

Firearm-Related Deaths and Injuries in the United States A Public Health Perspective

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Background

Firearms-related deaths and injuries are a serious public health problem in the United States. The problem typically receives the greatest public attention after high profile mass shootings. On April 16, 2007, a student with a history of mental illness shot and killed 32 fellow students and faculty members and injured at least 15 others at Virginia Tech University before killing himself.¹ The Virginia Tech shooting was the most deadly in a long series of mass shootings in the United States (see appendix), but high-profile mass shootings are only the tip of a much larger epidemic of firearm-related deaths and injuries in our country. Currently, on an average day in the United States, 81 U.S. civilians are killed by guns.²

The annual number of firearm-related deaths in the U.S. peaked at 39,595 in 1993, then declined steadily over the rest of the decade to 28,663 in the year 2000.³ Since the year 2000, the annual number of firearm-related deaths in the U.S. has risen back to about 30,000 per year.² It is estimated that there are at least two to three times this many non-fatal gunshot wounds every year in our country.^{4,5} Over 3,000 Californians are killed annually by firearms.^{2,6} By comparison, there were approximately 3,000 deaths due to polio in the entire United States at the height of the polio epidemic in 1952. The current rate of firearm-related deaths in the U.S. is more than double the rate of deaths due to AIDS. By 1991, the annual number of firearms related deaths exceeded the number of deaths due to motor vehicle accidents in seven states, including California.⁷ Overall, gunshot wounds are the 4th leading cause of years of preventable life lost below age 65 in our country.⁸ It is estimated that the annual cost of medical treatment of gunshot injuries in the United States is \$2.3-4 billion.^{9,10} The overall cost to society of firearm-related injuries in the United States has been estimated to be \$112 billion annually.¹¹

Firearms related deaths and injuries are particularly rampant in adolescents and young adults in this country.^{12,13,14,15,16} Gunshot wounds are the second leading cause of death for children ages 10-19 in the United States, with only motor vehicle accidents taking a higher toll.¹⁷ The rate of firearms-related deaths for U.S. children younger than 15 years of age is nearly 12 times greater than the rate in the other 25 leading industrialized nations of the world.^{18,19} A child in the United States is currently far more likely to catch a bullet than to catch the measles.^{2,20} The homicide rate for U.S. males

ages 15-24 is more than ten times higher than for their counterparts in most other developed countries, with the excess number of homicides in the U.S. being attributable largely to firearm violence.²¹ Between July 1, 1994 and June 30, 1999, the Centers for Disease Control and Prevention reported that there were 220 separate shooting incidents on high school campuses in the United States, with 253 deaths.²² The authors of this study concluded that school-related shootings were "rare." The Canadian press has noted that school-related shootings are "uniquely American," and that it is also uniquely American for a national health agency to regard 220 separate high school shooting incidents in 5 years as "rare."²³

Most firearm-related deaths in the U.S. are due to suicides or homicides (51% and 44%, respectively), with a much smaller proportion being due to accidents (3%).²⁴ Most firearm-related suicides occur in persons under the age of 50.² Only 1% of firearm-related deaths are a result of legal intervention. Because suicide attempts with a gun are fatal in most cases, suicide attempts account for a small proportion of non-fatal gunshot wounds (6%), with assaults and accidents accounting for higher percentages (62% and 17%, respectively). As with fatal gunshot wounds, only 1% of non-fatal shootings are a result of legal intervention.²⁴

In the U.S., most murders (67%) are committed with firearms, and most firearm-related murders (80%) are committed with handguns.²⁵ In cases in which the murderer is identified, most assailants (78%) are persons known to the victims, not strangers.²⁶ In cases in which the circumstances of firearm-related murders are known, most (72%) occur in the setting of an argument or domestic quarrel, not during the commission of another felony such as a robbery or sexual assault.²⁵ About 8% of firearm-related homicides are thought to be juvenile gang-related.²⁵

The much higher rate of firearms violence in the United States as compared with all other industrialized countries corresponds with a much higher rate of firearms ownership in the U.S.^{27,28,29} Within the United States, as well, the community rates of firearm-related fatalities generally parallel community rates of firearm ownership.^{30,31,32,33,34,35,36}

The Myth of "Guns for Protection"

It is estimated that there are approximately 200-300 million privately owned firearms in the United States,³⁷ and that 38-48% of adults keep firearms in their home.³⁸ Most persons who keep handguns at home cite "personal protection" as the reason for having firearms.³⁹ In fact, however, several studies in the medical literature have shown that guns in the home are much more likely to be used to kill,^{40,41} injure,⁴² or intimidate⁴³ a household member than to protect against an attacker. In one of the best known studies on this subject, it was found that for every one time a gun in the home was used to kill someone in self-defense, there were 43 firearm-related homicides, suicides, or accidental deaths.

Numerous other studies in the medical literature have shown that the presence of a gun in the home is associated with an increased risk of a household member becoming a victim of homicide or suicide.^{44,45,46,47,48} Most school shootings are committed with guns brought from home.⁴⁹ Other studies have shown that the purchase of a handgun is

associated with an increased risk of the purchaser becoming a victim of suicide or homicide over the ensuing five to six years.^{50,51}

The evidence in the medical literature that widespread firearm availability is associated with more risk than benefit is consistent with data from law enforcement agencies and other government sources. An analysis of crime and criminal victimization data from 1987-1992 showed that the ratio of violent crimes committed with a handgun to protection of person with a firearm was 15:1.⁵²

Effectiveness of Gun Control Laws

As one would expect from the data linking firearm availability with firearm-related deaths, injuries, and crimes, there is substantial evidence that enactment and enforcement of legislation which reduces firearm availability is effective in reducing firearm-related deaths and injuries.^{53,54,55,56,57,58,59,60,61} There is no credible evidence to support claims by the gun lobby that reducing firearm availability is associated with an increase in non-firearm related crimes. On the contrary, at least one study has shown that regions in the United States with stricter gun control laws have lower rates of rape and robbery.⁶² Conversely, another study has shown that states with the highest firearm ownership rates also have the highest overall murder rates.⁶³

The most significant pieces of firearm legislation to be enacted at the federal level in the United States over the past decade have been the Brady Handgun Violence Prevention Act and the federal Assault Weapons Ban, both of which were implemented in 1994. The Brady Act, which is still in effect, requires background checks and a 5 day waiting period prior to the purchase of a handgun from a federally licensed firearms dealer. The Brady Act prohibits sales of handguns to individuals who are or who have been: 1) indicted for or convicted of crimes punishable by more than one year in prison; 2) a fugitive from justice; 3) addicted to a controlled substance; 4) adjudicated “mentally defective” or committed to a mental institution; 5) an illegal alien; 5) dishonorably discharged from the Armed Forces; or 6) a former U.S. citizen who has renounced citizenship.⁶⁴ The federal Assault Weapons Ban, which Congress and President Bush allowed to sunset in 2004, prohibited the sale of semiautomatic weapons with high capacity magazines and other features conducive to firing large numbers of rounds in a short period of time. Other, less far-reaching firearms violence control measures have included enactment and enforcement of tougher state and local gun control laws,⁶⁵ tougher licensure for firearms dealers,^{66,67} the development of firearms safety locks,⁶⁸ and bans in some states on low-priced, concealable handguns (Saturday night specials).^{69,70}

California has been a leader over the past 15 years in enacting sensible firearm regulations. Some of the more significant pieces of firearm legislation enacted in California during this time period include:

- 1989 - Assault weapons ban
- 1990 - Universal 15 day waiting period and background check for firearm purchase

- 1991 - Requirement for basic handgun safety training; adults held responsible for crimes committed by their children with guns not stored safely
- 1997 - 10-20-life penalty for felonies committed with a gun
- 1998 - Security and licensing standards for gun manufacturers
- 1999 - Safety standards for handguns
- 2001 - Requirement for proficiency test before purchase of handgun
- 2002 - Repeal of special products immunity for gun makers; expanded powers of police to seize firearms in domestic violence cases
- 2003 - Requirement for chamber load indicators and magazine disconnect safety locks on new handguns
- 2004 - Ban on .50 caliber sniper rifles

From 1993 to 2000, there was a 28% drop in overall firearms mortality in the United States.² The beginning of this decline coincided with the passage of the federal Brady Act and the federal Assault Weapons Ban, as well as with many other state and local firearm ordinances, suggesting that these measures may have had a positive effect.⁷¹ Gun control opponents argue that it was not the Brady Act, the Assault Weapons Ban, and other gun control measures that were responsible for the decline in firearm-related deaths over this period, but rather other factors, such as improvements in the economy, waning use of crack cocaine, and tougher sentencing laws for criminals. One study of the effectiveness of the Brady Act found a statistically significant reduction in firearm-related deaths only in the category of suicides in individuals 55 years or older.⁷² This article has been widely misquoted as proving that the Brady Act was ineffective in reducing firearm-related deaths in other categories. In fact, though, the authors concluded that difficulties in controlling for the many variables involved did not allow a reliable analysis of the overall effectiveness of the Brady Act. What is known for certain is that from the date of implementation of the Brady Act in 1994 to the year 2002, background checks required by the Brady Act led to the rejection of 976,000 gun sales.⁷³

The Virginia Tech shooting on April 16, 2007, points out one of the shortcomings of the Brady Act. The shooter, Seung-Hui Cho, was suspected by fellow students and faculty of being mentally ill. He had been ordered by a Virginia judge in 2005 to undergo outpatient treatment for mental illness. The State of Virginia did not report him, though, to the national database which the Brady Act depends upon to identify persons prohibited from purchasing handguns.⁷⁴ As a result, Seung-Hui Cho had no difficulty in buying the two semi-automatic handguns he used in the Virginia Tech massacre at a Virginia gun store. It is suspected that many other states do not compulsively follow the reporting provisions of the Brady Act.⁷⁵

Another shortcoming of the Brady Act is that it does not require background checks at gun shows for handgun sales by private citizens who are not federally licensed firearm dealers. Sales of handguns to persons who would be ineligible to purchase firearms under the Brady Act provisions has been reported to be rampant at gun shows, and Congress has repeatedly failed to pass legislation closing the gun show loophole.⁷⁶

The effectiveness of the federal Assault Weapons Ban has similarly been questioned.⁷⁷ Opponents of the ban argue that the types of firearms prohibited under the ban are really no different from other semi-automatic weapons, except for the high capacity magazines that they fire. In a study commissioned by the Brady Center to

Prevent Gun Violence and conducted by former officials of the Bureau of Alcohol, Tobacco, and Firearms, however, it was found that percentage of assault weapons traced to crime dropped from 4.8% to 1.6% over the 10 year life of the ban (a relative difference of 66%).⁷⁸ This study estimated that had the ban not been in effect, an additional 60,000 assault weapons would have been traced to crimes over the 10 year life of the ban.

As demonstrated by controversies surrounding the Brady Act and the federal Assault Weapons Ban, the effectiveness of individual firearms injury prevention measures is difficult to assess using typical medical research methodology. Among other limitations, investigators are not able to randomly assign “treatment” and “control” groups; it is difficult to control for confounding variables; there is not a uniform reporting system for non-fatal firearms injuries; and the extent and effect of illegal gun trafficking is impossible to assess.⁷⁹ Applying the public health model of disease control to firearms injuries, however, one would expect that the most effective intervention would be to eradicate the vehicle of injury (firearms) from the environment.⁸⁰ Since handguns account for approximately 70-80% of all firearms-related homicides,⁸¹ suicides,⁸² and accidental deaths,⁸³ but only about one third of all firearms owned,³⁸ reducing or eliminating the availability of handguns would be expected to be a particularly effective intervention. In support of this argument is the observation that the ban on new handgun purchases which was imposed in Washington D.C. in 1976 was followed by a 25% drop in firearms homicides and a 23% drop in firearms suicides over the next 10 years. No similar decline was seen in neighboring states, and there was no compensatory rise in non-firearm-related homicides and suicides.

"Bowling for Columbine" and the Canada/U.S. Comparison

Michael Moore's film, "Bowling for Columbine"⁸⁴ provides a provocative, sometimes humorous, but more often scathing commentary on the gun culture in the United States. The film, which won the 2002 Academy Award for best documentary, has certainly raised the public's awareness of the problem of violence, and particularly gun violence, in our country. In a segment of the film comparing the U.S. and Canada, though, it is implied that the two countries have similar rates of gun ownership, that firearm regulations are lax in Canada, and that Canadians do not consider firearm-related deaths and injuries to be a serious problem in their country.

The exact rates of gun ownership in different countries and in different parts of a given country are difficult to determine with precision, particularly in countries such as the United States in which gun registration is not mandatory in most states. Estimates of rates of gun ownership vary somewhat, depending on the method used to arrive at the estimate. In a study done using random computer-assisted telephone interviews, it was estimated that 48% of U.S. households have guns as compared with 29% of Canadian households.²⁷ Other studies have come up with lower estimates of the percentages of households having guns, in the range of 38-43% for the United States,³⁸ and 25% for Canada.⁸⁵ Regardless of the methodology used, though, it is clear that the rate of gun ownership in the United States is substantially higher than in Canada.

The rates of suicide and homicide are much higher in the United States than in Canada, and much of the excess suicide and homicide rates in the U.S. can be accounted for by gun-related deaths (See table below).

Table. Rates* of homicide, suicide, and household gun ownership, United States and Canada
(Data from Killias²⁷)

<i>Country</i>	<i>Homicide Overall</i>	<i>Homicide Gun-related</i>	<i>Suicide Overall</i>	<i>Suicide Gun-related</i>	<i>% households with guns</i>
United States	75.9	44.6	124.0	72.8	48.0
Canada	26.4	8.0	44.4	29.1	29.1

* annual deaths per million population

A direct comparison of homicide rates in Seattle, Washington, and neighboring Vancouver, British Columbia, suggests that different rates of firearm ownership are more important than different cultures in explaining the increased homicide rate in the U.S.⁸⁶ At the time of the study, Seattle and Vancouver were very similar in population, median income levels, and crime rates, excluding homicide. The two cities are 140 miles apart and share common television stations as well as a common geography, climate, and history. Firearm regulations, though, are very different. The percentage of households with guns was estimated to be 41% in Seattle compared with 12% in Vancouver. The risk of being murdered was 1.6 times higher in Seattle than in Vancouver, with virtually all of this excess risk being accounted for by a 4.8 fold higher rate of handgun-related homicide in Seattle.

Within Canada, as well, regional differences in rates of gun ownership correspond with differences in rates of firearm-related deaths and injuries. Firearm ownership rates range from 67% of households in the Yukon and Northwest Territories to 15% in the province of Ontario, with corresponding differences in rates of firearm-related deaths and injuries across these regions.⁸⁵

Despite the facts that firearm-related deaths and injuries are much less common in Canada than in the United States, many Canadians view firearm-related injuries as a serious public health problem in their country. The rates of firearm-related deaths are similar to rates of deaths in motor vehicle crashes in Canada, and shootings are the third leading cause of death in teenagers and young adults from ages 15-24.⁸⁵

Canada has long had stricter gun control laws than the United States.⁸⁷ In 1976, a bill was passed requiring that every person in possession of any firearm or ammunition obtain a license, valid for 5 years, to be issued only if the licensing officer is "satisfied that the applicant has nothing in his or her background that would render him unfit to possess a firearms' license." The applicant was also required to provide "the statements of two guarantors, from a selected list, who have known him or her for more than two years, to the effect that they too know of nothing that would render him or her unfit to possess a firearms' license." The tragic mass murder of 14 young women at Montreal's L'Ecole Polytechnique in 1989 by a deranged gunman galvanized the Canadian public to call for even more stringent firearm restrictions, including tighter restrictions on handgun

ownership and the sale of ammunition, a ban on semi-automatic assault weapons and short-barreled handguns, and mandatory registration of all firearms. This new legislation, passed in 1995 in large part due to the efforts of the Canadian Association of Emergency Physicians, gave Canada among the strictest gun control regulations in the western world, while still allowing hunters and target shooters to practice their sports. Since enactment of the new regulations, gun ownership in Canada has fallen 17%,⁸⁸ firearm-related homicides have dropped to their lowest level since 1966,⁸⁸ and overall crime has declined by about 20%.⁸⁹

In summary, Canada has much more stringent firearm regulations than the United States, a substantially lower rate of firearm ownership, and about one third the rates of homicide and suicide, due largely to much lower rates of gun-related homicide and suicide.

Obstacles to Gun Control in the United States

Despite the evidence in the medical and the criminology literature linking rates of firearm-related deaths and injuries, as well as rates of homicide, with rates of firearms ownership, the issue of gun control remains a controversial one in the United States. The two most common arguments put forth by opponents of gun control are: 1) that the Second Amendment to the U.S. Constitution prohibits restrictions on firearms ownership by private citizens; and 2) that there is evidence that “responsible gun ownership” deters crime.

The Second Amendment

Although interpretation of the Second Amendment is not, strictly speaking, a medical issue, physicians are governed in their practice and guided in formulating policy recommendations by the laws of the land, including the U.S. Constitution. Physicians interested in firearms violence prevention should be familiar, therefore, with the Second Amendment. The full text of the Second Amendment reads, “A well regulated militia, being necessary to the security of a free state, the right of the people to keep and bear arms, shall not be infringed.” Opponents of gun control typically omit the first portion of the Second Amendment, which refers to “a well-regulated militia,” and cite only the last phrase referring to the “right to bear arms.” It has been repeatedly established in Supreme Court decisions,^{90,91} in decisions of lower courts, and in reviews by legal historians^{92,93} that the Second Amendment was intended to protect the rights of states to maintain armed militias, and that it does not imply a right of individual citizens to own firearms. The late Supreme Court Chief Justice, Warren Burger, stated, “[The Second Amendment] has been the subject of one of the greatest pieces of fraud, I repeat the word ‘fraud,’ on the American public by special interest groups that I have ever seen in my lifetime.”⁹⁴

In a departure from the Supreme Court’s interpretation of the Second Amendment that is unprecedented over the past 75 years, a Federal Appeals Court ruled in a 2-1 decision in *Parker v. District of Columbia* on March 9, 2007, that the Washington D.C. handgun ban violated the appellant’s Second Amendment constitutional right to bear

arms. The Washington D.C. handgun ban remains in effect while this case is being appealed to the full 11-member Appeals Court panel.⁹⁵ For the past several decades, the Supreme Court has refused to hear new cases which challenged its previous interpretation of the Second Amendment. Should *Parker v. District of Columbia* be upheld at the Appeals Court level, it is possible the Supreme Court could revisit the interpretation of the Second Amendment. In the absence of a reinterpretation of the Second Amendment by the Supreme Court, though, the Second Amendment currently has no bearing on whether physicians, legislators, or other policy makers should advocate gun control legislation as a means of reducing firearm-related deaths and injuries.

“Guns for Protection”

The contention that “responsible gun ownership” deters crime is based largely on anecdotal reports and quasi-scientific studies published outside of the medical literature. One of the most often quoted studies claims that there are 2.5 million incidents of defensive gun use annually in the United States.⁹⁶ This study was a telephone survey in which none of the alleged defensive gun uses reported by telephone respondents was actually confirmed. The estimate of 2.5 million defensive gun uses annually in this study is an extrapolation based on the result that 66 out of 4,977 respondents to the survey (1.3%) reported using a gun defensively in the past year. Other authors have pointed out the inherent fallacy in extrapolating from 66 unconfirmed reports of defensive gun use to the conclusion that there are 2.5 million defensive gun uses annually in the U.S.^{97,98} It has also been noted that a higher portion of the population reports having had contact with space aliens than having used a gun defensively.⁹⁹

Another study frequently cited by opponents of gun control purports to show that allowing private citizens to carry concealed weapons reduces crime.¹⁰⁰ Serious methodological flaws have also been noted in this study,^{101,102} and its conclusion is not consistent with other studies in the criminology literature.^{103,104} In a review of the literature on firearms and violence, the Committee on Law and Justice of the National Academy of Sciences recently concluded that there is no credible evidence that the carrying of concealed weapons by private citizens reduces crime.¹⁰⁵

The Positions of Medical Organizations Concerning Firearm Injury Prevention

Numerous physicians specialty associations, including the American College of Physicians,¹⁰⁶ the American Academy of Family Physicians,¹⁰⁷ and the American College of Surgeons,¹⁰⁸ support measures to reduce firearms violence. The American Academy of Pediatrics has called for firearms regulation, including bans on private ownership of handguns and assault weapons, as the most effective way to reduce firearm-related injuries in children.¹⁰⁹ In 1998, the American College of Emergency Physicians (ACEP) endorsed the Eastern Association of Surgery for Trauma position paper on violence in America.¹¹⁰ The EAST position paper calls for restrictions on private ownership of handguns and licensing and registration of all individual firearms, in addition to other measures to reduce overall violence.¹¹¹ Following the lapse of the

Federal Assault Weapons Ban in 2004, ACEP issued the following position statement with regard to assault weapons:

ACEP deplores the threat to public safety that results from the widespread availability of assault weapons and high capacity ammunition devices. ACEP supports a comprehensive ban on sales of assault weapons and high capacity magazines.¹¹²

ACEP also has a page on its website warning consumers regarding the risks of guns in the home.¹¹³

On April 6, 2000, the Board of Directors of the California Chapter of the American College of Emergency Physicians (CAL/ACEP) voted to make firearms injury prevention one of the organization's legislative priorities. The CAL/ACEP Board of Directors approved a position statement concerning firearm injury prevention on December 7, 2000, and modified the position statement on July 30, 2005.

Cal/ACEP's Position on Firearm Injury Prevention Modified July 30, 2005

Firearm-related deaths and injuries are a serious public health problem in California and the rest of the United States. The rate of firearm-related deaths is many times higher in the United States than in other democratic, industrialized nations. Handguns account for most firearm-related deaths and injuries in the United States. Although most people who keep handguns in their home cite personal protection as the reason for having them, there is overwhelming evidence that guns in the home are much more likely to be used to kill or injure a household member than to protect against an attacker.

It is the position of the California Chapter of the American College of Emergency Physicians (Cal/ACEP) that the rate of firearm-related deaths and injuries in California and in the United States can and should be reduced to levels at or below the rates in other democratic, industrialized countries, while still allowing legitimate hunters and target shooters to practice their sports. Cal/ACEP believes that the organization has a duty to work in the arena of injury prevention. Accordingly, Cal/ACEP will actively support and foster legislation to prevent firearm-related deaths and injuries. Such legislation should include, at a minimum, licensing of all firearm owners and registration of all firearms; preservation of products liability for firearm makers and dealers; and a comprehensive ban on civilian ownership of assault weapons. Cal/ACEP will educate other health professionals, policy makers, and the general public regarding the need to address firearm-related deaths and injuries as a public health problem. Finally, Cal/ACEP will work cooperatively with other organizations actively engaged in the arena of firearm injury prevention.

What Cal/ACEP is Doing to Prevent Firearm-Related Deaths and Injuries

In accordance with the above position statement, Cal/ACEP has been working actively in a number of areas to reduce the rate of firearm-related deaths and injuries in

our state and in our country. To educate its own members, articles have been published concerning firearm injury prevention in state and national newsletters.^{114,115,116,117,118} Cal/ACEP has developed a slide show on firearm-related injury prevention which is adaptable for both medical and non-medical audiences. In conjunction with the California Federation of Consumers, Cal/ACEP has prepared a 30-second public service announcement concerning the dangers of guns in the home. This PSA, which is suitable for radio broadcast, can be downloaded from Cal/ACEP's website.¹¹⁹ To help finance its educational program, Cal/ACEP has reconstituted the Emergency Medicine Research and Education Foundation (EMREF), a non-profit, 501 (c) (3) organization. Tax-deductible donations to EMREF to support Cal/ACEP's firearm injury prevention educational campaign can be sent to the address below.

In the legislative arena, Cal/ACEP has actively supported many of the important firearm injury prevention bills, listed above, that have signed into law in California over the past several years. In the 2007 legislative session, Cal/ACEP supports AB 1471 (Feuer), a bill that would require that firing pins on semi-automatic handguns be micro-stamped with a bar code that is imprinted onto the cartridge when the bullet is fired, allowing law enforcement to trace spent casings found at crime scenes back to the guns that fired them. Cal/ACEP has also supported other legislative proposals, including a warning to consumers about the risks of guns in the home, tightening of regulations concerning ammunition sales and reporting of lost and stolen firearms, and educational programs for high school students concerning firearm injury prevention.

Summary

Firearm-related deaths and injuries are a serious public health problem in California and in the United States, particularly among adolescents and young adults. The rate of firearm-related deaths and injuries in the U.S. is much higher than in other leading democratic, industrialized countries of the world. The higher rate of firearm-related deaths and injuries in the U.S. corresponds with a higher rate of firearm ownership and more lax gun control laws. Contrary to the widely held misconception that guns in the home offer net "protection" for household members, there is overwhelming evidence that guns in the home are much more likely to be used to kill or injure a household member than to protect against an attacker. Cal/ACEP is working with other organizations through education and public policy advocacy to reduce the rate of firearm-related deaths and injuries in our state and in our country. If you are interested in helping with this effort, please contact:

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Appendix

Partial List of High Profile Mass Shootings in the United States (in chronological order)

August 1, 1966 – Charles Whitman, a student at the University of Texas, killed 13 people and wounded 30 others from the observation deck of the university clock tower using a hunting rifle and a shotgun.

July 18, 1984 - James Huberty killed 21 people and wounded 19 others in a San Ysidro, California, McDonald's using an UZI assault pistol and a shotgun.

January 17, 1989 - Patrick Purdy killed 5 small children and wounded 29 others and a teacher at the Cleveland Elementary School in Stockton, California, using a semiautomatic version of the AK-47 assault rifle.

September 14, 1989 - Joseph Wesbecker killed 7 people and wounded 13 others at his former place of work in Louisville, Kentucky, using an AK-47 and two MAC-11 assault pistols.

October 16, 1991 – George Hennard killed 23 people and wounded 20 others in Luby's Cafeteria in Killeen, Texas, using a Glock-17 semiautomatic pistol.

July 1, 1993 - Gian Luigi Ferri killed 8 people and wounded 6 others in San Francisco at the 101 California Street law office building using two TEC-DC9 assault pistols with 50-round magazines.

April 20, 1999 - Eric Harris and Dylan Klebold killed 12 students and one teacher and wounded 24 others at Columbine High School in Littleton, Colorado with an arsenal that included a Hi-Point Carbine assault rifle and a TEC- DC9 assault pistol.

October 2-22, 2002 – John Allen Muhammed and Ley Boyd Malvo killed 10 people and critically wounded three others in a series of sniper attacks along the Washington D.C. beltway using a Bushmaster X-15 sniper rifle.

April 16, 2007 – Seung-Hui Cho shot and killed 32 fellow students and faculty at Virginia Tech University and injured at least 15 others using two semi-automatic handguns.

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