

Child Fatality Prevention System

Unintentional Drowning Death Data, 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.

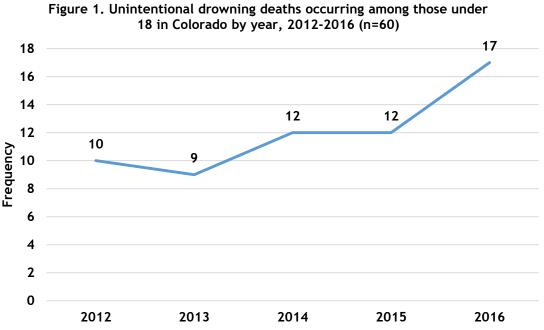
The data presented within this data summary come from comprehensive, statutorily-mandated reviews of deaths among those under 18 years of age occurring in Colorado between 2012 and 2016. Local child fatality prevention review teams are responsible for conducting individual, case-specific reviews of deaths 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 topicspecific data brief may not match other statistics reported at both the state and national levels. This data brief provides an overview of unintentional drowning death 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.



Overview of Unintentional Drowning Deaths

From 2012-2016, 60 unintentional drowning deaths occurred among children and youth ages 0-17 in Colorado. Unintentional drowning deaths for the period ranged from 9 in 2013 to 17 occurring in 2016, and averaged 12 per year (Figure 1). The 5-year incidence of unintentional drowning deaths for the 2012-2016 period was 0.9 per 100,000 population among Colorado residents under 18 years old. This rate did not change from year to year for the period (data not shown).



Demographics of Unintentional Drowning Deaths

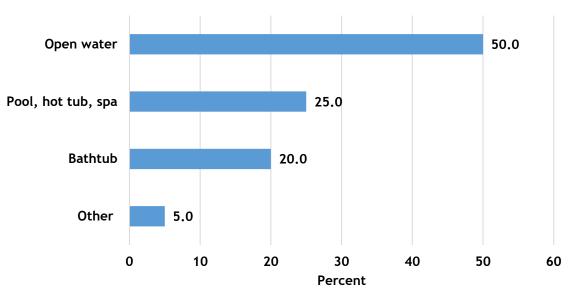
Among decedents in unintentional drowning deaths, 76.7 percent (n=46) occurred among males and 41.7 percent (n=25) occurred among children ages 1-4 years of age. Twenty percent occurred among youth ages 15-17 (n=12), and 15.0 percent (n=8) occurred among children ages 5-9. There were no statistically significant differences in rates across age groups, though younger age groups trended toward higher rates. The highest rates were observed among infants (1.8 per 100,000 population) and children ages 1-4 years (1.8 per 100,000 population) (data not shown). These rates derive from small numbers and can vary substantially if additional events occur within a particular age group. Of the 60 unintentional drowning deaths, 41.7 percent (n=25) of decedents were non-Hispanic white and 43.3 percent (n=26) were of Hispanic origin. The rate of unintentional drowning death among males (1.3 per 100,000 population) was more than double the rate among females (0.5 per 100,000 population), and this difference was statistically significant (data not shown).

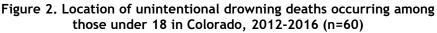


Unintentional Drowning Circumstances

Open water environments, including lakes, rivers, ponds, creeks, quarries, gravel pits and canals, were the most common drowning locations (50.0 percent, n=30), followed by pools, hot tubs, and spas (25.0 percent, n=15) and bathtubs (20.0 percent, n=12) (Figure 2). Nearly 90.0 percent (n=26) of open water and 100.0 percent (n=15) of pool, hot tub or spa drowning decedents were not wearing or using a personal flotation device, including U.S. Coast Guard approved jackets, cushions, or lifesaving rings, or those not approved, such as swim rings, inner tubes or air mattresses. Sixty-seven percent (n=8) of all bathtub drowning deaths occurred among children under age 5 and a bathing aid was not used in 83.3 percent of these deaths (n=10). Of the 30 open water drowning deaths, 40.0 percent (n=12) of decedents were unable to swim, while 73.3 percent (n=11) of pool, hot tub or spa drowning decedents were unable to swim.

CFPS teams determined 33.0 percent (n=20) of the unintentional drowning deaths met the criteria to be classified as child maltreatment (abuse or neglect). Eighty-five percent (n=17) of the unintentional drowning deaths where child maltreatment was a factor occurred among children under age 5. Where child maltreatment was not identified as contributing to the death, 65.0 percent (n=26) occurred among children and youth ages 5-17. Nearly all of the unintentional drowning deaths 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