



COALITION OF TRAUMA CENTERS FOR FIREARM INJURY PREVENTION

Testimony Submitted to the Senate Judiciary Committee

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Raquel Forsythe, MD FACS

First, I would like to thank Senator Baker and the members of the judiciary committee for holding this hearing as this is a critically important topic. I have lived and worked in Pittsburgh for 15 years. I am a wife and the mother of two daughters. I am a Trauma Surgeon. I have committed my life to caring for patients with any and all types of injuries. I trained for more than a decade between medical school, residency and fellowship to do this job. I strive every day to save lives, relieve suffering and ultimately to prevent injuries. Because we don't know when injured patients will arrive at the hospital, my partners and I have spent and will continue to spend nights, weekends and holidays in the hospital at the ready to care for the injured in our community.

I grew up in New York City, but I had no exposure to violent crime or trauma. As a medical student, again, I had limited exposure to Trauma in general and no exposure to injuries by firearms. It was not until my residency, when on my first night of Trauma call in Newark NJ, I treated a patient for injuries from gun violence. And on that first night, it was not one patient but three young men who were shot and ended up in my care. Since that time, I have personally operated on hundreds of patients with firearm injuries. Since that time, I have cared for more than three thousand patients injured by firearms, by my estimation. I have had to tell parents that their children were dead. I have had patients who have been shot, recovered, and been shot again. I have cared for patients who have taken their life with a gun, and those who have tried and failed to do just that. And more recently, in a new and harrowing phenomenon, I have cared for those injured in my community in intentional mass injury events – as part of the response to the shootings at Western Psychiatric Hospital and Tree of Life Synagogue.

The scourge of gun violence is getting worse and not better. As Trauma Surgeons, we are advocates for injury prevention - seat belts, helmets, efforts to minimize drunk and distracted driving – these and other efforts have reduced the injury burden and deaths from Motor Vehicle Crashes, but as we have seen these deaths drop in number, we have seen a rise in intentional deaths from Firearm injuries. Although firearm injured patients comprise only 4% of the patients U.S. trauma centers treat, they account for over 17% of the overall burden of injury deaths in the United States.¹ Violent injury secondary to firearms is the most poorly addressed public health



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problem in the United States and is drastically underfunded given its substantial burden of disease. As of September 20, 2019, there have been 21,411 people shot in the United States THIS YEAR and 10,792 have been killed, including 503 children under the age of 12 and 2,231 teens (ages 12-17.) This does not include suicides, which outnumber other types of firearm injuries both in the Commonwealth and nationwide.ⁱⁱ

Firearm injuries are a public health crisis. Similar to the way in which the health care community has addressed other public health problems, firearm-related injury should follow a similar approach. For example, when motor vehicle crash fatalities were rising, the nation moved toward safer roads, developing seatbelts and ensuring compliance, and improving vehicle safety. We enforce speed limits and seat belt laws. We require children to be in approved child safety seats. We require testing and licensing prior to operating a motor vehicle. In the Commonwealth, we have extra skill building requirements for drivers under the age of 18. With high rates of illness and death seen secondary to cigarette smoking and lung cancer, an effective antismoking campaign was developed. Per the CDC websiteⁱⁱⁱ, we have had 530 confirmed cases and 7 deaths from vaping related acute lung injury and the federal government is moving to ban flavored vape products. A major retailer, Walmart, announced that they would cease selling vape products. Public health advances regarding firearm-related injuries must be a priority as well^{iv}. We need to seek solutions that limit injuries from firearms as well.

Trauma Surgeons are the leaders of the Trauma team in the hospital. But we are here to represent all those involved in the care of patients injured by firearms. The impact of these injuries are felt, not just by patients, their families and their communities, but across the entire chain of trauma care. I have seen the effect on my colleagues in trauma care from Emergency Medical Service (EMS) providers like First Responders, Paramedics, Emergency Medical Technicians (EMT) to those in the hospital, which include other Physicians, Nurses, Nurse Practitioners, Physician Assistants, Nurse Anesthetists, Respiratory Therapists, Patient Care Technicians, Radiology Technicians, Physical and Occupational Therapists, to name a few. It is felt across the spectrum of rehabilitation and then by the Primary Care and Mental Health providers who deal with the aftermath of physical and emotional impact firearm injuries. This does not speak to the financial, social and emotional impact of firearm injuries on schools, students, teachers, congregations and communities.

PUBLIC HEALTH IMPACT OF FIREARM INJURY

Firearm injuries are among the leading causes of preventable death from injury across the United States. The root of the problem is complex and involves the interaction between many factors including the availability of firearms, cultural tolerance to violence, socioeconomic and behavioral issues. There is a general misconception that firearm



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injury is only a problem in urban environments, but this is not supported by the literature. Rural areas exhibit greater rates of firearm suicide and unintentional injury compared with urban areas, while homicide and assault are more common in urban areas. Firearm injury typically requires immediate treatment at a trauma center. More than half of intentional gunshots involve the region of the head and neck and are highly likely to be fatal. On the contrary, more than two-thirds of unintentional gunshots are in the extremities, where prompt treatment is potentially lifesaving. These are the types of injuries that can be helped prior to trauma center arrival by the types of techniques taught in Stop the Bleed classes. The teaching of hemorrhage control techniques to nonmedical provides, like tourniquet use and packing of wounds, has seen a decrease in mortality from these types of extremity injuries^v. Patients injured by firearms often have extended stays in the hospital at significant cost to the Commonwealth.

Given the significant impact of firearm injuries across the country, multiple medical organizations have recently published consensus statements on recommendations to minimize firearm injuries. Trauma Professional organizations the American Association for the Surgery of Trauma^{vi} (AAST) and the Eastern Association for the Surgery of Trauma^{vii} (EAST) each have one. The American College of Surgeons (ACS) sponsors Trauma Quality Programs and sets standards for Trauma Centers through the Committee on Trauma (COT) has brought together a group of Trauma Surgeons with the goal of developing consensus.^{viii}

The Firearm Strategy Team (FAST) Workgroup is composed of respected surgeons who meet the criteria of being on the frontline for the care of firearm injuries, involved in meetings with the COT Injury Prevention Committee, have a track record of working well as a part of a team, are avid firearm owners, and practice in areas distributed across the US. Among others, this group has put forward the following recommendations:

- Background checks on all firearm purchases/transfers
- Education and Training for all firearm owners
- Safe storage of firearms to avoid unintentional injury
- Risk mitigation via Extreme Risk Protection Order legislation
- Research that is as broad in scope and funding as the problem of firearm violence itself

The Coalition of Trauma Centers for Firearm Injury Prevention supports the following initiatives in Pennsylvania to minimize the impact of firearm injuries.



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EXTREME RISK PROTECTION ORDERS (ERPO)

Suicide is a major cause of premature death. In 2014, suicide was the second leading cause of death in the United States for those 10-34 years of age, with approximately half of over 42,000 suicides that year involving a firearm. The widespread availability of firearms across the Commonwealth results in easy access for those with suicidal ideation. Firearms are a highly lethal method for attempting suicide, with a mortality rate of 92%, compared with 67% for drowning and 2% for intentional overdoses.^{ix} Means restriction is an effective measure of reducing suicide. Even if an attempt is made by another method, there is a higher likelihood that the individual would survive and have access to mental health resources. ERPO legislation allows for the temporary removal of firearms those deemed at risk for self-injury or harm to others. In states where ERPO legislation has been enacted, reduction of suicide rates by 7.5% to 13.6% have been seen^x. Research estimates that for every 10-20 warrants obtained with an ERPO law, one life will be saved. The CTCFIP strongly supports implementation of ERPO legislation in the Commonwealth as a method of means restriction and reduction of death by suicide by firearm.

BACKGROUND CHECKS FOR ALL FIREARM PURCHASES

While evidence suggests that most firearms in the Commonwealth are purchased legally, not conducting background checks on all transfers and sales of firearms creates an opportunity for those who are a danger to themselves or others to illegally obtain firearms. There is broad support for Universal Background checks, with 83 percent of gun owners support expanded background checks on sales of all firearms, including 72 percent of all National Rifle Association (NRA) members.^{xi} A 2018 Rand Corporation evaluation of available studies regarding background checks concludes that they provide moderate evidence that background checks may reduce firearm suicides and homicides.^{xii} The data does not suggest that expanding background checks would reduce mass shootings.

CHILD ACCESS AND SAFE STORAGE

Efforts should be made to limit children's access to firearms through safe storage mechanisms. Parents often underestimate a child's interest in handling a firearm, especially if they have had firearm injury education. A study of 8-12 year old boys showed that children encountering a gun were very likely to handle it and pull the trigger. Parental estimates of their child's interest in guns did not predict actual behavior on finding a handgun in a playroom. Boys who were believed to have a low interest in real guns were as likely to handle the handgun or



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pull the trigger as boys who were perceived to have a moderate or high interest in guns. More than 90% of the boys who handled the gun or pulled the trigger reported that they had previously received some sort of gun safety instruction.^{xiii} Studies of adolescent and suicides have generally found that, relative to comparison groups of individuals who died other ways or living community members, those who died by firearm suicide lived in homes where guns were less securely stored.^{xiv} Another study found that child access prevention (CAP) laws significantly reduced unintentional firearm injuries among those aged 17 or younger and among those 18 or older.^{xv} In addition to limiting injuries to children, safely stored firearms are less likely to be stolen.

MENTAL HEALTH/ILLNESS AND FIREARMS

There is significant data that suggests that a diagnosis of mental illness alone has little relation to risk of interpersonal violence;^{xvi} in fact, studies estimate that between 2 percent and 4 percent of all violent behavior may be attributable to mental illness.^{xvii} Numerous studies, including a meta-analysis demonstrate that persons with diagnosed mental illness are more likely to be the victims of violent crime than the perpetrators.^{xviii} Prohibitions on firearm ownership related to mental illness is likely to have a greater reduction in suicide rather than violence related to firearms.

CONCLUSION

As a Trauma Surgeon, I strongly believe that part of my role is to prevent injury rather than simply treat those who are injured. Firearms cause a significant number of injuries that are treated at Trauma Centers. This represents a huge cost to society. In addition to the direct costs of caring for the injuries in hospitals, the burden of missed work and long-term disability is significant. There is also the human cost of pain, physical suffering, post-traumatic stress and to loss in the community. The Coalition of Trauma Centers for Firearm Injury Prevention was formed to add our voice to the dialogue in the Commonwealth of Pennsylvania. In an ideal world, the historically polarized debate would become more like the discussions that the American College of Surgeons has had on this topic, a dialogue between those who might differ with respect to their views on the benefits of firearm ownership and personal liberty, but who agree on the critical importance of reducing injuries and deaths related to firearms.



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