



Fiscal Year 2015:

Colorado Child Fatality Prevention System
Annual Legislative Report





Title: Colorado Child Fatality Prevention System 2015 Annual Legislative Report

Subject: A description of the activities of the Colorado Child Fatality Prevention System (CFPS) and CFPS State Review Team that occurred in Fiscal Year 2015, as well as recommendations to policymakers as required in statute.

Submitted by: The members of the Colorado Child Fatality Prevention System State Review Team *(See Appendix G for a list of members)*

Statute: Child Fatality Prevention Act; Article 20.5 Sections 401-409 of Title 25 of the Colorado Revised Statutes

Date: July 1, 2015



Table of Contents

Executive Summary	06-13
Introduction	14-17
Summary of Findings	18-21
CFPS State Review Team Recommendations	23-53
Sudden Unexpected Infant Death Prevention Recommendations	24-29
Motor Vehicle Safety Recommendations	30-33
Suicide Prevention Recommendations	34-39
Child Maltreatment Prevention Recommendations	40-43
Prescription Drug Overdose Prevention Recommendations	44-47
Cross-Cutting Prevention Recommendations	48-51
CFPS Prevention Activities Update	52-57
CFPS System Strengths and Weaknesses	58-65
CFPS Program Highlights	66-69
Conclusions	69-71
References	72-75
Appendices:	
Appendix A: Sudden Unexpected Infant Death in Colorado	76-79
Appendix B: Child and Youth Motor Vehicle Fatalities in Colorado	80-83
Appendix C: Youth Suicide Fatalities in Colorado	84-87
Appendix D: Child Maltreatment Fatalities in Colorado	88-93
Appendix E: Unintentional Drowning Fatalities in Colorado	94-95
Appendix F: Unintentional Poisoning Fatalities in Colorado	96-99
Appendix G: 2015 Colorado CFPS State Review Team	100-103
Appendix H: 2015 Colorado CFPS Local Review Team Coordinators	104-107
Appendix I : 2015 Comprehensive Recommendation List	108-109
Appendix J: 2015 Colorado CFPS Local Review Team Map	110-111

Executive Summary

The Child Fatality Prevention System uses a public health approach by aggregating data from individual deaths, describing trends and patterns of child 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 from occurring in the future.

Overview of Child Fatality Prevention System

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, the Child Fatality Prevention System (CFPS) State Review Team has been conducting retrospective reviews of child deaths in Colorado since 1989. Using a public health approach, the CFPS aggregates data from individual deaths, describes trends and patterns of child deaths and recommends prevention strategies. The identified strategies are implemented and evaluated at the state and local levels with the goal of preventing similar deaths from occurring in the future. As mandated in statute, this report identifies specific policy recommendations to reduce child deaths in Colorado and provides an overview of programmatic accomplishments for state Fiscal Year 2015.

The Colorado CFPS is housed at the Colorado Department of Public Health and Environment (CDPHE) in the Prevention Services Division's Violence and Injury Prevention - Mental Health Promotion (VIP-MHP) Branch. As of January 1, 2015, the

child fatality review process transitioned from the state-level to the local-level and local child fatality review teams became responsible for conducting individual, case-specific reviews of fatalities of children from 0-17 years of age occurring in the coroner jurisdiction of the local team. County or district public health agencies established 48 multidisciplinary, local child fatality review teams representing every county in Colorado. The variety of disciplines involved and the depth of expertise provided by the local child fatality review teams results in a comprehensive review process, allowing for a broad analysis of both contributory and preventive factors of child deaths.

Between July 1, 2014 and June 30, 2015, the CFPS State Review Team reviewed child fatalities that occurred in 2013. Beginning January 1, 2015, the local child fatality review teams began reviewing child fatalities that occurred in 2014. Local child fatality review teams will conduct all reviews from 2014 child deaths forward. The CFPS State Review Team will review the aggregated data and recommendations submitted by the local child fatality prevention review teams from 2014 and 2015, and annually thereafter, to identify recommendations to prevent child deaths in Colorado, including policy recommendations.

Summary of 2009-2013 Child Fatality Review Findings

The CFPS uses death certificates provided by the Vital Statistics Unit at CDPHE to identify deaths of children less than 18 years of age that occur in Colorado. The Colorado death certificate has five manners of death categories: natural, accident, homicide, suicide and undetermined. Manner of death is a classification of death, as determined by a coroner, based on the circumstances surrounding a cause of death. Cause of death is the specific disease or injury that killed the deceased person (i.e. drowning, child abuse, etc.). To prepare the recommendations contained in this report, the CFPS State Review Team analyzed information about children ages 0-17 who died in Colorado (inclusive of both residents and non-residents) between 2009 and 2013.

Of the 3,130 child death occurrences identified between 2009 and 2013, 997 met the statutory mandate for CFPS child death review criteria and received a thorough case review during the 2010 to 2015 calendar years.

Pursuant to C.R.S. 25-20.5-407, the CFPS State Review Team conducts comprehensive reviews of child fatalities that occur in the state of Colorado certified on death certificates as accidental, homicidal, suicidal or undetermined manner and related to one or more of the following causes: undetermined causes, unintentional injury, violence, motor vehicle incidents, child abuse/neglect,

sudden unexpected infant death (SUID) and suicide. All natural manner deaths of children aged 0-17 years receive an initial review by CFPS State Review Team members in order to identify any deaths that may have been preventable. If the CFPS State Review Team determines that a natural manner death may be preventable, the CFPS requests hospital records and other relevant reports and conducts a thorough case review.

Of the 3,130 child death occurrences identified between 2009 and 2013, 997 (31.9 percent) met the statutory mandate for CFPS child death review criteria and received a thorough case review during the 2010 to 2015 calendar years. Among the 997 child fatalities reviewed, 9.7 percent (97) were natural deaths, 46.8 percent (467) were accidental deaths, 11.1 percent (111) were homicides, 16.5 percent (165) were suicides and 15.7 percent (157) were ruled undetermined deaths. The leading causes of CFPS-reviewed child deaths from 2009 to 2013 were sudden unexpected infant death (SUID), motor vehicle and other transport crash, suicide, child maltreatment, unintentional drowning and unintentional poisoning. Additional data for each of these causes of child deaths is available in [Appendices A-F](#) of this report. During each review meeting, CFPS State Review Team members studied the information summarized in the case files for each of these deaths. Data from these clinical reviews were collected using a web-based data collection system developed by the National Center for the Review and Prevention of Child Deaths. CFPS State Review Team members also discussed and recorded community, system and policy-level recommendations to prevent child deaths.

2015 Child Fatality Prevention Recommendations



Based on 2009-2013 child fatality data, the CFPS State Review Team determined that child fatalities can be reduced in Colorado if the following recommendations are adopted and implemented:

Mandate the use of the Centers for Disease Control and Prevention's Sudden Unexplained Infant Death Investigation Reporting Form (SUIDIRF) for law enforcement agencies and coroner offices during infant death scene investigations.

Mandate that hospitals develop and implement policies to provide education and information about infant safe sleep promotion and require the practice and modeling of safe sleep behaviors in labor/delivery and neonatal intensive care unit (NICU) hospital settings.

Modify Colorado Department of Human Services' rules regulating family foster care homes to better align with the American Academy of Pediatrics (AAP) infant safe sleep recommendations, including training for foster families regarding infant safe sleep.

Establish a statutory requirement that allows for primary enforcement of Colorado's adult seat belt law, making it possible to stop a driver and issue a citation if anyone (the driver and all passengers in all seating positions) in the vehicle is not properly restrained.

Increase funding for the Office of Suicide Prevention to implement the following activities: 1) expand the *Gun Shop Project* to more counties in Colorado; 2) expand the implementation and evaluation of *Emergency Department-Counseling on Access to Lethal Means (ED-CALM)* training statewide; and 3) expand implementation and evaluation of school-based suicide prevention programs statewide that promote resilience and positive youth development as protective factors from suicide.

Support policies that impact the priorities of the Colorado Essentials for Childhood project: 1) increase family-friendly business practices across Colorado; 2) increase access to child care and after school care; 3) increase access to preschool and full-day kindergarten; and 4) improve social and emotional health of mothers, fathers, caregivers and children.

Provide funding for the Colorado Consortium for Prescription Drug Abuse Prevention to promote uptake of the *Quad-Regulator Policy for Prescribing and Dispensing Opioids* through increased training and education of prescribers.

Increase funding for the Child Fatality Prevention System (CFPS) to support the implementation and evaluation of youth programs that promote pro-social activities, resilience and positive youth development as protective factors from child fatalities statewide.

More information about each of these recommendations is available in the *Child Fatality Prevention System State Review Team Recommendations of the report*.

Prevention Activities and Accomplishments of the Child Fatality Prevention System

During Fiscal Year 2015, the Colorado Child Fatality Prevention System and its partners achieved several key accomplishments, which contribute to preventing child fatalities in Colorado. As part of the 2014 CFPS Annual Report, prevention recommendations were made to prevent child fatalities in Colorado. Colorado state agencies made significant progress towards accomplishing several of the recommendations.

- Effective April 1, 2015, the Colorado Department of Human Services Office of Early Childhood amended the rules that regulate licensed child care centers and homes to incorporate the language proposed by the CFPS regarding best practices for infant safe sleep environments.
- The Training and Development Workgroup of the Suicide Prevention Commission identified K-12 educators and special service providers (nurses, school psychologists, school counselors and social workers) as a target group for suicide prevention training. In addition, there is current legislation (C.R.S. 22-60.5-110) that allows educators to receive continuing education credits for specific training for suicide prevention, but it is not required for K-12 educators and special service providers at this time.
- The Joint Budget Committee allocated \$300,000 in general funds to the Colorado Household Medication Take-Back Program at CDPHE for medication take-back activities. This will allow CDPHE to expand the law enforcement and pharmacy collection network to ensure at least one location in each county where citizens can dispose of unused prescriptions and over-the-counter medications, including controlled substances. Facilitating the disposal of controlled substances prevents diversion of these medications for abuse.
- CDPHE contracted with the Kempe Center for the Prevention and Treatment of Child Abuse and Neglect, which coordinates the Child Welfare Training System on behalf of the Colorado Department of Human Services, to develop a training curriculum for child welfare

professionals to improve their knowledge and skills regarding infant safe sleep. The content for the training was completed in June 2015 and the training will be available to Colorado child welfare professionals in September 2015 at <http://www.coloradocwts.com>. This training will improve the ability of child welfare professionals to provide information to parents and other caregivers about infant sleep related risks and how to ensure safe sleeping environments.

- The Colorado Department of Human Services continued to dedicate resources and efforts to implement Colorado's Child Welfare Plan, "Keeping Kids Safe and Families Healthy 2.0." In early 2015, CDHS launched a statewide hotline to facilitate reporting of suspected cases of child abuse and neglect, which was one of the components of the Child Welfare Plan. The hotline (1-844-CO-4-KIDS) operates out of a centralized location and is Colorado's first child-abuse hotline of its kind.

In addition, CFPS support and resources allowed for the following child fatality prevention efforts to be implemented in Colorado:

Infant Safe Sleep Promotion.

Data and information gathered as part of the Colorado Sudden

Unexpected Infant Death (SUID) Case Registry improves the state's understanding about the incidence, risk factors and trends associated with SUIDs in order to develop effective prevention strategies. The Infant Safe Sleep Partnership utilized SUID data to provide infant safe sleep training and education to various provider groups in Colorado and hosted an infant death scene investigation training for 85 law enforcement representatives and coroners. The Infant Safe Sleep Partnership serves as a state-level resource for local partners seeking to implement infant safe sleep efforts.

Essentials for Childhood

In 2013, Colorado was one of only five states to be awarded the Essentials for Childhood (EfC) Cooperative Agreement from the Centers for Disease Control and Prevention. The EfC project is focused on preventing child maltreatment and other adverse childhood experiences. EfC supports a framework that creates safe, stable, and nurturing relationships and environments for all children, which are essential to preventing child maltreatment and assuring that children reach their full potential. Over the past fiscal year, the EfC statewide leadership and collective impact team identified and began work on community and societal level strategies to support Colorado's families and prevent child maltreatment: 1) Increase family-friendly business (FFB) practices across Colorado; 2) Increase access

to child care and after school care; 3) Increase access to preschool and full-day kindergarten; and 4) Improve social and emotional health of mothers, fathers, caregivers and children.

Suicide Prevention

The CFPS partnered with the Office of Suicide Prevention to support a *Sources of Strength* train-the-trainer skills session in June 2015 for 20 participants from school districts and cities across Colorado including Alamosa, Boulder, Brighton, Castle Rock, Cortez, Denver, Golden, Grand Junction, Longmont, Peyton, Trinidad and Westcliffe. *Sources of Strength* is an evidence-based suicide prevention program, which is designed to build protective influences among youth to reduce the likelihood that students will become suicidal. One of the key steps in implementing *Sources of Strength* is to identify and train adult advisors who will mentor peer leader teams and sustain the program in school districts beyond one school year. The purpose of the train-the-trainer session was to certify *Sources of Strength* trainers so they can implement *Sources of Strength* in new schools or sustain the program in existing schools at a reduced cost.

Local Child Fatality Review Team Prevention Efforts

In Fiscal Year 2015, CFPS staff provided an annual data report to each local child fatality review team summarizing the child fatality data

entered into the web-based data collection system. The purpose of the local child fatality data reports is to help the local child fatality review teams understand aggregated local child death circumstance data. This data is used to inform decisions about violence and injury prevention strategies to implement at the local level. As of May 2015, 23 local child fatality review teams began prevention activities at some level in their communities. Infant safe sleep education was implemented in eight counties. The other 13 counties focused on a range of prevention activities including accidental injuries, motor vehicle crashes, suicides and prescription drug overdose. In addition, the focus of the second annual CFPS Local Team Coordinator Training was to improve local team capacity to understand and implement child fatality, injury and violence prevention initiatives at the local level. Forty-five local child fatality review team coordinators representing 60 Colorado counties attended the training in May 2015.

By continuing to build partnerships and support prevention efforts at the state and local levels, the CFPS has the potential to reduce the incidence of child fatality, injury and violence in Colorado.



As of May 2015, 23 local child fatality review teams began prevention activities at some level in their communities. Infant safe sleep education was implemented in eight counties.

INTRODUCTION

The Child Fatality Prevention System State Review Team, a volunteer multidisciplinary committee comprised of clinical, legal and public health experts in child health and safety, works collaboratively with CDPHE staff to conduct comprehensive reviews of deaths of children less than 18 years of age.

Overview of Child Fatality Prevention System

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. The Child Fatality Prevention System (CFPS) State Review Team is required to report annually to the governor and the Colorado General Assembly. As mandated in statute, this report identifies specific policy recommendations to reduce child deaths in Colorado and provides an overview of the programmatic accomplishments for state Fiscal Year 2015. Additionally, in order to describe the trends and patterns of child deaths in Colorado, this report presents aggregated case review findings from 997 child fatalities that occurred during 2009-2013.

The Colorado CFPS is housed at the Colorado Department of Public Health and Environment (CDPHE) in the Prevention Services Division's Violence and Injury Prevention - Mental Health Promotion (VIP-MHP) Branch. The CFPS State Review

Team, a volunteer multidisciplinary committee comprised of clinical, legal and public health experts in child health and safety, works collaboratively with CDPHE staff to conduct comprehensive reviews of deaths of children less than 18 years of age. Members of the CFPS State Review Team are experts in the fields of child abuse prevention, pediatrics, family law, death investigation, motor vehicle safety, injury and violence prevention, suicide and sudden unexpected infant death (SUID). A full list of the CFPS State Review Team members is provided in [Appendix G](#). The variety of disciplines involved and the depth of expertise provided by the CFPS State Review Team results in a comprehensive review process, allowing for a broad analysis and robust discussion of both contributory and preventive factors of child deaths.

Pursuant to C.R.S. 25-20.5-404, each county or district public health agency was required to establish, or arrange for the establishment of, local child fatality prevention review teams by January 1, 2015. As of this date, the child fatality review process transitioned from the state-

level to the local-level and local child fatality review teams became responsible for conducting individual, case-specific reviews of fatalities of children from 0-17 years of age occurring in the coroner jurisdiction of the local team. County or district public health agencies established 48 multidisciplinary, local child fatality review teams representing every county in Colorado. The variety of disciplines involved and the depth of expertise provided by the local child fatality review teams results in a comprehensive review process, allowing for a broad analysis of both contributory and preventive factors of child deaths.

Between July 1, 2014 and June 30, 2015, the CFPS State Review Team reviewed child fatalities that occurred in 2013. Beginning January 1, 2015, the local child fatality review teams began reviewing child fatalities that occurred in 2014. Local child fatality review teams will conduct all reviews from 2014 child deaths forward. The CFPS State Review Team will review the aggregated data and recommendations submitted by the local child fatality prevention review teams from 2014 and 2015, and annually thereafter, to identify recommendations to prevent child deaths in Colorado, including policy recommendations.

Case Review Methodology

The CFPS comprehensive review process includes deaths of Colorado residents, as well as deaths of out-of-state visitors who died

in Colorado, and non-Colorado residents who were transported to a Colorado hospital and died. These criteria are different than those used in other reports of child fatalities. As a result, the data presented in this report may not match other statistics reported at both the state and national levels.

During Fiscal Year 2015, the CFPS State Review Team completed the reviews of child fatalities that occurred in the 2013 calendar year. In preparation for the review of each case, CFPS staff at CDPHE identified deaths of children ages 0-17 and developed a case file by requesting information from county coroner offices, law enforcement agencies, county district attorney offices, hospitals, the Colorado Department of Human Services, local health departments and newspapers. The CFPS State Review Team divided into five subcommittees to conduct case-specific, multidisciplinary reviews of child deaths: child abuse/neglect subcommittee, violence subcommittee, motor vehicle subcommittee, accident/injury subcommittee and sudden unexpected infant death (SUID) subcommittee. During each subcommittee review meeting, CFPS State Review Team members studied the information summarized in each case file. Data from these reviews were collected using a web-based data collection system developed by the National Center for the Review and Prevention of Child Deaths. CFPS State Review Team members

also discussed and recorded community, system and policy-level recommendations to prevent child deaths.

Limitations

Although the CFPS requested information from a variety of sources for each case, data was occasionally missing from the case file because incident investigators did not collect the information during the initial investigation, agencies did not respond to CDPHE staff's request for information or documentation lacked pertinent details. The circumstance data presented on the following pages is based on the information the CFPS received by March 31, 2015.

Additionally, case data from 2009 to 2013 have been aggregated in order to ensure that the numbers for any given manner of death are large enough to report data for a particular age, race/ethnicity or cause of death. Due to the fact that the CFPS reviews child death occurrences, rather than only deaths of Colorado residents, it is not possible to calculate rates using the full sample of reviewed cases.



This report presents aggregated case review findings from 997 child fatalities that occurred during 2009-2013.

SUMMARY OF 2009-2013 CHILD FATALITY REVIEW FINDINGS

In this time period, 3,130 children ages 0-17 years died in Colorado, including 247 children who were out-of-state residents.

The CFPS uses death certificates provided by the Vital Statistics Unit at CDPHE to identify deaths of children less than 18 years of age that occur in Colorado. The Colorado death certificate has five manners of death categories: natural, accident, homicide, suicide and undetermined. Manner of death is a classification of death as determined by a coroner that is based on the circumstances surrounding a cause of death. Cause of death is the specific disease or injury that killed the deceased person (i.e. drowning, child abuse, etc.). To prepare the recommendations contained in this report, the CFPS State Review Team analyzed information about children ages 0-17 years who died in Colorado (inclusive of both residents and non-residents)

between 2009 and 2013. In this time period, 3,130 children ages 0-17 years died in Colorado, including 247 children who were out-of-state residents (7.9 percent). Of the 3,130 child fatalities, Colorado coroners ruled 71.1 percent (2,227) as natural manner, 14.9 percent (467) accident manner, 5.3 percent (165) suicide manner, 3.5 percent (111) homicide manner and 5.1 percent (160) as undetermined manner. Among all child fatality occurrences, more males (1,821; 58.2 percent) died than females (1,305; 41.7 percent) and 44.5 percent of the child fatalities were of infants younger than 28 days of age (1,394). The majority of fatalities occurred among white (2,658; 84.9 percent) and non-Hispanic (2,060; 65.8 percent) children. A comprehensive data table describing the demographic characteristics of these child fatalities by manner is included in Table 1.

Table 1: Demographics from 2009-2013 of Colorado child fatality occurrences by manner of death.

	Natural (n = 2227)		Accident (n = 467)		Homicide (n = 111)		Suicide (n = 165)		Undetermined (n = 160)		Total (n = 3130)	
	n	Percent	n	Percent	n	Percent	n	Percent	n	Percent	n	Percent
Sex†												
Female	975	43.8	170	36.4	40	36.0	53	32.1	67	41.9	1305	41.7
Male	1248	56.0	297	63.6	71	64.0	112	67.9	93	58.1	1821	58.2
Age Group												
0 - 28 days	1358	61.0	17	3.6	*	*	0	0.0	18	11.3	1394	44.5
29 - 364 days	345	15.5	92	19.7	35	31.5	0	0.0	91	56.9	563	18.0
1 - 4 years	201	9.0	93	19.9	30	27.0	0	0.0	28	17.5	352	11.3
5 - 9 years	119	5.3	57	12.2	11	9.9	0	0.0	5	3.1	192	6.1
10 - 14 years	109	4.9	68	14.6	13	11.7	57	34.6	6	3.8	253	8.1
15 - 17 years	95	4.3	140	30.0	21	18.9	108	65.5	12	7.5	376	12.0
Race												
White	1887	84.7	400	85.7	85	76.6	155	93.9	131	81.9	2658	84.9
Black	226	10.2	43	9.2	20	18.0	5	3.0	25	15.6	319	10.2
American Indian §	38	1.7	15	3.2	3	2.7	3	1.8	*	*	60	1.9
Other	72	3.2	8	1.7	3	2.7	*	*	3	1.9	88	2.8
Unknown	4	0.2	*	*	0	0.0	0	0.0	0	0.0	5	0.2
Hispanic‡												
Yes	744	33.4	164	35.1	44	39.6	45	27.3	59	36.9	1056	33.7
No	1473	66.1	302	64.7	67	60.4	120	72.7	98	61.3	2060	65.8
Colorado Residency												
Resident	2030	91.2	425	91.0	109	98.2	163	98.8	156	97.5	2883	92.1
Non-Resident	197	8.9	42	9.0	*	*	*	*	4	2.5	247	7.9

* Indicates fewer than three deaths in the category

† Four had unknown sex

‡ Fourteen had unknown ethnicity

§ Also includes Eskimo and Aleut

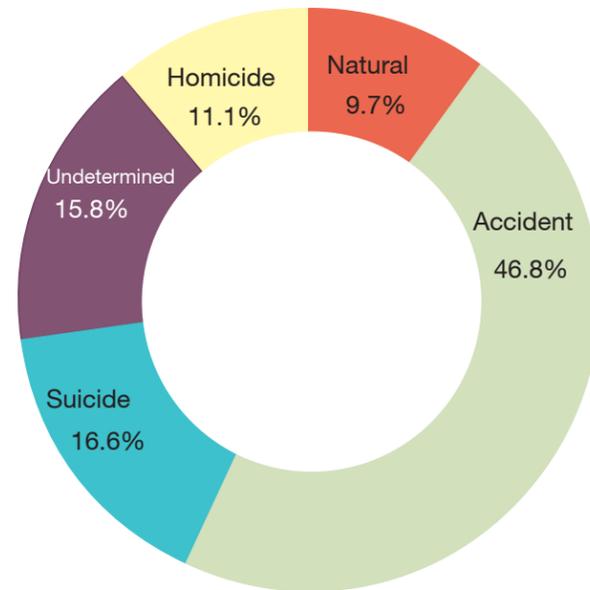
|| Chinese, Japanese, Hawaiian or part Hawaiian, Filipino, Other Asian or Pacific Islander, Other

Data Source: Child Fatality Prevention System

Pursuant to C.R.S. 25-20.5-407, the CFPS State Review Team conducts comprehensive reviews of child fatalities (children aged 0-17 years) that occur in the state of Colorado certified on death certificates as accidental, homicidal, suicidal or undetermined manner and related to one or more of the following causes: undetermined causes, unintentional injury, violence, motor vehicle incidents, child abuse/neglect, sudden unexpected infant death (SUID) and suicide. All natural manner deaths of children aged 0-17 years receive an initial review by CFPS State Review Team members in order to identify any deaths that may have been preventable. If the CFPS State Review Team determines that a natural manner death may be preventable, the CFPS requests hospital records and other relevant reports and conducts a thorough case review.

Of the 3,130 child death occurrences identified between 2009 and 2013, 997 (31.9 percent) met the statutory mandate for CFPS child death review criteria and received a thorough case review during the 2010 to 2015 calendar years. Among the 997 child fatalities reviewed, 9.7 percent (97) were natural deaths, 46.8 percent (467) were accidental deaths, 11.1 percent (111) were homicides, 16.5 percent (165) were suicides and 15.7 percent (157) were ruled undetermined deaths (Figure 1).

Figure 1: Manner of death for reviewed fatalities age 0-17 in Colorado from 2009-2013 (n=997).



Accidental deaths include those caused by unintentional injuries such as motor vehicle crashes or other transport injuries, asphyxia, drowning, falls, crushes and poisoning. From 2009 to 2013, motor vehicle crashes or other transport injuries were the leading cause in this category, accounting for 216 (46.3 percent) of all accidental deaths. Among the 165 suicide deaths reviewed, males ages 10-17 were twice as likely to die by suicide (112, 67.9 percent) as compared to females (53, 32.1 percent). Of the 111 child homicide deaths reviewed, 66 (59.5 percent) occurred among children under 5 years old. The CFPS State Review Team identified all of these 66 homicide deaths as child abuse or neglect. Among the 157 cases classified as

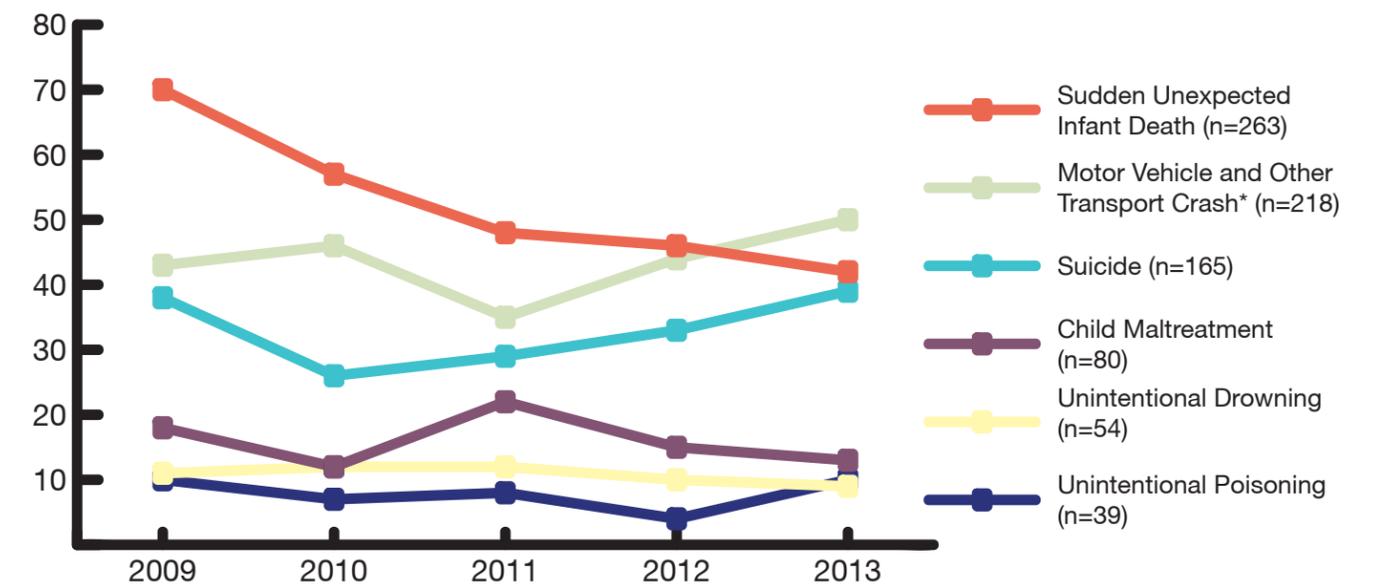
undetermined, the majority occurred among infants under 1 year of age (106, 67.5 percent).

The leading causes of CFPS-reviewed child deaths from 2009 to 2013, as represented in Figure 2, were sudden unexpected infant death (SUID), motor vehicle and other transport crash, suicide, child maltreatment, suicide, child maltreatment,

unintentional drowning and unintentional poisoning.

Additional data for each of these causes of child deaths is available in [Appendices A-F](#) of this report.

Figure 2: Leading causes of death for reviewed fatalities ages 0-17 in Colorado by year from 2009-2013 (n=997).



* Motor vehicle and other transport only includes accidental and undetermined manner.



CFPS STATE REVIEW TEAM RECOMMENDATIONS

The recommendations from the CFPS State Review Team subcommittee discussions, as well as trends and patterns of child deaths, are compiled at the end of each data year and discussed by the full CFPS State Review Team.

The CFPS State Review Team uses the following criteria to determine prevention recommendations: evidence-based/effective, data-driven, ease of implementation, population-based impact, cost, sustainability, political acceptability/feasibility and potential unintended consequences. [Appendix I](#) includes the full list of prevention strategies discussed by the CFPS State Review Team. On an annual basis, the CFPS State Review Team prioritizes policy recommendations to submit to the governor and the Colorado General Assembly. The CFPS State Review Team's decision to endorse the following prioritized prevention recommendations was based on the review of aggregated circumstance data from 2009-2013 child deaths, as well as multidisciplinary expertise about the best strategies to protect the health and wellbeing of children. Each of the prevention strategies is consistent with evidence-based practice.

Recommendations to Prevent Sudden Unexpected Infant Deaths

1

Mandate the use of the Centers for Disease Control and Prevention's Sudden Unexplained Infant Death Investigation Reporting Form (SUIDIRF) for law enforcement agencies and coroner offices during infant death scene investigations.

The CFPS State Review Team reviews all infant deaths that occur suddenly and unexpectedly in sleep environments. Sleep-related infant deaths are also referred to as Sudden Unexpected Infant Deaths (SUIDs). SUIDs include sudden infant death syndrome (SIDS), accidental suffocation, positional asphyxia and overlays, as well as deaths occurring in sleep environments that are due to undetermined causes. Between 2009 and 2013, 263 SUIDs occurred in Colorado. There were 28 fewer SUIDs in 2013 compared to 2009, representing a 40.0 percent decrease in SUIDs during this time period.

Infant death scene investigations are critical to fully understand the circumstances and factors contributing to unexplained infant deaths. A full infant death scene investigation includes a thorough examination of the death scene, a review of clinical history and the performance of an autopsy. Only 16.0 percent of the 263 SUID

scene investigations that occurred in Colorado from 2009-2013 used the Sudden Unexplained Infant Death Investigation Reporting Form (SUIDIRF). Of the 263 SUID scene investigations, there was a lack of consistency in how often a full infant death scene investigation was conducted. Only 63.5 percent of the investigations included scene photos, 9.5 percent completed a scene recreation with a reenactment doll and 4.9 percent completed a scene recreation without a reenactment doll. The CFPS has limited ability to determine the circumstances related to infant deaths when a full infant death scene investigation and the SUIDIRF is not completed. Having this information can help the CFPS identify risk factors associated with infant deaths and improve future prevention recommendations.

The Centers for Disease Control and Prevention designed the SUIDIRF to assist investigative agencies to



better understand the circumstances and factors contributing to unexplained infant deaths, as well as to establish a standardized death scene investigation protocol for the investigation of all sudden, unexpected infant deaths.¹ The SUIDIRF improves classification of sleep-related infant deaths by standardizing data collection, guides investigators through the steps involved in an investigation and produces information that researchers can use to recognize new threats and risk factors for SUIDs and SIDS. Although the SUIDIRF is a useful tool for death scene investigators, Colorado has among the lowest rates of all states for filling out SUIDIRF among the 12 states that participate in the CDC's SUID Case Registry.

Currently, 12 states require special training about SUID/SIDS for infant

death scene investigators.² In Colorado, there is interest from law enforcement and coroners to participate in infant death scene investigation training. In June 2015, 85 representatives from law enforcement agencies and coroner offices completed an infant death scene investigation training that included modules about sudden and unexpected infant deaths, normal infant development and the application to scene findings, pathology of infant deaths, unexpected infant death investigation, doll reenactment and how to fill out the SUIDIRF. In addition, mandating the SUIDIRF has the potential to improve the information collected about unexplained infant deaths as well as enhance SUID prevention recommendations to implement in Colorado.

personnel including medical, nursing, breastfeeding, childbirth education, nutritional and NICU staff.³ In addition, infant safe sleep policies should include modeling infant safe sleep practices throughout the facility so that safe sleep education for parents is consistent and repetitive. Multiple studies have demonstrated that infant sleep practices observed in the hospital setting are likely to be continued at home after discharge.^{4,5} Finally, and most importantly, infant safe sleep policies at hospitals will reduce the risk of injury and death to infants while sleeping, both in the hospital and subsequently in the home.

Currently, seven states require hospitals and health care providers to give parents and caregivers educational materials and information on infant safe sleep

practices during the hospital stay or at discharge.⁶ Children's Hospital Colorado (CHCO) has adopted hospital policies to promote safe sleep while the infant is in the hospital. In addition, CHCO is developing a webinar to train physicians and nurses about infant safe sleep, which will be offered with a post-test and a training certificate that can be applied towards continuing education credits. There is the potential to expand CHCO's infant safe sleep model, policies and training to other hospitals throughout Colorado, especially at birthing hospitals. Mandating that hospitals implement infant safe sleep policies as well as infant safe sleep training for hospital staff would further support hospital-based infant safe sleep programs throughout the state and potentially reduce sleep-related infant deaths in Colorado.

2

Mandate that hospitals develop and implement policies to provide education about infant safe sleep and require the modeling of safe sleep behaviors in the labor/delivery and neonatal intensive care unit (NICU) hospital settings.

In order to reduce the risk of infant death from modifiable sleep-related factors, recommendations for infant safe sleep environments should be supported and followed in all settings where an infant may be placed to

sleep, including hospital settings. Hospitals should be required to develop and implement infant safe sleep policies in order to provide accurate and consistent infant safe sleep information to hospital

3

Modify Colorado Department of Human Services' Rules Regulating Family Foster Care Homes to better align with the American Academy of Pediatrics (AAP) infant safe sleep recommendations, including training for foster families regarding infant safe sleep.

The American Academy of Pediatrics (AAP) identifies several risk and protective factors for sleep-related infant deaths and endorses specific recommendations for safe infant sleeping environments.⁷ Among

the 263 SUIDs that occurred in Colorado from 2009-2013, common risk factors included not using a firm sleep surface (66.9 percent); the use of soft bedding such as pillows, blankets and crib bumpers

(51.7 percent); placing the infant to sleep on his or her side or stomach (25.5 percent); and sleeping on the same surface with an adult or another child (often referred to as bed-sharing) (44.5 percent). Of the 263 SUIDs between 2009 and 2013 where there was data on the sleep environment, none met all nine AAP Level A recommendations. In order to reduce the risk of infant death from modifiable sleep-related factors, recommendations for infant safe sleep environments should be supported and followed in all settings where an infant may be placed to sleep, including foster care homes.

The Colorado Department of Human Services (CDHS) Office of Children, Youth and Families (CYF) is responsible for overseeing the *Rules Regulating Family Foster Care Homes* (7.708)⁸ and the *Rules Regulating Child Placement Agencies* (7.710).⁹ Currently, the rules do not specifically require implementation of all the AAP recommendations for an infant safe sleep environment when an infant

less than 1 year old is placed in a foster care home. In 2015, the Division of Child Care Licensing updated the *Rules Regulating Child Care Centers* to better align with the AAP recommendations for infant safe sleep and to require licensed child care centers and homes to establish infant safe sleep environments. In addition, the updated rules require that licensed child care providers participate in mandatory training about infant safe sleep. By modifying the *Rules Regulating Family Foster Care Homes* to better align with the AAP recommendations and to include a training component for infant safe sleep, all licensed facilities in Colorado will have consistent infant safe sleep rules, and there is the potential to reduce the risk of sleep-related infant deaths in licensed facilities.

Pursuant to C.R.S. 25-20.5-407 (1) (i), the CFPS State Review Team is required to collaborate with the Colorado Department of Human Services (CDHS) Child Fatality Review Team to make joint recommendations for the prevention of child fatalities due to child maltreatment. Both teams endorse the recommendation to modify rules regulating family foster care homes to better align with the AAP recommendations for infant safe sleep.



Recommendations to Prevent Child Motor Vehicle Fatalities

4

Establish a statutory requirement that allows for primary enforcement of Colorado’s adult seat belt law, making it possible to stop a driver and issue a citation if anyone (the driver and all passengers in all seating positions) in the vehicle is not properly restrained.

Between 2009 and 2013, a total of 147 children who were motor vehicle occupants (driver or passenger) died in motor vehicle crashes. Of the 147 children who died in a passenger vehicle crash, there was data on restraint use for 127 (86.3 percent). Sixty percent of those 127 children were unrestrained. Of the 0 to 7 year olds with known data on restraint use (24), 33.3 percent were improperly restrained.

Increasing safety belt use is the single most effective way to save lives and reduce injuries due to crashes on Colorado roadways. Studies have affirmed that seat belts reduce serious injuries and deaths in crashes by about 50 percent.¹⁰ States with primary seat belt laws, which allow law enforcement officers to issue citations to drivers solely for not buckling up, have seat belt use rates that are 13 to 16 percent higher than states with

secondary laws, which require officers to first stop a motorist for another violation before issuing a seat belt citation.¹¹ According to a systematic review of 13 published studies on restraint laws, primary safety belt laws are incrementally more effective in decreasing fatal injuries and increasing safety belt use than secondary safety belt laws.¹² Colorado has fallen behind other states and is now one of only 15 states that have not passed a primary seat belt law.¹³ Most recently, the state of Utah passed a primary seat belt law, effective May 2015, to allow law enforcement officers to ticket a driver or passenger for not wearing a seat belt without any other traffic offense. Motor vehicle stakeholders throughout Colorado prioritized supporting policies and activities that promote seat belt use, such as primary seat belt laws, in the *Colorado 2015-2019 Strategic*



*Highway Safety Plan.*¹⁴

Increasing adult seat belt use has a significant impact on child passenger safety because drivers who wear seat belts are more likely to restrain their child passengers. Adult behavior affects children; properly belted adults are positive role models for children and young adults. A national study of fatal crashes found that when adult drivers used a seat belt, children riding with them were also restrained 94 percent of the time. If the adult driver was not using a seat belt, child restraint use decreased to 30 percent.¹⁵

In 2013, 317 motor vehicle occupants (drivers and passengers of all ages combined) died in passenger vehicle crashes in Colorado and more than half (56 percent) were unrestrained at the time of the crash.¹⁶ In addition to pain and suffering to families, research from the Centers for Disease Control and Prevention indicates motor vehicle crashes cost Colorado more than \$623 million each year in medical expenses and work loss costs.¹⁷ In 2013, Colorado’s seat belt use rate was 82.1 percent,¹⁸ five percent less than the national average and nine percent less than states that have a primary law.¹⁹ The National Highway Safety Traffic Administration estimates that if Colorado increased its seat belt use rate to 90 percent, an additional 32 lives would be saved each year and the state would save \$111 million per year.²⁰ Approximately \$1.2 million



of this savings would come from a reduction in Medicaid expenditures in the first implementation year of a primary seat belt law.²¹

Currently, Colorado has primary restraint laws for children ages 0-15 years as well as for teen drivers under age 18 years, but the restraint law for adults remains secondary enforcement. In addition, the Colorado child passenger restraint laws only cover children through age 15 years and the safety belt components of the graduated driver license law only apply when a vehicle is driven by a teen driver. Children ages 16 and 17 years who ride in a vehicle driven by an adult driver are subject to secondary enforcement.

The fact that there are different types of enforcement for different age groups makes it difficult for law enforcement to properly enforce the laws, particularly for teen drivers who may appear to be older than they are. Making all safety restraint laws primary enforcement would close the gap in Colorado's law, increase enforcement and increase adult and child use of seat belts.

Recommendation to Prevent Youth Suicide

5

Increase funding for the Office of Suicide Prevention to implement the following activities: 1) expand the *Gun Shop Project* to more counties in Colorado; 2) expand the implementation and evaluation of *Emergency Department-Counseling on Access to Lethal Means (ED-CALM)* training statewide; and 3) expand implementation and evaluation of school-based suicide prevention programs that promote resilience and positive youth development as protective factors from suicide statewide.

Suicide is the leading cause of death for youth ages 10 to 17. Between 2009 and 2013, the CFPS identified 165 children who died by suicide in Colorado. Fifty-six percent of youth died by hanging, 33.9 percent died of firearm-related injuries and 8.5 percent died of poisoning or drug overdose. Males account for the greatest percentage of youth suicides (67.9 percent). This is largely due to the fact that females are more likely to use less lethal means (i.e., poisoning) in a suicide attempt compared to males who often use highly lethal means (i.e., firearms).²² Suicide deaths among males (112) involve a firearm 43.8 percent of the

time, as compared to 13.2 percent of the time for suicide deaths among females.

A review of the known circumstances surrounding youth suicides between 2009 and 2013 revealed that most children demonstrated one or more warning signs before they died by suicide. Of the 165 suicide deaths, 20.0 percent of the children made prior attempts, 35.2 percent made prior suicide threats and 47.3 percent talked about suicide.

Positive community environment and support, family and peer connectedness, school connectedness and positive

relationships can help youth build resiliency.²³ However, many of the 165 youth who died by suicide lacked these protective factors that would make them less likely to consider, attempt or die by suicide. Leading up to the incident, 30.3 percent of the 165 youth had an argument with a caregiver; and 26.1 percent of the 165 youth were dealing with family discord. Additionally, 24.9 percent of the 165 youth had a history of child maltreatment as a victim, half of which had been physically abused.

Another important protective factor against suicide is mental health treatment for depressed youth. Of the 165 suicide deaths, 34.6 percent received prior mental health services but only 17.0 percent were receiving mental health services at the time of the incident. Five percent of the youth had issues preventing them from receiving mental health services, such as not being able to afford it or an unwillingness to get the services. Finally, investigation reports indicated that 9.1 percent of the 165 youth who died by suicide were known to have a history of depression.

Since the CFPS was established in statute in 2005, the CFPS State Review Team has consistently identified the need for coordinated suicide prevention efforts and community-based programs that effectively provide education about the risk factors and warning signs associated with suicide so that at

risk youth can be identified in a timely manner and referred to care.

In 2000, the Colorado General Assembly created the Office of Suicide Prevention within the CDPHE to reduce the burden of suicide in Colorado. The mission of the Office of Suicide Prevention is to serve as the lead entity for suicide prevention and intervention efforts in Colorado, collaborating with communities statewide to reduce the number of suicide deaths and attempts in Colorado. In an effort to broaden the reach and impact of state-level suicide prevention activities, the Office of Suicide Prevention emphasizes using state funding to address strategic priority areas. Through 2020, the Office of Suicide Prevention has identified key priorities for suicide prevention in Colorado: funding local initiatives through community grants, providing training to emergency departments about how to counsel patients on reducing access to lethal means following a suicide attempt, outreach to working age males through mantherapy.org and implementing *Sources of Strength* in schools and community agencies throughout Colorado.²⁴

The state General Fund appropriation for the Office of Suicide Prevention provides the infrastructure necessary to make Colorado competitive for federal and foundation grants to address suicide. The Office of Suicide Prevention has demonstrated its ability to successfully obtain

grants that fund local communities and agencies throughout Colorado to implement youth suicide prevention programs. While the Office of Suicide Prevention works diligently to maximize current resources and leverage strong partnerships and additional funding, more resources are needed to move statewide suicide prevention efforts forward. Colorado needs more financial, human and political capital dedicated to suicide prevention and intervention efforts. The current Office of Suicide Prevention General Fund budget is \$465,820, which funds data-driven, evidence-based priorities. However, these initiatives cannot be implemented statewide at the current funding level. Prevention initiatives must focus on those Coloradans at highest risk for suicide, and on the parts of the state with the highest suicide rates. In addition, comprehensive evaluation of all initiatives must be conducted.

With additional resources, the Office of Suicide Prevention would prioritize the following to address youth suicide in Colorado:

- Implement the *Gun Shop Project*.
- Expand the implementation and evaluation of *Emergency Department-Counseling on Access to Lethal Means (ED-CALM)* training statewide.
- Expand implementation and evaluation of school-based suicide prevention programs statewide that promote emotional resilience, school connectedness and positive youth development as protective factors for suicide.

Between 2009 and 2013, the CFPS identified 165 children who died by suicide in Colorado.

The *Gun Shop Project* is a program developed in New Hampshire that aims to share materials, developed by and for firearm retailers and firing ranges, on ways to prevent suicide, warning signs of someone at risk for suicide and tips on safe storage of firearms when a loved one is in crisis. The project also develops and shares information with gun retailers about how to avoid selling a firearm to a suicidal customer and encourages retailers and ranges to display and distribute suicide prevention materials tailored to their customers. The Office of Suicide Prevention is interested in implementing the *Gun Shop Project* in Colorado through partnerships between community agencies and local firearm advocates. Materials would be provided to the advocates who then approach local licensed firearm retailers and firing range owners. The retailers and ranges would be asked to provide information in their stores. Follow up surveys would then be administered so that the program can be evaluated. Funding to the Office of Suicide Prevention to

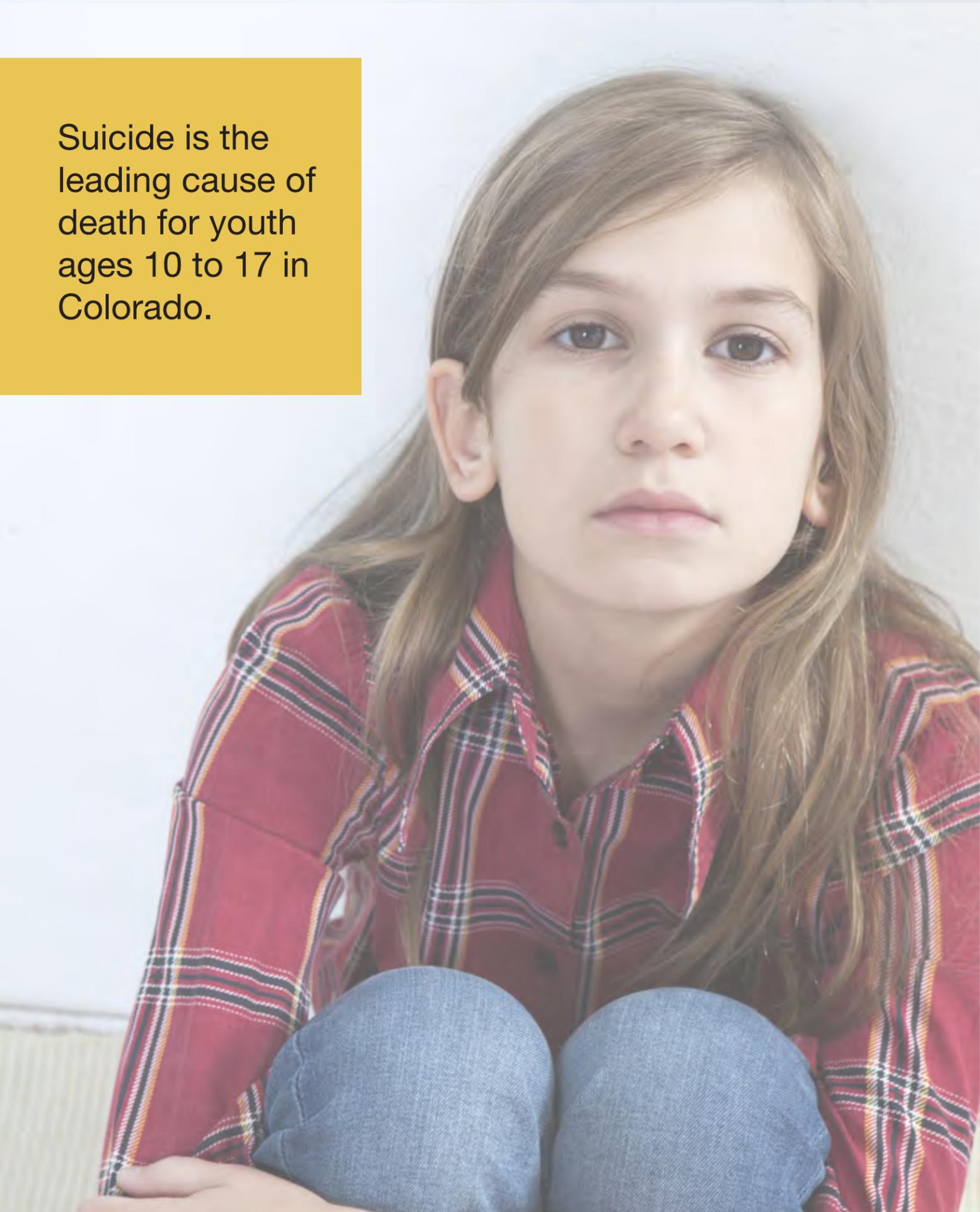


oversee and implement the project would enhance Colorado's ability to implement the *Gun Shop Project* in interested communities across the state.

Restricting access to lethal means is one of the most effective strategies to prevent youth suicide.²⁵ The *ED-CALM* training is a means restriction education program adapted for emergency department staff who work with suicidal pediatric patients and families. Means restriction efforts focus on the removal and/or

safe storage of firearms and lethal medications in the home. The *ED-CALM* training is online and teaches providers how to educate parents of suicidal youth about the techniques and importance of restricting access to lethal means in the home. The Children's Hospital Colorado has adopted the *ED-CALM* training and will continue to implement the intervention with all families visiting the emergency department because of a suicide attempt. Additional funding to the Office of Suicide Prevention and the *ED-CALM* project

Suicide is the leading cause of death for youth ages 10 to 17 in Colorado.



team will provide Colorado with the opportunity to conduct a larger scale implementation and evaluation of the means restriction education program to Colorado hospitals across the state.

School-based suicide prevention programs have the potential to promote emotional resiliency, increase school connectedness and build positive youth development among school-aged youth. Each of these is an important protective factor for suicide prevention and can mitigate the risk of a youth attempting suicide.²⁶ The Office of Suicide Prevention has identified *Sources of Strength*, an evidence-based suicide prevention program, for implementation in select Colorado communities through the Office of Suicide Prevention's community grant initiatives. *Sources of Strength* is designed to build socio-ecological protective influences among youth to reduce the likelihood that vulnerable high school students will become suicidal. The program works to reduce the acceptability of suicide as a response to distress, increase acceptability of seeking help, improve communication between youth and adults and develop healthy coping attitudes among youth. *Sources of Strength* is also designed to positively modify the knowledge, attitudes and behaviors of youth peer leaders selected for

the program.²⁷ Expanded funding to the Office of Suicide Prevention will enable the office to expand school-based suicide prevention programs to a greater number of communities in Colorado.

The burden of suicide in Colorado demands statewide leadership for prevention and intervention efforts, and the Office of Suicide Prevention is committed to providing that leadership through innovative prevention programs, strategic statewide partnerships and advancement of prevention science. During the 2014 legislative session, the Colorado General Assembly passed Senate Bill 14-088, which creates a 26-member multidisciplinary Suicide Prevention Commission for the purpose of providing public and private leadership and direction regarding suicide prevention in Colorado. Similar to the CFPS State Review Team, the Suicide Prevention Commission is tasked with identifying data-driven and evidence-based recommendations to move prevention efforts forward and maximize resources. Through this commission, there are opportunities for the CFPS State Review Team to collaborate and coordinate on suicide prevention recommendations and leverage implementation of statewide suicide prevention efforts.

The policy recommendation to increase available funding to address youth suicide programming and prevention is endorsed and supported by the Suicide Prevention Commission and aligns with the statewide priorities selected by the Suicide Prevention Commission.

Recommendation to Prevent Child Maltreatment

6

Support policies that impact the priorities of the Colorado Essentials for Childhood project: 1) increase family-friendly business practices across Colorado; 2) increase access to child care and after school care; 3) increase access to preschool and full-day kindergarten; and 4) improve social and emotional health of mothers, fathers, caregivers and children.

When conducting case-specific, multidisciplinary reviews of child fatalities that occur in Colorado, the CFPS State Review Team discusses whether any acts of omission or commission caused or contributed to the death, including child abuse and/or neglect. The team members are asked to collectively decide, using available information, if they believe that any human action or inaction caused and/or substantially contributed to the death of the child. This discussion is especially important because it provides information about any human behaviors that may be involved in the child's death. In addition, this information may be critical to the prevention of both intentional and unintentional deaths because the CFPS State Review Team makes this determination for every child fatality

that is reviewed.

From 2009-2013, the CFPS State Review Team identified 220 fatalities where child maltreatment caused and/or contributed to the child's death. County departments of human services substantiated 153 (69.5 percent) of the 220 fatalities and 62 (40.5 percent) of the 153 met statutory criteria for review by the Colorado Department of Human Services (CDHS) Child Fatality Review Team. The remaining 67 (30.5 percent) of the 220 fatalities were identified as child maltreatment fatalities solely by the CFPS State Review Team using team judgment. These 67 fatalities were either not reported to county departments of human services or the incident did not meet the statutory definition for substantiated maltreatment.

Regardless of whether the child fatality was substantiated as child maltreatment by human services, it is critical for the CFPS to use a public health framework to identify and aggregate the circumstances involved in an array of child maltreatment deaths in order to develop child maltreatment prevention recommendations. The purpose of the CFPS is to interpret trends, common risk factors and multiple variables among all potential child maltreatment fatalities in order to develop strategies that will prevent the occurrence of abuse and neglect before it happens. This will impact a broad population of children in Colorado rather than targeting efforts only towards children at-risk of being maltreated or mitigating the effects of serious maltreatment that has already occurred.

The Essentials for Childhood (EfC) project is focused on preventing child maltreatment and other adverse childhood experiences. EfC supports a framework that creates safe, stable, nurturing relationships and environments for all children, which are essential to preventing child maltreatment and assuring that children reach their full potential. Safe, stable, nurturing relationships and environments can help to:

- Reduce the occurrence of child maltreatment and other adverse childhood experiences;
- Reduce the negative effects of child maltreatment and other adverse childhood experiences;

- Influence many physical, cognitive, emotional outcomes throughout a child's life;
- Reduce health disparities; and
- Have a cumulative impact on health.²⁸

In 2013, Colorado was one of only five states to be awarded the EfC Cooperative Agreement from the Centers for Disease Control and Prevention. The Colorado EfC Collective Impact Team is a partnership of stakeholders with a commitment to a shared vision and common agenda. Utilizing a collective impact approach, partners will implement mutually reinforcing activities to create safe, stable, nurturing relationships and environments, and ultimately to reduce child maltreatment.

The Colorado EfC Collective Impact Team operates under the guiding principle that building safe, stable, nurturing relationships and environments:

- Requires a two-generation approach, targeting resources to children, as well as mothers, fathers and caregivers at the same time. Two-generation approaches in programs, policy and research put the entire family on a path to permanent economic security.
- Is the responsibility of all sectors in a community, including the business sector and policy makers.
- Requires that resources and opportunities be seamlessly

integrated from conception to career.

- Requires changing social norms to value families, support and empower mothers and fathers, and honor the strengths found in different cultures.
- Begins with the inclusion of the family voice in decision making.

The common agenda priorities selected by the Colorado EfC Collective in order to fulfill the vision of a future where children and families thrive in the places where they live, learn, work and play include advancing policy and community approaches to:

1. Increase family-friendly business practices across Colorado
2. Increase access to child care and after school care
3. Increase access to preschool and full-day kindergarten
4. Improve social and emotional health of mothers, fathers, caregivers and children.

Each of these common agenda priorities include policy recommendations at the organizational, regulatory or legislative level that build healthy families and communities. Policies in place at the community and state levels can help ensure children lead healthy and safe lives. Informing policies across multiple levels of the social ecology has the potential to improve the provision of safe, stable, nurturing relationships and environments in Colorado. For each



of the common agenda priorities, the following societal level strategies were selected to impact policy recommendations:

1. Increase family-friendly business practices across Colorado: 1) engage legislators and business leaders to support tax incentives for businesses that meet family-friendly criteria; 2) engage legislators and business leaders to increase Colorado's living wage covered by minimum wage; 3) engage legislators and business leaders to increase parents' abilities to take paid leave to care for children
2. Increase access to child care and after school care: 1) engage investors in socially motivated investments that enhance access to childcare and after school care (social impact bonds); 2) engage legislators, schools, community decision makers and philanthropic entities to determine strategies to ensure the long-term financial sustainability of childcare and after school programs; 3) engage organizations, legislators and community decision makers in developing strategies to ensure high quality family, friend, and neighbor care
3. Increase access to preschool and full-day kindergarten: 1) engage policymakers in long-term financially sustainable funding for free full-day preschool and 2) engage policymakers in long-term financially sustainable funding for

free full-day kindergarten

4. Advance policy and community approaches to improve social and emotional health of mothers, fathers, caregivers and children: 1) support policy, administrative, and regulatory changes needed to increase best practice behavioral health integration in all primary care and 2) address social norms around social/emotional wellness for children and parents (help-seeking behaviors, parenting expectations, health development).

During the 2015 legislative session, legislation was introduced to increase access to preschool and full-day kindergarten. Though this legislation did not pass, the introduction supports the work of the Colorado EfC Collective Impact Team and demonstrates commitment from Colorado policymakers that state-level policy is critical to building safe, stable, nurturing environments for healthy families and communities.

Pursuant to C.R.S. 25-20.5-407 (1) (i), the CFPS State Review Team is required to collaborate with the Colorado Department of Human Services (CDHS) Child Fatality Review Team to make joint recommendations for the prevention of child fatalities due to child maltreatment. Both teams endorse the recommendation to support policies that impact the Essentials for Childhood common agenda priorities.

Recommendation to Prevent Prescription Drug Overdose Fatalities

7 Increase funding for the Colorado Consortium for Prescription Drug Abuse Prevention to promote uptake of the *Quad-Regulator Policy for Prescribing and Dispensing Opioids* through increased training and education of prescribers.

Between 2009 and 2013, prescription drug overdose accounted for a total of 35 deaths in children and teens ages 0 to 17 years in Colorado. The number of prescription drug overdose fatalities among children and youth increased from three in 2012 to seven deaths in 2013. Coroners ruled 57.1 percent of the 35 deaths as accidental manner, 22.9 percent as undetermined manner and 20.0 percent as suicidal manner. Sixty-nine percent of the 35 deaths of children who died of prescription drug overdoses were ages 15 to 17 years and 14.3 percent were between ages 10 and 14 years. More males than females died from prescription drug overdose.

The categories of prescription drugs include non-opioid painkillers (e.g. aspirin, acetaminophen), opioids, (e.g. oxycodone, hydrocodone), narcotics (e.g. methadone, codeine), as well as other prescriptions, such

as antidepressants and anti-anxiety medications. Investigation reports indicated that 77.1 percent of the 35 children who died of a prescription drug overdose took opioids and another 14.3 percent took methadone (a synthetic opioid).

Fifty-one percent of the prescriptions were not stored in a locked place, but the storage location was unknown for 48.6 percent (17) of the prescriptions, meaning that unsafe storage of medications may be an even larger concern. Sixty-nine percent of the prescription drugs that caused the deaths were known to not be the child's prescription. Sixteen (55.2 percent) of the 29 youth ages 10 to 17 years who died of a prescription drug overdose had a documented history of substance use. The most commonly used drugs were alcohol and marijuana.

For Colorado as a whole, drug-

related poisoning deaths more than doubled from 352 deaths in 2000 to 846 deaths in 2013.²⁹ At least 35 percent of the 2013 drug-poisoning deaths were due to opioid analgesics. Non-medical use of prescription pain relievers is a persistent problem in Colorado, which has been in the top quartile of states for misuse since 2003. According to the 2012-2013 National Survey on Drug Use and Health, 5.1 percent of Colorado residents over age 12 reported nonmedical use of pain relievers in the past year.

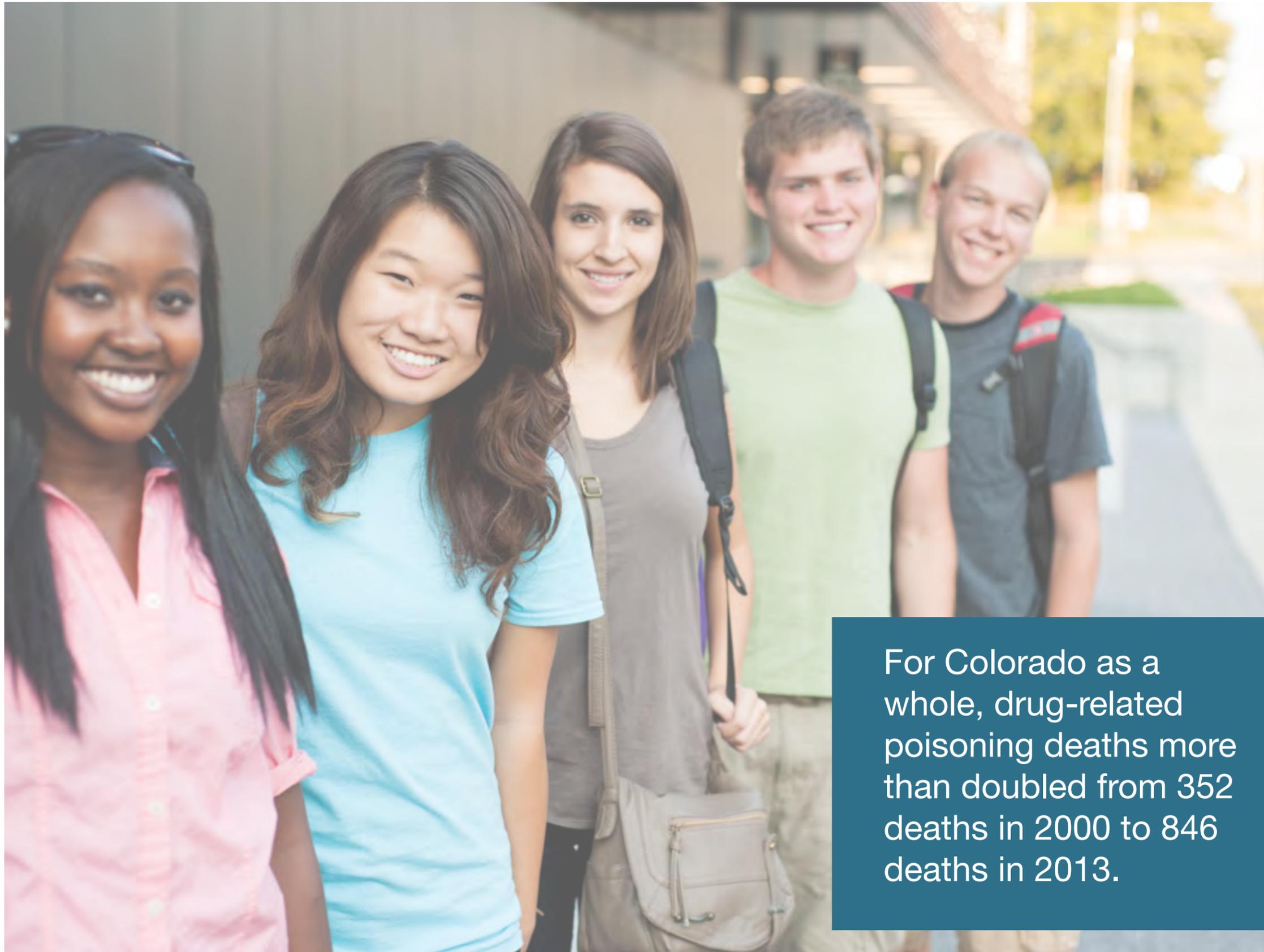
Prior to the fall of 2012, state agencies invested in reducing Colorado's high opioid death and hospitalization rates had not partnered to systematically implement known effective prevention programs, strategies and policies. However, in under three years, Colorado state agencies have generated a strategic plan, outlined and assigned action steps, gained the support of the Governor and attorney general, created a cross-system infrastructure to implement the strategic plan and adopted multiple legislative and regulatory changes to reduce prescription drug misuse, abuse and overdose.

In 2012, Colorado's Governor was selected to co-chair the Prescription Drug Abuse Reduction Policy Academy through the National Governors Association (NGA). Through participation in the yearlong NGA Academy, state agencies developed the *Colorado Plan to*

Reduce Prescription Drug Abuse. To better monitor progress toward implementing the plan, state-level leadership created the Colorado Consortium for Prescription Drug Abuse Prevention (Consortium), a statewide network that serves as the strategic implementation lead for the *Colorado Plan to Reduce Prescription Drug Abuse*.³⁰

Members of the Consortium worked closely with the regulatory Boards for dental, medical, nursing and pharmacy in Colorado to develop the joint *Quad-Regulator Policy for Prescribing and Dispensing Opioids* to support practitioners as they compassionately treat pain while addressing the prescription drug abuse crisis in Colorado. The guidelines, based on evidence from other state policies, recommends that physicians screen for addiction, consult the Prescription Drug Monitoring Program, use alternative therapies, recommend safe storage and disposal of their medications and monitor patients for misuse. Since the adoption of this policy across the boards, the Consortium is partnering with local health partners to effectively disseminate the guidance to prescribers and providers throughout Colorado.

As key partners in this effort, the North Colorado Health Alliance, a collaborative non-profit partnership of health care providers, community service organizations and other community leaders committed to the collaborative creation of integrated



For Colorado as a whole, drug-related poisoning deaths more than doubled from 352 deaths in 2000 to 846 deaths in 2013.

health care neighborhoods, recently tailored the state *Quad-Regulator Policy for Prescribing and Dispensing Opioids* to the resources within their region and are in the process of developing a best-practice plan for guideline integration into health care services.

State efforts to increase uptake of the prescribing and dispensing guidelines include a two-hour online, continuing medical education (CME) module on chronic pain treatment developed by the Colorado School of Public Health. The course aligns with the state and regional opioid prescribing policies, offering an important, easy to access resource to train Colorado prescribers. In addition, the CDPHE will partner with the Colorado Consortium for Prescription Drug Abuse Prevention and the North Colorado Health Alliance to implement and evaluate dissemination strategies to increase the uptake of the regional opioid prescribing guidelines. Expanded funding to the Colorado Consortium for Prescription Drug Abuse Prevention will enable the Consortium to increase training efforts to ensure effective dissemination and uptake of the *Quad-Regulator Policy for Prescribing and Dispensing Opioids* by Colorado prescribers and providers.

Cross-Cutting Recommendation to Prevent Child Fatalities

8

Increase funding for the Child Fatality Prevention System to support the implementation and evaluation of youth programs that promote pro-social activities, resilience and positive youth development as protective factors from child fatalities statewide.

Preventing child fatalities and protecting the health and safety of youth is complex and must include prevention at multiple levels. By taking a public health approach to child fatality prevention, there is an emphasis on primary prevention--preventing injury and violence before it occurs--and promoting evidence-based prevention strategies at the individual, community and societal levels.

Over the years, the field of violence prevention has developed a framework of shared risk and protective factors that influence violence-related incidents and fatalities such as suicide, firearm-related deaths, homicide and child maltreatment.³¹ Risk factors are characteristics or situations that increase youth's probability of experiencing violence. Examples of risk factors include family

conflict, low socioeconomic status, community disorganization, lack of job opportunities, substance use and history of emotional or mental health problems. Protective factors are characteristics or situations that make it less likely for youth to experience violence or increase their resilience when they are faced with risk factors.³² Examples of protective factors include connection to a caring adult, access to mental health services, school connectedness, having peers who participate in socially acceptable activities and family support.

Different types of violence are connected and can share some of the same risk and protective factors. Therefore, implementing prevention programs that address risk and protective factors shared across connected forms of violence can effectively prevent multiple

forms of violence. For example, by implementing programs that promote school connectedness, family support and solving problems non-violently, there is the potential to reduce youth violence, suicide and child maltreatment. Evidence-based prevention strategies that have been identified to reduce violence and increase protective factors include:³³

- Building children's and adolescents' skills and competencies to choose nonviolent, safe behaviors
- Fostering safe, stable and nurturing relationships between youth and their parents and caregivers
- Building and maintaining positive relationships between youth and caring adults in their communities
- Developing and implementing school-wide activities and policies to foster social connectedness and a positive environment
- Improving and sustaining a safe physical environment in communities and creating spaces to strengthen social relationships
- Building viable and stable communities by promoting economic opportunities and growth
- Facilitating the social cohesion and collective efficacy of the community
- Changing societal norms about the acceptability of violence and willingness to intervene
- Changing the social and structural conditions that affect youth violence and lead to health inequity

Based on this research, the CFPS State Review Team is recommending the following cross-cutting strategy to prevent child fatalities: increase funding to support the implementation and evaluation of youth programs that promote protective factors.

Colorado state agencies participate in several efforts that implement a shared protective factor approach. For example, CDPHE's Sexual Violence Program, Office of Suicide Prevention and Child Fatality Prevention System partners with CDHS's Tony Grampas Youth Services Program to implement an evidence-based suicide prevention program in Colorado schools and communities that promotes school connectedness and peer support, which are shared protective factors for each partner's specific violence area. In addition, CDPHE's Retail Marijuana Education and Prevention Program partners with CDHS's Tony Grampas Youth Services Program and the Office of Behavioral Health to fund programs implementing positive youth development approaches and provide training on this approach throughout Colorado. CDHS's Office of Behavioral Health implements the Life Skills Training, which addresses protective factors and prevents substance use, but also has the potential to impact other health outcomes such as bullying, suicide, sexual violence and youth violence. CDHS's Office of Early Childhood and the Tony

Grampas Youth Services Program promotes the Strengthening Families Framework, which includes promoting the following protective factors against child maltreatment: parental resilience, social connections, knowledge of parenting and child development, concrete supports in times of need and social emotional competence in children. CDPHE and CDHS also work together to support CO9to25, which is a collective, action-oriented group of Colorado youth and adults working in partnership to align efforts and achieve positive outcomes for all youth, ages 9-25, so they can reach their full potential. CO9to25 Youth Councils throughout Colorado are a unified community network of youth and organizations applying the positive youth development framework and coordinating resources and community support for youth. Finally, CDPHE's Maternal and Child Health Section recently selected two priorities related to shared risk and protective factors for programmatic focus between 2016 and 2020: 1) youth systems building with a focus on bullying, youth suicide and substance use prevention and 2) substance use/abuse prevention including marijuana, prescription drug abuse,

alcohol and smoking. Implementation of strategies that support shared protective factors will be necessary in order to accomplish these priorities over the next five years.

Greater funding in Colorado to support youth programs that promote protective factors such as

pro-social activities, resilience and positive youth development not only has the potential to impact multiple forms of violence; it also has the potential to leverage resources across state and community-based agencies, diversify funding sources and connect multiple violence

prevention practitioners to effectively break down silos across state agencies. Increased funding for this work in Colorado is necessary to maintain the momentum for implementing youth programs that take a primary prevention approach and promote protective factors.



Examples of protective factors include connection to a caring adult, access to mental health services, school connectedness, having peers who participate in socially acceptable activities and family support.

PREVENTION UPDATES OF THE CHILD FATALITY PREVENTION SYSTEM

Analysis and Updates on Recommendations from 2014 CFPS Annual Report Fiscal Year

As part of the [2014 CFPS Annual Report](#) seven recommendations were made to policymakers to prevent child fatalities in Colorado.³⁴ Colorado state agencies made significant progress towards accomplishing several of the recommendations. An analysis and summary of the CFPS State Review Team's recommendations from the previous year is described below.

Modify child care licensing requirements and regulations regarding infant safe sleep to better align with American Academy of Pediatrics (AAP) safe sleep recommendations.

Following this recommendation in the 2014 annual report, the Infant Safe Sleep Partnership, a workgroup of CFPS, proposed language inclusive of the AAP infant safe sleep recommendations to the CDHS Office of Early Childhood Division of the Early Care and Learning to incorporate into the rules that regulate licensed child care centers and homes. In addition, members

of the Infant Safe Sleep Partnership provided in-person expert testimony to the Colorado State Board of Human Services during rule-making hearings in January and February 2015. CDHS amended the rules to incorporate the language proposed by the Infant Safe Sleep Partnership regarding best practices for infant safe sleep environments. Effective April 1, 2015, approximately 6,000 licensed child care providers were required to adhere to the updated infant safe sleep rules.

Establish a statutory requirement that allows for primary enforcement of Colorado's adult seat belt law, making it possible for a driver to be stopped and issued a citation if anyone (the driver and all passengers in all seating positions) in the vehicle is not properly restrained.

While primary seat belt legislation was not proposed during the 2015 legislative session, state agencies and hundreds of motor vehicle

safety partners from across the state collaborated to develop the *Colorado 2015-2019 Strategic Highway Safety Plan* (SHSP), which includes a strategy to support policies and activities that promote seat belt use, such as primary seat belt laws. Additionally, due to the effectiveness and strong evidence-base of primary enforcement of the seat belt law, the CFPS State Review Team has included this recommendation in its annual legislative report for the last 10 years. Recently, Utah passed a primary seat belt law, which was effective May 2015, to allow law enforcement officers to ticket a driver or passenger for not wearing a seat belt without any other traffic offense. Utah's process for stakeholder engagement may serve as a model for Colorado when introducing primary seat belt law to the Colorado General Assembly.

Increase funding for the Office of Suicide Prevention to implement the following activities: 1) expand the Office of Suicide Prevention statewide community grant program to more counties and at higher funding levels; 2) expand the implementation and evaluation of means restriction education training at hospitals statewide; and 3) expand implementation and evaluation of school-based suicide prevention programs that promote resilience and positive

youth development as protective factors from suicide statewide.

The Office of Suicide Prevention received level funding from the General Fund for Fiscal Year 2016. The Office of Suicide Prevention is currently able to fund 11 community suicide prevention grants to agencies to implement programs in several priority areas, including implementation of means education training at hospitals and school-based suicide prevention programs. The burden of suicide in Colorado is disproportionate to the available resources. While the Office of Suicide Prevention works diligently to maximize current resources and leverage strong partnerships and additional funding, more resources are needed to move statewide suicide prevention efforts forward.

Require newly licensed K-12 educators and special service providers (nurses, school psychologists, school counselors and social workers) to complete suicide prevention trainings.

In 2015, the Training and Development Workgroup of the Suicide Prevention Commission identified K-12 educators and special service providers as a target group for suicide prevention training. In addition, there is current legislation (C.R.S. 22-60.5-110) that allows educators to receive continuing education credits for specific training for suicide prevention, but it is not

required for K-12 educators and special service providers at this time.

Increase funding for the Colorado Department of Public Health and Environment to expand the Colorado Household Medication Take-Back Program at pharmacies across the state.

The Joint Budget Committee allocated \$300,000 in general funds to CDPHE for the Colorado Household Medication Take-Back Program at CDPHE for medication take-back activities. This will allow CDPHE to expand the law enforcement and pharmacy collection network to ensure at least one location in each county where citizens can dispose of unused prescription and over-the-counter medications, including controlled substances. Facilitating the disposal of controlled substances prevents diversion of these medications for abuse. CDPHE is currently in the process of developing formal rules for the Colorado Household Medication Take-Back Program. Law enforcement agencies will be brought into the program if they wish to receive operational assistance and monetary support for medication collection and disposal. House Bill 14-1207, passed in the 2014 legislative session, narrowly limits the scope of rule development to the Colorado Household Medication Take-Back Program.

Incorporate infant safe sleep education and how to address safety concerns related to infant safe sleep practices as part of the Colorado Department of Human Services Child Welfare Training System for child welfare professionals.

The purpose of the Colorado Department of Human Services Child Welfare Training System is to provide strength-based, family-centered training programs for child welfare professionals by delivering specialized courses for caseworkers, supervisors, case service aides, foster parents and other child and family-serving personnel. In Fiscal Year 2015, CDPHE contracted with the Kempe Center for the Prevention and Treatment of Child Abuse and Neglect, which coordinates the Child Welfare Training System on behalf of the Colorado Department of Human Services, to develop a training curriculum for child welfare professionals to improve their knowledge and skills regarding infant safe sleep. The content for the training was completed in June 2015 and the training will be available to Colorado child welfare professionals in September 2015 at <http://www.coloradocwts.com>. This training will improve the ability of child welfare professionals to provide information to parents and other caregivers about infant sleep related risks and how to ensure safe sleeping environments.

Continue to provide dedicated resources for the implementation of Colorado’s Child Welfare Plan, “Keeping Kids Safe and Families Healthy 2.0,” to make prevention programs for families with young children available in every county in Colorado.

The Colorado Department of Human Services continues to dedicate resources and efforts to implement

Colorado’s Child Welfare Plan, “Keeping Kids Safe and Families Healthy 2.0.” In early 2015, Colorado Department of Human Services launched a statewide hotline to facilitate reporting of suspected cases of child abuse and neglect, which was one of the components of the Child Welfare Plan. The hotline (1-844-CO-4-KIDS) operates out of a centralized location and is Colorado’s first child-abuse hotline of its kind.



As part of the 2014 CFPS Annual Report, seven recommendations were made to policymakers to prevent child fatalities in Colorado.

Updates on CFPS Prevention Activities

In addition to the policy recommendations above, the CFPS participated in the child fatality prevention activities described below.

Sudden Unexpected Infant Death (SUID) Case Registry and the Infant Safe Sleep Partnership

Since 2009, Colorado has participated in the Centers for Disease Control and Prevention's Sudden Unexpected Infant Death (SUID) Case Registry to collect SUID data and identify strategies to prevent SUIDs. The information gathered for the SUID Case Registry under this project allows for more accurate and consistent classification of SUIDs. This information improves the state's understanding about the incidence, risk factors and trends associated with SUIDs in order to develop effective prevention strategies. The Colorado SUID Case Registry now contains 263 SUID cases. Reviews and data entry of SUID cases for the upcoming year of the SUID Case Registry will be the responsibility of local child fatality review teams in Colorado. CFPS staff will provide ongoing technical assistance and support to ensure that SUID cases are accurately reviewed and data

is entered in a timely fashion. Since 2010, the statewide, multi-agency Infant Safe Sleep Partnership develops statewide infant safe sleep promotion messaging, implements activities that promote safe sleeping environments and serves as a state resource for local partners seeking to implement infant safe sleep efforts.

Essentials for Childhood Project

As mentioned previously, Colorado was one of five states to be awarded a five-year Essentials for Childhood (EfC) Cooperative Agreement from the Centers for Disease Control and Prevention. The EfC project is focused on preventing child maltreatment and other adverse childhood experiences. Over the past fiscal year, the EfC statewide leadership and collective impact team identified strategies to impact Colorado's priority to advance policy and community approaches that:

- 1) increase family-friendly business (FFB) practices across Colorado;
- 2) increase access to child care and after school care;
- 3) increase access to preschool and full-day



kindergarten; and 4) improve social and emotional health of mothers, fathers, caregivers and children. EfC partners and workgroup members, including individuals from the CFPS State Review Team and local child fatality review teams, will spend the next three years implementing the strategic plan with the ultimate goal of preventing child maltreatment in Colorado.

Suicide Prevention Activities

During Fiscal Year 2015, the CFPS partnered with the Office of Suicide Prevention to support the implementation of *Sources of Strength*, an evidence-based school-based suicide prevention program. In order to make *Sources of Strength* more sustainable for schools to implement, CFPS funding supported a train-the-trainer skills session in June 2015 for 20 participants from schools districts and cities across Colorado including Alamosa, Boulder, Brighton, Castle Rock, Cortez, Denver, Golden, Longmont, Peyton, Trinidad and Westcliffe. One of the key steps in implementing *Sources of Strength* is to identify and train adult advisors who will mentor the peer leader teams and sustain the program in school districts beyond one school year. The purpose of the train-the-trainer session was to certify *Sources of Strength* trainers so they can implement *Sources of Strength* in new schools or sustain the program in existing schools at a reduced cost. All of the participants of the train-the-trainer session were recruited because of their commitment to implement *Sources of Strength* in their communities in Colorado.

SYSTEM STRENGTHS AND WEAKNESSES

Pursuant to C.R.S. 25-20.5-407 (1)(g), the CFPS State Review Team is required to provide a list of system strengths and weaknesses identified during the child fatality review process. Colorado families interact with many different state and local systems for a variety of reasons. For example, many families of the children who died between 2009 and 2013 had interactions with county departments of human services, local law enforcement agencies or local public health agencies. For the purposes of this section, “system” is defined as state and local agencies or Colorado laws that potentially impact the health and well-being of children and “systematic child-related issues” means any issues involving one or more agencies.

System Strengths

The CFPS State Review Team identified the following system strengths including legislation and state agency partnerships, which impact the health and well-being of children across each of the leading causes of child deaths in Colorado.

Sudden Unexpected Infant Deaths (SUID)

- Multi-agency coordination and implementation of the Infant Safe Sleep Partnership, which includes representation from the CFPS State Review Team, Safe Kids Colorado and the Children’s Hospital Colorado to promote safe sleeping environments to reduce infant deaths.
- In 2015, the Colorado Department of Human Services Division of Child Care Licensing updated

the Rules Regulating Child Care Centers to better align with the American Academy of Pediatrics (AAP) recommendations for infant safe sleep and to require licensed child care centers and homes to establish infant safe sleep environments.

Motor Vehicle Safety

- Multi-agency coordination and implementation of the Colorado Teen Driving Alliance, which includes representation from CDPHE and CDOT to improve motor vehicle safety of teen drivers.
- During the 2015 legislative session, the Colorado General Assembly did not pass legislation that would have allowed All-Terrain Vehicles (ATVs) to be driven on county roadways.

Suicide

- Multi-agency coordination and implementation of the Suicide Prevention Commission, which provides public and private leadership and recommendations regarding suicide prevention in Colorado. The CFPS State Review Team collaborates with the Suicide Prevention Commission to develop suicide prevention recommendations and implement statewide suicide prevention efforts.

Child Maltreatment

- The Colorado Department of Human Services (CDHS) implementation of Colorado’s Child Welfare Plan, “Keeping Kids Safe and Families Healthy 2.0,” includes enhanced screening of calls reporting possible child abuse and neglect, new prevention strategies to assist families before they become part of the system and training for mandatory reporters to identify at-risk children sooner.³⁵ During Fiscal Year 2015, a statewide hotline was launched to facilitate reporting of suspected cases of child abuse and neglect, which was one of the components of the Child Welfare Plan.
- CDPHE implementation of the Essentials for Childhood (EfC) project, which aims to create the context for safe, stable, nurturing relationships and environments through policy and systems change. The project includes a

statewide team of partners to identify and direct strategies and action steps over the course of the five-year project.

- Continued collaboration between CDPHE and CDHS to coordinate the CFPS State Review Team and the CDHS Child Fatality Review Team in order to identify child maltreatment fatalities and develop and implement recommendations to prevent child maltreatment in Colorado. Improved data linkages and better communication between CDPHE and CDHS will enhance both child fatality review teams’ ability to use quality data when reviewing child fatalities and developing data-driven, high-quality prevention recommendations.
- During the 2015 legislative session, legislation was introduced to increase access to preschool and full-day kindergarten. Though this legislation did not pass, the introduction aligns with the priorities of the Colorado EfC project and demonstrates commitment from Colorado policymakers to building safe, stable, nurturing environments for healthy families and communities.
- In 2015, CDHS, in collaboration with CDPHE and the Infant Safe Sleep Partnership, developed and incorporated infant safe sleep content into the Child Welfare Training System.



Poisoning

- Multi-agency implementation of the *Colorado Plan to Reduce Prescription Drug Abuse* by the Colorado Consortium to Reduce Prescription Drug Abuse (Consortium) has the potential to prevent Coloradans, including children and youth, from engaging in non-medical use of prescription pain medications.
- Members of the Consortium collaborated to develop the Take Meds Seriously public awareness campaign (<http://takemedsseriously.org>), which educates the public on the safe use, storage, and disposal of prescription drugs.

- During the 2015 legislative session, the final state budget allocates \$300,000 in general funds to CDPHE for medication take-back initiatives.
- CDPHE and the Department of Regulatory Agencies partnered with other members of the Consortium to submit four federal grant proposals to enhance prescription drug abuse and overdose efforts in the state.

System Weaknesses

In addition to system strengths, the CFPS State Review Team has also identified the following system weaknesses across the leading causes of preventable child deaths that hinder the protection of children.

Sudden Unexpected Infant Deaths (SUID)

- The CFPS data system has missing and unknown data for some variables related to infant sleep circumstances and medical history. In order to improve the case review process and conduct quality case-specific reviews, the CFPS State Review Team recommends that investigative agencies develop protocols and implement death scene investigation training so that law enforcement agencies and coroners use the SUIDIRF and doll reenactment following the death of an infant. Another recommendation is to enable the CFPS access to medical records of an infant or child prior to and leading up to the death in order to better understand the circumstances of death.
- Colorado ranks 34th in the nation for the tobacco excise tax.³⁶ Increasing the tobacco tax effectively reduces smoking rates, which can prevent secondhand smoke exposure to infants and reduce the risk for SUID.

Motor Vehicle Safety

- The Traffic Accident Report form that law enforcement agencies use to collect circumstance information on motor vehicle crashes does not adequately capture information on distracted driving and Graduated Driver Licensing (GDL) Law violations, nor does it distinguish between alcohol impairment and drug impairment. The CFPS State Review Team supports ongoing collaboration efforts between state agencies for better sharing of data. Linking various data systems will provide higher quality data, which can be used by the CFPS State Review Team to develop prevention recommendations and impact motor vehicle-related child fatalities. Currently, there is support for this strategy. State partners recently created the *Colorado 2015-2019 Strategic Highway Safety Plan*, which includes goals, strategies and performance measures related to data. In addition, improving the traffic records data system is also a priority for the State Traffic Records Advisory Committee (STRAC), whose principal agencies include the CDOT, Colorado Department of Public Safety, Colorado Department of Revenue, CDPHE, CDHS, Colorado State Judicial Department and the Governor's Office of Information Technology.



Data linkage between the agencies that oversee traffic record and injury data will enhance the CFPS State Review Team's ability to develop data-driven prevention recommendations.

- Colorado does not have a primary

seat belt law. Establishing a statutory requirement that allows for primary enforcement of Colorado's adult seat belt law will increase safety belt use among all Coloradans. Increasing safety belt use is the single most effective way to save

lives and reduce injuries due to crashes on Colorado roadways. Increasing adult seat belt use has a significant impact on child passenger safety because drivers who wear seat belts are more likely to restrain their child passengers. Adult behavior affects children; properly belted adults are positive role models for children and young adults.

- Although Colorado's Child Passenger Safety Law ensures that children are properly secured in approved and appropriate restraint systems while riding in a motor vehicle, best practices for use of booster seats is to restrain a child in a car seat or booster seat until they are about 57" (4'9"), regardless of age.³⁷ Strengthening the Child Passenger Safety Law to emphasize the height requirements instead of age requirements has the potential to better protect children in Colorado.
- Although Colorado has a GDL Law, expanding the restricted hours from between 12:00 AM and 5:00 AM to between 10:00 PM and 5:00 AM for teen drivers and extending passenger restrictions for teen drivers through age 18 would better align the GDL Law with national best practices.

Suicide

- Although there is recent support to provide public and private leadership for suicide prevention

in Colorado, there is a need for more resources and funding to move statewide suicide prevention efforts forward, especially to implement evidence-based programs at the community-level throughout the state. In doing so, statewide suicide prevention partners, including the newly created Suicide Prevention Commission, will be able to address the burden of suicide, especially among youth, in Colorado.

- Since children and teens spend a significant amount of time at school, there is a need for a comprehensive approach to suicide prevention that includes the entire school community: teachers, counselors, school psychologists, school social workers, administrators and support staff as well as students and parents.³⁸ In order to implement comprehensive suicide prevention programs within schools, the systems and policies must be in place within the school environment to approach suicide prevention and intervention. Mandated suicide prevention training is one way to ensure that school personnel have the necessary skills to intervene with youth at risk for suicide.
- The CFPS data system has missing and unknown data for some variables related to suicide circumstances and mental health history. In order to improve the

case review process and conduct quality case-specific reviews, the CFPS State Review Team recommends that investigative agencies develop protocols and implement standardized use of a suicide death scene investigation form so that law enforcement agencies and coroners consistently collect circumstance data when investigating a suicide death.

Child Maltreatment

- Alcohol and drug screening is not mandatory for the supervisor or caregiver when a child has died. Requiring drug and alcohol screening of the adult(s) responsible for supervising the child when there is a child death will enable the CFPS State Review Team to gain a greater understanding of what percentage of caregivers were impaired at the time of the fatal incident and may help target prevention recommendations.
- Improved communication and data sharing between hospitals, medical professionals, and county Departments of Human Services will enhance systematic responses to potential incidents of child maltreatment in Colorado.



By continuing to strengthen systems that help protect children and working to address the system weaknesses, Colorado will be in a position to promote the health and safety of children throughout the state and minimize the risk for child fatalities.

CHILD FATALITY PREVENTION SYSTEM PROGRAM HIGHLIGHTS

CFPS State Review Team Updates

In 2015, 45 of the 46 mandated State Review Team member positions were occupied. See [Appendix G](#) for the full list of CFPS State Review Team members. Over the last year, CFPS State Review Team members contributed approximately 921 volunteer hours. Members actively participated in monthly subcommittee meetings and quarterly full team meetings, responded to information requests for child death cases on behalf of their agencies, took part in multidisciplinary case reviews of 2013 child fatalities, reviewed aggregate child fatality data and developed and prioritized prevention recommendations.

Starting in Fiscal Year 2016, the structure of the CFPS State Review Team will change to reflect the transition of the multidisciplinary reviews from the state-level to local child fatality review teams. The CFPS State Review Team will review aggregate child fatality data provided by the local teams in order to develop policy and practice recommendations to prevent child fatalities. In addition, the CFPS State Review Team members will participate on prevention workgroups to determine the role of the CFPS

State Review Team in implementing prevention strategies related to infant safe sleep promotion, accident and injury prevention, child maltreatment prevention, violence prevention, suicide prevention and motor vehicle safety. These prevention workgroups will collaborate with other state-level workgroups and teams to implement the prevention strategies including Colorado Teen Driving Alliance, Suicide Prevention Commission, Essentials for Childhood Collective Impact Team, Colorado Consortium for Prescription Drug Abuse Prevention and the Infant Safe Sleep Partnership. There will also be a state-level workgroup that will develop partnerships with local child fatality review teams. The CFPS State Review Team will serve as a resource to the local child fatality review teams to ensure the local teams adequately conduct individual, case-specific child fatality reviews and implement local-level prevention activities. Finally, the CFPS State Review Team will facilitate an investigative and data quality workgroup to select and implement recommendations to improve infant and child death scene investigations and to ensure quality data collection and entry by local child fatality review teams.

Local Child Fatality Review Team Updates

During Fiscal Year 2015, the CFPS staff partnered with local public health agencies to establish 48 single-county and regional child fatality review teams in Colorado, representing all 64 counties. See [Appendix J](#) for a map of the local review teams. The majority of the local child fatality review teams are coordinated by local public health agencies. On January 1, 2015, the local child fatality review teams began requesting records, reviewing individual child fatalities assigned to local teams, facilitating local review team meetings and entering data into the National Center for the Review and Prevention of Child Deaths Case Reporting System. Local review team coordinators have until January 1, 2016 to enter child fatalities from 2014 assigned to their local review teams. To date, local review teams have entered information about 100 child fatalities that occurred in 2014 into the data collection system.

In order to support the local child fatality review teams to conduct individual, case-specific reviews of child fatalities and to implement local-level prevention initiatives, approximately \$323,000 was allocated to local review teams in Fiscal Year 2015. The funding amount for each local review team was determined using a funding formula based on the maximum number of child fatalities the team will be expected to review. Each year,

the funding formula will be reviewed to ensure that local child fatality review teams are appropriately funded.

Technical Assistance Provided to Local Child Fatality Review Teams

Child Fatality Prevention System staff at CDPHE provide ongoing training and technical assistance to local child fatality review teams through in-person site visits and remotely via phone and email. During Fiscal Year 2015, the CFPS staff visited Boulder, Broomfield, Chaffee, Custer, El Paso, Elbert, Jefferson, La Plata, and Lake Counties to provide training and technical assistance to local review teams. In addition, CFPS staff hosted the second annual CFPS Local Team Coordinator Training in May 2015. Forty-five local child fatality review team coordinators representing 60 Colorado counties attended the training to learn about child fatality, injury and violence prevention strategies to implement at the local level.

Prevention Activities of Local Child Fatality Review Teams

In order to monitor the prevention activities generated at the local level, the CFPS staff developed a Prevention Strategies Tracking Tool. This tool is sent out to local child fatality review teams on a quarterly basis to capture all child fatality prevention initiatives implemented at the local level. The first tool was completed in May 2015. Thirty-

three local teams completed the tool. Initial data revealed that 23 local child fatality review teams have already begun prevention activities at some level in their communities. Of these activities, nine are in the planning phase, eight are in the implementation phase, two are ongoing and four were completed. Local teams conducted infant safe sleep education activities in eight counties. The other 13 counties focused on a range of prevention activities including work toward preventing accidental injuries, motor vehicle crashes, suicides and prescription drug overdose.

Local Child Fatality Data Reports

Per C.R.S. 25-20.5-407 (1)(m), the CFPS staff provided an annual data report to each local child fatality review team summarizing the child fatality data entered into the web-based data collection system. The purpose of the Local Child Fatality Data Reports is to help the local child fatality review teams understand aggregated local child death circumstance data. This data is used to inform decisions about prevention strategies to implement at the local level. In addition, the data will help local child fatality review teams identify modifiable risk factors of child death and help to answer the following questions:

- What are the risk factors that cause child deaths or make children more susceptible to harm?

- Which risk factors can be modified or impacted?
- What is the extent of the problem and who does it most impact?
- Which children are most at risk and why?

The answers to these questions will inform prevention strategies across the socio-ecological model including the individual, interpersonal, organizational, community and societal levels. At the end of the reports, there are resources and guidance for which evidence-based, best practice prevention strategies to implement based on the leading causes of death that occurred in that particular county.

In order to support the local child fatality review teams to conduct individual, case-specific reviews of child fatalities and to implement local-level prevention initiatives, approximately \$323,000 was allocated to local review teams in Fiscal Year 2015.

To obtain child fatality data about a specific county or region in Colorado, contact the CFPS staff by emailing: support@cfps.freshdesk.com.

Child Fatality Prevention System Evaluation

Staff at CDPHE continue to implement the first year of the CFPS evaluation plan to accomplish the goals of the evaluation:

- A process evaluation of how the CFPS is implemented in order to provide data for continuous quality improvement during implementation and maintenance of the system and evidence-based recommendations for implementing and running a statewide CFPS.
- An outcome evaluation of the CFPS with a particular focus on how successful CFPS is at

producing actionable prevention recommendations and the actions taken as a result of these recommendations.

The Year One CFPS Evaluation Report is expected to be completed during summer 2015 and will include analyzed data collected from the CFPS State Review Team and local child fatality review teams. In addition, the report will include data collected from the CFPS Technical Assistance Tracking Form and Prevention Strategies Tracking Form. The report will be disseminated to CFPS evaluation stakeholders and will be posted on the CFPS website: <http://www.cochildfatalityprevention.com/p/evaluation.html>.



CONCLUSION

Since 1989, the CFPS State Review Team has been conducting retrospective reviews of child deaths in Colorado to describe trends and patterns of preventable child deaths in Colorado and to identify prevention strategies.

The Child Fatality Prevention System (CFPS) is a statewide, multidisciplinary, multi-agency effort to prevent child deaths. Since 1989, the CFPS State Review Team has been conducting retrospective reviews of child deaths in Colorado to describe trends and patterns of preventable child deaths in Colorado and to identify prevention strategies.

The CFPS State Review Team brings significant medical, psychosocial, public health, legal and law enforcement expertise to the process of child fatality review. The recommendations outlined in this report represent a synthesis of prevention strategies gathered from the analysis of child fatalities in Colorado over the years and are based on best practices from around the world.

1. Mandate the use of the Centers for Disease Control and Prevention's Sudden Unexplained Infant Death Investigation Reporting Form (SUIDIRF) for law enforcement agencies and coroner offices during infant death scene investigations.
2. Mandate that hospitals develop and implement policies to provide

- education and information about infant safe sleep promotion and to require the practice and modeling of safe sleep behaviors in labor/delivery and neonatal intensive care unit (NICU) hospital settings.
3. Modify Colorado Department of Human Services' rules regulating family foster care homes to better align with the American Academy of Pediatrics (AAP) infant safe sleep recommendations, including training for foster families regarding infant safe sleep.
4. Establish a statutory requirement that allows for primary enforcement of Colorado's adult seat belt law, making it possible to stop a driver and issue a citation if anyone (the driver and all passengers in all seating positions) in the vehicle is not properly restrained.
5. Increase funding for the Office of Suicide Prevention to implement the following activities: 1) expand the *Gun Shop Project* to more counties in Colorado; 2) expand the implementation and evaluation of *Emergency Department-Counseling on Access to Lethal Means (ED-CALM)* training

- statewide; and 3) expand implementation and evaluation of school-based suicide prevention programs that promote resilience and positive youth development as protective factors from suicide statewide.
6. Support policies that impact the Colorado Essentials for Childhood priorities: 1) increase family-friendly business practices across Colorado; 2) increase access to child care and after school care; 3) increase access to preschool and full-day kindergarten; and 4) improve social and emotional health of mothers, fathers, caregivers and children.
7. Increase funding for the Colorado Consortium for Prescription Drug Abuse Prevention to promote uptake of the *Quad-Regulator Policy for Prescribing and Dispensing Opioids* through increased training and education of prescribers.
8. Increase funding to support the implementation of youth programs that promote pro-social activities, resilience and positive youth development as protective factors from child fatalities statewide.

The CFPS State Review Team is confident that child fatalities can be reduced in Colorado if these recommendations are adopted by policymakers in Colorado. These deaths can be prevented, and research on evidenced-based strategies for preventing injury- and violence-related deaths shows that changes in policy and enforcement

of existing laws are effective prevention strategies for a myriad of child deaths.

Finally, the transition of child fatality reviews to the local level will bring together multidisciplinary partners across the community to improve the child fatality data collection process and the development of strong prevention recommendations to be implemented at the community level. A connected Child Fatality Prevention System at both the state and local levels is a significant opportunity in Colorado to drive child fatality prevention strategies and systems improvements with the ultimate goal of preventing future child deaths from occurring.

The recommendations outlined in this report represent a synthesis of prevention strategies gathered from the analysis of child fatalities in Colorado over the years and are based on best practices from around the world.

REFERENCES

1. Centers for Disease Control and Prevention (CDC). (2012, January 12). *Sudden unexpected infant death and sudden infant death syndrome: Infant death scene investigation*. Retrieved from <http://www.cdc.gov/sids/SceneInvestigation.htm>
2. National Conference of State Legislatures (NCSL). (2015, March). *Sudden unexpected infant death legislation*. Retrieved from <http://www.ncsl.org/research/health/sudden-infant-death-syndrome-laws.aspx>
3. Cribs for Kids. (2015). *Cribs for kids hospital initiative*. Retrieved from <http://www.cribsforkids.org/hospitalinitiative/>
4. Blair, P. S., Platt, M. W., Smith, I. J., Fleming, P. J., & CESDI SUDI Research Group. (2006). Sudden infant death syndrome and sleeping position in pre-term and low birth weight infants: An opportunity for targeted intervention. *Archives of Disease in Childhood*, 91(2), 101-106.
5. Fleming, P. J., & Blair, P. S. (2003). Sudden unexpected deaths after discharge from the neonatal intensive care unit. *Seminars in Fetal and Neonatal Medicine*, 8(2), 159-167.
6. National Conference of State Legislatures (NCSL). (2015, March). *Sudden unexpected infant death legislation*. Retrieved from <http://www.ncsl.org/research/health/sudden-infant-death-syndrome-laws.aspx>
7. Task Force on Sudden Infant Death Syndrome. (2011). SIDS and other sleep-related infant deaths: Expansion of recommendations for a safe infant sleep environment. *Pediatrics*, 128(5), e1341-e1367. doi: 10.1542/peds.2011-2285
8. Colorado Department of Human Services. (2012). *Rules regulating family foster care homes*. Retrieved from <http://www.sos.state.co.us/pubs/CCR/CCRHome.html>
9. Colorado Department of Human Services. (2012). *Rules regulating child placement agencies*. Retrieved from <http://www.sos.state.co.us/pubs/CCR/CCRHome.html>
10. Centers for Disease Control and Prevention National Center for Injury Prevention and Control. (2011, January 4). *CDC vital signs: Adult seat belt use*. Retrieved from <http://www.cdc.gov/vitalsigns/SeatBeltUse/>
11. Nichols, J. L. & Ledingham, K. A. (2008). *The Impact of Legislation, Enforcement, and Sanctions on Safety Belt Use*. (NCHRP Report 601). Washington, DC: Transportation Research Board. Retrieved from http://onlinepubs.trb.org/onlinepubs/nchrp_rpt_601.pdf
12. Dihn-Zarr, T. B., Sleet, D. A., Shults, R. A., Zaza, S., Elder, R. W., Nichols, J. L.,...Task Force on Community Preventive Services. (2001). Reviews of evidence regarding interventions to increase the use of safety belts. *American Journal of Preventive Medicine*, 21(4S), 48-65.
13. Governors Highway Safety Association. (2015, May). *Seat belt laws May 2015*. Retrieved from http://www.ghsa.org/html/stateinfo/laws/seatbelt_laws.html
14. Colorado Department of Transportation. *Colorado Strategic Highway Safety Plan. October 2014*. Retrieved from: <https://www.codot.gov/safety/safety-data-sources-information/safety-plans/colorado-strategic-highway-safety-plan/view>
15. National Highway Traffic Safety Administration. (2006). *2006 Motor Vehicle Occupant Protection Facts*. Retrieved from <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0CB8QFjAA&url=http%3A%2F%2Fwww.nhtsa.gov%2FDOT%2FNHTSA%2FTraffic%2520Injury%2520Control%2FArticles%2FAssociated%2520Files%2F810654.pdf&ei=B1pKVfCmBILYtQWlqYGADg&usg=AFQjCNHbVzaQDVnFP7ZB2onnANENLAWCqw&bvm=bv.92291466,d.b2w>
16. Colorado Department of Transportation. *Colorado Problem Identification Report Fiscal Year 2015*. Retrieved from <https://www.codot.gov/safety/safety-data-sources-information/colorado-problem-identification-id-reports/2015-problem-identification-id-report/view>
17. Centers for Disease Control and Prevention. (2014). *Injury prevention and control: Data and statistics (WISQARS): Cost of injury reports*. Retrieved from <http://www.cdc.gov/injury/wisqars/index.html>
18. Colorado State University. (2013). 2013 Colorado Statewide Seat Belt Survey.
19. National Highway Traffic Safety Administration. (2013). *Seat belt use in 2013—Overall results*. Retrieved from <http://www-nrd.nhtsa.dot.gov/pubs/811875.pdf>
20. National Highway Traffic Safety Administration. (2009, May). *The increase in lives saved, injuries prevented, and cost savings if seat belt use rose to at least 90 percent in all states*. Retrieved from <http://www-nrd.nhtsa.dot.gov/Pubs/811140.PDF>
21. National Highway Traffic Safety Administration. (2007). *Estimated minimum savings to the Medicaid budget in Colorado by implementing a primary seat belt law*. Retrieved from <http://www.nhtsa.gov/Driving+Safety/Research+&+Evaluation/Estimated+Minimum+Savings+to+the+Medicaid+Budget+by+Implementing+a+Primary+Seat+Belt+Law>
22. American Association of Suicidology. (2014). *Facts, statistics and current research*. Retrieved from <http://www.suicidology.org/resources/facts-statistics-current-research>
23. Colorado Department of Public Health and Environment. (2006). *Bold steps toward child and adolescent health: A plan for youth violence prevention in Colorado*. Retrieved from <http://cospl.coalition.org/fedora/repository/co:1583>
24. Colorado Department of Public Health and Environment. (2014). *Office of suicide prevention annual report: Suicide prevention in Colorado 2013-2014*. Retrieved from <https://www.colorado.gov/cdphe/categories/services-and-information/health/prevention-and-wellness/suicide-prevention>
25. Barber C. W., & Miller, M. J. (2014). Reducing a suicidal person's access to lethal means of suicide: A research agenda. *American Journal of Preventive Medicine*, 47(3 Suppl 2), S264-72.
26. Colorado Department of Public Health and Environment. (2006). *Bold steps toward child and adolescent health: A plan for youth violence prevention in Colorado*. Retrieved from <http://cospl.coalition.org/fedora/repository/co:1583>
27. Suicide Prevention Resource Center (SPRC). (2015). *Section I: Evidence-based programs*. Retrieved from <http://www.sprc.org/bpr/section-i-evidence-based-programs>

28. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Division of Violence Prevention. (2014). *Essentials for childhood: Step to create safe, stable, nurturing relationships and environments*. Retrieved from http://www.cdc.gov/violenceprevention/pdf/essentials_for_childhood_framework.pdf
29. Centers for Disease Control and Prevention (CDC). (2013). Injury prevention and control: Data and statistics: Web-based injury statistics query and reporting system (WISQARS). Retrieved from <http://www.cdc.gov/injury/wisqars/>
30. Colorado Consortium for Prescription Drug Prevention. (2013). *Colorado plan to reduce prescription drug abuse*. Retrieved from <http://www.corxconsortium.org>
31. Colorado Department of Public Health and Environment. (2006). *Bold steps toward child and adolescent health: A plan for youth violence prevention in Colorado*. Retrieved from <http://cospl.coalition.org/fedora/repository/co:1583>
32. Wilkins, N., Tsao, B., Hertz, M., Davis, R., & Klevens, J. (2014). *Connecting the dots: An overview of the links among multiple forms of violence*. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention Oakland, CA: Prevention Institute.
33. David-Ferdon C, & Simon TR.(2014). *Preventing youth violence: Opportunities for action*. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.
34. Colorado Child Fatality Prevention System. (2014). *Fiscal year 2014 Colorado Child Fatality Prevention System (CFPS) Annual Report*. Retrieved from <https://www.colorado.gov/pacific/cdphe/cfps-data-and-information>
35. Colorado Department of Human Services. (2014). *Child welfare 2.0*. Retrieved from <http://www.colorado.gov/cs/Satellite/CDHS-Main/CBON/1251639305644>
36. Campaign for Tobacco-Free Kids. (2015). State cigarette excise tax rates and rankings. Retrieved from <http://www.tobaccofreekids.org/research/factsheets/pdf/0097.pdf>
37. Colorado Department of Transportation. (2014). *Colorado CPS law*. Retrieved from <http://www.coloradodot.info/programs/seatbelts-carseats/carseats/parents/colorado-cps-law.html>
38. Power, T. J. (2003). Promoting children's mental health: Reform through interdisciplinary and community partnerships. *School Psychology Review*, 32(1), 3-16.
39. Power, T. J. (2003). *Promoting children's health: Integrating school, family, and community*. New York: Guilford Press.



Sudden Unexpected Infant Death in Colorado, 2009-2013



Sudden unexpected infant deaths (SUIDs), also referred to as sleep-related infant deaths, are fatalities of infants under one year of age that occur suddenly and unexpectedly in sleep environments. SUIDs include sudden infant death syndrome (SIDS), accidental suffocation, positional asphyxia and overlays, as well as deaths occurring in sleep environments that are due to undetermined causes.

Between 2009 and 2013, there were 263 SUIDs that occurred in Colorado, accounting for 13.4 percent of all infant deaths. There were 28 fewer SUIDs in 2013 compared to 2009, or a 40.0 percent decrease in SUIDs (Figure A.1).

Among the 263 SUIDs, 35.7 percent (94) were classified as Sudden Infant Death Syndrome (SIDS), 34.6 (91) percent as asphyxia, 25.1 percent (66) as undetermined, and 4.6 percent (12) as other causes, such as prematurity or pneumonia (Figure A.2). Over recent years, deaths related to SIDS have decreased, while asphyxia and undetermined deaths have increased slightly. This is due to a shift in how these types of death are classified by medical examiners and coroners. The diagnostic shift may be the result of more thorough death scene investigations, increasing the number of deaths being classified as asphyxia or undetermined.

Demographics

Forty-eight percent (125) of the SUIDs occurred among children ages 2-4 months, and 55.5 percent (146) of the SUIDs were male. Hispanic infants represented 32.3 percent (85) of the SUIDs (Figure A.3).

Figure A.1: Number of sudden unexpected infant deaths in Colorado per year from 2009-2013 (n=263).

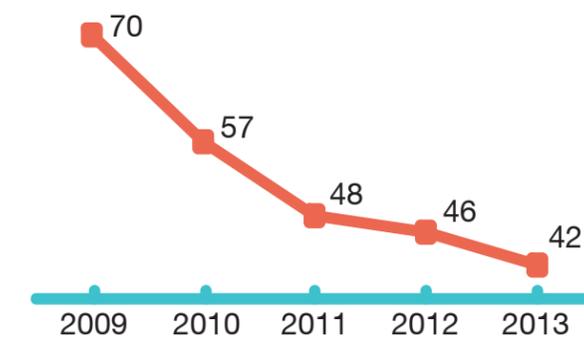


Figure A.2: Colorado sudden unexpected infant death occurrences by cause of death, 2009-2013 (n = 263).

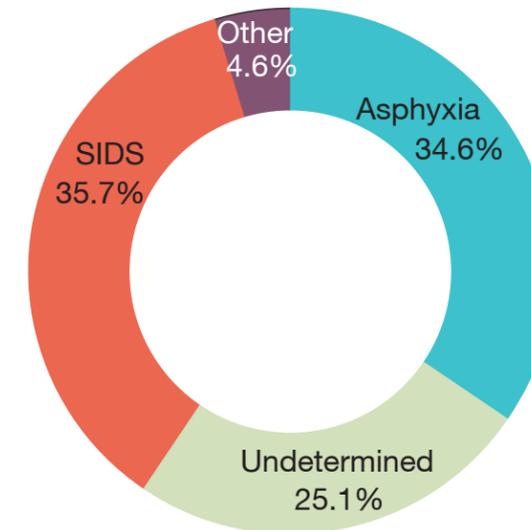


Figure A.3: Demographics of sudden unexpected infant death cases in Colorado from 2009-2013 (n=263).



Risk Factors

The American Academy of Pediatrics (AAP) developed a list of infant safe sleep recommendations to help reduce the risk of SUIDs.^{A1}

Level A Recommendations:

- Back to sleep for every sleep
- Use a firm sleep surface
- Room-sharing without bed-sharing is recommended
- Keep soft objects and loose bedding out of the crib
- Pregnant women should receive regular prenatal care
- Avoid smoke exposure during pregnancy and after birth
- Avoid alcohol and illicit drug use during pregnancy and after birth
- Breastfeeding is recommended
- Consider offering a pacifier at nap time and bedtime
- Avoid overheating
- Do not use home cardiorespiratory monitors as a strategy for reducing the risk of SIDS
- Expand the national campaign to reduce the risks of SIDS to include a major focus on the safe sleep environment and ways to reduce the risks of all sleep-related infant deaths, including SIDS, suffocation, and other accidental deaths; pediatricians, family physicians, and other primary care providers should actively participate in this campaign

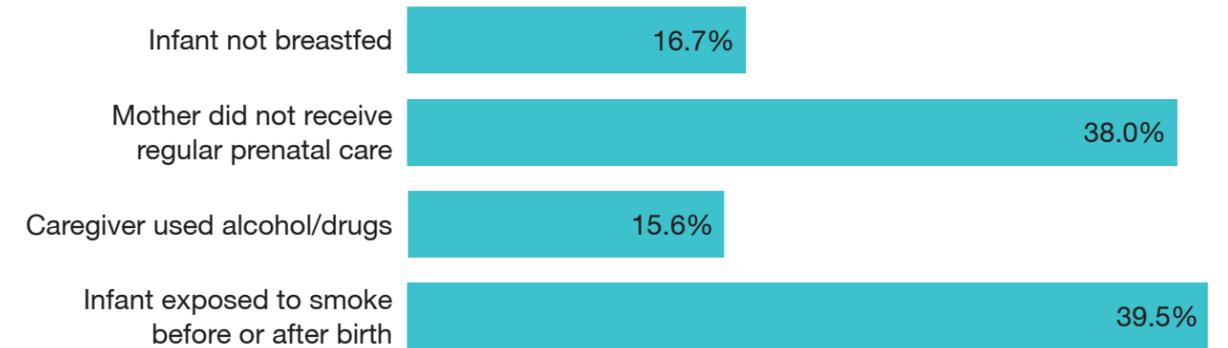
None of the 263 infants who died between 2009 and 2013 met all of the AAP's Level A Recommendations with known data for a safe sleep environment.

<p>Sleep Surface</p> <p>The AAP defines a safe infant sleep location as a safety-approved crib or bassinet with a firm mattress and tight-fitting sheet.</p> <p>67 of the SUIDs occurred on an unsafe sleep surface. PERCENT 176/263</p>	<p>Sleep Position</p> <p>The AAP recommends that infants should always be placed to sleep on their backs.</p> <p>26 of the SUIDs were put to sleep on their side or stomach. PERCENT 67/263</p>
<p>Soft Bedding</p> <p>According to the AAP, soft bedding such as pillows, blankets, stuffed animals, crib bumpers and comforters should be removed from the infant's sleep place to prevent suffocation.</p> <p>52 of the SUIDs were found in a sleep place with soft bedding. PERCENT 136/263</p>	<p>Bed-sharing</p> <p>The AAP recommends that infants share the same room as an adult, but that they sleep on a surface separate from adults or other children.</p> <p>45 of the SUIDs died while sleeping on the same surface with an adult or another child. PERCENT 117/263</p>

Caregiver Information

According to the AAP, mothers who do not breastfeed, do not receive regular prenatal care and smoke during or after pregnancy put their infant at increased risk for SUID. Of the 263 SUIDs between 2009 and 2013, 16.7 percent (44) of mothers were known not to breastfeed, 38.0 percent (100) did not receive prenatal care (at least nine prenatal visits) and 39.5 percent (104) smoked either during pregnancy or exposed their infant to secondhand smoke (Figure A.4). Additionally, investigation reports indicated that 15.6 percent (41) of the caregivers/supervisors used alcohol or drugs either during pregnancy or at the time of the incident (Figure A.4). Five percent (14) of the caregivers/supervisors were known to be drug impaired at the time of the incident and 7.2 percent (19) were known to be alcohol impaired at the time of the incident.

Figure A.4: Risk factors related to caregivers and supervisors of sudden unexpected infant deaths in Colorado (n=263).



Sudden Unexpected Infant Death in Child Care Environments

Between 2009 and 2013, 14 of the 263 SUIDs (5.3 percent) occurred in a child care environment. Eighty-six percent (12) of the 14 SUIDs occurred in licensed child care centers or homes. Eighty-six percent (12) of the 14 SUIDs occurred in child care homes (as defined by C.R.S. 26-6-102 (4)).

The average age of the supervisors in the 14 child care environments was 41 years old. Twenty-nine percent (4) of the infants were placed to sleep with soft bedding. Four (28.6 percent) of the 14 SUIDs in a child care environment occurred in Adams County and three (21.4 percent) occurred in Denver County.

^{A1}Task Force on Sudden Infant Death Syndrome. (2011). SIDS and other sleep-related infant deaths: Expansion of recommendations for a safe infant sleep environment. *Pediatrics*, 128(5), e1341-e1367. doi: 10.1542/peds.2011-2285

Child and Youth Motor Vehicle Fatalities in Colorado, 2009-2013



Between 2009 and 2013, there were a total of 220 motor vehicle related fatalities among children ages 0 to 17 years in Colorado. Motor vehicle related fatalities include drivers and passengers in motor vehicles, bicyclists struck by a motor vehicle and pedestrians struck by a motor vehicle. A motor vehicle can be a passenger vehicle (i.e. car, van, sports utility vehicle or truck), airplane, train, farming equipment or recreational vehicle, such as an all terrain vehicle (ATV) or snowmobile. Sixty-seven percent (147) of the 220 children who died were passenger vehicle occupants (driver or passenger) and 18.2 percent (40) of the 220 children who died were pedestrians (Figure B.1). Coroners determined 98.2 percent (216) of the 220 motor vehicle related fatalities as accidental manner. Coroners determined the remaining fatalities as undetermined, homicide or suicidal manner. The number of children who died in motor vehicle related incidents increased by 15.9 percent between 2009 and 2013 (Figure B.2).

Figure B.1: Number of children, ages 0 to 17, who died in a motor vehicle-related incident in Colorado per year, 2009-2013, (n=220).

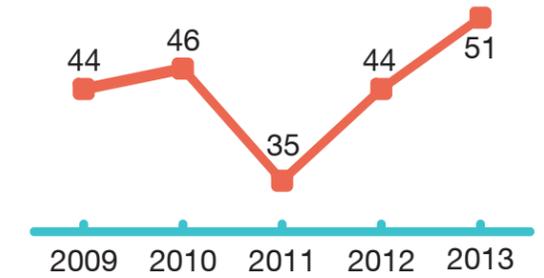
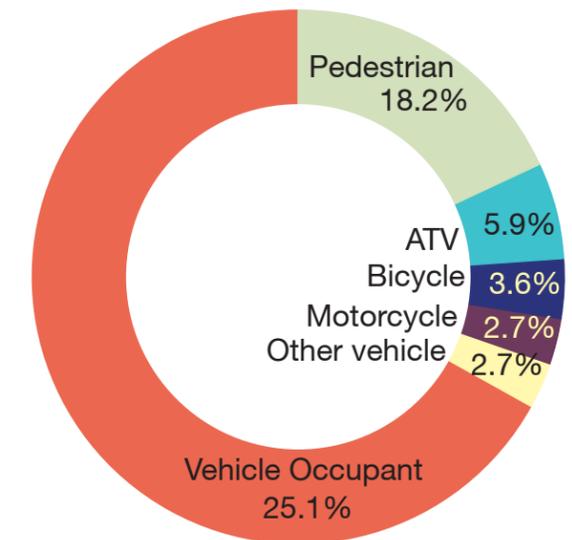


Figure B.2: Position of child in fatal motor vehicle crash in Colorado, 2009-2013 (n=220).



Demographics

Forty-five percent (99) of the 220 children who died in motor vehicle related incidents were between the ages of 15 and 17 years and 61.4 percent (135) were male. Hispanic children, ages 0-17 years, represented 39.6 percent (87) of the motor vehicle fatalities (Figure B.3). Forty percent (88) of the 220 motor vehicle crashes occurred on a highway, while 24.6 percent (54) occurred on a city street. The road conditions were considered normal for 68.6 percent (151) of the crashes.

Figure B.3: Demographics of the children who died in motor vehicle crashes in Colorado from 2009-2013 (n=220).



Teen Drivers

In 2004, Colorado strengthened its Graduated Driver Licensing (GDL) law to require passenger restrictions and nighttime curfews. While Colorado experienced a 63 percent reduction in deaths of teens ages 15-19 between 2004 and 2012, there is still work to be done.^{B1} Between 2009 and 2013, there were 70 teens, ages 14 to 18 years, involved in a motor vehicle crash that resulted in their own death or the death of another child.



Restraint Use

Increasing seat belt use is the single most effective way to save lives and reduce injuries in crashes on Colorado roadways. Studies have affirmed that seat belts are 45 to 65 percent effective in preventing fatal injuries and reducing the risk of severe injuries.^{B2} Colorado's child passenger safety law requires^{B3}:

- Children to be in a rear-facing car seat until 1 year of age;
- Children ages 1 to 3 years to be secured in a rear or forward-facing car seat, depending upon their height and weight;
- Children ages 4 to 7 years to be secured in a forward-facing car seat or booster seat, depending upon their height and weight;
- Children ages 8 to 16 years to correctly use a booster seat or lap and shoulder seat belt.

Of the 147 children who died in a passenger vehicle crash, 127 (86.3 percent) had known data on restraint use. Sixty-percent (76) of those 127 children were unrestrained. Additionally, 33.3 percent (8) of 0 to 7 year olds were improperly restrained. Table B.1 shows that the percent of unrestrained fatalities increases with age.

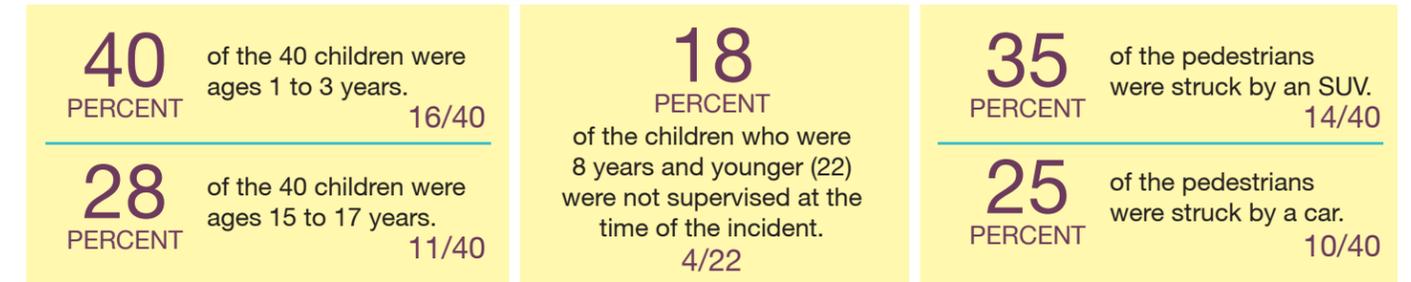
Table B.1: Percent of children (with known restraint use) unrestrained or improperly restrained who died in a passenger vehicle in Colorado by age group, 2009-2013 (n = 127).

Age Group (years)	Number of Deaths	Type of Restraint Required by Law	Unrestrained		Improperly Restrained	
			n	Percent	n	Percent
0-3	13	Car Seat	2	15.4	6	46.2
4-7	11	Car Seat or Booster Seat	8	72.2	2	18.2
8-17	103	Booster Seat or Safety Belt	66	64.1	2	1.9

Data Source: Child Fatality Prevention System

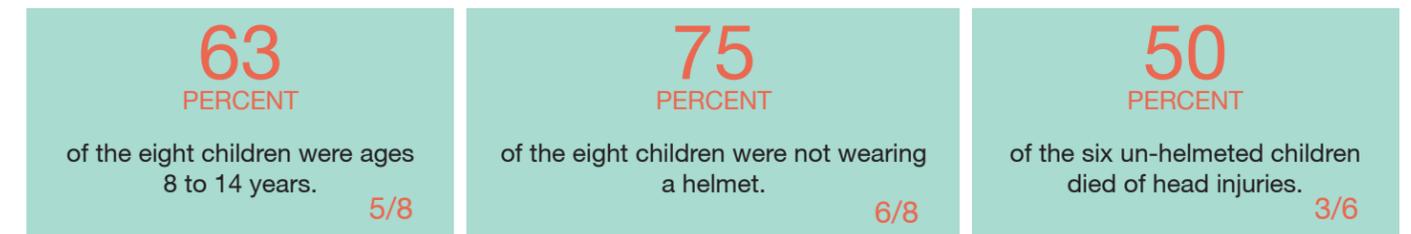
Pedestrians

There were 40 pedestrian child fatalities between 2009 and 2013 in Colorado.



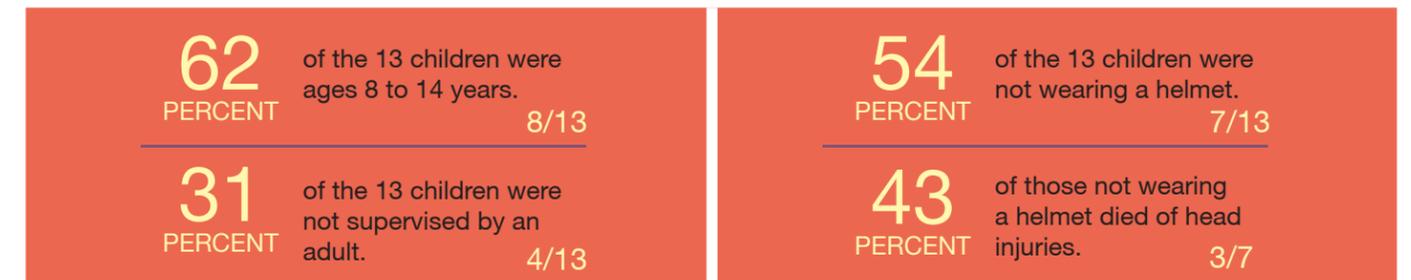
Bicyclists

Between 2009 and 2013, eight children who were riding a bicycle or tricycle were struck and killed by a motor vehicle.



ATV Crashes

Thirteen children were killed in ATV crashes between 2009 and 2013. Six of the ATV crashes were in 2013.



^{B1} Colorado Department of Public Health and Environment. (2011). Colorado health information dataset: Death data statistics. Retrieved from http://www.chd.dphe.state.co.us/cohid/topics.aspx?q=Death_Data

^{B2} National Highway Traffic Safety Administration. (2006). Primary enforcement saves lives: The case for upgrading secondary safety belt laws. Retrieved from <http://www.nhtsa.gov/people/injury/enforce/Primary-Enforcement/images/PrimaryEnforcement.pdf>

^{B3} Colorado Department of Transportation. (2014). Colorado CPS law. Retrieved from <http://www.coloradodot.info/programs/seatbelts-carseats/car-seats/parents/colorado-cps-law.html>

Youth Suicide Fatalities in Colorado, 2009-2013



Suicide is the leading cause of death for youth ages 10 to 17 years. Between 2009 and 2013, the Child Fatality Prevention System (CFPS) identified 165 children who died by suicide in Colorado. From 2010 to 2013, the number of youth suicides increased from 26 in 2010 to 39 in 2013, a 50.0 percent increase (Figure C.1).

Demographics

Males account for the greatest percentage of youth suicides (112, 67.9 percent). This is largely due to the fact that females are more likely to use less lethal means (i.e. poisoning) in a suicide attempt compared to males who often use highly lethal means (i.e. firearms).^{C1} Additionally, 65.5 percent (108) of the 165 youth who died by suicide were between ages 15 and 17 years (Figure C.2).

Figure C.1: Number of children who died by suicide per year in Colorado, 2009-2013 (n=165).

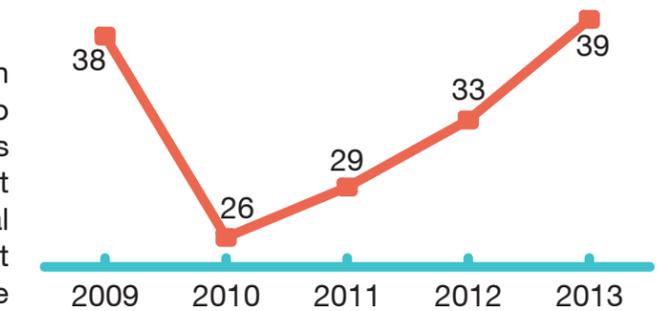
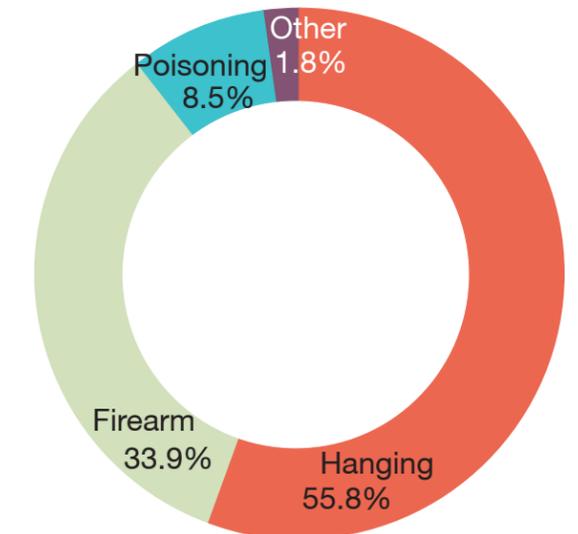


Figure C.3: Suicide fatalities in Colorado by means, 2009-2013 (n=165).

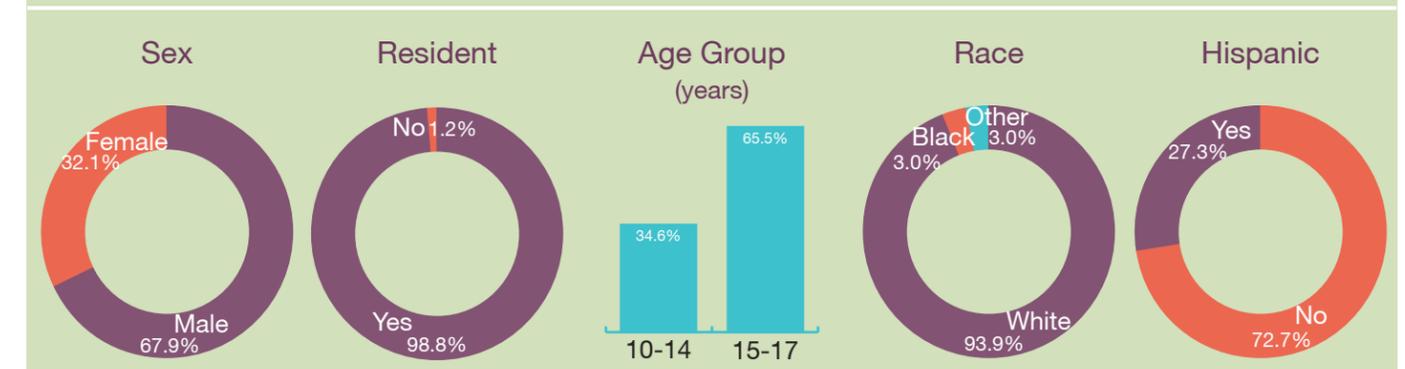


Suicide Methods

Fifty-six percent (92) of the 165 youth who died by suicide died by hanging, 33.9 percent (56) died of firearm-related injuries and 8.5 percent (14) died of poisoning or drug overdose (Figure C.3). Suicide deaths among males (112) involve a firearm 43.8 percent (49) of the time, compared to only 13.2 percent (7) of the suicide deaths among females (53).



Figure C.2: Demographics of children who died by suicide per year in Colorado, 2009-2013 (n=165).



Firearms

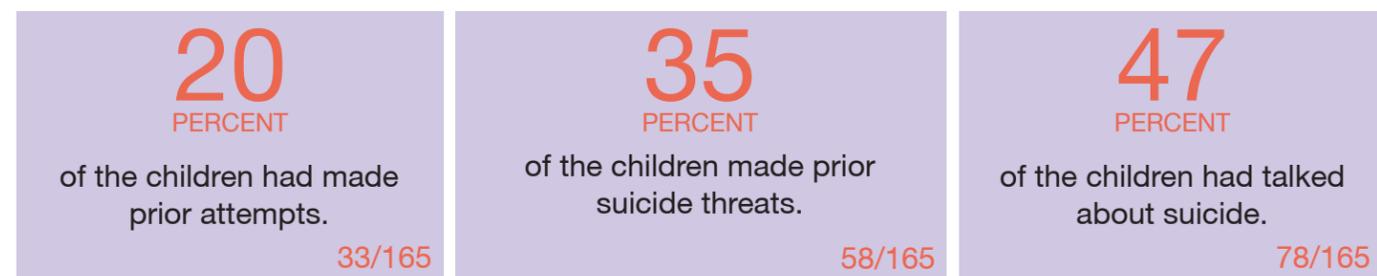
Thirty-four percent (56) of the 156 youth suicide deaths between 2009 and 2013 involved a firearm. Sixty-one percent (34) of the 56 firearms used in the suicide deaths were owned by a biological parent, stepparent of the child or mother's partner.

While 19.6 percent (11) of the 56 firearms were known to be stored in a locked place, 42.9 percent (24) were stored unlocked. In 37.5 percent (21) of the 56 fatalities, the storage place of the firearm was unknown. In 17.9 percent (10) of the 56 fatalities, the firearms were known to be stored loaded.

Restricting access to lethal means is one of the most effective strategies to prevent youth suicides.^{C2} It is critically important that parents, who are concerned that their child might be feeling suicidal, reduce easy access to lethal means, including firearms, medications and alcohol.

Suicide Circumstances

A review of the known circumstances surrounding youth suicides between 2009 and 2013 revealed that most children demonstrated one or more warning signs before they died by suicide (Table C.1). Of the 165 suicide deaths, 20.0 percent (33) of the children had made prior attempts, 35.2 percent (58) made prior suicide threats and 47.3 percent (78) had talked about suicide.



Positive community environment and support, family and peer connectedness, school connectedness and positive relationships can help youth build resiliency.^{C3} However, many of the 165 youth who died by suicide lacked these protective factors that would make it less likely for the youth to consider, attempt or die by suicide. Leading up to the incident, 30.3 percent (50) of the 165 youth had an argument with a caregiver; and 26.1 percent (43) of the 165 youth were dealing with family discord. Additionally, 24.9 percent (41) of the 165 youth had a history of child maltreatment as a victim (as documented in county department of human services or law enforcement reports) and 12.7 percent (21) of the 165 youth were physically abused.

Mental health treatment may help prevent youth suicides. Of the 165 youth who completed suicide, 34.6 percent (57) had received prior mental health services and only 17.0 percent (28) were receiving mental health services at the time of the incident (Table C.1). Five percent (9) of the youth had issues preventing them from receiving mental health services, such as not being able to afford the services or an unwillingness to receive the services. Investigation reports indicated that 9.1 percent (15) of the youth who died by suicide were known to have a history of depression.

Table C.1: Circumstances of youth suicides in Colorado, 2009 - 2013 (n=165).

	Known		Unknown*	
	n	Percent	n	Percent
History				
Child talked about suicide	78	47.3	25	15.2
Prior suicide threats were made	58	35.2	32	19.4
Prior attempts were made	33	20.0	58	35.2
Child had history of running away	19	11.5	46	27.9
Child had history of self mutilation	33	20.0	50	30.3
Family history of suicide	14	8.5	83	50.3
History of child maltreatment as a victim	41	24.9	62	37.6
Physically abused	21	12.7	-	-
Substance use	38	23.0	55	33.3
Depression	15	9.1	-	-
Adverse Experiences				
Argument with caregivers	50	30.3	-	-
Family discord	43	26.1	-	-
School failure	28	17.0	-	-
Breakup with boyfriend/girlfriend	33	20.0	-	-
Mental Health Services				
Received prior mental health services	57	34.6	45	27.3
Receiving mental health services at time of incident	28	17.0	49	29.7
On medications for mental illness	28	17.0	45	27.3
Had issues preventing them from receiving mental health services	8	4.9	37	22.4

* Some questions do not have an unknown option.

Data Source: Child Fatality Prevention System

^{C1} American Association of Suicidology. (2014). Facts, statistics and current research. Retrieved from <http://www.suicidology.org/resources/facts-statistics-current-research>

^{C2} Barber C. W., & Miller, M. J. (2014). Reducing a suicidal person's access to lethal means of suicide: A research agenda. *American Journal of Preventive Medicine*, 47(3 Suppl 2), S264-72.

^{C3} Colorado Department of Public Health and Environment. (2006). Bold steps toward child and adolescent health: A plan for youth violence prevention in Colorado. Retrieved from <http://cospl.coalliance.org/fedora/repository/co:1583>

Child Maltreatment Fatalities in Colorado, 2009-2013

Preface: Child Fatality Prevention System Definition of Child Maltreatment

When conducting case-specific, multidisciplinary reviews of child fatalities that occur in Colorado, the Child Fatality Prevention System (CFPS) State Review Team discusses whether any acts of omission or commission caused or contributed to the death. The team members collectively decide, using available information, if they believe that any human action or inaction caused (i.e., directly) and/or substantially contributed (i.e., indirectly) to the death of the child. The direct cause of death refers to an act that was the primary event leading directly to the death. The contributing cause of death refers to an act that plays a role, but not the primary role, in the child's death. This discussion is especially important because it provides information about any human behaviors that may be involved in the child's death. In addition, this information may be critical to the prevention of both intentional and unintentional deaths because the CFPS State Review Team makes this determination for every preventable child fatality that is reviewed.

If the CFPS State Review Team determines an act of omission or commission occurred, the team will then decide which act caused or contributed to the death. As part of this process, the team has the ability to select child abuse or child neglect as options. For the purpose of a public health-focused child fatality review process, child maltreatment (inclusive of both child abuse and child neglect) is defined as an act or failure to act on the part of a parent or caregiver. Child abuse includes physical abuse (any non-accidental act that results in physical injury or imminent risk of harm such as abusive head trauma, chronic battered child syndrome, beating/kicking, scalding/burning and Munchausen Syndrome by Proxy), emotional abuse (verbal assault, belittling, threats and blaming) or sexual abuse (a single or series of sexual assaults or sexual exploitation). Child neglect includes failure to protect from hazards, failure to provide necessities, failure to seek/follow treatment, emotional neglect or abandonment.^{D1}

Although Colorado's Children's Code (C.R.S. 19-1-103 (1)) and legal definitions of child abuse and child neglect serve as guidance for the CFPS State Review Team, the final decision on whether to record an act of omission or commission is based on available information and professional judgments made by the multidisciplinary CFPS State Review Team. This team includes representatives from departments of human services. The decision to document an act of omission or commission as child abuse or child neglect does not have legal ramifications. The determination is subjective opinion on the part of the CFPS State Review Team and does not trigger any prosecution or action on the part of departments of human services. As such, fatalities classified as child maltreatment by the CFPS State Review Team will not be reflective of official counts of child abuse or child neglect fatalities reported by the Colorado Department of Human Service (CDHS). Additionally, some of these fatalities do not meet the criteria for review by the CDHS Child Fatality Review Team. This is because deaths of children with no previous involvement with county departments of human services prior to the fatality or deaths of children where child maltreatment was not the direct cause of death do not meet the CDHS Child Fatality Review Team review criteria.

Regardless of whether the child fatality was substantiated as child maltreatment by human services, it is critical for the CFPS to identify and aggregate the circumstances, using a public health framework, involved in an array of child maltreatment deaths to develop child maltreatment prevention recommendations. In doing so, the CFPS applies the public health approach to achieve a better understanding of child maltreatment death and improve its ability to prevent these deaths.^{D2} The purpose of the CFPS is to interpret trends, common risk factors and multiple variables among all potential child maltreatment fatalities in order to develop strategies that will prevent the occurrence of abuse and neglect before it happens. This will impact a broad population of children in Colorado rather than targeting efforts only towards children at-risk of being maltreated or mitigating the effects of serious maltreatment that has already occurred.



From 2009-2013, the CFPS State Review Team identified 220 fatalities where child maltreatment caused and/or contributed to the child's death. Figure D.1 shows the number of child maltreatment fatalities identified by the CFPS State Review Team from 2009 to 2013. While the number of fatalities steadily increased between 2009 and 2011, there was a 49.2 percent decrease between 2011 and 2013 (Figure D.1).

Although the CFPS State Review Team and county departments of human services define child abuse and neglect fatalities differently, county departments of human services substantiated 153 (69.5 percent) of the 220 fatalities for maltreatment and 62 (40.5 percent) of the 153 met statutory criteria for CDHS Child Fatality Review Team review (Figure D.2). The remaining 67 (30.5 percent) of the 220 child maltreatment fatalities were identified as child maltreatment fatalities solely by the CFPS State Review Team using team judgment. These 67 fatalities were either not reported to county departments of human services or the incident did not meet the statutory definition for substantiated maltreatment.

Demographics

Infants under age one and children ages 1 to 4 years were more likely to die as the result of child maltreatment than all other age groups (Figure D.3). Additionally, 37.3 percent (82) of the children who died from child maltreatment were Hispanic.

Figure D.1: Number of child maltreatment fatalities in Colorado identified by CFPS by year from 2009-2013 (n=220).

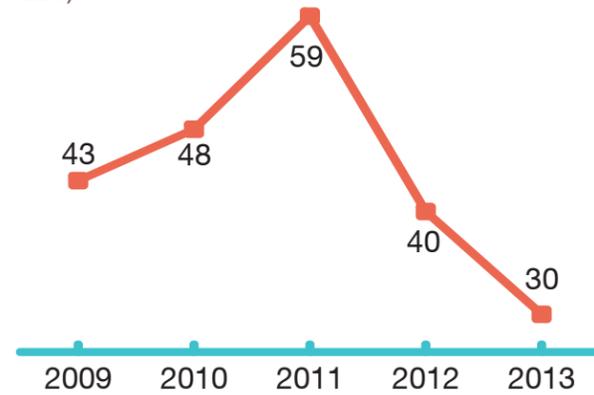


Figure D.2: Number of child maltreatment fatalities in Colorado identified by CFPS from 2009-2013 (n=220).

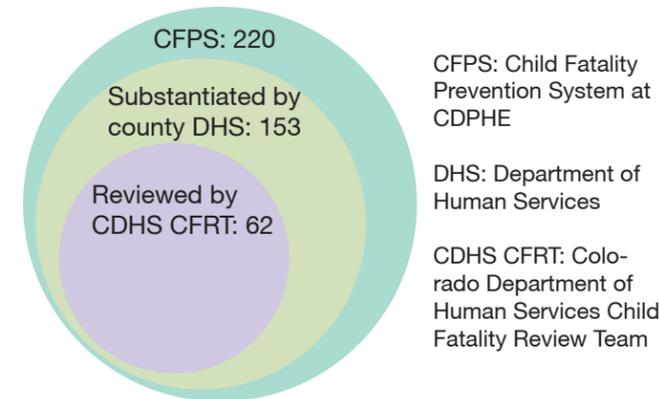


Figure D.3: Demographics of child maltreatment fatalities identified by CFPS in Colorado from 2009-2013 (n=220).

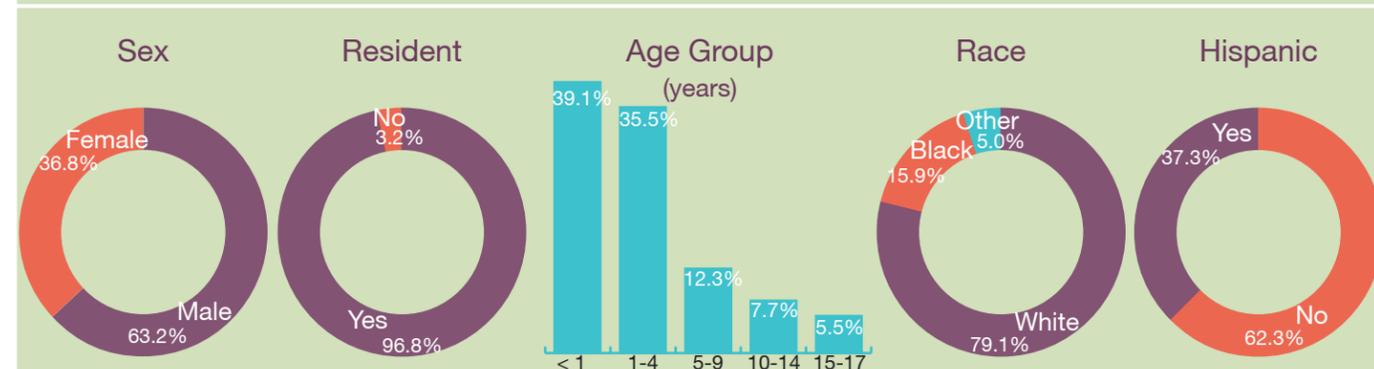


Table D.1 shows the details of circumstances that caused or contributed to the child maltreatment fatalities that were identified by the CFPS State Review Team. Of the 220 child maltreatment fatalities, 37.3 percent (82) were homicide manner of death. Thirty-nine percent (86) were accidental manner of death, such as motor vehicle or drowning incidents, and 4.1 percent (9) were suicide manner of death.

Abuse caused or contributed to 106 of the 220 child maltreatment fatalities. Seventy percent (109) of the 106 fatalities were caused by physical abuse (48.2 percent).

Neglect caused or contributed to 140 of the 220 child maltreatment fatalities. Eighty-two percent (115) of the 140 fatalities were due to failure to protect the child from hazards. For example, neglect may have been determined by the CFPS State Review Team in these fatalities because the parent or caregiver failed to protect the child from hazards by not using appropriate child passenger restraints or through poor or inadequate supervision of the child.

Table D.1: Details of circumstances that caused or contributed to the child maltreatment fatalities identified by the Child Fatality Prevention System in Colorado from 2009-2013 (n = 220).

	n	Percent
Manner		
Accident	86	39.1
Homicide	82	37.3
Natural	8	3.6
Suicide	9	4.1
Undetermined	35	15.9
Maltreatment Type		
Abuse (n=106)		
Physical	105	99.1
Emotional	4	3.8
Sexual	*	*
Neglect (n=140)		
Failure to protect from hazards	115	82.1
Failure to provide necessities	3	2.1
Failure to provide food	*	*
Failure to provide shelter	3	2.1
Failure to seek/follow medical treatment	19	13.6
Emotional neglect	*	*
Abandonment	0	0.0
Unknown	0	0.0

*Indicates fewer than three deaths in that category
 Data Source: Child Fatality Prevention System

Figure D.4: History of child maltreatment as a victim for child maltreatment fatalities in Colorado identified by CFPS, 2009-2013 (n=220).

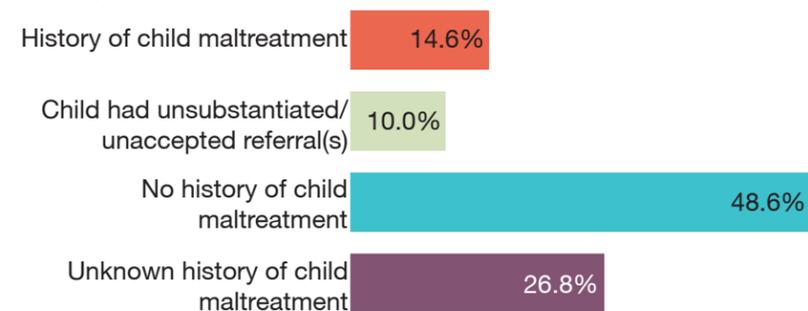


Figure D.4 shows the history of child maltreatment as a victim for the child maltreatment fatalities. Of the 220 child maltreatment fatalities, 32 (14.6 percent) had a history of child maltreatment identified either from law enforcement, hospital, or autopsy reports or a substantiated assessment from county department of human services. Ten percent (22) of the 220 children had one or more unsubstantiated or unaccepted referral(s) (Figure D.4).

Perpetrators

Table D.2 shows the type of perpetrators for the child maltreatment fatalities. The CFPS State Review Team is able to identify up to two perpetrators per child. For the 220 child maltreatment fatalities, 246 perpetrators of maltreatment were identified who either caused or contributed to the child's death. The perpetrator for 37.8 percent (93) of the 246 fatalities was the child's mother, while the perpetrator for 31.3 percent (77) of the 246 fatalities was the child's father. The frequencies of abuse (108) and neglect (138) are different here than previously mentioned because duplicate perpetrators have been removed and more than one perpetrator could have abused the child. Of the 108 perpetrators of abuse, 40.7 percent (44) were the child's father. Of the 138 perpetrators of neglect, 47.8 percent (66) were the child's mother.

Table D.2: Type of perpetrators who caused or contributed to the child maltreatment fatalities identified by the Child Fatality Prevention System in Colorado from 2009-2013 (n = 246).

Perpetrator type†	All (n = 246)		Abuse (n=108)		Neglect (n=138)	
	n	Percent	n	Percent	n	Percent
Mother	93	37.8	27	25.0	66	47.8
Father	77	31.3	44	40.7	33	23.9
Mother's partner	15	6.1	12	11.1	3	2.2
Other relative	11	4.5	6	5.6	5	3.6
Grandparent	6	2.4	3	2.8	3	2.2
Licensed child care worker	5	2.0	0	0.0	5	3.6
Adoptive parent	4	1.6	*	*	3	2.2
Foster parent	4	1.6	0	0.0	4	2.9
Babysitter	5	2.0	*	*	3	2.2

*Indicates fewer than three deaths in that category

† Other perpetrator types not listed due to small numbers

Data Source: Child Fatality Prevention System

Of the 246 perpetrators of the child maltreatment fatalities, 15.9 percent (39) had a known history of intimate partner violence as the perpetrator and 14.6 percent (36) had a known history of child maltreatment as the perpetrator (Table D.3). However, there was unknown or missing data regarding history of intimate partner violence among perpetrators for 49.6 percent (122) of the child maltreatment fatalities and unknown or missing data regarding history of maltreatment for 39.0 percent (96) of the child maltreatment fatalities (Table D.3). Data may have been missing or unknown because incident investigators did not collect the information during the initial investigation or documentation lacked pertinent details.

Table D.3: Information about perpetrators who caused or contributed to child maltreatment fatalities identified by the Colorado Child Fatality Prevention System from 2009-2013 (n = 246).

Perpetrator Information	n	Percent
Impaired at time of incident		
Alcohol	22	8.9
Drugs	20	8.1
History of intimate partner violence		
As a victim	20	8.1
As a perpetrator	39	15.9
No history	65	26.4
Unknown/Missing	122	49.6
History of maltreatment as a perpetrator		
Yes*	36	14.6
Had unsubstantiated/unaccepted referral(s)	29	11.8
No	85	34.6
Unknown/Missing	96	39.0

*identified from substantiated assessment by county departments of human services

Data Source: Child Fatality Prevention System

⁰¹ National Center for Review and Prevention of Child Deaths. (2013). Child death review case reporting system: Data dictionary. Retrieved from <http://www.childdeathreview.org/home.htm>

⁰² Covington, T. (2013). The public health approach to understanding and preventing child maltreatment: A brief review of the literature and a call to action. *Child Welfare*, 92(2), 21-39.

Unintentional Drowning Fatalities in Colorado, 2009-2013



Between 2009 and 2013, 54 fatalities due to unintentional drowning or complications of a near drowning occurred among children ages 0 to 17 years in Colorado. The number of drowning deaths remained consistent over the past five years, with nine to 12 deaths occurring each year (Figure E.1). Coroners ruled 96.3 percent (52) of the 54 unintentional drowning deaths as accidental manner. Seventy-eight percent (42) of the children who drowned were male and 42.6 percent (23) were between the ages of 1 and 4 years (Figure E.2). Drowning deaths can occur in various bodies of water. In Colorado, most drowning deaths took place in open water (Figure E.3).

Open Water

Twenty-four (44.4 percent) of the 54 drowning deaths in Colorado took place in open water (Figure E.3). Fifty-four percent (13) of the 24 open water drowning deaths occurred in a lake or pond. Forty-two percent (10) of the 24 open water drowning deaths occurred in a river, creek or canal. Forty-two percent (10) of the 24 open water drowning deaths occurred among children between ages 1 and 4 years, 12.5 percent (3) were between ages 5 and 14 years and 45.8 percent (11) were between ages 15 and 17 years.

Bathtub

Sixteen children (29.6 percent) in Colorado drowned in a bathtub (Figure E.3). Fifty-six percent (9) of the 16 bathtub drowning deaths occurred among infants under 1 year of age and 31.3 percent (5) were between ages 1 and 4 years.

Pool

In Colorado, 12 (22.2 percent) drowning deaths occurred in a pool (Figure E.3). Most of the children who drowned in a pool were between 1 and 4 years (8, 66.7 percent). Seventy-five percent (9) of the pools were privately owned.

Figure E.1: Unintentional drowning fatalities in Colorado by year, 2009-2013 (n=54).



Figure E.3: Location of unintentional drowning fatalities in Colorado, 2009-2013 (n=54).

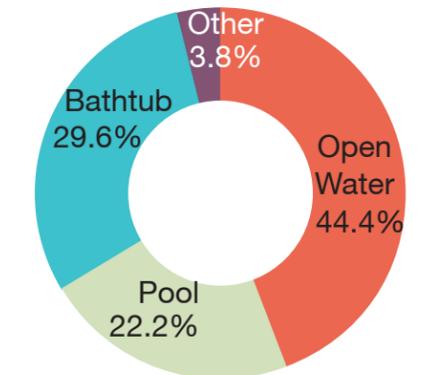
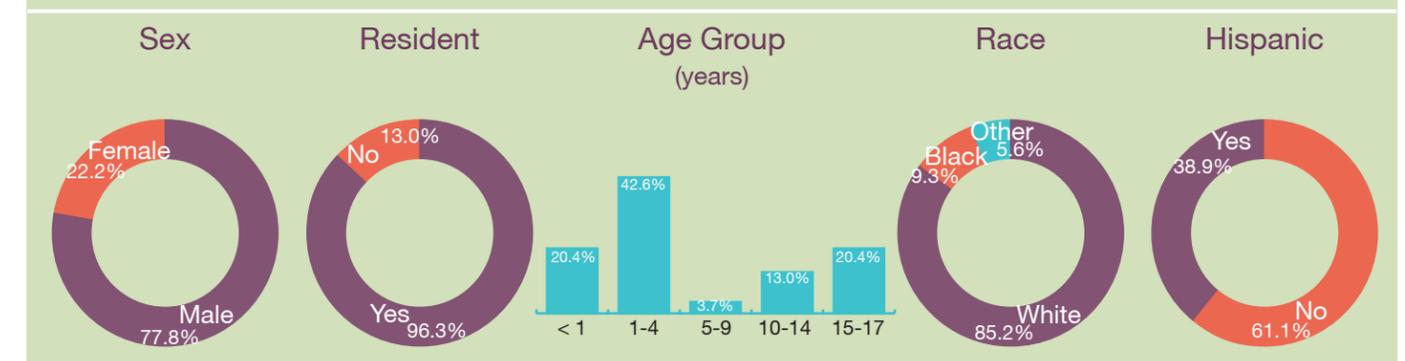


Figure E.2: Demographics of unintentional drowning fatalities in Colorado by year, 2009-2013 (n=54).



Unintentional Poisoning Fatalities in Colorado, 2009-2013



Between 2009 and 2013, unintentional poisoning, which includes poisoning deaths that coroners ruled accidental or undetermined manner, accounted for a total of 39 deaths in children and teens ages 0 to 17 in Colorado. Coroners ruled 76.9 percent (30) of the 39 deaths as accidental manner and 23.1 percent (9) as undetermined manner. The number of unintentional poisoning deaths among children increased from four in 2012 to ten deaths in 2013 (Figure F.1).

Demographics

Seventy-two percent (28) of the 39 children who died from unintentional poisonings were between the ages of 15 and 17 years, and more males than females died from unintentional poisoning (Figure F.2).

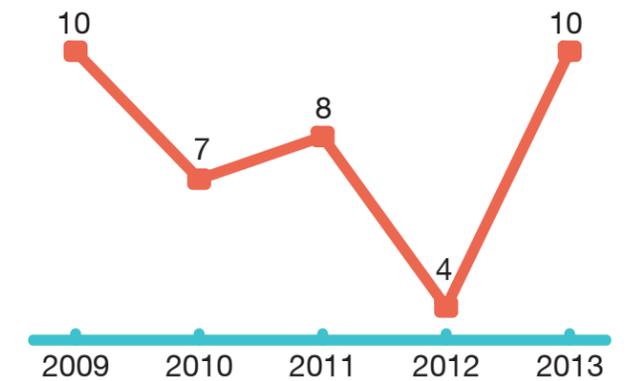
Types of Poisoning Deaths

Unintentional poisoning deaths can be the result of ingesting different types of substances. Of the 39 unintentional poisoning deaths, the largest portion resulted from the misuse of prescription or over-the-counter drugs (30, 76.9 percent). The categories of drugs include non-opioid painkillers (e.g. aspirin, acetaminophen), opioids, (e.g. oxycodone, hydrocodone), narcotics (e.g. methadone, codeine), as well as other prescriptions, such as antidepressants and anti-anxiety medications. Other substances, such as alcohol and carbon monoxide or other gases accounted for 23.1 percent (9) of the 39 unintentional poisoning deaths.

Prescription Drug Overdoses

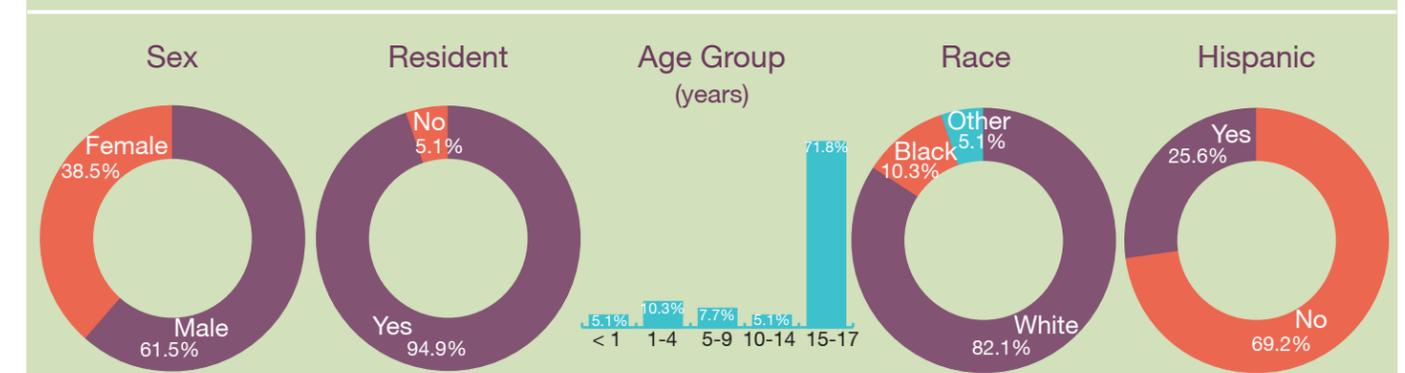
Of the 39 unintentional poisoning deaths, 28 children ages 0 to 17 years died of an unintentional prescription drug overdose between 2009 and 2013. Investigation reports indicated that 78.6 percent (22) of the 28 children who died of an unintentional prescription drug overdose took opioids and another 17.9 percent (5) took methadone (a synthetic opioid).

Figure F.1: Unintentional* poisoning and overdose fatalities in Colorado by year, 2009-2013 (n=39).



* Includes underdetermined and accidental manner.

Figure F.2: Demographics of unintentional poisonings and overdoses in Colorado by year, 2009-2013 (n=39).

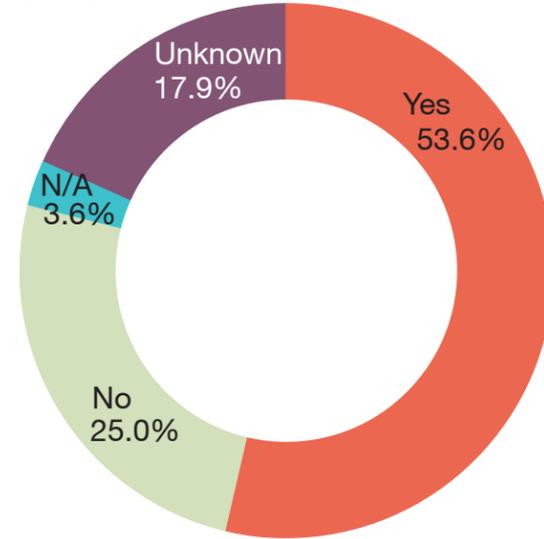


Seventy-five percent (21) of the 28 deaths of the children who died of unintentional prescription drug overdoses were between ages 15 and 17 years and 14.3 percent (4) were between ages 1 and 4 years. Sixty-four percent (18) of the prescription drugs that caused the deaths were known to not be the child's prescription.

Fifteen (53.6 percent) of the 28 children who died had a documented history of substance use (Figure F.3). The most commonly used drugs were alcohol and marijuana.

In addition to the 28 children who died of unintentional drug overdoses, seven teens completed suicide by overdosing on prescription drugs between 2009 and 2013 (see "Appendix C: Suicide Fatalities in Colorado, 2009 – 2013" for additional details).

Figure F.3: History of substance use for unintentional prescription drug overdoses in Colorado by year, 2009-2013 (n=28).



2015 Colorado CFPS State Review Team Members



Name	Title	Role	Agency
Amber Urban	Detective	Governor Appointed Voting Member: Peace Officer who specialized in crimes against children	Aurora Police Department
Brian Steckler	Law Enforcement Supervisor	Governor Appointed Voting Member: Peace Officer who specialized in crimes against children	Colorado Springs Police Dept.
Curtis Rashaan Ford	Pediatrician	Governor Appointed Voting Member: Physician who specializes in traumatic injury or children's health	Castle Rock Pediatrics
David Tennant	County Coroner	Governor Appointed Voting Member: County Coroner	Logan County Coroner
Fred Hosselkus	Sheriff	Governor Appointed Member: County sheriff from a rural area	Mineral County Sheriff's Office
Jennifer Kelloff	Physician	Governor Appointed Voting Member: Physician who specializes in traumatic injury or children's health	Kaiser Permanente- Pediatrician Group
Katherine Snyder	Physician and Child Abuse Pediatrician	Governor Appointed Voting Member: Physician who specializes in traumatic injury or children's health	Denver Health Medical Center and Children's Hospital Colorado
Katie Morris	Life Safety Educator	Governor Appointed Voting Member: Local Fire Department	Littleton Fire Rescue
Laurie Andrews	Public Health Nurse	Governor Appointed Voting Member: Nurse who specializes in traumatic injury or children's health	Tri-County Health Department
Leon Kelly	Associate Coroner	Governor Appointed Voting Member: County Coroner	El Paso County Coroner Office
Leora Joseph	District Attorney, 18th Judicial District	Governor Appointed Voting Member: District Attorney	Office of the District Attorney
Mike Ensminger	County Sheriff	Governor Appointed Voting Member: County Sheriff	Teller County Sheriff's Office
Nancy Doty	County Commissioner	Governor Appointed Voting Member: County Commissioner	Arapahoe County Commissioner
Rebecca Wiggins	Senior Assistant County Attorney	Governor Appointed Voting Member: County Attorney who practices in the area of dependency and neglect	Adams County Attorney's Office
Robert Case	Senior Deputy District Attorney	Governor Appointed Voting Member: District Attorney from a rural area	District Attorney's Office for the 10th Judicial District
Sabrina Byrnes	Associate Ombudsman	Governor Appointed Voting Member: Representative from Ombudsman's Office	Office of Colorado's Child Protection Ombudsman
Sam Wang	Physician	Governor Appointed Voting Member: Physician who specializes in traumatic injury or children's health	Rocky Mountain Drug & Poison Center/Toxicology & Children's Hospital
Scott Harpin	Assistant Professor	Governor Appointed Voting Member: Nurse who specializes in traumatic injury or children's health	University of Colorado, College of Nursing

Name	Title	Role	Agency
Alison Grace Bui	Statistical Analyst	State Agency Appointed Ex-Officio Member: Department of Public Health & Environment	CDPHE-Health Statistics Section
Ashley Tunstall	Clinical Services Director	State Agency Appointed Ex-Officio Member: Department of Human Services - Division of Youth Corrections	CDHS- Behavioral Health and Medical Services
Betty Donovan	Director of County Human Services	State Agency Appointed Ex-Officio Member: Director of a County Department of Human Services	Gilpin County Department of Human Services
Bill Bane	Manager	State Agency Appointed Ex-Officio Member: Department of Human Services - Mental Health Services	CDHS-Office of Children, Youth and Families, Mental Health Programs
Christal Garcia	CDPHE-ISVP	State Agency Appointed Member: Department of Public Health & Environment	CDPHE-Violence and Injury Prevention--Mental Health Promotion Branch
Erin Hall	Early Intervention Specialist	Content Expert/CDHS Representative	CDHS - Administrative Review Division
Giorgianna Venetis	Essentials for Childhood Program Coordinator	State Agency Appointed Member: Department of Public Health & Environment	CDPHE-Violence and Injury Prevention--Mental Health Promotion Branch
Gretchen Russo	Permanency Unit Manager	State Agency Appointed Ex-Officio Member: Department of Human Services - Child Welfare Division	CDHS-Office of Children, Youth and Families, Division of Child Welfare
Jane Flournoy	Manager	State Agency Appointed Member: Department of Human Services - Behavioral Health Services (MH/SA)	CDHS-Office of Behavioral Health, Culturally Informed and Inclusive Programs
Jarrold Hindman	Manager of Office of Suicide Prevention	State Agency Appointed Ex-Officio Member: Department of Public Health & Environment	CDPHE-Violence and Injury Prevention--Mental Health Promotion Branch
Kathy Patrick	State School Nurse Consultant	State Agency Appointed Ex-Officio Member: Department of Education	Colorado Department of Education
Lauren Bardin	Maternal Health Specialist	State Agency Appointed Ex-Officio Member: Department of Public Health & Environment	CDPHE-Children, Youth and Families Branch
Lindsey Myers	Injury and Violence Prevention Unit Manager	State Agency Appointed Ex-Officio Member: Department of Public Health & Environment	CDPHE-Violence and Injury Prevention--Mental Health Promotion Branch
Margaret Huffman	Public Health Nurse Supervisor	State Agency Appointed Ex-Officio Member: County Health Department	Jefferson County Public Health
Mary Martin	Division Director	Content Expert/CDHS Representative	CDHS-Office of Early Childhood, Division of Community and Family Support
Paige Rosemund	Manager	State Agency Appointed Ex-Officio Member: Department of Human Services - Child Welfare Division	CDHS-Office of Children, Youth and Families, Division of Child Welfare, Child Protection Services
Sarah Brummett	Suicide Prevention Commission Coordinator	State Agency Appointed Member: Department of Public Health & Environment	CDPHE-Violence and Injury Prevention--Mental Health Promotion Branch

Name	Title	Role	Agency
Scott Hophan	Sergeant	State Agency Appointed Ex-Officio Member: Department of Public Safety	District 2 Vehicular Crimes Unit
Beth Collins	Domestic Violence Advocacy Director	Team Selected Ex-Officio Member: State Domestic Violence Coalition	Colorado Coalition Against Domestic Violence (CCADV)
Diana Goldberg	Executive Director	Team Selected Ex-Officio Member: Child Advocacy Centers Network	Children's Advocacy & Family Resources, Inc./SungateKids
Donald Rincon	Program Director	Team Selected Ex-Officio Member: Private Out-of-Home Placement Provider	Kid's Crossing
Kathy Orr	President	Team Selected Ex-Officio Member: Injury Violence Specialists	Injury and Violence Prevention Specialists
Pat Givens	Nurse	Team Selected Ex-Officio Member: Hospital Injury Prevention or Safety Specialists	Colorado Organization of Nurse Leaders
Patty VanGilder	Administrative Assistant	Team Selected Ex-Officio Member: Community member with experience in childhood death	Angel Eyes
Sally Duncan	Injury Prevention Specialist	Team Selected Ex-Officio Member: Hospital Injury Prevention or Safety Specialists	Memorial Hospital
Sheri Danz	Deputy Director	Team Selected Ex-Officio Member: Office of the Child's Representative	Office of the Child's Representative
Theresa Rapstine	Nurse Consultant	Team Selected Ex-Officio Member: Hospital Injury Prevention or Safety Specialists	Healthy Child Care Colorado - Qualistar
Vicky Cassabaum	Injury Prevention Coordinator	Team Selected Ex-Officio Member: Hospital Injury Prevention or Safety Specialists	St. Anthony Central Hospital
Wave Dreher	Director of Communications	Team Selected Ex-Officio Member: Auto Safety/Driver Safety Organization	AAA Colorado
Vacant		Team Selected Member: Court-appointed Special Advocate Program Director	

2015 Colorado CFPS Local Review Team Coordinators



Local Team	Coordinator	Agency	Designation
Adams	Laurie Andrews	Tri-County Health Department	Single county
Alamosa	Beverly Strnad	Alamosa County Public Health Department	Single county
Arapahoe	Laurie Andrews	Tri-County Health Department	Single county
Archuleta	Andrew Grimm	San Juan Basin Health Department	Regional
Baca	Vacancy	Baca County Public Health Agency	Single county
Bent	Valerie Carnes	Bent County Public Health	Single county
Boulder	Kimberly Seifert	Boulder Coroners Office	Single county
Broomfield	Gail Wright	Broomfield Health and Human Services	Single county
Chaffee	Susan Ellis	Chaffee County Public Health	Single county
Cheyenne	Linda Roth	Cheyenne County Public Health	Single county
Clear Creek	Crystal Brandt	Clear Creek County Health and Human Services	Single county
Conejos	Connie Edgar	Conejos County Public Health and Nursing Services	Single county
Costilla	Vivian Gallegos	Costilla County Public Health Agency	Single county
Crowley	Rick Ritter	Otero County Health Department	Regional
Custer	Gail Stoltzfus	Custer County Public Health Agency	Single county
Delta	Bonnie Koehler	Delta County Department of Health and Human Services	Regional
Denver	Jodi Byrnes	Denver Children's Advocacy Center	Single
Dolores	Rose Jergens	Four Corners Advocacy Center	Regional
Douglas	Laurie Andrews	Tri-County Health Dept.	Single
Eagle	Jennifer Ludwig	Eagle County Public Health	Single
El Paso	Myrna Candraia	El Paso County Public Health	Single
Elbert	Alissa Marlatt	Elbert County Public Health	Single
Fremont	Tricia Sallie	Fremont County Public Health Agency	Single
Garfield	Laurel Little	Garfield County Public Health	Single
Gilpin	Sophia Yager	Jefferson County Public Health	Regional
Grand	Brene Belew-LaDue	Grand County Public Health and Nursing Services	Single
Gunnison	Joni Reynolds	Gunnison Department of Health and Human Services	Regional
Hinsdale	Tara Hardy	Hinsdale County Public Health	Regional
Huerfano	Cathy Montera	Las Animas-Huerfano District Health Department	Regional
Jackson	Jill Beck	Larimer County Child Advocacy Center	Regional
Jefferson	Sophia Yager	Jefferson County Public Health	Regional
Kiowa	Ryann Wollert	Prowers-Kiowa County Public Health and Environment	Regional
Kit Carson	Kindra Mulch	Kit Carson County Health and Human Services	Single
La Plata	Andrew Grimm	San Juan Basin Health Department	Regional
Lake	Colleen Nielsen	Lake County Public Health Agency	Single
Larimer	Jill Beck	Larimer County Child Advocacy Center	Regional
Las Animas	Cathy Montera	Las Animas-Huerfano District Health Department	Regional
Lincoln	Sue Kelly	Lincoln County Department of Public Health	Single
Logan	Dave Long	Logan County Department of Human Services	Regional
Mesa	Kristy Emerson	Mesa County Health Department	Single
Mineral	Tara Hardy	Hinsdale County Public Health Agency	Regional

Local Team	Coordinator	Agency	Designation
Moffat	Charity Neal	Northwest Colorado Visiting Nurse Association	Single
Montezuma	Rose Jergens	Four Corners Child Advocacy Center	Regional
Montrose	Kristin Pulatie	Montrose County Health and Human Services	Regional
Morgan	Jacque Frenier	Morgan County Department of Human Services	Regional
Otero	Rick Ritter	Otero County Health Department	Regional
Ouray	Elizabeth Lawaczeck	Ouray County Public Health	Regional
Park	Lynn Ramey	Park County Public Health Agency	Single
Phillips	Jackie Reynolds	Phillips County Department of Human Services	Regional
Pitkin	Liz Stark	Pitkin County Public Health Agency	Regional
Prowers	Tammie Clark	Prowers-Kiowa County Public Health and Environment	Single
Pueblo	Lynn Procell	Pueblo City County Health Department	Single
Rio Blanco	Jennifer O'Hearon	Rio Blanco County Department of Social Services	Single
Rio Grande	Dianne Koshak	Rio Grande County Public Health Agency	Single
Routt	Beth Watson	Northwest Colorado Visiting Nurse Association	Single
Saguache	Alyssa Metzger	Saguache County Public Health	Single
San Juan	Lois MacKenzie	San Juan County Public Health Service	Regional
San Miguel	June Nepsky	San Miguel County Department of Health & Environment	Regional
Sedgwick	Kathy Reano	Sedgwick Department of Human Services	Regional
Summit	Amy Wineland	Summit County Public Health	Single
Teller	Martha Hubbard	Teller County Public Health	Single
Washington	Rick Agan	Washington County Department of Human Services	Regional
Weld	Melanie Cyphers	Weld County Department of Health and Environment	Single
Yuma	Dave Henson	Yuma County Department of Human Services	Regional

Regional Team Contacts

Northeast CO	Trish McClain	Northeast Colorado Health Department	Regional
San Juan Basin	Andrew Grimm	San Juan Basin Health Department	Regional
Tri-County	Laurie Andrews	Tri-County Health Department	Regional
WCPHP	Kristin Pulati	Montrose County Health and Human Services	Regional

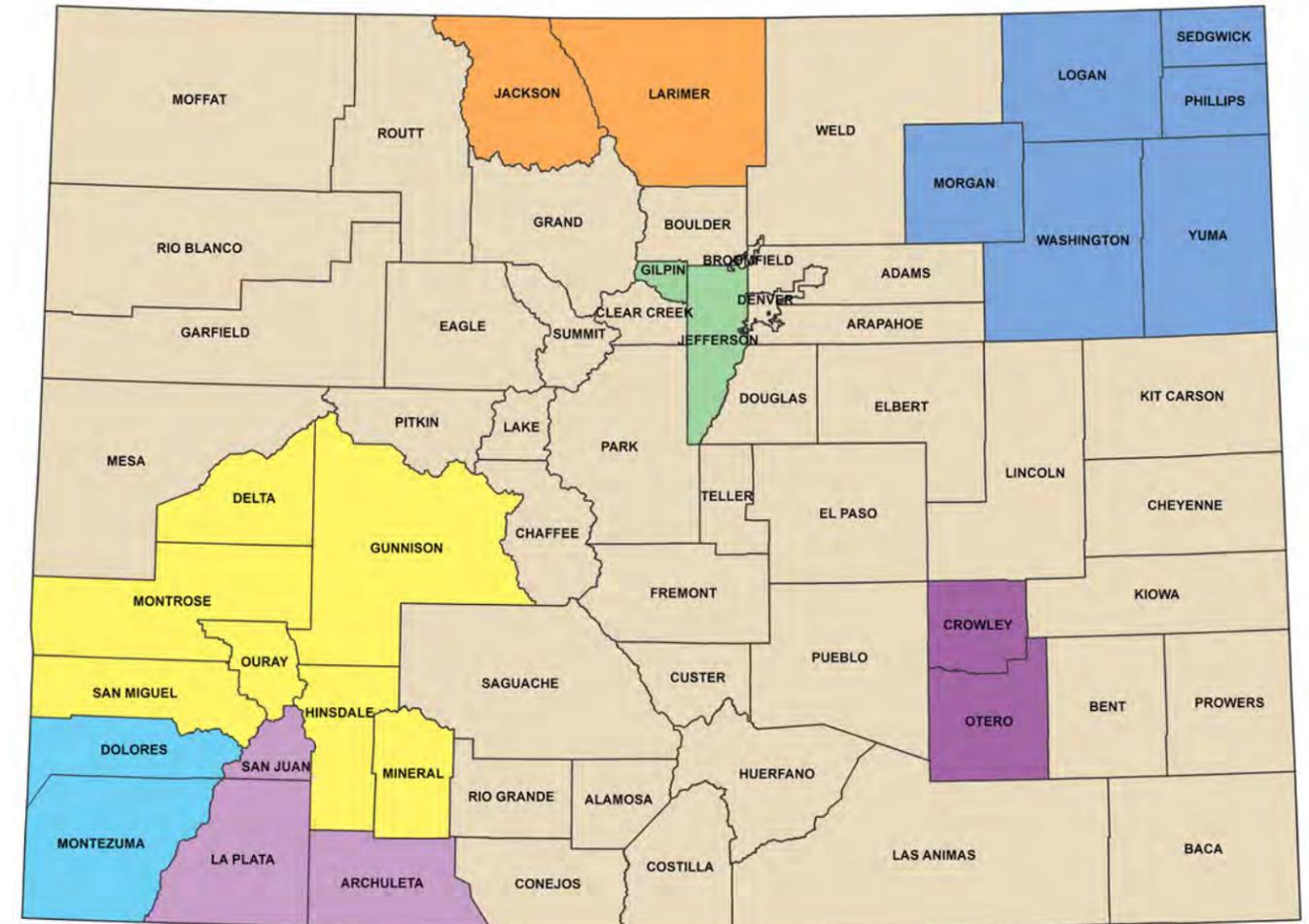


2015 Full List of Child Fatality Prevention Strategies Discussed by CFPS State Review Team

Child Fatality Prevention System Subcommittee	Prevention Recommendation
Sudden Unexpected Infant Death (SUID) Subcommittee	<p>Support non-smoking policies (all smoking—cigarette and marijuana) in multi-unit housing to prevent infant secondhand smoke exposure.</p> <p>Support policies to increase tobacco tax in Colorado to fund home visitation programs.</p> <p>Require training on infant death scene investigation and Sudden Unexplained Infant Death Investigation Reporting Form (SUIDIRF) for law enforcement, coroners, and firefighters.</p> <p>Mandate that hospitals develop policies to provide education and information about infant safe sleep promotion and to require the practice and modeling of safe sleep behaviors in the hospital setting and during discharge from labor/delivery and NICU.</p>
Motor Vehicle Subcommittee	<p>Support policies to expand the Primary Seat Belt Law: to cover all age groups making it possible for any driver to be stopped and issued a citation if anyone (all passengers and driver in all seating positions) in the vehicle is not properly restrained.</p> <p>Strengthen Colorado's Graduated Driver Licensing Law by: 1) expanding the restricted hours from between 12:00AM to 5:00AM to between 10:00PM to 5:00AM for teen drivers until age 18; and 2) extending passenger restrictions for teen drivers through age 18.</p> <p>Mandate drivers' education including behind the wheel training through age 18.</p> <p>Support policies to improve safety of use and operation of All Terrain Vehicles (ATVs). This will: 1) Require a minimum age of ATVs—to ride an ATV unsupervised, operators must be 16 years old. To ride on public lands, riders must have a safety certificate; 2) Require safety education certifications--operators under 16 years old riding ATVs on public lands must have a safety certificate; 3) Require helmets and/or eye protection—helmet and eye protection are required for all riders under age 16 while operating an ATV on public lands; and 4) Prohibit passengers—ATV operators on public lands may carry a passenger only if the vehicle is designed to carry more than one occupant.</p>
Violence Subcommittee	<p>Mandate child access prevention (CAP) policies and laws.</p> <p>Increase funding to support expansion of the gun shop project in other parts of Colorado.</p> <p>Expand the Counseling on Access to Lethal Means (CALM) training to primary care settings.</p> <p>Mandate law enforcement agencies and coroners to use a standardized suicide investigation form when investigating a suicide death.</p>
Child Abuse and Neglect Subcommittee	<p>Expand a continuum of family support services in communities across the state of Colorado.</p> <p>Support policies that impact the Essentials for Childhood common agenda priorities: 1) Increase family-friendly business (FFB) practices across Colorado; 2) Increase access to child care and after school care; 3) Increase access to preschool and full-day kindergarten; and 4) Advance policy and community approaches to improve social and emotional health of mothers, fathers, caregivers and children.</p> <p>Support collaboration efforts between Colorado Department of Public Health and Environment (CDPHE) and Colorado Department of Human Services (CDHS) agencies for child maltreatment data sharing.</p> <p>Develop a task force to discuss improved methods of communication between hospitals/medical providers and county Departments of Human Services.</p>

Child Fatality Prevention System Subcommittee	Prevention Recommendation
Accident/Injury Subcommittee	<p>Support local and statewide policies and/or laws regarding helmet use for children and youth while skiing and snowboarding in order to reduce traumatic brain injury.</p> <p>Recommendation to the Colorado Consortium for Prescription Drug Abuse Prevention to increase uptake of the Policy for Prescribing and Dispensing Opioids through increased training and education.</p>
Cross-Cutting Child Fatality Prevention Strategies	<p>Recommendation to Colorado Department of Human Services to modify foster care certification requirements and provide training regarding infant safe sleep to better align with the American Academy of Pediatrics (AAP) safe sleep recommendations and add safe infant sleep quality standards for foster care providers.</p> <p>Support policies to support families by ensuring a continuum of community-based home visiting programs that meet the varying needs of diverse parents.</p> <p>Support policies that ensure long-term financial sustainability of childcare and afterschool program and that ensure high quality family, friend, and neighbor (FFN) care.</p> <p>Support policies that require toxicology testing of parents/caregivers who were present at the time of a fatal incident to determine drug and/or alcohol use.</p> <p>Recommendation to state agencies (Governor's Office, Colorado Department of Public Health and Environment, Colorado Department of Health Care Policy and Financing) implementing the State Innovation Model (SIM) to consider the leading causes of preventable childhood deaths when providing technical assistance and practice transformation support to integrated primary care and behavioral health settings.</p> <p>Increase funding to support the implementation of youth programs that promote pro-social activities and protective factors across Colorado.</p>

Map of Local CFR Teams



- Northeast CO Team
- Larimer-Jackson Team
- Jefferson-Gilpin Team
- Otero-Crowley Team
- West Central CO Team
- Dolores-Montezuma Team
- San Juan Basin Team
- Single County Team

