

Firearm Injuries and Children: A Policy Statement of the American Pediatric Surgical Association

Michael L Nance, MD, FACS, Thomas M Krummel, MD, FACS, Keith T Oldham, MD, FACS, and the Trauma Committee of the American Pediatric Surgical Association

We can wait no longer to act.¹

—C Everett Koop, 1992

The American Pediatric Surgical Association (APSA) is an organization composed of more than 1,200 surgeons. Our surgeons are dedicated to the care of ill and injured children. We serve children and communities all across the United States and 16 countries.

More children will die from trauma than any other cause. Of those children who die in our trauma centers, the second most common cause is a firearm injury. When children or adolescents are injured by firearms, it is our job (and the job of many of our adult trauma colleagues) to care for these victims. We have all seen children die and we have seen firsthand the devastation of losing a child. We see the lives of the victims and families touched and then unalterably changed by gun violence. The surgeon members of APSA, who care for these injured children, endorse the positions outlined here.

The seemingly endless firearms-related mass casualty incidents, such as those that occurred at Columbine and Virginia Tech and Tucson and Aurora, serve as vivid, continuing reminders of our gun violence epidemic. But the shooting at Sandy Hook Elementary School, claiming 26 innocent lives, among them 20 first graders, was singularly disconcerting. Gun violence occurs every day, respecting no age, no sex, and no ethnicity. Firearms claim the lives of more than 30,000 Americans annually, including 10,000 homicides and 20,000 more who die of self-inflicted gunshots.² Additionally, another 75,000 are injured each year by guns and survive, their lives forever changed.² Every day surgeons in our trauma centers

witness the deaths of children from firearm injuries. In 2010, there were 2,711 children (ages 0 to 19 years) who died by gunshot, with another 15,576 injured. Firearms are associated with one of the highest case fatality rates (20%) of all injury mechanisms, even higher (26%) in the youngest children (0 to 10 years).² Firearms are the second leading cause (behind motor vehicles) of trauma death in the pediatric population in our trauma centers³ (Fig. 1). To rein in this complex problem, change is necessary. Since the last version of APSA's position statement in 1999, there have been 36 mass shootings, resulting in 317 deaths and 267 injuries.^{4,5} In addition, since 1999, more than 35,000 children (ages 0 to 19 years) have died as a result of a firearm injury.² Outlined here are the changes supported by APSA (Table 1).

In firearm ownership, the United States has no peers among the highest-income countries.^{6,7} Firearm-related injury and death are also distinctly more common in America^{8,9} (Fig. 2). 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.⁹ 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^{10,11} (Fig. 3). This parity in risk is due to the predominance of firearm suicides and unintentional firearms deaths in rural counties and the predominance of firearm homicides in urban counties. 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. **APSA supports addressing firearm-related injury and death as a public health issue with allocation of the necessary attendant resources to mitigate the problem.**

Suicide ranks as the 10th most common cause of death in America (all ages), but is the 3rd leading cause of death in our youth and young adults (ages 10 to 24 years).¹² Although precise data about attempted suicides are not available, it is estimated that there are 25 suicide attempts for every completed suicide.¹³ Firearms were used in 49% of completed suicides, making them by far the leading

Disclosure Information: Nothing to disclose.

Members of the Trauma Committee of the American Pediatric Surgical Association are listed in the Appendix.

Received June 29, 2013; Accepted July 9, 2013.

From the Children's Hospital of Philadelphia, University of Pennsylvania School of Medicine, Philadelphia, PA (Nance), Lucile Packard Children's Hospital, Stanford University School of Medicine, Palo Alto, CA (Krummel), and Children's Hospital of Wisconsin, Medical College of Wisconsin, Milwaukee, WI (Oldham).

Correspondence address: Michael L Nance, MD, FACS, Children's Hospital of Philadelphia, University of Pennsylvania School of Medicine, 34th and Civic Center Blvd, Philadelphia, PA 19104. email: nance@email.chop.edu

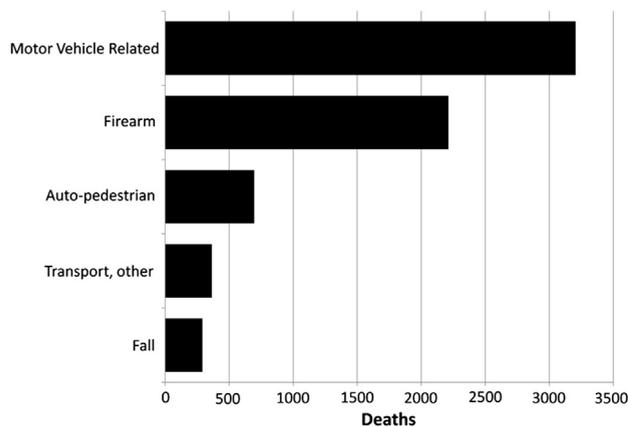


Figure 1. Mortality causes for pediatric (ages 0 to 19 years) patients treated in trauma centers, 2009-2011. (Data courtesy National Trauma Data Bank, American College of Surgeons, Chicago, IL.³)

method of completed suicide in children ages 10 to 19 years.¹⁴ Most adolescent suicides occur in the home with a firearm owned by the parent.¹⁵ In youth suicides, the use of a firearm resulted in a fatality in 95.3% of attempts.¹⁶ And although it is true that a troubled youth can simply choose another method to attempt suicide if a firearm is not accessible, none will be as lethal. In many cases, firearm suicide is accompanied by the murder of others. At times, this might be a family member, such as might occur in a domestic dispute; at times it involves the death of many, such as occurred at Columbine. It is estimated that between 1,000 and 1,500 deaths each year (1992 estimates) occur as a result of murder-suicide.¹⁷ In 95% of cases, a firearm was used for both the murder(s) and suicide.¹⁸ Addressing mental health services to reduce the firearm suicide rate (and unintended homicide rate) is crucial. **APSA supports efforts to improve the availability and quality of mental health services for both children and adults.**

As a result of the Brady Handgun Violence Prevention Act of 1993, the National Instant Criminal Background Check System was created.¹⁹ The National Instant Criminal Background Check System was used to perform background checks of individuals purchasing firearms from licensed dealers in the United States. 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.²⁰ This loophole includes private firearms sales and sales that occur at gun shows. Also compromising the integrity of the system of background checks are individual state variances. 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.²¹ 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 National Instant Criminal Background Check System has resulted in the denial of sale of nearly 1 million firearms.²² But, with loopholes that circumvent the system, reforms are necessary to eliminate transactions without appropriate background checks. **APSA supports a system of universal background checks for all firearms transactions, including private sales.**

As physicians and surgeons, we are expected to practice medicine based on the best data available for a given condition. We rely on data and experience to make decisions that impact lives every day. Data are no less important when trying to understand a problem as complex as firearm injury. Yet in 1996, Congress passed legislation limiting the CDC from funding firearms-related research.²³ Later, that moratorium was extended to all Department of Health and Human Services agencies, including the National Institutes of Health. 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,

Table 1. Policy Statements Endorsed by the American Pediatric Surgical Association

- APSA supports addressing firearm-related injury and death as a public health problem with the necessary attendant resources to succeed
- 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 language limiting the funding of firearms-related research necessary to address this public health problem as well as support to extend the National Violent Death Reporting System to all states and territories
- APSA supports limitations on access to high-capacity magazines and assault-style weaponry
- APSA supports all efforts to limit access by children to firearms, including the use of gunlocks and safe storage techniques
- APSA supports legislative efforts, such as child access prevention laws, to limit the access to firearms by children
- APSA recommends removal or clarification of language in the Affordable Care Act limiting discussion about the presence of firearms in homes with children. APSA opposes, in the strongest possible terms, state-level legislation infringing on the physician–patient relationship
- In the absence of data supporting the salutary benefits of armed personnel in schools, APSA does NOT support a standard practice of arming teachers, parents, or other officials in the school setting

APSA, American Pediatric Surgical Association.

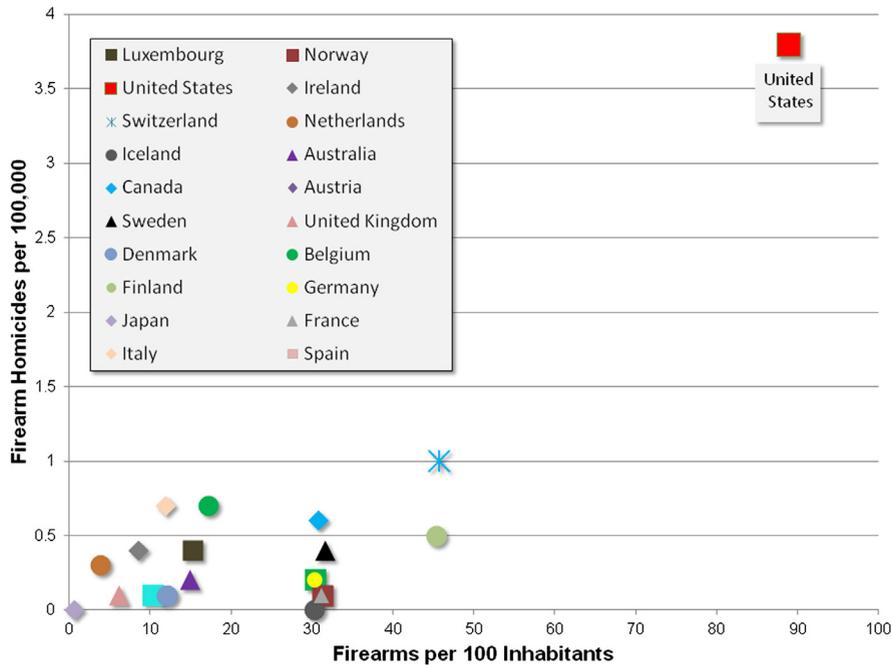


Figure 2. Firearm homicide rate (per 100,000 population) by firearm ownership (firearms per 100 inhabitants) for the 20 Organisation for Economic Co-Operation and Development (OECD) countries with the highest gross domestic product per capita. Based on data from Small Arms survey and United Nations Office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

or about \$4,200 per year of potential life lost.²⁴ Firearms injury research, in comparison, receives just \$2 million per year or just \$2.70 per year of potential life lost, less than the cost of a latte. Without research, claims about

the efficacy of existing, former, or proposed legislation are based on anecdote or conjecture. These data are 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 2002.²⁵ 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. Correct categorization of firearm deaths (determining unintentional from potentially self-inflicted or vice versa) is not always possible and frequently inaccurate. The NVDRS data-collection methodology is far more robust than other existing repositories and can help clarify many of these potentially misclassified firearm deaths.²⁶ In 2004, a blue-ribbon panel was convened by the National Academy of Science to study the state of firearms research.²⁷ The authors noted that “Adequate data and research are essential to judge both the effects of firearms on violence and the effects of different violence control policies.” And “...many of the shortcomings described in this report stem from the lack of reliable data itself rather than the weakness of methods.” The panel concluded, “...if policy makers are to have a solid

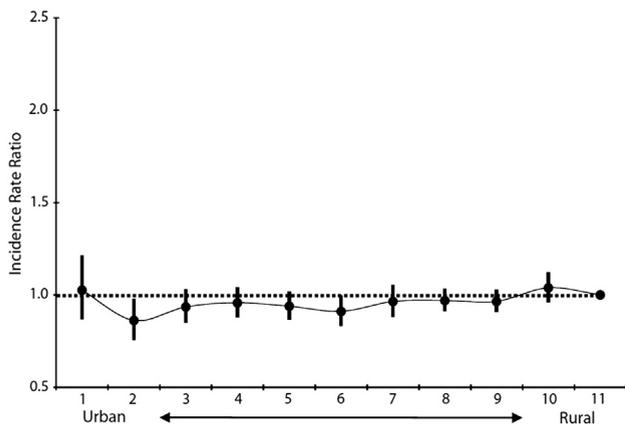


Figure 3. Regression-adjusted firearm incidence rate ratios and 95% confidence intervals by county type for firearm suicide and homicide deaths in the United States (1989–1999). County types stratified based on urban–rural continuum codes (1: largest counties to 11: smallest counties). (From Branas CC, Nance ML, Elliott M, et al. Urban-rural shift in intentional firearm death: different causes, same results. *Am J Public Health* 2004;94:1750–1755, reprinted with permission.)

empirical and research base for decisions about firearms and violence, the federal government needs to support a systematic program of data collection and research that specifically addresses that issue." The panel also renewed their support for the "development and maintenance of NVDRS." **APSA recommends removal of language limiting the funding of firearms-related research necessary to address this public health problem as well as support to extend the NVDRS to all states and territories.**

On October 2, 2006, Charles Roberts barricaded himself and 10 girls, ages 6 to 13 years, in a one-room schoolhouse in Nickel Mines, Pennsylvania, the heart of Amish country. Before the ordeal ended, he would shoot all 10 girls "execution style" and then himself. Eight girls survived long enough to receive medical treatment, 5 girls survived to discharge from the hospital. On December 14, 2012, Adam Lanza forcibly entered Sandy Hook Elementary School and murdered 26 people, including 20 children. Not one child survived to receive medical treatment. One difference between the 2 incidents was that Charles Roberts in Nickel Mines used a 9-mm handgun; Adam Lanza chose an assault-style rifle at Sandy Hook. In a review of mass shootings in the United States, Follman and colleagues analyzed data on the 62 mass shootings (4 or more homicides) that occurred during a 30-year period.⁵ Based on these data, it was noted that the weapons recovered from the assailants in these 62 shootings included 68 semi-automatic handguns and 35 assault weapons.²⁸ In 2012, there were a record 7 mass shooting incidents in the United States, injuring or killing 151 people. Although assault-style rifles are responsible for a minority of overall gun deaths in the United States, they have become a weapon of choice for the assailant whose intent is chaos and casualties. The high muzzle energy, large-capacity magazines, and ability to fire rapidly make these weapons particularly devastating. Their place in a civilian arsenal must be questioned. Although the Supreme Court firmly upheld the Second Amendment's guarantee of the right to bear arms, it did so with certain stipulations.²⁹ Justice Antonin 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 limitations on access to high-capacity magazines and assault-style weaponry.**

Children die by gunfire. These deaths occur unintentionally as well as intentionally (homicide or suicide). The presence of a firearm in the home has been shown to increase the risk of injury and death.³⁰ 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)]."³¹ 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 to 19 years of age dropped 8.3%.³² For households with firearms and children, safe storage practices reduce the risk of unintentional firearm deaths and suicides in children.³³ Each of the 4 practices of keeping a gun locked, storing a gun unloaded, keeping ammunition locked, and storing ammunition and gun separately was associated with incremental decreases in injury rates. Other safety devices, such as load indicators, magazine safeties, and personalized devices, have shown promise as well.³⁴ 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 gunlocks and safe storage techniques.**

Child access prevention (CAP) laws have been enacted in many states to help limit the exposure of children to firearms. In general, these laws are designed to hold the parent responsible for the consequences of a child accessing and using a firearm. The intent is to encourage parents to store weapons appropriately and prevent unintended access by children. Studies have demonstrated that in states with CAP laws, the rate of unintentional firearm deaths are lower than in states with no CAP laws. More importantly, unintentional firearm death rates decreased significantly in those states enacting CAP laws (when comparing a 5-year pre-CAP rate with a 5-year post-CAP rate).³⁵ Other researchers have demonstrated a more modest (but not statistically significant) post-CAP decline in unintentional firearms deaths of children.³⁶ Additional research is warranted to clearly establish the efficacy of these laws. **APSA supports legislative efforts, such as CAP laws, to limit the access to firearms by children.**

Counseling patients and their families about the potential risks of firearm ownership (as outlined here) is important. Just as it is important to know if there is a firearm present in the home of a patient assessed to be clinically depressed, or in a home with reported domestic violence, so too is it important for parents to know the risk of keeping a firearm in the presence of a child. A full understanding of the potential risk of a firearm in the home and understanding ways to mitigate that risk should be

proactively discussed by doctors with their patients. However, such previously inviolate physician–patient discussions have been imperiled by federal and state legislation. Language incorporated in the Patient Protection and Affordable Care Act limits conversations between physicians and their patients.

(c) PROTECTION OF SECOND AMENDMENT GUN RIGHTS.—

(1) WELLNESS AND PREVENTION PROGRAMS.—

A wellness and health promotion activity implemented under subsection (a) (1) (D) may not require the disclosure or collection of any information relating to—

- (A) the presence or storage of a lawfully possessed firearm or ammunition in the residence or on the property of an individual; or
- (B) the lawful use, possession, or storage of a firearm or ammunition by an individual.³⁷

Several states have enacted (or are considering) legislation banning discussion between a physician and his or her patients about the presence of firearms in the home. In Florida, in 2011, the legislature passed and the governor signed a bill stating that:

A health care provider or health care facility shall respect a patient's right to privacy and should refrain from making a written inquiry or asking questions concerning the ownership of a firearm or ammunition by the patient or by a family member of the patient, or the presence of a firearm in a private home or other domicile of the patient or a family member of the patient.³⁸

The penalty for violation of this law could include loss of license to practice medicine and a fine of up to \$10,000. The language of this bill was subsequently struck down as unconstitutional (violation of free speech). The relationship between physician and patient (family) should not be limited. **APSA recommends removal or clarification of language in the Affordable Care Act limiting discussion about the presence of firearms in homes with children. APSA opposes, in the strongest possible terms, state-level legislation infringing on the physician–patient relationship.**

In light of the Sandy Hook murders, there has been consideration of placing armed guards or armed school personnel (eg, teachers) in the schools. To limit the risk of injury by firearms, one must limit the exposure of

children to firearms. Ensuring there is a firearm present in all 100,000 US public schools ensures that nearly 50,000,000 children will be exposed to at least one firearm on a daily basis.³⁹ It is not hard to imagine that, with the sheer enormity of such an exposure and possibility of unintentional (or intentional) discharge of these weapons, arming individuals in schools will actually have the unintended consequence of increasing risk to our children. One premise for arming individuals in our schools is that it will act as a deterrent. Such might be the case if the felonious use of a firearm in a school was a rational event. It is not. Another potential unintended consequence of ensuring an armed presence in our schools is the “up arming” of a potential shooter at a school to match or exceed the weapons perceived to exist in the target school. Such a possibility would increase the likelihood of additional casualties. The practice of arming teachers in the schools might also place these well-meaning educators in the way of perpetrators who have the advantage of planning. Not 1 of the 62 mass shootings in the last 30 years was stopped by an armed civilian.⁴⁰ **In the absence of data supporting the salutary benefits of armed personnel in schools, APSA does NOT support a standard practice of arming teachers, parents, or other officials in the school setting.**

A meaningful reduction in the burden of firearms injury and death in the pediatric population will not happen with a single action nor will it happen quickly. But, the lack of a “magic bullet” is not a reason to abandon common-sense efforts to limit the access and exposure to firearms for children. 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 (eg, airbags)—a public health approach—change was realized. Former Congressman Jay Dickey, who helped author the bill restricting federal funding for firearms research, 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.”⁴¹ 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. There are no guarantees that these measures would have prevented the tragedy at Sandy Hook, or the next Sandy Hook. But, what if they did?

APSA believes that inaction is irrational and indefensible. This organization strongly supports the

continuation of legislative, public health and policy recommendations detailed here in an effort to reduce the impact of gun violence on our children and youth.

Author Contributions

Study conception and design: Nance, Oldham

Acquisition of data: Nance

Analysis and interpretation of data: Nance

Drafting of manuscript: Nance, Oldham

Critical revision: Nance, Krummel, Oldham

APPENDIX

APSA Trauma Committee: Michael Nance, Chair; Richard Falcone Jr, Vice Chair; Randall Burd, Anthony DeRoss, Mauricio Escobar, Barbara Gaines, Nilda Garcia, David Gourlay, Joseph Iocono, Scott Langenburg, David Mooney, Matthew Moront, Steven Morrow, Bindi Naik-Mathuria, Elizabeth Renaud, Eric Scaife, Dylan Stewart, Christian Streck.

REFERENCES

- Koop CE, Lundberg GD. Violence in America: a public health emergency. *JAMA* 1992;267:3075–3076.
- Centers for Disease Control and Prevention. Web-Based Injury Statistics Query and Reporting System (WISQARS™). Atlanta, GA: US Department of Health and Human Services, CDC, National Center for Injury Prevention and Control. Available at <http://www.cdc.gov/ncipc/wisqars>. Accessed February 23, 2013.
- Pediatric data (age 0-19 years) for years 2009-2011. Data courtesy National Trauma Data Bank, American College of Surgeons, Chicago, IL. Provided by special request.
- Stylianou S. The impact of firearm violence on children: support for prevention strategies. A position report from Trauma Committee. American Pediatric Surgical Association. *J Pediatr Surg* 1999;34:1445–1446.
- Follman M, Aronsen G, Pan D. “A guide to mass shootings in America”. Mother Jones Available at: <http://www.motherjones.com/politics/2012/07/mass-shootings-map>. Accessed February 23, 2013.
- Completing the count: civilian firearms. Available at: <http://www.smallarmssurvey.org/fileadmin/docs/A-Yearbook/2007/en/Small-Arms-Survey-2007-Chapter-02-annexe-4-EN.pdf>. Accessed February 23, 2013.
- Organisation for Economic Co-Operation and Development. StatExtracts. Available at: http://stats.oecd.org/Index.aspx?DatasetCode=SNA_TABLE1. Accessed February 23, 2013.
- United Nations Office on Drugs and Crime. Homicide statistics. Available at: <http://www.unodc.org/unodc/en/data-and-analysis/homicide.html>. Accessed February 23, 2013.
- Richardson EG, Hemenway D. Homicide, suicide, and unintentional firearm mortality: comparing the United States with other high-income countries. 2003. *J Trauma* 2011;70:238–243.
- Branas CC, Nance ML, Elliott M, et al. Urban-rural shift in intentional firearm death: different causes, same results. *Am J Public Health* 2004;94:1750–1755.
- Nance ML, Carr BG, Kallan MJ, et al. Variation in pediatric and adolescent firearm mortality rates between rural and urban US counties. *Pediatrics* 2010;125:1112–1118.
- Hoyert DL, Xu J. Deaths: preliminary data for 2011. National vital statistics reports; vol. 61 no 6. Hyattsville, MD: National Center for Health Statistics. 2011. Available at: http://www.cdc.gov/nchs/data/nvsr/nvsr61/nvsr61_06.pdf. Accessed February 23, 2013.
- McIntosh JL (for the American Association of Suicidology). (2010). USA suicide 2007: official final data. Washington, DC: American Association of Suicidology. Dated May 23, 2010. Available at: <http://www.suicidology.org>. Accessed February 23, 2013.
- Lubell KM, Swahn MH, Crosby AE, Kegler SR. Methods of suicide among persons aged 10-19 years—United States, 1992-2001. *MMWR Morb Mortal Wkly Rep* 2004;53:471–474.
- Johnson RM, Barber C, Azrael D, et al. Who are the owners of firearms used in adolescent suicides? *Suicide Life Threat Behav* 2010;40:609–611.
- Shenassa E, Catlin S, Buka S. Lethality of firearms relative to other suicide methods: a population based study. *J Epidemiol Community Health* 2003;57:120–124.
- Marzuk P, Tardiff K, Hirsch C. The epidemiology of murder-suicide. *JAMA* 1992;267:3179–3183.
- Warren-Gordon K, Byers BD, Brodt SJ, et al. Murder followed by suicide: a newspaper surveillance study using the New York Times Index. *J Forensic Sci* 2010;55:1592–1597.
- National Instant Background Check System. Available at: <http://www.fbi.gov/about-us/cjis/nics>. Accessed February 22, 2013.
- Cook P, Ludwig J. Guns in America: National Survey on Private Ownership and Use of Firearms National Criminal Justice Reference Service. Available at <http://www.ncjrs.org>. Accessed February 23, 2013.
- Record KL, Gostin LO. A systematic plan for firearms law reform. *JAMA* 2013;309:1231–1232.
- Federal Denials. Available at: http://www.fbi.gov/about-us/cjis/nics/reports/20130205_denials.pdf. Accessed February 23, 2013.
- Kellermann AL, Rivara FP. Silencing the science on gun research. *JAMA* 2013;309:549–555.
- Access Denied. Available at: <http://www.demandplan.org/detail/2013-01-access-denied-how-the-gun-lobby-is-depriving-police>. Accessed February 23, 2013.
- Paulozzi LJ, Mercy J, Frazier L Jr, Annet JL. CDC's National Violent Death Reporting System: background and methodology. *Inj Prev* 2004;10:47–52.
- Barber C, Hemenway D. Too many or too few unintentional firearm deaths in official US mortality data? *Accid Anal Prev* 2011;43:724–731.
- National Research Council. Firearms and violence: a critical review. Committee to Improve Research Information and Data on Firearms. In: Wellford CF, Pepper JF, Petrie CV, eds. Committee on Law and Justice, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press; 2005.
- Follman M, Aronsen G. “A killing machine”: half of all mass shooters used high-capacity magazines. Mother Jones. Available at: <http://www.motherjones.com/politics/2013/01/high-capacity-magazines-mass-shootings>. Accessed February 23, 2013.
- Heller v. District of Columbia. Available at: <http://www.supremecourt.gov/opinions/07pdf/07-290.pdf>. Accessed February 23, 2013.

30. Kellermann AL, Reay DT. Protection or peril? An analysis of firearm-related deaths in the home. *N Engl J Med* 1986;314: 1557–1560.
31. Miller M, Azrael D, Hemenway D. Firearm availability and unintentional firearm deaths, suicide, and homicide among 5-14 year olds. *J Trauma* 2002;52:267–274.
32. Miller M, Azrael D, Hepburn LM, et al. The association between changes in household firearm ownership and rates of suicide in the United States, 1981-2002. *Inj Prev* 2006; 12:178–182.
33. Grossman DC, Mueller BA, Riedy C, et al. Gun storage practices and risk of youth suicide and unintentional firearm injuries. *JAMA* 2005;293:707–714.
34. Vernick JS, O'Brien M, Hepburn LM, et al. Unintentional and undetermined firearm related deaths: a preventable death analysis for three safety devices. *Inj Prev* 2003;9: 307–311.
35. Hepburn L, Azrael D, Miller M, Hemenway D. The effect of child access prevention laws on unintentional child firearm fatalities, 1979-2000. *J Trauma* 2006;61:423–428.
36. Webster DW, Starnes M. Reexamining the association between child access prevention gun laws and unintentional shooting deaths of children. *Pediatrics* 2000;106:1466–1469.
37. Title X. Strengthening quality, affordable healthcare for all Americans. Patient Protection and Affordable care Act. Available at: <http://www.gpo.gov/fdsys/pkg/BILLS-111hr3590enr/pdf/BILLS-111hr3590enr.pdf>. Accessed February 23, 2013.
38. Florida HB4017. Privacy of Firearms Owners Act. Available at: [http://www.flsenate.gov/Session/Bill/2013/4017/BillText/ Filed/PDF](http://www.flsenate.gov/Session/Bill/2013/4017/BillText/Filed/PDF). Accessed February 23, 2013.
39. National Center for Educational Statistics Fast Facts. Available at <http://nces.ed.gov/fastfacts/display.asp?id=372>. Accessed February 23, 2013.
40. Follman M. “The NRA myth of arming the good guy”. Mother Jones. Available at: [http://www.motherjones.com/politics/2012/ 12/nra-mass-shootings-myth](http://www.motherjones.com/politics/2012/12/nra-mass-shootings-myth). Accessed February 23, 2013.
41. Dickey J, Rosenberg M. “We won’t know the cause of gun violence until we look into it”. *Washington Post*, July 27, 2012. Available at: <http://wapo.st/MKMI73>. Accessed February 23, 2013.

Invited Commentary

David B Hoyt, MD, FACS

Executive Director, American College of Surgeons
Chicago, IL

The policy statement of the American Pediatric Surgical Association on firearm injuries in children couldn't be more timely. This remains a tremendous public health problem, and the recent events in Newtown, CT emphasize this to us all. The American College of Surgeons has revised their Statement on Firearm Injuries and it is in line with the principles outlined by pediatric surgery.

The American College of Surgeons supports legislation limiting access to assault weapons, high-capacity magazines, and munitions designed for military and law enforcement agencies. In addition, mandatory background checks should be enhanced before the purchase of firearms, including at gun shows and auctions. To assure their role as health care professionals in preventing firearm injuries, the College recommends health screening, patient counseling, and referral to mental health services for those with behavioral medical conditions. Similarly, the promotion of programs directed at improving safe gun storage and teaching the nonviolent resolution of conflict are emphasized. Finally, evidence-based research on firearm injury and the creation of a national firearm injury database to inform federal health policy are essential needs going forward. The American Pediatric Surgical Association is to be commended for taking action in creating their statement and demonstrating leadership in this area, where inaction has prevented effective policy to control this problem.