



**COLORADO CHILD
FATALITY
PREVENTION
SYSTEM**

Unintentional Poisoning Death Data,
2013 - 2017



COLORADO
Department of Public
Health & Environment

UNINTENTIONAL POISONING DEATH DATA, 2013 - 2017

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. 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 2013 and 2017. 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 and other transportation-related, child maltreatment, sudden unexpected infant death (SUID) and suicide. During the 2018 fiscal year, local teams reviewed deaths that occurred in 2017.

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 Colorado. These criteria are different from other reports of child fatality data and many other Colorado government data sources. As a result, the data presented in this topic-specific 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. Additional CFPS data is available in a state-level overview, cause-specific data briefs and an interactive data dashboard at: www.cochildfatalityprevention.com/p/reports.html.

STRUCTURAL INEQUITY

CDPHE acknowledges that generations-long social, economic and environmental inequities result in adverse health outcomes. They affect communities differently and have a greater influence on health outcomes than either individual choices or one's ability to access health care. Reducing health disparities through policies, practices and organizational systems can help improve opportunities for all Coloradans.¹

Some families lose infants, children and youth to the types of deaths reviewed by CFPS not as the result of the actions or behaviors of those

who died, or their parents or caregivers. Social factors such as where they live, how much money or education they have and how they are treated because of their racial or ethnic backgrounds can also contribute to a child's death.² In the United States, most residents grew up and continue to live in racially and economically segregated neighborhoods, which can lead to marginalization.^{3,4} This marginalization of groups into segregated neighborhoods further impacts access to high-quality education,⁵ employment opportunities,⁶ healthy foods⁷ and health care.⁸ Combined, the economic injustices associated with residential, educational

and occupational segregation have lasting health impacts that include adverse birth outcomes, infant mortality,⁹ high rates of homicide and gun violence¹⁰ and increased motor vehicle deaths.¹¹

When interpreting the data, it is critical not to lose sight of these systemic, avoidable and unjust factors. These factors perpetuate the inequities

that we observe in child deaths across populations in Colorado. Research is making progress in understanding how race and ethnicity, economic status, sexual orientation and gender identity correlate with health. It is critical that data systems like CFPS identify and understand the life-long inequities that persist across groups in order to eradicate them.

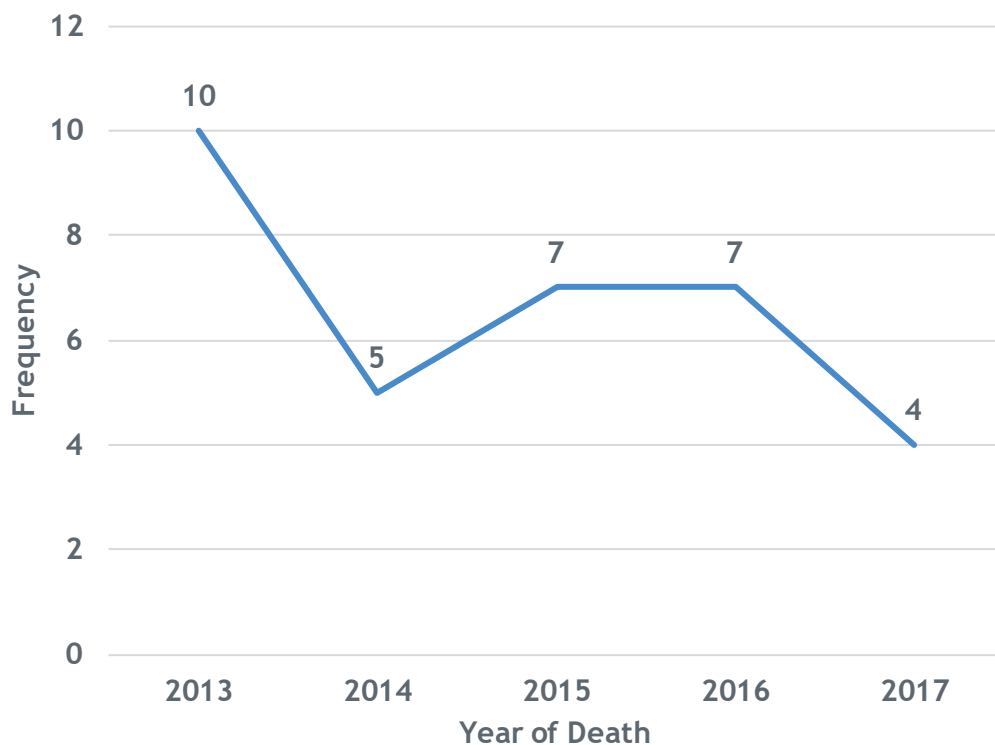
A note about terminology: While “Latinx” is becoming the preferred way to identify people of Latin descent, this report uses “Hispanic” throughout the data section to reflect how CFPS data is collected and to align with terminology used in cited literature and research.¹²

OVERVIEW OF UNINTENTIONAL POISONING DEATHS

From 2013-2017, there were 33 unintentional poisoning deaths among children and youth in Colorado. Unintentional poisoning deaths include those of accidental and undetermined manners of death, as determined by the coroner. They 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 by year. Unintentional poisoning deaths ranged from 4 in 2017 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.

Figure 1. Unintentional poisoning and overdose deaths occurring among those under age 18 in Colorado by year, 2013-2017 (n=33)



DEMOGRAPHICS OF UNINTENTIONAL POISONING DEATHS

Males represented 81.8 percent (n=27) of unintentional poisoning deaths. The majority of unintentional poisoning deaths occurred among youth ages 15-17 (78.8 percent, n=26), followed by deaths occurring among children ages 1-4 years (9.1 percent, n=3). Too few deaths occurred among those under age 1, ages 5-9, and ages 10-14 to report in accordance with applicable privacy standards. Among those age categories with enough data to report, youth ages 15-17 had the highest rate of unintentional poisoning deaths at 2.5 per 100,000 population. This was 12.5 times the rate of children ages 1-4 (0.2 per 100,000 population)

who represented the age category with the next highest number of deaths (data not shown). Readers should interpret this data with caution, as these represent very few deaths which decreases the stability of these rates.

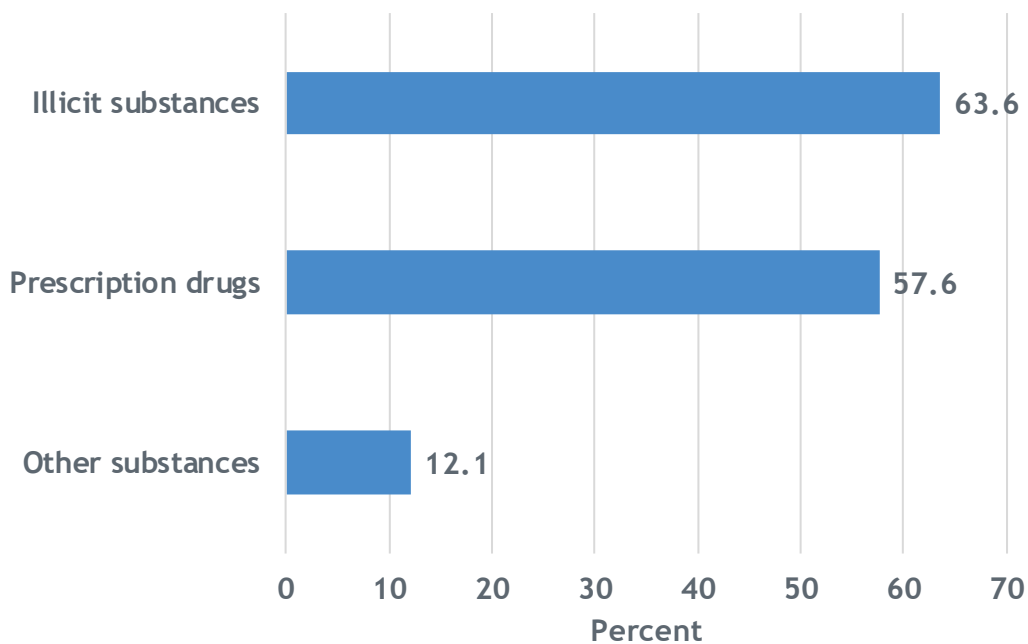
Of the 33 deaths, 48.5 percent (n=16) were non-Hispanic white, followed by Hispanic (36.4 percent, n=12) and non-Hispanic black (12.1 percent, n=4). Differences in rates of unintentional poisoning deaths by race and ethnicity were not statistically significant. Males (0.8 per 100,000 population) experienced significantly higher rates than females (0.2 per 100,000 population).

UNINTENTIONAL POISONING DEATH CIRCUMSTANCES

Among the 33 unintentional poisoning deaths occurring from 2013-2017, 57.6 percent (n=19) involved prescription drugs and 63.6 percent (n=21) 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 could have been identified at the time of investigation as contributing to the death.

Figure 2. Unintentional poisoning and overdose deaths occurring among those under age 18 in Colorado by substance category, 2013-2017 (n=33)



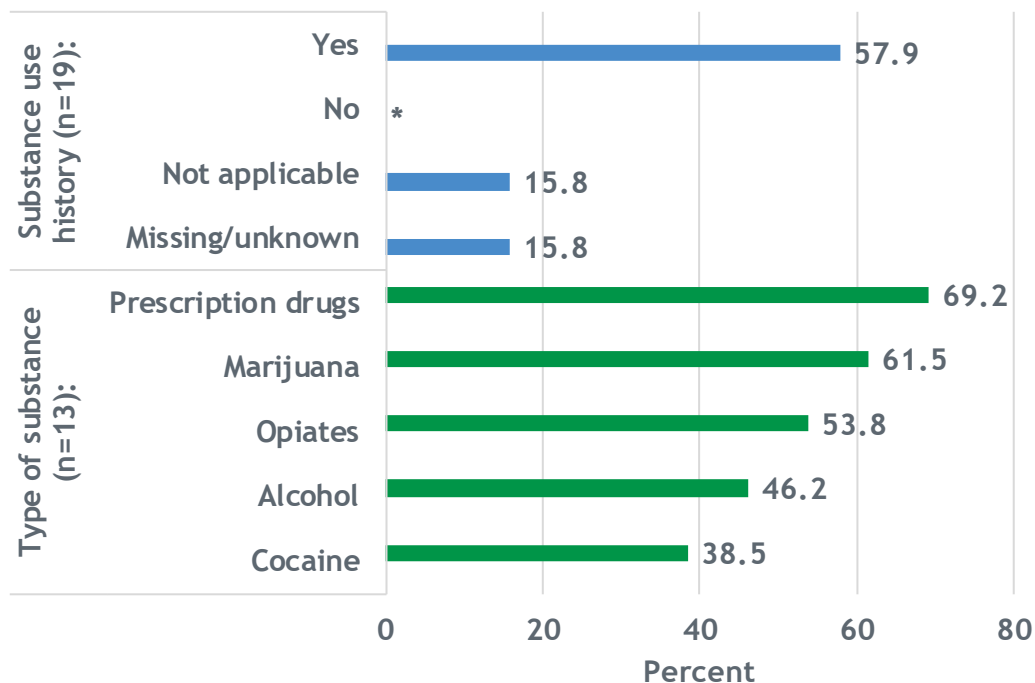
Youth ages 15-17 represented 73.7 percent (n=14) of unintentional poisoning deaths involving prescription drugs. There were 19 unintentional overdose or poisoning deaths involving prescription drugs. Among those, 84.2 percent (n=16) involved opioid analgesics. The only other drugs indicated frequently enough to report on were methadone (21.0 percent, n=4) and antidepressants (15.8 percent, n=3). These prescription drug categories are not mutually exclusive as more than one prescription medication class could have been involved in an overdose death.

There were 21 unintentional overdose or poisoning deaths involving illicit substances. Among those, 19.0 percent (n=4) involved alcohol and 14.3 percent (n=3) involved cocaine. These illicit substance categories are not mutually exclusive as more than one substance

could have been involved in an overdose death.

Figure 3 displays the types of substances previously used or abused by those who died of unintentional poisoning deaths involving prescription drugs. Of the 19 unintentional poisoning deaths involving prescription drugs, 57.9 percent (n=11) were indicated to have used or abused substances previously. Among those for whom a history of substance use or abuse was known (68.4 percent, n=13), 69.2 percent (n=9) were noted to have previously used or abused prescription drugs, 61.5 percent (n=8) had previously used or abused marijuana, 53.8 percent (n=7) had previously used or abused opioids and 46.2 percent (n=6) 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).

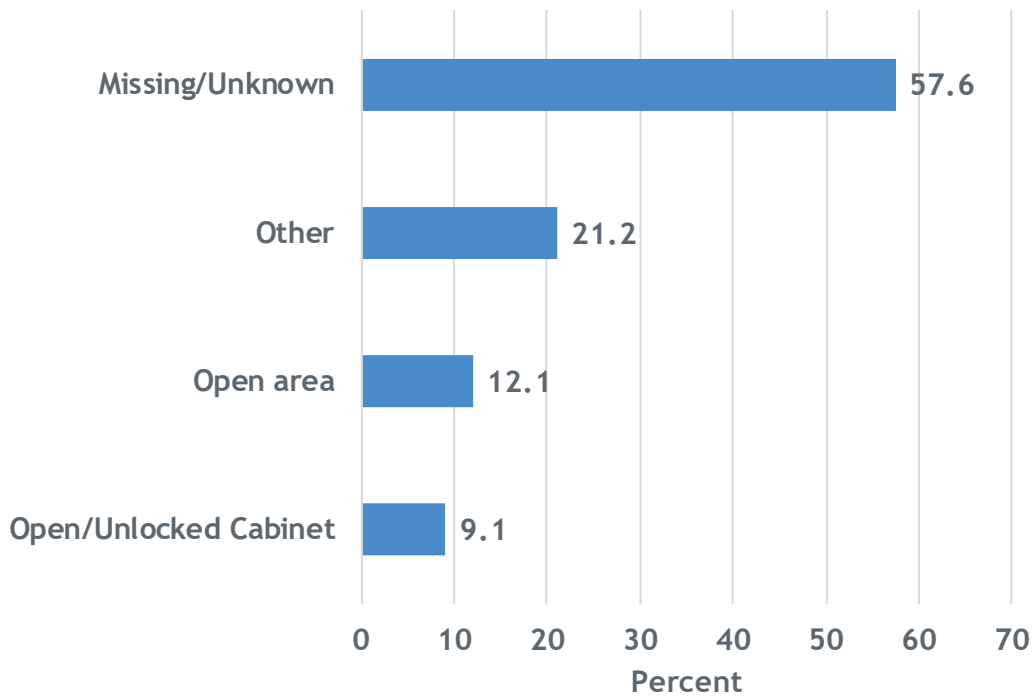
Figure 3. Unintentional prescription drug poisoning or overdose deaths occurring among those under age 18 in Colorado by substance use history, 2013-2017



CFPS review 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 2013-2017. Of these substances, none were stored in

a closed, locked location. Storage information was missing or unknown for 57.6 percent (n=19) of these deaths, while 21.2 percent (n=7) were stored in other unsecured locations and 12.1 percent (n=4) were not stored and were rather found in an open area.

Figure 4. Unintentional poisoning or overdose deaths occurring among those under age 18 in Colorado by substance storage location, 2013-2017 (n=33)



*Data points with fewer than 3 observations are suppressed.

For more information and CFPS data, please contact the CFPS Support Team at the Colorado Department of Public Health and Environment:

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