



COLORADO Child
Fatality
Prevention
System

Statewide Data Overview, 2011-2015

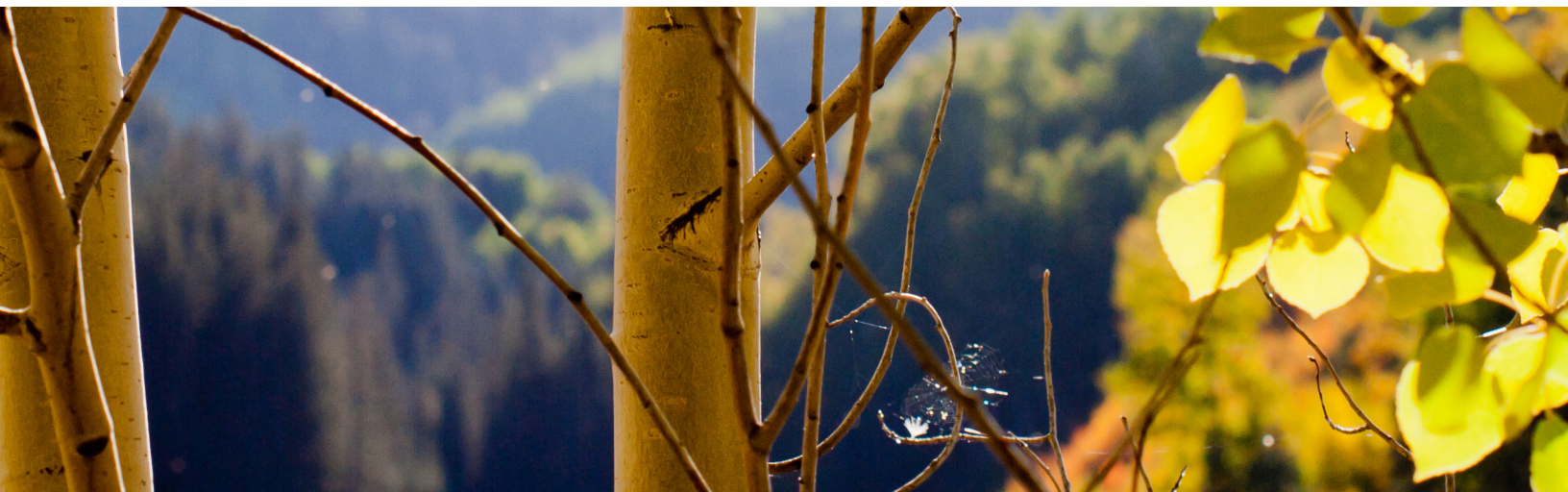


Introduction

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. The identified strategies are implemented and evaluated 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 2011 and 2015. Local child fatality prevention review teams are responsible for conducting individual, case-specific reviews of fatalities 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/other transport-related, child maltreatment, sudden unexpected infant death (SUID) and suicide. During Fiscal Year 2017, local teams completed reviews of deaths that occurred in 2015.

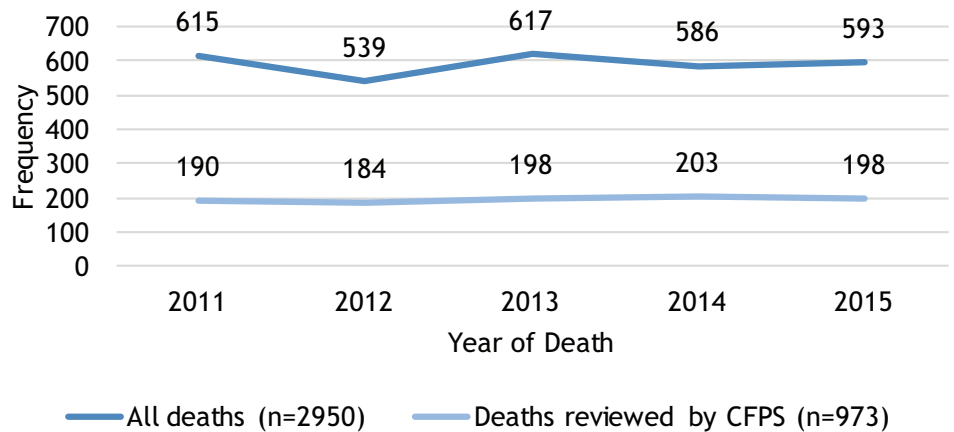
The CFPS review process includes deaths of Colorado residents occurring in Colorado, as well as deaths of out-of-state visitors who died in Colorado, and non-residents who were transported to a Colorado hospital and died. These criteria are different than those used in other reports of child fatality data and in many other Colorado government data sources. As a result, the data presented in this data summary may not match other statistics reported at both the state and national levels. This data summary provides an overview of the state-level data from CFPS. For more information on CFPS data, access additional cause-specific data briefs here: <http://www.cochildfatalityprevention.com/p/reports.html>.



Summary of CFPS Data between 2011 and 2015

Between 2011 and 2015, 973 deaths were identified that met CFPS review criteria. Over the same period, there were 2,950 deaths which occurred in Colorado among persons under 18 years of age. Importantly, CFPS does not review deaths of residents that occur out-of-state, but does review deaths of out-of-state residents that occur in Colorado. Figure 1 demonstrates the frequencies of all deaths occurring in Colorado among persons under 18 years of age and those reviewed by CFPS by year of death.

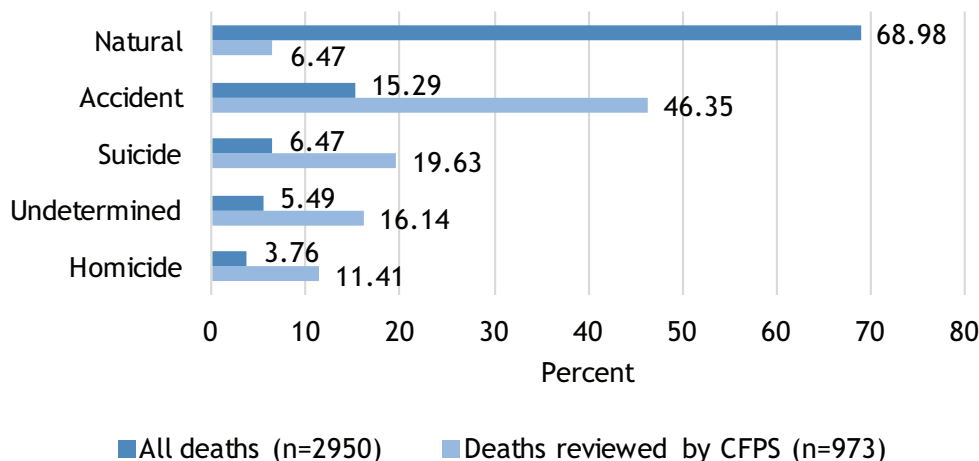
Figure 1. Total number of child fatalities reviewed by CFPS occurring in Colorado by year, 2011-2015



As can be observed from Figure 1, the total number of deaths occurring among those under 18 years of age in Colorado ranged from 539 in 2012 to 617 in 2013 and averaged 590 deaths per year. Of these, 973 met the statutory criteria for review by CFPS. In 2012, CFPS reviewed 184 deaths, a low for the period, while 203 deaths were reviewed in 2014, representing the highest frequency for the period. On average, CFPS reviewed 195 deaths per year.

One major difference between all deaths recorded for Colorado for the period and those meeting the statutory criteria for review is the manner of death determination made for these two cohorts by coroners and medical examiners. Upon investigating a particular death, a coroner or medical examiner may choose one of five manner of death classifications: natural, accident, suicide, homicide and undetermined manners. As can be observed in Figure 2, the majority of all deaths occurring among persons under 18 years of age in Colorado were determined as natural manner (69.0 percent, n=2035), followed by accident (15.3 percent, n=451), suicide (6.5 percent, n=191), undetermined (5.5 percent, n=162) and homicide (3.8 percent, n=111).

Figure 2. All deaths occurring in Colorado and those reviewed by CFPS by manner of death, 2011-2015



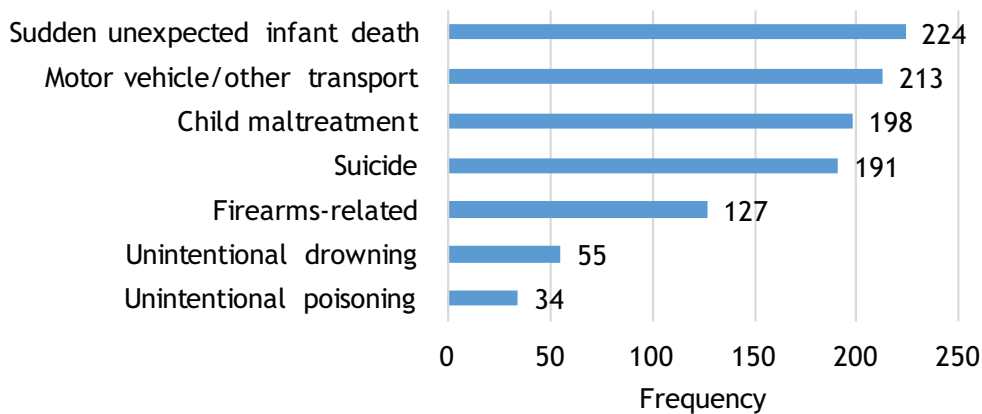
By contrast, the most frequent manners of death among those reviewed by CFPS were accident (46.4 percent, n=451) followed by suicide (19.6, n=191), undetermined (16.1 percent, n=157), homicide (11.4 percent, n=111) and natural (6.5 percent, n=67).

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The CFPS reviews one of every three deaths that occur in Colorado, and those that are not reviewed by CFPS are most often deaths of natural manner. All natural manner deaths receive an initial review by the system in order to identify any deaths that may have been preventable. If a natural manner death may be preventable, CFPS conducts a thorough case review of the death.

Leading causes of death reviewed by CFPS can be observed in Figure 3 for the years between 2011 and 2015. As can be observed in Figure 3, the leading cause of death identified by the system was sudden unexpected infant death (SUID) (n=224), which are also known as sleep-related infant deaths and include sudden infant death syndrome (SIDS). The next leading cause was motor vehicle/other transport-related deaths (n=213), which consisted primarily of passenger vehicle fatalities (n=136) and pedestrian deaths (n=43). Other leading causes of death included child maltreatment (n=198) (inclusive of child abuse and neglect deaths), deaths by suicide (n=191), firearms-related deaths (n=127), unintentional drowning deaths (n=55) and unintentional poisoning or overdose deaths (n=34). These cause of death categories are not mutually exclusive and a death may be assigned to one or more of the major cause of death categories. This occurs most often when child maltreatment is indicated to have caused or contributed to the death. For example, a suicide could also be considered a firearms-related death and a child maltreatment fatality, depending upon the circumstances of the case and the interpretation of those details by the local, multidisciplinary review team.

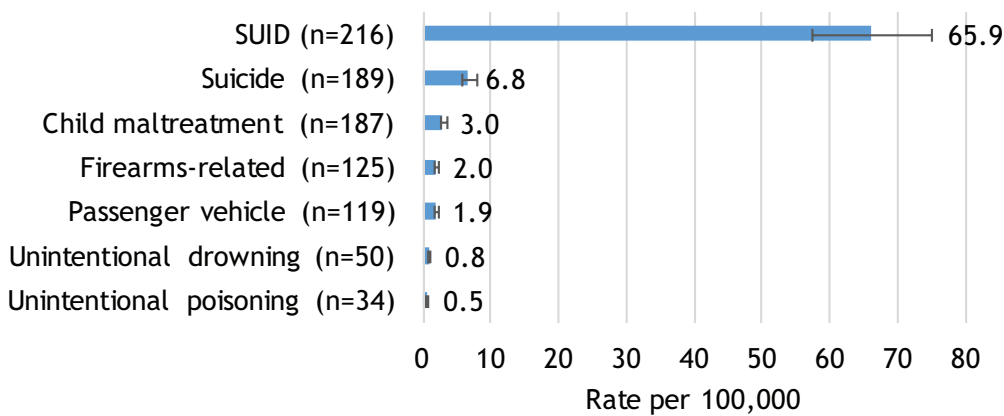
Figure 3. Leading causes of death for child fatalities occurring in Colorado and reviewed by CFPS, 2011-2015 (n=973)



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Figure 4 demonstrates the crude death rates for the leading causes of death reviewed by CFPS among Colorado residents between 2011 and 2015. SUID represented the highest rate of death for the period at 65.9 deaths per 100,000 live births in Colorado. This rate was nearly ten times the rate of any other cause of death category reviewed by the system. Suicide among those ages 10 through 17 years of age (no deaths by suicide were identified among those under 10 years of age between 2011 and 2015) represented the second highest rate at 6.8 per 100,000 population, followed by child maltreatment at 3.0 per 100,000 population. These rates also varied by age group. For example, the rate of child maltreatment among those under 1 year of age (21.7 per 100,000 population, n=72) exceeded the rate of suicide among those 15 through 17 years of age (11.6 per 100,000 population, n=118), both of which represented the age categories with the highest rates for these causes of death.

Figure 4. Crude rates of death for child fatalities occurring in Colorado and reviewed by CFPS, 2011-2015 (n=973)



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Table 1 displays the leading causes of the death CFPS reviewed by age group. Between 2011 and 2015, SUID was the leading cause of death among children under 1 year of age (75.7 percent, n=224), followed by child maltreatment (25.7 percent, n=76). Among 1-4 year olds, child maltreatment (49.7 percent, n=77), motor vehicle-related (18.1 percent, n=28) and unintentional drowning (16.1 percent, n=25) were the leading causes of death. Children ages 5-9 years had fewer deaths than any other age category. The leading causes of death for this age group were motor vehicle-related (53.3 percent, n=40) and child maltreatment (30.7 percent, n=23). Among 10-14 year olds, suicide (46.1 percent, n=71) was the leading cause of death, followed by motor vehicle-related deaths (27.9 percent, n=43) and child maltreatment (8.4 percent, n=13) fatalities. Suicide was also the leading cause of death among 15-17 year olds, representing 41.0 percent (n=120) of all reviewed deaths within this age group, followed by motor vehicle-related fatalities (34.1 percent, n=100) and unintentional poisoning deaths (8.5 percent, n=25).

Table 1. Leading causes of death for deaths reviewed by CFPS among those under 18 years of age occurring in Colorado, 2011-2015.*

	n	Percent		n	Percent
All (n =973)			Ages 5 - 9 (n = 75)		
Sudden unexpected infant death	224	23.0	Motor vehicle	40	53.3
Motor vehicle	213	21.9	Child maltreatment	23	30.7
Child maltreatment	198	20.3	Unintentional fall/crush	6	8.0
Age < 1 (n = 295)			Ages 10 - 14 (n = 154)		
Sudden unexpected infant death	224	75.7	Suicide	71	46.1
Child maltreatment	76	25.7	Motor vehicle	43	27.9
Unintentional drowning	8	2.7	Child maltreatment	13	8.4
Ages 1 - 4 (n = 155)			Ages 15 - 17 (n=293)		
Child maltreatment	77	49.7	Suicide	120	41.0
Motor vehicle	28	18.1	Motor vehicle	100	34.1
Unintentional drowning	25	16.1	Unintentional poisoning	25	8.5

*Cause of death categories are not mutually exclusive.

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

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.