

Confronting the Firearm Injury Plague

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Firearm injuries are an all-too-common way of death for children and youth in the United States. As Fowler et al¹ report in the current issue, firearm injuries are the third leading cause of death for all children aged 1 to 17 years. Although firearm injury mortality rates for these children declined gradually from 2006 to 2013, they have risen again over the past 2 years, now accounting for over 10% of all deaths among these ages in 2014 and 2015.² An even grimmer picture appears if we extend the age range through the teen-aged years to age 19, because firearm injury rates rise steeply in late adolescence; among children and youth aged 1 to 19, firearm injuries accounted for over 14% of all deaths in 2015. Thus, more than 1 out of every 7 children aged 1 to 19 who died of anything died of a gunshot wound. Only motor vehicle traffic injuries claim more of these lives, and those rates have fallen ~50% since 2000, whereas firearm mortality dropped only 10%.²

The value of Fowler's report lies not only in its updating of basic statistics on child firearm deaths but also in providing deeper insight into circumstances and factors involved with these deaths than we have had from past reports^{3,4} by using information from the National Violent Death Reporting System. By including a focus on nonfatal firearm injuries treated in emergency rooms, the authors also remind us of the fuller scope of these injuries and the toll they exact.

Some points may warrant further discussion or clarification. Unintentional injury (UI) deaths, although only a small portion of the

total, have indeed been undercounted in vital statistics data, as the authors suggest. Authors of a recent study use National Violent Death Reporting System analyses to estimate that UI firearm death rates in children less than age 15 are ~80% higher than they have been reported because of misclassifications of some UIs as homicides.⁵

The tragedy of UI deaths among young children is widely appreciated (and underscored by narrative descriptions provided in this recent study⁵), but perhaps what is underappreciated by many is that UI gun deaths occur at even higher rates among older adolescents than among young children. Still, the marked disparity between adolescent and younger children firearm death is due mostly to homicide and suicide. These intentional deaths account for the vast majority of pediatric firearm mortality, and they result in our nation's shameful lead over other high-income countries in gunshot fatalities.⁶ Our high rates of such violent death are inextricably linked to firearm ownership and availability.⁷⁻¹⁵ Adolescents' access to and carrying of firearms is well documented.¹⁶⁻¹⁹

While Fowler's report states that firearm suicide is "dispersed" across the United States, the relatively short time span examined has led them effectively to overlook persistently high suicide rates (over longer spans) in some rural states whose small populations yield low annual death counts. Other research has convincingly shown youth firearm suicide to predominate in rural counties nationwide²⁰; this is crucial for pediatricians and policy-makers

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to recognize. Both long guns and handguns are used for suicide in rural areas.²¹ The current report's analyses confirm that suicides often occur in response to short-term crises. The availability of a firearm may be especially critical for an impulsive teenager in such moments of crisis.^{22–25}

Recognizing the prevalence of guns in homes and the potential dangers of easy access to them makes it both reasonable and wise to ask and talk about firearms as part of our injury prevention guidance. Our right to do so, stifled somewhat by political assertions that this might somehow infringe on gun-owners' rights, has been recently reaffirmed in courts.^{26,27} Still, although we may legitimately support our American Academy of Pediatrics policy's assertion that the safest home is one without firearms,²⁸ we should be mindful that this message may be off-putting to parents who keep guns for hunting or self-protection, and who are part of a widespread and deeply rooted social gun culture in our country, especially in rural states.²⁹ We do need to try to engage those gun owners.³⁰ It may help to remind ourselves and our parents that our message on safe gun storage in homes with children is similar to that of gun rights and sport shooting groups.^{31,32} We can point out that parents may underestimate kids' propensity to handle guns unsafely, even when they've been taught.^{33–36} Excellent information can be shared on safe storage and locking methods that still allow quick access to a handgun if it were ever needed.³⁷ And finally, given the impulsivity, risk-taking, and unpredictability of adolescence, we should promote safe storage as a routine measure rather than only when a concern or crisis arises.

Studies demonstrate that counseling parents of young children about safe gun storage can be effective, especially when parents are provided with tools such as gun locks.^{38,39}

Though we lack research on counseling adolescents or their parents in primary care, a recent excellent review of this problem offers detailed guidance.⁴⁰ We pediatric clinicians tend not to discuss firearm injury prevention much⁴¹; such guidance may help us to do more.

Beyond our roles in clinical practice, we can work at the community level, supporting public education or advocating for legislation to protect children from gun violence. Child access prevention laws and comprehensive background check statutes most importantly aim to work upstream to prevent guns from getting into the wrong hands before crises or violent encounters occur. Such laws have been associated with reductions in UI deaths, teen suicides, and domestic violence homicides.^{42–44} We should be encouraged that public support for such legislation has remained strong since Newtown.⁴⁵ If Congress remains incapable of acting, state legislatures may do better.³⁰ Finally, the underfunding of research on gun violence remains inexcusable^{46,47}; we must continue to demand support commensurate to the huge public health burden.

However difficult it may be to confront the problem of firearm injuries in our children, youth, and families, we cannot ignore the magnitude of this ongoing public health crisis. Our time-honored role in preventive medicine, central to our pediatric mission, compels us to act. As Hemenway has reminded us, work in public health differs from much of medical endeavors in that the lives saved are anonymous, unknown statistical lives saved in the future⁴⁸; we won't likely know when the safely stored unloaded gun was what made a difference. Our efforts matter nonetheless.

ABBREVIATION

UI: unintentional injury

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