



**COLORADO** Child  
Fatality  
Prevention  
System

Unintentional Drowning Deaths in Colorado, 2011-2015



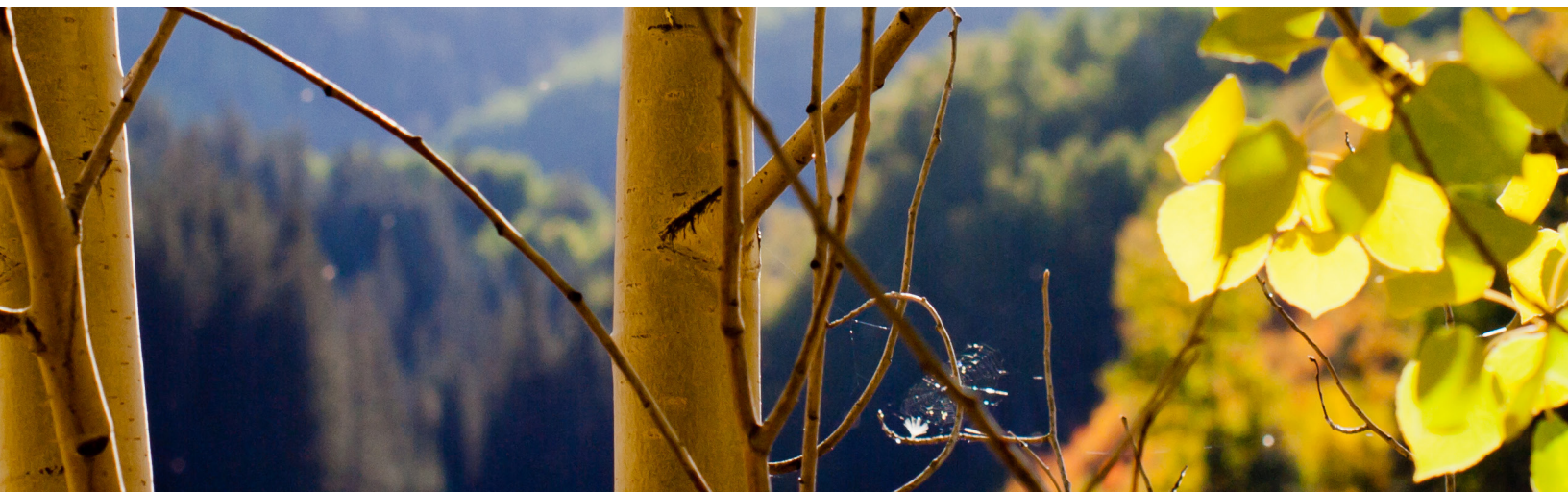


## Introduction

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.

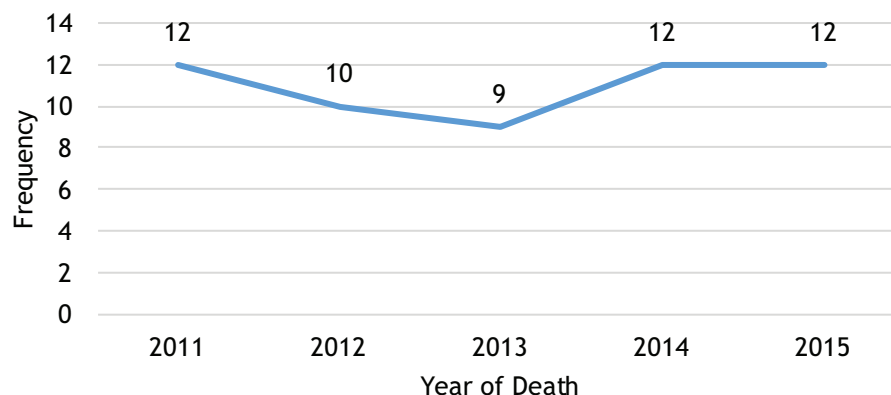
The CFPS review process includes deaths of Colorado residents occurring in Colorado, as well as deaths of out-of-state visitors who died in Colorado, and non-residents who were transported to a Colorado hospital and died. These criteria are different than those used in other reports of child fatality 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 brief provides an overview of unintentional drowning deaths occurring in Colorado among those under 18 years of age between 2011 and 2015. For more information on CFPS data, access additional cause-specific data briefs here: <http://www.cochildfatalityprevention.com/p/reports.html>.



## Overview of Unintentional Drowning Deaths

Between 2011 and 2015, 55 unintentional drowning deaths occurred among those under 18 years of age in Colorado. Unintentional drowning deaths for the period ranged from nine in 2013 to 12 occurring in 2011, 2014 and 2015 each, and averaged 11 per year (Figure 1). The five-year incidence of unintentional drowning fatalities occurring in Colorado among Colorado residents between 2011 and 2015 was 0.8 deaths per 100,000 population. This rate did not change from year to year for the period.

Figure 1. Unintentional drowning fatalities occurring in Colorado by year, 2011-2015 (n=55)



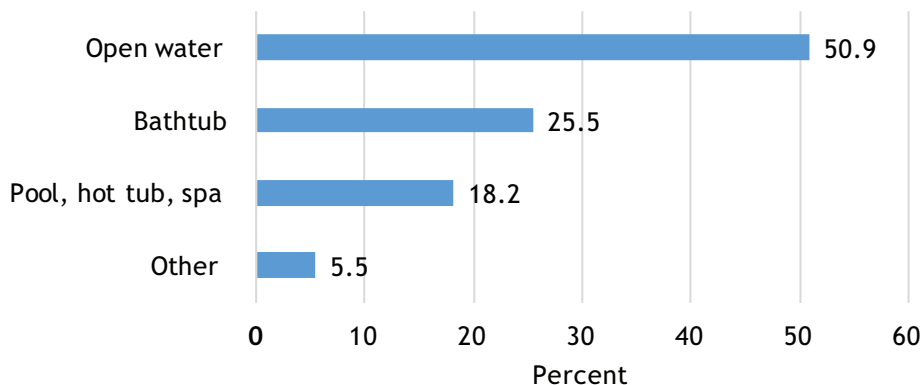
## Demographics

Among decedents in unintentional drowning fatalities, 78.1 percent (n=43) occurred among males and 45.5 percent (n=25) occurred among those 1 through 4 years of age. Twenty percent occurred among those 15 through 17 years of age (n=11) and 14.6 percent (n=8) occurred among those under 1 year of age and 10 through 14 years of age each. Of the 55 drowning fatalities, 83.6 percent (n=46) of decedents were white, 43.6 percent (n=24) were of Hispanic origin and 90.9 percent (n=50) were Colorado residents. A trend toward lower rates of unintentional drowning deaths was observed with increasing age, though this trend was not statistically significant. The highest rates were observed among infants (2.1 per 100,000 population) and those from 1 through 4 years of age (1.7 per 100,000 population). It should be noted, however, that these rates derive from small numbers and can vary substantially if additional events are observed. The rate of unintentional drowning fatalities among males (1.2 per 100,000 population) was three times the rate among females (0.4 per 100,000 population) and this difference was statistically significant.



## Unintentional Drowning Circumstances

Figure 2. Location of unintentional drowning fatalities in Colorado, 2011-2015 (n=55)



Open water environments, including lakes, rivers, ponds, creeks, quarries, gravel pits and canals, were the most common drowning locations (50.9 percent, n=28), followed by bathtubs (25.4 percent, n=14). Pools, hot tubs or spas were the location of 18.2 percent (n=10) of these deaths. In addition, 82.1 percent (n=23) of open water and 100.0 percent (n=10) of pool, hot tub or spa drowning decedents were

not wearing or using a personal flotation device, including Coast Guard approved jackets, cushions, or lifesaving rings, or those not approved by the Coast Guard, such as swim rings, inner tubes or air mattresses. Of the bathtub drowning fatalities, 78.6 percent (n=11) of all bathtub drowning fatalities occurred among those under 5 years of age and a bathing aid was not in use in 78.6 percent of these fatalities (n=11). Finally, 42.9 percent (n=12) of decedents in open water drowning fatalities were unable to swim and 70.0 percent (n=7) of pool, hot tub or spa drowning decedents were unable to swim.

Child maltreatment (abuse or neglect) was identified by CFPS teams in 30.9 (n=17) percent of all unintentional drowning deaths. Of these unintentional drowning fatalities identified as child maltreatment death, 94.1 percent (n=16) occurred among those under 5 years of age. Where child maltreatment was not identified as contributing to the death, 55.3 percent (n=21) occurred among those from 5 through 17 years of age. Nearly all of the unintentional drowning fatalities where child maltreatment contributed to the circumstances leading to death were due to neglect.

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](mailto:support@cfps.freshdesk.com).

