

Utah Child Fatality Review

Annual Report of 2019 Data



UTAH DEPARTMENT OF
HEALTH
Violence & Injury Prevention Program



In 2019, there were 482 Utah residents 0-18 who died.



177 child deaths were reviewed by the Utah Child Fatality Review Committee (CFRC), including every injury-related or undetermined death.



Suicide was the leading cause of death and accounted for more than 36% of deaths reviewed by the CFRC.



There are significantly higher rates of injury death in males, teens, and rural populations.

42

This report includes 42 specific recommendations to help prevent future child death in Utah identified by Utah's multidisciplinary team.

Child Fatality Review Committee (CFRC)

The CFRC brings together diverse agencies and organizations that serve Utah children and families. This multidisciplinary approach enables members to share available information from different sources to better understand how and why a child has died. It is this coordination that improves the process of thoroughly reviewing child deaths in Utah and helps to improve prevention recommendations.

The CFRC includes representatives from the following agencies:

- Utah Department of Health
 - Violence and Injury Prevention Program (VIPP)
 - Office of the Medical Examiner
 - Emergency Medical Services for Children (EMSC) Program
 - Maternal and Infant Health (MIH) Program
 - Office of Childcare Licensing
 - Emergency Medical Services
- Department of Human Services (DHS)
 - Division of Mental Health
 - Division of Child and Family Services (DCFS)
 - Office of Service Review (DHS Fatality Review)
 - Juvenile Justice Services
- Utah State Board of Education
- Salt Lake County District Attorney's Office
- Primary Children's Medical Center
- Utah Attorney General's Office
 - Children's Justice Division
 - Child Protection Division
- Administrative Office of the Courts
- Utah Office for Victims of Crime
- Various law enforcement agencies across the state
- Intermountain Healthcare
- University of Utah
 - Safe and Healthy Families

Periodically, other members are invited to attend reviews if they have expertise or history related to a particular case. These include representatives from support services, fire marshals, day care centers, child advocacy centers, etc. All information and data regarding each child death are treated confidentially. Committee members and professional visitors sign a confidentiality agreement which prohibits them from sharing case information outside the meeting. The review meetings are not open to the public.



Introduction

The death of a child is a tragedy for families and communities. In 2019, there were 482 Utah residents aged 0-18 who died. Of those deaths, 27.4% (n=132) were determined to be from an injury. Injuries are mostly preventable, yet they continue to be the leading cause of death for children 1-18 years of age in Utah¹.

CFRC applies a public health approach to prevent child death by aggregating data from individual child deaths, describing trends and patterns of the deaths and recommending prevention strategies. Between 2019 and 2020 the Utah CFRC reviewed 177 child deaths from 2019. This report summarizes the data from those fatalities reviewed and the prevention recommendations made by the inter-agency team.

Review Process and Data Overview

Manner of Death

The death of every child (ages 0-18) in Utah receives a review in one form or another. The Utah death certificate has five manners of death: natural, accident, suicide, homicide and undetermined. The manner of death is a classification made by the doctors at the Office of the Medical Examiner, typically following a review of circumstances surrounding the death, autopsy and a thorough investigation of relevant medical records. Deaths of a natural manner (i.e., deaths occurring shortly after birth or from disease or a medical condition) are not typically reviewed by the Office of the Medical Examiner (OME), however, they are reviewed by medical experts serving on the CFRC. Natural deaths involving birth defects are reviewed by the UDOH Birth Defects Network and natural deaths involving premature births are reviewed by the UDOH Perinatal Mortality Review Committee. All other natural deaths receive a death certificate review.

Figure 1: Manner of All Deaths Reviewed by CFRC Among Children Aged 0-18 Utah, 2019

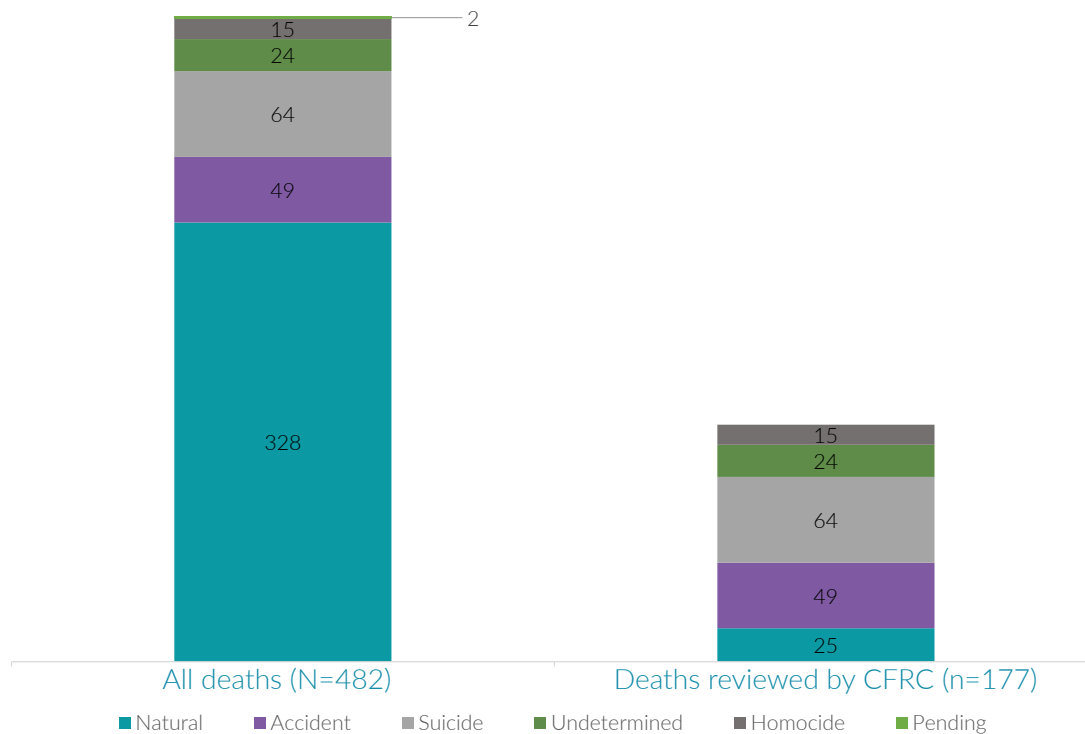


Figure 1 demonstrates the majority of all Utah 2019 deaths (0-18) were determined to be natural (68.0%, n=328), followed by suicide (13.3%, n=64), accidental or unintentional injury deaths (10.2%, n=49), homicide (3.1%, n=15), and undetermined deaths (5%, n=24). All Deaths (n=482)¹. By contrast, for deaths reviewed by CFRC the most frequent manners of death were suicide (36.2%, n=64), unintentional (27.7%, n=49), natural (14.1%, n=25), undetermined (13.6%, n=24), and homicide (8.5%, n=15).

Cause of Death

Cause of death is the specific injury or disease that resulted in the death (i.e., drowning, poisoning or a motor vehicle crash). Table 1 displays the leading causes of death occurring among those 0-18 in Utah for 2019. These leading causes of death included perinatal conditions (27.4%, n=132), congenital malformations (17.6%, n=85) and youth suicide (12.9, n=62)¹.

**Table 1. Leading Causes of Death Among Children Aged 0-18
Utah, 2019 (n=482)¹**

	#	%
Certain conditions originating in the perinatal period	132	27.4%
Congenital malformations, deformations and chromosomal abnormalities	85	17.6%
Intentional self-harm (suicide)	62	12.9%
Unintentional Injuries	48	10.0%
Malignant neoplasm	24	5.0%

Figure 2 shows the leading causes of death among children 0-18 reviewed by CFRC for the years 2019. Among these, the most frequent cause of death was youth suicide (n=64), followed by motor vehicle and other transportation and Firearm related deaths (n=29). Transportation deaths consisted primarily of passenger vehicle deaths (n=14). Other leading causes of death included homicide (n=15), unintentional drowning/poisoning deaths (n=15), and sudden unexpected infant death (SUID)/sudden unexpected death of a child (SUDC) (n=14).

**Figure 2. Leading Causes of Death Reviewed by CFRC Among Children Aged 0-18
Utah, 2019 (n=177)**

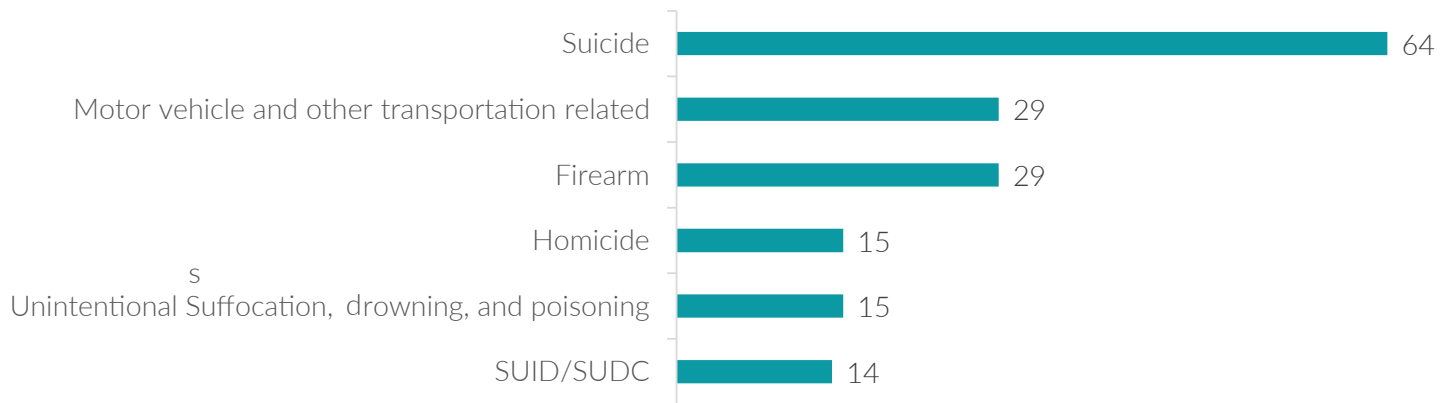
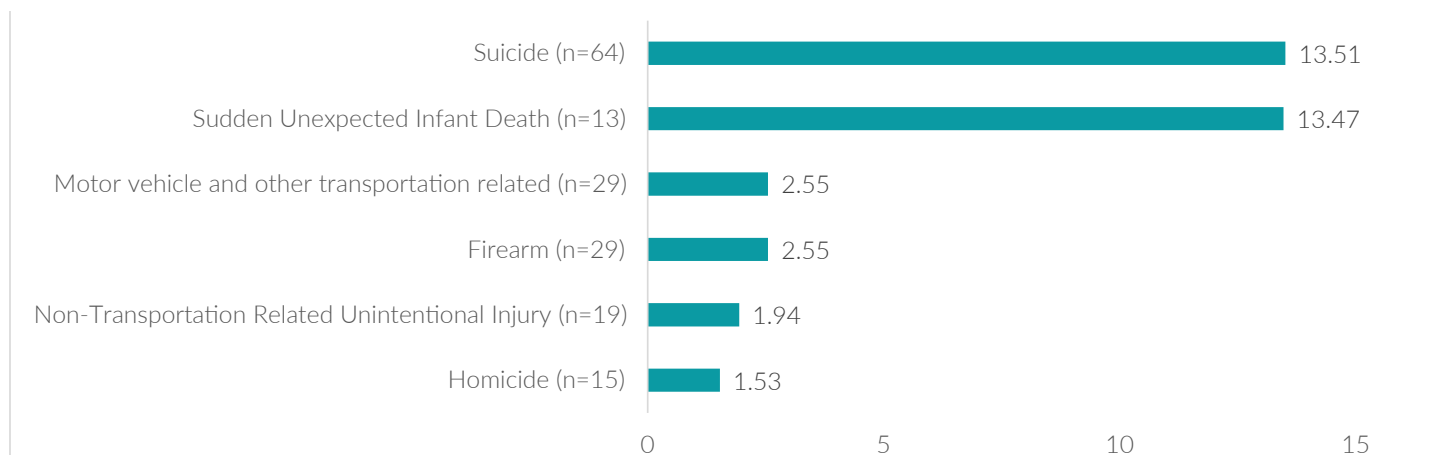


Figure 3 demonstrates the crude rates of death among the leading causes of death for children aged 10-18 reviewed by CFRC for 2019. The highest rate of death was suicide among youth ages 10-18 at 13.51 deaths per 100,000 population with SUID deaths right behind at 13.47 deaths per 100,000 infants (0-1) in Utah. The rates of suicide and SUID were more than five times higher than the rates of any other cause of death reviewed by CFRC. Motor vehicle and other transportation related death as well as firearm, suffocation, drowning, poisoning and homicide death rates however were calculated using the full 2019 0-18 population, since those deaths occur at all ages.

Figure 3. Crude Rates of Death for Fatalities Reviewed by CFRC Among Utah Resident Children Aged 0-18 Utah, 2019¹



Other Important Findings from 2019 Data

Suicide deaths among children aged 0-18 were the highest ever in 2019, accounting for 13.3% of deaths (n=64, crude rate of 6.4 per 100,000) in Utah

- Suffocation was the leading mechanism of suicide death (n=32) followed by firearms (n=21)
- Sexual abuse history (as victim and/or perpetrator) was identified as a risk factor in multiple suicide deaths reviewed
- 62.5% of suicides happened in the individual's residence

Transportation

- Basic safety equipment was not utilized in most transportation related deaths
- Seat belts were not used in 76% of passenger vehicle deaths, where that information was available.
- A helmet was not utilized in 80% of the bicycle/motorcycle/ATV deaths in 2019

Firearm

- Handguns were the most used type of firearm (n=16), followed by rifles and shotgun (n=9).
- Evidence of safe storage (firearm had lock or was in locked gun case) was only noted in 10% of firearm deaths.

Homicide

- Family member identified as perpetrator in 75% of cases where the perpetrator was known (n=9 of 12)

Safe Sleep Factors

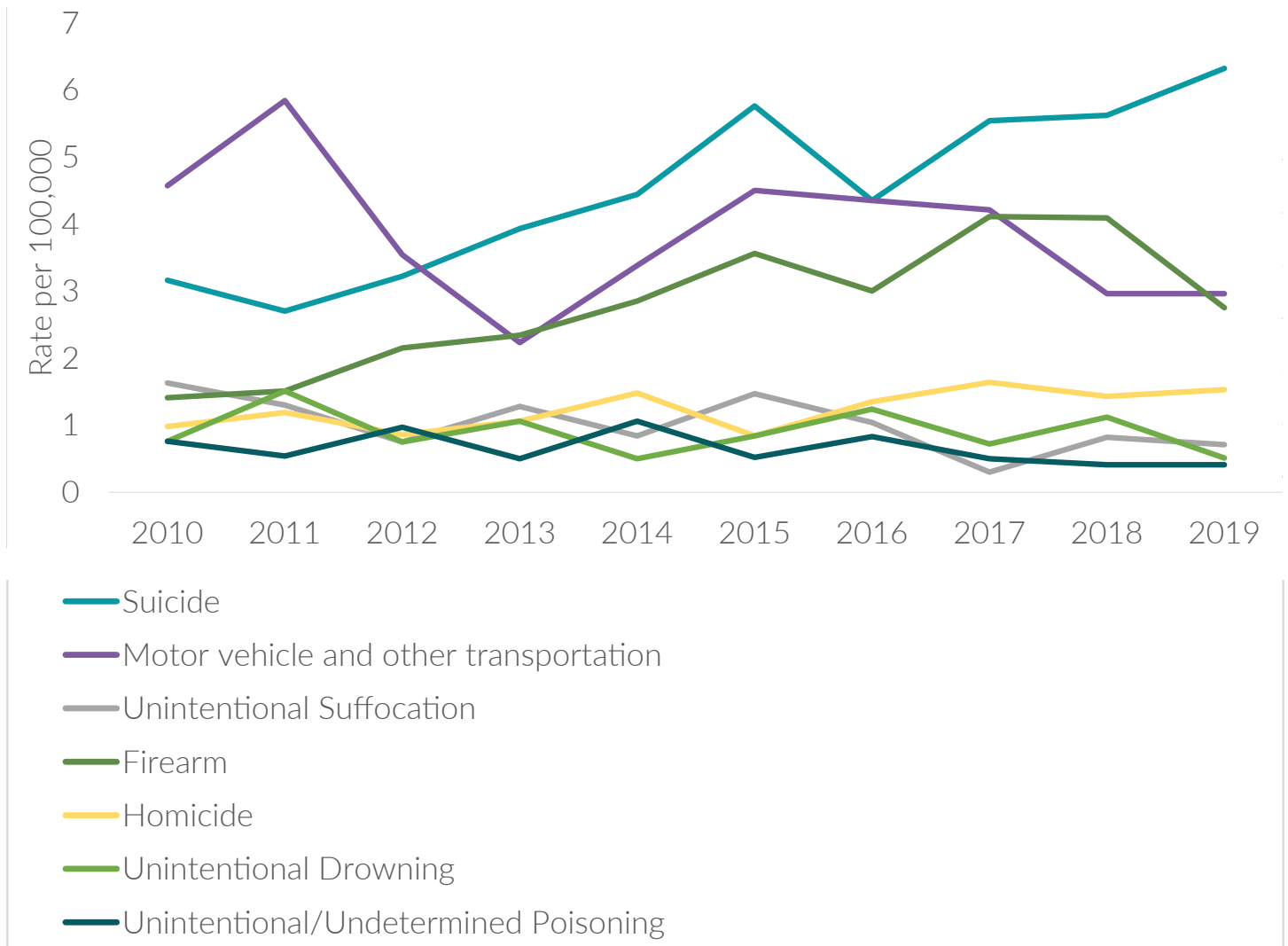
- 18 infant deaths had unsafe sleep factors present (soft objects and loose bedding in crib/bassinet, bed-sharing, or other unsafe sleeping situations as defined by American Academy of Pediatrics⁴).

Understanding the Trends

Summary of 2010-2019 Child Injury Death Report Findings (0-19)

Figure 4 shows the rates of death of the leading causes of death by year. The rate of childhood injury death from all causes remained stable from 2010 to 2019 in Utah (no significant change). However, the youth suicide rate more than doubled from 2010 to 2019 (from 3.16 to 6.32), while the rates of unintentional death significantly fell from 2010 to 2019 (from 8.81 down to 4.89). The fall in unintentional death rates was driven by a significant reduction in the rates of motor vehicle and other transportation deaths (from 4.57 to 2.96)¹.

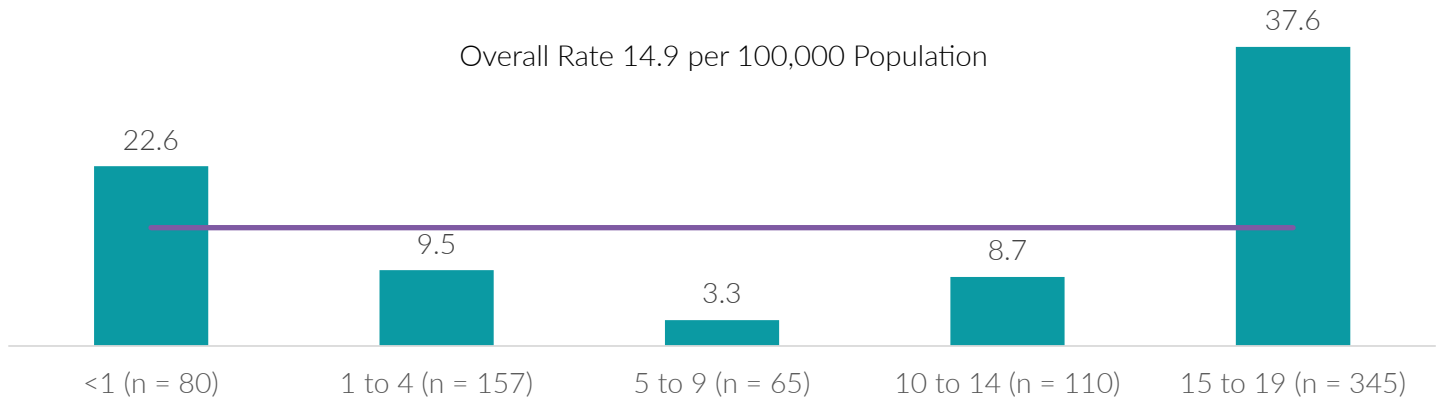
Figure 4. Leading Causes of Injury Deaths Among Children Aged 0-19, by Year, Utah, 2010-2019 (n=1,266)¹



Disparities by Age

Figure 5 shows the rates of injury death by age group. Infants (0-1) see statistically higher rates of SUID and suffocation deaths (38.8 and 12.27) than other age groups. Older child (15-19) see statistically higher rates of suicide, firearm, and motor vehicle and other transportation deaths (18.29, 11.2, and 9.6)¹.

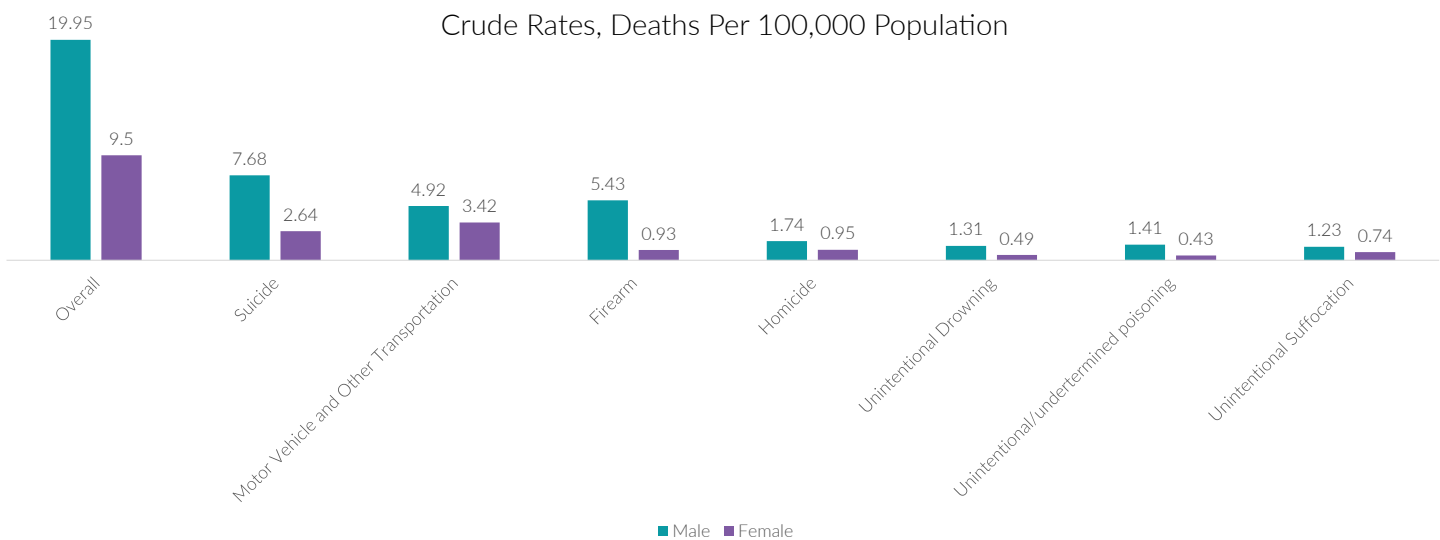
Figure 5. Differences in Injury Death Rates Among Children Aged 0-19 by Age, Utah, 2010 - 2019 (n=4,887)¹



Disparities by Sex

Figure 6 shows the significantly higher rates of death of males over females in all categories of injury. Overall males were five times as likely to die from firearms as females (4.66 compared to 0.82); Males were two times as likely to die of suicide, unintentional drowning, and unintentional/undetermined poisoning as females (7.68 compared to 2.33, 1.23 compared to 0.52, and 0.84 compared to 0.3); and males were significantly more likely than females to die of vehicle and other transportation, homicide, and unintentional suffocation (4.46 compared to 3.2, 1.55 compared to 0.91, and 1.23 compared to 0.78)¹.

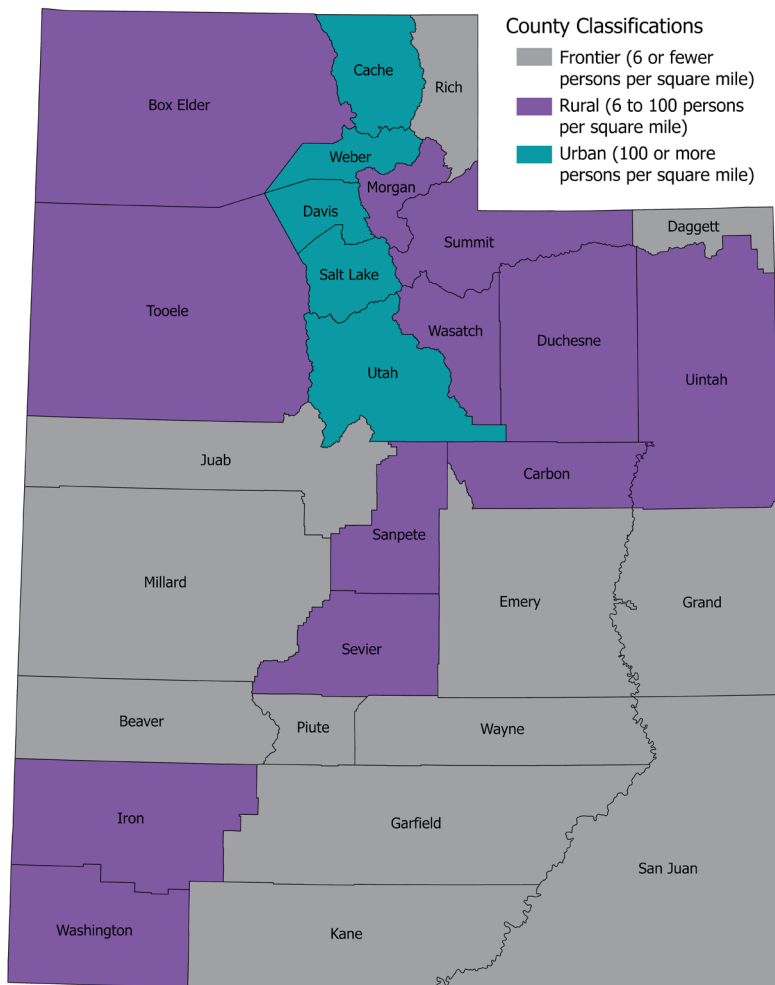
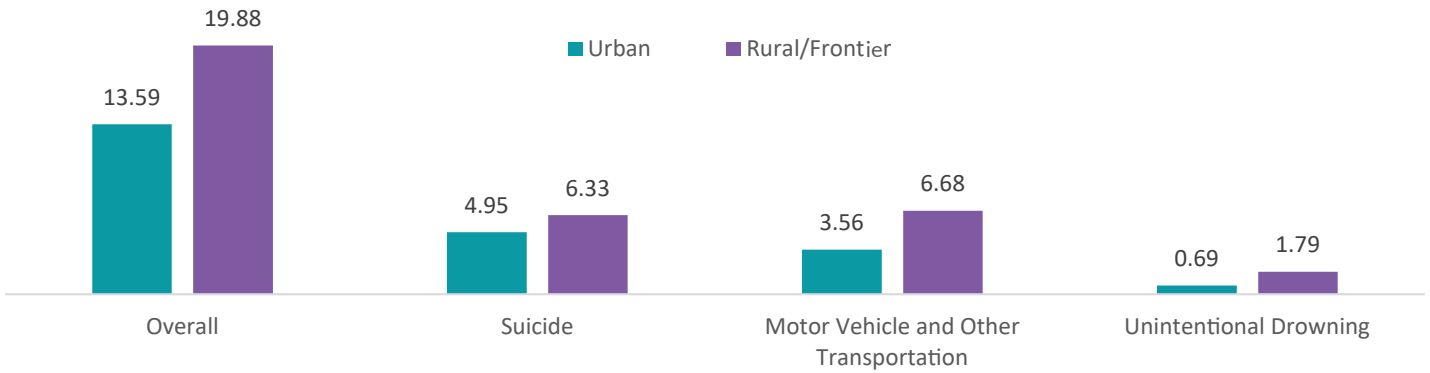
Figure 6. Significant Difference in Injury Death Rates Among Children Aged 0-19 by Sex, Utah, 2010 - 2019 (n=4,887)¹



Disparities by Geography

Figure 7 shows the significantly higher rates of child injury death in rural and frontier counties compared to urban counties. Children in rural and frontier counties were statistically more likely to die in suicide and transportation related deaths as urban children (5.51 compared to 4.28 and 6.24 compared to 3.24), and two times more likely to die in unintentional drownings (1.72 compared to 0.67)¹.

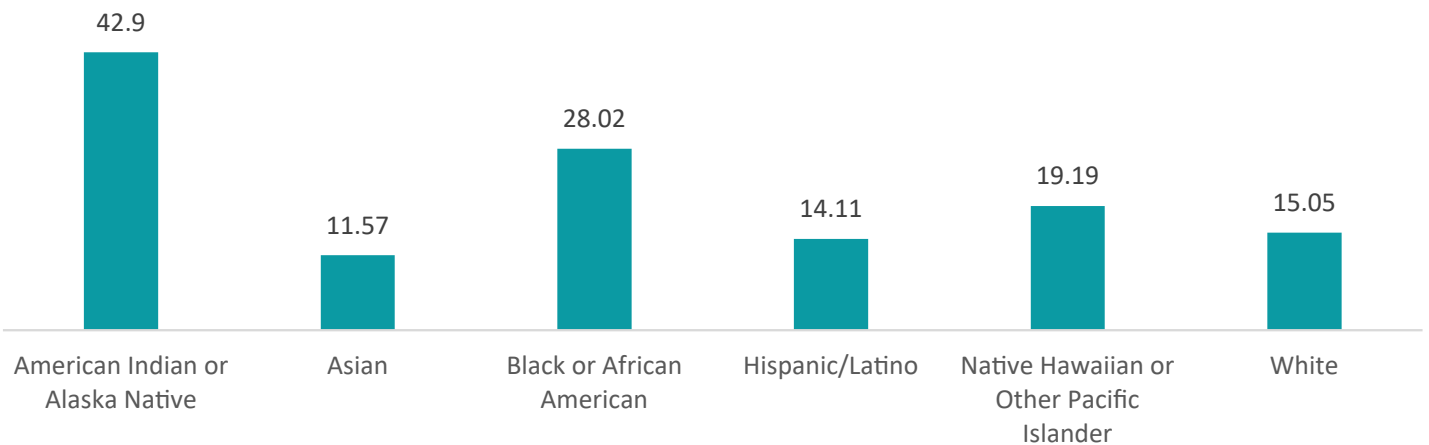
Figure 7. Significant Difference in Injury Death Rates Among Children Aged 0-19 in Urban Areas Compared with Rural/Frontier Counties Utah, 2010-2019 (n=4,887)¹



Disparities by Race/Ethnicity

Figure 8 highlights overall differences in the rates of child injury deaths by race and ethnicity. In this figure, we see American Indian or Alaska Native children were nearly 3 times more likely to die from injury as white children (42.9 compared to 15.05), while Black or African American children were nearly 2 times more likely to die from injury as white children (28.02 compared to 15.05). We also see significant differences by race and ethnicity when we look at some specific causes of death. American Indian or Alaska Native youth were nearly 3 times more likely to die by suicide and in transportation related deaths as white youth (16.74 compared to 5.75 and 14.65 compared to 4.03); white youth were nearly 2 times as likely to die by suicide as Hispanic/Latino youth (5.75 compared to 2.58); and Hispanic/Latino children were over 2 times more likely to die from homicide and more likely to die in transportation related deaths than white children (2.69 compared to 1.06 and 5.09 compared to 4.03)¹.

Figure 8. Child Injury Death Rates Among Children Aged 0-19 by Race/Ethnicity, Utah, 2010-2019 (n=4,887)¹



Social Disparities

It is known that health outcomes are impacted by inequities linked to economic, socio-cultural, racial/ethnic, and geographic disadvantage. At the same time, it is challenging to measure those associations. In order to link health outcomes to health disparities, the UDOH created the Health Improvement Index (HII)², a composite measure of social determinants of health by Utah Small Area (n=99). The HII combines indicators of income, education, home ownership, and household composition.

When child injury deaths were analyzed at the small area level by HII, children living in small areas identified as Very High HII Areas (most deprived areas) were significantly more likely to die than children in the state, as a whole (18.37 compared to 15.85), because of significantly more homicide deaths (3.32 compared to 1.46). Also, children living in areas identified as Average Health Improvement Index Areas were significantly more likely to die than children in the state, as a whole (18.82 compared to 15.85). These small areas were impacted by significantly more suicide deaths than the state, as a whole (7.17 compared to 5.65)¹.

The Utah Department of Health and CFRC acknowledge 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 Utahns.

CFRC Recommendations to Prevent Child Deaths

What follows is a summary of the 2019 recommendations, both specific and general, compiled by the amazing multi-disciplinary team of professionals that participate in the CFRC. Each recommendation was informed by one or more of the 177 child deaths reviewed by the committee during 2019 and 2020. These recommendations inform gaps and deficiencies that were identified from the available data. They are shared here to help strengthen child welfare and safety across the state of Utah.

Each recommendation includes a reference to one or more of the following areas of impact:

- A.** Suicide Prevention Impact
- B.** Motor Vehicle and other Transportation Related Deaths Prevention Impact
- C.** Firearm Death Prevention Impact
- D.** Homicide Prevention Impact
- E.** SUID/SUDC Prevention Impact
- F.** Unintentional Drowning/Poisoning Prevention Impact

Overarching Prevention Recommendations

1. Increase access to and funding for mental health, behavioral health, and substance abuse services across Utah (**A,B,C,D,E,F**)
 - Increase funding to schools
 - Social worker in every school
 - On-site response to [trauma](#)
 - Return to school education and resources following traumatic events
 - [CALM](#) training for school counselors
 - Increase tele-health services and broadband access, especially in rural Utah
 - Increase diversity in the behavioral health care workforce
 - Improve integration of behavioral health into primary care and emergency response
 - Ensure victims of trauma, those who lose a loved one to suicide or who are victims of sexual abuse, get counseling and wrap around services as needed (example: after the use of a rape kit)
 - Expand crisis resources and knowledge of those resources across the state
 - Increase opportunities for treatment instead of jail for individuals with substance abuse disorders
 - Provide [Narcan](#) and support for individuals with substance abuse disorders when they leave prison
 - Expand access to support groups for youth with substance abuse issues, gender identity concerns, or mental health struggles
2. Expand evidence-based home visitation (**B,C,D,E,F**)
3. Increase access to paid leave for families and quality, affordable child care (**A,B,C,D,E,F**)
4. Provide funding to improve data collection which informs prevention efforts (**A,B,C,D,E,F**)
 - Additional full-time death scene investigators to improve scene investigation (including doll re-enactments).
 - Employee to abstract the CFR cases
 - Personnel to do next of kin interviews to understand suicides
 - Fund research into firearms injury and death in the state
5. Implement a validated screening tool statewide for access to lethal means to be used by therapists, counselors, and physicians (**A,C,D**)
6. Statewide education campaigns to ensure safe stable nurturing relationships and environments for Utah children (**A,C,D,E,F**)
 - [Suicide safe homes](#) (including safe gun and medication storage and disposal);
 - [Safe sleep recommendations](#) for infants;
 - [Identification and reporting](#) of child maltreatment;
 - Promotion of [safe internet practices](#) (focus on cyber-bullying, pornography, and websites that promote suicide)

7. Comprehensive sex education for Utah children with specific discussions around consent, pornography, and healthy relationships **(A,D,F)**
8. Legislation to ensure community service hours do not include work with vulnerable groups **(C,D)**
9. Legislation to regulate the number of children with special needs who can be adopted by a single family **(C,D)**
10. Provide suicide prevention during hunter safety education courses **(A,C)**
11. Ensure equity by confirming resources and education are available to all regardless of geography (rural/urban), language, race, or ethnicity **(A,B,C,D,E,F)**

Criminal Justice Professionals

12. Create a State Rapid Response Team to assist investigators in smaller departments with fatalities, near fatalities, or suspected abuse **(A,B,C,D,E,F)**
13. Ensure thorough investigation by law enforcement of any fatality or critical incident occurring on the property of a private business or other organization **(A,C)**

First Responders and Crisis Responders

14. Ensure EMS record the body temperature at the time of arrival on scene **(E,F)**

Healthcare Providers

15. Re-education for primary care physicians to look for and report abuse **(C,D)**
 - a. Do a thorough undressed examination at all well-child visits
16. Education to healthcare providers regarding two-week follow up appointments after selective serotonin reuptake inhibitors are prescribed, which include education for parents about access to lethal means **(A,C)**
17. Ensure patient sobriety prior to crisis evaluation **(A,D)**
18. Parent mental health screenings and safe sleep review at well-child visits along with [resources](#) available for physicians to provide based upon the results of the screening **(D,E,F)**
19. Every Emergency Department across the state should have dedicated space and support for mental health crises, including social workers to assist and provide resources **(A,C,D)**
20. Ensure patient with chronic conditions are receiving mental health screenings **(A,C)**
21. Provide professional development for those who work with individuals on the autism spectrum to address their specific needs in suicide prevention **(A,C)**
22. Education and material on how to approach patients with gender identity concerns or who need guidance on transition best practice recommendations **(A,C)**
23. CPR training for parents of children with epilepsy or other high-risk health issues **(E)**

Public Health, Public Safety, and Human Services

24. Broad education for parents and caregivers regarding:
 - a. [DCFS reporting](#) (C,D)
 - b. [Suicide risk factors](#), including stress-triggering events from isolation and connectedness issues (break-up or a phone being taken away) (A,C)
25. Better wrap-around services for [those who report assault or abuse](#) (A,C,D)
26. Improve community coordination in postvention response to Systematic community response to multiple tragedies (A,C)
27. Education and resources for stigma reduction, especially in the [LGBTQ population](#) (A,C)
28. Provide education, outreach, and financial support to promote the use of helmets (B)
29. Provide education regarding the [Good Samaritan law](#) and providing assistance to those in crisis (A,C,D)
30. Provide education regarding [safe pool guidelines](#) and the [lanyard program](#) which provides a designated pool supervisor (F)
31. Continued education on correct [car seat](#) and [seatbelt usage](#), and the importance of not riding in the bed or trunk of a vehicle (B)
32. Provide follow-up on adoptions when a child has special needs to prevent medical neglect (C,D)

Schools

33. Healthy relationship education during sex education courses (A,C,D)
34. Promote healthy environments in schools for students at higher risk of suicide (individuals identifying as LGBTQ, those with ADHD, Autism, or chronic conditions) (A,C)
35. Do not hold [funerals and/or viewings for students in schools](#) (A,C)
36. Suicide prevention [education](#) to elementary, middle, and [high school](#) counselors and educators (A,C)
37. Education and outreach regarding suicide prevention to elementary school counselors and educators as well as middle and high schools (A,C)
38. Schools should provide notification of disciplinary action to parents and provide follow up (A,C)
39. Provide education and outreach to parents after a suicide fatality within a school (A,C)
 - Make parents aware of suicide waves and copy cats
 - Educate about [securing weapons](#)
 - Provide parents with guidance on finding support for their child
40. Education to schools about best practices on [safe messaging](#) about a suicide (Example: No announcements over the intercom) (A,C)

Higher Education

41. Provide education and support to Resident Advisors in college dorms on recognizing and addressing suicide risk and mental health crises (A,C)

Clergy/Faith Leaders

42. [Training](#) on how to get children into services when they disclose suicidal thoughts or abuse (A,C,D)

Conclusion

The purpose for the Utah Child Fatality Review Committee and this report is to prevent future child death and injury. The described trends and patterns that emerge from the aggregating data presented here have informed the recommendations included. Utah policymakers, organization heads, and partners from across the state can support our work by adopting and promoting the recommendations outlined in this report. While education is important, research shows that changes in policy and enforcement of laws are the most effective prevention strategies for many types of child deaths⁵.

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Special thank you to all the amazing people who participated in the Utah CFRC during 2019 and 2020 and gave of their time and expertise to work toward a safer Utah for our children.

References

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Our Mission:

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