CHILD FATALITY PREVENTION SYSTEM: SUICIDE DATA, 2014 - 2018

COLORADO
Department of Public Health & Environment

Introduction

The Child Fatality Prevention System (CFPS) is a statewide network that focuses on preventing child deaths. Housed at the Colorado Department of Public Health and Environment (CDPHE), CFPS consists of 43 local review teams, a 46-member State Review Team, and the CFPS state support team at CDPHE. Local teams include community members and field experts. These teams complete case reviews of infant, child, and youth deaths in Colorado to describe trends and patterns and create strategies to prevent future deaths. The CFPS State Review Team develops recommendations for the legislature on how to prevent child deaths in an annual legislative report.

The system reviews all deaths that occur in Colorado among infants, children, and youth under age 18. CFPS does not review deaths of Colorado residents that occur out of state. This is different from other reports of child death data and other Colorado government data sources. As a result, the data presented in this data brief might not match other statistics reported at both the state and national levels.

This data brief provides an overview of child and youth suicide data from CFPS. Additional CFPS data is available at: www.cochildfatalityprevention.com/p/reports.html.

The impact of policies and systems on child deaths

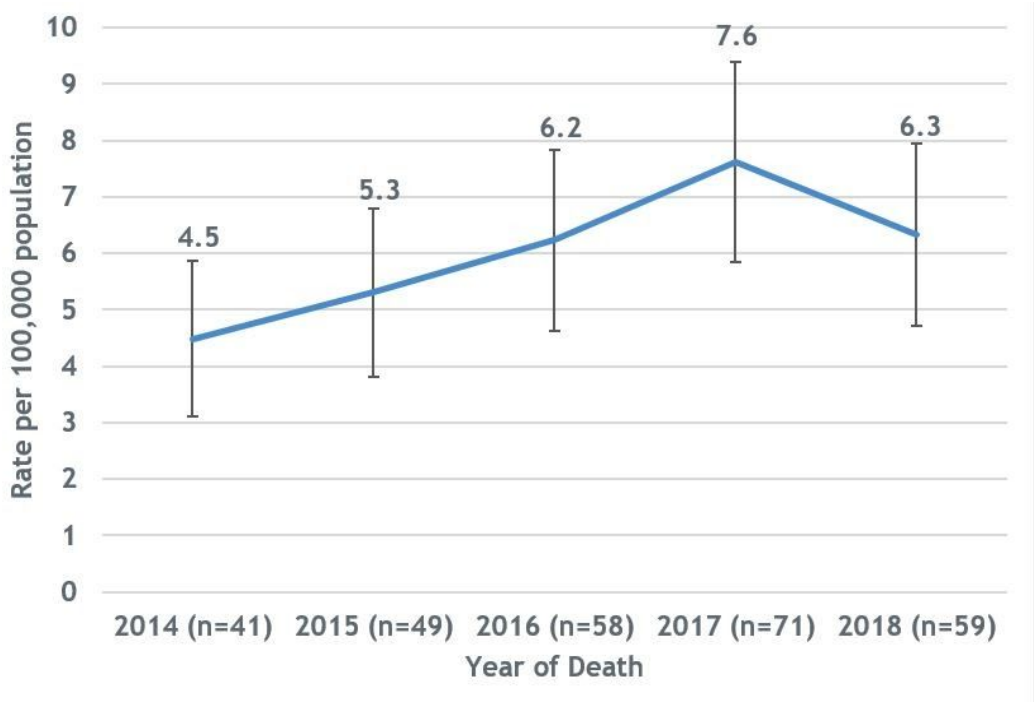
Generations of social, economic, and environmental inequities contribute to some families losing infants, children, and youth.[1] When interpreting the data, it is critical to not lose sight of these systemic, avoidable, and unjust factors. These factors perpetuate the disparities observed in child deaths in Colorado. Researchers work towards understanding how geography, race, ethnicity, sexual orientation, and gender identity correlate with health. It is critical that data systems like CFPS identify, understand, and eliminate life-long inequities that persist across groups. When limitations in the data system exist due to how data is collected, or because data is not collected, CFPS strives to provide additional context and research about how inequities impact child deaths. By changing policies and systems that create and perpetuate inequities, CFPS can reduce the number of child deaths that occur in Colorado. Examples of these inequities include, but are not limited to:

RURAL AND FRONTIER GEOGRAPHY	RACE AND ETHNICITY	SEXUAL ORIENTATION AND GENDER IDENTITY
Limited access to Level 1 trauma centers and mental and behavioral health services.[2] Increased stigma associated with mental illness and seeking help.[3] Longer response times by emergency medical services.[4] **→ These and other factors contribute to higher death rates in rural areas, including suicide[5] and passenger vehicle deaths.[6]**	Historical trauma, racism, and discrimination.[7,8] Limited access to high-quality education,[9] employment opportunities,[10] healthy foods,[11] culturally traditional foods,12 and health care.[13] Chronic stress.[14] **→ These factors result in lasting health impacts for people of color that include infant mortality,[15] high rates of homicide and gun violence,[16] and increased motor vehicle deaths.[17]**	Discrimination, stigma, and bias.[18] Rejection from family, friends, and community.[19] Non-inclusive school curricula and anti-harassment policies.[20] Insufficient access to LGBTQ+-informed health care.[21] **→ This chronic social stress that LGBTQ+ children and youth experience influences health across the lifespan, including higher rates of suicide[22] and substance use.[23]**

Overview of Suicide Deaths

In total, 282 children and youth ages 5-17 died by suicide in Colorado from 2014-2018. The number of suicide deaths increased steadily from 41 in 2014 to 72 in 2017 and then decreased to 60 in 2018. Figure 1 shows that the rate of suicide among Colorado residents ages 5 to 17 also increased from 2014-2017 with a subsequent decrease in 2018. The increase across the period was not statistically significant. Colorado's age-specific rate of suicide among children and youth ages 5-17 (6.0 per 100,000 population) was two-fold higher than the national suicide rate for those same ages (2.9 per 100,000 population) from 2014-2018.[24]

Figure 1. Rates of death by suicide occurring in Colorado among Colorado residents ages 5-17 by year, 2014-2018 (n=278)



*Error bars represent 95% confidence limits for rates.

Demographic Characteristics

Change in Methodology
Prior CFPS legislative reports and versions of this topic-specific data brief calculated suicide rates for *youth ages 10-17 only*. Honoring the knowledge that children ages 5-9 are at risk of suicidal ideation, suicide attempts, and dying by suicide,[25,26] CFPS will report suicide rates for *children and youth ages 5-17*. Given this change in methodology, **please do not compare the rates presented in this data brief and the 2020 CFPS Legislative Report to the rates published in past reports**. Please contact the CFPS state support team (www.cochildfatalityprevention.com/p/meet-cfps-support-team.html) if you have any questions or concerns.

Age

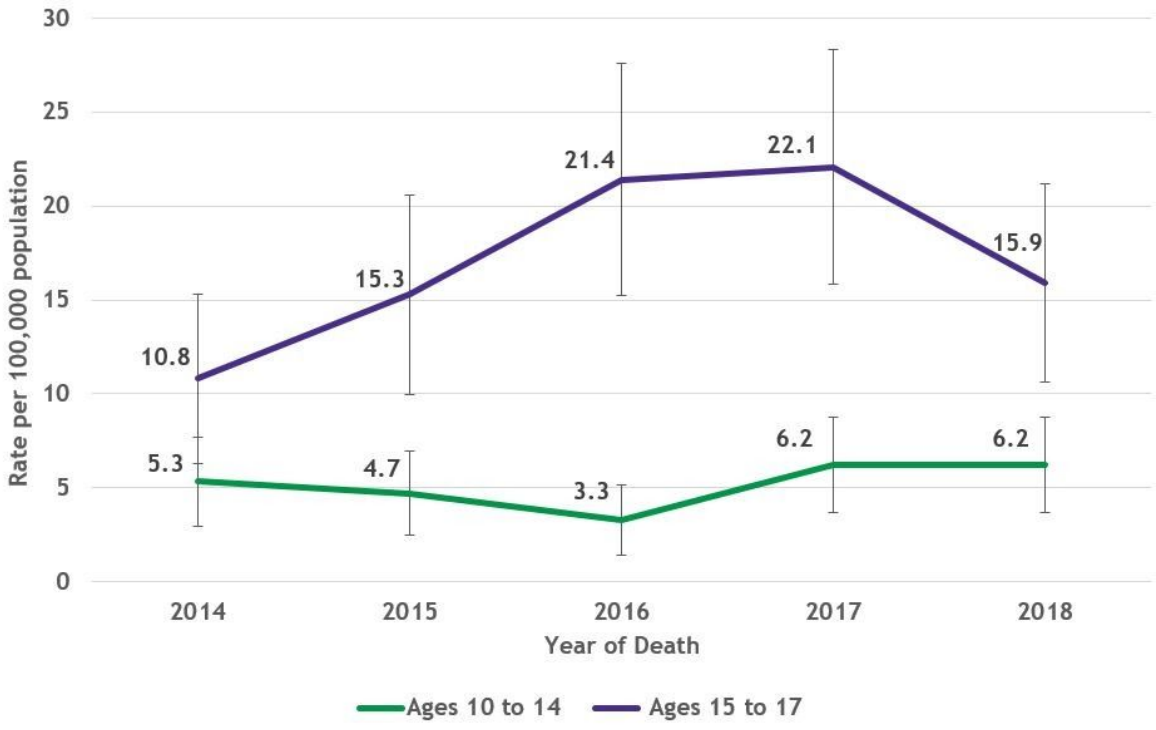
Suicide ideation, attempt, and death data must be considered across the lifespan, beginning at age 5, and it is important to consider differences by age group. Between 2014 and 2018, the Centers for Disease Control and Prevention reported 28 suicide deaths among children ages 5-9 nationally.[27] Among all elementary school-aged children (ages 5-11), suicide was the ninth leading cause of death from 2014-2018.[28] It is also understood that suicide in children

and youth ages 5-17 is undercounted, and may sometimes be classified as undetermined or accident on the death certificate.[29]

In Colorado, suicide deaths for children younger than age 10 are infrequent. These deaths are so rare that they do not meet privacy criteria for sharing data publicly by age group. Although it is rare for children under age 10 to die by suicide, their deaths are devastating for their families and communities, and their memories are honored in this brief.

Suicide is the leading cause of death among youth ages 10-17 in Colorado, with an age-specific rate of 9.6 per 100,000 population. When comparing youth suicide rates by age group, the rate for youth ages 15-17 (17.2 per 100,000 population) was significantly higher than for youth ages 10-14 (5.2 per 100,000 population). However, these two age groups have experienced different suicide trends over time. Figure 2 shows that the rate of suicide among Colorado residents ages 15 to 17 increased from 2014-2016, nearly leveling off in 2017, with a subsequent decrease in 2018. Among Colorado residents ages 10 to 14, the rate steadily decreased between 2014 and 2016, but subsequently increased in 2017 and remained stable in 2018.

Figure 2. Age-specific rates of deaths by suicide occurring in Colorado among Colorado residents ages 5-17 by age and year, 2014-2018 (n=278)**



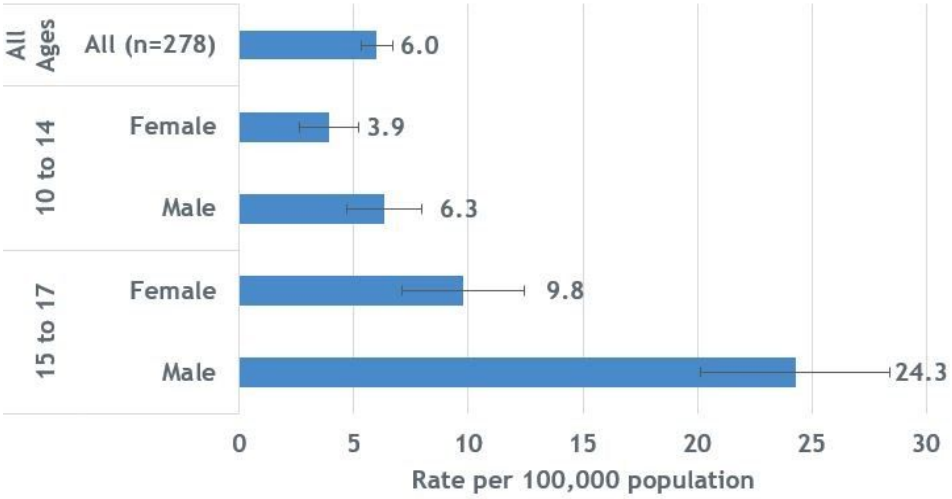
*Error bars represent 95% confidence limits for rates.
**Ages 5-9 suppressed due to counts less than 3.

The focus of this brief is suicide among children and youth ages 5-17. The stressors and contributing factors that lead to suicidal despair for children and youth may continue into young adulthood (ages 18-24). Suicidal despair encompasses a range of emotions, thoughts, and behaviors and can include feelings of hopelessness and being a burden, thoughts of suicide, suicidal ideation, chronic or acute suicidality, suicidal behaviors, and suicide attempts. In addition to big life transitions that can feel isolating or stressful, certain mental health diagnoses tend to emerge during young adulthood. The suicide rate for Colorado young adults ages 18-24 (23.8 per 100,000 population)[30] is more than double that of the rate for Colorado youth ages 10-17. It can be beneficial, from a suicide prevention perspective, to consider children, youth, and young adults when interpreting data and implementing suicide prevention strategies.

Sex

Males account for the majority of suicides among children and youth ages 5-17 in Colorado, representing 69.2% (n=195) of all suicides. This may be explained in part by the fact that females are more likely to use less lethal means (i.e. poisoning) in a suicide attempt compared to males who often use highly lethal means (i.e. firearms).[31] Figure 3 demonstrates that for those ages 10-14 and 15-17, males are at greater risk of death by suicide, and this difference was statistically significant in the 15-17 age group. The risk of death by suicide increases with age for both males and females. Males ages 15-17 experienced more than double the rate of death by suicide as their same-aged female peers and represented the category with the highest rate.

Figure 3. Age-specific rates of deaths by suicide occurring in Colorado among Colorado residents ages 5-17 by age and sex, 2014-2018**



*Error bars represent 95% confidence limits for rates.
**Ages 5-9 suppressed due to counts less than 3.

Sexual Orientation and Gender Identity

Defining Sexual Orientation, Gender Identity, and Gender Expression

- Sexual Orientation: A person's physical or emotional attraction to people of the same, neither, both, and/or opposite gender. "Heterosexual," "bisexual," and "homosexual" are all sexual orientations. A person's sexual orientation is distinct from a person's gender identity and expression.
- Gender Identity: A person's innate, deeply felt sense of identifying as male, female, or non-binary, regardless of the sex assigned at birth. Gender identity is distinct from sexual orientation. The term "cisgender" means someone's gender identity is the same as their sex assigned at birth. "Transgender" refers to a gender identity that is different from the sex assigned at birth.
- Gender Expression: A person's characteristics and behaviors that are socially defined as either masculine or feminine, such as dress, grooming, and mannerisms. Social or cultural norms can vary widely and some characteristics accepted as masculine, feminine, or neutral in one culture may be different in another.

It is well-researched that lesbian, gay, bisexual, transgender, queer, and questioning (LGBTQ+) children and youth experience increased suicidal ideation and suicide attempts when compared to their heterosexual and cisgender peers.[32,33] The '+' in LGBTQ+ stands for other sexualities, sexes, and genders that are not included in these few letters, which can include intersex, asexual, pansexual, agender, bigender, and gender queer. The disparities in suicidality by sexual orientation and gender identity exist because heterosexual and cisgender norms dominate our culture and systems.[34] This social context results in LGBTQ+ people experiencing discrimination, stigma, and bias, including rejection from family, friends, and community, as well as limited access to LGBTQ+ informed health care.[35]

In order to better understand these disparities and address the unique needs of LGBTQ+ people, it is critical to gather complete and standardized data about sexual orientation and gender identity. While CFPS does ask and attempt to collect information about the sexual orientation and gender identity of children and youth who die in Colorado, there are notable challenges for CFPS and other mortality data systems to accurately capture sexual orientation and gender identity information. It is worth noting that during the time period when deaths that occurred from 2014-2018 were being reviewed, questions asking about sexual orientation and gender identity were inconsistently available in the National Fatality Review-Case Reporting System (NFR-CRS), the data tool that CFPS uses. In April 2018, existing sexual orientation and gender identity questions were removed from the NFR-CRS. CFPS added Colorado-specific sexual orientation and gender identity questions in April 2019, and in April 2020, the National Center for Fatality Review and Prevention added sexual orientation and gender identity questions back into the NFR-CRS for all states. In addition, the NFR-CRS added a life stressors section in its newest update, which will improve CFPS's ability to understand

how stress due to sexual orientation and/or gender identity contributes to deaths among children and youth.

In an effort to reduce barriers in collecting this information, local child fatality prevention review teams receive guidance and technical assistance on how to discuss sexual orientation and gender identity during fatality reviews. In addition, the CFPS 2020 Legislative Report includes a data quality improvement recommendation to encourage and incentivize law enforcement agencies and coroner offices in Colorado to use the Suicide Death Scene Investigation Form (www.colorado.gov/cdphe/suicide-investigation-form) to improve collection of this information.

Although CFPS faces challenges in collecting data about sexual orientation and gender identity, there are other data sources in Colorado to provide information about suicidality by sexual orientation and gender identity. The Healthy Kids Colorado Survey (HKCS) is Colorado's only comprehensive survey on the health and well-being of young people. The purpose of HKCS is to better understand youth health and the factors that help young people make healthy choices.[36] The HKCS asks high school students to self-identify as lesbian, gay, bisexual (LGB), or heterosexual, and if they self-identify as transgender or cisgender, or not sure for each category.

2017 data from HKCS[37] shows that:

- 44.8% of LGB students had seriously considered suicide in the past 12 months, a prevalence more than three times higher than that among heterosexual students (13.2%). Among transgender youth, 58.9% had seriously considered suicide in the past 12 months, compared to 16.3% of cisgender youth.
- 19.9% of LGB students had attempted suicide in the past year compared with 5.1% of heterosexual students. Compared with 6.3% of cisgender youth, 32.5% of transgender youth reported attempting suicide in the past year.

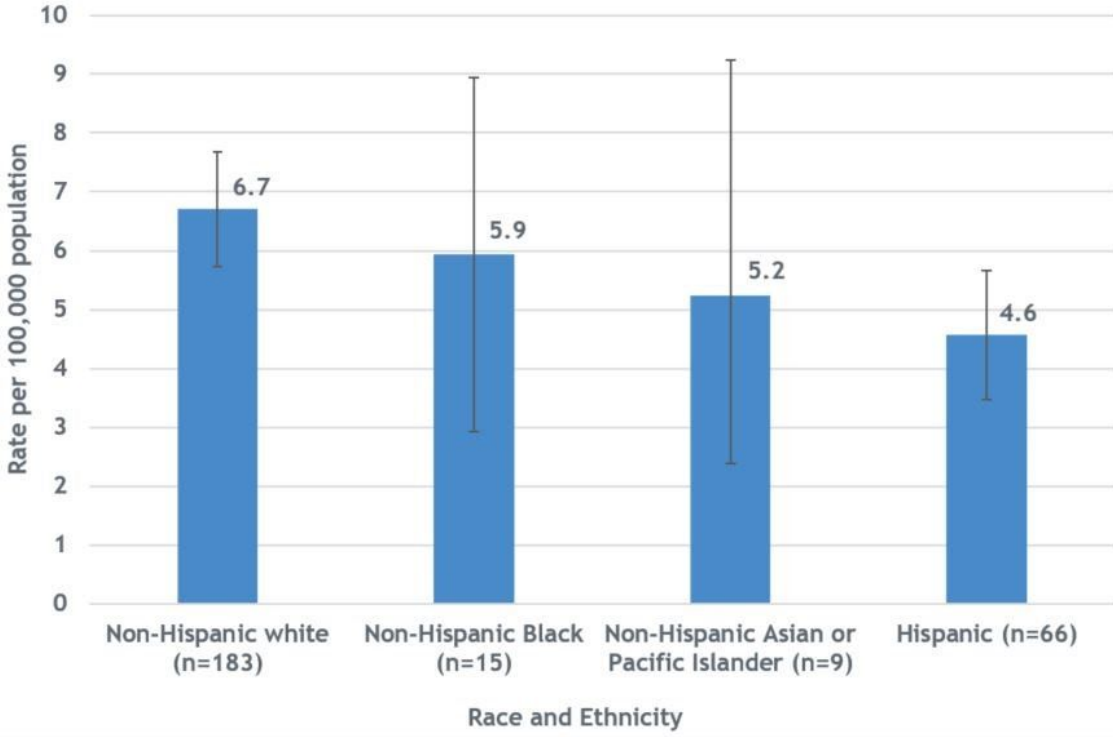
Race and Ethnicity

A note about terminology: Hispanic ethnicity as collected on the Colorado death certificate includes those that identify as Mexican, Mexican American, Chicano, Chicana, Puerto Rican, Dominican, Cuban, Central American, South American, Latin American, Spanish, and other Latin or Hispanic descent.[38,39] Additionally, "Latinx" and "Chicanx" are increasingly used gender inclusive terms, respecting those with a non-binary gender identity.[40] To ensure clarity, this report uses "Hispanic" throughout the data section to reflect how CFPS data is collected from the death certificate and to align with terminology used in cited literature and research.[41]

Between 2014 and 2018, 66.3% (n=187) of children and youth ages 5-17 who died by suicide in Colorado were non-Hispanic white, 23.4% (n=66) were of Hispanic origin, 5.3% (n=15) were non-Hispanic Black, and 3.2% (n=9) were non-Hispanic Asian or Pacific Islander.

Figure 4 demonstrates that when comparing suicide rates by race and ethnicity, the rate for non-Hispanic white children and youth (6.7 per 100,000 population) was significantly higher than for Hispanic children and youth (4.6 per 100,000 population). This is consistent with national trends from 2014-2018, where the suicide death rate is lower among Hispanic children and youth ages 5-17 (1.9 per 100,000 population) as compared to non-Hispanic white children and youth (3.7 per 100,000 population).[42,43]

Figure 4. Crude rates of deaths by suicide occurring in Colorado among Colorado residents ages 5-17 by race and ethnicity, 2014-2018 (n=278)



*Error bars represent 95% confidence limits for rates.
**Non-Hispanic American Indian or Alaska Native suppressed due to counts less than 3.

Research has shown that Hispanic youth often have positive cultural factors in their lives which can protect them from suicide death. This includes familialism, described as strong feelings of commitment, connection, and loyalty to family members.[44] However, in contrast to low rates of suicide death, Hispanic children and youth have consistently higher rates of suicidal ideation, plans, and attempts when compared to their non-Hispanic white counterparts.[45] For example, 2017 data from HKCS shows that 8.2% of Hispanic only/Hispanic

white students had attempted suicide in the past year compared with 5.9% of non-Hispanic white students.[46]

When reviewing the data by race, ethnicity, and sex, Hispanic female youth represent the highest rate of suicide attempts, compared to male and female youth across other racial and ethnic groups.[47] Current empirical research does not explain the differences in these trends with certainty. Possible reasons for increased rates of suicide attempts among Hispanic female youth include the cultural expectation of conforming to the female gender role, which may include suppressing feelings of anger and fulfilling numerous obligations to parents and family.[48] Future research prioritizing Hispanic youth can further identify why these differences exist.

Too few deaths occurred during this time period in Colorado among American Indian or Alaska Native (AIAN) children and youth to report in accordance with applicable privacy standards. In addition, there have been reports of misclassification of race and ethnicity of AIAN people on death certificates.[49] Although there are limitations to how CFPS is able to report data about AIAN children and youth, it is important to highlight that nationally from 2014 to 2018, AIAN children and youth experienced a significantly higher suicide rate when compared to all other races.[50] Additionally, 2017 data from HKCS shows that 12.6% of AIAN students had attempted suicide in the past year compared with 5.9% of non-Hispanic white students.[51]

The increased likelihood of suicide and suicidal despair among AIAN populations may stem from the historical loss of population, land, and culture that was endured by these communities.[52,53] This historical trauma includes the forcible removal of indigenous AIAN people from their lands in the United States, and the forcible transfer of children from their families to boarding schools designed to strip them of their culture.[54] Paralleling indigenous AIAN experiences, Native Hawaiian or Pacific Islander (NHPI) populations endured adverse colonization by the United States and historical trauma that includes the overthrow of the Hawaiian monarchy and contamination of their lands and people by United States military nuclear testing.[55] This trauma shapes the current societal context and leads to substantial socioeconomic and health disparities, including increased suicidality.[56]

Although CFPS reviews deaths of children and youth through age 17, a report published by Colorado's Office of Suicide Prevention found recent upward trends in the youth suicide rate for Black and Asian or Pacific Islander youth in Colorado when expanding the age range by one year to ages 10-18.[57] In addition, recent national research found that for elementary-school aged children (ages 5-12), the suicide rate was two times higher for Black children compared with white children, a finding observed in both boys and girls.[58] In addition to the overall higher suicide rate for Black children, the suicide rate significantly increased in Black boys ages 5-11 over the last few decades, and significantly decreased in white boys of the same age.[59] Although too few deaths occurred during this time period in Colorado among Black children ages 5-12 to replicate and report these findings in accordance to CFPS privacy standards, these national findings make clear the significant age and sex-related racial disparity in childhood suicide and highlight an important opportunity for prevention with Black, elementary-aged male children.

There are limitations to how CFPS collects and reports on data related to social and economic stressors experienced by a young person, their family, and their community. However, the NFR-CRS added a life stressors section in its newest update, which will improve CFPS's ability to analyze and interpret this data in the future. For instance, the new section asks if the young person, their family, or their community experienced racism, discrimination, poverty, food insecurity, or housing instability. In order to further understand the relationship between social and economic life stressors and suicide, it is worth noting that research has found a link between county-level poverty concentration and increased rates of child and youth suicide.[60] Data show 18.7% of AIAN, 18.0% of Black, and 14.5% of Hispanic Coloradoans live below the poverty level, compared to 7.5% of non-Hispanic white Coloradans.[61] These disparities are largely driven by discriminatory federal, state, and local policies, such as redlining, that create unjust geographic divisions among racial and ethnic groups.[62,63] This racial segregation leads to neighborhood disadvantage by concentrating neighborhood poverty, increasing exposure to environmental stressors, creating barriers to and fewer opportunities for a healthy lifestyle, limiting access to health services, and increasing housing and food insecurity.[64]

Finally, research found that Black children and youth may be disproportionately exposed to community and household violence;[65] experience more aggressive school discipline;[66] and are less likely to seek help for depression, suicidal ideation, and suicide attempts.[67] For instance, data from the Healthy Kids Colorado Survey (HKCS) show notable racial and ethnic disparities in the measure that asks students if they have someone to talk to when they are feeling sad, empty, hopeless, angry, or anxious. In response to this question, 86.3% of non-Hispanic white students answered in the affirmative, whereas 76.8% of AIAN youth; 80.8% of Black/African American youth; and 71.2% of NHPI youth answered in the affirmative.[68] These factors may influence the increasing suicide rates among Black children and youth. Although there are limitations to how CFPS collects and reports on data related to social stressors, the new life stressors section in the NFR-CRS will improve CFPS's ability to analyze this data. For instance, the new section asks if the young person witnessed violence in the community or in their home.

Geography

Between 2014 and 2018, the majority of Colorado residents ages 5-17 who died by suicide in Colorado resided in an urban county (87.8%, n=244), while 8.3% (n=23) lived in a rural county and 3.9% (n=11) lived in a frontier county. Although not statistically significant, the rate of suicide among children and youth living in a frontier county (11.0 per 100,000 population) was nearly twice as high as those living in a rural (5.1 per 100,000 population) or urban county (6.0 per 100,000 population). Readers should interpret this data with caution, as the frontier rate represents very few deaths, decreasing the stability of the rate.

This rate data is consistent with national data showing higher suicide rates in rural areas.[69] Possible explanations for these disparities include limited availability and accessibility of

mental and behavioral health services and longer travel distances to seek health care.[70] Among Colorado residents ages 5-17 who died by suicide in Colorado and resided in a rural or frontier county, 38.2% (n=13) had received prior mental health services, compared to 53.3% (n=130) of those living in an urban county. Nationally, access to care has been a long-standing problem for rural communities, which is mostly owed to shortages in qualified clinicians and long travel times to any health care facility. Nationally, there are about 6,000 areas that are federally designated as having a shortage of mental health care professionals, and about 70% of those are rural areas.[71] Instead, primary care physicians are often called on for mental health care, even though these physicians report feeling unprepared to treat mental illness. To compound the clinician shortage and longer travel times, many people living in rural communities are also less likely to have health insurance that even includes mental health benefits.[72]

Rural communities also experience increased stigma related to seeking help and mental health.[73] Even when services might be available, many people living in rural areas report not wanting to seek help because of the stigma and lack of anonymity when accessing services in a rural setting.[74] Additionally, people living in rural areas experience greater geographic and social isolation, with less face-to-face contact with support networks, which is associated with feelings of loneliness, depression, and suicidality.[75]

Although there are limitations to how CFPS collects data related to social and economic stressors experienced by young people residing in rural and frontier counties, the new life stressors section in the NFR-CRS will improve this data in the future. For instance, CFPS added Colorado-specific questions to this section asking if the young person, their family, or their community experienced lack of transportation, lack of access to health services, or limitations of their health insurance coverage.

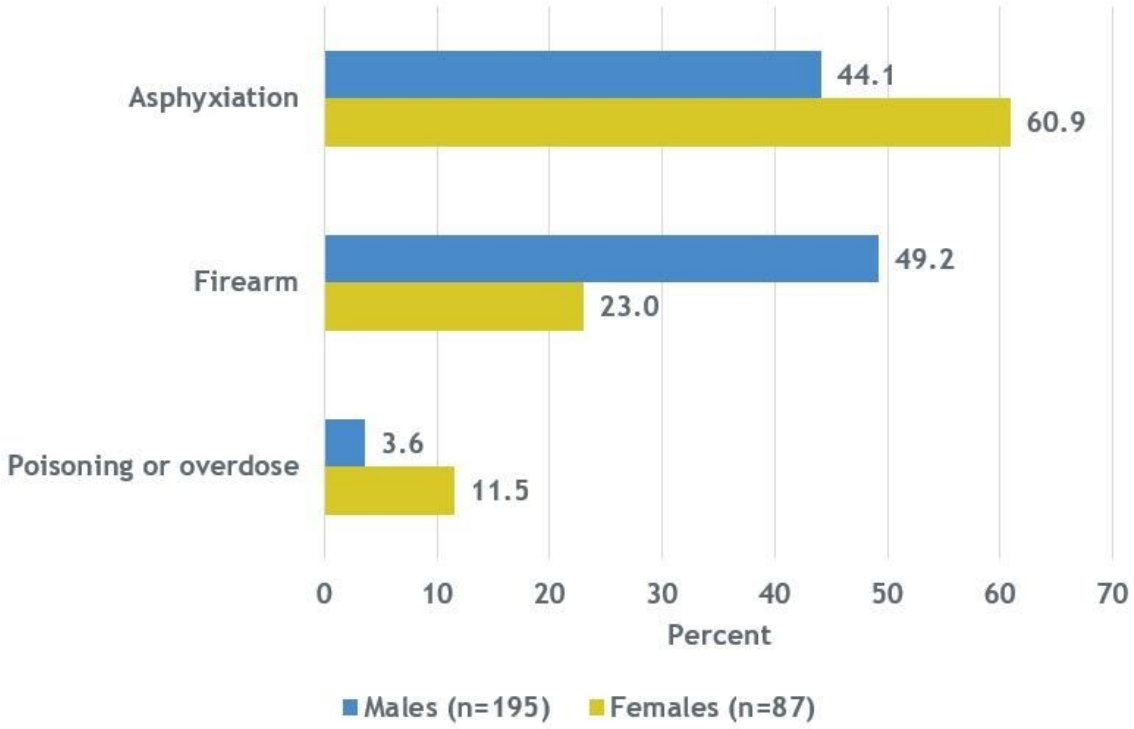
Finally, among Colorado residents ages 5-17 who died by suicide in Colorado and resided in a rural or frontier county, firearm was the most common cause of death (67.6%, n=23). Rural and frontier communities have greater access to firearms as a lethal means, as owning and using firearms is more common among rural residents and is a large part of the culture.[76] Rural residents often grow up around firearms, have firearms in their homes, and use them for hunting, agricultural needs, and recreation.[77]

Suicide Means

Among children and youth ages 5-17 who died by suicide in Colorado, asphyxia (hanging) remained the most common cause of death, followed by firearm deaths, and drug overdoses. CFPS identified 139 asphyxia suicides (49.3%), 116 firearm suicides (41.1%), and 17 drug overdose or poisoning suicides (6.0%). Among males, firearm suicides (49.2%, n=96) were most common, followed by asphyxia (44.1%, n=86), and drug overdose or poisoning suicides (3.6%, n=7) (Figure 5). Among females, asphyxia was the most common means of suicide (60.9%,

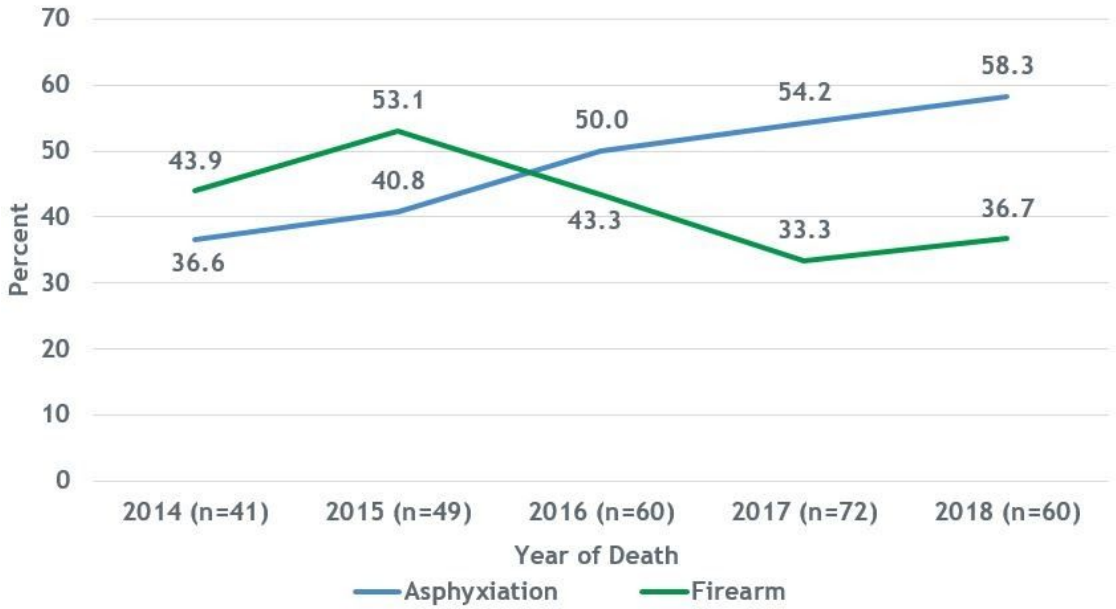
n=53), followed by firearm (23.0%, n=20), and drug overdose or poisoning suicides (11.5%, n=10).

Figure 5. Proportion of deaths by suicide occurring in Colorado among children and youth ages 5-17 by means and sex, 2014-2018 (n=282)



Asphyxiation was the most common means of suicide among Colorado children and youth and the proportion of asphyxia suicide deaths increased between 2014 and 2018. In 2014, 36.6% (n=15) of suicide deaths involved asphyxiation compared to 58.3% (n=35) in 2018 (Figure 6). The proportion of child and youth suicide deaths involving a firearm increased between 2014 and 2015, but then decreased to 36.7% (n=22) in 2018. CFPS will monitor these trends in coming years, especially given that the national rate of asphyxiation suicide deaths in the 5-17 age group significantly increased from 2014 to 2018.[78,79]

Figure 6. Proportion of deaths by suicide occurring in Colorado among children and youth ages 5-17 by means and year, 2014-2018 (n=282)



Firearm Suicides

Between 2014-2018, 41.1% (n=116) of all suicide deaths occurring among children and youth in Colorado were by firearm. Among all firearm suicides, 73.3% (n=85) occurred among non-Hispanic white children and youth and 82.8% (n=96) occurred among males. Additionally, 50.9% (n=59) of firearms used in suicide deaths were owned by a biological parent, and 66.4% (n=77) of owners of firearms used in suicide deaths in Colorado were male.

The system also collects information on the storage of these weapons. 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.[80] From 2014-2018, only 17.2% (n=20) of firearms used in suicide deaths among children and youth ages 5-17 were known to be stored locked and only 22.4% (n=26) were known to be stored unloaded.

In 27.6% (n=32) of cases, the information on if the firearm was stored locked was missing or unknown. In 50.0% (n=58) of cases, the information on if the firearm was stored loaded was missing or unknown. The cause for the high numbers of missing and unknown information is not clear, but may be due to lack of guidance on the importance of this information. Death scene investigators and child fatality prevention review team members may not be asking about firearm storage. The CFPS 2020 Legislative Report includes a data quality improvement recommendation to encourage and incentivize law enforcement agencies and coroner offices

in Colorado to use the Suicide Death Scene Investigation Form (www.colorado.gov/cdphe/suicide-investigation-form) to improve collection of this information.

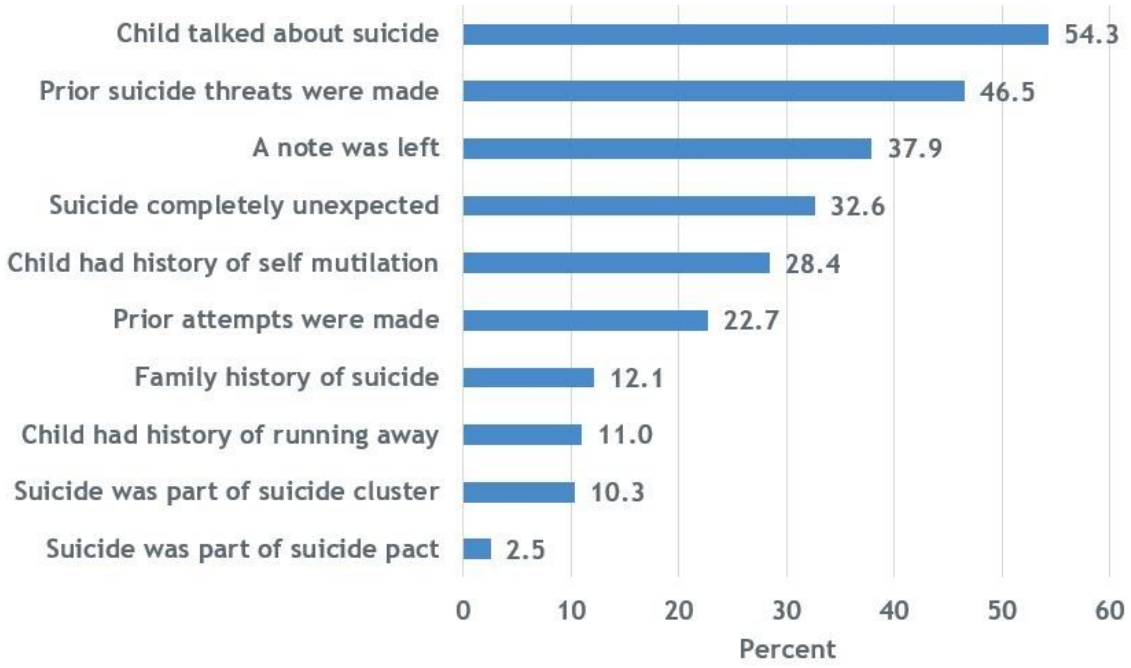
Suicide Circumstances

Contributing Circumstances

Suicide is a complex, multifaceted issue which is rarely the result of a single source of trauma or stress. The CFPS review teams collect circumstance information, including details of child and youth history of suicide-related behavior and personal crises. This data showed that those who died by suicide most commonly talked about suicide (54.3%, n=153), made prior suicidal threats (46.5%, n=131), or left a suicide note (37.9%, n=107) prior to dying (Figure 7). CFPS case reports indicated the suicide was completely unexpected in 32.6% (n=92) of cases. However, the National Center for Fatality Review and Prevention (NCFRP) revised this question in Version 5 of the case reporting system, the data tool that CFPS uses. This revision ensures that review teams can only indicate the suicide was completely unexpected if they do not select other options, like those listed above. In the past, suicide deaths could be designated as "completely unexpected" even if the review team also indicated that the child or youth had previously considered suicide.

The system often has missing and unknown data for variables related to suicide circumstances, in part because death scene investigators typically collect limited information about a child or youth's mental health history and access to lethal means. In an effort to improve the case review process and conduct quality case-specific reviews, the CFPS 2020 Legislative Report includes a recommendation to encourage and incentivize law enforcement agencies and coroner offices to use the Suicide Death Scene Investigation Form (www.colorado.gov/cdphe/suicide-investigation-form) to ensure law enforcement officers and coroner investigators consistently collect circumstance data when investigating a suspected suicide death.

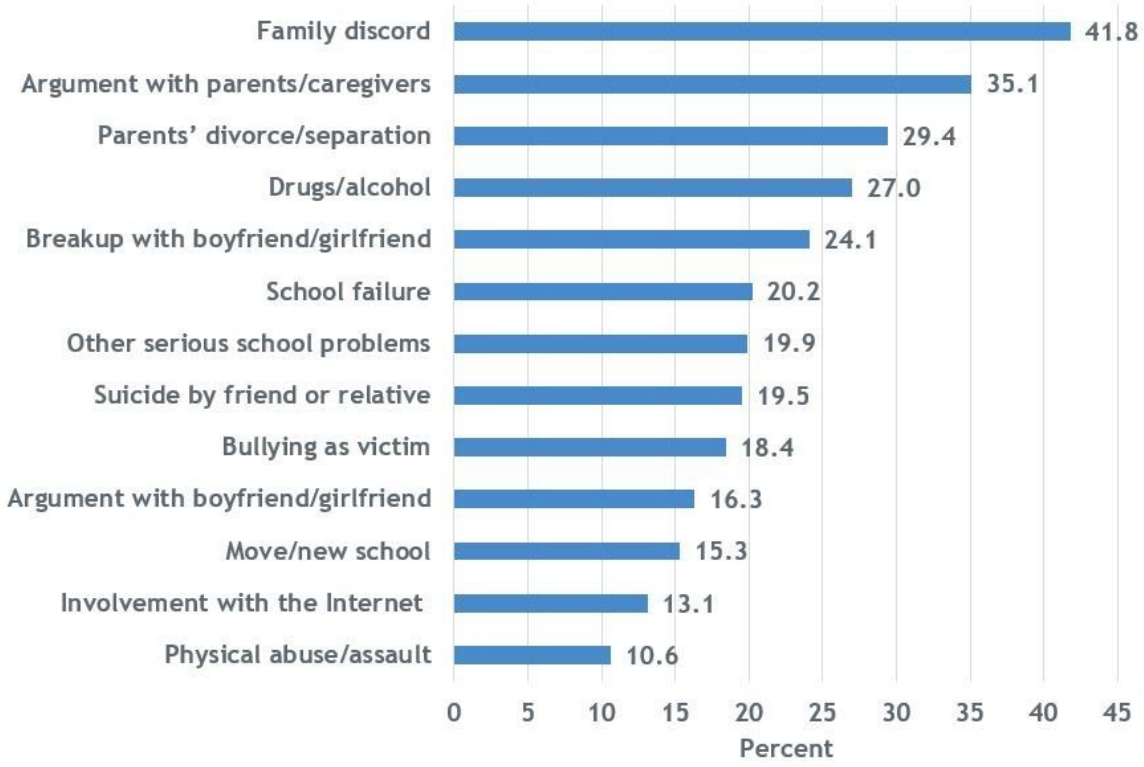
Figure 7. Selected circumstances for deaths by suicide occurring in Colorado among children and youth ages 5-17, 2014-2018 (n=282)



Personal Crises

CFPS also collects information on acute or cumulative personal crises that may have contributed to these deaths. From 2014-2018, the most common personal crisis identified for child and youth suicide deaths was family discord (41.8%, n=118), followed by arguments with parents/caregivers (35.1%, n=99), parents' divorce or separation (29.4%, n=83) and drug or alcohol use (27.0%, n=76) (Figure 8). These personal crises differ when stratified by age group (ages 10-14 or ages 15-17). For example, the proportion of suicide deaths preceded by an argument with a boyfriend or girlfriend is higher among youth ages 15-17 (21.0%, n=39) when compared to youth ages 10-14 (7.4%, n=7). Similarly, the proportion of suicide deaths preceded by a drug or alcohol problem is higher among youth ages 15-17 (34.4%, n=64) when compared to youth ages 10-14 (12.6%, n=12).

Figure 8. Selected acute or cumulative personal crises preceding death for deaths by suicide occurring in Colorado among children and youth ages 5-17, 2014-2018 (n=282)



Child Maltreatment

Child maltreatment includes physical, sexual, and emotional abuse, as well as neglect. Experiences of child maltreatment, considered to be one of the significant Adverse Childhood Experiences (ACEs),[81] have a large impact on health throughout the lifespan[82] and are associated with suicide.[83] CFPS collects data about if any child or youth had a history of child maltreatment prior to their death. This data includes a referral or substantiation from child protective services or documentation on the autopsy report, law enforcement report, or medical records.

Nearly 32.0% (n=88) of children and youth ages 5-17 who died by suicide experienced child maltreatment as a victim. Among those with a known child maltreatment history, 19.1% (n=41) experienced emotional abuse, 16.7% (n=36) experienced physical abuse, and 16.7% (n=36) experienced neglect. Information on history of child maltreatment was missing or unknown for 23.8% (n=67) of deaths by suicide among Colorado children and youth. The CFPS 2020 Legislative Report includes a data quality improvement recommendation to provide technical assistance to local teams on best practices for collecting child maltreatment history. Additional CFPS data on child maltreatment is available at: www.cochildfatalityprevention.com/p/reports.html.

Mental Health Services

Among Colorado children and youth who died by suicide, 51.1% (n=144) received prior mental health services, 33.0% (n=93) were receiving mental health services at the time of their death, and 23.4% (n=66) were on medications for mental illness. Of the children and youth who died by suicide, 8.9% (n=25) had issues preventing them from receiving mental health services. Review teams most commonly identified issues related to children and youth choosing not to access or continue care. Research suggests this may be related to stigma about receiving mental health care and norms related to seeking help.[84]

Conclusion

Suicide is a complex, multifaceted issue which is rarely the result of a single source of trauma or stress. In 2018, suicide was the 10th leading cause of death for people of all ages in the United States, and the second leading cause of death among children and youth ages 5-17.[85] This data brief highlights that suicide is the leading cause of death reviewed by CFPS among children and youth ages 5-17 in Colorado. The highest rates of child and youth suicide in Colorado were observed among youth ages 15-17 and among non-Hispanic white children and youth. Additionally, child and youth suicide in Colorado is largely driven by the means of hanging and firearm and is most often precipitated by family discord, arguments with parents and/or caregivers, and parental divorce or separation.

Each of us has a role and must work together to prevent suicide through evidence-based programming, connection, and supporting young people, families, and communities. The steps you take to support a young person can be lifesaving. To learn more about the prevention strategies recommended by CFPS, view the 2020 Legislative Report (www.cochildfatalityprevention.com/p/reports.html).

Need help now? Call 1-844-493-TALK (8255), text TALK to 38255, or access chat via www.coloradocrisisservices.org. Help and hope are available 24 hours a day, 365 days of the year.

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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