

Child Fatality Prevention System

Unintentional Poisoning 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.

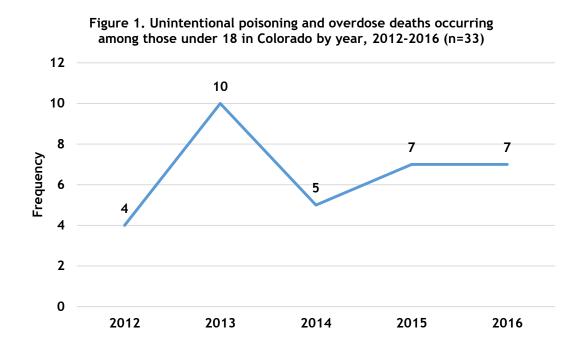
The data presented within this data summary come from comprehensive, statutorily-mandated reviews of deaths among those under 18 years of age occurring in Colorado between 2012 and 2016. Local child fatality prevention review teams are responsible for conducting individual, case-specific reviews of deaths 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 poisoning 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 Poisoning Deaths

From 2012-2016, there were 33 unintentional poisoning deaths identified among children and youth under 18 in Colorado. Unintentional poisoning deaths include those of accidental and undetermined manners of death, as determined by the coroner, and can include deaths due to overdose by 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 demonstrates the number of unintentional poisoning deaths occurring in Colorado by year from 2012-2016. Unintentional poisoning deaths ranged from 4 in 2012 to 10 in 2013 and averaged 6.6 deaths per year for the period. There were no significant differences in the rates of unintentional poisoning from year to year.



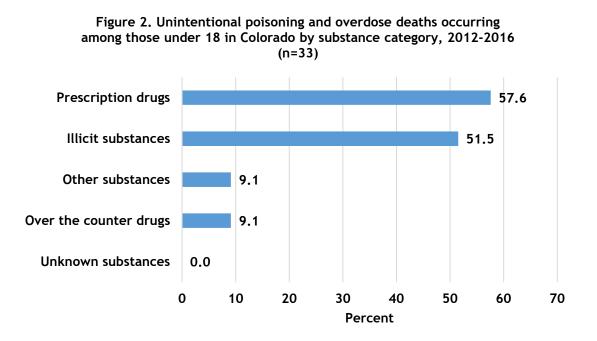
Demographics of Unintentional Poisoning Deaths

Males represented 75.7 percent (n=25) of unintentional poisoning deaths among children and youth ages 0-17 from 2012-2016. The majority of unintentional poisoning deaths occurred among youth ages 15-17 (72.7 percent, n=24), followed by deaths occurring among children ages 1-4 years (12.1 percent, n=4). Too few deaths occurred among those under age 1, ages 5-9, and ages 10-14 to report in accordance with applicable privacy standards. Of the 33 deaths, 51.5 percent (n=17) of the children and youth were non-Hispanic White, followed by those of Hispanic origin (30.3 percent, n=10) and non-Hispanic Black or African American decedents (15.2 percent, n=5). Among those age categories with three or more events, youth ages 15-17 had the highest rate of unintentional poisoning deaths at 2.3 per 100,000 population. This was nearly eight times the rate of children ages 1-4 (0.3 per 100,000 population) who represented the next category with the greatest frequency of events. This data should be interpreted with caution, however, as the rates represent very few events, decreasing the stability of these rates. Males (0.8 per 100,000 population) experienced higher rates than females (0.3 per 100,000 population).

Unintentional Poisoning Death Circumstances

Among the 33 unintentional poisoning deaths occurring from 2012-2016, 57.6 percent (n=19) involved prescription drugs and 51.5 percent (n=17) involved illicit substances, including alcohol and other 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.

Youth ages 15-17 and 1-4 represented the highest frequency age categories for unintentional poisoning deaths involving prescription drugs at 68.4 percent (n=13) and 21.1 percent (n=4), respectively. Among these unintentional overdose or poisoning deaths involving prescription drugs (n=19), 17 (89.5 percent) involved opioid analgesics. The only other drug indicated frequently enough to report on in accordance with applicable privacy standards was methadone (21.1 percent, n=4). These prescription drug categories are not mutually exclusive as more than one prescription medication class could have been involved in an overdose death. In addition to the 33 infants, children or youth who died of unintentional poisoning deaths involving prescription drugs, seven deaths by suicide were recorded where prescription drugs were indicated to have been involved among youth ages 10-17 in Colorado.



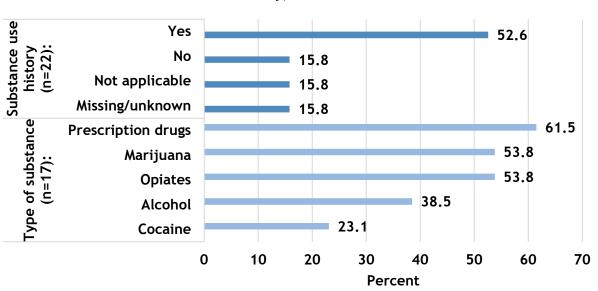
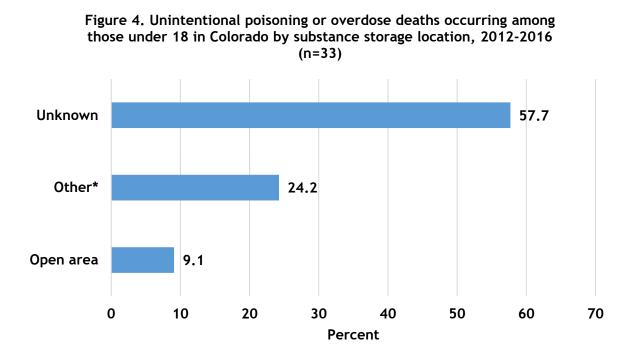


Figure 3. Unintentional prescription drug poisoning or overdose deaths occurring among those under 18 in Colorado by substance use history, 2012-2016

Figure 3 displays the types of substances decedents of unintentional poisoning deaths were noted to have previously used or abused. Of the 19 unintentional poisoning deaths involving prescription drugs, 52.6 percent (n=10) were indicated to have used or abused substances previously, and 15.8 percent (n=3) were not known to have used or abused substances previously. Among those for a whom a history of substance use or abuse was known (68.4 percent, n=13), 61.5 percent (n=8) were noted to have previously used or abused prescription drugs, 53.8 percent (n=7) had previously used or abused marijuana, 53.8 percent (n=7) had previously used or abused or abused or abused or abused or abused prescription (n=5) had previously used or abused alcohol. Opioids are a category which most likely represents both prescription (diverted and otherwise) and illicit opioids (i.e. heroin).



CFPS local teams also collect information on storage of substances causing unintentional poisoning deaths in Colorado. Figure 4 demonstrates the types of storage areas indicated for the 33 unintentional poisoning deaths from 2012-2016. Of these substances, fewer than 3 were stored in a closed, locked location. For the remaining deaths, this information was missing or unknown for 57.7 percent (n=19) of these deaths, while 24.2 percent (n=8) were stored in other unsecured locations and 9.1 percent (n=3) were not stored and were found in an open area.

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

