

Why Firearm Injury Prevention Should Be a Core Component of Medical Training

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On December 13th, I should have been studying for my final exam of pre-clinical medical training. Instead, I spent nine hours in lockdown following the mass shooting at Brown University. Crammed in a CD closet with 18 other students in the music library, I hid silently just two blocks away from the site of two deaths and nine injuries, with the unidentified shooter at large. As students passed around a single bag of snack-size potato chips, I felt a chilling familiarity of my peers coming together in tragedy, alongside an eerie comfort in knowing that everyone in the room knew what to do.

For many students, this wasn't their first experience with gun violence. It wasn't mine either. In 2020, two bullets from an automatic rifle went through my living room window in Portland, Oregon. Before then, I participated in several lockdowns at my high school in Seattle, Washington, with active shooters in surrounding blocks or on school property.

Like many, I found myself thinking it was unlikely I would encounter gun violence again. In statistics, there is the concept of independent events: the occurrence of one event does not change the probability of another. For example, flipping a coin and getting heads once doesn't make you more likely to get heads on a second flip. But I am no exception to the statistics of shootings in this country, and neither are my peers. According to the Pew Research Center, in 2023 there were 46,728 deaths due to gun-related injuries in the United States.¹ In 2022, firearm injuries were the number one cause of death among 1-19-year-olds, and in the top five leading causes of death among 1-44-year-olds in the United States (US).² It pains me that Brown students MukhammadAziz Umurzokov, 18, and Ella Cook, 19, have become part of

this statistic in 2025. It is imperative that medical schools and health professional training institutions recognize this reality and advocate for the incorporation of firearm injury prevention as a core component of medical training.

The Warren Alpert Medical School of Brown University is one of the few medical schools that provides longitudinal education in firearm injury epidemiology and prevention.^{3,4} In 2020, after recognizing this gap in training, Drs. Anita Knopov and Megan Ranney, and collaborating faculty and students, incorporated firearm injury epidemiology, screening questions, and counseling into our first- and second-year pre-clinical doctoring curriculum.³ During clinical rotations, third- and fourth-year students receive additional specialty-specific education on firearm injury prevention and counseling.

Last summer and fall, I helped teach a monthly session to students on their Brown Emergency Medicine Clerkship. Our focused curriculum—developed by Dr. Knopov, Anwen Lin (MS3), and Michael Brennan (MS3), and delivered by second-year medical students—emphasized gun terminology, safe storage techniques, physician-led harm reduction counseling, and Extreme Risk Protection Orders (ERPOs). ERPOs are laws in 22 states that allow clinicians, family members, or law enforcement to petition the court for the temporary removal of a person's firearm if they are at risk of hurting themselves or others.⁵ In Rhode Island, only law enforcement agencies can file petitions for ERPOs, but seven states specifically allow healthcare professionals to petition for an ERPO (Colorado, Connecticut, Hawaii, Maryland, Massachusetts, Michigan, and New York).^{5,6}

During our classes, I was struck by the stories of gunshot wounds students had

encountered both within and outside the realm of their medical training. Visiting medical students from Germany were struck by the fact that those in the US don't need a reason, or a psychiatric evaluation, to own a gun. All in all, I found students eager to incorporate firearm screening, counseling, and advocacy into their clinical practice.

I mourn the deaths of my fellow students. I oscillate between devastation and numbness, accepting that this violence is part of our reality, and will be part of my career as a physician. Still, I feel grateful to be surrounded by a supportive community of educators who have implemented firearm injury prevention as a public health priority within my medical school curriculum. Even in a state like Rhode Island—which has the fourth-lowest rate of deaths by guns (murders and suicides combined) in the United States—we are shaken by the lives lost to shootings, reminding us that firearm violence is a threat to population health and not a regional anomaly.¹

Firearm injury is a preventable cause of death, and clinicians have legal authority and professional obligation to intervene—including advocating at the state level, petitioning the court for an ERPO, counseling patients and families on safe firearm storage, screening for risk factors such as interpersonal violence or suicidality, or referring patients to mental health services. I urge medical educators and institutions to treat firearm injury prevention as an essential component of public health practice and medical training, addressing gun violence with the same rigor, advocacy, and evidence-based approach we apply to other leading causes of morbidity and mortality. ♦

References

1. Gramlich J. What the data says about gun deaths in the U.S. Pew Research Center. Published March 5, 2025. Accessed December 23, 2025. <https://www.pewresearch.org/short-reads/2025/03/05/what-the-data-says-about-gun-deaths-in-the-us/>
2. Centers for Disease Control and Prevention. Fast facts: firearm injury and death. CDC. Published July 5, 2024. Accessed December 23, 2025. <https://www.cdc.gov/firearm-violence/data-research/facts-stats/index.html>
3. Blackwood KL, Knopov A, Merritt R, Ranney ML. A 4-year longitudinal firearm screening and safety program for medical students. *Acad Med.* 2021;96(12):1626. doi:10.1097/ACM.0000000000004392
4. Weiner S. Fewer gun deaths: Medical schools prioritize prevention. *AAMC-News.* December 6, 2022. Accessed December 31, 2025. <https://www.aamc.org/news/fewer-gun-deaths-medical-schools-prioritize-prevention>
5. Institute for Firearm Injury Prevention. ERPO laws by state. University of Michigan. Updated 2025. Accessed December 23, 2025. <https://firearminjury.umich.edu/erpo-by-state/>
6. R.I. Gen. Laws § 8-8.3-3. Contents of petition. Rhode Island General Laws; 2024. Accessed December 30, 2025. <https://webserver.rilegislature.gov/statutes/title8/8-8.3/8-8.3-3.htm>

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