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Symposium 1: Building a Sustainable Community Violence Intervention Workforce: Using research to support innovation in recruitment, retention, and well-being

November 1, 1:00 - 2:30 PM (Main Ballroom)

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David Hureau PhD¹, Jordan Whealdon², Adam Pittman³, Angelica D'Souza MPP³

¹School of Criminal Justice, Rockefeller College of Public Affairs and Policy, Sociology, The University at Albany, ²Institute for Nonviolence Chicago, ³Center for Neighborhood Engaged Research & Science (CORNERS), Institute for Policy Research, Northwestern University

Symposium Summary: Over the last five years, the violence prevention community in Chicago and other US cities has made tremendous strides in building and professionalizing its Community Violence Intervention (CVI) capacity through the hiring, training, and development of a frontline workforce that relies on their own lived experiences and social networks to reach individuals most immediately involved in gun violence. Although these first responders are an integral component in a comprehensive public safety strategy, our understanding of this workforce, their work, and their exposure to violence has thus far been limited. As CVI work expands, it is more important than ever that we better understand the unique needs, strengths, and barriers to well-being of this workforce. This Symposium will include three presentations on researcher-practitioner partnerships seeking to understand the nature of the CVI workforce in multiple US cities, develop and assess a wellness initiative to address the effects of trauma at a CVI organization, and evaluate an innovative training and recruitment program aimed at creating a more diverse and skilled CVI workforce in Chicago. Together, these presentations will highlight the importance of equitable researcher-practitioner partnerships in conducting research with this critical public safety workforce and underscore the ways in which such partnerships can support the recruitment, retention, and well-being of CVI professionals.

Learning Objectives:

- Attendees will learn about the experiences, opinions, and attitudes of CVI workers from multiple U.S. cities.
- Attendees will learn how research-practice partnerships can co-develop knowledge to better understand the needs of CVI workers and identify promising strategies to promote wellness and healing.
- Attendees will learn about the effects of an innovative apprenticeship-like program to recruit and train a sustainable and diverse CVI workforce.
- 1. The Violence Intervention Workers Study (VIeWS): A comparative analysis of community violence intervention workers in Chicago, New York, and Boston

David Hureau PhD1, Andrew V. Papachristos PhD2, Adam Pittman PhD2, Jalon Arthur MS3, Angelica D'Souza MPP2

¹School of Criminal Justice, Rockefeller College of Public Affairs and Policy, Sociology, The University at Albany, ²Center for Neighborhood Engaged Research & Science (CORNERS), Institute for Policy Research, Northwestern University, ³Chicago CRED

Background/Purpose: Despite the increased attention national attention on gun violence prevention strategies, research about CVI workers or the nature of their work is nascent. This paper offers one of the first comparative examinations of the experiences, opinions, and attitudes of CVI workers from multiple U.S. cities. Findings will explore important themes in CVI work including workforce composition and experiences; worker health, well-being, and safety; working conditions; and opinions on public safety. Methods/Approach: The Violence Intervention Worker Study (VIeWS) is a longitudinal survey of CVI workers developed in partnership with CVI leaders in Chicago and has expanded to Boston, MA and throughout New York State. This in-depth survey develops foundational knowledge about the CVI workforce, including worker demographics, work history, exposure to violence, family and home life, criminal justice system involvement, and more. VIeWS utilized a researcher-guided tool to survey over 300 CVI workers from Chicago, New York State, and Boston (findings forthcoming). Wave one data collection occurred between Winter 2021-Summer 2023, with very high response rates (93% in Chicago and 100% in New York State). Results/Outcome: Findings point to key similarities and differences between the CVI workforce in Chicago, New York, and Boston. Chicago CVI workers were mostly male (84%), Black (81%), and had a mean age of almost 44 years. New

York-based CVI workers were also primarily male (84%) and Black (86%) but were, on average, younger than Chicago workers (mean age = 38). Exposure to violence on the job was common, with workers in Chicago experiencing violence exposure at slightly higher rates than New York: 32% witnessed someone being shot and hit. In New York, 23% witnessed someone being shot and hit. In terms of direct victimization, 19.6% of CVI workers in Chicago reported being shot at on the job, while 2% had been shot and hit. The figures were slightly lower in New York, where 13% of workers reported having been shot at while at work, and none were shot and hit. Finally, workers in both Chicago and New York experienced extensive Secondary Traumatic Stress (STS). **Conclusions/Implications:** Findings from this study can help inform ongoing local and national policy debates regarding the composition, health, and safety of CVI workers. Drawing from each of the study sites, exemplar cases will be identified to show how VIeWS data informed local CVI policy problems and emerging solutions.

2. Findings from a comprehensive and participatory needs assessment of CVI staff

Jordan Whealdon LCSW¹, Kathryn Carroll LCSW¹, Anne Rufa PhD, Marcie Hill¹, SeKeena Louis¹, Rebecca Weiland MPH², Alantha Miles², Kathryn Bocanegra PhD LCSW³

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Background/Purpose: It is typically a requirement that those working in community violence intervention (CVI) have lived experience, which often includes previous exposure to trauma in addition to the ongoing trauma exposure experienced on the job. Thus, there is an urgent need to address the mental health and well-being of these essential workers who experience very high levels of personal and professional exposure to violence. One Chicago-based CVI organization has taken up this call to action through the development of a comprehensive wellness initiative that includes an all-staff needs assessment. While organizations have implemented support for traumatic events that occur on the job (e.g., crisis support, counseling, etc.), less has been offered to respond to past traumas. Methods/Approach: The present study reports data and findings from the Institute for Nonviolence Chicago's recent needs assessment. Grounded in participatory action research principles, the needs assessment measured trauma over the life course, positive childhood experiences, trauma-related difficulties and symptoms, and preferences for supports among staff. Results/Outcome: Findings indicate that staff: a) have significant trauma exposure throughout the lifespan and on the job; b) have high rates of positive childhood experiences; c) screened positive for symptoms of PTSD at high rates; d) desire additional time off and calming spaces at work; and e) would like to see improvements in organizational climate. Additionally, staff report the blurring of relational and personal/professional boundaries as well as challenges related to time management and being "always on" in their roles. Conclusions/Implications: Implications for next steps in the process, including initial recommendations for intervention development, will also be discussed.

3. The FLIP Strategy: Training the next generation of CVI professionals

Angelica D'Souza MPP¹, Marisa Ross PhD¹

¹Center for Neighborhood Engaged Research & Science (CORNERS), Institute for Policy Research, Northwestern University

Background/Purpose: The Flatlining Violence Inspires Peace (FLIP) Strategy is a multi-pronged gun violence intervention designed to buttress Chicago's existing community violence intervention infrastructure and provide a nimble framework for innovation. Peacekeepers are a critical component of FLIP's program model; in partnership with CVI organizations, FLIP deploys Peacekeepers throughout violence hotspots. FLIP offers a variety of professional development services for Peacekeepers and for the past several years has served as an apprenticeship into full-time street outreach professions. **Methods/Approach:** The primary data sources for this study are threefold: (1) six interviews and 13 focus groups with FLIP Peacekeepers, analyzed with inductive thematic coding to decipher key themes relating to the apprenticeship dimension of the Peacekeeper experience; (2) surveys assessing demographics, employment history, access to insurance and professional development services, and criminal legal and gunshot victimization history for 418 unique Peacekeepers employed in 2022; and (3) program data providing end-of-session outcomes, such as the number of Peacekeepers hired into full-time violence prevention positions. **Results/Outcome:** Surveys revealed that Peacekeepers are younger than the average CVI professional in Chicago

(FLIP median age = 35 years; CVI median age = 44 years). Like the Chicago CVI workforce, a majority (72%) of Peacekeepers have at least one previous arrest and 45% have been shot at least once before participating in FLIP. For 25% of Peacekeepers, FLIP is their first job, and for 66%, FLIP is their first opportunity to access professional or workforce development services. Through FLIP, Peacekeepers have been connected to both CVI and non-CVI employment opportunities. In 2022, 14 Peacekeepers were recruited into formal violence prevention positions, joining the over 100 program alumni that have joined the profession since 2018. Interviews and focus groups with participants revealed that many view FLIP as a meaningful apprenticeship and entrée into the CVI field. Through their participation, Peacekeepers highlighted meaningful positive changes in how their family, friends, and community view them, and as a result, increased feelings of self-worth and confidence in Peacekeepers themselves. Conclusions/Implications: Beyond the immediate violence intervention activities in which FLIP Peacekeepers engage, the program serves as a training ground for the next generation of violence prevention professionals. FLIP supports the development of a more diverse CVI workforce and offers a gradual onramp to ease the transition from CVI participant to CVI professional. The program offers legitimate and regular income, a first for many Peacekeepers, and offers a pathway to meaningful and restorative work.

Symposium 2: Psychological and biobehavioral correlates of firearm ownership and use

November 1, 4:30 - 6:00 PM (Main Ballroom)

Michael D. Anestis PhD¹, Craig J. Bryan PsyD ABPP² {Back to table of contents}

¹New Jersey Gun Violence Research Center, ²The Ohio State University

Symposium Summary: Individual-level determinants and moderators of firearm-related violence have received much less empirical attention than group-level and social correlates and contributors. As a result, our understanding of the conditions under which firearm violence emerges remain limited, hindering efforts to develop and implement novel strategies to prevent these outcomes. Psychological and biobehavioral studies hold considerable promise for filling these gaps. Recent studies of firearm owners have suggested that owning a firearm for the purpose of protection (i.e., protective owners) and intending to acquire a firearm are associated with heightened threat expectancies, a cognitive-affective process that may increase vulnerability to suicide and aggression. Additional research is needed to understand these mechanisms more thoroughly, as such research could inform future efforts for preventing firearm-related injury and mortality. In this symposium, the results of multiple studies aimed at revealing cognitive-affective processes associated with firearm ownership, carriage, and storage are reported. Speaker 1 will present the results of a nationally representative survey of military personnel assessing threat sensitivity, PTSD symptoms, and perceptions of secure firearm storage practices. Results show that heighted threat sensitivity (perceiving the world as dangerous and other people as untrustworthy) was associated with lower perceived value of secure storage with respect to preventing suicide, but elevated PTSD symptoms were associated with higher levels of perceived value of secure storage. Speaker 2 will present the results of a study comparing protective firearm owners and non-owners on a gambling task assessing several facets of decision-making. Results show that firearm owners were less willing to refrain from making bets and deliberated for longer before making a bet. Participants reporting an intention to purchase a firearm within the next year showed higher risk taking than those who did not intend to purchase a firearm. Speaker 3 will present the results of a study using ecological momentary assessment (EMA) to measure suicidal ideation among firearm owners and non-owners in real-time. Results show that when a firearm was nearby, suicidal ideation became less stable, a pattern that has been associated with increased vulnerability to suicidal crises and suicidal behaviors. Collectively, these studies provide novel information about psychological and biobehavioral processes that may contribute to firearm-related violence.

Learning Objectives:

- Describe how various fear-related variables related to the perceived value of specific secure firearm storage practices
- Describe how cognitive processes may differ based on firearm ownership variables
- Describe how firearm availability affects the experience of suicidal ideation

Symposium presentations:

1. Threat, fear, and the perceived value of specific firearm storage practices in suicide prevention within a sample of firearm-owning military servicemembers

Michael D. Anestis PhD1

¹New Jersey Gun Violence Research Center

Background/Purpose: Approximately 70% of military suicides result from firearms. Prior research has shown that, although secure firearm storage may help prevent suicide, such practices are rare. One possible explanation is that individuals who own firearms for protection and who perceive more danger in their environment see less suicide prevention value in secure storage, perhaps because they conceptualize firearms as a tool for protection from threats rather than as a risk for suicide. Methods/Approach: Using the KnowledgePanel (KP) calibration approach, we recruited a nationally representative sample of 719 firearm-owning military service members. Data were collected between December 3, 2021 and January 4, 2022. Along with demographic variables, perceived neighborhood safety, defensive firearm ownership, threat sensitivity, intolerance of uncertainty, and PTSD symptoms were examined as potential fear-related variables associated with the perceived value of secure firearm storage. Specific storage

practices examined included storing firearms: unloaded, separate from ammunition, in a locked location, with a locking device, and away from home. **Results/Outcome:** Across all five storage practices, heighted threat sensitivity – perceiving the world as dangerous and other people as untrustworthy – was associated with lower perceived value of secure storage with respect to preventing suicide. In contrast, across all storage practices, elevated PTSD symptoms were associated with higher levels of perceived value of secure storage. No other fear-related variables were associated with the perceived value of any storage practice. **Conclusions/Implications:** Prior research has demonstrated that threat sensitivity is associated with increased intent to purchase firearms and with firearm purchasing behavior during the recent firearm purchasing surge. These results extend that work by highlighting that perceiving general (vs neighborhood specific) threats is associated with less perceived suicide prevention value across a variety of forms of secure firearm storage. As such, individuals more likely to see the world as threatening see less point in reducing ready access to firearms. Unexpectedly, elevated levels of PTSD symptoms were associated with greater perceived value in secure storage. This may reflect messaging received during PTSD treatment or could reflect shifts in perspective due to increased salience for suicide. Overall, our results highlight that fear may influence how firearm owners perceive secure firearm storage and, as such, how important it is to address fear when attempting to promote safe firearm behavior.

2. Cognitive processes and firearm ownership factors

Darrin M. Aase PhD ABPP¹

¹The Ohio State University

Background/Purpose: Owning a firearm for the purpose of protection (i.e., protective ownership) and intending to acquire a firearm are associated with heightened threat expectancies, a cognitive-affective process that may increase suicide risk vulnerability (Bryan et al., 2020b). Currently missing from the extant literature are studies using objective measures of cognitive functioning in relation to firearm ownership and affective functioning. Such research would help to clarify cognitive-affective vulnerability factors that increase the risk of firearm suicide. This study informs future prevention/intervention efforts for potentially vulnerable firearm owners (Bryan et al., 2020a). Methods/Approach: We are enrolling 800 adults utilizing ResearchMatch to complete an initial survey focusing on firearm ownership and psychosocial measures in a larger study. Of 505 surveyed participants thus far, 115 were selected for cognitive assessment based on a) protective firearm owners or nonowners, and b) intent to purchase a firearm or not within the past year. Participants completed the Cambridge Gambling Task from the Cambridge Neuropsychological Test Automated Battery, a computerized cognitive assessment package that was administered remotely. Analyses were conducted to determine assess for independent effects of protective firearm ownership and intent to purchase a firearm on executive functioning performances. Results/Outcome: Out of n=115 participants, 69 identified as nonowners and 46 were identified as protective firearm owners. Moreover, 81 reported no intent to purchase a firearm within the next year, while 34 reported intent to purchase a firearm within the next year. When comparing groups based on firearm ownership status, protective owners exhibited significantly higher Delay Aversion (unwilling to refrain from betting; M=0.26, SD=0.21) relative to nonowners (M=0.15, SD=.20, p=.006). Moreover, protective owners deliberated for longer before making a bet (M=2518.17, SD=1622.64) relative to nonowners (M=1959.26, SD=846.75, p=.017). When comparing groups based on intent to purchase a firearm, those with intent to purchase a firearm within the next year demonstrated lower Risk Adjustment (higher risk taking; M=1.09, SD=1.15) relative to those without intent (M=1.09, SD=0.97, p=0.48). Conclusions/Implications: Findings suggest that there are some differences between participants on the Cambridge Gambling Task based on protective ownership status (unwillingness to refrain from betting, longer deliberation of bets) and intent to purchase a firearm (higher risk taking) variables. Limitations of these pilot data, as well as implications of findings as they pertain to threat expectancies and cognitive-affective processes involved in firearm acquisition and ownership will be discussed.

3. Suicidal ideation in the presence of a firearm: Results of an ecological momentary assessment study Craig J. Bryan PsyD ABPP¹

¹The Ohio State University

Background/Purpose: Firearm availability is correlated with increased risk of suicide. Studies examining this correlation are limited by retrospective reports and prospective designs with lengthy gaps between assessments that are not well-suited for measuring the highly dynamic nature of suicidal ideation. **Methods/Approach:** This study used ecological momentary assessment (EMA) to repeatedly assess suicidal ideation in a sample of 142 U.S. adults (82 handgun owners, 60 non-owners). Participants received 6 EMA prompts per day for 28 consecutive days. **Results/Outcome:** Results revealed no group differences in the frequency, maximum amplitude, or variability of suicidal ideation across male and female handgun owners and non-owners. Stability of suicidal ideation significantly differed across groups, however (F(1,132)=4.5, p=.036); male handgun owners had the strongest stability and male non-owners had the weakest stability. Stability of suicidal ideation was significantly lower when participants reported a firearm was nearby as compared to when no firearm was nearby (F(4,17732)=5.6, p<.001). **Conclusion/Implications:** Firearm availability increases reactivity to the environment, slows recovery from acutely elevated risk states, and may increase vulnerability to sudden shifts to higher risk states characterized by increased probability of suicidal behavior. Although these effects were observed in both handgun owners and non-owners, they disproportionately impact handgun owners because they report being near firearms more often.

Symposium 3: Structural and social determinants of firearm violence

November 2, 8:00 - 9:30 AM (Main Ballroom)

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Daniel B. Lee PhD¹, Mallory Loe BS², Katherine P. Theall PhD³

¹University of Michigan Institute for Firearm Injury Prevention, ²Tulane University, School of Medicine, ³Tulane University, School of Public Health and Tropical Medicine, Center for Youth Equity

Symposium Summary: Firearm related homicides occur at rates 25 times higher in the U.S. compared to other high-income countries. Non-fatal firearm injuries also have high morbidity and economic burden, costing the U.S. an estimated \$557 billion annually. Furthermore, discrete geographic areas and populations endure a disproportionate burden of firearm violence, with rates highest in several Southern states and with a disproportionate impact among Black communities. Structural and social determinants including racism, socioeconomic inequalities, and lack of access to other resources, play a critical role in perpetuating and exacerbating racial disparities in firearm violence, including homicides, non-fatal assault injuries, and police shootings involving Black victims. This symposium opens with a scoping review of the role of racism on firearm violence and details important future directions for research to understand racism as a determinant of inequities in exposure to firearm violence. Two additional presentations include examples of the impact of markers of structural determinants on firearm violence. The first examines the roles of housing instability and other social determinants such as income inequality on firearm homicides in major U.S. cities. The second explores the impact of markers of structural racism, including racial-income residential segregation and neighborhood police encounters on youth homicide in a Southern city with some of the highest firearm mortality rates globally. Findings are relevant to furthering policy and programmatic change in addressing structural determinants to reduce inequities in firearm violence exposure.

Learning Objectives:

- Understand the role systemic racism plays in firearm violence
- Discover markers of structural racism and how to use them in violence prevention research
- Apply concepts and factors of structural racism to policy and programmatic changes that impact firearm violence exposure

Symposium Presentations:

1. Racism as a determinant of firearm violence: A scoping review

Daniel B. Lee PhD¹, Lexie Ornelas MPH², Riley Bennett MPH³, Laney Rupp MPH³, Stephanie Cook PhD⁴, Marc Zimmerman PhD³, Julia Fleckman PhD²

¹University of Michigan Institute for Firearm Injury Prevention, ²Tulane University, School of Public Health and Tropical Medicine, Center for Youth Equity, ³University of Michigan School of Public Health, Michigan Youth Violence Prevention Center, ⁴New York University Social and Behavioral Sciences, Attachment and Health Disparities Research Lab

Background/Purpose: The historical and contemporary consequences of racism on health disparities is well-documented. Akin to many public health issues, recent studies have increasingly recognized the influence of racism on firearm violence. In light of growing racial disparities in firearm violence, there is a significant need to assess racism as a determinant of firearm violence. We sought to summarize the state of evidence on the relation between the multiple facets of racism (institutional, interpersonal) and firearm violence. We also suggest avenues to expand the substantive breadth and methodological rigor of this research area. Methods/Approach: We searched Medline, Scopus, Embase, Sociological Abstracts, Criminal Justice Abstracts, PsychINFO, and Cochrane for US-based empirical research articles from 1990-2022. Our search yielded 3,767 articles, and after deduplication left 2,579 for title and abstract review. 18 articles were advanced to extraction. Articles were dually reviewed by two co-investigators and a research assistant for data abstraction and methodological quality. Results/Outcome: Most studies indicated that racism is associated with higher rates of firearm violence. Historical (e.g., redlining) and contemporary forms of institutional racism (e.g., racial disparities in educational attainment, residential racial

segregation), in particular, were associated with higher rates of firearm-related homicides, injuries, and shooting incidents. There was also evidence that residential racial segregation (e.g., Index of Dissimilarity) and other indices of institutional racism (e.g., racial disparities in employment) is associated with higher rates of police shootings that involve Black victims. The majority of studies utilized cross-sectional data and causal inference cannot be drawn (n = 14). Moreover, the preponderance of studies measured institutional racism using place-based indicators which limit our understanding of how personal experiences of institutional and other forms of racism influence firearm violence. Additional methodological limitations will be discussed including but not limited to limited generalizability, spatial bias, and limited understanding of processes (mediation, moderation). We will then follow this discussion with opportunities for future research, such as using multiple approaches for measuring racism and leveraging longitudinal designs (e.g., sensitive/critical periods, developmental trajectories). **Conclusion/Implications:** Taken together, emerging research indicates that racism plays a critical role in perpetuating and exacerbating racial disparities in firearm violence, including homicides, non-fatal assault injuries, and police shootings involving Black victims. We will discuss future research opportunities to enhance our understanding of how racism contributes to racial disparities in firearm violence.

2. Housing instability and income inequality affect firearm homicide mortality: A cross-sectional analysis of major US metropolitan areas

Mallory Loe BS¹, Caroline Ghio MD¹, Michael Ghio MD¹, Joseph Constans PhD², Julia Fleckman PhD², Patrick McGrew MD¹, Juan Duchesne MD¹, Katherine Theall PhD², Sharven Taghavi MPH MD³

¹Tulane University, School of Medicine, ²Tulane University, School of Public Health and Tropical Medicine, Center for Youth Equity, ³Tulane University, School of Medicine, Center for Youth Equity

Background/Purpose: Major metropolitan cities in the US suffer from disproportionate rates of firearm violence, however, the structural and social factors contributing to firearm-related homicides (FH) in these areas is poorly defined. How adequate housing supply and affordability in major US cities contribute to the current gun violence epidemic is not well understood. The goal of this study was to determine how measures of housing availability affect the incidence of FH. We hypothesized that measures of housing instability would be associated with higher rates of FH in major US metropolitan cities. Methods/Approach: This cross-sectional analysis evaluated the largest 51 US metropolitan statistical areas (MSAs) using data from 2021. Measures of housing instability included affordable/available rental homes for < 50% of average median income (AMI) obtained from the National Low-Income Housing Coalition (NLIHC). Data on the number of residents with income >30% of the AMI was also obtained from NLIHC. Data providing a point-in-time estimate of homelessness was obtained from the Housing and Urban Development Continuum of Care Program. The National Housing Preservation Database provided the size, number, and funding for all current, federally subsidized housing projects. Firearm homicide mortality rates were obtained from the Centers for Disease Control. Spearman Rho and linear regression were performed. Results/Outcome: On Spearman Rho, shortage of affordable/available rental homes for <50% of AMI was associated with more FH (r= 0.36, p<0.05). Number of individuals with income >30% of the AMI (r=-0.28, p=0.03) was associated with less FH. Number of government housing units (r=0.31, p=0.04) and federal housing subsidies (r=0.36, p=0.01) were associated with FH. Overall homelessness (r=0.30, p=0.31) was not associated with FH. On linear regression, a shortage of affordable and available rental homes for < 50% average median incomes households (=0.61, OR:1.84, 95%CI: 0.35-0.87, p<0.001) and income less than 30% of the median (=0.43, OR:1.54, 95%CI: 0.17-0.69, p=0.002) were associated with firearm homicides. Conclusion/Implications: Housing instability contributes to FH in major US metropolitan cities. Income disparities also contribute to the firearm epidemic. Public health intervention aimed at mitigating structural factors such as housing instability and income inequality may help decrease the number of FH in major US cities.

3. Getting at the root: The role of structural racism on youth homicide

Katherine P. Theall PhD¹, Julia Fleckman PhD¹, Samantha Francois PhD², Lexie Ornelas MPH¹, Charles Branas PhD³, Joseph Constans PhD¹, Sharven Taghavi MPH MD⁴

¹Tulane University, School of Public Health and Tropical Medicine, Center for Youth Equity, ²Tulane University School of Social Work, Center for Youth Equity, ³Mailman School of Public Health, Columbia University, ⁴Tulane University, School of Medicine, Center for Youth Equity

Background/Purpose: While recent studies have shown that structural racism impacts violent injury, how racism impacts youth violence specifically is poorly understood. The current study examines relationships between two markers of structural racism—neighborhood police encounters and racial-income residential segregation on youth homicide rates in New Orleans, Louisiana—a city with one of the highest rates of violence in the world. Methods/Approach: This secondary, ecologic study was conducted among New Orleans neighborhoods (defined as census tracts), with data from publicly available data from the New Orleans Police Department (2018), the New Orleans Coroner's Office (2015-2021), and the American Community Survey (ACS), as well as vital statistics data from the Louisiana Department of Health (2017-2018). We examined two markers of structural racism-1) racial and income segregation with the Index of Concentration at the Extremes (ICE) from ACS 5-year survey estimates 2014-2018 and 2) the rate of stop-and-frisk police encounters (by race) per 1,000. Analyses include both a longitudinal examination of youth (<18 years) homicide rates and kernel density estimates from coroner's data and a cross-sectional for vital statistics data, both with linear regression and accounting for spatial autocorrelation of both homicide rates and exposures across contiguous neighborhoods. Results/Outcome: Geographically, we observed substantial clustering by neighborhood in the rates of youth homicide across the city, and by age (< 18 years vs. 18-25 years). The average rate of police stop-and-frisk encounters and juvenile violations cited were more than twice as high for Black individuals compared to their White counterparts (4.02 vs. 1.28 per 1000, p< 0.001) and for black youth, all stop-and-frisk encounters were among Black youth. Even after accounting for concentrated disadvantage of the neighborhood, there were nearly 3 additional cases of youth homicide per 1,000 based on vital statistics in neighborhoods with medium levels of racial-income residential segregation (aOR=2.97, 95% CI=2.12-4.16) and approximately 9 additional cases for neighborhoods with high levels of segregation (aOR=8.84, 95% CI=4.50-17.34) compared to neighborhoods with low levels of segregation. There were 1.5 additional cases in neighborhoods with high rates of stop-and-frisk (aOR=1.43, 95% CI=1.07-1.91). Examining gun-related homicides over time, both racial-income segregation and stop-and-frisk rates were significantly associated with increased levels of youth homicide over time, with a greater impact among youth <18 years versus those 18-25 years. Conclusions/Implications: Policy and programmatic interventions focused on addressing forms of structural racism at the neighborhood level may help mitigate the epidemic of youth violence and racial inequities in youth violence.

Symposium 4: Experiences with handguns among rural adolescents: A call for tailoring firearm injury prevention efforts to rural settings

November 2, 8:00 - 9:30 AM (Sheraton I)

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Elizabeth Weybright PhD1, Kimberly Dalve MA2,3, Emma Gause MS MA3,4

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Symposium Summary: Rates of death by firearms are higher in rural, compared to urban communities. Compared to other ages, adolescence is a critical developmental period as behaviors developed during this time are often carried into adulthood. However, the experiences and voices of rural adolescents are often ignored and only starting to emerge related to handguns. This symposium builds on this growing literature by bringing together an interdisciplinary team of researchers and presenters to broaden our understanding of how rural adolescents engage with handguns to inform injury prevention efforts. The first presentation, titled "Handgun Experiences and Behaviors among Rural Adolescents: A Mixed Methods Study" will present data from a contemporary sample of rural adolescents enrolled in a 4-H Youth Development program to understand their experiences with handguns among their community, family, and peers. By integrating both quantitative and qualitative data, findings indicated handguns were often present in the adolescents' households and that youth demonstrated a shared understanding of acceptable and unacceptable handgun behaviors that aligned with state law. The second presentation, titled "Bullying and Handgun Carrying Among Youth Growing Up in Rural Areas" identifies the association between bullying and handgun carrying over 6-12th grade using data from the Community Youth Development Study, a community-randomized controlled trial of the Communities That Care prevention system in 24 rural communities. By leveraging longitudinal data, study findings suggested an association such that adolescents who used or both used and experienced bullying were more likely to carry a handgun compared to those who had not experienced nor used bullying. The final presentation, titled "Reflections on Firearm Exposure and Experiences Among Young Adults Who Grew Up in Rural Areas" also uses data from the Community Youth Development Study but from a later wave where participants were approximately 28 years old. By engaging young adults about their current and past behaviors, study findings suggest the lived experience of many young adults growing up in rural communities includes exposure to both firearm suicide and firearm assault. Findings presented in this symposium will add to the growing literature on handgun experiences, behaviors, and correlates among adolescents in rural communities. This is an important step in preventing firearm-related injury prevention approaches and how they need to be tailored to rural communities.

Learning Objectives:

- To identify rural adolescents' perceptions of acceptable/unacceptable handgun behaviors.
- To identify the association between using or experiencing bullying and subsequent handgun carrying among rural adolescents.
- To identify experiences with handguns and handgun-related violence both as young adults and adolescents' growing up in rural areas.

Symposium Presentations:

1. Handgun experiences and behaviors among rural adolescents: A convergent mixed methods study Elizabeth Weybright PhD¹, Ashley Hall PhD², Alice M. Ellyson Ph³, Gary Varrella PhD⁶, Margaret R. Kuklinski PhD७, Julia P. Schleimer MPH³, Sabrina Oesterle PhD⁰, Kimberly Dalve MA³, Ali Rowhani-Rahbar MD MPH PhD³,

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University of Washington, ⁹Southwest Interdisciplinary Research Center, School of Social Work, Arizona State University

Background: Firearm injury is the leading cause of death in adolescence, and rural communities are especially at risk. A growing body of research addresses factors associated with firearm injury, such as handgun carrying, among rural adolescents by identifying patterns, correlates, and consequences. Rural areas have unique attributes impacting how adolescents engage with handguns. Fully understanding rural adolescent handgun engagement requires qualitative data to gather rich description. The current study, Youth Experiences in Rural Washington: Research on Firearm Safety, used a qualitatively-oriented convergent mixed methods design to understand the cultural context of handguns among rural adolescents. Methods: The project used a community-based participatory research approach leveraging Washington State University Extension as partners to understand handgun behaviors among adolescents, their family, peers, and community. The sample included 93 adolescents between 13- and 18-years old living in rural Washington state and enrolled in Extension's 4-H Youth Development program. Adolescents completed a survey and semi-structured focus group/interview. Adolescents averaged 15.7 years old, were 52.7% female, 92.5% White (could select multiple), 17.2% resided in a Frontier and Remote area, and 47.3% enrolled in 4-H Shooting Sports. We separately analyzed qualitative and quantitative data and then integrated for broader inferences. Results: Over half (55.9%) of adolescents ever carried a handgun and the average age of first carry was 10.9 years old (SD=3.1). Thematic results identified situations where handgun carrying was and was not acceptable. Across family, peers, and community contexts, acceptable carrying behaviors included for a specific purpose (e.g., recreation, self-defense, protection) and in accordance with state law (e.g., licensed, adult supervised). Unacceptable behaviors included in public spaces (e.g., school), not in accordance with state law, and to show off or harm others. Most adolescents reported a handgun was kept in their home (81.7%), 21.1% of whom reported the handgun was unsecured. A quarter (24.7%) reported their peers carried a handgun in the past year and 18.3% felt it would be very or sort of easy to borrow a handgun from someone in their community. Conclusions: Findings suggest rural adolescents have an understanding of acceptable and unacceptable handgun behaviors consistent with state law and rural cultural norms. Perceived access to firearms was higher within adolescents' household compared to their community or peers. Firearm injury prevention efforts should be tailored to rural settings to account for and build on the important role firearms play in rural families and leverage trusted community partners, such as Extension and 4-H.

2. Bullying and handgun carrying among youth growing up in rural areas

Kimberly Dalve MA^{1,2}, Alice M. Ellyson PhD^{2,3,4}, Emma L. Gause MS MA^{2,5}, Julia P. Schleimer MPH^{1,2}, Margaret R. Kuklinski PhD⁶, Sabrina Oesterle PhD⁷, John S. Briney MA ⁸, Elizabeth H. Weybright PhD⁹, Ali Rowhani-Rahbar MD MPH PhD^{1,2}

¹Department of Epidemiology, University of Washington, ²Firearm Injury and Policy Research Program, University of Washington, ³Department of Pediatrics, University of Washington, ⁴Center for Child Health, Behavior, and Development, Seattle Children's Research Institute, ⁵Center for Climate and Health, Boston University School of Public Health, ⁶Social Development Research Group, School of Social Work, University of Washington, ⁷Southwest Interdisciplinary Research Center, School of Social Work, Arizona State University, ⁸Social Development Research Group, School of Social Work, University of Washington, ⁹Department of Human Development, Washington State University

Background: Adolescents who experience or use bullying are at increased risk of interpersonal and self-directed harm. Experiencing or using bullying may lead to weapon carrying, including firearms, among youth, which is a well-known marker for violence and increases the risk of physical fighting, injury, and hospitalizations. The association between bullying and weapon carrying may be particularly strong among youth who both experience and use bullying (i.e., bully-victims). However, most prior research on these associations has been cross-sectional and among urban youth. The prevalence of both experiencing bullying and carrying a handgun are higher among rural adolescents, and rural youth may have different patterns, motivations, and circumstances for handgun carrying such (e.g., hunting, shooting sports). The current study examined the association of using and experiencing bullying with handgun carrying among youth growing up in rural areas using a longitudinal sample of rural youth. **Methods:** Data are from the Community Youth Development Study, a community-randomized controlled trial of the Communities That Care prevention system in 24 rural, incorporated towns in 7 states starting in 2003/2004 when participants were in grade 5. We used data from the 12 control communities to avoid confounding by intervention (n=2,002). Bullying

status in each grade was categorized as neither experienced nor used bullying; experienced bullying only; used bullying only; and used & experienced bullying. The outcome was handgun carrying in the subsequent wave. We estimated the association between bullying and handgun carrying over 6-12th grade using population-average generalized estimating equations with logistic regression. **Results:** Compared to youth who neither experienced nor used bullying, we found that youth who used bullying were 1.63 (95% CI: 1.18-2.26) times as likely to report handgun carrying, and youth who both experienced and used bullying were 1.54 (95% CI: 1.18-2.01) times as likely to report handgun carrying in the following wave. Youth who experienced bullying only were no more likely to carry a handgun than those who did not experience or use bullying (OR: 1.02; 95% CI: 0.81-1.29). **Conclusions:** To our knowledge, this is the first longitudinal study of handgun carrying as the outcome of experiencing and using bullying among youth in rural areas. Youth who used bullying or both used and experienced bullying were more likely to carry a handgun compared to youth who had no experience with bullying. This understanding can inform bullying prevention programs to prevent violent injury and harm via reductions in handgun carrying in rural areas.

3. Reflections on firearm exposure and experiences among young adults who grew up in rural areas

Emma Gause MS MA^{1,2}, Alice M. Ellyson PhD^{1,3,4}, Sabrina Oesterle PhD⁵, Margaret R. Kuklinski PhD⁶, Elizabeth H. Weybright PhD⁷, John S. Briney MA⁶, Kimberly Dalve MA^{8,1}, Julia P. Schleimer MPH^{8,1}, Ali Rowhani-Rahbar MD MPH PhD^{8,1}

¹Firearm Injury and Policy Research Program, University of Washington, ²Center for Climate and Health, Boston University School of Public Health, ³Department of Pediatrics, University of Washington, ⁴Center for Child Health, Behavior, and Development, Seattle Children's Research Institute, ⁵Southwest Interdisciplinary Research Center, School of Social Work, Arizona State University, ⁶Social Development Research Group, School of Social Work, University of Washington, ⁷Department of Human Development, Washington State, ⁸Department of Epidemiology, University of Washington

Background: Rates of firearm-related death are higher in rural areas compared to urban. Evidence suggests youth in rural areas are more likely to carry handguns, and those who report carrying have higher risk of engaging in physical violence. Firearm ownership is more common in rural households and firearms are an important facet of life among many US families. While handgun carrying is associated with other risk behaviors, positive firearm interactions may also promote protective prosocial bonds with friends and family. Understanding opinions about firearm experiences among adults who grew up in rural areas is necessary for preventing firearm-related harm in a culturally appropriate manner. Methods: The Community Youth Development Study (CYDS) is a cluster-randomized study of the Communities that Care intervention and included a longitudinal grade cohort survey which enrolled 4427 youth in 24 rural communities across seven states when respondents were in grade 5 (2003/2004). The most recent survey wave was administered in 2021 when respondents were approximately 28 years old, and asked the adult respondents about experiences with, reflections on, and exposure to firearms during adolescence, and their current handgun carrying behavior. Results: The 2021 survey response rate was 82.1%. 17.8% of respondents ever reported carrying a handgun in earlier survey waves during adolescence, and 12.9% of respondents carried a handgun in the latest wave. 65% of current carriers did so "for protection against strangers." 49.8% of respondents reported living in a home with a firearm growing up before 18 years old, 15.1% reported that handguns were somewhat or extremely important in their family's life, and 6.0% reported having somewhat or extremely negative experiences with handguns. 0.5% (n=22) of respondents reported ever sustaining a gunshot wound, and 23.1% reported knowing someone personally who had sustained a gunshot wound; 10% of gunshot wounds were intentional self-inflicted, 38% assault, 33% unintentional/negligence, and 17% unknown/undetermined. Conclusions: Firearm ownership in households where respondents grew up was common and respondents described their firearm experiences during adolescence as mostly positive, though handguns had varying importance in their early lives. Almost a quarter of respondents knew someone personally or themselves had sustained a firearm injury during their lifetime. The lived experience of many young adults growing up in rural communities includes exposure to both firearm suicide and firearm assault. Firearm injury prevention efforts among youth in rural areas could benefit from culturally tailored strategies addressing all facets of firearm harm.

Symposium 5: Priorities for firearm research after Bruen

November 2nd, 2:30P.M-4:00 P.M. (Main Ballroom) {Back to table of contents}

Eric Ruben JD¹, Rosanna Smart PhD², Ali Rowhani-Rahbar MD, MPH, PhD³

¹Southern Methodist University Dedman School of Law, ²RAND Corporation, ³University of Washington

Symposium Summary: On June 23, 2022, the Supreme Court issued a landmark Second Amendment opinion in New York State Rifle & Pistol Association, Inc. v. Bruen (hereafter, Bruen). The Court struck down New York State's concealed carry permit regime and announced for the first time the constitutional right to carry firearms outside of the home. The Bruen majority rejected the two-step framework that lower courts used to analyze Second Amendment challenges after District of Columbia v. Heller (2008), casting doubt on more than a decade's worth of Second Amendment jurisprudence. The pre-Bruen consensus methodology considered both the history of firearms regulation and modern public safety needs. The Bruen court critiqued the lower courts' reliance on the latter, instead announcing that Second Amendment decisions should be based solely on textual and historical analyses. Particularly, the Supreme Court held that the government must point to analogous regulations from the era of the Second Amendment's enactment in 1791, or perhaps from the era of the Fourteenth Amendment's enactment in 1868, to justify the constitutionality of modern-day gun regulations. Bruen thus calls into question the constitutionality of all firearms regulation, not just the public carry permit regime that brought the issue before the Court. In the months since Bruen, courts have held that various firearm laws, previously upheld in the courts, violate the Second Amendment. These post-Bruen decisions holding gun laws unconstitutional can be paired with other post-Bruen decisions reaching the opposite conclusion regarding the same policies—a stark demonstration of the tremendous confusion about the Second Amendment in the lower courts. In the meantime, firearm violence rates in the United States have continued to increase, and there is a continuing need for solutions. After Bruen, however, any solutions must comport with an uncertain Second Amendment jurisprudence. While recent work argues that there remains an important role for science in guiding gun policy decisions, there may now be different priorities regarding where research efforts could or should be focused. The changed landscape, in turn, raises novel and profound questions for researchers, which is the focus of this symposium. This symposium will present findings of three projects all centrally focused on identifying firearm research priorities following Bruen using a combination of qualitative, quantitative, and survey methodologies. This symposium will provide a landscape of pressing firearm research questions post-Bruen across various scholarly disciplines.

Learning Objectives:

- To identify which types of gun laws have been most litigated after Bruen, and which have higher likelihood of being struck down or requiring adjustments.
- To understand the types of gun laws where courts are reaching divergent opinions and explain potential reasons for this divergence.
- To learn the perspective of scholars with expertise in gun violence and gun policy on priority research questions after Bruen.

Symposium Presentations:

1. Systematic and qualitative analysis of Second Amendment opinions after Bruen Eric Ruben JD¹

¹SMU Dedman School of Law

Statement of Purpose: To better understand which gun laws have been most litigated after Bruen, which gun laws have been struck down, where litigation is occurring, and why courts have diverged in their opinions, we systematically tracked, categorized, and reviewed post-Bruen opinions. **Methods/Approach**: We conducted a search on the Westlaw legal database for case opinions that involved the terms "Bruen" and "Second Amendment" and were decided between June 23, 2022 (the date the Bruen decision was issued) and March 14, 2023 (the date we ran our search). Our search returned 285 opinions, of which we determined 75 were false positives, leaving 210 opinions. Some of those opinions addressed multiple challenged provisions. Our final data set included 336 Second Amendment challenges. The list was sorted by opinion date and coded across variables including: state or federal court; trial or appellate court; state or federal circuit in which the court sits; civil or criminal case; if civil, whether the

case included an organizational plaintiff; provision challenged; category of challenged provision; whether the requested relief was granted, granted in part, or denied; and whether the case cited to Heller's list of presumptively lawful regulations. After identifying areas in which courts have reached opposite outcomes on Second Amendment cases, we conducted a deeper qualitative analysis of those opinions. The goal in this respect was to isolate areas of historical and methodological disagreement. **Results**: Second Amendment challenges to gun laws have succeeded with greater frequency in the months after Bruen than in the years prior to it. At the same time, successful Second Amendment challenges can be paired with as many or more unsuccessful Second Amendment challenges regarding the same policies. Qualitative analysis highlights ways in which Bruen's novel historical-analogical method has failed to constrain courts to reach similar outcomes in similar cases. Rather, courts have applied different methodologies within the Bruen framework to reach different outcomes. Among other things, courts have diverged with respect to the level of generality at which to consider historical sources, the narrowness of the textual reach of the Second Amendment's twenty-seven words, and how to measure the self-defense impact of firearm restrictions. **Conclusions**: Qualitative case analysis highlights uncertainty and disagreement in Second Amendment jurisprudence after Bruen. These areas of jurisprudential disagreement call for further academic research and scholarship. Ultimately, Bruen's long-term impact on gun policy may turn on how these disagreements are resolved.

2. Factors associated with trial court decisions deeming firearm regulations unconstitutional: An empirical analysis of post-Bruen Second Amendment opinions Rosanna Smart PhD¹

¹RAND Corporation

Statement of Purpose: To provide preliminary insights on types of gun laws most likely to be struck down or require adjustments because of Bruen, we quantitatively analyzed post-Bruen case law to identify patterns and characteristics associated with higher likelihood that a challenged regulation would be deemed unconstitutional under the Bruen framework. Approach: Based on originally collected and coded data for trial court case opinions decided between June 23, 2022 and March 14, 2023, we identified 190 cases involving 308 Second Amendment challenges. We characterized the composition of these challenges in terms of timing, the state or federal circuit in which the court sits, the category of challenged provision, and the outcome (i.e., whether the requested relief was granted, granted in part, or denied). We then estimated multivariate linear probability models to assess provision characteristics predictive of a judgment granting relief. Results: Of the 308 challenges, most were from criminal cases (n=188, 61%) and heard in federal court (n=306, 98%). Broad law categories most-commonly challenged were restrictions on who could possess or purchase firearms (n=147, 48%), designation of sensitive places (n=66, 21%), and restricting sales of types of firearms, ammunition, or ancillary components (n=29, 9%). Overall, 46 challenges (15%) were granted relief in full and 26 (8%) were granted relief in part. In multivariate analysis, challenges to provisions related to public carry processes and sensitive places had the highest probability of being granted relief. In contrast, challenges to provisions involving "when" restrictions (almost all of which were related to firearm possession while committing a crime), official actions (primarily sentence enhancements and bail conditions), or prohibited possessors had lower probability of a successful challenge. Within the prohibited possessor category, however, there were important nuances. Distinguishing between prohibitions for felons versus other groups (e.g., domestic violence misdemeanants, minors) showed that challenges related to firearm prohibitions for felons were particularly unlikely to be granted relief, with significantly higher probability of relief granted for challenges to other prohibited classes of individuals. Conclusions: In the approximately nine months following the Bruen decision, there has been a substantial number of Second Amendment challenges. While less than one-quarter of provisions that have been challenged in trial courts have been granted relief, several categories of law seem particularly likely (or unlikely) to be deemed unconstitutional. Implications for firearm policy evaluation research, as well as for research on judicial decision-making in the post-Bruen versus post-Heller era, will be discussed.

3. Firearm research priorities after Bruen: The perspective of experts Ali Rowhani-Rahbar PhD¹

¹University of Washington

Statement of Purpose: To elicit direct information from scholars with expertise in gun violence and gun policy regarding their perspectives on priority research questions in a post-Bruen landscape. Approach: We conducted a survey of firearm researchers across various disciplines including criminology, economics, history, law, medicine, public health, public policy, and sociology. We conducted a systematic search of the Social Science Citation Index. From this list, we searched for researchers whose publications in recent years satisfied either of the following conditions: (1) corresponding author of a publication with 50 or more citations; or (2) author on more than five relevant publications. We reviewed the publication of these authors to determine whether they had expertise that could help guide research project ideas specific to our study. We supplemented this list with additional researchers affiliated with organizations that have conducted substantive research related specifically to Bruen. We used REDCap to solicit input regarding research needs from the identified experts (n=75). The survey contained one question that asked experts to provide three research questions which funders should prioritize after the Bruen decision. Survey invitations were sent to participants in May 2023 with two reminder emails. Results: We received 28 completed survey responses. Cross-cutting research priorities entailed broader questions related to: (1) historical policy implementation, social norms, and behaviors related to firearms and firearm regulations; (2) legal research inquiries to clarify outstanding questions from Bruen regarding how to scope historical analogues, consider local governance in light of state law changes, understand constitutional law in relation to Bruen, and advance scientific understanding of judicial decision-making related to Second Amendment challenges based on Bruen case analysis; (3) descriptive empirical questions to assess changing public attitudes and norms, firearm markets, firearm use and other behaviors, and firearm violence preceding and subsequent to Bruen; (4) descriptive empirical questions to characterize defensive gun use and the full social costs and benefits of firearm prevalence and firearm violence exposure; and (5) causal inference research to understand the effects of laws reversed or threatened by Bruen, or of non-statutory or non-firearm-specific interventions that might effectively reduce gun violence. Regarding specific policy areas, several research questions within "Where", "Who", and "What" categories of regulations and the effects of Bruen on policing and prosecutorial actions emerged as priorities and will be presented in this symposium. Conclusions: This survey of the experts provides a landscape of pressing firearm research questions post-Bruen across various scholarly disciplines.

Symposium 6: Mass shootings vs the other 97% of firearm deaths: Findings from the Northwestern Juvenile Project

November 2, 2:30 - 4:00 PM (Sheraton I)

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Linda Teplin PhD1, Nicholas S Meyerson MA1,2, Sara E. Thomas PhD1

¹Department of Psychiatry and Behavioral Sciences, Northwestern University Feinberg School of Medicine, ²Department of Health Policy and Management, Johns Hopkins Bloomberg School of Public Health

Symposium Summary: Conversations about firearm violence rivet our society. News about mass shootings dominate the front page and public conversation. Yet, mass shootings comprise only 3% of firearm-related homicides and 1.4% of all firearm deaths. Moreover, the media highlights violence in high-income communities but underreports gun violence that disproportionately affect persons of color who live in under-resourced communities. As a result, the public may oversimplify which policies, legal changes, and preventive interventions are most needed. Moreover, policies that reduce firearm violence in high-income communities may be prioritized over policies to help those at greatest risk. One population at great risk for both perpetration of and injury by firearm violence is youth who have been involved in the justice system. Yet, few studies have examined firearm violence in this population as they age, or how their experiences with firearms might affect their children. We address this key omission in the literature using new data from the Northwestern Juvenile Project (NJP), the longest prospective, longitudinal study of firearm violence in youth after detention. Our sample includes 1,829 youth who were randomly selected at intake to the Cook County Juvenile Temporary Detention Center in Cook County, Illinois between 1995 and 1998. To ensure adequate representation of key subgroups, the sample was stratified by sex, race/ethnicity (Black, non-Hispanic white, Hispanic, other), age (10-13 years or ≥14 years), and legal status (processed in juvenile or adult court). Youth were interviewed in detention and up to 13 times over the ensuing 16 years, wherever they were living—in the community or in a correctional facility. Our newest waves of data come from the Northwestern Juvenile Project: Next Generation; a study of 317 of our original participants and their oldest biological child living with them, ages 10-18 years. This symposium includes three papers: (1) Victims as Well as Perpetrators: Firearm Injury and Death 25 Years after Juvenile Detention (2) Firearm Involvement of Parents and Their Adolescent Children: Intergenerational Patterns of Firearm Violence (3) "If you go out, you are threatened by guns...": Teens in High-risk Communities

Learning Objectives:

- Describe how incarceration may increase risk for firearm injury and death.
- Identify the types of firearm exposures that "trickle down" into the next generation.
- Understand how young people navigate threats of firearm violence in their neighborhoods.

Symposium Presentations:

1. Victims as well as perpetrators: Firearm injury and death 25 years after juvenile detention

Nanzi Zheng MA¹, Nicholas S Meyerson MA^{1,2}, Leah J. Welty PhD^{1,3}, David A. Aaby MS³, Karen M. Abram PhD ¹, Linda A. Teplin PhD¹

¹Department of Psychiatry and Behavioral Sciences, Northwestern University Feinberg School of Medicine, ²Department of Health Policy and Management, Johns Hopkins Bloomberg School of Public Health, ³Department of Preventive Medicine, Northwestern University Feinberg School of Medicine

Background/Purpose. More than 100 people die from firearms each day. Even more people are injured by firearms. Most studies of firearm violence among youth examine youth in the general population. The few studies that examine at-risk youth have focused on the perpetration of firearm violence, rather than firearm victimization. The current study addresses this omission by: (1) investigating the incidence rates of firearm injury and death in youth involved in the juvenile justice system; and (2) comparing the rates of firearm death in youth involved in the juvenile justice system with youth in the general population. **Methods/Approach.** We used self-reported firearm injuries

across 16-years of interviews and death records through July 2020, 25 years after the study began to assess firearm injury and death among our population. To compare this to firearm deaths in the general population, we obtained counts of firearm deaths in Cook County from comparable demographic groups from the Illinois Department of Public Health. Results/Outcome. By July 2020, 4.7% participants (n = 86) had been killed by a firearm (74 homicides, 7 suicides, 4 legal interventions [killed by police], and 1 accidental death). By the 16-year follow-up interview, 13% of participants (n = 237) had been injured or killed by a firearm. Among Black and Hispanic males, over a quarter were injured or killed (n = 156/575 and n = 103/387, respectively). Compared with non-Hispanic white males, Black males had 4.1 times (95% CI, 2.5-6.8) and Hispanic/Latinx males had 3.2 times (95% CI, 1.9-5.5) the odds of being shot by firearms. Compared with youth in the general population, the incidence rates of firearm homicide in both Black and Hispanic/Latinx males were significantly higher throughout adolescence and young adulthood. For instance, among Hispanic males in our sample, youth aged 15 to 19 had over 10 times the risk of being killed by a firearm (95% CI, 7.5-14.9), while youth aged 20 to 24 had 9 times the risk (95% CI, 6.4-12.7) compared to demographically similar peers. Black males aged 15 to 19, had nearly 6 times the odds of being killed by a firearm than those in the general population (95% CI, 4.4-7.0). Conclusions/Implications: Although firearm mortality generally decreases as youth age, youth involved in the juvenile justice system continue to be at high risk. Our findings demonstrate the need for allocating resources to victims of firearm violence, especially for justice-involved youth.

2. Firearm involvement of parents and their adolescent children: Intergenerational patterns of firearm violence

Nicholas S Meyerson MA^{1,2}, Leah J. Welty, PhD¹, Karen M. Abram PhD ¹, Nanzi Zheng MA¹, Sara E. Thomas PhD¹, David A. Aaby MS³, Linda A. Teplin PhD ¹

¹Department of Psychiatry and Behavioral Sciences, Northwestern University Feinberg School of Medicine, ²Department of Health Policy and Management, Johns Hopkins Bloomberg School of Public Health, ³Department of Preventive Medicine, Northwestern University Feinberg School of Medicine

Background/Purpose. Many studies of violence in youth have focused on family influences, (i.e., parenting style and childhood maltreatment). However, none has examined how parents' patterns of involvement with firearms influences that of their children. This omission is critical: adolescents whose parents engaged in antisocial behavior are more likely to develop these behaviors. Similarly, parents' early experiences are likely to influence subsequent attitudes and behaviors towards firearms, and, in turn, those of their children. We examined whether parents' patterns of firearm victimization and perpetration were associated with their children's involvement with firearms. Methods/Approach. Data on parents' history of firearm perpetration and victimization is from the Northwestern Juvenile Project. Data on parents' current firearm perpetration and victimization and firearm involvement of their children is from Northwestern Juvenile Project: Next Generation, an intergenerational study of firearm involvement. Analyses were based on 317 parent-child pairs. We used logistic regression to investigate the influence of parents' firearm involvement (independent variable) on that of their children (dependent variable). Results/Outcome. Nearly half of parents had ever perpetrated firearm violence (48.6%). Fewer were currently involved; only 1.3% had perpetrated firearm violence in the past year. Approximately one fifth had ever been victimized by firearms (19.9%), and none in the past year. Most children reported that they had seen a firearm (61.1%) and had been taught about firearm safety (79.1%). Only 15.2% of children reported a firearm in the home, but of those, 91.2% reported unsafe storage practices. More than 1 in 10 children reported that they had been victimized by firearms (11.7%), and 1 in 5 reported easy access to firearms (21.8%). Although not statistically significant, preliminary results suggest that children whose parents had perpetrated firearm violence may be more likely to be victimized by firearms (14.4% vs 9.6%; OR, 1.94 [95% CI, 0.92-4.09]). Among children whose parents had been victimized by firearms, 8.3% reported having been victimized by a firearm. Among children whose parents had not been victimized, rates were slightly higher but not statistically significant: 13.1% (OR, 0.56 [95% CI, 0.20-1.55]). Future analyses will consider how other parental factors, like recency of involvement or instruction on firearm safety might influence this relationship. We will also consider how peers and neighborhoods might influence firearm involvement. Conclusions/Implications: Children's firearm involvement may be influenced by multiple factors including peers, family, and community environments.

3. "If you go out, you are threatened by guns...": Teens in high-risk communities share their perspectives Sara E. Thomas PhD¹, Joeann M. Salvati MA¹, Karen M. Abram PhD¹, Linda A. Teplin, PhD¹

Background: Firearm violence has become an epidemic, disproportionately affecting teenagers who are Black and Hispanic, and those from the highest poverty communities. Although laws in most states prohibit juveniles from owning or carrying firearms without parental supervision, more than 5% of high school students reported carrying a firearm weapon in the past month. In this presentation, we ask: How do youth who are at high-risk for firearm injury navigate threats to safety in their communities? When and how do they decide to carry guns? **Methods/Approach**: Participants were drawn from Northwestern Juvenile Project: Next Generation. Based on their parent's lifetime firearm involvement, we drew a purposive sample of 48 youth, ages 13 to 18 years. Youth were interviewed using a semi-structured interview protocol which followed a base set of questions but used participant responses to guide follow-up questions. We asked youth to describe their neighborhoods, safety strategies, and exposure to and involvement with firearms. We used inductive thematic analysis (Willig, 2013) to identify recurring themes. Using these themes, we developed a codebook with definitions, inclusion criteria, and anchor examples for each of the codes, and then established reliability across three coders. Results/Outcomes: Youth described guns as an inevitable part of their neighborhoods—both a danger to their survival and a necessary tool for safety. Though most had not yet purchased a gun, most of them had intentions to do so once they could legally obtain a license. Young men reported feeling an abrupt escalation of risk from firearm violence as they hit adolescence. Their main challenge was avoiding gangs who might target them for recruitment or misidentify them as part of a rival gang. In response, they took efforts to make themselves look less threatening by walking alone, adjusting their appearance, adopting a calm demeanor, and "keep[ing] [their] head on a swivel". Though some received direct education from adults as to how to navigate their neighborhoods, most of their safety strategies came through their own experience and stories from peers and community members. Young women by and large did not report feeling directly threatened by firearms in their neighborhoods but expressed fear for their brothers and fathers at the hands of both community members and police. Conclusions/Implications: Despite the high risk for firearm injury, young men reported they have very few tools at their disposal in which to handle threats in their communities.

Symposium 7: Establishing a community-academic research collaborative: The Community Firearm Violence Prevention Network

November 2, 4:15-5:45 PM (Main Ballroom)

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Patrick M. Carter MD^{1,2,3}, Rebeccah L. Sokol PhD^{1,3,4}, Michael Wallace MPH⁵

¹University of Michigan Institute for Firearm Injury Prevention, ²Department of Emergency Medicine, School of Medicine, University of Michigan, ³School of Public Health, University of Michigan, ⁴School of Social Work, University of Michigan, ⁵Mint Project, George Washington University

Symposium Summary: Firearms deaths constitute an urgent public health crisis. Firearm violence is linked to social determinants, yet most interventions to date have focused on individual risk factors, rather than addressing structural and community factors. As such, there is an urgent need for research evaluating the efficacy of community-based interventions, especially participatory research that engages community organizations actively working to advance solutions. Given the lack of research over the past two decades, there is also a need to build greater capacity for conducting this research, while structuring research programs to have a transformative impact on scientific advancement that maximizes the NIH investment. In 2022, the NIH solicited applications to create a cooperative research network. The Community Firearm Violence Prevention Network (hereafter, "Network") consists of a centralized Coordinating Center (CC) and multiple research projects (RPs) testing the efficacy of phased (UG3/UH3) community-level prevention programs designed to prevent firearm violence, injury, and mortality. The CC and each of the RPs work collaboratively with one or more NIH Science Officers from several NIH Institutes, Centers and Offices. Network activities are accomplished with CC facilitation through four cores and their corresponding Workgroups: (a) Data/Methods; (b) Community Engagement; (c) Implementation/Economics; and, (d) Dissemination.

This symposium presents Network work in 3 areas: (1) Addressing the need to maximize the NIH investment by building research capacity in firearm prevention research and creating opportunities for Network data to have a transformative impact through knowledge generation and novel solutions to this public health problem. (2) The Data Harmonization Workgroup's iterative and consensus building process for standardizing measures across RPs. Standardized measures will promote innovative cross-project analyses, secondary analyses on data linked to other national datasets, and comparative analyses that will catalyze and advance scientific knowledge in this field. (3) The development of a Community Engagement Principles/Practices Charter in collaboration between community and academic representatives provides a framework to guide the integration of community engagement across all Network research activities; and is a model for the process of forming a collaborative community-academic partnership. In addition to describing this initial work of the Network, the symposium will highlight how this investment in a cooperative research network can serve to build research capacity, support innovative analyses that advance the field and have a synergistic impact, build space to engage trainees and new faculty, and advance this field of research and the range of effective community-based solutions to this public health problem.

Learning Objectives:

- Discuss how a research Network model combining individual research projects (RPs) and a coordinating center (CC) can enhance research activities and generate broader impact on the research landscape in the field of firearm injury prevention research.
- Demonstrate the process of data harmonization across Network research projects and the benefits of harmonization to achieving broader impact in the field.
- Demonstrate the process of developing best practices in community engagement through consensus building process and Network Charter development.

Symposium Presentations:

1. Greater than the sum of its parts: Fulfilling the NIH's vision for a Community Firearm Violence Prevention Network

Patrick M. Carter MD^{1,2,3,5}, Marc A. Zimmerman PhD^{1,3,5}, Gregory J. Sallabank MA^{1,5}, Rebeccah L. Sokol PhD^{1,3,4,5}, Community Firearm Violence Prevention Network⁵

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Background/Purpose: Firearm injuries constitute a major U.S. public health crisis, with increasing fatal/non-fatal injury rates. Scientific advances in firearm injury prevention have lagged behind those for other medical/injury diseases. While the recent allocation of federal research funding provides an opportunity to develop community prevention strategies that reduce injury and associated disparities, critical deficits remain in the capacity to conduct such research and the data needed to inform best practices. To address this deficit and advance this field of science, NIH recently funded the Community Firearm Violence Prevention Network, consisting of multiple staged research projects (RPs) supported/led by a centralized Coordinating Center (CC). In this paper, we detail the role of the CC and initial Network-wide results. Methods: We applied a process evaluation approach utilizing participant observation data from in-person and virtual meetings organized within a collaborative workgroup structure, and review of documents produced to advance/catalyze Network science (e.g., meeting agendas and notes, operating principles). Results/Outcome: In Year 1, the CC has utilized a consensus building approach to: (a) establish a broad Community Firearm Prevention Network consisting of three staged (UG3/UH3) research projects led by the CC with involvement of 32 investigators, 9 community partners, 17 research staff, 7 trainees and 6 NIH Officers across the Network; (b) created a Steering Committee chaired by an investigator external to the Network; (c) regularly convene workgroups (Data/Methods; Community Engagement; Implementation/Economics; Dissemination) to advance cross-Network activities; (d) provide in-depth technical assistance to Network RPs to enhance research design/procedures; (e) develop initial network products, including a steering committee charter, catalog of Network investigator expertise, authorship agreement, community charter, and harmonized data codebook; (f) support capacity building efforts through submission of two diversity supplements; (g) host a network-wide in-person conference; (h) establish the underlying repository architecture necessary for harmonized/integrated data analysis and data archiving; and, (i) produce early dissemination products to support RPs, including a website and podcasts. Conclusions/Implications: Employing a cooperative Network model consisting of research projects supported and led by a Coordinating Center addresses the key need to build research capacity in firearm prevention research and maximizes the NIH investment by ensuring that data/products emerging from the Network will have greater impact on advancing scientific knowledge and solutions to this public health problem than any single research project would be able to accomplish independently.

2. Advancing the science: Harmonizing data between network projects

Rebeccah L. Sokol PhD^{1,3,4,5}, Patrick M. Carter MD^{1,2,3,5}, Marc A. Zimmerman PhD^{1,3,5}, Gregory J. Sallabank MA^{1,5}, Mahum Farooqui MA^{1,5}, Community Firearm Violence Prevention Network⁵

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Background/Purpose: The lack of firearm research over the past two decades has resulted in critical data/knowledge deficits to inform prevention. Harmonizing measures and linking data across a research Network allows for integrated analyses comparing risk/protective factors for firearm outcomes across communities, as well as analyses comparing intervention approaches and the relative influence of moderating/mediating factors. Such data has the potential to address existing deficits and accelerate our understanding of prevention science. In this presentation, we describe the process of Network data harmonization. Methods/Approach: Our process evaluation of the data harmonizing workgroup employed the same methods noted in the overall Center evaluation of the iterative, consensus-building process to identify validated measures and adapt them for project populations. The workgroups voted to include/exclude measure(s) and assign them a designation: (a) Tier 1—standardized items required for inclusion; (b) Tier 2—Tier 1 measures where a special opt-out provided by NIH (either to not ask/modify); (c) Tier 3—considered optional, with at least two RPs standardizing items; (d) Tier 4—included by only one RP; and, (e) Tier

5—considered, but not harmonized. **Results/Outcome:** The Workgroup met bi-weekly (12/2022-6/2023), identifying key constructs/measures for answering cross-Network research questions and making novel contributions to the field. The CC identified construct domains/measures from RP proposals, RPs proposed new measures as they engaged in UG3 activities, and NIH/CC brought forward new constructs/measures that would offer important contributions to firearm injury prevention. Domains included: (a) demographics; (b) social determinants-of-health; (c) mental health; (d) substance use; (e) physical health; (f) violence exposures/behaviors; (g) firearm attitudes/behaviors; and, (h) protective factors. The Workgroup reviewed administrative data (e.g., address) to identify opportunities for linkage to other data (e.g., alcohol outlet density; neighborhood vulnerability indices). Across 8 domains, 61 measures were considered for harmonization, with 36 designated Tier 1, including 5 socio-demographic, 4 social determinants-of-health, 1 substance use, 4 mental health, 1 physical health, 11 violence, 7 firearm, and 3 protective factor measures. The Workgroup also harmonized 11 measures as Tier 2, 16 as Tier 3, and 10 as Tier 4. **Conclusions/Implications:** While complex, harmonization can be optimized with CC support/facilitation, regular meetings, and by employing a consensus building model. Standardizing Network measures will promote innovative cross-project analyses, secondary analyses on data linked to other national datasets, and comparative analyses that will catalyze/advance knowledge in this field.

3. Moving beyond partnerships: Building a charter for conducting community engaged research Michael Wallace MPH^{1,6}, Patrick M. Carter MD^{2,3,4,6}, Marc A. Zimmerman PhD^{2,4,6}, Gregory J. Sallabank MA^{2,6}, Teresa Neumann MA^{2,6}, Community Firearm Violence Prevention Network⁶

¹Mint Project, George Washington University, ²University of Michigan Institute for Firearm Injury Prevention, ³Department of Emergency Medicine, School of Medicine, University of Michigan, ⁴School of Public Health, University of Michigan, ⁵School of Social Work, University of Michigan, ⁶Community Firearm Violence Prevention Network

Background/Purpose: The Community Firearm Violence Prevention Network is designed to examine efficacy of community-level interventions to reduce firearm violence. As such, community engagement is central to research design, project implementation and outcome evaluation. Each RP is structured to be co-led by an academic and a community organization. Recognizing the disparities that exist between communities affected by firearm violence and the academic institutions conducting research, the CC identified the need to collaboratively establish a Charter outlining the principles/practices of conducting community-engaged research within the Network. This abstract describes the process and outcomes of the Charter development. Methods/Approach: The process evaluation for the Community Engagement Workgroup (CEW) followed the same steps as the Center evaluation. The CEW involved 16 academic and 9 community organization representatives affiliated with Network RPs. The CC facilitated workgroup meetings, employing a consensus-based decision-making model that respects individual viewpoints while striving to reach agreement among workgroup members. Initial principles, identified through consensus were drafted and circulated for review. In virtual meetings, breakout sessions and an advanced whiteboard tool were used to encourage dialogue and capture perspectives from across the workgroup. Principles and practices were synthesized into an initial Charter document that was reviewed and iteratively refined by Workgroup members. Results/Outcome: Following an initial in-person meeting, the workgroup met virtually over six months. Seven key domains emerged from the consensus process: (1) Co-creation and Shared Purpose of Research Activities; (2) Building Accountability and Trust; (3) Ensuring Local Relevance; (4) Mobilizing Assets and Promoting Lasting Change; (5) Co-dissemination of Findings; (6) Fostering Inclusive Engagement; and, (7) Collaborative Decision-Making Processes. Each domain encompassed 3-7 community-engaged principles. Examples include: Community and academic partners contribute to development of research questions and selection of study methods/outcomes (Principle 1); Linking research data with community/administrative data to contextualize understanding (Principle 3); Working towards sustainable and scalable interventions (Principle 4); Sharing authorship on reports and scientific manuscripts (Principle 5); Overall 35 community engagement practices were established and adopted across the seven domains. The CEW Charter was reviewed/approved by the through Network Steering Committee. Conclusions/Implications: The Charter, established through a collaborative consensus process, is a framework to guide the integration of community engagement across all Network research activities; and is a model for the process of forming a collaborative community-engaged network. The agreed upon principles/practices provide a measurable approach and through evaluation and case studies will facilitate additional learning opportunities and continual improvement in conducting community-engaged research.

Symposium 8: Advances in the measurement of CVI impact: Evidence from three evaluations in Chicago

November 3, 8:00 - 9:30 AM (Main Ballroom)

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Susan Burtner PhD¹, Dallas Wright MA¹, Marisa Ross PhD¹

¹Center for Neighborhood Engaged Research & Science (CORNERS), Institute for Policy Research, Northwestern University

Symposium Summary: In the last decade, Community Violence Interventions (CVIs) have seen increased interest from funders, policymakers, and researchers from across the United States. Recent evaluations of such programs suggest promising results on key outcomes such as firearm victimizations and arrests for violence. However, the decidedly non-random nature of gun violence and holistic program models pose several challenges to rigorous program evaluation. CORNERS employs a community engaged approach to CVI program evaluation, partnering with local organizations in Chicago to develop innovative quasi-experimental and mixed methods research designs to assess CVI program impact with fidelity to lived experience. This symposium presents distinct evaluation approaches for three diverse CVI programs in Chicago: Communities Partnering 4 Peace (CP4P), a consortium of CVI programs; Chicago CRED, a phased programming model; and FLIP, a place-based strategy that recruits street-involved or connected community members as apprentice Peacekeepers. Researchers will present the applications, challenges, and results from a quasi-experimental research design assessing program impact on individual victimizations and arrests, a qualitative study exploring program impact on positive outcomes such as social capital, and a mixed methods approach to evaluating the impact of an innovative place-based presentation strategy. Together, these approaches seek to broaden the scope of CVI program evaluation to a more holistic understanding of impact and address challenges facing violence prevention researchers.

Learning Objectives:

- Identify methodological, especially mixed-method, approaches appropriate for addressing challenging quasi-experimental designs.
- Examine the assessment of positive outcomes of interest in gun violence research, such as social capital and levels of trust, as well as alternative prevention strategies, to better contextualize what contributes to successful CVI programming.
- Introduce innovations in CVI program operations, and how such innovations can inform the future of CVI.

Symposium Presentations:

1. Evaluating impact: Applications and challenges of quasi-experimental research designs for assessing the effect of street outreach on reducing gun violence

Susan Burtner PhD1, Dallas Wright MA1, Marisa Ross PhD1

¹Center for Neighborhood Engaged Research & Science (CORNERS), Institute for Policy Research, Northwestern University

Background/Purpose: An enduring question in street outreach is one of the most difficult ones to answer: "Does it reduce violence?" The decidedly non-random nature of gun violence makes assessing impact extremely difficult, and further, quasi-experimental research designs grapple with the stronger assumptions needed to determine causal effects. Overall, the field has produced mixed results of the impact of outreach on gun violence at varying levels of aggregation. Methods/Approach: This session will present results from a quasi-experimental research design with several mixed methods analyses that assess (a) the impact of street outreach work on individual (participant) level involvement in gun violence and (b) neighborhood levels of gun violence. Analyses will focus on one ongoing effort in Chicago, Communities Partnering 4 Peace (CP4P), for two main outcomes of interests: arrests for violent crimes and shooting victimizations. Results/Outcome: At the individual-level, percent changes in arrests for violent crimes decrease after 18 months, and shootings victimizations see a consistent decrease at both 12 months and 18 months post-CP4P programming. At the neighborhood level, results from a comparative interrupted time series and synthetic

control group design find that rates of gun violence were lower in several CP4P communities that had active street outreach efforts than in respective synthetic control areas. Additional analyses that explore other regression predictors, such as the number of CVI workers operating in a community area, offer additional insights into possible mechanisms explaining the successes and limitations of these efforts in Chicago. **Conclusions/Implications:** The non-random and clustered nature of gun violence leads to numerous evaluation and research design challenges. Our analyses offer some unique approaches for overcoming these challenges and, in so doing, provide updated insights into the successes and limitations of outreach efforts as well as possible ways for more accurately measuring and assessing the impact of such programs on the lives of participants and their neighborhoods.

2. Identifying the effects of changing social ties on perceived safety among high-risk male participants in a community violence intervention program

Dallas Wright MA¹, Azucena Lopez MPH¹, Naomi Ostrander¹, Kevin Barry PhD(c)², Akeem Shepherd¹, Andrew Papachristos PhD³

¹Center for Neighborhood Engaged Research & Science (CORNERS), Institute for Policy Research, Northwestern University, ²Department of Sociology, Northwestern University, ³Department of Sociology, Center for Neighborhood Engaged Research & Science (CORNERS), Institute for Policy Research, Northwestern University

Background/Purpose: Cities across the nation have seen increased calls for Community Violence Interventions (CVI) that center local expertise while avoiding the harsh consequences of the criminal legal system. This study describes the experiences of participants in one such program in Chicago, IL: Chicago CRED. CRED reaches individuals at acute risk for gun violence involvement and recruits them into a phased program spanning 12-18 months that includes counseling, mentoring, educational assistance, and job training. While street outreach is a long-standing violence intervention strategy, the experiences of participants in modern CVI iterations are under-researched because few programs have been able to retain participants longitudinally. Using data from longitudinal interviews, this study analyzes how CRED participants' social ties changed over time and describes how those relationships impacted the participants' perceived safety. Methods/Approach: In collaboration with CRED staff, Corners' researchers identified a cohort of participants (n = 22) to interview and observe longitudinally. A total of 44 interviews were conducted over three waves. Data collection occurred over approximately 22 months—a period that included the COVID-19 crisis. CORNERS employed a flexible coding approach followed by several rounds of thematic analysis. Given the study's longitudinal nature, the researchers then constructed journey maps—infographics which concisely summarize the trajectories of participants' relationships and perceived safety over time—to help analyze the interplay between social ties and safety. Results/Outcome: As they progressed through the program, study participants reported deepening levels of trust in CRED staff. High levels of trust were associated with increased access to social capital and adherence to safety-promoting behaviors and attitudes. Several participants reported improved relationships with their loved ones and stronger motivation to succeed as parents. These family and friend networks were essential support systems for participants to model a safer lifestyle. Many participants' gang/group ties remained central to their identities throughout the study, despite their decisions to avoid people and gatherings with which they felt it was too dangerous to associate. Conclusions/Implications: Results from this study demonstrate how engagement with Chicago CRED's violence intervention model positively impacted participants' social ties in ways that promoted the adoption of safer lifestyles. Additionally, participants' improved sense of safety often fed back into their relationships in ways that reinforced pro-social ties. Program involvement offered participants an alternative to "network avoidance", a document strategy of self-isolation in response to the elevated risk of violence.

3. Building peace through gang truces: An evaluation of the Flatlining Violence Inspires Peace (FLIP) Strategy

Marisa Ross PhD1, Angelica D'Souza MPP1

¹Center for Neighborhood Engaged Research & Science (CORNERS), Institute for Policy Research, Northwestern University

Background/Purpose: The Flatlining Violence Inspires Peace (FLIP) Strategy is a multi-pronged gun violence intervention designed to buttress Chicago's existing community violence intervention infrastructure and provide a

nimble framework for innovation. In partnership with CVI organizations, FLIP deploys Peacekeepers throughout violence hotspots. One of the principal violence prevention methods employed during FLIP is the non-aggression agreement (NAA), by which rival street groups agree to not aggress. In this study, we employed a mixed methods approach to conduct an evaluation of the FLIP program's impact, specifically NAAs, on violence outcomes in intervention sites in Chicago. Methods/Approach: We reviewed two years of ethnographic observations and FLIP participant and implementer interviews. We then used a deductive thematic method to extract themes around conflict dynamics, methods of establishment and maintenance of NAAs, NAA interruption and re-establishment, and impact of NAAs on the community. We followed the qualitative analysis with an evaluation of the impact of NAAs on shootings in NAA intervention areas. We used an interrupted time series approach to analyze the effect of NAAs on shooting and homicide trends in each intervention area separately, controlling for cyclic fluctuations in such trends over time. Results/Outcome: NAAs are negotiated between groups with both long-standing and new conflicts. Peacekeepers incentivize buy-in among group members through material benefits and increased safety. Once established, NAAs facilitate communication between group members and CVI professionals to aid conflict mediation. Although occasionally interrupted due to violence or inflammatory media content they are usually reinstated. Overall, NAAs lead to an increase in perceived and actual safety and a broadened sense of responsibility among community members. Quantitative analysis both supports and conflicts with qualitative data. Three FLIP NAA intervention sites had significantly fewer shootings and homicides immediately following the implementation of an NAA in 2022 and three FLIP NAA sites had significantly more shootings and homicides immediately following the NAA. Conclusions/Implications: This is the first study to investigate the holistic impact of NAAs on communities with high gun violence. While the quantitative arm of this evaluation yielded mixed findings on the effect of NAAs on shootings in intervention areas, the qualitative arm revealed critical elements of a successful peace-building intervention. Through this study, we have shown how Peacekeepers use incentives, open new lines of communication, and mediate conflict to establish and maintain peace on Chicago's most violent blocks.

Symposium 9: Supporting the frontline through community healing: Advancing science on violence intervention outreach and trauma exposure

November 3, 9:45 - 11:15 AM (Main Ballroom)

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Kathryn T Bocanegra PhD LCSW¹, Vincent Ortega², Rashid Junaid³, Marvia Jones MPH PhD⁴, Jordan Costa⁵, Darren Faulkner⁶

¹University of Illinois Chicago, ²Jackson County COMBAT, ³AIM4Peace Kansas City, ⁴Kansas City Public Health Department, ⁵Giffords Center for Violence Intervention, ⁶KC Common Good,

Symposium Summary: The symposium comprehensively examines strategies to support the infrastructure of Community Violence Intervention (CVI) to enhance worker wellness through a trauma-responsive lens. Recent studies substantiate high levels of trauma exposure and symptomatology within the CVI workforce (Bocanegra et al, 2022; Giffords, 2022; Hureau, 2022). The symposium will present data from an in-depth, single city case study of Kansas City, Missouri. The study examined trauma recovery and violence reduction efforts through an ecological lens through exploring how CVI worker wellness is conditioned by their organizational experience and community context. Kansas City is both a unique and representative site through which to examine CVI practice. Kansas City represents mid- to small-size urban centers with less than 20 years of experience in implementing CVI strategies. The expansion of CVI programming is occurring in urban contexts that mirror Kansas City's context. In 2021 Kansas City was one of the few cities that demonstrated a reduction in homicide rates, yet still ranked in the top ten cities with the highest violent crime rates. The study examines Aim4Peace's street intervention and hospital-based programming within an ecological context. Interviews, focus groups, and community site visits were conducted May-June 2022 with 57 CVI workers, partners, community residents, survivors of violence, law enforcement, and government officials. The three presentations incorporated into the symposium present focus on core findings from the Kansas City study. The following themes are incorporated into each of the presentations which center CVI staff and partner insights in their recommendations around worker wellness and trauma recovery. Democratizing violence reduction planning: CVI practitioners must be authentically engaged in local, city, and county-wide efforts to reduce violence. The explicit recognition of their critical role as first responders and leaders in violence reduction legitimizes the trauma they experience and helps define support strategies. Trauma recovery innovation: CVI practitioners and partners recognize that existing trauma recovery efforts are inadequate those most impacted by violence, and that new models and methods of trauma responsive care are necessary. Racial reconciliation and healing is a key strategy to address root causes of violence in Kansas City as well as healing from the traumatic effects of firearm violence. CVI practitioners and partners discuss the racialized history of violence in KC and how to undo its harms. This symposium will be enriched by the invaluable perspectives and insights of Kansas City community members who actively participated in the research as co-presenters.

Learning Objectives:

- To identify a minimum of 3 strategies to equitably engage and sustain Community Violence Intervention leader involvement in city and state violence reduction planning efforts
- To understand at least 5 manifestations of traumatic stress among Community Violence Intervention workers and at least 3 organizational strategies to mitigate the effects of this stress among the workforce.
- To understand the intersection of racism, violence, and trauma at the community-level and to develop strategies
 that acknowledge historical harm and empower community leaders towards racial reconciliation and trauma
 recovery.

Symposium Presentations:

1. CVI programs and public safety coalition building

Kathryn T Bocanegra PhD LCSW¹, Vince Ortega²

¹University of Illinois Chicago, ²Jackson County COMBAT

Background/Purpose: Kansas City, MO has a rich history of coalition building around violence reduction, however

community perspectives and CVI involvement has not always been prioritized. The first coalition around violence reduction was led by a group of concerned black residents in the 1970s to address a serial killer targeting black women in KC. This group eventually formed the Ad Hoc Group Against Crime organization, a city leader in providing victim services. More recently, the KC No Violence Alliance (KC NOVA) and the KC Public Safety Partnership with the US Department of Justice are two examples of law enforcement led public safety coalitions. Currently the KC Mayor has created "Partners for Peace" in an attempt to more equitably engage a wide range of community stakeholders to reduce violence and support survivors. The aims of this presentation are to a) analyze how City, County, and State leaders developed and implemented violence reduction coalitions, and b) to examine the extent to which CVI practitioners were integrated into, and led, coalition efforts. Methods/Approach: Historical archival research was conducted reviewing archived public safety plans of Kansas City in addition to political commentary documented in Kansas City public media sources. Interviews and focus groups were completed with the Kansas City Police Department, the Jackson County Prosecutor's Office, the Jackson County COMBAT Director, and community partners specified as partners in coalition efforts. The research team also conducted informal interviews with representatives from the USDOJ and retired KCPD members as well. These interviews and focus groups were recorded, transcribed verbatim, and analyzed using constant comparative methods and thematic analysis. Results/Outcome: Results document the necessity of funding collaboration leveraging both public and private funding sources to support and sustain violence reduction collaborative efforts. Conclusions/Implications: The findings illuminate how unfunded mandates to participate and collaborate in law enforcement led public safety coalition efforts both undermine community trust and impede the collaborative's ability to sustain reductions in shootings and homicides.

2. Trauma recovery and CVI worker wellness

Shani Buggs PhD MPH¹, Rashid Junaid²

¹University of California Davis, ²Aim4Peace Kansas City

Background/Purpose: Community violence intervention (CVI) workers are indispensable in their efforts to address and prevent violence within communities. These committed individuals actively engage with at-risk individuals, defuse conflicts, and provide vital support to those affected by violence. However, their work exposes them to significant levels of trauma, which can deeply impact their mental, emotional, and physical well-being. This issue takes on heightened importance in cities like Kansas City, which continues to rank among the top ten cities with the highest violent crime rates. This presentation aims to a) provide an overview of the trauma experienced by Aim4Peace CVI workers in Kansas City, b) assess organizational efforts to support worker wellness, and c) identify strategies that attend to traumatic stress among workers. Methods/Approach: The research team conducted in-depth interviews with Aim4Peace's outreach workers, hospital responders, and behavioral health providers in Kansas City. 2 rounds of focus groups were also conducted with Aim4Peace members assessing for team support dynamics and professional resources available for worker wellness. Finally, the research team participated in a "ride along", conducting multiple community site visits where Aim4Peace workers conduct outreach and engage participants. The interviews were recorded, transcribed verbatim, and analyzed using constant comparative methods and thematic analysis. The results from the thematic analyses, coupled with the notes and observations from the focus groups and site visits, generated the following results. Results/Outcome: The study's findings revealed that CVI workers experience constant anxiety related to personal safety and that of their clients, leading to a pervasive sense of impending disaster. To cope with this anxiety and heightened sensitivity, some workers employ strategies to numb their empathic qualities, which in turn increases their susceptibility to burnout and compassion fatigue. The direct exposure to gun violence, coupled with distressing encounters, imposes a substantial psychological burden on these workers. Aim4Peace staff shared that this trauma burden is shared by their program participants and community residents, and that existing therapeutic efforts are either a) inaccessible due to cost, insurance requirements, or long waiting lists, b) culturally incongruent and not developed in collaboration with Black and Latinx community members c) resistant to working with systems-impacted participants who may be involved in high-risk behaviors. Conclusions/Implications: Collectively, the results indicate a necessity of supporting innovation in trauma recovery practices and expanding their availability in community-based settings.

3. Violence reduction, racial reconciliation, and community healing

Jordan Costa¹, Reverend Darren Faulkner²

¹Giffords Center for Violence Intervention, ²KC Common Good

Background/Purpose: Kansas City has a deep and complex history around racially motivated red-lining and community disinvestment policies. Troost Avenue is repeatedly upheld as a reminder of a racial dividing line in the city, and while racial integration has occurred in schools, within neighborhoods, and in other dimensions of city life, residents and stakeholders in KC communities disproportionately impacted by violence advocate that racial reconciliation is necessary to address the root causes of violence in the city. Instances of police violence in KC as well as demands for city (versus State) control of the Kansas City Police Department are embedded within community reflections on race, violence, and the need for community healing. Methods/Approach: To analyze the historical and current experiences of racism, violence, and policing in Kansas City the research team interviewed Black community leaders and elders involved in the development of Ad Hoc Group Against Crime, community Crisis Response Teams, community block club leaders, and faith-based leaders in Kansas City. These interviews were recorded, transcribed verbatim, and analyzed using constant comparative methods and thematic analysis. Results/Outcome: Analyses of key informant interviews reveal a trend of Black community residents and faith-based leaders continually leading grassroots efforts to address violence in the absence of perceived government concern and support as well as protection from law enforcement. The continuity of historical trends of racially motivated neglect were manifest in current reflections on police killings in Kansas City and recent reports on kidnapping and hostage situations involving Black women. Conclusions/Implications: The results provide guidelines as to how government and community leaders can acknowledge histories of harm and neglect, as well as engagement strategies to support grassroots led efforts. The results also discuss the role of faith-based institutions in supporting community-led efforts around violence reduction, and the collaborative potential with CVI organizations.

Symposium 10: Advancing equitable research on community violence intervention: Challenges, best practices, and implications for policy and practice

November 3, 12:45 - 2:15 PM (Main Ballroom)

Shani Buggs PhD¹, Jason Corburn PhD², Joseph Richardson PhD³ {Back to table of contents}

Symposium Summary: This session will take an in-depth look at research on community violence intervention (CVI), with an emphasis on the need for equitable, inclusive, and intersectional efforts that address the complexity of violence. Defined by the U.S. Department of Justice as "an approach that uses evidence-informed strategies to reduce violence through tailored community-centered initiatives," CVI strategies are designed to "engage individuals and groups to prevent and disrupt cycles of violence and retaliation, and establish relationships between individuals and community assets to deliver services that save lives, address trauma, provide opportunity, and improve the physical, social, and economic conditions that drive violence." With unprecedented federal funding made available to support the growth and expansion of these programs around the country, the opportunity to learn more -- about 1) how these programs are designed and implemented, 2) their effects on individual and community-level violence, and 3) how to scale these efforts -- is tremendous. To support efforts to build the evidence base for CVI and equip decisionmakers with better information on what strategies are most effective to reduce violence in their communities, advancing equitable, inclusive research and evaluation on CVI is critical. Leading researchers in the field, including Dr. Shani Buggs (UC-Davis), Dr. Joseph Richardson (University of Maryland), and Dr. Jason Corburn (University of California, Berkeley) will share their insights on the key research questions of interest, the challenges and opportunities of engaging in this research (including discussion of both substantive issues as well as methodological complexity), and how their findings can inform policy and practice of CVI. They will draw on their respective efforts to assess implementation and impact of a diverse set of CVI programs in California, Washington, DC, and beyond.

Learning Objectives:

- Understand how community violence interventions are designed and implemented, and the underlying theory of change of these approaches to community violence reduction.
- Learn best practices in the design and implementation of research and evaluation efforts of these complex programs, with an emphasis on equitable, inclusive approaches that minimize harm and improve wellbeing of Black and Brown communities most impacted by gun violence.
- Disseminate key findings and lessons learned from some of the leading studies underway.

Symposium Presentations:

 Equity in CVI research: Best practices and strategies to minimize harm, improve wellbeing in Black and Brown communities, and address the complexity of violence through an intersectional lens Shani Buggs PhD¹

¹University of California, Davis

As violence was spiking in communities across the country, particularly in Black and Brown communities, the Black and Brown Gun Violence Prevention Collective was loosely formed in spring 2021 driven by a desire to increase the impact of research on policy, practice, and advocacy to address firearm violence and minimize harm and trauma. The Collective includes a group of multi-disciplinary and cross-organizational researchers who have decades of experience, who aspire to engage in rigorous, culturally responsive, and equitable research to promote healing and to save lives. The Collective is dedicated to addressing the need for significant change in the gun violence research field, which has been under-resourced for decades, despite the toll of violence in Black and Brown communities. The recent increase in funding and visibility in the firearm violence field, particularly in community violence intervention strategies, presents a significant opportunity to elevate Black and Brown gun violence researchers, given their long-term

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commitment to advancing violence prevention and reduction and centering those with direct lived experience. This presentation will: (1) focus on the role of equitable and inclusive research practices in the gun violence field and the importance of research strategies that minimize harm and trauma to impacted people and communities and; (2) outline a set of research objectives and strategies that can improve wellbeing in Black and Brown communities, change narratives about how the problem of gun violence is framed and understood, and address the complexity of violence using an intersectional lens.

2. Advance Peace: Evaluating a community-based approach to reducing gun violence Jason Corburn PhD¹

¹University of California, Berkeley

Advance Peace (AP) is a community-based intervention that aims to reduce gun violence by engaging the young people at the center of firearm hostilities and providing them transformational opportunities to avoid conflict. Advance Peace uses formerly incarcerated street outreach workers to interrupt and mediate conflicts and mentor the few community members most likely using guns through an intensive, 18-month program called the Peacemaker Fellowship. Through the Advance Peace fellowship, clients receive 24/7 support, including cognitive behavioral therapy, life coaching, a range of social services, and opportunities for travel, education, and employment. The Advance Peace program operates in Richmond, Vallejo, Stockton and Fresno, California, and is expanding to other cities across the United States.

This presentation will focus on the design and implementation of a rigorous, multi-site evaluation of the Advance Peace program in these four California sites. Dr. Jason Corburn will highlight the research questions and methodology, which examine the overall impact of Advance Peace on gun homicides and assaults in the four sites and the amount and type of street outreach "dosage" necessary to influence a high-risk individual to stop engaging in gun violence. Dr. Corburn will also discuss lessons learned in working with Advance Peace staff to build trust and develop a data collection infrastructure to support both program operations and research, and share preliminary findings and lessons learned from this evaluation effort thus far. This presentation will underscore key considerations related to how program efficacy is defined and measured in the context of CVI efforts that are highly localized and implemented at the individual level.

3. Evaluating and enhancing community violence intervention effectiveness in Washington, DC Joseph Richardson PhD¹

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Like many communities around the country, Washington, DC experienced a significant increase in violent crime in 2020, with over 900 people shot and nearly 200 homicides – increases of 33 and 19 percent, respectively, as compared to 2019. Homicides nearly doubled between 2017 and 2021 and remain elevated into 2023. Recognizing the urgency of the problem, and with the aid of federal resources, the City has recently invested federal funds into expanding and improving community violence intervention and prevention work through two programs, the Mayor's Office of Neighborhood Safety and Engagement (ONSE) Violence Intervention Initiative and the Office of the Attorney General (OAG) Cure the Streets program. The two programs are both designed to reach those at highest risk of involvement in violence with credible messengers or violence interrupters (VIs) who can develop trust with program participants. VIs' primary job is to steer program participants away from violence by directly mediating disputes and encouraging individuals to find nonviolent ways to respond to conflicts and provocations. VIs also attempt to connect program participants to needed services and/or opportunities for employment or education. Finally, over the past year, DC has also established two initiatives to enhance violence interrupters' effectiveness: a) conducting regular shooting reviews to coordinate support for survivors and head off potential retaliations, and b) launching professional training opportunities for VIs and supervisors through the DC Peace Academy and the University of the District of

Columbia's (UDC) Violence Prevention and Community Wellness Initiative. This presentation will focus on the effort underway to rigorously evaluate the implementation and impact of these CVI programs, led by Co-PIs Joseph Richardson (University of Maryland) and Daniel Webster (Johns Hopkins University). Notably, Dr. Richardson will discuss how the evaluation aims to not only measure program efficacy but also understand how the ONSE and OAG programs fit into the broader violence reduction ecosystem, which includes hospital-based violence intervention, person-based programs, and traditional law enforcement initiatives, offering critical context and informing interpretation of findings. Dr. Richardson will detail the team's multi-method, inclusive approach to studying program implementation and impact, cost-effectiveness, and participant and staff experiences, offering a detailed example of how to design rigorous, inclusive research of CVI efforts.