

Part Two. Firearm Fatalities Among Children and Adolescents in Virginia, 1994

Introduction

The Virginia Child Fatality Review Team reviewed firearm fatalities in order to gain an understanding of the circumstances surrounding child and adolescent firearm fatality, to provide a profile of children and adolescents who died from firearms, and to make recommendations for prevention, education, and investigation of child death due to firearms. The findings presented here are purely descriptive; however, they paint a picture of child and adolescent death due to firearms during 1994, and they provide new information and insight regarding this alarming cause of child and adolescent death in Virginia.

A recent review of child firearm deaths by the Centers for Disease Control and Prevention (CDC) found that the United States has the highest rates of firearm fatality due to homicide, suicide, and unintentional injury among 26 industrialized countries. In 1994, among children aged 0 to 14, the U.S. rate of firearm fatality per hundred thousand was 1.66 compared to the combined rate of 0.14 in the other 25 countries studied.¹ The comparable firearm fatality rate in Virginia in 1994 was 1.69 per hundred thousand. Moreover, in 1994 in Virginia 63 children and adolescents under the age of 18 died as a result of firearm injury and it was the second leading external cause of death in this age group.

Section I of this part of the report describes the method for review of cases by the multidisciplinary Team. Section II describes the demographics of the children killed by firearm injury in 1994. Section III looks more closely at manner of death and section IV summarizes the key findings of the review. Section V describes the firearm fatalities that the Team judged to be preventable and section VI includes discussion and the Team's consensus recommendations for the reduction of firearm fatality among children and youth in Virginia.

I. Method of Review

The General Assembly set some general guidelines that govern the method of review. All reviews are retrospective, only residents of Virginia are included, and the individuals must be less than 18 years old. Firearm fatalities were selected by using ICD-9 (International Classification of Diseases, Ninth Revision) codes for homicide (E965.0-E965.4), suicide (E955.0-E955.9), legal intervention (E970), unintentional injury (E922.0-E922.9) and undetermined deaths (E985.0-E985.4) caused by firearm. A case file was created for each death to include the Medical Examiner record, certificate of death and other records obtained for review. All records collected by the Team and all information about the cases discussed by the Team are completely confidential. Team members and advisors sign a confidentiality statement before they review records. In addition, the records themselves cannot be obtained by a third party and are shredded at the conclusion of the fatality review.

The Team is authorized by statute to review records from agencies or persons who provided services to the child whose death is under review. This may include, but is not limited to the Department of Social Services, Child Protective Services, Emergency Medical Service providers, hospitals, physicians, counselors, schools, Community Service Boards, Juvenile and Domestic Relations Court and Court Services Units of the Department of Juvenile Justice. A standardized protocol for requesting records is used. Each agency receives a cover letter and request for records from the Chair of the Team. The initial letters are sent to law enforcement, schools, Community Service Boards, EMS, and Court Services Units. In addition, a list is provided to the Department of Social Services and to the Child Protective Services Unit in order to conduct a record search in their respective databases. When additional service providers, such as pediatricians or mental

health providers are identified, requests for records are also sent to them. Once the case file is complete, the death is assigned to three Team members who review the materials, hold a conference call to discuss them, and prepare a summary of the case for the Team meeting.

The Team meets every other month for case review. The business portion of these meetings is open to the public and routinely publicized in the *Virginia Register*. When cases are discussed, the meeting goes into closed session and becomes completely confidential. A Team member of the subgroup that reviewed the case file presents the facts of the case, as well as suggestions for education, training or prevention. The Team then considers whether there may have been opportunities to prevent this death and comes to a conclusion about whether or not the death was preventable.

One of the key functions of the Team is to review the cause and manner of death listed on the certificate of death and to make an independent assessment of cause and manner of death. All firearm deaths in Virginia are medical examiner cases in which cause and manner are certified by a medical examiner and forensic pathologist. Cause of death refers to the mechanism of injury or disease process that results in death. For example, gunshot wound to the head may be listed as a cause of death on a certificate of death. Manner of death refers to the circumstances in which the death occurred, and is certified by the medical examiner as natural, accident, homicide, suicide or undetermined.ⁱⁱ The Team came to its conclusions about cause and manner of death on a case by case basis after review of the materials and discussion by the group. In seven cases the Team categorized the manner of death differently from the medical examiner.

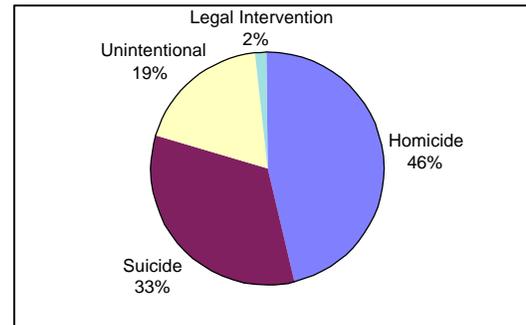
The Team and medical examiner utilize somewhat different criteria to assess manner of death. For example, the Team might assess a self-inflicted gunshot wound death in a ten-year-old as a suicide

after consideration of all of the circumstances. After homicide has been excluded, the medical examiner is more likely to certify this death as undetermined or accidental manner because of the inherent inability of a ten-year-old to truly appreciate the concept of death as a “forever” event. On the other hand, the Team might consider a self-inflicted gunshot wound to the temple with a revolver in a fifteen-year-old “playing with a gun” as an accident, whereas the medical examiner is more likely to conclude the death was a suicide. The medical examiner would argue that the placing of an obviously lethal weapon to a site where injury would essentially guarantee death and subsequently exerting 3 to 12 pounds of pressure to pull the trigger are clear expressions of an intent to die by one’s own hand. These differences underscore the purpose and usefulness of child fatality review.

II. Demographics

The Team examined the records of 63 children less than 18 years old who died as a result of firearm injury in 1994. Homicides at 29 or 46% comprised the most frequent manner of firearm death, followed by suicide at 21 or 33%, unintentional injury at 12 or 19%, and legal intervention at one or 2% (Figure 31).ⁱⁱⁱ Boys were more frequently the victims of

Figure 31. Firearm Fatalities by Manner of Death, Virginia, 1994, Total=63



firearm injury, accounting for 81% of the total. The distribution of deaths by race/ethnicity and sex can be seen in [Figure 32](#). Forty-four percent of these deaths occurred among black children and youth for an annual incidence rate per hundred thousand of 7.53 compared to the rate of 2.68 per hundred thousand among white children ([Table 1](#)). In Virginia, the relatively small population size of other racial and ethnic groups makes rate calculations less meaningful for those groups. The age distribution of firearm fatality can be seen in [Figure 33](#). Children less than 10 years old accounted for only seven or 11% of the deaths. Forty deaths or 63% occurred in the 15 to 17 year old age group and 16 or 25% of the deaths occurred among the 10 to 14 year old group. Handguns were the most frequently used firearms accounting for 54 or 86% of the deaths, and of those, 25 or 46% were auto-loading weapons ([Figure 34](#)).

Place of Injury and Health Service Area

The majority of these firearm injuries occurred in a residence, 31 or 49% in the victim’s home and 15 or 22% in another residence. Another 12 or 19% occurred on a city street and the remaining injuries occurred in other locations, including one in a park. The Team wants to emphasize that eight victims were injured in a friend’s home with a household firearm. Thus, when children and adolescents are involved, their safety can be dependent upon the firearm storage practices of others. In addition, as can be seen in [Figure 35](#), for the 57 deaths where time of injury was known, most of these deaths occurred between four in the afternoon and midnight.

For planning purposes, the Virginia Department of Health (VDH) has five health service areas (see [Appendix III](#)). Firearm fatalities occurred in all

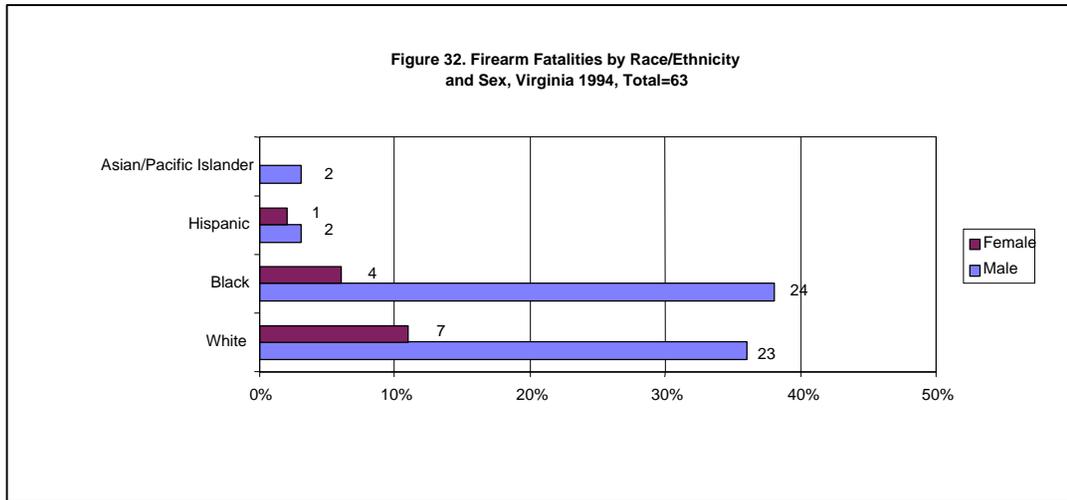


Table 1.

Firearm Fatality Rates by Race per hundred thousand, Virginia 1994, Age 0-17

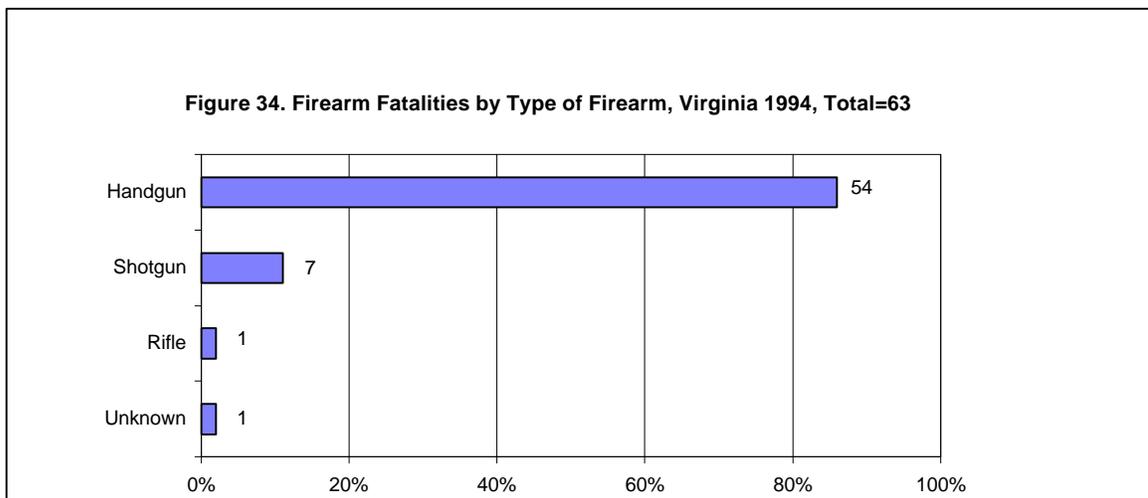
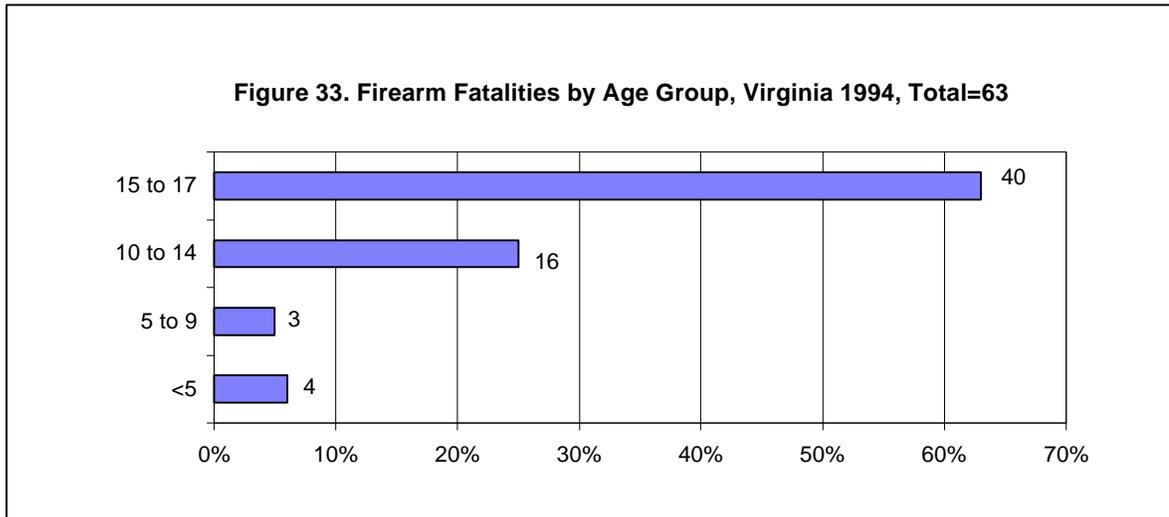
	No.	Population	Rate
White	30	1,115,485	2.68
Black	28	371,585	7.53

health service areas of the state, though some variation is seen in the manner of death (Figure 36). Thirty-eight percent of the deaths and 48% of the homicides occurred in the Eastern region. Central region accounted for 24% of the deaths and 34% of the homicides. While the Northwest region accounted for only 14% of the deaths, 33% of the suicides occurred there. Likewise Southwest region had 14% of the deaths, but 33% of the unintentional injuries. Northern Region had the fewest firearm fatalities, accounting for 10% of the deaths, including 7% of the homicides, and 14% of the suicides. Northern Region is the only location where there were no unintentional injury deaths and the only location where a firearm fatality was a result of legal intervention.

Firearm Fatality by Manner of Death

Homicide

The 29 homicide victims ranged in age from 2 to 17 years old. Selected race and sex specific rates were calculated for the 15 to 17 year old victims (Table 2). The firearm homicide rate per hundred thousand among black males in this age group was 47.76 or 21 times that of the white male rate per hundred thousand of 2.23. The rate per hundred thousand for black females was 6.97 or three times the white female rate per hundred thousand of 2.37. These data mirror data at the national level where the disproportionate impact of firearm homicide among black youth is well established.



When the homicides among youth are examined more closely they also have characteristics that Christoffel describes as accepted and probable risk factors for homicide.^{iv} Accepted risk factors include male, black race, urban residence, and poverty. Probable risk factors include juvenile system involvement and low educational level. Of note, Christoffel suggests that poverty probably explains the risk associated with black race.^v All but one of the homicides in this review had at least one of these risk factors and many had multiple risk factors. For example, juvenile justice involvement, low educational level, and poverty as evidenced by benefits received from the Department of Social Services (DSS) were found in 17 or 59% of the cases.

The circumstances of the homicide deaths among children and adolescents ranged from drug related execution style murders to family annihilations to ambiguous circumstances of youth playing with guns. Nearly half (14) of these homicides were either drug related, drive by shootings or gang related. Another four deaths occurred in the context of an argument, three deaths occurred in the context of youth playing with firearms, one as a result of a struggle over a firearm, one in the context of a robbery and in one case the motive could not be determined. Tragically, five children were also murdered in the context of a family annihilation. Handguns were used in 26 or 90% of these deaths.

