



Colorado Child Fatality Prevention System

Colorado Child Fatality Prevention System

Annual Report
January 2009

**To the Governor,
Health and Human Services Committees and
Judiciary Committees of the
House of Representatives and the Senate of the
Colorado General Assembly**

Document Information

Title: Colorado Child Fatality Prevention System Annual Report

Submitted By: The members of the Colorado State Child Fatality Prevention Review Team
(See Attachment One for a list of members)

Subject: A description of trends in child deaths reviewed by the Colorado Child Fatality Prevention Review Team and, as required in statute, specific recommendations for changes in laws or policies most likely to reduce child deaths in Colorado.

Statute: Article 20.5 of Title 25 of the Colorado Revised Statutes

Date: March 10, 2009

Number of Pages: 19 plus attachments

Executive Summary

The Child Fatality Prevention Act (Article 20.5 of Title 25, Colorado Revised Statutes) established the Child Fatality Prevention System, a statewide, multidisciplinary, multi-agency effort to prevent child deaths. Although not codified in Colorado Revised Statutes until 2005, the Child Fatality Prevention System has been reviewing child deaths in Colorado since 1989 with the goals of describing trends and patterns of child death in Colorado and identifying prevention strategies. Each year, the Child Fatality Prevention System Review Team (State Review Team) conducts retrospective reviews of child deaths (ages 0-17) that are related to the following causes:

- child abuse and neglect,
- violence,
- motor vehicle,
- accidental/unintentional,
- natural, and
- Sudden Infant Death Syndrome (SIDS)/ undetermined.

In 2008, the State Review Team reviewed 350 of the 1537 child deaths that occurred in Colorado between 2004-2005. This report presents a description of these 350 cases and provides recommendations to the Colorado General Assembly to promote the safety and well being of children. The remaining 2004 and 2005 child deaths were described in previous reports.

Of the 350 child deaths reviewed in 2008, 41.4 percent were due to motor vehicle-related incidents, 22.3 percent were attributed to SIDS or an undetermined cause, 12.6 were accidental injury deaths, 11.1 were natural deaths, 9.1 were violent deaths, and 3.4 percent were related to child abuse and/or neglect. Fifty-nine percent of the cases reviewed in 2008 involved male children. The following are some of the key trends noted:

- In at least 77 percent of the motor vehicle-related fatalities, the deceased was the teen driver of a vehicle that crashed or was the passenger in a vehicle driven by another teenager.
- Sixty-two percent of children who died in motor vehicle crashes were not appropriately restrained in a child safety seat or seat belt.
- Over half of the child abuse or neglect perpetrators were previously involved in domestic violence, either as perpetrators or victims.
- The lack of proper adult supervision was a significant factor in a majority of accidental injury deaths.
- In the deaths involving a firearm, children had easy access to the weapon due to unsafe storage.

The common characteristics identified during reviews in 2008 are comparable to those seen in case reviews conducted over the past 19 years. Therefore, the recommendations outlined in this report represent a synthesis of prevention strategies gathered from the analysis of many similar cases of child fatality over 19 years.

Colorado Child Fatality Prevention System

Annual Report

I. Introduction

The Child Fatality Prevention Act (Article 20.5 of Title 25, Colorado Revised Statutes) established the Child Fatality Prevention System, a statewide, multidisciplinary, multi-agency effort to prevent child deaths. The Child Fatality Prevention System Review Team (State Review Team) is required to report annually to the Governor, and to the Health and Human Services and Judiciary Committees of the House of Representatives and the Senate of the Colorado General Assembly. This report describes trends in 350 child deaths that occurred in 2004 and 2005, reviewed by the State Review Team in the 2008 calendar year. Additionally, as required in statute, this report identifies specific recommendations to reduce child deaths in Colorado.

The Colorado Child Fatality Prevention System is housed at the Colorado Department of Public Health and Environment (CDPHE) in the Prevention Services Division's Injury, Suicide and Violence Prevention Unit. The State Review Team, a volunteer multidisciplinary committee composed of clinical and legal experts in child health and safety, works collaboratively with state staff in reviewing child deaths. Members of the State Review Team are experts in the fields of child abuse prevention, pediatrics, family law, death investigation and Sudden Infant Death Syndrome (SIDS). The variety of disciplines involved and the depth of expertise provided by the State Review Team results in a comprehensive review process, resulting in a broad analysis of both contributory and preventive factors in each case of child death. The Child Fatality Prevention System's mandate and a list of the State Review Team members, including a list of new members appointed by Governor Ritter in October 2008, are included in Attachment One.

II. Clinical Review Methodology

The National Center for Child Death Review defines a child's death as preventable if the community or an individual could reasonably have acted to change the circumstances resulting in death. Based on this definition, the State Review Team considers deaths due to child abuse/neglect, homicide, suicide, motor vehicle-related incidents and other accidental injuries to be preventable. Deaths from natural causes in infants younger than 28 days of age are defined as neonatal deaths and are not included in this review. Excluding neonatal deaths, 446 children died in Colorado in 2004 and 423 children died in 2005. The Review team examined these deaths between 2006 and 2008. The data and recommendations presented in this report are derived from the 350 cases reviewed in 2008.

In preparation for the clinical review of each case, the Child Fatality Prevention System Coordinator identifies deaths of children ages 0-17 and develops a case file by requesting information from county coroners, law enforcement, county district attorneys, hospitals, the Department of Human Services, local health departments and newspapers. Deaths are then grouped into six major categories for clinical review:

- child abuse and neglect,
- violence,
- motor vehicle,
- accidental/unintentional,
- natural, and
- Sudden Infant Death Syndrome (SIDS)/ undetermined.

Five to ten experts then meet to study the information summarized in each case file. Data from these clinical reviews are collected using several tools, including one created by the Maternal and Child Health National Center for Child Death Review (<http://www.childdeathreview.org/history.htm>). At the end of each clinical review, team members identify any system failures associated with the case and make recommendations for prevention. A graphic representation of the review process is included in Attachment Two.

Although the Child Fatality Prevention System requests information from a variety of sources for each case, data are occasionally missing from the case file because incident investigators did not collect the information during the initial investigation, agencies did not respond to the coordinator’s request for information, or documentation lacked pertinent details. This report is based on the data that was available by December 2008 for the 350 cases reviewed over the last year.

III. Case Description and Key Findings

Table 1, below, categorizes deaths of children under the age of 18, occurring in Colorado in 2004 and 2005, by the six major clinical review categories. It excludes 668 neonatal deaths that occurred over the same time period, as the State Review Team does not review neonatal deaths. Ninety percent of the 2004 and 2005 deaths were Colorado residents. Cases grouped into the natural category represented 42.3 percent of the deaths reviewed. The motor vehicle category had the second highest number of cases (20.2 percent), followed by the SIDS/undetermined (13.7 percent), violence (9.9 percent), accidental/unintentional (9.8 percent), and child abuse and neglect (4.1 percent) categories.

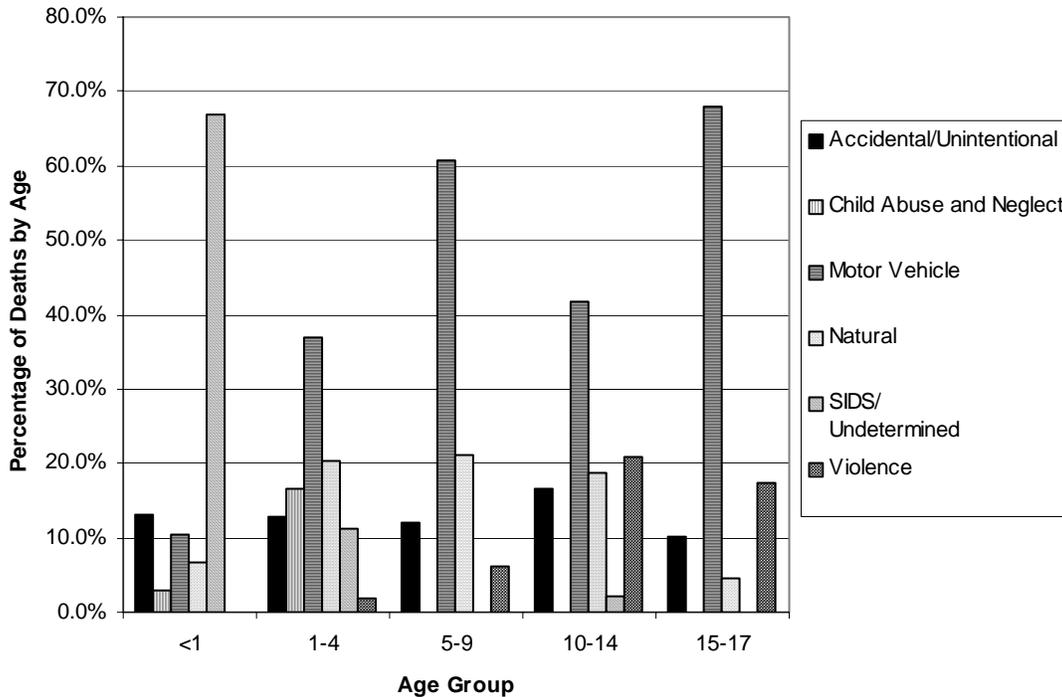
As Table 1 indicates, the State Review Team reviewed 59.8 percent of these cases prior to January 2008; case descriptions and findings associated with these case reviews are outlined in the Colorado Child Fatality Prevention System’s 2007 and 2008 Annual Reports. In 2008, the State Review Team reviewed 40.3 percent of the child deaths occurring in 2004 and 2005. The case descriptions presented in this report are only based on this subset of 2004 and 2005 death cases, and are only a partial representation of the deaths that occurred during these two years. A comprehensive report, detailing the patterns and trends of child deaths over time, will be completed in 2009.

Table 1: 2004-2005 Colorado Child Deaths, Ages 0-17

Type of Death	Number of Deaths 2004-2005	Cases Reviewed in 2006-2007 N (%)	Cases Reviewed in 2008 N (%)
Accidental/Unintentional	85	41 (48.2%)	44 (51.8%)
Child Abuse and Neglect	36	24 (66.7%)	12 (33.3%)
Motor Vehicle	176	31 (17.6%)	145 (82.4%)
Natural	367	328 (89.4%)	39 (10.6%)
SIDS/Undetermined	119	41 (34.4%)	78 (65.6%)
Violence	86	54 (62.8%)	32 (37.2%)
Total Cases Reviewed	869	519 (59.7%)	350 (40.3%)

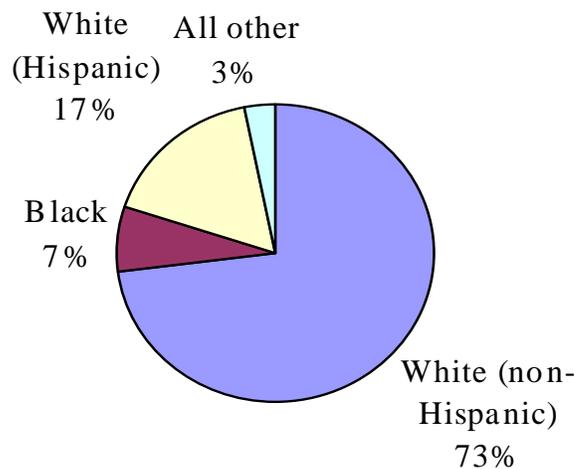
The number of cases assigned to each clinical review category differs markedly with age (see Table 2). SIDS/Undetermined deaths accounted for 67 percent of the reviewed deaths among children younger than one year of age. Motor vehicle-related deaths constituted a majority of the reviewed cases in age groups 1-4, 5-9, 10-14, and 15-17. All of the cases reviewed in the child abuse and neglect subcommittee involved children younger than five years of age. The accidental/unintentional cases had a fairly even age distribution, representing between 10 percent and 16.7 percent of the cases in each age category. Violence-related cases were concentrated in the older age groups, comprising 20.4 percent of the cases in the 10-14 age group and 17.4 percent of the cases in the 15-17 age group.

Figure 1. Child Death Cases Reviewed in 2008 by Clinical Review Category and Age (N=350)



Fifty-nine percent of the 350 cases reviewed in 2008 involved male children. Males represented a higher number of reviewed cases than females in every age category. Figure 2 shows the race/ethnicity of the children in the cases reviewed. Seventy-three percent of the reviewed cases involved white (non-Hispanic) children, 17 percent were white (Hispanic), and seven percent were black.

Figure 2. Child Death Cases Reviewed in 2008 by Race/Ethnicity (N=350)



The demographic characteristics for the cases reviewed in each clinical review subcommittee during 2008 are provided in Table 2. There were a higher percentage of male cases reviewed by all of the clinical review subcommittees, with the exception of the motor vehicle subcommittee. Although 50.3 percent of the motor vehicle cases examined in 2008 were females, more males than females actually died in motor vehicle crashes from 2004 to 2005 (93 males compared to 83 females). The percentage of Hispanic cases reviewed in the motor vehicle (19.3 percent) and natural (18.0 percent) subcommittees were higher than for the sample as a whole (17 percent).

Further description of the cases reviewed in each of the six clinical review subcommittees, as well as key subcommittee findings are presented in the following pages. Although the subcommittee findings are based on the cases reviewed in 2008, they are consistent with case findings from previous years of review.

Table 2. Demographic Characteristics of Child Death Cases Reviewed in 2008 (N=350)

Case Characteristic	Accident/Injury (44)	Child Abuse and Neglect (12)	Motor Vehicle (145)	Natural (39)	SIDS/ Undetermined (78)	Violence (32)
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
Gender						
Male	29 (65.9%)	8 (66.7%)	72 (49.7%)	23 (59.0%)	48 (61.5%)	27 (84.4%)
Female	15 (34.1%)	4 (33.3%)	73 (50.3%)	16 (41.0%)	30 (28.5%)	5 (15.6%)
Race/Ethnicity						
White (non-Hispanic)	34 (77.3%)	7 (58.3%)	105 (72.4%)	27 (69.2%)	55 (70.5%)	27 (84.4%)
White (Hispanic)	6 (13.6%)	2 (16.7%)	28 (19.3%)	7 (18.0%)	13 (16.7%)	3 (9.4%)
Black	3 (6.8%)	2 (16.7%)	10 (6.9%)	4 (10.3%)	5 (6.4%)	1 (3.1%)
All Other	1 (2.3%)	1 (8.3%)	2 (1.4%)	1 (2.6%)	5 (6.4%)	1 (3.1%)
Age						
<1	14 (31.8%)	3 (25.0%)	11 (7.6%)	7 (17.9%)	71 (91.0%)	0 (0.0%)
1-4	7 (15.9%)	9 (75.0%)	20 (13.8%)	11 (28.2%)	6 (7.7%)	1 (3.1%)
5-9	4 (9.1%)	0 (0.0%)	20 (13.8%)	7 (17.9%)	0 (0.0%)	2 (6.3%)
10-14	8 (18.2%)	0 (0.0%)	20 (13.8%)	9 (23.1%)	1 (1.3%)	0 (0.0%)
15-17	1 (2.3%)	0 (0.0%)	74 (51.0%)	5 (12.8%)	0 (0.0%)	19 (59.4%)

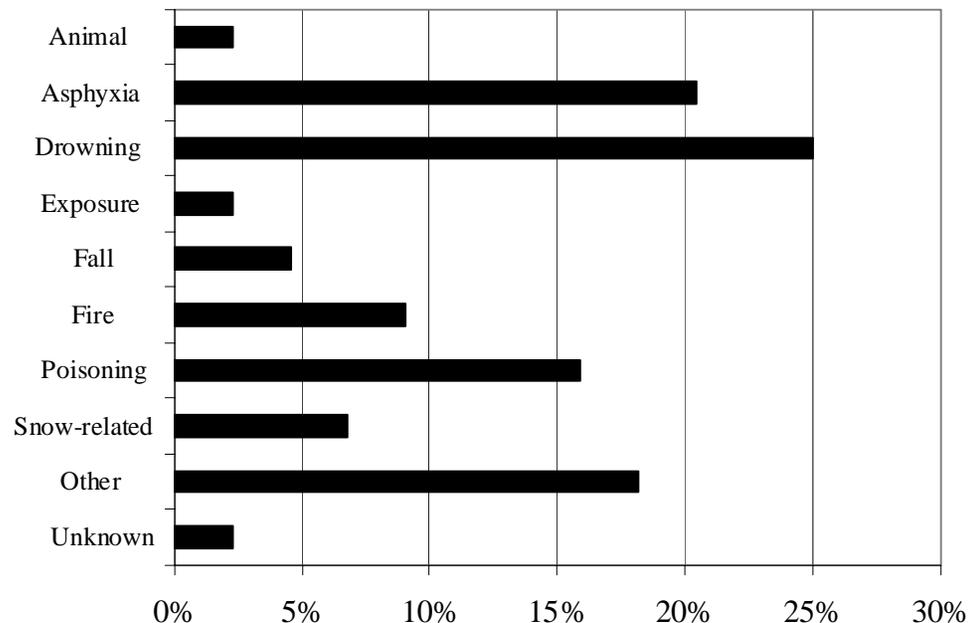
Accidental/ Unintentional Injury Clinical Case Review Key Findings

Case Description

The Accidental/Unintentional Injury Clinical Review Subcommittee reviews deaths among children ages 0-17 years that are certified as “Accidental” since the cause of death is due to injuries resulting from unintentional actions (except motor vehicle crashes). This category includes deaths due to drowning, fire, falls, poisoning, and recreational and other types of injuries. Deaths related to motor vehicle accidents/crashes or firearm injuries are not included here, as other subcommittees review these cases. In 2008, 44 cases meeting these criteria were reviewed.

Twenty-five percent of these deaths resulted from drowning. Three children died in snow-related accidents (sledding, skiing, snowboarding). Six of the fatalities involved infants who died as a result of positional suffocation (e.g., the child became wedged between cushions or under another person). Two children unintentionally hanged themselves while playing with their siblings. Another child died when he choked on a small object. Sixteen percent of the deaths were due to unintentional poisoning; five of these seven deaths involved teens accidentally overdosing on drugs. Fifty percent of the deaths attributed to unintentional injury involved children under the age of six.

Figure 3. Accidental/Unintentional Injury Subcommittee Cases Reviewed in 2008 by Type (N=44)



Key Findings

- Of the eleven drowning deaths, two of the victims were not adequately supervised and drowned in residential swimming pools. Five of the drowning deaths involved older children (older than age 10) who were not following proper safety precautions around open bodies of water (e.g., not wearing life jackets or playing around a drainage ditch). Two infants drowned in a bathtub.
- In all of the snow-related deaths, the children were not wearing helmets and died from head injuries.
- The Team determined that a lack of appropriate supervision was a serious factor in at least nine of the 22 cases of children under six-years of age (40.1 percent).

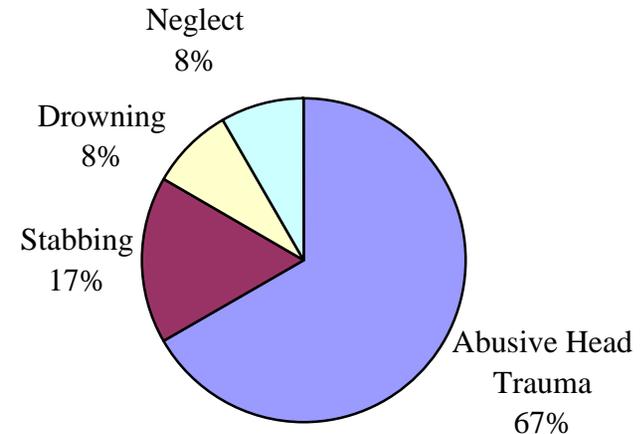
Child Abuse and Neglect Clinical Case Review Key Findings

Case Description

The Child Abuse and Neglect Clinical Review Subcommittee reviews deaths among children ages 0-17 years that are certified as Homicide, Accident or Undetermined manner of death and the underlying cause of death is related to circumstances involving child abuse and/or neglect. This category includes those deaths where the investigation determined that abuse and/or neglect was perpetrated by parents and/or caregivers. In 2008, 12 cases meeting these criteria were reviewed.

Ten of these children were younger than three years old. Sixty-seven percent of the children were male. In 67 percent of the cases reviewed, the cause of death was abusive head trauma.

Figure 4. Child Abuse and Neglect Subcommittee Cases Reviewed in 2008 by Type (N=12)



Key Findings

- Fifty-eight percent of the perpetrators in the 12 child abuse and neglect cases were men left to care for the child while the mother was working or away from the home. Two of these eight perpetrators were the mothers' boyfriends, four were the children's biological fathers, one was an adoptive parent, and one was a stepfather.
- Two of the perpetrators were the grandmothers of the children who died.
- Four of the 12 perpetrators had criminal histories.
- In half of the cases, the perpetrator had a history of substance abuse; however, only one of the perpetrators was known to be under the influence of drugs or alcohol during the incident leading up to the child's death.
- Forty-two percent of the perpetrators of child abuse or neglect had a prior personal history as a domestic violence perpetrator. Additionally, 17 percent of the perpetrators were victims of prior domestic violence themselves.
- Thirty-three percent of the perpetrators were previously victims of child maltreatment.

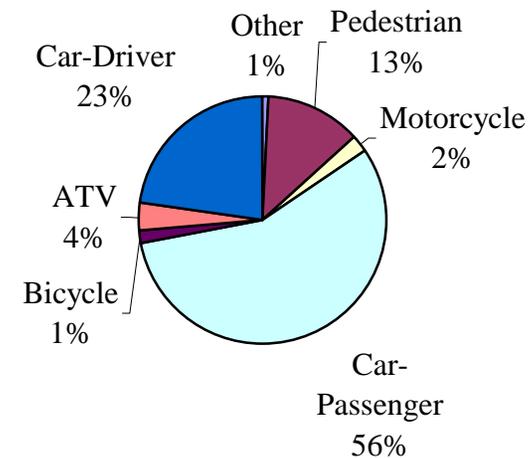
Motor Vehicle Clinical Case Review Key Findings

Case Description

The Motor Vehicle Clinical Review subcommittee reviews deaths among children ages 0-17 years that are certified as “Accidental” when the cause of death is related to a motor vehicle crash or incident. This category also includes deaths related to pedestrian, bicycle and all-terrain vehicle incidents. In 2008, 145 cases meeting these criteria were reviewed.

Of these deaths, 110 children were drivers or passengers in a motor vehicle crash, 17 were pedestrians hit by a vehicle, five children were killed in all terrain vehicle (ATV) crashes, and two children were killed in bicycle-related incidents. Sixty-three percent of the deaths due to motor vehicle crashes were among adolescents ages 14-17. Four of the five children who died as a result of an ATV crash were under 14 years old.

Figure 5. Motor Vehicle Subcommittee Cases Reviewed in 2008 by Type (N=145)



Key Findings

- Sixty-five percent of the motor vehicle crashes occurred in rural areas.
- Sixty-two percent of the children who died in motor vehicle crashes were not properly restrained (not using a seatbelt, car seat or booster seat) or were not using the restraint correctly.
- In at least 77 percent of these fatalities, the deceased was the teen driver of the vehicle or was the passenger in a vehicle driven by another teenager (ages 15-19). Fifty-two percent of the deceased teenagers were females.
- Teen drivers were responsible for causing 43 percent of the motor vehicle crashes that resulted in a child death. Many of the teen drivers were not in compliance with the Graduated Drivers Licensing law that went into effect on July 1, 2005.
- Alcohol was a significant factor in 14 percent of the deaths due to motor vehicle crashes.
- Four of the five children who died in ATV crashes were not under adult supervision at the time of the crash. Two of the children who died were under eight years old and were operating the ATV alone when it crashed. In three of the crashes, the decedent was riding with another child driver.

Natural Death Clinical Case Review Key Findings

Case Description

The Natural Clinical Review Subcommittee reviews deaths among children ages 28 days-17 years that are certified as “Natural” (except SIDS deaths, which are reviewed in a separate subcommittee). This category includes deaths due to asthma, cancer, cardiovascular conditions, congenital anomalies, HIV/AIDS, influenza, neurological/seizure disorders, pneumonia, pre-maturity, and other infectious diseases or medical conditions. In 2008, 39 cases meeting these criteria were reviewed.

Key Findings

- Deaths in this category are generally considered to be non-preventable. The State Review Team identified less than one percent of these deaths as preventable (that is, resulting from lack of access to health care or inadequate or inappropriate care).

SIDS/Undetermined Clinical Case Review Key Findings

Case Description

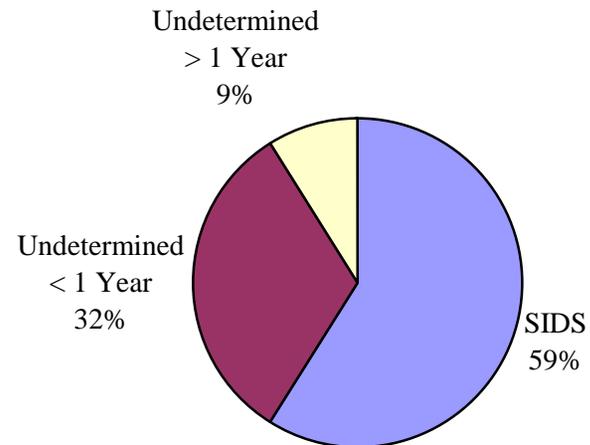
The SIDS/Undetermined Clinical Review Subcommittee reviews deaths among children ages 0-17 years that are certified as “Natural” or “Undetermined” when the cause of death is due to Sudden Infant Death Syndrome or Sudden Unexplained Death in Childhood. This category does not include deaths of undetermined manner that are reviewed by other subcommittees, such as those related to firearm injury or child abuse or neglect. In 2008, 78 cases meeting these criteria were reviewed.

County coroners designated 59 percent of these cases as deaths due to Sudden Infant Death Syndrome (SIDS) or Sudden Unexpected Death in Infancy (SUDI). Thirty-two percent of the infant deaths were classified as undetermined due to the presence of suspicious factors ruling out SIDS or any other natural cause of death. SIDS is defined as the sudden death of an infant younger than one year of age that remains unexplained after a thorough case investigation, including performance of a complete autopsy, examination of the death scene and a review of the clinical history.

Key Findings

- In 30 percent of the SIDS deaths, the infant was co-sleeping with an adult, which could have resulted in a suffocation death rather than a SIDS-related death. In another 10 percent of these cases, the infant was co-sleeping with another child.
- In 58 percent of the SIDS deaths, the child was not put to sleep on his/her back, as recommended by the American Academy of Pediatrics.
- The clinical review process identified inconsistencies among county coroners in assigning the cause of death as SIDS or undetermined

Figure 6. SIDS/Undetermined Subcommittee Cases Reviewed in 2008 by Type (N=78)



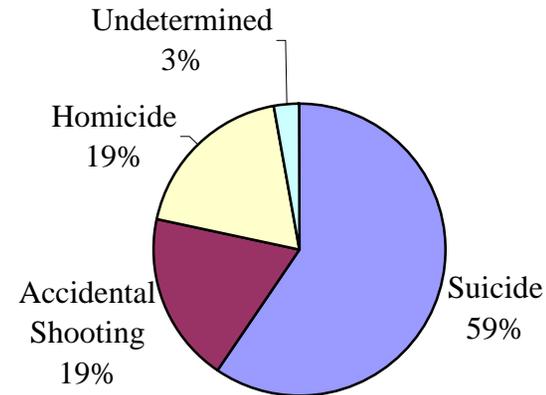
Violence Subcommittee Clinical Case Review Findings

Case Description

The Violence Clinical Review Subcommittee reviews deaths among children ages 0-17 years that are certified as Suicide, Homicide and Accidental manners of death when the cause of death is attributed to intentional injuries (except those deaths related to child abuse and neglect). This category includes all suicide deaths and all firearm related injuries, but does not include homicide cases that are determined to be the result of child abuse or neglect. In 2008, 32 cases meeting these criteria were reviewed.

According to the death certificates, 22 deaths were suicides; seven deaths were homicides (not related to child abuse); two were accidental shootings; and one was undetermined. In all of the homicides, the victim was male. Eighty-three percent of the youth suicide deaths were males.

Figure 7. Violence Subcommittee Cases Reviewed in 2008 by Type (N=32)



Key Findings

- The Clinical Review Team disagreed with the manner of death listed on the death certificate for one of the two accidental shootings cases, as well as the death certified as undetermined. After reviewing all of the case information, the Team felt there was sufficient evidence that these two deaths were suicides.
- In six of the seven homicide cases, a firearm was used. Three of the homicide deaths were murder-suicides perpetrated by a parent of the victim. One of the homicides was gang-related.
- Fifty percent of youth suicides were completed using a firearm; all of the firearm suicides occurred among males. Forty-two percent of the suicide deaths resulted from hanging/suffocation and the remaining eight percent were the result of poisoning. Twenty-nine percent left a suicide note.
- In all the suicide deaths involving a firearm, the firearms were not stored safely, and therefore were easily accessible.
- In 38 percent of the suicide deaths, the youth expressed suicidal ideation to others, made prior threats of suicide, or attempted suicide in the past.
- Twenty-nine percent of the youth who died by suicide had a history of relationship problems either with parents or intimate partners.
- Thirty-three percent of the children who completed suicide had a history of substance abuse problems and twenty-five percent were drug or alcohol impaired at the time of the incident leading to death.
- Twenty-nine percent of the youth were receiving mental health services at the time of their death and 17 percent of them were taking medications for mental illness.

IV. Program Improvements

In December 2008, the Child Fatality Prevention System began to take part in the National Child Death Review Case Reporting System, a web-based data collection system, funded by the federal Maternal and Child Health Bureau, that stores case-level data for all participating states. The system allows local and state users to enter case review data and download standardized reports via the Internet. Users are also able to complete data analysis and develop customized reports. This new system will allow the Child Fatality Prevention System to conduct more sophisticated data analysis, which will help the State Review Team better target and evaluate prevention activities. The State Review Team will also be able to compare Colorado data with other states and national compilations. Additionally, this system will enable local child fatality review teams to enter data from their reviews and compare to state-level data. Local child fatality review teams will be trained to use the database over the next year.

V. Challenges

Management and analysis of data collected during the clinical review process remains challenging. Limited federal funds provided by CDPHE, through its Maternal and Child Health Block Grant, and by the Colorado Department of Human Services, through the Child Abuse Prevention Treatment Act (CAPTA), have been used to support the work of the coordinator. No state funds are provided to coordinate the Child Fatality Prevention System. Resources are only available to support basic data collection and coordination of the clinical reviews. Currently, the Child Fatality Prevention System does not have funding to implement recommendations for the prevention of child deaths.

VI. General Recommendations

The State Review Team recommends that funding be identified through fee-based or cash fund sources in the state to support the Child Fatality Prevention System and to implement recommendations outlined in this report. Now that the Child Fatality Prevention System has a database to store and manage data collected during clinical reviews, funding is needed to support the work of a data analyst. Funding also is needed to implement local-level prevention strategies identified during the clinical case reviews.

VII. Specific Subcommittee Recommendations

Although the Child Fatality Prevention System was codified in statute in 2005, the Colorado Department of Public Health and Environment has been conducting reviews of child deaths for the past 19 years. Many of the members of the State Review Team, who previously participated on the voluntary Child Fatality Review Committee, indicated that the trends identified during reviews in 2008 matched those seen in case reviews conducted over the past 18 years. Therefore, the following recommendations represent a synthesis of prevention strategies gathered from the analysis of many similar cases of child fatality over the years. The State Review Team endorses these recommendations as the most effective means of reducing child death rates in Colorado. Specific prevention recommendations for each category of death are outlined in Table 3.

Table 3: Specific Recommendations by Category of Death

CLINICAL REVIEW GROUP	RECOMMENDATION	EVIDENCE IN SUPPORT OF THIS RECOMMENDATION
<p>Child Abuse/ Neglect</p>	<ul style="list-style-type: none"> • Establish and fund free or low-cost respite childcare centers with access 24 hours per day, seven days per week. • Develop and implement a public information campaign, targeting mothers, that emphasizes the danger of leaving children with caregivers who may be unskilled or abusive. The availability of respite care centers should be presented as an option. 	<ul style="list-style-type: none"> • Respite care centers provide an option for child care, so mothers do not have to leave their child/ren with a potentially abusive caregiver. The Children’s Bureau of the U.S. Department of Health and Human Services has recognized the effectiveness of crisis nursery (respite) care.¹ The American Academy of Family Physicians also recommends community respite care as a child abuse prevention strategy.² The National Resource Center for the Community Based Child Abuse Prevention Programs states that respite services directly contribute to a reduction in the likelihood of child abuse and neglect, and in the removal of children from their homes; while contributing directly to the safety of children receiving care.³ An outcome evaluation of planned and crisis respite care programs conducted by the ARCH National Respite Network and Resource Center found that 20 percent of caregivers would have left their child with an inappropriate caregiver if crisis respite care had not been available. Eighty-two percent said that the availability of crisis respite reduced the risk of harm to their children to a “very” or “extremely” high degree.⁴ • Locally funded respite child care centers in Fort Collins and Colorado Springs serve many families each year and could serve as models for the development of other centers. Family resource centers also might be able to provide this service or facilitate referrals to families in need of respite care.

¹<http://www.archrespite.org/archfs01.htm>

² Bethea M.D., Lesa, (1999) Primary Prevention of Child Abuse. American Family Physician. 59. <http://www.aafp.org/afp/990315ap/1577.html>

³http://www.archrespite.org/friends_factsheet9.pdf

⁴ Ibid

CLINICAL REVIEW GROUP	RECOMMENDATION	EVIDENCE IN SUPPORT OF THIS RECOMMENDATION
Child Abuse/Neglect	<ul style="list-style-type: none"> • Support the Colorado Child Welfare Action Committee’s recommendations related to preventing the co-occurrence of domestic violence and child abuse, specifically by: <ul style="list-style-type: none"> • Requiring all Collaborative Management Programs created under HB04-1451 include a domestic violence representative on the Interagency Oversight Group. • Requiring counties to request information related to domestic violence when screening calls related to potential child abuse and neglect. 	<ul style="list-style-type: none"> • Governor Bill Ritter commissioned the Child Welfare Action Committee on April 16, 2008 to make recommendations that will improve the child welfare system in Colorado. This committee reviewed national incidence studies on co-occurrence of domestic violence and child abuse, as well as the Colorado Department of Human Services’ 2008 Child Fatality Report, which indicates that domestic violence is a co-occurring factor in 30-40 percent of all child maltreatment deaths. • In over fifty percent of the child abuse or neglect cases reviewed in 2008, the perpetrators had a prior history of domestic violence either as a batterer or a victim.
Child Abuse/Neglect	<ul style="list-style-type: none"> • Continue to support the Colorado Children’s Trust Fund to enhance communities’ capacity to prevent child abuse and neglect. 	<ul style="list-style-type: none"> • The Colorado Children’s Trust Fund (CCTF) is authorized in Colorado Statute within the Children’s Code (C.R.S. 19-3.5-101) and was established in 1989 to prevent abuse and neglect among Colorado’s children. The CCTF Board of Directors approves funds for programs that are evidence-based, replicable, and evaluation-ready. Currently, CCTF supports Nurturing Parenting programs throughout the state. Evaluation results from the past three years demonstrate a statistically significant improvement for the parents who have attended these programs. Hence, they are less likely to maltreat their children. • Child Abuse and Neglect Clinical Review Team members consistently identified the need for Nurturing Parenting and/or child development programs for parents/caretakers during the 2008 case reviews.

CLINICAL REVIEW GROUP	RECOMMENDATION	EVIDENCE IN SUPPORT OF THIS RECOMMENDATION
Violence	<ul style="list-style-type: none"> • Establish a statutory requirement that mandates the safe storage⁵ of firearms in the homes of parents with children and youth under age 18. • Establish a statutory requirement that requires licensed gun dealers to post or provide a warning to prospective gun purchasers about the connection between teen suicide and accessible firearms in the home. 	<ul style="list-style-type: none"> • Of the 18 firearm-related deaths reviewed, 15 deaths were caused by youth with easy access to a firearm. • Several research studies have noted that the availability of firearms is a key risk factor in youth suicide. The implementation of legislation requiring safe storage of firearms led to decreases in firearm-related youth suicides in several U.S. states and in New Zealand.^{5, 6, 7} Currently, there are 19 states with safe storage laws. A recent study showed that state safe storage laws were associated with an 8.3 percent decrease in suicide rates among 14-17 year olds.⁸
Violence	<ul style="list-style-type: none"> • Mandate an evidence-based school suicide prevention curriculum that trains students, teachers and parents on how to recognize and respond to suicidal risk in adolescents. 	<ul style="list-style-type: none"> • Adolescents spend a significant amount of time in school and with peers. Suicidal youth are most likely to disclose their suicidal ideation to a peer. Peer response to suicidal disclosures is extremely important to saving lives.⁹ In 38 percent of the suicide deaths reviewed in 2008, the youth expressed suicidal ideation to others, made prior threats of suicide, or attempted suicide in the past. Providing young people with the necessary training to recognize suicide risk in their peers and to refer those peers to appropriate treatment is an important prevention strategy.

⁵ Safe storage of firearms is defined as the following: guns are stored unloaded and locked in a cabinet; keys are stored in a hidden and undisclosed location away from the cabinet; and ammunition is stored in a hidden and undisclosed location away from the cabinet.

⁶ Miller, Matt; Hemenway, David. (2001). Gun Prevalence and the Risk of Suicide: A Review. *Harvard Health Policy Review*. 2, 29-37.

⁷ Beautrais, A.L.; Fergusson, D.M.; Horwood, L.J. (2006). Firearms Legislation and Reductions in Firearm-Related Suicide Deaths in New Zealand. *Australian and New Zealand Journal of Psychiatry*. 40, 253-259.

⁸ Webster, Daniel W., et al. (2004). Association between Youth-Focused Firearm Laws and Youth Suicides. *Journal of the American Medical Association*. 292, 594-601.

⁹ Dunham, Katherine. (2004). Young Adults' Support Strategies When Peers Disclose Suicidal Intent. *Suicide and Life Threatening Behavior*. 34, 56-65.

CLINICAL REVIEW GROUP	RECOMMENDATION	EVIDENCE IN SUPPORT OF THIS RECOMMENDATION
<p>Violence</p>	<ul style="list-style-type: none"> • Continue to support the Office of Suicide Prevention to enhance communities' capacity to address suicide and to provide suicide prevention resources, outreach, and training throughout Colorado. 	<ul style="list-style-type: none"> • The Office of Suicide Prevention (OSP) was established by the 2000 Colorado General Assembly to reduce the number of suicide deaths in Colorado by providing resources, outreach, training, and funding for prevention and intervention activities across the state. Colorado's annual suicide rate declined by 6.5 percent between 1998 and 2007. During this time, OSP has funded several successful projects, including the Pueblo Suicide Prevention Center Hotline. The number of calls coming into the Pueblo Suicide Prevention Hotline increased from 2,018 in 2002 to 6,068 in 2007, secondary to grant support from OSP. The suicide rates in Pueblo remained steady between 2002 and 2007, suggesting that more people are seeking help. • Additionally, OSP received a grant from the Substance Abuse and Mental Health Services Administration to facilitate a youth suicide prevention initiative called, Project Safety Net. This program has trained over 2,000 people in Colorado in suicide awareness and intervention skills, in addition to building community networks to connect at-risk youth to care and resources. A robust evaluation of the suicide awareness and intervention skill training has shown that the training increases adults' confidence and willingness to intervene with youth who are suicidal. • During the 2008 case reviews, Violence Review Team members consistently identified the need for suicide prevention education to help parents and community members recognize associated risk factors and warning signs.

CLINICAL REVIEW GROUP	RECOMMENDATION	EVIDENCE IN SUPPORT OF THIS RECOMMENDATION
Motor Vehicle	<ul style="list-style-type: none"> Establish a statutory requirement that allows for primary enforcement of the seat belt law, making it possible for a driver to be stopped and issued a citation if anyone in the vehicle is not properly restrained. 	<ul style="list-style-type: none"> Fifty-two percent of the children/youth who died in motor vehicle crashes were not properly restrained by a car seat or seatbelt. Practices of the adult driver influence the use of restraints by children. A national study of fatal crashes found that when adult drivers used a seatbelt, children riding with them also were restrained 94 percent of the time. If the adult driver was not using a seatbelt, child restraint use decreased to 30 percent.¹⁰ States with primary safety restraint laws have seatbelt use rates that are 10 to 15 percent higher than states with secondary laws.¹¹ Currently, 26 states have a primary safety restraint law. A systematic review of 13 published studies showed that primary safety belt laws are incrementally more effective in decreasing fatal injuries and increasing safety belt use than secondary safety belt laws.¹²
Motor Vehicle	<ul style="list-style-type: none"> Enhance Colorado's booster seat law to require that children be secured in booster seats from age four to age eight, up to a weight of 80 pounds and a height of four feet nine inches. 	<ul style="list-style-type: none"> Among children ages four to eight who died in a motor vehicle crash, 92 percent were not properly restrained in a booster seat. Existing child passenger safety restraint laws in Colorado adequately address use for infants, toddlers and children ages four to five, whose height is less than 55 inches. This law does not reflect the best practice recommendation from the Centers for Disease Control and Prevention, which states that children should be secured in booster seats from age four to eight, up to a weight of 80 pounds and a height of four feet nine inches.

¹⁰ National Highway Traffic Safety Administration. (2006) Fact Sheet available on line: <http://www.nhtsa.dot.gov>

¹¹ Ibid

¹² Dihn-Zarr, et al. (2001). Reviews of Evidence Regarding Interventions to Increase the Use of Safety Belts. *American Journal of Preventive Medicine*. 21 (4S). 48-65.

CLINICAL REVIEW GROUP	RECOMMENDATION	EVIDENCE IN SUPPORT OF THIS RECOMMENDATION
Motor Vehicle	<ul style="list-style-type: none"> • Increase parental awareness and support enforcement of the Graduated Drivers Licensing Law. 	<ul style="list-style-type: none"> • Colorado’s Graduate Driver’s Licensing (GDL) law was first enacted in 1999 to increase the amount of behind the wheel training necessary for beginning drivers. In 2005, the Colorado General Assembly passed additional components to the GDL law restricting the number of passengers that a minor driver can transport and prohibiting any minor driver who has held a license for less than one year from driving between midnight and 5 a.m. These passenger and curfew restrictions went into effect on July 1, 2005. • In the sample of deaths reviewed, at least 52 percent of the motor vehicle crash fatalities involving teens, the teen drivers were out past curfew, had multiple passengers, and/or were driving recklessly. Their lives may have been saved if they had followed the provisions outlined in 2005 Graduated Drivers Licensing law. In order for this law to be effective, it is necessary to continue educating parents and law enforcement about how best to enforce it.
Motor Vehicle	<ul style="list-style-type: none"> • Establish a statutory requirement that would mandate the use of helmets when operating All-Terrain Vehicles (ATVs), prohibiting children under age 16 from operating off-road vehicles, and prohibiting driving an ATV with a passenger, based on the recommendations from the American Academy of Pediatrics. 	<ul style="list-style-type: none"> • Four of the five children who died in ATV-related incidents were under the age of 14. All of the children were either passengers on the back of ATVs driven by inexperienced drivers or were inexperienced drivers themselves. • According to the U.S. Consumer Product Safety Commission, 20 children under age 16 died in ATV crashes in Colorado between 1982-2004, meaning that on average, less than one death occurred per year during this time period.¹³ Data from the Child Fatality Prevention System indicates that this number may be rising, as there were five ATV-related child deaths in 2005 alone. • The American Academy of Pediatrics recommends the following: children under age 16 should not be allowed to operate off-road vehicles, riding double should not be permitted, and all riders should wear appropriate protective gear (e.g. motorcycle helmets and protective clothing).¹⁴

¹³ <http://www.atvsafety.gov/state/colorado.html>

¹⁴ American Academy of Pediatrics (2000). All-Terrain Vehicle Injury Prevention: Two-, Three-, and Four-Wheeled Unlicensed Motor Vehicles. *Pediatrics*. 105, 1352-1354.

CLINICAL REVIEW GROUP	RECOMMENDATION	EVIDENCE IN SUPPORT OF THIS RECOMMENDATION
Accidental/ Unintentional	<ul style="list-style-type: none"> Establish a statutory requirement that would mandate children wear helmets while skiing or snowboarding. 	<ul style="list-style-type: none"> Over the past 19 years, review of child deaths indicate that almost all of the deaths resulting from skiing/snowboarding could have been prevented if the child had been wearing a helmet. U.S. Consumer Product Safety Commission staff, following an evaluation of head injuries associated with snow skiing and snow boarding, concluded that ski helmets will reduce the risk of head injuries.¹⁵ A study of Colorado residents hospitalized for skiing-related injuries found that children are at increased risk for serious head trauma and are ten times more likely to be hospitalized for a skiing-related head injury than adults. Head injuries are the cause of up to 88 percent of ski-related fatalities.¹⁶ Several research studies, including one by a neurologist at St. Anthony’s Hospital in Denver, show that skiers wearing helmets have better outcomes in ski-related accidents, reducing or preventing neurological impairment.^{17 18 19}
Accidental/ Unintentional	<ul style="list-style-type: none"> Establish a statutory requirement that mandates drug and alcohol toxicology screening of parents (or caregivers) in cases where a lack of adequate supervision may have contributed to the injury or death of a child. Expand the definition of child abuse and neglect to include the abuse of a controlled substance or alcohol that impairs an adult caregiver’s ability to keep a child safe from injury as part of the civil definition of child abuse or neglect. 	<ul style="list-style-type: none"> The majority of accidental/unintentional deaths involved children under age five. Many of these deaths could have been prevented with adequate supervision of the child or with safer sleeping environments. In many of these deaths, the adult(s) responsible for supervising or caring for the child had been using alcohol or drugs. Six states have included the use of a controlled substance by a caregiver that impairs the caregiver’s ability to adequately care for the child as part of the civil definition of child abuse or neglect.²⁰

¹⁵ <http://www.cpsc.gov/library/skihelm.pdf>

¹⁶ <http://www.healthsystem.virginia.edu/internet/pmr/skihelm.cfm>

¹⁷ <http://www.jama.ama-assn.org/cgi/content/short/295/8/919>

¹⁸ <http://www.thecni.org/reviews/11-1-p27-levy.htm>

¹⁹ <http://www.aaos.org/about/papers/position/1152.asp>

²⁰ http://www.childwelfare.gov/systemwide/laws_policies/statutes/drugexposed.cfm

VIII. Limitations

For many of the cases analyzed, the State Review Team lacked complete information for a comprehensive review. Data were missing because the information was not collected during the initial investigation, agencies did not respond to the coordinator's request for information, or documentation was incomplete or lacked pertinent details.

The review process would be enhanced if relevant information were readily available. For example, in child abuse deaths, greater detail about the history of the perpetrator or the psychosocial factors affecting the family would better inform the development of prevention strategies. In suicide deaths, more information about the child's mental status, school performance or social life would inform critical points for intervention. In motor vehicle deaths, detailed information about components of the automobile involved in the crash would lead to recommendations related to the safe engineering of cars. These gaps in information could be addressed through outreach and training to law enforcement, coroners and social service agencies conducting scene investigations.

Additionally, the review process would be enhanced with adequate resources for the development of local or regional review teams that could assist the Child Fatality Prevention System obtain data and implement prevention recommendations generated from clinical reviews.

IX. Conclusion

After 15 years as a voluntary endeavor, the process of child death review was legislatively mandated in 2005 with the passage of the Child Fatality Prevention Act. The State Review Team brings significant medical, psychosocial, legal and law enforcement expertise to the process of child fatality review, and this expertise has been utilized in developing recommendations for effective prevention strategies. The State Review Team is confident that child fatalities can be reduced in Colorado if these recommendations are adopted.

The definition of preventability used by the National Center for Child Death Review states that a child's death is preventable if the community or an individual reasonably could have acted to change the circumstances resulting in death. The vast majority of "preventable" deaths are due to unintentional injuries, suicide or violence. Deaths resulting from unintentional injuries, suicide and violence once were believed to be the result of chance or misfortune; however, science has proven otherwise. These deaths can also be prevented, and research on evidenced-based strategies for preventing injury-related deaths shows that change in policy and enforcement of existing laws are effective prevention strategies for a myriad of deaths.

The recommendations outlined in this report represent a synthesis of prevention strategies gathered from the analysis of child fatality in Colorado over 19 years and are based on best practices from around the world. The Child Fatality Prevention System Review Team believes that the implementation of these recommendations will promote the safety and wellbeing of children throughout Colorado.

Attachment One
COLORADO STATE CHILD FATALITY PREVENTION REVIEW TEAM

Name/Title	Representation/Role	Agency	Membership by	Term
Vacant	County Sheriff		Governor Appointed Voting Member	9/1/08 – 9/1/11
Vacant	County Sheriff from a Rural Area		Governor Appointed Voting Member	9/1/08 – 9/1/11
Amy Martin, MD Chief Medical Examiner	County Coroner	Denver County Coroner's Office	Governor Appointed Voting Member	9/1/08 – 9/1/11
Kelly Lear-Kaul, MD Deputy Coroner	County Coroner	Arapahoe County Coroner's Office	Governor Appointed Voting Member	9/1/08 – 9/1/11
Brad Lenderink Sargent	Peace officer who specializes in crimes against children	Denver Police Department	Governor Appointed Voting Member	9/1/08 – 9/1/11
Mathew Testa Sergeant	Peace officer who specializes in crimes against children		Governor Appointed Voting Member	9/1/08 – 9/1/11
Vacant	District Attorney		Governor Appointed Voting Member	9/1/08 – 9/1/11
Atrelle Jones Chief Deputy District Attorney	District Attorney from a rural area	10th Judicial District Attorney's Office	Governor Appointed Voting Member	9/1/08 – 9/1/11
Larry Matthews, MD Pediatric Consultant	Physician who specializes in traumatic injury or children's health	Department of Human Services	Governor Appointed Voting Member	9/1/08 – 9/1/11
Maria Mandt, MD Pediatrician	Physician who specializes in traumatic injury or children's health	The Children's Hospital	Governor Appointed Voting Member	9/1/08 – 9/1/11
Deniz Kolozs, MD Physician	Physician who specializes in traumatic injury or children's health	Kaiser Permanente Group	Governor Appointed Voting Member	9/1/08 – 9/1/11
Antonia Chiesa, MD Physician	Physician who specializes in traumatic injury or children's health	The Children's Hospital	Governor Appointed Voting Member	9/1/08 – 9/1/11
Mary Pat DeWald, RN Forensic Nurse	Nurse who specializes in traumatic injury or children's health	C-Sane Consulting LLC.	Governor Appointed Voting Member	9/1/08 – 9/1/11
Theresa Rapstine, RN Injury Prevention Specialist	Nurse who specializes in traumatic injury or children's health	The Children's Hospital	Governor Appointed Voting Member	9/1/08 – 9/1/11
Vacant	Local Fire Department		Governor Appointed Voting Member	9/1/08 – 9/1/11

Attachment One
COLORADO STATE CHILD FATALITY PREVENTION REVIEW TEAM

Name/Title	Representation/Role	Agency	Membership by	Term
Vacant	County attorney who practices in the area of dependency and neglect		Governor Appointed Voting Member	9/1/08 – 9/1/11
David Long Weld County Commissioner	County Commissioner	Weld County	Governor Appointed Voting Member	9/1/08 – 9/1/11
Ron Hyman State Registrar	Department of Public Health & Environment	CDPHE - Health Statistics & Vital Records	State Agency Appointed Ex-Officio Member	1/1/06 – 1/1/09
Shannon Breitzman Unit Director	Department of Public Health & Environment	CDPHE - Injury, Suicide and Violence Prevention Unit	State Agency Appointed Ex-Officio Member	1/1/06 – 1/1/09
Rochelle Manchego Child Fatality Program Coordinator	Department of Public Health & Environment	CDPHE - Injury, Suicide and Violence Prevention Unit	State Agency Appointed Ex-Officio Member	1/1/06 – 1/1/09
Scott Bates Program Manager	Department of Public Health & Environment	CDPHE – CO Children's Trust Fund and Family Resource Centers	State Agency Appointed Ex-Officio Member	1/1/06 – 1/1/09
Lindsey Myers Injury Prevention Program Manager	Department of Public Health & Environment	CDPHE - Injury, Suicide and Violence Prevention Unit	State Agency Appointed Ex-Officio Member	1/1/06 – 1/1/09
Vacant	Department of Public Health & Environment		State Agency Appointed Ex-Officio Member	1/1/06 – 1/1/09
Holly Hedegaard, MD Injury Epidemiology Program Director	Department of Public Health & Environment	CDPHE – Health Facilities and Emergency Medical Services Division	State Agency Appointed Ex-Officio Member	1/1/06 – 1/1/09
Kathi Orr FICMR Program Coordinator	County Health Department	El Paso County Health Department	State Agency Appointed Ex-Officio Member	1/1/06 – 1/1/09
Vacant	Department of Human Services - Child Welfare Division	CDHS - Child Welfare Division	State Agency Appointed Ex-Officio Member	1/1/06 – 1/1/09
Shirley Mondragon	Department of Human Services - Child Welfare Division	CDHS - Child Welfare Division	State Agency Appointed Ex-Officio Member	1/1/06 – 1/1/09
Lori Banks	Department of Human Services - Mental Health Services Division	CDHS - Division of Mental Health	State Agency Appointed Ex-Officio Member	1/1/06 – 1/1/09
Karen Abrahamson	Department of Human Services - Alcohol & Drug Abuse Division	CDHS – Alcohol and Drug Abuse Division	State Agency Appointed Ex-Officio Member	1/1/06 – 1/1/09
Vacant	Department of Human Services - Division of Youth Corrections	CDHS - DYC	State Agency Appointed Ex-Officio Member	1/1/06 – 1/1/09

Attachment One
COLORADO STATE CHILD FATALITY PREVENTION REVIEW TEAM

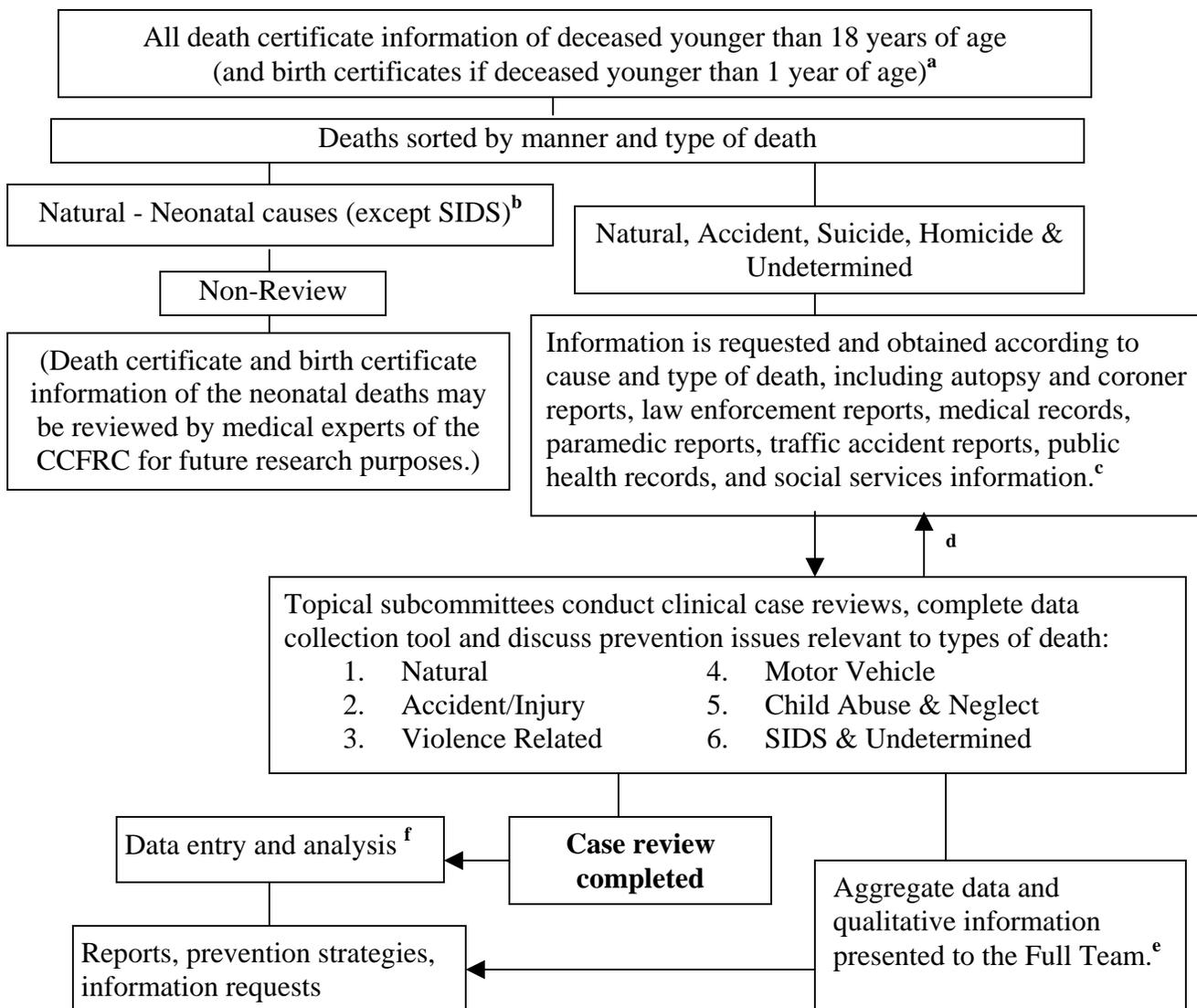
Name/Title	Representation/Role	Agency	Membership by	Term
Betty Donovan Director of County Human Services	Director of a County Department of Human Services	Gilpin County Department of Human Services	State Agency Appointed Ex-Officio Member	1/1/06 – 1/1/09
Vacant	Department of Public Safety		State Agency Appointed Ex-Officio Member	1/1/06 – 1/1/09
Vacant	Department of Education		State Agency Appointed Ex-Officio Member	1/1/06 – 1/1/09
Andrew Sirotnak, MD Director	Hospital Injury Prevention or Safety Specialists	KEMPE Center at Children's Hospital	Team Selected Ex-Officio Member	9/1/06 – 9/1/09
Vicky Cassabaum, RN Injury Prevention Coordinator	Hospital Injury Prevention or Safety Specialists	St. Anthony's Central Hospital	Team Selected Ex-Officio Member	9/1/06 – 9/1/09
J. Leah Lamb-Allen, MD	Hospital Injury Prevention or Safety Specialists	Dinosaur Junction Pediatrics	Team Selected Ex-Officio Member	9/1/06 – 9/1/09
Peter Werlin Flight for Life Nurse	Hospital Injury Prevention or Safety Specialists	Flight for Life	Team Selected Ex-Officio Member	9/1/06 – 9/1/09
Maile Gray Executive Director	Auto Safety/Driver Safety organization	DRIVE SMART Colorado Springs	Team Selected Ex-Officio Member	9/1/06 – 9/1/09
Sheila Marquez, RN Consultant	Sudden Infant Death Specialists	Consultant to Colorado SIDS Program	Team Selected Ex-Officio Member	9/1/06 – 9/1/09
Diana Goldberg Executive Director	Child Advocacy Centers network	Children's Advocacy & Family Resources, Inc./SungateKids	Team Selected Ex-Officio Member	9/1/06 – 9/1/09
Elizabeth Collins DV Advocacy Director	State Domestic Violence Coalition	Colorado Coalition Against Domestic Violence (CCADV)	Team Selected Ex-Officio Member	9/1/06 – 9/1/09
Lori Burkey Executive Director	Court-Appointed Special Advocate Program Directors	Colorado Court Appointed Special Advocates (CASA)	Team Selected Ex-Officio Member	9/1/06 – 9/1/09
Linda Weinerman Deputy Director	Office of the Child's Representative	Office of the Child's Representative	Team Selected Ex-Officio Member	9/1/06 – 9/1/09
Bonnie McNulty Consultant	Private Out-Of-Home Placement Provider	Colorado State Foster Parents Association	Team Selected Ex-Officio Member	9/1/06 – 9/1/09
Vacant	Community member with experience in childhood death		Team Selected Ex-Officio Member	9/1/06 – 9/1/09

Attachment One
COLORADO CHILD FATALITY PREVENTION SYSTEM MANDATE

The mandate of the Child Fatality Prevention System is to

- 1) *review specified deaths* of children from birth to 18 years of age occurring in Colorado and involving circumstances where the child is receiving services from a county department or where there has been a report of suspected abuse or neglect;
- 2) *review the records* of all other unexpected and unexplained deaths of children from birth to 18 years of age occurring in Colorado;
- 3) *understand the incidences and causes* of childhood deaths;
- 4) *identify services* provided by public agencies to children and their families that are designed to prevent child abuse, neglect or death;
- 5) *identify any gaps or deficiencies* that may exist in the delivery of services by public agencies to children and their families that are designed to prevent child abuse, neglect or death;
- 6) *make recommendations* for implementing any changes to laws, rules and policies that will support the safe and healthy development of children and prevent child abuse, neglect and death; and
- 7) *develop a community approach* to the problem of child abuse and neglect and to the prevention of childhood deaths.

Attachment Two COLORADO CHILD FATALITY CASE REVIEW PROCESS



Notes:

Colorado Child Fatality Review Process

a. Birth and death certificate data are obtained through the Colorado Department of Public Health and Environment, Division of Health Statistics and Vital Records.

b. “Neonatal” deaths are all natural mannered child deaths occurring at fewer than 28 days of age (except those classified as SIDS) and are reviewed by experts in neonatology outside of the CFR process.

c. Records regarding the circumstances of a specific child death are requested from the Colorado Trails system, county coroners, state and local law enforcement agencies, hospitals, EMS agencies, local public health and nursing service agencies, and other statewide data sources and available for review by clinical subcommittees.

d. On occasion, the clinical subcommittee review raises more questions and further information is requested.

e. A summation of the subcommittee case reviews and discussions are presented to the Full State Child Fatality Prevention Review Team for the broader professional expertise.

f. Data collection tools are reviewed for completion and accuracy and data is entered into comprehensive database (activity is pending completion of national database). CFPR staff analyzes data for data requests, reports and publications.

Attachment Three

COLORADO STATE CHILD FATALITY PREVENTION REVIEW TEAM SUBCOMMITTEE DESCRIPTIONS

The Child Fatality Prevention System categorizes all child deaths into one of seven categories, or subcommittees, for case review and data reporting purposes. The subcommittees meet quarterly to conduct case reviews, discuss prevention efforts and prepare qualitative data reports for the full State Review Team. Each subcommittee consists of a core membership reflective of the varied expertise and disciplines related to the category of death. The charge of the subcommittees is to review the circumstances of each death to determine preventability and make recommendations for community, agency and policy level prevention efforts.

1. **NATURAL** – deaths of children ages 28 days-17 years, that are certified as Natural manner and Natural causes (except SIDS). This category includes deaths due to congenital conditions, chronic illnesses, cancers and other non-preventable medical conditions.
2. **ACCIDENT AND UNINTENTIONAL INJURIES** – deaths of children ages 0-17 years that are certified as Accidental manner and the cause of death is due to injuries of unintentional actions (except motor vehicle incidents). This category includes deaths due to drowning, fire, fall, poisoning, recreational and other types of injuries, but does not include deaths related to motor vehicle accidents/crashes or firearm injuries, as they are reviewed by other subcommittees.
3. **VIOLENCE** – deaths of children ages 0-17 years that are certified as Suicide, Homicide and Accidental manners of death and the cause of deaths are attributed to intentional injuries (except Child Abuse and Neglect). This category includes all suicide deaths and all firearm related injuries, but does not include homicide cases that are determined to be the result of child abuse or neglect.
4. **MOTOR VEHICLE** – deaths of children ages 0-17 years, that are certified as Accidental manner and the cause of death is related to a motor vehicle crash or incident. This category also includes deaths related to pedestrian, bicycle and All-Terrain vehicle incidents.
5. **CHILD ABUSE AND NEGLECT** – deaths of children ages 0-17 years that are certified as Homicide, Accident or Undetermined manner of death and the underlying cause of death is related to child abuse and/or neglect circumstances. This category includes those deaths that were founded for abuse and neglect by the state Department of Human Services Child Fatality Review Team and those where the investigation determined that abuse and neglect were perpetrated by others.
6. **SIDS AND UNDETERMINED** - deaths of children ages 0-17 years that are certified as Natural or Undetermined manner and the cause of death is either due to Sudden Infant Death Syndrome, Sudden Unexplained Death in Childhood and/or undetermined causation. This category does not include cases of undetermined manner, with a cause of death specific to another category, such as firearm injury or child neglect circumstances.
7. **NEONATAL** – deaths of infants age 28 days or younger, that are certified as Natural manner and the cause of death is natural (except those classified as SIDS). The Child Fatality Prevention System does not review these deaths.