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#### **Invited Commentary | Pediatrics**

### Adolescent Access to Firearms—This Is Definitely Our Lane

Shayla A. Sullivant, MD; M. Denise Dowd, MD, MPH

Access to firearms is a well-recognized risk factor for homicide and suicide among youth in the United States. While homicides have declined, the rate of suicides with firearms increased 60% between 2007 and 2014, and most youth (82%) who end their lives by suicide with a firearm are not in treatment when they die. <sup>1</sup> Gaining a better understanding of the accessibility of firearms to all adolescents is a critical step toward reducing adolescent deaths with firearms.

The study by Salhi et al<sup>2</sup> identified storage patterns for firearms within the homes of adolescents and compared adolescent and caregiver perceptions of the accessibility of those firearms to the perceptions of adolescents. The study sample was nationally representative, with 280 parent-child dyads participating. The study findings are consistent with other studies on the high proportion of unsecured firearms in homes with children as well as the discordance between parent and adolescent reports on firearm accessibility. More than half of adolescents reported that they could access a loaded gun in less than an hour (33.9% in less than 5 minutes). Even in homes where firearms were reported as locked, more than one-third of adolescents reported that they could access the firearm in less than an hour. A new and highly concerning finding in this study was a significant proportion of parents (30%) knew their child had access to firearms in the home. While further exploration of this apparent permissive attitude was beyond the scope of the study, the finding begs for further investigation. It may signal a comfort among some parents who own firearms who believe adolescents should have firearm access. Or perhaps parents feel that their teenaged child is well educated on the dangers of firearms or knows better than to handle the gun.

The high proportion of adolescents with access to unsecured firearms is highly disconcerting when we consider the prevalence of suicidal thoughts among adolescents. The Youth Risk Behavior Survey tells us that more than 1 in 6 high school students seriously considered suicide in the past year.<sup>3</sup> However, half of parents are unaware that their child has been suicidal.<sup>4</sup> A recent study of index suicide attempts found that 71.4% of adolescents who died by suicide died on their first attempt, while a minority (41.2%) had a known psychiatric history. Most (85%) of those index attempts involved a firearm.<sup>5</sup> We know that the practice of keeping a gun locked and unloaded and storing ammunition in a separate, locked location are protective against both unintentional injuries and suicide.<sup>6</sup> Thus, finding effective ways to limit adolescent access to guns is a clear priority in youth suicide prevention.

Physicians who address firearms have been criticized for not staying in their lane. When advising on safe storage, we often focus on the action taken to secure the firearm from unintended users—to assure the firearm is locked up and unloaded, with the ammunition locked separately. While some physicians may be experts on the specifics of securing firearms, the why behind safe storage is the area where we all have credibility on the basis of the science of neurodevelopment. The emotion centers of the brain, where shame and desperation emerge, are formed and functioning long before the maturation of the ability to think through decisions. The developing brain of a 15-year old reacts very differently to a sudden relationship ending than it might at 35 years of age, and as clinicians, we have an opportunity to remind caregivers of this. Many parents focus on educating their children on gun safety and avoidance. Gun avoidance education programs, such as Eddie Eagle, have been shown to be ineffective precisely because of developmental risk. The capacity to weigh long-term consequences and control impulses is not fully online in early adolescence, making quick access to a lethal tool particularly dangerous.

Related article

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Addressing the why behind safe storage can be fraught with emotion. Certainly, it is a more straightforward discussion when educating about the curious nature of a child who might pick up a firearm and discharge it unknowingly. It is a very different scenario when talking to a caregiver about risk among adolescents. The elephant in the room is painful to address. The message we convey, when advising on safe storage is essentially that of grave concern: "I think your daughter may use a gun to end her life." In addition, "if a firearm is used, your child is unlikely to survive." We may be trained to deliver painful messages, but this is a challenging conversation to have with a caregiver. It is heavy, it takes time, and it is easy to avoid given the strong feelings and politics around guns in this country. However, if we do not engage parents in the why behind our recommendations on securing firearms, we may miss an opportunity to truly motivate them to make changes that can save lives.

Statistics alone may fail to move people to action; real stories are needed to effectively communicate a message. One of us (S.A.S.) knows John, a retired police officer, who speaks openly about losing his daughter to suicide. She was "good with guns, she was safe with guns, she knew how to use them." They went to the range to shoot together, so firearms were a part of their family culture. John shared that he felt it was his fault as a parent that he did not secure their firearms. Like most young people who end their lives with a gun, his daughter used a firearm she found at home. John's story may resonate with a fellow firearm owner who allows their child access, feeling reassured that their child has taken the safety class, that they know the rules. But this is where we as physicians can play an important role. Development of the adolescent brain is our lane, and it is incumbent on us to help firearm owners understand why it is so important to practice safe storage and not allow adolescents access. When death rates from motor vehicle collisions increased, we found many avenues to improve passenger safety in cars. Addressing firearm storage is complex, and it has been difficult to study, but this article by Salhi et al<sup>2</sup> provides a good indication on where to go next.

#### **ARTICLE INFORMATION**

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#### **REFERENCES**

- 1. Fowler KA, Dahlberg LL, Haileyesus T, Gutierrez C, Bacon S. Childhood firearm injuries in the United States. *Pediatrics*. 2017;140(1):e20163486. doi:10.1542/peds.2016-3486
- 2. Salhi C, Azrael D, Miller M. Parent and adolescent reports of adolescent access to household firearms in the United States. *JAMA Netw Open*. 2021;4(3):e210989. doi:10.1001/jamanetworkopen.2021.0989
- 3. US Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance System (YRBSS). Reviewed October 27, 2020. Accessed January 4, 2021. https://www.cdc.gov/YRBSS
- 4. Jones JD, Boyd RC, Calkins ME, et al. Parent-adolescent agreement about adolescents' suicidal thoughts. *Pediatrics*. 2019;143(2):e20181771. doi:10.1542/peds.2018-1771
- 5. McKean AJS, Pabbati CP, Geske JR, Bostwick JM. Rethinking lethality in youth suicide attempts: first suicide attempt outcomes in youth ages 10 to 24. *J Am Acad Child Adolesc Psychiatry*. 2018;57(10):786-791. doi:10.1016/j.jaac.2018.04.021
- **6**. Grossman DC, Mueller BA, Riedy C, et al. Gun storage practices and risk of youth suicide and unintentional firearm injuries. *JAMA*. 2005;293(6):707-714. doi:10.1001/jama.293.6.707
- 7. Romer D, Reyna VF, Satterthwaite TD. Beyond stereotypes of adolescent risk taking: placing the adolescent brain in developmental context. *Dev Cogn Neurosci*. 2017;27:19-34. doi:10.1016/j.dcn.2017.07.007