



Firearm Injuries and Children Position Statement of the American Pediatric Surgical Association

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Abbreviations: APSA—American Pediatric Surgical Association, PTSD—post-traumatic stress disorder

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The increase in firearm injuries affects all pediatric care providers. APSA recommends improved trauma care, research, prevention and policy to address this public health problem.

Contributors' Statement

Drs Petty, Henry, and Nance performed the literature reviews to acquire relevant data, analyzed and interpreted these data, and drafted the article. Dr. Ford and the APSA Board of Governors reviewed, edited, and provided substantial input in terms of commentary and content.

All authors provided substantial contribution to conception and design, revised the article for critically important intellectual content, agree to be accountable for all aspects of the accuracy and integrity of the work, and give final approval of the version to be published.

Abstract

Firearm injuries are the second most common cause of death in children who come to a trauma center, and pediatric surgeons provide crucial care for these patients. The American Pediatric Surgical Association (APSA) is committed to comprehensive pediatric trauma readiness, including firearm injury prevention. APSA supports a public health approach to firearm injury, and it supports availability of quality mental health services. APSA endorses policies for universal background checks, restrictions on assault weapons and high capacity magazines, strong child access protection laws, and a minimum purchase age of 21 years. APSA opposes efforts to keep physicians from counseling children and families about firearms. APSA promotes research to address this problem, including increased federal research support and research into the second victim phenomenon. APSA supports school safety and readiness, including bleeding control training. While it may be daunting to try to reduce firearm deaths in children, the U.S. has seen success in reducing motor vehicle deaths through a multidimensional approach—prevention, design, policy, behavior, trauma care. APSA believes that a similar public health approach can succeed to save children from death and injury from firearms. APSA is committed to building partnerships to accomplish this.

“You can’t talk of the dangers of snake poisoning and not mention snakes.”¹

--C. Everett Koop

The American Pediatric Surgical Association (APSA) is an organization comprised of more than 1,300 surgeons who are dedicated to the care of ill and injured children. We serve children and communities all across the United States and 18 countries. Members of our association are the leaders of most of the pediatric trauma centers across the United States

More children will die from trauma than any other cause. Of those children that die in our trauma centers, the second most common cause is a firearm injury.² When firearms injure children or adolescents, it is our job (and the job of many of our adult trauma colleagues) to care for these victims. We have all felt the devastation alongside a family who has lost a child. The conversations with the parents are never forgotten.³ We enter the lives of the victims and families irreversibly pierced by firearm injury. A recent survey of APSA members demonstrated that over 90% of respondents provide pediatric trauma care, confirming our daily, personal commitment to care for injured children. Over 80% believe APSA should give high priority to reducing gun-related injuries through research, education, outreach, prevention, and advocacy. [Table 1] The surgeons of the American Pediatric Surgical Association strongly support the positions outlined herein, [Table 2] and the members of the Board of Governors of APSA unanimously endorse the firearm safety statement presented below.

Pediatric Trauma Care

The seemingly endless firearms-related mass casualty incidents such as occurred at Columbine, Virginia Tech, Tucson, Aurora, Orlando and Las Vegas serve as vivid, continuing

reminders of our gun violence epidemic. However, the shootings at Sandy Hook Elementary School (claiming 26 lives, including 20 first graders), and more recently at Marjory Stoneman Douglas High School (14 students and 3 staff members killed) were singularly disconcerting due to the number of lives lost and the weaponry employed. Firearms claim the lives of more than 38,000 Americans annually, including nearly 15,000 homicides and nearly 23,000 suicides.⁴ Additionally, another 85,000 are injured each year by guns but survive, their lives forever changed.⁴ Every day, surgeons in our trauma centers witness the deaths of children from firearm injuries. Since 2010, there were 2,711 children (age 0-19 years) who died by gunshot with another 15,576 injured. In children (age 0-19 years), firearms are associated with one of the highest case fatality rates (22%) of all injury mechanisms, even higher (37%) in the youngest children (0-10 years).² Firearms are the second leading cause (behind motor vehicles) of trauma death in the pediatric population (age 0-19 years), resulting in more than 25% of all pediatric deaths reported in our Trauma Centers.² [Figure 1] Nearly half of all children who survive a shooting are discharged from the hospital with disability, including 8.2% with long term disability, predominantly neurological.⁵ These data emphasize the importance of trauma care not only for survival, but also for functional outcome. Since the last version of the APSA position statement following the Sandy Hook shooting in 2012, there have been over 17,000 children killed or injured by firearms and over 1,500 mass shooting events.^{6,7} In addition, since the sentinel mass shooting at Columbine High School in 1999 (data for 1999-2016), more than 52,000 children (age 0-19 years) have died as a result of a firearm injury.⁴ **APSA fundamentally commits to pediatric trauma care, pediatric trauma readiness, pediatric trauma centers, and pediatric trauma systems as the optimal resources for pediatric firearm injuries when they occur. APSA endorses firearm injury prevention as part of comprehensive pediatric trauma care.**

Public Health Issue

In firearm ownership, the United States has no peers among the highest-income countries.^{8,9} Firearm-related injury and death are also distinctly more common in America.^{10, 11} [Figure 2] Mass shootings account for less than 1% of firearm incidents in America.⁷ The risk of firearm homicide, suicide, and unintentional injuries is more than 5-fold greater in the United States than 23 other high-income countries considered collectively.¹¹ Firearm-related injury and death are issues for all Americans, in all communities. The risk of dying by firearm is the same for residents of the largest cities as it is for the residents of the smallest counties and holds true for adult and pediatric patients alike.^{12, 13} [Figure 3] This parity in risk is due to the predominance of firearm suicides and unintentional firearms deaths in the rural counties and the predominance of firearm homicides in the urban counties. Although rural and urban families face similar risk for firearm injury, rural children are disadvantaged for access to pediatric trauma care. Only 57% of our nation's children live within 30 miles of a pediatric trauma center.¹⁴ All Americans should share concern about firearms-related mortality. Because of the regularity, complexity and geographic variability of the problem, it is best addressed as a public health issue. Simply stated, the public health approach views firearm injury in a disease framework with an epidemiology, pathophysiology, treatment, and prevention. As physicians, we have the most credibility when we approach firearms as an issue of health rather than an issue of law, politics, or personal freedom. A public health model has been profoundly effective in reducing motor vehicle mortality despite an overall increase in vehicle miles traveled. [Figure 4] A similar approach should be applied to addressing firearm injury. **APSA supports addressing firearm injury as a public health issue that requires resources and commitment to solve.**

Mental Health Services

Suicide ranks as the 10th most common cause of death in America (all ages) but is the 2nd leading cause of death in our youth (ages 10-19).¹⁵ While precise data regarding attempted suicides are not available, it is estimated that there are 25 suicide attempts for every completed suicide.¹⁶ Firearms were utilized in 43% of completed suicides in 2016, equal to hanging and other suffocation as a means of completed suicide in children ages 10-19 years.¹⁷ Most adolescent suicides occur in the home with a firearm owned by the parent.¹⁸ In youth suicide attempts, the use of a firearm was fatal 95.3% of the time.¹⁹ And while some troubled youth may simply choose another method to attempt suicide if a firearm is not accessible, none will be as lethal. Most people who attempt suicide once do not attempt suicide again. Thus, decreasing the lethality of the first attempt would save lives. In addition, the presence of a firearm in the home may impart a greater risk of suicide than baseline.²⁰ Almost half of suicide survivors report that the time between the first thought of suicide and the attempt was less than 10 minutes.²¹ The landscape of mental health treatment for suicidality is far from hopeless. Randomized studies indicate that youth suicidality can be prevented effectively with psychosocial interventions in the school, community, and healthcare settings.^{22, 23} **APSA supports efforts to improve the availability and quality of mental health services for both children and adults.**

Background Checks

As a result of the Brady Handgun Violence Prevention Act of 1993, the National Instant Criminal Background Check System (NICS) was created.²⁴ The NICS was employed to perform background checks of individuals purchasing firearms from licensed dealers in the U.S. However,

this system did not address firearms sales by unlicensed dealers, creating a serious loophole that still excludes an estimated 40% of gun transactions in the United States.²⁵ This loophole includes private firearms sales and sales that occur at gun shows. Individual state variances further compromise the integrity of the system of background checks. A total of 19 states allow licensed dealers to waive the background check and 4 states do not consider mental illness as a reason to deny a firearm purchase.²⁶ In addition, the criteria for mental health reporting to the national system by the states is inconsistent. Despite the shortcomings in the system, since its inception, the NICS has resulted in the denial of sale of 1.5 million firearms with more than 250 million transactions processed.^{27, 28} Consistent research provides meaningful evidence that background check legislation lowers the risks of firearm suicide and firearm homicide.²⁹ The current system would be improved with consistency across vendors and states, more robust evaluation of mental health background, and increased data sharing regarding prohibited possessors.²⁹ **APSA supports an enforceable and strong system of universal background checks for all firearms transactions, including private sales.**

Firearms Research

As physicians, we aspire to practice based on the best evidence available for a condition. Scientific evidence is crucial when trying to understand a problem as complex as firearm injury. Research generates evidence to inform care. Yet in 1996, Congress passed legislation (the Dickey Amendment) whose initial intent was to prohibit the use of federal funds to advocate or promote gun control policies through the CDC (Centers for Disease Control and Prevention). Although the purpose was not to prohibit research initially, the ultimate result was the limitation of federal funding of firearms-related research.³⁰ These actions effectively shut off public funds to nearly

all firearms research. Currently, cancer research receives approximately \$4 billion in federal funds annually for research or about \$4,200 per year of potential life lost.³¹ Firearms injury research, in comparison, receives just \$2 million per year in federal funding, or just \$2.70 per year of potential life lost. Among the top 30 causes of death, firearm injury research is federally funded at a mere 1.6% of its mortality proportion, making it the second-least funded cause of death and the very least researched cause of death.³² Without research, claims regarding the efficacy of existing, former or proposed legislation are based on anecdote or conjecture. Better scientific evidence is desperately needed. A promising research tool to help understand the circumstances of violent death is the National Violent Death Reporting System (NVDRS), initially funded by Congress in 2002.³³ This system, modeled after the highly successful Fatal Accident Reporting System for motor vehicle crashes, has been functional in just 18 states. Lack of funding has limited its full implementation, which has in turn limited our understanding of gun violence and its causes. The NVDRS data collection methodology is far more robust than other existing repositories and can help clarify many potentially misclassified firearm deaths.³⁴ **APSA recommends removal of policy barriers that prevent federal funding of firearms-related research and recommends expansion of the NVDRS to all states and territories.**

Assault Weapons

While assault-style rifles are responsible for a minority of overall gun deaths in the US, they have become the weapon of choice for the assailant whose intent is chaos and casualties. A recent review of mass shooting deaths from 1981-2017 revealed that assault weapons accounted for 85.8% of these deaths.³⁵ From the years 2014-17, 1,333 mass shooting events occurred, claiming the lives of 1,521 people and injuring 5,760 more.⁷ Assault weapons are particularly

devastating because of their high bullet energy, large capacity magazines, and ability to fire rapidly. The high muzzle velocity of these weapons increases cavitation as a mechanism of injury, resulting in a field of tissue destruction several inches out from the direct path of the bullet.³⁶ Children are physiologically vulnerable to firearm injuries. Compared to adults, they have larger head and torso proportions as targets for tissue injury. Their bones are less densely calcified to deflect bullet forces.³⁷ Skin and muscle absorb some kinetic energy from a bullet, and these tissues are less well developed in children.³⁸ The place of assault weapons in a civilian arsenal must be questioned. During the federal ban on assault weapons from 1994-2004, mass shooting fatalities were 70% less likely to occur.³⁵ While the Supreme Court firmly upheld the second amendment's guarantee of the right to bear arms, it did so with certain stipulations.³⁹ Justice Scalia, in his majority opinion noted that, "like most rights, the Second Amendment right is not unlimited. It is not a right to keep and carry any weapon whatsoever in any manner whatsoever and for whatever purpose." **APSA supports restrictions on civilian access to high capacity magazines and assault-style weaponry.**

Safe Storage and Children

Pediatric firearm deaths occur both unintentionally and intentionally. Having a firearm in the home is associated with an increased risk of injury and death.⁴⁰ For every self-protection homicide, there were 1.3 unintentional firearm deaths, 4.6 criminal homicides and 37 gun suicides. Researchers noted a "positive and statistically significant association between gun availability and state level rates of unintentional firearm deaths, homicides, firearm homicides, suicides, and firearm suicides among children (ages 5-14 years)."⁴¹ That is, in states with increased gun availability, death rates from firearms (all categories) for children were higher. Conversely, for

each 10% decline in the percentage of households with both firearms and children, firearm suicide among children 0–19 years of age dropped 8.3%.⁴² For households with firearms and children, safe storage practices reduce the risk of unintentional firearm deaths and suicides in children.⁴³ Each of the four practices of keeping a gun locked, storing a gun unloaded, keeping ammunition locked, and storing ammunition and gun separately were associated with incremental decreases in injury rates. Other safety devices such as load indicators, magazine safeties and personalized devices (biometric locks and biometric storage) have shown promise as well.⁴⁴ Limiting access to firearms by children limits the risk of injury and death. **APSA supports all efforts to limit access by children to firearms, including the use of gun locks, gun safes, lock boxes, and safe storage techniques.**

Firearm Policy and Children

Children and teens should not have access to firearms, as the presence of a firearm in the home is associated with an increased risk of accidental death and suicide.⁴³ While best evidence supports the use of gun locks and safe storage, these practices are not universally promoted by legislation.⁴⁵ Child Access Prevention (CAP) laws impose criminal liability on persons who allow minors access to loaded firearms. Currently, federal law does not require firearm owners to store their firearms safely. Though there is no federal safe storage law, twenty-seven states and the District of Columbia have CAP laws. These state laws vary with regard to the protective measures, the nature of the minor access, and the age of minority. Strong CAP laws impose liability on persons who negligently store firearms, regardless of if the firearm is loaded or if a minor actually gains access to or uses the firearm. Weak CAP laws impose liability for intentional, knowing, or reckless provision of firearms to minors. As a group, CAP laws are associated with a 26% lower odds of

accidental injury and 77% lower odds of suicidal injury among children 12 and under.⁴⁶ States that enact CAP laws generally see a decrease in the firearm death rate in the years that follow such legislation.^{47,48} Furthermore, strong CAP laws are associated with a 61% lower rate of all pediatric firearm injuries compared to weak CAP laws across different states.⁴⁹ A systematic review of best evidence concludes that CAP laws reduce self-inflicted firearm deaths and unintentional firearm deaths among children and youth.²⁹

Similarly, minimum age laws for gun purchase intend to prevent unsupervised purchase or possession of firearms by children and adolescents. A more stringent minimum age standard has been invoked for handguns than for long guns (shotguns, traditional rifles, and semi-automatic assault rifles). Current federal law prohibits licensed firearm dealers from selling handguns to persons under age 21 and long guns to persons under age 18. However, unlicensed persons may sell handguns to persons age 18 and up, and they may sell long guns to persons of any age. [Table 3] In other words, federal law currently prohibits some citizens who are of age to vote or to serve in the military (age 18) from purchasing certain firearms from certain sellers. It is not a question of IF limitations may be placed on 18-21 year olds for firearms purchase, but WHICH limitations are best. State laws may enact additional restrictions by age for purchase of firearms beyond the federal minimums. It is important to note that federal and state laws permit exceptions to age restrictions based on occupation (e.g. member of the Armed Forces). State laws vary with regard to age limits for purchase and possession of firearms, with unclear effects on firearm mortality.⁵⁰ Currently, Hawaii and Illinois restrict the age of purchase to 21 years for all firearms (handguns and long guns). This is analogous to the limits placed on alcohol or tobacco. There is evidence that a minimum purchase age of 21 may reduce firearm suicides among youth.²⁹ A minimum purchase age of 21 years requires that an adult be involved with the purchase of a firearm, even if

that adult subsequently allows a younger person to use or possess that firearm. **APSA supports strong CAP laws for firearm storage and a legal minimum purchase age of 21 years for all firearms.**

Physician Counseling

The confidential relationship between physician and patient is central to the practice of medicine. Discussions about firearms and children can be delicate, and thus should be free of external interference. Healthcare based interventions may improve safe firearm storage in homes with children, and parents are generally agreeable to counseling on firearm safety.⁵¹ APSA and other organizations such as the American College of Surgeons, the American Academy of Pediatrics, and the American Medical Association have maintained that physicians should be free to discuss firearms and health with their patients.

Notwithstanding, discussions between physicians and patients have come under attack recently. Language in the Patient Protection and Affordable Care Act prohibits disclosure or collection of information about the presence, storage, possession, or use of a firearm as part of a wellness and health promotion activity.⁵² Physicians may ask about car seats, bicycle helmets, sunscreen, and fluoride, but they may not ask about firearms and ammunition. More significantly, Florida's Firearm Owner's Privacy Act (FOPA) challenged the sanctity of these physician-patient discussions.⁵³ This legislation was initially upheld by lower courts, before the key restrictions were struck down in *Wollschlaeger v Governor, Florida*. Judge William Pryor stated, "Health-related information is more important than most topics because it affects matters of life and death. Doctors help patients make deeply personal decisions, and their candor is crucial. If anything, the doctor-patient relationship provides more justification for free speech, not less."⁵⁴ Physicians do well to

remember that “professional speech” with patients is a privilege, and the best way forward will be to emphasize not only the protection of speech for the physician but the access to relevant health information for the patient.^{55, 56} **APSA opposes, in the strongest possible terms, any policy or legislation that infringes upon the freedom of physicians and patients to discuss firearm safety.**

School Safety

Although the majority of pediatric firearm deaths occur outside of schools, school shootings are among the most heinous of these deaths. Columbine. Sandy Hook. Marjory Stoneman Douglas. Epidemiologic evidence reveals that school shootings are less likely in states with background check laws and in states with higher per capita mental health expenditure and K-12 education expenditure.⁵⁷ These areas deserve emphasis in discussions about creating safer schools. Implementation of school safety involves many layers of security, and APSA endorses expert recommendations to improve school security in building design, preparedness training, threat reporting, communication systems, and police support.⁵⁸ While everyone in school has a role to play in school safety, the use of potentially lethal force belongs to police professionals and not armed civilians. Concealed carry laws have not been demonstrated to suppress crime and may be associated with increased firearm injuries.⁵⁹ An FBI study of 160 active shooter situations over 14 years revealed that the majority of active shooter situations ended when the shooter fled the scene or committed suicide. Of the situations that were ended by civilians, four times as many were ended by unarmed citizens as were ended by armed citizens.⁶⁰ The majority of active shooter situations end in 5 minutes or less, and even when armed, trained personnel are on the scene, a significant number of deaths may occur before the shooter is stopped.^{60, 61} Current evidence does

not support arming teachers as a strategy to improve the safety of children.⁶² Inasmuch as schools enfold our most vulnerable citizens—our children—the standard of evidence to bring potentially dangerous weapons into the schools should be higher, not lower, than in adult environments.

Finally, the readiness of bystanders to care for life-threatening bleeding may be the difference between life and death for the wounded. The “Stop the Bleed “ program was created in the aftermath of the Sandy Hook shooting, to train laypersons to respond to hemorrhage in injured bystanders.⁶³ As with the Heimlich maneuver or connecting automated external defibrillators, nonmedical laypersons can be trained to provide immediate lifesaving interventions to bystanders. A person with a firearm injury or other penetrating wound may bleed to death before the arrival of trained medical personnel. The “Stop the Bleed” program trains laypersons to apply direct pressure, pack a wound, and place a tourniquet until the injured person can receive definitive medical care.⁶⁴ Though this training applies to many penetrating injuries, its value as a component of school readiness bears special emphasis. **APSA supports school safety and readiness for active shooter situations. APSA does not support arming teachers to improve school safety. APSA supports wide dissemination of “Stop the Bleed” training to school personnel.**

Second Victim Phenomenon

A mass shooting leaves many people struggling in its aftermath. Survivors and uninjured witnesses of gun violence, whether adults or children, may develop post-traumatic stress disorder (PTSD).⁶⁵ PTSD can adversely affect the amygdala, causing many survivors to report feeling "numb" or unable to respond in the immediate aftermath of a crime.⁶⁶ Adverse effects of PTSD may endure long past the event. High school students who were present at a school shooting subsequently exhibited a drop in enrollment and a decrease in math and English test scores,

potentially creating a negative impact on college admissions, future earnings, and long term quality of life.⁶⁷ In addition to they who survive a shooting, first responders, nurses, and physicians all may suffer post-traumatic stress disorder symptoms (PTSD).⁶⁸ Health care workers may suffer from the “second victim phenomenon” in which they become traumatized by an event and suffer feelings of guilt and failure.⁶⁹ The scenes from sites of injury and trauma bays are like scenes out of war. Short-term responses can develop into long-term reactions if not properly addressed. Critical incident debriefing can help those who suffer in these situations.⁷⁰ **APSA supports research, education and treatment for the second victim phenomenon and the stress reactions faced by survivors and health care teams in the face of these incidents.**

Summary

A meaningful reduction in the burden of firearms injury and death in children will not happen with a single quick action. We need a steady, enduring commitment. The systematic and dramatic reduction in motor vehicle-related injuries and death in both the adult and pediatric populations should serve as a model for success. Through modifications in the environment (roads), adoption of safety measures (seatbelts), modification of behavior (use of seatbelts) and modifications of vehicle design (e.g. airbags)--a public health approach--change was realized. Former Congressman Dickey recently commented, “Like motor vehicle injuries, violence exists in a cause-and-effect world; things happen for predictable reasons. By studying the causes of a tragic — but not senseless — event, we can help prevent another.”⁷¹ With more than 300,000,000 guns in circulation in the United States, we as an Association and we as a nation need to develop ways to live safely in a world with guns. We cannot know for certain if the positions APSA supports would

have prevented the tragedy at Sandy Hook, Las Vegas, Parkland, or the next location. But, what if they did?

APSA believes that inaction is irrational and indefensible. Our organization strongly supports the continuation of public health and policy recommendations detailed above in an effort to reduce the impact of firearm injury on our children and youth.

Acknowledgments

The APSA Board of Governors approved this statement unanimously October 16, 2018.

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Table Legends

Table 1. APSA member survey results (n= 295).

Table 2. Position statements endorsed by the American Pediatric Surgical Association.

Table 3. Minimum age for firearm purchase. Under current federal law, the age for sale, delivery, or transfer of a firearm varies by license status of the seller and type of firearm being sold.^{72, 73} Additional laws to restrict age of purchase vary by state.

Figure Legends

Figure 1. Mortality causes for pediatric (age 0-19 years) patients treated in Trauma Centers, 2000-2016. Data courtesy National Trauma Data Bank, American College of Surgeons, Chicago, IL.²

Figure 2. Firearm homicide rate (per 100,000 population) by firearm ownership (firearms per 100 inhabitants) for the 20 Organisation for Economic Co-operation and Development (OECD) countries with the highest gross domestic product per capita. Based on data from Small Arms survey and United Nations Office on Drugs and Crime.⁸⁻¹⁰ [From Nance et al,⁶ with permission]

Figure 3. Regression-adjusted firearm incidence rate ratios and 95% confidence intervals by county type for firearm suicide and homicide deaths to non-firearm deaths in the United States (1989-1999). County types stratified based on urban-rural continuum codes (1-largest counties to 11-smallest counties) [From Branas et al,¹² with permission]

Figure 4. Comparison of motor vehicle-related mortality (blue line) and firearm mortality (red line). Decline in motor vehicle-related mortality is despite marked increase in average annual vehicle miles driven (green line). Mortality data courtesy National Trauma Data Bank, American College of Surgeons.² Motor vehicle travel data courtesy of U.S. Department of Transportation.⁷⁴

Table 1.

| Organization Priorities (% responding) | High | Medium | Low |
|--|----------------|----------------|---------------|
| What level of priority should APSA give to reducing gun-related injuries through non-advocacy related methods, such as research, education, community outreach, injury prevention? | 83 | 13 | 4 |
| What level of priority should APSA give to advocate for health policy changes in the US, designed to reduce the loss of life caused by firearms, with a specific focus on insuring the safety of children? | 84 | 10 | 6 |
| Health Policy Issues (% responding) | Support | Neutral | Oppose |
| Preventing people with mental health illness from purchasing firearms. | 95 | 4 | 1 |
| Mandatory background checks and licenses/permits for all firearm purchases including those from authorized dealers, gun shows or private sales prior to purchase. | 94 | 4 | 2 |
| Improve mental health screening and treatment for Americans to help reduce suicides and gun-related violence. | 97 | 2 | 1 |
| Promoting Child Access Prevention (CAP) laws to prevent children from gaining access to loaded firearms. | 95 | 3 | 2 |
| Preserving the right of physicians and health care providers to counsel their patients or the parents of their patients on safe firearm ownership. | 94 | 5 | 1 |
| Requiring safety features to promote gun safety, including childproof locks and "smart gun" technology. | 90 | 6 | 4 |
| Requiring firearms owners to be 21 years of age or older. | 76 | 12 | 12 |
| Identifying and implementing evidence-based injury prevention programs that decrease firearm injuries (either in partnership with or independently of other professional organizations). | 94 | 5 | 1 |
| Advocacy efforts to restrict civilian access to assault rifles (magazine-fed, semi-automatic, e.g., AR-15) | 84 | 6 | 10 |

Advocacy efforts to limit civilian access to types of ammunition designed for military or law enforcement use (e.g., armor piercing, large magazine capacity).

| | | |
|----|---|---|
| 84 | 8 | 8 |
|----|---|---|

Making funds available for research to better understand gun violence and how to prevent gun violence.

| | | |
|----|---|---|
| 92 | 6 | 2 |
|----|---|---|

Table 2.

Positions supported by APSA

- APSA fundamentally commits to pediatric trauma care, pediatric trauma readiness, pediatric trauma centers, and pediatric trauma systems as the optimal resources for pediatric firearm injuries when they occur. APSA endorses firearm injury prevention as part of comprehensive pediatric trauma care.
- APSA supports addressing firearm injury as a public health issue that requires resources and commitment to solve.
- APSA supports efforts to improve the availability and quality of mental health services for both children and adults.
- APSA supports a system of universal background checks for all firearms transactions, including private sales.
- APSA recommends removal of policy barriers that prevent federal funding of firearms-related research and recommends expansion of the NVDRS to all states and territories.
- APSA supports restrictions on civilian access to high capacity magazines and assault-style weaponry.
- APSA supports all efforts to limit access by children to firearms, including the use of gun locks, gun safes, lock boxes, safe storage techniques, and strong CAP laws for firearm storage.
- APSA supports a legal minimum purchase age of 21 years for all firearms.
- APSA opposes, in the strongest possible terms, any policy or legislation that infringes upon the freedom of physicians and patients to discuss firearm safety.
- APSA supports school safety and readiness for active shooter situations. APSA does not support arming teachers to improve school safety. APSA supports wide dissemination of “Stop the Bleed” training to school personnel.
- APSA supports research, education and treatment for the second victim phenomenon and the stress reactions faced by survivors and health care teams in the face of these incidents.

Table 3.

| | Handguns | Rifles or Shotguns |
|---------------------------------------|-------------------|---------------------------|
| Licensed Firearms Seller | 21 years or older | 18 years or older |
| Other Persons Selling Firearms | 18 years or older | No minimum age |

Figure 1.

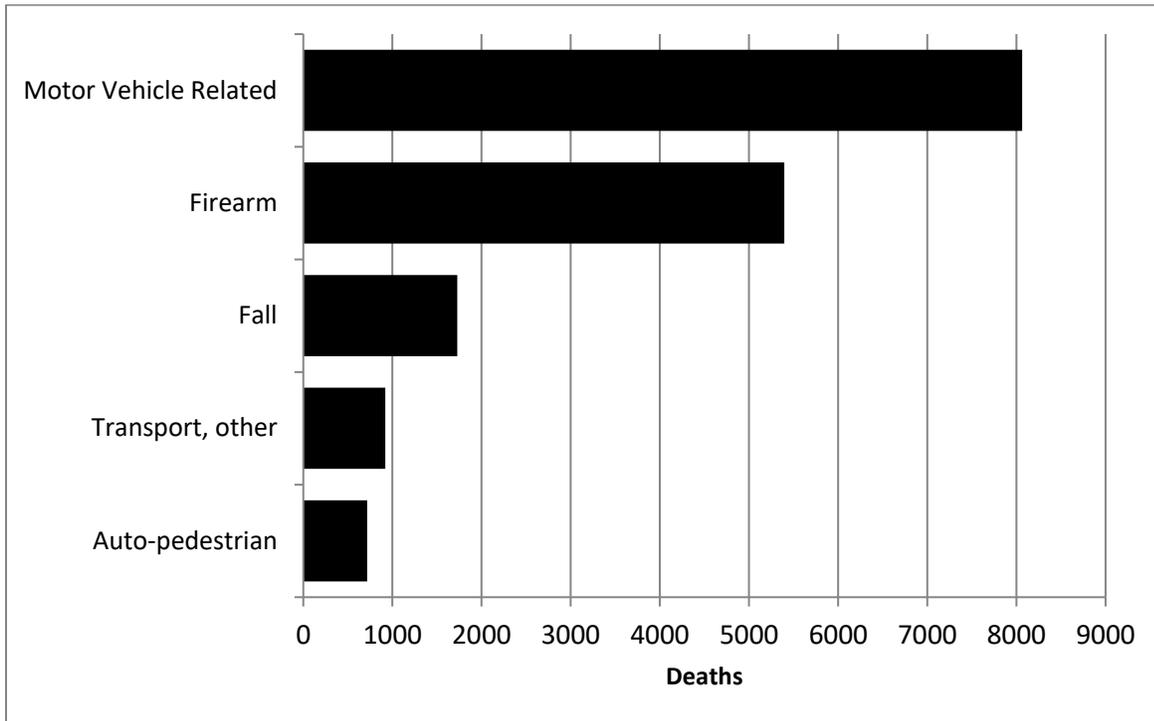


Figure 2.

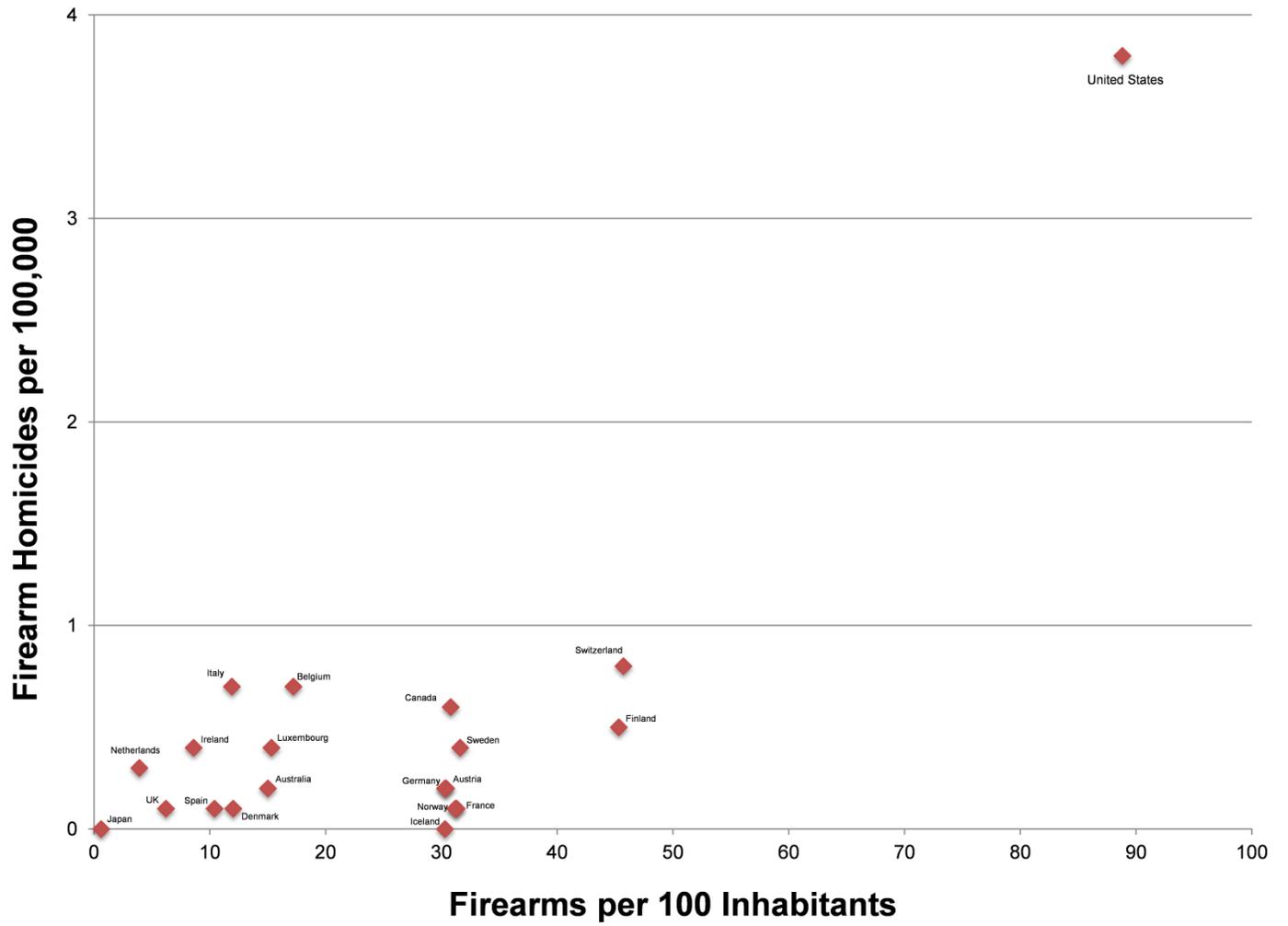


Figure 3.

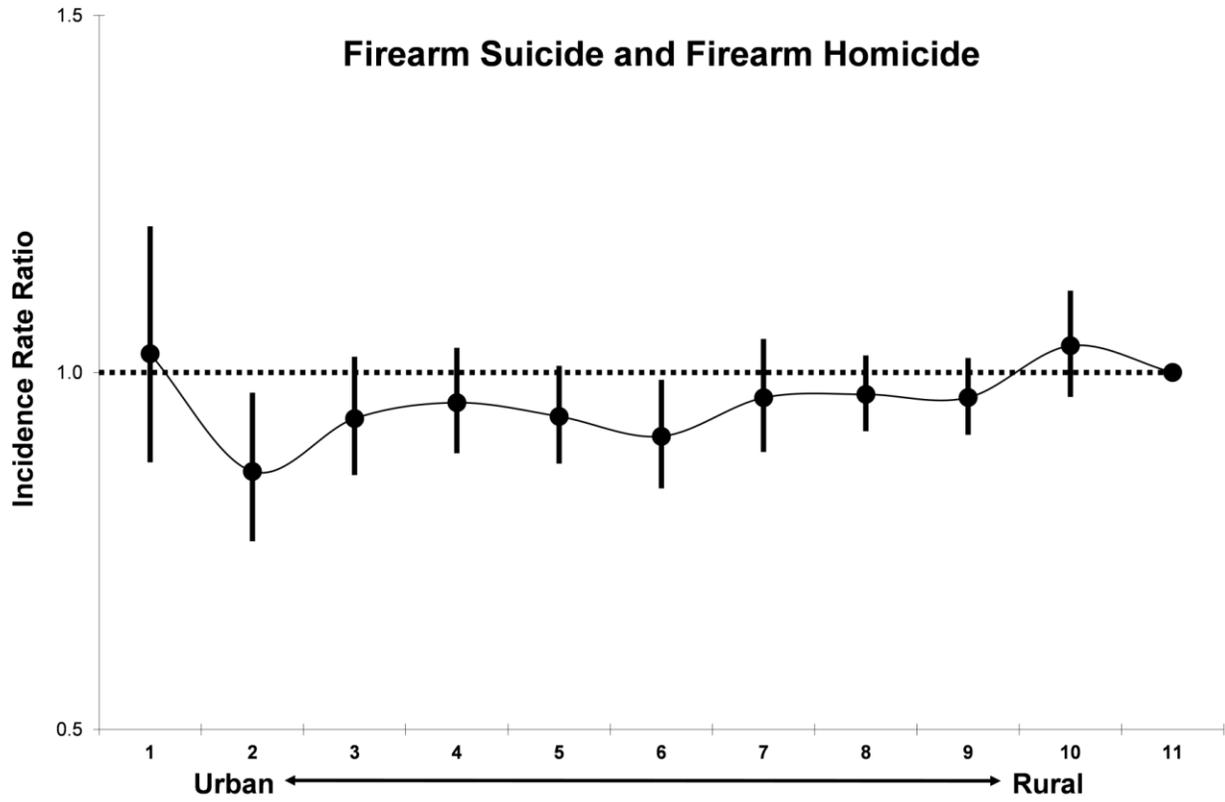


Figure 4.

