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural</td>
<td>440</td>
<td>32</td>
<td>7.3%</td>
</tr>
<tr>
<td>Accident</td>
<td>101</td>
<td>37</td>
<td>37%</td>
</tr>
<tr>
<td>Suicide</td>
<td>55</td>
<td>55</td>
<td>100%</td>
</tr>
<tr>
<td>Homicide</td>
<td>9</td>
<td>9</td>
<td>100%</td>
</tr>
<tr>
<td>Undetermined</td>
<td>3</td>
<td>3</td>
<td>100%</td>
</tr>
</tbody>
</table>
** In the 64 accidental deaths in which no postmortem examination was performed, all were decedents who were hospitalized for an extended period of time and the injuries were well documented in the hospital and/or care facility. Of these 64 deaths; 50 deaths were from complications of a fall from standing height or a low height such as bed. Six accidental deaths were from motor vehicle crashes. Two accidental deaths were from pedestrian verses motor vehicle. Two accidental deaths were from drug intoxication. One accidental death was the result of thermal injuries when the decedent was burning debris on their property. One accidental death was from aspirating food. One accidental death was from therapeutic complications. Finally, one accidental death was from complications from a shoulder injury while at work.

**Accidental Deaths**

<table>
<thead>
<tr>
<th>Type</th>
<th>Number of deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor vehicle (MV) crash</td>
<td>18</td>
</tr>
<tr>
<td>Falls</td>
<td>52</td>
</tr>
<tr>
<td>Drug intoxication</td>
<td>16</td>
</tr>
<tr>
<td>Pedestrian vs. Motor vehicle (MV)</td>
<td>5</td>
</tr>
<tr>
<td>Drowning</td>
<td>2</td>
</tr>
<tr>
<td>Thermal injuries</td>
<td>1</td>
</tr>
<tr>
<td>Other **</td>
<td>7</td>
</tr>
</tbody>
</table>

**The “other” cases include: one food aspiration, one hyperthermia, one hypothermia, two work related injuries, and two complications of a therapeutic interventions.**

The 18 motor vehicle crash-related deaths displayed the following data:

- Drivers – 16 (One was a driver that drove into a ditch and drowned)
  - Tractor operator – 1
  - Motorcycle/ATV - 6
- Passengers – 2
- Motorcycle/ATV wearing a helmet – 3
- Motorcycle/ATV without a helmet – 3
- Motorcycle/ATV unknown if wearing a helmet – 0
- Automobile victims wearing a seatbelt – 2
- Automobile victims not wearing a seatbelt – 8
- Automobile victims unknown if wearing a seatbelt – 2
- Alcohol and/or drugs involved in at least 11 of the deaths (44% of cases)
  - Alcohol (absent of drugs) in 3 deaths
Drugs (absent of alcohol) in 2 deaths
Combination of both alcohol and drugs in 3 deaths
Unknown if alcohol and/or drugs involved in 3 deaths due to hospitalization for extended time

The drownings consisted of:
- 1 Creek drowning (positive for drugs and alcohol)
- 1 Canal drownings

The drugs consisted of:
- 7 were mixed drug intoxications
  - oxycodone, gabapentin, and fentanyl
  - alcohol, acetylfentanyl and cocaine
  - alcohol and methamphetamine
  - heroin and methamphetamine
  - alcohol and fentanyl (2 cases)
  - methadone and methamphetamine
- 9 were from a single drug
  - 4 methamphetamine
  - 2 fentanyl
  - 1 oxycodone
  - 1 heroin
  - 1 methadone
- 5 deaths had drugs or alcohol as a contributing factor in the death

Homicides

The 9 homicides had the following characteristics:
- 1 death due to stab wound of the chest
- 1 complications of blunt force chest injuries
- 7 deaths due to gunshot wounds

Natural deaths

Of the 440 natural deaths investigated, the majority of the deaths were cardiovascular related (292 deaths, 66%). Deaths due to cardiovascular causes include myocardial infarcts (heart attacks), heart arrhythmias, strokes, and aneurysms. There were 30 deaths related to infectious causes (predominantly pneumonia in elderly individuals), 36 cancer related deaths, 15 deaths related to chronic obstructive pulmonary disease (emphysema),
and 22 deaths due to effects of chronic alcoholism. The remaining 45 deaths were primarily from complications of other long-standing disease processes.

Undetermined

There were 3 undetermined deaths in 2018. Two deaths are still currently being investigated. One undetermined death was a drug ingestion case.

Suicides

OVERVIEW

Suicide per Year 2014 to 2018

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>36</td>
</tr>
<tr>
<td>2015</td>
<td>37</td>
</tr>
<tr>
<td>2016</td>
<td>48</td>
</tr>
<tr>
<td>2017</td>
<td>46</td>
</tr>
<tr>
<td>2018</td>
<td>55</td>
</tr>
</tbody>
</table>
Suicides rates are often expressed in number of suicides per 100,000 people.

There were 55 suicides in 2018. 45 of the 55 suicides in 2018 were male; whereas, 10 suicides were female. 33 suicides were from gunshot wounds. Twelve suicides were hangings. Three suicides were from drug intoxications. Three suicides were stab wounds. Three suicides were multiple blunt force injuries. One suicide was a result of carbon monoxide poisoning.

- Males age range was 21 to 89 years-old
  - 30 gunshot wound
  - 8 hanging
  - 2 drug intoxication
  - 3 stab wound
  - 2 multiple blunt force injuries
- Females age range was 32 to 75 years-old
  - 3 gunshot wound
  - 4 hanging
  - 1 drug intoxication
  - 1 multiple blunt force injuries
  - 1 carbon monoxide poisoning
SUICIDE AND AGE

The following table displays suicide by age range and method. This year the number of suicides per age range showed that the age groups from 30 to 39 and 50 to 59 had the highest number of deaths by suicide. The 0 to 9 age range and 10 to 19 age range had no suicides. All of the remaining age ranges were within two deaths of each other.

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Drug Intoxication</th>
<th>Gunshot Wound</th>
<th>Hanging</th>
<th>Carbon Monoxide</th>
<th>Multiple Blunt Force Injuries</th>
<th>Stabbing</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 9</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10 to 19</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>20 to 29</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>30 to 39</td>
<td>6</td>
<td>6</td>
<td>2</td>
<td>3</td>
<td>17</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>40 to 49</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>50 to 59</td>
<td>1</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>60 to 69</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>70 to 79</td>
<td>1</td>
<td>6</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>80 Plus</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
</tbody>
</table>

SUICIDE AND MARITAL STATUS

For the purpose of this analysis, married included any common law arrangements or separations that were not legal.

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>15</td>
<td>42%</td>
<td>17</td>
<td>46%</td>
<td>18</td>
<td>37%</td>
<td>13</td>
<td>28%</td>
<td>19</td>
<td>36%</td>
</tr>
<tr>
<td>Divorced</td>
<td>6</td>
<td>17%</td>
<td>7</td>
<td>19%</td>
<td>8</td>
<td>17%</td>
<td>12</td>
<td>26%</td>
<td>20</td>
<td>36%</td>
</tr>
<tr>
<td>Single</td>
<td>14</td>
<td>38%</td>
<td>14</td>
<td>24%</td>
<td>21</td>
<td>44%</td>
<td>16</td>
<td>35%</td>
<td>14</td>
<td>25%</td>
</tr>
<tr>
<td>Widowed</td>
<td>1</td>
<td>3%</td>
<td>1</td>
<td>11%</td>
<td>1</td>
<td>2%</td>
<td>5</td>
<td>11%</td>
<td>2</td>
<td>3%</td>
</tr>
</tbody>
</table>
TOXICOLOGY

One common denominator can be found with suicides; the presence of alcohol and/or drugs in the decedent’s system at the time of death. 16% of the suicides did not show any drugs or alcohol at the time of the post-mortem examination and 33% were not tested or unknown. In 2018, there were a few individuals that survived for an extended period in a healthcare setting. This made the performance of toxicology on these cases difficult since there were no appropriate toxicology samples to test. Majority of the individuals that were negative for drugs or alcohol were either diagnosed with a mental health disease or a terminal illness. The Mesa County Coroner’s Office also observed the overall number of deaths that involved the use of marijuana. 16% of all suicides tested positive for marijuana.

POSSIBLE STRESSORS

An attempt was made to identify the proximate stressor that caused a person to decide to commit suicide. This information has the possibility to be very subjective. The information was derived from interviews with the people closest to the decedent and reviewing medical records. At times, there may have been multiple stressors; however, the stressor that was emphasized the most was selected.
MENTAL HEALTH AND TREATMENT

Families and friends of many of the suicide victims expressed that the decedents were depressed prior to the decedent’s death. In 2018, there was an increase in the number of decedents not receiving mental health services. The following chart explains graphically.
PREVIOUS SUICIDAL THOUGHTS OR ATTEMPTS

In 2018, 47% of decedents had previous suicide ideations or suicide attempts. On the other hand, 47% of decedents also did not have any previous ideations or attempts. However, it was unknown on whether or not the decedent had suicidal ideations or previous attempts in 6% suicides in Mesa County.

![Pie chart showing Suicide Ideation or Previous Attempts in Completed Suicides 2018]

SUICIDES TRENDS

The table below shows the number of suicides by month from 2014 to 2018. 2018 countered the presumption that holidays (November-December) are the busiest time for suicides. April and July had the highest number of deaths by suicide; whereas, November did not have any deaths by suicide. The overall rate of suicides per total number of cases reported to the office was the highest in 2018. Between the years of 2014-2018, 2018 also had the highest number of suicides.
Completed Suicides per Year 2014 to 2018 by Month

<table>
<thead>
<tr>
<th>Month</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>February</td>
<td>7</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>March</td>
<td>0</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>April</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>May</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>June</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>July</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>August</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>September</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>October</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>November</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>December</td>
<td>6</td>
<td>3</td>
<td>8</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Suicides per Year</td>
<td>36</td>
<td>37</td>
<td>48</td>
<td>46</td>
<td>55</td>
</tr>
</tbody>
</table>

Suicide % of Case Load: 7.5% 6.5% 7.1% 7.0% 78.2%

Suicide by Season 2014 to 2018

This graph indicates that in 2018 spring and summer had the highest number of suicides.
Links:

Suicide Prevention Lifeline: 1-800-273-TALK (8255)
www.suicidepreventionlifeline.org

Suicide Prevention Foundation: www.suicidepreventionfoundation.org

References:
https://www.census.gov/quickfacts/fact/table/mesacountycolorado/PST045217
2007 to 2018 Quick Summary

There has been several inquiries as to how the staffing and caseload has changed over the years at the Mesa County Coroner’s Office. Being that 2007 was the first year an annual report was completed, 2007 was selected as the starting point. 2018 was the last year that part-time medicolegal death investigators (MDI) were used. This was due to an addition of a third full-time MDI.

All of the following graphs are for the total number of deaths that were handled by the Mesa County Coroner’s Office. These graphs also include the deaths that were transferred back to the county of origin. Thus, the numbers in each category may not match the previous graphs as they also include the transferred cases. These graphs do not include such tasks as responding to observe bones or administrative duties.

The above graph shows that the number of deaths maintained around the mid-400s until 2015 when there was a sudden increase. For the last three years, the caseload has remained in the mid to upper 600s. As of July, 2019, there were 30 additional total cases reported when compared to the case total of July, 2018.
The number of postmortem examinations has decreased since 2007. The graph below shows a comparison of the deaths investigated as well as the deaths which had an autopsy performed.
MANNER OF DEATHS

The following graphs show the number of deaths for each manner of death.

**NATURAL DEATHS**

![Graph showing natural deaths from 2007 to 2018]

**ACCIDENTAL DEATHS**

![Graph showing accidental deaths from 2007 to 2018]
The manner of death with the largest increase in the number of deaths was natural followed by accidental deaths. Suicides and homicides had the smallest increase in number. Undetermined deaths had a decrease in the number of deaths.
STAFFING

The following two graphs show a breakdown of cases handled per investigator (one for full-time and one for part-time). The third graph displays the caseload per forensic pathologist.

In 2011 and 2012, there was only one full-time investigator and three part-time/on-call investigators. That model of employment did not work well; therefore, a second full-time investigator was reinstated in 2013. With the increase in number of deaths investigated, a third investigator was added in 2018.
In 2007 and 2008, there was one part-time medicolegal investigator (MDI). There were no part-time MDIs from 2009 to 2010. In 2011, when there was only the one full-time investigator, the Coroner’s Office hired three part-time/on-call investigators. Initially, this appeared to work. However, as shown in the graph above, the part-time MDIs handled less and less death investigations over time. With the decrease in death investigations handled by part-time MDIs and the caseload increase, they were replaced with a full-time investigator at the start of 2019.
Since 2014, the Mesa County Coroner’s Office has been contracting with only one forensic pathologist.