

Approved by MACEP Board of Directors – April 28, 2015

On December 14, 2012, a young man with serious mental health issues entered Sandy Hook Elementary School in Newtown, Connecticut, with an assault weapon. He shot and killed 26 people, including 20 young children.

On July 20, 2012, a young man with serious mental health issues entered the Century movie theater in Aurora, Colorado with a semiautomatic rifle, a 12-gauge shotgun, and a handgun. He shot and killed 12 people, injuring 70 others.

On January 8, 2011, a young man with serious mental health issues entered a constituent meeting in a grocery store parking lot with a semi-automatic pistol. He shot and killed 6 people, injuring 14 others, including Representative Gabrielle Giffords.

On January 21, 2015, a cardiovascular surgeon was shot twice at Brigham and Women's Hospital by a patient's family member who was disgruntled over the care his mother had received.

“The Massachusetts College of Emergency Physicians (MACEP) is dedicated to advancing excellence in emergency care, and advocating for emergency physicians, their patients and the health of the community.”

- MACEP Mission Statement

Death and dismemberment of adults and children due to firearms is a sadly common sight in Massachusetts' and nation's emergency departments (EDs). Emergency physicians (EPs) are on the front lines, caring for victims of violence. As all firearms injuries are preventable, MACEP strongly supports the study and implementation of policies that reduce patient harm from firearm violence.

The emergency physicians of Massachusetts are a diverse group, including gun owners and hunters. We are all too familiar with the violence in our urban and rural regions; therefore, we respect the right to self-defense. At the same time, it is our public health responsibility to advocate for the safety of our patients, colleagues and communities. We must work together with researchers, public health leaders, politicians, and our community partners to develop and implement improved policies to decrease gun violence.

Scope of the Problem

Firearms are the third-leading cause of injury-related deaths in the United States, trailing only poisoning and motor vehicle accidents, killing approximately 30,000 people in the US per year. 66% of homicides and 55% of suicides in the United States are committed with firearms. (<http://www.cdc.gov/injury/wisqars/index.html>.) In 2010, 73,505 people were treated for nonfatal firearm-related injuries in emergency departments in the United

States, among them 15,576 children and adolescents younger than 20 years. (National Center for Injury Prevention and Control, US Centers for Disease Control and Prevention. Web-Based Injury Statistics Query & Reporting System (WISQARS) Injury Mortality Reports, 1999–2009, for national, regional, and states (May, 2012). Available at: http://www.cdc.gov/injury/wisqars/fatal_injury_reports.html. Accessed June 8, 2012)

The United States has the highest rates of firearm-related deaths among high-income countries. Firearm death rates in the US are more than seven times higher than the average high-income country. Firearm homicide rates are 19 times higher in the US compared with the other high-income countries, while firearm suicide rates, and unintentional firearm death rates are over five times higher. (Richardson EG, Hemenway D. Homicide, suicide, and unintentional firearm fatality: comparing the United States with other high-income countries, 2003. *J Trauma*. 2011;70(1):238–243.)

Though homicides may get most of the press related to firearms violence, gun suicides are more common. Overall, suicide is the tenth most common cause of death in the United States. In 2010, 19,392 people in the United States died of self-inflicted firearm injuries. Suicide attempts with a firearm have a case fatality rate of 90%, which is much higher than most other means of self-harm. (Matthew Miller et al., The Epidemiology of Case Fatality Rates for Suicide in the North-east, *43 Annals Of Emergency Med*. 723, 726 (2004) / Shenassa ED, Catlin SN, Buka SL. Lethality of firearms relative to other suicide methods: a population based study. *J Epidemiol Community Health* 2003;57:120-4.).

Children are not immune to the epidemic of firearms violence. Of all injury deaths of individuals 15 through 19 years of age in the United States in 2009, more than 1 (28.7%) in 4 were firearm related. (http://www.cdc.gov/injury/wisqars/fatal_injury_reports.html.) Per Richardson and Hemenway, firearm homicide rates for youth 15 to 24 years of age were 35.7 times higher than in other countries. (Richardson EG, Hemenway D. Homicide, suicide, and unintentional firearm fatality: comparing the United States with other high-income countries, 2003. *J Trauma*. 2011;70(1):238–243.)

Though only 1% of gun-related deaths are due to mass shootings (defined as a single shooter killing four or more people – not including himself - in during one incident), they have deeply traumatized communities throughout this country. Over 900 people in the US died from mass shootings between 2006 and 2012 (<http://www.usatoday.com/story/news/nation/2013/02/21/mass-shootings-domestic-violence-nra/1937041/>).

Similarly, death from unintentional firearm use is dwarfed by the overall burden of firearm-related casualties in the United States; however these deaths should be most amenable to preventive strategies. In 2009, 114 children and adolescents younger than 20 years died as a result of unintentional firearm-related injuries. (National Center for Injury Prevention and Control, US Centers for Disease Control and Prevention. Web-Based Injury Statistics Query & Reporting System (WISQARS) Injury Mortality Reports,

1999–2009, for national, regional, and states (May, 2012). Available at: http://www.cdc.gov/injury/wisqars/fatal_injury_reports.html.)

The Brady Center to Prevent Gun Violence ranks Massachusetts as the having the 3rd most stringent gun laws in the United States. “After Massachusetts passed the toughest firearm control legislation in 1998, firearm ownership rates plummeted but violent crimes and homicides rose.” From 2000–2010, the overall firearm-related deaths for the US was 10.21/100,000, with Massachusetts being among the lowest at 3.24/100,000. The Massachusetts gun-related fatality rate has been rising annually over this time period, though, at a rate of 0.074. “The significant firearm fatality-rate increase in MA may be explained by the influx of firearms from the two neighboring states (Maine and New Hampshire) with weak firearm control legislation.” (Kalesan B, Vasani S, Mobily ME, et al. State-specific, racial and ethnic heterogeneity in trends of firearm-related fatality rates in the USA from 2000 to 2010. *BMJ Open* 2014;4:e005628. doi:10.1136/bmjopen-2014-005628).

MACEP’s Policy Positions

MACEP supports addressing firearm-related injury and death as a public health problem. We strongly believe that public health organizations such as the National Institutes of Health and the Centers for Disease control should be granted the necessary means to properly study and develop policies to decrease the harm caused by firearms.

Public health research and policy, with the strong support of emergency physicians, has had a dramatic effect on mortality from other types of injuries, including motor vehicle trauma, domestic violence, and drowning.

The case of traffic fatalities is particularly instructive. Over the last 60 years, fatalities per mile driven have decreased by 80%. (National Highway Traffic Safety Administration. 2010 motor vehicle crashes: overview. Traffic safety facts: research note. February 2012 (<http://www-nrd.nhtsa.dot.gov/Pubs/811552.pdf>.) This dramatic improvement occurred not due to the banning of cars, but with evidence-based policies that incrementally made driving safer. Government and industry partnered to develop and implement interventions such as seat belts, air bags, drunk driving prevention campaigns, and highway rumble strips. (Hemenway, David; Miller, Matthew. “Public health approach to the prevention of gun violence. *New England Journal of Medicine*. 2013; 368:2033-35.)

Per the CDC, a public health approach to decreasing gun violence would require the following steps: 1) define and monitor the problem; 2) identify risk and protective factors; 3) develop and test prevention strategies; and 4) assure widespread adoption. (Centers for Disease Control and Prevention. The Public Health Approach to Violence Prevention. <http://www.cdc.gov/violenceprevention/overview/publichealthapproach.html> March 5, 2008.)

Accomplishing these aims requires significant resources. However, the funding and federal backing for such research has been dramatically reduced. In 1996, the US Congress eliminated all funding for CDC research on gun violence and prohibited it from

funding research to “advocate or promote gun control.” This prohibition was later extended to include the Department of Health and Human Services, including the National Institutes of Health. As a result, it has been estimated that fewer than 20 academics in the U.S. currently focus on gun violence research. (Wadman, Meredith. *The Gun Fighter*. *Nature*. Vol. 496. April 25, 2013.)

We strongly support robust federal funding for firearms research. We also believe that the National Violent Death Reporting System should be expanded to all 50 states to aid in collection of accurate epidemiologic information about the circumstances surrounding gun violence. This system, modeled after the highly successful Fatal Accident Reporting System for motor vehicle crashes, has been functional in only 18 states. Lack of funding has limited its full implementation, which has in turn limited our understanding of gun violence and its causes.

We agree with a 2004 National Academy of Science report on the state of firearms research, which concluded, “...if policy makers are to have a solid 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.” (APSA / National Research Council. (2005). *Firearms and Violence: A Critical Review*. Committee to Improve Research Information and Data on Firearms. Charles F. Wellford, John V. Pepper, and Carol V. Petrie, editors. Committee on Law and Justice, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press.)

Multiple professional organizations endorse this policy statement (*Annals of Internal Medicine*, February 24, 2015. “Firearm-Related Injury and Death in the United States: A Call to Action From 8 Health Professional Organizations and the American Bar Association” <http://annals.org/article.aspx?articleid=2151828>).

MACEP supports improved access to and quality of mental health services.

Nearly two thirds of firearms-related deaths are from suicide. Difficulty accessing high-quality mental health care for both children and adults has hampered the medical community’s ability to prevent such tragedies.

Emergency physicians in Massachusetts witness the ineffectiveness and lack of parity for our mental health system on a daily basis. Mental health patients are routinely stuck in our state’s emergency departments, rather than receiving the care they need in psychiatric facilities, due to underfunding and regulations that do not put the patients’ needs first.

Disturbingly, suicide is the third most common cause of death among American youth between the ages of 15-19 years. Firearms are the most common means of suicide completion. (“Firearm-Related Injuries Affecting the Pediatric Population” www.ncbi.nlm.nih.gov/pubmed/10742344).

Strong evidence links the availability of firearms to suicide rates among children and adults. (Miller M, Hemenway D. The relationship between firearms and suicide: a review of the literature. *Aggress Violent Behav*. 1999; 4(1):59–75). When Australia instituted an aggressive gun buy-back program in 1997, thereby decreasing the rate of gun-owning households by nearly half, the rate of firearm suicides decreased by almost

80% without a corresponding change in other means of suicide.

(http://andrewleigh.org/pdf/GunBuyback_Panel.pdf). A 1% decrease in household gun ownership in the U.S. has been shown to decrease suicide rates by 0.5-0.9%.

(<http://www.sciencedirect.com/science/article/pii/S014481881300077X>)

Suicide attempts using a firearm are particularly lethal, with a case fatality rate around 90% (Matthew Miller et al., The Epidemiology of Case Fatality Rates for Suicide in the Northeast, 43 Annals Of Emergency Med. 723, 726 (2004).), which is much greater than other common suicide methods. (Elnour AA, Harrison J. Lethality of suicide methods. Inj Prev. 2008;14(1):39–45). Most suicide attempts are impulsive in nature and about 90% of people who attempt suicide do not go on to die from suicide. (Matthew Miller et al., Suicide Mortality in the United States: The Importance of Attending to Method in Understanding Population- Level Disparities in the Burden of Suicide, 33 Ann. Rev. Pub. Health 393 (2012).

Although the mentally ill are more often victims than perpetrators of violence, those with violent tendencies can commit horrific acts, as evidenced by the recent spate of mass shootings at Newtown, Aurora, Virginia Tech, and others.

(<http://www.ncbi.nlm.nih.gov/pubmed/16061769>).

We agree with the American Psychiatric Association that the following interventions are essential to creating a safer community: a. Increased funding and support for early identification and treatment of mental disorders; b. Remove barriers to accessing appropriate treatment for those people with mental illness who pose an increased risk of harm to themselves or other people; c. Because privacy in mental health treatment is essential to encourage persons in need of treatment to seek care, laws mandating health professionals to report to law enforcement officials everyone who appears to be a danger to themselves or others are likely to be counterproductive and should not be adopted.

(http://www.psych.org/File%20Library/Learn/Archives/ps2013_Firearms.pdf)

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MACEP strongly supports the rights of health care professionals to freely counsel their patients regarding firearm safety.

Physician counseling about personal safety is a critical component of the patient-physician relationship. Research has shown that counseling about safe health practices can dramatically improve healthy behaviors. One study found that 64% of individuals who received verbal firearm storage safety counseling from their doctors improved their gun safety practices. (Teresa L. Albright & Sandra K. Burge, Improving Firearm Storage Habits: Impact of Brief Office Counseling by Family Physicians, 16 J. of the Am. Bd. of Family Practice 40, 40 (2003).) Such critical interventions should not be infringed upon by legislation.

Of particular concern, recent federal and state legislation have limited health care providers' ability to counsel patients, as well as limiting public health researchers from collecting critical information related to firearm violence.

In 2010, the Affordable Care Act included the following language: "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." (Title X. Strengthening quality, affordable healthcare for all Americans. Patient Protection and Affordable care Act <http://www.gpo.gov/fdsys/pkg/BILLS-111hr3590enr/pdf/BILLS-111hr3590enr.pdf>. Accessed 2/23/13.)

In 2011, the Florida legislature passed a bill stating, "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. (Florida HB4017. Privacy of Firearms Owners Act. Available at <http://www.flsenate.gov/Session/Bill/2013/4017/BillText/Filed/PDF>.) The Florida law has since been struck down by a federal court as unconstitutional.

MACEP strongly believes that health care providers have a right to free speech in matters related to their patients' health.

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MACEP supports establishing of a universal system of background checks for anyone buying a firearm or ammunition.

Federal law requires a background check through the National Instant Criminal Background Check System for all firearms sold through licensed dealers. However, unless otherwise specified by state law, firearms may be purchased through private sellers without a background check.

According to a Department of Justice investigation, an estimated 80% of firearms possessed by an assailant while committing a crime were purchased through a source other than a licensed dealer. (<http://www.bjs.gov/content/pub/pdf/fuo.pdf>) One survey has estimated that 36% of US firearms are purchased through private sellers. (Cook PJ, Ludwig J. *Guns in America: results of a comprehensive national survey on firearms ownership and use*. Washington, DC: The Police Foundation, 1996.)

Denial of a handgun to felons has been correlated with decreased subsequent criminal firearm use. (Wright MA, Wintemute GJ, Rivara FA. Effectiveness of denial of handgun purchase to persons believed to be at high risk for firearm violence. *Am J Public Health*. 1999;89(1):88-90.) States that have expanded background checks have seen decreased rates of firearms trafficking. (Webster DW, Vernick JS, Bulzacchelli MT. Effects of state-level firearm seller accountability policies on firearm trafficking. *J Urban Health*. 2009;86(4):525-537.) Improved tracking of gun sales has been shown to assist

law enforcement in solving crimes. (Wintemute GJ, Romero MP, Wright MA, Grassel KM. The life cycle of crime guns: a description based on guns recovered from young people in California. *Ann Emerg Med.* 2004;43(6):733-742.) The relaxation of firearms laws in Missouri in 2007 led to significant increases in overall firearms violence (<http://www.judiciary.senate.gov/pdf/2-12-13WebsterTestimony.pdf>)

Due to lax federal laws, individual states have varied regulations related to the private firearms market. This leads to frequent trafficking of guns from states with lax oversight into those, like Massachusetts, with more stringent laws. Only 34% of crime guns used in Massachusetts in 2011 originated in the state.

(<http://www.atf.gov/files/statistics/download/trace-data/2011/2011-trace-data-massachusetts.pdf>)

MACEP supports a national universal background check law, which would keep guns out of the hands of those most likely to use them in crime, and prevent guns from being trafficked from low-regulation to high-regulation states such as Massachusetts.

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MACEP supports all efforts to limit access by children to firearms.

No child in advanced society should die from gun violence. However, firearms continue to be a major cause of death and disability among children and adolescents. Among adolescents aged 15 to 19, about 1 in 4 injury deaths in the U.S. are due to firearms. (<http://webappa.cdc.gov/sasweb/ncipc>) In 2009, 84.5% of U.S. homicides of people between the ages of 15 and 19 were due to guns. (check for updated reference). Among this age group, suicide is the third leading cause of death; most suicides are completed with firearms. (http://www.cdc.gov/injury/wisqars/fatal_injury_reports.html)

Several studies have linked the prevalence of firearms with childhood death from firearms. The link is especially strong among suicide deaths.

(<http://www.ncbi.nlm.nih.gov/pubmed/17426563>),

(<http://www.sciencedirect.com/science/article/pii/S1359178997000578>),

(<http://www.healthandlearning.org/documents/milleronFirearmsandSuicideinNEJTrauma04.pdf>). One study showed that for each 10% decline in household firearm possession, the rate of childhood suicide decreased by 8.3%.

(<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2563517/>)

Many people in the U.S. do not store guns safely, even when at-risk adolescents are in the home. (<http://archpedi.jamanetwork.com/article.aspx?articleid=205373>) One study showed that among households with children and at least one gun, only 39% kept their firearms locked, unloaded and separate from ammunition, while 1 in 11 kept their firearms unlocked and loaded.

(http://www.rand.org/content/dam/rand/pubs/reprints/2005/RAND_RP890.pdf) The practice of keeping a gun locked and unloaded, as well as storing ammunition locked and in a separate location, are associated with decreased childhood firearm deaths and injuries. (<http://jama.jamanetwork.com/article.aspx?articleid=200330>)

Educating children about gun use has been proposed as a method of decreasing injuries. The National Rifle Association, for example, developed the Eddie Eagle SunSafe Program. (<http://eddieeagle.nra.org/>). However, studies have shown inconsistent results relating to safe gun handling as a result of such programs.

(<http://www.ncbi.nlm.nih.gov/pubmed/11943968>),

(<http://www.ncbi.nlm.nih.gov/pubmed/15342889>),

(<http://www.ncbi.nlm.nih.gov/pubmed/14702451>)

Child access prevention (CAP) laws have shown promise in reducing unintentional childhood deaths. These laws hold parents and guardians liable for allowing children to have access to their guns. In Massachusetts, people can be prosecuted for negligent firearm storage even in the gun is unloaded.

(<https://malegislature.gov/Laws/GeneralLaws/PartI/TitleXX/Chapter140/Section131L>)

One paper showed a 23% decrease in unintentional child shooting deaths from 1990 to 1994 in states with CAP laws. (<http://www.ncbi.nlm.nih.gov/pubmed/9315767>) A study of the CAP law in Florida showed a 51% decrease in unintentional child shooting deaths.

(http://www.firearmsresearch.org/content.cfm/article_summary?article_id=3841)

Simply, as children are especially vulnerable to impulsive harmful behavior, we strongly support measures to keep guns out of the hands of children.

Conclusion

Since 1996, when the U.S. Congress drastically cut funding for firearms injury research, approximately 427,000 Americans have been killed with guns, which is more than all U.S. soldiers killed in action from World War II through today

(<http://www.defense.gov/news/casualty.pdf>).

Emergency physicians are on the front lines caring for the victims of firearms violence. As 100% of gun violence is preventable, MACEP does not think it acceptable to stand idly by as our patients continue to be gunned down in our communities. Though there may not be a single politically feasible legislative solution that would eliminate gun violence, we believe that evidence supports taking a multifaceted approach that would gradually blunt the firearm violence epidemic.