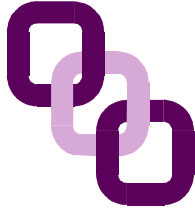


COLORADO



Child Fatality Review Committee BRIEF

December 1999

The second in an ongoing series of brief reports on Colorado Child Fatality Review Committee findings

Firearm Child Fatalities Colorado 1993-97

The Colorado Child Fatality Review Committee (CFRC) reviews all child deaths (ages 0-17 years) that occur in Colorado each year. Cases are identified by death certificate data from the Colorado Department of Public Health and Environment Health Statistics and Vital Records Program. All deaths occurring in Colorado to both residents and nonresidents are included. These criteria may be different from those used in other reports, and these data may not match other statistics reported on both state and national levels.

In addition to the death certificate, information is obtained as needed to complete each case review. This information may include reports related to the death investigation or to the child's background. In some cases, newspaper articles have been found to be consistent with official reports and have been used to supplement available information.

In the five-year period 1993-97, there were 193 child fatalities in Colorado that were attributable to firearms, an average of 39 per year. These 193 firearm child fatalities account for more than five percent of the 3575 child deaths during this period and 18 percent of the 1072 injury-related child deaths. The manner of death was suicide in 88 cases, homicide in 78 cases, accident in 20 cases, and undetermined in seven cases. In four cases, the manner of death as classified on the death certificate was changed for CFRC data purposes only. In addition to the four cases in which the CFRC reclassified the manner of death, there were other cases which raised questions about the determination of manner of death. Persons completing death certificates may not always be consistent in determining manner of death. For example, a self-inflicted gunshot wound by an adolescent with a high blood alcohol level could be categorized as suicide, accident, or undetermined manner of death, depending on the perspective of the coroner who completes the death certificate.

**Table 1: Firearm child fatalities by age and gender
Colorado 1993-97, ages 0-17 years, n=193**

Age Group	Male		Female		Total	
	Number	Rate*	Number	Rate*	Number	Rate*
0-9	5	0.3	5	0.4	10	0.4
10-14	38	5.4	13	2.0	51	3.7
15-17	116	29.3	16	4.2	132	17.1
Total	159	6.2	34	1.4	193	3.9

*Deaths to resident and non-resident children under 18 per 100,000 Colorado population under 18 (1997-based population estimates)

Forty-six percent of the firearm child fatalities (88) were classified as suicide, followed by 40 percent (78) homicide and 10 percent (20) accidental. The manner of death varied by race/ethnicity, with homicide accounting for 78 percent of fatalities among blacks, 63 percent of fatalities among Hispanics, and 22 percent of fatalities among white non-Hispanics.



Prevention Strategy

Teach children never to touch a gun and to tell an adult if they find a gun.

Demographics

Eighty percent of the firearm-related child fatalities occurred among males in the 10-17 year age group. Table 1 shows that the total rate for males (6.2 per 100,000 Colorado resident population) is more than four times that for females (1.4 per 100,000). The rate for black children was 11.0 per 100,000 (Table 2), which is double the rate for Hispanic children (5.5 per 100,000) and more than three times that for white non-Hispanic children (3.1 per 100,000).

**Table 2: Firearm child fatalities by race/ethnicity
Colorado 1993-97, ages 0-17 years, n=193**

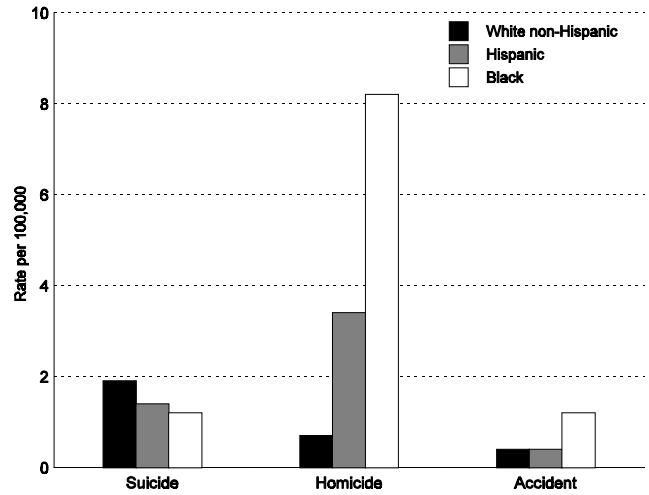
Race/Ethnicity	Number	Percent	Rate*
White, non-Hispanic	115	59.6%	3.1
Hispanic	46	23.8%	5.5
Black	28	14.5%	11.0

*Deaths to resident and non-resident children under 18 per 100,000 Colorado population under 18 (1997-based population estimates)

Suicide, on the other hand, was the manner of death for 11 percent of fatalities among blacks, 26 percent of fatalities among Hispanics, and 63 percent of white non-Hispanics. Homicide rates range from 0.7 per 100,000 for white non-Hispanics to 8.2 per 100,000 for blacks, and suicide rates range from 1.2 per 100,000 for blacks to 1.9 per 100,000 for white non-Hispanics (Figure 1). The rates for Hispanics fall between those of blacks and white non-Hispanics for both homicide and suicide.

Most of the firearm child fatalities occurred to residents of the most highly populated counties in Colorado (Table 3). The eleven Colorado counties which had more than two firearm child fatalities during 1993-97 were among the fourteen counties with the highest populations in this age group during that time (according to 1997-based population estimates). Six of the deaths were to children who were not Colorado residents.

Figure 1: Firearm child fatality rates* by manner and race/ethnicity Colorado 1993-97, ages 0-17 years, n=193



*Deaths to resident and non-resident children under 18 per 100,000 Colorado population under 18 (1997-based population estimates)


Table 3: County[†] of residence, firearm child fatalities Colorado 1993-97, 0-17 years, n=193

County	Average population [‡]	Number of fatalities
El Paso	127082	32
Denver	126660	42
Jefferson	125517	15
Arapahoe	118132	25
Adams	87260	15
Boulder	60847	8
Larimer	54524	*
Weld	41675	7
Pueblo	33517	10
Douglas	31665	*
Mesa	27555	3
Garfield	10081	4
La Plata	10069	*
Fremont	8778	5

[†]Fourteen most populous counties only
[‡]Average population, 1993-97, ages 0-17 years (1997-based population estimates)
 *Fewer than three incidents

Circumstances


The type of weapon used was a handgun in at least two-thirds (127) of firearm child fatalities (Figure 2). The type of weapon was unknown in 17 deaths, but the circumstances indicate that the majority of these were handguns. There were 28 deaths in which a rifle was used and 21 in which the weapon was a shotgun; 38 of the 49 rifle or shotgun deaths were self-inflicted, either intentionally or unintentionally. Handguns were used in at least two-thirds of the homicides and three-quarters of the accidental deaths.



Prevention Strategy
 Store firearms unloaded and locked up.
 Lock ammunition in a separate location, out of a child's reach.

Some understanding of who fired the weapon and with what intent can be gained from the manner of death designation. However, it may also be useful to know whether the gun was being handled by the victim or by another person at the time of the shooting. Figure 3 shows that in 108 (56%) of the firearm child fatalities the weapon was discharged by the victim. These 108 fatalities include 88 suicides, 13 accidents, and seven deaths of undetermined manner.

Figure 3 also shows the age distribution of the shooter for both deaths in which the firearm was discharged by the victim and cases in which another person was responsible. In 165 cases (85%), the age of the shooter was known. Of the 108 deaths in which the firearm was discharged by the victim, 53 (49%) were in the 16-17 year age group, 38 (35%) were in the 14-15 year age group, and 17 (16%) were younger than 14 years of age. Of the 84 deaths in which the firearm was known to be discharged by another person, 27 (32%) of the shooters were older than 17 years of age, 10 (12%) were in the 16-17 year age group, 15 (18%) were in the 14-15 year age group, and five (6%) were younger than 14 years of age. In the remaining 27 deaths, the age of the perpetrator was unknown.



Prevention Strategy
 Use gun locks and load indicators on all firearms.



Prevention Strategy

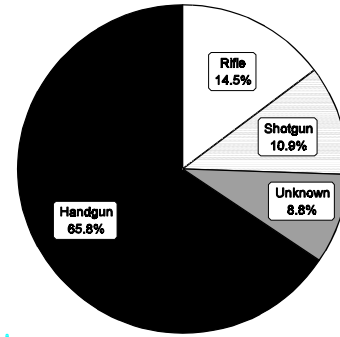
If you own a gun, take lessons on how to properly handle a firearm. Make sure children also take lessons if they will be using a firearm.

Over half (101) of all deaths occurred while the child was at his or her own home (Table 4), including 74 of the 88 suicides (84%). Another 35 (18%)

occurred at the home of a relative, friend, or acquaintance. Although only 35 (45%) of homicides occurred at homes, the overall picture indicates that children are at risk where they should be safest - in their homes and the homes of others.

It is difficult to get complete information on the role of drugs and alcohol in firearm child fatalities, particularly when the shooter is other than the child who has died. However, alcohol and/or drugs were a factor in at least 59 (31%) of these deaths. In most cases for which this information is available, the known drug and/or alcohol use was by the child rather than another involved individual.

Figure 2: Firearm Child Fatalities by Type of Weapon
Colorado 1993-97, ages 0-17 years, n=193



Prevention Strategy

Remove firearms from homes with troubled adolescents.

Figure 3: Child fatalities by shooter and shooter age
Colorado 1993-97, ages 0-17 years, n=192



Prevention

According to the National SAFE KIDS Campaign, Americans possess nearly 200 million firearms, including 65 million handguns. Gun owners keep firearms in the home for hunting and recreation (60%) or for protection and crime prevention (40%). A 1995 study in the *Journal of the American Medical Association* reported that although firearms were often kept in homes for protection, they were rarely used for that purpose in home invasion crimes.

Limiting access to firearms, particularly handguns, by children and adolescents was identified by the Child Fatality Review Committee repeatedly as the most obvious prevention strategy. According to the CFRC, if a gun is kept in the home, it should be locked up with the ammunition stored separately, particularly if there are young children

living in or visiting the home. Children are curious by nature and may have a difficult time distinguishing between real and toy guns. According to information compiled by the National SAFE KIDS Campaign, children as young as three years old are strong enough to pull the trigger on many of the handguns available in the U.S.

Eighty-six percent of the firearm-related deaths to children in Colorado during 1993-97 were intentional (suicide or homicide). Prevention efforts must take this factor into account. The CFRC recommends that children who may be at risk because of drug or alcohol use, suicidal talk or behavior, or mental health concerns, such as anger or depression, should not be allowed access to guns. This may mean removing the firearms from the home entirely because locking up or hiding guns or ammunition does not necessarily prevent access by an adolescent who is determined to obtain the weapon. A 1992 *New England Journal of Medicine* article by Kellermann *et al* reported that people living in a household where a gun is kept have a five times greater risk of suicide than people living in a household without a gun.

Table 4: Location of firearm child fatalities by manner
Colorado 1993-97, 0-17 years, n=193

Manner	Own home	Other home	Car, street, or sidewalk	Other
Accident	8	7	3	*
Suicide	74	5	4	5
Homicide	12	23	30	13
Undetermined	7	*	*	*

*fewer than three incidents

In addition to reducing handgun accessibility, particularly for high-risk individuals, the American Academy of Pediatrics recommends that pediatricians and other child health care providers inform patients and parents about the risk of keeping a handgun in the home. Even when precautions have been taken to protect children from firearms in their own homes, relatives, friends, or neighbors may also have guns in their homes that could be accessible to children. Prevention starts with awareness.

Conclusions

Gun ownership is legal in our society, but those who choose to own firearms must also take responsibility for their safe storage and use. Most deaths to children from firearms are directly related to access and availability of these weapons. Many of these deaths are predictable, and they are often preceded by a sequence of events that can set the stage for tragedy. Early identification of these warning signs may allow the event chain to be broken and provide the opportunity to save a life. For example, when a person is contemplating suicide, there can be warning signs such as changes in mood, grades, eating and sleeping habits, isolation from family and friends, or giving away personal belongings. When these signs are recognized, any firearms in the home should be secured or removed. Children are not always capable of protecting themselves and may not understand the lethality of firearms or finality of death. Also, many adolescents engage in high-risk behaviors that endanger themselves and others. The responsibility rests on adults to take the necessary steps - whether it is locking up firearms or removing them from the home - to keep children safe. Appropriate safety measures can prevent future firearm child fatalities and reduce unnecessary pain and grief for many family members, friends, and communities.



Prevention Strategy

Ask relatives, friends and neighbors if they own a firearm and how it's stored. Don't allow a child to play in a home where guns are improperly stored.

The Colorado Child Fatality Review Committee (CFRC) is a multidisciplinary team which has been reviewing all child deaths that occur in Colorado since 1989. The goals of the committee include describing patterns of child death in Colorado, identifying the prevalence of risk factors for child death, characterizing high-risk groups in terms compatible with the development of public policy, evaluating system responses to children and families who are at high risk and offering recommendations for improvement in those responses, and improving the quality of data necessary for child death investigation and review. A fundamental purpose of the review process is the development and implementation of prevention strategies that are suggested by the in-depth review of the circumstances of each child fatality.

See CFRC web site for further information about CFRC.

A copy of this brief is available on the CFRC web page.

Web Sites of Interest

Colorado Child Fatality Review Committee	http://www.cdphe.state.co.us/pp/cfrc
Center for the Study & Prevention of Violence	http://www.Colorado.EDU/cspv/
CDC Division of Violence Prevention	http://www.cdc.gov/ncipc/dvp/dvp.htm

Supported in part by Project H28-MC-00006-01 from the Maternal and Child Health Bureau (Title V, Social Security Act), Health Resources and Services Administration, Department of Health and Human Services.



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