

SOCIAL SCIENCES

Exposure to gun violence among the population of Chicago community violence interventionists

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Gun violence is a leading cause of premature death and a driver of racial disparities in life expectancy in the United States. Community-based interventions are the foremost policy strategy for reducing gun violence without exacerbating harm associated with criminal justice approaches. However, little is known about the interventionist workforce. In 2021, we used a researcher-guided survey to obtain a near-census of Chicago violence interventionists ($n = 181$, 93% response rate). Workers were mostly male (84%) and Black (80.9%), with a mean age of 43.6 years. Interventionists commonly experienced work-related exposure to violence and direct victimization. A total of 59.4% witnessed someone being shot at, whereas 32.4% witnessed a victim struck by gunfire. During work hours, 19.6% were shot at, while 2.2% were nonfatally shot. Single-year rates of gun violence victimization exceeded those of Chicago police. Results suggest that investment in community violence intervention should prioritize improving worker safety and reducing violence exposure while developing support for vulnerable frontline practitioners.

INTRODUCTION

Gun violence is a leading cause of premature death and a key driver of racial disparities in life expectancy in the United States (1–3). More than 19,384 people were killed in gun homicides in the United States in 2020—an increase of 34% over 2019—representing what is likely to be the largest single-year increase in gun homicide in recorded history (4). This spike in gun violence occurred within the context of a national reckoning with the racial inequality and social harm associated with conventional policy approaches to responding to crime through intensive policing and incarceration. In need of alternative strategies to reduce gun violence without exacerbating these harms, civic leaders and policymakers have called for expanded investment in community violence intervention (5, 6). Community violence intervention—commonly understood as the work of preventing retaliatory shootings, mediating gang and interpersonal conflicts, monitoring and responding to flash points for community violence, and mentoring those at highest risk of violence and connecting them to crucial social services (7)—has risen as the foremost nonpolicing strategy for addressing urban gun violence and is expected to play an increasingly important role in antiviolence policy in the United States. President Biden's Build Back Better Act, for example, includes an unprecedented \$5 billion investment in community violence intervention programming (8). Long stressed by the challenges of gun violence, American cities have led the way in prioritizing community violence intervention; the site of this study—Chicago—has budgeted \$50 million to community violence reduction in 2022, more than tripling its commitment to such strategies over the prior 2 years (9).

The theory of change underlying many community violence interventions dictates that its practitioners interrupt the transmission

of gun violence, in large part by being proximate to the social networks and geographic spaces where this violence is most likely to occur (10). Through mediating conflicts, responding to scenes of violence, or even connecting with clients in need of services, intervention workers often insert themselves into situations and social contexts that carry the threat of serious violence. Thus, as part of their basic work responsibilities, interventionists knowingly risk gun violence exposure. In addition, given the nature of intervention work, gun violence exposure might, in fact, serve as a marker of worker effectiveness.

Because of this proximity to violence, in Chicago and other cities, community violence interventionists are often referred to as first responders; in this study, approximately 80% of workers reported arriving at a scene of violence before traditional first responders (such as police, firefighters, and emergency medical technicians). In contrast to other first responders, however, community violence interventionists are called upon not only to show up to scenes of acute violence but also to maintain a presence in its aftermath, helping affected parties cope with traumatic loss while actively managing the threat of retaliation and additional violence. Deeply embedded in contexts of violence, interventionists offer essential services to communities, but these services might be achieved by means of underappreciated personal costs to the workers that perform them.

A key concern for the burgeoning field of community violence intervention, then, is understanding the extent of worker exposure to gun violence. There is good reason to believe that exposing this workforce to gun violence—even for public benefit—is likely to generate negative consequences. A large body of research has demonstrated the harm associated with exposure to gun violence, including posttraumatic stress and depression (11), loss of sleep and increased levels of cortisol (12), reduced cognitive performance (13), and even decreased community-level physical and mental health (14, 15). Although work-related exposure to gun violence is less well measured, research into traditional first responders has shown a consistent link between exposure to violence and

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posttraumatic stress disorder (PTSD) (16, 17) despite evidence that professional training can decrease the likelihood of adverse response to critical incidents (18).

Despite the growing significance of community violence intervention work, research attention into the area has generally been concerned with evaluating program impact (7, 10, 19). In contrast, little research has considered the people that serve in this profession or the work involved in community violence intervention practice. To address this gap in knowledge about this emerging kind of work and those who perform it, we launched a novel survey of violence intervention workers: the Violence Intervention Worker Study (VIEWS). Drawing from a near-census of the community-based violence interventionists in Chicago, IL, we present what we believe is the first systematic evidence regarding the demographic profile of an entire interventionist workforce in this increasingly important antiviolence profession, while simultaneously documenting its work-related exposure to violence.

RESULTS

Table 1 provides the demographic characteristics for the interventionists in our study. The average age of the workers was approximately 43 years, and over 65% of the workers were in their 40s or older. Less than 10% of the workers were in their 20s, and we found

no worker under the age of 20. Workers were mostly male (84%) and Black (81%). These workers reported working, on average, 41 hours per week for pay in this job, with 82% being classified as having a traditional full-time status (reporting working at least 40 hours per week). Most workers (89%) completed at least high school or a high school equivalency with some (22.9%) also completing a college and/or graduate degree (typically an associate's degree).

Table 2 provides descriptive statistics on the prevalence of work-related exposure to violence as either witness or victim. Table 2 makes clear that professional exposure to violence broadly—and gun violence, in particular—is substantial. Roughly 60% of workers reported ever seeing someone get shot at (but not hit) while on the job, whereas 20% of workers reported getting shot at themselves while working on the job. During the past 12 months, 44% of workers reported witnessing someone get shot at, while 12% reported that they, themselves, were shot at (but not hit). Almost a third of workers have seen someone get shot and hit over the course of their professional career, and a fourth of workers saw someone get shot while on duty in the past 12 months. Although less common, it is important to highlight the occurrence of direct gun violence victimization among this population: More than 2% have been nonfatally shot while on the job, with over 1% reporting being shot in the past 12 months.

Table 1. Demographic characteristics.

Variable/measure	Percentage	Mean	SD	Minimum	Maximum	<i>n</i>
Age		43.60	9.80	23.00	71.00	181
Gender						181
Male	83.98					
Female	16.02					
Race						173
African American or Black	80.92					
Caucasian/white/European American	3.47					
Native American/American Indian/Alaskan Native	6.36					
Multiethnic or mixed	9.25					
Ethnicity						180
Identifies as Hispanic/Latino/Chicano	20.00					
Does not identify as Hispanic/Latino/Chicano	80.00					
Hours worked for pay per week on this job		41.24	10.09	6.00	88.00	179
Highest educational degree earned						179
Less than high school	11.17					
High school diploma or equivalent	65.92					
Associate's degree	17.32					
Bachelor's degree	2.23					
Master's degree	3.35					
Marital status						180
Married	22.22					
Widowed, divorced, or separated	15.00					
Never married	62.78					

Table 2. Professional exposure to violence as both victim and witness among outreach workers (percentages).

Item/topic	Witness		Victim	
	Lifetime	Last 12 months	Lifetime	Last 12 months
A. Gun violence exposure				
Shot at, not hit	59.44	44.13	19.55	11.73
Shot and hit	32.40	25.14	2.22	1.11
B. Exposure to scenes of violence				
Responded to scene of violence before emergency services	79.66			
Provided first aid to shooting/stabbing victim	22.60			
Came onto scene of violence and seen the body of deceased	73.89	61.45		
Came onto scene of a shooting and seen the victim	82.78	77.22		
Seen someone get killed as result of violence	24.86	18.64		
C. Death exposure				
Knew someone shot, not killed	81.92	67.23		
Knew someone killed	64.97	55.93		
Knew someone committed suicide	19.21	12.50		
Experienced death of a client due to violence	51.98			
Attended funerals for community member died from violence	81.82			
D. Threat and attack exposure				
Seriously threatened			27.12	18.64
Attacked with a weapon, such as a knife or bat	54.44	45.56	4.44	1.11
Hit, slapped, punched, and beaten up	79.44	71.11	5.56	3.89

Alongside gun violence exposure, the Chicago interventionists also evidence substantial exposure to scenes of violence. Over the course of their careers, 80% have responded to a scene of violence before emergency services arrived, 74% have seen a deceased victim, 83% have seen a shooting victim at the scene, and 25% have directly witnessed someone get killed in an act of violence. Workers further experienced indirect violence through people they knew through work; 65% of the workers knew someone from their professional duties who was killed, 20% knew someone through work who committed suicide, and 52% experienced the death of a client due to violence. Thus, in addition to elevated levels of direct exposure to gun violence and scenes of violence, Chicago interventionists additionally commonly experienced indirect exposure to death, violent deaths, and interpersonal loss within their work-related social networks.

Whereas Table 2 established the prevalence of work-related violence exposure, Table 3 uncovers the variation in witnessing violence by considering how many times the workers were exposed to particular forms of violence. Respondents who reported experiencing specific violence survey items also answered a follow-up question concerning how many times they witnessed that form of violence while on the job (once, 2 or 3 times, 4 to 10 times, or more than 10 times). If a respondent noted that a type of violence occurred more than 10 times, they had an opportunity to indicate exactly how many times it happened. These conditional percentages are presented in Table 3, along with the reported maximum number of times respondents indicated witnessing the given violence item. Table 3 shows that those who witnessed or encountered scenes of

violence typically did not experience them as a single isolated incident but, instead, witnessed these forms of violence multiple times—and sometimes, dozens to a hundred times over the course of their career (or past 12 months). Beyond work-related violence exposure among the population, Table 3 also reveals subgroups within the interventionist workforce for whom witnessing of violence is extreme. For example, of the 32.4% of workers who had seen someone get shot on work duty (lifetime), nearly 9% of this group had witnessed a completed shooting—an incident where shots were fired and a victim was struck by gunfire—more than 10 times. In addition, among the 18.6% of interventionists who witnessed a killing on duty within the past year, nearly 41% of this group had seen someone killed between 4 and 10 times, just over the past 12 months.

Table 4 provides the boundaries for the prevalence estimates in Table 2 to provide conservative ranges that adjust from the 87% of Chicago violence interventionists we reached to 100% of these workers. As Table 4 displays, these 100% intervals are narrow, given that they are guaranteed to contain the true population percentage experiencing the given type of exposure to violence. The narrow range of these 100% confidence intervals is the result of the near-census level of participation in the study and the quality of the data we were able to collect. The ranges presented in Table 4 increase confidence in the results displayed in Tables 2 and 3, as the assumptions used to create the lower and upper bound estimates (i.e., all missing cases either did or did not experience the phenomena) are overly conservative.

Table 3. Lifetime and past 12 months work-related witnessing of violence—counts of incidence (percentages).

A. Lifetime exposure item/topic	1 time	2 or 3 times	4 to 10 times	More than 10 times	Maximum
Shot at, not hit	14.29	43.81	24.76	17.14	100 times
Shot and hit	35.71	35.71	19.64	8.93	30 times
Come onto scene of violence and seen the body of deceased	20.93	36.43	27.91	14.73	100 times
Came onto scene of a shooting and seen the victim	7.43	21.62	41.22	29.73	100 times
Seen someone get killed as result of violence	18.60	27.91	41.86	11.63	30 times
B. Past 12 months exposure item/topic					
Shot at, not hit	16.88	44.16	29.87	9.09	30 times
Shot and hit	38.64	40.91	15.91	4.55	15 times
Come onto scene of violence and seen the body of deceased	31.78	43.93	17.76	6.54	35 times
Came onto scene of a shooting and seen the victim	15.33	40.15	29.20	15.33	60 times
Seen someone get killed as result of violence	18.75	40.63	40.63	0.00	
Knew someone shot, not killed	21.19	41.53	28.81	8.47	25 times
Knew someone killed	23.47	42.86	29.59	4.08	24 times
Knew someone committed suicide	85.71	14.29	0.00	0.00	
Attacked with a weapon, such as a knife or bat	18.52	41.98	32.10	7.41	60 times

DISCUSSION

Drawing upon a near-census of community-based violence interventionists in Chicago, we have provided an analytic description of the demographic profile of this expanding antiviolence profession and its work-related exposure to violence. We found that Chicago interventionists were overwhelmingly men (84%) who identified as Black (81%), with little experience in higher education (77% reported a high school degree or less as their highest level of formal education attained). Our results show that the interventionist workforce is generally middle-aged (mean age of 43 years), with 65% of workers aged 40 or older. However, apart from age, interventionists largely resemble the demographics of the people they serve. For example, a recent study found that most fatal and nonfatal gunshot victims in Chicago were men (82%) who were identified as Black (76%); the average age of gunshot victims was nearly 28 years old (20).

This demographic profile of community violence interventionists is likely a reflection of long-standing patterns of residential segregation in Chicago and established professional logics in the hiring and selection of intervention workers. With respect to residence, 98% of workers reported growing up in Chicago, almost exclusively from historically marginalized Black and Latino neighborhoods affected by legacies of concentrated violence. In terms of worker selection, it has become standard practice in the community violence intervention field to hire workers who will be seen as “credible messengers” by the violence-affected populations they serve (7). The credibility of workers is purportedly rooted in familiarity with specific neighborhoods and the common experiences of young people associated with those neighborhoods, including gang involvement, violence exposure, and criminal justice contact.

Given that neighborhoods affected by concentrated violence have also been shown to be sites of disproportionate incarceration (21), it should be expected that incarceration was one such common experience for the workers in our study; nearly 80% reported being

imprisoned as an adult, most often for a long span of their 20s and/or 30s. The observed age disparity between interventionists and their clients takes on new meaning in light of this incarceration history. One potential explanation for this age gap is that workers have reached the other side of a commonplace life course disruption confronting the communities and populations they serve, and relatively few young men from these neighborhoods are perceived to have assembled the experience necessary to be a credible messenger without also having experienced incarceration. If the notable difference in age between clients and workers affects job performance, interventionists themselves did not appear to be overly concerned; nearly 88% believed that their colleagues had strong relationships with the people actually causing violence in Chicago communities.

Our results establish that work-related exposure to gun violence and scenes of violence is common among interventionists. Nearly one-third of interventionists have seen someone get shot while on the job, and more than one-quarter reported this experience within the past year. What is more, nearly 20% of workers reported being shot at while performing their work, with nearly 12% reporting being shot at within the past year. Beyond exposure, our results further reveal that interventionists also experience direct gun violence victimization while on the job: Over the course of their careers, 2.2% reported being nonfatally shot while working.

Placing these figures in the context of other first-responding professions and violence-affected populations is instructive. Samples of large city police officers—who have more years of work experience and thus more exposure—reveal that fewer than 40% report ever being shot at (22). Within the study site of Chicago, although disaggregated estimates of officer shootings are not available, 76 officers were shot at or shot in 2020, representing a 1-year victimization rate of approximately 0.6% (23). In contrast, the comparable 1-year victimization rate for workers in our study was at least 11.7%. This 12-month rate of direct victimization (being shot and being shot at) also exceeds that of a “high-risk” sample of urban young people

Table 4. Confidence intervals (100%) for lifetime and past 12 months work-related witnessing of violence (percentages). Notes: This table provides 100% confidence intervals for only the witnessing violence items displayed in Table 2. The data in the observed value column come directly from those present in Table 2.

Item/topic	Lifetime			Last 12 months		
	Lower bound	Observed value	Upper bound	Lower bound	Observed value	Upper bound
A. Gun violence exposure						
Shot at, not hit	51.44	59.44	64.90	37.98	44.13	51.92
Shot and hit	27.88	32.40	41.83	21.63	25.14	35.58
B. Exposure to scenes of violence						
Responded to scene of violence before emergency services	67.79	79.66	82.69			
Provided first aid to shooting/stabbing victim	19.23	22.60	34.13			
Came onto scene of violence and seen the body of deceased	63.94	73.89	77.40	52.88	61.45	66.83
Came onto scene of a shooting and seen the victim	71.63	82.78	85.10	66.83	77.22	80.29
Seen someone get killed as result of violence	21.15	24.86	36.06	15.87	18.64	30.77
C. Death exposure						
Knew someone shot, not killed	69.71	81.92	84.62	57.21	67.23	72.12
Knew someone killed	55.29	64.97	70.19	47.60	55.93	62.50
Knew someone committed suicide	16.35	19.21	31.25	10.58	12.50	25.96
Experienced death of a client due to violence	44.23	51.98	59.13			
Attended funerals for community member died from violence	69.23	81.82	84.62			
D. Threat and attack exposure						
Attacked with a weapon like a knife or bat	47.12	54.44	60.58	39.42	45.56	52.88
Hit, slapped, punched, and beaten up	68.75	79.44	82.21	61.54	71.11	75.00

deliberately selected for their involvement in serious crime; only subpopulations actively carrying illegal guns surpassed the levels of victimization experienced by the workers in our study (24).

Despite its strengths, our study is subject to several limitations. As with all self-report studies, recall and social desirability biases likely produced some inaccuracies in our results—particularly those pertaining to exposure to violence. Although the study benefited from a strong response rate (93% among workers approached), research into similar populations has found that survey nonresponse is nonignorable and correlated with social and economic vulnerability (25), suggesting that our results likely understate the levels of hardship among this workforce. The confidence intervals presented in Table 4 help to mitigate this limitation and provide a representative snapshot of the true exposure to violence among the population of Chicago interventionists. Last, despite the quality of our results in describing the Chicago interventionist population, we do not yet know to what extent our findings generalize to workers beyond Chicago.

Our study offers important insights and raises challenging questions for policymakers, practitioners, and scholars dedicated to reducing gun violence. Our description of the demographic profile of the Chicago interventionist population is a needed first step in addressing the workforce and professional development needs of these

antiviolence workers. Future research is required to investigate whether this population continues to age and, relatedly, the field may benefit from reflecting upon the age, race, and gender composition of its practitioners and their continued capacities for connecting with those entangled in gun violence. Although there may be numerous benefits associated with established interventionist hiring practices—especially the opportunities afforded to the formerly incarcerated—in practice, the imperative to hire credible messengers seems to have been narrowly interpreted. Community violence intervention organizations may benefit from considering how a broader set of intersectional identities and human and professional capacities could expand and improve intervention practice.

The policy and practical implications of our findings regarding work-related exposure to violence are more complicated, however. Research into community violence intervention has focused almost exclusively on the efficacy of programs, with little attention paid to the workforce itself. Although understanding programmatic impact is a vital policy question, sustained programmatic success seems difficult to imagine in the face of serious safety and health concerns confronting the workforce implementing these programs. Our findings underscore the dire need for the violence intervention community to consider practical options for improving worker safety and

reducing worker violence exposure without curtailing crucial anti-violence services. Recent shootings of violence interventionists in other cities—including the on-duty killings of three Baltimore workers in the span of 13 months (26)—indicate that the problem of worker safety is likely to apply broadly to the field. Attention to the matter of worker safety has too frequently been reactive, generating interest mainly in the wake of injury or death of interventionists. Moving forward, the field would do well to develop proactive policies to ensure worker safety, perhaps drawing from best practices found among other civilianized first responders.

Intervention organizations must also find ways to monitor worker well-being for common sequelae of violence exposure (such as PTSD, anxiety, and depression) and offer workers robust systems of support. At a minimum, this support should include access to trauma-informed mental health support services at work and employer-supported access to health insurance to ensure longer-term care. Providing these additional health and safety resources may present a challenge for organizations that are often under-resourced. For this reason, funding entities—including local, state, and federal agencies, as well as private philanthropy—should rapidly encourage development and innovation in support of interventionist health and safety.

For American violence policy, community violence intervention represents a promising approach for reducing gun violence, bypassing the harsh consequences of the criminal-legal system while simultaneously leveraging local expertise to build community capacity for providing public safety. However, as our results make clear, community violence intervention—as currently implemented—frequently exacts a great personal cost from those who perform the frontline work. It bears reminding that these are people who have often already borne an outsized share of the burden of societal exposure to violence before arriving in their current profession. Further investment in community violence intervention will thus require more than simple scaling-up; it requires systemic support for the safety and vulnerability of its professional workers and the impact the work has made on their person.

MATERIALS AND METHODS

Between March and November 2021, we fielded a researcher-guided web-based survey in an attempt to obtain a near-census of field-based violence intervention workers in the city of Chicago, IL. Interventionists were selected for participation on the basis of their employment with 1 of 16 violence prevention organizations providing professional street intervention services. With assistance from our practitioner partners, we sequentially approached each organization for participation, explaining the rationale for the survey and its content. A total of 15 of 16 (94%) organizations agreed to participate. Organizations provided a roster of their field-based interventionists (excluding those exclusively engaged in victim services, case management, and hospital settings), which the research team used to schedule survey sessions with each worker. The median number of interventionists at each organization was 12 (mean = 13), ranging from 41 workers to several organizations that employed just 3 workers. Together, we approached 195 interventionists for participation; 181 (93%) agreed to participate, representing approximately 87% of the professional interventionist population in Chicago. This response rate and population

representation is noteworthy when considering overarching declining response rates within contemporary survey research (27), that response rates obtained by comparable studies are typically lower than 70% (28, 29), and that many interventionists have markers of hard-to-reach populations (30).

The survey was designed in collaboration with leading violence intervention organizations and practitioners, with the intention of comprehensively documenting the full range of violence intervention work, including worker backgrounds, training, supervision, pay and benefits, past involvement with gangs and street violence, histories of incarceration and police contact, experience with guns, work stress, views on police and the law, the impact of COVID-19 on intervention work, and worker opinions on the causes of violence among the communities and people they serve. To test the survey clarity, timing, web functionality, and worker responses to sensitive questions, preliminary versions of the survey were pilot-tested with former outreach workers in Chicago and active outreach workers in two East Coast cities (one small and one large). Given the survey length (median duration of 1 hour and 44 min) and our interests in ensuring data quality, creating a positive survey experience, and maintaining high response and retention rates (for planned future follow-up waves), we chose to administer the survey through Zoom and guided by trained researchers.

Human participant statement

This research was approved by Northwestern University's Institutional Review Board, ID: STU00213037. Informed consent was obtained from all research participants after the study's purpose and potential risks were explained to them.

Statistical analysis

Because our data contain approximately 87% of all of the community violence interventionists in Chicago, constituting a near-census of the population, these descriptive statistics are demonstrative in their own right. Nevertheless, we use a sensitivity analysis to produce bounds for the true prevalence of witnessing violence for all Chicago violence interventionists. To accomplish this, we produce lower and upper bounds for the prevalence of the witnessing violence items in the full population. The lower bounds are produced by assuming that all of the missing cases from the population did not witness the given exposure to violence item and producing the corresponding prevalence estimate. The upper bounds are produced by assuming that all of the missing cases from the population did witness the given exposure to violence item and producing the corresponding prevalence estimate. As a result, we can interpret these lower and upper bounds as the absolute floors and ceilings for the prevalence of these exposure to violence items among the population of Chicago interventionists.

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