

## PERSPECTIVE

## FIREARM VIOLENCE

## Mass Shootings and the Numbing of America

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**My daughter celebrated her *Bat Mitzvah*** on October 27, 2018. It was a day of joyous celebration as she chanted from the *Torah* and provided her *Dvar Torah*, her commentary on the ethics of the binding and near sacrifice of Isaac by his father Abraham.

At the same time, the Tree of Life Congregation in Pittsburgh, Pennsylvania was celebrating the beginning of life with a *bris*, the ritual circumcision that brings a child into the community, and that also dates back to Abraham and Isaac. However, their joy was cut short; the service ended in mayhem as a man opened fire with an AR-15 assault rifle and 3 handguns, killing 11 congregants and wounding 6 others.

Although this horrific anti-Semitic attack led to brief and intense reflection, that mass killing was eclipsed 11 days later by a mass killing in Thousand Oaks, California that claimed the lives of 12 people. As the numbers of those injured and killed by firearms climb, we as a country have become far too numb to these tragedies. Some people vividly remember the shooting at Sandy Hook Elementary School in Newtown, Connecticut that killed 26 young children and teachers in 2012. But how many recall the details of the movie theater shooting in Aurora, Colorado just 6 months prior to Sandy Hook, killing 12 and injuring 58 others, at the time the largest mass shooting in modern US history? How many recall the specifics of the 2018 shooting at Marjory Stoneman Douglas High School in Parkland, Florida, which killed 17 students and teachers and wounded 17 others; followed 3 months later by the Santa Fe High School shooting in Texas—10 killed and 13 more injured? It is impossible to fully absorb and process each of these mass killings, which are defined as shootings where 4 or more people are killed.<sup>1</sup> In 2018 there were 25 mass killings and another 315 mass shootings (defined as 4 or more people injured by a firearm). We have gradually shut down our emotional response to these extraordinary events.

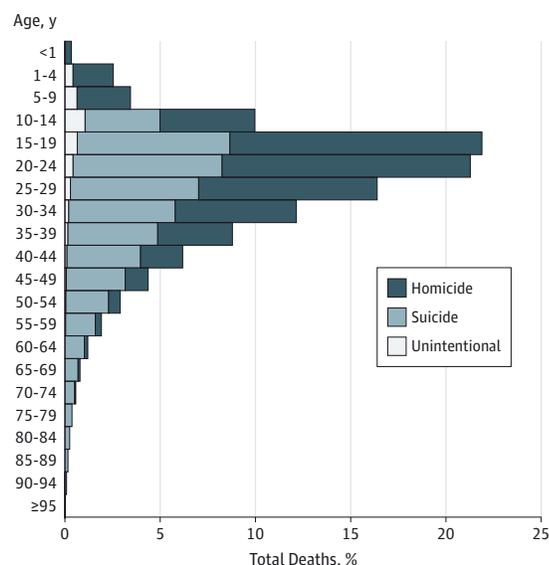
After my daughter's service, many people approached me to talk about the massacre in Pittsburgh. This was in part because of its overt anti-Semitic nature, but also because of my work as a firearm injury researcher. My colleagues and I have published research on firearm injury epidemiology, risk factors for homicide and suicide, and the role of firearm legislation in the reduction of fatalities.<sup>2,3</sup> I continue to speak about firearm injuries nationally, at academic meetings, at quarterly talks to our residents, as well as at forums in my community. Through these conversations, I seek to share information about the nature of firearm morbidity and mortality, to clarify the role of firearm legislation, to suggest specific strategies for firearm safety around children, and, most importantly, to encourage people to become engaged with firearm injury prevention.

How is it possible that in 2017, among 15- to 24-year-olds in the United States, firearms were involved in over 20% of their deaths (Figure)?<sup>4</sup> Why do black men die from firearm homicides at rates 15 times greater than white men?<sup>5</sup> Why do firearm suicides dramatically spike in white men older than 65 years?<sup>5</sup> In substantial part, the answers to these questions are about access to firearms. Between 2009 and 2016, more than 97 million firearms were brought to the US market,<sup>6</sup> bringing the estimated total number of firearms in the country to more than 350 million. Approximately 42% of all US households have a gun, including 38% of households with children. In 2017, the United States had the highest rate of firearm fatalities since 1996; there were 39 773 firearm deaths, including 8187 in children and young adults.<sup>5</sup>

Reducing firearm fatalities will require thorough regulation of the sale, use, and storage of all guns. Multiple studies have shown the efficacy of legislation in reducing firearm deaths.<sup>5,7</sup> Laws that prohibit persons with domestic violence restraining orders against them from possessing firearms decrease domestic violence homicides.<sup>8</sup> Child access prevention laws reduce unintentional firearm injuries and deaths among children.<sup>9</sup>

Some laws lead to more harm than good. States with "shall issue" laws that automatically permit concealed firearms if minimal criteria are met are associated with an 11% increased rate of firearm homicides.<sup>10</sup> "Stand your ground" laws, which provide legal immunity to individuals using lethal force in self-defense, have been associ-

**Figure. Percentage of Total Deaths in the United States Due to Firearms**

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ated with about a 30% increase in the rate of firearm homicides.<sup>11</sup>

In 1994, Congress enacted the “Public Safety and Recreational Firearms Use Protection Act,” also known as the Federal Assault Weapons Ban, which expired in 2004. Subsequently, there have been no new federal firearm laws. Although opinion polls suggest that 90% of people in the United States support universal background checks for gun purchases, Congress has not enacted such legislation. The Marjory Stoneman Douglas High School shooting led to the “March for Our Lives” in March 2018, where roughly 1 million people in more than 800 groups marched in cities across the United States and internationally to protest federal inaction. Nothing changed.

Many states, however, have strengthened their firearm laws. Since 2012, Washington, Nevada, Colorado, and Delaware have enacted background check laws; 7 other states have expanded their laws. At present, 18 states have background-check laws that go beyond the federal law, which only regulates licensed firearm dealers, and thus allows unchecked sales at gun show events and other venues. In contrast, other states (Maine, Mississippi, Missouri, North Dakota, and West Virginia) have enacted legislation allowing gun

owners to carry loaded firearms without a permit or training, bringing the total number of states with such laws to 12.

To reduce firearm-related deaths, Congress should pass legislation to protect all people in the United States. Research suggests that the approaches that have the greatest potential to protect public health include the following:

- Requiring universal background checks to regulate all gun sales
- Passing child access prevention laws
- Introducing measures that allow the removal of guns from people who threaten violence against others
- Introducing extreme risk protection orders that allow family members and some professionals, such as states’ attorneys or mental health professionals, to petition authorities to temporarily take away guns from individuals who a judge deems dangerous to themselves or others

Mass shootings have become commonplace in the United States, whether in a house of worship, a public school, or a private home. Congress should offer more than “thoughts and prayers” and enact laws that are strong enough to reverse the upward trajectory of firearm injuries and deaths.

**Published Online:** April 1, 2019.

doi:10.1001/jamainternmed.2019.0578

**Conflict of Interest Disclosures:** Dr Fleegler has received honorariums for grand round presentations related to firearm injuries, social determinants of health, and sedation. He is the coeditor of a book in progress tentatively entitled, *Pediatric Firearm Injuries and Fatalities—The Clinician’s Guide to Approaches, Policies and Harm Prevention*. He is a coauthor of a chapter on pediatric advance life support (PALS) for UpToDate. He is a consultant to Veta Health, which develops disease management tools and supports HelpSteps, a tool for social service referrals he developed.

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