



COLORADO Child
Fatality
Prevention
System

Statewide Data Overview, 2012 - 2016



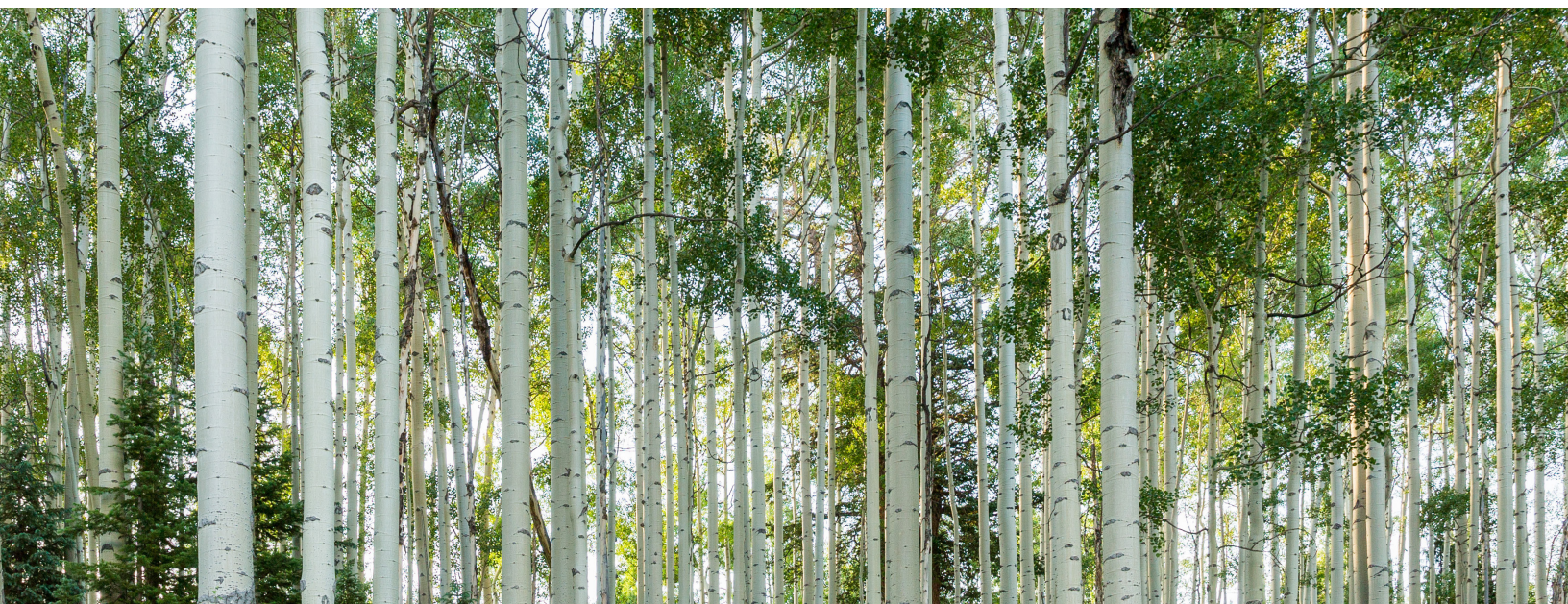
Introduction

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 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 2012 and 2016. 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/transport-related, child maltreatment, sudden unexpected infant death (SUID) and suicide. During Fiscal Year 2018, local teams reviewed deaths that occurred in 2016.

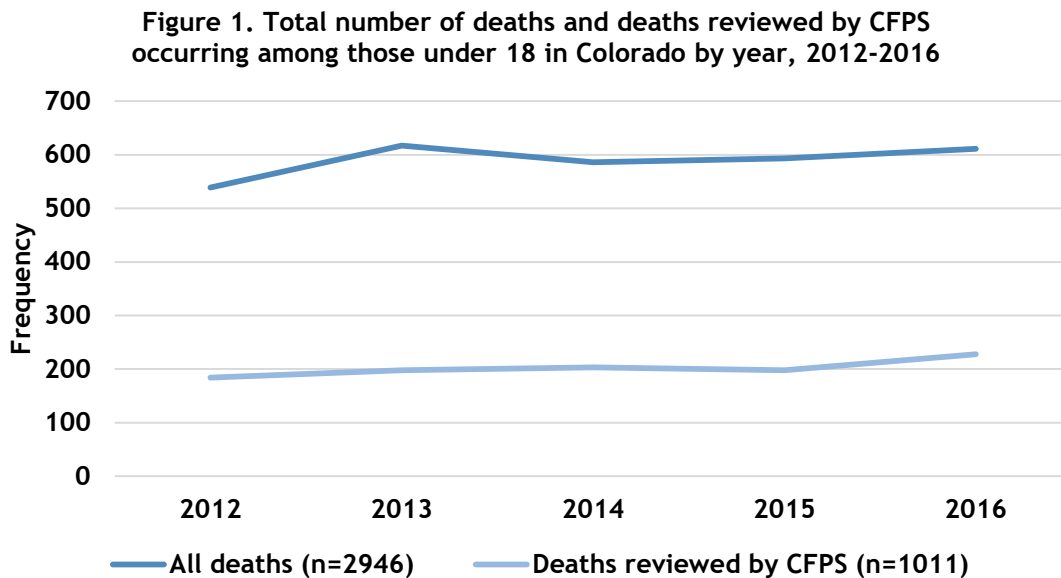
The CFPS review process includes deaths of Colorado residents occurring in Colorado, as well as deaths of out-of-state residents who died in Colorado or were transported to a Colorado hospital and died. CFPS does not review deaths of Colorado residents that occur outside of the state. These criteria are different from other reports of child fatality data and in 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 the state-level data from CFPS. For more details on CFPS data, access cause-specific data briefs and an interactive data dashboard here: www.cochildfatalityprevention.com/p/reports.html.



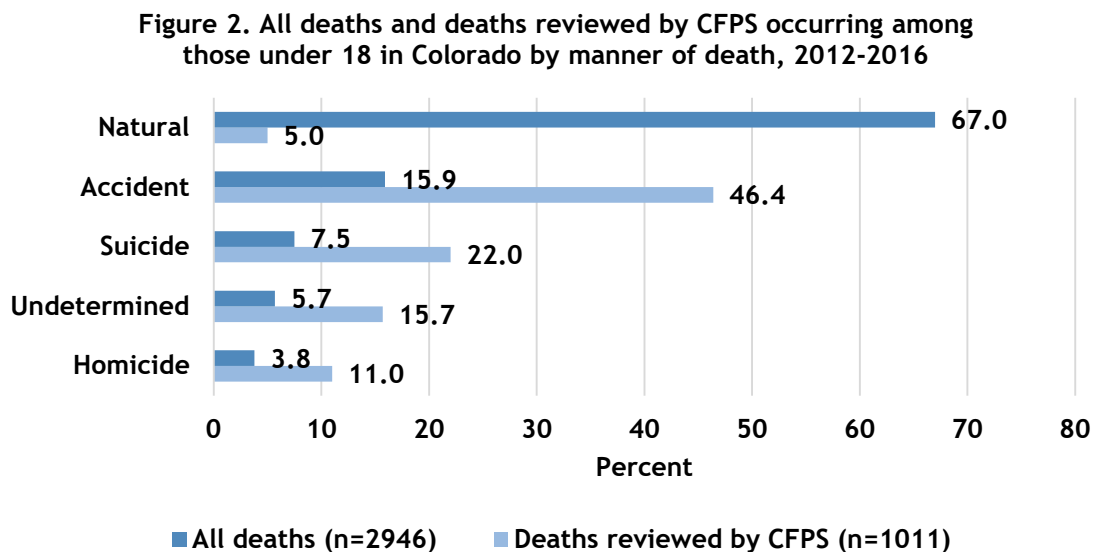
Statewide Data Overview, 2012-2016

Overview of CFPS Data from 2012-2016

From 2012-2016, there were 2,946 deaths that occurred in Colorado among those under age 18 (Figure 1). This number ranged from 539 in 2012 to 617 in 2013 and averaged 589 deaths per year. Over the same period, 1,011 deaths met CFPS statutory review criteria. In 2012, CFPS reviewed 184 deaths, a low for the period, while CFPS reviewed 228 deaths in 2016, representing the highest frequency for the period. On average, CFPS reviewed 202 deaths per year.



One major difference between deaths not reviewed by CFPS and those meeting the statutory criteria for CFPS review is the manner of death determination made by coroners and medical examiners. Upon investigating a particular death, a coroner or medical examiner may choose one of five manner of death classifications including: natural, accident, suicide, homicide, and undetermined manners. Figure 2 demonstrates that the majority of all deaths occurring among those under 18 years of age in Colorado were determined to be of natural manner (67.0 percent, n=1,975), accident (15.9 percent, n=469), suicide

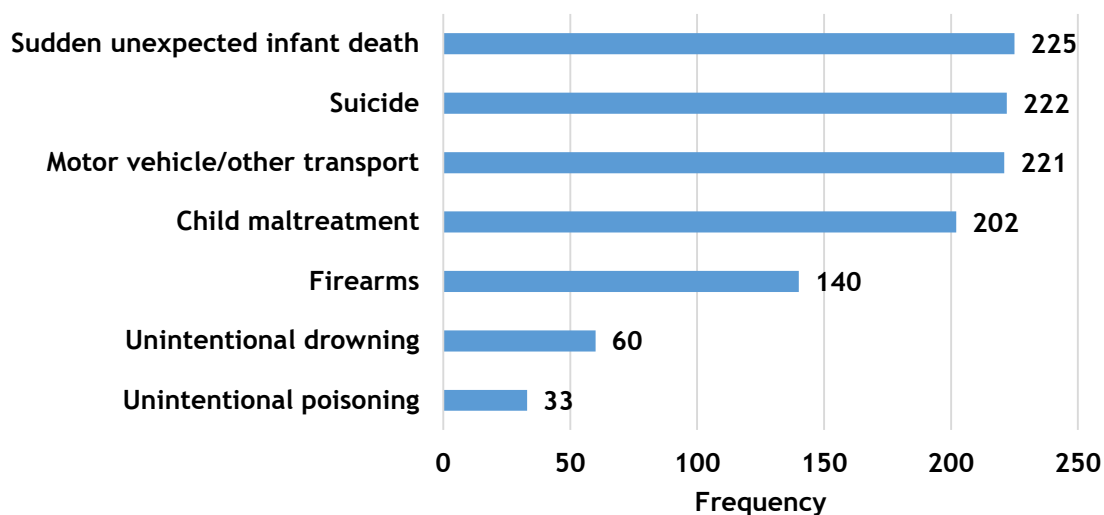


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(7.5 percent, n=222), undetermined (5.7 percent, n=169) and homicide (3.8 percent, n=111). By contrast, the most frequent manners of death among those reviewed by CFPS were accident (46.4 percent, n=469), suicide (21.9, n=222), undetermined (15.7 percent, n=159), homicide (11.0 percent, n=111) and natural (5.0 percent, n=50). CFPS reviews approximately one of every three deaths occurring in Colorado, and those that are not reviewed by CFPS are most often deaths of natural manner.

The leading causes of death for all deaths occurring in Colorado for the period included perinatal conditions (29.4 percent, n=871) and congenital malformations (16.2 percent, n=478). For CFPS data analysis purposes, a death may be assigned to one or more of the major cause of death categories when child maltreatment is indicated. For example, in the case of a youth known to be experiencing a mental health crisis who subsequently dies by suicide, the death may be coded as a death by suicide, a firearms death (depending on the means of death) and potentially as a child maltreatment death if the professional opinion of the team identified child neglect where access to lethal means were not restricted. Figure 3 shows the leading causes of death reviewed by CFPS for the years 2012-2016. The most frequent cause of death identified by CFPS from 2012-2016 was sudden unexpected infant death (SUID) (n=225), also known as sleep-related infant deaths, a group of deaths of which sudden infant death syndrome (SIDS) is one category. Other leading causes of death were youth suicide (n=222); motor vehicle/other transport-related (n=221), consisting primarily of passenger vehicle deaths (n=140) and pedestrian deaths (n=41); child maltreatment (n=202) or child abuse and neglect deaths; firearms deaths (n=140); unintentional drowning (n=60) and unintentional overdose or poisoning (n=33) deaths.

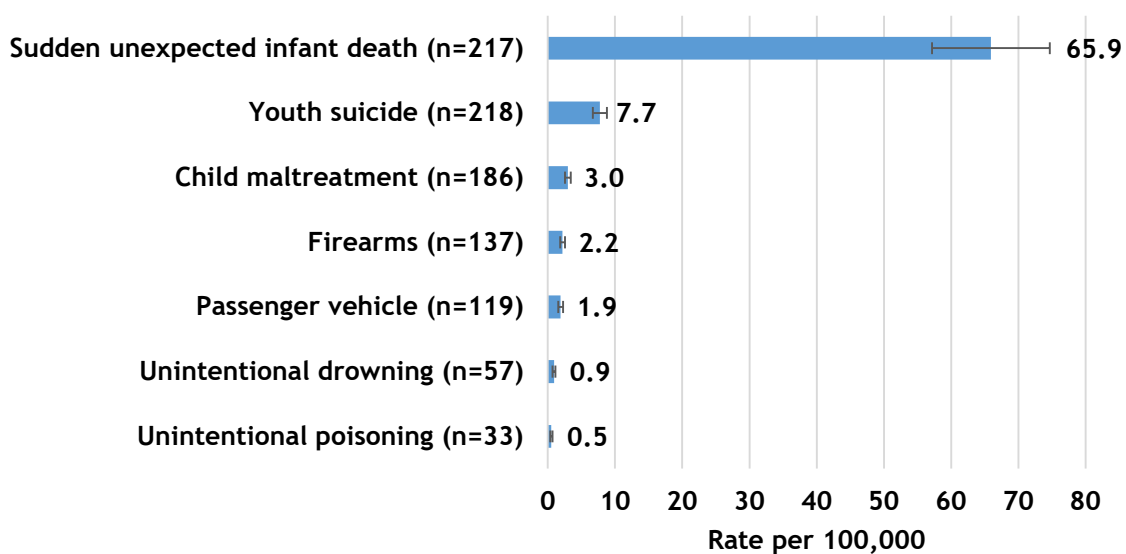
Figure 3. Leading causes of death occurring among those under 18 in Colorado and reviewed by CFPS, 2012-2016 (n=1011)



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Figure 4 demonstrates the crude rates of death for the leading causes of death identified by CFPS from 2012-2016. SUID was the leading rate of death for the period at 65.9 deaths per 100,000 live births in Colorado. This rate was nearly 10 times the rate of any other cause of death category reviewed by CFPS. Suicide among youth ages 10-17 was the second highest rate at 7.7 per 100,000 population, followed by child maltreatment at 3.0 per 100,000 population. These rates varied by age group, where the rate of child maltreatment among infants under age 1 (23.5 per 100,000 population, n=78) exceeds the rate of suicide among those ages 15-17 (14.1 per 100,000 population, n=145), both of which represent the age categories with the highest rates for these causes of death (data not shown).

Figure 4. Crude rates of death for child deaths occurring in Colorado among Colorado residents under 18 and reviewed by CFPS, 2012-2016



*Error bars represent 95% confidence limits for rates.

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Table 1 displays the leading causes of death by age group. The leading causes for infants under age 1 (n=295) included SUID (76.3 percent, n=225), child maltreatment (28.1 percent, n=83) and unintentional drowning (2.0 percent, n=6). Among children ages 1-4 years of age (n=151), the leading causes of death were child maltreatment (45.0 percent, n=68), motor vehicle (16.6 percent, n=25) and unintentional drowning (16.6 percent, n=25). Children ages 5-9 had the fewest deaths of any age category (n=79), with motor vehicle as the leading cause of death (48.1 percent, n=38), followed by child maltreatment (31.7 percent, n=25) and unintentional drowning (11.4 percent, n=9). For youth ages 10-14 (n=159), the leading causes of death included suicide (46.5 percent, n=74), motor vehicle (28.9 percent, n=46) and child maltreatment 8.8 percent (n=14). Finally, there were 327 deaths among youth ages 15-17. Leading causes for this age group included: suicide (45.3 percent, n=148), motor vehicle (33.0 percent, n=108), and unintentional poisoning (7.3 percent, n=24).

Table 1. Leading causes of death for deaths reviewed by CFPS occurring among those under 18 years of age in Colorado, 2012-2016.*

	n	Percent		n	Percent
All (n = 1011)			Ages 5 - 9 (n = 79)		
Sudden unexpected infant death	225	22.3	Motor vehicle/transport-related	38	48.1
Suicide	222	22.0	Child maltreatment	25	31.7
Motor vehicle/transport-related	221	21.9	Unintentional drowning	9	11.4
Age < 1 (n = 295)			Ages 10 - 14 (n = 159)		
Sudden unexpected infant death	225	76.3	Suicide	74	46.5
Child maltreatment	83	28.1	Motor vehicle/transport-related	46	28.9
Unintentional drowning	6	2.0	Child maltreatment	14	8.8
Ages 1 - 4 (n = 151)			Ages 15 - 17 (n=327)		
Child maltreatment	68	45.0	Suicide	148	45.3
Motor vehicle/transport-related	25	16.6	Motor vehicle/transport-related	108	33.0
Unintentional drowning	25	16.6	Unintentional poisoning	24	7.3

Data source: Child Fatality Prevention System, Colorado Department of Public Health and Environment.

*Cause of death categories are not mutually exclusive. Totals may sum beyond 100%.

For more information about CFPS data, please contact the CFPS Support Team at the Colorado Department of Public Health and Environment: support@cfps.freshdesk.com