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Exposure to Gun Violence Among the Population of Chicago Community Violence Interventionists

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Abstract

Background. In spite of increased calls for policy investment in community-based violence intervention efforts, very little information exists about the existing interventionist workforce or its basic work conditions. The researchers set out to learn about the population of community violence intervention workers in a major American city (Chicago, IL) and assess its work-related exposure to gun violence.

Methods. Between March and November 2021, the researchers conducted a near-census of Chicago community-based violence interventionists using a researcher-guided webbased survey. Based on survey responses, they analyzed the demographic composition and work-related exposure to violence of Chicago interventionists. They used 100% confidence intervals to generate population levels of witnessing violence on the job.

Findings. 93% of contacted interventionists agreed to participate in the study, representing 87% of the professional population in Chicago. The majority of interventionists are middleaged Black men. Exposure to violence among this population is substantial; workers regularly confront scenes of gun violence, injury, and death, with nearly 12% reporting being personally shot at in the last year during the course of professional duties.

Interpretation. Increased policy attention should be given to the personal costs associated with violence intervention work. Public health practice should consider methods for improving worker safety and reducing worker exposure to violence while developing robust systems of support for its most vulnerable practitioners on the front lines of community violence.

This research was partially supported by a grant made to Northwestern University by Everytown For Gun Safety Support Fund (<u>www.everytownsupportfund.org</u>).

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Summary

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Introduction

Interventions aimed at interrupting the transmission of community violence are among the most important and popular initiatives associated with the public health turn in gun violence prevention.¹ Among policymakers, these approaches represent a means for reducing gun violence without further exacerbating the harms associated with intensive policing and incarceration for communities already burdened by multiple forms of disadvantage. For this reason, 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 services²—has been identified as a key strategy within the federal government's investment in community safety and is expected to play an increasingly important role in contemporary violence policy in the United States and beyond.³

Yet in spite of the growing societal significance of community violence intervention work, research attention into the area has generally been concerned with evaluating program impact.^{2,4,5} In contrast, little research has considered the *people* that make up this emerging public health profession or the common professional *experiences* that have come to define community violence intervention practice. To address this important gap in public health knowledge, 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 public health profession, alongside its work-related exposure to violence.

The theory of change common to many community violence interventions dictates that workers interrupt the transmission of gun violence; but in order to do this, interventionists must become proximate to the social networks and geographic spaces where gun violence is most likely to occur. Thus, for interventionists, elevated risk of exposure to gun violence quite simply comes with the job and might, in fact, serve as a marker of worker effectiveness.

However, a large body of public health research has compellingly demonstrated the harms associated with exposure to gun violence, including post-traumatic stress and depression,⁶ loss of sleep and increased levels of cortisol,⁷ reduced cognitive performance,⁸ and even decreased community-level physical and mental health.^{9,10} Although work-related exposure to gun violence is less well measured, research into first responders (police, firefighters, and emergency medical technicians) has shown a consistent link between exposure to violence and post-traumatic stress disorder (PTSD),^{11,12} in spite of evidence that professional training likely decreases the likelihood of adverse response to critical incidents.¹³ In Chicago and other cities, community violence interventionists are often referred to as first responders for good reason; in our study, approximately 80% of workers reported arriving at a scene of violence before traditional first responders. In contrast to other first responders, however, community violence interventionists are called upon not only to respond to acute violence, but 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, community-based interventionists offer essential services to communities, but these services might be achieved by means of underappreciated personal costs to the workers that perform them.

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 based on their employment with one 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. 15 of 16 (94%) of 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 three workers. Altogether, 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 that many interventionists possess markers of hard-to-reach populations.¹⁴

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. In order to test the survey clarity, timing, web functionality, as well as 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. Given the survey length (median duration of one hour and 44 minutes) as well as 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.

To shed light upon the important question of who violence interventionists are, our analysis begins with a presentation of the demographic composition of this population. Specifically, we highlight worker age, gender, race, ethnicity, hours worked per week, educational attainment, and marital status. We then present results from an analysis of these workers' work-related exposure to violence (violence that occurred "on the clock" during the time they were working in a professional capacity). These exposure to violence items included witnessing violence or the outcome(s) of violence as well as direct experiences of personal victimization and spanned four domains: 1) gun violence exposure; 2) exposure to scenes of violence; 3) mortality exposure; and 4) threat and attack exposure. Interventionists were queried regarding both prevalence and frequency for many of these items in terms of lifetime exposure on the job as well as exposure over the last 12 months on the job.

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 employ 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 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 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.

Role of the Funding Source

Everytown For Gun Safety Support Fund was not involved in the study design, data collection, analysis, interpretation, the writing of the report, or the decision to submit this paper for publication.

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%). In sum, Chicago interventionists are predominantly middle-aged Black men. 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 preponderance 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 last 12 months, 44% of workers reported witnessing someone get shot at while 12% reported they, themselves, were shot at (but not hit). Almost a third of workers have seen someone shot and hit over the course of their professional career, and a fourth of workers saw someone get shot while on duty in the last 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 last 12 months.

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 via people they knew through work. 65% of the workers knew someone from their professional duties that was killed, 20% knew someone through work that 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

Variable/Measure	Percentage	Mean	S.D.	Minimum	Maximum	n
Age		43.60	9.80	23.00	71.00	181
Gender						181
Male	83.98					181
Female	16.02					181
Race						173
African American or Black	80.92					173
Caucasian/White/European American	3.47					173
Native American/American Indian/Alaskan Native	6.36					173
Multiethnic or Mixed	9.25					173
Ethnicity						180
Identifies as Hispanic/Latino/Chicano	20.00					180
Does not Identify as Hispanic/Latino/Chicano	80.00					180
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					179
High School Diploma or Equivalent	65.92					179
Associate's Degree	17.32					179
Bachelor's Degree	2.23					179
Master's Degree	3.35					179
Marital Status						180
Married	22.22					180
Widowed, Divorced, or Separated	15.00					180
Never Married	62.78					180

 Table 1. Demographic Characteristics of Chicago Violence Interventionists

	W	<i>Titness</i>	Victim		
Item/Topic	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 prior to emergency services	79.66				
Provided first aid to shooting/stabbing victim	22.60				
Come 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 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 like a knife or bat	54.44	45.56	4.44	1.11	
Hit, slapped, punched, beaten up	79.44	71.11	5.56	3.89	

 Table 2. Work-Related Exposure to Violence Among Chicago Violence Interventionists (Percentages)

of violence while on the job (once; two or three times; four to ten times; more than ten times). If a respondent noted that a type of violence occurred more than ten 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. The takeaway from the data presented in Table 3 is 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.

Table 4 provides the boundaries for the prevalence estimates in Table 2 to provide conservative ranges that adjust from our near-census of 87% of Chicago violence interventionists 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 are 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 employed to create the lower and upper bound estimates (i.e., all missing cases either did or did not experience the phenomena) are overly conservative.

Discussion & Conclusion

Drawing upon a near-census of community-based violence interventionists in Chicago, we have provided a novel analytic description of the demographic profile of this expanding public health 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). Perhaps surprising for a profession known for its social proximity to those engaged in violence, we found that the interventionist workforce is overwhelmingly middle-aged (mean age of 43 years), with 65% of workers aged 40 or older. Apart from age, interventionists generally resemble the demographics of the population they serve: those at highest risk for involvement in gun violence. For example, a recent study found that the majority of fatal and non-fatal gunshot victims in Chicago were men (82%) who were identified as Black (76%); the average age of gunshot victims was nearly 28 years old.¹⁵

Our results establish that work-related exposure to gun violence and scenes of violence is common among Chicago violence interventionists. Nearly one-third of interventionists have seen someone shot while on the job, and more than one-quarter reported this experience within the last 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 last year. Beyond exposure, our results reveal that interventionists do experience direct gun violence *victimization* while on the job: $2 \cdot 2\%$ reported being nonfatally shot while working.

A. Lifetime exposure item/topic	1 time	2 or 3 times	4 – 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 suicide	85.71	14.29	0.00	0.00	
Attacked with a weapon like a knife or bat	18.52	41.98	32.10	7.41	60 times

Table 3. Lifetime and Past 12 Months Work-Related Witnessing of Violence – Counts of Incidence (Percentages)

	Lifetime			Last 12 Months			
Item/Tonic	Lower	Observed	Upper	Lower	Observed Value	Upper Bound	
	Doulid	value	Dound	Doulid	v aluc	Doulid	
A. Gun violence exposure	51.44	50.44	64.00	27.09	44.12	51.02	
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 prior to emergency services	67.79	79.66	82.69				
Provided first aid to shooting/stabbing victim	19.23	22.60	34.13				
Come 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 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, beaten up	68.75	79.44	82.21	61.54	71.11	75.00	

 Table 4. 100% Confidence Intervals for Lifetime and Past 12 Months Work-Related Witnessing of Violence (Percentages)

Placing these figures in the context of other violence-exposed first-responding professions and 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.¹⁶ And compared to a "high-risk" sample of urban young people deliberately selected for their involvement in serious crime, Chicago violence interventionists reported higher levels of direct victimization (being shot and being shot at) over a 12-month period; only sub-populations actively carrying illegal guns exceeded the victimization risk of the workers in our study.¹⁷

In spite of 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, representing 87% of the population), research into similar populations has found that survey non-response is nonignorable and correlated with social and economic vulnerability.¹⁸ 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. Finally, in spite of 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 public health scholars and practitioners dedicated to reducing gun violence. Although this analysis only scratched the surface of the full complexity of the Chicago interventionist population, our description of its demographic profile can be useful to practitioners and policymakers in addressing the workforce and professional development needs of these public health professionals, including workplace training, safety, supervision, and benefits. Future research will be required to investigate whether this population continues to age and, relatedly, the field may benefit from reflecting upon the composition of its practitioners and their continued capacities for connecting with those entangled in gun violence.

Our findings regarding worker exposure to violence while on the job are more vexing, however. Given the levels of exposure to gun violence we uncovered—by means of witnessing, confronting the aftermath of violence, and even being directly targeted and victimized—the Chicago violence intervention community should consider practical options for improving worker safety and reducing worker exposure to violence without curtailing crucial anti-violence services. Such improvements are especially important during outbreaks of gun violence when violence prevention efforts are even more needed, and, simultaneously, when interventionists are likely to be exposed to higher levels of violence on the job. In the wake of violence, intervention organizations must find ways to monitor worker wellbeing for common sequalae of violence exposure (such as PTSD, anxiety, and depression) and offer workers robust systems of support, a challenge for organizations that are often under-resourced. For the broader public health community, fully admitting violence intervention workers into its ranks requires more than admiration for their brave work, it requires systemic support for their vulnerability and the impact the work has made on their person.

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Author Contributions

David M. Hureau: Co-led the conceptualization of the study, engaged in data curation, participated in formal analysis, co-led investigation, developed the study methodology, led the project administration, led the writing of the original manuscript and participated in reviewing/editing the manuscript.

Theodore Wilson: Engaged in data curation, participated in formal analysis, participated in investigation, developed the study methodology, participated in the writing of the original manuscript, and reviewed / edited the manuscript.

Hilary M. Jackl: Engaged in data curation, participated in investigation, developed the study methodology, participated in the project administration and reviewed / edited the manuscript.

Jalon Arthur: Co-led the conceptualization of the study, participated in the project administration, and reviewed/edited the manuscript.

Christopher Patterson: Co-led the conceptualization of the study, participated in the project administration, and reviewed/edited the manuscript.

Andrew V. Papachristos: Co-led the conceptualization of the study, engaged in analysis, secured partial funding, developed methodology, participated in admin, and reviewed/edited the paper.

Conflict of Interest Statement

The authors report no conflicts of interest. The authors report funding from Everytown For Gun Safety Support Fund during the conduct of the study.

Ethics Committee Approval

This research was approved by Northwestern University's Institutional Review Board, IRB ID: STU00213037.

Role of the Funding Source

Everytown For Gun Safety Support Fund was not involved in the study design, data collection, analysis, interpretation, the writing of the report, or the decision to submit this paper for publication.