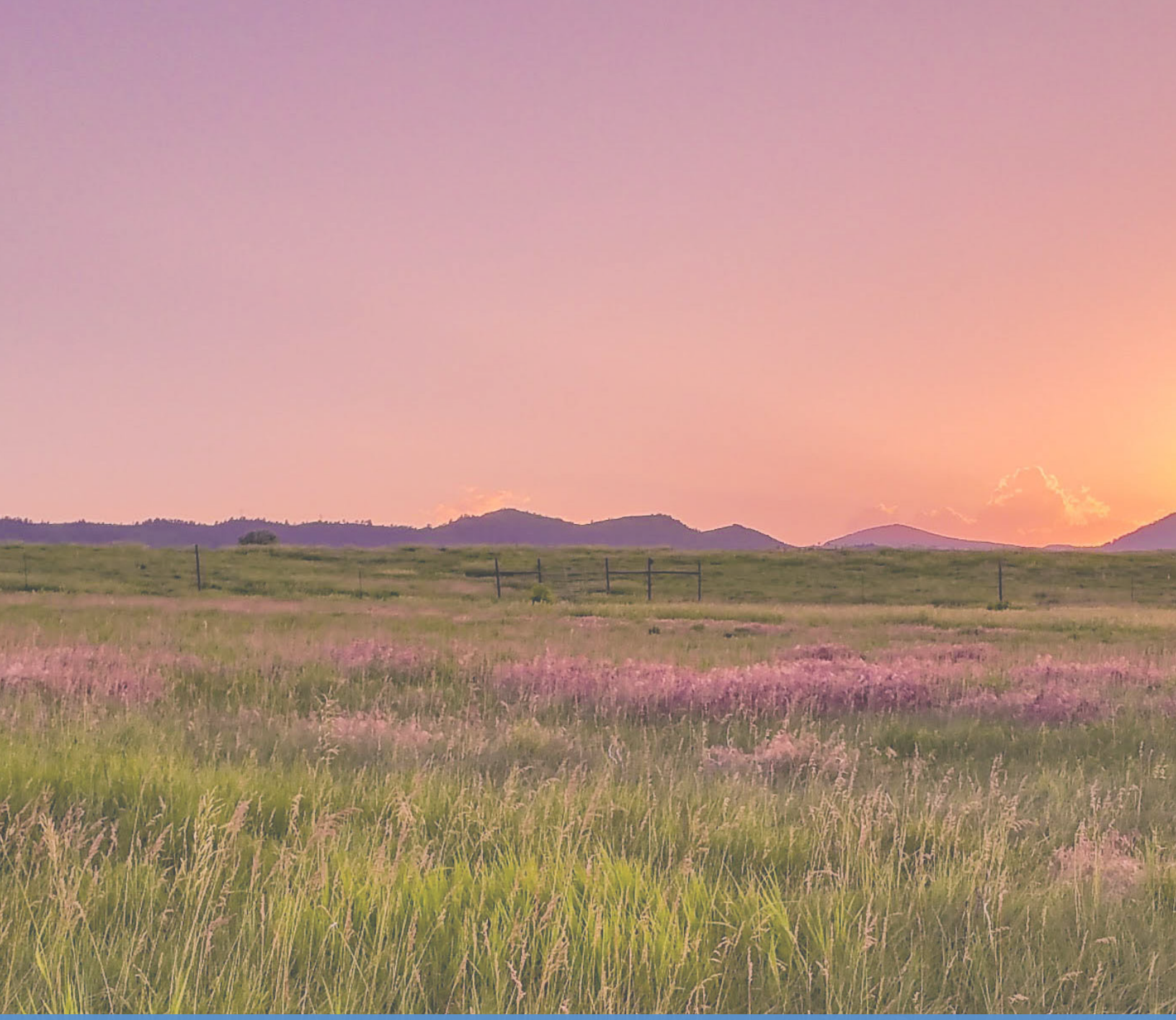

COLORADO

CHILD FATALITY PREVENTION SYSTEM

Firearm Death Data, 2013 - 2017

COLORADO
Department of Public Health & Environment

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FIREARM DEATH DATA, 2013 - 2017

INTRODUCTION

The Child Fatality Prevention Act (Article 20.5 of Title 25, Colorado Revised Statutes) established the Child Fatality Prevention System (CFPS), a statewide, multidisciplinary, multi-agency effort to prevent child deaths. Although not codified in Colorado Revised Statutes (C.R.S.) until 2005, CFPS has been conducting retrospective reviews of child deaths in Colorado since 1989. CFPS applies a public health approach to prevent child deaths by aggregating data from individual child deaths, describing trends and patterns of the deaths and recommending prevention strategies. Child fatality prevention review teams and their partners implement and evaluate the identified strategies at the state and local levels with the goal of preventing similar deaths in the future.

The data presented within this data summary come from comprehensive, statutorily-mandated reviews of deaths among those under 18 years of age occurring in Colorado between 2013 and 2017. Local child fatality prevention review teams are responsible for conducting individual, case-specific reviews of deaths of children meeting the statutory criteria. Reviewable child deaths result from one or more of the following causes: undetermined causes, unintentional injury, violence, motor vehicle and other transportation-related, child maltreatment, sudden unexpected infant death (SUID) and suicide. During the 2018 fiscal year, local teams reviewed deaths that occurred in 2017.

The CFPS review process includes deaths of Colorado residents occurring in Colorado, as well as deaths of out-of-state residents who died in Colorado or were transported to a Colorado hospital and died. CFPS does not review deaths of Colorado residents that occur outside Colorado. These criteria are different from other reports of child fatality data and many other Colorado government data sources. As a result, the data presented in this topic-specific data brief may not match other statistics reported at both the state and national levels. This data brief provides an overview of firearm death data from CFPS. Additional CFPS data is available in a state-level overview, cause-specific data briefs and an interactive data dashboard at: www.cochildfatalityprevention.com/p/reports.html.

STRUCTURAL INEQUITY

CDPHE acknowledges that generations-long social, economic and environmental inequities result in adverse health outcomes. They affect communities differently and have a greater influence on health outcomes than either individual choices or one's ability to access health care. Reducing health disparities through policies, practices and organizational systems can help improve opportunities for all Coloradans.[1]

Some families lose infants, children and youth to the types of deaths reviewed by CFPS not as the result of the actions or behaviors of those who died, or their parents or caregivers. Social factors such as where they live, how much money or education they have and how they are treated because of their racial or ethnic backgrounds can also contribute to a child's death.[2] In the United States, most residents grew up and continue to live in racially and economically segregated neighborhoods, which can lead to marginalization.[3,4] This marginalization of groups into segregated neighborhoods further impacts access to high-quality education,[5] employment opportunities,[6] healthy foods[7] and health care.[8] Combined, the economic injustices associated with residential, educational and occupational segregation have lasting health impacts that include adverse birth outcomes,

infant mortality,[9] high rates of homicide and gun violence[10] and increased motor vehicle deaths.[11]

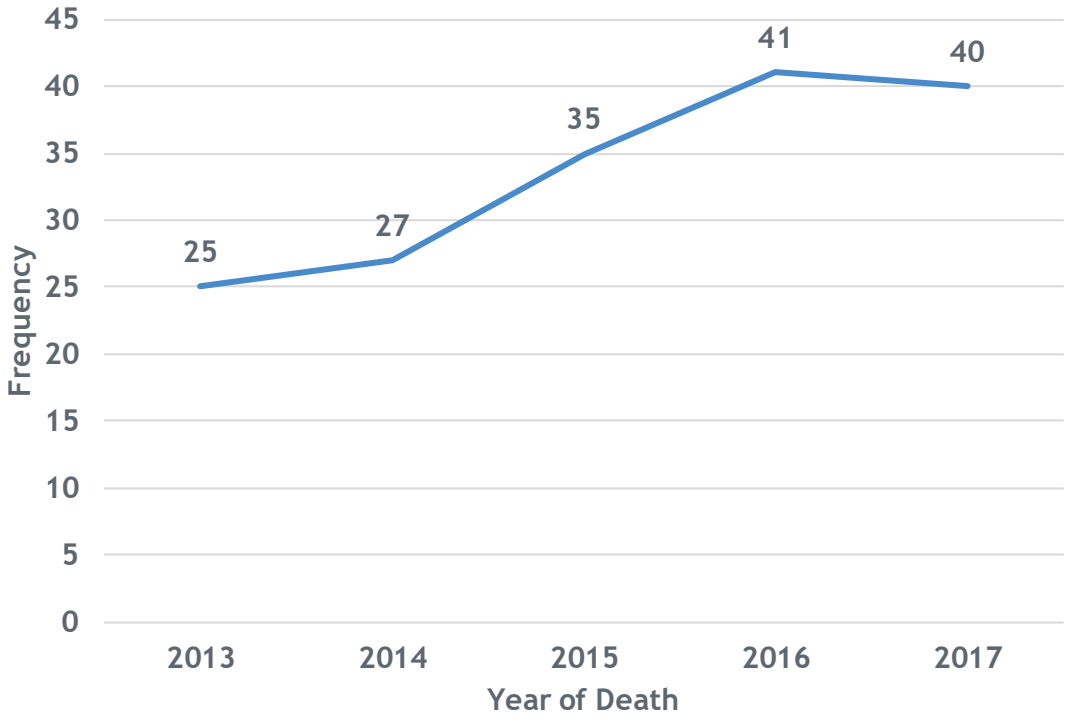
When interpreting the data, it is critical not to lose sight of these systemic, avoidable and unjust factors. These factors perpetuate the inequities that we observe in child deaths across populations in Colorado. Research is making progress in understanding how race and ethnicity, economic status, sexual orientation and gender identity correlate with health. It is critical that data systems like CFPS identify and understand the life-long inequities that persist across groups in order to eradicate them.

A note about terminology: While "Latinx" is becoming the preferred way to identify people of Latin descent, this report uses "Hispanic" throughout the data section to reflect how CFPS data is collected and to align with terminology used in cited literature and research.[12]

OVERVIEW OF FIREARM DEATHS

CFPS analyzes circumstance data on deaths involving firearms in Colorado, regardless of manner. From 2013-2017, 168 children and youth ages 0-17 died as a result of firearm injuries. Figure 1 shows that the number of yearly firearm deaths ranged from 25 in 2013 to 41 in 2016, averaging 33.6 deaths per year. The rate has been increasing since 2013, although this difference was not statistically significant when comparing 2013 (2.0 per 100,000 population) to 2017 (3.1 per 100,000 population). Among these deaths, suicide was the leading manner of death (64.3 percent, n=108), followed by homicide (32.7 percent, n=55) and accidental manner (2.4 percent, n=4).

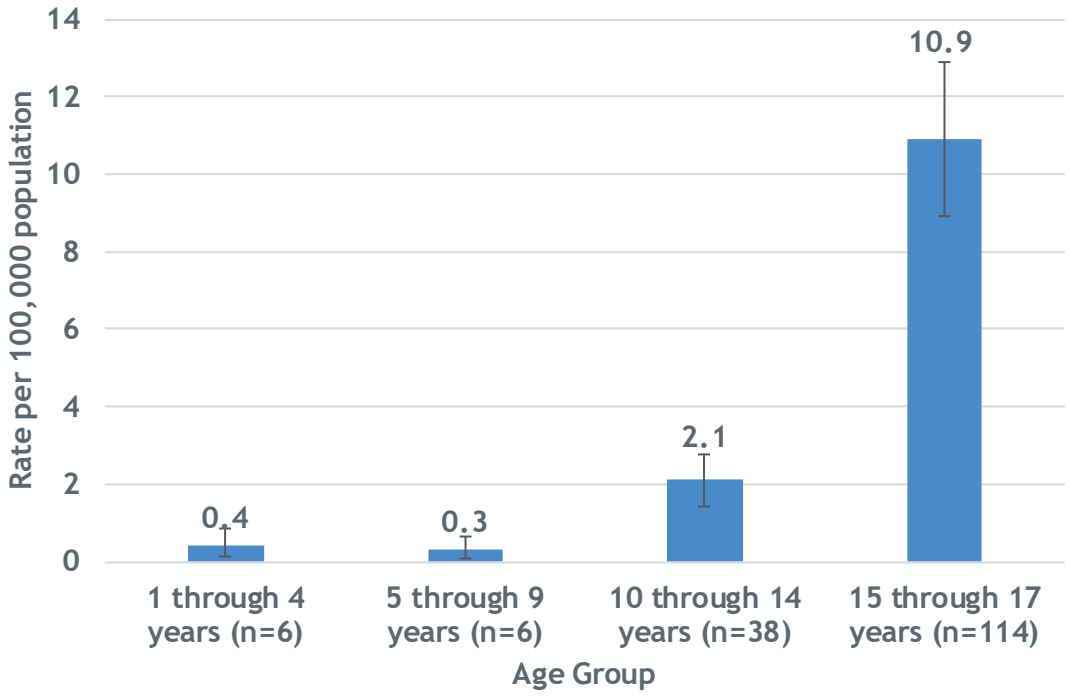
Figure 1. Firearm deaths occurring among those under age 18 in Colorado by year, 2013-2017 (n=168)



DEMOGRAPHICS OF FIREARM DEATHS

Of the 168 firearm deaths, 69.1 percent (n=116) occurred among youth ages 15-17, and 22.6 percent (n=38) occurred among those ages 10-14. Of all firearm deaths among youth in Colorado, 91.7 percent (n=154) were among youth ages 10-17. The rate of firearm deaths was significantly higher among youth ages 10-14 and 15-17 relative to other age groups (Figure 2). Of the 168 firearm deaths, 82.7 percent (n=139) of those who died were male, with the rate of firearm deaths significantly higher for males (4.2 per 100,000 population) than for females (0.9 per 100,000 population).

Figure 2. Age-specific rates of firearm deaths occurring in Colorado among Colorado residents under age 18, 2013-2017 (n=165)



*Error bars represent 95% confidence limits for rates.

RACIAL AND ETHNIC INEQUITIES

Of the 168 firearm deaths, 61.9 percent (n=107) were non-Hispanic white, 26.2 percent (n=44) were of Hispanic origin and 9.5 percent (n=16) were non-Hispanic black. The rate of firearm deaths was nearly two-fold higher among non-Hispanic black infants, children and youth in Colorado (5.2 per 100,000 population) compared to non-Hispanic whites (2.8 per 100,000 population); however, the difference was not statistically significant. When narrowed down specifically to homicide deaths by firearm (n=39), there is a significant difference across racial and ethnic groups in Colorado. Consistent with national trends,[13] the rate of homicide deaths by firearm among non-Hispanic black children and youth was 12.8 times higher (3.2 per 100,000 population) than for non-Hispanic whites (0.2 per 100,000 population). These differences exist because of community-level inequities.

Racialized residential segregation is a social determinant of the racial inequities observed in firearm deaths, and is largely driven by discriminatory federal, state and local policies, such as redlining, that create unjust geographic divisions among racial and ethnic groups.[14] Racial segregation leads to neighborhood disadvantage by concentrating neighborhood poverty, creating barriers

to and fewer opportunities for a healthy lifestyle, limiting access to health services, and increasing housing and food insecurity.[15] The consequences of residential segregation resulting from historical practices like redlining are still reverberating throughout communities of color today. In the United States, black families are likely to live in communities that are highly segregated with limited access to basic needs assistance, mental health and substance abuse treatment, and opportunity for employment.[16] In Colorado, 19.9 percent of black Coloradoans live below the poverty level, compared to 8.5 percent of non-Hispanic white Coloradans.[17]

In addition to harming economic opportunity, this structural injustice may reduce a community's ability to achieve collective goals of keeping residents safe and neighborhoods free of crime and interpersonal violence.[18,19] As a result communities may be less able to monitor children's play groups, intervene to prevent acts such as truancy and confront those who are disturbing public spaces.[20] Racial segregation concentrates poverty in certain areas and isolates residents from key resources. This results in a less cohesive neighborhood and makes it less likely for residents to intervene on behalf of the good of the community. Having poor neighborhood support and cohesion fosters a social norm in which violence is a part of daily life.[21]

Therefore, the inequity observed for firearm deaths may be partly explained by racialized residential segregation and living in high poverty areas. This is continually perpetuated by social policies that maintain segregation.[22,23] It is critical to identify, understand and eradicate the life-long inequities that persist across racial groups and that contribute to these differences in firearm death rates.

CIRCUMSTANCES OF FIREARM DEATHS

Figure 3 displays the types of firearms used in firearm deaths occurring in Colorado. The weapon type most commonly associated with these deaths was a handgun (68.5 percent, n=115), followed by shotguns (9.5 percent, n=16), hunting rifles (8.9 percent, n=15) and assault rifles (2.4 percent, n=4). Information about weapon type was missing or unknown for 10.1 percent (n=17) of these deaths.

Figure 3. Type of firearm for firearm deaths occurring among those under age 18 in Colorado, 2013-2017 (n=168)

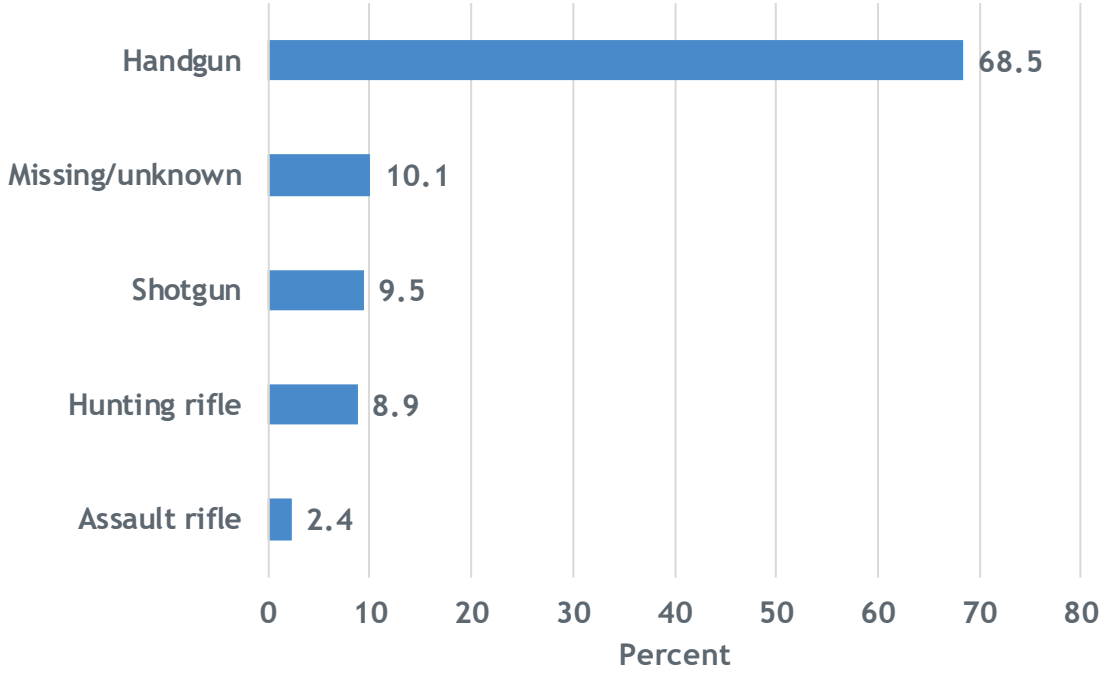


Figure 4 includes information about where and how the firearms used to inflict deadly injuries were stored. Current best practice for safe firearm storage includes storing the firearm locked and unloaded, and storing ammunition locked and in a separate location from the firearm.[24] Only 11.9 percent (n=20) of firearms involved in the death of an infant, child or youth in Colorado were known to have been stored in a locked storage location. Firearms were stored unlocked 48.8 percent (n=82) of the time. This information was missing or unknown for 39.3 percent (n=66) of these firearms. Firearm owners stored firearms unloaded 14.9 percent (n=25) of the time. This information was missing or unknown 55.9 percent (n=94) of the time.

The cause for such high numbers of unknown and missing firearm information is not clear. It may be due to lack of guidance on the importance of this information. It may also be because death scene investigators and child fatality review team members are not asking about firearm storage. The CFPS 2019 Legislative Report includes a recommendation to improve data quality of the circumstances of firearm deaths by providing technical assistance to local teams on best practices for firearm death reviews.

Figure 4. Firearm storage status for firearm deaths occurring among those under age 18 in Colorado, 2013-2017 (n=168)

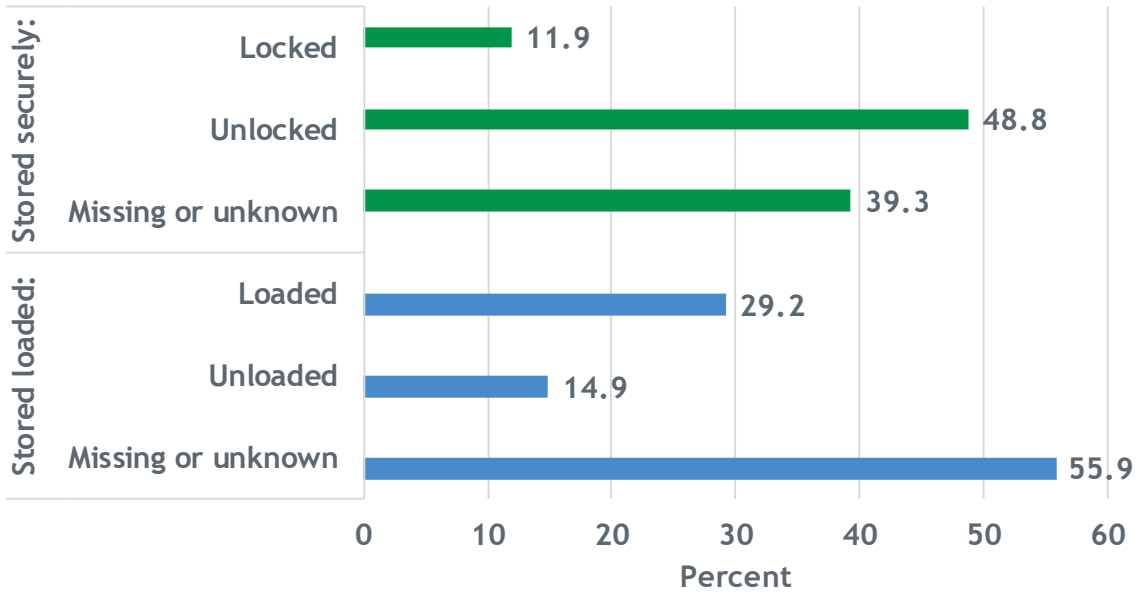
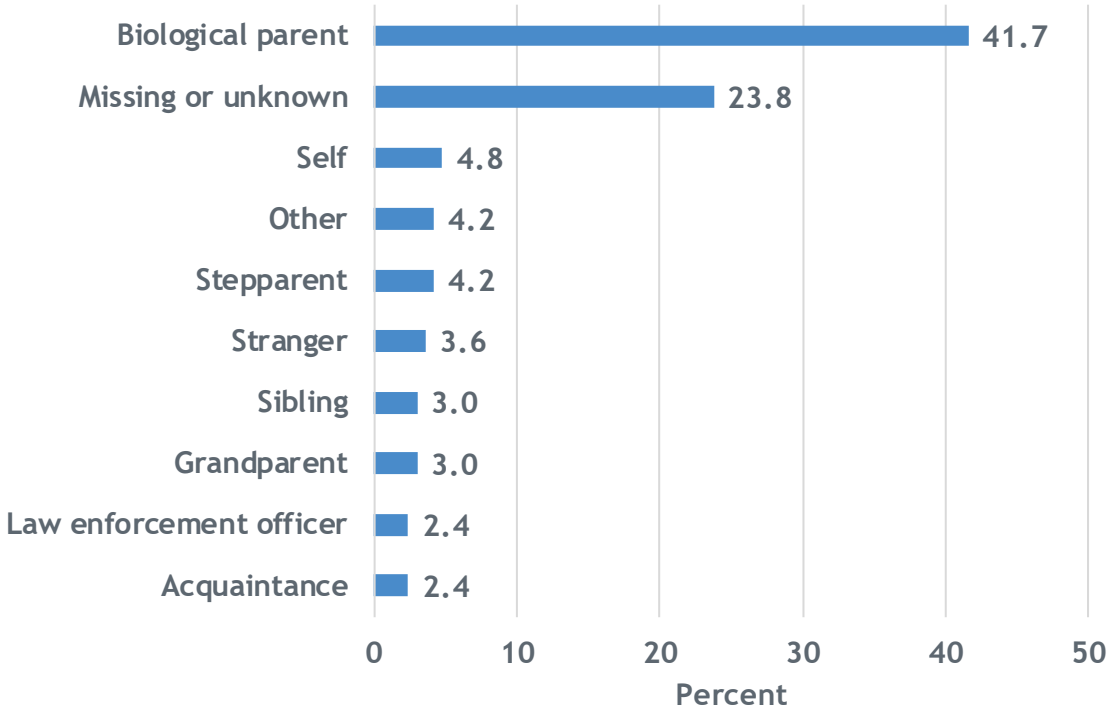


Figure 5 demonstrates ownership of firearms involved in firearm deaths in Colorado by relationship to the child or youth who died. Biological parents were most commonly the reported owners of the firearm involved in the death (41.7 percent, n=70). The child or young person owned the firearm for 4.8 percent (n=8) of the firearm deaths. This information was missing or unknown for 23.8 percent (n=40) of the deaths. Approximately 54.8 percent (n=92) of the firearm owners were male, 13.1 percent (n=22) were female and information about the sex of the owner was missing or unknown for 32.1 percent (n=54) of these deaths.

Figure 5. Firearm ownership for firearm deaths occurring among those under age 18 in Colorado, 2013-2017 (n=168)



For more information and CFPS data, please contact the CFPS Support Team at the Colorado Department of Public Health and Environment:

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