November 2020

# Reducing Violence Without Police: A Review of Research Evidence

Submitted to Arnold Ventures by the John Jay College Research Advisory Group on Preventing and Reducing Community Violence



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### **Executive Summary**

Arnold Ventures asked the Research and Evaluation Center at John Jay College of Criminal Justice to review and summarize research on policies and programs known to reduce community violence without relying on police. To accomplish this goal, the Research and Evaluation Center assembled a diverse group of academic consultants across the fields of criminology, social and behavioral sciences, public health, epidemiology, law, and public policy. The group met several times during the summer of 2020 to produce an accessible synthesis of research evidence. Key questions were:

- Can communities ensure the health and security of residents without depending on law enforcement,
- What is the strongest research evidence to aid in the selection of violence-reduction strategies,
- How can community leaders and funding organizations like Arnold Ventures draw upon existing evidence while building even better evidence, and
- How can funding organizations use this report to elevate discussions about violence, improve outcomes in communities affected by violence, and help local and national partners to identify evidence-based interventions that are ready to be scaled.

The consultants used a broad lens to define community violence as the type of interpersonal violence that occurs in public places, but they considered the personal and structural antecedents of violence as well. By identifying the precursors of violence and emphasizing both their practical salience and theoretical relevance, the group sought to identify the most useful evidence for preventing and reducing community violence.

This report represents the consultants' best advice for funding organizations and community leaders, but it is not a technical synthesis of research or a meta-analysis of the most rigorous studies. (There are sources for that information already, see CrimeSolutions.gov, a site hosted for the U.S. Department of Justice.) This report summarizes the collective judgment of an experienced group of researchers who were free to consider all evidence, unconstrained by the conventional priority given to randomized controlled trials (RCT). The most rigorous studies in the field of community violence are RCTs, but many focus on individual behaviors only, failing to account for the full social context giving rise to those behaviors, including social and economic inequities, institutionalized discrimination, and the racial and class biases of the justice system itself.

To synthesize evidence in an inclusive manner, one must be aware of social context and prioritize solutions that help to address structural impediments while still providing immediate interventions to reduce violence. Unless research evidence is considered in this context, potentially effective strategies may be overlooked simply because they target community-level change rather than

individual change, and for that reason are difficult to evaluate and the research literature to back them up is inevitably less rigorous and less prominent.

With these goals in mind, the members of the research group worked collaboratively to identify, translate, and summarize evidence for strategies to reduce violence without police. To identify the most important and potentially effective strategies, the research group placed a high value on programs designed with a clear theoretical rationale and outcomes at specific levels—i.e. individuals, families, neighborhoods (including blocks and street segments), or larger geopolitical boundaries, including cities and counties. Recognizing that evaluation research tends to favor programs aimed at individual behaviors, the group made an effort to include strategies focused on community-level change with the potential to achieve durable, scalable effects.

The research advisory group also focused on the time frame for intervention. Some effective methods for preventing violence take years to reach their maximum effect. Some well-known strategies generate outcomes in a year or two, but that doesn't make them the best ideas. The research advisory group resisted a systematic bias favoring short-term interventions.

The group identified seven evidence-backed strategies:

#### **Improve the Physical Environment**

Place-based interventions that are structural, scalable, and sustainable have been shown to reduce violence and many strategies are economically viable. Increasing the prevalence of green space in a neighborhood, improving the quality of neighborhood buildings and housing, and creating public spaces with ample lighting suitable for pedestrian traffic can be cost-effective ways of decreasing community violence.

## Strengthen Anti-Violence Social Norms and Peer Relationships

Programs such as Cure Violence and Advance Peace view violence as a consequence of social norms spread by peer networks and social relationships. Outreach workers, a key part of these interventions, form supportive and confidential relationships with individuals at the highest risk of becoming perpetrators or victims of violence, connecting them with social resources and working to shift their behavior and attitudes toward non-violence. Evaluations suggest these programs may help reduce neighborhood violence.

#### **Engage and Support Youth**

Young people, especially young males, account for a disproportionate amount of community violence. Any effort to reduce violence must involve a special focus on youth. Strategies that add structure and opportunities for youth have been shown to decrease their involvement in violent crime. Youth employment, job mentorship and training, educational supports, and behavioral

interventions can improve youth outcomes and reduce violence. Some of these strategies require relatively costly individualized therapeutic interventions, but others focused on work and school have been associated with cost-efficient reductions in violence.

#### **Reduce Substance Abuse**

Numerous studies show that interventions to reduce harmful substance abuse are associated with lower rates of community violence, and not all strategies involve treatment. Policies to enforce age limits on alcohol access, restrict alcohol sales in certain areas or during specific times, as well as increasing access to treatment have been shown to decrease violent crime.

#### **Mitigate Financial Stress**

Financial stability and economic opportunities help to reduce crime. Short-term assistance, especially when coupled with behavioral therapy programs, appears to affect rates of violence and the timing of financial aid plays a role in community safety. People experiencing negative income shocks are less inclined to behave violently when they receive timely financial assistance.

#### Reduce the Harmful Effects of the Justice Process

The judicial process must be viewed as legitimate for community members to engage effectively with law enforcement in reducing violence. Research suggests that community safety is supported when justice systems operate with transparency, openness, consistency, and trust, and when police departments are willing to address complaints from the community.

#### **Confront the Gun Problem**

Implementing comprehensive and uniform gun policies can decrease the use of firearms in violent acts. Violence has been reduced by policy mechanisms that limit access to guns and increase restrictions for individuals with violent crime backgrounds, reduce access to guns by young people, impose waiting periods, and increase required training.

#### Recommendations

Behavior responds to situational and environmental influences. In addition to changing behavior one person at a time, communities should create physical environments that reduce violence with cost-effective, place-based interventions that are structural, scalable, and sustainable.

Violence can be reduced by increasing pro-social bonds and anti-violence norms across communities, especially when the message comes from community-based programs staffed by familiar and credible messengers.

Violence prevention and reduction strategies must include a priority on young people, focusing on protective factors as well as risk factors.

Violence prevention must include a focus on alcohol distribution, drug decriminalization, and treatment.

Violence is more prevalent where residents face severe and chronic financial stress. Timely and targeted financial assistance can help to reduce rates of violence.

To maximize the benefits and reduce the potential harms of the formal justice system, communities should invest in strategies designed to increase the objectivity, neutrality, and transparency of the justice process.

Keeping firearms away from people inclined to use them for violence is challenging given widespread gun ownership in the United States, but it remains an essential part of any effort to reduce community violence. Effective prevention should include short-term strategies with rapid returns, but ignoring long-term investments increases community risk.

To generate reliable evidence, funding entities should place a priority on research involving significant and sustained community engagement.

Assessing the strength of research evidence is a technical skill. Evaluations of violence reduction efforts should involve teams of experts from a variety of fields, and advanced degrees are not enough. Experts in evaluation methods, statistics, and causal inference are essential partners.

Prioritizing intervention strategies based simply on the results and methodological rigor of research published in academic journals is dangerously naive and harmful. Strategies to reduce violence should reflect an appropriate balance of evidentiary support with theoretical salience and practical viability.

Many strategies for reducing violence require direct contact with human subjects for interviews and surveys. Funding entities should continue to invest in these studies, but more effort should be made to design cost-effective evaluations using pre-existing, administrative data from varying sectors, including schools, hospitals, housing, taxes, employment records, commercial sales, business regulations, etc. Researchers and funders should collaborate in designing data analytic projects and natural experiments that test a wide array of policies and programs for their potential to reduce violence.

### Introduction

Researchers have conducted hundreds of studies looking for effective ways to prevent and reduce violence, but the knowledge base is far from complete, especially as it relates to one important question: are there ways to prevent violence without relying on the police? The obvious answer is "yes." Policing has never been the primary explanation for obviously varying levels of community safety. Residents of wealthy areas do not experience the intense police surveillance and enforcement imposed on poor neighborhoods. Yet, rates of violence are reliably lower in wealthy communities.

What are we to make from this simple observation? Are wealthy areas relatively safe from violence because the police already finished their work in those neighborhoods, or are other factors having nothing to do with law enforcement actually responsible for low rates of violence? Can those factors be replicated in non-wealthy areas affected by community violence? What are the most practical ways to prevent and reduce violence without police? Have those strategies been evaluated? Which interventions are backed by rigorous research?

Researchers have produced many studies of violence reduction strategies, but this does not mean contemporary policies and programs are always based on evidence from those studies. Searching the large volume of available research can be an obstacle for funders and community leaders. Many studies are hidden behind the paywalls of academic journals. It is also not a simple matter to read and comprehend evaluation research. Researchers often use a style of writing and presentation that can be impenetrable to non-researchers. The path from research evidence to actionable policies and programs is far from simple.

Arnold Ventures asked the John Jay College Research and Evaluation Center (JohnJayREC) to review the research evidence for violence reduction strategies that do not rely on law enforcement. The scan was carried out by an expert group of researchers from the fields of public policy, criminology, law, public health, and social science. The members of the research group worked collaboratively to identify, translate, and summarize the most important and actionable studies.

## Framing the Agenda

Before summarizing the state of research evidence for non-policing strategies to reduce community violence, the term community violence must be clarified. This is more difficult than it may appear. From a purely legal perspective, the term "violence" is used quite liberally. Merely threatening another person with bodily harm would be considered a violent offense in many states (i.e. simple assault or misdemeanor assault).

To the average citizen, the term "violent crime" describes serious harm. "Community violence" suggests the type of violent harm that a resident may encounter during the course of a normal day, whether in their own home or out in the neighborhood, and whether they are the intended victim of a violent act or merely an incidental victim or bystander. This would include homicides, shootings, violent robberies, serious assaults, and sexual assaults. It would not include suicides and it would exclude many routine interpersonal conflicts that are not seriously violent (i.e. loud arguments). The limits of this conventional definition are addressed later in this discussion.

Given a conventional understanding of community violence, the next issue is how to prevent and reduce it? Is policing sufficient? Comprehensive efforts to reduce community violence may always include a role for law enforcement, but a disproportionate amount of research on violence reduction focuses on policing and the formal justice system, although non-policing interventions have demonstrated promising results and positive returns on investment. The key questions are, which non-policing interventions are most promising and how do we know? Several important points help to frame the research described below.

First, if one searches for research on violence prevention it is immediately apparent that evaluations of policing interventions are more common than non-policing strategies. A search of community-based violence interventions on CrimeSolutions.gov using the filters for strong evidence ("effective"), topic ("crime and crime prevention"), and setting ("high crime neighborhood") yielded only 17 programs. Of those 17 programs, 14 involved the police as either the lead agency or a key partner, and at least 5 of the 14 were based on the "focused deterrence" law enforcement strategy. Changing the filter for evidence rating to "promising" yielded 34 programs, again with the overwhelming majority being police programs and those related to focused deterrence.

Websites like CrimeSolutions.gov are used heavily by state and local governments without sufficient resources to conduct their own evaluations. The information they provide, however, is heavily skewed toward policing programs because studies of policing interventions (i.e. hotspots policing and focused deterrence) are strongly supported by public and private funding bodies. For instance, the large number of evaluations of focused deterrence programs stems in part from years of Federal funding in support of the Project Safe Neighborhoods (PSN) portfolio of law enforcement programs, which originated in 2001 and mandated (or, in some years encouraged) the involvement of research partners (Roman et al. 2020). In the early years of PSN, federal solicitations emphasized the focused deterrence model as a priority for

funding. Similarly, the federal Bureau of Justice Assistance provided hundreds of millions of dollars for community-level violence reduction over the last two decades through the Byrne Criminal Justice Innovation portfolio, now known as "Innovations in Community-Based Crime Reduction" (CBCR). These grants, most of which involved a policing partner, also mandated the participation of research partners. Thus, it is not surprising that a search of recent literature produces many examples of police-driven or police-affiliated strategies for preventing and reducing violence.

Putting aside policing interventions, a search of the literature finds another large group of studies testing the effects of social services for children and their families (Weisburd et al. 2017). This may be the case because evaluating family programs is relatively easy. Researchers can establish control over program implementation and follow-up periods can be relatively quick.

Of course, the easiest and quickest answers are rarely the best answers. Perhaps it would be just as effective to focus on schools, neighborhood networks, communities, and the physical characteristics of communities. Other interventions may reduce violence by improving labor markets, economic opportunities, housing quality, gun laws, and the prevalence of substance abuse and mental health issues. Even broader interventions may be able to affect community violence by changing cultural beliefs and attitudes about racism, gender bias, and class differentials.

Violence reduction interventions other than policing have been successful in some places and under some conditions, but which strategies can be expanded and replicated across communities? Are some ideas ready to be scaled up and scaled out? Replication is a critical issue (Lösel 2018). As every evaluation researcher knows, public officials tend to believe the problems of their communities are unique to their communities. Indeed, some violence problems could be site-specific, but interventions to reduce violence should be constructed from general principles to ensure effectiveness and facilitate replication.

Community leaders must be able to identify strong, theoretically informed strategies with proven track records, know how to implement them, and know whether they can be modified in any way before making them a permanent part of their approach to violence prevention. The evidence base for violence prevention is strengthened when outcome evaluations are backed up by process evaluations that investigate the ideal conditions for program implementation and use rigorous methods to identify the required components of interventions versus those that may be modified or even disregarded. Before an intervention is chosen for

implementation, research partners should also help with "problem analysis," an organized effort to identify exactly what an intervention is designed to achieve and whether it is the right solution for the immediate problem.

Researchers testing interventions focused on individual behaviors must also try to identify whether strategies are equally effective across the demographic spectrum—i.e. differences by age, race, ethnicity, sex, and gender. Knowing whether programs are equally beneficial for all persons and places is often just as important as the design, implementation, and management of programs (Windsor et al. 2015).

Moreover, individuals live in neighborhoods, located within cities and counties, all of which are contained within states or provinces. Evaluation evidence must be sensitive to the externalities of a community's social and political environment and how they influence the implementation and effectiveness of intervention strategies (Aisenberg and Herrenkohl 2008). Developing a deeper understanding of how different contexts influence outcomes is important for understanding violence prevention and violence reduction, whether at the individual level or the community level.

The time frame for intervention is another critical issue. Some of the most effective methods for preventing violence could take years to reach their maximum effect, but the research spotlight does not always linger long enough to see the benefits (Brame et al. 2016). Investments in violence reduction are often short term. Due to funding issues and the rush to present findings, many evaluations of violence reduction rely on outcomes that are measurable within a year or two. Political leaders change, social contexts evolve, agency priorities shift, and researchers are under constant pressure to publish. A short time horizon may limit the utility of evaluation studies.

Finally, the utilization of research suffers from misleading marketing. Policymakers and the public have been told for decades that the "gold standard" of evaluation evidence is the randomized experiment, or randomized controlled trial (RCT). If all questions relevant for policy and practice in the prevention of violence were amenable to randomized studies, this would be an admirable position. In many areas of social policy, however, some important questions cannot be answered with RCT studies due to logistical, financial, and ethical concerns. This is especially true in the case of violence prevention and violence reduction at the community level. Randomized designs are a valuable resource for providing precise answers to specific questions, but it is also important to ask the right questions and only then select the best method of answering them (Butts and Roman 2018).

## **Major Strategies**

What exactly is a non-policing approach? How does it work and how long does it take to have an effect? In what contexts or circumstances could it work? Most importantly, is it feasible and affordable as a mainstream practice? These questions should be answered with research evidence and not simply politics or public opinion.

Policymakers and the public instinctively embrace a classic deterrence perspective, or a belief that crime is most effectively prevented when criminal sanctions for illegal acts are delivered with certainty, swiftness, and appropriate severity. This is thought to apply at the level of individuals in the case of "specific deterrence," and at the aggregate or population level for "general deterrence."

If deterrence were entirely sufficient to prevent violence and ensure public safety, the United States would undoubtedly enjoy one of the lowest rates of community violence in the world. The U.S. drastically expanded its already substantial investments in policing and prisons during the past 50 years (Platt 2018). Effective violence prevention, however, involves strategies beyond deterrence. It requires investments in communities and organizations other than police and the justice system.

Non-policing approaches to violence prevention can produce significant benefits without the attendant harms of policing and punishment. Funding organizations should invest in a broad range of research to build a strong evidence base for communities seeking effective approaches to reduce violence. The following sections review the state of research evidence for some of the most promising strategies:

- Improve the Physical Environment
- Strengthen Anti-Violence Social Norms and Peer Relationships
- Engage and Support Youth
- Reduce Substance Abuse
- Mitigate Financial Stress
- Reduce the Harmful Effects of the Justice Process
- Confront the Gun Problem

### Improve the Physical Environment

The relationship of violence to poverty and inequality is well documented. It is not surprising that many violence interventions focus on people and behaviors associated with social and economic disadvantages. But, are individualized services the best approach? Can neighborhoods themselves be the focus of interventions to prevent and reduce violence?



OBSERVATIONS FROM GROUP MEMBERS

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As citizens, we want to be able to call for help when we need it. The way things are set up now, there's really only two kinds of agencies on the other end of that call. One is an ambulance and the other is the police. So, unless you've got a medical emergency, you'll get the police--no matter what the situation is. It doesn't have to be like this. We can imagine different kinds of responders and different kinds of interventions that could be available when we call for help. We do want somebody on the other end of the line when we call for help. Sometimes, we may be in danger or there may be a violent situation and we may want law enforcement to respond, but we don't need the police to respond to every situation. We might want somebody to help kids in trouble, or to support stressed out families. We might want somebody to help the neighborhood with a proven intervention that reduces violence but doesn't involve law enforcement. It's going to require us as a nation to have a conversation about what public safety really means and how we can achieve it.

A growing body of scientific evidence with a long theoretical tradition indicates that structural, place-based modifications may significantly decrease violence. Strategies focusing on the "root causes" of violence—especially accumulated structures of neighborhood poverty—can be implemented in specific geographic areas in ways that help to counter even decades of disinvestment, neglect, racist policies, and indeed violence. By reshaping certain aspects of the physical environment—e.g., fixing abandoned buildings, greening vacant lots, and lighting public spaces—policymakers can reduce opportunities for violence, prevent the possession of illegal guns, lower rates of gun violence, and create sustained co-benefits such as reductions in stress, fear, and common nuisances.

The notion that crime can be prevented by improving physical space inspired an entire branch of research known as Crime Prevention Through Environmental Design, or CPTED (Cozens et al. 2005). Broadly, CPTED builds on Jane Jacob's idea that the physical design of streets and public spaces can encourage the active guardianship of those spaces, thereby promoting informal neighborhood social control and reducing potential opportunities for crime (MacDonald et al. 2019). Epidemiologists and city planners, borrowing from decades of thinking on maximizing and sustaining interventions to improve the

health and safety of whole populations and not simply subsets of high-risk individuals, also independently developed a series of community-engaged, place-based interventions that recognize violence as a public health crisis (Frieden 2010; Rose 2001).

These interventions can function like other systemic public health interventions, such as the chlorination of water to prevent infectious diseases and the restructuring of roadways to prevent traffic crashes. Of course, city planners must be careful to avoid using CPTED as a justification for severe physical modifications that increase resident anxiety and hinder collective efficacy (Cozens et al. 2005). Reliable evidence for well-considered place-based interventions, however, indicates that interventions that are structural, scalable, and sustainable may help to reduce community violence (Branas and MacDonald 2014).

#### **Green Space**

One of the most obvious place-based interventions to reduce crime and violence without policing is the creation of green space, such as adding parks, planting trees, and revitalizing vacant lots. Nature is believed to reduce crime by having a neuro-therapeutic effect that reduces aggression and creates an inviting space for local residents to congregate and become more invested in their relationships with each other and their surroundings (Kuo and Sullivan 2001b). Natural experiments in Chicago demonstrated that increased greening and greater tree canopy in public housing areas were associated with significantly less violent crime and reports of aggression by residents (Kuo and Sullivan 2001a; Kuo and Sullivan 2001b). Using data from Philadelphia, another study found evidence of an inverse relationship between tree cover and gun assaults, especially in low-income areas (Kondo et al. 2017a). Taking advantage of an exogenous shock (i.e. an infestation of emerald ash borer beetles that decimated trees across the Cincinnati, Ohio area), another natural experiment estimated that tree loss was associated with significant increases in simple assaults, felony assaults, and violent crimes (Kondo et al. 2017b). A study conducted in Connecticut, on the other hand, found a null relationship between tree planting and crime, but this may have been driven by selection effects determining which neighborhoods succeeded in their tree-planting efforts (Locke et al. 2017).

Multiple cities have implemented straightforward and highly scalable programs to revitalize vacant lots. The creation of small "pocket parks" has been evaluated with a mixture of epidemiologic randomized controlled trials, quasi-experimental studies, and ethnographic participant-observer research, showing that "cleaning and greening" interventions signal to residents that their communities are investing in the neighborhood and closely monitoring the newly greened spaces. Greening vacant lots may directly intervene to prevent gun assaults since vacant and overgrown lots are known to be havens for the storage and disposal of illegal guns as well as

## RESEARCH HIGHLIGHTS Journal of Urban Economics

Cui, Lin and Randall Walsh (2015). Foreclosure, vacancy and crime. Journal of Urban Economics, 87, 72-84.

Vacant properties are associated with increased violent crime. Pennsylvania sets a time period between when a foreclosure process begins and the resident is evicted, making the property vacant. Researchers use geocoded foreclosure and crime data from Pittsburgh, Pennsylvania to compare areas immediately surrounding vacant homes and similar areas without vacancies. Results indicate violent crime rates are 19 percent higher in surrounding areas after foreclosed homes become vacant.

inviting violence and other unwanted behaviors along with abandoned cars and other large trash items (Branas et al. 2011).

One decade long quasi-experimental study in Philadelphia showed that greening vacant lots was associated with consistent and significant reductions in gun assaults and resident stress citywide (Branas et al. 2011). A randomized controlled trial in Philadelphia assigned vacant lots into clean and green treatment and control groups, finding that "removing trash and debris, grading the land, planting new grass using a hydroseeding method that can quickly cover large areas of land, planting a small number of trees to create a park-like setting, installing low wooden perimeter fences, and then regularly maintaining the newly treated lot" reduced residents' safety concerns when going outside their homes by 58 percent, while decreasing crime overall by 9 percent, gun violence by 17 percent, and police-reported nuisances by 28 percent (Branas et al. 2018). Another study found that similar interventions significantly increased residents' feelings of safety (Garvin et al. 2013), and that simply mowing the grass and cleaning up trash significantly reduced shootings by 9 percent (Moyer et al. 2019).

Research in several cities shows that community-led initiatives to maintain vacant lots can decrease violence. In a quasi-experimental study in Flint, Michigan, street segments that voluntarily engaged in a "Clean & Green" program experienced nearly 40 percent fewer assaults and violent crimes compared with street segments that did not maintain their vacant lots (Heinze et al. 2018). A quasi-experimental study in Youngstown, Ohio analyzed the effects of "Lots of Green," an initiative focused on cleaning up vacant lots and growing plants while inviting area residents to propose new uses for the empty space. The first intervention significantly reduced burglaries while the proposal process alone was associated with a significant reduction in overall violent crime (Kondo et al. 2016). Given the low cost of such remediations and the high costs of violent crime outcomes such as gun

Improve the Physical Environment	EVIDENCE-BACKED STRATEGIES TO PREVENT AND REDUCE COMMUNITY VIOLENCE
Add tree coverage and other plants to neighborhoods, including the grounds of public housing	Kondo et al. 2017a; Kondo et. al 2017b; Kuo and Sullivan 2001a; Kuo and Sullivan 2001b
Clean up debris and add greenery to vacant lots; partner with residents to improve vacant lots	Branas et al. 2011; Branas et al. 2018; Garvin et al. 2013; Heinze et al. 2018; Kondo et al. 2016; Moyer et al. 2019
Monitor lead levels and reduce children's exposure, especially children younger than age 3	Aizer and Currie 2019; Billings and Schnepel 2018; Grönqvist et al. 2020
Reduce number of abandoned buildings, prevent foreclosure of homes and prevent foreclosed homes from becoming vacant	Branas et al. 2016; Cui and Walsh 2015; Ellen et al. 2013; Kondo et al. 2015
Fine business owners for uncovered doors and windows in occupied buildings	Kondo et al. 2015
Close streets and create cul-de-sac streets in neighborhoods affected by or at risk of violence	Southworth and Ben-Joseph 2004; Lasley 1996; Welsh and Farrington 2009a
Install surveillance cameras in subways and other public areas	Priks 2015; Welsh and Farrington 2009b
Increase street lighting in residential areas	Chalfin et al. 2019; Farrington and Welsh 2002
Increase funding for Business Improvement Districts (BIDs)	Cook and MacDonald 2011
Reduce traffic congestion	Beland and Brent 2018
Increase use of bulletproof glass	Smith 2005
Alter school district boundaries to decrease grouping of disadvantaged students within same schools	Billings et al. 2019
Increase social connectedness among neighborhood residents	Stuart and Taylor forthcoming

violence, every dollar spent on cleaning and greening interventions may return hundreds of dollars in public safety benefits (Branas et al. 2016).

#### Housing and Buildings

Another widely studied place-based intervention targets housing and other types of buildings. The condition and quality of built structures affect the overall safety of neighborhoods as well as the experiences of individuals residing within them. From the impact of lead paint to perimeter defenses, to whether a building is simply abandoned or in disrepair, multiple factors have been linked to crime and violence.

One aspect of housing receiving considerable attention from researchers is the mounting evidence of the relationship between lead exposure and subsequent violence. Measuring blood lead levels of 125,000 preschool boys born in Rhode Island between 1990 and 2004, one study found that increased blood lead levels were significantly associated with delinquency (Aizer and Currie 2019). A Swedish study examining long-term outcomes from reforms that phased out leaded gasoline found that lead exposure affected noncognitive skills,

which in turn affected individual probabilities of criminal behavior, especially among males (Grönqvist et al. 2020). Even after children have been exposed to elevated lead levels, interventions to address the behavioral consequences of such exposure could help to reduce subsequent crime and violence (Billings and Schnepel 2018).

Abandoned buildings are often focal points for illegal activity, including violence. Interventions targeting vacant and abandoned buildings can decrease neighborhood violence. A quasi-experimental study in Philadelphia found that abandoned building remediations were associated with a 39 percent reduction in firearm assaults and, given the low cost of such remediations, returned hundreds of dollars for every dollar invested in the program (Branas et al. 2016; Kondo et al. 2015). A New York City study found that foreclosures increased violent crime by nearly 6 percent (Ellen et al. 2013), and a study from Pittsburgh found that foreclosed homes left vacant increased violent crime rates in the surrounding area (Cui and Walsh 2015). Multiple studies provide evidence that abandoned and disheveled buildings may signal to the community that illegal activities and violence can proceed unseen and unmonitored.

Other studies have examined the impact of demolishing public housing on neighborhood crime. With data on the closure and demolition of roughly 20,000 units of geographically concentrated high-rise public housing in Chicago, Aliprantis and Hartley (2015) found an 86 percent reduction in shots fired in and near areas where highrises were demolished. The reductions in violent crime in these neighborhoods greatly outweighed any increases in violent crime associated with a displacement effect. Likewise, a quasi-experimental study in Detroit found that building demolitions reduced firearm assaults (Jay et al. 2019). Philadelphia's "Doors and Windows Ordinance" in January 2011 allowed the city to fine building owners for building openings that were "not covered with a functional door or window on blocks that are more than 80% occupied," which significantly reduced assaults and gun assaults citywide (Kondo et al. 2015). In this way, the condition and availability of a neighborhood's physical infrastructure provide opportunities for intervention that can have widespread effects on the incidence of violence.

#### Place-Based Situational Crime Prevention

Crimes are more likely to occur when suitable targets and motivated offenders converge in time and space in the absence of capable guardians. Street robberies, for example, are more likely to occur on dark streets that allow easy access to users of cash machines in locations offering other advantages—e.g., bad lighting or easy egress. Place-based approaches suggest that simple modifications to physical space may reduce the likelihood of crime and violence. A key element of place-based crime prevention is to diminish opportunities for crime by making it "riskier, less rewarding, more difficult, less excusable, or less likely to be provoked" (Welsh and Farrington 2012).

Roadway and traffic control enhancements have been shown to increase safety and decrease opportunities for crime. For instance, cul-de-sac streets are safer than other street layouts for preventing auto accidents. Changing the layout of streets has been shown to reduce violent crime (Southworth and Ben-Joseph 2004). The Los Angeles Police Department used traffic barriers to create cul-de-sacs in some neighborhoods to decrease gang violence in the 1990s, an intervention that led to a 20 percent decrease in violent crime within a year of implementation (Lasley 1996). After officials in Dayton, Ohio enacted barriers to turn several local streets into culde-sacs, the number of traffic accidents fell 40 percent, overall crime dropped 26 percent, and violent crime decreased by half (Lasley 1996). Street closures have been associated with decreased crime in other studies of highcrime neighborhoods (Welsh and Farrington 2009a).

Security cameras and lighting have been found to deter crimes of opportunity, such as burglary and robbery. One study found surveillance cameras were effective at decreasing planned crime: pickpocketing dropped 20 percent and robbery fell 60 percent (Priks 2015). A systematic review found that closed-circuit television

## RESEARCH HIGHLIGHTS Proceedings of the National Academy of Sciences

Branas, Charles C., Eugenia South, Michelle C. Kondo, Bernadette C. Hohl, Philippe Bourgois, Douglas J. Wiebe and John M. MacDonald (2018). Citywide cluster randomized trial to restore blighted vacant land and its effects on violence, crime, and fear. Proceedings of the National Academy of Sciences, 115(12), 2946-2951.

Researchers worked with city officials to conduct an experiment involving several hundred vacant and littered lots. Some were randomly selected to be cleaned of debris with plantings added to improve green space while others received no improvement. Crime outcomes were then compared, controlling for the extent to which improvements were implemented as intended, and declines were compared to changes in lots which received no improvement. Results indicate an overall crime decline of 9 percent in neighborhoods with cleaned lots. Gun assaults fell 29 percent more in the poorest areas which received lot improvements.

(CCTV) surveillance cameras significantly decreased crime by 16 percent in public areas that had them compared with areas that did not, and CCTV reduced crime 51 percent in car parks (Welsh and Farrington 2009b). The benefits of CCTV surveillance, however, are not reliably consistent. Other quasi-experimental studies have not found crime prevention effects (Ratcliffe and Groff 2019).

Lighting may be an important factor for reducing crime and fear because it allows better monitoring of spaces. A 2002 systematic review and meta-analysis examining the effect of street lighting on crime found that, across eight American and five British studies reviewed, crimes decreased by 20 percent in experimental areas compared with control areas, and most of the studies included measures of violent crime (Farrington and Welsh 2002).

Treating daylight saving time (DST) as an exogenous shock, one natural experiment found the additional light decreased daily cases of robbery by 7 percent and decreased the probability of any robbery by 19 percent, highlighting the importance of ambient light in reducing criminal activity (Doleac and Sanders 2015). Analyzing the discontinuous nature of daylight savings time and its 2007 extension, researchers estimated the extension resulted in a gain of \$59 million annually from the avoided social cost of robberies. A recent RCT provided additional evidence for the effect of street lighting on crime by studying the impact of randomly allocated temporary street lights in public housing developments across New York City, finding a 36 percent reduction in night-time outdoor, violent crime after the introduction of lighting (Chalfin et al. 2019).

The public safety effects of business improvement districts can also reduce violent crime. Leveraging spatial and temporal variation in the establishment of 30 Los Angeles Business Improvement Districts (BIDs), Cook and MacDonald (2011) found large decreases in violent crime. The social benefits from BID expenditures on security were perhaps 20 times larger than the private expenditures required to establish BIDs. Even reducing traffic congestion can reduce violence. Relying on data about deviations from normal traffic flow in Los Angeles from 2011 to 2015, Beland and Brent (2018) estimated that extreme traffic increases the incidence of family violence.

The installation of bulletproof glass may also reduce crime. In New York City, homicides decreased among taxi drivers who installed bulletproof partitions in their cars (Smith 2005). Other mixed methods research, however, suggests the risk of gun violence can be exacerbated by bulletproof glass installed in take-out alcohol outlets (Branas et al. 2009). For situational-based crime prevention to be effective, it is important to understand the specific context of any intended environment before choosing an appropriate and locally acceptable place-based intervention.

Policymakers have relied on a variety of quantitative and qualitative studies to formulate place-based violence prevention policies. Cities such as New York, Chicago, Philadelphia, New Orleans, and others have appropriated municipal funds in response to the growing body of research supporting the public safety benefits of place-based approaches, especially in historically disinvested neighborhoods. The available evidence—both quantitative and qualitative—underscores the value of place-based structural and environmental improvements for preventing and reducing violence.

#### Social Consequences of Place

Research suggests that place-based interventions may affect violence at least in part through their social consequences. Reducing neighborhood socioeconomic segregation through housing policy, for example, could reduce violence. Capitalizing on the quasi-random assignment of refugee immigrants to specific neighborhoods, Damm and Dustmann (2014) found strong evidence that pre-existing rates of violent crime among young people in a neighborhood were associated with increased violent crime convictions of newly assigned male residents.

The configuration of school districts may influence the propensity of youth to engage in violent crime. Leveraging the as-if random variation in neighborhood residence along opposite sides of a newly drawn school boundary, Billings et al. (2019) found that, within small neighborhood areas, grouping more disadvantaged students together in the same school increased violence. Youth were more likely to be arrested together. Neighborhood and school segregation tended to increase violence by fostering



OBSERVATIONS FROM GROUP MEMBERS
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A neighborhood might be in bad condition for decades -- forty or fifty years of disregard and disinvestment. Neighbors will tell you they've been calling city government to do something about it for decades. Once a neighborhood is actually improved, whether it be abandoned buildings or green spaces and parks, the neighborhood does not want it to return to the way it was. They will go out of their way to be certain that little things don't happen on or near those spaces that would bring back the old problems, including acts of violence. The neighbors connect with each other and the newly revitalized spaces to make sure the spaces don't return to how they were in the past.

unwanted social interaction among youth most at risk for violence.

Policies that increase the diversity and connectedness of neighborhoods may reduce violence through social mechanisms. Using idiosyncratic variations in social connectedness stemming from patterns of housing relocation that resulted in some people moving away from their home towns, Stuart and Taylor (forthcoming) found that a gain of one standard deviation in social connectedness was associated with a 21 percent decrease in murder in U.S. cities from 1970 to 2009 as well as significantly lower incidences of rape, robbery, and assault. The study suggested greater social connectedness may be related to improved public safety.

Reducing neighborhood foreclosures and vacancies may reduce violence. Using geocoded foreclosure and crime data from Pittsburgh, Pennsylvania, Cui and Walsh (2015) found that violent crime rates increased by roughly 19 percent when foreclosed homes became vacant, an effect that grew with the length of vacancy. Conversely, supporting the construction of affordable housing may reduce violent crime. An analysis of federal rule variations in determining census tract eligibility for the subsidized construction of low-income housing rental units found that low-income housing development in poor neighborhoods brought significant reductions in violent crime. When scaled by population, robberies and aggravated assaults declined two percent for each development of new low-income rental housing located in an eligible census tract rather than a wealthier neighborhood (Freedman and Owens 2011).

## Strengthen Anti-Violence Social Norms and Peer Relationships

Research is beginning to produce strong evidence for intervention models that see violence as behavior shaped by social norms and the relationships people share with their peer networks. Programs using this approach include Cure Violence based in Illinois and Advance Peace from California. Both programs operate in numerous locations across the country and increasingly around the world. These and similar models rely on two key interventions: community outreach and direct interruption or mediation of neighborhood conflicts by trained people known to the neighborhood and trusted by the residents.

Community outreach, sometimes called street outreach, has been well documented in the health field as a strategy for reaching historically marginalized and populations, disenfranchised understanding barriers to health care, and addressing their healthrelated needs (Mack et al. 2006). Community outreach begins with the understanding that individuals who are marginalized, "hard to reach," and at the highest risk for negative health outcomes are also likely to be chronically alienated, disconnected, and distrustful of traditional structures and systems of support (Advance Peace n.d. a; Boag-Munroe and Evangelou 2012). Building relationships with individuals in the community helps staff to identify and address participant needs and to alter unhealthy or negative life trajectories. For those at the highest risk of violence, community outreach may serve as both an immediate and long-term mechanism for desistance from violence.

Early efforts to use a form of community outreach for engaging youth and young adults date to the 1800s in the U.S., and by the 1940s many cities were using outreach

strategies to work with young gang members, linking them with social services to reduce their involvement in illegal activities and violence (Decker et al. 2008; Goldstein 1993; Spergel and Grossman 1997). Community-based organizations have often used outreach activities to address unmet needs for those most vulnerable to violence and other negative health outcomes (Boston TenPoint Coalition n.d.; Collins 2006; Thomas et al. 1994).

Prominent violence prevention strategies—particularly those valuing social and behavioral interventions-have incorporated outreach workers (National Network for Safe Communities, n.d.). Cure Violence from Chicago and Advance Peace in Richmond, California rely on paid outreach workers to develop relationships with individuals at high risk for committing or being victims of violence (Advance Peace n.d. b; Cure Violence Global n.d.). Outreach workers at the United Teen Equality Center (UTEC) in Lowell, Massachusetts strive to build relationships with youth at risk for group-related violence (Frattaroli et al. 2010). The Urban Peace Institute's Urban Peace Academy provides specialized training for community intervention workers. The program trains gang intervention workers nationwide (Urban Peace Institute n.d.). Similar programs are found across the United States, including ROCA, LIFE Camp, Inc., the Institute for Nonviolence, the City of Oakland's Department of Violence Prevention, and New York City's network of more than two dozen programs called the Crisis Management System, coordinated by the Mayor's Office of Criminal Justice.

Community outreach strategies may vary somewhat in their specific program objectives and implementation tactics. The populations they seek to engage are unlikely to welcome unsolicited attention or to trust outsiders, however, so their approaches also share many characteristics. For one, the programs must be adept at identifying and connecting with the right participants.



OBSERVATIONS FROM THE FIELD

Gary Slutkin

Founder and CEO

Cure Violence

With recent increases in gun violence in many cities, and with social protests about existing methods, communities expect safety and we should work diligently to answer their current demands. We don't know how long this moment will last, but with increasing violence, other pressures might see public officials once again turn to aggressive policing. We have to offer the other alternatives. We have to design new systems and new alternative strategies now. It is also essential that it be done right, with evidence-based community health approaches that are proven to help. We must scale them up now.

## RESEARCH HIGHLIGHTS American Journal of Public Health

Matthay, Ellicott C., Kriszta Farkas, Kara E. Rudolph, Scott Zimmerman, Melissa Barragan, Dana E. Goin and Jennifer Ahern (2019). Firearm and nonfirearm violence after Operation Peacemaker Fellowship in Richmond, California, 1996–2016. American Journal of Public Health, 109(11), 1605-1611.

Participants in Operation Peacemaker Fellowship (OPF) in Richmond, California receive person-specific mentorship, cognitive behavioral therapy, internship opportunities, and stipends up to \$1,000 per month for achieving program goals. Researchers modeled the presence and absence of the program with a synthetic control method to predict pre- and post-intervention patterns in violence and found the program was associated with 55 percent fewer homicides and 43 percent fewer assaults.

Strengthen Anti-Violence Social Norms and Peer Relationships	EVIDENCE-BACKED STRATEGIES TO PREVENT AND REDUCE COMMUNITY VIOLENCE
Reduce gang violence through community engagement	Spergel and Grossman 1997; Spergel et al. 2003; Spergel et al. 2006
Partner with African American churches to sponsor community health outreach efforts	Thomas et al. 1994
Build positive adult connection	Culyba et al. 2016
Improve maternal closeness, offer social supports to families through daily support and limitations on violence exposure	Hammack et al. 2004
Support anti-violence social norms via community outreach workers and violence interrupters (e.g. Cure Violence, Advance Peace)	Butts et al. 2015; Butts and Delgado 2017; Delgado et al. 2017; Maguire at al. 2018; Milam et al. 2018; Webster et al. 2013
Offer individually tailored social service and substance abuse treatment	Huguet et al. 2016; Matthay et al. 2019
Use hospital-based interventions with recent victims of violent injuries	Becker et al. 2004; Cooper et al. 2006; Juillard et al. 2016; Zun et al. 2006

In the 1990s, Chicago's Comprehensive Community-Wide Gang Program Model was implemented in multiple communities around the United States. Community engagement via street outreach was a strong component of the model. Outreach workers served as part of an intervention team—the primary service-delivery mechanism. Some communities using the approach even partnered with law enforcement. Intervention teams connected youth with supportive services, established job training programs, and trained youth in filling out job applications, conducting job interviews, and using appropriate interpersonal skills with employers and coworkers. Evaluations sometimes found strong effects on violence, especially with younger youth (Spergel and Grossman 1997; Spergel et al. 2003; Spergel et al. 2006).

Outreach workers must be well known by the communities in which they work. They must use relentless yet positive persistence and intensive follow-ups to make connections and demonstrate their commitment to supporting and uplifting their intended clients. It is critically important for relationship development and their personal safety that program participants and the community at large perceive outreach workers as people who can be trusted not to share potentially incriminating information with authorities.

Community outreach staff must be relatable to the population of youth and young adults most at risk for violence involvement. While not an absolute requirement, many outreach workers share the backgrounds and justice-system experiences of their program participants. They can recognize and relate to the complex traumas their clients may have endured. Being formerly involved in and familiar with the very behaviors and activities they hope to change increases the likelihood that their clients will see them as trustworthy and credible. Outreach workers function as role models, exhibiting prosocial behaviors and providing the social support

known to be a protective factor for violence involvement (Cullen et al. 1999; Culyba et al. 2016; Feeney and Collins 2015; Hammack et al. 2004). Outreach workers connect individuals to resources and trainings, address personal and familial needs, and encourage social development. Through their community-wide influence, outreach programs help to shift community norms related to violence.

Evaluations of community outreach are promising but mixed. The approach is difficult to evaluate. First, the programs intentionally engage individuals who are disconnected from traditional institutions and systems of support and are already involved in illegal activities, possibly including violence. Forming relationships with participants and helping them towards lifestyle transformations that will still likely be interrupted by setbacks requires substantial time and resources, especially if workers are viewed with suspicion at first (Jones 2018). There are also significant challenges for program managers working to secure consistent financial and political support for program operations. The pay and benefits for outreach workers are typically low, despite the high stress and high-risk nature of their jobs. Programs encounter difficulties in identifying and retaining appropriate staff. Outreach strategies must have consistent leadership and program oversight, with the ability to respond quickly to changing community needs. And finally, outreach programs may not be equipped to address the many obstacles facing their participants, including structural racism and systemic barriers to health care, employment, affordable and stable housing, and quality education.

The most studied community outreach program is probably Cure Violence (formerly known as Chicago CeaseFire), which has been replicated in dozens of cities around the United States and internationally. One early study used interrupted time series analysis with 16 years

of data to detect significant declines in shootings in five of seven sites operating Cure Violence programs in Chicago (Skogan et al. 2008). Shooting trends in Cure Violence areas generally outperformed matched comparison neighborhoods, and researchers concluded the decline was due to the program in four of five sites.

Another early study used a difference-in-difference model with monthly panel data from Baltimore to test the effects of a Cure Violence inspired model on homicides and shootings (Webster et al. 2013a). The results were inconsistent across several sites, but researchers also conducted participant surveys in several neighborhoods, finding evidence of cross-contamination. More than 30 percent of respondents in comparison areas reported program activities in their neighborhoods.

The Research and Evaluation Center at John Jay College conducted a quasi-experimental evaluation of the Cure Violence approach in New York City from 2013 to 2017 (Delgado et al. 2017). Using more than 10 years of police and hospital data, researchers measured shootings and gun injuries in two neighborhoods with Cure Violence programs, comparing them with two matching areas. Results of an ARIMA analysis showed statistically significant breaks in violent injuries in both treatment areas while smaller declines in the comparison areas were not significantly different from zero.

New York researchers also conducted three waves of surveys with samples of men ages 18-30 in both treatment and comparison areas, asking respondents to indicate their support for the use of interpersonal violence in a series of hypothetical scenarios representing varying degrees of provocation (Butts and Delgado 2017). Respondents' inclination to use violence dropped across all study areas for serious disputes, but the decrease was steeper in Cure Violence areas (33% vs. 12%). Support for violence in petty disputes declined significantly only for neighborhoods with Cure Violence programs (down 20%). Other research confirms that Cure Violence may help participants to embrace nonviolent responses to interpersonal conflict (Milam et al. 2018).

More recent studies were conducted in Philadelphia and Port of Spain, Trinidad and Tobago. In Philadelphia, Roman and colleagues (2018) tracked shooting trends in crime hotspots and found that shootings decreased significantly compared with matched comparison areas. The evaluation in Trinidad and Tobago (Maguire et al. 2018) found the presence of Cure Violence was associated with significant reductions in overall violent crime (–45%) and shooting injuries (–39%). Compared with the legal and medical costs of gun injuries, the program also appeared to be cost-effective, as each averted gun injury cost just \$4,300 in program expenses.



OBSERVATIONS FROM GROUP MEMBERS

Shani Buggs

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Violence Prevention Research Program

Outreach workers may serve as violence interrupters, individuals skilled at conflict and dispute resolution. Because of their relationships with individuals in the neighborhood, they are able to broker truces and bring parties together to have conversations rather than violent confrontations. Community violence often involves interpersonal disputes. Sometimes disputes are quick and volatile and come up from recent conversations. Sometimes they are long-standing and involve rivalries that have existed longer than many individuals involved even know. Having relationships with people in the neighborhood, violence interrupters and outreach workers can understand the conflicts, have conversations, and bring individuals together to have discussions. By helping the parties feel heard, they can mitigate conflicts that those of us not involved would never even understand.



OBSERVATIONS FROM THE FIELD
Charlie Ransford
Cure Violence
Senior Director of Science & Policy

Fidelity is an essential part of any intervention. In the same way that you would not alter the ingredients of an effective medication, it is incredibly important to get the elements of violence reduction right. Approaches like Cure Violence have repeatedly been found effective and adaptable, and we need to invest in efforts to scale up the approach and ensure that communities implement it correctly, with enough resources to produce substantial impact.

Studies of Cure Violence and similar models (e.g. California's Advance Peace) continue to produce promising, but less than definitive evidence of program effects (Butts et al. 2015; Roman et al. 2018; Webster et al. 2013a). In one study, for example, the Richmond program from which Advance Peace was created may have been associated with statistically significant reductions in firearm violence, but researchers noted small increases in other types of violence (Matthay et al. 2019). While the research literature in support of the community outreach approach is still emerging, evidence suggests it is at least promising despite its many challenges (Huguet et al. 2016; Maguire et al. 2018).

Some outreach programs, including Cure Violence, partner with hospital-based violence intervention programs (HVIP), an important addition to community-based violent reduction strategies. Capitalizing on the healthcare and social support available from hospital-based medical staff in the immediate aftermath of a violent incident, HVIP efforts can help survivors and their families recover from violence and reduce the chances of retaliation. Working with victims to overcome trauma helps to stop violence from reoccurring. Research on these programs is relatively new, but findings are promising (Evans and Vega 2018).

One early study measured the effect of crisis intervention specialists making hospital visits with young survivors of violent injuries to offer supportive services and dissuade them from seeking revenge. Youth served by the program were less likely than those from a comparison group to be arrested in a six-month follow-up period (Becker et al. 2004). A more recent California study compared the incidence of new injuries among a group of patients served by a violence prevention program and detected a decrease of four percent after controlling for demographic characteristics of the patients (Juillard et al. 2016). Patients randomly assigned to a hospitalbased program in Baltimore were less likely to be rearrested or incarcerated compared with those assigned to a control group (Cooper et al. 2006), and other studies have found lower rates of both arrest, re-injury, and rehospitalization after intervention by a hospital-based prevention program (Zun et al. 2006).

#### **Engage and Support Youth**

Youth with positive and structured lives have lower rates of crime and violence, and youth programs often use positive engagement as a mechanism for public safety (Butts et al. 2010). Programs traditionally focus on individualized services, but some rely on creative features of law and policy. Using spatial and temporal variations in state laws setting the minimum permissible age to drop out of high school, for example, Anderson (2014) found that relative to states with minimum ages of 16 or 17, states setting the age at 18 experienced 23 percent lower rates of violent crime arrests for youth ages 16 to 18. Similarly, Berthelon and Kruger (2011) studied temporal and spatial variations in the implementation of policies to lengthen the school day. Their analysis found that a 20 percent increase in the share of a municipality's high schools requiring full versus half days reduced violent crimes 12 percent.

Ensuring quality school experiences for young children has demonstrable benefits for public safety and reductions in violence. In a now-classic example of program evaluation from the 1960s, researchers followed a sample of 123 disadvantaged pre-schoolers in Ypsilanti,

## RESEARCH HIGHLIGHTS Journal of Urban Economics

McMillen, Daniel, Ignacio Sarmiento-Barbieri and Ruchi Singh (2019). Do more eyes on the street reduce crime? Evidence from Chicago's Safe Passage program. Journal of Urban Economics, 110, 1-25.

Chicago's Safe Passage program hires civilians to guard schools at arrival and dismissal times each day, providing an alternative to policing that increases student safety. Guards patrol designated routes after being trained in de-escalation strategies and safety protocols. Researchers combined geolocated crime data with the location of guards and the timing of the program and estimated the program's effects by comparing neighborhood areas with and without guards and controlling for crime trends. The program appeared to reduce violent crime by 14 percent with little displacement. Violent crime reductions persisted through a three-year follow-up period.

Michigan. Children were randomly assigned to treatment and control groups. Treatment provided two years of extra educational supports in a 2.5-hour program each school day, along with weekly home visits from teachers. Outcomes were tracked for decades and revealed an array of possible benefits, including reductions in criminal behavior (Heckman et al. 2010; Heckman et al. 2013). One study found 48 percent of control group subjects experienced at least one violent crime arrest later in life while the same was true for just 32 percent of the treatment group (Schweinhart 2007).

Providing summer jobs for youth may lower violence not only during the period of employment but afterward as well. Using randomized assignment, a study of youth applicants to a summer jobs program in Chicago found that variations in a 6-8 week part-time job at minimum wage coupled with a job mentor and a job-readiness training led to 42 percent and 33 percent reductions in violent crime arrests one year after program participation (Davis and Heller forthcoming). Likewise, a randomized controlled trial of a Boston summer youth employment program found that an offer of a six-week part-time minimum wage job, coupled with a 20-hour, jobreadiness curriculum was associated with a 35 percent decrease in violent crime arraignments for 17 months following program participation (Modestino 2019). The study found larger decreases in violent crime among treatment-group youth reporting gains in social skills during the summer of participation, including their ability to manage their own emotions and how to resolve conflicts with peers.

Helping youth gain access to positive opportunities also improves community safety. A community-randomized trial of 24 U.S. towns showed that "Communities That Care," a prevention and youth engagement strategy, reduced the incidence and prevalence of problem behaviors among a panel of youth followed from 5th through 12th grade (Rhew et al. 2016). The program engaged communities in evidence-based programs prioritized for each area and providing an array of youth development activities with specific tools for assessing levels of risk and protection experienced by youth. An independent quasi-experimental trial involving more than 100 Pennsylvania communities found the strategy was effective in reducing delinquency. Cost-benefit analyses suggested the program returned \$5.30 for every dollar invested.

Providing visible civilian safety officers in areas with high youth foot traffic has been shown to reduce violent crime. By exploiting spatial and temporal variations in the rollout of Chicago's "Safe Passage" program that placed civilian guards along routes used by students walking to school, McMillen et al. (2019) observed an average reduction of 14 percent in violent crime. Somewhat analogously, directly restricting risky youth behavior reduces violent crime. For example, using spatial and temporal variation in the implementation of Graduated Driver Licensing (GDL) laws, which restrict nighttime driving for teenagers, Deza and Litwok (2016) found that the implementation of GDL decreased arrests for murder and manslaughter among teenagers ages 16 and 17, with larger effects in states where the nighttime driving curfew was required for a longer period of time.

Providing youth with greater structure and supervision may lower violence. Investing in their human and social capital may be effective as well. Requiring youth to complete more years of schooling has been shown to reduce post-graduation violent crime convictions. Using temporal and spatial variation in the rollout of a policy increasing the number of years of compulsory schooling, Hjalmarsson et al. (2015) found that each additional year of schooling decreased the eventual number of violent crime convictions by 62 percent among men ages 19-29.

Improving the quality of schools attended by youth at risk for violence has been found to reduce violent crime arrests after graduation. Using data on high school choice lotteries in a North Carolina school district, Deming (2011) found that, seven years after random assignment, high school lottery winners had about 70 percent fewer violent felony arrests relative to high school lottery losers, with the greatest effects concentrated among high-risk youth. Gains in school quality for high school lottery winners, as measured by peer and teacher inputs, were equivalent to moving from one of the lowest-ranked schools in the district to one at the district average.

Other programs serving children, adolescents, and parents have been shown to prevent violence by improving participants' self-control, social skills, and decision-making. Programs such as Nurse Home Visitation (Olds et al. 1997) and "Stop Now and Plan" (Augimieri et al. 2016) have performed well in evaluations. Supplementing education with targeted programs in social skill development may help to reduce violent youth arrests. In two large-scale randomized controlled trials carried out in Chicago, Heller et al. (2017) found that youth participating in group sessions focused on social and cognitive skill development had 45-50 percent fewer violent-crime arrests during the year of program participation. Researchers believed the program helped youth to slow down and reflect on their behavioral options during stressful situations.

Engage and Support Youth	EVIDENCE-BACKED STRATEGIES TO PREVENT AND REDUCE COMMUNITY VIOLENCE
Raise minimum age for school dropout	Anderson 2014
Offer access to full-day schools	Berthelon and Kruger 2011
Provide summer working experience for high-risk youth	Davis and Heller forthcoming; Modestino 2019
Place civilian lookouts along walking routes to schools	McMillen et al. 2019
Restrict nightime driving by age (Graduated Driver Licensing)	Deza and Litwok 2016
Enforce requirements for minimum years of education	Hjalmarsson et al. 2015
Improve school quality and work with children and youth to develop positive social skills and emotional intelligence	Deming 2011; Heckman et al. 2010; Heckman et al. 2013
Provide early interventions with children, youth, and parents to improve self-control, social skills, and decision-making	Augimieri et al. 2016; Heller et al. 2017; Olds et al. 1997

#### Reduce Substance Abuse

Interventions to reduce substance abuse, especially alcohol abuse, can lower violence, often without individualized treatment. Age limits on alcohol access, for example, have been found to reduce violent crime. Using a regression discontinuity design in a California study, Carpenter and Dobkin (2015) found that, relative to young adults just over age 21, individuals just under age 21 with no legal access to alcohol were six percent less likely to be arrested for aggravated assault, seven percent less likely to be arrested for robbery, and nine percent less likely to be arrested for other assaults. In an Oregon study, Hansen and Waddell (2018) found a measurable increase in violent crime among individuals after age 21, with particularly sharp increases in assaults lacking premeditation. Crime increases were 50 percent greater after age 21 among people with no prior criminal

Controlling where and when alcohol may be sold also appears to reduce violence. Variations in the adoption of "dry laws" restricting the sale of alcohol in bars/ restaurants during specific hours of the week allowed Biderman et al. (2010) to detect a 10 percent homicide reduction associated with legal provisions governing alcohol sales. The phased repeal of laws in Virginia law that once prohibited the sale of packaged liquor on Sundays provided an opportunity for Heaton (2012) to estimate that repeal of the laws increased alcoholinvolved serious crimes—including violent crime—by 10 percent. Similarly, using county-level variations in Kansas laws governing the sale and on-premises consumption of alcohol, Anderson et al. (2018) found that a ten percent increase in the number of establishments licensed to sell alcohol by the drink increased violent crime by three to five percent. In a study of Chicago zoning codes, Twinam (2017) used an instrumental variable strategy to find that in neighborhoods without high residential population density, the presence of liquor stores and late-hour bars was associated with higher levels of violent crime.

Individual interventions for substance abuse may reduce violence as well. South Dakota's 24/7 Sobriety Program requires those arrested for or convicted of an alcohol-related offense to abstain from alcohol and submit to alcohol tests multiple times daily. Testing positive or missing a test automatically results in moderate sanctions, typically a short period in jail. Kilmer and Midgette (2020) examined spatial and temporal variations in the rollout of the 24/7 program and concluded the program significantly reduced individual-level probabilities of violent crime arrests for one year following participation.

Simply increasing access to substance abuse treatment, of course, also reduces violence. Using county-level variations in the opening and closing of substance abuse treatment facilities, Bondurant et al. (2018) found that expanded access to substance-abuse treatment facilities reduced violent crimes. Effects were particularly pronounced for serious violence, including homicides,



OBSERVATIONS FROM GROUP MEMBERS

Joseph Richardson, Jr.

University of Maryland Department of African American Studies

It's just amazing how the funding faucet opens up when policymakers care about an issue. Millions and millions come out of nowhere. The government picks and chooses what it wants to address. And now, with this COVID-19 example... it's interesting that we find the money when we want to devote resources to a problem. It's just unfortunate that life and death has to be politicized. Gun violence has been killing populations of young black men for decades. It's often their leading cause of death. If gun violence was the leading cause of death for young white men, wouldn't we have solved the issue a long time ago? We only have to look at the opioid crisis to understand the disparities between what we fund as a public health problem and what we choose not to fund at all. Look at the difference between the policy response to crackcocaine before and opioid addiction now. It's very clear there's a racial component, and we can't just sweep it under the table. We need to confront it directly.

## RESEARCH HIGHLIGHTS Quarterly Journal of Economics

Heller, Sara B., Anuj K. Shah, Jonathan Guryan, Jens Ludwig, Sendhil Mullainathan and Harold A. Pollack (2017). Thinking, fast and slow? Some field experiments to reduce crime and dropout in Chicago. The Quarterly Journal of Economics, 132(1), 1-54.

Chicago's Becoming a Man program reduced violent crime arrests in the socioeconomically disadvantaged neighborhoods in which it was conducted. The program teaches participants how to respond to scenarios to change their automatic response when encountering conflict. The researchers conducted large-scale experiments and compared the outcomes of individuals randomly assigned to the control with those assigned to the program. The program reduced total arrests by 28-35% and violent crime arrests by 45-50%. The substantial benefits and minimal costs suggest up to a 30-1 cost-benefit ratio of these interventions.

Reduce Substance Abuse	EVIDENCE-BACKED STRATEGIES TO PREVENT AND REDUCE COMMUNITY VIOLENCE
Maintain age limits for purchasing alcohol	Carpenter and Dobkin 2015; Hansen and Waddell 2018
Enforce "dry laws" placing restrictions on the purchase and consumption of alcohol	Biderman et al. 2010; Heaton 2012
Decrease the number of establishments licensed to sell alcohol	Anderson et al. 2018; Twinam 2017
Implement sobriety programs (e.g., South Dakota 24/7 Sobriety)	Kilmer and Midgette 2020
Increase availability and access to substance abuse treatment	Bondurant et al. 2018
Increase Health Insurance Flexibility and Accountability (HIFA) waivers	Wen et al. 2017
Decriminalize small quantities of marijuana	Adda et al. 2014
Introduce or expand medical marijuana laws	Gavrilova et al. 2019

particularly in densely populated areas. Another analyzed the effects of a staggered expansion of Medicaid eligibility through Health Insurance Flexibility and Accountability (HIFA) waivers to find that HIFA-waiver expansion led to sizable reductions in rates of robbery and aggravated assault (Wen et al. 2017). Much of the crime-reduction effects likely occurred through increasing treatment rates that reduced substance use prevalence.

Efforts to lessen the legal consequences of substance use may also have benefits in violence prevention. In an experiment that decriminalized the possession of small quantities of marijuana in defined geographic areas within a large city, Adda et al. (2014) found that decriminalization reduced sexual assault, robbery, and burglary. Likewise, Gavrilova et al. (2019) found the introduction of medical marijuana laws led to a decrease in violence in states bordering Mexico. The effect was strongest for counties closest to the border (less than 350 kilometers) and for specific crimes related to drug trafficking. The results were consistent with the notion that decriminalization of the production and distribution of drugs may reduce violent crime if drug markets would otherwise be controlled by trafficking organizations.

#### Mitigate Financial Stress

Helping families avoid financial stress and negative income shocks may lead to reduced violence. Using data that captured the negative shock to mothers' economic status after the introduction of unilateral divorce laws, Cáceres-Delpiano and Giolito (2012) found that children whose mothers were likely to fall below the poverty level and remain unmarried after the introduction of unilateral divorce were significantly more likely to engage in violent crime as adults.

Mitigating even short-term economic insecurity can reduce community violence. Chicago's Homelessness Prevention Call Center (HPCC) connects families and individuals experiencing income loss with immediate, one-time financial assistance. The availability of the support, however, varies unpredictably due to public budgeting cycles. Exploiting this quasi-random variation, Palmer et al. (2019) found that eligible individuals requesting assistance during periods of funding availability were 51 percent less likely to be arrested for a violent crime during the follow-up period compared with other eligible applicants who failed to secure help simply due to funding interruptions. Researchers noted the effect on violence may have been related in part to housing stability.

Other researchers have found that short-term financial assistance is more effective at reducing violent crime and victimization when coupled with programs that support the development of emotional and social skills. In one randomized trial of cognitive behavioral therapy for criminally engaged men, Blattman et al. (2017) found that both an eight-week CBT program combined with \$200 cash grants reduced violent crime initially, but the effects dissipated over time. When the cash followed therapy, however, violent crime among participants decreased for more than a year. The researchers hypothesized that providing cash after the program reinforced its impact.

Analyzing data from 81 large American cities during the period 1930 to 1940, Fishback et al. (2010) found that social welfare (relief) spending helped to reduce violent crime. Individuals receiving income support were required to work a defined number of hours. Researchers speculated the work requirement may have been more effective in reducing crime than direct income support

simply by limiting the free time available for program participants. Bell et al. (2018) found that young people finishing school during periods of high entry-level job availability were significantly less likely to engage in repeated violent criminal activity than youth leaving school and entering the labor market during downturns in entry-level employment.

Yang (2017) analyzed data from a sample of four million people released from prison across 43 states between 2000 and 2013 and found that those leaving prison and entering counties characterized by higher low-skilled wages had a significantly lower risk of being reincarcerated for new violent crimes. Notably, the impact of higher wages on reducing recidivism was larger in employment sectors with greater willingness to hire people of color, formerly incarcerated people, and people released after their first period of incarceration.

Researchers find promising effects simply from relocating residents of public housing into less impoverished neighborhoods. The most studied program is the U.S. Department of Housing and Urban Development's Moving to Opportunity (MTO) experiment, in which families living in high-poverty neighborhoods across the United States were randomly given housing subsidies with various stipulations. Comparing outcomes among individuals randomly offered an option to move versus those of a control group, one study found that moving families from high- to low-poverty neighborhoods decreased unwanted outcomes such as juvenile

involvement in violent crime (Ludwig et al. 2001). Such relocation experiments suggest that changing places matters to the prevention of violence, but caution should be exercised in their implementation as many residents might prefer their home neighborhoods, decline offers for relocation, or react to the offers as unethical. "In situ" place-based programs that correct longstanding problems within neighborhoods where people live and allowing them to remain in place could be preferable choices for the prevention of violence in some instances.

A Chicago study estimated long-term outcomes among children from public housing developments who received vouchers to relocate to less-disadvantaged neighborhoods after their homes were demolished. Children who moved had fewer violent crime arrests into adulthood, compared with those from nearby public housing units that were not demolished (Chyn 2018). Other evidence suggests that subsidizing rental housing decreases violent crime. A paper studying the effects of the federal Low-Income Housing Tax Credit program, which provides additional tax breaks for developers building rental housing for low-income residents in high-poverty areas, found that the poorest neighborhoods experienced the most significant reductions in violent crime (Freedman and Owens 2011).

The immediacy and reliability of income can affect rates of violence. Wright et al. (2017) examined the effects of county-level variations in the timing of transitions from cash benefits to electronic benefit transfer (EBT)

Mitigate Financial Stress	EVIDENCE-BACKED STRATEGIES TO PREVENT AND REDUCE COMMUNITY VIOLENCE
Reduce negative income shocks following divorce	Cáceres-Delpiano and Giolito 2012
Increase one-time, immediate financial assistance	Palmer et al. 2019
Increase short-term financial assistance and programs that support the development of emotional and social skills	Blattman et al. 2017
Increase social welfare (relief) spending that combines income and a work requirement	Fishback et al. 2010
Increase availability of high-wage entry-level jobs	Bell et al. 2018
Increase low-skilled wages for individuals returning home after periods of incarceration	Yang 2017
Offer housing voucher programs (e.g. Moving to Opportunity) with priority for residents of demolished public housing	Aliprantis and Hartley 2015; Chyn 2018; Jay et al. 2019; Ludwig et al. 2001
Increase the Low-Income Housing Tax Credit	Freedman and Owens 2011
Use electronic benefit transfer (EBT) instead of cash	Write et al. 2017
Alter the timing of income support payments to stagger them across each month	Foley 2011
Stagger the timing of delivery of federal food benefits (SNAP)	Carr and Packham 2019

and found that the switch to EBT reduced overall crime rates by nine percent. Staggering payments may also reduce violent crime. Using daily reported incidents of major crimes in twelve U.S. cities, Foley (2011) found the incidence of financially-motivated violent crimes was related to cycles in monthly welfare payment, but only in jurisdictions in which disbursements were focused at the beginning of the month and not in jurisdictions in which disbursements were staggered. Likewise, Carr and Packham (2019) found that staggering payments to individual recipients of federal food benefits (SNAP) led to meaningful reductions in crime, including assault, domestic violence, and kidnapping.

## Reduce the Harmful Effects of the Justice Process

Despite the best efforts of state and local governments, their nonprofit partners, and residents themselves, every community is likely to face some level of violence. When violence occurs, the formal justice system will be expected to respond. Communities should ensure that operations of the justice system do not add to violence problems. For example, punitive approaches to justice can easily become theater, designed to satisfy the public's appetite for punishment but adding little to actual public safety. Moving to less punitive policies may reduce the incidence of violence. In one recent study based in Texas, Mueller-Smith and Schnepel (forthcoming) examined temporal discontinuities in policies affecting diversions from felony prosecutions and found that diverting felony offenders from prosecution reduced their subsequent convictions for violent crime. Likewise, taking advantage of "as-if random" practices for assigning Assistant District Attorneys to misdemeanor arraignments in one Massachusetts county, Agan et al. (forthcoming) found that when prosecutors decline to prosecute marginal misdemeanor defendants, it can lead to significant reductions in their downstream felony arrests and convictions.

Reducing the use of juvenile detention has also been shown to reduce violent crime. Using the incarceration tendency of randomly-assigned judges as an instrumental variable, Aizer and Doyle (2015) constructed legal histories of criminal cases from a large urban county over a 10-year period and found that juvenile incarceration resulted in substantially higher adult incarceration rates, including for violent crimes. Using variation in small cohorts within the same juvenile detention facility, Stevenson (2017) found that detained youth exposed to peers having higher levels of aggression and more troubled family histories had increased felony arrests and a greater likelihood of felony incarceration after release.

#### **Procedural Justice**

Research suggests the effectiveness of justice interventions depends in part on procedural justice, or the extent to which citizens perceive the actions of the formal justice system as fair, trustworthy, and legitimate (Lind and Tyler 1988; Tyler 2006). Legitimacy

## RESEARCH HIGHLIGHTS Journal of Public Economics

Palmer, Caroline, David C Phillips and James X. Sullivan (2019). Does emergency financial assistance reduce crime? Journal of Public Economics, 169, 34–51.

Financial assistance reduces criminal behavior among those experiencing negative income shocks, such as job loss. By exploiting a quasi-random variation in how temporary financial assistance was allocated to eligible individuals, researchers found evidence indicating a decrease in arrests one to two years after the initial call. Results were particularly notable for violent crime, as arrests for individuals receiving funds were 51 percent lower than among callers who were eligible but did not receive funds.

refers to whether people experience the actions of legal authorities as unbiased and whether they are treated fairly and equally during interactions with justice officials. Researchers have investigated whether perceptions of legitimacy are associated with voluntary decisions to comply with the law, defer to requests from authorities, and cooperate and engage with the justice process.

Procedural justice depends on four factors. First, participation and voice are critical. People report higher levels of satisfaction in encounters with authorities when they have an opportunity to explain their situation and perspective. Even when people know their input will not entirely control an outcome, they want to be heard and taken seriously. Second, people care a great deal about the fairness of decision-making by authorities and they pay attention to neutrality, objectivity, factuality, consistency, and transparency. This means that people care about whether a decisionmaker takes the time to explain what he or she is doing and why. Third, people care that legal authorities treat them with dignity, respect for their rights, and politeness. Fourth, in their interactions with authorities, people want to believe authorities are acting with a sense of benevolence. They want to trust that the motivations of the authorities are sincere and well-intentioned. Basically, the public needs to believe that actors from the justice system think they matter. In relationships with law enforcement, the public makes this assessment by evaluating how police officers treat them.

Research shows this is more than a theory. In one federally funded project, Project Safe Neighborhoods, jurisdictions held "notification meetings" for individuals convicted of serious felonies. The meetings were deliberately organized with procedural justice principles. An evaluation demonstrated positive effects (Papachristos et al. 2007; Wallace et al. 2016). Perceptions of legitimacy encourage trust and add to public safety beyond the effects of simple deterrence achieved through fear of consequences (McLively and Nieto 2019; Wakeling et al. 2016).

Reduce Harmful Effects of the Justice Process	EVIDENCE-BACKED STRATEGIES TO PREVENT AND REDUCE COMMUNITY VIOLENCE
Divert felony offenders from prosecution	Mueller-Smith and Schnepel 2020
Decline to prosecute marginal misdemeanor defendants	Agan et al. (forthcoming)
Reduce the use of juvenile detention	Aizer and Doyle 2015
Increase citizen perception of the legitimacy of justice system	Lind and Tyler 1988; McLively and Nieto 2019; Tyler 2006; Wakeling et al. 2016
Organize interventions around procedural justice principles	LaGratta 2017; Lawrence et al. 2019; Lee et al. 2013; Meares and Tyler 2014; Papachristos et al. 2007; Wallace et al. 2016; Wood et al. 2020

A recent evaluation of interventions centered on procedural justice, limitations on the consequences of bias, and promotion of community reconciliation demonstrated promising results and decreases in violent crime in five of six cities hosting the study (Lawrence et al. 2019). Other research documented a causal relationship between procedural justice training provided to police and a reduction of police use of force as well as fewer complaints against officers (Wood et al. 2020).

In any comprehensive strategy to reduce community violence, officials in the justice system should attend to the effects of their own process. Research suggests that systems focused on procedural justice may be more effective in addressing neighborhood violence. Evidence for the value of procedural justice applies across the wide array of criminal legal institutions, including police, prosecutors, courts, and the many nonprofit partners involved in the justice process (LaGratta 2017; Lee et al. 2013; Meares and Tyler 2014).

#### Confront the Gun Problem

Any credible effort to reduce violence in the United States must attend to the problem of firearms (Abt 2019; Smart et al. 2020). Reducing access to guns would reduce violent crime. Increasing restrictions on gun access for people convicted of domestic violence offenses, for example, has been shown to reduce violent crime. Using spatial and temporal variation in the application of the 1996 expansion of the federal Gun Control Act (GCA) to prohibit defendants convicted of qualifying domestic violence misdemeanors from possessing or purchasing a firearm, Raissian (2016) found GCA expansion led to 17 percent fewer gun-related homicides among female intimate partner victims, 31 percent fewer gun homicides among male domestic child victims, and a 24 percent reduction in gun homicides of parents and siblings. Restricting children's access to guns reduces violent crime as well. Analyzing data from the Youth Risk Behavior Survey (YRBS) from 1993–2013, Anderson and Sabia (2018) found that child-access-prevention (CAP) laws were associated with an 18 percent decrease in gun carrying and 19 percent fewer students being threatened or injured with weapons on school property.

The wide availability of firearms appears to play a role in explaining why the United States has a homicide rate 7.5 times higher than that of the average high rate of homicide in high-income nations (Grinshteyn and Hemenway 2019). Firearm availability is associated with rates of homicide across the U.S. (Cook and Ludwig 2006; Siegel et al. 2014) and is a good predictor of rates of fatal police violence (Hemenway et al. 2019). One recent study examined changes in state-level policies governing access to firearms, including child access prevention, right-to-carry laws, and stand your ground laws (Schell et al. 2020). The results suggested that child access protection laws alone could lead to 11 percent fewer firearm deaths.

Reducing firearm availability to those who might be inclined to use them to commit violence is challenging given widespread gun ownership and the many weaknesses in federal firearms laws that allow individuals



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Many U.S. cities continue to struggle with the scourge of violence. I hope we can move away from the rhetorical polarities of "defund" versus "law and order" and create coordinated responses instead. We should embrace community input into problem solving, develop coresponder models, and ensure appropriate resources for social services, housing, mental health, and addiction services. And, we need to measure and assess all our efforts. Our habit of looking to punitive responses first and seeing police as the universal problem solver will not be quickly undone, but we need to understand how we created the current climate and lean on that knowledge to create a better future.

with histories of violence to obtain firearms legally (Webster and Wintemute 2015). The primary objective of most U.S. firearms policies is to keep guns away from individuals with histories of violence. The effectiveness of such laws depends upon the breadth of prohibiting conditions (i.e., how well the law specifies various prohibitions), how well state and local jurisdictions make records available for criminal background checks, and how well the laws and their enforcement hold violators accountable (Webster and Wintemute 2015).

Studies have suggested that laws that time-limited (5-10 years) firearm prohibitions for violent misdemeanor convictions are associated with lower rates of violent offending with a firearm among individuals targeted by the law (Wintemute et al. 2001). State-level studies find protective effects for violent misdemeanant prohibitions for Blacks but not for Whites (Knopov et al. 2019). At the county level, firearm prohibitions for violent misdemeanors were associated with reduced firearm homicide rates in suburban and rural counties, but not among urban counties (Crifasi et al. 2018; Siegel et al. 2020). A recent study of California's laws to prohibit violent misdemeanants from possessing firearms and extend background check requirements to private transfers of firearms found no clear effects on state-wide homicide rates (Castillo-Carniglia et al. 2019).

The lack of protective effects from violent misdemeanor firearm prohibitions reported in some population-level studies may be due to relatively weak laws to prevent diversions of guns to the underground market where guns used in homicide are frequently obtained (Braga et al. 2020). Studies that use indicators of diversion or trafficking from crime gun trace data show that extending background checks to private transfers, requiring licenses or permits to purchase handguns, waiting periods, mandated reporting of lost or stolen firearms, and strong regulation and oversight of licensed gun sellers are each associated with reduced levels of diversion of firearms for criminal use (Collins et al. 2018; Crifasi et al. 2017; Webster et al. 2013b; Webster et al. 2009). Comprehensive background check laws are necessary for preventing the diversion of firearms for criminal misuse, but rigorous studies fail to find clear evidence that they are sufficient for reducing homicides unless coupled with requirements that handgun purchasers be licensed (Castillo-Carniglia et al. 2019; Crifasi et al. 2018; Kagawa et al. 2018; McCourt et al. 2020; Rudolph et al. 2015).

Research monitoring firearm homicides after states change their handgun purchaser licensing laws provides compelling evidence that purchaser licensing has a large protective effect. In 1995, Connecticut enacted a law requiring handgun purchasers to be licensed by state police contingent upon passing a background check and receiving eight hours of firearm safety training. Rudolph and colleagues (2015) estimated the law reduced firearm homicide rates by 40 percent during the first 10 years. Another recent study updated the analysis with 12 additional years of post-enactment data and estimated a



OBSERVATIONS FROM GROUP MEMBERS
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If we amplify anything in the short-term, I think it would be the coordination of strategies. The lack of coordination in cities is often tied to budgets. Service agencies, especially those operating with private funding, are always trying to keep their lights on and battling for scarce resources with public entities. Public entities, like police departments, usually have steady budgets. They don't have to worry about physical infrastructure, their heat, or their Wifi access. Private agencies have to deal with things like that constantly. I think this is doubly true in the violence prevention sector, where good workers are scarce and never well-equipped.

28 percent reduction in firearm homicide rates associated with Connecticut's handgun purchaser licensing law (McCourt et al. 2020).

Beginning in the 1920s, Missouri state law required handgun purchasers to be licensed and vetted by local sheriff's departments. The state repealed the law in 2007. Three studies, using data over different time periods and different statistical modeling methods demonstrated that the law's revocation was associated with statistically significant increases in firearm homicide rates between 17 and 47 percent (Hasegawa et al. 2019; McCourt et al. 2020; Webster et al. 2014). Revocation was also associated with a two-fold increase in an important indicator of illegal diversion of firearms for criminal use (Webster et al. 2013b). Importantly, these and other studies of Connecticut's and Missouri's handgun purchaser laws found similarly large effects on firearm suicides (Crifasi et al. 2015; McCourt et al. 2020). Studies examining the association between purchaser licensing laws across all states having such laws find that licensing provisions are associated with lower firearm homicide rates (Crifasi et al. 2018; Knopov et al. 2019; Luca et al. 2017; Siegel et al. 2020), lower rates of fatal mass shootings (Webster et al. 2020), and lower rates of law enforcement officers shot in the line of duty (Crifasi et al. 2016).

Purchaser licensing laws may reduce the incidence of fatal shootings by police. In states that require comprehensive background checks but without purchaser licensing laws, rates of fatal shootings by police are twice as high as in states with licensing laws. States with neither licensing laws nor background checks experience fatal police shootings at four times the rate seen in states with purchaser licensing laws (Webster and Booty 2020).

Confront the Gun Problem	EVIDENCE-BACKED STRATEGIES TO PREVENT AND REDUCE COMMUNITY VIOLENCE
Prohibit people with previous convictions for domestic violence charges from possessing or purchasing firearms	Raissian 2016
Enact child-access-prevention (CAP) laws	Anderson and Sabia 2018
Reduce firearm availability for individuals with documented histories of interpersonal violence	Crifasi et al. 2018; Siegel et al. 2020; Wintemute et al. 2001
Implement comprehensive background check laws coupled with purchasing liscenses	Castillo-Carniglia et al. 2019; Crifasi et al. 2018; Kagawa et al. 2018; McCourt et al. 2020; Rudolph et al. 2015
Implement handgun purchaser licensing laws	Crifasi et al. 2015; Crifasi et al. 2018; Crifasi et al. 2016; Hasegawa et al. 2019; Knopov et al. 2019; Luca et al. 2017; McCourt et al. 2020; Siegel et al. 2020; Webster et al. 2013b; Webster et al. 2014; Webster and Booty 2020; Webster et al. 2020
Remove "Stand Your Ground" (SYG) laws	Cheng and Hoekstra 2013; Crifasi et al. 2018; Humphreys et al. 2017; McClellan and Tekin 2017
Add waiting periods for purchasing firearms	Luca et al. 2017; Collins et al. 2018; Webster et al. 2013
Implement mandated reporting of lost or stolen firearms	Crifasi et al. 2015; Collins et al. 2018; Webster et al. 2009; Webster et al. 2013
Extend background check requirements to private transfers	Collins et al. 2018; Webster et al. 2013
Utilize strong regulation and oversight of licensed gun sellers	Collins et al. 2018; Webster et al. 2013
Maintain "No Issue" or "May Issue" laws rather than "Shall Issue" laws	Crifasi et al. 2018; Donohue et al. 2019; Gius 2019; Siegel et al. 2017; Siegel et al. 2019

National surveys indicate growing support for handgun purchaser licensing laws—77 percent overall (Barry et al. 2019). In states requiring handgun purchaser licensing, more than three-quarters of gun owners support the laws (Crifasi et al. 2019). Purchaser licensing that allows local officials wide discretion in denying applications, as in New York and Massachusetts, may be more vulnerable to inequitable restrictions on 2nd Amendment rights. (Faculty at the Johns Hopkins University Center for Gun Policy and Research are working with the Consortium for Risk-Based Firearm Policy to develop licensing guidelines that address equity concerns.)

State regulations of concealed carry of firearms outside the home appear to affect rates of violent crime, including homicide. Most states have so-called "Shall Issue" laws that make it relatively easy for citizens to obtain permits to legally carry concealed firearms outside of the home, provided they are not legally prohibited from having firearms. Some Shall Issue laws allow for denials of permit applications if there is some evidence an applicant is

## RESEARCH HIGHLIGHTS Proceedings of the National Academy of Sciences

Schell, Terry L., Matthew Cefalu, Beth A. Griffin, Rosanna Smart, and Andrew R. Morral (2020). Changes in firearm mortality following the implementation of state laws regulating firearm access and use. Proceedings of the National Academy of Sciences, 117(26), 14906–14910.

Researchers affiliated with the RAND Corporation's initiative, Gun Policy in America, recently examined changes in several state-level policies governing access to firearms, including child access prevention, right-to-carry laws, and stand your ground laws. The results suggested that when implemented properly the effects of child access laws alone would lead to 11 percent fewer firearm deaths.

dangerous. Eight states and the District of Columbia have "May Issue" laws that provide law enforcement with discretion to deny concealed carry license applications even when the applicant is not a prohibited person. "Permitless" carry laws are gaining popularity in states with strong anti-gun-regulation politics. The best available research indicates that changing laws from "No Issue" or "May Issue" to "Shall Issue" may be associated with increased rates of violent crime, including homicide (Crifasi et al. 2018; Donohue et al. 2019; Gius 2019; Siegel et al. 2017; Siegel et al. 2019).

A more politically feasible and legally sound way to reduce civilian gun carrying would be through rigorous licensing that sets a higher bar for prohibitions relevant to a history of violent or dangerous behavior as well as a high standard for applicants' ability to discern when and when not to reach for, brandish, or shoot a firearm. There is wide support (83% of non-gun-owners and 73% of gun owners) for laws requiring civilians seeking concealed carry licenses to demonstrate they can safely do what they are seeking a license to do (Barry et al. 2019).

So-called "Stand Your Ground" (SYG) laws that expand justifications for lethal responses to perceived threats represent a threat to community safety. Research is somewhat inconsistent based upon modeling strategies, time periods studied, and whether the effects of other key laws are considered. The weight of evidence, however, suggests that SYG laws increase homicides (Cheng and Hoekstra 2013; Crifasi et al. 2018; Humphreys et al. 2017; McClellan and Tekin 2017). Using state-level monthly data and a difference-in-difference identification strategy, McClellan and Tekin (2017) found that about 30 people are killed monthly due to SYG laws. The study suggested the laws were associated also with increased hospitalizations due to firearm-inflicted injuries. Using state law variations between 2000 to 2010, Cheng and Hoekstra (2013) found that SYG laws led to a statistically significant eight percent net increase in the number of reported murders and nonnegligent manslaughters.

## More Evidence, Different Evidence

If any country could be expected to generate and use high-quality evidence for reducing violence, it would be the United States. Not only does the U.S. suffer from high rates of interpersonal violence, especially gun violence, but it also has a well-funded and diverse community of researchers ready to conduct rigorous evaluations of policies and programs. Why then, do public officials and community leaders still ask for new evidence when designing strategies to prevent violence? Why has the country not solved this problem?



OBSERVATIONS FROM GROUP MEMBERS
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Policymakers usually want programs that work fast, so they rely on law enforcement, but studies of police intervention rarely assess their potential to cause harm--either to individuals or communities. We need to convince political leaders to replace suppression efforts with prevention efforts and to make investments in resources and opportunities that engage youth in structured prosocial activities. Investments in the physical infrastructure of playgrounds, ball fields and swimming pools, coupled with resources for structured activities, will likely result in a host of quality-of-life outcomes in addition to violence reduction. It just might take a bit longer to achieve these outcomes.

First, policymakers are reluctant to reject established concepts. Strategies for reducing violence have traditionally depended on two core components: 1) police and other agencies in the formal justice system are expected to deter and rehabilitate people already known to be violent offenders while simultaneously communicating a general message of deterrence to potential offenders still unknown, and 2) numerous organizations including human service agencies, schools, healthcare providers, and the faith community try to mitigate the wide array of social structures and community conditions associated with high rates of violence. Public officials can be reluctant to support the second strategy. Especially during periods of social unrest and increasing violence, addressing the underlying causes of violence with preventive services and supports can sound vague, complicated, and ineffectual. To attract broad political support, violence prevention strategies must have immediate and visible effects. When news media produce images of people being arrested and imprisoned, the public readily assumes these actions will generate greater safety. It is harder, if not impossible, to photograph the long-term preventive effect of good schools, secure housing, and orderly public spaces.

Second, the nature of evaluation research creates a bias that disadvantages non-policing approaches. Researchers are more likely to find positive effects for interventions focused on individuals rather than neighborhoods and communities. Individual-level studies benefit from larger sample sizes and predictably higher base rates

of key outcomes, especially when research subjects are already involved in the justice system. These factors increase the ability of researchers to detect statistical effects (or the strength of a measurable relationship between an intervention and its outcomes). Community-based interventions, on the other hand, are usually implemented in groups of cities or neighborhoods, which results in smaller sample sizes, hard-to-control treatment assignments, and large numbers of unmeasurable covariates. This creates an evidentiary bias favoring individual-level programs for known offenders (secondary intervention) rather than strategies designed to prevent crime and violence at the neighborhood or community level (primary prevention).

Researchers assessing the strength of evidence reinforce the individual-level bias when they:

- 1. prioritize studies based on the rigor of comparative designs, with a preference for randomization,
- 2. rank studies according to reported effect size on crimerelated outcomes (usually police reports), and
- designate interventions at the top of the list as "evidence-based."

Individual-level interventions inevitably find their way to the top of such lists due to the nature of statistics. In this way, public officials are taught to be skeptical of community-based strategies for violence prevention and violence reduction. The common ideological tendency of public officials to locate the sources of social problems within individuals rather than communities only aggravates and strengthens the bias in favor of interventions operated by law enforcement and the justice system.

#### **Data Blinders**

Too much of the knowledge base for reducing violence depends on studies that measure public safety with data generated by law enforcement and subsequent processing within the justice system. Police data do not capture all crimes and certainly not all forms of harm and abuse. Even for crimes of violence, more than half of all offenses are never reported to police, and only half of those reported ever result in an arrest (Butts and Schiraldi 2018; Morgan and Oudekerk 2019).

Police data are affected by differential reporting based on a community's trust in police, residents' reluctance to report certain crimes (e.g., interpersonal violence, sexual assault), and numerous other definitional/measurement problems, data entry errors, and even purposeful manipulation by law enforcement agencies (Elliott et al. 1986; Flowers 1988; Gelles 1993; Rokaw et al. 1990).

Police and justice system data are generated from the work processes of formal bureaucracies that are inherently subject to racial and class biases and that create a distorted image of community crime (Hetey and Eberhardt 2018; Richardson et al. 2019). Even if communities of color are only slightly more likely to



OBSERVATIONS FROM GROUP MEMBERS

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When people ask what they should do to reduce violence, I think of three things. First, convene the right players in your city. You need multiple agencies. You need the police at the table, the DA and public defenders, and you need social services, mental health, everyone... you need all the key agencies to buy in. Second, you need short-term and long-term goals. Everybody wants to solve things now, but a good process may be a slow process. People need to know that up front. There are things you can do right now, of course, but many things take two, five, ten years, because they require investments from not only government sources but the philanthropic community too. The third thing you need to do is establish a science advisory board. Scientists will never drive all decisions, but you need them to assess what science says about any serious proposal. Oh, and one more thing -- Transparency. No matter what the best solution may be, if you are not transparent and telling people what you are doing and why you are doing it, people tend to come up with their own interpretations. They may not agree with everything, and that is fine, but you will need at least some clear common ground.

be under constant police surveillance, for example, and even if people of color are only slightly more likely to be stopped and questioned, then just slightly more likely to be arrested, charged, and convicted, all the slight increments of racial bias accumulate (Bishop et al. 2020). When the formal systems of law enforcement and public safety are perceived as biased, poor communities and communities of color are less likely to report incidences of violence to the police and less likely to cooperate with police when crimes are reported. Thus, police data represent an incomplete picture of the harmful behaviors affecting neighborhoods and exposing residents to trauma and stress.

Official crime data also fail to capture the harms resulting from justice operations (Bell 2020; Pettit 2012; Roberts 2003; Rowe and Søgaard 2019). Data portraying the possible harms of a program, such as added victimization and negative effects on mental health and general well-being are not common in evaluation studies when the outcome of interest is violent crime. Data to operationalize community variations in resident well-being, social integration, and peer support would likely come from self-report data generated through surveys and interviews. Self-report data, however, are typically

time- and resource-intensive. As funding for evaluation is often treated as an afterthought by government funding sources, investigators are incented to avoid expensive data in favor of readily available police and court data, which encourages evaluations to focus on simply ascertaining whether officially recorded violence decreased after an intervention was implemented and not the full range of other important outcomes.

One critical and overlooked outcome, nearly always ignored in evaluations of both policing and non-policing approaches to violence reduction, is the true cost of policing. In many ways, the push to "defund" police that gained traction in 2020 is built on claims about costs and benefits: that investing limited city funds in institutions other than the police could reduce crime at substantially lower costs. Unfortunately, addressing this claim head on is hampered not just by the general lack of costbenefit analyses (CBA) of policing (Fackler et al. 2017; Ponomarenko and Friedman 2017; Washington State Institute of Public Policy 2019), but by the fact that CBA studies generally fail to identify important shortcomings in police operations and their outcomes.

Few if any studies reporting net positive effects from policing actually show it is specifically the police that reduce crime. Instead, results indicate that having someone present reduces crime and that police can be that someone, but not that police *must be* that someone. In other words, CBA studies appear to validate Jacobs' (1961) "eyes on the street" hypothesis more than they credit the effects of police involvement. Of course, it may be that the threat of arrest is what makes police presence matter, but even that does not necessarily imply that armed police are essential. As Sharkey (2018) and Cook and MacDonald (2011) point out, many Business Improvement Districts have relied on (often unarmed) private security to provide safety. In fact, the U.S. employs more people as private security than as sworn police officers, even though studies of policing's impact on crime tend to omit private security from their models.

Another shortcoming is that CBAs of policing measure the fiscal costs of policing and not the social costs of policing (Ponomarenko and Friendman 2017; WSIPP 2019; though see Manski and Nagin 2017 for a rare, narrowly focused exception). Deaths caused by policing, for example, do not show up as costs in traditional CBAs, nor does community fear and other collateral costs that usually follow in the wake of such deaths. Studies do not include the costs of non-lethal police violence as well, both physical and emotional, nor do studies include any of the macro-level costs, such as an unwillingness to report crime (Desmond et al. 2016), communitywide declines in voting that come from negative police encounters (Weaver and Lerman 2010), or the collective costs of racialized mass stops, such as NYC's Stop and Frisk campaign (Fagan et al. 2009). Studies tend to measure fiscal outlays, which would likely be dwarfed by measures of true social costs.



OBSERVATIONS FROM GROUP MEMBERS
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School of Social Welfare

Public officials (and researchers) need to learn to really listen, and not just in a PR way, going to town halls and churches, shaking hands and kissing babies, but really sitting with people and understanding them and their experiences. To do that, we also have to deal with things we'd really rather not address, in our own systems. Even progressives. From their voting record, they may be working for social justice, but always from a privileged station. It's the same with the social science research community. We have to clean up our side of the street and think about: how did we become an authority on these phenomena in the first place? What hoops did we jump through? What tests did we take? Why is our voice louder than these other voices? Why is our kind of knowing privileged, and how do I benefit from that? Those are the questions that mayors, attorneys, policymakers, and scientists need to reckon with, and do it seriously.

Policing CBAs also typically fail to engage the issue of opportunity costs (though see Aos and Drake, 2013 for a partial exception). Chalfin and McCrary (2018), for example, estimate that \$1.63 in reduced crime flows from each additional dollar spent on policing, even implying that "US cities are underpoliced" (the title of their paper). Their conclusion does not hold, of course, if each dollar could produce more than \$1.63 in reduced crime if spent elsewhere. Studies cited by Doleac (2018) suggest that a dollar spent on (civilian) drug treatment may cut crime by almost \$4, gains that far exceed those of policing without the attendant social costs, and with a host of other social benefits. It is certainly helpful to know that interventions are not net losses when viewed in isolation (putting aside concerns about overlooked social costs), but findings of "net gain" should not be always read to mean "invest more." They may be consistent with "invest less." The United States spends about \$100 billion per year on policing, but CBAs of policing do not accurately measure social costs, spend little time examining opportunity costs and have not carefully identified the extent to which any measured deterrent effect is due to the unique powers of police officers or might be matched by other sorts of observers. These are serious and significant blind spots at any time, but especially during a period when the efficacy and centrality of policing is facing significant criticism.

## Refocusing

As community leaders and funders consider ways to reduce violence without police and to prove the effectiveness of those strategies, the conventional view of violence must be reconsidered. The narrow and traditional definition of violence used in most evaluation research is interpersonal harms reported by the police or to the police. This view is wholly insufficient if the goal is to prevent and reduce community violence. For one, most violent acts are not measurable with police data because they are never reported to police (Biderman and Reiss 1967). Not only do conventional definitions of violence fail to capture half of all violent acts between neighborhood residents, but they also omit any violent harm resulting from organizational behaviors, social structures, and systematic racial and class oppression. If the goal of violence reduction is to enhance the peace and security of neighborhood residents, efforts to reduce violence should attend to all forms of violence.

If a person knowingly poisons their neighbor's water with lead, causing lasting harm to a child, the public would condemn the act as a serious and even violent crime. When a government does the same thing, however, the average citizen might describe it as a cruel and callous bureaucratic error, but probably not a violent crime. If a person sits in a car while a friend attempts to rob a liquor store and a clerk inside the store is shot and killed, the driver would probably be charged with taking part in a murder even if they were unaware the friend was carrying a weapon. When corporations repeatedly take actions to condemn entire communities to levels of stress proven to result in high rates of violence, however, most people would not see those actions as crimes.

Using a broad definition would hold parties criminally responsible for violence whenever they were accountable for violent harms, whether they were individual perpetrators, organizational entities, political bodies, or economic and corporate structures. Without a legal framework to address all forms of structural violence, traditional definitions of violence fail to indict all responsible parties (Farmer et al. 2006). Expanding the concept of violence to include structural violence would signal a true commitment to peace, truth, reconciliation, and racial healing.

Researchers should participate in expanding the concept of violence. Conventional evaluation frameworks are often deficient for transformative research as they are less attuned to data from community experts and more oriented for academics and professional researchers. The data instruments commonly deployed in social scientific studies do not account for the dual- or multi-coding schemes required to capture the experiential overlap unfolding in complex social contexts (Brezina et al. 2009; Forenza et al. 2019; Sabol et al. 2004).

Conventional evaluation studies often fail to account for the full social context giving rise to violence and other unwanted behaviors. Traditional research analyses label the behavior of individuals as violent while omitting other relevant traits (e.g., exposure to neighborhood-level crime salience, prior experiences in police custody, exposure to police violence). Without an analytically appropriate strategy for unpacking the dynamics of place-based violence, the full contour of these other factors remains detached from research methods and measures (regardless of an individual scientist's conceptual understanding of violence and victimhood).

Measurement validity in studies of community violence would be enhanced by including input from community residents as they are usually in the best position to identify and shape the type of violence reduction interventions that would be most effective in their own communities. Resident guidance and control of research would make evaluations more meaningful and effective. Researchers would benefit from following the knowledge of residents as they contribute to the contextual definitions of violence, the identification of precursors and consequences of violence, and the design of investments to improve public health and safety. This is particularly important for research aimed at developing interventions to disrupt violence without relying on the formal legal system. Research that fails to acknowledge this paradigmatic gulf inevitably yields an incomplete understanding of the core constructs that supposedly form the subject of such studies—community violence and community empowerment.

### Recommendations

The John Jay College Research Advisory Group on Preventing and Reducing Community Violence offers 11 recommendations to consider when generating new evidence for violence reduction without police.

The seven major strategies identified in this report are consistent with the most persuasive research evidence for preventing and reducing violence without relying on police. Funding organizations and researchers should ensure each strategy is also responsive to the values and experiences of community residents.

Needed Action: Funding entities should place a high priority on research involving significant and sustained community engagement. Resident participation should begin during the design phase and not wait until data are already collected.

2. Environmental strategies, such as greening vacant lots, improving lighting, and increasing tree canopy can reduce violence and address accumulated structures of poverty, fear, and stress, while increasing social integration and resident well-being.

Needed Action: Place-based interventions have been tested and often found to be successful. Researchers should identify the strategies ready to be scaled-up and identify best processes, relative dosages, and thresholds of intervention needed to reduce violence. Current evidence is often derived from natural experiments that examine existing differences across contexts without intervention by scientists (e.g., effects of variations in the tree canopy or lighting levels). New trials-oriented research should be used to manipulate physical features and establish the effects of place-based interventions and build a portfolio of investments focused on low-cost, high-reward opportunities.

Strategies that increase pro-social bonds, promote anti-violence norms, and provide social supports and opportunities for participants can produce short-term and long-term desistance from crime when implemented and managed properly.

Needed Action: Outreach-based programs, such as Advance Peace and Cure Violence, are an attractive area for new research investments, but the literature is at an early phase. In addition to outcome evaluations, funding organizations should focus on two areas: (1) the use of implementation science to identify the key components of such programs and establish the role of program fidelity, and (2) research to assess individual-level behavior change by varying the timing and intensity of program components.

Communities seeking to reduce violence must place a priority on young people. Interventions should focus on protective factors as well as risk factors, strengths as well as problems, and efforts to facilitate successful transitions to adulthood for all youth. Young people engaged with positive, prosocial adults and peers are more likely to build the developmental assets needed for non-violent lives.

Needed Action: Researchers in the area of youth services traditionally measure deficits, including criminal re-arrest and recidivism. New funding should focus on rigorous evaluations of efforts to deliver positive assets for youth, including improvements in family relations, school success, labor market performance, and use of leisure time.

Violence-prevention efforts must include a focus on substance abuse but look beyond the effects of substance abuse treatment. Studies suggest that restricting access to alcohol among young people can reduce rates of interpersonal violence.

> Needed Action: New research should establish the benefits of varying strategies to reduce youth access to alcohol while monitoring displacement effects if youth increase their use of other substances.

Community violence is more prevalent in neighborhoods where residents face severe and chronic financial stress. To disregard this reality while focusing solely on surveillance and enforcement is inherently discriminatory.

Needed Action: Research funders should support evaluations of violence reduction strategies that include fiscal components, such as cash incentives tied to skills training, therapeutic counseling, and other programs that assist low-income residents in need of immediate help.

Communities are continuing to invest in procedural justice, or strategies to increase the objectivity, neutrality, and transparency of the justice process. Evidence for the value of procedural justice has been found across the wide array of criminal legal institutions, including police, prosecutors, courts, and the many nonprofit partners involved in the justice process.

Needed Action: Research is still needed to establish the causal effects of various approaches to procedural justice, controlling for the severity of the legal matters involved and community context as well as the fidelity of strategies intended to achieve procedural justice outcomes.

Keeping firearms away from people inclined to use them for violence is challenging given widespread gun ownership in the United States and many weaknesses in federal and state firearms laws. The variability in law, however, allows researchers to model the effects of policies on firearm violence.

Needed Action: Evidence suggests that strategies to prevent community violence should include policies that control access to and possession of firearms. New research should test the association between the presence of such policies and the knowledge and behavior of individuals residing in affected areas.

Weighing the strength and applicability of research evidence is a technical skill. Any effort to base policy and practice on research evidence should involve the advice and counsel of trained researchers--not merely those with advanced degrees, but experts in evaluation methods, statistics, and causal inference.

Needed Action: Research funding should include incentives for individual investigators to use multi-disciplinary teams, both in the design phase of studies and in the data analytic stages.

Judging the strength of evidence behind a specific policy or practice is not a simple matter of determining which studies are best from a technical perspective. Some causal propositions are harder to test than others.

Needed Action: In choosing specific research projects, funding organizations must strike a balance of theoretical salience, practical viability, and evidentiary support. Judging research value based solely on statistical rigor is dangerously naive and even harmful.

There will never be enough financing to support rigorous evaluations of every feasible method of reducing community violence—especially studies requiring direct contact with human subjects for interviews and surveys.

Needed Action: Researchers and community leaders should collaborate in data analytic projects and natural experiments to test a wide array of policies and programs for their potential to reduce community violence. Funding bodies will undoubtedly continue to invest in studies requiring primary data collection, but other cost-effective research projects should use pre-existing, secondary data from varying sectors, including schools, hospitals, housing, taxes, employment, commercial sales, business regulations, etc.

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