# Commentary: Evidence to Guide Gun Violence Prevention in America

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# **Keywords**

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## **Abstract**

Gun violence is a major threat to the public's health and safety in the United States. The articles in this volume's symposium on gun violence reveal the scope of the problem and new trends in mortality rates from gunfire. Leading scholars synthesize research evidence that demonstrates the ability of numerous policies and programs—each consistent with lessons learned from successful efforts to combat public health problems—to prevent gun violence. Each approach presents challenges to successful implementation. Future research should inform efforts to assess which approaches are most effective and how to implement evidence-based interventions most effectively.

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### INTRODUCTION

Most readers will not be shocked to learn that gun violence in the United States has enormous detrimental impacts on public health and that firearm availability plays an important role in explaining why US homicide rates are many times that of other high-income nations. The profound impact that gun violence has on public safety and American life, as well as the outsized influence the gun lobby has over gun policy, can cultivate pessimism about the nation's ability to significantly reduce gun violence. This volume's symposium of articles on gun violence and its prevention offers evidence-based insights on recent trends in firearm violence and a range of interventions designed to prevent it. These critical reviews of the research demonstrate that (a) some programs and policies have been effective in preventing gun violence; (b) these interventions are often grounded in theories and approaches commonly applied to public health problems; and (c) achieving results—less gun violence—requires adept implementation of the evidence-based programs and policies.

## **INSIGHTS FROM THE SYMPOSIUM**

A recent surge in mass shootings (1) may skew public perceptions of the true nature of and trends in gun violence as well as prescriptions for how to reduce gun violence. In this volume, Wintemute (11) presents extensive data documenting how gun violence affects the US population and various subgroups. He describes contrasting recent trends: Rates of firearm-involved homicide, which disproportionately affect young black men, have been declining, whereas firearm suicides, which principally affect white men, are increasing. Although firearm suicides account for 60% of all deaths by gunfire in the United States and are preventable (7), most public policies and programs are directed at the criminal use of guns.

Wintemute also notes starkly different firearm homicide and firearm suicide rates across states (11). Debates, often not based on the best science, about the effectiveness of various gun policies commonly involve comparisons between states or cities with different types of gun laws on the basis of some measure of violence to make the case for stronger or more lax gun laws. Given the substantial differences across states in demographic factors associated with violence as well as in social factors relevant to violence that cannot be easily measured, how much of the across-state variance in homicide and suicide rates, if any, can we attribute to specific gun policies?

Webster & Wintemute's (10) article reviews the scientific evidence relevant to what they argue are the most important types of firearm policies: those designed to keep firearms from criminals and other high-risk groups. The policies examined establish the conditions for proscribing the purchase and possession of firearms as well as the requirements that firearm sellers and purchasers must meet to prevent the diversion of firearms to prohibited persons (e.g., comprehensive background checks, record keeping). Some laws establishing firearm-prohibiting conditions are associated with reductions in violence (e.g., convictions for misdemeanors, domestic violence restraining orders, involuntary commitments for mental illness provided records are available), but others are not (e.g., misdemeanor domestic battery). The protective effects of gun laws appear to be greatest in states with the highest capacity to keep firearms from prohibited persons through comprehensive background checks, broader checks of records of disqualifying conditions, and permit-to-purchase licensing procedures that require in-person applications for permits.

Webster & Wintemute cite numerous studies that used crime gun trace data from the US Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) that have consistently shown negative associations between policies designed to prevent diversions of guns to criminals and such diversions. Some may question the public health relevance of research on gun diversions, but such

studies are important because they demonstrate the key mediating relationship between the effects of firearm sales regulations and violence. Individual-level crime gun trace data enable researchers to determine the policy context in which the firearms were originally sold on the basis of the date and state in which the firearm was originally sold; unfortunately, Congress has restricted the ATF's release of these data.

As Webster & Wintemute note, research on the effects of gun laws has been limited by the small number of studies that examine relationships between changes in firearm laws and subsequent changes in various forms of violence. Lack of funding for such studies has impeded the advancement of gun policy research (6); other impediments include the small number of changes during the past 40 years to what may be the most significant gun policies for keeping guns from highrisk individuals (the strongest firearm purchaser licensing laws) and uncertainty about or lack of consideration of the proper temporal relationship between the introduction of a new law and its hypothesized effects on violence (9).

Butts and colleagues (5) describe a promising public health approach to prevent gun violence, branded as Cure Violence, and the current research on the program's effectiveness. Recognizing that urban gun violence can spread much like a contagious disease, Gary Slutkin and his colleagues have applied effective infection control principles and methods for gun violence prevention approaches. The model uses street outreach workers and violence interrupters to mediate conflicts that could lead to shootings, to promote norms of nonviolence, and to direct youth to less risky lifestyles. Butts et al. reported on evidence that the program significantly reduced gun violence in most of the communities where the program was implemented, but in many instances, either there was no effect or, in some instances, the program was linked to increased violence. As with many behavioral interventions, program effects are likely to depend greatly on the individuals implementing the program, how well it is managed, and the community context in which it is implemented.

Butts and colleagues appropriately call for "practices that ensure fidelity to the theoretical model, and utilize data, evaluation tools, and methods that support a rigorous test of the intervention. Fidelity to the model and measurement of fidelity to the model is particularly important...because unfaithful replications that prove to be ineffective or even detrimental unjustifiably undermine the credibility of the program" (5).

Braga & Weisburd (4) review relevant theories and empirical evidence pertinent to focused deterrence as a strategy to reduce gun violence. Focused deterrence programs intervene with a relatively small number of individuals at greatest risk of perpetrating or instigating gun violence by issuing direct warnings of certain and severe consequences from the criminal justice system if the individuals or their associates commit violent crimes or illegally possess firearms. The message to stop the violence is reinforced by community members with moral authority or those who are otherwise respected by those the program targets. Services to facilitate transitions to less violent lifestyles are also offered. Although the program could be perceived by some as simply another "lock 'em up" approach to curtail violent crime, Braga & Weisburd explain how properly implemented focused deterrence can actually lead to less incarceration than traditional law enforcement. Its approaches are common to successful public health interventions: a focus on prevention; scientific study of risk and patterns of the problem; multidisciplinary interagency collaborations to achieve agreed-upon objectives; and use of available tools, including legal levers and effective communications, to affect the target risk behaviors.

Data presented from a meta-analysis of the effects of ten focused deterrence interventions targeting gun and gang violence tested in quasi-experimental studies reveal consistent and impressive reductions in violence (3). Furthermore, some studies document positive (preventive) spillover effects on gangs not directly targeted by the interventions (2, 8).

In summary, the articles in this symposium provide evidence that gun violence in America can be significantly reduced with proven and/or promising policies and programs. Each intervention examined here comes with unique challenges. There are significant research gaps to fill, especially concerning the effects of gun laws and the factors that support the most effective implementation of Cure Violence and focused deterrence. In light of the enormous social costs of gun violence in the United States, further investment is needed into research that will enhance efforts to prevent gun violence.

### **DISCLOSURE STATEMENT**

The author is not aware of any affiliations, memberships, funding, or financial holdings that might be perceived as affecting the objectivity of this review.

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