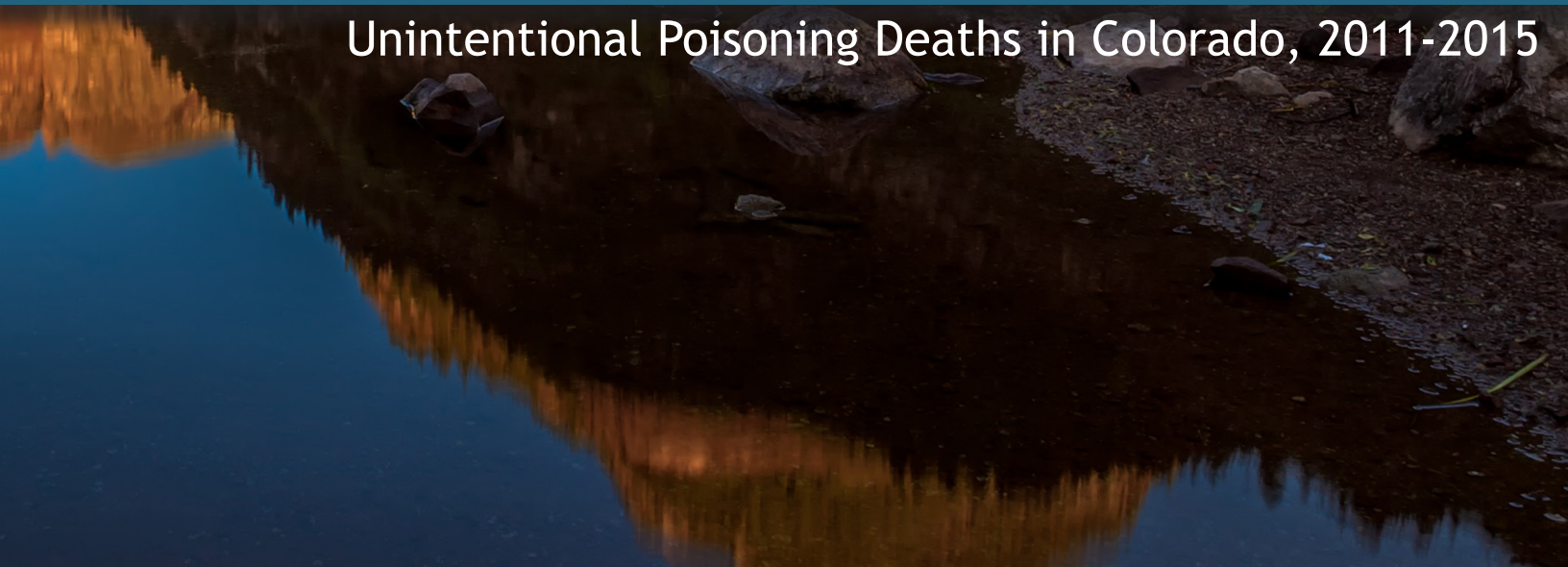




COLORADO Child
Fatality
Prevention
System

Unintentional Poisoning 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.

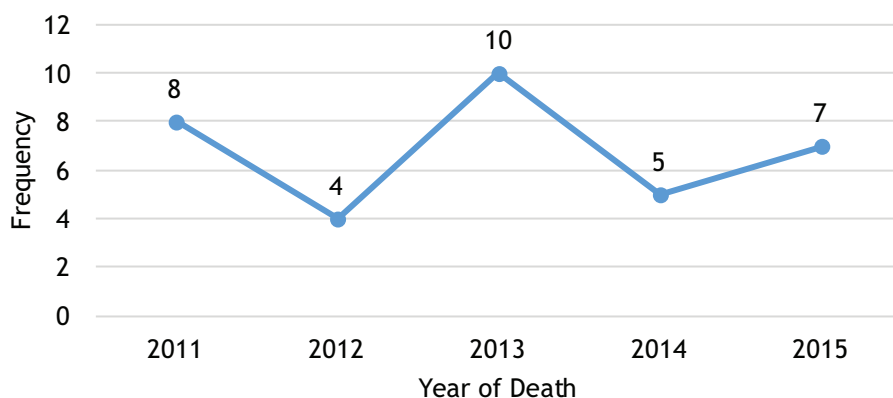
The CFPS review process includes deaths of Colorado residents occurring in Colorado, as well as deaths of out-of-state visitors who died in Colorado, and non-residents who were transported to a Colorado hospital and died. These criteria are different than those used in other reports of child fatality 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 poisoning 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 Poisoning Deaths

Between 2011 and 2015, 34 unintentional poisoning deaths were identified among those under 18 years of age in Colorado. Unintentional poisoning fatalities include those of accidental and undetermined manner of death, as determined by the coroner, and can include deaths due to overdose on prescription, illicit or over the counter drugs or may result from unintentional poisoning with other substances, such as household cleaners, carbon monoxide, plants or pesticides. Figure 1 shows the number of unintentional poisoning fatalities occurring in Colorado by year from 2011 through 2015. Unintentional poisoning fatalities ranged from four in 2012 to 10 in 2013 and averaged 6.8 deaths per year for the period. No significant differences were observed in the rates of unintentional poisoning deaths from year to year.

Figure 1. Unintentional poisoning fatalities occurring in Colorado by year, 2011-2015 (n=34)



Demographics

Males accounted for 70.6 percent (n=24) of unintentional poisoning deaths among those under 18 years of age in Colorado between 2011 and 2015. The majority of unintentional poisoning deaths occurred among those from 15 through 17 years of age (73.5 percent, n=25), followed by deaths occurring among those from 1 through 4 and 10 through 14 years of age (8.8 percent, n=3 each). Too few deaths occurred among those under 1 and from 5 through 9 to report in accordance with applicable privacy standards. Among those age categories with 3 or more events, those 15 through 17 years of age had the highest rate of unintentional poisoning death at 2.45 per 100,000 population. This was more than 11 times the rate of those from 2 through 4 years of age (0.2 per 100,000 population) who represented the next most frequent age category. This data should be interpreted with caution as the derived rates were constructed with very small numbers of events, which decreases the stability of the observed rates. A higher rate was observed for males (0.7 per 100,000 population) relative to females (0.3 per 100,000 population), though this difference was not statistically significant.

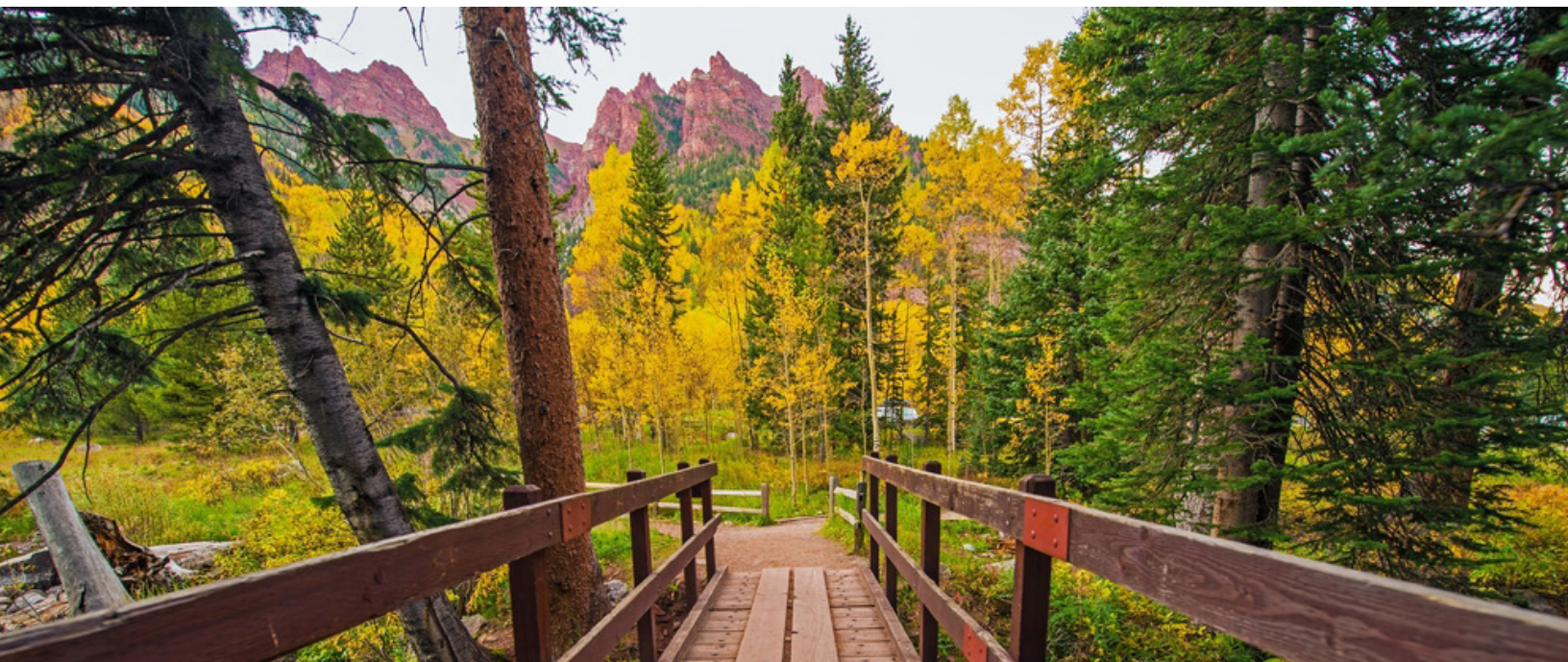
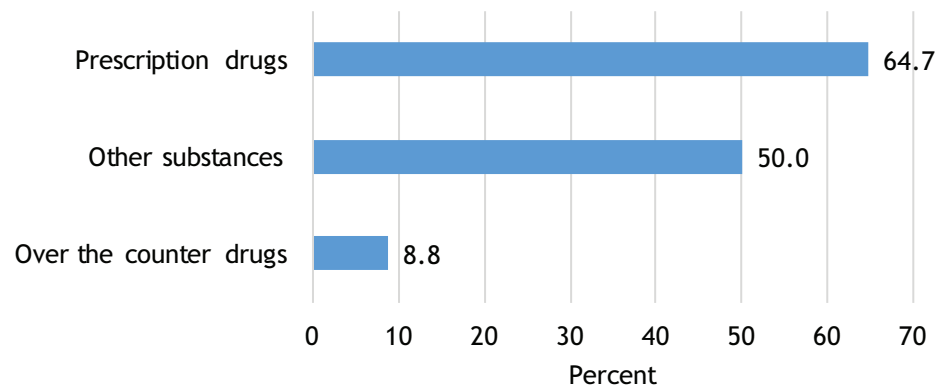
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Unintentional Poisoning Circumstances

Among the 34 unintentional poisoning deaths occurring between 2011 and 2015, 64.7 percent (n=22) involved prescription drugs and 50.0 percent (n=17) involved other substances, including alcohol and street drugs, such as heroin, cocaine, synthetic cannabinoids or methamphetamine (Figure 2). These substance categories are not mutually exclusive as more than one substance from distinct categories could have been identified at the time of investigation as contributing to the death.

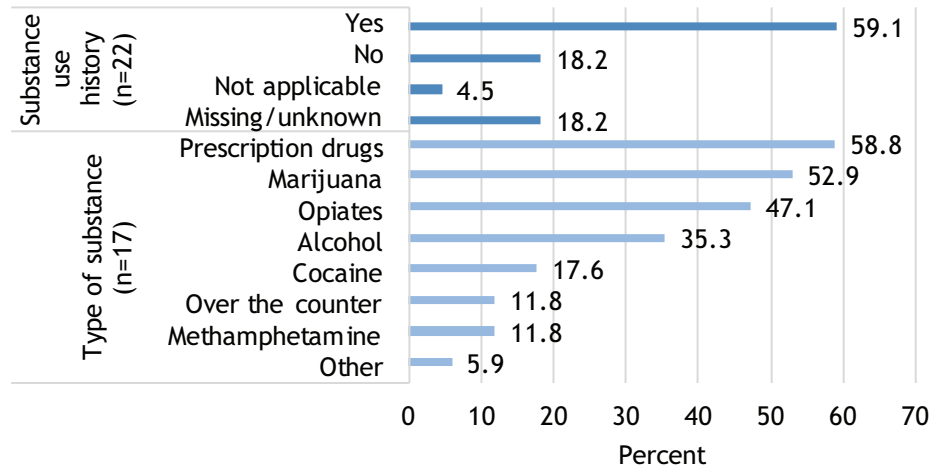
Among unintentional poisoning deaths involving prescription drugs (n=22), 21 (95.5 percent) involved opioid analgesics. The only other drug indicated frequently enough to report on in accordance with applicable privacy standards was methadone (18.2 percent, n=4). These prescription drug categories are also not mutually exclusive as more than one prescription medication class could have been involved in an overdose fatality. In addition to the 22 infants, children, or youth who died of unintentional poisoning deaths, eight suicide deaths were recorded where prescription drugs were indicated to have been involved among those 10 through 17 years of age in Colorado.

Figure 2. Unintentional poisoning fatalities occurring in Colorado by substance category, 2011-2015 (n=34)



Unintentional Poisoning Deaths in Colorado, 2011-2015

Figure 3. Unintentional prescription drug poisoning fatalities occurring in Colorado by substance use history, 2011-2015 (n=22)

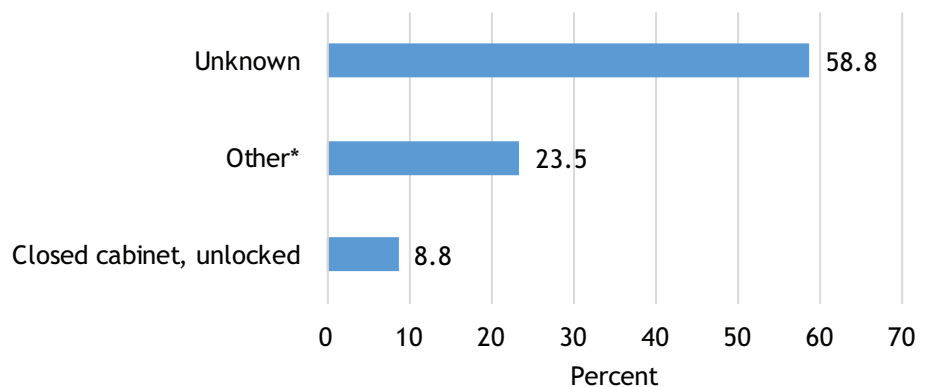


Information on history of substance use was also collected for decedents of unintentional prescription drug overdose deaths. Figure 3 displays the types of substances decedents of unintentional poisoning were noted to have previously used or abused. Of the 22 decedents of unintentional poisoning deaths involving prescription drugs, 59.1 percent (n=13) were indicated to have used or abused substances

previously, 18.2 percent (n=4) were not known to have used or abused substances previously and this information was missing or unknown 18.2 percent (n=4) of the time (Figure 3). Among those for whom a history of substance use or abuse was known (77.3 percent, n=17), 58.8 percent (n=10) were noted to have previously used or abused prescription drugs, 52.9 percent (n=9) had previously used or abused marijuana, 47.1 percent (n=8) had previously used or abused opiates and 35.3 percent (n=6) had previously used or abused alcohol. The opioid category represents both prescription (diverted and otherwise) and illicit opioids, like heroin.

The system also collected information on storage of substances causing unintentional poisoning fatalities in Colorado. Figure 4 demonstrates the types of storage areas indicated for the 34 unintentional poisoning fatalities identified through CFPS reviews between 2011 and 2015. Of these substances, 8.8 percent (n=3) were known to be stored in a closed, unlocked cabinet, 23.5 percent (n=8) in other unsecured locations and 58.8 percent (n=20) in an unknown location. Importantly, none of these substances were indicated have been stored in a closed, locked cabinet or other secured location.

Figure 4. Unintentional poisoning deaths occurring in Colorado by substance storage location, 2011-2015 (n=34)



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.