Urban Teen Perspectives on Gun Violence: A Mixed Methods Study

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Abstract

We aimed to explore perspectives of teenagers on their exposure to gun violence (GV), their knowledge and attitudes towards firearm injury prevention (FIP) efforts, and how to counsel them about FIP. Teens from two single-sex Bronx Catholic high schools participated in videoconferencing focus groups. Participants completed an online survey collecting demographic information and Likert-scale scoring of attitudes towards GV. Quantitative data was analyzed with descriptive statistics. Focus group discussions were recorded and transcribed. Using Dedoose, two investigators independently coded data and achieved consensus using thematic analysis. We used qualitative methods for analysis. Six focus groups (3 from each school, n = 28 participants) were held from October-November 2020. 27 participants completed the survey. Eighty-one percent of respondents agreed “Doctors should talk to teens about gun safety.” During focus groups, participants reported personal, community, and entertainment media exposure to GV. GV elicited many emotions, including fear and frustration. Teens identified factors contributing to GV that should be addressed, including poverty, racism, and mental illness. Most had not received prior FIP education and desired more information from trusted adults. They preferred discussions over written materials and information given over time. Teens were open to doctors counseling on FIP during healthcare visits and suggested including screening questions on surveys, conversations during healthcare maintenance visits, and classroom talks by physicians. Bronx teens are exposed to and distressed by community GV. They desired more FIP education, including physician counseling during healthcare visits. Next steps are to create and test FIP guidance for adolescents.

INTRODUCTION

Approximately 1300 children in the United States (US) are killed by guns each year, and another 5800 are injured.\textsuperscript{1} Most of these deaths are in adolescents, who suffer from twin epidemics: gun-inflicted suicide in rural teens, and gun-inflicted homicide in urban teens.\textsuperscript{2}

The Bronx, New York is one of the epicenters of urban gun violence (GV). Among 62 counties in New York State, Bronx County had the second highest rate of gun homicide from 2012–2016: 4.12 per 100,000 people.\textsuperscript{3} An inpatient study on firearm injury prevention (FIP) counseling in Bronx, NY, found high rates of exposure to GV.\textsuperscript{4} Of the 225 parents surveyed, 60% reported hearing gunshots in their neighborhood, 9% had been threatened with a gun, and 1% had been shot. Moreover, 42% reported having a friend or relative who had been shot.\textsuperscript{4} This parent-derived data serves as a proxy to inform us of the high levels of community GV experienced by our pediatric patients.

It is recommended that pediatricians counsel on FIP as part of routine safety counseling.\textsuperscript{5} However, most published guidance on counseling refers to parents who may be gun owners. Advice centers on safe storage of firearms, asking about guns before children play at others’ homes, and removing guns from the home of an at-risk teenager.\textsuperscript{5,6} This approach is less applicable to teens who are exposed to community GV, who may transiently possess firearms as they pass through networks of friends, and...
whose parents may not be gun owners. Therefore, physicians caring for urban children and teens may be at a loss when it comes to counseling them on FIP.

The Center for Disease Control (CDC)’s National Youth Risk Behavior Study 2019 data for New York City (NYC) revealed that both 7% of ninth and 7% of twelfth graders in the Bronx carried a gun on at least one day during the year prior to the survey. Though we know local youth are exposed to guns, we lack data on Bronx teens’ beliefs and attitudes towards GV and FIP efforts. In 2002, a survey study of 342 NYC high school students found that 63.8% were willing to discuss GV with their physicians, but did not specify the content or manner in which teens wanted to receive this information. One subsequent publication used focus groups in Wisconsin to explore urban teen viewpoints on gun violence and but also did not comment on FIP counseling in healthcare settings. This information is necessary to develop effective counseling interventions for this group.

Our objective was to gather information from Bronx high school teens regarding their exposure to GV in their community, their knowledge and attitudes towards FIP efforts, and how to best counsel them about FIP. We hypothesized that Bronx teens are open to receiving counseling about FIP but have limited resources available to them.

**METHODS**

**Study Design & Procedures**

We used a mixed methods approach consisting of a quantitative survey and qualitative focus groups to understand urban teen viewpoints on GV. An anonymous survey gave teens the opportunity to honestly report their exposure to and opinions about GV and safety. Since a survey could not adequately address the complex barriers to counseling teens on FIP, focus groups were conducted. While the social constraints of peer pressure may apply in a group setting, focus groups allowed for more in-depth, granular discussions.

At the beginning of each session, we administered an anonymous online survey collecting demographic information and asking about teens’ knowledge of, exposure to and attitudes towards GV and FIP (Appendix A). Questions were modified from the CDC National Youth Risk Behavior Study and the 1995 National Youth Survey. Using a predetermined question guide (Appendix B), the principal investigator (PI), IT, a pediatric hospitalist trained in qualitative methods, moderated focus group discussions. Both male and female student focus groups were led by the same female facilitator; participants were informed this facilitator was a physician. These discussions were held on Zoom videoconferencing due to the Coronavirus Disease 2019 (COVID-19) pandemic.

**Study Population**

The study population consisted of students from two private, parochial, Bronx, single-sex (one all-female and one all-male) high schools in the following age groups: 13–14 year-olds, 15-16-year-olds and 17-19-
year-olds. We aimed to hold at least one focus group in each age group from each school. Eligibility included enrollment in one of these two schools and ability to verbalize their opinions in English in a focus group. Exclusion criteria included lack of parent/guardian consent. These two high schools were identified from community outreach at our institution as organizations interested in partnering with our hospital to address GV in Bronx, NY, and investigators had no prior relationships with students.

Participant Recruitment

Guidance counselors at each school sent recruitment emails with study information to all students. Interested voluntary participants contacted the PI via email. A consent form was sent home for parent/guardian written consent as well as student assent. Subjects received a $20 gift card for participation. Contact with students outside the focus group was not maintained; therefore, a transcript was not provided to students for comments or review. Furthermore, participant feedback on findings was not collected. This study was approved by our Institutional Review Board.

Data Analysis

We used descriptive statistics to analyze survey data. Focus group interviews were audio-recorded and transcribed. The PI read all the transcripts and created a preliminary coding scheme using a phenomenological approach\textsuperscript{11,12} and theoretical thematic analysis.\textsuperscript{13} A second investigator applied the initial coding scheme to each transcription. The investigators refined the coding scheme, discussed new emergent themes and reached consensus on the definition and application of each code. Codes were linked to segments of dialogue based on a priori (questions asked in the focus group) or emergent themes (central ideas from the data). Qualitative data analysis software (Dedoose Version 9.0.17)\textsuperscript{14} was used to organize codes and their subcategories.

RESULTS

Six focus groups (3 from each school, n = 28 participants, 3–8 participants per group) were held via Zoom from October-November 2020; each lasted 45–60 minutes.

Survey Results

Twenty-seven participants completed the quantitative survey (Table 1), of whom 56% were female. Respondents reflected our patient population, with 63% self-identifying as Hispanic/Latino and 48% identifying as Black/African American. As a proxy for socioeconomic status, we asked if students qualified for free or reduced school meals and 67% did. Seventy-eight percent resided in Bronx County. All grades from both schools were represented except for tenth grade students at the all-male school. Likert-scale score distributions were similar between males and females (Fig. 1). Students from both schools overwhelmingly agreed that there should be stricter laws for background checks when buying a gun (89%) and that people who have guns should use gun locks (71%). Seventy-four percent did not agree that having a gun at home would make them feel safer. Over 40% of students worried about being shot in
their neighborhood. Fewer students (25%) were worried about shootings occurring at their school. Nevertheless, the majority were in favor of active shooter drills (75%) and school metal detectors (83%). Notably, 82% of respondents agreed or strongly agreed with the statement “Doctors should talk to teens about FIP.”

Table 1. Demographic Information for Survey Respondents$^a$
<table>
<thead>
<tr>
<th></th>
<th>All-Male High School</th>
<th>All-Female High School</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Sex Total</td>
<td>12</td>
<td>100</td>
<td>15</td>
</tr>
<tr>
<td>Male</td>
<td>12</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Female</td>
<td>0</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>Age Mean</td>
<td>15.8</td>
<td></td>
<td>15.4</td>
</tr>
<tr>
<td>Age Median</td>
<td>16</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Age Range</td>
<td>13-18</td>
<td></td>
<td>14-17</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic/ Latino</td>
<td>10</td>
<td>83</td>
<td>7</td>
</tr>
<tr>
<td>Non-Hispanic/Latino</td>
<td>1</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Unknown</td>
<td>1</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black/African American</td>
<td>4</td>
<td>33</td>
<td>9</td>
</tr>
<tr>
<td>White</td>
<td>3</td>
<td>25</td>
<td>2</td>
</tr>
<tr>
<td>Asian</td>
<td>1</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Native Hawaiian/Other Pacific Islander</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other (Mexican, Dominican, Latinx)</td>
<td>4</td>
<td>33</td>
<td>2</td>
</tr>
<tr>
<td>Qualification for free or reduced school meals</td>
<td>Yes</td>
<td>6</td>
<td>50</td>
</tr>
<tr>
<td>Grade</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>3</td>
<td>25</td>
<td>4</td>
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<tr>
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<td>0</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>4</td>
<td>33</td>
<td>5</td>
</tr>
<tr>
<td>12</td>
<td>5</td>
<td>42</td>
<td>3</td>
</tr>
<tr>
<td>Area of residence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bronx</td>
<td>9</td>
<td>75</td>
<td>12</td>
</tr>
</tbody>
</table>
Exposure to GV

During the focus groups, participants reported personal, community, and media exposure to GV (Table 2). Unsurprisingly, the older age groups had more personal exposure to GV than the younger groups. Teens shared anecdotes of family members and friends who were injured by guns; one teen “almost got hit by a stray bullet.” Some stated that GV was prevalent around their schools and homes. Additionally, media sources such as television news, social media, and the internet alerted them to nearby stories of GV. One teen pointed out that glorification of firearms in entertainment media led to youth “[seeing guns] as this kind of cool outlet for something rather than looking at it as an actual dangerous weapon” and concluded education was needed to change this perception.

Table 2. Illustrative Quotes from Focus Groups
<table>
<thead>
<tr>
<th>Exposure to gun violence</th>
<th>“I've been in New York, for the most part, all my life I've seen gun violence. I've lost some [of] my friends to it.”</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>“I've been to parties where they've ended early because a shooting transpired... I've definitely been in parties, like I know there's somebody in there with a weapon or like a gun on them.”</td>
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<tr>
<td></td>
<td>“…my family member was shot several times and luckily they survived…”</td>
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<td></td>
<td>“Gun violence is...very prevalent in like the neighborhood of our school, like it hasn't been like the first time there's been like shootings around our school”</td>
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<td></td>
<td>“I feel very upset, every time I hear reports about people dying from gun violence, mainly because I feel like there's so many different ways that it could have been prevented…”</td>
</tr>
<tr>
<td></td>
<td>“It's very traumatic to hear...stuff like school shootings and when you imagine yourself...in their shoes. You could just see, like people our age, are basically scared out of their minds and forced to have to do school shooter routines and drills...It's just really sad to imagine. And it's just inhumane in general, honestly.”</td>
</tr>
<tr>
<td></td>
<td>“Depending on what areas of like the Bronx or New York...you have to look out depending on where you are, because not everywhere is safe.”</td>
</tr>
<tr>
<td>Knowledge and attitudes towards gun safety efforts</td>
<td>“It's extremely easy to get a gun anywhere in the five boroughs.”</td>
</tr>
<tr>
<td></td>
<td>“It's our right to bear arms, but we should carefully...see who we are giving these...lethal firearms to.”</td>
</tr>
<tr>
<td></td>
<td>“…I believe that we try to promote democracy and being able to have rights to do certain things, but they don't reinforce the responsibility that comes with a lot of the things that we do, and the consequences that come from them. So, as a society, I think when it comes to gun violence and gun safety, the ball was kind of dropped.”</td>
</tr>
<tr>
<td></td>
<td>“…the Bronx...we are very high in poverty, we are also very high in gun crime. The two have a very strong relation.”</td>
</tr>
<tr>
<td></td>
<td>“I feel like it [information on gun violence] should be a lot more accessible, considering just how much it happens in our society.”</td>
</tr>
</tbody>
</table>
“...these are things [gun safety] that we aren't learning about, that we aren't talking about that we should be talking about and it gets me very infuriated when the right conversations aren't being had.”

<table>
<thead>
<tr>
<th>How to best counsel teens about gun safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>“I felt like parents should, uh you know, instill like the idea of using a gun is bad.”</td>
</tr>
<tr>
<td>“...people are more likely to take doctors seriously and trust in their work.”</td>
</tr>
<tr>
<td>“Because not only are they credible sources, even if you don't have experience [treating gun violence], I feel like just the fact that they're doctors themselves and just know more about this type of stuff that's going on.”</td>
</tr>
<tr>
<td>“Yes 100%, because my personal doctor, I feel like I have a very strong relationship with them. I see them very much...they've been with me for at least 10 plus years and I feel like if I have, already have a bond with them if they try to introduce me to something that they feel it is very important and necessary for my health then, by all means, they should do it...”</td>
</tr>
<tr>
<td>“...in the survey that they asked about like teen behaviors, they [doctors] can put like something about gun violence...then when they're talking to me about that survey, they can just ask me about it.”</td>
</tr>
<tr>
<td>“Most definitely during regular checkups and if they go to the ER because...a doctor [is] supposed to make sure a person is healthy and that they're running correctly. So, any chance they get to make sure a person can be knowledgeable on keeping themselves safe is the opportunity they should take to make sure that the patient...understands gun violence.”</td>
</tr>
<tr>
<td>“I definitely think they should talk to the patient and ask about their family history with guns. If any of their family members have been shot or killed by gun violence...”</td>
</tr>
<tr>
<td>“Our attention span isn’t, you know, super high. Sometimes, we get distracted... I think them [doctors] coming in more times [to the classroom for talks] shows, like okay, they really do want to help.”</td>
</tr>
<tr>
<td>“I feel like straight to the point will be like in its best interest because a lot of people these days, they don't really pay attention...”</td>
</tr>
</tbody>
</table>

This constant exposure to GV elicited a range of emotions, especially fear and frustration. Students expressed fear that they or their acquaintances could become victims of GV at any moment; one student
described it as a “ticking time bomb.” Teens feared for their safety when moving around their neighborhoods: “sometimes you feel like just to go[ing] to the deli…you could feel afraid that you might get shot on the way.” Another teen acknowledged that they continued to feel anxious after a neighborhood incident: “a few months ago, someone had got shot near the supermarket down the hill from me, and now I have PTSD [Post Traumatic Stress Disorder] for any loud pops and noises.” Due to their fear, participants knew the importance of vigilance and avoiding areas perceived to be dangerous.

All students commented on how widespread the problem of GV is in this country and how frustrated they were at the lack of solutions from leaders. In line with prior research, they were in favor of legislation to restrict gun access and stated that “citizens should...advocate that we actually want stricter gun laws and then the government should...listen to us and not just ignore us.” Teens also expressed sadness and futility when hearing stories of GV, with one lamenting “Why isn't anything getting done?” They were aware of the normalization of gun-related deaths in the US and “how ingrained in a community [it] could be, because...your corpse isn’t even dead yet and you already have...pictures of you and candles laid out.”

Knowledge and Attitudes Towards FIP

Teens identified multiple factors contributing to GV they felt should be addressed, including poverty, racism, and mental illness. Participants recognized the relationship between poverty and gun-related crime, stating “when you put people in these predicaments...low-income housing, they don't get a proper education... what do you expect?” They remarked that GV is more prevalent in neighborhoods with lower socioeconomic statuses, citing that residents resort to gun-related crime, such as theft, to survive, often perpetuating a vicious cycle.

Adolescents were aware of biased news coverage of perpetrators of GV: “the news sometimes it's just mainly focused on Black and Latinos on gun violence and they don't really mention...White people.” Racism and the role of police in the community were raised in a prior teen focus group study on gun violence. In our study, participants also discussed these topics and exhibited different relationships with law enforcement. Some teens had parents and family members serving as police officers, while others mentioned the distrust between police and community members stemming from incidents of officers using firearms disproportionately against racial minority groups. One black male teen had a conversation with his mother about why he shouldn’t “wear a hoodie when it's dark... in case [he] happens to be at the wrong place, at the wrong time, even the police can just look at [him], think [he’s] a suspect ...so, people could...probably try to shoot [him] down without any questions.”

Mental illness was frequently mentioned as a modifiable factor causing GV, as well as the idea that social isolation during the COVID-19 pandemic exacerbated mental illness. One teen stated he “went through a little bit of a mental health issue and that once quarantine happened...crime went up.” Teens suggested including mental health screening in background checks for firearm purchases and increased mental health resources in schools. Ultimately, teens believed the government is responsible for addressing these issues since “the government could help... with the whole poverty issue or even they could make it more of a social norm to ask for help.”
Though teens felt guns were too accessible and favored stricter gun access laws, they understood that guns will exist in the US due to the second amendment and thus FIP education was needed. Most teens (56%) had not received prior education on FIP and the most common education received consisted of school shooter drills. Teens did not find these drills helpful because they were rote exercises with little explanation of the rationale: “if they discuss why we were doing it, it would have helped us maybe take it more seriously.” They agreed that the education they received thus far was inadequate and strongly desired more information.

How to Counsel Teenagers About FIP

Multiple groups of trusted adults were thought to be appropriate educators on FIP and receiving information from more than one group was beneficial as “everyone’s input really helps a lot.” The most mentioned groups were family members, teachers, and doctors; other groups included police officers, emergency medical technicians, and psychologists. As one teen said, “any adult you feel comfortable about talking about guns [or] gun violence with, they should inform you about what guns can do, how they’re operated.” Parents could teach children about the dangers of guns from a young age and teachers were also important since “not everyone was blessed with...a good set of parents who will put them on this right path.” Some teens felt more comfortable receiving education from same-age peers who had experienced GV, though this may center around psychosocial support: “we talk more about our feelings and our opinions to each other than to adults.”

Teens specifically desired information on self-defense tips, first aid, and mental health resiliency. While teens had received tips in the past from family members to avoid gangs and high-crime areas, they wanted more practical information on what to do if they ever found themselves in a situation with a shooter. This included self-defense techniques to prevent gunshot injuries, how to call for help if a gunshot occurs, and how to treat the wound while waiting for assistance. Teens were particularly interested in information on mental health resiliency from doctors and psychologists, such as how to maintain composure “to perform these physical actions to help save a person” and how to “approach those who are involved [in GV] and...comfort them and their family.”

Because doctors were viewed as trusted, credible sources, some of whom had first-hand experience treating injuries, teens were open to doctors counseling them on FIP during healthcare visits. Suggested educational methods included screening questions on surveys, conversations during routine healthcare maintenance visits, and classroom talks by physicians. Teens thought including screening survey questions would help raise the topic of GV to increase awareness. They preferred interactive discussions over written materials and small amounts of information given over time due to their self-described short attention spans. Longitudinal education was better because “if they [doctors] come several times into our classroom...the students will realize that it’s important.” Participants differed in preferred techniques but most agreed with a combination of practical tips, personal stories, and a few statistics.

DISCUSSION
As a unique mixed-methods study exploring urban teen perspectives on GV, we discovered that adolescents in the high gun-crime area of Bronx, NY were acutely aware of, exposed to, and distressed by community GV. Adolescent distress from GV exposure is well-documented.\textsuperscript{16,17} Teens described few prior experiences with FIP counseling and a desire for more education, affirming our hypothesis. They were open to receiving education from physicians, a finding supported by a previous NYC adolescent survey.\textsuperscript{8} Despite 44\% of our respondents having received any form of FIP education, only 19\% had received education specifically from a physician, a low percentage supported by prior studies.\textsuperscript{8} In contrast to our study, focus groups in Providence, Rhode Island found that adolescents were less trusting of their physicians and reluctant to discuss general violence in primary care settings,\textsuperscript{18} suggesting teen willingness to discuss violence and FIP with physicians may vary regionally. However, since that study was conducted over 10 years ago, the culture around GV and willingness to discuss this topic may also have changed.

Most teens’ prior experiences with FIP education consisted of school active shooter drills, classroom discussions of current events, and practical tips from family members. While our survey data indicated that 78\% of teens agreed that schools should carry out active shooter drills, some teens were vocal during the focus groups about how unhelpful these drills were since they lacked explanations and discussions. Given the prevalence of GV in this country, teens felt “[FIP] should be taught a lot more.” Teens desired information from physicians about first aid for gunshot wounds, mental health resiliency after experiencing GV, and finding help for peers experiencing psychological distress.

This information may not be feasible or within their area of expertise for pediatricians to provide at outpatient visits or during inpatient admissions. Pediatricians already have a considerable list of age-specific topics on which to counsel.\textsuperscript{19} However, this study establishes a gap in guidance for teens residing in urban areas. Subsequent guidelines incorporating validated GV exposure and risk assessment tools\textsuperscript{20,21} can be an important tool for pediatricians to use for at-risk patients, in line with a strategy of tailoring anticipatory guidance to the most salient issues at each encounter. Physicians can also provide better trauma-informed care and appropriate mental health referrals for teens at risk. The receptivity to physician outreach at schools including classroom talks is an area of opportunity for pediatricians of varying specialties who are interested in advocacy and community outreach. Though community-based programs have shown variable success,\textsuperscript{22} unique hospital-based violence prevention programs have positively impacted adolescent attitudes towards GV.\textsuperscript{23}

Limitations of this study include recruitment from two private, parochial, single-sex schools due to convenience. This population may differ significantly from public school students or adolescents who do not regularly attend school. Nevertheless, students in our cohort reported high exposure to firearms with 37\% having friends/relatives with guns in their possession and 33\% having touched or held a gun. Additionally, 96\% of students lived in New York City and 78\% in Bronx County, representing our population of interest. Findings from this study may not apply to teenagers residing in non-urban settings. Moreover,
tenth-grade male students were not represented, nor were students who were not comfortable discussing this topic in English.

**CONCLUSIONS**

The GV epidemic in the US has accelerated in recent decades, causing both physical injuries and mental trauma for many Americans, including urban adolescents. Bronx teenagers reported high levels of exposure to GV, resulting in sadness and fear for their safety. Teens were frustrated at the lack of education they had received on FIP. They believed such education should be widely available given the magnitude of the problem and were receptive to physician counseling during healthcare visits. It may be interesting to investigate if parents of urban adolescents share the same attitudes towards FIP counseling, given mixed parental views reported in other cities.\textsuperscript{24,25} This study can be repeated in public high schools and other geographical regions to verify the findings. Using community-based participatory research, next steps include creating and testing FIP counseling guidelines for urban adolescents and developing physician-school FIP outreach programs.

**Abbreviations**


**Declarations**

**Declarations of Interest**: E.Yeates is an employee at Bristol Myers Squibb.

**Funding**: This work was supported by the American Pediatrics Association 2019 Region II Young Investigators Award.

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**References**


**Figures**
Figure 1. Likert-Scale Survey Responses: Percentage of Respondents with Varying Levels of Agreement with Statements Regarding Gun Violence

**All-Boys High School, n=12**

- Schools should routinely carry out active shooter drills: 37 42 17 50
- I worry about shootings at school: 17 42 17 50
- I worry about being shot in my neighborhood: 17 25 42 33
- Schools should have metal detectors for security purposes: 17 25 42 33
- Stricter gun laws will decrease gun related violence: 17 33 17 25
- There should be stricter gun laws for background checks when buying a gun: 8 33 58
- People should have the right to carry guns for protection: 33 42 12 58
- People who have guns should use gunlocks: 42 17 42
- Doctors should talk to teens about gun safety: 8 33 58 33
- Having a gun in the home does or would make me feel safer: 17 67 5

**All-Girls High School, n=15**

- Schools should routinely carry out active shooter drills: 7 33 47 33
- I worry about shootings at school: 2 40 20 27
- I worry about being shot in my neighborhood: 13 23 40 7
- Schools should have metal detectors for security purposes: 13 20 27 27
- Stricter gun laws will decrease gun related violence: 13 20 27 27
- There should be stricter gun laws for background checks when buying a gun: 7 33 47 33
- People should have the right to carry guns for protection: 13 20 27 27
- People who have guns should use gunlocks: 20 20 60
- Doctors should talk to teens about gun safety: 7 33 27 47
- Having a gun in the home does or would make me feel safer: 20 13 33 33

Figure 1

See image above for figure legend

**Supplementary Files**

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• TAGAppendices5.16.23.docx