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SYMPOSIUM

## Gun Violence in America: An Interdisciplinary Examination

GUEST EDITED BY Ian Ayres, Abbe R. Gluck,  
and Tracey L. Meares

*Hannah Abelow, Ian Ayres, Brian Barnett, Joseph Blocher, Catherine Camp, Jacob D. Charles, Edouard Coupet, Jr., Cassandra Crifasi, Gail D'Onofrio, Gabriel A. Delaney, Allison Durkin, Catherine Feuille, Abbe R. Gluck, Amber Goodwin, TJ Grayson, Camila Gripp, David Hemenway, Hilary J. Higgins, Ronald S. Honberg, Vikram Jairam, Chandini Jha, Spurthi Jonnalagadda, James Kimmel, Jr., Kaveh Khoshnood, Nina A. Kohn, Katherine L. Kraschel, Samuel A. Kuhn, Victor Lee, Jonathan E. Lowy, Carolyn T. Lye, Tracey L. Meares, Jonathan Miller, Alexander Nabavi-Noori, Yamini Narayan, Cara Newlon, Caroline Nobo Sarnoff, Kate Nyhan, Kathleen M. O'Neill, Henry S. Park, Chelsea Parsons, Megan L. Ranney, Andrew J. Rising, Michael Rowe, Christopher Schenck, Zachary Shelley, Blake N. Shultz, Reva Siegel, Adam Skaggs, Thaddeus Talbot, Benjamin Tolchin, Erica Turret, Fredrick E. Vars, Bardia Vaseghi, Paige E. Vaughn, Sten H. Vermund, Susan Wang, Daniel Webster, Brandon Willmore, and James B. Yu*



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## LETTER FROM THE EDITOR

**T**he last issue of the year is always a time for reflection, but this year we reflect on a profoundly different kind of year. COVID-19 changed so much of how we lived our daily lives, and this might be our new normal for quite some time. And sadly, even with a pandemic, we continued to grapple with startling numbers of another serious issue in our country: gun violence.

Publishing an entire issue on gun violence during these changing times is particularly timely. As a country this year, like many before, we've witnessed mass shootings, suicides, homicides, and firearms-related injuries — tragedies that will leave families, loved ones, communities, and many others reeling in pain for years. Yet in the United States we are still divided on how best to prevent gun violence and improve upon existing policies, despite evidence that gun control laws help prevent the kind of violence we are concerned about. Because of the challenges related to reducing gun violence, the talented authors of this issue have taken a multi-pronged approach to address this issue in "Gun Violence in America: An Interdisciplinary Examination." Guest edited by Ian Ayres, Abbe R. Gluck, and Tracey L. Meares, this carefully organized issue pulls together scholars and practitioners from medical, legal, and academic fields who offer new perspectives and approaches. The authors of the 27 articles discuss gun violence as an important public health issue, and discuss in more detail the following: Extreme Risk Protection Orders; violence prevention programs; physicians' experiences and roles with gun violence; psychiatrists' understanding of patients' gun rights; firearms data systems improvement; purchaser licensing policy; mental illness; the effect of private corporations' policies on firearms suicides; youth firearm injuries; a behavioral addiction model of violence; and of course various arguments on Second Amendment sanctuaries, public safety, self-defense, among many other topics. Most of the issue can be found in these printed pages of the journal, but the remaining articles and all of the articles' appendices can be found online.

This issue is a fundamental roadmap for future gun violence research and policy, and we thank the excellent team at Yale University for their dedication to this issue. Because of them and all of the co-authors, we have a real opportunity to advance our understanding of how we may prevent unnecessary harm. If we have something to be hopeful about for 2021, may a decline in gun violence be one of them.

Courtney McClellan  
Special Projects Editor  
*JLME*

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Symposium Articles

SYMPOSIUM

**Gun Violence in  
America: An  
Interdisciplinary  
Examination**

Guest Edited by  
Ian Ayres,  
Abbe R. Gluck, and  
Tracey L. Meares

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*Letter from  
the Editor*

Cover image ©Getty

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**Introduction**

*Ian Ayres, Abbe R. Gluck, Katherine L. Kraschel, Tracey L. Meares, and Caroline Nobo Sarnoff*

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**Why Regulate Guns?**

*Reva Siegel and Joseph Blocher*

Courts reviewing gun laws that burden Second Amendment rights ask how effectively the laws serve public safety — yet typically discuss public safety narrowly, without considering the many dimensions of that interest gun laws serve. “Public safety” is a social good: it includes the public’s interest in physical safety as a good in itself, and as a foundation for community and for the exercise of constitutional liberties. Gun laws protect bodies from bullets — and Americans’ freedom and confidence to participate in every domain of our shared life, whether to attend school, to shop, to listen to a concert, to gather for prayer, or to assemble in peaceable debate. Courts must enforce the Second Amendment in ways that respect the public health and constitutional reasons a democracy seeks to protect public safety. Lawyers and citizen advocates can help, by creating a richer record of their reasons in seeking to enact laws regulating guns.

This inquiry is urgent at a time when the Supreme Court’s new conservative majority may expand restrictions on gun laws beyond the right to keep arms for self-defense in the home first recognized in *District of Columbia v. Heller* in 2008.

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**The Legal and Empirical Case for  
Firearm Purchaser Licensing**

*Hannah Abelow, Cassandra Crifasi, and Daniel Webster*

This article argues that state government actors concerned about gun violence prevention should prioritize enactment of robust firearm purchaser regimes at the state level. First, the article outlines the empirical evidence base for purchaser licensing. Then, the article describes how state governments can design this policy. Next, the article assesses the likelihood that purchaser licensing legislation will continue to be upheld by federal courts. Finally, the article addresses the implications of this policy, aimed at

curbing gun deaths, for equally important racial justice priorities. Taken together, these various considerations indicate that purchaser licensing policies are among the most effective firearm-focused laws state governments can enact to reduce gun deaths within the existing federal legislative and legal frameworks.

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**Gun Regulation Exceptionalism and  
Adolescent Violence: A Comparison  
to Tobacco**

*Catherine Camp*

This article compares the landscape of tobacco regulations to the landscape of gun regulations, with a focus on regulations that target youth. This article argues that guns are significantly less regulated compared to tobacco, despite the frequency with which each product causes significant harm to both self and other.

Many of the specific ways tobacco is regulated can be applied analogously to firearms while plausibly surviving potential Second Amendment challenges. This article compares the regulatory landscape of tobacco and firearms across six categories: (a) minimum age for purchase, (b) sale by unlicensed individuals, (c) taxation, (d) advertising, (e) graphic warning labels, and (f) zoning.

At one time, tobacco was as central — or more so — to American culture as guns are today. However, many decades of public health advocacy led to historic tobacco regulations. Tobacco’s regulatory history provides a valuable blueprint for gun regulation, despite Constitutional differences.

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**The Firearms Data Gap**

*Allison Durkin, Brandon Willmore, Caroline Nobo Sarnoff, and David Hemenway*

The firearms data infrastructure in the United States is severely limited in scope and fragmented in nature. Improved data systems are needed in order to address gun violence and promote productive conversation about gun policy. In the absence of federal leadership in firearms data systems improvement, motivated states may take proactive steps to stitch gaps in data systems. We propose that states evaluate the gaps in their systems, expand data collection, and improve data presentation and availability.

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**Implementing Checklists to Improve  
Police Responses to Co-Victims of Gun  
Violence**

*Samuel A. Kuhn and Tracey L. Meares*

This qualitative study identifies police interactions with gun violence co-victims as a crucial, overlooked component of police unresponsiveness, particularly in minority communities where perceptions of police illegitimacy and legal estrangement are relatively high. Gun violence co-victims in three cities participated in online surveys, in which they described pervasive disregard by police in the aftermath of their loved ones' shooting victimization. We build on the checklist model that has improved public safety outcomes in other complex, high-intensity professional contexts to propose a checklist for police detectives to follow in the aftermath of gun violence. To build the checklist, we also reviewed the general orders of five police departments to better understand what guidance, if any, is currently given to police personnel regarding how they should interact with gun violence victims.

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**Enhancing Community Safety through  
Interagency Collaboration: Lessons from  
Connecticut's Project Longevity**

*Camila Gripp, Chandini Jha, and  
Paige E. Vaughn*

Group Violence Interventions (GVIs) combine a focused deterrence law enforcement approach with community mobilization and social services. The current study qualitatively examines Project Longevity, Connecticut's largest GVI initiative, to contribute to the limited literature on implementation of gun violence reduction strategies. Relying on interviews with 24 of Project Longevity law enforcement and non-law enforcement partners, we explore the establishment of interagency collaboration, which was viewed by study participants as the most pressing implementation challenge of Project Longevity. Our case study results offer important lessons to practitioners responsible for implementing GVI strategies.

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**Physicians on the Frontlines:  
Understanding the Lived Experience of  
Physicians Working in Communities That  
Experienced a Mass Casualty Shooting**

*Kathleen M. O'Neill, Blake N. Shultz,  
Carolyn T. Lye, Megan L. Ranney, Gail  
D'Onofrio, and Edouard Coupet, Jr.*

This qualitative study describes the lived experience of physicians who work in communities that have experienced a public mass shooting. Semi-structured interviews were conducted with seventeen physicians involved in eight separate mass casualty shooting incidents in the United States. Four major themes emerged from constant comparative analysis: (1) The psychological toll on physicians: "I wonder if I'm broken"; (2) the importance of and need for mass casualty shooting preparedness: "[We need to] recognize this as a public health concern and train physicians to manage it"; (3) massive media

attention: "The media onslaught was unbelievable"; and (4) commitment to advocacy for a public health approach to firearm violence: "I want to do whatever I can to prevent some of these terrible events."

**67**  
**Emergency Department Visits for  
Firearm-Related Injuries among Youth  
in the United States, 2006–2015**

*Victor Lee, Catherine Camp, Vikram  
Jairam, Henry S. Park, and James B. Yu*

Firearm injuries are a significant public health problem. Prior studies have analyzed firearm death data or adult firearm injury data, but few studies have analyzed firearm injury data specifically among youth. To inform the current debate surrounding gun policy in the United States, this study aims to provide an estimate of the immense burden of youth firearm injury and its associated risk factors. Therefore, we performed a descriptive analysis of the Nationwide Emergency Department Sample (NEDS), the largest all-payer emergency department database in the United States, from January 2006 to September 2015. All patients age < 21 who presented with any diagnosis of firearm-related injuries were included.

There were an estimated 198,839 incidents of firearm-related emergency department visits for patients age < 21 from 2006 through 2015. After presenting to the ED, an estimated 11,909 cases resulted in death. The population adjusted rate of firearm-related emergency department visits was highest in the South and Midwest. This study demonstrates the significant burden of firearm injury among youth. Having a reliable estimate of the number of children harmed by firearms each year is a critical tool for policymakers — and may make common-sense gun safety measures more politically possible.

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**The Walmart Effect: Testing Private  
Interventions to Reduce Gun Suicide**

*Ian Ayres, Zachary Shelley, and  
Fredrick E. Vars*

This article tests the impact of Walmart's corporate decisions to end the sale of handguns at its stores in 1994 and to discontinue the sale of all firearms at approximately 59% of its stores in 2006 before resuming firearms sales at some of those stores in 2011. Using a difference-in-differences framework, we find that that from 1994 to 2005 counties with Walmarts robustly experienced a reduction in the suicide rate and experienced no change in the homicide rate. These models suggest that Walmart's policy change caused a 3.3 to 7.5% reduction in the suicide rate within affected counties, which represents an estimated 5,104 to 11,970 lives saved over the studied period (425-998 per year). In contrast, Walmart's 2006 and 2011 decisions to discontinue and subsequently resume the sale of rifles and shotguns in many of its stores was not associated with a robustly measured effect on homicide or suicide rates. We do find evidence that Walmart's 2006 decision to reduce the number of its stores that sold firearms caused a statistically significant reduction in the suicide rate for counties in which Walmart did not subsequently resume firearms sales.

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**States' Rights, Gun Violence Litigation,  
and Tort Immunity**

*Hilary J. Higgins, Jonathan E. Lowy, and  
Andrew J. Rising*

The devastating toll of gun violence has given rise to hundreds of lawsuits seeking justice on behalf of victims and their families. A significant number of challenges against gun companies, however, are blocked by courts' broad reading of the Protection of Lawful Commerce in Arms Act (PLCAA) — a federal statute often interpreted to shield the gun industry from civil liability. This article reexamines PLCAA in light of the Supreme Court's recent federalism caselaw, which counsels courts to narrowly construe federal laws that could otherwise upset the balance of power between states and the federal government. Since PLCAA infringes on traditional areas of state authority, the Supreme Court's federalism jurisprudence requires lower courts to interpret PLCAA narrowly, to not bar states from imposing negligence, nuisance, product liability, or other common law liability on gun companies. Reading PLCAA in line with federalism principles would preserve states' traditional authority over their civil justice laws, and enable gun violence victims, and their families, to hold gun companies responsible for wrongdoing.

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**Gun Violence in Court**

*Abbe R. Gluck, Alexander Nabavi-Noori,  
and Susan Wang*

Litigation cannot solve a public health crisis. But litigation can be an effective complementary tool to regulation by increasing the salience of a public health issue, eliciting closely guarded information to move public opinion, and prompting legislative action. From tobacco to opioids, litigants have successfully turned to courts for monetary relief, to initiate systemic change, and to hold industry accountable.

For years, litigators have been trying to push firearm suits into their own litigation moment. But litigation against the gun industry poses special challenges. Not only has the regulatory regime failed to prevent a public safety hazard, Congress has consistently underfunded and understaffed the relevant regulatory actors. And in 2005 it legislatively immunized the gun industry from suit with the Protection of Lawful Commerce in Arms Act (PLCAA).

This paper surveys the field of litigation in response to gun violence, tracking the limited successes of victims and stakeholders suing the gun industry. We find that victories remain confined to individual actors and unlike high-impact public litigations in other areas, aggregate class actions and major public litigation led by state attorneys general are noticeably absent in the firearm context.

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**Regulating 3D-Printed Guns Post-  
Heller: Why Two Steps Are Better  
Than One**

*Thaddeus Talbot and Adam Skaggs*

This article describes why a constitutional test that relies exclusively on history and tradition for deciding modern firearm regulations is woefully inadequate when applied to modern technologies. It explains the unique advancements in

firearm technology — specifically, ghost guns — that challenge the viability of a purely historical test, even if legal scholars or judges attempt to reason by analogy. This article argues that the prevailing, two-step approach, which incorporates both history and tradition, and requires a judicial examination of the purposes and methods supporting a challenged firearm regulation, should apply nationwide. That a dissenting faction of conservative judges seeks to ignore the prevailing approach presents a potentially dangerous path for Second Amendment jurisprudence. This article draws from certain historical gun laws to illustrate the difficult legwork that analogies must do under a purely historical test. It uses the advent of ghost guns as a case study to offer guidance for judges in their rulemaking practices regarding Second Amendment cases.

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**Second Amendment Sanctuaries:  
A Legally Dubious Protest Movement**

*Erica Turret, Chelsea Parsons, and  
Adam Skaggs*

This article assesses the origins and spread of the Second Amendment sanctuary movement in which localities pass ordinances or resolutions that declare their jurisdiction's view that proposed or enacted state (or federal) gun safety laws are unconstitutional and therefore, local officials will not implement or enforce them. While it is important to assess Second Amendment sanctuaries from a legal perspective, it is equally as important to understand them in the context of a broader protest movement against any efforts to strengthen gun laws. As the gun violence prevention movement has gained strength across the United States, particularly at the state level, gun rights enthusiasts have turned to Second Amendment sanctuaries in order to create a counter narrative to the increasing political power of gun safety. By passing these ordinances or resolutions, local officials legitimize and fuel Second Amendment absolutism which poses real risks to public safety and democracy.

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**True Threats, Self-Defense, and the  
Second Amendment**

*Joseph Blocher and Bardia Vaseghi*

Does the Second Amendment protect those who threaten others by negligently or recklessly wielding firearms? What line separates constitutionally legitimate gun displays from threatening activities that can be legally proscribed? This article finds guidance in the First Amendment doctrine of true threats, which permits punishment of "statements where the speaker means to communicate a serious expression of an intent to commit an act of unlawful violence to a particular individual or group of individual." The Second Amendment, like the First, should not be read to protect those who threaten unlawful violence. And to the degree that the constitution requires a culpable mental state (*mens rea*) in such circumstances, the appropriate standard should be recklessness.

## Online Articles

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### COVID-19 Emergency Restrictions on Firearms

*Samuel A. Kuhn*

This article examines emergency restrictions imposed by state-level public officials on firearms during the COVID-19 pandemic. It surveys the litigation challenging each of the relatively few restrictions that were imposed, considers when and whether courts should apply the deferential *Jacobson* standard, the *Heller* Second Amendment analysis, or both, and explores the possibility that the unsettled nature of Second Amendment jurisprudence makes it likely that challenges to emergency firearms restrictions could result in dramatic developments in what the Second Amendment protects.

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### A Double-Filter Provision for Expanded Red Flag Laws: A Proposal for Balancing Rights and Risks in Preventing Gun Violence

*Gabriel A. Delaney and Jacob D. Charles*

In response to the continued expansion of “red flag” laws allowing broader classes of people to petition a court for the removal of firearms from individuals who exhibit dangerous conduct, this paper argues that state laws should adopt a double-filter provision that balances individual rights and government public safety interests. The main component of such a provision is a special statutory category — “reporting party” — that enables a broader social network, such as co-workers or school administrators, to request that a law enforcement officer file a petition for an Extreme Risk Protection Order (ERPO). A double-filter provision would not give reporting parties a right to file a court petition directly. Instead, parties would file a request for petition with law enforcement officers (first filter), who must seek an ERPO from the court if they find the reporting party’s information credible. That information is then transmitted to the court (second filter) as a sworn affidavit of the reporting party. The goal is to facilitate a balanced policy model that (1) widens the reporting circle in order to feed more potentially life-saving information into the system, (2) mitigates the risk of erroneous deprivation of constitutionally protected due process and Second Amendment rights.

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### How the Guardianship System Can Help Address Gun Violence

*Nina A. Kohn*

This article shows how state guardianship law can provide a mechanism for courts to reduce gun violence by removing the right to possess firearms from individuals found, after hearing and due process, to be incapable of safely possessing them. It explores how this often overlooked body of law not only complements extreme risk protection orders where they exist, but can also be used to accomplish a portion of what such orders are designed to do in states that have not authorized them. It concludes by suggesting some modest adjustments to guardianship law and practice that would help ensure that guardianship systems interventions in this arena are fair and effective.

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### Mental Illness and Gun Violence: Research and Policy Options

*Ronald S. Honberg*

This article provides an overview of current knowledge about the relationship between mental illness, violence, homicides, and suicides, with a view towards crafting sensible public policy options for reducing gun violence towards self or others. With this knowledge as a backdrop, the limitations of the federal National Instant Background Check System (NICS) as both over-inclusive and under-inclusive in identifying people with mental illness who pose potential risks are discussed. Finally, the article describes emerging approaches for identifying and removing firearms from persons who pose potential risks of gun violence towards self or others, including Extreme Risk Protection Orders (“Red Flag Laws”) and other options.

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### The “Rules of the Road”: Ethics, Firearms, and the Physician’s “Lane”

*Blake N. Shultz, Benjamin Tolchin, and Katherine L. Kraschel*

Physicians play a critical role in preventing and treating firearm injury, although the scope of that role remains contentious and lacks systematic definition. This piece aims to utilize the fundamental principles of medical ethics to present a framework for physician involvement in firearm violence. Physicians’ agency relationship with their patients creates ethical obligations grounded on three principles of medical ethics — patient autonomy, beneficence, and nonmaleficence. Taken together, they suggest that physicians ought to engage in clinical screening and treatment related to firearm violence. The principle of beneficence also applies more generally, but more weakly, to relations between physicians and society, creating nonobligatory moral ideals. Balanced against physicians’ primary obligations to patient agency relationships, general beneficence suggests that physicians may engage in public advocacy to address gun violence, although they are not ethically obligated to do so. A fourth foundational principle — justice — requires that clinicians attempt to ensure that the benefits and burdens of healthcare are distributed fairly.

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**Understanding the Role of Law in Reducing Firearm Injury through Clinical Interventions**

*Blake N. Shultz, Carolyn T. Lye, Gail D'Onofrio, Abbe R. Gluck, Jonathan Miller, Katherine L. Kraschel, and Megan L. Ranney*

Firearm injury in the United States is a public health crisis in which physicians are uniquely situated to intervene. However, their ability to mitigate harm is limited by a complex array of laws and regulations that shape their role in firearm injury prevention. This piece uses four clinical scenarios to illustrate how these laws and regulations impact physician practice, including patient counseling, injury reporting, and the use of court orders and involuntary holds. Unintended consequences on clinical practice of laws intended to reduce firearm injury are also discussed. Lessons drawn from these cases suggest that physicians require more nuanced education on this topic, and that policymakers should consult front-line healthcare providers when designing firearm policies.

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**Your Liberty or Your Gun? A Survey of Psychiatrist Understanding of Mental Health Prohibitors**

*Cara Newlon, Ian Ayres, and Brian Barnett*

This first-of-its-kind national survey of 485 psychiatrists in nine states and the District of Columbia (DC) finds substantial evidence of clinicians being uninformed, misinformed, and misinforming patients of their gun rights regarding involuntary commitments and voluntary inpatient admissions. A significant percentage of psychiatrists (36.9%) did not understand that an involuntary civil commitment triggered the loss of gun rights, and the majority of psychiatrists in states with prohibitors on voluntary admissions (57%) and emergency holds (56%) were unaware that patients would lose gun rights upon voluntary admission or temporary commitment. Moreover, the survey found evidence that psychiatrists may use gun rights to negotiate "voluntary" commitments with patients: 15.9% of respondents reported telling patients they could preserve their gun rights by permitting themselves to be voluntarily admitted for treatment, in lieu of being involuntarily committed. The results raise questions of whether psychiatrists obtained full informed consent for voluntary patient admissions, and suggest that some medical providers in states with voluntary admission prohibitor laws may unwittingly deprive their patients of a constitutional right. The study calls into question the fairness of state prohibitor laws as policy, and — at minimum — indicates an urgent need for psychiatrist training on their state gun laws.

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**Investing in the Frontlines: Why Trusting and Supporting Communities of Color Will Help Address Gun Violence**

*Amber Goodwin and TJ Grayson*

This article proposes potential strategies to address gun violence in communities of color while identifying the harms associated with a policing-centered, criminal legal approach. In addition to highlighting the dangers associated with the United States' current criminal legal tactics to reduce gun violence in these communities, the authors advocate for community-endorsed strategies that give those impacted by this issue the resources to take on gun violence in their own communities. Specifically, they identify, describe, and endorse a series of violence prevention programs that rely on community relations to detect and prevent incidents of gun violence and that view gun violence as a public health rather than criminal legal issue.

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**A Behavioral Addiction Model of Revenge, Violence, and Gun Abuse**

*James Kimmel, Jr. and Michael Rowe*

Data from multiple sources point to the desire for revenge in response to grievances or perceived injustices as a root cause of violence, including firearm violence. Neuroscience and behavioral studies are beginning to reveal that the desire for revenge in response to grievances activates the same neural reward-processing circuitry as that of substance addiction, suggesting that grievances trigger powerful cravings for revenge in anticipation of experiencing pleasure. Based on this evidence, the authors argue that a behavioral addiction framework may be appropriate for understanding and addressing violent behavior. Such an approach could yield significant benefits by leveraging scientific and public health-oriented drug abuse prevention and treatment strategies that target drug cravings to spur development of scientific and public-health-oriented "gun abuse" prevention and treatment strategies targeting the revenge cravings that lead to violence. An example of one such "motive control" strategy is discussed. Approaching revenge-seeking, violence, and gun abuse from the perspective of compulsion and addiction would have the added benefit of avoiding the stigmatization as violent of individuals with mental illness while also acknowledging the systemic, social, and cultural factors contributing to grievances that lead to violent acts.

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**Rethinking the Medicalization of Violence: The Risks of a Behavioral Addiction Model**

*Catherine Feuille*

This commentary responds to and problematizes Kimmel and Rowe's approach in "A Behavioral Addiction Model of Revenge, Violence, and Gun Abuse." By advancing an addiction model of retaliatory violence, Kimmel and Rowe medicalize behavior that is better understood as a social problem rooted in structural inequality. Reframing violence in terms of individual pathology abstracts it from social context and risks obscuring the need for structural change. For poor urban communities of color, who are disproportionately impacted by gun violence, medicalizing violent behavior may fuel further marginalization and oppression.



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*Next Issue:*

**Public Sector and Non-Profit Contributions to Drug Development:** Historical Scope, Opportunities, and Challenges

A Symposium Guest Edited by Ameet Sarpatwari

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**Guests with Guns: Public Support for “No Carry” Defaults on Private Land**  
*Ian Ayres and Spurthi Jonnalagadda*

A nationally representative survey of 2000 American adults shows broad support for prohibiting gun-possession on private land without the landowner's explicit permission. Many states have laws which permit concealed weapon carry unless explicitly prohibited by the landowner, but our survey suggests statistically-significant majorities would prefer “no carry” defaults with regard to homeowners, employers, and retailers. While respondents who are Republican, male, or gun owners are more likely to support “carry” defaults, we find that the majoritarian rejection of “carry” defaults does not tend to vary by region or state. However, our survey does find majority support for a default right to possess guns in rented property and on an employer's parking lot. Respondents across all contexts also report substantial ignorance or misinformation about the law. Landowners who don't know or mistakenly believe that concealed carry is, by default, prohibited on their land may be less able to protect themselves by explicitly prohibiting such third-party possession.

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**Prevention of Firearm Injury through Policy and Law: The Social Ecological Model**

*Allison Durkin, Christopher Schenck, Yamini Narayan, Kate Nyhan, Kaveh Khoshnood, and Sten H. Vermund*

Rates of firearm injury and mortality are far higher in the United States compared to other high-income nations. Patterns of firearm injury have complex causal pathways; different social contexts may be differentially affected by firearm legislation. In the context of the diversity of social, political, and legal approaches at the state level, we suggest the application of the social ecological model as a conceptual public health framework to guide future policy interventions in the U.S.

# INTRODUCTION

*Ian Ayres, Abbe R. Gluck, Katherine L. Kraschel,  
Tracey L. Meares, and Caroline Nobo Sarnoff*

In the United States nearly 40,000 people die annually as a result of being shot by a firearm. Another 73,000 people experience firearm injuries — some so severe they are life altering. There is no question that deaths and injuries from firearms — what we will call gun violence — comprise a serious and important problem in this country. It is also evident that the United States has long resisted solutions to its gun violence epidemic. The reasons for the seeming intractability of our ability to staunch the flow of gun violence are varied. There is not just one gun violence problem in the United States, and there is no single solution.

From 2019-2020, members of the Yale University community, working with scholars, physicians, advocates and other experts from across the country sought to address the issue through the tools of interdisciplinary conversation and research. The twenty-

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seven articles that resulted, which comprise this issue, engaged three framework questions:

1. What exactly is America's gun violence problem, and do the policy response fit the real causes?;
2. How is the criminal justice system, and its stakeholders, responding to gun violence?; and
3. How has the law conceived of the nature of gun violence and the constitutional issues concerning gun safety regulations?

Our approach was intentionally interdisciplinary to bring together perspectives and methodologies that are not always in dialogue with one another. The articles put medical practice in dialogue with legal doctrine; sociological approaches in dialogue with criminal justice; empirical study in dialogue with constitutional law. The papers loosely fall into four categories, but all are in conversation: (1) criminal justice, (2) medicine and public health, (3) the roles of regulation and litigation, and (4) data and empirics.

In the context of criminal justice, the authors in the volume use various methodologies to critique the status quo and propose new methods to address gun violence. An important theme is community engagement. One article analyzes police interactions with gun violence victims, calling for a checklist system for law enforcement to follow in the aftermath of gun violence to ensure community needs are attended to; a second utilizes interviews of law enforcement and non-law enforcement partners involved in a group violence intervention (GVI) program to illuminate best practices for implementing GVI strategies; a third details community-endorsed strategies that give

those affected by gun violence the resources to address it within their own communities.

With respect to health, in addition to examining public health approaches, the pieces focus on a full spectrum of issues related to health and the practice of medicine as related to gun violence. Authors discuss stigma and mental health; the costs and benefits of expanding the use of extreme risk protection order laws (ERPOs); the role of guardianship laws as a complement to EPROs in reducing gun violence; patterns of gun purchasing during the COVID-19 pandemic; whether gun violence can be addressed, with a medical lens, through a behavioral addiction model; the effects on health care providers treating patients in a mass casualty; and prevalence of youth emergency department visits due to gun violence. Contributors also took on challenging issues of understanding the roles of healthcare providers in gun policy, and the extent to which gun violence prevention laws inform clinical practice. One article empirically investigates psychiatrists' understanding of the gun ownership consequences of voluntary, involuntary and emergency hold admissions; another details how legal regimes, sometimes unknown to doctors and differing across states, provide a spectrum of responses available to physicians facing high risk patients; another unpacks physicians' ethical obligations to their patients and to the public to address the gun violence epidemic.

The third category that developed from our framing is understanding the roles of two legal mechanisms to address the gun violence problem outside of criminal justice: litigation and regulation. Regulatory gaps — often intentionally created by Congress — have led advocates to look to litigation as a salve. As one paper details, Congress granted the gun industry exceptional, and perhaps partially unconstitutional, tort immunity in the controversial 2005 statute, the Protection of Lawful Commerce in Arms Act. Another compares federal regulation of guns to the much stronger regulation tobacco, especially as it pertains to youth access. Another maps decades of affirmative litigation against gun violence, examining how and why gun litigation has not been as successful as public health litigation in other areas, like opioids.

Of course, the legal dimensions of gun violence throughout the volume are addressed against the backdrop of a robust discourse of constitutional law. Authors critique efforts to use the Second Amendment as a basis for so-called Second Amendment “sanctuary cities” —

as well as efforts to use the Second Amendment, during COVID-19, to protect access to guns in the face of other closures. They consider open questions in constitutional doctrine about how to regulate new technologies, such as ghost guns. They discuss how to design extreme risk protection laws that ensure due process rights are protected, and argue that the Second Amendment, like the First, should not be read to protect those who threaten unlawful violence. And they advocate for a new kind of constitutional discourse in defense of gun regulation, more broadly focused on broad array of constitutional rights *protected* by the absence of gun violence.

Finally, we illustrate the pressing need for empirical evidence. There is a marked gap in the understanding of gun violence, specifically what existing data says about the nature of the problem and how policy responses map onto those problems. One article identifies the data gaps that remain and proposes that states evaluate the gaps in their systems, expand data collection, and improve data presentation. Survey data can inform policy too. A representative survey of 2000 Americans reveals broad support for a legal default rule against visitor possession of guns on private land — the opposite presumption of current law in many states. Another piece illustrates the power of corporate leadership in addressing gun violence by empirically estimating that Walmart's choice to stop selling handguns likely avoided thousands of gun suicides. Authors also present new empirical data illustrating the efficacy of licensing regimes as effective and politically palatable tools of regulation.

Each election cycle brings with it roadmaps for the future on key issues, and gun violence is no exception. Regardless of the outcome of the 2020 election, the gun violence problem is not going away. The multiple perspectives in this volume reveal the benefits of an “all hands on deck” approach to addressing this important public health problem, its many victims, and its future.

#### Note

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# Why Regulate Guns?

*Reva B. Siegel and Joseph Blocher*

In Second Amendment cases, courts regularly ask how effectively gun laws serve public safety — yet typically discuss public safety narrowly, without considering the many dimensions of that interest gun laws serve. Gun laws protect bodies from bullets — and Americans’ freedom and confidence to participate in every domain of our shared life, whether to attend school, to shop, to listen to a concert, to gather for prayer, or to assemble in peaceable debate. It is time to take a full accounting of the reasons gun laws are enacted, so that courts review those laws with attention to the many constitutional values Americans vindicate when they regulate guns. Constitutional precedent, much of it authored by sitting conservative justices, directs courts to protect constitutional rights in ways that respect the prerogatives of democratic self-government. Lawyers, health and public health officials, legislators, and citizen advocates can help, by creating a richer record of the government’s reasons for enacting laws that regulate guns.

Observing the wide range of activities gun laws protect is urgent at a time when federal judges are asserting a more active oversight role and the Supreme Court’s new conservative majority seems poised to expand the right to keep and bear arms. In 2008’s *District of Columbia v. Heller*, the Court first recognized an individual right to keep arms for self-defense in the home, but said nothing explicit about whether that right extends to public places.<sup>1</sup> In 2020, the Court considered but ultimately dismissed another Second Amendment case, *New York State Rifle & Pistol Associ-*

*ation v. City of New York (NYSRPA)*, which concerned the transport of guns. And gun rights advocates are pushing hard for recognition of a right to public carry — that is, to bear a gun outside one’s home. Whenever the Court hears another Second Amendment case, it will almost certainly consider the constitutionality of gun regulations designed to keep people safe in public, either through direct restrictions on public carry or through rules regarding the manufacture, sale, transport, possession, and use of weapons more generally.

This creates a risk: that the Court could begin to extend constitutional protection to the use of guns outside the home without taking account of the full range of reasons why citizens look to their government to regulate guns — as well as the discretion and flexibility government needs to respond to local circumstances and emergency conditions. Whatever framework for reviewing guns laws the Court develops, that framework needs to recognize the many dimensions public life that gun laws protect. But the debate, though robust in so many other ways, has been strangely silent on just this point.

Judges and legislators often recite the government’s interest in protecting “public safety” without full consideration of what is encompassed in that concept — freedom from intimidation, for example, not just physical pain. “Public safety” is a social good: it includes the public’s interest in physical safety as a good in itself, *and* as a foundation for community and for the exercise of many of our most cherished constitutional liberties. As we show, gun laws protect the physical safety of citizens to free them to participate, without intimidation, in a wide variety of domains and activities (family, education, political protest, prayer, commerce, travel, voting). Gun laws thus serve many constitutional values, and governments enact them

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under complex political and practical conditions. If courts do not properly account for this complex balance of considerations, judges could call into question the constitutionality of mainstream laws like those restricting high capacity magazines<sup>2</sup> or requiring permits for carrying loaded weapons in public places like Walmart<sup>3</sup> — some of the very regulations that *Heller* itself describes as “presumptively constitutional,”<sup>4</sup> but which are subject to growing litigation pressure.

In short, gun laws are designed to do much more than save lives, and courts evaluating their constitutionality should recognize this. If Second Amendment doctrine instead limits the government’s interest in regulation to protecting citizens’ physical safety

sons government regulates guns that reach beyond securing the simple physical safety of its citizenry. One powerful illustration in that regard is the remarkable amicus brief filed by the March for Our Lives (MFOL) Action Fund in *NYSRPA*.<sup>8</sup> The brief “presents the voices and stories of young people from Parkland, Florida, to South Central Los Angeles who have been affected directly and indirectly by gun violence,” and paints a graphic picture of the direct and indirect costs of gun violence on young people, in an effort to “acquaint the Court with the pain and trauma that gun violence has inflicted on them, and the hope that their ability to advocate for change through the political process affords them.”

**Gun laws are designed to do much more than save lives,  
and courts evaluating their constitutionality should recognize this.  
If Second Amendment doctrine instead limits the government’s interest in  
regulation to protecting citizens’ physical safety only, courts are likely  
to ask the wrong questions and demand the wrong kinds of evidence.**

only, courts are likely to ask the wrong questions and demand the wrong kinds of evidence. Far from relegating the Second Amendment to a “second class right,”<sup>5</sup> such a narrow account of state interests would put the government at a substantial disadvantage it does not face in other areas of constitutional law. The Supreme Court has “long recognized that a State’s interests in the health and well-being of its residents extend beyond mere physical interests.”<sup>6</sup> As with other forms of constitutionally protected conduct — speech, for example — the reasons for regulating guns include, but are not limited to, securing the physical safety of citizens.

Courts need not defer to every reason a legislature proffers. Instead, case law drawn from outside the Second Amendment context — and written by some of the Court’s conservative members — provides guidance about the kind of deference to legislative judgment that is warranted here. Given that federal judges seem increasingly inclined to exert close judicial oversight in Second Amendment cases,<sup>7</sup> these questions will be before courts, and it so is now critical that legislators and other interested parties begin to record — throughout the legislative process — the many reasons they have for enacting gun laws.

### **Why We Look to Government to Regulate Guns**

We start our discussion with an appeal to connect law to our lived worlds — and consider some of the rea-

The MFOL brief recounts the stories of young Americans whose lives have been convulsed by gun violence and who turned to the political process in an effort to manage the trauma. They seek to persuade others of the importance of enacting gun laws that would protect their families, friends and communities from similar violence in the future, and that would rebuild confidence in public institutions in their communities. Their message is not only about students and schools. It is that Americans living in fear of gun violence can turn to their government to enact gun laws, not simply to keep people from being shot, but also to protect people from being terrorized and intimidated — so that they can participate in freedoms many Americans take for granted, to walk on the streets and gather in public spaces where they can exercise constitutionally protected interests including speech, religion, and peaceable assembly.

Schools illustrate the point, and the stakes. Guns in schools do much more than threaten individual students’ physical safety. One recent headline reported “356 victims” of school shooting over the past ten years — counting only those killed or injured in 180 incidents during that period.<sup>9</sup> But even if one focuses only on students present in the schools where shootings occurred, the true number of students victimized by guns is many hundreds of times higher. Consider the children who hid, or fled, or were marched out of school with their hands in the air, or who lost friends,

or watched their friends die, or wake up with nightmares. Anyone present in a school where a shooting takes place runs a risk of suffering lifelong trauma. By one count, approaching a quarter of a million school children have experienced gun-related school violence since Columbine.<sup>10</sup> For many, guns transform schools and surrounding neighborhoods into dangerous spaces. *Most* teenagers in the United States now report being “very” or “somewhat” worried about the possibility of a shooting taking place at their school,<sup>11</sup> and the preparations for such a possibility (including unannounced active shooter drills with gunshots and fake blood) can themselves be traumatizing.<sup>12</sup> These are harms that government has a legitimate interest in preventing, above and beyond the shootings themselves.

As the MFOL brief illustrates, gun laws protect and preserve a wide range of institutions and activities, from Walmarts to synagogues to concerts to state legislatures to public parks. In all these places, the threat of gun violence can dramatically restrict exercise of a wide range of freedoms, many of them constitutionally guaranteed liberties. Gun laws enable the public to participate in these institutions, activities, and spaces in security and confidence and freedom from fear.

Physical safety captures a core purpose of gun regulation, but it does not do justice to the many reasons Americans enact gun safety laws. Americans who enter politics to enact gun laws seek the freedom to act without fear, in order to exercise constitutionally protected freedoms of many kinds. When government legislates in response, it is doing more than preventing particular deaths — it is protecting the citizenry’s liberty to exercise a wide range of constitutional freedoms, including speech, peaceable assembly, travel, and others. Such lawmaking is an exercise in responsive local democracy that simultaneously affirms the lives and voices of a new generation of citizens, and the long-standing role of states as laboratories of democracy, as the MFOL brief puts it, “to devise solutions to social problems that suit local needs and values.” Courts must protect Second Amendment rights in ways that respect the many weighty constitutional values at stake — recognizing not only the many freedoms that gun safety laws vindicate but also, given democracy and federalism, the prerogatives of other branches of government to promote those ends.

### **What the Architecture of Governmental Interests in Other Areas Can Teach**

In a constitutional democracy, government inevitably legislates in ways that can burden the exercise of constitutionally protected rights; the Supreme Court

has accordingly adopted frameworks of review that coordinate and balance considerations of individual liberties with the values of democratic self-governance and of federalism.<sup>13</sup> Cases outside the Second Amendment context, many written by the Court’s conservative members, provide some guidance about how the Second Amendment’s doctrinal framework can best coordinate these same considerations.

The Court has recognized that, even when the government is burdening the exercise of First Amendment rights, the government has an interest in legislating to promote social values and interests that go beyond remedying or preventing particular instances of wrongful conduct. In *Roberts v. Jaycees*, for example, the Court upheld a law prohibiting discrimination in public accommodations against a freedom of association challenge, noting that the law was designed to protect citizens “from a number of serious social and personal harms,” that discrimination in public accommodations “deprives persons of their individual dignity and denies society the benefits of wide participation in political, economic, and cultural life,” and that the state’s interest is not limited to “assuring equal access limited to the provision of purely tangible goods and services.”<sup>14</sup> The *Jaycees* case is important because it recognizes that government can legislate in ways that burden freedom of association rights in order to promote public values including dignity and equal opportunity for individuals and communities as well as to fairly distribute access to goods and services.

The discussion of state interests in the *Jaycees* case suggests, first, that states enacting gun laws can vindicate societal as well as individual interests. Beyond that, *Jaycees* shows us that government’s interests in legislating reach far beyond the critical task of protecting citizens’ bare interest in survival or freedom from physical harm. Just as critically, government exists to support and enable public participation in community life, and to be able to serve that purpose, the government must cultivate the confidence of citizens in the responsiveness, effectiveness, integrity and safety of its institutions.

Consider a more recent state interest analysis — Chief Justice Roberts’ majority opinion in *Williams-Yulee v. Florida Bar*, which rejected a First Amendment challenge to a Florida law prohibiting judicial candidates from soliciting campaign funds.<sup>15</sup> The Chief Justice’s majority opinion upheld the challenge to a law burdening candidates’ speech rights despite applying the most restrictive level of review, “strict scrutiny.” In doing so, the Chief Justice found that the Florida law was narrowly tailored. Not only did the law further the prevention of *quid pro quo* corruption, but it advanced the “State’s compelling interest

in preserving public confidence in the integrity of the judiciary.”<sup>16</sup> Can public confidence in schools be any less compelling?

In confirming that certain threatening speech (termed “true threats”) can be proscribed without violating the First Amendment, the Court has repeatedly emphasized that a prohibition on such threats does more than “protect[] people from the possibility that the threatened violence will occur,” but also “protect[s] individuals from the fear of violence” and “from the disruption that fear engenders.”<sup>17</sup> Is preventing fear and disruption a valid government interest only when fear and disruption are caused by speech, but not guns?

Recognizing the wider range of state interests that gun legislation may serve has important implications for the law’s constitutionality going forward. When courts enforcing the Second Amendment employ heightened scrutiny and demand a close fit between a challenged law and the narrow conception of the state’s interest in regulating guns, courts may strike down legislation that the government has a wholly legitimate interest in enacting.

If judges understand the government’s public safety interest in enacting gun laws narrowly — as only consisting in an interest in deterring wrongful shootings that can be measured by deaths and injuries that a law can be shown to prevent — then judges might make the constitutionality of a gun regulation depend on a concrete empirical showing. And while there is plenty of good empirical evidence of this kind,<sup>18</sup> requiring a means-ends showing could impose a heavy and sometimes insurmountable burden on the government. Evidentiary burdens of this kind may prove impossible to meet in cases involving new laws designed to address novel problems or emerging technologies, where evidence (empirical comparisons of jurisdictions with and without such laws, for example) might not be available, especially given the political and even legal obstacles to funding research on gun violence<sup>19</sup> or even collecting information about it.<sup>20</sup> That, in turn, could lead a skeptical judge to strike down a law, even while recognizing a compelling state interest in protecting public safety.

New kinds of gun regulation will not come with a deep empirical record one way or the other. But that fact should not prevent governments from trying to address a problem in new ways. States and local governments have a constitutionally appropriate role to play as laboratories of experimentation attempting to fashion locally appropriate solutions to complex problems of gun violence. *Heller* does not limit those laboratories to repeating only those experiments they have

tried before, nor should the government have to face the impossible burden of proving that a new law will certainly save lives.

Recognizing that gun regulations protect not only physical bodies, but the freedom and confidence to participate in community life, means that the constitutionality of a gun law need not pivot exclusively on how many shootings the law can be shown to prevent. Instead the government may justify its reasons for enacting the law both in terms of its hoped-for deterrence effects and in terms of the ways it contributes to public confidence and to the public’s sense of safety.<sup>21</sup> These public goods are rooted in social relationships whose existence cannot be measured by the same kind of body-counting empirical analysis used to measure lives saved or lost. One prominent study found that heavily armed communities have lower levels of mutual trust and civic engagement.<sup>22</sup> The fact that the study could only demonstrate correlation in these complex social relationships is not surprising — and certainly no reason for a court to dismiss the study’s evidentiary value, or worse, to block innovative government efforts to address the social relationships the study is analyzing.

In fact, there are many Supreme Court cases outside the Second Amendment context that uphold laws that burden the exercise of constitutional rights without requiring empirical proof of how the law advances the government’s interest. The Justices — who in some cases have outright rejected invitations to consider empirical evidence<sup>23</sup> — generally do not require government to justify the government interest advanced through legislation burdening a constitutional right through statistical showings of causation, especially when the interest being asserted is not readily susceptible to measurement. Rather, in case after case, the Court has recognized that government has authority to legislate to vindicate public values and public confidence in government institutions. In abortion cases, for example, courts do not require empirical evidence of how a particular restriction furthers state interests like the respect for potential life. Or, as the Chief Justice put it in *Williams-Yulee*, “The concept of public confidence in judicial integrity does not easily reduce to precise definition, nor does it lend itself to proof by documentary record. But no one denies that it is genuine and compelling.”<sup>24</sup>

### What Government Needs to Show and When Courts Need to Defer

How might the many dimensions of the government interest in enacting gun laws be made more visible and concrete? So far we have told a story that taps our ordi-

nary-life understanding of why gun laws are enacted. To ensure that gun laws are strengthened against the risk of judicial invalidation (where until now their greatest challenge was surviving threats in politics), it is important that these ordinary-life understandings be explicitly articulated in the legislative process.

Legislatures considering gun regulations might build and preserve (by formal or informal means) more developed legislative records, through hearings and statements by public officials and engaged citizens that speak to the wide range of concerns that animate passage of gun laws. Citizens supporting might speak of their many reasons for supporting the legislation as March for Our Lives does in advocating “the right not to be shot”<sup>25</sup> and in their *NYSRPA* brief.<sup>26</sup> Whether preserving a more developed record is feasible as a formal matter, law makers can explicitly incorporate into a law’s title, preamble, and language an account of the government’s core concerns in enacting the legislation — an account that will make clear that the government’s interest in public safety includes but is hardly limited to protecting persons from physical harm.

In addition to acknowledging the loss of life to gun violence, prefatory language can note the broader goal of, for example, ensuring feelings of safety and confidence in shared public spaces. Prefatory language might also affirm citizens’ equal freedom to inhabit, or exercise rights in, shared public spaces. The existence of such language would make it easier for lawyers to articulate and plausibly defend the laws without having to identify undisputed empirical evidence of bullets stopped and lives saved.

Another possibility is for attorneys defending gun regulations to build more thorough records at trial. In the vast majority of Second Amendment challenges, the government interest will be uncontested, and the regulation upheld.<sup>27</sup> But the success rate for Second Amendment challenges rises within certain subsets of cases (those involving challenges to public carry restrictions, for example<sup>28</sup>), and is higher on appeal than at trial.<sup>29</sup> In appellate cases, the attorneys tasked with defending gun laws will be better served if they can point to record evidence that, for example, a particular restriction on public carrying contributes to people’s enjoyment of public spaces, rather than simply (as in *NYSRPA*) an affidavit from a law enforcement officer speculating about how the rule will prevent certain crimes. That evidence might take the form of citizen testimony — as has been done in abortion cases, and as exemplified in the MFOL brief discussed above.

More generally, how can lawyers, advocates, and others better articulate the government interests in

gun regulation? We have suggested a few possible answers here, but nothing like a full taxonomy — if such a thing is even possible. Our point in this short piece has simply been that gun laws do more than protect bodies from bullets; they are about much more than this narrow conception of “public safety.” We hope to help start a conversation, not to resolve a debate. Identifying and articulating the full range of interests gun laws vindicate will require the attention of advocates, policymakers, litigators, scholars, and others, and will demand attention and expertise to the wide range of contexts and laws that give rise to both gun laws and gun rights claims. And answering those claims is all the more important as we move from a world in which the primary obstacles to reasonable gun regulation have been legislative to one in which an increasing number of judges seem poised to play an assertive role.

## Conclusion

Gun regulation implicates — and also serves — multiple constitutional liberties and interests. Too often, the gun debate is presented as if there are constitutional rights on one side (that of gun owners) and only nebulous policy “interests” on the other. But that frame misses precisely what is hard about the gun debate, and on which our account of the state interests focuses. In enacting gun laws, the government acts for a majority of citizens who believe that not only their families’ physical safety, but their communities’ fundamental freedoms — to travel, to speak, to learn, to pray, and to vote without fear or intimidation — are at stake. *Both* sides feel urgently that they must do all they can to keep themselves and their children safe from gun violence. *Both* sides can appeal to constitutional values. As Justice Stevens recognized, “In evaluating an asserted right to be free from particular gun-control regulations, liberty is on both sides of the equation. Guns may be useful for self-defense, as well as for hunting and sport, but they also have a unique potential to facilitate death and destruction and thereby to destabilize ordered liberty. Your interest in keeping and bearing a certain firearm may diminish my interest in being and feeling safe from armed violence.”<sup>30</sup>

Gun owners regularly point to reassurance they feel in owning or carrying guns, even knowing that only a small fraction of them will ever use a gun in self-defense. That *feeling* of security is part of the argument for a broad right to keep and bear arms. We have tried to show that the argument goes both ways: advocates of gun regulation seek the same freedom and security through the democratic politics. There are



constitutional values and interests on both sides, and articulating them is an increasingly crucial task.

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# The Legal and Empirical Case for Firearm Purchaser Licensing

*Hannah Abelow, Cassandra Crifasi, and Daniel Webster*

State government actors concerned about gun violence prevention operate with limited political capital and must prioritize interventions based on existing empirical evidence and the likelihood of withstanding judicial scrutiny. Before pushing for assault weapons bans, enhanced background checks, or increased location restrictions, policymakers in states with an appetite for meaningful yet achievable gun safety legislation should consider placing firearm purchaser licensing at the top of their agenda.

The crisis of high rates of gun violence has been met with remarkable federal inaction. In order to circumvent this stasis, this article advocates for a pragmatic state-level policy response: purchaser licensing. To do so, we first outline the evidence base for firearm purchaser licensing. We then describe how state governments can design this policy. Next, we examine the likelihood that purchaser licensing legisla-

tion would be held up by federal courts. Finally, we address the implications of this policy, aimed at curbing gun deaths, for other equally important racial justice priorities. Using empirical research — including a recently-published study of mass shootings — we argue that a purchaser licensing policy is one of the most effective firearm-focused laws that state governments can enact to reduce gun deaths within the existing federal legislative and legal frameworks.

Thirty-five states require a license to carry a concealed firearm. Only nine require a license to purchase a firearm from any seller. To obtain purchaser licenses, prospective gun owners typically make an application to a state or local government agency, which always includes a background check to assess whether the applicant has prohibiting conditions. Frequently, the background check is augmented by required fingerprinting and a fee. Although some studies treat purchaser and possession licensing regimes as interchangeable, there is both a broader body of research supporting and more consistent public opinion polling data available in favor of purchaser licensing. For this reason, among others, we advocate for purchaser licensing rather than possession licensing.

For both purchaser and possession licenses, there is compelling evidence that the application processes reduce diversions of guns for criminal use and reduce gun homicides and suicides. While more research is needed on the underlying mechanism, these regimes may work by deterring straw purchases, creating an additional time lag for obtaining a firearm which can reduce impulsive purchases, and pooling a myriad of other component requirements such as background checks, firearm training mandates, and in-person interviews.

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In the United States, the firearm bans or near-bans that many other countries have used to greatly reduce gun violence are currently unattainable due to the Supreme Court's recognition of a Second Amendment right to a gun for self-defense in the home. Purchaser licensing regimes offer rigorous approaches for regulating firearms in the near term and make use of a type of regulation well-recognized across many facets of society. From marriage licenses to liquor licenses, Americans recognize the license as a way for governments to fairly regulate goods and behaviors. An even

crisis, high rates of gun homicides, disproportionately affects young black men.<sup>A5</sup> Given the challenges associated with getting political support for multiple pieces of gun legislation at one time, the best policies will tackle both aspects of this crisis. Researchers have studied the effects of both enacting and repealing firearm purchaser licensing laws in Missouri, Connecticut, Maryland, and elsewhere.<sup>A6</sup> The data is particularly persuasive in light of the lack of compelling data showing efficacy of other commonly advocated-for gun safety reform measures such as comprehensive

## Using empirical research — including a recently-published study of mass shootings — we argue that a purchaser licensing policy is one of the most effective firearm-focused laws that state governments can enact to reduce gun deaths within the existing federal legislative and legal frameworks.

broader role for licensing is accepted in regulating dangerousness: state governments impose stringent licensing requirements for driving a car or operating an amusement park ride. Although the intersection of licensing and fundamental rights is subject to greater scrutiny, enacting a licensing regime remains compatible with preserving fundamental rights so long as it is appropriately tailored. The potential for this commonplace regulatory tool to take on a broader role in gun safety regulation was reinforced by a 2019 Quinnipiac University poll showing 82% overall support for the policy, including a majority of Republicans polled.<sup>A1</sup> Several additional polls conducted have shown greater than 75% support for purchaser licensing among adults in the United States, including support from over 60% of gun owners across the United States and 75% of gun owners in states that already require purchaser licenses.<sup>A2</sup>

### Empirical Evidence Supports Firearm Purchaser Licensing

A growing body of research evidence supports the claim that laws requiring firearm purchasers to be licensed reduce both homicides and suicides. There are two distinct gun crises wreaking havoc on the United States. One is the high rate of gun suicides that disproportionately affects middle-aged white men.<sup>A3</sup> Gun suicides account for nearly two-thirds of gun deaths in the United States annually.<sup>A4</sup> The other

background checks absent licensing systems or the federal assault weapon ban.<sup>A7</sup> Many states have focused on implementing comprehensive background checks for gun purchasers. While evidence suggests private sale background check policies can reduce gun diversion — transfers from legal gun purchasers to someone else who is arrested with the gun within a year of the initial retail sale — the data shows no corresponding reduction in gun deaths.<sup>A8</sup> Enacting purchaser licensing as a complement to requiring background checks for firearms bought from any seller greatly enhances their effectiveness in reducing firearm-related deaths.

### Homicides

In 2007, Missouri repealed its purchaser licensing law.<sup>1</sup> The law, which had been in place since 1921, required those seeking to purchase a handgun to be licensed by local police.<sup>2</sup> Several studies have shown that this repeal of handgun purchaser licensing requirements significantly increased firearm homicide rates relative to estimated counterfactuals.<sup>3</sup> In a 2014 study, Webster and colleagues found that Missouri's firearm homicide rate, which had been largely unchanged between 1999 and 2007, increased dramatically after the purchaser licensing law repeal.<sup>4</sup> In the immediate period following the repeal, 2008-2010, the mean firearm homicide rate was 5.82 per 100,000 people annually.<sup>5</sup> This number was 24.9% higher than the mean of 4.66 per 100,000 people annually prior to the repeal.<sup>6</sup> This initial study, though promising, was not sufficient in of itself to draw conclusions on the efficacy of enacting similar policies elsewhere and prompted further analysis of both the Missouri repeal and enactment of similar laws elsewhere.<sup>7</sup>

In a more recent study, which included data through 2016, Hasegawa and colleagues estimated that Missouri's repeal was associated with a firearm homicide rate increase of 27% in the statistical model contrasting Missouri's rates against its most similar controls.<sup>8</sup>

This second study indicated the finding is worth extrapolating from.

Connecticut enacted a purchaser licensing law in 1995.<sup>9</sup> A 2015 study used synthetic control models to estimate the effect of this purchaser licensing law on homicide rates.<sup>10</sup> It found that the law was associated with a 40% reduction in firearm homicide rates during the first 10 years it was in place and found no change in homicide rates that did not involve firearms.<sup>11</sup>

The most recent study of the effects of these changes in purchaser licensing laws uses additional years of data and somewhat different statistical models, but supports the general findings from the earlier studies.<sup>12</sup> McCourt and colleagues estimated that Missouri's repeal of handgun purchaser licensing requirements was associated with a 47% increase in firearm homicide rates during 2008-2017 and Connecticut's law was associated with a 28% decrease in firearm homicide rates between 1996 and 2017.<sup>13</sup> Finally, a study that examined data from a broader set of states in order to estimate the association between state firearms laws and homicide rates in urban counties found that licensing laws were associated with an 11% reduction in firearm homicide rates at the county level.<sup>14</sup>

Note that the estimates of effectiveness vary within different studies due to differing time periods, units of analysis, and statistical procedures. Regardless of the range of estimates, each study of the effects of this policy on reducing gun homicides has shown significant public safety benefits. Importantly, none of these studies revealed any association between changes in purchaser licensing laws and homicides that did not involve firearms, strengthening the argument for a causal link.<sup>15</sup>

### *Suicides*

The same pattern of associations between firearm homicide rates and changes in purchaser licensing laws was found in a study of suicide rates.<sup>16</sup> Crifasi and colleagues estimated a 15.4% reduction in firearm-related suicide rates in Connecticut during the first ten years after the state passed a purchaser licensing law (1996-2005) and a 16.1% increase in gun-related suicide rates in Missouri during the years following lawmakers' repeal of its purchaser licensing law, 2008-2012.<sup>17</sup> Note that although Connecticut simultaneously passed a law increasing the minimum age to purchase a firearm from 18 to 21, this concurrent change is unlikely to have significantly biased the results, as the minimum age law could only have affected 18-20 year-olds, and there is limited evidence that minimum age laws on their own lessen homicide risk.<sup>18</sup> A new study by McCourt et al. extended the analyses through 2017, estimating that Missouri's repeal of its handgun

purchaser licensing law was associated with a 24% increase in firearm suicide rates and Connecticut's law was associated with a 33% decrease in firearm suicide rates.<sup>19</sup> Connecticut enacted and in 2007 began significant enforcement of a law that gave law enforcement authority to remove firearms from individuals when there was an imminent threat.<sup>20</sup> When the estimates were limited to the time period before the emergency firearm removal law was implemented, the handgun purchaser license law was associated with a 23% decrease in firearm suicide rates.<sup>21</sup>

### *Mass Shootings*

A study in the February 2020 issue of *Criminology & Public Policy* built on this earlier research by studying fatal mass shootings.<sup>22</sup> Although deaths from mass shootings comprise a relatively small percentage of gun deaths, this study's findings are instructive.

Webster and colleagues compared "handgun purchaser licensing laws that require either in-person application or fingerprinting" to a wide range of common gun violence prevention policy solutions including laws regulating civilian concealed gun carrying, comprehensive background checks that include private transfers but don't require a license to purchase, domestic violence restraining orders, the addition of state-level prohibitor categories, large capacity magazine bans, and assault weapon bans.<sup>23</sup> Although the researchers acknowledge limitations of the dataset used, the findings on licensing handgun purchasers were robust to a range of statistical modeling approaches.<sup>24</sup>

After controlling for other gun laws and factors hypothesized to influence risk for mass shootings, purchaser licensing laws were associated with a roughly 56 percent lower risk for fatal mass shootings.<sup>25</sup> The researchers "found no evidence that concealed carry laws, assault weapons bans, prohibitions for domestic abusers and violent misdemeanants, or point-of-sale [criminal background check] laws were associated with the incidence of fatal mass shootings."<sup>26</sup>

### *Why It Works*

Researchers posit that these laws work by "reduc[ing] overall firearm availability within a state as well as reduc[ing] firearm availability to high-risk individuals."<sup>27</sup>

The precise mechanisms at work require greater study. Initial evidence suggests that purchaser licensing requirements reduce the diversion of guns to prohibited individuals through straw purchases and generally raise the price and risk of transferring handguns to someone without verification of their legal status.<sup>28</sup> Legal requirements to have a purchaser license

also make it easier for a potential private seller to determine whether a prospective purchaser or gun-owner can legally acquire firearms.<sup>A10</sup> In a state with a licensing requirement, a person must apply for a license from the state after federal and state background checks have been completed, wait to obtain a license, and then buy the firearm from a dealer or private seller after showing said license. In a non-licensing state, the person can walk into a gun shop, complete a background check, and buy a gun from a seller with a vested interest in allowing the purchase to go through without any oversight from an outside actor. Fingerprinting requirements make a background check more likely to identify prohibited persons because merely recording information from a government-issued ID onto purchase applications can lead to errors.<sup>A11</sup> Finally, direct interface with the licensing officer may also be a deterrent to those who would like to acquire a gun to harm themselves or others, even if the person is not prohibited from possessing firearms.<sup>A12</sup>

### Current Models for Licensing Gun Purchase

Today, nine states require firearm purchasers to obtain a license law. Maryland, Iowa, and North Carolina have laws pertaining only to the purchase of handguns, and regulate other firearms such as hunting rifles separately.<sup>A13</sup> Connecticut, Hawaii, and New Jersey have broader purchaser licensing laws.<sup>A14</sup>

Three states — Illinois, New York, and Massachusetts — license possession in addition to the purchase of firearms. New York's licensing law applies only to handguns.

Finally, the District of Columbia has a registration law in place that functions much the same way that possession licensing does elsewhere.<sup>A15</sup>

#### *Typical Features of a Licensing Regime*

Maryland's Firearm Safety Act of 2013 contains many elements typical of purchaser licensing regulation.<sup>A16</sup> In Maryland, a person seeking to purchase a handgun must first apply for a license. To apply, the person must be 21 years old and reside in Maryland. The applicant submits an online form to the state police stating that they have no prohibitors and have completed a firearms training course, gets fingerprinted, and pays a \$67 fee for the application and fingerprinting. After the application is submitted, the state public safety agency must run a criminal history records check within 30 days. To deny the ten-year license, the agency has to "provide a written denial, along with a statement of reasons and notice of appeal rights." Administrative and judicial review of the licensing

decision are available if requested within 30 days of denial.<sup>A17</sup>

Elements of the policy vary by state, and often include minimum age, training requirement, discretion assigned to licensing officer, duration of permit, relationship to carry permit, fee charged, and maximum wait allowed. See Online Appendix 1 for additional detail.

### Crafting Gun Licensing Legislation to Withstand Constitutional Challenge

Gun regulation is limited by the Supreme Court's decision in *Heller v. District of Columbia*, which significantly recast Second Amendment jurisprudence. However, even as the *Heller* court recognized a Second Amendment right to own a firearm for self-defense within the home, the court did not hold that Second Amendment rights are without limitation. The *Heller* court concluded that "nothing in our opinion should be taken to cast doubt on longstanding prohibitions on the possession of firearms by felons and the mentally ill, or laws forbidding the carrying of firearms in sensitive places such as schools and government buildings, or laws imposing conditions and qualifications on the commercial sale of arms."<sup>A18</sup> Although the policy challenged in *Heller* included a licensing component, the Court did not reach that issue. Because the "respondent conceded at oral argument that he does not 'have a problem with ... licensing'" the court chose instead to "assume petitioners' issuance of a license will satisfy respondent's prayer for relief and [did] not address the licensing requirement..."<sup>A19</sup>

Since *Heller*, the lower courts have established a two-step test for assessing the constitutionality of a challenged firearm regulation. First, the court assesses whether the regulation restricts an activity protected by the Second Amendment. Second, if the Second Amendment is implicated, the court determines whether the core right has been affected and based on that determination assigns a level of scrutiny and performs a means-ends analysis.<sup>A20</sup>

Most post-*Heller* litigation relating to purchaser and possession licensing regimes has taken the form of as-applied challenges to individual denials. When litigation on the facial validity of a regulation has arisen, state and federal have held a variety of regimes to be Second Amendment compliant. In New York, courts have mostly agreed that the State's possession licensing law restricts an activity protected by the Second Amendment, but does not go to the core of the right, and is therefore assessed using an intermediate level scrutiny.<sup>A21</sup> Intermediate scrutiny requires that the regulation further an important government interest by means that are substantially related to that govern-

ment interest — in this case, that of protecting public health and safety — in order to be upheld.

Federal courts in New York have consistently held that the State's gun licensing regime satisfies that standard.<sup>A22</sup> State and federal courts in Massachusetts have similarly rejected a series of facial challenges to the constitutionality of its licensing statute.<sup>A23</sup> New Jersey state courts have consistently held the State's purchaser licensing statute to be Second Amendment compliant.<sup>A24</sup> Courts have generally upheld the District of Columbia's registration system, after striking down certain ancillary components to be discussed *infra Heller III*.<sup>A25</sup>

In addition to relying on the scattered case law to date, defenses to intermediate scrutiny can be strengthened by the data on effectiveness of this policy in reducing gun deaths cited herein, which further reinforces courts' conclusions that licensing regimes are substantially related to the government interest in protecting public safety.

#### Implementation

Policymakers may differ in which elements of a licensing regime they include, given other essential values at play. In making choices around setting fees or allowing decision-maker discretion, policymakers should take care to avoid imposing undue costs for those without ability to pay or exacerbating the effects of decision-maker bias. Whatever policy choices government actors make, they should craft a regime likely to withstand legal challenges. To ensure a new law is upheld, policymakers should consider (1) what constitutes a fair fee and situations in which a waiver of that fee may be applicable, (2) whether law enforcement discretion is appropriate in denying licenses, and (3) potential constitutional challenges to duration restrictions, as these issues have been most frequently litigated to date. Although the Supreme Court has yet to rule on these issues, circuit court case law and Supreme Court precedent from other areas of law can be instructive.

#### Fees

Licensing fees have been the subject of substantial post-*Heller* litigation. In *Kwong v. Bloomberg*, the Second Circuit upheld a \$340 handgun license fee, though plaintiffs asserted the fee was unlawfully high.<sup>A26</sup> The Second Circuit upheld the district court's finding "that the \$340 fee did not impermissibly burden plaintiffs' Second Amendment rights under the Supreme Court's 'fee jurisprudence' because it was designed to defray, and did not exceed, the administrative costs of regulating an individual's right to bear arms."<sup>A27</sup>

The court says this finding holds true regardless of whether or not the regulation is analyzed under intermediate scrutiny. The court "express[es] skepticism" that the regulation would receive heightened scrutiny because it places only a "marginal" or "incremental" burden on the right. Even if intermediate scrutiny were to be applied, the "substantial" and "compelling, governmental interests in public safety and crime prevention" that are a "reasonable but not perfect fit" with a "licensing fee ... designed to allow the City of New York to recover the costs incurred through operating its licensing scheme, which is designed to promote public safety and prevent gun violence" constitute a regulation that "easily survives."<sup>A28</sup>

In the 2015 *Heller III* decision, the DC Circuit agreed with the Second Circuit's fee analysis. Rather than arguing a \$48 fee was too high, the plaintiff argued that "[t]he District may not condition exercise of a fundamental constitutional right on the creation of a burdensome registration regime and then justify imposing 'administrative costs' to pay for it."<sup>A29</sup> But the court, citing to *Kwong*, the Supreme Court's First Amendment jurisprudence, and its own holding in *Heller II*, found that "'administrative ... provisions incidental to the underlying regime'—which include reasonable fees associated with registration—are lawful insofar as the underlying regime is lawful."<sup>A30</sup>

How courts will respond to fees above what is needed to defray administrative costs is as yet unclear, although an Illinois state appellate court upheld such a fee in 2019.<sup>A31</sup> States looking to do so may wish to invoke the history of using gun tax revenue for other purposes, as Shearer and Anderman do when they argue that courts should look to this history to uphold gun violence-prevention taxes.<sup>A32</sup>

Courts may also look to case law from other contexts. For instance, the Supreme Court has well-developed case law around First Amendment licensing fees. The Court first addressed this issue in a 1941 case, *Cox v. New Hampshire*, upholding a New Hampshire fee requirement for parade permits because it was designed "to meet the expense incident to the administration of the act and to the maintenance of public order in the matter licensed."<sup>A33</sup> Shortly thereafter, the Court cabined its holding in *Cox* in *Murdock v. Pennsylvania*, striking down an ordinance requiring Jehovah's Witness preachers to pay for a license to collect contributions when handing out pamphlets. The Court saw *Murdock* as different from *Cox* because the fee in question was neither merely recouping administrative costs nor protecting public health and safety while regulating dangerous activities.<sup>A34</sup>

Although courts have upheld, and will likely continue to uphold, fees as high as \$340 for a firearm

purchaser license, policymakers should consider a fee waiver for low-income applicants. A fee waiver would have the dual benefits of providing added protection against constitutional challenges and making access to licensing more equitable for low-income communities, and in particular for low-income communities of color most likely to be targeted for enforcement against unlicensed gun purchases. A reasonable fee waiver might waive the fee for applicants receiving certain public benefits, applicants with income under 125% of the federal poverty level, or applicants otherwise unable to pay.

### Discretion

If gun licensing litigation tracks patterns in litigation over other gun laws, decision-maker discretion may continue to grow as a litigation focal point. State actors wishing to reduce litigation risk and craft a policy that is relatively less susceptible to potential licensing officer bias should consider eliminating all decision-maker discretion. Recognizing, however, the policy trade-offs inherent in doing so, some may wish to maintain elements of discretion. If a policymaker chooses to maintain some level of licensing officer discretion, they should do so narrowly — perhaps borrowing from procedures used for discretionary Extreme Risk Protection Orders — to enact policies with strict parameters around permissible reasons for discretionary denial as well as documentation requirements for the licensing officers.<sup>A35</sup>

In the concealed carry arena, debates over discretion often center on whether a licensing officer “may” or “shall” issue a license. States with purchaser licenses currently sidestep that controversy by including “shall” issue language, making it mandatory for the licensing officer to issue a license if the applicant meets certain criteria.<sup>A36</sup> However, discretion can be found elsewhere in a statutory scheme. New York’s Penal Law § 400.00 delegates broad discretion to the licensing officer, allowing denial “for good cause” and asking the licensing officer to determine whether the applicant has “good moral character” without clear legislative standards for either determination.<sup>A37</sup> As a result, individual license denials have been widely litigated in New York.

Courts have generally created and upheld their own standards for reasoned decision-making by licensing officers making gun licensing decisions. In *Kachalsky v. County of Westchester*, a 2012 concealed carry case, the Second Circuit upheld an assignment of discretion in New York’s concealed carry regulatory scheme comparable to the assignment of discretion found in its possession licensing regime, a requirement of “proper

cause.” The court concluded “[p]laintiffs’ contention that the proper cause requirement grants licensing officials unbridled discretion is something of a red herring” because the standard is defined by “binding judicial precedent” established over the course of many years.<sup>A38</sup> New York courts have used similar logic to reject facial challenges to the possession licensing statute’s grant of discretion.<sup>A39</sup>

Courts have opted not to apply First Amendment doctrines around unbridled administrator discretion, substantial overbreadth, or facial vagueness to the Second Amendment context. These three distinct but overlapping doctrines are grounded in reasoning seen as specific to the First Amendment.<sup>A40</sup>

In *Hightower v. City of Boston*, the plaintiff challenged the revocation of her firearm license, arguing that a provision of the state law asking the licensing officer to determine whether an applicant is “suitable” for a license was facially unconstitutional as a grant of “unbridled discretion.”<sup>A41</sup> In evaluating this claim, the First Circuit chose to rely upon Second Amendment case law from lower courts instead, holding that “the prior restraint doctrine is specific to the First Amendment and stems from the substantive First Amendment restrictions.”<sup>A42</sup> The court went on to cite the 1988 Supreme Court case *City of Lakewood v. Plain Dealer Publishing Company* warning against the dangers of a licensing law that “constitutes a prior restraint and may result in censorship.”<sup>A43</sup>

In short, non-discretionary purchaser licensing regimes are on strong legal footing and can help alleviate concerns about licensing officer bias. Discretionary licensing, while likely also constitutional if properly implemented, remains vulnerable to as-applied challenges if the State cannot provide an objective reason for denial.

### Duration Restrictions

To date, duration restrictions, though common, have either been upheld or gone unlitigated. In *Heller III*, however, the DC Circuit struck down a related “requirement that a gun owner re-register his firearm every three years” as unconstitutional on the basis that the government had not provided “substantial evidence” that they “could reasonably have concluded that requiring re-registration would advance an important governmental interest.”<sup>A44</sup> Two of the government’s justifications deemed insufficient by the court could have implications for licensing regimes in other states. The court did not view the possibility that a gun owner could have entered a prohibited category during the three years as reason to make them re-register, arguing that background checks could be done

separately.<sup>A45</sup> Similarly, the court argued that concerns about lost weapons could be handled through stand-alone reporting.<sup>A46</sup> Although courts have not imported this to the licensing-only context to date, policymakers should be aware of litigation risk when considering duration restrictions.

Duration restrictions can, however, be useful as a forcing mechanism for frequent criminal background checks. States with point-of-sale background checks may consider longer license durations than states fully reliant on licensing background checks. For instance, Connecticut, a state with a point-of-sale background check law in place, allows purchaser licenses to remain valid for up to 5 years. States without point-of-sale background checks should consider a shorter license duration.

### Racial Justice Implications of Gun Purchaser Licensing Regimes

In enacting such a policy, state actors should consider the specific burdens of gun violence on communities of color as well as the potential for racist enforcement of well-intended legal interventions including the one proposed herein, and should acknowledge the obvious tension between those two realities.

In proposing purchaser licensing rather than possession licensing, the authors hope to reduce the risk of harming communities of color through what may be the most pernicious outcome of discriminatorily-enforced licensing policies: that of disproportionate gun arrests and disproportionate incarceration due to gun arrests. Although most gun arrests reflect conceal carry infractions rather than possession licensing violations, the ongoing nature of a possession licensing law leaves significant room for disproportionate enforcement leading to disproportionate incarceration. Since the mechanism best-supported by empirical research to date occurs at time of purchase, a policy that regulates only purchase and not possession maintains the integrity and effectiveness of licensing regimes studied to date without creating additional opportunities for racist law enforcement in communities of color.

Policymakers should also seek to ensure that the purchasing licenses are not themselves issued in a racially (or economically) discriminatory manner. Preliminary ideas of how to do so have been detailed herein and include automatic fee waivers below certain income levels as well as elimination of discretion in the licensing officer's process to prevent lawful gun-owners of color from being dissuaded from seeking a license due to previous negative experiences with law enforcement. The proposed purchaser licensing

scheme does, however, rely on the existing, and significantly biased, criminal justice system, for instance through its reliance on criminal background checks, and will therefore remain susceptible to carried-over bias.

### Conclusion

Given the strength of the empirical case for purchaser licensing, state-level lawmakers concerned about gun violence should move swiftly to put such policies in place. Lawmakers should take care to do so in a racially-sensitive manner. Online Appendix 2 includes model bill language for policymakers' consideration. The highly litigious environment around gun regulation requires that all potential litigation risks be weighed carefully within the context of important policy objectives. However, such licensing schemes have to date withstood legal challenges and state actors should not allow the theoretical litigation risk to deter them from taking this important action.

### Editor's Note

Appendices 1-3 can be found online. Reference notes for A1-A46 can be found in Online Appendix 3.

### Note

Cass Crifasi and Daniel Webster report grants from The Joyce Foundation. Hannah Abelow reports no conflicts of interest.

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2. *Id.*
3. *Id.*
4. See Webster, *supra* note 1, at 296.
5. *Id.*
6. *Id.*
7. *Id.*, at 300.
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9. K. Rudolph et al., "Association between Connecticut's Permit-to-Purchase Handgun Law and Homicides," *American Journal of Public Health* 105, no. 8 (August 2015): e49-e54.
10. *Id.*, at e51.
11. *Id.*
12. A. McCourt et al., "Effects of Purchaser Licensing and Point-of-Sale Background Check Laws on Firearm Homicide and Suicide in Four States," *American Journal of Public Health* (forthcoming).
13. *Id.*
14. *Id.*
15. *Id.*; see also C. Crifasi et al., "Association between Firearm Laws and Homicide in Large, Urban U.S. Counties," *Journal of Urban Health* 95, no. 3 (2018): 383-390. Correction: *Journal of Urban Health* 95, No. 5 (2018): 773-776.
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  18. See, e.g., *Effects of Minimum Age Requirements on Suicide*, RAND Corporation, available at <<https://www.rand.org/research/gun-policy/analysis/minimum-age/suicide.html>> (last updated August 13, 2020).
  19. See McCourt, *supra* note 12.
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  22. D. Webster et al., “Evidence Concerning the Regulation of Firearms Design, Sale, and Carrying on Fatal Mass Shootings in the United States,” *Criminology & Public Policy* 19 (2020): 171-212.
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# The Legal and Empirical Case for Firearm Purchaser Licensing

Hannah Abelow, Cassandra Crifasi, and Daniel Webster

## APPENDIX 1

	Discretion to Deny a permit	Fingerprints Taken	Age	Maximum Wait	Duration	Safety Training/ Exam	Type	Can use Carry Permit
<b>CT</b>	No	Yes or any other method of positive identification required.	21+	90 days	5 years	Yes	Handgun	Yes
<b>HI</b>	Yes	Yes	21+	20 days.	Handgun: 10 days; 1 transaction Long gun: 1 year.	Yes, Training course.	All	No
<b>IL</b>	No	No	21+ unless written consent of parent or guardian.	30 days for new applicants; 60 days for renewal.	10 years.	No	All	No
<b>IA</b>	No	No	21+	Upon completing application.	5 years	No	Handgun	Yes
<b>MD</b>	No	Yes	21+	30 days	10 years	Yes	Handgun	No
<b>MA</b>	Yes	Yes	21+	40 days	6 years	Yes, Safety certificate.	Any firearm	Not a separate license.
<b>NJ</b>	Yes	Yes	21+	30 days for residents, 45 days for nonresidents	90 days, 90 day renewal, 1 handgun.	No	Handgun	No
<b>NY</b>	Yes	Yes	21+	6 months	Generally, until revoked. 3 years in New York City, 5 years in certain counties.	Generally, no. Required only in Westchester county.	Handgun	Yes
<b>NC</b>	Yes	No	18+ to possess	14 days	5 years, 1 handgun	No	Handgun	Yes
<b>DC</b>	No	Yes	21+ (18 with signature)	60 days	3 years	Yes	All firearms	No

### Notes

1. Conn. Gen. Stat. A. §§ 29-36, 29-33.
2. Haw. Rev. Stat. § 134-2.
3. 430 Ill. Comp. Stat. § 65.
4. Iowa Code. §§ 724.15, 724.19, 724.20.
5. MD Code Ann., Pub. Safety § 5-117.1.
6. Mass. Gen. Laws 140 § 131.
7. N.J. Stat. Ann. § 2C:58-3; N.J. Admin. Code § 13:54-1.4(i); N.J. Stat. Ann. § 2C:58-3(c)(5) (allows denial for anyone where the “issuance would not be in the interest of the public health, safety or welfare”); N.J. Stat. Ann. § 2C:58-3; N.J. Admin. Code § 13:54-1.4(i); N.J. Stat. Ann. § 2C:58-3(c)(5) (allows denial for anyone where the “issuance would not be in the interest of the public health, safety or welfare”).
8. NY Penal Law § 400.00.
9. N.C. Gen. Stat. Ann. § 14-404(a)(2) (“...the sheriff shall issue a permit when the sheriff has ... fully satisfied himself or herself by affidavits, oral evidence, or otherwise, as to the good moral character of the applicant. For purposes of determining an applicant’s good moral character to receive a permit, the sheriff shall only consider an applicant’s conduct and criminal history for the five-year period immediately preceding the date of the application.”); N.C.G.S.A §§ 14-404(e), 14-269.7, 14-404(f), 14-403, 14-402.
10. DC ST § 7-2502.

## APPENDIX 2

# Model Firearm Purchaser Licensing Act

### Short Title.

This (chapter, statute, law) shall be known and cited as the “firearm purchaser licensing act.”

### Findings.

The legislature finds that a firearm purchaser licensing act requiring all persons within the State of \_\_\_\_ seeking to purchase firearms from licensed firearm dealers or through private sales to first obtain a license to do so shall improve public health and public safety through a reduction in gun diversions, gun deaths, and overall gun violence.

### Definitions.

- **Licensing Officer.** State employee designated by the Commissioner [of Public Safety /Public Health] to review applications for Firearm Purchaser Licenses and issue Firearm Purchaser Licenses and denials.
- **Approved Firearm Use and Safety Course.** A course in the safe and lawful use of firearms must be approved by the Department of Public Safety and must include instruction regarding: (1) knowledge and safe handling of firearms and ammunition; (2) safe storage of firearms and ammunition and child safety; (3) safe firearms shooting fundamentals; (4) federal and state laws pertaining to the lawful purchase; (5) ownership, transportation, use, and possession of firearms; (6) state laws pertaining to the use of deadly force for self-defense; (7) techniques for avoiding a criminal attack and how to manage a violent confrontation, including conflict resolution; and (8) suicide risks for adults and teenagers with easy access to firearms.

### Authority.

\_\_\_\_\_.

### Eligibility for Firearm Purchaser License.

Any person who is twenty-one years of age or older may apply to the Commissioner of [Public Safety or Public Health] for a firearm purchaser license in order to purchase a handgun, semi-automatic rifle or other long gun.

The Licensing Officer shall issue a firearm purchaser license unless said Licensing Officer finds that the applicant: (1) has failed to successfully complete an Approved Firearm Use and Safety Course; (2) meets any federal prohibitor, as defined by the Gun Control Act (CGA), codified at 18 U.S.C. § 922(g); (3) meets any state prohibitor, as defined by \_\_\_\_; (4) has committed a serious violent offense adjudicated in the juvenile justice system within the ten years preceding application; (5) is currently subject to an Extreme Risk Protection Order pursuant to \_\_\_\_; (6) has been convicted of a violent misdemeanor within the ten years preceding application, has been convicted of an alcohol-related offense within the ten years preceding application; (7) has been involuntarily committed to a treatment facility for individuals with psychiatric disabilities within the ten years preceding application; or (8) resides out of state.

### Application for Firearm Purchaser License.

Requests for Firearm Purchaser Licenses shall be submitted to the Commissioner of [Public Safety or Public Health] on application forms prescribed by the Commissioner. No Firearm Purchaser License for a handgun, semi-automatic rifle, or other long gun shall be issued unless the applicant for such Firearm Purchaser License gives the Licensing Officer full information concerning the applicant’s criminal record and relevant information concerning the applicant’s mental health history. Each applicant shall submit to state and national criminal history records checks. The Licensing Officer shall take a full description of such an applicant. The Licensing Officer shall take the fingerprints of such applicant or conduct any other method of positive identification required by the Federal Bureau of Investigation. The Licensing Officer shall record the date the fingerprints were taken in the applicant’s file and shall conduct criminal records checks in accordance with state statute. The Licensing Officer shall, within sixty days of receipt of the national criminal history records check from the Federal Bureau of Investigation, either approve the application and issue the Firearm Purchaser License or deny the application and notify the applicant of the reason for such denial in writing.

Applicants may appeal denials through an administrative appeals process prescribed by the Commissioner.

## APPENDIX 2

### Model Firearm Purchaser Licensing Act

The Firearm Purchaser License shall be of such form and content as the Commissioner may prescribe; shall be signed by the license holder; and shall contain an identification number, the name, address, place and date of birth, height, weight and eye color of the certificate holder and a full-face photograph of the certificate holder.

#### **Scope of Firearm Purchaser License.**

A Firearm Purchaser License authorizes the purchase of firearms within the state from any licensed firearm dealer or through private sales from date of issuance until date of expiration.

A Firearm Purchaser License shall not authorize the holder thereof to carry a firearm upon his or her person in circumstances for which a permit to carry a firearm issued pursuant to \_\_\_\_ is required under \_\_\_\_.

#### **Fee for Firearm Purchaser License. Fee Waiver.**

The fee for each Firearm Purchaser License issued under the provisions of \_\_\_\_ shall be \_\_\_\_, which fees shall be paid to the Commissioner. Upon deposit of such fees in the General Fund, the fees shall be credited to the appropriation to the Department of \_\_\_\_ and retained within a restricted account for the purposes of the issuance of Firearm Purchaser Licenses under said section.

A fee waiver shall be made available, in a form prescribed by the Commissioner, to (1) applicants receiving public benefits under the Supplemental Nutrition Assistance Program (SNAP), Social Security Income (SSI), Temporary Assistance for Needy Families (TANF), or other comparable state or federal programs, (2) applicants whose monthly income is 125% or less of the poverty guidelines as updated periodically in the Federal Register by the United States Department of Health and Human Services pursuant to 42 USC § 9902 (2), or (3) applicants who, as individually determined by the Licensing Officer, cannot pay licensing fees without using moneys that normally would pay for the common necessities of life for the applicant and the applicant's family.

#### **Change of Address, Expiration, and Renewal.**

A person holding a Firearm Purchaser License shall notify the Commissioner or their designee within two business days of any change of address. The notification shall include the old address and the new address.

Any Firearm Purchaser License shall expire [one year if no point-of-sale background check in place or five years if point-of-sale background check in place] after issuance.

The Commissioner shall send a notice of the expiration of the Firearm Purchaser License issued pursuant to \_\_\_\_ to the holder of such License, by first class mail, at the address of such person as shown by the records of the Commissioner, not less than ninety days before such expiration, and shall enclose therein a form for the renewal of said License. Each renewal thereof shall expire \_\_\_\_ years after the date it becomes effective. A renewal fee to be determined by the Commissioner shall apply.

#### **Revocation of Firearm Purchaser License.**

Any Firearm Purchaser License shall be revoked by the Commissioner upon the occurrence of any event which would have disqualified the holder from being issued the Firearm Purchaser License pursuant to section \_\_\_\_\_. Upon the revocation of any Firearm Purchaser License, the person whose Firearm Purchaser License is revoked shall be notified in writing. Surrender of the Firearm Purchaser license must occur within five days of notification in writing of revocation.

#### **Severability.**

If any section, subsection, sentence, clause, phrase, word, provision, or application of the law shall be found invalid, illegal, unconstitutional, or unenforceable, that finding shall not affect or undermine the validity of any other section, subsection, sentence, clause, phrase, word, provision, or application which can be enforced without the use of the portion of this statute found invalid, illegal, unconstitutional, or unenforceable.

#### **Effective Date.**

The effective date of the act shall be \_\_\_\_\_.

## APPENDIX 3

### Additional Notes

- A1. Quinnipiac University, “Majority Of Voters Say Climate Change Is An Emergency Quinnipiac University Poll Finds; 72% Say Congress Needs To Act To Reduce Gun Violence,” *available at* <<https://poll.qu.edu/national/release-detail?ReleaseID=3639>> (August 14, 2020).
- A2. See, e.g., C. Barry et. al., “Trends in Americans’ Support for Gun Policies,” *Health Affairs* 38, no. 10 (2019): 1727-1734; C. Crifasi et. al., “Differences in Public Support for Handgun Purchaser Licensing,” *Injury Prevention* 26, no. 1 (2020): 93-95.
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- A7. C. Foran, “The Missing Data on Gun Violence,” *The Atlantic*, January 21, 2016, *available at* <<https://www.theatlantic.com/politics/archive/2016/01/gun-control-laws-research/424956/>> (last visited August 14, 2020).
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- A9. Center for Gun Policy and Research, Johns Hopkins Bloomberg School of Public Health, *The Impact of Handgun Purchaser Licensing on Gun Violence, available at* <[https://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-center-for-gun-policy-and-research/\\_docs/Impact\\_of\\_Handgun.pdf](https://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-center-for-gun-policy-and-research/_docs/Impact_of_Handgun.pdf)> (last visited August 14, 2020).
- A10. *Id.*
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- A12. *Id.*
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- A18. *District of Columbia v. Heller* (hereinafter *Heller I*), 554 U.S. 570, 595 (D.C. Cir. 2008). *Id.* at 631.
- A19. See, e.g., *United States v. Marzzarella*, 614 F.3d 85, 89 (3d Cir. 2010) (“As we read *Heller*, it suggests a two-pronged approach to Second Amendment challenges.”).
- A20. See, e.g., *Kwong v. Bloomberg*, 723 F.3d 160, 168 (2d Cir. 2013).
- A21. See, e.g., *Weinstein v. Krumpter*, 386 F. Supp. 3d 220, 231 (S.D.N.Y. 2019); *Napolitano v. Ryder*, No. CV18-3607(SJF) (AKT), 2019 WL 365710, at \*8 (E.D.N.Y. Jan. 30, 2019); *Libertarian Party of Erie County v. Cuomo*, 300 F.Supp. 3d 424 (S.D.N.Y. 2018); *Toussaint v. City of New York*, No. CV5576(NGG)(VMS), 2018 WL 4288637 (E.D.N.Y. Sept. 6, 2018); *Mishtaku v. City of New York*, No. 14-CV-839(VSB), 2015 WL 13002182, at \*5 (S.D.N.Y. May 4, 2015); *Aron v. Becker*, 48 F. Supp. 3d 347, 371 (N.D.N.Y. 2014). But see *John Doe No. 1 v. Putnam County*, 344 F.Supp. 3d 518 (S.D.N.Y. 2018).
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- A24. *Heller v. District of Columbia* (hereinafter *Heller III*), 801 F.3d 264 (D.C. Cir. 2015); *Kwong v. Bloomberg*, 723 F.3d 160, 162 (2d Cir. 2013).
- A25. *Id.*, at 164.
- A26. *Id.*, at 168.
- A27. *Heller III*, 801 F.3d at 278.
- A28. *Id.*
- A29. *Guns Save Life*, 2019 WL 6486055.
- A30. H. Shearer and A. Anderman, “Analyzing Gun-Violence-Prevention Taxes under Emerging Firearm Fee Jurisprudence,” *Southern Illinois University Law Journal* 43 (2018): 157.
- A31. *Sozinsky v. United States*, 57 S.Ct. 554 (1937).
- A32. *Cox v. New Hampshire*, 312 U.S. 569, 577 (1941).
- A33. *Murdock v. Pennsylvania*, 319 U.S. 105, 116 (1943).
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- A35. *Concealed Carry*, Giffords Law Center to Prevent Gun Violence, <<https://lawcenter.giffords.org/gun-laws/policy-areas/guns-in-public/concealed-carry/>> (last visited August 14, 2020).
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- A37. *Id.*
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- A41. *Hightower v. City of Boston*, 693 F.3d 61, 79-80 (1st Cir. 2012).
- A42. *Id.*, at 81.
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# Gun Regulation Exceptionalism and Adolescent Violence: A Comparison to Tobacco

*Catherine Camp*

## Introduction

The National Rifle Association and their congressional allies claim that firearms are the most regulated product in America. Yet guns are less restricted than a number of other dangerous products. A comparison of the restrictions on the sales of firearms and tobacco — especially to non-adults — shows that along some dimensions, such as federal age restrictions, it is easier for an adolescent to purchase an assault weapon with 20 rounds of ammunition than a pack of 20 cigarettes.

That was not always so. Until the Master Settlement Agreement (MSA) ended a decade of litigation between the major tobacco companies and public health advocates in 1998, cigarettes — which had enjoyed a century of widespread public appeal, reaching their all-time high that year in sales to those under 18 — were as unfettered as firearms sales are today. And the MSA was not even codified into law until eleven years later in the 2009 Family Smoking Prevention and Tobacco Control Act. It took many decades of federal, state, and local enactments to dramatically reduce tobacco use by adolescents. Cigarette use by those in 12th grade, for example, decreased from 23.1% in 1999 to 3.6% in 2018.<sup>1</sup>

Restrictions on the sales and use of cigarettes were all adopted without outlawing the products themselves or banning their legal purchase *by adults*. These tobacco restrictions may therefore be seen as a model for public health advocates similarly seeking to reduce

firearm violence that disproportionately involves adolescents as both perpetrator and victim.

Tobacco restrictions were made more politically palatable by specifically targeting restrictions to the youth market or emphasizing the impact of the regulation on youth. A similar youth-focused framing could be effective in promoting common-sense gun regulation as well. In addition, regulations targeting youth are more likely to pass constitutional muster, as laws that are explicitly youth-focused have been upheld as not violating the Second Amendment.<sup>2</sup>

This article considers six restrictions on tobacco purchase and use and compares tobacco's regulatory landscape to that of firearms: (a) minimum age for purchase, (b) sale by unlicensed individuals, (c) taxation, (d) advertising, (e) graphic warning labels, and (f) zoning.

## The Special Status of Both Guns and Tobacco in America

Firearms and tobacco share several common features, including an elevated cultural and political status throughout American history, and have both been represented by powerful lobbies. These common features make tobacco an applicable comparison point to firearms, especially as it relates to protecting youth from the harms of both products.

First, tobacco and guns are dangerous both to self and other. The lethality of cigarettes to the individual smoker was recognized as official government policy in 1964, and later found to be deadly to others as well through second-hand smoke. Likewise for firearms, a meta-analysis found that the mere presence of a gun in a home increases the odds of suicide (3.24 pooled odds ratio) and of being a homicide victim (2.00

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pooled odds ratio).<sup>3</sup> Guns harm tens of thousands of people each year through assault and homicide.

Second, despite such sobering statistics, both products long enjoyed a highly elevated status in the American economy and psyche. Tobacco was once so important to the American economy that its leaves were selected to grace the columns at the U.S. Capitol. Many Americans considered cigarettes to be central to their identities. For decades, tobacco's political power and its exemption from meaningful regulation were very similar to the status and power firearms still enjoy today.

Finally, the use of both products has long been asserted to be a matter of "right" by their users. Although tobacco has no Second Amendment equivalent, for years tobacco use was nearly ubiquitous. And attempts to ban cigarettes altogether have never been successful. The public health approach therefore shifted, in the 1990s, to focus on reducing *youth*

the FDA some authority to regulate tobacco product standards.

Gun regulation started earlier than tobacco regulation, but it has been slower; and, in contrast to tobacco, there have been several key laws that cut in the opposite direction and actually protect the firearm industry. The National Firearms Act of 1934 established a tax on the manufacture or sale of some firearms. The Federal Firearms Act of 1938 created federal license requirements for firearm manufacturers and retailers; it also established categories of "prohibited purchasers" (e.g., convicted felons). The Gun Control Act of 1968 established a minimum age for some firearm purchases. The Firearms Owners' Protection Act of 1986, however, reversed some of the previous regulatory gains; this law reduced restrictions on federally licensed dealers, limited the number of regular inspections that ATF can conduct, and prohibited the federal government from keeping a central database

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**Firearms and tobacco share several common features, including an elevated cultural and political status throughout American history, and have both been represented by powerful lobbies. These common features make tobacco an applicable comparison point to firearms, especially as it relates to protecting youth from the harms of both products.**

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initiation of smoking. This special focus on youth finally turned the regulatory tide to convince the public, regulators, and the industry to adopt meaningful restrictions.

### **Federal Regulation of Tobacco and Guns**

Federal law regulates the sale, marketing, and content of tobacco products. For decades, from the 1960s through the 1990s, tobacco was not effectively regulated, and youth smoking rates were very high. It was not until the late 1990s and 2000s that there was a major shift toward more tobacco regulation.

The 1965 Federal Cigarette Labeling and Advertising Act was the first law to mandate warning labels on every pack and advertisement, but it also preempted additional state or local warnings. The Federal Communications Commission has authority to ban cigarette advertisements from radio and television, which it did in 1970. In 1998, the Master Settlement Agreement implemented widespread restrictions after a decade of litigation, but ultimately, the most sweeping piece of legislation came in the form of the 2009 Family Smoking Prevention and Tobacco Control Act, which further regulated marketing and sales and gave

of gun sales. The Brady Act of 1993 strengthened background checks and waiting period requirements for firearm sales. The Federal Assault Weapons Ban, enacted in 1994, prohibited certain semi-automatic and large-capacity magazines. In another backslide from laws that expand gun restrictions, the Protection of Lawful Commerce in Arms Act was a 2005 landscape-changing law that immunized the gun industry from most tort claims.

### **Minimum Age for Purchase**

In many situations, a person can buy a firearm, even an assault weapon, before he is old enough to purchase a pack of cigarettes. While the minimum age to purchase any tobacco or nicotine product is 21, some gun sales are not subject to a federal minimum age whatsoever.

In practice, the minimum age for firearm purchase ranges from nonexistent to 21, depending on the type of gun purchased and from whom. Under federal law, when a gun is purchased from a federally licensed gun dealer, the purchaser must be 21 for a handgun and 18 for a long gun.<sup>4</sup> If purchased from an unlicensed individual, the customer must only be 18 to buy a hand-

gun, and there is no federal minimum age for a long gun if purchased from an unlicensed seller.<sup>5</sup> Although some states have passed higher age minimums — such as California, where one must be 21 to buy any gun from any seller<sup>6</sup> — these higher minimums are not the norm.

The distinction between handguns and long guns is historical. When Congress passed the Gun Control Act of 1968, it implemented a higher minimum age for handguns because they were, and still are, the type of gun used in the majority of criminal acts and suicide. A lower minimum age was supposedly implemented for long guns because they are used in hunting and sport.

Today, that distinction makes less sense, especially because many assault weapons are characterized as “long guns.” In the Parkland shooting, the shooter was 19 and had legally purchased an AR-15 style rifle — a “long gun” — from a licensed gun dealer.<sup>7</sup> He would have been too young to buy a handgun from the same store, and could not have legally purchased a pack of cigarettes.

There is scientific support for minimum age regulations. Adolescent brains are still developing impulse control mechanisms until the mid-20s, which might make younger people more prone to violence and have a higher risk for suicide.<sup>8</sup>

Although somewhat limited, empirical evidence on the effect of firearm minimum age laws suggests minimum age laws are associated with a reduction in suicide and unintentional death rates, at least among some populations. One study found that firearm minimum age laws implemented at the state level were significantly associated with a reduction in firearm suicides among those 18-20 years old (although the effects on total suicides were uncertain).<sup>9</sup> Federal firearm minimum age laws are likewise associated with a decrease in youth suicide and unintentional death rates.<sup>10</sup>

Young people are also disproportionately represented among both firearm offenders and gun violence victims. People aged 24 and younger commit nearly half of all gun homicides.<sup>11</sup> At the same time, those aged 18-24 are victims of gun violence at a higher rate than any other age group.<sup>12</sup> Taken to their logical end, these statistics could suggest raising the minimum age to 25 (and some do). A minimum age of 21 is more politically palatable, however, and is consistent with the legal age for drinking and smoking.

One objection to raising the minimum age for all firearm purchase to 21 is that the United States still requires males to register for Selective Service at age 18 and potentially be forced to use these types of weapons. There is a key difference, however, between

someone 18 years old who gets military training and is under constant supervision and one who is untrained and unsupervised.

Second, the fact that there is a minimum age distinction between sales by federally licensed dealers and by unlicensed individuals weakens the overall regulatory scheme. If a 16-year-old wanted to buy a gun in a state that does not have its own minimum age regulation for unlicensed sale, he would only need to go to armslist.com and find a listing. To close that loophole, Congress should impose an across-the-board federal minimum age which would apply to all firearm sales. In the absence of federal action, states should make the minimum age 21 for purchase of all guns.

### Sale by Unlicensed Individuals

In most states, anyone who wishes to sell tobacco must obtain a tobacco retail license. However, one does not need a license to sell firearms as long as the individual is not “engaged in the business” of selling firearms (if so, they would need to register as a federal dealer).<sup>13</sup> Requiring all sales to be performed through federally licensed dealers would protect youth, as federal dealers are more able and more motivated to verify minimum age requirements and help prevent youth access to firearms.

A retail license is even more important in the sale of guns than in the sale of tobacco given the safety considerations. Certain categories of people — domestic abusers, those with certain mental health conditions, those with records of criminal violence — are barred by law from buying a firearm. But, unlike licensed dealers, unlicensed sellers are not required to take affirmative steps to confirm that the buyer is not a prohibited purchaser. Although federal law requires a background check for anyone who wishes to purchase a gun from a federal dealer, background checks are not required by federal law for sales by unlicensed individuals (although some *states* do require background checks for such sales).<sup>14</sup> Purchasing from an unlicensed seller is a well-known “loophole” to avoid a background check in many states, and 22% of gun owners are estimated to have obtained their last firearm with no background check.<sup>15</sup>

A recent House bill, the Bipartisan Background Checks Act of 2019, which stalled in the Senate, proposed to significantly close the gun private sale loophole.<sup>16</sup> But ideally, any legislative solution would go further. The federal government, or more likely state governments, could require anyone who wishes to sell a firearm to obtain a license, regardless of the size of their retail business. A retail license is a requirement to sell tobacco in most states. Requiring a license to sell a firearm would create a record of people who have



sought authorization to sell any firearm, maintain a means of communicating with them, and create a sensible hurdle to selling firearms without preventing individuals from doing so.

### Taxation

Taxes discourage consumption of products that our society deems harmful, from tobacco to alcohol to soft drinks. Taxes on tobacco have been one of the most effective anti-tobacco measures. Increased firearm (and ammunition) taxation might also be effective in decreasing youth access to firearms, as youth have less disposable income and are therefore more elastic gun purchasers. Current firearm taxes are nowhere near those of tobacco.

Excise taxes build in the externalities of the product's use both to the purchaser and to the public, yet still ultimately allow the user to make their own choice. Tobacco is heavily taxed at the federal, state, and local levels. Federal excise taxes are currently \$1.01 per pack, while state and local excise taxes range from \$0.17 to \$6.16; another \$0.60 per pack is typically added to fund the Tobacco Master Settlement Fund.<sup>17</sup> The wide range in state and local tax levels thus results in different per-pack prices around the country, from \$4.70 in Virginia to \$13.50 in New York — representing an increase of between 250% and 600% of the untaxed cost of the product.

Tobacco excise taxes can effectively reduce consumption, with a 10% price increase leading to a 4% consumption decrease on average.<sup>18</sup> At a certain level, such as \$13.50 per pack in New York City, a pack-a-day habit becomes prohibitively expensive for many.

Firearms are not taxed nearly as much. Handguns are currently subject to a 10% excise tax; long guns and ammunition to an 11% excise tax.<sup>19</sup> Legislators have previously used gun taxes to discourage the purchase of some firearms. In the National Firearms Act, Congress implemented a then-prohibitive \$200 tax on the transfer or manufacture of machine guns, short-barreled shotguns and rifles, and silencers. In today's dollars that is about \$3,800; the tax has eroded significantly as it was never indexed to inflation.

The level of federal taxation on guns is thus an insignificant fraction of what it is on tobacco. Moreover, unlike tobacco, there has been relatively little state and local experimentation with firearm excise taxes. In the past decade, Seattle and Cook County, Illinois respectively passed a tax of \$25 on firearms and \$0.01 to \$0.05 per round of ammunition or cartridge sold. Importantly, both of these taxes withstood legal challenges; however, there is generally insignificant state or local progress on firearm taxes. There may be a constitutional limit to how high gun taxes can go; a

court found that a \$1,000 pistol tax in the Northern Mariana Islands (a U.S. Territory) ran afoul of the Second Amendment.<sup>20</sup> The precise constitutional limits of firearm taxes are not yet clear.

The lack of taxation on firearms is a missed opportunity for public health. The demand for firearms, especially handguns, is possibly quite elastic; one study estimated that a 1% handgun price increase leads to a 2-3% decrease in demand.<sup>21</sup> (Other studies, however, find that for some groups the value of possessing a firearm is high and persistent; there may be a lower elasticity among these groups.<sup>22</sup>)

Legislation has been proposed to increase federal firearm taxes through the Gun Violence Prevention and Safe Communities Act of 2018.<sup>23</sup> This legislation would set the excise taxes on guns at 20% and on ammunition at 50%; it would also raise the transfer tax to \$500. Although these levels would still be far below taxes on tobacco, they would be more than twice as high as the current levels. State and local governments can implement firearm excise taxes as well.

### Advertising

Over the last 50 years, the U.S. has virtually eliminated tobacco advertising, for reasons that are explicitly youth-based: tobacco companies are not permitted to advertise anywhere likely to be viewed by youth. However, there are virtually no legal restrictions on gun advertising. Although some companies, such as Google and Facebook, have policies that prohibit gun marketing on their websites, those policies can be changed at any time. Firearm advertising restrictions should focus on eliminating advertising anywhere youth may see it, not least because this may engender maximum political support.

Before any advertising regulation was put into place, tobacco ads were ubiquitous — appearing on children's television networks, radio, billboards, and at sports games. Advertisements were then banned on TV and radio for cigarettes in 1971 and in 1986 for smokeless tobacco products. Still, tobacco was advertised in magazines, newspapers, billboards, and transit. In 1998, the most significant advertising restriction for tobacco came in the form of the Master Settlement Agreement (MSA), which banned advertising targeted to youth under 18, outdoor advertising, and "product placement." The Family Smoking Prevention and Tobacco Control Act of 2009 further strengthened advertising restrictions.

Guns, however, can be advertised on TV and radio (although networks may have policies against airing such advertisements), magazines, newspapers, and billboards. A House bill introduced in 2014, the Children's Firearm Marketing Safety Act, that would have

required the Federal Trade Commission (FTC) to promulgate rules prohibiting marketing guns to children, was not enacted.<sup>24</sup> Although Google and Facebook ban gun marketing, users with many followers — i.e., “influencers” — are still paid to post about firearms. And the restrictions that do exist are under attack. For example, a century-old California law restricting handgun advertisements at gun shops was struck down a few years ago.<sup>25</sup> Finally, and most troubling, it is alleged that some gun advertisements may actively “encourage violent, criminal behavior” as a lawsuit argues against Remington,<sup>26</sup> the manufacturer of the weapon used in the Sandy Hook mass shooting.

In addition to general prohibitions, the tobacco industry is specifically prohibited from making false or misleading claims in the very few advertisements that remain.<sup>27</sup> Tobacco advertisements are prohibited from using the terms “low tar” and “light” for fear of misleading consumers. Yet, gun advertisements still promote the idea of firearms as home protection, even though studies suggest that having a gun in the home makes its residents *less* safe given the risk that one of the inhabitants will be killed by their own gun.<sup>28</sup> Although the Federal Trade Commission has federal authority to regulate deceptive marketing, there is limited scrutiny of the claims made in gun advertisements. Regulating advertising about such dangerous products is even more important because the federal government lacks the authority to regulate the physical attributes of firearms in the same way it regulates those of other consumer products; firearms are explicitly carved out of the jurisdiction of the Consumer Product Safety Commission.<sup>29</sup>

Some may contend the restriction on tobacco advertising is a gold standard unattainable for other products. But the form of the restrictions — e.g., bans on youth, severe bans on place and type of advertisement — show that some advertising restrictions are an attainable model for gun advertisements, whether through legislation or litigation, especially when focused on (a) prohibiting advertising anywhere that can be viewed by youth and (b) prohibiting false or misleading claims. The increasing restrictions on tobacco advertisements over the past 50 years, at least the extent to which advertising is targeted to youth, may set achievable goalposts for proponents of gun advertising restrictions.

## Labeling

Today, one cannot imagine a cigarette pack without one of its familiar warning labels, such as: “WARNING: Smoking Causes Lung Cancer, Heart Disease, Emphysema, and May Complicate Pregnancy.” And that message does not come close to the warning labels

on cigarettes in other countries, such as this one from Germany: “Smoking Can Cause a Slow and Painful Death,” or ones that carry graphic images of diseased lungs or deformed fetuses.

Graphic warning labels have a tumultuous history in the U.S. Although the 2009 Family Smoking Prevention and Tobacco Control Act required the FDA to implement graphic warning labels, tobacco companies successfully achieved a 2012 D.C. Circuit court ruling that these warnings, in their original formulation, were unconstitutionally compelled speech.<sup>30</sup> The FDA then failed to revise the graphic warning labels until it was sued to do so, in compliance with the 2009 Tobacco Control Act.

The FDA is finally making progress toward placing graphic warning labels on U.S. cigarette packs and issued a final rule in March 2020. The labels are horrific, which is the intent. One shows a child with an oxygen mask, another shows an eye with a syringe entering it.

Graphic warning labels on tobacco have been shown to be effective at deterring would-be smokers from purchasing cigarettes. In one study, graphic labels reduced the chance of cigarette purchase among people with lower nicotine dependence.<sup>31</sup> Another study found that smokers who viewed graphic warning labels reported being more motivated to quit smoking than those not shown the images.<sup>32</sup>

Graphic warning labels could apply to firearms as well. There has been at least one call for ammunition to carry graphic warning labels created by a team of advertising professionals.<sup>33</sup> They propose that each ammunition cartridge carry an image of a person with a facial gunshot wound, accompanied by the text “In homes where domestic violence occurs, a gun increases the risk of women being killed by 5 times.” These labels aim to deter ammunition purchase, the same way tobacco graphic warnings do. Gun boxes could also carry graphic warnings.

Tobacco graphic warnings have been viciously challenged, and firearm graphic warnings would be as well. However, graphic warnings on firearms and ammunition could potentially deter firearm or ammunition purchase, or at least make users think twice.

## Zoning

Smoke- and gun-free zones are a type of “place restriction” — a prohibition on the locations where a person can engage in a given activity. Smoke-free laws have been a critical factor in decreasing the smoking rate in the U.S. Gun-free zones could be equally important but are vigorously opposed by the NRA.

Smoke-free zones are now ubiquitous — and they are important for a number of reasons. First, they “de-

normalize” smoking as smokers are more hesitant to smoke in public. Second, they provide a physical area free from smoking, making it less likely a would-be smoker would start and reinforcing the likelihood that a cessation effort might succeed. Third, restricting smoking from places where children are likely to be — schools, parks, beaches — reduces youth exposure and the likelihood children will start smoking at all.

New York City has among the most comprehensive smoke-free laws in the country, prohibiting smoking in nearly all workplaces, and many outdoor areas such as parks and beaches. New York City also restricts retailer density, limiting tobacco retail licenses and not issuing new ones until the existing number falls below a cap. Smoke-free laws are cited as one of the measures that contributed to NYC’s youth smoking rate decreasing 52% over ten years.<sup>34</sup>

Gun-free zones exist at both the state and federal levels, but there is significant room to expand them — both where firearms can be carried and where they can be sold. Although federal law prohibits guns in federal buildings, airports and airplanes, and K-12 schools through the Gun Free School Zones Act, state and local governments may be better positioned to make zoning regulations due to conceivable limits on Congress’s authority to create new gun-free zones.<sup>35</sup> States can make more places gun-free — for example, prohibiting guns in banks, hospitals and mental health facilities, polling places, parks, anywhere tensions might cause violence (e.g., sports arenas, protests), anywhere alcohol is served, places of worship, daycare or childcare, amusement parks, casinos or gambling facilities, and concerts. States can also make certain zones gun-free by default, unless the location opts in; for example, making all bars or places of worship gun-free *unless* the place posts a sign stating that guns are permitted. Such default rules are the opposite of the carry laws in certain states, which require gun carry to be permitted in many public places.

Local governments might also use zoning to limit where guns are sold, the distance between gun stores, the proximity of gun stores to sensitive areas (e.g., schools), and the number of gun store permits to issue. The town of Piscataway, New Jersey, enacted a zoning ordinance with such steep requirements that effectively no gun stores can open in the town — any gun store would have to be 1,000 feet away from any sensitive location, including schools, parks, and health care facilities.<sup>36</sup> Alameda County, in California, has enacted a zoning ordinance requiring that any new firearm retailer not be within 500 feet of certain sensitive areas, including schools, and not within 500 feet of other firearm retailers. The Ninth Circuit upheld the constitutionality of the Alameda County require-

ments.<sup>37</sup> Some zoning laws, however, may go too far; the Seventh Circuit struck down a Chicago law that restricted available locations for a shooting range to 2.2% of the city as unconstitutionally burdening the Second Amendment.<sup>38</sup>

The NRA contends that gun-free zones contribute to mass shootings (*i.e.*, if more people were armed, perhaps the shooter might be stopped). The NRA estimates that the vast majority of mass shootings occur in gun free zones; however, Everytown for Gun Safety estimates only 10% of mass shootings occur in gun-free zones. Currently, there is little evidence that gun-free zones increase the probability of a mass shooting.<sup>39</sup>

## Conclusion

At one time, the centrality of tobacco to American culture was equal to — or even exceeded — the centrality that guns hold today. However, through public health advocacy, sustained campaigns to change public opinion about cigarettes, and a focus on youth specifically, historic tobacco regulations were achieved. These regulations were ultimately both politically feasible and effective in promoting public health. Tobacco’s regulatory history provides a valuable blueprint for gun regulation, as both products cause health harm to self and other, despite Constitutional differences.

Where political will to make federal change on firearms is lacking, state and local governments can act in the absence of federal action. Adopting an explicitly youth-focused frame and targeting regulations to restricting youth access to firearms is likely the most politically feasible approach, as it was for tobacco.

## Note

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# The Firearms Data Gap

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## Introduction

How many people in the United States are accidentally shot each year? What percentage of gun owners in North Dakota store at least one gun loaded and unlocked? What percentage of gun owners in Louisiana have carried a concealed loaded handgun in the past month? How many Americans have openly carried a handgun, or any gun? We lack the answers to these and a multitude of other basic questions, specifically because the U.S. currently lacks systems to effectively collect the relevant data and distribute them to researchers.

Gun violence is a pervasive challenge in the United States,<sup>1</sup> yet our firearms data infrastructure is severely limited in scope and fragmented in nature.<sup>2</sup> Better data systems should be beneficial to gun owners and non-owners alike. Experts agree that these data gaps stymie productive conversation about gun policy and undermine gun violence prevention efforts.<sup>3</sup>

The federal government's traditional role in collecting firearms-related criminal and health data has stalled in recent decades, and significant improvements to these efforts remain difficult given the present political landscape. In response, we believe states should levy their powers to legislate, incentivize, and lobby to enhance firearms data collection.

This article proceeds in three parts. Part I describes the current federal and state firearms data infrastructure, noting that publicly available data are largely

silozed and inadequate. Part II explains why firearms data are necessary to support both public health and litigation. Part III presents two policy prescriptions.

## I. Current Firearms Data Landscape

### A. Development of the Federal Firearms Data Infrastructure

In 1938, Congress passed the Federal Firearms Act, requiring gun manufacturers, importers, and dealers to register for federal licenses and mandating that dealers keep records of gun transactions. However, in the late 20th Century, as firearms policy increasingly became part of the culture wars — driven most notably by the National Rifle Association — Congress began limiting federal data gathering and research efforts.

In 1986, Congress legislatively forbade the establishment of a federal firearms registry. Although Congress in 1994 began requiring that federally licensed dealers (but not private sellers) conduct background checks of all handgun purchasers, the data benefits of those requirements were minimized by the 2004 Tiahrt Amendments (see below). The 1996 Dickey Amendment chilled gun violence research by prohibiting the Centers for Disease Control and Prevention (CDC) from using funds “to advocate or promote gun control.” Federal funding through the National Institute for Health (NIH) and the National Institute of Justice (NIJ) has also been extremely limited for decades, particularly when compared to funding for diseases with similar mortality.<sup>4</sup> The 2004 Tiahrt Amendments: prohibited the Bureau of Alcohol, Tobacco & Firearms (ATF) from releasing firearms trace data, except for limited purposes; prevented requiring gun dealers to send firearms inventory data to law enforcement; and required the FBI to destroy firearms purchase background check records within 24 hours. In 2005, the

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annual CDC health survey known as the Behavioral Risk Surveillance System (BRFSS) — which was the only source of data to track household gun ownership and storage at the state level — ceased asking about firearms.<sup>5</sup> Perhaps marking a reverse of the tide, in December 2019, Congress modestly funded firearms research for the first time in almost a quarter century, and fully funded the National Violent Death Reporting System (NVDRS).

### *B. State Firearms Data Infrastructure*

State-driven firearms-related data gathering efforts often lack standardization. However, states do gather some consistent information from two key contexts: crime reports and public health systems. These contexts are not easily separated conceptually, but government agencies often characterize these data as distinct, and collect and store these data separately. Consequently, these databases tend to be fragmented and lack relationships to one another, stymieing cross-database analyses. To illustrate state-based data collection, we studied in depth three states with contrasting approaches to firearms policy, and provide examples from each below.<sup>7</sup> Our analyses of Connecticut, New York, and Texas reveal that all three states lack data collection components necessary to sufficiently guide efforts to reduce gun violence.

#### 1. PUBLIC HEALTH DATA ON FIREARMS FATALITIES

The CDC's NVDRS provides consistent and comparable demographic and circumstantial information on all firearms deaths in all 50 states.<sup>8</sup> NVDRS aggregates state data on violent deaths from state-based medical examiner and coroner reports, death certificates, and law enforcement reports.

The NVDRS databases allow for causal evaluations by identifying decedent demographics, and the circumstances and mechanisms of death, including use of firearms. The CDC makes summary-level statistics publicly available and also provides free access to case-level databases for qualified researchers. Specific data are collected on the firearms when known (type, make, model, caliber/gauge, whether stolen), and on post-mortem toxicologic screen results, type of place where incident occurred, part of the body injured, number of wounds, mental health information about the victim, detailed precipitating circumstances, and victim-offender relationship.

Though state-level NVDRS data have led to important changes in policies and programs,<sup>9</sup> the database is limited in the data it collects. Because the data are drawn from existing reports, the system does not impose a new reporting burden on medico-legal death investigators but rather pays states to gather and cen-

tralize data from existing reports. States have generally not made efforts to improve on the NVDRS system by proactively collecting data on variables not included in the standard federal NVDRS mold, despite leeway to do so.

In addition to the NVDRS, state health departments can collect and publish data independently. However, where these publications exist, they are often redundant or limited in their ability to explain phenomena. For example, New York State publishes data about firearms usage in suicides, but these data are limited in terms of their historical scope and the range of variables available.<sup>10</sup>

#### 2. PUBLIC HEALTH DATA ON FIREARMS INJURIES

In contrast to the data on firearms fatalities, the U.S. lacks quality data on non-fatal firearms injuries. In 2019, the CDC acknowledged that its estimates of non-fatal firearms injuries, which are based on a small unrepresentative sample of the nation's hospitals, are “unstable and potentially unreliable.”<sup>11</sup> Likewise, individual states generally do not publish high quality data on non-fatal firearms injuries. For example, while the New York Department of Health collects injury and violence data, the information published rarely includes information regarding firearms.<sup>12</sup> In Connecticut, state law mandates that hospitals provide incident-level discharge data, but the usefulness of these data are limited by inconsistent publication and the divergent ways that hospitals collect specific data, like race and ethnicity inputs.<sup>13</sup> States such as Connecticut and Texas will make additional information available only to researchers upon application. The main problem is that hospitals collect data primarily for billing purposes, not for public health analyses. Burdens at the point of data collection can also reduce data quality. Some examples of these burdens include inadequate diagnosis codes, privacy laws, and restrictions on the information medical providers may gather while acting in emergent situations. Additionally, health care personnel are not typically required to ask about firearms, and absent explicit requirements they may not do so due to time constraints.

#### 3. CRIME DATA

In the crime context, each state gathers and reports summary-level data, including firearms-related details, through the FBI's standardized Uniform Crime Report System (UCR).<sup>14</sup> These data provide the basis for annual state crime reports, but these data are currently of limited use to researchers, both because the federal UCR reporting system provides little detail on the circumstances of firearms assaults (e.g., precipitants, victim/offender relationship) or specific gun crimes

and because the UCR is built from and presented as summary-level data. The lack of incident-level crime data limits researchers' ability to employ dynamic statistical methods that can identify causal relationships between independent variables (e.g., firearms safety policies or programs); covariates (e.g., location or person-based variables including perpetrator and victim demographics); and gun violence. While the National Incident-Based Reporting System (NIBRS) gathers incident-level data that could hypothetically be used in causal analyses,<sup>15</sup> only summary-level statistics are

intervention, and assess the effectiveness of interventions."<sup>19</sup> The United States has used a public health approach to greatly reduce deaths and harms due to a variety of other causes, including tobacco, STIs, and motor vehicles.<sup>20</sup>

In 1999, the CDC recognized the reduction in motor vehicle deaths per mile driven as one of the great public health accomplishments of the 20th century.<sup>21</sup> The national public health data system for motor vehicles that was created by the National Highway Traffic Safety Administration in 1975 was crucial to this success. The

Because courts rely on available data in determining the constitutionality of firearms-related laws, gathering robust firearms-related data should be a priority for policymakers in all states. Empirics will empower the courts to uphold meaningful public safety programs and dispose of policies that unnecessarily burden the right to bear arms. Legislatures and courts can best make these evaluations when data incorporates the consistent and the unique aspects of gun violence across all states and localities.

made available to researchers and the public at the federal level. Connecticut, New York, and Texas choose not to publicize incident-level data for firearms-related crimes occurring within their own jurisdictions.

While Connecticut and New York provide supplementary firearms-related data in state-based reports, Texas does not.<sup>16</sup> Connecticut has also made efforts to supplement the UCR's homicide reports by gathering and publishing incident-level family homicide information, and making these data directly available to the public.<sup>17</sup> By collecting and publishing supplemental incident-level data, the Connecticut and New York family violence reports illustrate the capacity of states to take the lead in expanding data gathering efforts.

The National Crime Victimization Surveys (NCVS) provide some information about gun crime from a large, nationally representative sample of the public and is the best source for crimes not reported to police. Individual-level NCVS data are readily available to researchers, and the NCVS is beginning to incorporate a variety of procedures to provide state-level and local-level crime victimization estimates.<sup>18</sup>

## II. Need for Improved Firearms Data

### *A. A Public Health Approach Is Needed to Alleviate Gun Violence*

Under a public health approach to gun violence, "[e]ffective strategies are built on research to identify patterns of risk, illuminate productive targets for

Fatality Analysis Reporting System (FARS) collects detailed, consistent and comparable data across states and over time for every motor vehicle-related death. The specificity of the data from FARS has enabled prevention specialists to identify and evaluate many promising interventions. For example, FARS data identified that 16-year-old drivers were at very high risk, and at the highest risk when driving at night and with only other teenagers in the car. Policies supporting graduated drivers' licenses, that restrict the youngest drivers from driving under these circumstances, have been credited with saving thousands of lives.<sup>22</sup> Additionally, FARS data and analyses support drunk driver legislation, child restraint laws, mandatory belt use laws, revised speed limits, vehicle crash survivability standards, right-turn-on-red laws, and airbag regulations, among others.<sup>23</sup> FARS data are available online at no cost. In addition, there is also a nationally representative data system of police-reported crashes, and states have data on licensed drivers, registered vehicles, and safety inspection results, among other information. Knowing what is needed, and then what policies actually work, has been crucial for reducing motor vehicle deaths.

To mimic the reduction in violence seen in the motor vehicle context, the national firearms violence data system requires much improvement to help researchers propose and evaluate effective strategies for preventing harm. This includes both expanded

public health surveillance data and original research. Without these data, researchers lack answers to basic questions, such as the effects of gun usage on various health outcomes, and the laws most effective for reducing gun violence regionally or nationally. Possessing data on these kinds of metrics would make it easier to know how to best channel resources, enact reforms, and tailor firearms policy to local circumstances.

### *B. Developing Constitutionally Permissible Firearms Safety Reforms*

In addition to providing evidence-driven methods for addressing gun violence, improved and expanded firearms-related databases would provide legislatures with more information about how to devise effective and constitutional legal interventions. In the past decade, courts have increasingly assessed the constitutionality of gun laws and evaluated empirical evidence of their effectiveness in promoting governmental interests.

The Supreme Court has provided little concrete guidance on what constitutes constitutionally permissible gun safety policy. However, lower courts have consistently interpreted the Supreme Court's current Second Amendment jurisprudence<sup>24</sup> to mean that firearms-related laws should be evaluated in a manner consistent with laws burdening other constitutionally defined rights such as free speech. Under this approach, courts evaluate the constitutionality of federal, state, and local firearms-related policies under a two-part test.<sup>25</sup> First the courts ask whether the policy burdens Second Amendment rights. If it does, the courts then determine whether the policy is constitutionally justified by virtue of its importance to achieving government interests. The weight of the burden on the Second Amendment is therefore weighed against the strength of the countervailing government interest and the specific policy's individual importance to achieving those interests.

Although courts do not require empirical evidence to sustain a government program,<sup>26</sup> many courts have considered database evidence when weighing the policy's burden on Second Amendment rights, compared with its connection to furthering important rights or interests.<sup>27</sup> First, federal appeals courts have relied upon data in cases establishing categorical limits on individuals who use firearms. In upholding a law that prohibited those convicted of a misdemeanor crime of domestic violence from possessing firearms,<sup>28</sup> the Seventh Circuit relied on empirical studies that demonstrated high recidivism rates for those who commit domestic abuse, heightened homicide rates where firearms are present in the home, and high risk of

violence to law enforcement officers responding to domestic violence.<sup>29</sup>

Second, federal appeals courts have relied on empirical evidence when considering laws that place conditions on firearms ownership. For example, in a case about firearms registration requirements, the D.C. Circuit remanded and vacated several of the provisions for their evidentiary weaknesses.<sup>30</sup> By contrast, the Ninth Circuit upheld a California law that established a 10-day waiting period before a buyer may take possession of a lawfully purchased firearm.<sup>31</sup> The court cited empirical studies demonstrating the effectiveness of waiting period laws in supporting the state's interest in "prevent[ing] or reduc[ing] impulsive acts of gun violence or self-harm."<sup>32</sup>

Third, federal appeals courts have evaluated empirical evidence when assessing governmental regulations on access to firearms or ammunition. For example, the Second Circuit upheld an assault weapon ban for furthering a substantial governmental interest in "public safety and crime prevention," based on evidence of the lethality of assault weapons, and their disproportionate use in crime, mass shootings, and law enforcement officer killings.<sup>33</sup>

Because courts rely on available data in determining the constitutionality of firearms-related laws, gathering robust firearms-related data should be a priority for policymakers in all states. Empirics will empower the courts to uphold meaningful public safety programs and dispose of policies that unnecessarily burden the right to bear arms. Legislatures and courts can best make these evaluations when data incorporates the consistent and the unique aspects of gun violence across all states and localities.

### **III. State-Based Policy Prescriptions**

We argue that states can and should do more to fill federal gaps and focus some data collection efforts on their own unique needs. While federal leadership in systematic firearms data collection would be invaluable, we suggest that states with the political will can proactively advance firearms data collection rather than waiting on federal consensus. States are well-positioned to act in this domain for several reasons: (1) state legislators can bypass the federal legislative logjam and implement meaningful data reform; (2) states regularly collect data, including from hospitals and the police, so data regarding firearms is merely an expansion of existing infrastructure; and (3) states can use their powerful platforms to advocate for necessary improvements at the federal level.

We propose that states first perform a data gap analysis, to evaluate what data they presently collect and what data they do not. Next, we suggest that states



levy their strengths to address gaps in data collection, storage, and reporting.

#### *A. Perform a Data Gap Analysis*

As a first step, we propose that each state conduct a data gap analysis to understand how firearms data are collected and stored. The goal is to identify not only “what data is currently available and what the gaps are,” but also what “missed opportunities” might exist.<sup>34</sup> To conduct this analysis, state should assess “data collection and infrastructure in key substantive domains (criminal justice, health, and public health), including both administrative and survey data as well as compilations and systems of data integration.”<sup>35</sup> States may wish to rely on state agencies and interviews with researchers and practitioners.<sup>36</sup> States might consider commissioning an independent body to make these evaluations.

In assessing existing data collection, it is important to consider what an ideal data infrastructure might look like. For an example of a data gap report, see the Stanford Criminal Justice Center and Measures for Justice’s analysis of California’s criminal justice databases.<sup>37</sup> We suggest that states publish data gap analyses to the public.

Even where data are available, states should attend to the quality and timeliness of the data, including whether it appears to contain inaccuracies, inconsistencies, or absences. The CDC recently acknowledged that its estimates for non-fatal firearms injuries have become “unstable and potentially unreliable”<sup>38</sup> due to unrepresentative sampling.<sup>39</sup> In conducting data gap analyses, states should consider whether particular reporting requirements are attached to incentives for compliance.

#### *B. Fill Data Gaps: Improve Data Scope, Presentation, and Availability*

After conducting a data gap analysis, states can levy their capacities to legislate, incentivize, and lobby in order to remedy these gaps. Below we discuss how states can (1) expand data collection and (2) improve data presentation and availability.

##### **I. EXPAND THE SCOPE OF FIREARMS DATA COLLECTION**

States should consider how they can expand their current information gathering systems to supplement federal firearms databases. Where databases exist, states should become strong advocates for data system maintenance and improvements. For example, as discussed in Section I.B, the CDC’s NVDRS is the nation’s best source of firearms fatality data, but it took two decades for the system to be fully funded. States need to lobby to ensure that NVDRS is maintained and expanded. The most pressing need is more uniform

documentation across medico-legal death investigation systems at the local level. Presently, if one county coroner routinely documents suicide decedents’ mental health treatment status and another never does, the resulting NVDRS data will imply that decedents in one county have far greater mental health service use than another, when no such gap exists. Other aspects of NVDRS could also improve, such as intimate partner violence categorizations<sup>41</sup> and circumstance data for police shootings.<sup>42</sup>

Other existing state databases could incorporate additional covariates and contextual data. Information regarding the individuals involved in gun violence, such as demographics, criminal background, or mental health profile, could guide efforts to keep firearms from those at risk of harming themselves or others. Data relating to the weapons involved in gun violence — including the model of firearms used, or when, where, or how a firearm was obtained — could inform key restrictions on firearms sales. Data regarding the circumstances of individual incidents of gun violence, such as timing, geospatial location, or whether the shooting occurred in a family violence, hate crime, schooling, or mass shooting context can also bolster efforts to explain and alleviate gun violence.

States should expand data gathering and reporting for firearms injuries. States can proactively gather and report emergency department and inpatient hospital discharge datasets, thereby facilitating research on the human and monetary consequences of firearms injuries and other detriments to health. As an example, in 1989 the Massachusetts Department of Public Health created a data system of all knife and gunshot wounds seen in the emergency department. The system revealed that pellet gun injuries to children can cause serious injuries and were common in western Massachusetts. The system also showed that the rapid decline in firearms injuries in Boston in the 1990s — the “Boston Miracle,” which has served as a model for many other cities trying to reduce youth gun violence — was not unique to Boston.<sup>43</sup> This model exemplifies how states can facilitate research through improved injury data collection.

States should also lobby for or create a source of state- and national-level estimates of firearms ownership and storage, such as on the Behavioral Risk Factor Surveillance System (BRFSS) or the National Survey on Drug Use and Health (NSDUH). In 2017, a half dozen states used an optional BRFSS firearms safety module, but a national system would allow for better cross-state comparisons. State-level BRFSS coordinators should support restoration of firearms modules to the BRFSS. As an initial step, states lacking records of firearms sales could initiate data collection either

through legislation or incentives, including distribution of state surveys, and make these records available to researchers.

California demonstrates how records of firearms ownership can improve research and shape policy. California has probably the best firearms data system of any state, including a permanent record of virtually every legal firearms transfer. Studies using California data have shown that violent crime was or could be reduced by making it illegal for individuals with a violent misdemeanor conviction<sup>44</sup> or a DUI conviction<sup>45</sup> to purchase firearms. Another California study showed that handgun purchases were associated with substantially elevated risks of suicide in the subsequent week.<sup>46</sup>

## 2. ENHANCE FIREARMS DATA STORAGE AND PRESENTATION

State leadership can also take steps to ensure that data are available in a format that is conducive to analyses by researchers and viewing by the public. For researchers to independently analyze data, the information should be in a format analyzable by a machine. To ensure that databases can be compared, states can implement state-wide data dictionaries requiring consistent use of variables. In order to perform regression analysis and draw causal conclusions, researchers need access to historical and incident-level data, rather than summary statistics. For example, the Massachusetts public health data system of knife and gunshot wounds, discussed above, would be even more useful if the raw data were more readily available to researchers. States can use their lobbying power to promote the dissemination of individual-level federal data for research as well. States should help ensure that the raw ATF tracing data are available — as they were in the late 1990s — and ensure that state-level concealed carry permit databases and ICD-10 diagnosis data are also available to all researchers, with the appropriate safeguards.

States should take the lead in providing cross-references between crime and public health datasets, in order to integrate the databases and give researchers fuller context when running statistical analyses. Utah provides a model of the value of implementing these measures. In 2018, the state of Utah funded a suicide study and authorized the linking of suicides with medical ED and inpatient records, and also authorized the determination of who originally bought the suicide firearms and how long ago, whether the decedent ever had a concealed carry permit, and whether they could have passed a background check the day they died. Results galvanized policy initiatives including: an online video and discounts for gun safes for concealed carry applicants; state laws requiring the distribution of locking devices for the sale of long guns; and state

grants to rural communities to support outreach on suicide prevention.

Because of the findings, some private groups, including the Church of the Latter Day Saints and Intermountain Healthcare, Utah's largest hospital, contributed funds to support public education on safe firearms storage and modified some of their programs and institutional policies.<sup>47</sup> Collaboration between the public health and the pro-gun communities promoted the rapid response to address the firearms suicide problem. This example demonstrates how states can bypass political gridlock to collect robust firearms data that researchers currently lack.

For the public to access firearms information, states should make data easily accessible. Some online databases, such as the CDC's Web-based Injury Statistics Query and Reporting System (WISQARS), incorporate data visualization or statistical analysis software directly in their interface. In response to the COVID-19 pandemic, many state health departments created interactive visuals displaying their state data surveillance.<sup>48</sup> State leadership might fund and support similar efforts for firearms.

## Conclusion

The firearms data infrastructure in the United States is extremely limited, hindering the capacity to identify and promote effective strategies to reduce gun violence. To remedy the data gap, we propose that states first conduct a data gap analysis in their own states to identify the strengths and weaknesses of their firearms data collection. Second, states should stitch gaps in the data infrastructure through legislation, incentives, and lobbying. In the wake of growing gun violence and persistent federal inaction, state action is critical. Robust firearms data collection has the potential to promote evidence-based solutions to this growing public health crisis.

## Note

Authors Durkin and Willmore contributed equally. The authors do not have any conflicts of interest to disclose.

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# Implementing Checklists to Improve Police Responses to Co-Victims of Gun Violence

*Samuel A. Kuhn and Tracey L. Meares*

## Introduction

Over 12,000 people die of gun homicides in the United States annually, leaving behind loved ones (“co-victims”) burdened by psychological trauma and economic loss. The state has tasked police as the primary responders to gun violence, but police often exacerbate trauma in every interaction with co-victims, from investigative follow-ups to failing to connect them to trauma counseling.<sup>2</sup> Police are intimately involved with gun violence survivors and the families of the deceased for months or even years after the incident. At each juncture, police represent the state in deeply sensitive and delicate interactions that have dramatic implications for the ripple effects of gun violence.

We build on the checklist model that has improved public safety outcomes in other complex, high-intensity professional contexts to propose a checklist for police detectives to follow in the aftermath of gun violence. Although checklists would likely improve police responses to co-victims of non-gun violence, we focus on gun violence because it constitutes a disproportionately harmful share of illegal serious injuries and deaths. To build the checklist, we reviewed the general orders of five police departments to better understand what guidance, if any, is currently given to police personnel regarding how they should interact with gun violence victims. We also interviewed fourteen co-vic-

tims in three of these cities who have lost at least one family member to gun violence, for critical perspectives on police responses to the victimization of their loved ones.

## Implications of the Literature: Procedural and Substantive Fairness in Policing After Gun Violence

Beginning in 2014, organizing associated with the Black Lives Matter movement galvanized renewed nationwide scrutiny of unconstitutional, discriminatory, over-aggressive, and ineffective policing.<sup>3</sup> This attention added to existing research demonstrating that groups receiving disproportionate police attention, victimization, and incarceration — especially among Latinx and Black populations — are more likely than whites to mistrust the police, view the police as illegitimate, and be afraid of police.<sup>4</sup>

Concepts in the literature such as “procedural justice,” “police legitimacy,” “legal cynicism,” and “legal estrangement” have been useful to explaining the theoretical, political, and practical significance of the experience of policing of many in “race-class subjugated” communities. Some of this work has specifically addressed police interactions on the street, but police interactions with the victims of gun violence and co-victims have not similarly been a target of reform strategies. Interactions between police and co-victims of gun violence are numerous, including, but not limited to, investigating the scene, notifying surviving family members of their loved one’s death, facilitating collection of compensatory resources, and communicating information throughout the investigation. Incorporating the expectations and desires of those who receive the most police attention should

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help improve what police do and do not do after gun violence incidents.<sup>5</sup>

Unresponsiveness to the needs of co-victims whose safety — both perceived and actual — has been dramatically compromised by their loved one's shooting likely shapes public perceptions of civic standing and distrust of legal institutions. For example, Jill Leovy connects perceptions of community distrust of police in Los Angeles to their failure to respond quickly and urgently to murder, pointing to police failure to clear homicides as evidence of this problem.<sup>7</sup> Similarly, Lisa Miller argues that “security from violence is an important state obligation,” and that violence and state punishment should be considered together as “social risks” from which the state often fails to protect marginalized communities — “particularly with respect to African-Americans.”<sup>8</sup> Recently, “the dual position of being abandoned and overseen, unprotected and occupied” has been usefully described by the concept of “distorted responsiveness” by the police — a state that is over-vigilant in punishing minor indiscretions like selling loose cigarettes but negligent with respect to serious threats to community safety.<sup>9</sup>

Further, police unresponsiveness to gun violence co-victims entails a special harm in minority communities where police play an outsized role, likely further marginalizing them from state institutions and their potential protections.<sup>10</sup> This phenomenon is described by the related concepts of legal cynicism — a subjective “cultural orientation in which the law and the agents of its enforcement are viewed as illegitimate, unresponsive, and ill-equipped to ensure public safety” — and the objective structural conditions, including police institutions and behaviors, that give rise to this orientation (a concept sometimes referred to as “legal estrangement”).<sup>11</sup>

One way to address legal cynicism is to adopt strategies consistent with what members of the public consider procedurally just.<sup>12</sup> Decades of research concerning the social psychology of procedural justice demonstrates that people are more likely to consider the legal authorities with whom they come into contact as fair, and are more likely to seek help from and cooperate with state authorities and agencies, when members of the public: (1) are given an opportunity to tell their side of the story, offer their point of view or have input on a policy; (2) are treated with dignity, concern and respect; (3) receive decisions they understand as fair in that the decision is transparent, neutral and grounded in fact; (4) and finally, are able to discern that the authority they are dealing with has trustworthy motives and is concerned about their well-being.<sup>13</sup>

Some initial research has shown that procedurally just police interactions with victims of crime can mitigate their fear of crime and feelings of social exclusion,<sup>15</sup> while disregard from justice system actors can result in secondary victimization.<sup>16</sup> Police demeanor and the sense that police cared about the case has been linked with victim satisfaction and reduced post-traumatic stress disorder.<sup>17</sup> Police responses characterized by procedural justice principles can create positive effects in victims' lives: victims given the chance to express their views and who saw those views reflected in police officers' decisions described the experience as “empowering.”<sup>18</sup>

### **Assessments of Police Responses: Perspectives of Gun Violence Victims' Families**

Using online surveys due to the COVID-19 pandemic, we sought to understand gun violence co-victims' experiences with police in the aftermath of their loved one's shooting.<sup>19</sup> Fourteen respondents, almost all African-American women from neighborhoods where gun violence and police contact are high, participated. See Online Appendix 3 for a more comprehensive summary of results.

Respondents' survey responses indicated unfavorable experiences characterized by police disregard, suspicion, and unresponsiveness rather than concern, helpfulness, transparency, or urgency. In their interviews, they described police failures to listen and respond to their concerns, and to provide case updates, their loved ones' belongings, and consistent follow-up. Each expressed a desire for changed police practices in this realm, and provided specific recommendations to that end. Their experiences as co-victims with police exacerbated feelings of unsafety and discredited both police and the justice system more broadly.

### **Existing Police Policies**

We conducted a comprehensive review of police policies in Baltimore, Chicago, Minneapolis, New Haven, and Stockton — larger cities and police departments with relatively high rates of gun violence,<sup>20</sup> where demand and capacity for responding to gun violence co-victims is likely to be higher than in smaller jurisdictions with less violence. Our search was maximally inclusive: we combed through all of each city's general orders and flagged key words and concepts.<sup>21</sup>

General orders do not capture the full set of guidance police officers follow. Police officers are trained, formally in the academy or informally on the job, on practices that are not mandated in departmental general orders.<sup>22</sup> They are also frequently not followed,<sup>23</sup>

Figure 1

City	Responsive Policies
Baltimore	<ul style="list-style-type: none"> <li>• Victim notification of clearance</li> <li>• Witness Assistance Program</li> </ul>
Chicago	<ul style="list-style-type: none"> <li>• Securing the crime scene</li> <li>• Notice of victim’s compensation fund</li> <li>• Victim notification of investigation status by request</li> <li>• Chicago Survivors: trauma treatment for victims of gun violence &amp; families (conducted by non-profit)</li> <li>• Members of public requesting letters of clearance</li> </ul>
Minneapolis	<ul style="list-style-type: none"> <li>• Victim’s family notification of death (usually conducted by Medical Examiner’s Office)</li> <li>• Suspect interviews at hospital beds</li> <li>• Link to victim’s services page</li> </ul>
New Haven	<ul style="list-style-type: none"> <li>• Disclosure of records (not tailored)</li> </ul>
Stockton	<ul style="list-style-type: none"> <li>• Notice of victim’s compensation fund</li> <li>• Documenting reports of death (internal)</li> <li>• Link to victim’s services page</li> </ul>

and are generally not enforceable by courts.<sup>24</sup> Nonetheless, policies are extremely important to police. They are internally enforceable, reflect the department’s understanding of its role, and are more specific and specialized than legal mandates. Failure to follow policy may subject officers to discipline or other employment consequences, including days without pay. Revising policy is a central goal of major reform efforts like consent decrees.<sup>26</sup>

The police departments we examined have very few policies governing their interactions with the victims of gun violence or their families. No department had greater than five policies that were responsive to our exceedingly broad relevancy criteria.<sup>27</sup> The substance of the policies also indicated a high degree of non-responsiveness: among the five police departments, none has a general order pertaining specifically to police interactions with either victims of gun violence or bereaved family members.

These policies fail to incorporate core components of the policing frameworks that are most responsive to community perceptions of police illegitimacy, legal cynicism, and legal estrangement. This failure is particularly acute given that these police departments do have policies governing police responses to such unusual events as downed airplanes, such specific calls as those involving “parties and loud music,” and describing specific, sensitive procedures for sexual assault and domestic violence investigations.

### Intervention: Developing a Responsive Model Checklist

Although governments should budget for other resources for gun violence survivors and the families of those killed by gun violence,<sup>30</sup> police can substantially improve their practices by turning to a tool deployed in a variety of other fields where stakes are high and processes are increasingly complex: checklists.<sup>31</sup>

Checklists have enhanced public health outcomes in a variety of other professions where human welfare is at risk, based on the recognition that costly errors due to complex and stressful work conditions can be avoided through these adaptable prompts.<sup>32</sup> In his 2009 book *The Checklist Manifesto*, Dr. Atul Gawande brought checklists to a broader audience by describing their applicability to a wide range of processes, including the successful implementation of checklists in hospitals around the world through the World Health Organization Safe Surgery Saves Lives program he directed.<sup>33</sup>

There is substantial reason to believe that checklists could be useful to police officers in this context. Police management literature often differentiates between behaviors requiring official policies, including high-risk, low-frequency activities where potential exposure to liability for failure to adopt an official policy is significant, and situations where it is crucial to allow officers to maintain wide discretion within organizational values and goals defined by structured guidelines and summary guidance.<sup>34</sup> Checklists fall somewhere in between these extremes: they seek to instigate specific actions, triggered here by an incident of gun violence, that police are unlikely to be sued for failing to execute — but which require more direction than a mere prompt but more discretion than a strict protocol.<sup>35</sup> Other police departments with more specific general orders may see checklists as an on-the-ground companion to remind officers of these more comprehensively-outlined procedures.

Indeed, checklists are already used in policing and criminal justice — though often without explicit attention to needs articulated by marginalized communities or the design principles developed by professionals in other fields.<sup>36</sup> Checklists can facilitate better communication, name the issues to be addressed, force professionals to recognize unfamiliar jobs as part of their roles, and create accountability. However, deploying too many checklists risks checklist fatigue, which could lower compliance; we argue that gun violence co-victimization presents an issue of particular importance to police and should therefore take priority over other functions that could be improved by checklists. Further, although the proposed checklists

may be seen as expanding detectives' responsibilities, these are unlike other checklist initiatives that have been derided as unnecessary paperwork that micro-manages core investigatory functions; instead, they convey an expectation that detectives spend more time and departmental resources on their homicide investigations, and provide guidance on a function for which they are unlikely to have preexisting expertise.

Checklists have also proven particularly effective where they govern the activities of professionalized specialists. Here, they would apply primarily to detectives, a group whose function is necessarily circumscribed and particular compared to the generalist responsibilities of patrol officers. Homicide detectives are highly specialized and generally overburdened: despite significant declines in gun violence in major cities, they tend to be assigned more cases than is considered advisable.<sup>37</sup> Further, detectives juggle many responsibilities. The aforementioned Chicago

police trainings can improve police conduct with community members, even in high stress situations.<sup>40</sup> Any checklist should be reviewed and revised by frontline staff, and in consultation with impacted communities, as deficiencies or impracticalities become apparent during implementation. Where they exist, tensions between officer or community input and checklist best practices should be proactively discussed among parties to the development process.

Neither new resources nor new expertise is necessary to address the gaps we identified in existing police policies. Instead, agencies must require careful attention that has not historically been marshaled for this purpose. Detectives may not overtly disregard the families of gun violence victims; indeed, many see themselves as working most directly for victims' interests, though differential police treatment of victims by race is well-documented.<sup>41</sup> As Dr. Gawande writes, checklists are particularly useful where busy

The state can and should do more to invest in robust support for bereaved families of gun violence victims, such as trauma counselors and automatic financial compensation regardless of the victim's criminal history or other means testing. But police can also substantially improve their post-shooting protocols without significant additional investment by adapting the "checklist" model that has proven so effective at enhancing public health in other fields. We think that adopting checklists that are responsive to community desires may also improve community perceptions of police legitimacy as well as implicate more traditional forms of justice.

Police General Order outlines five separate tasks for a detective, each of which require a complex interplay of communication, specialized skill, discretion, and adaptability, all at the scene of the crime — one brief component of an investigation that can last months or even years. Responsibilities requiring this combination of specialization and task proliferation are precisely those where the step-by-step guidance of checklists seems to be particularly helpful.

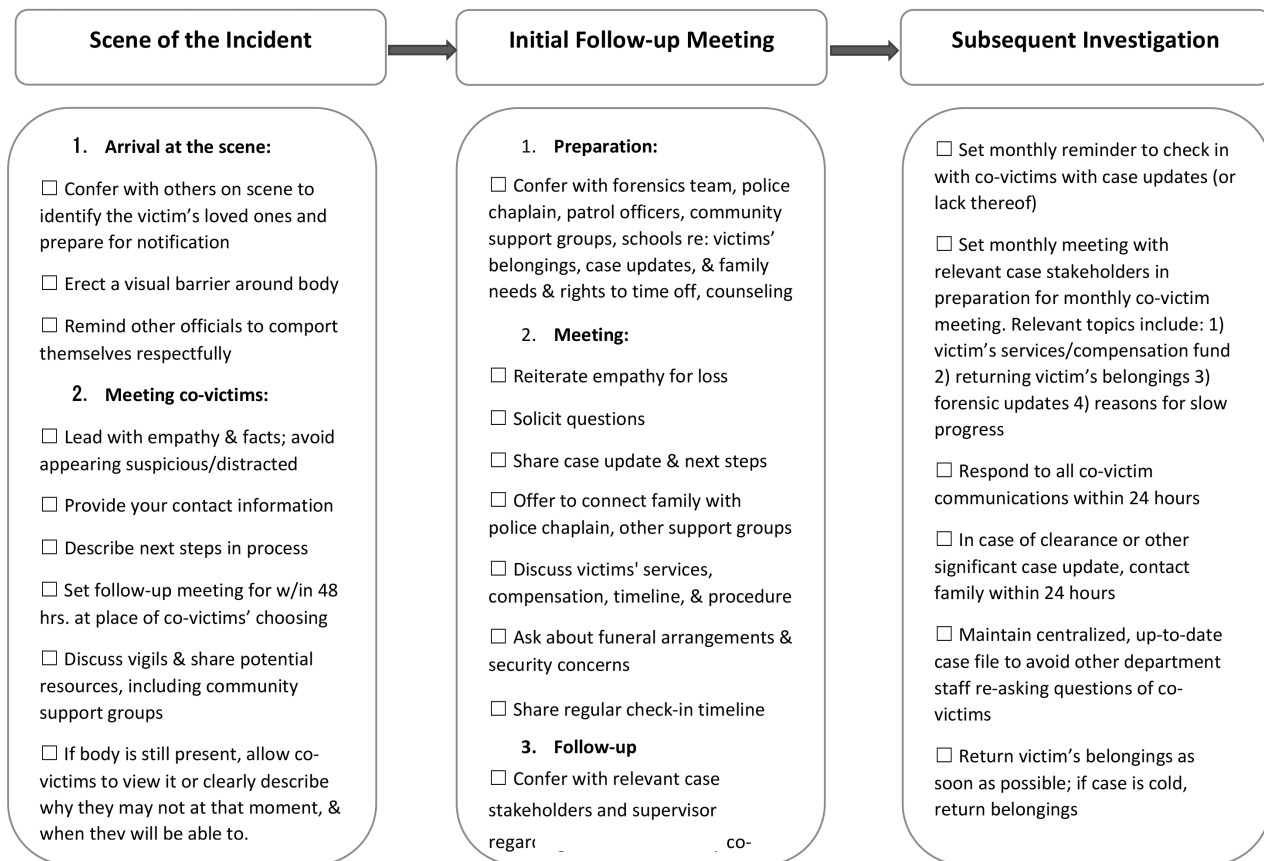
Where police directives are adopted pursuant to "internal procedural justice" — where those whom the directive will govern are consulted on its scope and implementation, and reasons for decisions are given — they are more likely to be seen as internally legitimate and to be followed.<sup>38</sup> Indeed, a study of five hospitals in Washington State found that implementation efficacy hinged on leaders' ability to explain why and how the checklist should be used.<sup>39</sup> Further,

professionals exhibit "a kind of silent disengagement, the consequence of specialized technicians sticking narrowly to their domains. "That's not my problem" is possibly the worst thing people can think" — especially when, as here, others believe that it is your problem.<sup>42</sup>

Designing checklists should be an iterative process guided in large part by those tasked with implementing them. Checklists should be followable, step-by-step guides rather than statements of principles or rules; objectives should be clear and concise, and each step should be critical to the safety objective at hand. Ideally they should comprise ten or fewer steps that are designed to be read aloud, can fit on one page, and are formatted simply, in a way that makes referring to them as easy as possible in the midst of the job.

Traditionally, checklists focus on "pause points," i.e., natural breaks in workflow where it is useful to take stock of what must be done and how to do it.<sup>43</sup>

Figure 2



In responding to gun violence co-victims, some pause points are clear: upon arrival at the crime scene, or just before meeting the victim's loved ones for the first time. Based on our review of relevant police policies and survey responses, other pause points should exist, but generally do not. This latter category could include creating monthly check-ins between the detective and the co-victims, a pause point that could trigger preparatory and follow-up meetings with other state stakeholders. Checklists can help create the expectation that so-called pause points, once identified, will actually result in a process of fruitful deliberation that produces actions responsive to the desires of co-victims.<sup>44</sup>

We have included a model checklist for police detectives responding to gun violence co-victims. It draws on the lessons for developing useful checklists as described in the literature and the helpful diagram included in "The Checklist Manifesto."<sup>45</sup> Police agencies seeking to implement these recommendations are advised to subject this model to frontline officers who will be asked to implement it — as well as to gun violence survivors and co-victims, local bereaved families' support groups, and other members of the police

department and criminal justice system who are likely to come in contact with co-victims after gun violence (including, for example, forensics team members, prosecutors, police chaplains, patrol officers, public health officials, and school administrators for children impacted by the shooting).

## Conclusion

Even where gun violence is an issue of persistent public concern, police policies display disregard for the families of victims — a disregard in line with patterns of police marginalization of lower-income minority communities. The state can and should do more to invest in robust support for bereaved families of gun violence victims, such as trauma counselors and automatic financial compensation regardless of the victim's criminal history or other means testing. But police can also substantially improve their post-shooting protocols without significant additional investment by adapting the "checklist" model that has proven so effective at enhancing public health in other fields. We think that adopting checklists that are responsive to community desires may also improve community per-



ceptions of police legitimacy as well as implicate more traditional forms of justice — for example, homicide clearance rates, which have declined significantly over time even as murder rates have plummeted, may be improved by enhanced victim assistance.<sup>46</sup> Improving clearance rates may interrupt escalating chains of retaliatory gun violence such that co-victims, who are generally at greater risk of gun victimization or using a gun, avoid death or incarceration.

Just as checklists are obviously insufficient to overcome the history of structural oppression underlying biases in medical treatment, even the most responsive and effective policing checklist cannot account or atone for the generations of structural police and state disregard for minority communities. Indeed, checklists should be introduced to police departments with training that explicitly grounds their adoption in an acknowledgment of historical and present racial oppression, consistent with reconciliation frameworks proposed and implemented by some advocates and practitioners.<sup>48</sup> American jurisdictions seeking to situate just police responses to bereaved families of gun violence victims in this frame might look to the Metropolitan Police Service's Family Liaison Officer (FLO) system. FLOs are assigned to bereaved families of those whose deaths are under criminal investigation by the police. They are charged with providing "constant, up-to-date and accurate information" on the investigation, connecting families with governmental services, and "mediating between the full horror of what has happened and the unintentionally insulting routines of the legal process."<sup>49</sup> The modern FLO process stems from an acknowledgment of racialized disregard by the British police; it was substantially reformed as one of more than 70 recommendations made to Parliament in the watershed MacPherson Inquiry into the Met Police's negligent response to the racially-motivated 1993 murder of Stephen Lawrence, a black 19 year old.<sup>50</sup> The relative success of the FLO program indicates that police responses to co-victims could involve police staff other than detectives, including community relations officers or departmental victims' services representatives with whom detectives are required to coordinate regularly.

Professor Monica Bell argues that states should promote safety as a component of social inclusion and solidarity based in a recognition of collective and individual humanity.<sup>51</sup> Checklists have been powerfully embraced in professions that celebrate their life-saving potential, from operating tables to cockpits. We argue that they can also be crucial to preserving public safety, and therefore social inclusion and social solidarity, for gun violence co-victims whose acute loss is often exacerbated by state disregard for their collective and individual humanity.

## Editor's Note

Appendices 1-5 can be found online.

## Note

The authors do not have any conflicts of interest to disclose.

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# Implementing Checklists to Improve Police Responses to Co-Victims of Gun Violence

Samuel A. Kuhn and Tracey L. Meares

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## APPENDIX 1 Questionnaire

**Qualtrics Survey:** <[https://yalesurvey.ca1.qualtrics.com/jfe/form/SV\\_9RyIvCVcrsbg3Tn](https://yalesurvey.ca1.qualtrics.com/jfe/form/SV_9RyIvCVcrsbg3Tn)>

### *Biographical information:*

- What is your age?
- What is your gender? (Choose all that apply)
- With which race do you identify? (Choose all that apply)
  - Hispanic or Latinx?
- Education level?
  - Did not graduate high school
  - High school diploma
  - Some college or technical school
  - 4-year bachelor's degree
  - Professional/post-graduate education
- Have you been the victim of gun violence?
- Has a family member been a victim of gun violence? If so, what was their relationship with you, and when did the incident occur?
- How favorably would you rate the way that police interacted with you in the aftermath of your or your loved one's victimization?

### *Substantive questions:*

- Have you ever been stopped by police in your lifetime?
  - If so, what was your age when you were first stopped by police?
  - How recently were you stopped by police?
    - More than 5 years ago?
    - In the last year?
    - In the last month?
    - In the last week?
  - How many times have you been stopped by police in your lifetime?
    - More than 7
    - 4-7
    - 1-3
- I trust the police to do their job well
  - Strongly disagree
  - Disagree
  - Neutral
  - Agree
  - Strongly agree
- I have confidence in the police to do their job well
  - Strongly disagree
  - Disagree
  - Neutral
  - Agree
  - Strongly agree
- Have you ever been incarcerated?
- Have you ever been stopped by police for anything other than a traffic violation?
- Have you ever had an involuntary encounter with the police?
- When you were a victim of the crime, who did you call?

## APPENDIX 1

### Questionnaire (continued)

**Branching question: Are you a facilitator? If no, Branch 1. If yes, Branch 2.**

*(Branch 1) For focus group participants:*

1. What do you remember about the way in which police responded to the shooting of your loved one?
2. How would you describe the police response to the immediate aftermath of your loved one being shot? What, if anything, was good about their response? What do you wish was improved, changed, or eliminated?
3. Were you in contact with the police after the immediate aftermath of the shooting? When and for what purpose (e.g. to collect your loved one's belongings, to receive further investigations updates, to discuss the incident in further detail, or for any other reasons?)
4. Were other state officials in contact with you regarding the shooting? If so, in what capacity (e.g. District Attorney's office, victim's advocates, trauma counselors, others)? What was your impression of these officials?
5. Did you feel as though you were given the opportunity to communicate with or tell your side of the story to state officials? If not, what would you have wanted to communicate?
6. Would you expand, limit, or modify the ways in which government and government officials (including but not limited to police) were involved in your case or cases involving others from your neighborhood?
7. How did the way in which state officials responded to the shooting make you feel?
8. What would you hope the state would do in response to your loved-one's shooting? How does this expectation compare with what the state actually did?

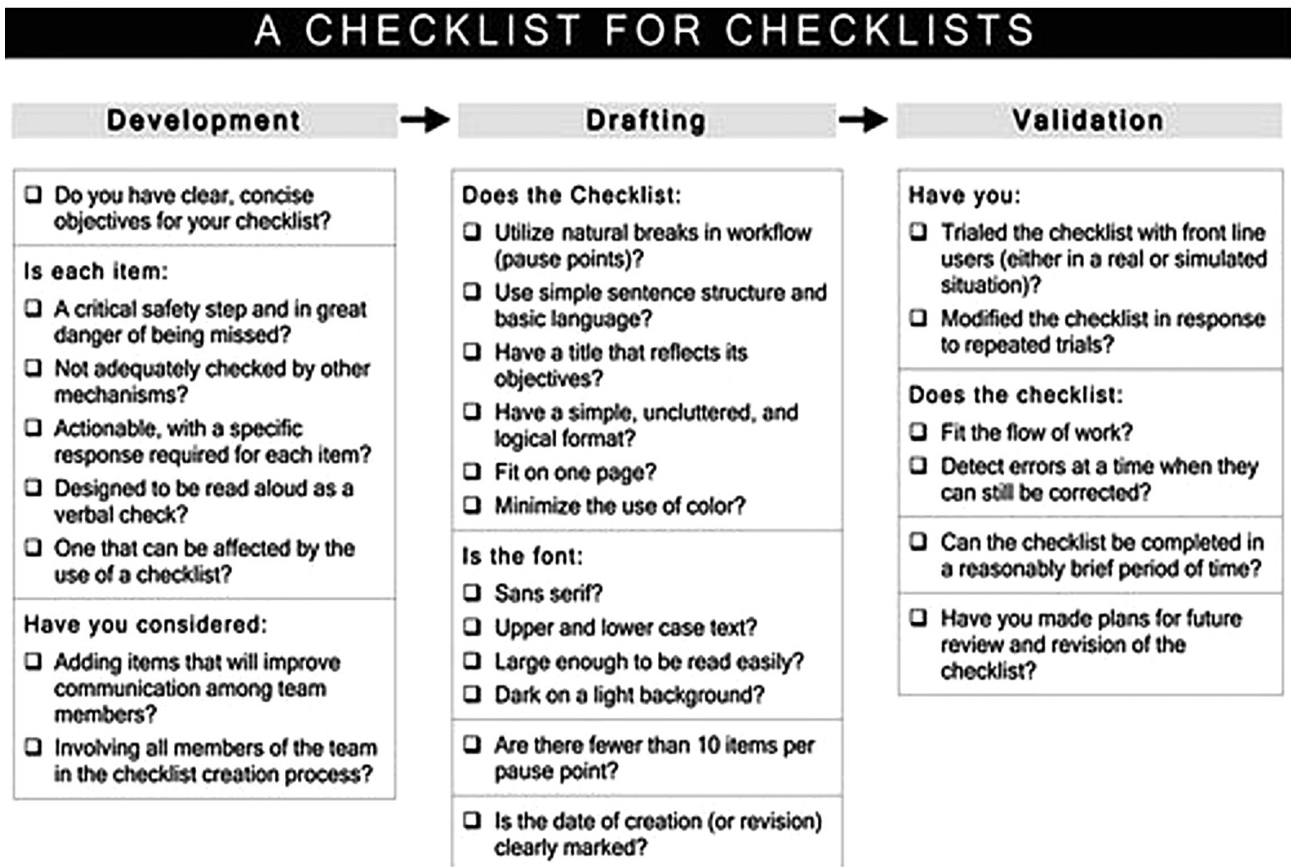
*(Branch 2) For facilitators:*

1. What do you think police believe are the relevant tasks they should carry out after someone is shot?
2. Have you watched police interact with victims of gun violence and their families? What have you observed?
3. Based on your work with those impacted by gun violence, what can you say about what they want or need from the state?
4. Based on your work with those impacted by gun violence, what role(s) should police have, if any, in interacting with the family of a gun violence victim?
5. Based on your work with those impacted by gun violence, what role(s), if any, should police NOT have in interacting with the family of a gun violence victim?
6. Are you aware of any guidance for police officers regarding their interactions with the families of gun violence victims?
7. Do you have any anecdotes you would like to share regarding the ways in which police acted or failed to act in relation to a gun violence victim's family?

## APPENDIX 2

# “A Checklist for Checklists”

From Atul Gawande, “The Checklist Manifesto,” Appendix 4.



## APPENDIX 3

# Survey Results

Below are results from the 14 survey responses we received from homicide co-victims.

Despite the prevalence of gun homicides in cities across America, evidence of the perceptions, desires, and needs of the families of gun violence victims in the aftermath of their loved one’s shooting is extremely sparse, particularly in the black and brown communities at greatest risk of victimization.

We seek to address this gap in the literature by surveying relatives of people slain in urban gun violence. Using online surveys, we sought to understand what these relatives believe to be the most memorable, traumatizing, productive, and significant components of the ways in which police were involved with them in the aftermath of their family member’s death<sup>19</sup> We also solicited their recommendations for alternative approaches, including reducing the role of police in post-incident family contacts. Pursuant to our focus on legal cynicism and estrangement, we interviewed minorities from low-income neighborhoods with high levels of gun violence and police contact — groups most likely to distrust police or believe them to be illegitimate. In each city, we worked with local facilitators — all of whom work with survivors of gun violence in some capacity — to assemble the respondents. Surveys were conducted in the same cities as those assessed in the next section in order to give us a sense of the sufficiency of existing police policies to community perceptions. Although we sought to survey people from race-class subjugated (RCS) backgrounds by coordinating with facilitators who work primarily in low-income communities of color, we did not seek out any specific ethnic, racial, or gender group.

## APPENDIX 3

### Survey Results (continued)

We received 14 survey responses, including eight support group participants and five facilitators, across three cities. Respondents were between 18 and 62 years old; the median respondent was 38. All respondents except one Caucasian/White female identified as African-American/Black females, with one identifying as both African-American and American Indian or Alaska Native. One respondent did not graduate high school, five had some college or technical school, four had completed a four-year bachelor's degree, and three completed professional or post-graduate education. Though most respondents reported one family member killed by gun violence — sons, brothers, cousins, and one brother-in-law — one respondent reported that “six of my cousins got killed” and another reported that gun violence had killed more family members “than I can count but my son & 2 of my cousins.” Four reported that their family member survived the gun violence incident, two with significant, lasting physical repercussions, and two with minimal health repercussions. All respondents had been stopped by police, four as juveniles, six between 18 and 24, and three after turning 25; eleven had been stopped by police within the last five years, including seven within the last year. Three had been stopped by police more than seven times, and all but two had been stopped more than twice. Despite this relatively significant police contact, only one respondent reported having been incarcerated for a conviction.

Respondents reported neutral or low levels of trust and confidence in the police. No respondents rated the way police interacted with them following their loved one's victimization as even moderately favorable. Multiple respondents described feeling as though they were treated as suspects. No respondents reported that anything the police did in the immediate aftermath of their loved one being shot was done well; respondents reported dissatisfaction at how police communicated, their seemingly perfunctory actions at the crime scene, and feelings of being threatened by police for making reasonable requests.

Respondents reported dissatisfaction with slow initial notification of their loved one's victimization and a lack of updates thereafter, even when they sought them directly. In fact, a majority of respondents were never in contact with police again after they met at the crime scene, and only one respondent was contacted by police to discuss the case again; all others were in touch only to receive their loved one's belongings, some of which they still have not received despite numerous attempts to collect them. This lack of police contact was not supplemented by other state officials or justice system actors stepping in. Respondents reported delays and re-questioning caused by a lack of staffing continuity on their loved one's case within the police department, and none of the respondents were connected by police with trauma services or victims' compensation funds. Multiple respondents underscored the importance of facilitating connection to victims' services and trauma support as crucial improvements to the police role.

In addition to police reticence, respondents reported that police were generally unwilling to listen to them.

Respondents expressed dismay at pervasive feelings that they or their victimized loved one was under investigation or “just another statistic” rather than the subject of empathy or an urgent investigation to apprehend the shooter. These concerns were often described as related to racial bias by police officials. There was some tension between the sense that police officers should avoid talking to families if they were to act with suspicion or insensitivity, but that it was important for officers to make themselves available to co-victims to discuss the case and answer any questions that they may have.

No respondents said they would not change anything about how the state responded to their loved one's death. Asked to describe how police actions made them feel, the most positive responses were far from glowing: “unsure” and “not sure how I feel.” Others described themselves as “Disappointed disregarded angry shocked,” “unsafe betrayed,” and “upset.”

Ultimately, the survey responses indicate that co-victim respondents have overwhelmingly negative memories of their interactions with police after their loved one was shot. Though they would like for police to act with compassion and urgency, they experienced insensitivity, disregard, suspicion, and a “going through the motions” attitude. Though they wanted to be in consistent communication with one point of contact who would be responsive to their questions and forthcoming with investigation updates, victims' resources, and their loved one's belongings promptly, they received nothing of the sort.

Eight respondents were neutral in response to the question, “I trust police to do their job well,” while three disagreed and one strongly disagreed. Responses to the prompt “I have confidence that the police will do their job” were the same, except for three respondents who moved from “neutral” to “disagree.” Even so, all respondents but three reported having called the police in the past, one with no reservations and two with reservations. One said “The[y] dont (sic) come often due to where i live.”

## APPENDIX 3

### Survey Results (continued)

In response to the question “How would you rate the way police interacted with you in the aftermath of your or your loved one’s gun violence victimization?”, two were neutral, while five rated their treatment moderately unfavorable and six as very unfavorable. Respondents corroborated these ratings in their descriptions of police following the gun violence: “Horrible, it’s very hard to speak about”; “very overtly inconsiderate and insensitive”; “They first treated us like we were the ones who did the shooting”; police acted “[a]s if he [the shooting victim] did something wrong”).

In response to the question, “How would you describe the police response to the immediate aftermath of your loved one being shot? What, if anything, was done well? What do you wish was improved, changed, or eliminated?”

- “They took statements they looked around that was basically it and we still haven’t got any leads at all”
- “Nothing was done well. I was threatened to be arrested simply for asking to verify the deceased was indeed my son.”
- “Nothing. Communicate”
- “I really don’t know”
- “Nothing”

In response to the question, “Did you feel as though you were given the opportunity to tell your side of the story to state officials? If not, what would you have wanted to communicate?”

- “No, I was not. There was no side of the story to tell, but as his mother, as well as his wife, siblings and child deserved the courtesy of informing us he was killed, and what they could either verify or surmise, and was the responsible person in custody.”
- “Nope”
- “No never”
- “And we actually did get to talk to them we got everything we could out and asked all the questions we could just figure out if there’s really being an effort being put forth because after this incident there were four more unrelated to this but similar situations that raise more questions in our minds about our situation because of what we were hearing about how the misconduct Miss appropriation was happening with these other things in the news”
- “No. Who he was become. change”
- “Yes”
- “Yes”
- “No”

In response to the question, “Do you have any anecdotes you would like to share regarding the ways in which police acted or failed to act in relation to a gun violence victim’s family?”

- “My personal experience involves the police department failing to notify my me of my son’s murder. I wasn’t notified until approximately 8 hours later by a close friend of his and received confirmation of his murder only after contacting the county coroner’s office.”
- “In February of 2020 a mother was arrested from the hospital while grieving her murdered daughter.”
- “Yes to many to list”

In response to the question, “What else would you like to add regarding police activity in response to your loved one’s shooting? Please feel free to elaborate as much or as little as you would like.”

- “I feel they had no business informing my pastor not for purposes of comforting my family but for gossip and the pretense the church should be prepared for a large funeral not because we are so well known but because the crowd might be to emotional. My sons funeral had in excess of 1700 people from a diverse crowd.”
- They should of tried a bit harder to find out what happened



## APPENDIX 3

### Survey Results (continued)

- “I have nothing else to add because it doesn’t matter anyway they don’t care they never cared why should I expect anything to be different now I’m sorry that’s just the way I feel and it’s sad that I feel that way this is what happens when you lose faith in the police and justice system”
- “The police would response better and be more compassion”

In response to the question, “What would you hope the state would do in response to your loved one’s shooting?”

- “I wish they treated him more like a human instead of just another statistic because of the color of his skin”
- “Act like they care”
- “They should of tried a bit harder to find out what happened”
- “Act with compassion”

In response to the question, “What do you think police believe to be their job when someone is shot?”

- “paperwork and getting it “taken care of” quickly”
- “Figuring out if it was gang related”
- “To be honest I don’t know what their tasks are besides making sure the body is recovered from the street or wherever the incident has happened making sure pictures get taken statements get taken and that’s about it is there more to it I will never know”
- “Turn off body cams, make a threat or weapon visible on the shooting victim”

In response to the question, “Based on your work with those impacted by gun violence, what role(s), if any, should police NOT have in interacting with the family of a gun violence victim?”

- “Don’t treat everyone of color like a criminal”);
- “Telling them the situation is gang related or anything without facts.”
- “talking to families”
- “They should not avoid discussing the cas[e] if the fa[m]ily needs that”
- “This would also be contingent upon an officers capacity/willingness to offer compassionate support to the family.”
- “That people will respond so much better to police officers in times like this or in general if we see more sympathy when the matter calls for it”

Respondents report dissatisfaction with a lack of updates (“To this date 8 years later, my sons death was not explained to me by detectives.”), as well as overt unresponsiveness to requests for materials taken from their loved ones (“I have asked for my sons phone for 7 years & 6 months for pictures and music sake. The response; someone will get back to you...”).

Nearly half of respondents reported that police never contacted them again after processing the crime scene. Of those who did have subsequent contact, they reported going to the station to collect their loved one’s belongings; only one reported the police wanting to “discuss the incident,” while others described receiving no further information about the progress of the investigation. One respondent reported that rather than receiving follow-up directly, police “went to our family pastor and filled him in with the private matters of my family’s loss without our permission.”

All of the respondents reported there being no consistent follow-up by any one member of the police department, which created delays as department representatives “had to get their paperwork in order” and “re-ask all the same questions.” Underscoring the centrality of police to this process, all respondents reported that no other criminal justice system actors were ever in contact about the case. None of the respondents were connected with victims’ compensation funds or counseling services; one who reached out was told they did not qualify because their son, the homicide victim, “had been arrested one time before.”

Respondents expressed desire for easy access to victims’ services, especially where the deceased was a spouse or parent (and presumably a wage earner) and to cover funeral costs. Also, compassion and connection to trauma services (“a trained grief specialist”; “Come as an empathetic human first. Next ask what could they say or do to

## APPENDIX 3

### Survey Results (continued)

give a clear & succinct answer as best possible to make the family aware of the situation.”; “To not trigger further trauma. To do their due diligence in providing safety and consciously look to obtaining those who have committed the crime”)

“Most definitely, they made us stand within 50 feet of my child’s body and would not give us the courtesy to identify him. I even said to the officers on guard even if it’s not my son dieing I could comfort whoever it was and I was told if I continued to pursue the question I would be arrested for interfering with a crime scene. I never raised my voice or became indignant and I calmed the emerging crowd who were not as decent as I was with the insensitive treatment we received even from the chaplain.”

“Become more aware of the emotions that come from no regard, nor information given & I would hope protocol would be enter an honest conversation with the family and not let them stand around for hours praying it’s not their loved one. I was so hurt be the disregard and constantly calling my sons number in hopes he would answer that my daughters convinced me to go home and wait. I did so only because my heart would not let me believe if it was my son that they would let us stand that close and refuse to answer questions.”

Respondents were more likely to report that they had seen police act with compassion with other people, depending on the officer, incident, family, and location. Still, some said police responses are characterized by “insensitivity” or “it’s always the same spiel.”

## APPENDIX 4

### Anecdotes

On October 22, 2012, Terri McCoy, 31, was murdered with Marco Antonio Garcia, 23, in east Stockton, California. They were two of nine people killed by guns in five separate incidents over a particularly bloody 51-hour span in the Central Valley city of approximately 300,000. McCoy and Garcia’s deaths were reported alongside the seven others in a Stockton Record-Net article titled “Family left grieving,” but the headline referred only to those mourning for Dennis Martin, Jr., another man murdered in Stockton that weekend. The sparse reporting on their murders made no mention of their families, including instead that “Police confirm one victim was a documented gang member and the other was on parole, but they have not released a motive.”

Still, the headline applied to McCoy. His sister, Tashante McCoy-Ham, moved by the immense grief she and her mother felt, founded Stockton Angel Mothers, a group dedicated to women whose children have died (primarily, but not exclusively, from gun violence). The group seeks to provide emotional support for the families of victims of violence who they believe have been traumatized twice: once by the premature, violent death of their loved one, and once by the disregard, judgment, and abandonment they feel from the police and state officials.

McCoy-Ham, who has been invited to discuss victim’s perspectives with Stockton Police leaders, was initially surprised at law enforcement’s narrow understanding of its role in the aftermath of gun violence (“They think their only job is securing the crime scene”). Even after she had told the Stockton Police Chief about the department’s initial failure to communicate crucial information about her brother’s case, and he seemed troubled by and responsive to her request for more information, she learned that a suspect in her brother’s killing had been arrested when she happened to hear a report over the car radio.

Accounts of interactions between police and the families of those impacted by gun violence indicates they are rife with acrimony, distrust, and trauma, and are therefore missed opportunities for much-needed relief. For example, Nyisha Beemon’s daughter Jaya, an 18-year-old nursing student, was shot and killed on February 25th; when Nyisha went to view her daughter’s body, she was arrested and charged with battery and resisting arrest after breaking down (“I passed out when I saw my baby and they drug me out the hospital like a dog,” Ms. Beemon said.). She spent the night in jail. Minutes after 12-year old Tamir Rice was shot by Cleveland Police Officer Timothy Loehmann for playing with a toy gun in 2014, Tamir’s 14-year old sister Tajai was tackled to the ground, handcuffed, and detained by police as she ran to reach her dying brother. Soon after, she developed an eating disorder. Less dramatic but still important reports that many officers fail to notify victims about much-needed, existing compensation funds even when they are legally required to do so have demonstrable impacts on material outcomes for victims and their families.

## APPENDIX 5

### City-Specific Information

City	Population	Total Law Enforcement Employees	Law Enforcement Employees/10K Population	Homicide Rate (per 100,000 residents)
Baltimore	639,929	2908	47.0	51.0
Chicago	2,833,649	13135	48.2	20.7
Minneapolis	385,704	1018	24.4	7.2
New Haven	130,512	509	39.0	6.90
Stockton	292,047	532	18.2	10.5

Law enforcement and population data as of 2016, per Governing.com/FBI statistics: <https://www.governing.com/gov-data/safety-justice/police-officers-per-capita-rates-employment-for-city-departments.html>

Homicide data as of 2018, per The Trace: <https://www.thetrace.org/2018/04/highest-murder-rates-us-cities-list/>.

Each of these departments except Stockton has higher than median law enforcement employees per capita. Each of these cities has homicide rates that are higher than the national average (5.0 per 100,000), though it should be noted that Minneapolis, New Haven, and Stockton have each also seen homicide declines that have outpaced national declines in the last decade (Minneapolis: 11.9/100k in 2015, 25.6/100k in 1995; Stockton 24.1/100k in 2012; New Haven 26.2/100k in 2011).

#### Police Policies:

Our search was maximally inclusive: we combed through all of each city’s general orders and flagged key words (victim, families, gun crime, gun violence, homicide, shooting, witness, trauma, critical incident) and concepts (crime scene management, investigations process, clearance notifications, victims’ compensation, chaplains, evidence management, victims’ families).

Baltimore Police Department General Orders: <https://www.baltimorepolice.org/transparency/policies>

Chicago Police Department Directives System: <http://directives.chicagopolice.org/directives/>

Minneapolis Policy & Procedure Manual: <http://www.ci.minneapolis.mn.us/police/policy/index.htm>

New Haven Police Department General Orders: [https://www.newhavenct.gov/depts/nhpd/division/internal\\_affairs/general\\_orders.htm](https://www.newhavenct.gov/depts/nhpd/division/internal_affairs/general_orders.htm)

Stockton Police Department General Orders: <http://ww1.stocktonca.gov/Departments/Police/News-and-Information/General-Orders>

#### Policy Observations:

1. In short, across these five departments, there is very little policy that mandates any particular contact with families of gun violence victims. Further, the policies that do exist are far from exhaustive — they have very little to say regarding the many components of post-incident contact with bereaved families, gun violence survivors, or the concerns expressed by our survey respondents. For example, Chicago’s General Order 4-02, “Information on securing the crime scene,” includes exhaustive direction regarding how to establish a staging area and inner and outer perimeters, who should be allowed within the perimeter, how to handle evidence, and the specific duties of the Bureau of Patrol Supervisors, Bureau of Detectives, Forensic Services Division, and more. No procedure regarding officer contact with the victim’s loved ones at the scene is included, even though such guidance could fit neatly as a fifth task listed under Part IV.E., “a detective assigned to investigate a crime scene.”

## APPENDIX 5

### City-Specific Information (continued)

2. A 2019 Urban Institute report provides some examples of procedurally just homicide scene practices, applying the four components of procedural justice (treating people with dignity and respect, giving voice, neutral and transparent decision-making, and conveying trustworthy motives) to common issues identified over the course of a practice review of the Oakland (CA) Police Department.<sup>28</sup> Many of the practices identified — for example, placing a mobile tent around bodies in respect for the privacy of the deceased and their loved ones, notify family members as soon as possible, or “be mindful of what is being communicated non-verbally” (a prompt that is responsive to community dismay at police laughing at the scene, a commonly-observed practice) is perhaps better-suited for unofficial, norm-creating guidance like the checklists we propose than for a general order.<sup>29</sup>
3. It is unlikely that such gun violence co-victim policies are too specific or granular to be included in these jurisdictions’ general orders. For example, Stockton Police have policies for addressing exceedingly rare events including protocols for downed airplanes, stolen boats, and the evacuation of San Joaquin County Courthouse and Annex.
4. It is possible that not all General Orders posted online are entirely up to date. For example, Stockton Police Chief Eric Jones said: “We have begun to change some of our policies and practices based on the feedback from the sessions. One of the first changes I made was making it routine for us to follow up with victims’ families. It used to be, if a community member has more information, then they had to get a hold of us. Survivors told us, “Let us know you still care and reach back out to us.” Now we are actually intentionally getting back to families. It sounds small, but it’s not. It took recognizing these are impacted humans, and a shooting hits through their whole family. We need to stay connected, whether we have a legal or investigative reason to or not.” E. V. Brocklin, *The Police Chief Who Learned to Listen*, (April 2019), *The Trace*, available at <<https://www.thetrace.org/2019/04/stockton-police-eric-jones-reconciliation/>> (last visited May 26, 2020).
5. Some jurisdictions and national organizations have developed policies that are more responsive to victims of crime or state violence and their families. For example, the Bureau of Justice Assistance, White House Domestic Policy Council, and the International Association of Chiefs of Police recommend that police follow specific trauma-informed protocols when interacting with children at crime scenes where their parents are being arrested. The IACP also publishes model resources regarding police departments’ responsibilities in interacting with victims of violence. Notably, none is tailored to the unique harms posed by gun violence. The Urban Institute report also includes a number of other good examples of procedurally just practices that are specifically responsive to gun violence. For example, Chattanooga (TN) Police established the Enhancing Law Enforcement’s Response to Victims (ELERV) victims services unit, which coordinates victim-centered practices including conducting regular surveys of officers’ attitudes toward victims and of public perceptions of police responses to victims, conducting training on trauma-informed responses to violence, and staffing two full-time victims service providers and victim services coordinator. Other departments have adjusted staffing at crime scenes to ensure that there is capacity for one or more members of the department to speak with co-victims about the incident.

New York City has established Mobile Trauma Units in each borough, staffed by mental health professionals and street outreach workers, that will “provide targeted public education and outreach, therapeutic services for community members impacted by gun violence, trauma response to communities where violent incidents occur ... and will connect victims of violence and families to services and resources.”

# Enhancing Community Safety through Interagency Collaboration: Lessons from Connecticut's Project Longevity

*Camila Gripp, Chandini Jha, and Paige E. Vaughn*

## 1. Introduction

Researchers have consistently found that a small proportion of an area's population accounts for a disproportionately large amount of urban gun violence.<sup>1</sup> This finding, coupled with the ineffectiveness of traditional law enforcement approaches, drove the development of a range of policies aiming to reduce gun violence through the targeting of high-risk individuals and groups. Group Violence Intervention (GVI) is a popular strategy that shares this objective.

GVI combines a focused deterrence law enforcement approach with community mobilization and social services. Its main goals include (1) identifying individuals associated with street groups at high risk of gun violence, (2) preventing them from perpetrating or becoming victims of gun violence, and (3) directing them towards community support services.<sup>2</sup>

GVI strategies garnered national and international attention after Boston's Operation Ceasefire (1996) demonstrated great success in reducing gun violence.

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The effectiveness of the GVI model has been supported by empirical research.<sup>3</sup> Since 2005, the National Network for Safe Communities (NNSC), an outgrowth of Boston's Ceasefire, has used the GVI model to address gun violence, overt drug markets, and other forms of violence in the United States and abroad.<sup>4</sup> Yet, few studies have examined GVI implementation from the perspective of practitioners, making it difficult to pinpoint implementation challenges and potential ways of overcoming them.

The current study qualitatively examines Project Longevity, Connecticut's largest GVI initiative, to contribute to the limited literature on implementation of gun violence reduction strategies. Relying on interviews with 24 of Project Longevity law enforcement and non-law enforcement partners, we explore the establishment of interagency collaboration, which was viewed by study participants as the most pressing implementation challenge of Project Longevity.<sup>5</sup> Our case study results offer important lessons to practitioners responsible for implementing GVI strategies.

## 2. Connecticut's Project Longevity

Group Violence Intervention takes seriously the notion that crime is highly concentrated among a specific and small group of offenders. Unlike traditional social intervention efforts, GVI blends a deterrence message focused on certain, swift, and severe punishment with social services provision (e.g., case management, educational opportunities, employment training and placement, crisis intervention, drug treatment). The deterrence message and opportunities to benefit from services are delivered to a small and specific group of offenders or individuals at high risk of becoming offenders or victims of violence.<sup>6</sup>

In response to an increase in gun offenses between 2003 and 2011, Connecticut state legislators approved funding for Project Longevity, a multi-city gun violence prevention strategy that closely follows the GVI model. Project Longevity was first launched in New Haven in 2012, and it was subsequently introduced in Bridgeport (2013) and Hartford (2014). Together, these three cities accounted for 71% of Connecticut's gun crime in 2014.<sup>7</sup>

Project Longevity mobilizes law enforcement, social service providers, and community representatives to deliver an anti-violence message to individuals associated with street groups who are likely to commit crimes together, and to engage in or be victimized by retaliatory violence. To identify these individuals, Project Longevity utilizes a two-part 'Problem Analysis,' composed of a 'Group Audit' and an 'Incident Review.' During the Group Audit, law enforcement practitioners map and share their knowledge of each street group's location, membership, and activities. During Incident Reviews, staff collect information about 'group member involved' (GMI) shootings, usually from police expertise, in an attempt to identify victims and perpetrators. Through this two-part information collection and sharing system, Longevity staff select individuals to engage with, either through group meetings, known as 'Call-Ins,' or through one-on-one meetings, known as 'Custom-Notifications.'<sup>8</sup>

'Call-Ins,' which involve bringing street-group members into a room with law enforcement agents, community representatives, and social service providers, typically take place two or three times a year in Connecticut. 'Call-In' participants are individuals on probation or parole whose attendance can be mandated by their community supervising officer. 'Call-Ins' are structured around a three-part message. First, criminal justice system agents (i.e., police and prosecutors) give a warning that those who choose to continue committing acts of violence will be met with swift and certain legal consequences. These warnings are followed by community representatives (usually formerly incarcerated individuals or individuals impacted by gun violence) who deliver a moral plea against gun violence, describing its impact on their families and communities. Lastly, Project Longevity's social services coordinator offers case management help and referrals to a range of support services that interested participants are encouraged to take advantage of.<sup>9</sup>

The second mode of engaging individuals at risk of gun violence is the 'Custom Notification.' 'Custom Notifications' involve one-on-one, in-person meetings that generally take place after a violent incident occurs, or when new knowledge collected by law enforcement intelligence points to a potential risk for violent crime.

The notifications involve meeting with the identified person at their home or in their neighborhood, and they are done by a local program manager and/or a senior law enforcement agent.

Both 'Call-in' attendees and recipients of 'Custom Notifications' are put into contact with the program's social service coordinator. The coordinator supports individuals who either express certain needs or demonstrate the desire to avoid future involvement with gun violence by connecting them to community resources, raising their awareness of existing services, and guiding them toward opportunities that they can pursue on their own. Social service coordinators work collaboratively with parole and probation officers, local non-governmental organizations (NGOs), and social service providers. Available services generally include high school diploma or general education development classes, employment assistance, drug and alcohol abuse treatment, childcare assistance, mental health services, access to basic goods, and entrepreneurship assistance.

### 2.1 GVI Evaluations

Researchers who examined Project Longevity in New Haven, CT, found that three years after its implementation, GMI incidents were reduced by nearly five incidents per month.<sup>10</sup> A number of other GVI programs across the nation also have empirical support.<sup>11</sup> For example, the Cincinnati Initiative to Reduce Violence (CIRV), which partnered political leaders, law enforcement, researchers, healthcare professionals, street advocates, and community and business officials in an attempt to reduce violence among at-risk gang members, demonstrated a statistically significant 61% reduction.<sup>12</sup> Engel and colleagues (2013) found that both group-member involved homicides and violent firearm incidents significantly declined after the Cincinnati program's implementation for both 24- and 42-month post-intervention periods, demonstrating the potential long-term effects of such programming.<sup>13</sup> The New Orleans' Group Violence Reduction Strategy, an intervention that sought to identify and change the behaviors of high-risk offenders through homicide incident reviews and gang audits, revealed a statistically significant 32% decrease in gang homicides.<sup>14</sup> Similarly, the Indianapolis Violence Reduction Partnership, which involved a multi-agency working team, a research partnership, and problem-solving techniques aiming to lower gun assaults and homicides, experienced a 34% reduction in homicides in Indianapolis compared to six other Midwestern cities.<sup>15</sup> In 2012, Braga and Weisburd conducted a meta-analysis of focus deterrence evaluations, and found that 10 of 11 noted a significant, medium-sized crime

reduction impact.<sup>16</sup> This conclusion was reinforced in their updated 2018 review of 24 quasi-experimental evaluations.<sup>17</sup>

Yet, evaluations, which tend to be exclusively quantitative, present well-known methodological challenges. For instance, GVI interventions are generally not designed as randomized controlled trials, and may overlap with other initiatives and/or changes in the environment that affect violence and crime rates (e.g., employment or poverty), making it difficult to isolate and evaluate the impact of specific policies. Moreover, evaluations depend on the continuous quality of data collection done by law enforcement, program administrators, and social service providers, who often experience data management updates and turnover of key personnel. An updated version of an evaluation of Project Longevity, for instance, would not be presently feasible given changes and inconsistencies in the GMI incident classification used by the New Haven Police Department.<sup>18</sup>

Additionally, given their focus on intervention outcomes, rather than the process of planning and implementing interventions, quantitative evaluations often leave out the voice of program administrators and do not explore challenges that appear to be critical to GVI implementation. A few progress and impact reports, however, have pointed to obstacles that can arise at various points of GVI implementation. For instance, the National Network for Safe Communities highlighted “irregular meetings and inconsistent participation by agency partners” as an implementation challenge of the Birmingham Violence Reduction Initiative in Birmingham, Alabama.<sup>19</sup> In addition, a 2016 report produced by the London’s Mayor Office for Policing and Crime identified “differences in interpretation of the core elements of the GVI model between some practitioners” as key challenges for Shield, a pilot GVI program in the United Kingdom.<sup>20</sup> Further, a study of Kansas City’s No Violence Alliance (NoVA) noted various implementation challenges, including poor interagency collaboration and enforcement decisions being made at a variety of organizational levels.<sup>21</sup> Reports such as these point to program implementation challenges, a topic we explore in this article based on narrative accounts of Project Longevity’s administrators.

### 3. Methodology

Between October of 2019 and January of 2020, we interviewed 24 stakeholders of Project Longevity in New Haven, CT. In light of Project Longevity’s success in reducing GMI incidents in New Haven, our goal was to qualitatively explore key practitioners’ perceptions regarding Longevity’s challenges, shortcomings, and

conditions for success. Our semi-structured interview schedule included questions relating to implementation challenges and how they were overcome.<sup>22</sup> The current study focuses on findings relating to this topic.

Our study focuses on New Haven given our access to local stakeholders and their overall perception that Longevity has been more strongly consolidated in this city than in Bridgeport or Hartford. Project Longevity’s former state-wide coordinator helped us identify key interviewees. Twenty-four of the 28 identified individuals agreed to be interviewed. Participants include current and former police officers, state and federal prosecutors, parole and probation officers, Project Longevity staff, social service providers, and religious leadership.<sup>23</sup> A third-party company transcribed audio recordings verbatim, and we coded the transcripts using MaxQDA, a qualitative data analysis software. Using a ‘flexible coding’ approach, we indexed transcript passages with codes derived from the interview schedule, and created additional sub-codes as other themes emerged.<sup>24</sup>

### 4. Results

Our interview participants were asked what the most pressing challenges were in implementing Project Longevity, as well as how they addressed them.<sup>25</sup> The most frequently mentioned challenge was ‘poor interagency collaboration,’ followed by ‘cultural resistance/lack of buy-in,’ particularly by the police department. Notably, both challenges were spontaneously brought up by approximately 59% of participants without specific prompts. Because of word constraints, we focus in this article on interagency collaboration.<sup>26</sup>

For the purposes of our discussion, we broadly define interagency collaboration as coordinated efforts of various entities, possibly across different levels of government, sharing risks and responsibilities in the pursuit of shared objectives.<sup>27</sup> The presumption carried by this definition is that organizations are more likely to efficiently achieve their goals by working together rather than separately through the reduction of duplicative efforts, more integrated services, and improved communication.<sup>28</sup>

In discussing interagency collaboration, interviewees referred to two dynamics: (1) collaboration within and between law enforcement agencies (police, prosecutors, probation and parole) and (2) collaboration between law enforcement and non-law enforcement partners (Project Longevity staff, social service providers, and religious leadership).

#### 4.1 Collaboration between Law Enforcement Partners

Before the program began, law enforcement agencies, and officers within these agencies, had largely oper-

ated in silos. Our interview participants spoke about Project Longevity's initial challenges relating to collaboration within and between law enforcement agencies. One high-ranking police officer commented on communication difficulties associated with this during the launching of Project Longevity:

[Police departments] ... don't capitalize on the information that everybody, even within the department, has. Let alone other jurisdictions and other law enforcement agencies. So, like most departments, we operated in these silos, so to speak... We shared only the information that we felt was necessary to share. But we pretty much kept our investigations private and to ourselves. We weren't communicating with each other the way that we do now... We certainly weren't communicating with our partners. We always had a relationship with the federal authorities and with ATF, DEA. ... but we really didn't have the type of relationship that we do now (103019).<sup>29</sup>

Another high-ranking police officer spoke about having positive, personal relationships with colleagues from other agencies, but noted that such relationships did not involve agency-wide open channels of communication that guaranteed "all the agencies at one table" (110519).

When asked about how initial challenges were overcome, interviewees emphasized the role of leadership in establishing top-down directives. A number of police officers described initial resistance within the department, especially by officers who understood the initiative as "another hug-a-thug program" (110519), distinct from what they typically consider to be the proper crime-control role of law enforcement.

Interviewees agreed that Project Longevity gained credibility within and across law enforcement agencies as shootings decreased and distinct agencies were able to establish trust and collective accountability among themselves. Participants noted that daily intelligence meetings, which were initially met with skepticism, ultimately became a pathway to interagency collaboration among New Haven partners. As described by a prosecutor:

[T]he challenge was just bringing everybody together, and sort of explaining the program's strategy and its philosophy. ... [W]e started meeting maybe once a month with some of our federal counter-agencies represented, state probation, state parole, and NHPD... and we saw that those monthly meetings were valuable in just

developing relationships, sharing information, putting a face to a name. ... We started, then, doing them two times a week. And then, ... [New Haven's Assistant Police Chief] said 'Why don't we have these intel[ligence] sharing meetings every day?' And we began to have them every day. ... They've been fantastic intel[ligence] sharing and partnership forming meetings (111219).

The meetings also fostered trust and accountability between partner agencies. One probation officer explained:

So those intel[ligence] meetings have been huge ... I think that was one of the hardest challenges initially, was trusting one another and learning to work together (090120).

This interviewee continued to explain that it "took time" to fully understand that different actors were "all working towards the same goals." Relatedly, a prosecutor spoke about the intelligence meetings as an opportunity to create joint accountability among the different agencies (111219).

It is important to note that daily intelligence meetings were not part of the initial operational plan for the implementation of Project Longevity, nor were they part of the National Network for Safe Communities' guidelines. Rather, in New Haven, the meetings were a local response to the recognition of a problem that impacted stakeholders' trust and cooperation.

#### *4.2 Collaboration between Law Enforcement and Non-Law Enforcement Partners*

Interviews also revealed how Project Longevity's key players perceived initial frustrations with and tensions between law enforcement and community service providers. The two groups often demonstrated conflicting views about community interests and their agencies' roles and goals.

Though the GVI strategy is formally described as an intervention that provides a continuum of services, law enforcement interviewees tended to emphasize its deterrence effect, while service providers and religious leaders focused on the program's potential to foster behavior change through the provision of support services. Participants explored how these different views posed challenges to Longevity's implementation.

A civilian partner of Project Longevity spoke about the unsurprising character of such tensions, given that interagency collaboration requires overcoming cultural barriers without guidance or a formal mandate binding multiple agencies: "You have all these players. You have this consortium of players, but nothing



really, you know, saying, “This design is mandated and you have some sort of stake in the game” (102219).

Along these lines, another non-law enforcement partner commented on how establishing concerted efforts between multiple agencies requires time and trust:

[T]he process of aligning [the State’s Attorney Office, the U.S. Attorney’s Office, and the community partnership], which are all critically important to actually putting the intervention together, and I think most importantly, sustaining it, requires kind of a long period of both education, just getting everyone to the same place of understanding what we’re actually proposing to do here and what their responsibility will be, and a position of sort of mutual trust and really believing that everyone else is committed at the same level (110819).

Skepticism about partners’ alignment of views, values, and responsibilities was particularly evident in a comment offered by a non-law enforcement former partner:

I’m not sure everybody was on the same agenda. There were similarities in the kind of well-meaningness of the program but from various different vantage points. Some people had pieces of the process or journey that others didn’t have, which I think eventually created – for me as well – a suspicion and skepticism that I think could’ve been avoided from an open and full kind of understanding of where we are, where we’re going... (111319).

Notably, tensions between non-law enforcement and law enforcement partners led to initial distrust, which was perceived as hindering collaboration. Both groups described these tensions. Law enforcement agents labeled the intervention’s ‘deterrence message’ as its most effective mechanism, while non-law enforcement agents highlighted the importance of ‘support services and behavioral change.’ A former prosecutor described how “[i]t’s very important that the public know that law enforcement will act, that the message that we give is real and not empty” (010119). In contrast, a non-law enforcement participant expressed a different understanding and “would have preferred to spend more energy around the transforming culture work than just going to your house saying. ... [I]f you get arrested again, this is what’s going to happen to you” (111319).

These tensions, acknowledged by most interviewees, were at least partially solved through the hiring of a local project manager. Interviewees noted that New Haven’s program manager, a former police investigator with close ties to community organizations, brought in technical competence, as well as management skills that allowed for the balance of multiple and sometimes conflicting points of view. Ultimately, the project manager encouraged conflicting partners to focus on the construction of a joint agenda.

As described by a current police officer, the program manager “is like the face of Longevity for us and he basically helps balance us. He’s intimately involved in what we’re doing and identification [of street group members], but he also is the one that is out there, at all the community meetings” (102919). A retired high-ranking officer shared a similar perception:

When we hired [program manager] ... I think him being a former law enforcement officer in New Haven, understanding the dynamics in New Haven, understanding the dynamics in this department, it made it very easy for us to have a relationship. ... [T]hat’s when the legitimacy of the program began changing [within the police department] (103019).

Importantly, non-law enforcement partners also recognized the program manager’s skills. One such participant described the individual’s “incredibl[e] passion about people” and “genuine car[ing] for the individuals that are involved in these gangs” (112519).

New Haven’s program manager worked as a ‘boundary spanner,’ strengthening relationships between different organizations and helping Project Longevity gain the trust of community members.<sup>30</sup>

## 5. Recommendations

Our law enforcement and non-law enforcement interviewees emphasized the critical role played by interagency collaboration in the implementation and establishment of Project Longevity. Based on our interviewees’ experiences and other reports describing similar challenges, GVI programs might consider institutionalizing this feature.<sup>31</sup> There are different ways of going about this. First, local, state, and federal grant providers might incentivize, or mandate, the hiring of a program manager. In Project Longevity, the program manager enhanced interagency collaboration by balancing Project Longevity’s deterrence and social service support goals. If the use of such a manager was formally required, official roles and responsibilities could be outlined prior to program implementation, and manager progress could be tracked without sus-

tainability concerns regarding the position being cut or downsized.

An alternative recommendation might involve formalizing interagency collaboration requirements in the legislative text authorizing GVI programs. Authorizing texts for these programs could require, for example, interagency partners to create memorandums of understanding detailing roles, co-responsibilities, and intervention milestones. This approach would institutionalize interagency collaboration during the front end through substantive commitments that spell out the balance between deterrence and social services before program implementation, rather than during the back end through the project manager. Although including a program manager role or formalizing programmatic goals cannot guarantee successful agency collaboration, more careful consideration of this issue as part of the GVI implementation process appears warranted.

extant literature on interagency collaboration, which recognizes that it is not uncommon for organizations holding distinct missions to see the injunction to work together as a threat to their specialism, and interpret it as a negative assumption about the value of their own work.<sup>32</sup> In New Haven, this challenge was at least partially addressed by the hiring of a program manager who worked as a ‘boundary spanner’ and was capable of bridging the community-law enforcement divide. In the public management literature, boundary spanners (also known as ‘nurturing reticulists’) are skilled communicators capable of “talking the right language” and working across agency boundaries.<sup>33</sup> In New Haven, the program manager served as a reliable and trustworthy source for law enforcement and non-law enforcement participants alike, and was thus vitally important to strengthening interagency collaboration.

By examining stakeholders’ perceptions’ of challenges in Project Longevity’s implementation, this

**Our exploratory study of perspectives of key stakeholders from Connecticut’s Project Lonvegeity examines the challenges and successes that come with implementing a GVI strategy. Our results demonstrate that stakeholders perceive interagency collaboration to be crucial for their work. Yet, the ways in which implementing agents enact or formalize interagency collaboraton has not been fully explored in the GVI literature.**

## 6. Conclusion

Our exploratory study of perspectives of key stakeholders from Connecticut’s Project Lonvegeity examines the challenges and successes that come with implementing a GVI strategy. Our results demonstrate that stakeholders perceive interagency collaboration to be crucial for their work.

Our interviewees described collaboration challenges among different law enforcement agencies, as well as between law enforcement and non-law enforcement partners. Challenges involved law enforcement buy-in and the establishment of open communication channels for the exchange of information about GMI incidents and individuals involved in shootings. This challenge lingered until the creation of new, daily intelligence meetings which established formal communication channels, and fostered information sharing and mutual accountability.

When describing collaboration challenges between law enforcement and non-law enforcement partners, our interviewees noted cultural fragmentation and conflicts of value. This finding is consistent with the

study helps add detailed nuance and advice that may be useful to GVI researchers and policymakers elsewhere. Our exploratory study was, however, limited by a sample size that did not include community members beyond their representatives in the form of non-law enforcement implementers. Further, it relied on interviewees’ retrospective accounts of successes and challenges. Self-reported data are subjective and not to be mistaken for mirrored reflections of people’s experiences. Moreover, retrieved memories are known to be subject to modification.<sup>34</sup>

While the solutions to interagency collaboration challenges in New Haven evolved organically after trial and error, this might not always be the case. Our study suggests that gun violence prevention programs may benefit from greater attention to strategies, such as the formalization of collaboration. Ways of best formalizing collaboration, as we noted, could potentially include the use of legislative text or memorandums of understanding to strengthen agencies’ efforts to work together.

## Editor's Note

Additional materials for this article can be found in the Online Appendix.

## Note

The authors do not have any conflicts of interest to disclose.

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# Enhancing Community Safety through Interagency Collaboration: Lessons from Connecticut's Project Longevity

Camila Gripp, Chandini Jha, and Paige E. Vaughn

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## APPENDIX

### Quantitative Issues

When this study was first designed, our goal was to supplement our interview data with an updated quantitative evaluation of Project Longevity's outcomes similar to that conducted by Sierra-Arévalo et al. in 2017.<sup>1</sup> Our initial plan, however, proved unfeasible given two data gaps we encountered. First, the New Haven Police Department (NHPD) did not have a system in place to keep accurate records on shootings prior to 2013, making a shooting trend analysis pre- and post-Project Longevity nearly impossible. We attempted to triangulate across internal police databases to create shooting trends, but inconsistencies between shooting logs and information inferred from incident reports made this method unsuccessful. Second, a precise assessment of the impact of Project Longevity would need to assess the decline in shootings classified specifically as Group Member Involved (GMI). But in New Haven, GMI classifications have not remained consistent over time. In conversations with a New Haven Assistant Police Chief who has been involved with Project Longevity since its inception, we learned that the point system currently used to identify individuals as members or associates of street groups was not implemented until 2015-2016.<sup>2</sup> Unfortunately, to be used with some degree of confidence, the GMI classification would need to be audited line by line by the Assistant Chief based on his memory of the events, or by police staff, based on non-systematized notes and records. This time-consuming undertaking would exceed the data collection possibilities for this article.

### Interview Schedule

1. What is your current job or profession?
  - a. How long have you been involved with this work?
  - b. Can you walk me through a typical day in your role?
2. Are you currently involved with Project Longevity?
  - a. IF YES:
    - i. What is your current role within Longevity?
  - b. IF NO:
    - i. Were you involved with Longevity in the past? What was your role then?
3. Were you involved in the initial implementation of project longevity? When and how did you become involved?
4. What do you think were the program's most difficult challenges during implementation?
  - a. How did you or others go about addressing those challenges?
5. In what cities [New Haven/Bridgeport/Hartford] have you been involved in Project Longevity?
  - a. Could you speak to the program's challenges in the different locations?
6. Has your role with Longevity changed over time? (*How so?*)
7. In your opinion, is Project Longevity a successful program?
  - a. IF YES:
    - i. What do you think are Longevity's greatest successes? Has your view on this changed over time?
    - ii. What were some factors that helped Longevity to be successful?
  - b. IF NO:
    - i. What do you think have been Longevity's greatest failures? Has your view on this changed over time?
    - ii. What were some factors that contributed to Longevity not being successful?
8. What are some of the project's most pressing challenges today?
  - a. Are these challenges different from challenges Longevity faced earlier on in its implementation?
9. With the knowledge you have today, is there something you would have done differently with Longevity?
10. In your opinion, who are the most important players in the Longevity program? Why?
11. Do you attend the program's call-ins?
  - a. If YES: How frequently and what role do you play in the meetings?

# APPENDIX

## Interview Schedule (continued)

12. Are there resources within the program, to follow up with call-in participants or check whether they have benefited from any of the social programs?
13. Are there resources, not currently offered, that you believe should be offered to call-in participants?
14. Are you aware of resources within the program to address mental illness problems among call-in participants?
15. What type of support, if any, does Longevity receive from the National Network for Safe Communities?
16. To your knowledge, does Project Longevity interact with other gun violence reduction strategies in New Haven or elsewhere?
  - a. If *YES*: How do they interact with each other?
17. In your opinion, what is the root cause of the gun violence problem in New Haven? Is it different from the rest of the country?
18. What does Longevity need in order to be improved and continued?
 

*If answer is “funding”*: If funding was not an issue, what other challenges do you see to the program’s expansion and improvement?

## References

1. M. Sierra-Arévalo et al., “Evaluating the Effect of Project Longevity on Group-Involved Shootings and Homicides in New Haven,” *Crime & Delinquency* 63, no. 4 (2017): 446-467.
2. Assistant Chief at the New Haven Police Department, interviewed by Camila Gripp in January, 2020. The classification system provides a list of criteria that may qualify someone as a group member, with designated points for each criterion. With more than 10 points, an individual is considered a ‘group member,’ with more than five points, a ‘group associate.’ Criteria include self-admitted membership, possession of group paraphernalia or identifiers, social media evidence, testimony from a reliable source, becoming a target of group violence, among others.

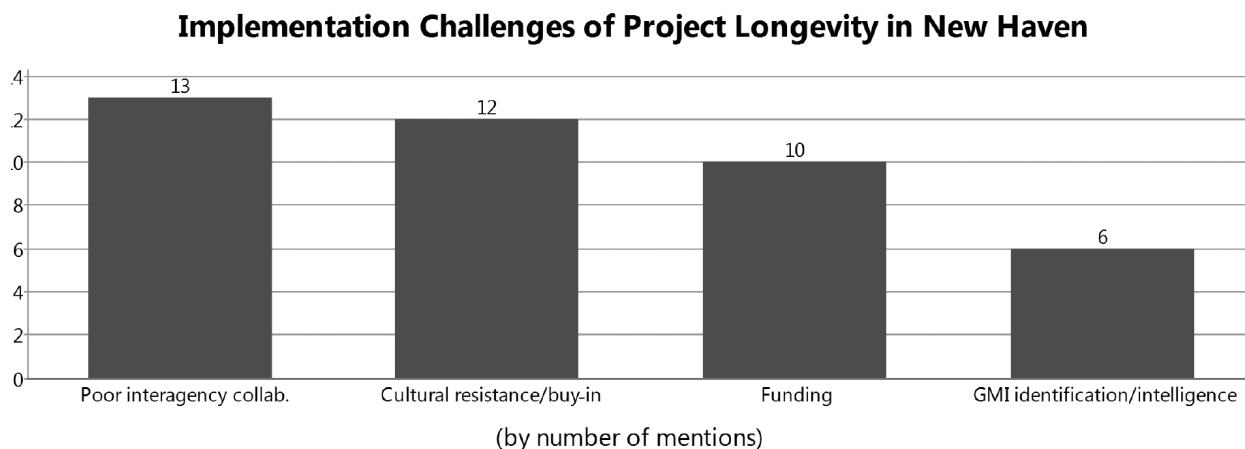
Table I

## Summary of Interviewee Roles

Role Type	N
Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF)	1
Police	9
Prosecution	3
Probation	1
Parole	1
Representatives of partner entities	4
Project Longevity staff	5

Figure I

## Most Mentioned Implementation Challenges



# Physicians on the Frontlines: Understanding the Lived Experience of Physicians Working in Communities That Experienced a Mass Casualty Shooting

*Kathleen M. O’Neill, Blake N. Shultz, Carolyn T. Lye,  
Megan L. Ranney, Gail D’Onofrio, and Edouard Coupet, Jr.*

## I. Introduction

A subset of the firearm violence epidemic in the United States are public mass casualty shootings.<sup>1</sup> The number of public mass casualty shootings — generally defined as “incidents occurring in relatively public places, involving four or more deaths ... and gunmen who select victims somewhat indiscriminately”<sup>2</sup> — has increased every year for the last five years.<sup>3</sup>

In response, the medical community has published an increasing number of studies analyzing the epidemic.<sup>4</sup> In November 2018, the National Rifle Association (NRA) tweeted that “someone should tell self-important anti-gun doctors to stay in their lane.”<sup>5</sup> More than 21,000 twitter users, consisting largely of members of the medical community, responded, sharing their experiences treating victims of firearm injury and dealing with the grief and despair of those victims’ family members.<sup>6</sup>

This online movement highlighted an important consequence of mass shootings that had previously received minimal attention. Multiple studies demonstrate that there are long-term consequences of

mass casualty events on communities, victims and first responders.<sup>7</sup> Studies around firearm injury also highlight the unique and devastating effect that it can have on communities and victims.<sup>8</sup> However, few studies have looked at the specific phenomenon of mass casualty shootings (versus other types of shootings such as interpersonal violence or unintentional) and these events’ effect on communities.<sup>9</sup> Even less is known about the lived experience of physicians tasked with treating the victims of mass casualty shootings. Filling this knowledge gap will allow institutions and policymakers to better identify and proactively support psychological sequelae commonly experienced by physicians providing care during these events.

## II. Methods

### A. Study Design

We performed a qualitative study that sought to understand the lived experiences of physicians who worked at hospitals that had a public mass casualty shooting. Our study protocol was approved by the Yale University Institutional Review Board.

**Kathleen M. O’Neill, M.D.**, is a general surgery resident at Yale New Haven Hospital. She is currently completing a Ph.D. at the Yale Graduate School of Arts and Sciences in New Haven, CT through the Investigative Medicine Program. She received her BA from Columbia University (2008) in New York City, NY and her M.D. from University of Pennsylvania (2015) in Philadelphia, PA. **Blake N. Shultz** is a fifth-year medical student at Yale School of Medicine and a second-year law student at Yale Law School, in New Haven, CT. He is also a fellow at the Solomon Center for Health Law and Policy at Yale Law School. He received his B.A. from Cornell University (2015) in Ithaca, NY. **Carolyn T. Lye** is a fourth-year medical student at Yale School of Medicine and a first-year law student at Yale Law School in New Haven, CT. She received her B.A. from University of Pennsylvania (2016) in Philadelphia, PA. **Megan L. Ranney, M.D., M.P.H.**, is an Associate Professor Emergency Medicine at Alpert Medical School and Director of the Center for Digital Health at Brown University. She is also Chief Research Officer for the American Foundation for Firearm Injury Reduction in Medicine (AFFIRM Research). **Gail D’Onofrio, M.D., M.S.**, is Professor and Chair of Emergency Medicine at Yale School of Medicine and Professor in the School of Public Health. She is also the Chief of Emergency Services for Yale New Haven Hospital. **Edouard Coupet, Jr., M.D., M.S.**, is a National Institute of Drug Abuse (NIDA)-sponsored Yale Drug Use, Addiction, and HIV Scholar (DARHS) and Assistant Professor in Emergency Medicine at Yale New Haven Hospital. He received his M.D. from the University of Chicago Pritzker School of Medicine (2012). He received his Master’s in Health Policy Research at the University of Pennsylvania Perelman School of Medicine (2018).

### *B. Sample Selection and Recruitment*

Eligible participants were physicians who worked at hospitals located in communities that experienced a public mass casualty shooting, as defined by the Congressional Research Service.<sup>10</sup> All major public mass casualty shootings with significant media attention that occurred between 2012 and 2018 were included. Initial study participants were recruited via emails sent to professional listservs as well as advertised on the social media platform, Twitter. Eligible participants contacted the investigators to set up an interview. After the first few interviews, we used the snowball sampling technique to recruit additional participants by referrals from previously enrolled participants.<sup>11</sup> Our team concluded that we had thematic

saturation (the point at which no new codes are being generated) after twelve interviews; we then completed five more interviews to confirm saturation.

### *C. Data Collection*

We conducted semi-structured one-on-one interviews of eligible participants by telephone. The interview guide was created by the authors and circulated for edits among content experts. The guide was intentionally broad to accommodate the grounded theory approach. Verbal consent was obtained. Each participant was informed that their interviews would be audio recorded and transcribed with the removal of any identifying information. Participants were not compensated for their involvement.

Figure 1

## Interview Guide

<b>Interview guide</b>
<p><b>Basic information</b></p> <ul style="list-style-type: none"> <li>- Ask a quick verbal survey           <ul style="list-style-type: none"> <li>o How old are you?</li> <li>o What is your sex?</li> <li>o What type of training have you had? (ie: nurse, doctor, specialty training)</li> <li>o How many years have you been in practice?</li> </ul> </li> </ul>
<p><b>Experiences with a mass casualty shooting</b></p> <ul style="list-style-type: none"> <li>- Tell me about your experience the day the mass casualty shooting occurred</li> <li>- Were you on service when it happened? If you weren't on service, where were you when you found out?</li> <li>- How did the hospital react? What preparations were made/systems in place to deal with that event?</li> <li>- How did your colleagues react?</li> <li>- What did you do?</li> </ul>
<p><b>Response to a mass casualty shooting</b></p> <ul style="list-style-type: none"> <li>- How did your community react to the mass casualty shooting?           <ul style="list-style-type: none"> <li>o How did the hospital react?</li> <li>o How did the nation react?</li> <li>o How did the media react?</li> </ul> </li> <li>- How has the experience of a mass casualty shooting affected your colleagues or the people you work with?</li> <li>- How has your experience with a mass casualty shooting affected your work?</li> <li>- How has your experience with a mass casualty shooting affected you personally?</li> <li>- What structures/supports were in place to help providers deal with trauma of that experience?           <ul style="list-style-type: none"> <li>o What did you find helpful, if anything?</li> <li>o What, if anything, made the aftermath more difficult for you?</li> </ul> </li> <li>- What would you like to see put in place to help providers on the frontlines deal with the trauma of a mass casualty shootings?</li> </ul>



Four authors conducted interviews from January to May 2020. The interviews consisted of broad, open-ended questions using a grounded theory approach. See Figure 1, *infra*. All interviews were audio recorded. Interviews began with basic demographic questions including age, sex, type of training, and years of practice. Questions then addressed the participant's experience during the event. The final set of questions involved the response to the event. These questions addressed the participant's personal reactions and how the reactions of the hospital, community, and nation at large affected their experiences.

#### D. Data Analysis

Audio recordings were professionally transcribed. The transcriptions underwent review by the investigators with the audio recording to ensure accuracy of the data. The coding team consisted of an emergency medicine physician and a general surgery resident as the primary coders. Two medical students also participated in the development of the code book and themes as a part of the coding team. We used the constant comparative method of qualitative analysis to develop codes and themes.<sup>12</sup> The primary coders first read through transcripts and catalogued the transcript data by assigning conceptual codes to different sections. The entire coding committee reviewed these codes at multiple coding meetings, discussing the meaning of the codes and how they relate to each other. We then created a hierarchy of codes, grouping them into themes. These themes, with the subgroups of codes became the codebook for the study. This process was organized on Dedoose Version 8.0.35, a web-based qualitative research software.<sup>13</sup>

Table 1

#### Sample Characteristics

Variable	Mean (range) or Frequency
Age, years	48 (29-68)
Number of years in practice	14 (0-34)
Years since mass casualty shooting	3.9 (2-8)
Gender, Female	53% (9/17)
<i>Type of training</i>	
Emergency Medicine	35% (6/17)
Pediatrics	6% (1/17)
Psychiatry	24% (4/17)
Trauma Surgery	35% (6/17)

### III. Results

#### A. Sample

A total of 17 participants with training in emergency medicine, trauma surgery, pediatrics and psychiatry were interviewed. Participant demographics including age, sex, gender, and years of practice are displayed in Table 1, *infra*. The mean age of participants was 48 years old, and over half were female (53%; 9/17). The mean number of years of practice was 14. Trauma surgery and emergency medicine were the most represented specialties at 35% (6/17) each. The participants came from eight different communities that experienced a mass casualty shooting. Each community was represented by 2-3 participants on average with three incidents being represented by one

Table 2

#### Description of Mass Casualty Shooting Incidents

Location	Date	Number Killed	Number Injured	Type of weapon
Pittsburgh, PA	March 8, 2012	2	7	Semi-automatic handgun
Aurora, CO	July 20, 2012	12	70	Semi-automatic rifle
Sandy Hook, CT	December 14, 2012	26	0	Semi-automatic rifle
Charleston, NC	June 17, 2015	9	0	Handgun
San Bernardino, CA	December 2, 2015	14	22	Semi-automatic rifle
Orlando, FL	June 12, 2016	49	53	Semi-automatic rifle
Las Vegas, NV	October 1st, 2017	58	413	Semi-automatic rifle (modified to shoot like an automatic weapon with a bump fire stock)
Pittsburgh, PA	October 27, 2018	11	6	Semi-automatic rifle and handguns

participant. Some participants had experienced more than one mass casualty shooting. Each incident in these communities involved significant media attention. The deadliest event occurred in Las Vegas, NV on October 1, 2017, which injured 413 people and killed 58 people. In the majority of events, the shooter used a semi-automatic rifle. Additional descriptions and details of all incidents included in this study can be found in Table 2, *infra*.

### B. Themes

In discussing the experiences of physicians working in a community that experienced a mass casualty shooting, four major themes emerged: (1) The psychological toll on physicians: “I wonder if I’m broken”; (2) the importance of and need for mass casualty shooting preparedness: “[We need to] recognize this as a public health concern and train physicians to manage it”; (3) massive media attention: “The media onslaught was unbelievable”; and (4) commitment to advocacy for a public health approach to firearm violence: “I want to do whatever I can to prevent some of these terrible events.”

#### 1. THE EMOTIONAL AND PSYCHOLOGICAL IMPACT ON PHYSICIANS

##### *The day of the shooting:*

Participants described a variety of strong emotions in both their personal experiences and observations. Reactions to the sheer volume, type of wounds, selfless behavior of the victims, and the pressure on providers to succeed all emerged as themes. One participant described his experience of that day stating:

I just remember being on the phone with my [spouse] and sobbing and thinking to myself — not saying this to her — but thinking to myself, “Wow, I wonder if I’m broken. [Participant #7]

Many participants described feeling overwhelmed by the sheer volume of patients who were injured by firearms. *See* Figure 2, *infra*. One emotion commonly discussed was horror at the event itself, with a distinct feeling that this type of event was different from anything else they had seen in the past:

The impact of seeing this number of people — It’s not just that they were shot. It goes beyond that ... It’s the fact that they were victimized in a very insidious, insidiously planned event ... I think that’s one of the hardest things. [Participant #2]

Participants also noticed a difference in the patients’ wounds when compared to their typical practice due to the types of weapons used in the attacks. The nature of the mass casualty shootings and lack of readily available information also led several providers to feel afraid for their own safety. *See* Figure 2, *infra*.

The participants also described a heightened sense of pressure to ensure a good outcome for the victims of the shootings. One participant whose hospital only received one patient from a mass shooting described this feeling:

I think this situation was really different in the fact that I wanted him so badly to survive. I wanted the one person that got to us to have the chance to live because none of the rest of them did. [Participant #12]

While not every participant described each of these emotions or responses, every single participant described at least one of these reactions to the mass casualty shooting.

##### *Dealing with the aftermath:*

Almost all participants described long term psychological consequences in either themselves or colleagues that persisted for many months:

I know we have colleagues, especially ones who were directly impacted at the shooting, who continue, to this day, to struggle tremendously with the psychological impact of that event. [Participant #9]

The impact of these events was particularly difficult for participants for a variety of reasons. First, participants described how their roles as perceived leaders within the healthcare system hindered processing their emotions in the immediate aftermath:

As physicians, we are so socialized to be the captains of the ship — to be the leaders — to never let them see you sweat, never let them see you cry. We would not let our guards down in front of the team at all. [Participant #2]

This reaction was compounded by the fact that many physicians continued to care for the victims of the mass shooting for days, weeks and months after the event:

Grieving a traumatic event, while also caring for others who’ve been traumatized is actually really, really difficult because it is effectively

forced re-traumatization ... Being healthcare professionals, we may find ourselves in a position where we are forced to relive the trauma even if we don't want to. [Participant #14]

This forced re-traumatization and compartmentalization, led several physicians to feel the weight of that day even more forcefully than they otherwise would have. See Figure 2, *infra*.

Despite these difficulties, participants also described several positive feelings. For many, the outpouring of support locally, as well as from around the country, brought their communities together. See Figure 2, *infra*. Several participants discussed the satisfaction they gained from taking care of patients that had been so horrifically injured, especially when they were able to achieve a good outcome:

Figure 2

**Theme: Psychological/Emotional Responses (with exemplar quotes)**

Theme	Exemplar quote
<b>The day of the shooting</b>	
Intense emotional response	<i>I just remember being on the phone with my wife and sobbing and thinking to myself — not saying this to her — but thinking to myself, “Wow, I wonder if I’m broken.”</i>
Horror	<i>The impact of seeing this number of people — It’s not just that they were shot. It goes beyond that ... It’s the fact that they were victimized in a very insidious, insidiously planned event ... I think that’s one of the hardest things.</i>  <i>The type of bullets they used are horrific ... These are bullet wounds that are just tearing at your flesh. To be seeing those, it was like going into a war zone — very different than the wounds we normally see.</i>
Disrupted sense of safety	<i>There was an immediate like, “Are we safe? Is this shooter in one of our hospitals?”</i>
Overwhelmed	<i>I mean, we’re a busy trauma center. So, you get multiple gunshot wounds in a short period of time. We usually don’t see 100 people in a matter of a few hours. The sheer volume was different.</i>
Pressure for a good outcome	<i>I think this situation was really different in the fact that I wanted him so badly to survive. I wanted the one person that got to us to have the chance to live because none of the rest of them did.</i>
<b>Dealing with the Aftermath</b>	
Long-term psychological consequences	<i>I know we have colleagues, especially ones who were directly impacted at the shooting, who continue, to this day, to struggle tremendously with the psychological impact of that event.</i>
Compartmentalization	<i>As physicians, we are so socialized to be the captains of the ship — to be the leaders — to never let them see you sweat, never let them see you cry. We would not let our guards down in front of the team at all.</i>
Forced re-traumatization	<i>Grieving a traumatic event, while also caring for others who’ve been traumatized is actually really, really difficult because it is effectively forced re-traumatization ... Being healthcare professionals, we may find ourselves in a position where we are forced to relive the trauma even if we don’t want to. I think we have to have a very good plan and find a way to take care of ourselves while we’re doing this — whether it is engaging in our own therapy or giving the people who work for us the chance to do that when they need it.</i>
Pride	<i>I had worked really hard. I was really happy with the work I did. I was proud. Nobody who had arrived alive, died. I was proud of that.</i>
Sense of community	<i>It’s always going to be different in every community with every event ... But there’s a widely distributed, closely connected community of survivors across the country from these events. The people who were carried away or who walked away, who lost loved ones in school shootings, concert shootings, religious place shootings and they connect with each other. God, what a terrible club for anyone to have to join. But, how inspiring to see what they have to teach and how willing they are to engage.</i>

I had worked really hard. I was really happy with the work I did. I was proud. Nobody who had arrived alive, died. I was proud of that.  
[Participant #5]

## 2. MASS CASUALTY SHOOTING PREPAREDNESS

Participants expressed the importance of being better prepared for a mass casualty shooting to meet the immediate needs of patients, physicians, and for the aftermath:

The chances of that happening to you on your shift where you work is pretty small. The chances of it happening to somebody on their shift is almost 100%.... With the increasing frequency, increasing amplitude, I think it would be wise for us to... recognize this as a public health concern and train physicians to manage it.  
[Participant #3]

### Meeting the immediate needs:

Several participants noted that technology in their hospitals was not set up to serve them appropriately during the mass casualty event. *See Figure 3, infra.* There were failures in several systems including the electronic medical record, communications and notifications within the hospital, and inadequate and/or inaccurate communications from pre-hospital emergency services. This led providers to devise work-arounds that did not always conform to what was normally accepted at their institutions:

Our internal communication system, our intranet crashed...what still worked was texting each other on our cell phones. We actually had to resort to that, rather than our usual method of communication because it wasn't prepared.  
[Participant #2]

The volume of injuries caused supply shortages in some instances. Physicians needed to change their clinical management practices to meet the demand, further compounding the stress placed upon physicians. *See Figure 3, infra.*

So, we ran out of chest tubes. So, what do you do? So, we used endotracheal tubes. Is that okay? Is that not okay? ... People I think were reticent, worried, self-paced... You know the right thing to do, but you can't do it. That creates a great deal of post-traumatic stress injury and I think that could be in part alleviated by establishing some crisis standards of care. [Participant #3]

While no physicians expressed about potential liability or malpractice in the moment, a few noted that liability concerns from hospital administration hindered them in speaking openly about the decisions they had to make during the crisis.

This stress was further compounded by a lack of information and abundance of misinformation about the mass casualty shooting from both pre-hospital emergency services as well as the media. This lack of information led some participants to suspect there was an active shooter in the hospital or surrounding area, triggering fear for their own safety. *See Figure 3, infra.*

We just had no idea what was happening and there was a lot of fear for our own safety. The lack of information was really a problem.  
[Participant #10]

Barriers that normally exist between siloed specialties or professions — such as between the emergency department and inpatient surgery team — broke down as everyone came together to take care of the patients. Without that effort, participants felt that many more lives would have been lost. *See Figure 3, infra.*

### Addressing the aftermath of a mass casualty shooting:

All participants in this study described at least some long-term psychological effects for either themselves or colleagues, including anxiety, flashbacks, and hypervigilance. The majority expressed concern about the development of post-traumatic stress disorder (PTSD) in the weeks to months following the mass casualty shooting — some continuing to describe symptoms years afterwards. Participants identified a wide array of direct support services available from their institution following the mass casualty shooting, including direct provision of therapy and counseling sessions. But participants from three of the eight incidents reported a complete lack of response or recognition. *See Figure 3, infra.* The importance of having organized, readily-available support systems for providers was repeatedly emphasized:

There has to be a more coordinated, institutional response to go to the people that have been involved in the care... and offer them services. Also, just to explain to them that this is hard... People are going to have some post-acute stress disorder, maybe even some PTSD down the road and to explain that dealing with these things or that after you experience something like this, it is not abnormal to have those feelings.  
[Participant #12]

Figure 3

**Theme: Mass Casualty Shooting Preparedness (with exemplar quotes)**

Theme	Exemplar quote
<b>Meeting the Immediate Needs</b>	
Need for institutional preparation for a mass casualty shooting	<i>The chances of that happening to you on your shift where you work is pretty small. The chances of it happening to somebody on their shift is almost 100% ... With the increasing frequency, increasing amplitude, I think it would be wise for us to ... recognize this as a public health concern and train physicians to manage it.</i>
Failure of technology	<i>Our internal communication system, our intranet crashed ... what still worked was texting each other on our cell phones. We actually had to resort to that, rather than our usual method of communication because it wasn't prepared.  We couldn't register patients [in the electronic medical record] fast enough ... We couldn't then, on the computer, link each patient for orders or imaging.</i>
Lack of information	<i>We just had no idea what was happening and there was a lot of fear for our own safety. The lack of information was really a problem.</i>
Crisis standard of care	<i>So, we ran out of chest tubes. So, what do you do? So, we used endotracheal tubes. Is that okay? Is that not okay? ... People I think were reticent, worried, self-paced ... You know the right thing to do, but you can't do it. That creates a great deal of post-traumatic stress injury and I think that could be in part alleviated by establishing some crisis standards of care.  In a mass casualty situation ... the needs exceed the resources and therefore the priority becomes doing the most for the greatest number of people. So, you need to decide who will potentially benefit from your time and your efforts. The people who are [not going to make it], you still evaluate them, you still treat their pain, but you are not going to spend individual significant time with them. There are other people who could be dying in that time that you could really save.</i>
Teamwork	<i>I'm going to tell you that night, there was no pushback from anyone. Everyone came to the hospital, everyone worked together, and everyone was on the same page. It was actually phenomenal, and I've never seen something like that before.</i>
<b>Addressing the aftermath of a mass casualty shooting</b>	
The need for a coordinated, institutional response to address mental health	<i>There has to be a more coordinated, institutional response to go to the people that have been involved in the care ... and offer them services. Also, just to explain to them that this is hard ... People are going to have some post-acute stress disorder, maybe even some PTSD down the road and to explain that dealing with these things or that after you experience something like this, it is not abnormal to have those feelings</i>
Wide variation in the institutional responses to mass casualty shootings	<i>No one really reached out at all. There wasn't any true, focused intervention, support or anything like that for the actual providers that took care of the patients and were there that night.  They did opt-out sessions. They scheduled counseling sessions for every provider ... and they had the option of opting out of them. But, at least it was scheduled for you. I think that's important because when you're going through the event, you're not going to necessarily take the initiative to make that appointment</i>
Forgotten trainees	<i>Since I was a trainee, a resident, we go on about our lives. We work really long hours. Then you are working the next day, then the next day. There isn't a lot of time to really go home and reflect. It's really important for hospital systems and residency programs to truly recognize the importance of including residents and trainees ... Residents should not be forgotten because they are on the frontlines, you know? They're the one that don't get much a break afterwards to really reflect and heal.</i>
Recognition	<i>The hospital recognized the providers, which I actually thought was really useful in retrospect. Prospectively, I thought that that was dumb— I was just doing my job. But, in retrospect, it changed a little bit about how I view the event. It's something positive that came out of an overall, really hard event... It's a positive outcome of something that's otherwise pretty negative.  The unsung heroes of the response was actually the medicine service ... I think my medicine colleagues felt, at least for some time, that all of the glory was showered upon those on the guts and gore side ... The actual making the system work side, they were not recognized at least externally to the hospital ... Their contribution was underappreciated by the larger community. But, those of us that understand how the hospital functions could not have done what we did unless they did what they did.</i>

Individuals who were trainees at the time of the mass casualty shooting were identified as particularly in need of organizational support. In the words of one participant who was a resident at the time of the event:

Since I was a trainee, a resident, we go on about our lives. We work really long hours. Then you are working the next day, then the next day. There isn't a lot of time to really go home and reflect. It's really important for hospital systems and residency programs to truly recognize the importance of including residents and trainees ... Residents should not be forgotten because they are on the frontlines, you know? They're the ones that don't get much a break afterwards to really reflect and heal. [Participant #12]

Community and hospital recognition of providers' work was identified by some as an important source of healing. See Figure 3, *infra*. However, the unequal distribution of that recognition also caused some stress:

"The unsung heroes of the response were actually the medicine service ... I think my medicine colleagues felt, at least for some time, that all of the glory was showered upon those on the guts and gore side ... The actual making the system work side, they were not recognized at least externally to the hospital ... Their contribution was underappreciated by the larger community. But, those of us that understand how the hospital functions could not have done what we did unless they did what they did." [Participant #3]

Figure 4

**Themes: The Media and #thisismylane (with exemplar quotes)**

Theme	Exemplar quote
<b>Massive media attention</b>	
Engaging with the media during the event	<i>The media onslaught was unbelievable during our incident. How are you going to manage those and who is going to manage those? We have a media relations department that did a very, very good job. The onslaught of media attention is extremely stressful to deal with. How do you manage the gracious VIPs and politicians and actors and actresses that want to come to your hospital to express their sympathy, managing all of that? How your security manages that is all part of the post incident phase. I think that we didn't realize how important that was until we had to go through it.</i>
Sensationalism in the media	<i>The media response after the *** shooting was horrid. It was the worst of the worst of predatory media stuff combined with all the stuff we know not to do with media coverage of violent events. If there's a rule, they broke it ... Not one mention of the heroic survivors and first responders and the stories of the lives lost, just [descriptions of] how they died and glorifying the assailants ... So, we've systematically and strategically been working with all of our media partners locally and as best as we can nationally about best practices. After these terrible events, please don't fill [the time] with some dumbass who doesn't know what they're talking about. We will give you real subject matter experts. Please don't speculate about motives and causes.</i>
<b>The need for a public health approach to firearm violence</b>	
Leadership from medical professionals	<i>I want to do whatever I can to prevent some of these terrible events. So, that's a lot of what I do now. I write, I publish, I teach around threat management and violence prevention. I'm involved in state level activities and it's built over the years.</i>
Change in attitude towards firearms	<i>Having been a military guy and a country guy, I'm comfortable with [firearm] use. I will tell you, for me, my personal thoughts on weapons changed quite a bit as a result of this... It really changed my mind in terms of the idea of my personal enjoyment with weapons. I haven't shot any of my weapons since that event and I don't have the desire to... I also feel very strongly about the Dickey Amendment and that we really must take a public health approach to firearms and firearm violence.</i>
"Regular" firearm violence	<i>Mass shootings are horrific and garner a lot of psychological attention from the media and from the communities, but the day-to-day cold gun violence in our communities, and the community I work in, is staggering.</i>

### 3. MASSIVE MEDIA ATTENTION

All of these incidents were accompanied by a massive amount of media coverage. Many of the interview participants were asked by their departments to interact with the national news media. Participants described

I'm comfortable with [firearm] use. I will tell you, for me, my personal thoughts on weapons changed quite a bit as a result of this... It really changed my mind in terms of the idea of my personal enjoyment with weapons. I haven't shot

This study suggests that physicians experience significant psychological symptoms from working during a public mass casualty shooting. Based on our findings, we propose that these psychological sequelae could be mitigated with coordinated systematic plans from institutions for psychological support in the aftermath of a mass casualty event, improved guidelines and training in mass casualty events for health care providers, improved sensitivity and ethical standards from the media, and institutional support for healthcare providers engaged in firearm violence prevention work. Finally, more research needs to be done to better understand the psychological impact of these events on healthcare providers.

the logistical difficulties of dealing with media attention in the midst of an ongoing crisis. *See* Figure 4, *infra*.

The media onslaught was unbelievable during our incident. How are you going to manage those and who is going to manage those? We have a media relations department that did a very, very good job. The onslaught of media attention is extremely stressful to deal with ... Managing all of that — how your security manages that — is all part of the post-incident phase. I think that we didn't realize how important that was until we had to go through it. [Participant #4]

Some, but not all, participants also expressed frustration with sensationalized and inaccurate information that was disseminated by the media, including descriptions of how people died. One participant even described how that experience inspired him to engage the local and national media in responsible reporting following a violent event. *See* Figure 4, *infra*.

### 4. COMMITMENT TO ADVOCACY FOR A PUBLIC HEALTH APPROACH TO FIREARM INJURY

One physician who owned firearms for recreational use, discussed the change in their attitude towards firearms after treating patients that were victims of a mass casualty shooting:

any of my weapons since that event and I don't have the desire to. [Participant #3]

While not all participants decided to engage in advocacy, every physician we spoke with agreed that it is appropriate or even necessary for healthcare professionals to have a voice in the firearm violence debate. In addition to expressing frustration with the current political discourse around firearm injury, several participants saw the unique perspective of physicians as crucial for creating policy change surrounding firearm injury prevention:

I want to do whatever I can to prevent some of these terrible events. So, that's a lot of what I do now. I write, I publish, I teach around threat management and violence prevention. I'm involved in state level activities and it's built over the years. [Participant #9]

## IV. Discussion

In this qualitative study of seventeen physicians across five medical specialties working in eight different communities that experienced a public mass casualty shooting, four major themes emerged: (1) the intense psychological toll on providers, (2) the importance of and need for mass casualty shooting preparedness, (3) the onslaught of media attention, and (4) the commitment to a public health approach to firearm injury. These four themes have important implications for

healthcare institutions, medical professionals, and policymakers.

This study suggests that physicians experience significant psychological symptoms from working during a public mass casualty shooting. Based on our findings, we propose that these psychological sequelae could be mitigated with coordinated systematic plans from institutions for psychological support in the aftermath of a mass casualty event, improved guidelines and training in mass casualty events for health care providers, improved sensitivity and ethical standards from the media, and institutional support for healthcare providers engaged in firearm violence prevention work. Finally, more research needs to be done to better understand the psychological impact of these events on healthcare providers.

Very little research quantitatively describes the impact of these events on healthcare providers' mental health and resiliency. To our knowledge, the only study of physician mental health following a mass casualty shooting was a study of thirty-one general surgery residents working in Orlando, FL on June 12, 2016, during the Pulse nightclub shooting.<sup>14</sup> The authors found a high prevalence of post-traumatic stress disorder (PTSD) and major depression that did not resolve over time, representing a large emotional toll upon healthcare providers involved in mass casualty shootings. Although our study did not formally screen for any psychiatric disorders, the vast majority of participants in our study expressed concern for or knowledge of development of acute stress disorder or PTSD in either themselves or their colleagues. They described institutional responses to mental health concerns that ranged from nothing, to individualized formal psychotherapy. Institutions may consider implementing protocols to address acute and long-term psychological sequelae after a mass casualty shooting, particularly for trainees. Future research is needed to better understand the psychological impact of these events, its relationship to mental illness and burnout among physicians.

Our findings are consistent with prior literature that details the need for improved guidelines and training in mass casualty shooting events for healthcare providers.<sup>15</sup> Participants expressed stress and uncertainty about whether the clinical decisions they made in response to the overwhelming demand for services were the right ones. Those participants with training in the military or prior work on mass casualty events were more comfortable with their clinical decision making and felt less stressed about their response after the fact. Development of guidelines that delineate "crisis standards of care" along with formal train-

ing and/or simulation in preparation for a mass casualty event may be beneficial.

Resource limitations, difficult triage decisions, and the need for rapid communication in emergency situations all raised concerns for providers. Multiple participants described resorting to texting on cellphones for rapid communication during the mass casualty event, which is not compliant with the Health Insurance Portability and Accountability Act (HIPAA). While the Department of Health and Human Services (HHS) has discretionary authority to modify enforcement of HIPAA violations (as it did recently to promote the use of telehealth during the COVID pandemic),<sup>16</sup> they have not released general guidance on the use of texting during emergencies. Hospital systems concerned about HIPAA compliance during emergencies should incorporate a Privacy and Security Rule-compliant rapid communication network into their institutional policy. Institutions, hospitals and professional societies should work alongside policymakers to ensure that the technology regularly used in hospitals is prepared to encounter a mass casualty shooting.

Further, although many states and the federal government have taken steps to limit liability for ordinary negligence in emergencies, legal protections are patchwork and full immunity from liability is often not guaranteed.<sup>17</sup> Medical negligence claims typically hold providers to a "reasonable" standard — meaning that a court will ask what a "reasonable" provider in the same scenario would have done. Often, demonstration that a provider followed emergency protocols for triage decision-making and resource allocation is sufficient to show reasonableness.<sup>18</sup> While none of our participants reported that any medical liability claims were filed in these incidents, some expressed concern for the potential for medical liability. In the absence of an agreed upon "crisis standard of care" for the extraordinary circumstances encountered in a mass casualty shooting, the courts would be left without clear guidance on adjudication of medical liability claims. This underscores the need for the development of guidelines for "crisis standards of care."

Direct interaction with and passive consumption of the media surrounding a mass casualty shooting was a central component of the lived experience for providers. Inaccurate and sensationalized reporting negatively impacted our participants by contributing to psychological suffering. The deleterious effects of misinformation and sensationalism during mass casualty shootings has been highlighted in prior publications, with specific recommendations for journalists and media outlets.<sup>19</sup> Our work underscores the critical need for a change in reporting tactics from various



media outlets to ensure ethical and accurate journalism during any mass casualty shooting.

Without prompting, multiple participants described how their experience led them to recognize the need for a paradigm shift in the firearm injury debate that focuses on preventing firearm injuries through proven public health strategies. As there has been a vacuum of effective leadership on this issue, medical professionals including physicians are increasingly taking the lead in crafting and promoting these public health policies as well as devising studies to better inform policymakers in the future.<sup>20</sup>

### Limitations

There are limitations in this study. As with all qualitative studies, our findings are hypothesis-generating, and may not be generalizable, although we strove to identify outliers and dissenting opinions. Unique to this study, our participants were temporally removed from their experiences, some by many years. Therefore their recollections were subject to recall bias, though our interviewers were trained to prompt participants for concrete details and specific memories. In addition, their accounts are likely influenced by social desirability bias — the inclination to report answers, behaviors, or attitudes that adhere to social norms.<sup>21</sup> To mitigate this, all interviewers did not have a personal or professional relationship with the participants and all participants were assured of having anonymity. All interviews were conducted over the phone which increases the anonymity of the interview though may impact the way participants responded or understood questions. Finally, this research was conducted using snowball sampling with referral from one physician to another which may have biased the type of participants that were included within the study, in favor of those who may feel more comfortable speaking about their experiences. To mitigate this, we recruited multiple initial “nodes” of snowball sampling to ensure a variety of participants. Finally, our findings may not be transferable to other healthcare professions, such as nurses and pre-hospital providers, who also care for victims of public mass casualty shootings.

### V. Conclusion

In this study we identify four themes which characterize the lived experiences of physicians working in communities that experienced a mass casualty shooting. The intense psychological toll imposed upon physicians called to action during an unprecedented tragic event in their communities, the need for mass casualty preparedness in the hospital setting, and complications arising from the relentless media atten-

tion were clearly front and center. Finally, the medical professionals in this study expressed hope that future firearm injury could be prevented. They believed that healthcare professionals are uniquely positioned to promote and devise public health strategies to curb firearm injury and hopefully prevent the next mass casualty shooting.

### Note

The authors do not have any conflicts of interest to disclose.

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# Emergency Department Visits for Firearm-Related Injuries among Youth in the United States, 2006–2015

*Victor Lee, Catherine Camp, Vikram Jairam, Henry S. Park, and James B. Yu*

## Introduction

Firearm injuries are responsible for significant morbidity and mortality in the United States. A recent evaluation of national emergency department visits highlights the enormous burden placed on the health-care system through emergency department visits and subsequent hospitalizations; from 2006-2014, it is estimated that over 700,000 patients of all ages presented to the emergency department with a firearm-related injury.<sup>1</sup>

One concerning aspect of firearm-related injury is the significant portion of injuries that occur to youth, whether in homes, schools, or elsewhere in their communities. Youth firearm injury is concerning not only because youth are often innocent victims, but also because youth firearm injury is alarmingly widespread — such injury is the second most common cause of childhood death in the United States.<sup>2</sup> Finally, youth firearm injuries appear to be associated with greater severity than other forms of injury.<sup>3</sup>

This study provides a novel estimate of the youth firearm injury burden. While other studies<sup>4</sup> have used databases such as the National Electronic Injury Surveillance System and National Hospital Ambulatory

Medical Care Survey, this study is the first to examine the Nationwide Emergency Department Sample (NEDS) within youth. And while NEDS has been used to estimate the burden of *adult* firearm-related emergency department visits,<sup>5</sup> no previous study has used NEDS to provide detailed estimates of firearm-related emergency department visits specific to youth.

This study aims to inform current policymaking by quantifying the extent to which guns injure youth each year, as well as the factors that increase the risk of injury. The study enhances the current understanding of the youth firearm injury burden in the United States with a novel analysis of the NEDS database.

## Methods

This study used the Nationwide Emergency Department Sample (NEDS) published by the Healthcare Cost and Utilization Project, Agency for Healthcare Research and Quality. NEDS is the largest all-payer ED database in the United States, yielding approximately 25 million to 35 million ED visits each year across more than 950 hospitals in 34 states. It contains approximately 20% of US hospital-based ED visits. NEDS is deliberately constructed to be representative of ED visits in the United States by being a large but selective sampling of 20% of US ED departments and is weighted to provide nationally representative estimates. The NEDS sample includes all payers and is not subject to self-report bias because it is based on ED visit data.

We used weighted ED visits to estimate a national sample of ED visits. All diagnoses reported in NEDS were based on the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM). Our study omitted analysis of data after

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September 2015 to maintain code consistency in the database. This study was granted an institutional review board exemption by the Yale Human Investigations Committee.

NEDS was queried from January 2006 to September 2015 for all patients age < 21 who presented with any diagnosis of firearm-related injury. Youth up to age 20 were included to evaluate firearms injuries in patients who were broadly in adolescence. Youth aged 18-20 were included in their own age category given the legal definition of childhood being those under age 18. External cause of injury codes (E-codes) were

tion by age group. Total ED charges were estimated and compared by age group. Weighted frequencies were incorporated in all analyses to produce national estimates. Hypothesis testing was 2-sided, and  $P < .001$  was used to indicate statistical significance for all comparisons. Because of the large sample size in this data set, this P value was chosen to increase the likelihood of obtaining clinically relevant findings. Data analysis was carried out using Stata, version 13.1 (StataCorp LP).

Population-adjusted ED visits per 100,000 persons was estimated by taking the estimated ED visit per

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used to identify firearm-related injuries as detailed in Online Supplemental Table 1.

Emergency department visits and inpatient stays were characterized by demographic factors (age, sex, survey year), socioeconomic factors (insurance type, median household income by zip code), hospital characteristics (teaching status, trauma designation, location), cause of injury (unintentional, suicide, assault, legal intervention, undetermined), and type of firearm (handgun, shotgun, hunting rifle, military, other). Outcome variables of interest included inpatient admission and mortality. Geography was defined by HCUP into the 4 census regions (West, Midwest, Northeast, South). 2018 American Community Survey data was used to determine the likelihood of children to visit the ED for a gun related injury. As an exploratory analysis, we compared the rates of death within the NEDS dataset (Online Supplemental Table 2) to deaths reported by the CDC (Online Supplemental Table 3).

#### *Statistical Analysis*

Univariable analysis comparing demographic, socioeconomic, and hospital-related factors between patients of different age groups was carried out using the chi-squared test. Descriptive analyses were also incorporated to characterize cause of firearm injury, type of firearm involved, and ED status and disposi-

census region during the study period (2006-2015) and dividing by the American Community Survey population of that age group as of 2018.

CDC death rates were extracted from the CDC WONDER database by requesting data for ages 0-20, for the years 2006-2015, for deaths due to firearm injury as identified by ICD-10 cause of death codes with at least one death during the study period (Online Supplemental Table 3).<sup>6</sup> We intended to provide comparison of CDC data and NEDS data to show that there are more firearm deaths in this country beyond what is shown in NEDS since people die before reaching the ED. Given the difficulty in comparing two different datasets, a formal statistical comparison of death rates between the two datasets was not performed.

## **Results**

### *Demographics*

Overall, we found an estimated 198,839 incidents of firearm related emergency department visits over 2006-2015 for youth age < 21, which represents 19,884 annual visits. The majority (59.4%) of these visits occurred for youth aged 18-20, and the average age of all visits was 17.3 years. However, we estimated 2,827 visits for children aged 0-4 years (1.4%). We found that generally, youth who experienced firearm injury were male (89.2%), from the lowest

Table 1

**Demographic and Hospital Characteristics of Patients Presenting with Gunshot Injuries from 2006-2015**

Variable	Age Category					Total	P Value <sup>a</sup>
	0-4	5-9	10-14	15-17	18-20		
<b>Age (mean, years)</b>	2.2	7.2	12.9	16.3	19.0	17.3	<b>&lt;0.001</b>
<b>Sex</b>							<b>&lt;0.001</b>
Male	65.0	69.0	81.2	89.2	91.3	89.2	
Female	35.0	31.0	18.8	10.8	8.7	10.8	
<b>Season</b>							<b>&lt;0.001</b>
Winter	19.5	22.2	24.7	21.5	21.5	21.7	
Spring	28.0	25.5	26.0	25.2	26.1	25.8	
Summer	26.9	28.3	25.0	30.8	28.7	29.0	
Fall	25.7	24.0	24.3	22.6	23.8	23.5	
<b>Payer Income</b>							<b>&lt;0.001</b>
1 - 41,999	50.7	47.7	49.8	55.4	53.1	53.5	
42,000 - 51,999	29.1	23.5	27.2	24.7	25.2	25.2	
52,000 - 67,999	12.5	20.2	16.3	14.1	14.8	14.8	
68,000+	7.6	8.5	6.7	5.9	6.8	6.6	
<b>Payer Insurance</b>							<b>&lt;0.001</b>
Medicare	0.6	0.1	0.3	0.3	0.5	0.4	
Medicaid	63.2	53.5	51.4	54.2	34.2	42.2	
Private	18.0	31.5	32.8	24.4	20.1	22.5	
Self-pay	13.7	11.3	10.9	16.0	36.9	27.9	
No charge	0.3	0.3	0.1	0.4	1.6	1.1	
Other	4.3	3.4	4.5	4.6	6.9	5.9	
<b>Hospital Trauma Status</b>							<b>0.574</b>
Not Trauma Center	32.0	35.6	36.6	34.5	35.4	35.2	
Trauma Center	68.0	64.4	63.4	65.5	64.6	64.8	
<b>Hospital Location</b>							<b>0.014</b>
Midwest	21.5	26.1	25.8	24.6	22.5	23.4	
Northeast	4.8	7.6	9.7	11.7	12.4	11.8	
South	52.9	46.1	42.6	39.5	42.2	41.6	
West	20.8	20.2	22.0	24.1	23.0	23.2	
<b>Hospital Teaching Status</b>							<b>&lt;0.001</b>
Non-metropolitan hospital	14.6	16.0	15.4	7.0	7.1	7.9	
Metropolitan teaching	65.2	59.9	62.0	69.9	68.7	68.4	
Metropolitan non-teaching	20.2	24.1	22.6	23.1	24.2	23.7	
<b>Total ED Charge (mean, \$)</b>	4,402.53	3,755.29	3,671.63	4,371.24	4,496.25	4,382.79	
<b>Total</b>	2,827 (1.4)	3,464 (1.7)	13,837 (7.0)	60,691 (30.5)	118,020 (59.4)	198,839	

<sup>a</sup>Significance threshold set at  $p < 0.001$

Table 2

**Cause of Firearm Injury by Age Category, weighted count (% of age cat) [% died] from 2006-2015**

Cause of Injury	Age Category					Total	% Died
	0-4	5-9	10-14	15-17	18-20		
<b>Unintentional</b>	1,650 (58.4) [11.9]	2,352 (67.9) [5.0]	7,610 (55) [3.1]	20,245 (33.4) [3.6]	36,780 (31.2) [4.1]	68,637	4.08
<b>Suicide &amp; Self Inflicted</b>	48.9 (1.7) [37.1]	14.3 (0.4) [0.0]	374 (2.7) [36.0]	1,284 (2.1) [33.5]	2,399 (2) [35.3]	4,119	34.68
<b>Assault</b>	917 (32.5) [17.5]	838 (24.2) [11.4]	4,737 (34.2) [5.2]	33,392 (55) [5.5]	67,861 (57.5) [5.7]	107,745	5.76
<b>Legal Intervention</b>	36.2 (1.3) [10.8]	73 (2.1) [0.0]	142 (1) [0.0]	949 (1.6) [3.3]	1,633 (1.4) [4.5]	2,833	3.85
<b>Undetermined</b>	174 (6.2) [15.5]	187 (5.4) [2.6]	975 (7) [8.2]	4,821 (7.9) [8.2]	9,348 (7.9) [9.2]	15,505	8.78
<b>Total</b>	2,827	3,464	13,837	60,691	118,020	198,839	

Table 3

**Type of Firearm Involved by Age Category, weighted count (% of age cat) from 2006-2015**

Firearm Type	Age Category					Total
	0-4	5-9	10-14	15-17	18-20	
<b>Handgun</b>	806 (29)	716 (22)	3,001 (21.9)	14,056 (21.9)	28,080 (23)	46,659
<b>Shotgun</b>	133 (4.9)	408 (10)	1,202 (8.7)	3,664 (5.1)	6,324 (4.8)	11,731
<b>Hunting</b>	65.3 (1.7)	277 (6.6)	887 (6.2)	1,164 (2)	1,459 (1.2)	3,852
<b>Military</b>	11.4 (0.6)	15.6 (0.5)	54.2 (0.5)	125 (0.3)	191 (0.2)	398
<b>Other</b>	1,047 (35.3)	1,122 (31.3)	5,190 (37.4)	28,259 (47.3)	55,696 (48.2)	91,313
<b>Unspecified</b>	764 (28.6)	926 (29.6)	3,503 (25.3)	13,423 (23.5)	26,270 (22.7)	44,886
<b>Total</b>	2,827	3,464	13,837	60,691	118,020	198,839

income quartile (53.5%), and presented to metropolitan teaching and non-teaching hospitals (68.4% and 23.7%). Medicaid was the most common insurance (42.2%). We also found that geographically, a plurality of firearm injuries occurred in the South (41.6%). A plurality of events occurred in the summer (29.0%). Demographic data is shown in Table 1.

*Cause of Injury*

There were 5 categories of firearm injury reported (Table 2). Overall, there were an estimated 107,745 incidences of assault and 68,637 incidences of unintentional injury. Depending on the child’s age, different causes of injury were relatively more or less

prevalent. In the youngest ages (age 0-4), unintentional (accidental) firearm injury was most prevalent (58.4%), though a significant fraction also presented to the ED due to assault (32.5%). However, for the 18-20 age group, the majority of injuries were due to assault (57.5%). There were 2,833 incidences of injury due to legal intervention and 4,119 incidents of suicide and self-inflicted injury. An estimated 15,505 ED visits were due to firearm injury of undetermined cause.

*Type of Firearm Used*

Table 3 identifies the type of firearm implicated in the ED visit. The plurality of injuries occurred from unspecified firearms (22.7-29.6%) or “other” (31.3-

Table 4

**Vital Status after Visit and Disposition from ED by Age Category, weighted count (% of age cat) in 2006-2015**

Vital Status after visit	Age Category					Total
	0-4	5-9	10-14	15-17	18-20	
Alive	2,421 (85.6)	3,246 (93.7)	13,136 (94.9)	57,283 (94.4)	110,844 (93.9)	186,930 (94)
Dead	406 (14.4)	218 (6.3)	701 (5.1)	3,408 (5.6)	7,176 (6.1)	11,909 (6)
Disposition from ED						
Routine	1,102 (39)	1,915 (55.3)	7,589 (54.8)	30,659 (50.5)	59,772 (50.7)	101,037 (50.8)
Transfer to Short term Hospital	390 (13.8)	377 (10.9)	1,248 (9)	3,486 (5.7)	6,787 (5.8)	12,289 (6.2)
Transfer to other type of facility	69.9 (2.5)	23.9 (0.7)	192 (1.4)	718 (1.2)	1,276 (1.1)	2,280 (1.2)
Home Health Care	5.48 (0.2)	9.12 (0.3)	22.4 (0.2)	118 (0.2)	159 (0.1)	314 (0.2)
Admitted as Inpatient	930 (32.9)	899 (26)	4,078 (29.5)	22,473 (37)	43,008 (36.4)	71,388 (35.9)
Died in ED	283 (10)	138 (4)	404 (2.9)	2,044 (3.4)	4,412 (3.7)	7,280 (3.7)
Other	46.6 (1.7)	102 (3)	304 (2.2)	1,193 (2)	2,606 (2.2)	4,252 (2.1)

Table 5

**Gun-Related ED Visits from 2006-2015 per 100,000 Children in Each Region Using 2018 American Community Survey Data**

	0-4	5-9	10-14	15-17	18-20	Total
<b>Midwest</b>	14.8	21.7	79.7	563.0	1,455.3	269.7
<b>Northeast</b>	4.4	8.6	39.7	349.5	1,100.6	181.3
<b>South</b>	19.6	20.7	70.6	497.1	1,418.0	258.6
<b>West</b>	12.3	14.5	58.3	489.5	1,217.8	229.9
<b>Total</b>	14.4	17.5	64.7	485.3	1,328.2	241.8

48.2%). Of the identified firearms, handguns were by far the most common (21.9-29.0%) particularly for the youngest presenting patients (age 0-4). Much less common were injuries due to shotguns (4.8-10.0%), hunting guns (1.2-6.6%), or military-style guns (0.2-0.6%).

**Vital Status and Disposition from the ED**

After presenting to the ED, there were an estimated 11,909 youth deaths from firearms in the years examined. In particular, the youngest patients (age 0-4) had the highest proportion of deaths after presenting to the ED (14.4%). There were 71,388 hospitalizations after presentation to the ED. Other dispositions are

outlined in Table 4. Based on the NEDS data, suicide and self-inflicted injuries presented as the category with the highest death rate (89.2%) with the death rate increasing by age. Unintentional causes presented as the category with the lowest death rate (2.9%) with the death rate decreasing with age (Online Supplemental Table 2).

In comparing the number of deaths that occur after presenting to the ED, data from the CDC indicates a much higher overall burden of death from firearm injury (Online Supplemental Table 3), which may reflect the number of youth that die before presenting to the ED. Both the NEDS and CDC data demonstrate an increasing firearm injury trend by age for suicide and homicide (Online Supplemental Table 3).

**Likelihood of Children Visiting the ED by Region**

Table 5 demonstrates the gun-related ED visits per 100,000 children based on 2018 American Community Survey data. Children in the Midwest were 1.5 times more likely to visit the ED for a gun-related injury than children in the Northeast. Children in the South were 1.4 times more likely than children in the Northeast to present to the ED for a gun-related injury. Youths aged 18-20 were 92.3 times more likely to visit the ED for a gun-related injury than children aged 0-4. Children aged 0-4 in the South were 4.5 times more likely than children aged 0-4 in the Northeast to present to the ED for a gun-related injury. For a trend

analysis, Online Supplemental Table 4 demonstrates the number of ED visits per 100,000 children based on 2018 American Community Survey data.

## Discussion

Firearm injuries are all too frequent among youth. Our sample estimated 198,839 emergency room visits and 11,909 deaths for youth age < 21. Injuries impacted all age groups and were particularly deadly for the youngest children, age 0-4. Firearm injuries occurred most frequently in males, individuals in the South, and most commonly presented to metropolitan emergency departments. Handguns were the most commonly identified firearm that caused injury, being almost 3 times as common as shotgun and hunting rifle injuries. It is evident that firearm injuries are a major public health problem for which a comprehensive strategy is needed. The high number of youth firearm injuries every year suggests urgent action is needed to protect youth. Stronger minimum age laws, safe storage laws, and child access prevention laws all aim to protect youth specifically, and should be further adopted, although better data on where and how these injuries occurred would allow for more specific policy recommendations.

The NEDS data does not contain detail about where the gun injury took place (e.g., in the home, outdoors) or who fired the weapon (e.g., other youth, an adult). However, the extent to which youth are being injured by firearms in the United States underscores the need for greater regulation targeted at protecting children and youth.

Minimum age laws, safe storage laws, and child access prevention (CAP) laws are examples of policies which explicitly aim to prevent youth access and exposure to firearms. Handguns were the weapon most likely used in the NEDS data. And while under federal law, a person must be 21 to buy a handgun from a federally licensed dealer, he must only be 18 to purchase a handgun from an unlicensed dealer in a casual sale. There is opportunity to raise the minimum age for handgun purchase to 21 for all sales.

Safe storage and CAP laws are policies which intend to keep firearms away from children in the home. While NEDS does not contain data about whether an injury was the result of a child having firearm access in the home, the most likely place a child can access a gun is in the home. A RAND survey of the evidence for CAP laws found that CAP laws may decrease the risk of unintentional injury and death in children.<sup>7</sup> Policymakers are urged to expand safe storage laws, which require that firearms be stored unloaded and locked, and CAP laws, which place liability on adults

who permit youth to have access to a firearm without supervision.

There are significant medical implications of our study. Our work is consistent with a large body of work investigating youth firearm injury<sup>8</sup> — and it is crystal clear that firearm-related injury is a significant issue for the youth population. Medical practitioners should make conversations about gun safety, including gun storage, part of routine medical care for any household with children. As firearm injury disproportionately impacts male youth, male youth especially should be targeted for education. Households with handgun ownership and youth should also be a focus for targeted intervention and education. This is particularly urgent as approximately 4.6 million youth live in homes in which at least one firearm is loaded and not locked in secure storage.<sup>9</sup> Given the over 190,000 emergency department visits for firearm injury for youth age < 21, the NIH should consider firearm injury for targeted research and interventions as well.

There are several limitations of our analysis. First, the National Emergency Department Sample provides estimates of patients who presented to an emergency department but does not include patients who die from injury and therefore do not present to the emergency department. Therefore, our study undercounts the number of youth firearm-related death and injury. Second, the NEDS data represents administrative data and not direct evaluation of written medical records. Misclassification of the cause of emergency room visits is therefore possible (e.g., within the “type of firearm” category, “other” likely includes some handgun and shotgun injuries due to data entry errors). Third, NEDS does not include data on the identity of who shot the firearm (e.g., a family member), where the injury took place (e.g., in the home), or race of the patient. Access to this information would allow better tailored policy recommendations. Fourth, while similar trends in death rate amongst age categories were seen when comparing the death rates in the NEDS data to CDC data, comparing different datasets presented with additional limitations. Though uncommon, some people may visit the ER multiple times and others do not present to the ER before dying. Lethal injuries that do not present to the ED are not accounted for in the NEDS dataset and therefore it is difficult to compare trends between the two datasets.

Finally, it is important to acknowledge similarities and differences in results between our analysis and those which have used other data sources, such as National Electronic Injury Surveillance System (NEISS),<sup>10</sup> the National Hospital Ambulatory Medical Care Survey,<sup>11</sup> and CDC data. The NEISS, sponsored



by the National Center for Injury Prevention and Control of the Center for Disease Control and the US Consumer Product Safety Commission, samples from around 100 hospitals out of the 5000+ US hospitals with EDs. The NEISS collects data through information entered by an ED staff member and also conducts phone calls and on-site interviews. In a report in the journal *Pediatrics*, Fowler et al.<sup>12</sup> reported only a fraction of deaths compared to the number that our study estimates. This difference stems from our inclusion of patients aged 18-20 as “youth,” whereas Fowler et al. included patients aged 0-17. We felt that it was important to include these patients aged 18-20 who, though legally adults, are often included as “youth” in epidemiologic studies. Furthermore, we felt that including these patients would more accurately reveal the breadth of injury caused by firearms. In a study whose results are more similar to ours, Srinivasan et al.<sup>13</sup> used National Hospital Ambulatory Medical Care Survey (NHAMCS) data to estimate firearm injury for patients aged 0-19 years. Finally, CDC data indicates almost 6-fold more deaths than our study estimates (58,932 deaths in CDC vs. 11,909 deaths in NEDS). This is likely due to the lethal nature of many firearms injuries, causing death before presentation to ED is possible. We believe it is likely that our evaluation of the NEDS dataset greatly underestimates the morbidity and mortality from firearms injury in the US.

## Conclusion

Youth firearm injury is a significant public health problem. If no action is taken and rates of firearms injuries continue at the same rate, then over a hundred thousand youth will likely present to the ED with a firearm injury over the coming decade and more than 10,000 youth will die. Male youth, youth in the South, and youth in environments with handguns — as opposed to shotguns — are particularly at risk for injury. Children aged 0-4 are at highest risk of death if they experience a firearm injury. The extensive burden of firearm injury on youth underscores the need for better policy to protect children in the United States. The federal minimum age should be raised to 21 for handgun purchase from all sellers (not just from federally licensed dealers), and safe storage and CAP laws

should be expanded. With better data on who obtained the firearm, the location of the injury, and who fired the weapon, these policies could be more targeted. Further study and intervention to address this youth public health crisis is absolutely critical.

## Editor’s Note

Supplemental tables and figures can be found online.

## Note

Authors Lee and Camp contributed equally. The authors do not have any conflicts of interest to disclose.

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# Emergency Department Visits for Firearm-Related Injuries among Youth in the United States, 2006–2015

Victor Lee, Catherine Camp, Vikram Jairam, Henry S. Park, and James B. Yu

## APPENDIX Supplemental Tables

Supplemental Table 1

### E-Codes Used to Identify Patients in the NEDS Database That Presented to the ED for Firearm-Related Injury

	Handgun	Shotgun	Hunting Rifle	Military Rifle	Other	Unspecified
<b>Unintentional</b>	E922.0	E922.1	E922.2	E922.3	E922.8	E922.9
<b>Suicide/Self-inflicted Injury</b>	E955.0	E955.1	E955.2	E955.3	E955.4	
<b>Assault</b>	E965.0	E965.1	E965.2	E965.3	E965.4	
<b>Legal Intervention</b>						E970
<b>Undetermined Event</b>	E985.0	E985.1	E985.2	E985.3	E985.4	

Supplemental Table 2

### Overall Death Rate from NEDS Data for Different Age Groups by Cause of Injury for the Years 2005-2016

Cause of Injury	Age Category					Total
	0-4	5-9	10-14	15-17	18-20	
<b>Unintentional</b>	13.7%	5.6%	3.0%	3.2%	2.0%	2.9%
<b>Suicide &amp; Self Inflicted</b>	0.0%	25.9%	79.9%	89.6%	90.0%	89.2%
<b>Assault</b>	42.6%	43.0%	21.8%	32.9%	28.5%	30.0%
<b>Legal Intervention</b>	3.0%	0.0%	4.7%	20.7%	29.1%	24.5%
<b>Undetermined</b>	13.5%	8.1%	6.7%	5.6%	4.4%	5.1%
<b>Total</b>	25.2%	18.0%	16.0%	29.5%	27.1%	

Supplemental Table 3

### CDC Data on Firearm Death Rates from CDC WONDER Database, for Years 2006-2015

Age Group	Population	Crude rate per 100,000	Deaths
<b>&lt; 1 year</b>	79,395,694	0.3	204
<b>1-4 years</b>	317,210,466	0.4	1,384
<b>5-9 years</b>	402,702,690	0.4	1,457
<b>10-14 years</b>	416,534,314	1.3	5,448
<b>15-19 years</b>	424,775,775	11.9	50,439
<b>Total</b>	<b>1,640,618,939</b>	<b>3.6</b>	<b>58,932</b>

ICD-10 cause of death codes for Unintentional injury (W32,W33,W34), Suicide (X72, X73, X74), Homicide (X93, X94, X95), Undetermined (Y22, Y23, Y24), and Legal Intervention / Operations of War (Y35.0, Y36.4) were used to classify injury intent. Crude rate per 100,000 was calculated by CDC WONDER. (<http://wonder.cdc.gov>)

# APPENDIX

## Supplemental Tables (continued)

Supplemental Table 3b

### CDC Data on Firearm Death Rates From CDC WONDER Database, for Years 2006-2015

Age Group	Injury Intent	Population	Crude rate per 100,000	Deaths
<b>&lt; 1 year</b>	Unintentional	79,395,694	0	23
	Homicide	79,395,694	0.2	178
	Undetermined	79,395,694	Unreliable	2
	Legal Intervention / Operations of War	79,395,694	Unreliable	1
	<b>Total</b>	<b>79,395,694</b>	<b>0.3</b>	<b>204</b>
<b>1-4 years</b>	Unintentional	317,210,466	0.1	408
	Homicide	317,210,466	0.3	930
	Undetermined	317,210,466	0	46
	<b>Total</b>	<b>317,210,466</b>	<b>0.4</b>	<b>1,384</b>
<b>5-9 years</b>	Unintentional	402,702,690	0.1	282
	Suicide	402,702,690	Unreliable	8
	Homicide	402,702,690	0.3	1,126
	Undetermined	402,702,690	0	41
	<b>Total</b>	<b>402,702,690</b>	<b>0.4</b>	<b>1,457</b>
<b>10-14 years</b>	Unintentional	416,534,314	0.1	566
	Suicide	416,534,314	0.5	2,106
	Homicide	416,534,314	0.6	2,602
	Undetermined	416,534,314	0	155
	Legal Intervention / Operations of War	416,534,314	Unreliable	19
	<b>Total</b>	<b>416,534,314</b>	<b>1.3</b>	<b>5,448</b>
<b>15-19 years</b>	Unintentional	424,775,775	0.4	1,532
	Suicide	424,775,775	3.8	16,180
	Homicide	424,775,775	7.4	31,621
	Undetermined	424,775,775	0.1	621
	Legal Intervention / Operations of War	424,775,775	0.1	485
	<b>Total</b>	<b>424,775,775</b>	<b>11.9</b>	<b>50,439</b>
<b>Total</b>		<b>1,640,618,939</b>	<b>3.6</b>	<b>58,932</b>

Firearm injury intent was classified by website menu option. Crude rate per 100,000 was calculated by CDC WONDER. (<http://wonder.cdc.gov>)

## APPENDIX

### Supplemental Tables (continued)

Supplemental Table 4

**Gun-Related ED Visits from 2006-2015 per 100,000 Children Each Year Using 2018 American Community Survey Data**

Year	0-4	5-9	10-14	15-17	18-20	Total
2006	1.1	1.5	8.3	70.8	160.5	30.9
2007	1.3	2.2	7.4	64.4	157.0	29.5
2008	1.4	2.0	7.4	60.6	163.0	29.6
2009	1.6	1.8	6.8	53.6	136.3	25.5
2010	1.3	1.5	6.0	46.9	135.8	24.0
2011	1.9	1.6	5.6	40.2	122.1	21.6
2012	1.8	1.9	7.2	40.8	134.9	23.5
2013	1.3	1.4	5.1	31.1	102.8	17.8
2014	1.6	1.9	5.8	43.8	123.6	22.3
2015	1.1	1.7	5.2	33.2	92.1	17.0

# The Walmart Effect: Testing Private Interventions to Reduce Gun Suicide

*Ian Ayres, Zachary Shelley, and Fredrick E. Vars*

## Introduction

After the Parkland massacre in 2018, some large retailers voluntarily restricted their own gun sales. Dick's Sporting Goods has removed all guns from over 100 stores and pledged to remove them from hundreds more locations.<sup>1</sup> Walmart has been especially pro-active in its efforts to responsibly market firearms over the past three decades — instituting a number of self-imposed restrictions, including a refusal to sell handguns, military assault rifles, high capacity magazines, and bump stocks, as well as videotaping firearm sales, “allowing only select associates who have passed a criminal background check to sell firearms,” and refusing to sell to people younger than 21 years old.<sup>2</sup>

The question looms: can corporate policies reduce the toll of gun violence?

It is too early to empirically assess post-Parkland events, but there is a long history of corporate policy changes in gun sales. Despite all of its restrictions on firearms sales, Walmart is the largest gun retailer in the country.<sup>A1</sup> In 1994, Walmart stopped selling handguns at all of its locations in every state except for Alaska. In 2006, Walmart stopped selling firearms altogether in more than half of its stores. As shown in Figure 1, the number of Walmart Federal Firearm Licensees (FFLs) dropped from 2,900 to less than

1,300 for several years before the company reversed course in 2011 and began increasing the number of stores selling rifles and shotguns.

This article estimates the impact of these policy changes on firearm suicide and homicide. In the sections that follow, we split our analysis between the 1994 handgun policy change and the 2006 and later rifle and shotgun policy changes.

One reason for skepticism about the possible impact of voluntary corporate supply restrictions is that the United States is awash with gun dealers. There are more than 62,000 FFLs — more than the number of grocery stores or pharmacies.<sup>A2</sup> But not all FFLs are equal. Walmart is a particularly powerful marketing force. In any given month, more than two-thirds of Americans will visit a Walmart store.<sup>A3</sup> The elimination of a major marketer of firearms may have increased the search and effort costs of acquiring a weapon — forcing people to travel farther to find the next FFL. Walmart may have even been the only place some consumers knew they could purchase weapons. At Walmart, consumers could purchase a weapon from a trusted supplier at the same time as they shop for other household goods, instead of making a one-off trip to a specialized gun shop. The marketing restrictions of big-box retailers might not only directly reduce the supply of firearms but might also reduce the salience and normality of gun-purchasing. Walmart's FFL marketing restrictions made guns less a part of everyday life. Walmart's decisions not to sell firearms is unlikely to impact collectors or recreational hunting enthusiasts or most of the estimated two-thirds of gun owners that own multiple firearms.<sup>A4</sup> However, marketing restrictions by major retailers might be effective at reducing gun suicide by poten-

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tial victims who are not as well-informed about, or as comfortable patronizing, other firearms suppliers.

Another reason for skepticism about the possible impact of marketing restrictions on suicide is that many gun suicides are accomplished with firearms that were purchased by someone other than the person committing suicide and were purchased years in advance. One study found a median period of more than 10 years between purchase and use in suicide.<sup>3</sup> We note, however, that around 14% of firearms suicides by handgun owners occur within 30 days of the victim acquiring a handgun.<sup>4</sup> In addition, since Walmart's policy change may, for the reasons discussed above, reduce gun ownership on the margin, we expect that any effect from Walmart's market restrictions would become more pronounced after a number of years.

We find that Walmart's 1994 decision to stop selling handguns reduced firearms suicides without increasing non-firearms suicides. From 1994 to 2005, across a number of difference-in-difference specifications and after controlling for a variety of legal, social and demographic variables as well as county and time fixed effects, counties with Walmarts robustly experienced a 3.3 to 7.5% reduction in the suicide rate. This represents an estimate of at least 5,104 lives saved (425 per year). During this period, we find no corresponding increase in non-firearms suicides — suggesting that

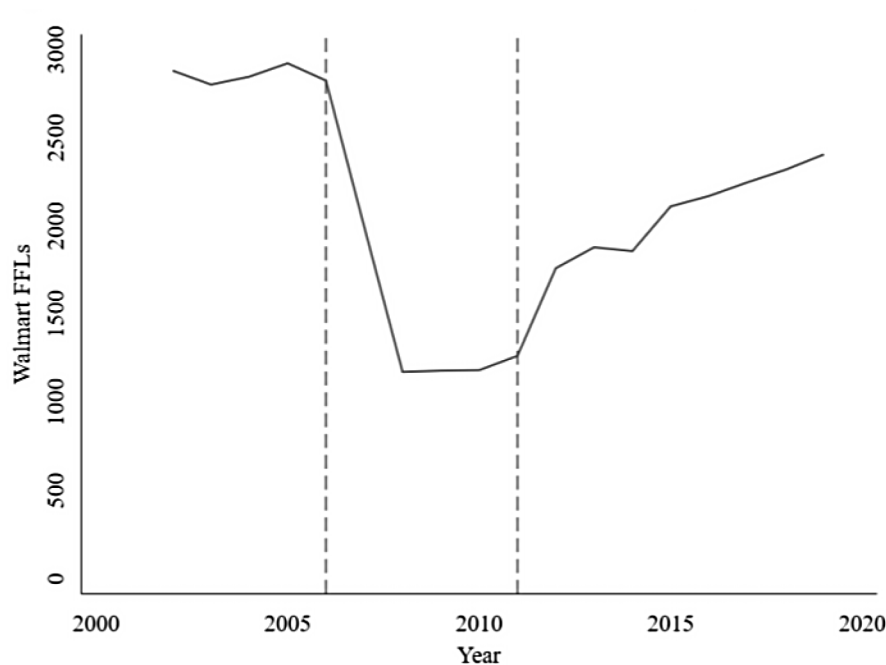
the people who, but for the 1994 policy, would have killed themselves with a gun, were not substituting to other lethal means. Using the same framework, we find no effect of the policy change on homicide rates. In contrast, Walmart's 2006 and 2011 decisions to discontinue and subsequently resume the sale of rifles and shotguns in many of its stores, taken as a whole, was not associated with robustly measured changes in homicide or suicide rates. In an intensity of treatment analysis, we do find evidence that Walmart's 2006 decision to reduce the number of its stores that sold firearms caused a statistically significant reduction in the suicide rate for counties in which Walmart did not subsequently resume firearms sales.

### Literature

In 2017, 47,173 people in the United States died by suicide, over half by firearm as has been true over the past two decades, and another 14,542 individuals were victims of firearms homicide.<sup>5</sup> Restricting access to firearms has been shown to reduce overall suicide, not merely to shift people to a different method.<sup>6</sup> One recent study found that having fewer licensed gun dealers in a county is associated with lower suicide rates.<sup>5</sup> Even if a person substitutes to another method of attempting suicide, the most common alternatives are far less lethal than guns.

Figure 1

### Variation in the Number of Walmart FFLs, 2002-2019



Source: ATF FFL Listings.

Most studies of the effect of policy on firearms suicide have focused on the effects of gun control laws. There is evidence that mandatory waiting periods and some other forms of firearms laws can reduce suicide rates.<sup>6</sup> By preventing access to firearms owned by family members, safe storage laws can reduce suicides, particularly among adolescents.<sup>A7</sup> Strengthening background checks can also reduce suicides, again by introducing barriers to easy access.<sup>7</sup>

State gun laws are an important control variable in estimating the effect of Walmart's policy changes, but state gun laws are of separate interest for comparing the effectiveness of private and public gun control. Studies examining individual policies are numerous and their findings are mixed.<sup>A8</sup> Studies examining the overall strictness or laxity of gun regulation generally find that suicide rates are lower where gun laws are more restrictive.<sup>8</sup>

As for homicide, previous studies have found that background checks, child access prevention laws, prohibitions, waiting periods, and policies restricting right to carry can all reduce violent crime.<sup>A9</sup> These policies may decrease homicides by preventing impulsive purchase and use of a firearm or by decreasing firearm ownership at the margin and thus limiting the availability of guns for use in crime (either by the gun owner or by individuals that steal firearms for use in crime). However, we note that many, if not a majority, of firearms used in crime travel across state or county lines, as is the case in Chicago.<sup>A10</sup> Due to these spillover effects, measuring the impact of county-level firearms supply shocks on crime may be significantly more difficult than measuring the effect on suicide.

Our study builds upon this literature, investigating the ability of private corporations, rather than state actors, to impact firearms suicide rates. Since suicidal impulses are so often fleeting, even short delay periods before purchasing a firearm can save many lives.<sup>A11</sup> Walmart's policy change reduced the total number of FFLs, increasing the average travel time to the nearest FFL. Because the time between forming a suicide plan and acting on one is often a matter of minutes, having to drive an hour to the nearest gun store could be a real deterrent. Similarly, delaying purchase of a firearm by even this short period may prevent homicides in which a person impulsively purchases a firearm.

Reducing the number of FFLs may also decrease gun ownership by increasing the effort required to purchase a firearm. Presence of a firearm in the home significantly increases the probability of suicide.<sup>12</sup> Decreasing the number of firearm owners would mitigate this risk, as people would be pushed

away from this most lethal method of attempting suicide. Decreased ownership of firearms may also decrease homicides by the same mechanism or by reducing the ease by which a criminal could steal a firearm for use in homicide.

There are reasons to think the loss of just one gun retailer could similarly reduce suicide and homicide, particularly if that retailer has a significant market share or is highly visible in the area. Walmart fits the bill on both counts. Walmart stopped selling handguns in 1994 and all guns in many locations in 2006, providing two opportunities to test the impact of a large, well-known gun dealer leaving the market. We test the impact of each policy change. Because roughly 75% of suicides and 86% of crimes committed with firearms involve handguns,<sup>A13</sup> we hypothesize a greater impact from the 1994 handgun policy shift.

### Identification Strategy

We aim to measure the causal impact that Walmart's voluntary corporate decisions about firearms sales had on firearms suicide and homicide rates. Accordingly, our main outcomes of interest are the county-level firearms suicide rate and county-level firearms homicide rate. By using all non-firearms suicides as an alternative outcome variable, we attempt to determine whether individuals substituted from firearms to other methods of suicide.

To determine the causal impact of each of Walmart's policy changes, we implement a Difference-in-Differences (DiD) framework comparing firearm suicide and homicide rates in counties that had Walmarts to counties that did not before and after the policy change.

Counties that had a Walmart that sold handguns in 1993 experienced a negative shock to the supply of firearms when Walmart stopped selling handguns in 1994, while those counties without Walmarts did not experience the shock. This supply shock could result in decreased availability and ownership of handguns, as well as increase the difficulty of acquiring a handgun for use in suicide or homicide. Evidence suggests that most guns used in suicides are owned by the individual who commits suicide or a person within their family.<sup>9</sup> We therefore expect that the impact of a decrease in local firearm supply will have primarily local effects on suicide. Still, there may be some spillover effects to nearby counties, which would attenuate our results. As noted above, we expect significant spillover effects with respect to homicide since firearms used in crime typically travel across state or county lines.

To implement the DiD strategy, we estimate the following equation:

$$Y_{ct} = \beta(I_w^{walmart} \cdot I_t^{post}) + \gamma I_t^{post} + \rho I_w^{walmart} + \alpha_c + X_{ct} + \epsilon_{ct}$$

Where  $Y$  is the county firearm suicide or homicide rate,  $c$  represents the county,  $t$  is the year of observation, and  $w$  indicates whether a county had a Walmart in 1993.  $I_w^{walmart}$  and  $I_t^{post}$  are dummy variables for counties with at least one Walmart in 1993 and post-1993 observations, respectively, and  $\alpha$  is a county fixed effect.  $X_{wct}$  is a vector of the time-varying controls described below. When estimating this equation, we cluster standard errors at the county level.

Here,  $\beta$  is the post-1993 change in firearm suicide or homicide rates for counties that had at least one Walmart in 1993 relative to those that did not have any Walmarts at the end of 1993, controlling for overall trends in suicide rates, time-invariant differences in suicide rates between counties with and without Walmarts, and the time varying controls contained in  $X_{wct}$ . If gun suicides or homicides decreased in counties that had Walmarts at the end of 1993 relative to those that did not, we should measure a  $\beta$  value of less than zero.

The 1994 policy change was announced at the end of 1993, so we define the pre-policy period as 1989-1993.<sup>A14</sup> The post-policy period is set as 1994-2005 (just prior to Walmart's next significant policy change). Here, it is important to have as many years as possible in the post-policy period because decreasing the supply of guns and limiting gun purchases now may prevent suicides and homicides both now and in the future — while some percentage of firearms are bought and immediately used for suicide, the median time between purchase and use in suicide is 11 years and the average time between purchase and use in crime is 9 years.<sup>A15</sup>

The same logic described above in reference to the 1994 policy change also applies to counties in which Walmart ceased the sale of all firearms in 2006. However, since Walmart no longer sold handguns outside of Alaska, this should only affect the availability of long guns. Since long guns are used in only around 25% of all suicides, 8% of all homicides and in 2006 there was only a decrease in Walmart FFLs of 59%, we expect that this effect should be significantly smaller (and more difficult to detect) than any effect measured for the 1994 policy change.<sup>A16</sup>

For the 2006 policy change, the pre-policy period is defined as 1996-2005. Since the policy was implemented in the middle of 2006, we exclude this year from the analysis as it is neither fully treated nor fully untreated. Consequently, we define the post-policy period as 2007-2016 (the last year for which mortality

data is available). While Walmart reduced the number of stores operating as FFLs in 2006, the company began expanding the number of its store that sold firearms in 2011. This reversal reduces the intensity of treatment for some counties, so we include two intensities of treatment analyses to complement our main difference-in-differences results.

We note that while suicide and homicide rates have varied significantly over the past three decades, as long as our parallel trends assumption holds (*see* discussion below), the difference-in-differences framework should correctly measure the true treatment effect of Walmart's policy change.

To test for heterogeneous treatment effects, we employ the same framework as above, with the addition of interaction terms, as described in the Appendix.

Our difference-in-differences framework described above relies on the parallel trends assumption. That is, trends in suicide rates in counties that had Walmarts prior to the policy changes were parallel to those in counties without Walmarts and, in the absence of Walmart's policy change, would have remained so. If this is not the case, then the estimated coefficients may simply be picking up on pre-existing trends and not a break from the pre-policy dynamic. To test this assumption, Online Appendix Figure 1 plots the treatment effect for each year of the 1994 analysis. Prior to the policy change, there should be no measured treatment effect and, indeed, there are no significant coefficients prior to the policy's enactment. A joint test of significance finds no evidence that the total pre-policy effect differs from zero. However, we do find evidence for some specifications that the pre-policy year treatment effects are not jointly all equal. Additional tests of the parallel trends assumption (including synthetic controls analysis) are discussed in the Online Appendix.

## Data

Data on county-level suicide and homicide rates come from the Center for Disease Control (CDC) Compressed Mortality Files. This dataset provides population, firearms suicides, firearms homicides, non-firearms suicides and non-firearm homicides data at the county level from 1989-2016.<sup>A17</sup>

As a proxy for whether a county was affected by Walmart's 1994 policy change, we use whether Walmart had operated any stores in a given county by 1993.<sup>10</sup> Some of these stores may have closed by the end of the treatment period, and not all of these stores necessarily sold handguns prior to 1994, but these data provide the best available proxy for whether a county contained a Walmart that sold handguns prior



Table 1

**Estimates of Walmart’s Decision to Stop Selling Handguns on Suicide Rates, 1989-2005**

	(1)	(2)	(3)	(4)	(5)
	Firearms Suicide Rate - Had Walmart - No County FE - No Controls	Firearms Suicide Rate - Had Walmart - No County FE - With Controls	Firearms Suicide Rate - Had Walmart - County FE - No Controls	Firearms Suicide Rate - Had Walmart - County FE - With Controls	Non-Firearms Suicide Rate - Had Walmart - County FE - Controls
After 1993 x Had Walmart FFL in 1993	-0.525*** (-5.77)	-0.495*** (-3.77)	-0.525*** (-5.77)	-0.224*** (-2.73)	0.104 (1.27)
Number of state gun laws		-0.0728*** (-11.66)		-0.00118 (-0.29)	0.00466 (1.16)
N	53,193	45,408	53,193	45,408	45,408
Outcome	Firearms Suicide Rate	Firearms Suicide Rate	Firearms Suicide Rate	Firearms Suicide Rate	Non-Firearms Suicide Rate
County FE	No	No	Yes	Yes	Yes
Controls	No	Yes	No	Yes	Yes

t statistics in parentheses

\* p < 10%, \*\* p < 5%, \*\*\* p < 1%.

to 1994 (and thus was affected by Walmart’s 1994 policy change). This dataset does not include stores operated in Alaska or Hawaii, so these states are excluded from the analysis of the 1994 policy change.

For Walmart’s 2006 decision not to sell firearms in some stores, we use Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) FFL listings to determine whether a given county had a Walmart FFL in January 2006 (prior to the policy change, which was announced in April 2006).<sup>A18</sup> Using these same data, we also observe whether a county lost a Walmart FFL once the policy went into place.

In addition to the main treatment variables described above, we use separate control variables in some of our regressions, including county population density, county unemployment rate, the share of counties’ population that are (separately) veterans, white, black, age 20–64, age 65 or older, male, Hispanic, and living below the poverty line.<sup>11</sup> As a crude measure of state law, we use an index from Everytown for Gun Safety that tracks the number of gun control laws in a given state and year. Finally, following Steelesmith, we use Census County Business Patterns data to construct a measure of social capital based on the number of recreational, personal service, religious and civil organizations per 100,000 residents. Sources for additional controls used in robustness checks are described in Appendix.

For each analysis, we filter to counties that appear in the mortality data in each year of that analysis (1989–2005 for 1994 and 1996–2016 for 2006). This amounts to 3,129 counties in the 1994 analysis and 3,134 counties in the 2006 analysis. For regressions that contain controls, we only include counties that have controls data for all years (1990–2005 for 1994 and 1996–2016 for 2006). This amounts to 2,838 counties in the 1994 analysis and 3,089 counties in the 2006 analysis.

**Results**

*1994 Treatment Estimates*

Table 1 reports the core results of our difference-in-difference analysis concerning Walmart’s discontinuation of handgun sales (with full regression estimates reported in Online Appendix Table 1). Specifications 1-4 show the four possible permutations of including or excluding county-fixed effects and the 14 control variables described above. For example, Specification 1 excludes both county fixed effects and the control variables — but includes uninteracted dummy variables indicating whether the county had a Walmart in 1993 and whether the observation was after the policy took effect. Table 1 reports our estimates of the variable of interest (the interaction between these two indicator variables) which represents the policy’s treatment effect on suicide rates. We find for 1994–2005 that counties that had a Walmart in 1993 experienced 0.525 fewer suicides per 100,000 residents than did counties in those years which didn’t start off having a Walmart and this estimate is highly significant (p. < 1%). This estimate represents a 7.5% reduction from the baseline rate weighted average rate of 7.82 suicides per 100,000 residents that these counties experienced in the years before the policy took effect. The reduction translates annually to 998 lives saved in these counties or almost 12,000 lives saved for the 12 years estimated.

Specification 2 reruns the same regression, but adds the additional control variables discussed above. The figure shows that the estimated treatment effect of the policy remains substantial (0.485 fewer suicides per 100k) and statistically significant. The figure shows that the Everytown Gun Control Law index was estimated to be correlated with reductions in the county suicide rate and is also highly significant (p. < 1%). While this measure of gun control laws is less well-identified than our DiD estimate of Walmart policy

change, our estimated coefficient implies that a one-standard deviation increase in this gun law index is associated with 0.884 fewer suicides per 100k. To save space, we report the remaining control coefficients in the Online Appendix.

Specification 3 of Table 1 excludes the control variables of the second specification and instead estimates more than 3,000 county fixed effects. Even after estimating county-specific suicide tendencies, we still find that counties that had a Walmart in 1993 experienced 0.525 fewer suicides per 100,000 residents than did counties in those years which didn't start off with a Walmart. This estimate remains highly significant ( $p < 1\%$ ).

Specification 4 combines both the time-variant controls and the county-fixed effects and continues to estimate a highly significant suicide reduction of 0.234 suicides per 100k residents ( $p < 1\%$ ). This somewhat smaller treatment effect translates to 425 lives saved in these counties annually — or more than 5,100 lives saved cumulatively for the 12 years estimated. The figure also shows that in this specification,

the Everytown Gun Control Index is no longer significant, but this result might simply be an artifact of the tendency of the index to be highly collinear with the county-fixed effects. This collinearity should decrease the precision of our estimate of the effect of gun laws on gun suicide rates, but should not affect the estimate of our main treatment effect.

Finally, Specification 5 provides evidence that Walmart policy did not cause an increase in non-gun suicides. This specification regresses the non-firearm suicide rate onto the same controls used in Specification 4 and finds that the Walmart policy caused no significant change. Stepping back, Table 1 provides evidence that Walmart's decision to eliminate handgun sales had a substantial and statistically significant impact in reducing the suicide rate, saving between 425 and 998 lives each year, without causing an increase in non-firearms suicides.

To ensure that pre-existing trends are not driving our results, we also conduct a synthetic control analysis, which finds that counties with a Walmart experienced an average reduction of 0.339 suicides

Table 2

### Heterogeneous Treatment Effects for Walmart's 1994 Decision to Stop Selling Handguns, 1990-2005

Outcome	Firearms Suicide Rate	Firearms Suicide Rate
Total effect on rural counties	0.341	1.295
Total effect on small metropolitan/micropolitan counties	-0.362***	-0.158
Total effect on large metropolitan counties	-0.738***	-0.415***
Total effect on counties in bottom tercile of social capital	-0.663***	-0.369**
Total effect on counties in middle tercile of social capital	-0.555***	-0.252**
Total effect on counties in top tercile of social capital	-0.217	-0.117
Total effect on counties in states with fewest gun laws	-0.585***	-0.082
Total effect on counties in middle tercile of social capital	-0.432**	-0.573***
Total effect on counties in states with most gun laws	-0.486***	-0.191*
No state handgun waiting period from 1994-2005	-0.529***	-0.327***
Had state handgun waiting period for some years from 1994-2005	-0.220	-0.358*
Had state handgun waiting period for all years from 1994-2005	-0.485***	-0.139
N	53,193	48,512
County FE	Yes	Yes
Controls	No	Yes

Note: \*  $p < 10\%$ , \*\*  $p < 5\%$ , \*\*\*  $p < 1\%$

per 100,000 residents after Walmart ended handgun sales. Synthetic controls results are presented in full in the Appendix.

While we find that Walmart’s policy change did have an impact on firearms suicide rates, we find no effect of the policy on either firearm homicide rates or non-firearm homicide rates. Online Appendix Table 3 presents our full estimates of the 1994 policy change on homicide rates.

*1994 Heterogeneous Treatment Estimates*

We next explore whether these estimated treatment effects of Walmart’s 1994 policy varied across different types of counties. Table 2 shows the results from specifications featuring county fixed effects (analogous to Specifications 3 and 4 in Table 1) that interact the DiD treatment effects with dummy variables indicating a county’s population type, social capital type, and the number of its gun laws. The figure shows the largest treatment effects are for large metropolitan counties.

For example, in the first specification (with county fixed effects and no controls), the treatment effect for large metropolitan counties is estimated to be -0.738 suicides per 100k residents ( $p < 1\%$ ), while the treatment effect for rural counties is not statistically distinguishable from 0. This may be due to the fact that, at least among adolescents, handguns are used in a larger proportion of suicides in metropolitan areas than they are in rural areas.<sup>A19</sup>

Table 2 also estimates that counties in the lowest tercile of social capital experienced the largest benefit from Walmart’s 1994 policy change. For example, in the first specification, the treatment effect for the third of counties with the lowest social capital measures is estimated to be 0.741 lives saved per 100k residents, while the treatment effect for the third of counties with the highest social capital measures is not statistically distinguishable from 0.

Somewhat analogously, counties with weaker gun control laws may create more opportunities for

Table 3

**Estimates of Walmart’s Decision to Stop Selling Rifles & Shotguns in Some Stores on Firearm Suicide Rates, 1996-2016**

	(1)	(2)	(3)	(4)	(5)
	Firearms Suicide Rate - Lost Walmart - No County FE - No Controls	Firearms Suicide Rate - Lost Walmart - No County FE - With Controls	Firearms Suicide Rate - Lost Walmart - County FE - No Controls	Firearms Suicide Rate - Lost Walmart - County FE - With Controls	Non-Firearms Suicide Rate - Lost Walmart - County FE - With Controls
After 2006 x Lost Walmart FFL	-0.547*** (-5.19)	-0.172 (-1.64)	-0.547*** (-5.19)	-0.0722 (-0.82)	-0.121 (-1.48)
Number of state gun laws		-0.0833*** (-13.93)		-0.00581 (-1.34)	0.0116** (2.33)
N	34,600	34,400	34,600	34,400	34,400
Outcome	Firearms Suicide Rate	Firearms Suicide Rate	Firearms Suicide Rate	Firearms Suicide Rate	Non-Firearms Suicide Rate
County FE	No	No	Yes	Yes	Yes
Controls	No	Yes	No	Yes	Yes

t statistics in parentheses  
\*  $p < 10\%$ , \*\*  $p < 5\%$ , \*\*\*  $p < 1\%$ .

Table 4

**Intensity of Treatment Estimates of Walmart’s Decision to Stop Selling Rifles & Shotguns in Some Stores on Suicide Rates, 1996-2016**

	(1)	(2)	(3)	(4)	(5)
	Firearms Suicide Rate - No County FE - No Controls - Continuous Years	Firearms Suicide Rate - No County FE - With Controls - Continuous Years	Firearms Suicide Rate - County FE - No Controls - Continuous Years	Firearms Suicide Rate - County FE - With Controls - Continuous Years	Non-Firearms Suicide Rate - County FE - With Controls - Continuous Years
After 2006 x No. of years from 2007-2016 that county had fewer Walmart FFLs than in 2006	-0.0856*** (-7.27)	-0.0385*** (-3.28)	-0.0856*** (-7.27)	-0.0220** (-2.42)	-0.0287*** (-3.20)
Number of state gun laws		-0.0808*** (-14.00)		-0.00587 (-1.36)	0.0115** (2.32)
N	34,600	34,400	34,600	34,400	34,400
Outcome	Firearms Suicide Rate	Firearms Suicide Rate	Firearms Suicide Rate	Firearms Suicide Rate	Non-Firearms Suicide Rate
County FE	No	No	Yes	Yes	Yes
Controls	No	Yes	No	Yes	Yes

t statistics in parentheses  
\*  $p < 10\%$ , \*\*  $p < 5\%$ , \*\*\*  $p < 1\%$ .

Walmart's supply restriction to have an impact. Table 2 provides some support for this conjecture. In Column (1) of Table 2, counties with the lowest tercile of the gun laws were estimated to have a the largest treatment effect of 0.585 lives saved per 100k residents, compared with a treatment effect of 0.486 lives saved in counties with the highest number of gun laws (however, possibly because of the collinearity between county fixed effects and several of the additional control variables, this estimated effect is not distinguishable from zero in Column (2)).

Overall, the results reported in Table 3, as well as those reported in Online Appendix Table 5, suggest that there is not robust evidence that Walmart's policy changes in 2006 and 2011, taken as a whole, reduced the suicide rate. The absence of an effect on suicide might be due to the fact that suicide by rifle is less prevalent than suicide by handgun, or because the Walmart policy of ending long gun sales in some of its stores was not maintained for a sufficient number of years in a sufficient number of stores to have a measurable impact.

To determine whether Walmart's 2006 policy change had an effect on suicide rates in counties that

This article suggests that Walmart's decision to suspend handgun sales at all of its 1,975 stores in 1994 was responsible for preventing between 500-1,000 gun suicides annually. We also find evidence, albeit less robust, that Walmart's later decision to end rifle and shotgun sales at some of its stores reduced the firearms suicide rate in counties in which Walmart did not subsequently reverse course. And while our identification strategy for investigating the causal effect of state gun laws is not as well identified, we join a host of other studies finding that stronger gun control laws are associated with substantial and statistically significant reductions in suicide as well.

#### *2006 Treatment Estimates*

Finally, to estimate the impacts of Walmart's 2006 decision to discontinue rifle and shotgun sales at over half of its stores and its subsequent decision to expand the number of its stores selling firearms, Table 3 reports DiD treatment estimates analogous to the specifications we used to estimate the 1994 treatment effects in Table 1. In Specification (1), which excludes both county fixed effects and our other controls, we find for 2007-2010 that counties that lost a Walmart FFL in 2006 experienced 0.547 fewer suicides per 100,000 residents than did counties in those years that had, but did not lose, a Walmart FFL ( $p. < 1\%$ ). However, only two of the four specifications in Table 3 find a statistically significant reduction on suicides associated with Walmart's 2006 policy change, as the effect disappears when control variables are included. Specification (2) estimates that the policy caused a reduction in the suicide rate of 0.172 suicides per 100k residents ( $p. > 10\%$ ). This specification gives us our most reliable estimates of the impact of gun control laws — and again shows that the number of gun laws is associated with statistically significant reduction in the suicide rate similar in magnitude to the gun law effect found in Table 1 (-0.0833 vs. -0.0728).

experienced a reduction in Walmart FFLs for longer periods, we run several specifications replacing our binary treatment variable with a continuous measure of the number of years from 2007-2016 that a county had fewer Walmart FFLs than it did in 2006. Table 4 presents the results from these regressions, which are analogous to those presented in Figures 2 and 4. In each specification, we find that for each year that a county had fewer Walmart FFLs than it did in 2006, the county experienced a statistically significant ( $p. < 1\%$ ) decrease of between, on average, 0.0220 and 0.0856 suicides per 100,000 residents. However, we also find a statistically significant reduction in the non-firearms suicide rate ( $p. < 1\%$ ). We present additional intensity of treatment specifications that employ dummy variables for partial treatment and years of partial treatment in the Online Appendix.

Similar to the analysis of Walmart's 1994 decision, we do not find robust evidence that Walmart's 2006 and 2011 decisions on the number of stores selling rifles and shotguns had an effect on firearms homicide rates. A full set of results for the effect of Walmart's policy on firearms homicide rates can be found in Online Appendix Table 9.

## Limitations

This study is limited in part by the crude measure of gun controls used as a control variable. We do not investigate the effect of categories of gun laws and instead use an aggregate measure of the number of gun laws in a state. We are also limited by the fact that we do not measure whether counties that saw an increase in non-Walmart FFLs after Walmart's policy changes differed in their treatment effect from counties that did not see an increase in non-Walmart FFLs.

## Conclusion

This article suggests that Walmart's decision to suspend handgun sales at all of its 1,975 stores in 1994 was responsible for preventing between 500-1,000 gun suicides annually. We also find evidence, albeit less robust, that Walmart's later decision to end rifle and shotgun sales at some of its stores reduced the firearms suicide rate in counties in which Walmart did not subsequently reverse course. And while our identification strategy for investigating the causal effect of state gun laws is not as well identified, we join a host of other studies finding that stronger gun control laws are associated with substantial and statistically significant reductions in suicide as well.<sup>A20</sup>

The evidence that restricting the presence of FFLs can reduce gun suicide (without increasing non-gun suicide) also might suggest different forms of public intervention. While gun-control laws are often directed at who can buy, more attention might be paid to who can sell. For example, several major cities have used imposed zoning requirements that have substantially reduced the number of FFLs within their jurisdictions.<sup>12</sup> Simply imposing a local sales tax may cause FFLs to close or move beyond a city's limits — as was the case when Seattle implemented a tax on firearms and ammunition.<sup>A21</sup>

Our estimates underscore the possibility that private decisions can play an important role in mitigating the country's gun suicide crisis. Corporate leaders at other substantial retailers, such as Bass Pro Shops (which still sell handguns) and Dick's Sporting Goods (which has substantially reduced firearm sales), would do well to take note. Customers and employees of these companies would also be wise to leverage their influence to enact change.

## Editor's Note

Additional notes and other materials can be found in the Online Appendix.

## Note

The authors do not have any conflicts of interest to disclose.

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# The Walmart Effect: Testing Private Interventions to Reduce Gun Suicide

Ian Ayres, Zachary Shelley, and Fredrick E. Vars

## APPENDIX Tables and Figures

Appendix Table 1

### Full Estimates of Walmart's Decision to Stop Selling Handguns on Suicide Rates, 1989-2005

	(1)	(2)	(3)	(4)	(5)
	Firearms Suicide Rate - Had Walmart - No County FE - No Controls	Firearms Suicide Rate - Had Walmart - No County FE - With Controls	Firearms Suicide Rate - Had Walmart - County FE - No Controls	Firearms Suicide Rate - Had Walmart - County FE - With Controls	Non-Firearms Suicide Rate - Had Walmart - County FE - Controls
After 1993 x Had Walmart FFL in 1993	-0.525*** (-5.77)	-0.495*** (-3.77)	-0.525*** (-5.77)	-0.224*** (-2.73)	0.104 (1.27)
After 1993	-0.832*** (-14.01)	0.810*** (6.88)	-0.832*** (-14.01)	-0.137* (-1.82)	0.111 (1.49)
Had Walmart FFL in 1993	1.432*** (4.28)	0.801*** (3.71)			
Number of state gun laws		-0.0728*** (-11.66)		-0.00118 (-0.29)	0.00466 (1.16)
Unemployment rate		-10.02*** (-3.55)		-0.413 (-0.30)	5.845*** (4.29)
Population density (people per sq. mile)		-0.0000525*** (-3.06)		0.0000267 (1.55)	-0.0000941** (-2.22)
Social institutions per 100k residents		-0.000453 (-0.32)		-0.00138 (-1.50)	-0.00181* (-1.82)
Male (%)		54.49*** (8.55)		-3.661 (-0.56)	-2.197 (-0.33)
White (%)		1.444 (1.15)		6.416*** (2.89)	-3.252 (-1.34)
Black (%)		-3.008** (-2.32)		1.906 (0.71)	3.001 (0.86)
Hispanic (%)		-4.970*** (-6.82)		-20.11*** (-13.85)	0.983 (0.60)
People under poverty line (%)		29.90*** (17.16)		11.04*** (8.79)	4.179*** (2.78)
Veterans (%)		37.92*** (10.40)		-1.017 (-0.42)	10.55*** (3.96)
Age 20-64 (%)		-0.809 (-0.26)		-4.558 (-1.40)	34.29*** (10.31)
Age 65+ (%)		7.679*** (2.70)		-1.381 (-0.34)	23.23*** (5.81)
Constant	6.410*** (24.33)	-26.91*** (-7.16)	7.372*** (208.01)	7.031* (1.90)	-16.64*** (-3.82)
N	53,193	45,408	53,193	45,408	45,408
Outcome	Firearms Suicide Rate	Firearms Suicide Rate	Firearms Suicide Rate	Firearms Suicide Rate	Non-Firearms Suicide Rate
County FE	No	No	Yes	Yes	Yes
Controls	No	Yes	No	Yes	Yes

We note that the decrease in the interaction term coefficient in Specifications (2) and (4) relative to Specifications (1) and (3) appears to be driven at least in part by controlling for the share of each county's population that is white and Hispanic (separately). In the heterogeneous treatment effect regressions presented in Appendix Table 2, we include columns for change in the share of the population that is white and change in the share of population that is Hispanic (separately). We find that counties with the largest increase in Hispanic population share and largest decrease in white population share saw the largest reductions in suicide rates.

# APPENDIX

## Tables and Figures (continued)

Appendix Table 2

### Full Heterogeneous Treatment Effects for Walmart's 1994 Decision to Stop Selling Handguns, 1989-2005

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Urban/rural - had Walmart - no controls	Urban/rural - had Walmart - controls	Social capital - had Walmart - no controls	Social capital - had Walmart - controls	Gun laws - had Walmart - no controls	Gun laws - had Walmart - controls	Waiting periods - had Walmart - no controls	Waiting periods - had Walmart - controls	Change in white population - had Walmart - no controls	Change in white population - had Walmart - controls	Change in Hispanic population - had Walmart - no controls	Change in Hispanic population - had Walmart - controls
After 1993 x Had Walmart FFL in 1993	-0.362*** (-3.18)	-0.158 (-1.33)	-0.555*** (-3.84)	-0.252** (-2.27)	-0.432** (-2.05)	-0.573*** (-2.62)	-0.220 (-1.20)	-0.358* (-1.76)	-0.236 (-1.28)	-0.210 (-1.03)	-0.102 (-0.74)	-0.175 (-1.27)
After 1993 x Had Walmart FFL in 1993 x Rural	0.703 (0.71)	1.453 (1.28)										
After 1993 x Had Walmart FFL in 1993 x Large metropolitan	-0.376** (-2.14)	-0.257 (-1.57)										
After 1993 x Had Walmart FFL in 1993 x Bottom tercile of social capital in 1993			-0.108 (-0.50)	-0.117 (-0.64)								
After 1993 x Had Walmart FFL in 1993 x Top tercile of social capital in 1993			0.337 (1.56)	0.136 (0.72)								
After 1993 x Had Walmart FFL in 1993 x Bottom tercile of state gun control laws in 1993					-0.152 (-0.56)	0.490* (1.83)						
After 1993 x Had Walmart FFL in 1993 x Top tercile of state gun control laws in 1993					-0.0539 (-0.22)	0.382 (1.57)						
After 1993 x Had Walmart FFL in 1993 x No state handgun waiting period from 1994-2005							-0.309 (-1.44)	0.0302 (0.14)				
After 1993 x Had Walmart FFL in 1993 x Had state handgun waiting period for all years from 1994							-0.265 (-1.03)	0.218 (0.85)				
After 1993 x Had Walmart FFL in 1993 x Bottom tercile of change in percent white population from 1990-2005									-0.350 (-1.63)	-0.0835 (-0.37)		
After 1993 x Had Walmart FFL in 1993 x Top tercile of change in percent white population from 1990-2005											-0.298 (-0.99)	-0.0447 (-0.15)
After 1993 x Had Walmart FFL in 1993 x Bottom tercile of change in percent hispanic population from 1990-2005												-0.157 (-0.72)
After 1993 x Had Walmart FFL in 1993 x Top tercile of change in percent hispanic population from 1990-2005												-0.0332 (-0.15)
After 1993 x Had Walmart FFL in 1993 x Bottom tercile of change in percent hispanic population from 1990-2005												-0.533*** (-2.92)
After 1993 x Had Walmart FFL in 1993 x Top tercile of change in percent hispanic population from 1990-2005												-0.190 (-1.08)
After 1993 x Rural	-0.174 (-0.68)	-0.209 (-0.74)										
After 1993 x Large metropolitan	-0.0952 (-0.78)	0.210* (1.65)										
After 1993 x Bottom tercile of social capital in 1993			-0.109 (-0.78)	0.112 (0.81)								
After 1993 x Top tercile of social capital in 1993			-0.175 (-1.18)	-0.234 (-1.59)								
After 1993 x Bottom tercile of state gun control laws in 1993					-0.0182 (-0.09)	-0.490** (-2.32)						
After 1993 x Top tercile of state gun control laws in 1993					0.0581 (0.35)	-0.0990 (-0.54)						
After 1993 x No state handgun waiting period from 1994-2005							-0.278* (-1.88)	-0.147 (-0.92)				
After 1993 x Had state handgun waiting period for all years from 1994-2005							-0.502*** (-2.64)	-0.137 (-0.68)				
After 1993 x Bottom tercile of change in percent white population from 1990-2005									-0.0653 (-0.39)	0.101 (0.53)		
After 1993 x Top tercile of change in percent white population from 1990-2005									-0.00313 (-0.01)	-0.0760 (-0.32)		
After 1993 x Bottom tercile of change in percent hispanic population from 1990-2005											0.116 (0.72)	-0.0608 (-0.37)
After 1993 x Top tercile of change in percent hispanic population from 1990-2005												-0.242* (-1.74)
After 1993	-0.770*** (-8.56)	-0.175 (-1.62)	-0.757*** (-10.51)	-0.0762 (-0.77)	-0.866*** (-5.77)	0.0877 (0.51)	-0.531*** (-4.05)	0.0415 (0.27)	-0.785*** (-5.23)	-0.138 (-0.78)	-0.746*** (-6.79)	-0.151 (-1.30)
Small metropolitan/Micropolitan	0 (.)	0 (.)										
Number of state gun laws		0.000433 (0.11)		0.000490 (0.13)		0.000234 (0.06)		0.00136 (0.32)		0.000276 (0.07)		0.000158 (0.04)
Unemployment rate		-0.00708 (-0.01)		0.0665 (0.05)		0.811 (0.59)		0.234 (0.17)		-0.0239 (-0.02)		-0.0648 (-0.05)
Population density (people per sq. mile)		0.0000234 (1.46)		0.0000293* (1.78)		0.0000285* (1.75)		0.0000318* (1.92)		0.0000295* (1.76)		0.0000302* (1.82)
Social institutions per 100k residents		-0.00163* (-1.82)		-0.00148 (-1.60)		-0.00176** (-2.02)		-0.00182** (-2.07)		-0.00156* (-1.73)		-0.00161* (-1.79)
Hispanic (%)		-19.70*** (-13.77)		-20.14*** (-14.16)		-19.99*** (-14.21)		-20.22*** (-13.95)		-19.87*** (-13.86)		-20.34*** (-13.15)
People under poverty line (%)		10.91*** (8.97)		11.00*** (9.00)		10.08*** (7.95)		10.65*** (8.54)		10.84*** (8.83)		10.70*** (8.82)
Veterans (%)		-0.892 (-0.41)		-1.468 (-0.63)		-1.782 (-0.78)		-1.588 (-0.68)		-1.076 (-0.48)		-1.350 (-0.59)
Age 20-64 (%)		-2.906 (-0.88)		-3.640 (-1.18)		-2.766 (-0.87)		-3.228 (-1.02)		-3.099 (-0.94)		-3.100 (-0.96)
Age 65+ (%)		-0.286 (-0.11)		-1.194 (-0.30)		0.427 (0.11)		-0.118 (-0.03)		-0.630 (-0.16)		-0.347 (-0.09)
Constant	7.372*** (226.33)	4.776 (1.24)	7.372*** (206.97)	4.825 (1.33)	7.372*** (207.03)	3.642 (0.98)	7.372*** (218.50)	4.530 (1.18)	7.372*** (214.69)	4.869 (1.31)	7.372*** (235.35)	5.043 (1.40)
N	53,193	48,512	53,193	48,512	53,193	48,512	53,193	48,512	53,193	48,512	53,193	48,512
Outcome	Firearms Suicide Rate	Firearms Suicide Rate	Firearms Suicide Rate	Firearms Suicide Rate	Firearms Suicide Rate	Firearms Suicide Rate	Firearms Suicide Rate	Firearms Suicide Rate	Firearms Suicide Rate	Firearms Suicide Rate	Firearms Suicide Rate	Firearms Suicide Rate
Total effect on rural counties or bottom tercile	0.341	1.295	-0.663***	-0.369**	-0.585***	-0.082	-0.529***	-0.327***	-0.586***	-0.293**	-0.259	-0.208
Total effect on small metropolitan/micropolitan counties or middle tercile	-0.362***	-0.158	-0.555***	-0.252**	-0.432**	-0.573***	-0.220	-0.358*	-0.236	-0.102	-0.102	-0.175
Total effect on large metropolitan counties or top tercile	-0.738***	-0.415***	-0.217	-0.117	-0.486***	-0.191*	-0.485***	-0.139	-0.534**	-0.254	-0.636***	-0.366***
County FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes

## APPENDIX

### Tables and Figures (continued)

To test for heterogeneous treatment effects, we employ the same framework as described for the DiD model, with the addition of interaction terms. between our main treatment effect and county density (large metropolitan/small metropolitan/rural), social capital (top/middle/bottom tercile), number of gun laws (top/middle/bottom tercile), share of uninsured individuals (top/middle/bottom tercile, for the 2006 analysis only), and the number of FFLs in a county prior to the policy change (top/middle/bottom tercile, for the 2006 analysis only).

To implement this analysis, we estimate the equation:

$$Y_{wct} = \beta(\mathbf{I}_w^{walmart} \cdot \mathbf{I}_t^{post} \cdot \mathbf{I}_h^{tercile}) + \Phi(\mathbf{I}_w^{walmart} \cdot \mathbf{I}_h^{tercile}) + \Psi(\mathbf{I}_t^{post} \cdot \mathbf{I}_h^{tercile}) + \Omega(\mathbf{I}_w^{walmart} \cdot \mathbf{I}_t^{post}) + \gamma \mathbf{I}_t^{post} + \rho \mathbf{I}_w^{walmart} + \theta \mathbf{I}_h^{tercile} + \alpha_c + \mathbf{X}_{wct} + \varepsilon_{wct}$$

Where  $h$  is the heterogeneous treatment category and  $\mathbf{I}_h^{tercile}$  is an indicator for each category of the heterogeneous treatment variable. To avoid collinearity, the middle category/tercile of each heterogeneous treatment is excluded from the regression, so  $\Omega$  is the treatment effect for this excluded category and the two  $\beta$  (from the two remaining values of  $\mathbf{I}_h^{tercile}$ ) are the differences in treatment effects between the excluded category and each of the non-excluded categories.

Appendix Figure 2 reports the full regression estimates underlying Main Article Table 2. We also report analogous estimates for the 2006 policy change below in Appendix Figure 8. Using F-statistics to test for equality of treatment among the subgroups presented in Main Article Table 2, we find marginally significant evidence for difference of treatment for each specification in Column (1), but no statistically significant evidence of treatment for any specification in Column (2).



# APPENDIX

## Tables and Figures (continued)

Appendix Table 3

### Full Estimates of Walmart's Decision to Stop Selling Handguns on Homicide Rates, 1989-2005

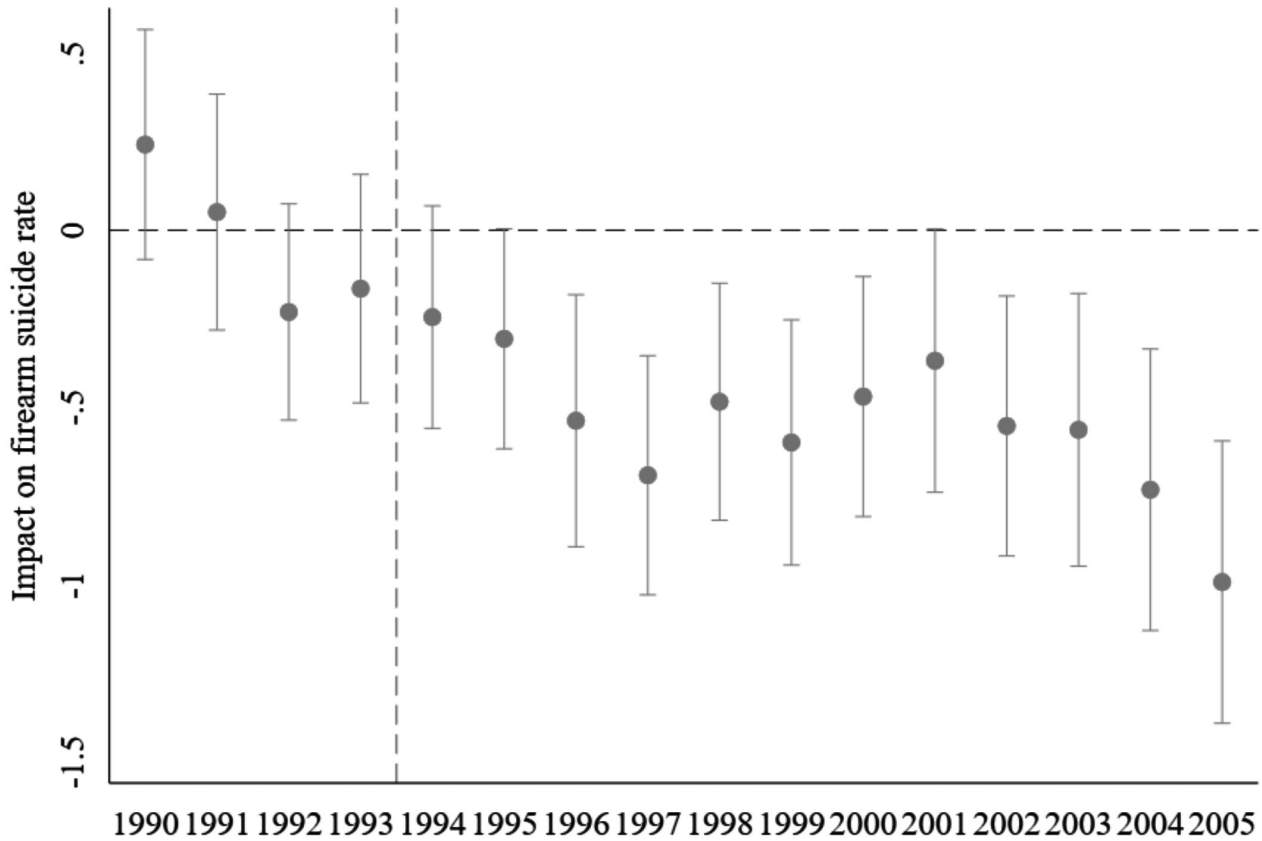
	(1)	(2)	(3)	(4)	(5)
	Firearms Homicide Rate - Had Walmart - No County FE - No Controls	Firearms Homicide Rate - Had Walmart - No County FE - With Controls	Firearms Homicide Rate - Had Walmart - County FE - No Controls	Firearms Homicide Rate - Had Walmart - County FE - With Controls	Non-Firearms Homicide Rate - Had Walmart - County FE - Controls
After 1993 x Had Walmart FFL in 1993	0.382 (0.59)	0.363 (0.55)	0.382 (0.59)	0.553 (1.05)	-0.00376 (-0.03)
After 1993	-2.182*** (-3.79)	-1.978*** (-3.18)	-2.182*** (-3.79)	-0.822* (-1.73)	-0.515*** (-3.91)
Had Walmart FFL in 1993	0.452 (0.40)	0.108 (0.15)			
Number of state gun laws		0.00688 (0.38)		-0.0212 (-1.55)	-0.000567 (-0.11)
Unemployment rate		-1.269 (-0.25)		0.200 (0.05)	-10.63*** (-4.77)
Population density (people per sq. mile)		-0.0000572 (-0.14)		-0.000699* (-1.73)	0.000103 (1.40)
Social institutions per 100k residents		-0.00306 (-1.21)		-0.00276 (-0.59)	-0.00313 (-1.50)
Male (%)		-28.33*** (-3.75)		13.11 (0.75)	16.90** (2.52)
White (%)		-3.157* (-1.90)		6.512 (0.71)	-3.883* (-1.73)
Black (%)		18.96*** (7.54)		19.29 (1.50)	-0.135 (-0.04)
Hispanic (%)		6.096*** (3.12)		-22.27*** (-2.70)	-10.41*** (-6.19)
People under poverty line (%)		25.11*** (4.48)		41.33*** (5.87)	9.871*** (5.98)
Veterans (%)		25.75*** (3.53)		10.11 (1.52)	3.680 (1.55)
Age 20-64 (%)		10.68* (1.69)		27.06** (2.36)	-4.321 (-1.08)
Age 65+ (%)		-5.950 (-1.18)		30.53* (1.89)	9.403** (1.97)
Constant	6.213*** (6.67)	8.884 (1.62)	6.517*** (33.69)	-29.82* (-1.90)	-0.232 (-0.06)
N	53,193	45,408	53,193	45,408	45,408
Outcome	Firearms Homicide Rate	Firearms Homicide Rate	Firearms Homicide Rate	Firearms Homicide Rate	Non-Firearms Homicide Rate
County FE	No	No	Yes	Yes	Yes
Controls	No	Yes	No	Yes	Yes

# APPENDIX

## Tables and Figures (continued)

Appendix Figure 1

**DiD Estimates for had any Walmart FFLs vs. had no Walmart FFLs, 1990-2005**



To test the parallel trends assumption underpinning our difference-in-difference framework, Appendix Figure 5 plots the treatment effect for each year of the 1994 analysis. The model presented in Appendix Figure 5 is analogous to Figure 2, Specification (3) with the treatment period dummy variable replaced by year dummy variables. Prior to the policy change, there should be no measured treatment effect and, indeed, there are no significant coefficients prior to the policy’s enactment. A joint test of significance finds no evidence that the total pre-policy effect differs from zero. However, we do find significant evidence that the pre-policy year treatment effects are not all equal. Additional tests of the parallel trends assumption are discussed in the Appendix. We also run these tests for models analogous to Figure 2 Specifications (1), (2), and (4). For Specification (1), we find no evidence that the total pre-policy effect differs from zero ( $p = 0.86$ ) or that the pre-policy year treatment effects are not all equal ( $p = 0.12$ ). For Specification (2), we find evidence that the total pre-policy effect differs from zero ( $p = .01$ ) and that the pre-policy year treatment effects are not all equal ( $p = .01$ ). For Specification (4), we find marginal evidence that the total pre-policy effect differs from zero ( $p = .09$ ) and statistically significant evidence that the pre-policy year treatment effects are not all equal ( $p = .03$ ). In each case, we find significant and negative effects on firearms suicide when aggregating across all years in which the policy was in place.

# APPENDIX

## Tables and Figures (continued)

Appendix Table 4

### Synthetic Control Results for Firearms Suicide Rate

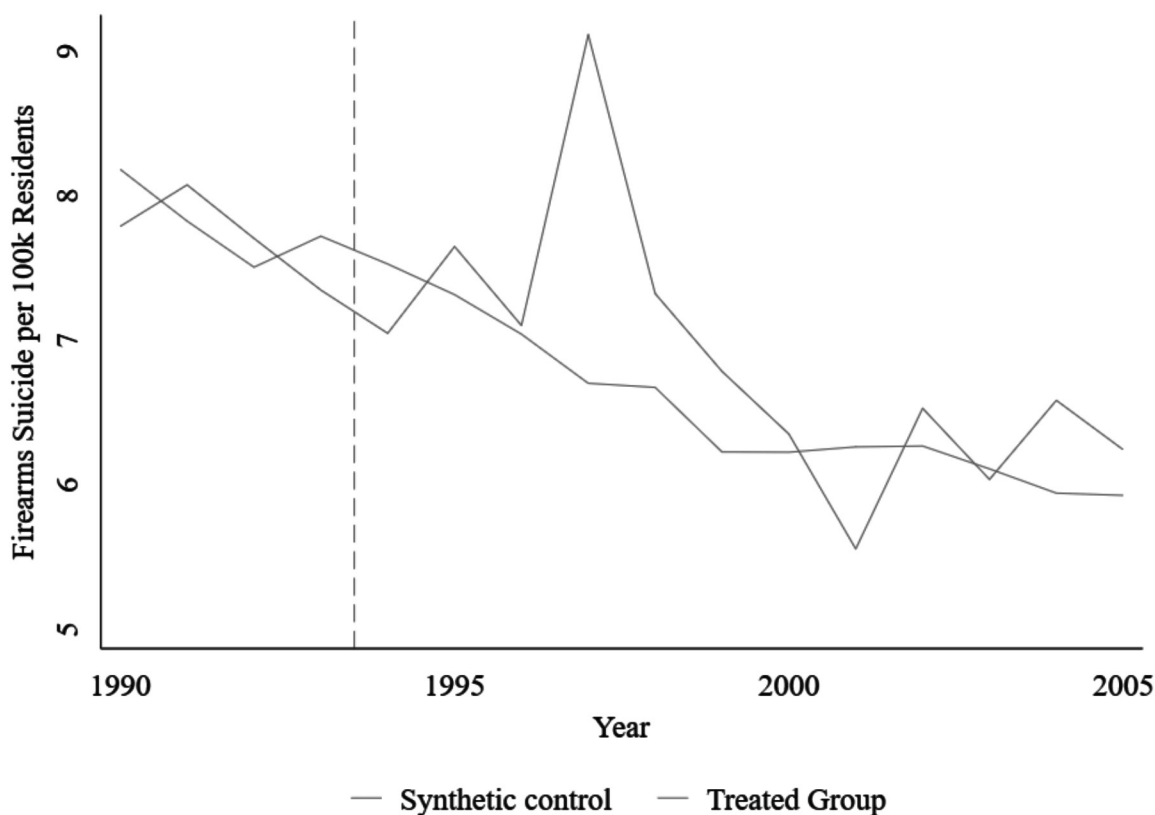
	Difference Between Treatment Group and Synthetic Control	
	1990 - 1993	1994 - 2005
Treatment Effect (Difference in Firearms Suicide Rate)	0.0790 (0.95)	-0.339*** (-5.85)
N	5,416	16,248

t statistics in parentheses

As a robustness check to address any concerns about our parallel trends assumption, we conduct a synthetic controls analysis of our 1994 results, as laid out in Abadie and Gardeazabal and Abadie et al. and expanded to multiple treated units in Donohue et al. and Dube and Zipperer.<sup>A22</sup>

Appendix Figure 2

### Graph of Synthetic Control Estimates for Firearms Suicide Rate



# APPENDIX

## Tables and Figures (continued)

Appendix Table 5

### Estimates of Walmart's Decision to Stop Selling Rifles and Shotguns in Some Stores on Suicide Rates

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Firearms Suicide Rate - Had Walmart - No County FE - No Controls	Firearms Suicide Rate - Had Walmart - No County FE - With Controls	Firearms Suicide Rate - Had Walmart - County FE - No Controls	Firearms Suicide Rate - Had Walmart - County FE - With Controls	Non-Firearms Suicide Rate - Had Walmart - County FE - No Controls	Firearms Suicide Rate - Lost Walmart - No County FE - No Controls	Firearms Suicide Rate - Lost Walmart - No County FE - With Controls	Firearms Suicide Rate - Lost Walmart - County FE - No Controls	Firearms Suicide Rate - Lost Walmart - County FE - With Controls	Non-Firearms Suicide Rate - Lost Walmart - County FE - With Controls
After 2006 x Had Walmart FFL in 2006	0.18** (1.83)	-0.135 (-1.37)	0.187* (1.83)	0.0385 (0.45)	-0.0762 (-0.74)					
After 2006 x Lost Walmart FFL						-0.547*** (-5.19)	-0.172 (-1.64)	-0.547*** (-5.19)	-0.0722 (-0.82)	-0.121 (-1.48)
After 2006	0.211*** (2.77)	1.127*** (9.17)	0.211*** (2.77)	0.251*** (3.01)	0.608*** (6.30)	0.843*** (11.46)	0.741*** (6.56)	0.843*** (11.46)	0.346*** (3.73)	0.663*** (8.20)
Had Walmart FFL in 2006	1.483*** (3.87)	-0.0463 (-0.26)								
Lost Walmart FFL						-2.655*** (-11.98)	-0.912*** (-6.57)			
Number of state gun laws		-0.0878*** (-15.86)		-0.08530 (-1.35)	0.08870** (1.98)		-0.0833*** (-13.93)		-0.08581 (-1.34)	0.01166** (2.33)
Unemployment rate		-6.565*** (-3.74)		-3.194*** (-3.61)	2.049** (2.07)		-7.877*** (-4.62)		-3.987*** (-4.07)	1.800 (1.58)
Population density (people per sq. mile)		-0.0000333* (-1.70)		0.0000311 (1.27)	-0.000104*** (-2.80)		-0.000333*** (-3.89)		-0.000654* (-1.80)	-0.0000642 (-1.60)
Social institutions per 100k residents		-0.00343*** (-2.63)		-0.00716*** (-6.74)	-0.00297*** (-2.60)		-0.00752*** (-5.66)		-0.0109*** (-7.65)	-0.00232 (-1.44)
White (%)		0.170 (0.14)		4.138*** (7.31)	1.996*** (2.58)		-3.540*** (-2.62)		3.078*** (3.84)	1.913** (2.00)
Black (%)		-6.670*** (-5.31)		2.221 (1.27)	3.180* (1.75)		-7.317*** (-5.34)		1.652 (0.76)	2.886 (1.20)
Hispanic (%)		-3.934*** (-5.18)		-7.400*** (-5.81)	3.508** (2.36)		-3.230*** (-4.02)		-7.599*** (-4.43)	3.940** (2.14)
Male (%)		17.55*** (7.68)		4.305*** (3.66)	2.032* (1.77)		11.75*** (4.57)		5.022*** (3.48)	1.215 (0.91)
People under poverty line (%)		25.80*** (15.66)		5.722*** (4.77)	2.187 (1.57)		19.82*** (11.46)		4.038*** (3.29)	1.942 (1.24)
Veterans (%)		44.16*** (13.32)		1.626 (0.70)	-6.134*** (-3.00)		30.94*** (10.36)		0.749 (0.28)	-7.657*** (-3.17)
Age 20-64 (%)		2.872 (0.97)		6.755** (2.34)	20.70*** (7.80)		8.859** (2.32)		9.121** (2.39)	19.54*** (6.22)
Age 65+ (%)		11.41*** (4.50)		38.71*** (15.37)	37.96*** (16.97)		19.74*** (6.43)		40.44*** (12.78)	35.86*** (13.53)
Constant	4.893*** (14.26)	-8.163*** (-2.98)	6.090*** (214.43)	-6.680*** (-3.05)	-14.74*** (-7.42)	8.537*** (88.00)	-3.101 (-0.98)	6.377*** (202.49)	-5.655* (-1.78)	-12.83*** (-5.23)
N	62,680	61,780	62,680	61,780	61,780	34,600	34,400	34,600	34,400	34,400
Outcome	Firearms Suicide Rate	Firearms Suicide Rate	Firearms Suicide Rate	Firearms Suicide Rate	Non-Firearms Suicide Rate	Firearms Suicide Rate	Firearms Suicide Rate	Firearms Suicide Rate	Firearms Suicide Rate	Non-Firearms Suicide Rate
County FE	No	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Controls	No	Yes	No	Yes	Yes	No	Yes	No	Yes	Yes

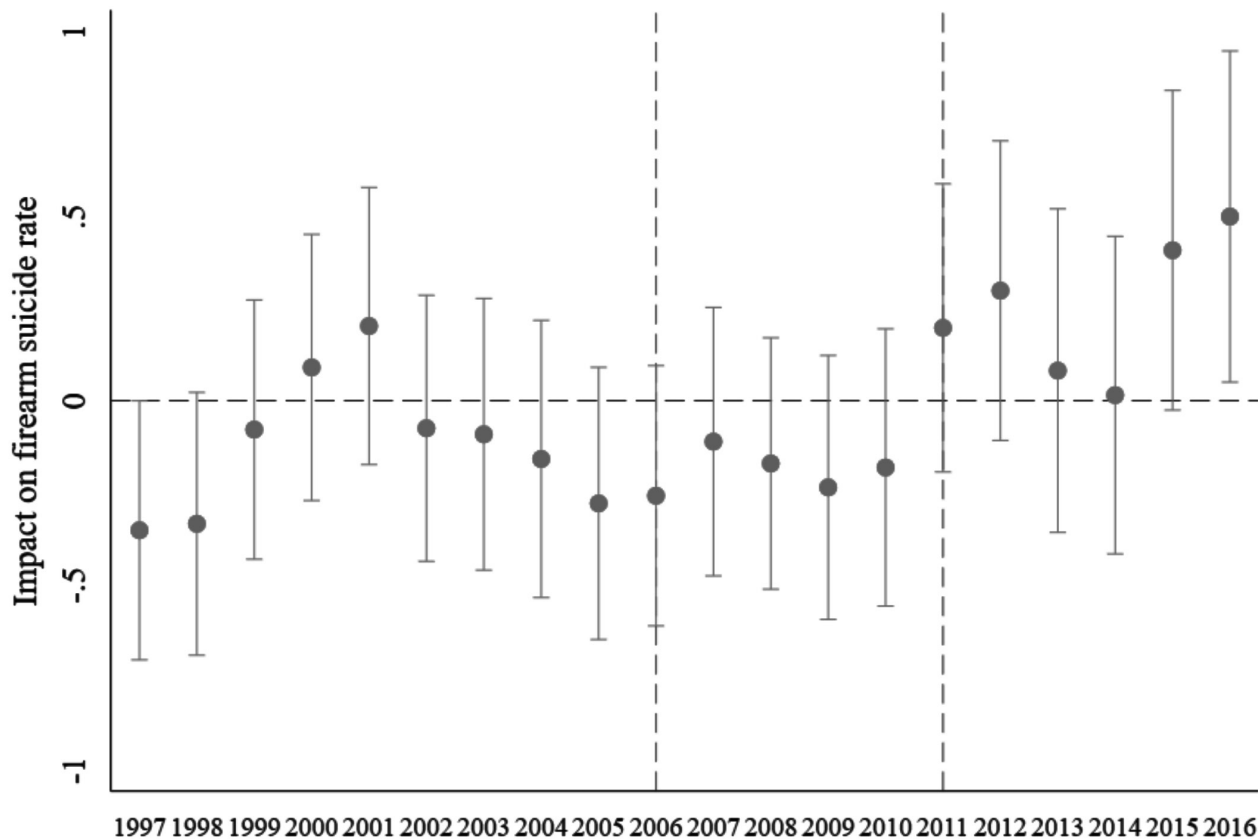


# APPENDIX

## Tables and Figures (continued)

Appendix Figure 3

**DiD Estimates for had any Walmart FFLs vs. had no Walmart FFLs, 1997-2016**



This figure replicates the analysis presented in Appendix Figure 1. In this instance, we find no evidence of an effect on firearms suicide when aggregating across all years in which the policy was in place.

# APPENDIX

## Tables and Figures (continued)

Appendix Table 7

### 2006 Firearms Suicide Partial Treatment Analysis

Estimates of effect full/partial period decrease in Walmart FFLs on changes in firearms suicide rate

	(1)	(2)	(3)	(4)	(5)
	Firearms Suicide Rate - No County FE - No Controls - Partial Treatment	Firearms Suicide Rate - No County FE - With Controls - Partial Treatment	Firearms Suicide Rate - County FE - No Controls - Partial Treatment	Firearms Suicide Rate - County FE - With Controls - Partial Treatment	Non-Firearms Suicide Rate - County FE - With Controls - Partial Treatment
After 2006 x Lost Walmart FFL(s) in 2006 & Gained Walmart FFL(s) Back By 2012 (Partially Treated)	0.0944 (0.63)	0.0277 (0.17)	0.0948 (0.63)	0.0312 (0.20)	0.0497 (0.35)
After 2006 x Lost Walmart FFL(s) in 2006 & Didn't Gain Back By 2012 (Fully Treated)	-0.291*** (-2.90)	0.0338 (0.31)	-0.284*** (-2.81)	0.0333 (0.32)	-0.143 (-1.49)
After 2006	0.121 (1.42)	0.104 (0.89)	0.121 (1.41)	0.318*** (2.93)	0.534*** (5.64)
Didn't Lose Walmart in 2006 (Not Treated)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)
Lost Walmart FFL(s) in 2006 & Gained Walmart FFL(s) Back By 2012 (Partially Treated)	-0.406* (-1.88)	-0.180 (-1.13)			
Lost Walmart FFL(s) in 2006 & Didn't Gain Back By 2012 (Fully Treated)	-2.945*** (-12.91)	-1.118*** (-6.64)			
Number of state gun laws		-0.0754*** (-12.53)		-0.00724 (-1.10)	0.0104* (1.78)
Unemployment rate		-2.173 (-1.16)		4.544*** (3.62)	4.971*** (3.98)
Population density (people per sq mile)		-0.000255** (-2.50)		0.000375 (0.70)	0.000238 (0.52)
Social institutions per 100k residents		-0.00652*** (-4.34)		-0.00353** (-2.17)	-0.00342** (-2.20)
Psychiatrists per 100k people		-0.0273*** (-4.60)		-0.00299 (-0.34)	0.00390 (0.58)
Primary care physicians per 100k residents		0.00915** (2.17)		0.00115 (0.22)	0.00866* (1.88)
White (%)		-5.953*** (-2.94)		10.61*** (3.00)	-11.26*** (-4.06)
Black (%)		-7.849*** (-3.95)		8.761* (1.85)	-12.89*** (-3.68)
Hispanic (%)		-2.388*** (-3.27)		-11.56*** (-6.00)	-1.035 (-0.49)
Male (%)		21.92*** (3.27)		7.592 (0.74)	14.54 (1.47)
People under poverty line (%)		17.72*** (9.79)		2.951** (2.07)	3.479** (2.02)
Veterans (%)		31.20*** (8.23)		6.773** (2.26)	0.443 (0.15)
Age 20-64 (%)		14.74*** (3.40)		2.407 (0.46)	17.44*** (4.30)
Age 65+ (%)		19.45*** (5.50)		14.47*** (2.72)	16.65*** (3.03)
Constant	8.537*** (67.98)	-9.985** (-2.23)	6.378*** (511.49)	-9.666 (-148)	-4.367 (-0.73)
N	24,204	22,374	24,204	22,374	22,374
Outcome	Firearms Suicide Rate	Firearms Suicide Rate	Firearms Suicide Rate	Firearms Suicide Rate	Non-Firearms Suicide Rate
County FE	No	No	Yes	Yes	Yes
Controls	No	Yes	No	Yes	Yes

t statistics in parentheses

While the 1994 policy estimates in Main Article Table 1 did not distinguish between Walmart stores that were affected by the 1994 policy changes (because they originally were FFLs) and those stores that were not affected, Article Table 3's 2006 estimates only include counties that had a Walmart FFL in 2006 and distinguishes between Walmart stores that were affected by the 2006 policy changes (i.e. stopped selling rifles) and those that were not affected. In Appendix Table 7, we include analogous specification that test whether counties that had Walmart FFLs in 2006 (rather than those that both had and lost Walmart FFLs) had lower suicide rates than counties that did not have Walmart FFLs prior to the treatment period. These specifications also fail to find robust evidence that the 2006 policy caused a reduction in the suicide rate.

# APPENDIX

## Tables and Figures (continued)

Appendix Table 8

### 2006 Firearms Suicide Years of Treatment Analysis

Estimates of effect of the number of years from 2007-2016 that counties had fewer FFLs than in 2006 on changes in firearms suicide rate

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Firearms Suicide Rate - No County FE - No Controls - Continuous Years	Firearms Suicide Rate - No County FE - With Controls - Continuous Years	Firearms Suicide Rate - County FE - No Controls - Continuous Years	Firearms Suicide Rate - County FE - With Controls - Continuous Years	Non-Firearms Suicide Rate - No County FE - With Controls - Continuous Years	Firearms Suicide Rate - No County FE - No Controls - Discrete Years	Firearms Suicide Rate - No County FE - With Controls - Discrete Years	Firearms Suicide Rate - County FE - No Controls - Discrete Years	Firearms Suicide Rate - County FE - With Controls - Discrete Years	Non-Firearms Suicide Rate - County FE - With Controls - Discrete Years
After 2006 x No. of years from 2007-2016 that county had fewer FFLs than in 2006	-0.085*** (7.27)	-0.085*** (3.38)	-0.085*** (7.27)	-0.020** (2.42)	-0.020*** (3.30)					
After 2006 x 1 year with fewer Walmart FFLs						0.110 (0.46)	-0.209 (-0.95)	0.110 (0.46)	-0.0120 (-0.06)	0.199 (0.78)
After 2006 x 2 years with fewer Walmart FFLs						-0.338*** (-4.37)	-0.532*** (-7.44)	-0.338*** (-4.37)	-1.265*** (-10.79)	0.243*** (2.62)
After 2006 x 3 years with fewer Walmart FFLs						0.528 (1.51)	0.395 (1.01)	0.528 (1.51)	0.577* (1.67)	0.112 (0.26)
After 2006 x 4 years with fewer Walmart FFLs						0.204 (1.35)	0.186 (1.17)	0.204 (1.35)	0.165 (1.06)	0.150 (1.05)
After 2006 x 5 years with fewer Walmart FFLs						0.125 (0.57)	-0.00748 (-0.03)	0.125 (0.57)	0.107 (0.51)	0.214 (1.19)
After 2006 x 6 years with fewer Walmart FFLs						0.198 (1.15)	0.265 (1.38)	0.198 (1.15)	0.380* (1.81)	0.273 (1.15)
After 2006 x 7 years with fewer Walmart FFLs						0.0381 (0.14)	0.148 (0.56)	0.0381 (0.14)	0.0336 (0.14)	0.0293 (0.13)
After 2006 x 8 years with fewer Walmart FFLs						-0.488* (-1.79)	-0.457 (-1.48)	-0.488* (-1.79)	-0.210 (-0.73)	0.120 (0.59)
After 2006 x 9 years with fewer Walmart FFLs						-0.455*** (-2.71)	-0.108 (-0.70)	-0.455*** (-2.71)	0.0247 (0.18)	0.0255 (0.16)
After 2006 x 10 years with fewer Walmart FFLs						-0.742*** (-10.85)	-0.165*** (-6.30)	-0.742*** (-10.85)	-0.189* (-1.93)	-0.247*** (-2.75)
After 2006	1.025*** (14.50)	0.819*** (7.60)	1.025*** (14.50)	0.416*** (4.90)	0.760*** (9.73)	0.839*** (10.85)	0.703*** (6.35)	0.839*** (10.85)	0.346*** (3.56)	0.646*** (7.85)
No. of years from 2007-2016 that county had fewer FFLs than in 2006	-0.338*** (-12.97)	-0.132*** (-3.69)								
Number of state gun laws		-0.00808*** (-14.06)		-0.00307 (1.36)	0.0115** (2.32)		-0.0709*** (-3.74)		-0.00639 (-1.48)	0.0115** (2.32)
Unemployment rate		-7.347*** (-4.46)		-3.947*** (-4.07)	1.849 (1.63)		-7.891*** (-4.64)		-3.811*** (-3.97)	2.034* (1.83)
Population density (people per sq. mile)		-0.000293*** (-3.70)		-0.000606* (-1.71)	-0.000586 (-1.51)		-0.000281*** (-3.64)		-0.000577** (-1.69)	-0.000517 (-1.46)
Social institutions per 100k residents		-0.00781*** (-5.90)		-0.0171*** (-7.58)	-0.00210 (-1.31)		-0.00795*** (-5.85)		-0.0106*** (-7.65)	-0.00200 (-1.28)
White (%)		-3.790*** (-2.80)		2.880*** (3.56)	1.679* (1.72)		-3.380*** (-2.51)		2.771*** (3.43)	1.550 (1.63)
Black (%)		-7.023*** (-5.10)		1.612 (0.74)	2.753 (1.18)		-6.523*** (-4.63)		1.486 (0.89)	2.493 (1.09)
Hispanic (%)		-2.491*** (-3.32)		-7.586*** (-4.46)	3.963** (2.16)		-2.244*** (-3.07)		-7.474*** (-4.43)	4.063** (2.26)
Male (%)		10.81*** (4.27)		5.040*** (3.50)	1.237 (0.93)		10.48*** (4.26)		5.126*** (3.58)	1.313 (1.01)
People under poverty line (%)		17.91*** (10.37)		3.978*** (3.30)	1.867 (1.22)		17.41*** (10.06)		3.790*** (3.19)	1.722 (1.16)
Veterans (%)		29.71*** (10.43)		0.264 (0.10)	-8.233*** (-3.44)		27.33*** (9.62)		-0.191 (-0.07)	-8.840*** (-3.71)
Age 20-64 (%)		10.95*** (2.94)		9.008** (2.38)	19.39*** (6.21)		12.35*** (3.46)		8.733*** (2.31)	18.76*** (6.09)
Age 65+ (%)		21.16*** (7.02)		39.75*** (12.57)	35.04*** (13.38)		22.46*** (7.67)		39.52*** (12.47)	34.38*** (13.11)
1 year with fewer Walmart FFLs						1.121* (1.80)	0.926** (2.13)			
2 years with fewer Walmart FFLs						-1.225*** (-10.44)	-1.301*** (-8.40)			
3 years with fewer Walmart FFLs						-0.590 (-0.95)	-0.415 (-1.10)			
4 years with fewer Walmart FFLs						-0.431* (-1.82)	-0.209* (-1.82)			
5 years with fewer Walmart FFLs						0.00314 (0.01)	0.0401 (0.17)			
6 years with fewer Walmart FFLs						-0.927*** (-3.50)	-0.0929 (-0.21)			
7 years with fewer Walmart FFLs						0.00574 (0.01)	-0.0245 (-0.05)			
8 years with fewer Walmart FFLs						-2.082*** (-4.47)	-0.689* (-1.88)			
9 years with fewer Walmart FFLs						-2.519*** (-7.26)	-1.128*** (-5.47)			
10 years with fewer Walmart FFLs						-3.044*** (-12.22)	-1.229*** (-6.86)			
Constant	8.850*** (70.60)	-3.453 (-1.10)	6.377*** (223.24)	-5.377* (-1.71)	-12.50*** (-5.11)	8.374*** (71.45)	-4.594 (-1.50)	6.377*** (224.35)	-5.117 (-1.62)	-11.96*** (-4.95)
N	34,600	34,400	34,600	34,400	34,400	34,600	34,400	34,600	34,400	34,400
Outcome	Firearms Suicide Rate	Firearms Suicide Rate	Firearms Suicide Rate	Firearms Suicide Rate	Non-Firearms Suicide Rate	Firearms Suicide Rate	Firearms Suicide Rate	Firearms Suicide Rate	Firearms Suicide Rate	Non-Firearms Suicide Rate
County FE	No	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Controls	No	Yes	No	Yes	Yes	No	Yes	No	Yes	Yes

t statistics in parentheses



# APPENDIX

## Tables and Figures (continued)

Appendix Table 9

### Full Estimates of Walmart's Decision to Stop Selling Rifles and Shotguns in Some Stores on Homicide Rates

	(1)	(2)	(3)	(4)	(5)
	Firearms Homicide Rate - Lost Walmart - No County FE - No Controls	Firearms Homicide Rate - Lost Walmart - No County FE - With Controls	Firearms Homicide Rate - Lost Walmart - County FE - No Controls	Firearms Homicide Rate - Lost Walmart - County FE - With Controls	Non-Firearms Homicide Rate - Lost Walmart - County FE - No Controls
After 2006 x Lost Walmart FFL	-0.260 (-1.17)	-0.326* (-1.69)	-0.260 (-1.17)	0.108 (1.03)	-0.126** (-2.42)
After 2006	-0.0602 (-1.08)	-0.427*** (-3.66)	-0.0602 (-1.08)	-0.141 (-1.32)	0.0188 (0.36)
Lost Walmart FFL	1.783*** (4.56)	0.526*** (2.99)			
Number of state gun laws		-0.00212 (-0.20)		0.0195* (1.96)	0.0000545 (0.01)
Unemployment rate		-5.369** (-2.10)		-11.40*** (-4.78)	-0.862 (-1.62)
Population density (people per sq. mile)		0.000735*** (7.13)		-0.00161** (-2.19)	-0.000151 (-0.32)
Social institutions per 100k residents		-0.000457 (-0.20)		-0.0128*** (-2.89)	-0.000711 (-0.81)
White (%)		-1.892 (-1.16)		8.060*** (3.59)	0.955 (1.18)
Black (%)		14.01*** (7.74)		29.06*** (6.10)	6.563*** (3.73)
Hispanic (%)		0.786 (0.64)		-4.956 (-1.41)	-5.013*** (-3.78)
Male (%)		-9.266*** (-2.77)		-5.658** (-2.37)	-4.506*** (-5.06)
People under poverty line (%)		21.00*** (7.64)		6.196* (1.90)	-1.200 (-1.62)
Veterans (%)		5.644 (1.48)		-6.918** (-2.13)	2.799* (1.83)
Age 20-64 (%)		-7.433* (-1.70)		9.438 (1.54)	-5.140** (-2.11)
Age 65+ (%)		-3.119 (-0.85)		15.07*** (4.42)	-1.647 (-0.94)
Constant	2.911*** (29.46)	9.508** (2.48)	4.362*** (49.77)	-5.930 (-1.23)	6.803*** (3.10)
N	34,600	34,400	34,600	34,400	34,400
Outcome	Firearms Homicide Rate	Firearms Homicide Rate	Firearms Homicide Rate	Firearms Homicide Rate	Non-Firearms Homicide Rate
County FE	No	No	Yes	Yes	Yes
Controls	No	Yes	No	Yes	Yes

t statistics in parentheses

Appendix Tables 10 and 11 (pages 13-14) present additional robustness checks for the effect of Walmart's 1994 and 2006 policy changes on firearms homicide, respectively. Following Donohue et al., these regressions include additional variables that may influence firearms homicides. We control for the lagged number of police officers per 100,000 residents (from the Universal Crime Reports) and lagged incarceration rate per 100,000 residents (from the Vera Institute) at the county-level and per capita ethanol consumption from beer, percentage of state population living in MSAs, and real per capita personal income at the state level (each from Donohue et al. and aggregated from NIH, BEA, and ICPSR). Due to limitations on data availability, the analysis of the 2006 policy change only includes the years 1996-2014. The results presented in these two tables are not substantially different to those in Appendix Tables 3 and 9.

# APPENDIX

## Tables and Figures (continued)

Appendix Table 10

### Full Estimates of Walmart's Decision to Stop Selling Handguns on Homicide Rates with Additional Controls, 1989-2005

	(1)	(2)	(3)
	Firearms Homicide Rate - Had Walmart - No County FE - With Controls	Firearms Homicide Rate - Had Walmart - County FE - With Controls	Non-Firearms Homicide Rate - Had Walmart - County FE - Controls
After 1993 x Had Walmart FFL in 1993	-0.719* (-1.79)	-0.288 (-0.90)	-0.152 (-1.29)
After 1993	-0.291 (-1.01)	0.0244 (0.10)	-0.205** (-2.45)
Had Walmart FFL in 1993	0.274 (0.55)		
Number of state gun laws	0.00108 (0.10)	-0.0122 (-1.07)	-0.00573 (-1.12)
Unemployment rate	5.774 (1.60)	3.715 (1.35)	-3.819*** (-2.99)
Population density (people per sq. mile)	-0.00000279 (-0.06)	-0.000340*** (-3.09)	0.000163*** (3.91)
Social institutions per 100k residents	-0.00714*** (-2.72)	-0.0101** (-2.18)	-0.00580** (-2.54)
Male (%)	-23.96*** (-3.92)	23.29 (1.51)	14.81** (2.41)
White (%)	-1.979 (-1.06)	1.087 (0.20)	2.706 (1.09)
Black (%)	18.97*** (7.75)	7.617 (0.96)	4.364 (1.24)
Hispanic (%)	0.228 (0.19)	-29.46*** (-4.64)	-9.570*** (-5.29)
People under poverty line (%)	17.80*** (5.65)	39.41*** (6.16)	10.82*** (6.52)
Veterans (%)	23.64*** (4.47)	10.37* (1.84)	5.401** (2.35)
Age 20-64 (%)	1.256 (0.29)	15.61* (1.73)	-6.904 (-1.64)
Age 65+ (%)	-5.985 (-1.37)	4.156 (0.39)	3.883 (0.90)
Lag of police officers per 100k residents	-0.00000186*** (-3.22)	-0.00000216* (-1.81)	-0.000000799 (-1.30)
Lag of incarceration rate per 100k residents	0.000381*** (12.57)	-0.0000263 (-0.12)	-0.000139 (-1.36)
Per capita ethanol consumption from beer	0.891 (1.52)	0.200 (0.16)	1.498*** (2.97)
Percentage of state population living in metropolitan statistical areas (MSA)	0.00226 (0.31)	-0.0260* (-1.71)	-0.0238*** (-3.18)
Real per capita personal income	-0.000147** (-2.04)	0.000195** (2.09)	0.000207*** (4.19)
Constant	13.18*** (3.03)	-19.40 (-1.37)	-6.419 (-1.32)
N	46,116	46,116	46,116
Outcome	Firearms Homicide Rate	Firearms Homicide Rate	Non-Firearms Homicide Rate
County FE	No	Yes	Yes
Controls	Yes	Yes	Yes

t statistics in parentheses

# APPENDIX

## Tables and Figures (continued)

Appendix Table 11

### Full Estimates of Walmart's Decision to Stop Selling Handguns on Homicide Rates with Additional Controls, 1996-2014

	(1)	(2)	(3)
	Firearms Homicide Rate - Lost Walmart - No County FE - With Controls	Firearms Homicide Rate - Lost Walmart - County FE - With Controls	Non-Firearms Homicide Rate - Lost Walmart - County FE - No Controls
After 2006 x Lost Walmart FFL	-0.238* (-1.93)	-0.0579 (-0.54)	-0.162*** (-3.25)
After 2006	-0.0842 (-0.61)	0.0115 (0.09)	-0.00771 (-0.15)
Lost Walmart FFL	0.519*** (3.58)		
Number of state gun laws	0.0164* (1.83)	0.0153* (1.66)	0.00338 (1.00)
Unemployment rate	-3.253 (-1.01)	-6.546*** (-3.01)	-2.007*** (-2.79)
Population density (people per sq. mile)	0.000552*** (6.68)	-0.00145 (-1.61)	-0.0000815 (-0.18)
Social institutions per 100k residents	-0.00155 (-0.72)	-0.00921** (-2.04)	-0.00241** (-2.52)
Male (%)	-2.681 (-0.80)	0.919 (0.37)	-7.016*** (-7.00)
White (%)	1.316 (0.68)	8.996*** (4.24)	0.912 (1.27)
Black (%)	16.99*** (8.09)	30.34*** (6.20)	8.387*** (4.82)
Hispanic (%)	-0.746 (-0.70)	-2.393 (-0.61)	-2.523* (-1.81)
People under poverty line (%)	17.25*** (6.64)	6.660** (2.35)	-0.870 (-1.28)
Veterans (%)	11.99*** (3.04)	-0.598 (-0.19)	1.097 (0.73)
Age 20-64 (%)	-12.02*** (-3.11)	8.294 (1.31)	-2.381 (-1.01)
Age 65+ (%)	-4.485 (-1.25)	8.686* (1.71)	8.038*** (3.32)
Lag of police officers per 100k residents	-0.00000481*** (-4.24)	-1.91e-08 (-0.01)	0.00000308 (1.47)
Lag of incarceration rate per 100k residents	0.000192*** (6.28)	0.0000244 (0.34)	-0.0000147 (-0.46)
Per capita ethanol consumption from beer	0.651 (1.26)	1.352* (1.71)	1.200*** (5.36)
Percentage of state population living in metropolitan statistical areas (MSA)	-0.0137** (-1.98)	-0.0361*** (-3.63)	-0.0188*** (-3.73)
Real per capita personal income	-0.000114*** (-2.76)	0.0000678 (1.59)	0.0000313 (1.50)
Constant	7.859** (2.09)	-10.65** (-2.08)	4.527** (2.28)
N	28,716	28,716	28,716
Outcome	Firearms Homicide Rate	Firearms Homicide Rate	Non-Firearms Homicide Rate
County FE	No	Yes	Yes
Controls	Yes	Yes	Yes

t statistics in parentheses

## APPENDIX

### Data Sources

Data come from US Census Bureau, HRSA, USDA, BLS, Institute for Public Policy and Social Research, Everytown for Gun Safety, FBI, Vera Institute and Donohue, *supra* note A9.

#### *2002-2016 FFL listings*

FFLs listings are updated by Bureau of Alcohol, Tobacco, Firearms and Explosive (ATF) on a monthly basis. FFL listings for January of 2014-2016 were downloaded from the ATF website: <https://www.atf.gov/firearms/listing-federal-firearms-licensees>

FFL listings from 2002-2013 were received from the ATF through a Freedom of Information Act (FOIA) request. Data prior to 2002 was not available. The months provided through the FOIA request are February 2002, October 2003, May 2004, March 2005, January 2006, February 2007, January 2008, January 2009, January 2010, January 2011, January 2012, and January 2013.

The decline in the number of Walmart FFLs presented in Figure 1 appears to take place over two years. We believe that this is an artifact of the fact that some Walmart locations that stopped selling firearms in 2006 did not cancel their license to sell firearms and rather allowed the license to lapse sometime after February 2007.

#### *Walmart store opening data*

Data on store openings were gathered by Holmes (2011) and are available at <http://users.econ.umn.edu/~holmes/data/WalMart/index.html>

#### *Census Bureau*

Intercensal estimates of race, age, gender, and ethnicity are used for 1990-2010. For 2011-2014, these variables come from the 2010-2014 ACS 5-year estimates. For 2015-2018, these variables come from the 2014-2018 ACS 5-year estimates. Poverty rates for the entire period come from the Census Small Area Income and Poverty Estimates (SAIPE) Program.

Land area estimates used to determine population density are provided by Census geographic files.

#### *Bureau of Labor Statistics (BLS)*

Unemployment rates for the entire period come from the BLS.

#### *County Business Patterns (CBP)*

Using CBP data, we create a measure of social capital equal to the total number of recreational, personal services, religious, civil, and professional institutions per 100,000 residents. The dataset recorded institutions using SIC codes prior to 1998 and used NAICS codes from 1998 onward.

Our measure of social capital includes the SIC codes 72\*\*, 79\*\*, 84\*\*, 86\*\*, 0752, 4493, 4899, 6512, 6531, 6553, 6732, 7383, 7384, 7389, 7521, 8399, and 8999, as well as the NAICS codes 71\*\*\*\*, 812\*\*\*, and 813\*\*\*.

#### *Gun control laws*

Data on gun control laws is sourced from Everytown for Gun Safety, as described in Siegel et al. (2017). Data is only available at the state level.

#### *Area Health Resources Files (AHRF)*

The share of residents that are veterans, the number of primary care physicians per 100,000 residents, and the number of psychiatrists per 100,000 residents for the entire period are sourced from the AHRF.

Data on the share of uninsured individuals is not available for much of the analyzed period, so it is not used as a control. We do use the share of uninsured individuals in 2005 as part of the 2006 heterogeneous treatment analysis.

#### *Department of Agriculture*

For the heterogeneous treatment effect analysis, we use rural-urban continuum codes (RUCC) created by the Department of Agriculture in order to separate out large metropolitan, small metropolitan, micropolitan, and rural counties. RUCC codes from 1993 (based on the 1990 Census) are used in the 1994 analysis and RUCC codes from 2003 (based off the 2000 Census) are used in the 2006 analysis.

RUCC codes 0 and 1 are classified as large metropolitan areas, codes 2 and 3 as small metropolitan areas, codes 4 through 7 as micropolitan areas, and codes 8 and 9 as rural.

# APPENDIX

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# States' Rights, Gun Violence Litigation, and Tort Immunity

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## Introduction

On May 5, 2001, a 13-year-old boy found his father's Beretta handgun. He removed the magazine containing its ammunition and, like many gun users, believed he had unloaded the gun. However, a live round remained in the chamber. Because such errors are common, an inexpensive safety feature was developed over a century ago to prevent a gun from firing without a magazine.<sup>1</sup> But Beretta did not include this feature. As a result, when the boy pulled the trigger, the hidden bullet killed his 13-year-old friend, Joshua Adames.<sup>2</sup>

Under most states' products liability law, Beretta could be held liable to Joshua's family for selling an unreasonably dangerous product without feasible safety features. But when Joshua's parents sued Beretta, the Supreme Court of Illinois held that the federal Protection of Lawful Commerce in Arms Act (PLCAA) barred their case — even though, if Illinois had its own way, Beretta could be held liable.

Enacted in 2005, PLCAA provides unique protection from civil liability for the gun industry. PLCAA requires courts to dismiss certain lawsuits against gun companies,<sup>3</sup> with exceptions that permit some actions.<sup>4</sup> Tort law generally imposes liability on a wrongdoer even if others also caused the plaintiff's

injury.<sup>5</sup> But PLCAA, according to many courts, shields firearm companies from liability for harm caused by some tortious conduct if another cause of harm was a third party's unlawful use of a gun.<sup>6</sup>

PLCAA can significantly restrict states from enforcing their tort law against negligent gun companies. This article explores the constitutionality of those restrictions, focusing on PLCAA's so-called "predicate exception," which allows otherwise-prohibited actions to be brought against gun companies who knowingly violate "a State or Federal statute applicable to the sale or marketing of the product" where "the violation was a proximate cause of the harm."<sup>7</sup> Several courts have held that this exception allows gun companies to be held liable for their negligence if they violate *statutory* law created by a legislature, while barring liability for the same conduct if it only violates a state's common law (judge-made law). For instance, if a statute mandated a life-saving safety feature that Beretta failed to include, courts could hear the Adames's case. But PLCAA can bar claims in many states that do not have such statutory mandates, though states generally allow plaintiffs to bring common law claims, like products liability and negligence, without a predicate statutory violation. As a result, PLCAA can deny many states the authority to enforce and apply their common law, and effectively serves as a federal command to states to use their legislatures, not their judiciaries, to regulate gun companies.

This article argues that this reading of PLCAA violates the Supreme Court's Tenth Amendment precedent concerning federalism — the balance of power between states and the federal government. PLCAA implicates significant constitutional concerns because it infringes on core areas of state authority: states have

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the right to make law however they choose, and must be free to exercise their “traditional authority to provide tort remedies to their citizens as they see fit.”<sup>8</sup>

While gun violence litigation is discussed in some literature,<sup>9</sup> how federalism jurisprudence impacts a constitutional analysis of PLCAA has not. This article fills this void by reconsidering PLCAA’s bar in light of new federalism precedent. Part I of this article provides an overview of PLCAA’s statutory provisions and

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legislative history. This Part also reviews how courts have interpreted PLCAA, focusing on the law’s definition of “qualified civil liability actions” and the predicate exception. Part II explains how the Court applies federalism principles, demonstrating how the Court has aggressively interpreted statutes to protect state authority. Part III applies these principles to PLCAA, explaining how federalism counsels narrowly interpreting PLCAA to allow lawsuits where gun companies violate common law. We conclude that absent such a narrowing construction, PLCAA would violate the Tenth Amendment by impermissibly infringing on the states’ sovereign rights to allocate lawmaking functions among their governmental branches and to shape tort law. Part IV addresses some complications and counterarguments.

### I. The Protection of Lawful Commerce in Arms Act

#### A. Background

PLCAA protects firearm and ammunition businesses, including manufacturers, distributors, dealers, importers, and trade associations, from some civil liability.<sup>10</sup> The Act bars “qualified civil liability actions” from being brought in State or Federal court, and directs courts to dismiss these actions.<sup>11</sup> PLCAA defines a qualified civil liability action as:

[A] civil action or proceeding or an administrative proceeding brought by any person against a manufacturer or seller of a qualified product, or a trade association, for

damages, punitive damages, injunctive or declaratory relief, abatement, restitution, fines, or penalties, or other relief, resulting from the criminal or unlawful misuse of a qualified product by the person or a third party.<sup>12</sup>

The Act exempts six categories of cases from the general definition of prohibited qualified civil liability actions.<sup>13</sup> For instance, exceptions allow certain cases involving a design or manufacture defect<sup>14</sup> and negligent entrustment or negligence per se claims against firearm sellers.<sup>15</sup>

PLCAA’s “predicate exception” allows lawsuits against gun companies whose violation of a “[s]tate or Federal statute applicable to the sale or marketing of [firearms]” was “a proximate cause of the harm for which relief is sought.”<sup>16</sup> Courts have held that the predicate exception allows all common law claims against gun companies to proceed if the defendant commits a “predicate violation” of a statutory law (or related implementing regulations).<sup>17</sup>

#### B. Legislative and Statutory History of PLCAA

PLCAA was drafted by Congress out of concern that “novel” legal claims could impose sweeping liability against the firearms industry.<sup>18</sup> Lawsuits had sought to impose liability on some manufacturers and dealers for criminal shootings using “Saturday Night Specials,” simply because those guns posed (in plaintiffs’ view) too great a risk of unlawful use,<sup>19</sup> and one was upheld.<sup>20</sup>

PLCAA’s enacted findings reflect Congress’s intent to bar such suits, decrying lawsuits “based on theories without foundation in hundreds of years of the common law and jurisprudence of the United States” that, if sustained by “a maverick judicial officer or petit jury would expand civil liability in a manner never contemplated by the framers of the Constitution, by Congress, or by the legislatures of the several States.”<sup>21</sup>

Another finding indicates PLCAA’s narrow scope, referencing “[t]he possibility of imposing liability on an entire industry for harm that is *solely caused* by others,”<sup>22</sup> as does its first stated purpose to “prohibit” actions against gun companies “for the harm *solely caused* by the criminal or unlawful misuse of firearm products or ammunition products by others.”<sup>23</sup> The addition of “solely” to the first purpose was one of the few changes made to an earlier version of PLCAA that failed to pass.<sup>24</sup> As Justice Scalia has explained,

amendments that appear key to the legislation's ultimate passage can reflect legislative intent.<sup>25</sup>

Senator Larry Craig, PLCAA's lead Senate sponsor, noted that "[t]he only lawsuits this legislation seeks to prevent are novel causes of action that have no history or grounding in legal principle."<sup>26</sup> Senator Craig affirmed that gun companies could still be liable if they "break the law or commit negligence," declaring that "this is not a gun industry immunity bill."<sup>27</sup> Other PLCAA co-sponsors agreed,<sup>28</sup> expressing a desire to bar liability for companies that did nothing wrong but sell a legal product that was later misused.<sup>29</sup>

This history and language points to a congressional intent to allow traditional negligence claims so long as the harm was not "solely caused" by the criminal misuse of a gun. Such cases would include claims against dealers that made negligent sales, or against manufacturers that carelessly distributed or negligently designed a firearm.

### C. Judicial Interpretation and Application of PLCAA

The aforementioned text and legislative history has left courts to grapple with the ambiguity presented by a statute that (1) is intended to only bar gun industry liability where harm was "solely caused" by unlawful actors, while preserving negligence actions against gun companies;<sup>30</sup> yet (2) only expressly exempts certain common law actions from its broad definition of prohibited actions; but (3) allows all common law actions if defendant knowingly commits a statutory "predicate" violation.<sup>31</sup>

PLCAA's distinction between judge-made and statutory law is inconsistent with the Supreme Court's foundational understanding of federalism. In the landmark case *Erie Railroad Co. v. Tompkins*, the Court firmly established that common law and statutory law are equally authoritative expressions of law, and "whether the law of the State shall be declared by its Legislature in a statute or by its highest court in a decision is not a matter of federal concern."<sup>32</sup> How states choose to allocate lawmaking power between the branches of state governments is a core prerogative of the states as sovereign entities, over which the federal government has no authority to interfere.<sup>33</sup>

Yet under courts' reading of PLCAA's predicate exception, in some cases Congress only allows gun industry liability if the state expresses gun industry liability law via statute instead of common law.<sup>34</sup> For instance, in *Williams v. Beemiller, Inc.*, the Appellate Division of New York allowed claims that gun companies negligently sold and distributed guns where the plaintiff alleged predicate violations of statutory firearms laws by the defendants.<sup>35</sup> But in *Kim v. Coxe*,

the Alaska Supreme Court found that PLCAA barred holding a gun dealer liable for negligence (for enabling a supposed theft), but that the dealer could be held liable if it violated statutory law.<sup>36</sup>

## II. The Supreme Court's Federalism Jurisprudence

The Court consistently touts the importance of interpreting federal statutes in light of federalism principles.<sup>37</sup> The Tenth Amendment specifically protects state authority: "[t]he powers not delegated to the United States by the Constitution, nor prohibited by it to the states, are reserved to the states respectively, or to the people."<sup>38</sup> The Court has read the Tenth Amendment to preserve states' substantial sovereign authority, including preventing the federal government from compelling states to "enact and enforce a federal regulatory program,"<sup>39</sup> from regulating conduct that does not have an interstate economic effect,<sup>40</sup> and from conscripting state officers to "address particular programs" or execute federal laws.<sup>41</sup>

States traditionally exert control in areas like criminal, family, public health, election administration, and corporate law" without federal government interference.<sup>42</sup> While the lines of division between the powers of the federal government and states are continually debated and redrawn, federalism only retains its meaning if courts maintain "reservoir[s] of state power."<sup>43</sup>

The Court has applied federalism principles in two primary ways: by striking down as unconstitutional laws that infringe on state authority, and by interpreting statutes to protect federalism principles. Starting in the 1980s, the Court began to favor the latter approach, pressing "super-strong clear statement rules" for federalism-based canons, while abandoning "constitutional activism on federalism issues."<sup>44</sup> Two seminal cases, *Gregory v. Ashcroft*<sup>45</sup> and *Bond v. U.S.*,<sup>46</sup> affirm the Court's desire to engage in statutory interpretation to protect federalism.

*Gregory* considered whether a Missouri constitutional provision, requiring that judges retire at seventy, violated the federal Age Discrimination in Employment Act of 1967 (ADEA).<sup>47</sup> Although the ADEA prohibits age discrimination, and its exceptions do not expressly exempt judges,<sup>48</sup> the Court upheld Missouri's provision.<sup>49</sup> *Gregory* noted that Missouri had authority to create qualifications for its own officers and that federal involvement in this decision-making "upset[s] the usual constitutional balance of federal and state powers."<sup>50</sup>

The Court recognized that its reading was not straightforward, especially in light of the Act's other



exceptions and since Congress could have excluded judges explicitly.<sup>51</sup> Nonetheless, the Court “[would] not read [the federal law] to cover state judges unless Congress ha[d] made it clear that judges [we]re included” in the law’s coverage.<sup>52</sup> *Gregory* creates a “new, super-strong clear statement rule”<sup>53</sup> for statutes that “intrude on state governmental functions”<sup>54</sup> — Congress must make its intention to intrude on state sovereignty “unmistakably clear in the language of the statute.”<sup>55</sup>

*Bond* concerned a prosecution under the federal Chemical Weapons Convention Implementation Act of 1998 (CWCIA) of a woman who attempted to injure her husband’s paramour with chemicals. The CWCIA’s plain language criminalized such attacks with prohibited chemicals, without relevant exceptions. However, the Court, per Chief Justice Roberts, found no indication that Congress intended the CWCIA to reach local criminal acts like the defendant’s, and held that the Act could not be enforced against such a crime.<sup>56</sup> The Court reasoned that because states generally exercise police power authority over local crimes, applying the Act to this offense would undermine federalism.<sup>57</sup> The Court rejected the statute’s plain reading because its breadth “would ‘alter sensitive federal-state relationships.’”<sup>58</sup>

### III. Federalism and the Predicate Exception

The way that PLCAA has been interpreted by most courts contravenes federalism principles, by: (1) requiring states to use legislatures, rather than courts, to make laws that hold negligent gun companies liable, and (2) interfering with states’ traditional control over tort law.

#### *A. A Broad Reading of PLCAA Improperly Interferes with States’ Lawmaking Function*

The dominant, broad reading of PLCAA interferes with states’ authority to decide how to allocate their lawmaking power. Most states choose to enforce tort law through common law, including public nuisance and negligence claims. Under PLCAA’s predicate exception, however, Congress restricts states from applying their common law in many such cases unless gun companies also violate an applicable statute.<sup>59</sup> With PLCAA, then, Congress often requires states to make liability law through Congress’s favored government branch (i.e., legislatures, not courts).

In so doing, PLCAA intrudes on traditional areas of state authority, including dictating to states which branch of government should make liability laws, how to structure their governments, and how to define their “laws.”<sup>60</sup> However, the Constitution does not

permit Congress to so intrude on state sovereignty, or to so manipulate the functions of state government. PLCAA also contravenes *Erie*’s rule that whether state laws are declared by a state’s legislature or its highest court “is not a matter of federal concern.”<sup>61</sup> The law also violates *Gregory*’s pronouncement that states have a “constitutional responsibility for the establishment and operation” of their government,<sup>62</sup> as well as over a century of precedent affirming state authority over its governmental functions<sup>63</sup> — and that “[s]tates are free to allocate the lawmaking function to whatever branch of state government they may choose.”<sup>64</sup>

PLCAA impermissibly subverts state judiciaries to state legislatures, preventing states from using their courts to redress wrongs.

#### *B. A Broad Reading of PLCAA Improperly Interferes with States’ Traditional Control over Tort Law*

States have a special interest in “exercising judicial jurisdiction over those who commit torts within its territory.”<sup>65</sup> Indeed, protecting the health and safety of citizens is “primarily, and historically [a] matter[] of local concern,”<sup>66</sup> and “[i]n our federal system, there is no question that States possess the ‘traditional authority to provide tort remedies to their citizens’ as they see fit.”<sup>67</sup> As the Court has explained:

the State’s interest in fashioning its own rules of tort law is paramount to any discernible federal interest, except perhaps an interest in protecting the individual citizen from state action that is wholly arbitrary or irrational.<sup>69</sup>

Since PLCAA intrudes on states’ authority to make and apply their tort law, the federalism principles of *Bond* and *Gregory* apply with special force.

#### *C. How Courts Should Interpret PLCAA Going Forward*

The Supreme Court’s federalism precedent counsels that courts construing PLCAA either: (1) interpret the definition of PLCAA’s prohibited qualified civil liability actions to bar only actions arising *solely* from the unlawful misuse of a firearm by a third party; (2) read the predicate exception to allow actions involving knowing violations of common law; or (3) strike down PLCAA as unconstitutional. The first solution stays true to PLCAA’s intended meaning, and the Court’s call to do the “least violence to the text,”<sup>69</sup> while protecting federalism principles.

Reading PLCAA to allow common laws claims is consistent with *Gregory* and *Bond* since PLCAA does not expressly bar these claims. Instead, PLCAA’s

definition of “qualified civil liability action” bars (unexempted) actions against gun companies “resulting from the criminal or unlawful misuse of a qualified product by the person or a third party.”<sup>70</sup> As PLCAA does not define the phrase “resulting from,” federalism principles demand that it be read narrowly, to preserve state authority to apply and enforce liability laws. This can be done by construing “resulting from” consistently with “solely caused by,” thereby allowing claims where the harm resulted, at least in part, from gun company negligence.

This reading also furthers Congress’s intent to not prohibit negligence claims and furthers the Act’s Purposes and Findings, which state an intent to only bar actions “solely caused by” the criminal or unlawful misuse of a product. Hence, PLCAA should not bar claims against a negligent gun company if a plaintiff’s harm “result[ed] from” both a gun company’s negligence and a criminal shooter.<sup>71</sup> This reading cures the federalism concerns raised by PLCAA.

Some courts have rejected this reading because PLCAA specifically excepts some subsets of negligence — negligent entrustment and negligence per se — but does not specifically except general negligence claims. A narrowing construction of “qualified civil liability actions,” they suggest, renders the exceptions superfluous.<sup>72</sup> However, the “preference for avoiding surplusage constructions is not absolute,”<sup>73</sup> and the presumption can be overcome in the face of competing contextual concerns.<sup>74</sup> And *Bond* and *Gregory* require a narrowing construction to cure PLCAA’s serious federalism problems.

Indeed, the Supreme Court rejected that approach in *Gregory* when it held that age limits on state judges were exempt from the ADEA, even though Congress had chosen to exempt other functions, because federalism concerns would be raised by a broader (albeit more straightforward) reading. To protect state authority, the Court would not hold the law included state judges “unless Congress ha[d] made it clear [they] [we]re included.”<sup>75</sup>

Reading PLCAA to allow common law claims is less drastic than *Gregory*’s interpretation. Allowing common law claims is arguably permitted by PLCAA’s general definition and is consistent with PLCAA’s stated Purposes, Findings, and legislative history. A narrow reading of PLCAA is also more supportable than *Bond*’s statutory interpretation, where the Court read an exception for local crimes into the law to avoid federalism issues, even though none existed.

The principle of constitutional avoidance — where courts “interpret ambiguous, but potentially unconstitutional, statutes in ways that avoid the constitu-

tional problem”<sup>76</sup> — also favors this reading.<sup>77</sup> Nor can courts simply strike down the predicate exception, as it was a critical part of the congressional compromise needed to enact PLCAA. Congress intended to create only narrow protection for gun companies, and repeatedly stated that companies remain liable for unlawful conduct.<sup>78</sup> Eliminating the predicate exception would immunize law-breaking companies from statutory violations, contrary to Congress’s purpose. Removing the predicate exception also exacerbates federalism issues, leaving states even less recourse against gun companies. Courts favor reading statutes to fix federalism problems in ways that are both constitutional and respect the intent of Congress by doing the “least violence to the text.”<sup>79</sup> Both eliminating the predicate exception or reading it to encompass violations of common law do more violence to the text than interpreting “resulting from” to mean “solely caused by” — courts should thereby do the latter.

Courts may be awakening to PLCAA’s fatal federalism issues: a Pennsylvania appellate court recently became the first to hold PLCAA unconstitutional based on its usurpation of state common law — “a police power reserved for the several States under the Tenth Amendment.”<sup>80</sup>

## IV. Complications and Counterarguments

*A. Laws of General vs. Firearm-Specific Applicability*  
Federalism principles also aid resolution of the most commonly litigated issue relating to the predicate exception — whether “predicate” statutes can be generally applicable or must specifically mention firearms or ammunition<sup>81</sup> — favoring reading the predicate exception to include all relevant laws, specific or general.

### *B. Express Preemption*

Gun companies have argued that federalism principles are inapplicable to PLCAA because it involves “express” preemption, wherein Congress has explicitly stated its intent to override state law, leaving no ambiguity for interpretation.

The Court, however, has never stated that “implied” preemption or ambiguity are preconditions for applying federalism principles.<sup>82</sup> On the contrary, *Gregory* involved explicit preemption, and in *Bond* the Court found that ambiguity arose, not from ambiguous statutory language, but from the “improbably broad reach of [a] key statutory definition[;] ... the deeply serious consequences of adopting such a boundless reading; and the lack of any apparent need to do so in light of the context from which the statute arose.”<sup>83</sup> And even if some preemption is express, as in *Gregory*,

federalism principles apply to determine the scope of preemption, and to protect a state's right to structure and balance its own government, on which PLCAA infringes.

Further, the conflict between PLCAA's "solely caused by" and "resulting from" language creates, at least, ambiguity as to whether Congress intended to bar common law claims in the general definition of "qualified civil liability action."

### C. Anti-Commandeering

A handful of courts have mistakenly held that PLCAA does not violate the Tenth Amendment because it does not "commandeer" state officials.<sup>84</sup> But the Tenth Amendment does not state it is limited to "commandeering," nor has the Supreme Court held that it is.

For example, in *Murphy v. NCAA* the Court recently held that a federal statute violated the Tenth Amendment by prohibiting states from authorizing private sports gambling.<sup>85</sup> This statute, like PLCAA, achieved its objectives by requiring states to *refrain* from acting, without commanding "affirmative" action of state officials. But "[t]he basic principle — that Congress cannot issue direct orders to state legislatures — applies in either event."<sup>86</sup> *Murphy* supports the argument that a broad reading of PLCAA violates the Tenth Amendment.<sup>87</sup>

### Conclusion

For more than a decade, PLCAA has shielded the gun industry from the civil accountability to which every other industry is subjected, due to a judicial interpretation that is unduly broad, and violates federalism principles. Reading PLCAA to bar many common law claims unless there is a statutory violation unconstitutionally interferes with traditional state authority, dictating to states how to make their laws, and how to apply their tort law. The federalism principles developed by the Supreme Court requires that PLCAA's bar on gun industry liability be narrowed, or done away with.

### Note

This article builds in part upon a theory devised by Robert S. Peck in challenging PLCAA several years ago. It does not purport to speak for him or how he would currently articulate this argument.

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# Gun Violence in Court

*Abbe R. Gluck, Alexander Nabavi-Noori, and Susan Wang*

## I. Introduction

Litigation cannot solve a public health crisis. But litigation can be an effective complementary tool to regulation by increasing the salience of a public health issue, eliciting closely guarded information to move public opinion, and prompting legislative action. From tobacco to opioids, litigants have successfully turned to courts for monetary relief, to initiate systemic change, and to hold industry accountable.<sup>1</sup>

For years, litigators have been trying to push firearm cases into their own litigation moment. The recent success of the opioid litigation provides a tantalizing model for those who would turn to courts for gun control. But litigation against the gun industry poses special challenges. Not only has the regulatory regime failed to prevent a public safety hazard, Congress has consistently underfunded and understaffed the relevant regulatory actors. And in 2005, it legislatively immunized the gun industry from suit with the Protection of Lawful Commerce in Arms Act (PLCAA) — a protection not replicated in any other field.

Over the last several decades, victims and stakeholders suing the gun industry have had limited success; victories remain confined to individual actors and unlike high-impact public litigations in other areas, aggregate class actions and major public litigation led by state attorneys general are noticeably absent in the firearm context. Industry-wide, high leverage lawsuits

have been critical turning points in suits involving other high-risk products. Why not for guns?

## II. Why Litigation?

Litigation can do more than generate funds: it can complement regulation, especially when the regulatory backdrop is weak as in the gun context. Among other things, litigation can raise the public profile of an issue for reform, disclose private industry information, and compel change in industry practices.

### A. Regulatory Vacuum

The United States has “the most severe gun problem of any high-income country,” and yet “no national requirements for training, licensing, registration, or safe storage.”<sup>2</sup> The Federal Assault Weapons Ban of 1994 lapsed in 2004 and has never been renewed. The Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) consistently struggles to meet its responsibility to oversee federal firearms license holders, leaving the industry’s flow of weapons largely unchecked. And the Consumer Product Safety Commission lacks jurisdiction to regulate firearms.

State-level legislation also remains patchwork, and individual states cannot provide the comprehensive monitoring or information benefits that would come from a federal regime. And because states with lax gun laws have spillover effects on their neighbors, state-level regulation is an imperfect solution.

The lack of a robust regulatory regime forces litigants to courts for individualized, case-specific relief against bad actors. But the lack of a regulatory regime also poses challenges for lawsuits, creating relatively few statutory causes of action under which distributors can be held accountable. Firearm litigants are

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thus stymied by a lax regulatory regime at both ends of the lawsuit.

### B. Information Problems

A ban on federal funding for gun injury research has produced large gaps in scientific knowledge on the scope of gun violence and what policies reduce injuries. The Dickey Amendment, first passed in 1996 and renewed every year since, prohibits federal funds from being used “to advocate or promote gun control.” The Amendment until 2020 had been interpreted to prevent the Center for Disease Control (CDC) from doing any research on gun violence. In 2019, Congress authorized \$25 million to the CDC and the National Institutes of Health (NIH) to fund studies on gun violence.

There is also no firearms surveillance system that could help researchers understand trends in injury and suicide involving guns. The Tiahrt Amendments functionally prohibit ATF from releasing firearm trace data, which could help track illegal gun traffickers and preventing gun crimes.

The lack of information increases pressure on litigation as a key method of disclosure. Discovery has become essential to understanding the effects of firearm marketing strategies on violence, or the extent to which industry leaders are aware that their distribution strategies allow guns to end up in criminal hands.

### C. Lawsuit-Blocking Federal Legislation

A final hurdle is the 2005 federal Protection of Lawful Commerce in Arms Act (PLCAA). PLCAA prohibits all civil actions “against manufacturers, distributors, dealers, or importers of firearms or ammunition” for any harm caused by the criminal or unlawful action of third parties.

The Act contains six exceptions:

1. Suits against those who “knowingly transfer a firearm, knowing that such a firearm will be used to commit a crime of violence;”
2. Negligent entrustment or negligence per se suits against sellers;
3. Suits against a manufacturer or seller of a qualified product who knowingly violated a “State or Federal statute applicable to the sale or marketing of the product,” where the violation was a “proximate cause” of the relevant harm (also called the “predicate exception”);
4. Suits for breach of contract or warranty;
5. Defective design suits;
6. An action commenced by the Attorney General to enforce the Gun Control Act or the National Firearms Act.

As we discuss in Section III.C, courts have interpreted the litigation shield broadly despite the exceptions. The effect has been a functional immunization of the gun industry from suit, unseen in any other areas.

## III. Waves of Litigation and the Current Plateau

Gun violence cases began as scattered individual injury suits. Over time, these cases attracted the involvement of municipalities and other institutional actors. Nevertheless, the litigation remains immature as compared to other public-health litigation efforts. It has failed to achieve mass aggregation, government actors have much more limited involvement in the cases, and strategies continue to emphasize targeting individual manufacturers, distributors, and retailers in ways that fail to elicit the necessary industry information that could promote broader, systematic change in practices at the industry level.

The cases discussed below are a representative sample of a universe of cases compiled through searches of Westlaw; Bloomberg; and state attorneys general press releases.<sup>3</sup> An initial search of these sources uncovered a body of over 400 cases. We excluded cases that did not concern litigation stemming from gun violence and arrived at a final body of 215 cases occurring between 1975 and 2020. We corroborated our findings with litigators from the Brady Center, the National Association of Attorneys General, and through a review of the relevant secondary literature.

### A. First Wave of Litigation (1970-1998)

Beginning in the 1970s, scholars began to conceptualize gun violence as a public health issue. This new framing shifted the focus upstream, with an emphasis on the “environmental factors” that foster gun violence” including the “marketing and distribution of firearms,” later available for criminal misuse.<sup>4</sup>

Coupled with the fast-growing prevalence of firearm-related homicides in the 1980s, victims began seeking liability not only against their assailants, but also against the manufacturers and sellers. Cases during this period fell into several broad categories: defective design, negligent sales, and abnormally dangerous activity claims. In the end, courts dismissed the vast majority of these lawsuits before trial.

#### I. PER SE LIABILITY FOR DANGER TO THE PUBLIC

The most ambitious claims argued that manufacturing firearms was an abnormally dangerous activity for which strict liability should attach, even when the firearms themselves were not defective. Of the thirty such cases of this kind in our sample, nearly all were

dismissed at either summary judgment or on a motion to dismiss.

For example, in *Mavilia v. Stoeger Industries*,<sup>5</sup> the family of a bystander killed by a pistol unsuccessfully argued in Massachusetts federal court that the manufacturer was strictly liable because the weapon presented an inherent danger to the public. The court relied upon the “formidable Massachusetts legislative policy against banning handguns” to reject strict liability. Similarly, in *Riordan v. International Armament Corp.*, plaintiffs shot during a criminal assault argued that manufacturers were liable for failing to “tak[e] adequate precautions to prevent the sale of [their] handguns to persons...reasonably likely to cause harm to the general public.” The Illinois Circuit and Appellate Courts ultimately found that manufacturers owed no duty to members of the public to control the distribution of their handguns under state law. And in *Forni v. Ferguson*, New York’s Appellate Division refused to question legislative policy toward firearms, leaving it to the legislature to analyze risk versus utility “to decide whether manufacture, sale and possession of firearms is legal.”

In only one case — *Kelley v. R.G. Industries* in 1985 — was this argument successful. There, the Maryland Supreme Court held manufacturers strictly liable for injuries resulting from so-called “Saturday Night Specials” — lightweight and easy-to-conceal handguns. The court argued that these weapons were “particularly attractive for criminal use and virtually useless for the legitimate purposes of law enforcement, sport, and protection of persons, property and businesses.” However, the Maryland legislature eventually passed article 27 § 36-I(h) overturning *Kelley’s* strict liability holding.

## 2. DEFECTIVE DESIGN

Products liability claims for injuries resulting from firearm malfunctions were also common during this period — comprising forty-five cases in our dataset — sometimes leading to significant compensation for victims. For example, in *Johnson v. Colt Industries*, a jury in the federal district court in Kansas awarded \$2.1M to two plaintiffs injured when the handgun they dropped accidentally discharged. Some courts recognized more capacious understandings of what constituted a design defect. For example, in *Smith v. Bryco*, the New Mexico Supreme Court held a manufacturer liable for their failure to include “available and economically reasonable design features and warnings which would have prevented the shooting.”

Claims brought by crime victims were less likely to succeed. These complaints often failed to allege any actual defect in the firearm itself. For instance, in

*Addison v. Williams*, the victims of a shooting using a Colt rifle did not argue that the weapon malfunctioned. Rather, they relied on a risk/utility assessment to argue that the weapons were per se dangerous and defective. The Louisiana Court of Appeals held that defective design claims must allege a specific defect in the weapon to proceed to such a risk/utility analysis. Federal and state courts in California, Illinois, and Texas came to the same conclusion.

## 3. NEGLIGENT SALES AND MARKETING

Negligent marketing or sales claims made up thirty-four of the cases in our dataset. These cases relied on theories that manufacturers failed to take adequate precautions against foreseeably dangerous misuses of their weapons.

In some cases, plaintiffs targeted retailers who sold firearms to an individual who the retailer should have suspected would misuse the weapon. In *Bernethy v. Walt Failor’s, Inc.*, a retailer sold a rifle to a visibly intoxicated man who threatened store employees before leaving to shoot and kill his estranged wife. The Washington Supreme Court recognized a negligent entrustment theory and a duty not to furnish a gun to an intoxicated buyer. The Florida Supreme Court in *Kitchen v. K-Mart Corp.* similarly recognized that negligent entrustment was available to hold a merchant liable for selling a rifle to a visibly intoxicated purchaser who misuses the weapon.

However, foreseeability was a crucial factor in these cases. For example, in *Everett v. Carter*, the representative of a homicide victim unsuccessfully sued a local handgun dealer in Florida state court for illegally selling a firearm to a nineteen-year-old who later used the gun to kill the decedent. Although underage sales are prohibited under both state and federal law, the court found that the chain of causation was broken by the criminal misuse of the weapon to commit homicide six weeks after the illegal sale.

In *Buczkowski v. McKay*, the Supreme Court of Michigan also mused about whether imposing a duty on retailers was a prudent method of decreasing gun violence after refusing to hold a merchant liable for the criminal misuse of ammunition sold to an individual allegedly behaving erratically during the sale. The court noted that imposing liability would “raise the price of a multitude of potentially harmful products as sellers redistribute the cost of potential liability to all consumers” and that it is “unlikely” that this “will have ‘a substantial impact on crime.’”

Finally, some plaintiffs accused manufacturers of negligently marketing their guns, leading to crime-related injuries. Nearly all these claims — fourteen of which were in our dataset — were dismissed prior

to trial or defeated on summary judgment “based on judicial insistence that manufacturers owe no duty of care to the public in marketing non-defective guns.”<sup>6</sup> The notable exception came in *Merrill v. Navegar*, in which plaintiffs claimed that the manufacturer marketed their firearms to persons at high risk of criminal misuse. The California Court of Appeals held that defendants had a duty to exercise reasonable care in marketing weapons, and that liability for marketing would further the social policy of decreasing gun-related injuries. This theory of liability of overpromotion of a weapon served as a predecessor to a recent, important case from Connecticut, *Soto v. Bushmaster*, which we discuss *infra*.

### B. Second Wave of Litigation (1998-2005)

In most major successful public health litigation, there is a common pattern: individual suits against individual defendants mature into government-initiated legal actions against broader swaths of the industry. In this way, state-initiated suits against the tobacco industry in the late 1990s and locality- and state- initiated opioid suits today transformed individual personal injury claims into mass torts.

In the late 1990s, municipalities began suing the gun industry, “inspired by state lawsuits against the tobacco industry.”<sup>7</sup> Although municipalities brought similar claims to those raised in earlier individual suits, they also advanced novel public nuisance theories and sought injunctive relief in addition to damages.

In *Morial v. Smith Wesson Corporation*, New Orleans brought the first such suit in 1998 against ten manufacturers, five local pawn shops, and three sporting goods retailers. That same year, in *City of Chicago v. Beretta*, Chicago sued “18 manufacturers, 4 distributors, and 11 dealers of handguns that have been illegally possessed and used in the city.” Over the coming years, Atlanta, Boston, Cincinnati, Los Angeles, Miami, Philadelphia, San Francisco, and others filed similar cases. These suits were part of a coordinated effort organized by the Castano Safe Gun Litigation Group, which had arisen out of the same Castano Group that spearheaded the tobacco class actions.<sup>8</sup>

The efforts to frame the industry’s marketing, distribution, and design activity as contributing to a public nuisance largely failed. For instance, the Third Circuit rejected a City of Philadelphia suit, holding that Pennsylvania state law did not support public nuisance claims involving “lawful products...lawfully placed in the stream of commerce.” New York’s Appellate Division came to the same conclusion in *People v. Sturm, Ruger Company*, pointing to decisions in the Third Circuit, California, DC, and Indiana to demonstrate

that “other jurisdictions have dismissed public nuisance claims against firearms manufacturers.”

A notable outlier is *City of Gary*, in which the Indiana Supreme Court reinstated a nuisance claim against ten firearms manufacturers. However, these victories were rare and required significant municipal resources to litigate. The *City of Gary* suit has yet to be resolved more than twenty years later.

Other municipalities chose not to continue their litigation even after legal victories. Boston and Cincinnati abandoned their suits by 2003, citing low likelihoods of success and high litigation costs. Cincinnati’s decision came despite the Ohio Supreme Court’s favorable holding that a public nuisance claim could move forward based on allegations of “marketing, distributing, and selling firearms in a manner that facilitated their flow into the illegal market.”

This second wave of litigation also saw the involvement of issue-driven organizations such as the Brady Center and the NAACP, which filed a case against AcuSport highlighting the public health effects of handguns on the Black community. While the court ultimately dismissed the case for lack of specific organizational standing, Judge Weinstein used his opinion to expound on how the merits of the NAACP’s public nuisance claims could be established on the available record. He concluded that the evidence showed defendants were responsible for creating a public nuisance, and that through “voluntarily and . . . easily implemented changes in marketing,” manufacturers and distributors could “substantially reduce the harm occasioned by the diversion of guns to the illegal market.” The passage of PLCAA two years later, however, would curtail hopes that this dicta could be used as a roadmap for ushering in the “golden age” of firearm litigation.

Individual claims also began to expand beyond specific manufacturer grievances. In *Hamilton v. AccuTek*, the relatives of individuals killed by handguns sued twenty-five manufacturers in federal district court in New York, alleging that negligent marketing practices led to the sale of handguns to criminals. They also introduced an affidavit from a former Smith & Wesson employee who testified that the “industry as a whole are fully aware of the extent of the criminal misuse of firearms” and yet “take no independent action to [ensure] responsible distribution practices.” Despite an initial jury verdict for millions of dollars, New York’s highest court eventually overturned the verdict, determining that the manufacturers owed no duty to the plaintiffs to exercise reasonable care in the marketing and distribution of their handguns.

In some cases, municipalities were able to elicit key settlement agreements with manufacturers. For



instance, in 2000, Brady-led litigation on behalf of cities nationwide elicited a settlement from Smith & Wesson in which the manufacturer agreed to design, marketing, and distribution changes — including the installation of trigger locks on weapons — in exchange for an agreement to drop threatened lawsuits. Similarly, in 2003, cities across California coordinating litigation against five firearms distributors and retailers, obtaining a settlement for \$70,000, and a promise to cease selling firearms at gun shows and to annually train employees on avoiding sales to straw purchasers.<sup>9</sup>

Some commentators have argued that these municipal lawsuits acted as stand-ins for aggregation. Neither the first nor second wave yielded a successful class action certification, largely because individual claims of gun victims lacked commonality and instances of gun violence were too infrequent to yield the thousands of clients needed to tempt law firms.

### C. *The Third Wave and Effects of PLCAA (2005-Present)*

But momentum towards municipal suits and coordinated nationwide action in the second wave came at a price, spurring the gun industry to lobby for statutory immunity from tort claims. In 1999, Louisiana enacted Act 291 which “preclude[d] suits from being filed by any political subdivision or local governmental authority against any firearms or ammunition manufacturer, trade association, or dealer for damages relating to the lawful design, manufacture, marketing, or sale of firearms or ammunition.” Similarly, in response to a suit by the City of Atlanta, Georgia amended its firearm regulations, reserving the right to bring civil actions against the gun industry to the State.

These state efforts served as a predecessor to PLCAA. Congress passed PLCAA in 2005 to preempt individual and municipal lawsuits that threatened the industry. Pro-gun lobbyists saw the bill as saving the industry from collapse at the hands of politically motivated suits. PLCAA in turn inspired further legislation in 34 states which shields manufacturers from litigation by state and local governments.

Pressure from litigation in the early 2000s had begun to yield limited results, such as Smith & Wesson’s agreement to establish a “code of conduct” for its dealers and distributors as part of a settlement with fifteen cities seeking damages for gun violence.<sup>10</sup> As the court in *NAACP v. AcuSport* noted, litigation discovery against industry defendants had also revealed that some members of the firearm industry had failed to take “obvious and easily implemented steps” to “check[] illegal handgun diversion,” such as prohibiting repeat sales to the same individual. Reformers worried PLCAA would stymie this progress and also

that a broad federal shield would “diminish[] incentives for safer designs and distribution, at the expense of gun consumers and bystanders alike.”

Post-PLCAA, gun litigation still involves mostly private individuals and municipalities filing suit. Although some individual litigants have won limited relief, manufacturer liability remains elusive. Throughout, state attorneys general have remained uninvolved in aggregated class actions or multi-district litigation.

#### I. CLAIMS AND REQUESTED RELIEF

Post-PLCAA, there remain four broad categories of claims: negligent sales and marketing, deceptive marketing, municipal public nuisance, and defective design claims. Plaintiffs continue seeking compensatory and punitive damages as well as injunctive relief.

##### (a) Individual Tort Claims

Private litigants continue to advance claims that defendants should be held liable for injuries caused by their negligent sales and marketing practices. Claims tend to cluster around negligent sale and entrustment theories. Litigants likely turn to negligent entrustment because it is an express exception under PLCAA. However, general negligence is not excepted and those claims have had less success.

For example, the plaintiff in *Delana v. CED Sales* alleged that she called the defendant firearms store begging them not to sell a gun to her daughter, who suffered from schizophrenia. The store ignored her warnings and sold her daughter the firearm she later used to kill her father. The plaintiff argued that the defendant had negligently entrusted her daughter with the firearm, because they “knew or had reason to know” that the sale “posed an unreasonable risk” due to the daughter’s “severe, ongoing mental illness.” The Missouri Supreme Court upheld the claim as valid under PLCAA, and the case ultimately settled for \$2.2M.

Other negligent entrustment suits have also had successful results: a \$6M award after the jury found the gun shop had negligently entrusted firearms to an obvious straw purchaser in *Norbert v. Badger Guns*; a \$2M settlement against the pawn store that sold guns used in a 2016 Kansas mass shooting in *Luke v. A Pawn Shop*; and a \$132k settlement in *Shirley v. Glass* against the gun store that sold the firearm used in a 2015 murder-suicide in Kansas.

Plaintiffs have also asked for creative forms of injunctive relief. In *Englund v. J&G Sales & World Pawn Exchange*, the Brady Center helped plaintiffs sue a gun store that sold firearms to the shooter’s mother, even though the shooter had emailed the

store explaining he was the actual buyer. As part of the settlement, the defendant agreed to improve employee training and change their purchase-tracking system to prevent future such straw purchases. While inventive, relief in these cases continues to be against individual gun shop owners. Large, industry-wide payouts or injunctions have yet to materialize.

On the other hand, courts almost universally agree that general negligence claims are preempted by PLCAA. In *Jefferies v. District of Columbia*, where the mother of the decedent filed a negligence suit against ROMARM, the manufacturer of the AK-47 used to kill her daughter in a drive-by shooting. The DC District Court found such claims were “unambiguously bar[red]” by PLCAA.

Courts have dismissed other negligence actions because the intervening actions of a third party severs the chain of causation between the defendant’s negligent act and the plaintiff’s injury. In *Johnson v. Wal-Mart Stores, Inc.*, a federal district court in Illinois found that a Wal-Mart employee’s failure to verify the buyer’s ID in an ammunition sale as required by state law did not make Wal-Mart liable because the victim’s intervening suicide severed the chain of causation.

The courts’ narrow approach to causation mirrors the first wave of cases against opioid manufacturers in the early 2000s. There, courts often found that plaintiffs’ addiction — considered an intervening moral wrong — broke the chain of causation. Over time, cases matured, addiction stigma lessened, and courts accepted arguments for deceptive marketing and careless distribution and sale, regardless of the actions taken by the injured or their physicians. Growing understanding of the biological nature of addiction may explain that shift.

As other papers in this volume discuss, scientific understanding of the relationship between mental and behavioral health and gun violence is still evolving. But as evidence develops about how firearm marketing containing violent imagery affects vulnerable audiences such as individuals who struggle with suicidal ideation, views of culpability and causation around gun violence may similarly change.

#### (b) Deceptive and Unfair Trade Practices

Deceptive marketing suits continue and may be emerging as litigation safe harbors under PLCAA. PLCAA’s predicate exception allows plaintiffs to sue where they can demonstrate that a defendant knowingly violated an underlying statute “applicable to the sale or marketing” of a firearm. As detailed elsewhere in this volume, courts have held that if the plaintiff satisfies the statutory predicate exception then *all*

claims, including common law claims for negligence and nuisance, are allowed to proceed.

A recent victory was *Soto v. Bushmaster*, which arose out of the Sandy Hook Elementary school shooting. Plaintiffs argued that the defendant Bushmaster had marketed the weapon used in the shooting as “militaristic and assaultive...suitabl[e] for offensive combat missions” in violation of the Connecticut Unfair Trade Practices Act. The Connecticut Supreme Court allowed the case to go forward, taking a position on a yet-unresolved PLCAA question: whether PLCAA’s predicate exception includes statutes of general applicability like CUTPA. The court held it did, and the U.S. Supreme Court denied certiorari.

In a subsequent case *Prescott v. Slide Fire Solutions*, the plaintiffs argued that the defendant, a bump stock manufacturer, had marketed its product “as a ‘military-grade accessory for civilians.’” A Nevada federal court upheld the plaintiff’s deceptive advertising claims under the Nevada Deceptive Trade Practice Act. Like the Connecticut Supreme Court, it found that the predicate exception did not require a statute “that pertained *exclusively* to the sale or marketing of firearms.” The case is still in discovery.

#### (c) Municipal Suits

Cities including New York City, Kansas City, and D.C. continue to sue, but face novel problems under courts’ broad interpretation of PLCAA. Only Kansas City’s suit is still pending post-*Soto*. In *City of New York v. Beretta*, the City sued manufacturers and distributors for public nuisance under state statutes, claiming that the defendants failed to “monitor, supervise or regulate the sale and distribution of their guns by” downstream suppliers, and that as a result, “thousands of guns manufactured or distributed by defendants were used to commit crimes” in the city. The city sought injunctive relief and abatement of the public nuisance. The New York court held that PLCAA’s predicate exception did not encompass statutes of “general applicability” like the public nuisance statute. On the other hand the Indiana Court of Appeals in *City of Gary* was willing to find a statutory predicate in state regulations that “deal[] with the sale of handguns.” The case is still pending.

#### (d) Defective Design

Defective design suits fall into two general categories: exploding firearms and unintended discharges. While these suits easily circumvent PLCAA under the defective design exception, the majority of cases are still dismissed during motions practice or at summary judgment on the merits. For example, in *Harris v. Remington Arms Company*, an Oklahoma federal

court granted the defendant's motion for summary judgment on an unintended discharge claim, finding there was no causal connection between the alleged design defect and the injury-causing event. Similarly in *A.S. v. Remington Arms*, an Indiana federal court found the plaintiff had failed to establish that a defect in the rifle had caused it to explode when fired.

Product liability claims have also proved the exception to the paucity of aggregation in gun litigation, likely because commonality is more easily satisfied if all guns have the same defect. In the 2017 case *Pollard*

public opinion towards greater support for gun control, AGs' continued reticence remains a puzzle. A full answer lies outside the scope of this paper, but presents an interesting avenue for future research.

#### IV. Conclusion: Paths Forward

The past four decades of litigation against the firearm industry have seen patchwork success but stunted growth. Gun litigation has yet to reach the tipping point towards industrywide accountability or large multidistrict settlements. But lawyers and plaintiffs

The past four decades of litigation against the firearm industry have seen patchwork success but stunted growth. Gun litigation has yet to reach the tipping point towards industrywide accountability or large multidistrict settlements. But lawyers and plaintiffs can still push firearm litigation beyond the framework of the last forty years. Aggregation and aggressive claims remain live possibilities for innovative lawsuits against the firearm industry.

*v. Remington Arms*, a court approved a nationwide class-action settlement against Remington for rifles which discharged unexpectedly. In March 2020, Sig Sauer also reached a settlement in a class action lawsuit involving the P320's faulty trigger design.

#### 2. CLASS AGGREGATION AND STATE ATTORNEYS GENERAL

Outside of defective design claims, the third wave of litigation has seen very few successful class actions. Classes have been certified in only two pending cases, both arising from mass shootings — *Soto* and *Prescott*. In some ways, the difficulty of successful aggregation is foreseeable given the peculiarities of firearm litigation. Plaintiffs may not share enough commonality to obtain class certification. Victims of gun violence may not be numerous enough, or gun industry actors wealthy enough, to tempt the private plaintiffs' bar into collecting thousands of clients into mass suits. However, the momentum towards larger-scale, municipal lawsuits throughout the 1990s and early 2000s suggests that for government plaintiffs these obstacles were not insurmountable.

Why then have municipal suits not led to larger-scale litigation by states? One possible explanation is politics. Most state AGs are elected; gun cases may be too politically toxic, even in otherwise liberal states such as Massachusetts. AG-driven large-scale, multi-state litigation often is bipartisan so politics may also be a barrier there. However, in light of recent shifts in

can still push firearm litigation beyond the framework of the last forty years. Aggregation and aggressive claims remain live possibilities for innovative lawsuits against the firearm industry.

Most theories of mature tort litigation rely on aggregation. The classic counterargument to aggregation here is that it is unnecessary for firearms. If only about 5% of bad actors are responsible for 90% of the firearms used to harm people, then the existing strategy of individual payouts and injunctive relief is enough to remove the few "bad apples." But ongoing lawsuits point to more systemic wrongdoing: municipalities allege that firearm manufacturers are aware that their distribution and marketing practices put many of their guns in criminal hands; and the plaintiffs in *Soto* and *Prescott* base their suits on the defendants' use of violent advertisements to sell firearms. So reconceived, the problem is not a few non-compliant actors, but rather common industry practices that help create the conditions for gun violence.

Moreover, there are reasons to think that earlier impediments to class aggregation — a lack of commonality and too few plaintiffs to bring lawsuits — have become less relevant. Firearm litigation is already seeing nascent aggregation. The changing reality of mass shootings makes commonality easier to find amongst plaintiffs. The plaintiffs in *Prescott* are a class comprising victims of the same Las Vegas shooting, and the plaintiffs in *Soto* are also a class of the Sandy Hook victims and their family members. Mul-

tidistrict litigation — consolidation of individual cases not amenable to class action — has also proved a valuable tool in other public health mass torts, including opioids and JUUL.

Economic concerns, however, may still be important barriers. For instance, the Brady Center reports obtaining \$30 million in settlements for victims of gun violence, but those settlements come from over 250 lawsuits, bringing the average expected to only \$120,000 per suit on average. There are, of course, outliers. While in the high-profile DC sniper case, *Johnson v. Bull's Eye Shooter Supply*, plaintiffs' negligent sale claim resulted in a settlement of over \$2 million, this outcome is the exception to the rule. Most gun violence is the product of decentralized systems of negligent dealers and the unethical marketing which distribute the costs of gun violence widely and so make blockbuster settlements difficult.

Economic impediments to litigation spotlight the importance of government involvement. Municipalities themselves can fill the gap in aggregated cases left by State AGs. Local government plaintiffs have played an outsized role in the most recent opioid multidistrict litigation, bringing suits even where their own State governments initially declined to do so.

Litigators also should not lose track of the fact that even unsuccessful lawsuits can be essential to obtaining disclosure of guarded information through discovery. In the tobacco and opioids cases (still in progress), early stages of the litigation exposed to public view internal documents fueling “exposes of industry misconduct,”<sup>11</sup> which in turn led to more information production, settlements, changes in public opinion, longer-lasting reforms to public health policy, and even preemptive changes by industry itself. There can be “winning through losing”: individual court defeats can still be a productive part of broader social changes.<sup>12</sup>

Gun litigation has already had a role in revealing gun-industry executives' awareness of their role in contributing to the proliferation of gun violence. Consider, for example, the affidavit from the former industry employee in *Hamilton v. Accu-Tek*, discussed above. In cases where settlement is an option, litigators might try to get some discovery first. In *Soto*, however, even as litigants enter the crucial discovery phase, a court protective order motivated by a desire to protect confidential trade secrets prevent information dissemination. The opioids MDL likewise has sealed discovery.

Finally, although national gun control legislation may not be politically feasible, even modest legislative proposals might significantly improve the odds of successful litigation against firearms manufacturers. PLCAA's predicate exception invites dialogue with state legislatures. Passing state statutes “applicable to the sale or marketing of [firearms]” would unlock new theories of liability beyond basic product liability claims. A comprehensive modern litigation strategy should include aggressive lobbying in statehouses on this front.

#### Note

The authors do not have any conflicts of interest to disclose.

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# Gun Violence in Court

Abbe R. Gluck, Alexander Nabavi-Noori, and Susan Wang

## APPENDIX A First Wave of Litigation: 1970-1998

Table I

Case Name	Circuit/Court	Year
Dixon v. Bell, [1816] 105 Eng. Rep. 1023, 1024 (K.B.)	UK	1816
Mears v. Olin, 527 F.2d 1100 (8th Cir. 1975)	8	1975
De Rosa v. Remington Arms Co., 509 F. Supp. 762 (E.D.N.Y. 1981)	2	1981
Bernethy v. Walt Failor's, Inc., 97 Wn. 2d 929 (Wash. 1982)	Washington	1982
Adkinson v. Rossi Arms Co., 659 P.2d 1236 (Alaska 1983)	Alaska	1983
First Commercial Trust Co. v. Lorcin Eng'g, Inc., 900 S.W.2d 202 (Ark. 1995)	Arkansas	1983
Mavilia v. Stoeger Industries, 574 F. Supp. 107 (D. Mass. 1983)	1	1983
Linton v. Smith & Wesson, 469 N.E.2d 339 (Ill. App. Ct. 1984)	Illinois	1984
Martin v. Harrington & Richardson, Inc., 743 F.2d 1200 (7th Cir. 1984)	7	1984
Rhodes v. R.G. Indus., 325 S.E.2d 465 (Ga. Ct. App. 1984)	Georgia	1984
Burkett v. Freedom Arms, Inc., 704 P.2d 118 (Or. 1985)	Oregon	1985
Kelley v. R.G. Industries, 497 A.2d 1143 (Md. 1985)	Maryland	1985
Patterson v. Rohm Gesellschaft, 608 F. Supp. 1206 (N.D. Tex. 1985)	5	1985
Perkins v. F.I.E. Corp., 762 F.2d 1250 (5th Cir. 1985)	5	1985
Riordan v. International Armament Corp., 477 N.E.2d 1293 (Ill. App. Ct. 1985)	Illinois	1985
Coulson v. DeAngelo, 493 So. 2d 98 (Fla. Dist. Ct. App. 1986)	Florida	1986
Everett v. Carter, 490 So. 2d 193 (Fla. Dist. Ct. App. 1986)	Florida	1986
Johnson v. Colt Industries Operating Corp., 797 F.2d 1530 (10th Cir. 1986)	10	1986
Moore v. R.G. Indus., 789 F.2d 1326 (9th Cir. 1986)	9	1986
Shipman v. Jennings Firearms, Inc., 791 F.2d 1532 (11th Cir. 1986)	11	1986
Strickland v. Fowler, 499 So. 2d 199 (La. Ct. App. 1986)	Louisiana	1986
Trespacios v. Valor Corp., 486 So. 2d 649 (Fla. Dist. Ct. App. 1986)	Florida	1986
Caveny v. Raven Arms Co., 665 F. Supp. 530 (S.D. Ohio 1987)	6	1987
Richardson v. Holland, 741 S.W.2d 751 (Mo. Ct. App. 1987)	Missouri	1987
Knott v. Liberty Jewelry & Loan, Inc., 748 P.2d 661 (Wash. Ct. App. 1988)	Washington	1988
Addison v. Williams, 546 So.2d 220, (La. Ct. App. 1989)	Louisiana	1989
Buczowski v. McKay & Kmart, 441 Mich. 96, 108 (Mich. 1992)	Michigan	1992
Forni v. Ferguson, 648 N.Y.S.2d 73 (App. Div. 1996)	New York	1996
McCarthy v. Sturm Ruger & Co., 916 F. Supp. 366 (S.D.N.Y. 1996)	2	1996
Alderman v. Bradley, 957 S.W.2d 264	Kentucky	1997
Kitchen v. K-Mart Corp., 697 So. 2d 1200 (Fla. 1997).	Florida	1997
McCarthy v. Olin Corp., 119 F.3d 148 (2d. Cir. 1997) (ammunition)	2	1997
Resteiner v. Sturm, Ruger & Co., 566 N.W.2d 53 (Mich. Ct. App. 1997)	Michigan	1997

## APPENDIX A

### First Wave of Litigation: 1970-1998 (continued)

Table I

Case Name	Circuit/Court	Year
Ahlschlager v. Remington Arms Co., Inc., 750 S.W.2d 832	Texas	1998
Bubalo v. Navegar, Inc., No. 96 C 3664, 1998 WL 142359 (N.D. Ill. Mar. 20, 1998)	7	1998
Copier v. Smith & Wesson Corp., 138 F.3d 833 (10th Cir. 1998)	10	1998
Copier v. Smith & Wesson, 138 F.3d 833 (10th Cir. 1998)	10	1998
Dix v. Beretta, No. 750681-9 (Cal. Super. Ct. County of Alameda filed April 15 1998)	California	1998
Halberstam v. Daniel, No. CV-95-3323 (E.D.N.Y. 1998)	2	1998

## APPENDIX B

### Second Wave of Litigation: 1998-2005

Table I

Case Name	Circuit/Court	Year
Morial v. Smith & Wesson, No. 98-18578 (La. Civ. Dist. Ct. Parish of Orleans filed Oct. 30, 1998)	New Orleans	1998
Archer v. Arms Tech., Inc., 725 F.Supp. 2d 784 (E.D. Mich. 1999)	6	1999
City of Bridgeport v. Smith & Wesson, Inc., No. CV-99-0361279 (Conn. Super. Ct. filed Jan. 27, 1999)	Connecticut	1999
City of Chicago v. Beretta U.S.A. Corp., No. 99-2518 (Ill. Cir. Ct. Cook County filed November 12, 1999)	Illinois	1999
Ganim v. Smith & Wesson No. CV 99 361279-S (Conn Super Ct Fairfield County filed Feb. 5 1999)	Connecticut	1999
Hamilton v. Accu-Tek, 62 F.Supp. 2d 802 (EDNY 1999)	2	1999
Merrill v. Navegar, Inc., 89 Cal. Rptr. 2d 146 (Ct. App. 1999), rev. granted 991 P.2d 775 (2000)	California	2000
Merrill v. Navegar, Inc., 26 Cal.4th 465 (Cal. 2001)	California	2001
Smith v. Bryco Arms, 131 N.M. 87 (N.M. Ct.App. 2001)	New Mexico	2001
City of Gary v. Smith & Wesson Corp, 801 N.E.2d 1222, 1234 (Ind. 2003).	Indiana	2003
Johnson v. Bull's Eye Shooter Supply, 2003 WL 21639244 (Wash. Super. Ct. 2003)	Washington	2003
McGuire and Lemongello v. Will Co., Inc., No. 02-c-2952 (Cir. Court, Kanawha County, W.Va) (March 19, 2003)	West Virginia	2003
Smith & Wesson v. City of Gary (CoA Indiana 2003)	Indiana	2003
People v. Sturm, Ruger Company, Inc., 309 A.D.2d 91 (N.Y.App. Div. 2003)	New York	2003
City of Chicago v. Beretta, 213 Ill.2d 351 (Ill. 2004)	Illinois	2004
<b>Other Cases Filed by Cities</b>		
City of Philadelphia v. Beretta U.S.A., Corp., 126 F.Supp. 2d 882 (E.D. Pa. 2000)	3	2000
In re Firearm Cases, 126 Cal.App. 4th 959 (Cal. Ct.App. 2005)	California	2005
Penelas v. Arms Technology, Inc., 778 So. 2d 1042 (Fla. Dist. Ct.App. 2001)	Florida	2001
Smith Wesson v. City of Atlanta, 273 Ga. 431 (Ga. 2001)	Georgia	2001
Boston v. Smith Wesson Corp., 12 Mass. L. Rptr. 225 (Mass. Super. Ct. 2000) (No. 1999-02590)	Massachusetts	2000
Cincinnati v. Beretta U.S.A. Corp., 95 Ohio St. 3d 416 (Ohio 2002)	Ohio	2002

## APPENDIX C

### Third Wave of Litigation: 2005-Present

Table I

Case Name	Circuit/Court	Year
Sisemore v. Sturm, Ruger (1:05-cv-01093) (W.D.Ark. Oct. 6, 2005)	8	2005
Grunow v.Valor Corp. of Florida, 904 So. 2d 551 (DCT Fla. 2005)	Florida	2005
T&M Jewelry, Inc. v. Hicks ex rel. Hicks, 189 S.W.3d 526 (KY 2006)	Kentucky	2006
City of New York v.A-1 Jewelry & Pawn, Inc., 247 F.R.D. 296 (E.D.N.Y. 2007)	2	2007
Bezot v. Smieth & Wesson (3:08-cv-00685) (M.D. La. Oct. 24, 2008)	5	2008
Brown v. Smith & Wesson (1:08-cv-01059) (W.D.Ark. Jul. 18, 2008)	8	2008
City of New York v. Beretta U.S.A. Corp., 524 F.3d 384 (2d Cir. 2008)	2	2008
District of Columbia v. Beretta, 940 A.2d 163 (D.C. 2008)	DC	2008
Foltz v. Smith & Wesson (3:08-cv-00858) (N.D.Tex. May 20, 2008)	5	2008
Hunter v. Smith & Wesson (3:08-cv-00733) (S.D. Ill. Oct. 17, 2008)	7	2008
Rider v. O. F. Mossberg & Sons (3:08-cv-00980) (W.D. La. July 10, 2008)	5	2008
Adames v. Sheahan, 233 Ill. 2d 276 (Ill. 2009)	Illinois	2009
Estate of Charlot v. Bushmaster, 628 F.Supp. 2d 174 (D.D.C. 2009)	DC	2009
Ileto v. Glock, Inc. 565 F.3d 1126 (9th Cir. 2009)	9	2009
Johnson v. Wal-Mart Stores, Inc., 588 F.3d 439 (7th Cir. 2009)	7	2009
Worrall v. Smith & Wesson (2:09-cv-00051) (S.D. Ind. Feb. 13, 2009)	7	2009
Bridges v. Remington (2:10-cv-07487) (E.D. Pa. Dec. 23, 2010)	3	2010
Norberg, et al. v. Badger Guns, Inc., et al., No. 2010-CV-20655 (Milw. Co. Cir. Ct. 2010).	Wisconsin	2010
Thompson v. Remington, 2010 WL 3737869 (S.D. Miss. Sept. 17, 2010)	5	2010
Gilland v. Sportsmen's Outpost, Inc., 2011 WL 2479693 (Sup. Ct. Conn. May 26, 2011)	Connecticut	2011
Rice v. Mossberg (3:11-cv-00516) (M.D.Tenn. June 1, 2011)	6	2011
Williams v. Beemiller, Inc., 2011 N.Y. Slip Op. 34303 (N.Y. Sup. Ct. 2011)	New York	2011
Bailey v. Remington (7:12-cv-0003) (M.D. Ga. Jan. 4, 2012)	11	2012
Chavez v. Glock, Inc., 144 Cal. Rptr. 3d 326 (Ct.App. Cal. 2012)	California	2012
Riley v. Remington (0:12-cv-02844) (D. Minn. Nov. 9, 2012)	8	2012
Ryan v. Hughes-Ortiz, 959 N.E.2d 1000 (Mass.App. Ct. 2012)	Massachusetts	2012
Sewell v. Smith & Wesson (4:12-cv-00364) (N.D.Ala. Feb. 2, 2012)	11	2012
Webb v. Remington (4:12-cv-04140) (D.S.D. Aug. 2, 2012)	8	2012
Williams ex rel. Raymond v. Wal-Mart Stores East, L.P., 99 So. 3d 112 (Miss. 2012)	Mississippi	2012
Estate of Kim ex rel. Alexander v. Coxe, 295 P.3d 380 (AK 2013)	Alaska	2013
Jefferies v. D.C., 916 F.Supp.2d 42 (D.D.C. 2013)	DC	2013
Paulmann v. Hodgdon Powder Company (3:13-cv-00021) (W.D. Ky. Jan 7, 2013)	6	2013
Pfizer v. Smith & Wesson (4:13-cv-00676) (E.D. Mo. April 11, 2013)	8	2013
Shirley v. Glass, 308 P.3d 1 (Kan. 2013)	Kansas	2013
Woods v. Steadman's Hardware, 2013 WL 709110 (D. Mon. 2013)	Montana	2013
Chiapperini v. Gander Mountain Co., 2014 N.Y. Slip Op. 24429 (N.Y. Sup. Ct. 2014)	New York	2014

## APPENDIX 3

### Third Wave of Litigation: 2005-Present (continued)

Table I

Case Name	Circuit/Court	Year
Maffei v. Smith & Wesson (7:14-cv-01374) (S.D.N.Y. Feb. 28, 2014)	2	2014
Sambrano v. Savage Arms, Inc., 338 P.3d 103 (N.M. Ct.App. 2014)	New Mexico	2014
Bachert v. Remington (4:15-cv-03220) (S.D.Tex. Nov. 2, 2016)	5	2015
Corbett v. Remington (4:15-cv-00279) (D. Idaho Jul. 22, 2015)	9	2015
Harris et al. v. Remington (5:15-cv-01375) (W.D. Okla. Dec. 23, 2015)	10	2015
Phillips v. Lucky Gunner, 84 F. Supp. 3d 1216 (D. Color. 2015)	10	2015
Turner v. Remington (4:15-cv-00087) (M.D. Ga. June 5, 2015)	11	2015
Burdett v. Remington, 2016 WL 3745682 (N.D.Tex. July 13, 2016)	5	2016
Corporon v. Wal-Mart Stores East, 2016 WL 3881341 (D. Kans. 2016)	10	2016
Delana v. CED Sales, 486 S.W.3d 316 (MO 2016)	Missouri	2016
Fear v. Taurus Int'l Manufacturing (2:16-cv-10715) (E.D. Mich. Feb. 29, 2016)	6	2016
Garrison et al. v. Sturm, Ruger (5:16-cv-01559) (N.D. Ala. Sept. 20, 2016)	11	2016
Liverman v. Remington (1:18-cv-00275) (W.D. Tex. Nov. 2, 2016)	5	2016
McNeal et al. v. Smith & Wesson (3:16-cv-00067) (M.D. Tenn. Jan. 21, 2016)	6	2016
Ramos v. Wal-Mart Stores, 202 F. Supp. 3d 457 (E.D. Pa. 2016)	3	2016
Turner v. Sturm, Ruger (1:16-cv-02003) (N.D. Ala. Dec. 14, 2016)	11	2016
Alberti v. Remington (1:17-cv-00108) (D. Idaho Mar. 13, 2017)	9	2017
Arnold v. Remington (1:17-cv-00225) (W.D. Tex. Mar. 10, 2017)	5	2017
Batts v. Remington (6:17-cv-00346) (W.D. Tex. Dec. 8, 2017)	5	2017
Contreras v. Remington (1:17-cv-00075) (D. Mont. May 30, 2017)	9	2017
Garnett v. Remington (6:17-cv-00263) (W.D. Tex. Oct. 2, 2017)	5	2017
Johnson v. Remington (9:17-cv-00151) (E.D. Tex. Aug. 23, 2017)	5	2017
KS&E Sports v. Runnels, 72 N.E.3d 892 (Ind. 2017)	Indiana	2017
Luke v. A Pawn Shop (Kan. Dist. Ct. 2018) available at < <a href="https://www.bradyunited.org/legal-case/luke-v-a-pawn-shop">https://www.bradyunited.org/legal-case/luke-v-a-pawn-shop</a> >	Kansas	2018
Lefebvre v. Remington Arms, 415 F. Supp. 3d 748 (W.D. Mich. 2019)	6	2017
Pollard v. Remington Arms, 320 F.R.D. 198 (W.D. Miss. 2017)	8	2017
Rivers v. Remington (2:17-cv-17124) (E.D. La. Dec. 12, 2017)	5	2017
Seguin v. Remington Arms Company, 260 F. Supp. 3d 674 (E.D. La. 2017)	5	2017
Shearouse v. Remington (4:17-cv-00107) (S.D. Ga. June 19, 2017)	11	2017
Garrison v. Sturm, Ruger & Company, Inc., 322 F. Supp. 3d 1217 (N.D. Ala. 2018)	11	2018
Seward v. Smith & Wesson (5:18-cv-00116) (W.D. Okla. Feb. 07, 2018)	10	2018
Stratton v. Thompson/Center Arms (4:18-cv-00040) (D. Utah June 18, 2018)	10	2018
Stringer v. Remington Arms Company, 2:18-CV-00059 (S.D. Miss. April 10, 2018)	5	2018
City of Gary v. Smith & Wesson Corp, 126 N.E.3d 813 (CoA Indiana 2019)	Indiana	2019
Crawford v. Jimenez Arms (1916-CV17245) (June 24, 2019)	Missouri	2019
Daniel v. Armslist, 386 Wis.2d 449 (Wis. 2019)	Wisconsin	2019



## APPENDIX 3

### Third Wave of Litigation: 2005-Present (continued)

Table I

Case Name	Circuit/Court	Year
Fischer v. Remington (2:19-cv-01342) (S.D. Ohio April 10, 2019)	6	2019
Harris et al. v. Remington, 398 F.Supp. 3d 1126 (W.D. Okla. 2019)	10	2019
Hilde v. Sturm, Ruger (9:19-cv-00073) (D. Mont. April 22, 2019)	9	2019
Pannell v. Remington (4:19-cv-00061) (N.D. Ala. Jan 11, 2019)	11	2019
Prescott v. Slide Fire Solutions, 410 F.Supp.3d 1123 (D. Nev. 2019)	9	2019
Soto v. Bushmaster, 202 A.3d 262 (Conn. 2019)	Connecticut	2019
Summers v. Cabela's Wholesale, 2019 WL 1423095 (Super. Ct. Dela. 2019)	Delaware	2019
Swank v. Smith & Wesson (2:19-cv-02113)	4	2019
Timperio v. Bronx-Lebanon Hospital Center, 384 F. Supp. 3d 425 (S.D.N.Y. 2019)	2	2019
A.S. v. Remington, 2020 BL 96877 (S.D. Ind. Mar. 16, 2020)	7	2020
Parsons v. Colt's Manufacturing Company, 2020 WL 1821306 (D. Nev. 2020)	9	2020
Scott v. Remington (2:19-cv-01891) (N.D. Alab. Nov. 21, 2019)	11	2020
Travieso v. Glock (2:20-cv-00523) (D. Ariz. 2020)	9	2020
Williams v. ROMARM, 2020 WL 1557156 (D.D.C. 2020)	DC	2020
Sig Sauer P320 Settlement Agreement, available at < <a href="https://www.sig-sauer.com/wp-content/uploads/2020/03/Short-Form-Agreement-Notice.pdf?utm_campaign=Hartley&amp;utm_medium=email&amp;utm_source=Eloqua">https://www.sig-sauer.com/wp-content/uploads/2020/03/Short-Form-Agreement-Notice.pdf?utm_campaign=Hartley&amp;utm_medium=email&amp;utm_source=Eloqua</a> >	n/a	2020

# Regulating 3D-Printed Guns Post-Heller: Why Two Steps Are Better Than One

*Thaddeus Talbot and Adam Skaggs*

“There’s all kinds of hybrid guns ... I’ve seen printable revolvers and multishot pistols and all kinds of weird, interesting stuff in resins and plastics.”<sup>1</sup>

“The debate is over. The guns are downloadable. The files are in the public domain. You cannot take them back.”<sup>2</sup>

- *Cody Wilson, creator of the first downloadable, 3D-printed gun*

## Introduction

While the Supreme Court’s landmark 2008 decision in *District of Columbia v. Heller* announced the individual right to keep and use a handgun for self-defense, it left unanswered the question of how courts should decide future Second Amendment cases. After *Heller*, several lower courts developed a two-step methodology under which judges first ask whether a regulated activity falls within the Second Amendment’s scope and, if so, whether the regulation survives means-end scrutiny. This test has become the near-consensus approach.<sup>3</sup>

But a dissenting group of judges argues that the consensus approach is inconsistent with *Heller* and renders the Second Amendment a “second-class” right.<sup>4</sup> In *Heller II*, then-judge Brett Kavanaugh laid out a different approach that looks solely to text, history, and tradition to decide constitutional inquiries

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instead of the strength of the government’s interest and evidence that a particular law advances that interest. This “history-only” test has support from conservative judges and Justices, including several appointed by President Donald Trump.

We argue that advanced firearm technologies, specifically 3D-printed weapons called “ghost guns,” demonstrate why a purely historical approach to constitutional judging is inadequate when applied to new, emerging technologies. Ghost guns are unserialized, do-it-yourself weapons available with no background checks. They can be undetectable by standard security equipment when built from plastic using 3D printers. Because plastic guns have no precedent in American history, we argue that historical gun laws are inadequate tests for their constitutionality even if legal scholars or judges attempt to reason by analogy. This reality challenges the viability of a purely historical test and demonstrates why the prevailing, two-step approach is appropriate.

Existing literature either highlights the limitations of a purely historical test or proposes creative regulations for ghost guns. This article uses 3D-printed guns as a case study to illustrate the shortcomings of the history-only test. We proceed in three Parts. First, this article outlines the consensus approach to deciding Second Amendment cases and notes the history-only alternative. Second, it describes the features of plastic 3D-printed guns that make them categorically different from any technology in history. Relatedly, we discuss proposed legislative responses to the dangers that ghost guns pose. Third, this article argues why a purely historical test fails as a manner of constitutional inquiry using three examples of historical gun regulations. We end by demonstrating why a two-step inquiry is more appropriate.

## After *Heller*, a Consensus on How to Review Gun Laws

Since 2008, more than 1,300 cases have raised Second Amendment claims in the lower courts.<sup>5</sup> To resolve these matters, judges adopted a two-step methodology that asks whether regulated activity falls within the scope of the Second Amendment and, if so, whether the regulation survives means-end scrutiny.

At step one, courts assess whether a challenged law falls into one of several, non-exhaustive categories of “longstanding” laws that *Heller* deemed “presumptively lawful.”<sup>6</sup> If it does, the law is constitutional and the inquiry ends. But if the regulation is not “longstanding” and implicates the protections of the Sec-

and tradition.”<sup>10</sup> He suggested that modern-day regulations that can reasonably be tethered to a historical analogue should be deemed constitutional, and courts have said this accords with the practice in other areas of constitutional law.<sup>11</sup> This article posits that some technologies, namely 3D-printed ghost guns, stretch judicial analogies beyond the breaking point, necessitating judicial reliance on evidence of burden and benefit to settle the matter.

This methodological dispute is no mere academic exercise. Besides elevating the architect of the history-only approach to the Supreme Court, President Trump has appointed numerous judges who support the approach and advocate for retiring the consensus

We argue that advanced firearm technologies, specifically 3D-printed weapons called “ghost guns,” demonstrate why a purely historical approach to constitutional judging is woefully inadequate when applied to new, emerging technologies. Ghost guns are unserialized, do-it-yourself weapons available with no background checks. They can be undetectable by standard security equipment when built from plastic using 3D printers. Because plastic guns have no precedent in American history, we argue that historical gun laws are inadequate tests for their constitutionality even if legal scholars or judges attempt to reason by analogy. This reality challenges the viability of a purely historical test and demonstrates why the prevailing, two-step approach is appropriate.

ond Amendment, then courts assess whether the law burdens the “core” right and to what degree. Laws that impose severe burdens on the core right may be subject to strict scrutiny, while laws that impose lesser burdens are generally assessed under intermediate scrutiny. The lower courts have been near unanimous in embracing this approach.<sup>7</sup>

Most conservative judges have followed the prevailing test.<sup>8</sup> But a growing contingent have advocated for an alternative approach that was first outlined by then-Judge Kavanaugh in a follow-on case to *Heller*. He argued that courts should look solely to text, history, and tradition to surmise the meaning of the Second Amendment. Now on the Supreme Court, Justice Kavanaugh telegraphed his continued preference for a historical test in an April 2020 New York City gun case.<sup>9</sup>

According to Justice Kavanaugh, this history-only test could adequately address new firearm technologies if courts simply “reason by analogy from history

methodology. The Trump administration’s Department of Justice has begun presenting solely historical argumentation in Second Amendment litigation, even when binding circuit precedent mandates the two-step test and application of heightened scrutiny.<sup>12</sup>

With the administration’s thumb on the scale and conservative Justices eager to decide another gun case,<sup>13</sup> the Supreme Court may have an opportunity to resolve this dispute in the near future. This article uses 3D-printed ghost guns to explain why the Court should not upset the circuit consensus.

### The Threat of 3D-Printed Ghost Guns

Ghost Guns are so named because they lack serial numbers, and thus cannot be traced by law enforcement. This makes their history and the ways they are acquired invisible. The parts to build ghost guns can be obtained or made without background checks, which makes them attractive to prohibited users and others who would fail these checks. Moreover, plastic

3D-printed ghost guns are largely undetectable by x-ray machines, and may be smuggled into high-security environments, like airplanes.

Some ghost guns are assembled using kits in which a key part — the “frame” or “receiver” — is sold in an unfinished, not-yet-functional form. Federal regulators at the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) have ruled that these unfinished frames or receivers do not trigger the regulations that apply to operable guns or finished frames and receivers. Kits with unfinished components are essentially unregulated even though they can be used to easily build guns that are functionally indistinguishable from traditional firearms.<sup>14</sup>

This article focuses on plastic ghost guns built with 3D-printers because their elusive capabilities represent a significant challenge to historical analogizing. Using digital blueprints called computer-aided design (CAD) files, 3D-printers layer sheets of plastic to create three-dimensional objects. They make components that fit with other gun parts to form functional firearms or they can print fully-operable, self-contained guns. While the composite plastic materials are not as durable as the materials used to build traditional guns, the plastic in 3D-printed guns may be undetectable by traditional security means.

Ghost guns are frequently used in the commission of crimes. In January 2020, a couple in Rhode Island was accused of murdering a woman using a 3D-printed gun.<sup>15</sup> A year before that, police arrested a man who carried a “hit list” of politicians and who built a rifle using a 3D-printed receiver after failing a background check.<sup>16</sup> American law enforcement agencies are recovering hundreds of illegal ghost guns from sea to shining sea, including in California, where 30 percent of guns ATF recovers are ghost guns.<sup>17</sup> The number of federal prosecutions involving ghost guns may also indicate the scope of the problem. According to one report, more than 2,500 ghost guns were connected to criminal activity in 114 federal cases from 2010 to April 2020.<sup>18</sup>

There is a high risk that ghost guns will be used to support future criminal activity. Law enforcement has recovered plastic guns in carry-on luggage at the Reno airport,<sup>19</sup> in Australia,<sup>20</sup> Sweden,<sup>21</sup> and the United Kingdom.<sup>22</sup> Journalists in Israel smuggled a 3D-printed gun into the Israeli Knesset during a speech by Prime Minister Benjamin Netanyahu.<sup>23</sup> And, although the Transportation Security Administration (TSA) has intercepted 3D-printed guns at airport checkpoints,<sup>24</sup> legislators and scholars warn that as 3D-printing technology advances, the size and shape of printed firearms will make detection impossible.<sup>25</sup>

Further, the sale of ghost guns is likely to increase during national emergencies. Giffords Law Center reported that online purchases of untraceable and undetectable gun kits and 3D printers have skyrocketed since the outbreak of COVID-19.<sup>26</sup> Yet, federal officials have left this advanced technology largely free of regulation.

#### *An Absence of Federal Leadership Allows the Ghost Gun Threat to Proliferate*

The elusive capabilities of 3D-printed ghost guns threatens to undermine existing federal legislation. The Undetectable Firearms Act of 1988 (UFA) prohibits the manufacture, sale, or possession of firearms that are not detectable by security screening devices.<sup>27</sup> With the support of the National Rifle Association, President Reagan signed the UFA into law in 1998 and Congress renewed it in 2003 and 2013. Given the ubiquity of downloadable manufacturing instructions, 3D printers allow users to easily make plastic guns that, while illegal under the UFA, can be smuggled into secure areas.

The ability to self-print plastic firearms also undermines the federal background check law. The Gun Control Act of 1968 (GCA) requires the central component of a firearm that houses the firing mechanism — the frame or receiver — to bear a serial number, and it cannot be purchased from a dealer without a background check. But a firearm is defined as any weapon that will “expel a projectile by the action of an explosive” or “the frame or receiver of any such weapon.”<sup>28</sup> Those who use 3D-printing technology to create their own frames or receivers, do not submit to background checks, and generally do not serialize gun components, making their weapons invisible to law enforcement.

The extent of the ghost guns problem has only widened due to federal inaction. While some members of Congress have urged ATF to address the panicked buying of ghost guns, including by introducing comprehensive reform,<sup>29</sup> Congress has failed to act. Simultaneously, President Trump’s Department of Justice has acted to allow the online distribution of blueprints to build 3D-printed guns to anyone with a computer. Leadership on this issue has fallen to the states. Two dozen states have sued the Trump administration to stop the distribution of downloadable guns. In California,<sup>30</sup> Connecticut,<sup>31</sup> and Washington,<sup>32</sup> legislatures have passed their own bans on undetectable ghost guns.

If courts are to determine whether such bans on 3D-printed ghost gun inhibit a protected Second Amendment right then, under the history-only test, there must be a comparable historical technology or law. We next explore the challenges of using a purely

historical framework to resolve the constitutional question.

### Why A Purely Historical Test Doesn't Work for 3D-Printed Ghost Guns

Beginning in the colonial period and continuing since the ratification of the Second Amendment in 1791, federal, state, and local governments have regulated the kinds of firearms that law abiding citizens may possess as well as the purposes for which they can be used.<sup>33</sup> The Founders could not have contemplated 3D-printing technology capable of producing functional, undetectable firearms made of plastic. To state the obvious, no study of eighteenth or nineteenth century statute books, however comprehensive, will reveal on-point statutory precedent for contemporary responses to this modern threat. But supporters of the history-only test would suggest this simply means that judges must “reason by analogy” when assessing such legislation.

The problem with historical analogies is not the particular analogy that might be invoked. Any crafty litigator or judge can dust off historical laws that share superficial similarities to modern-day firearm regulations. The problem may be the more basic one of fit. Especially where historical laws, and the context in which they were passed, present glaringly distinguishable features upon closer review. Without a rule of relevance, the methodology fails to constrain the ideological preferences of adjudicators and threatens the stability of constitutional decision-making. This issue is particularly threatening in the Second Amendment context where judicial rulings striking down regulations could have catastrophic consequences.

To assess the viability of a purely historical approach, we evaluate historical laws that could arguably serve as analogues to restrictions on undetectable, 3D-printed guns. The goal here is not to provide a taxonomy of potential approaches to judicial analogies, but to note the difficult legwork that analogies must do under any purely historical test.

#### *Historical Metal Detection and 3D-Printed Guns*

The first metal detector was invented in 1881 by Alexander Graham Bell, and it was not until four decades later that the first portable metal detector was invented. Modern metal-detection systems were not widely adopted until even later. The first airport to install metal detectors did so in 1970, and other airports only gradually followed suit. So it is not surprising that the first federal law prohibiting plastic guns that cannot be detected by a magnetometer, the UFA, was not passed until the end of the twentieth century, in 1988.

We assume, for two reasons, that under a text, history, and tradition approach, legislative precedent

dating to the end of the twentieth century would be insufficiently “longstanding” to establish a presumption of constitutionality.<sup>34</sup> First, courts have not held laws of this vintage as sufficiently grounded in history to be presumptively lawful. This is true even though *Heller* endorsed laws dating to the nineteenth and early twentieth centuries as longstanding. Second, scholars have argued that judicial reliance on contemporary laws to ascertain the original meaning of the Constitution contradicts the goals of originalism.<sup>35</sup> We also assume that 3D-printed guns are “arms” for purposes of Second Amendment analysis, since they are closer in functionality to the handguns *Heller* deemed protected than to other weapons courts have held are “arms,” from stun-guns to nunchakus, dirk knives, and police batons.<sup>36</sup> So if the Undetectable Firearms Act is not sufficiently longstanding to justify a 3D-printed gun ban under a history-only test, the question becomes whether there are other, older laws sufficiently analogous to uphold federal firearm detection laws without assessing the burdens imposed on gun rights and the benefits for public safety. We examine some potential candidates and conclude there are not.

#### *Quality Control Laws*

Beginning in the 1970s, quality-control laws aimed at prohibiting the sale of cheap, fragile guns called “Saturday Night Specials” that were widely available to criminals. States like New York maintained “minimum standards of quality control” by setting specifications as to the materials used to make guns. Melting point tests were used to make sure that guns were made from strong metals.<sup>37</sup>

These quality-control laws, like the UFA, date only to the latter half of the twentieth century, and may be insufficiently old to establish the UFA’s constitutionality under a history-only approach. But they arguably have roots in older laws dating to the early nineteenth century that required guns to pass safety and quality inspections before being sold. These laws authorized “provers of gun barrels,” to “try the strength” of firearms and mark them as passing inspection.<sup>38</sup> To reinforce these safe use standards, governments imposed criminal penalties, asset forfeiture, and even incarceration.

Whether dating to the nineteenth century or the 1970s, however, these laws are a sub-optimal analogue to laws prohibiting undetectable firearms made of plastic. True, throughout American history, laws have regulated materials used to build guns, just as the laws aimed at 3D-printed guns regulate guns made of plastic. The goals of these laws, however, are entirely different: through history, quality-control laws have aimed to protect users by outlawing guns that might

malfunction or explode in a user's hands, or otherwise degrade over time. In the colonial era, these laws were tied to ensuring guns were of sufficiently high quality to guarantee militia readiness in instances of attack. In the 1970s, these laws were designed to limit the availability of inexpensive and low-quality guns fueling urban crime. By contrast, regulation of the materials used in guns to ensure they can be detected by a magnetometer aim at preventing them from being smuggled into secure locations.

Quality-control laws touch on the materials from which guns are built for very different reasons. As such, they are an inadequate analogue for contemporary laws that prohibit undetectable plastic guns.

#### *Sensitive Place and Time Laws*

If bans on undetectable firearms aim at preventing guns from being smuggled into secure locations, then perhaps an adequate analogy can be found in laws that historically have banned guns from "sensitive places." *Heller* itself deemed laws "forbidding the carrying of firearms in sensitive places such as schools and government buildings" as longstanding and presumptively lawful. If sensitive-place bans are constitutional, and bans on undetectable guns are a means to effectuate them, should that resolve the question in favor of their constitutionality under a history-only test?

We would argue not. It is true that "sensitive place" laws have throughout history regulated the presence of guns in enumerated locations like schools and government buildings, and also in places like courtrooms, polling places, houses of worship, and public parks. The reasons for banning guns in sensitive places vary. In a courtroom tensions run high leading to escalation into an armed confrontation. At polling places, such laws aim to prevent voter intimidation. By contrast, modern metal detection laws are principally concerned not with *where* a firearm is possessed, but with the materials that make the gun detectable in the first instance. While the UFA does require that firearms be detectable by security screeners "commonly used at airports," it does not limit the ban on undetectable guns to airports — or any other particular locations. It makes possession of an undetectable, plastic gun illegal *anywhere*, including even in the home, where *Heller* tells us the Second Amendment right is at its apex. Laws like the UFA prohibit possession of a particular *type* of gun anywhere, not the possession of *any* type of gun in one particular place. Thus, place-based laws prohibiting people from bringing guns into particular locations seem an inadequate comparator to resolve constitutional questions concerning laws that prohibit possession of a particular variety of gun, even in the home.

Moreover, were bans on guns in sensitive places sufficiently analogous to laws like the UFA because banning undetectable guns helps effectuate bans on guns in particular places, it would be difficult to discern a limiting principle. If banning gun possession by minors might contribute to keeping guns out of schools, would sensitive place laws provide an adequate historical analogy for minimum age laws? If banning gun possession by criminal defendants helps effectuate bans on guns in courtrooms, under a history-only test would sensitive place laws justify bans on possession by those accused, but not convicted of certain crimes? As with these examples, it proves too much to suggest that a ban on carrying any type of gun into one particular place justifies banning possession of a single type of gun everywhere.

#### *Open Carry Laws*

A final analogy for undetectable gun bans might be historical laws permitting open carry or preferring openly visible guns to concealed arms. Certainly, there is ample evidence that concealed weapons have been historically disfavored, and *Heller* itself noted that the vast majority of courts through nineteenth century found bans on concealed weapons constitutional.<sup>39</sup>

But here, too, the analogy breaks down. First, *Heller* only cited historical decisions from southern state courts that endorsed open carry. The South's open carry tradition differed in practice from most of the country. In the northeast, mid-west and western portions of the country, the civilian carrying of guns in public was broadly prohibited. Scholars have also argued that Southern gun culture was borne out of a shameful past of slavery and hypermasculinity.<sup>40</sup> Slaveowners openly carried weapons in fear of slave uprisings and skirmishes with Native Americans. Post-Emancipation, concealed carry was denounced as dishonorable because it was thought to escalate routine disagreements or public confrontations. For Southern open-carry laws to serve as the appropriate analogy to justify modern bans on undetectable (or concealed) guns would require relying on a tradition that was limited to one region and that advanced entirely different goals than those served by undetectable gun bans today.

Second, basing constitutional judgment calls today on the traditions of a bygone era may be problematic in a context of evolving social mores. Today, those who wish to carry guns in public overwhelmingly prefer concealed to open carry. As late as the 1980s, concealed carry was illegal in almost every state; today it is legal in all 50 states. The trend is notably toward deregulation of concealed carry. As recently as 2014, all but four states required a license to carry a con-

cealed gun in public. Now, fifteen states have eliminated the licensing requirement altogether. A robust political movement claims not only that it is good policy to eliminate concealed carry licensing, but that doing so is compelled by the Second Amendment. This so-called “constitutional carry” movement suggests that any restrictions on carrying hidden guns violate the Constitution.

Ultimately, open carry analogies expose the reality that history rarely speaks with a unified voice. Making contemporary constitutional problem-solving depend on analogies to distinguishable regulations and gun cultures is problematic. Like quality control and sensitive place laws, Southern open carry laws are an inadequate historical analogue for modern regulations addressing modern technological developments.

### A Two-Step Method Makes More Sense

In contrast to the uncertainty that historical analogies present, the settled two-step test that courts have embraced ensures that constitutional inquiry reflects modern realities while also taking into account the historical tradition of gun regulation. The test does look to history and tradition to evaluate whether a law is sufficiently longstanding to be deemed constitutional on the threshold inquiry. And when confronted with laws that implicate Second Amendment rights, this test evaluates the relationship between the stated interests served by the regulation and the method employed to achieve that interest. Notably, a majority of conservative judges have also adopted this approach. Legal scholars have persuasively argued that this approach is consistent with *Heller’s* teachings, aligns the Second Amendment with other constitutional rights, and meaningfully protects the right to keep and bear arms.<sup>41</sup>

Several flaws with a history-only test are avoided under the prevailing methodology. First, a solely backward-looking test for constitutionality freezes gun regulation at some unspecified past point. If modern policymakers may constitutionally adopt only regulations closely tied to historical antecedents, then modern gun laws are limited to the types of laws policymakers adopted in the past, regardless of the changes in technology and societal norms. Consider state laws that permit the use of “smart gun” technology, which uses biometric recognition technology, to prevent gun theft and unauthorized use. Or the federal law against possession of a firearm on an airplane, which present safety challenges foreign to earlier means of transportation. A history-only text would restrict policymakers from effectively tailoring regulations, like these, based on contemporary policy needs because of circumstances un contemplated centuries ago.

Moreover, the history-only test requires judicial analogies that are not based in reason but intuition and inarticulable hunches. The late Justice Scalia popularly used this approach in analogizing obscene video games to reading a scary book,<sup>42</sup> and comparing GPS tracking to “a constable concealing himself in the target’s coach in order to track its movements.”<sup>43</sup> Attempting to judge by analogy poses as many problems in the Second Amendment context as it does in the First or Fourth, making it reasonable to ask whether attempting to adjudicate constitutional questions by resort to such comparisons would inevitably open the door to judicial activism or introduce subjective, outcome-driven decisions by judges.

By contrast, in allowing evidence of the government interests advanced by a particular gun law, as well as its effectiveness in advancing those interests, the prevailing methodology’s use of heightened scrutiny allows courts to assess how effectively modern gun laws respond to modern problems, including the causes and patterns of contemporary gun violence.

### Conclusion

Gun regulations have coexisted with gun rights since the Founding — and even before, from the 1328 Statute of Northampton, through the development of modern carry laws. A test looking purely to history, then, will find historical antecedents for many of the gun regulations enforced today. But modern gun technology, modern society, and modern patterns of gun violence also differ dramatically from their historical forebears, and present modern policymakers with new challenges that warrant new solutions. To limit the policy solutions to serious contemporary problems to those developed in an earlier era would hamper the states’ ability, as laboratories of democracy, to develop new solutions to new problems and combat modern gun violence. Moreover, judges would have to employ analogical reasoning to guns and gun laws from vastly different points in history, ignoring that the passage of time may have altered their foundational meaning and significance. As demonstrated within the context of advanced technologies like 3D-printed plastic guns, a purely historical test is insufficient.

### Note

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# Second Amendment Sanctuaries: A Legally Dubious Protest Movement

*Erica Turret, Chelsea Parsons, and Adam Skaggs*

## Introduction

The years following the mass shooting at Sandy Hook Elementary School in December 2012 have been marked by significant progress as state legislatures across the country have strengthened gun laws. They have enacted a variety of new laws, often on a bipartisan basis, to require universal background checks, disarm domestic abusers, ban assault weapons and high capacity ammunition magazines, and create extreme risk protection orders (ERPOs) that allow courts to remove guns from individuals during temporary periods of crisis.<sup>1</sup> The gun violence prevention movement's strength is growing. According to an analysis by the Giffords Law Center, as of December 2019, 137 gun safety bills had been enacted in 32 states and Washington, D.C. in less than two years after the Parkland shooting in February 2018.<sup>2</sup> Public opinion has also swung in favor of stronger gun laws<sup>3</sup> and candidates for office across the country are increasingly campaigning on their support for them. This message is resonating with voters: in November 2019, for example, Democrats took control of the Virginia legislature for the first time in a generation, a change driven largely by the gun issue.<sup>4</sup>

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Perhaps predictably, a backlash has followed this shifting momentum. One component of that backlash is the so-called “Second Amendment sanctuary” movement in which localities pass ordinances or resolutions that declare their jurisdiction’s view that proposed or enacted state (and sometimes federal) gun laws are unconstitutional and therefore, local officials will not implement or enforce them. The sanctuary movement can be viewed as a natural outgrowth of the Second Amendment fundamentalism that led to the conception of the Second Amendment as an individual right and has shaped American gun culture and conservative politics since the mid-twentieth century.<sup>5</sup> In contrast to other social movements seeking to challenge laws or government action seen as unjust, the gun rights movement is not just about speech or protest. Its adherents increasingly use the objects of their focus — guns — to intimidate and chill the speech, political participation and rights of others.

The Second Amendment sanctuary phenomenon originated in Illinois in 2018 as the gun safety movement gained political power in the state.<sup>6</sup> Several rural Illinois counties sought to co-opt the language and recognition of the more well-known and longstanding sanctuary cities movement, in which localities have refused to expend local resources on enforcement of federal immigration laws. While most of the Second Amendment sanctuary activity has thus far taken place in rural counties in states with Democratically controlled governments that pass or are expected to pass gun safety laws — including Illinois, New Mexico, Washington, Colorado, and most recently Virginia — some counties have taken this step in states like Kentucky and North Carolina where the passage of new gun safety laws is unlikely.<sup>7</sup> These actions serve as a

way for local government officials to prove their “pro-gun” credentials and demonstrate a local response to counteract the increasing political power of gun violence prevention advocacy in state capitols.

As of May 2020, more than four hundred counties across the country had declared themselves Second Amendment sanctuaries to protest the enactment of strong gun laws. The text of these ordinances and resolutions varies by jurisdiction, with some targeting particular bills being contemplated in state legislatures (like ERPO laws), and others articulating broad opposition to a range of policies claimed to infringe Second Amendment rights.

The extent of the movement’s opposition to nearly all gun safety laws and the absolutist position adopted

... while acting in their official capacity, shall:  
 1. Knowingly and willingly, participate in any way in the enforcement of any Unlawful Act, as defined herein, regarding personal firearms, firearm accessories, or ammunition. 2. Utilize any assets, (LOCALITY) funds, or funds allocated by any entity to the (LOCALITY), in whole or in part, to engage in any activity that aids in the enforcement or investigation relating to an Unlawful Act in connection with personal firearms, firearm accessories, or ammunition.

In some jurisdictions, it is not local legislative bodies, but local sheriffs, who have publicly declared “sanctuary” status and pledged not to enforce state or federal

**Numerous flaws in the logic that undergirds the gun sanctuary movement render declarations of sanctuary status not, strictly speaking, legally significant. Even though these ordinances are themselves unenforceable, they may appear to give local law enforcement officials latitude to ignore state law. Moreover, properly understood within the broader context of a social protest movement, gun sanctuaries also threaten public safety and for that reason deserve serious attention.**

by many proponents of these Second Amendment sanctuaries is reflected in a model ordinance developed and circulated by a hard-line gun-rights organization, Gun Owners of America.<sup>8</sup> Following several inaccurate assertions about the Supreme Court’s articulation of the Second Amendment’s scope, the model ordinance includes the following statement:

Therefore, the right to keep and bear arms is a fundamental individual right that shall not be infringed; and all local, state, and federal acts, laws, orders, rules or regulations regarding firearms, firearm accessories, and ammunition are a violation of the Second Amendment.

The model ordinance follows this recitation with a prohibition on any local official participating in the enforcement of “any Unlawful Act,” which under the ordinance’s definition includes any regulation of guns other than fully automatic machine guns:

**SECTION 3. PROHIBITIONS**  
 A. Notwithstanding any other law, regulation, rule or order to the contrary, no agent, department, employee or official of (LOCALITY),

gun laws. The phenomenon of some local law enforcement voices opposing gun safety efforts has a longer history than the sanctuary ordinances passed by local legislative bodies. When the Obama administration pushed for the passage of gun safety measures after the Sandy Hook shooting, including universal background checks, it encountered opposition from several sheriffs associated with the Constitutional Sheriffs and Peace Officers Association, a fringe movement that views sheriffs as the highest law enforcement authority in a county and encourages sheriffs to resist laws they believe to be unconstitutional. This earlier opposition from the Constitutional Sheriffs movement, which “vowed to uphold and defend the Constitution against Obama’s unlawful gun control measures,”<sup>9</sup> can be viewed as a predecessor to the Second Amendment sanctuaries movement.

It is important to assess the validity of these sanctuary efforts from a legal perspective, but it is equally important to examine them in the context of a broader protest movement against efforts to strengthen gun laws. The larger purpose of the Second Amendment sanctuary effort is not merely to nullify restrictive gun laws in these jurisdictions. Rather, the movement’s larger purpose is to create a counter-narrative to the

growing support for stronger gun laws that is at a historic high among nearly every demographic group.

This protest movement against efforts to protect American communities from gun violence poses real risks to public safety and democracy. Not only do these efforts undermine the effective implementation of gun laws shown to protect public safety, they create confusion among gun owners and inflame extremists who engage in open carry demonstrations and other heavily-armed public protest actions. And while sometimes local dissent breeds productive democratic discourse, this particular movement does the opposite because its encouragement of the use of firearms can intimidate and endanger others, pushing opposing views out of the debate.

As set forth below, numerous flaws in the logic that undergirds the gun sanctuary movement render declarations of sanctuary status not, strictly speaking, legally significant. Even though these ordinances are themselves unenforceable, they may appear to give local law enforcement officials latitude to ignore state law. Moreover, properly understood within the broader context of a social protest movement, gun sanctuaries also threaten public safety and for that reason deserve serious attention.

### The Flawed Legal Basis for Second Amendment Sanctuaries

The foundational principle behind local Second Amendment sanctuary efforts is that any restrictive gun law enacted (or proposed) by state or federal government is an unconstitutional infringement on the gun rights of local residents. Proponents of these efforts argue they are necessary to prevent any unconstitutional infringement of these rights and that they are permissible and appropriate as exercises of local discretion for the same reasons that sanctuary cities may permissibly decline to enforce federal immigration laws.

But Second Amendment law makes clear that the vast majority of existing or proposed gun policies at issue in the discourse surrounding Second Amendment sanctuaries are, in fact, constitutional. The Supreme Court's landmark gun case, *District of Columbia v. Heller*, explicitly approved several categories of important gun safety laws<sup>10</sup> and its companion case, *McDonald v. City of Chicago*, likewise emphasized that the Second Amendment did not end state and local experimentation with firearms regulation.<sup>11</sup> In short, the Supreme Court has held that, like all other constitutional rights, the right to keep and bear arms is not unlimited, and that a broad range of gun laws adopted throughout the nation's history are fully consistent with the Constitution. And in contrast

to other movements like marriage equality that have featured dissenting localities attempting to define the scope of a right for future judicial action, here the absolutist position that the Second Amendment prohibits any and all gun regulation was already squarely rejected by the Supreme Court in *Heller*. Indeed, in the years since *Heller* and *McDonald*, lower courts around the country have upheld the very types of gun safety laws that sanctuary ordinances and resolutions paint as unconstitutional and target for non-compliance. From background check requirements to restrictions on particularly dangerous weapons or ammunition to prohibitions on gun possession by individuals with convictions for violent crimes, courts have repeatedly upheld the types of gun safety laws that these sanctuary ordinances target.<sup>12</sup>

The Second Amendment sanctuary effort ignores this growing body of caselaw, disregarding the orthodox view that it is largely the province of *the courts* to decide which laws comport with the Constitution (and that local legislators and law enforcement officers lack that authority).<sup>13</sup> To be sure, social movements and institutions other than the courts play important roles in shaping the scope and understanding of constitutional rights; but the central role of the courts in drawing constitutional lines cannot simply be ignored. One recent article that makes a legal argument for Second Amendment sanctuaries proposes a theory of departmentalism in which local officials could refuse to enforce a law when the right at issue has not been firmly settled by the judiciary.<sup>14</sup> But even if one agreed with that position, it is difficult to see the applicability to the Second Amendment sanctuaries context because of the movement's absolutist interpretation of the Second Amendment, which is directly at odds with settled Supreme Court (and lower court) precedent. Furthermore, it is difficult to imagine where one would draw the line to determine when the right at issue, here the Second Amendment, would be decidedly settled by the judiciary. As a result, this approach would appear to leave the door open for local law enforcement officials to perpetually ignore duties mandated under state law based on their personal assessments of constitutionality.

Of course, law enforcement officials — whether they be prosecutors or sheriffs — enjoy discretion in prioritizing enforcement efforts. But enforcement discretion does not give local law enforcement the power to systematically refuse to perform required duties or declare state law unenforceable. For example, if state law requires that an individual subject to an extreme risk protection order surrender his guns to law enforcement, unless and until a court strikes down the law, law enforcement policy must be to effec-

tuates such surrender regardless of individual officers' personal beliefs. Sanctuary jurisdictions do not simply state that law enforcement has discretion about what crimes to prioritize with limited resources or that individual officers may exercise discretion in particular circumstances. Instead, they attempt to declare that the gun laws themselves are legally unenforceable or constitutionally infirm. The rule of law would collapse if local legislative bodies or law enforcement officials were free to declare that state laws have no legal effect in the jurisdiction based on a personal assessment of their constitutionality. This is not to say that local legislative or law enforcement officials have no recourse when they believe a state law to be unconstitutional; like other residents, they may challenge these laws in the courts.

The gun sanctuary movement has explicitly modeled itself after the more well-known and longstanding immigration sanctuaries movement, in which localities have declined to use local resources to enforce federal immigration law. But immigration sanctuaries rely on the Tenth Amendment's anti-commandeering doctrine, a principle of federalism, as the legal basis for their refusal to enforce federal immigration law.<sup>15</sup> That doctrine prohibits the federal government from "commandeering" states or localities into arms of the federal government by compelling them to implement or enforce federal laws.<sup>16</sup> While the doctrine does not give localities the ability to nullify or obstruct federal law, it does vest them with discretion over how to use their own resources and prevents them from being forced to expend their own non-federal resources on enforcing federal law. Sanctuary cities do not question federal authority to regulate immigration or seek to obstruct federal enforcement, they simply require that federal policy is carried out with federal resources.

While state and local governments cannot be compelled by the federal government to use their own resources to implement or enforce federal laws, local governments generally lack such a shield when it comes to state law. Thus, while a jurisdiction that simply prevented local resources from going toward the enforcement of federal gun laws would stand on a comparatively stronger legal footing, the same cannot be said of the broad ordinances that declare state and federal gun laws in their jurisdictions to be null and void.

State leaders are becoming increasingly vocal in making this point. In December 2019, Virginia Attorney General Mark Herring issued an advisory opinion stating that Second Amendment sanctuary resolutions passed by local governments in Virginia "have no legal force" and that "[n]either local governments nor local constitutional officers have the authority to declare state statutes unconstitutional or decline to

follow them on that basis."<sup>17</sup> In February 2020, New Mexico Governor Michelle Lujan Grisham signed an extreme risk protection order law into effect, warning sheriffs in the state who had threatened not to enforce the new law that "[t]hey cannot not enforce ... And if they really intend to do that, they should resign as a law enforcement officer and leader in that community."<sup>18</sup>

While there is an argument to be made for "firearm localism" in which urban and rural localities with different gun cultures and gun violence problems could have different gun laws reflecting the needs and viewpoints of their respective localities,<sup>19</sup> here, localities are explicitly attempting to nullify state laws, rather than enact a tailored regulatory scheme that treats jurisdictions differently. It is also a mistake to view the gun violence targeted by state gun safety laws as narrowly targeted to problems that only affect urban areas. For example, suicide, which accounts for the majority of gun deaths in the United States and is specifically targeted by ERPO laws (among others), is a disproportionate problem in rural areas.<sup>20</sup> The proper scope of state preemption of local laws and the ability of localities to enact additional gun regulations on top of state law is beyond the scope of this article, but it is important to acknowledge the long history of local regulation of firearms and a stark disparity in attitudes toward guns in urban and rural areas that is an important factor in the origin and growth of Second Amendment sanctuaries.

### A Protest Movement Disguised as a Legal Intervention

The Second Amendment sanctuary effort is also occurring against the backdrop of broader — and more extreme — protests against strengthening gun laws. The most extreme of these are open carry protests, during which visibly armed individuals — largely white men — congregate in public spaces to protest efforts to strengthen gun laws. One of the biggest armed protests against efforts to strengthen gun laws occurred on Martin Luther King Day in January 2020 in Richmond, Virginia at the start of the state's first legislative session following an election that put both chambers under Democratic control. The adoption of sanctuary county ordinances and resolutions occurred at the same time — and were spurred by the same organizers — as calls for armed demonstrations against state legislative action, both elements of the same backlash to the gun violence prevention movement's historic success in Virginia's 2019 elections.<sup>21</sup> Placards, banners, and other materials touting the sanctuary movement in Virginia featured prominently in the January demonstrations in Richmond, but the sanctuary activity and the large armed protest on Martin Luther King

Day failed to achieve their legislative goal, and the legislature subsequently enacted several gun safety measures including an ERPO law and universal background checks.<sup>22</sup> Still, as noted below, they were not without effect: concerns over possible violence forced organizers of a counter-demonstration and lobbying in support of the proposed new gun laws to cancel their plans and urge their supporters to stay home rather than exercising their rights of political expression and participation.

The Richmond protest was not a one-off but part of a larger trend of armed demonstrations at state capitols that have had the effect of silencing and intimidating the gun safety majority. In late January 2020, a smaller armed rally of about 100 individuals outside of the state capitol in Kentucky led to groups of heavily armed men marching down the halls inside the building, as they are permitted to do under state law.<sup>23</sup> A similar event encouraging people to protest at the state capitol while carrying firearms was reported in Ohio.<sup>24</sup> And in the time of COVID-19, armed demonstrators in several states including Michigan have turned up at state capitols to protest stay-at-home orders.<sup>25</sup>

Groups like the NRA have consistently characterized any attempts to strengthen gun laws as a step down a slippery slope toward universal gun confiscation. This dangerous rhetoric has reached the highest levels of political discourse in the United States, becoming intertwined in the talking points of conservative elected leaders at all levels of government including President Trump.<sup>26</sup> This type of inflammatory rhetoric, the increased presence of armed protesters at statehouses, and the adoption of Second Amendment sanctuary ordinances and resolutions all feed one another. These in tandem efforts are unquestionably designed to intimidate those who disagree and deter legislative action. Together they stoke fears, raise the temperature of the political debate, and legitimize and normalize non-compliance with the law and even potentially more serious acts of violence. They all fuel and perpetuate the mistaken idea that the Second Amendment is absolute and that any government action to regulate guns is a violation of constitutional rights that must be resisted at all costs.

### **This Protest Movement Presents Multiple Dangers**

Understood in the context of these broader efforts to oppose any attempt to strengthen gun laws, it is clear that the gun sanctuary phenomenon has numerous potential dangerous effects. These range from risks that arise when some people's assertions of gun rights intersect with other people's First Amendment rights, to heightened risk of gun violence.

As an initial matter, political activism and engagement by those carrying guns is distinct from similar, unarmed conduct, insofar as it carries at least an implicit threat of violence.<sup>27</sup> That dynamic — a gunman-heckler's veto — was illustrated perhaps most clearly by the armed protests in Richmond on Martin Luther King Day. Press accounts have widely documented that law enforcement, citing the risks of violent confrontation, compelled organizers of an annual gun safety vigil that had been held for nearly three decades to cancel their counter-protest, as was the case with a long-planned, annual march for a progressive agenda organized by an advocacy group for working-class Virginians of color. When protesters sharing one point of view are forced to refrain from peaceably assembling, protesting, and lobbying their elected representatives because of implicit — or, in the worst case, explicit — threats of violence from other, armed protesters asserting their own view of their Second Amendment rights, the former's First Amendment rights of speech and assembly have been irreparably harmed. In several other recent cases in which armed protesters or counter-protesters have actually opened fire, the harm can be even worse, resulting in serious injury or death.<sup>28</sup>

Armed protesters motivated by the absolutist view of the Second Amendment that animates the gun sanctuary movement undermine healthy democratic debate and even the functioning of democracy itself. In May 2020, armed individuals in Michigan protesting the governor's restrictive stay-home order designed to limit the spread of COVID-19 intimidated the state legislature into adjourning their session prematurely.<sup>29</sup> The legislature wanted to avoid a repeat of an incident that occurred two weeks earlier, when heavily armed individuals entered the statehouse, confronting lawmakers and standing over them in the gallery. Sheriffs refusing to enforce stay-at-home orders and armed protestors claiming a "willing[ness] to die" rather than comply with COVID-19 restrictions demonstrates the far-reaching consequences of the Second Amendment sanctuary movement's legitimization of open resistance to attempts by states to protect the health and safety of the public.<sup>30</sup>

The gun sanctuary movement also poses physical dangers to residents living within sanctuary counties. On the one hand, real dangers of gun violence may result from promises of non-enforcement or under-enforcement of otherwise valid gun laws. If a county declares that mandatory background checks on gun transfers are unconstitutional and will not be required, and if county gun owners rely on that declaration and sell guns to strangers without such background checks, it is clear that someone legally prohibited from pos-

sessing guns will have an easier time obtaining a firearm than if the law were broadly followed. Similarly, if local law enforcement officials object to an ERPO law that allows them to petition a court to temporarily disarm someone posing a danger of suicide or violence, their failure to avail themselves of this powerful tool may place a vulnerable person — or community — at risk. Indeed, extreme risk laws have been shown to be effective in preventing suicide,<sup>31</sup> but support for gun sanctuaries is often highest in the counties with the largest need for suicide prevention tools. In Colorado, for example, 22 out of the 24 sanctuary counties for which suicide data was available — 92% — had firearm suicide rates above the state average.<sup>32</sup>

Leaving aside the threat of physical violence, gun sanctuary resolutions or ordinances may also place residents of these counties at risk of legal jeopardy by creating confusion about whether residents must comply with valid gun laws regardless of their locality's public opposition. Causing the misimpression that residents do not have to comply with gun laws — or even encouraging that non-compliance — poses a real threat to gun owners who may face legal consequences, including jail time, if they act in reliance on a symbolic statement that a gun law should not be enforced. This was the case for two unfortunate Kansas gun owners who, relying on a state nullification law that declared certain firearms exempt from federal regulation, illegally purchased gun silencers without complying with federal law, only to be prosecuted and convicted for the crime.

## Conclusion

The emergence of Second Amendment sanctuaries is part of a broader protest movement from gun rights absolutists who oppose any attempt to strengthen gun laws. The majority of Americans support common sense gun safety laws like universal background checks and do not favor an extremist interpretation of the Second Amendment that puts all other constitutional rights at risk. As the gun violence prevention movement grows in strength at the state level, gun rights enthusiasts are turning to the local level in an effort to thwart this shifting political tide.

Second Amendment sanctuaries pose important questions about the ability of local governments to undermine state laws and which institutions have the authority and democratic legitimacy to decide the scope and limits of constitutional rights. This movement, the most recent outgrowth of Second Amendment fundamentalism, is unique in that it seeks to entirely nullify the operation of democratically enacted state laws in local jurisdictions. That presents a greater threat to democratic norms than the exer-

cise of discretion or prioritization of resources that are more typical ways in which localities express opposition to state or federal policies. Second Amendment sanctuaries attempt to merge the “sanctuary” rhetoric that has been associated with the left with the gun rights absolutism of the right. And in the proper context of open carry demonstrations and the use of guns to intimidate and chill the expression of opponents, the spread of Second Amendment sanctuaries poses risks to public safety and legitimizes the refusal of gun rights enthusiasts to comply with any perceived restrictions on their Second Amendment rights.

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# True Threats, Self-Defense, and the Second Amendment

*Joseph Blocher and Bardia Vaseghi*

## Introduction

In June 2020, when a group of peaceful Black Lives Matter protestors passed by on the sidewalk outside their home in St. Louis, Mark and Patricia McCloskey emerged from the house and confronted them with firearms.<sup>1</sup> While Mark McCloskey wielded an AR-15-style semiautomatic rifle slung across his shoulder, Patricia McCloskey pointed her semiautomatic handgun at the crowd, shouting at protestors and keeping her finger on the gun's trigger.<sup>2</sup> The scene quickly sparked a nationwide debate. Although prosecutors charged both Mr. and Mrs. McCloskey with felonious use of a weapon, some argued that these charges did not go far enough and that Mrs. McCloskey — by pointing the gun at the crowd — may have committed assault.<sup>3</sup> Others — including the Governor of Missouri — argued that the couple was engaged in lawful self-defense, or even that their actions were covered by the Second Amendment's right to keep and bear arms.<sup>4</sup>

Such debates about the constitutional protection afforded gun displays have become increasingly embedded in nationwide debates over gun regulation. Less than a week after the incident in St. Louis, a white woman pointed a loaded handgun at an African-American woman and her 15-year-old daughter during a minor dispute in a Michigan parking lot, claiming that she did so out of fear for her own safety.<sup>5</sup> The recent killing of Ahmaud Arbery, too, highlights the ways in which race plays a part in threat perception and the privileging of some kinds of private violence.<sup>6</sup>

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The question that interests us here is whether the Second Amendment protects gun owners who threaten others by negligently or recklessly wielding their guns, whether in response to perceived threats or not. In *District of Columbia v. Heller*, the Supreme Court indicated that self-defense is the “core” interest protected by the Second Amendment.<sup>7</sup> The Court's holding raises difficult and contested empirical questions about how often firearms are used to effectuate that core interest,<sup>8</sup> as well as conceptual questions about whether and how to reconcile Second Amendment and self-defense doctrines, which traditionally require the use of force to be necessary and proportional to an imminent threat.<sup>9</sup> But *if* a person is engaged in lawful self-defense, their threats to shoot someone else are protected not only by the Second Amendment but by self-defense doctrine itself. On the flip side, a person who knowingly threatens violence against others *without* any legal justification has committed a crime (or tort) for which the Second Amendment offers no protection — *Heller* did not immunize those who commit assault with guns.

But what about the in-between cases, such as those in which a gun owner overreacts to a perceived threat? Can people be punished for recklessly pulling a gun in response to a claimed threat, or must their actions rise to the level of negligence or even knowing wrongness? In other words, assuming that the Second Amendment has some application in such a scenario, what mental state requirements might it impose?

In answering such questions, careful consideration of the First Amendment can provide some useful guidance. While not all constitutional rules can or should travel between the two Amendments,<sup>10</sup> judges and scholars have nonetheless turned to free speech doctrine for guidance about the scope and strength of the right to keep and bear arms.<sup>11</sup> Indeed, the *Heller*



Court signaled a receptiveness to such an approach by explicitly analogizing the purpose, history, and scope of the First and Second Amendments.<sup>12</sup> More fundamentally, an analogy is appropriate in this specific instance because the challenge is relevantly similar: establishing how a fundamental constitutional right limits the law's power to punish threats.

This article considers a First Amendment doctrine that has thus far received little attention in the gun debate but might shed useful light on the line between self-defense and gun-related behavior like brandishing or assault: the doctrine of true threats. Free speech doctrine permits punishment of "statements where the speaker means to communicate a serious expression of an intent to commit an act of unlawful violence to a particular individual or group of individuals."<sup>13</sup> We

fore uncovered by the Second Amendment. There is a robust historical and doctrinal debate about the constitutional status of public carrying,<sup>15</sup> and our contribution is relevant only to a subset of public carry. Neither do we advance the weak claim that some threats are not covered by the right to keep and bear arms, nor that *only* purposefully threatening behavior can be regulated. Rather, our hope is to zero in on the thin line that separates constitutionally legitimate gun displays from threatening activities that can be proscribed.

For purposes of this paper, we assume a broad version of the right to keep and bear arms and make two primary assumptions — both debatable — about its breadth: that the right extends outside the home and that armed self-defense outside the home comes within

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A central challenge of the true threat doctrine is identifying what kind of "intent" must be required by a criminal prohibition in order to pass constitutional muster. A criminal prohibition with a stringent mental state requirement provides less room for legal liability, and, therefore, involves lower constitutional stakes. Mental state requirements are defined with varying degrees of stringency ("knowing," "negligent," "reckless," etc.). The proper standard to apply in any particular context remains a major subject of debate in the First Amendment and of course in the criminal law more broadly,<sup>14</sup> and we do not suppose that the Second Amendment will lend itself to a single, simple answer, either. But identifying the issue, and perhaps some doctrinal guideposts from other areas of law, is a good first step.

Our goal here is not to make the strong claim that *all* public carrying amounts to a true threat and is there-

the core of the right.<sup>16</sup> Nearly all courts have held or assumed that the right extends outside the home, but the Supreme Court has not yet clearly weighed in on the issue, which remains a matter of scholarly debate.<sup>17</sup> Moreover, while *Heller* clearly protects some forms of "keeping" and "bearing," those verbs do not necessarily encompass the *act* of self-defense itself.<sup>18</sup>

Our focus here is related to, but different from, the traditional focus on mental states and threats in the Second Amendment context. A gun owner's threat perception is already baked into "good cause" requirements for public carrying, for example, which typically require a person seeking a permit to show that he or she faces threats more serious than those faced by the general population.<sup>19</sup> Here we ask whether and how the threats that others perceive gun owners to *pose* are protected by the Second Amendment.

The article proceeds in two parts. Part I briefly explores the evolution of the true threat doctrine in the Supreme Court, culminating in a synopsis of the true threat doctrine in its current form. Part II maps

the doctrinal elements of true threat jurisprudence onto the considerations of the Second Amendment.

## I. True Threats as First Amendment Doctrine

The Supreme Court has held that “the government may regulate certain categories of expression” that are “of such slight social value as a step to truth that any benefit that may be derived from them is clearly outweighed by the social interest in order and morality.”<sup>20</sup> It has recognized a prohibition on “true threats” as one such category of permissible regulation. The elaboration of that exception has led to a great deal of doctrinal nuance, especially regarding the question of what mental state a law must require in order to satisfy the First Amendment.

### A. From *Watts* to *Black*

In *Watts v. United States*,<sup>21</sup> a 1969 per curiam decision, the Supreme Court indicated for the first time that the First Amendment does not protect speech conveying a threat to harm others, otherwise known as a “true threat.” In *Watts*, an eighteen-year-old man, Robert Watts, was arrested during a public rally formed to protest the Vietnam War.<sup>22</sup> Watts said, “If they ever make me carry a rifle the first man I want to get in my sights is L.B.J.,” apparently causing uproarious laughter.<sup>23</sup> A jury nonetheless found Mr. Watts to have committed a felony by “knowingly and willfully threatening the President,” in violation of a 1917 statute that proscribes threats to “inflict bodily harm upon the President of the United States.”<sup>24</sup>

Emphasizing that the First Amendment must shield even “vehement, caustic, and ... unpleasant[ ]” attacks on government officials to ensure that “debate on public issues” remains “uninhibited, robust, and wide-open,”<sup>25</sup> the Court found that Mr. Watt’s statements were “crude” attempts to register “opposition to the President” rather than a “true threat.”<sup>26</sup> The majority offered a contextual analysis to determine whether a statement constitutes a true threat, comprising factors such as (1) whether the statement was made in a political context, (2) whether the statement was “expressly conditional,” and (3) the reaction of the listeners.<sup>27</sup>

After *Watts*, the Court did not squarely consider the true threat doctrine until 2003’s *Virginia v. Black*, which addressed whether Virginia’s statute prohibiting burning crosses with “an intent to intimidate a person or groups of persons” violated the First Amendment.<sup>28</sup> The defendants had burned crosses (a traditional symbol of the Ku Klux Klan), leading witnesses to feel “awful,” “terrible,” and “very scared.”<sup>29</sup>

As in *Watts*, the Court recognized that a thin line existed between true threats and speech protected by the First Amendment. Indeed, it recognized that cross burning had been used — at different times and places — both to intimidate and as symbolic expression.<sup>30</sup> The question presented, then, was whether the government could regulate an activity that has both threatening and expressive qualities if it restricts its regulation only to those instances intended to intimidate others. The Court concluded that it could.<sup>31</sup> However, it took issue with the statute’s stipulation that merely burning a cross amounted to “prima facie evidence of an intent to intimidate.”<sup>32</sup> Rejecting a blanket prima facie evidentiary standard, the Court again underscored the importance of a contextual analysis in determining whether an activity is intended to intimidate.<sup>33</sup>

Building on *Watts*, the Court also held that a speaker need not “actually intend to carry out [a] threat” for the statement to be deemed a threat.<sup>34</sup> Indeed, restrictions on free speech established by the true threat doctrine exist also to “protect[ ] individuals from the fear of violence, ... the disruption that fear engenders ... and from the possibility that the threatened violence will occur.”<sup>35</sup>

The Court’s decision in *Virginia v. Black* reaffirmed its commitment to contextual analysis in considering true threats cases, but it left unanswered some important questions regarding the mental state — if any — that the First Amendment requires before a threat is punishable.<sup>36</sup>

### B. *Elonis v. United States*

In the 2014 case *Elonis v. United States*,<sup>37</sup> the Supreme Court seemed poised to answer these contested questions. The defendant in *Elonis* was charged with breaching 18 U.S.C. § 875(c), which criminalizes the transmission of “threats ... to injure the person of another” in interstate commerce.<sup>38</sup> In a series of online posts, *Elonis* referred to killing his estranged wife, as well as co-workers, a kindergarten class, and an FBI agent. The question before the Court was squarely presented: what mental state with respect to a statement is required to convict a speaker under a statute proscribing the communication of threats?

Although the Court averred that the statute did not explicitly include a *mens rea* requirement, it held that the “basic principle[s]” “that ‘wrongdoing must be conscious to be criminal’” and that a defendant “must be blameworthy in mind” to be found guilty necessitate reading a *mens rea* requirement into the statute.<sup>39</sup> The Court also held that any insertion of an *implicit* state of mind requirement into a statute must be limited to

that “*mens rea* which is necessary to separate wrongful conduct from ‘otherwise innocent conduct.’”<sup>40</sup>

The Court declined to articulate the precise *mens rea* that would distinguish criminal from non-criminal conduct. Instead, as it has done with other true threat questions, the Court urged lower courts to consider context in determining the appropriate level of *mens rea*. And so, on remand, the Third Circuit held that the graphic nature of Mr. Elonis’s posts and the intimate relationship between him and his wife made it highly likely that Elonis intended his communications to be a threat under any *mens rea* standard. The clearly threatening nature of the conduct thus obviated the need to declare a particular *mens rea* standard and to determine whether Mr. Elonis’s conduct met it.<sup>41</sup>

*Elonis* is certainly not the last word on the First Amendment’s treatment of true threats, but it does contain (and affirm) a few useful guideposts. First, punishment must involve some consideration of the speaker’s subjective state of mind. Second, the government *can* constitutionally punish “those statements where the speaker means to communicate a serious expression of an intent to commit an act of unlawful violence to a particular individual or group of individuals.”<sup>42</sup> Third, beyond such purposeful threats, a contextual analysis is appropriate both to determine the requisite *mens rea*, and to ascertain whether a defendant’s conduct meets the chosen state of mind requirement. What guidance might this approach provide for Second Amendment challenges to convictions for brandishing, assault, and other gun-related prohibitions?

## II. True Threats as Second Amendment Doctrine

We can begin by ruling out the “easy” cases — lawful assertions of self-defense (which involve *justified* threats to inflict violence) and intentional threats of violence involving no claim of self-defense at all (which are *prima facie* unlawful and not protected by the Second Amendment). We focus instead on the in-between cases: those like the Missouri examples where a gun has been not merely carried but displayed in a way that menaces or threatens others in an arguably negligent or reckless manner. Assuming that the Second Amendment *does* have some application in such scenarios — an especially gun-protective assumption — what mental state would it require and what lessons might First Amendment doctrine teach?

A direct importation of free speech doctrines will not work. Courts applying heightened standards in speech cases have done so because of a concern with “chilling” legitimate speech.<sup>43</sup> But that particular rule is a

poor candidate for doctrinal borrowing, as the Court has consistently and consciously declined to apply it outside the First Amendment context. Moreover, the reason for denying constitutional protection to true threats — the likelihood of inflicting unlawful violence — is especially acute when the very implement of such violence (i.e., a gun) is at issue. Accordingly, at least as a *prima facie* matter, there is less reason for the Second Amendment to be especially solicitous of true threats — if anything, the mental state requirements under the Second Amendment should be correspondingly lower.

Assuming that the Second Amendment does impose a mental state requirement on a crime like brandishing, the most sensible starting point is probably recklessness — the standard that Justice Alito advocated for with respect to the First Amendment in his *Elonis* concurrence. Gun owners who act recklessly — or “disregard[] a substantial and justifiable risk” that a known harm will result from their gun-related conduct — should not expect the Second Amendment to protect such conduct.<sup>44</sup> Their disregard, however, must be of such a nature and degree that it constitutes “a gross deviation from the standard of conduct [of] a law-abiding person” in the same situation.<sup>45</sup>

Such an approach comports with the principles at the heart of the Court’s *mens rea* analysis. Again, the Court requires only that “*mens rea* which is necessary to separate wrongful conduct from ‘otherwise innocent conduct.’”<sup>46</sup> And, as Justice Alito agreed in the First Amendment context, reckless behavior that evinces a blatant disregard of a significant risk can hardly be described as innocent. On many occasions and in different contexts, the Court has held that individuals are morally culpable — and therefore, not entirely innocent — when they act recklessly.<sup>47</sup> Indeed, one could reasonably conclude that the threshold for what constitutes morally culpable conduct is lower when an individual wields an instrument of deadly violence.

Adopting a recklessness standard, moreover, makes sense in light of the values underlying the Second Amendment. A person who recklessly threatens others with violence outside the context of self-defense is not furthering the personal safety interests at the core of the Second Amendment as defined by *Heller*. To the contrary, he is engaged in precisely the kind of conduct that has been subject to “longstanding prohibition[]” that the Court in *Heller* recognized as “presumptively lawful.”<sup>48</sup> It is worth noting, however, that while virtually all courts agree that a knowledge or purpose *mens rea* requirement is sufficient to transform speech into a true threat, no such court has yet concluded that mere recklessness suffices.

If, instead, we adopt the historical approach advanced by many gun rights advocates — evaluating the constitutionality of modern gun laws solely by reference to “text, history, and tradition” — we find that gun-related behavior like brandishing requires, at most, a minimal showing of *mens rea*. No less authority than Blackstone referred to the “offence of riding or going armed, with dangerous or unusual weapons, [as] a crime against the public peace, by terrifying the good people of the land.”<sup>49</sup> Blackstone was referring to 1328’s Statute of Northampton, which held that the King’s subjects could “bring no force in affray of the peace, nor to go nor ride armed by night nor by day, in fairs, markets, nor in the presence of the justices or other ministers, nor in no part elsewhere.”<sup>50</sup> Scholars debate whether the Statute banned armed travel in public places,<sup>51</sup> or simply “those circumstances where carrying arms was unusual and therefore terrifying,”<sup>52</sup> or — even more stringently — applied only to cases where an intent to terrify could be shown.<sup>53</sup>

It is worth noting here an interpretive difficulty that arises if one attempts to articulate *mens rea* requirements based on the kind of historical analysis that Second Amendment doctrine seems increasingly poised to require: namely, that the understanding of *mens rea* has changed *immensely* since 1791.<sup>54</sup> The current framework (itself still evolving) can be traced to the mid-twentieth century, the 1962 Model Penal Code and other developments.<sup>55</sup> Following the historical approach would therefore — somewhat ironically, given that gun rights advocates often favor history — lead to an especially constrained right to keep and bear arms (i.e., one that requires no, or very little, showing of *mens rea*).

Returning to the present, consider two specific and concrete examples in which the recklessness standard might have purchase. In April 2020, thousands of protestors descended upon state capitols in Ohio, Michigan, and Pennsylvania, to show their disapproval of lockdown policies enacted in response to the COVID-19 pandemic. Many of the protestors openly carried assault rifles and handguns, and wore camouflage, body armor, and military-style helmets.<sup>56</sup> To our knowledge no gun-related charges have been filed against anyone in connection with those protests. But if armed protestors were to face criminal or civil liability — and again, assuming that *some* mental state requirement applied<sup>57</sup> — the Second Amendment would not protect those who evinced a reckless disregard for the safety of others. Such a theory of liability may discourage individuals from engaging in reckless behavior that increases the risk of unnecessary firearm-related injury or fatality in the first place.

Second, consider the case of Dmitriy Andreychenko. Days after the mass shootings in Dayton, Ohio, and El Paso, Texas, he put on body armor and carried a loaded “tactical rifle” into a Missouri Walmart.<sup>58</sup> His wife and sister (whom he asked to tape the incident) advised him not to, but Andreychenko later insisted that, in the words of the probable cause affidavit, “he wanted to see if the Walmart manager would respect his Second Amendment right” and that “his intentions were to buy grocery bags and [he] did not intend for anybody to act negatively towards him.” A Walmart spokesman disagreed: “This was a reckless act designed to scare people, disrupt our business and it put our associates and customers at risk.”

Of course, Walmart itself is not subject to the Second Amendment. But Missouri is, and Andreychenko faced a felony charge of making a terrorist threat in the second degree, pursuant to a Missouri statute criminalizing behavior that “recklessly disregards the risk of causing the evacuation of a building.”<sup>59</sup> The constitutionality of his conviction, we have suggested, would not depend on whether he *knowingly* sought to communicate a threat of unlawful violence. What would matter is whether he did so recklessly.

## Conclusion

To our knowledge, there has yet to be active litigation about the intersection of true threat doctrine, criminal and tort laws against brandishing, and the Second Amendment. But with the apparently increasing number of incidents like those discussed above, and the expansion of open carry and “stand your ground” laws, we suspect that more attention must be paid to the question of how — if at all — the Second Amendment alters what counts as a true threat punishable by law.

The importance of the question is not limited to a few headline-grabbing incidents. The line between defensive gun use (DGU) and the commission of a crime can be vanishingly thin. A person who feels threatened by a stranger on a street at night might pull out a gun in response, causing his perceived attacker to flee. In that scenario, the would-be defender is either exercising “core” Second Amendment rights<sup>60</sup> or engaged in the crime of brandishing,<sup>61</sup> or even assault.<sup>62</sup> Once the gun is pulled, and the intended target flees, there is little room for a third categorization. The stark binary between constitutionally laudatory activity and the commission of a crime makes it all the more important to establish an articulable legal line between the two.

Empirical studies on DGUs underscore the scope of the problem. Some self-reported surveys indicate

between 2.2 and 2.5 million DGUs per year, 200,000 of them involving the successful wounding of an attacker.<sup>63</sup> But these surveys likely include enormous numbers of false positives considering that only about 100,000 shooting victims show up in hospital emergency rooms every year.<sup>64</sup>

This conclusion, in turn, suggests that gun owners sometimes overreact to perceived threats, perhaps pulling — or even using — a gun on a person who was simply minding his own business, or asking for directions, or happened to match the gun owner's mental image of a threatening person. In one study, researchers summarized self-reported DGUs from a survey and then sent the summaries to five criminal court judges. Even taking the facts as given, and assuming that the person with the gun had a valid permit to own and carry it, the surveyed judges found that roughly half of the incidents were potentially illegal.<sup>65</sup>

In short, it is empirically and legally important to draw a line between armed self-defense, which *Heller* states receives heightened constitutional protection,<sup>66</sup> and threats, which are punishable by law. The First Amendment's true threat doctrine can provide some general guidance in that regard. Gun-related activities which meet the strict definition of true threat — a specific, subjective intent to inflict unlawful violence on others — are punishable without offending the right to keep and bear arms. But we have also suggested that, even assuming that the Amendment does require some kind of mental state requirement, a recklessness standard is a good place to start.

#### Note

The authors do not have any conflicts of interest to disclose.

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# COVID-19 Emergency Restrictions on Firearms

*Samuel A. Kuhn*

## Introduction

The fight over gun rights and the Second Amendment has been on prominent display during the U.S. response to the novel coronavirus. In all 50 states, governors have used emergency authority to impose unprecedented, temporary bans on a wide array of industries and activities deemed either “non-essential” or “non-life-sustaining” in the name of public health, placing restrictions on even constitutionally protected activities like religious and public assembly. However, the governors of only six states — Massachusetts, Michigan, New Mexico, New York, Pennsylvania, and Washington, and public health officials in four California counties — closed or significantly restricted the operation of federal firearms licensees (FFLs) and other gun stores. In each state but Washington, where federal firearm licensees (FFLs) openly flouted Governor Jay Inslee’s executive order, the temporary closure was immediately challenged in court by gun rights groups.

Meanwhile, across the country, gun sales have skyrocketed during the pandemic as organizations like the National Rifle Association stoked fears of disorder and draconian restrictions which were mostly never implemented.<sup>1</sup> Nationwide, Americans bought more guns in March 2020 — between two and 2.5 million,<sup>2</sup> an increase of as much as 85% compared to the previous March — than at any time in U.S. history other than January 2013, after the Sandy Hook mass shooting and President Obama’s reelection prompted concern that gun control was imminent.<sup>3</sup> Paradoxically,

in states where FFLs were ordered closed, data from the National Instant Criminal Background Check System indicates that more guns were bought while the sheltering and closure orders were in effect in April 2020 than in the prior year.<sup>4</sup> The number of firearm sales also increased more than 80% year-over-year in April and May 2020.<sup>5</sup> An unprecedented proportion of firearms purchased in this period were handguns<sup>6</sup> bought by first-time, and therefore often less experienced, gun buyers,<sup>7</sup> a particularly volatile combination given the dramatic economic decline and quarantine tensions that experts believe have combined to produce increases in intimate partner violence,<sup>8</sup> suicides,<sup>9</sup> accidents involving children,<sup>10</sup> and other forms of violence.<sup>11</sup>

This paper seeks to understand the extent and limitations of emergency gubernatorial powers to impose restrictions on firearms and related paraphernalia and services, reviews COVID-19 firearms restrictions and resulting legal challenges, and considers the unintended hazards that litigating these orders is likely to have on unsettled Second Amendment jurisprudence.

## Foundations of Emergency Police Power

Governors enjoy expansive police powers to regulate their states in the name of “public health, safety and morals.”<sup>14</sup> The “police power,” a term coined by the Supreme Court in 1827, derives from the Founders’ commitments to maintaining a significant sphere of state sovereignty,<sup>12</sup> and is generally viewed as an unenumerated Tenth Amendment power of the states.<sup>13</sup> The Supreme Court recognized “[t]he safety and the health of the people” as “in the first instance, for that [state] to guard and protect” in the 1905 vaccine-related case *Jacobson v. Commonwealth of Massachusetts*.<sup>16</sup>

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Police powers are generally granted by state constitutions,<sup>17</sup> whereas state statutes often grant or clarify the extent of additional emergency authority.<sup>18</sup> Most states allow their governors to temporarily suspend statutes and regulations during an emergency. A plurality only permit their governors to issue emergency regulations and urgency statutes.<sup>19</sup> Every governor may declare states of emergency in the event of disaster, including pandemics; such declarations generally allow them to invoke broad powers, including commandeering private property<sup>20</sup> and restricting state residents' movements.<sup>21</sup>

In all states, governors may impose emergency restrictions on constitutional rights that may not be justified in non-emergency times. This authority is primarily found through a combination of federal constitutional interpretation of state police powers and state statutes providing for broad emergency power, and has been applied during COVID to place restrictions on a variety of activities protected under state and federal constitutions.

### Evaluating Challenges to Emergency Powers During COVID-19: Differing Approaches

Courts and commentators disagree over how much deference to give emergency orders that burden constitutional rights. On one hand, the highly deferential *Jacobson* standard provides robust cover for such restrictions — so robust that critics refer to it as the “suspension principle,” meaning that it effectively suspends judicial review. Others caution against resorting to the *Jacobson* standard on doctrinal and normative grounds, arguing that “ordinary” scrutiny is sufficiently flexible to effectively weigh the magnitude of an emergency without compromising the constitutional check — especially crucial in emergencies — of judicial review.

Steven Vladeck and Lindsay Wiley argue compellingly against applying the suspension principle to coronavirus restrictions. Specifically, they argue that (1) the suspension principle is premised on a crisis being finite, whereas a crisis like COVID-19 has precipitated indefinite and/or recurring restrictions imposed on civil liberties; (2) proponents of the principle are overly concerned that judicial review will be too harsh on government emergency responses, when in fact COVID-19 decisions in diverse jurisdictions have upheld a variety of restrictions without reference to *Jacobson*; and, (3) that *Jacobson* effectively removes the courts — the institution best situated to check governmental infringement upon civil liberties during a crisis — from the role our constitution requires of them.<sup>22</sup>

Indeed, numerous constitutional challenges to COVID-19 restrictions have been rejected by courts

by applying ordinary scrutiny instead of citing *Jacobson*. For example, the Pennsylvania Supreme Court rejected multiple federal constitutional claims against Governor Tom Wolf's Executive Order closing “non-life sustaining businesses” in *Friends of DeVito v. Wolf*, without using heightened *Jacobson* deference.<sup>23</sup> In *DeVito*, the court applied “ordinary scrutiny” to dismiss plaintiffs' four separate claims that the order, which closed their state House of Representatives campaign offices, violated the U.S. and Pennsylvania constitutions. For example, the court applied the *Mathews v. Eldridge*<sup>24</sup> three-part due process balancing test to determine whether the state provided sufficient pre-deprivation notice and post-deprivation opportunities to challenge its closure order. Pre-deprivation notice was held to be impossible given the abrupt, looming disaster of pandemic.<sup>25</sup>

Even so, the *Jacobson* standard seems to predominate in opinions considering the lawfulness of COVID-related restrictions. Chief Justice Roberts did invoke *Jacobson* in his majority concurrence *South Bay Pentecostal Church v. Newsom*, 2020 WL 2813056 (2020) where his was the fifth vote to deny an application for injunctive relief seeking to overturn California Governor Gavin Newsom's restrictions on congregating in places of worship during the pandemic.<sup>26</sup> Chief Justice Roberts wrote that when state officials “undertake [ ] to act in areas fraught with medical and scientific uncertainties,” their latitude “must be especially broad.”<sup>27</sup> Such actions, he continued, should not be subject to second-guessing by an “unelected federal judiciary,” which lacks the background, competence, and expertise to assess public health and is not accountable to the people.<sup>28</sup> The majority in *South Bay* found that the restrictions on the Free Exercise Clause were permissible because they do not specifically target religious institutions, treating secular gatherings of similar size similarly and permitting only dissimilar institutions and activities to persist.

This purportedly more deferential standard has not amounted to a rubber stamp for all COVID restrictions, however. Other emergency restrictions ordered by governors, such as governors' suspension of “nonessential” medical procedures including abortions, have met mixed fortunes even though courts applied *Jacobson* deference rather than ordinary scrutiny. Some courts followed similar analyses as applied in *South Bay* and came to analogous results. For example, contrary to the district court's ruling that a *de facto* abortion ban would cause irreparable harm, the Fifth Circuit held that Texas Governor Ken Paxton's emergency powers did in fact allow the restriction.<sup>29</sup> The Fifth Circuit found that all constitutional rights, including the right to abortion, can face restriction when



needed to combat a public health emergency, unless the Supreme Court had expressly ruled otherwise.<sup>30</sup> An Arkansas district court facing similar facts and procedural history applied the same standard, finding that the restriction had some “real or substantial relation” to the public health crisis and was not “beyond all question, a plain, palpable invasion of rights secured by the fundamental law.”<sup>31</sup>

On the other hand, the Sixth and Tenth Circuits found that restrictions placed on abortion under governors’ enhanced emergency police powers did cause irreparable harm and violated the Fourteenth Amendment right to abortion.<sup>32</sup> The Sixth Circuit noted that although *Jacobson* does alter their analysis of burdens placed on abortion in the *Roe/Casey* framework, the pandemic has not “demoted *Roe* and *Casey* to second-class rights, enforceable against only the most extreme and outlandish violations.”<sup>33</sup>

### Firearms Restrictions and Litigation During COVID-19

Seven states mandated complete or partial closures of gun stores, ammunition stores, and/or firing ranges pursuant to orders that left them off lists of either “essential” or “life-sustaining” businesses. An eighth, Connecticut, allowed state officials to suspend fingerprinting services necessary for residents to obtain a handgun. However, as of this writing, relatively few opinions have been handed down regarding challenges to firearms restrictions from the pandemic period because most of the claims underlying the filed firearms complaints were either not enforced, became moot, or are pending.<sup>34</sup> In two states, restrictions were either not enforced or rolled back when challenged. In Washington, the first state to impose COVID restrictions, Governor Jay Inslee followed the initial guidance from the Department of Homeland Security regarding essential and non-essential businesses to deem FFLs non-essential and order them closed.<sup>35</sup> No challenge to Governor Inslee’s order was filed — perhaps because FFLs openly defied the order, which in turn was never enforced. In each state, the closures were subject to time limits. In some states, proprietors of businesses ordered to close could appeal to a state body — for example, the New York State Economic Development Corporation — to reopen or otherwise clarify the terms of their closure order.

Only five of the eight cases filed challenging the restrictions resulted in decisions on the merits, and only three of these — *Altman, et al., v. County of Santa Clara, et al.*, 2020 WL 2850291 (N.D.CA., June 2, 2020), *Connecticut Citizens Defense League, Inc. et al., v. Lamont*, 2020 WL 3055983 (D. Conn. June 8, 2020), and *Lynchburg Range & Training, LLC v.*

*Northam*, 2020 WL 2073703 (Cir. Ct., City of Lynchburg Apr. 27, 2020) — included a majority opinion. The Northern District of California and the Supreme Court of Pennsylvania both upheld their states’ restrictions without requiring any changes, while the District of Massachusetts granted a partial preliminary injunction against the governor’s executive order that left in place significant restrictions, including requiring that all purchases be made by appointment only, capping the number of allowable appointments at four per hour, and imposing stringent social distancing and public health measures on firearms dealers.<sup>36</sup> In New Mexico<sup>37</sup> and Michigan,<sup>38</sup> applications for temporary restraining orders and for preliminary injunctions were determined to be moot after the respective governors of those states loosened their stay-at-home orders. New York’s determination that FFLs remain closed except to sell firearms and ammunition to law enforcement has remained in force as litigation is pending. In Connecticut, a preliminary injunction ended the Governor’s order suspending fingerprinting services.<sup>39</sup>

The Second Amendment claims included allegations that rights to acquire and practice with firearms and ammunition were violated by gun store and firing range closures. Plaintiffs also argued that the Second Amendment encompasses a right to transfer firearms privately that was violated when closures made it impossible for residents otherwise eligible to transfer firearms to submit to the state-required federal background check process because it must be facilitated in person by licensed dealers. Further, plaintiffs in New Mexico argued that the Second Amendment encompasses a right to “practicing safety and proficiency with firearms” that was violated by gun range closures.<sup>40</sup>

### Governors’ Broad Emergency Powers to Regulate the Second Amendment: *Jacobson* and *Heller*

Despite this relatively slender record, it appears that governors’ broad emergency powers may receive significant deference even when they restrict the exercise of the Second Amendment in response to the emergency posed by COVID-19. Courts agree that restrictions must be justified by reference to their impact on the public health crisis presented by the disease, without reference to the specific nature of the business, beyond determining if it is essential or non-essential. If gun stores are deemed non-essential, they are required to close — as are all other non-essential businesses.

Per *Jacobson*, during an emergency, a “statute purporting to have been enacted to protect the public health, the public morals, or the public safety” must

yield to a fundamental, constitutionally protected right when the statute (1) “has no real or substantial relation” to those public ends, and (2) when it is “beyond all question, a plain, palpable invasion of rights secured by the fundamental law.”<sup>43</sup>

As to whether there exists any “real or substantial relation” between closing FFLs and the public health end sought, there is ample evidence that restricting the movements and interaction of citizens is a blunt but effective tool to slow COVID-19’s spread. Some degree of restriction of commerce and/or movement has been enacted in all 50 states to mitigate the risk of transmission and save lives, prevent the health care system from becoming overwhelmed, and conserve scarce personal protective equipment (PPE).<sup>44</sup> In *Altman*, plaintiffs did not contest the stay-at-home order or the relationship between closing FFLs and these clearly legitimate public health goals — meaning that the case turned exclusively on the second *Jacobson* prong regarding a “plain, palpable invasion” of the Second Amendment.<sup>45</sup> However, *Connecticut Citizens Defense League* indicates that where restrictions placed on constitutionally protected behavior (like acquiring firearms, which had been effectively precluded by the fingerprinting ban) are more onerous than those on unprotected activities (like haircutting, which was available by appointment), courts will invalidate the more onerous restrictions.

As to the second inquiry, whether the restrictions create a “plain, palpable invasion” of Second Amendment rights may turn on *Heller* and related Second Amendment jurisprudence. *Heller*’s direct holding was that the core Second Amendment right is “the right to possess a handgun in the home for the purpose of self defense.”<sup>46</sup> Most circuit courts have adopted the two-pronged test endorsed in *Heller* for evaluating Second Amendment claims since *Heller*: (1) determine whether the law in question burdens conduct falling within the scope of the Second Amendment, and (2) if so, determine the level of scrutiny required for the law by reference to the severity of the burden.<sup>47</sup> Circuits have extended the right of possession to acquisition,<sup>48</sup> though not without permitting waiting periods.<sup>49</sup> They have also found that range training may be protected by the Second Amendment.

The argument can be made, however, that COVID-related restrictions — especially, emergency orders that restrict access to guns but are not targeted at guns alone, and also restrict many other goods, so-called “incidental burdens” — need not implicate the Second Amendment at all.<sup>42</sup> If closure orders are neutral and generally applicable, it is unclear why gun stores should receive more deference than other constitutionally protected activities, from religious and politi-

cal assembly to state constitutions’ education guarantees, subject to the same restrictions.

If courts do find that a Second Amendment analysis is appropriate, the Supreme Court has left lower courts with relatively little guidance as to the extent of Second Amendment rights and the scrutiny that should be applied to restrictions. Therefore, state governments imposing executive orders pertaining to firearms and the lower federal courts that review them are each likely to have significant interpretive flexibility — which suggests a greater likelihood that courts will make new law regarding Second Amendment protections, and that there will be disagreements among them. Executive orders requiring gun stores to close altogether, even temporarily, do burden protected conduct. The same is almost certainly true for gun ranges, especially in jurisdictions where gun training and education is required for lawful gun ownership. Acquisition rights are also burdened where access is precluded to federal background checks and to licensed dealers who must be present for in-person firearm transfers among lawful owners.

Other “middle ground” restrictions, like those implemented in Massachusetts (FFL appointments and limits on the number of customers allowed in FFLs at one time) and Michigan (curbside pickup for online delivery) may be considered sufficiently accommodating as to avoid burdening any Second Amendment rights.<sup>50</sup> Similarly, the categorical ban on firearm access imposed by the total suspension of fingerprinting services in Connecticut also may not have been terminated if the burden imposed on the right was found to be commensurate to restricted access and precautions required for other services in the state.

Some judges have seized on the Supreme Court’s acknowledgment in *Heller* that “longstanding” laws regulating firearms impose less of a burden on the Second Amendment right simply by virtue of their longevity and presumed acceptance by the public.<sup>51</sup> Longstanding state laws and constitutional provisions that provide sweeping gubernatorial emergency powers, as well as *Jacobson*’s early-20th-century pedigree, could reduce the burden sufficiently at the first step of the analysis to remove it from *Heller* scrutiny altogether.<sup>52</sup> Alternatively, its “longstanding” nature will likely not apply if the restriction is narrowly conceived as the necessarily temporary emergency order itself.

Most circuit courts apply intermediate scrutiny to laws that burden Second Amendment rights.<sup>53</sup> Although some judges have held that stricter scrutiny may be appropriate where the emergency restrictions are triggered more regularly (for example, by cyclical, semi-predictable emergencies like hurricanes), less scrutiny is required for rarer emergencies.<sup>54</sup> Interme-

diate scrutiny requires (1) the government interest to be significant, substantial, or important; and (2) that the government's means for achieving that interest are substantially related to it.<sup>55</sup> Under intermediate scrutiny, some circuits do not require firearms regulations to be narrowly tailored to the least restrictive alternatives.

The *Jacobson* standard does not, of course, preclude the possibility that restrictions will be determined constitutionally invalid.<sup>56</sup> In some jurisdictions, softening restrictions to allow in-store purchasing helped moot some claims that might have been decided against the state. But invalidating emergency orders

to consider it distinguishable from devastating but regular natural disasters, for which emergency measures may require heightened scrutiny.<sup>57</sup> Still, it is fair to wonder how dislocating and rare a disaster has to be in order to produce *Jacobson* deference. More immediately, will courts apply *Jacobson* if governors re-tighten restriction on gun sellers and firing ranges in response to periodic resurgences of the virus?

It is also possible that the fights over FFL restrictions during COVID could have much longer-lasting implications for the Second Amendment and the right to bear arms. Pro-gun litigants have challenged not only restrictions on the core, well-established right to

It is also possible that the fights over FFL restrictions during COVID could have much longer-lasting implications for the Second Amendment and the right to bear arms. Pro-gun litigants have challenged not only restrictions on the core, well-established right to possess arms, but also restrictions that they argue violate attendant rights. It is possible that courts could find that these attendant rights are in fact extensions of the core Second Amendment right — holdings that would endure after the emergency has passed. These include claims to rights to an in-person gun transfer, to selling guns, to fingerprinting services, to an instant federal background check, to “maintaining proficiency” in gun use by allowing access to the range, and to ammunition. Any of these questions with long-term national implications for gun rights could be settled as a result of litigation over a COVID-related restrictions, raising the stakes of such restrictions.

as insufficiently related to the public health ends poses a variety of ambiguous line-drawing exercises. For example, one could imagine a challenge to such seemingly arbitrary qualifications as the four FFL appointments per hour required by the Massachusetts court. Further, could Walmart and other stores that carry essential goods in addition to firearms be required by courts rather than elected officials to close their firearm sections, or may essential stores sell non-essential firearms during an emergency? Might wily storeowners begin selling toilet paper so as to position themselves as “essential businesses” for the next emergency, and will courts seek to differentiate between “real” essential businesses and FFLs moonlighting as convenience stores? Unconfronted questions like these, on the margins, abound.

Further, we understand COVID-19 to be a particularly rare emergency requiring particularly drastic quarantine and isolation measures. It is reasonable

possess arms, but also restrictions that they argue violate attendant rights. It is possible that courts could find that these attendant rights are in fact extensions of the core Second Amendment right — holdings that would endure after the emergency has passed. These include claims to rights to an in-person gun transfer, to selling guns, to fingerprinting services, to an instant federal background check, to “maintaining proficiency” in gun use by allowing access to the range, and to ammunition. Any of these questions with long-term national implications for gun rights could be settled as a result of litigation over a COVID-related restrictions, raising the stakes of such restrictions.

*Connecticut Citizens Defense League, Inc. et al., v. Lamont*, 2020 WL 3055983 (D. Conn. June 8, 2020) is illustrative. As part of his response to COVID-19, Governor Ned Lamont suspended a law prohibiting officials from refusing to collect fingerprints of those seeking to apply for a handgun, and a state agency and

some number of police departments did so. A federal district judge granted a preliminary injunction, ruling that after three months the Governor's previously-justifiable order no longer bore "a substantial relation to protecting public health consistent with respecting plaintiffs' constitutional rights."

At the same time, *Connecticut Citizens* also indicates that governors may succeed when they carefully tailor and update their restrictions as conditions change. The court unambiguously upheld both judicial deference to the state's right to impose extraordinary restrictions in response to COVID-19 and states' power to establish long, costly, and narrowly-drawn handgun ownership procedures, and recognized that such restrictions may have been justified at the beginning of the pandemic. Crucially, it referenced alternative arrangements that Connecticut had already adopted for other activities, including scheduled appointments and other safety measures. Had such measures been adopted for fingerprinting as other state and private services became more available in response to declining infection rates, it seems likely that they would have been upheld.

The state court decision in *Lynchburg Range v. Northam* offers another example of how courts may use the occasion of adjudicating the extent of a governor's emergency powers under state law to signal support for expanding Second Amendment protections to new firearm-related activities and the most aggressive standard of judicial review. There, the court relied on Virginia's Emergency Services and Disaster Law, prohibiting the Governor from limiting the rights of Virginians to keep "a well regulated militia...trained to arms" to find that that the phrase "well-regulated" implies a trained militia. The court further found that a list describing the right to bear arms includes training even if it is not expressly mentioned it also held that the Supreme Court has implied that training is necessarily attendant to the right to bear arms. Significantly, the court applied strict scrutiny to the regulation, the much harder standard for it to survive, and an outlier approach among courts.

## Conclusion

The deep uncertainty as to the impact of the COVID-19 crisis on American life extends to the Second Amendment, where restrictions implemented to prevent disease transmission may expand, narrow, or otherwise clarify firearm-related rights with consequences that will last long after the pandemic ends.

## Author's Note

This article was drafted in June 2020, which means that further developments in COVID-19 emergency restrictions, including litigation and policymaking, are not contemplated here.

## Editor's Note

Additional materials for this article can be found in the Online Appendix.

## Note

The author does not have any conflicts of interest to disclose.

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15. *Barnes v. Glen Theatre*, 502 U.S. 560, 569 (1991).
16. *Jacobson v. Commonwealth of Massachusetts*, 197 U.S. 11 (1905).
17. See, e.g., California Constitution art. IV Sec. 86.
18. See, e.g., Mich. Comp. Laws § 10.31.
19. See, e.g., Cal. Const. art. IV, § 8, cl. (d).
20. See, e.g., Ga. Code § 38-3-51(d)(4).
21. See, e.g., 20 Ill. Comp. Stat. § 3305/7(c)(8).
22. See, e.g., L.F. Wiley and S.I. Vladeck, "Coronavirus, Civil Liberties, and the Courts: The Case Against "Suspending Judicial Review," *Harvard Law Review Forum* 133, no. 9 (2020): 179-199.
23. *Friends of DeVito v. Wolf*, 2020 WL 1847100 (Supr. Ct. of PA. 2020).
24. *Mathews v. Eldridge*, 424 U.S. 319 (1976).
25. *Friends of DeVito* at 21.
26. *South Bay Pentecostal Church v. Newsom*, 2020 WL 2813056 (2020).
27. *Id.*, at 2 (quoting *Marshall v. United States*, 414 U.S. 417, 427 (1974)).
28. *Id.* (quoting *Garcia v. San Antonio Metropolitan Transit Authority*, 469 U.S. 528, 545 (1985)).
29. *In re: Abbott*, 954 F.3d 772, 784 (5th Cir. 2020).
30. *Id.*, at 786.
31. *Little Rock Family Planning Services v. Rutledge*, 2020 WL 2240105, 3-5 (E.D. Ark., May 7, 2020).
32. *Adams & Boyle, P.C. et al., v. Slatery et al.*, 956 F.3d 913 (6th Cir. 2020); *South Wind Women's Center LLC v. Stitt*, 2020 WL 1860683 (10th Cir. 2020).
33. *Adams* at 927.
34. See the Online Appendix for table summarizing claims.
35. Wash. Exec. Order No. 20-25 (March 23, 2020), available at <<https://www.governor.wa.gov/sites/default/files/proclamations/20-25%20Coronavirus%20Stay%20Safe-Stay%20Healthy%20%28tmp%29%20%28002%29.pdf>> (last visited September 11, 2020).
36. *McCarthy v. Baker*, 2020 WL 2297278 (D. Mass. 2020) (amended preliminary injunction order).
37. New Mex. Exec. Order No. 2020-026 (April 30, 2020), available at <<https://www.governor.state.nm.us/wp-content/uploads/2020/05/Executive-Order-2020-026.pdf>> (last visited September 11, 2020).
38. Mich. Exec. Order No. 2020-59 (April 26, 2020), available at <[https://www.michigan.gov/documents/whitmer/EO\\_2020-59\\_Signed\\_688350\\_7.pdf](https://www.michigan.gov/documents/whitmer/EO_2020-59_Signed_688350_7.pdf)> (last visited September 11, 2020) (allowing curbside pickup for non-essential goods, including firearms, and in-store purchases of guns from stores that sell necessary supplies as well as guns).
39. Conn. Exec. Order No. 7E (March 17, 2020), available at <<https://portal.ct.gov/-/media/Office-of-the-Governor/Executive-Orders/Lamont-Executive-Orders/Executive-Order-No-7E.pdf?la=en>>
40. Complaint, *Aragon et al v. Grisham et al.*, 1:20-cv-00325, 10 (D.N.M., April 10, 2020).
41. *South Bay Pentecostal* at 1; See also *In re Abbott*, 954 F.3d 772, 785 (5th Cir. 2020); *In re Rutledge*, 956 F.3d 1018, 1028 (8th Cir. 2020).
42. J. Blocher and D.A.H. Miller, "What is Gun Control? Direct Burdens, Incidental Burdens, and the Boundaries of the Second Amendment," *University of Chicago Law Review* 83 (2016): 295-355.
43. *Jacobson* at 7.
44. S. Mervosh, J.C. Lee, L. Gamio, and N. Popovich, "See How All 50 States Are Reopening," *New York Times*, June 5, 2020.
45. *Altman, et al., v. County of Santa Clara, et al.*, 2020 WL 2850291, 9 (N.D.C.A., June 2, 2020).
46. *Heller*, 554 U.S. at 635.
47. See, e.g., *Woollard v. Gallagher*, 712 F.3d 865, 874-75 (4th Cir. 2013) (including a list of cases that apply a two-step approach).
48. See, e.g., *Teixeira v. County of Alameda*, 873 F.3d 670 (9th Cir. 2017) (*en banc*).
49. See, e.g., *Silvester v. Harris*, 2016 U.S. App. LEXIS 22184 (9th Cir. Dec. 14, 2016).
50. *Silvester v. Becerra*, 138 S.Ct. 945 (2018).
51. *Heller v. District of Columbia (Heller II)*, 670 F.3d 1244, 1253 (D.C. Cir. 2011).
52. See, e.g., *United States v. Skoien*, 614 F.3d 638, 641 (7th Cir. 2010) (*en banc*).
53. Giffords Law Center, *Post-Heller Litigation Summary: January 2020*, available at <<https://lawcenter.giffords.org/wp-content/uploads/2020/02/PHLS-February-2020-Update.pdf>>
54. *Altman* at 14.
55. *Craig v. Boren*, 429 U.S. 190 (1976).
56. *Jacobson* at 28.
57. *Bateman v. Perdue*, 881 F. Supp. 2d 709 (E.D.N.C. 2012)

# COVID-19 Emergency Restrictions on Firearms

Samuel A. Kuhn

## APPENDIX

### COVID-19 Restrictions on Firearms

Table 1

**Second Amendment Litigation Filed During COVID-19**

State: Case	Executive Order – Restrictions Applied	Claims	Dispositions
California, <i>Altman, et al. v. County of Santa Clara, et al.</i> , 2020 WL 2850291 (N.D.CA., June 2, 2020)	4 county public health departments close all businesses except those deemed “essential.” Shooting ranges, firearm and ammunition retailers not exempted.	<u>2A and 14A</u> : 1) right to acquire or practice with firearms violated by closures; 2) right to conduct training and education violated by closure  <u>5A and 14A</u> : “arbitrary and capricious, overbroad, [and unconstitutionally vague”	Only Alameda County still did not allow in-store retail at time of decision, so case was moot for the other 3 counties.  Court ruled that Alameda County order was justified: 1) real & substantial relation to protecting public health; 2) reasonably fits; 3) facially neutral, untargeted; 4) limited in time
Connecticut, <i>Connecticut Citizens Defense League, Inc. et al. v. Lamont</i> , 2020 WL 3055983 (D. Conn. June 8, 2020)	Gubernatorial executive order allowing officials required to provide fingerprinting services necessary to firearm acquisition the discretion to indefinitely suspend such services.	<u>2A</u> : right to acquire firearms violated by order allowing fingerprinting to be suspended.  <u>14A</u> : Due process claim that fingerprinting services were suspended without sufficient process; equal protection claim; privileges and immunities claim	District Judge Meyer granted plaintiffs’ preliminary injunction on grounds that they were irreparably harmed when they were excluded from the state’s only process for lawful firearm acquisition. Despite acknowledging deference due in an emergency per <i>Jacobson</i> and <i>South Bay</i> , the court ruled that the state had failed to demonstrate a “substantial fit” between ongoing suspension of all fingerprinting and protecting the public — especially since other establishments had been allowed to open with significant restrictions.
Massachusetts: <i>McCarthy et al. v. Baker</i> , 2020 WL 2297278 (D.MA. May 7, 2020)	EO altering COVID-19 Order No. 21 removing gun retailers, shooting ranges, and other elements of firearms industry from essential business list; manufacturers, importers, distributors still allowed to operate	<u>2A</u> : deprivation of right to self-defense by closure of gun stores and ranges  <u>42 U.S.C. § 1983</u> : deprivation of property interests in plaintiffs’ federal firearms licenses and business licenses  <u>14A</u> : due process violation — procedural due process  <u>Art. XVII, Mass. Dec. of Rights</u> : state right to bear arms	State ordered to allow FFLs to sell guns, ammunition, other goods by appointment only, maximum 4 appointments per hour, 9am to 9pm, with proper social distancing and enhanced sanitation measures

# APPENDIX

## COVID-19 Restrictions on Firearms (continued)

Table I

### Second Amendment Litigation Filed During COVID-19

State: Case	Executive Order – Restrictions Applied	Claims	Dispositions
Michigan: <i>Beemer et al. v. Whitmer</i> , No. 1:20-cv-00323, (W.D.MI, April 27, 2020).	EO 2020-42 ordering closure of nonessential businesses, following initial CISA guidance that did not include gun sellers, ammunition retailers, and firing ranges.	<u>2A and analogous state constitutional provision</u> : deprivation of 2A right to keep and bear arms, including carrying gun in case of confrontation, acquiring ammunition, and training at firing ranges — all of which are necessary, or else the 2A will be toothless  <u>14A</u> : equal protection claim that the challenged measures deprive plaintiffs of fundamental rights and lack rational basis  <u>14A</u> : procedural due process claim that fundamental rights were deprived without due process	EO 2020-59 modified original restrictions to allow curbside gun pickup, the sale of guns in-store from stores that sell necessary supplies as well as guns in their normal course of business subject to mitigation measures required by Secs. 11 & 12 of order. Thus, TRO/PI moot.  Plaintiffs amended complaint; plaintiff’s response brief to defendant’s motion to dismiss is pending.
New Mexico: Complaint, <i>Aragon et.al v. Grisham et.al</i> , 1:20-cv-00325 (D.N.M, April 10, 2020)	EO ordering closure of all businesses “except for those deemed essential” <sup>1</sup>	<u>2A</u> : deprivation of right to “keep” or “bear” arms, including ammunition and access to “proficiency in their use” by training at shooting ranges  <u>2A</u> : deprivation of right to transfer firearms by depriving New Mexicans of federal instant background check required to do so	Motion for preliminary injunction and temporary restraining order filed (4/16/20); TRO motion withdrawn (5/18/20); Found moot (5/19/20).
New York: Complaint, <i>Dark Storm Industries, LLC v. Gov. Cuomo</i> , 1:20CV00360-LEK-ATB (N.D.N.Y, March 30, 2020)	EO 202.6 <sup>2</sup> and subsequent determination that gun store “designated as essential solely with respect to work directly related to police and/or national defense matters”  Applies to firearms and ammunition	<u>2A</u> : deprive New Yorkers of ability to purchase arms for self-defense  <u>Art. IV, § 2</u> : Privileges & Immunities “Substantive due process right” to purchase arms for self-defense in this time of crisis and uncertainty”	Complaint filed; Answer due from NYS EDC by May 7, 2020, still not provided as of June 4, 2020.
Pennsylvania: <i>Mullins et al. v. Wolf</i> , No. 63 MM 2020 (Sup. Ct. PA., March 22, 2020)	“All businesses that are not life sustaining”	<u>35 Pa. CS § 7301(c)</u> : Gov. Wolf exceeds the emergency authority conferred by emergency statute, even if COVID-19 qualifies as a disaster under its provisions  <u>2A &amp; analogous state claim</u> : <u>5A &amp; analogous state claim</u> : <u>14A &amp; analogous state claim</u> : due process claims; unconstitutionally vague	Supreme Court of PA rejected petitioners’ application for extraordinary relief: no majority opinion filed; Wecht, J. dissenting: between closure of physical FFLs and requirement that transfers must occur in person unless transferee is exempt, the state has effectively violated the 2A and PA Const. Art. I, Section 21 and placed a burden on gun sellers and buyers not placed on other industries in which transfers can occur fully remotely.

<sup>1</sup> New Mex. Exec. Order No. 2020-004 (March 23, 2020), <https://cv.nmhealth.org/wp-content/uploads/2020/03/COVID-19-DOH-Order-fv.pdf>.

<sup>2</sup> N.Y. Exec. Order No. 202.6 (March 18, 2020), <https://www.governor.ny.gov/news/no-2026-continuing-temporary-suspension-and-modification-laws-relating-disaster-emergency>.

# APPENDIX

## COVID-19 Restrictions on Firearms (continued)

Table 1

### Second Amendment Litigation Filed During COVID-19

State: Case	Executive Order – Restrictions Applied	Claims	Dispositions
<p>Virginia: <i>Lynchburg Range &amp; Training v. Northam</i>, No. CL20-333 (Cir. Ct., City of Lynchburg April 27, 2020)</p>	<p>E.O. 53: ordering “[c]losure of all public access to recreational and entertainment businesses, effective 11:59 p.m., Tuesday, March 24, 2020 until 11:59 p.m., Thursday, April 23, 2020” including “shooting ranges”</p>	<p>Originally challenged in state court, removed by defendants to federal court, voluntarily dismissed by plaintiffs, then re-filed in state court without the U.S. Constitutional claim. Defendants removed again, and Western District of Virginia federal court granted defendants’ motion to remand to state court.</p> <p><u>E.O. 53 is “ultra vires” and beyond the scope of executive authority under the Virginia Constitution and Emergency Services and Disaster law</u></p> <p><u>Art. I, § 13 of Va. Constitution: state constitutional right to bear arms</u></p> <p><u>Art. I, § 7 of Va. Constitution: Anti-Suspension Provision</u></p>	<p>Governor, State Police, and law enforcement enjoined from enforcing prohibition on public access to Lynchburg Range &amp; Training as long as the gun range operates in a manner consistent with E.O. 53, Paragraph 7 (requiring open businesses to operate “to the fullest extent possible in a manner consistent with social distancing and sanitizing guidance from federal and state authorities”</p>



# A Double-Filter Provision for Expanded Red Flag Laws: A Proposal for Balancing Rights and Risks in Preventing Gun Violence

*Gabriel A. Delaney and Jacob D. Charles*

## Introduction

As of July 2020, 19 states and the District of Columbia have adopted Extreme Risk Protection Order laws (what we call “ERPO” or “extreme risk” laws). ERPO laws allow law enforcement, and often other statutorily defined parties, to petition a court to temporarily remove firearms from someone whom the court determines poses a threat to themselves or others. These laws are modeled on Connecticut’s 1999 “risk warrant” law,<sup>1</sup> which aimed at removing firearms from people at high risk of violence to self or others. A new wave of laws, beginning in 2014 with California’s Gun Violence Restraining Order,<sup>2</sup> has seen widespread adoption in the last few years.<sup>3</sup> Although these types of laws are popularly referred to as “red flag laws,” we avoid the term, except for identification purposes in the title of this article, due to potential stigma associated with it.<sup>4</sup>

One primary way in which the recent wave of ERPO laws go beyond the early Connecticut statute is by allowing not just law enforcement, but also family members and sometimes others to directly petition a judge to order temporary removal of firearms from a dangerous individual, employing a legal process simi-

lar to what all 50 states have in place for domestic violence restraining orders.<sup>5</sup> In the years since the 2018 shooting at Marjory Stoneman Douglas High School, extreme risk laws have continued to evolve. Jurisdictions like California, Maryland, Hawaii, New York, and the District of Columbia have expanded the class of petitioners eligible to bring a direct petition for an ERPO, including in an initial, *ex parte* proceeding.<sup>6</sup> In several of these states, co-workers, employers, health-care professionals, and school faculty and staff now join law enforcement, family, and household members as eligible petitioners.<sup>7</sup>

The significant expansion of the ERPO petitioner classes raises questions about how far states are constitutionally permitted to expand such classes consistent with the Due Process Clause. Though the Constitution likely poses no barrier to extreme risk laws that permit law enforcement, family members, and perhaps trained professionals like healthcare workers to directly petition for a court order, the questions become harder as petitioner classes extend to those with more indirect or tangential relationships with the prospective respondent. Because the risk of erroneously depriving someone of a protected right is a key component of the due process inquiry,<sup>8</sup> groups with less direct access to information and fewer connections to the respondent may more often petition based on mistaken perceptions, unconscious bias, incomplete information or even, rarely, outright fabrication. Broad expansions may thus, critics charge, result in additional ERPOs being erroneously issued.<sup>9</sup>

In this article, we argue that, to assuage concerns with broadening the class of petitioners, states can adopt what we call a “double-filter provision,” which is exemplified by New Mexico’s recent extreme risk

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statute.<sup>10</sup> The main component of such a provision is a special statutory category — “reporting party” — that enables a broader social network, such as co-workers or school administrators, to request that a law enforcement officer (“LEO”) file a petition for an ERPO, but does not give reporting parties themselves a right to file a petition directly with the court. LEOs provide the first filter on these requests and, crucially for our proposal (and the New Mexico law), LEOs legally *must* seek an ERPO from the court if they find the reporting party’s information credible. That information is then transmitted to the court (the second filter) in the form of a sworn affidavit of the reporting party.

We argue that employing LEOs and judges as double filters provides key benefits relevant to both the due process analysis and to the life-saving goals of ERPOs by funneling more reliable information to

The policy borrows from the same legal framework as domestic violence restraining orders (DVROs),<sup>12</sup> which have now been adopted in various forms in all 50 states and the District of Columbia.<sup>13</sup> Connecticut’s statute pioneered the practice of preemptive gun removal as a civil court action, which neither requires nor generates a record of criminal or mental health adjudication. The Connecticut statute only allows LEOs or state prosecutors, after independently investigating and determining probable cause, to seek a judicial warrant authorizing them to remove firearms from an individual found to pose an imminent risk.<sup>14</sup>

Since 2014, many of the new wave of extreme risk laws have expanded the original Connecticut model by, as relevant here, broadening the class of petitioners eligible to directly petition for an ERPO. Of the 20 jurisdictions with an ERPO law as of this writing, 13

**Employing LEOs and judges as double filters provides key benefits relevant to both the due process analysis and to the life-saving goals of ERPOs by funneling more reliable information to the court system and enhancing the transparency and accountability of ERPO enforcement. In these ways, expanding the sources of information through a double-filter provision maintains the appropriate balance between individual rights and government interests that the due process inquiry requires.**

the court system and enhancing the transparency and accountability of ERPO enforcement. In these ways, expanding the sources of information through a double-filter provision maintains the appropriate balance between individual rights and government interests that the due process inquiry requires.

Part I of this article lays out the relevant policy landscape, including the key structural differences between original and modern ERPO statutes. Part II briefly assesses the constitutionality of expanding petitioner classes in ERPO statutes, specifically as it relates to those petitioners filing *ex parte* orders. Part III argues that states considering further expansion of ERPO petitioner classes to broad social networks should adopt double-filter provisions.

### **I. The Context and History of Extreme Risk Laws**

In 1999, Connecticut became the first state to pass a law allowing police to temporarily remove guns from an individual when there is “probable cause to believe ... that person poses a risk of imminent personal injury to himself or herself or to other individuals[.]”<sup>11</sup>

also allow a family or household member to directly petition a court for a gun removal order.<sup>15</sup> And some of these states have expanded the class of eligible petitioners to additional categories: school administrators,<sup>16</sup> co-workers,<sup>17</sup> and healthcare professionals.<sup>18</sup>

The theory undergirding petitioner class expansion is that “those who teach or work with a person and have frequent interaction may see the early warning signs and be the first to know that the person is at severe risk of harming self or others with a firearm.”<sup>19</sup> In other words, by expanding the category of persons eligible to file an ERPO petition to those in one’s wider social or professional network, there is a higher likelihood that a dangerous gun owner will be identified and separated from his or her firearm(s) before a violent incident occurs.

The recent expansion of extreme risk petitioner classes may present a way to increase the frequency of pre-incident interventions that save lives. In Maryland, for example, which has extended the class of petitioners, recent statistics show that family members were petitioners in approximately 41% of cases and physicians petitioned in 1% of cases.<sup>20</sup> Researchers who

recently interviewed Maryland physicians about the state's ERPO law reported that few were familiar with the process, but that after the law was explained, most physicians (1) had interacted with patients who would be likely candidates and (2) would likely file a petition.<sup>21</sup> As this and other recent research has shown, the use and efficacy of ERPO laws are in part a function of awareness.<sup>22</sup> But expanding the category of petitioners has costs, too — a potentially higher risk of erroneous deprivation. As the categories expand, the possibility of less accurate or relevant information entering the calculation could increase as individuals have less context for the respondent's behavior or may be motivated by conscious or unconscious bias. Because such possible errors play directly into the constitutional calculus, we turn next to that question.

## II. Assessing the Constitutionality of Expanded ERPO Petitioner Classes

Although many restrictions on gun possession implicate the Second Amendment, ERPOs most directly raise a different constitutional question about the *procedure* by which rights can be deprived. Our focus here is thus on the Due Process Clause. That Clause generally requires conditions, such as proper notice and the opportunity for a fair hearing,<sup>23</sup> before the state deprives an individual of constitutionally-protected liberty or property.<sup>24</sup> However, the Supreme Court has often recognized exceptions in cases where an adversarial hearing is postponed until after a deprivation if a compelling government interest is at stake, as long as the risk of erroneous deprivation is not excessively high.<sup>25</sup> Scholars (including one of us) have argued that *ex parte* ERPOs fit into the Court's exceptions to pre-deprivation hearings.<sup>26</sup> We are interested here in whether expanding petitioner classes in ERPO statutes jeopardizes that constitutional footing.

A court reviewing an ERPO law is likely to use the Court's balancing test laid down in *Matthews v. Eldridge* to determine what process is due. This test instructs courts to weigh three factors:

First, the private interest that will be affected by the official action; second, the risk of an erroneous deprivation of such interest through the procedures used, and the probable value, if any, of additional or substitute procedural safeguards; and finally, the Government's interest, including the function involved and the fiscal and administrative burdens that the additional or substitute procedural requirements would entail.<sup>27</sup>

In terms of the first factor, ERPOs implicate two private interests: (1) the Second Amendment right of a

“responsible, law-abiding citizen”<sup>28</sup> to “keep and bear arms,”<sup>29</sup> and (2) the property interest in the firearms themselves. The last factor, the government interest in the prevention of gun violence in the community at large, is uncontestedly significant.<sup>30</sup> Because the private and government interests at stake are both compelling, a court's evaluation will likely turn on whether the risk of erroneous deprivation has been appropriately mitigated through the law's procedures.

Most existing extreme risk laws contain numerous mechanisms to mitigate the risk of erroneous orders. Judges, not administrative functionaries like court clerks,<sup>31</sup> entertain the orders and can only grant emergency *ex parte* orders after a petitioner provides sufficient evidence to carry her burden (ranging from good cause to clear and convincing evidence) that an individual poses an immediate risk of harming themselves or others. All states carry a misdemeanor penalty for filing a knowingly false petition.<sup>32</sup> Current extreme risk laws require courts to hold a full hearing in which both petitioner and respondent participate within as little as two days after the initial *ex parte* order is served and no longer than a few weeks.<sup>33</sup> And even when a final order is granted after a hearing, it is usually limited to a duration of six months to a year,<sup>34</sup> though a respondent may typically move to have an ERPO terminated sooner.<sup>35</sup>

With respect to petitioners, allowing LEOs, family, and household members to directly file petitions allows access to this legal tool by those considered best situated to detect the warning signs of potential dangerousness in armed subjects.<sup>36</sup> The types of information these individuals possess is not likely to undermine the accuracy and fairness of the process.

Would expanding this same direct petitioning right to employers, co-workers, school employees, health-care professionals, or others undermine the procedural safeguards that have been put in place to protect against erroneous deprivations? The ACLU argues that it does. In its opposition to California's Assembly Bill 61, enacted in October 2019, the ACLU of California argued against expanding the class of eligible GVRO petitioners to employers, co-workers, and school staff or faculty because they “lack the relationship or skills required to make an appropriate assessment” of an individual's dangerousness.<sup>37</sup> Though the ACLU supported California's existing extreme risk law, which allowed law enforcement and family members to petition the court directly, it argued that “expanding the parties that could apply for such an *ex parte* restraining order to include all the parties listed above” would “upset[]” the balance between preventing gun violence and protecting civil liberties struck in the original law and “create[] significant potential

for civil rights violations.<sup>38</sup> The ACLU chapters of Pennsylvania and Rhode Island have made similar arguments against expansive ERPO bills introduced in those states.<sup>39</sup> The ACLU argument drives at the idea that by expanding the categories of eligible ERPO petitioners to those lacking “relationship or skills to make an appropriate assessment” policymakers will increase the risk of erroneous deprivation.

Measuring this possible risk of an erroneous deprivation is difficult. In theory, an ERPO is granted in error when (1) the respondent does not *actually* pose a risk to himself or others, or (2) the petitioner fails to meet her burden of proof in establishing that he does. But it is hard to translate that definition into a workable empirical analysis. For one, there is no way to objectively measure whether a standard of proof was met or whether a person was sufficiently dangerous. One imperfect substitute is to consider the percentage of *ex parte* ERPOs that result in full-length ERPOs. That provides some sort of statistical measurement that might show that the information leading to the *ex parte* order was insufficient, incomplete, or fabricated, but it could also turn out that full orders were not entered because the respondent was incarcerated or civilly committed, or that the relevant witnesses were too afraid to testify against the respondent,<sup>40</sup> or that the crisis prompting the emergency order had ceased before the full hearing. Erroneous orders certainly exist, but it is not easy to observe their frequency.

The risk for an erroneous order depends on the type and quality of the new information made available through additional individuals and on how judges process this information. In DVRO laws, on which the basic ERPO structure was built, only family members or those with similarly close personal relationships can seek a DVRO.<sup>41</sup> These laws have withstood due process challenges.<sup>42</sup>

Since data gathering on more expansive extreme risk statutes is still in its early stages, comparative data on petitioner classes is still hard to find. But what legislatures in California, Hawaii, New York, Maryland, and DC have concluded is that allowing trustworthy members of a community to voice concern when they witness suspicious, threatening, or dangerous behavior by armed individuals increases the likelihood that incidents of gun violence will be prevented. These are undoubtedly hard questions, and the concerns that have been raised by the ACLU and other groups are important.

But whatever the ultimate answer to the constitutional question of permitting these additional groups direct access to the courts, we propose a solution for states considering expanding the class of petitioners

that, in our view, best balances governmental and individual interests while decreasing the chance for error.

### III. A New Model: The Double-Filter Provision

To more fully consider the ACLU’s concern with expanded petitioner classes, we highlight some of the costs and benefits of expanding the pool of reporting individuals before identifying and addressing our preferred solution.

#### A. *The Costs and Benefits of a Broader Class*

Expanding the pool of petitioners could have several drawbacks. First, a larger number of requests might lead to more questionable petitions reaching LEOs and judges. This may mean that higher numbers of ERPOs are granted out of an abundance of caution for public safety, and not because there is particularly strong evidence that a respondent is a danger to themselves or others. Second, with the overall number of petitions filed increasing, the administrative costs of managing those filings will also rise. (Although the costs of a procedure are a factor in the constitutional test, a state can of course choose to create procedures that increase its own expenses.) The costs might include workload increases for state courts; additional workloads for LEOs tasked with filing more paperwork, prosecuting petitions, or retrieving weapons from the homes of dangerous individuals; law enforcement agencies or gun dealers mandated to store weapons for extended periods; and the data management needed to keep track of all this information.<sup>43</sup>

The potential payoff in exchange for these costs is the same paramount goal for all weapon restrictions — lives saved. A greater number of community members capable of requesting ERPOs means a greater number of eyes and ears employed to aid law enforcement in the pre-incident intervention of dangerous individuals. This is the same idea behind enlisting the support of the public in thwarting domestic terrorist plots.<sup>44</sup>

There are aspects of our identities, attitudes, and intentions that we do not share with family or household members, much less a LEO. There are things we might tell a co-worker, a healthcare professional, or a friend in our social network that we might never say to our significant other, or our parents. If that information could save a life, shouldn’t the system make it easy to use that information to take action? Present estimates indicate that for every ten to twenty ERPOs granted, one suicide is averted.<sup>45</sup> And that estimate is based on data derived from Connecticut and Indiana, states that only allow LEOs to file ERPO petitions. Giving categories of people with potentially better knowledge about the character or emotional status of

a respondent the ability to raise that information may make the risk of erroneous deprivation smaller, not greater.

### *B. The Double-Filter Proposal*

A state considering expanding the class of those eligible to seek an ERPO need not choose between providing these individuals direct access to court and shutting them out of the ERPO process altogether. We propose that states inclined to expand the pool out to a broader social network adopt what we call a “double-filter provision,” like New Mexico’s recent adoption of a “reporting party” category.<sup>46</sup> This provision would allow a wide array of specifically listed groups, like co-workers, employers, and school administrators, to request that LEOs file a petition for an ERPO. Unlike in states where worried citizens can only raise concerns with LEOs, who are the only party allowed to petition directly, reporting parties are not passive conveyers of information. Instead, they must file a sworn affidavit supporting the LEO’s petition that goes to the court.<sup>47</sup> Such sworn documents subject reporting parties to the same civil and criminal penalties that similarly-situated petitioners in other states are for false statements. Of course, in such a process, LEOs could still directly petition without a reporting party if they perceive threatening or dangerous behavior themselves.

Under this framework, LEOs are the first filter with judges serving as the second. In this way, a broader number of individuals with relevant information have statutory rights to request that LEOs file for a petition against a specific person. Two crucial parts of this framework help distinguish it from other possible ERPO designs: (1) LEOs are *required* to petition for an ERPO if they are presented with “credible information from a reporting party that gives the agency or officer probable cause to believe that a respondent poses a significant danger of causing imminent personal injury to self or others,”<sup>48</sup> and (2) if they *decline* to seek a requested petition from a reporting party, LEOs must inform the chief law enforcement officer of the respondent’s county.<sup>49</sup> We would also add that declination information should be reported to the state’s Attorney General and that as much information as possible should be publicly released about declination decisions, rates, and rationales on a periodic basis.

In some ways, our proposal resembles the original Connecticut risk warrant law, because both rely on several stages of review before a petition can be filed. But the double-filter provision here is importantly different. Most notably, reporting parties are a statutory category with respect to whom LEOs owe special duties. If someone in that category requests that the LEO file an ERPO, the LEO either must do so if

she finds the information credible or report why she has declined to do so. And that information on declinations must be reported, tracked, and publicly disclosed. There are no similar obligations under Connecticut’s original law.

The double-filter provision enables LEOs to provide an extra check on misleading, baseless, or incomplete requests. It may also help assuage concerns about expanded petitioner classes, including some of the ACLU’s objections. LEOs’ first-level review also helps decrease the possibility that expanded petitioning rights may result in the biased use of the procedure, such as by those who are more likely to code (unconsciously or not) behavior as threatening when it comes from Black or Brown students, neighbors, or co-workers. To be sure, these concerns are not fully eliminated, but inserting an extra filter before views are aired in court filings should reduce the likelihood of petitioners’ potential misuse of the tool.

On the other hand, requiring a LEO filter can be problematic if, for example, a member of law enforcement is the individual who poses a risk of imminent personal injury to himself or herself or to other individuals. Other LEOs might be hesitant or resistant to filing a petition against their colleague. It can also generate difficulty if — as is the case in some New Mexico jurisdictions — LEOs have stated their refusal to seek or enforce such orders by proclaiming their jurisdictions “Second Amendment sanctuaries.” But New Mexico’s law adds several counterbalancing features to mitigate these concerns, which we think can be slightly modified for states that want to adopt broader classes of requesters. In New Mexico, if a LEO is the potential petition respondent, then a local prosecutor can file the petition. And if a LEO declines to file a requested petition, the officer must inform the sheriff of the respondent’s county.<sup>50</sup> (The law went into effect on July 1, 2020, and no data is yet available on the frequency of the practice.) We would modify this requirement to mandate LEOs, or the county sheriffs, to provide this information to the state’s chief law enforcement officer, typically the Attorney General, so that recalcitrant local LEOs, like sheriffs refusing to enforce gun laws, are not the only repository of information about declined requests; they should also provide a rationale for why they have declined to seek such an order.

New Mexico’s law also strips LEOs of their state immunity for harm that results if they refuse to follow the law.<sup>51</sup> Although such a provision would undoubtedly provide extra incentive for LEOs to seek appropriate orders, we are agnostic about whether other states should include similar provisions in their laws. The key point to maintain the efficacy of the double-

filter provision is the transparency and accountability that comes from a legal obligation to file warranted ERPOs and a reporting provision for declinations. The state should provide a mechanism to publicly report as much information as possible on declination decisions, such as rates, rationales, and case outcomes, while respecting the privacy rights of those against whom no court order was ultimately sought.

Not only does this mechanism provide an initial filter of potentially spurious or unreliable claims made against a respondent, but it keeps LEOs accountable to reporting parties and the public as well. Unlike the role that everyday citizens play in alerting law enforcement to troubling behavior that might lead to a LEO-initiated ERPO in other states, such as by calling 911 or showing up to a station, reporting parties are more central. They play a formal role in court as affiants, and LEOs are legally required to act on credible information from reporting parties and to report and disclose when they decline to do so. This combination of reduced LEO discretion and enhanced accountability helps expanded extreme risk laws more easily satisfy the due process analysis because it lowers the marginal risk for error. It adds a disinterested, neutral observer into the equation before a judicial officer reviews the petition and erects an additional burden on the reporting party to satisfy that LEO. This kind of error-reducing measure allows the state both to vindicate the individual interests in correctly-adjudicated petitions and, because of the expanded class of requesters, to increase the likelihood that more lives will be saved with additional information coming into the process.

## Conclusion

Extreme risk laws can save lives without unduly affecting the right of responsible, law-abiding citizens to keep and bear arms. The laws impose only a temporary burden on those whom a court finds to be at serious risk to himself or others. We offer a balanced model that has the additional benefit of expanding the reporting circle more widely but that also reduces the possibilities for errors as the circles spread. The double-filter provision increases accountability, adds transparency, decreases error, and filters a greater amount of credible information on serious risks to the court system.

Initial data in some jurisdictions with expanded petitioner classes demonstrate that there are a set of people with relevant risk information willing to make those declarations under oath in hopes of averting harm.<sup>52</sup> We suspect that adding a layer of review will encourage more individuals to come forward, fewer mistaken claims to slip through, and more lives to be saved.

## Note

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# How the Guardianship System Can Help Address Gun Violence

*Nina A. Kohn*

A 2019 nation-wide poll of adults found that 86% would support “a law allowing the police to take guns away from people who have been found by a judge to be a danger to themselves or others.”<sup>1</sup> A Quinnipiac poll of registered voters conducted a month earlier found that 80% would support “allowing the police or family members to petition a judge to remove guns from a person who may be at risk for violent behavior.”<sup>2</sup>

Consistent with this broad public support, many states are adopting “Red Flag” or “Extreme Risk Protection Order” (ERPO) laws that allow police, family members, and, in some states, healthcare professions and educators, to petition a judge for temporary removal of guns from persons who present a risk of danger to themselves or others.<sup>3</sup> While ERPOs are an important tool for addressing gun violence, there is an overlooked body of law already present in all fifty states that complements ERPOs, and that can be used to accomplish much of what ERPOs are designed to do in states that have yet to adopt legislation authorizing them. Specifically, probate courts and other courts with jurisdiction to do so could use existing state guardianship law to remove the right to possess guns from certain people who are at risk because they cannot make appropriate decisions about guns.

## Use of the Guardianship System to Directly Restrict Gun Rights

Guardianship is a process by which a court appoints another person to make decisions for an adult who

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the court finds cannot make decisions for himself or herself and consequently has unmet needs. Guardianship law is rooted in the ancient doctrine of *parens patriae*, and the longstanding recognition that states have a right and duty to care for vulnerable citizens unable to care for themselves. The guardianship process, although not without problems,<sup>4</sup> provides individuals subject to a petition for guardianship with substantial due process guarantees. For example, a guardian — with limited exceptions — may only be appointed following notice and a hearing before a judge.

Guardianship goes by a variety of names. This article uses “guardianship” as an umbrella term to refer to processes by which courts appoint others to make decisions for adults found incapable of making those decisions for themselves, but many states call a person appointed to make financial decisions a “conservator” and one appointed to make personal decisions for another a “guardian.” Other states call both types of appointees “guardians,” and several call both types “conservators.” Louisiana uses altogether different terms: “curator” and “tutor.”<sup>5</sup>

The appointment of a guardian can result in limitations on gun rights. Some states statutorily bar an individual subject to guardianship from possessing or purchasing a firearm.<sup>6</sup> Even in states without those restrictions, if a judge finds after notice and hearing that an individual is at substantial risk because the individual cannot make safe decisions about firearms, the judge could appoint a guardian to control the individual’s relevant possessions (guns), finances (gun purchases), and activities (gun use). With such a finding, the court could also explicitly remove the individual’s right to possess or purchase guns and to engage in gun-related activities.



In addition, in some states, the guardianship system could be used to limit rights related to firearms without actually appointing a guardian. Under the Uniform Guardianship, Conservatorship, and Other Protective Arrangements Act (“UGCOPAA”) — which has been adopted by Washington<sup>7</sup> and Maine<sup>8</sup> — a court may enter an order of limited scope in lieu of guardianship where the limited order would meet the needs that would otherwise warrant appointment of a guardian.<sup>9</sup> This could enable a court to order firearms removed from individuals who, due to cognitive limitations, are at significant risk if they possess

Thus, whether an individual at risk for perpetrating gun violence will meet the criteria needed for the court to use guardianship systems to restrict gun rights varies by state. States with criteria that focus on the risk posed or faced by the individual,<sup>15</sup> and not simply on the individual’s abilities to provide self-care,<sup>16</sup> are better situated to use their guardianship systems to address gun-related risk. Nevertheless, even those states that focus on self-care may capture a sizeable portion of those prone to gun violence. In the United States, the majority of those who commit suicide use a firearm to do so.<sup>17</sup> Suicide by firearm is a

Like the use of an ERPO, using the guardianship system to remove the right to possess guns is consistent with the type of tailored, individualized determinations that have broad bipartisan support and clearly pass constitutional muster. The requirement that a court only appoint a guardian or enter an alternative order after notice and hearing, as well as the right of an individual subject to guardianship to petition to have rights restored, provides ample due process to protect the underlying Second Amendment right. This is especially true where the court makes an affirmative finding as to whether the individual has the ability to retain access to firearms.

a firearm, and prohibit them from acquiring firearms without otherwise limiting their ability to engage in transactions or activities. While the UGCOPAA allows for a significantly broader array of protective orders in lieu of guardianship than are available in most states, other states also permit targeted orders short of guardianship that could include an order to remove guns and prohibit their acquisition.<sup>10</sup>

The standard that must be met to use guardianship systems to limit gun possession varies by state. Under the UGCOPAA, an appointment of a guardian or protective arrangement in lieu of guardianship may only be ordered if a court finds that an individual “lacks the ability to meet essential requirements for physical health, safety, or self-care” because of an inability to “receive and evaluate information or make or communicate decisions.”<sup>11</sup> In addition, under the UGCOPAA, a guardian may not be appointed if the individual’s needs can be met by less restrictive alternatives.<sup>12</sup> By contrast, some jurisdictions expand the basis for an order by, for example, allowing for guardian to appointed for individuals with broader functional needs or abilities.<sup>13</sup> And some limit imposition of guardianship to situations in which the individual has particular disabilities or conditions (e.g., mental illness, chemical dependency).<sup>14</sup>

particularly common method of suicide among older adults,<sup>18</sup> a class already disproportionately subject to guardianship.

### **Indirect Impact of Guardianship on Gun Rights**

Imposition of guardianship even without court-imposed restrictions on firearm possession can indirectly lead to the loss of firearm-related rights. Imposition of guardianship renders the individual subject to guardianship one “who has been adjudicated as a mental defective,” within the meaning of the federal Gun Control Act of 1968, which prohibits the sale or other “disposal” of firearms to such individuals.<sup>19</sup> Under federal regulations, a person is considered to have been “adjudicated as a mental defective” when a court has determined that the person is “(1) a danger to himself or to others; or (2) [l]acks the mental capacity to contract or manage his own affairs” because of “marked subnormal intelligence, or mental illness, incompetency, condition, or disease.”<sup>20</sup> Although the term “incompetence” has generally fallen out of favor in guardianship statutes in favor of either “incapacity” or simply a description of the functional limitations, this language clearly contemplates including those subject to guardianship because guardianship is the

process by which individuals have historically been adjudicated incompetent. Indeed, this reading is sufficiently clear that Texas' statutory code assumes that a person subject to guardianship will lose the right to purchase a firearm indefinitely under 18 U.S.C. § 922(g)(4).<sup>21</sup> Several states, however, have enacted statutes designed to counteract this effect by requiring a court to determine that an individual for whom a guardian is appointed is "mentally defective" within the meaning of the federal Gun Control Act.<sup>22</sup>

### Comparison to the ERPO Approach

Like the use of an ERPO, using the guardianship system to remove the right to possess guns is consistent with the type of tailored, individualized determinations that have broad bipartisan support and clearly pass constitutional muster.<sup>23</sup> The requirement that a court only appoint a guardian or enter an alternative order after notice and hearing, as well as the right of an individual subject to guardianship to petition to have rights restored, provides ample due process to protect the underlying Second Amendment right. This is especially true where the court makes an affirmative finding as to whether the individual has the ability to retain access to firearms.

Using the guardianship system to remove the right to control firearms, however, has several potential advantages over using ERPOs. First and foremost, guardianship laws already exist in every state in the nation. By contrast, many states have not adopted ERPOs and some — such as Oklahoma, which enacted the nation's first "Anti-Red Flag Act" in May of 2020<sup>24</sup> — have clearly rejected them. Second, the category of persons who may petition for guardianship is substantially broader than the category of persons who may petition for an ERPO. Whereas ERPO laws limit petitioners to police in some states, or police and family members in others, typically anyone with an interest in the welfare of an individual can petition for a guardian for that individual. Thus, teachers, doctors, and other persons who might be aware of an individual's risk would be in a position to petition under guardianship law. Third, guardianship laws may be used to limit risks posed by individuals whose risk level does not rise to the level required for an ERPO. For example, many ERPO laws only allow removal of gun rights where the individual poses an "imminent" risk of violence.<sup>25</sup>

Nevertheless, guardianship system responses do not obviate the need for ERPO laws because these responses have some significant limitations relative to ERPOs. Most importantly, the criteria for applying ERPOs are better tailored to the risk of gun violence. ERPO laws make danger to others a basis for removal

of guns, whereas guardianship laws often only consider danger to self. Even then, guardianship laws may only consider risk to self created by certain types of disabilities or limitations.

In addition, guardianship system responses should not be seen as a substitute for ERPOs because ERPOs have the advantage of being more targeted. Using the guardianship system to address gun violence risks removal of more rights than are necessary to prevent gun-related harm because it opens the door to the appointment of a guardian who may control far more than gun-related concerns. In states that authorize targeted orders like those created by Article 5 of the UGCOPAA, this risk may be reduced. Such orders offer a targeted approach to removing the right to possess firearms from individuals who pose a risk to themselves, without the additional stigma, expense, and liberty restriction resulting from guardianship.

### Conclusion and Recommendations

State guardianship law can further one objective upon which gun control advocates and gun owners typically agree: removal of the right to possess firearms from those adjudicated incapable of safely possessing them.

To facilitate the efficient and fair use of the guardianship system as a tool to prevent gun violence, courts and states legislatures should consider adopting several key policies. First, court systems should make it standard practice to inquire as to whether a respondent in a guardianship proceeding currently possesses or has access to firearms. This will help judges to make a specific, fact-based findings as to an individual's firearm related abilities and risks. Second, states that have not already done so should adopt legislation authorizing limited orders such as those authorized in Article 5 of the UGCOPAA. This will reduce the likelihood that courts seeking to protect individuals from gun violence or other serious risks will unduly limit individuals' liberty by stripping them of more rights than necessary. Third, states should require courts to report individuals found to lack the ability to possess or use firearms to the National Instant Background Checks System (NICS), used to screen would-be firearm purchasers. Currently, approximately one-third of the states explicitly require that individuals subject to guardianship be reported to the NICS.<sup>26</sup> Even states that reject the minority approach as overbroad, should embrace a requirement that courts report those individuals explicitly adjudicated to be unable to safely possess or use firearms.

Even with such policy advancements, however, guardianship system interventions will remain only a complement to — not a substitute for — more modern ERPO laws. Guardianship system interventions can

be initiated by a broader range of people, but do not allow for removal of firearms from all individuals who pose a clear and present danger to others.

#### Note

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# Mental Illness and Gun Violence: Research and Policy Options

*Ronald S. Honberg*

In the aftermath of recent mass tragedies involving firearms, gun control proponents called for bans on certain types of weapons, enhanced background checks, and stronger enforcement of existing laws. Gun rights groups attempt to shift the focus away from gun reforms and towards people with serious mental illness and the failures of the mental health system as the culprits.<sup>1</sup>

The inadequacies of the mental health system in the U.S. are well documented. But, focusing on untreated mental illness as the reason for gun violence reinforces a long tradition equating mental illness with criminality and violence without contributing in meaningful ways to reducing overall gun violence in the U.S.<sup>2</sup>

The overall contribution of mental illness to gun violence in the U.S. is very small. Untreated symptoms of certain serious mental illnesses, such as delusions and hallucinations, can somewhat increase risks of violence, particularly when coupled with other risk factors such as the use of alcohol or illegal drug. However, mental illness as a broad category is not a significant risk factor for violence towards others.

Mental illness is more of a risk factor for gun-related suicides. With this in mind, several promising “risk-based” approaches for reducing gun violence have recently emerged, including “Extreme Risk Protection Orders” (ERPOs), voluntary placement on “do

not sell” lists, and projects to educate gun shop owners about risk factors for gun violence.

This article briefly summarizes research on risk factors for gun violence, with particular focus on mental illness. It then discusses the limitations of the existing federal background check system as it relates to mental illness. Finally, the article describes ERPOs and other emerging approaches for limiting access to firearms for persons at risk for violence towards self or others.

## Research on Mental Illness and Gun Violence

### *Mental Illness and Violence Generally*

The term “mental illness” encompasses a wide range of conditions and diagnoses. Researchers have concluded that there is little if any relationship in general between having a mental health diagnosis and being violent towards others.<sup>3</sup> Most research has focused on “serious mental illnesses,” defined as conditions that can cause substantial disruptions in functioning and the ability to perform major life activities. Examples include schizophrenia, bipolar disorder, major depression, and other conditions that cause serious disruptions in functioning.<sup>4</sup>

Two definitive studies were conducted across multiple sites in the 1990s. The first study, the National Institute of Mental Health’s Epidemiologic Catchment Area (ECA) study revealed that approximately 4 percent of all violence in the U.S. was attributable to serious mental illness. It should be noted that “violence” was defined broadly in the ECA study to include a broad range of physically assaultive behaviors, including hitting with a fist, pushing, shoving, or throwing things, in addition to more serious acts such as attacking or threatening to harm another person with a weapon.<sup>5</sup>

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A second major study conducted in the mid-1990s focused on individuals released from psychiatric hospitals and followed for one-year post-discharge. Significantly, the study showed that substance abuse significantly increased risks of violence among persons with and without mental illnesses.<sup>6</sup> After controlling for substance abuse, mental illness was not significantly associated with violence.

More recent studies have similarly shown low overall rates of violence among people with mental illness as a class. However, rates of violence do increase among certain subgroups, including some individuals experiencing symptoms of psychosis such as delusions and hallucinations, particularly when substance abuse is also a factor.<sup>7</sup>

media attention and have a profound effect on public perceptions about gun violence.<sup>10</sup> Mass shootings understandably create shock and in their aftermath often generate speculation that the shooters must have had a mental illness.

Since a number of those who committed mass violence in recent years have died during their attacks, information about their psychiatric histories is frequently based on prior reports or behaviors rather than evaluations after the tragedies. Nevertheless, researchers studying the characteristics of mass shooters in recent years have connected serious mental illness to between 23 percent<sup>11</sup> and 40 percent<sup>12</sup> of these tragedies, a significantly higher percentage than with acts of gun violence generally.

This article briefly summarizes research on risk factors for gun violence, with particular focus on mental illness. It then discusses the limitations of the existing federal background check system as it relates to mental illness. Finally, the article describes ERPOs and other emerging approaches for limiting access to firearms for persons at risk for violence towards self or others.

Few studies have directly examined whether people with co-occurring mental illness and substance use disorders are more prone to violence than people with substance use disorders who do not have mental illness. A meta-analysis conducted by a team of researchers at Yale Medical School revealed that risks of violence among substance abusers was particularly high in people diagnosed with psychotic disorders such as schizophrenia or schizoaffective disorder.<sup>8</sup>

Other factors, such as a history of violence and anti-social behavior, past victimization or trauma, youth, and male gender may also have an impact on rates of violence among people with serious mental illness (as well as among people who don't have serious mental illness). Socio-economic status and a person's living conditions and circumstances may also be a factor. Disproportionate numbers of people with serious mental illness live in economically disadvantaged neighborhoods with high rates of alcohol and drug abuse and violence. When these factors are controlled for, mental illness alone does not pose a significant risk for increased violence.<sup>9</sup>

#### *Mental Illness and Mass Violence*

Mass shootings, defined as acts in which 4 or more people are killed, constitute less than one percent of all gun violence in the U.S., yet garner much of the

While these percentages are quite high, it is important to consider them in context. According to Everytown for Gun Safety, deaths resulting from mass shootings constitute less than one percent of all gun deaths in the U.S. each year.<sup>13</sup> This is not to suggest that efforts to identify individuals who pose risks for mass gun violence or to take steps to prevent such violence from occurring should not be undertaken. Extreme Risk Protection Orders, which are discussed later in this paper, may be one effective strategy for doing so. But, considering the low percentage of mass shootings relative to shootings in general, focusing on mass violence data to draw broad conclusions about overall threats posed by people with serious mental illness is neither fair nor an effective strategy for broadly reducing gun violence.

#### *Gun Violence and Suicides*

Although gun homicides generate more attention in the media, there are actually significantly far more suicides with guns than murders. In 2017, 60 percent of gun related deaths in the U.S. were suicides (22,854) whereas 37 percent were homicides (14,542). And, suicide rates have been increasing in recent years.<sup>14</sup> Suicides were the second leading cause of death in 2016 for young people between the ages of 16 and 24.<sup>15</sup>

The epidemic of suicides has been particularly severe among veterans. In 2016, the U.S. Department of Veterans Affairs reported that about 20 veterans per day take their own lives. In that same year, veterans accounted for 14% of all suicide deaths in the U.S. Rises in suicide rates among young veterans between the ages of 18 and 34 have been particularly prevalent between 2006 and 2016.<sup>16</sup>

Nearly half of all suicide deaths in the U.S. are with firearms, accounting for 60% of all gun deaths each year.<sup>17</sup> Ninety percent of suicide attempts with guns result in deaths. Others result in serious disability.<sup>18</sup> By contrast, only one in twelve suicide attempts overall in the U.S. are lethal.<sup>19</sup>

Mental illness appears to be associated with a significant percentage of suicide deaths. The Centers for Disease Control (CDC) recently estimated that about half of all suicide deaths involved people diagnosed with mental illness, and they speculated that the actual rates may have been significantly higher because many others may have had mental health conditions but had not seen a mental health professional and thus were undiagnosed.<sup>20</sup>

The statistics concerning suicides suggest that national conversations about reducing gun violence should focus as much on reducing gun related suicides as they focus on homicides.

### The Limits of the National Instant Background Check System

The National Instant Background Check System (NICS) excludes certain people from purchasing firearms based on their legal status.<sup>21</sup> For example, persons who have been convicted of crimes punishable by sentences of more than one year are excluded from purchasing firearms. So too are persons who have been “*adjudicated as a mental defective or committed to any mental institution*” (emphasis added). The outdated and offensive term “adjudicated as a mental defective” listed in the NICS statute has been defined as a finding by a lawful authority that a person is dangerous, lacks competence to manage their own affairs, or in criminal cases has been found either not competent to proceed or not criminally responsible due to severe mental disability.<sup>22</sup>

The NICS system has significant limitations. First, individuals who may demonstrate risky behaviors but do not fall into one of the eleven exclusionary categories are not included in the system. For example, Nikolas Cruz, the shooter at Parkland High School in Florida, was not in the NICS database despite having shown clear signs of danger because he had never been civilly committed or criminally adjudicated.

Second, reporting by states to the NICS system is optional, not mandatory. Although state reporting has improved in recent years, a number of states still do not have systems in place for accurate reporting.

Third, NICS applies only to the sale of firearms by licensed gun dealers. In most states, persons who purchase firearms privately or at gun shows are not subject to NICS background checks.

Finally, NICS applies only to the sale of firearms. It does not provide authority for removing firearms from those who already possess them.

Therefore, while NICS is helpful, additional strategies are needed for the temporary removal of firearms from people who show risks of gun violence towards self or others, whether or not connected to mental illness.

### Extreme Risk Protection Orders

Laws authorizing Extreme Risk Protection Orders (ERPOs), also sometimes called “Red Flag” laws, have been passed in 18 states and the District of Columbia.<sup>23</sup> ERPOs provide legal authority to temporarily remove firearms and ammunition from people who demonstrate immediate or imminent risk for gun violence.

Although state requirements and procedures differ somewhat, ERPOs generally involve a two-stage process, depending upon the urgency of the specific situation. In cases involving concerns about immediate risks, “*ex parte*” hearings may be held at which a judge may issue a temporary order prohibiting the person from possessing or purchasing a firearm. These *ex-parte* orders are typically in effect for three weeks or less.

In all cases, including when *ex-parte* orders have been issued, a subsequent hearing must be held to further assess dangerousness and determine whether a longer-term order should be issued. Persons who are subjects of ERPO petitions must be given notice of the hearing and provided with an opportunity to present evidence that they are not dangerous and that an ERPO should not be issued.

When ERPOs are issued, they typically remain in effect for up to one year. After this time period or earlier if the respondent provides evidence satisfying the court that he or she is no longer dangerous, the firearms must be returned. Most state laws also include provisions permitting petitioners to file requests to renew orders if they believe the person remains dangerous and should continue not to have access to firearms.

Since ERPOs are quite new, research on their effectiveness is limited. Studies in several states suggest that ERPOs have had a positive impact particularly in preventing gun related suicides.<sup>24</sup> Moreover, anecdotal evidence suggests that ERPO laws are being used effectively to remove firearms from individuals

making threats of violence, including violence aimed at schools.<sup>25</sup>

Mental health organizations such as the National Alliance on Mental Illness,<sup>26</sup> the American Psychiatric Association<sup>27</sup> and the American Psychological Association<sup>28</sup> have indicated support for ERPOs because they are focused on overall risk, not on a person's mental health status or diagnosis.

### Voluntary “Do not Sell” Lists

In 2019, Washington became the first state to pass legislation enabling persons to voluntarily place themselves on “do not sell” lists for firearms.<sup>29</sup> The idea was developed by Fredrick Vars, a law professor who had experienced depression. Washington's law enables individuals to sign confidential waivers directing that they should not be permitted to buy a gun until they request to have their names removed from the registry. Although these laws will only help individuals who are willing to voluntarily step forward and give up their guns, they can be effective tools in preventing suicides, which are frequently impulsive acts.<sup>30</sup>

### Gun Shop Projects

In 2009, the New Hampshire Firearms Safety Coalition began a project to inform firearms retailers and range owners on ways to prevent suicides. The coalition developed and shared guidelines on how to recognize and avoid selling or renting firearms to people who may be suicidal as well as encouraged gun owners to display and distribute suicide prevention materials.

By 2012, half of all gun shops in New Hampshire were displaying and disseminating these materials and today, similar projects are being conducted in at least 18 states.<sup>31</sup> A recent study conducted in Washington State and published in the journal *Suicide and Life-Threatening Behavior* revealed that more than two thirds of gun retailers responding to a survey knew someone who had died by suicide, with firearms the means used in the majority of those suicides. The survey also revealed that the more retailers know about suicides, the more comfortable they are with training employees and talking with customers about it.<sup>32</sup>

### Conclusion

In a society with loose restrictions on access to firearms, focusing on mental illness as the most significant strategy for reducing gun violence is both unfair and unlikely to be effective. Gun violence prevention strategies should focus on limiting access to firearms for those who present risks of harm to self or others, irrespective of whether they have mental health conditions.

### Note

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# The “Rules of the Road”: Ethics, Firearms, and the Physician’s “Lane”

*Blake N. Shultz, Benjamin Tolchin, and Katherine L. Kraschel*

Physicians play a critical role in preventing and treating firearm injury. From 2009-2014, there were an average of 74,319 annual encounters for firearm injury in US emergency departments (EDs) alone.<sup>1</sup> In 2017, firearms caused 39,773 deaths in the US – more than HIV, hypertension, automobiles, or alcohol.<sup>2</sup> A growing body of evidence strongly associates gun ownership with an increased risk of suicide.<sup>3</sup> As one emergency physician noted, “[gun violence] is an integral part of every residency program, and almost every hospital across the country sees victims of gun violence. It ... affects [providers], both in terms of the number of resources that are needed to respond to [it] and in terms of the emotional aftermath.”<sup>4</sup> Despite this undisputed treatment role, preventative clinical interventions and physician advocacy aimed at addressing firearm injury as a public health issue has been met with intense opposition from the National Rifle Association (NRA) and other firearm industry supporters. Although physicians regularly engage in advocacy to address public health matters – such as automobile and consumer products safety – when advocacy is related to guns, we are told by the NRA

that “self-important anti-gun doctors [should] stay in their lane.”<sup>5</sup>

Firearm violence, like other common causes of morbidity and mortality, is precisely within physicians’ “lane.” As long as guns are available, clinicians must address the injuries they create. The more relevant question is how broadly physicians’ “lane” should be defined, and what rules of the road should guide their role in it. As clinicians have long acknowledged, “health is determined by a wide variety of influences beyond biology, including ... social, ... political, legal [and] cultural factors.”<sup>6</sup> Because physicians have professional, ethical, and legal obligations to care for their patients’ health, restricting their obligations to medical treatment of firearm injuries alone would be a “long-term waste of resources and lives” and represent less-than-adequate care.<sup>7</sup> Some legal frameworks guiding physicians’ clinical engagement with firearm violence in are explored elsewhere in this volume.<sup>8</sup> This article focuses on how the obligations of medical ethics in particular should guide physician involvement in firearm violence. We argue, by unpacking fundamental principles of medical ethics, that physicians *ought* to engage in clinical screening and treatment and *may* engage in public advocacy to address gun violence.

## Principles of Medical Ethics and the Patient-Physician Relationship

Physicians’ ethical obligations to their patients arise from the agency they exercise when entrusted to utilize their expertise to assess the risks and benefits of treatment and/or act as medical decisionmakers on behalf of their patients.<sup>9</sup> Their agency relationship with patients creates ethical obligations grounded on three of four widely accepted ethical principles of mod-

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ern medical ethics — patient autonomy, beneficence, and nonmaleficence.<sup>10</sup> Patient autonomy is the cornerstone of informed consent doctrines, while beneficence requires clinicians to promote their patients' welfare and health and nonmaleficence requires clinicians to avoid any harm to their patients. Balancing respect for patients' autonomy with concern for their welfare underlies a great deal of modern medical ethical discourse. Decisions about the ownership and use of firearms are one area where a patient's autonomous decisions might conflict with their medical wellbeing. Striking the right balance generally favors voluntary over coercive interventions in such situations.

The principle of beneficence applies most strongly to relations between physicians and their patients

advocacy to reduce firearm injuries, though it does not create an obligation to do so.

#### *Clinical Interventions*

Respect for autonomy counsels that non-coercive clinical interventions should be the obligatory first-line approach to address firearm injury in appropriate patients. Of these, educating and counseling patients regarding risk of harm and risk mitigation strategies — known as “anticipatory guidance” — is a regular component of clinical practice that is applicable to firearms.<sup>12</sup> Patient education and counseling are widely used by physicians to mitigate risks to their patients presented by drugs, alcohol, tobacco, unhealthy foods, a sedentary lifestyle, motor vehicles, and many other

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— what Beauchamps and Childress refer to as “obligations of specific beneficence.”<sup>11</sup> But the principle of beneficence also applies more generally but more weakly to relations between physicians and all members of society. General beneficence does not generate *obligations* but rather *nonobligatory* moral ideals. Promoting the health and welfare of other members of society is praiseworthy, even if it is not required. Such ideals are secondary to and less binding than physicians' obligations to their patients, but are important nonetheless.

A fourth foundational ethical principle — justice — requires that clinicians attempt to ensure that the benefits and burdens of healthcare are distributed fairly.

#### **Ethical Engagement in Firearm Injury**

The requirements to minimize patients' risks of harm and promote patients' welfare impels physician interventions that minimize the risks and mitigate harms caused by firearms. Respect for patients' self-determination dictates that such clinical interventions should be voluntary whenever possible and include interventions such as patient counseling and education. Coercive measures may be justified when severe harms such as loss of life are foreseeable and when voluntary interventions are likely to be ineffective. Finally, as discussed above, the principle of beneficence encourages physicians to engage in public education or political

risk factors.<sup>13</sup> Clinicians are obliged to inform patients of relevant risk factors and mitigation strategies in order for them to make informed decisions about their health, including information regarding firearm risks. The American Medical Association's Code of Medical Ethics instructs that physicians should, consistent with their professional commitment, “[e]ducate patients about modifiable risk factors.”<sup>14</sup> For example, studies have shown that parents are likely to voluntarily remove guns from the home when educated by a physician about the increased risk for suicidal children.<sup>15</sup> Counseling must be grounded in rigorous scientific data, individually tailored, and presented without judgment and with cultural sensitivity. The focus of education should be on well-being and safety and should involve family-members whenever possible.

The paucity of appropriate data regarding firearm ownership, injury risk, and risk mitigation strategies represents a significant barrier to presenting evidence-based recommendations to patients.<sup>16</sup> Other perceived barriers are less substantial. Although physicians have a First Amendment right to discuss gun ownership and injury risk with patients, many physicians incorrectly believe such discussions are against the law.<sup>17</sup> Many physicians fear that these discussions conducted to promote the welfare and autonomy of their patients could be interpreted as a criticism of gun ownership and might therefore violate Second

Amendment prohibitions on the infringement of the right to bear arms. In part because of this misconception, physicians counsel patients about firearm injury infrequently — in just 15% of encounters with veterans screening positive for suicidal thoughts, for example.<sup>18</sup> The ethical principles of beneficence and nonmaleficence suggest that education should occur far more frequently. Studies find that the majority of the general public believe that conversations about gun safety with physicians are sometimes or usually appropriate.<sup>19</sup>

When voluntary measures are insufficient to avert foreseeable severe harm for high-risk patients, coercive measures are generally ethically mandated and may be legally required in certain situations. Outside of the firearm injury context, physicians can and do trigger a number of measures that severely restrict individual autonomy, albeit with extreme care and selectivity. For example, in the case of acute suicidality when patients represent a risk of harm to themselves or others, physicians may involuntarily commit a patient for inpatient treatment and monitoring. The risk of future harm must be real and substantial, and nearly all state laws reflect this requirement — some include *ex ante* due process protections.<sup>20</sup> In other cases, physicians are required to play a role in restricting access to drivers' licenses for patients with Alzheimer's disease and seizure disorders, and in accessing worker's compensation benefits.<sup>21</sup> In many states, certain physicians are also statutorily required under "duty to protect" (or warn) statutes to notify third parties of real and imminent threats made by patients.<sup>22</sup>

State and federal laws often include a significant degree of discretion allowing physicians' ethical obligations and professional judgment to dictate a course of action.<sup>23</sup> When approaching a coercive measure, the principle of autonomy dictates that physicians should be informed and guided by a "soft" approach to paternalism, through which the physician attempts to maximize individual autonomy during periods of crisis.<sup>24</sup> This may include, for example, seeking assent (in the case of an incompetent patient) or verbal consent whenever possible.

Physicians should not see themselves as "gatekeepers" controlling access to firearms. For example, extreme risk protection orders are merely *triggered* by physicians — the ultimate determination of fitness to own a firearm is determined by law enforcement and the court system. Physician gatekeeping presents significant concerns for physicians and patients alike. First, it may undermine the foundational trust between physician and patient. Firearm owners may decline to report risk factors or may be deterred from seeking care due to concerns that their weapon may

be removed from them without due process. Second, there is no scientifically validated test for fitness to own a firearm.<sup>25</sup> As with non-coercive clinical interventions, physicians are ethically obligated to trigger coercive measures with appropriate patients, when consistent with the law and professional judgment.

### *Community and Political Advocacy*

Physicians' primary obligations remain to individual patients and clinical practice due to their direct agency relationship. However, the principle of beneficence grants physicians license, as part of their professional duties, to engage in public education and political advocacy related to firearm violence. Physicians have long engaged in political conversations related to public health matters, including those surrounding tobacco use, drugs, motor vehicle accidents, and accidental poisoning.<sup>26</sup> In recognition of this long history, the AMA's Code of Medical Ethics includes a provision declaring that "physicians have an ethical responsibility to seek change when they believe the requirements of law or policy are contrary to the best interests of patients."<sup>27</sup>

Framed in this way, public advocacy can be seen as a more general extension of the duties based on beneficence which clinicians have to individual patients as applied to the public writ large. As such, the same guiding principles ought to inform their engagement. When such advocacy is related to medical matters, it should again be supported by rigorous evidence. Advocacy should not be "anti-gun," but rather should focus on risk factors and strategies for mitigating them — mirroring conversations in the clinical setting.

This approach should be distinguished from a second form of advocacy, related to issues affecting the profession itself, which may also be ethically sound. Physicians, like any other profession, should not be prohibited from advocating against policies that negatively impact their ability to perform their job (i.e., caring for patients). One example of this is advocating against "gag laws," or laws circumscribing or dictating the conversations physicians may have with their patients related to firearms. Yet another example is advocating against restrictions on studying firearm violence, for an increase in funding for such research, and for increased training on firearm injury in education programs.

### **Conclusion**

The notion that firearm injury is somehow separate and distinct from other public health matters — and is therefore outside the bounds of physician scope of practice — disregards the reality of clinical practice. Physicians confront gun violence as a daily occurrence;

it is an integral part of many residency programs, accounts for tens of thousands of emergency department visits per year,<sup>28</sup> and 39,000 annual deaths.<sup>29</sup> Therefore, the correct question is not whether physicians' "lanes" encompass firearm injury, but rather what the scope of those "lanes" should be.

The principles of modern medical ethics require physicians to undertake clinical interventions to reduce risks and mitigate harms caused by firearms to their patients. Voluntary measures such as education and counseling are appropriate first-line interventions for most patients. Coercive clinical interventions may be appropriate for certain high-risk patients, but must be conducted so as to preserve individual autonomy and trust whenever possible. Interventions should be supported by professional expertise and scientific evidence. Finally, public education and political advocacy are ethically permissible and indeed praiseworthy as acts of general beneficence.

#### Note

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# Understanding the Role of Law in Reducing Firearm Injury through Clinical Interventions

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## Introduction

Firearm injury in the United States is a public health crisis. Approximately 38,000 people are killed, and 73,300 people are injured, by firearms each year in the United States.<sup>1</sup> Between 2014 and 2018, firearm suicide rates increased by 10% in the past five years, while firearm homicide rates increased by 25%.<sup>2</sup> Americans have a significantly higher risk of firearm injury compared to citizens of other high-income countries.<sup>3</sup> Physicians are uniquely situated to act as upstream interveners to prevent firearm injury. They can identify patients at risk of harming themselves or others as well as patients at risk of being harmed by firearm violence.<sup>4</sup> However, their ability to mitigate harm is limited. Laws and regulations that shape physicians' roles in the context of firearm injury prevention interact in complex ways, and, in many cases physicians are unaware of, or have misconceptions about, how and whether these laws affect their clinical practice.

Using clinical scenarios to illustrate how firearm laws and regulations interact to directly impact physicians' abilities to reduce firearm-related harms, this article suggests not only that physicians and other

healthcare providers require more nuanced education on this topic, but also that policymakers should consult with front-line healthcare providers — just as they consult with other stakeholders — when designing firearm policies.

## The Law's Influence on Reducing Firearm Injury in Clinical Practice

Clinical encounters between physicians and their patients represent opportunities to screen for and identify firearm injury risk.<sup>5</sup> Physicians can lawfully screen and ask patients about firearm ownership in all states.<sup>6</sup> Next, a physician must decide how to appropriately manage that risk in order to reduce the likelihood of firearm injury by: (1) providing firearm safety counseling to patients and their families, such as encouraging voluntary transfer of an at-risk patient's firearm; (2) reporting high-risk individuals to law enforcement; (3) temporarily restricting an individual's access to firearms through a court order; and/or (4) involuntarily holding or committing an individual for further evaluation and care. The law may guide, and occasionally dictate, the appropriate course of

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action, but physicians often act based out of misperception or lack of awareness of what the law allows them to do. In almost all situations, counseling alone will be sufficient. In extremely high risk situations, the other three types of interventions — reporting, temporary restriction of access to firearms, and involuntary commitment — may be used, but bring risks and other implications for the patient-physician relationship.

#### *Counseling*

Like patient screening, counseling patients on firearm safety is legal in all states. For example, at a pediatric wellness visit, physicians can offer information about safe storage. Firearm safety and lethal means counseling may also be useful to mitigate suicide risk.<sup>7</sup>

State laws may limit the ways in which physicians counsel patients to reduce access to firearms. For example, physicians may wish to encourage particu-

cise their duty to warn.<sup>12</sup> Many physicians are aware of HIPAA's disclosure restrictions but are not familiar with disclosure permissions, so may hesitate to report firearm risk due to misunderstanding.

#### *Court Orders and Involuntary Holding/Commitment*

Some states allow physicians to trigger processes to temporarily and involuntarily remove firearms from extremely high-risk individuals. For example, extreme risk protection order (ERPO) laws allow certain groups of people to petition a court for the temporary removal of a person's access to firearms.

Additionally, when a patient poses an imminent risk to themselves or others, voluntary admission or involuntary commitment is an option in all states. Patients may voluntarily admit themselves for inpatient psychiatric care and are allowed to discharge themselves as long as they do not represent an imminent risk of

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larly high-risk patients to decrease access to lethal means by voluntarily and temporarily transferring their firearms to family members or friends. This strategy is strongly recommended for firearm suicide prevention.

#### *Reporting*

State law may govern whether physicians are legally mandated or permitted to report firearm injury, risk, or ownership to third parties. Most states' laws require physicians to report firearm-related injuries. Psychiatrists have a long-recognized "duty to warn," as articulated by the California Supreme Court in *Tarasoff v. Regents of the University of California*.<sup>8</sup> Some states' legislatures have created a statutory "duty to warn" that typically arises only if a "patient has communicated ... an explicit threat to kill or inflict serious bodily harm ... upon a reasonably identified victim or victims and the patient has the apparent intent and ability to carry out the threat."<sup>9</sup> Most states narrow the application of this duty to warn such that it applies only to "mental health professionals."<sup>10</sup> Some states permit third-party warning without requiring it.<sup>11</sup>

The Health Insurance Portability and Accountability Act (HIPAA) expressly allows physicians to exer-

harm to themselves or others. If extremely high-risk patients decline to voluntarily admit themselves, physicians may consider initiating an involuntary hold. An emergency hold is a temporary measure intended for observation and acute treatment purposes, usually lasting less than seventy-two hours. A minority of states require judicial approval prior to initiation.<sup>13</sup> Most states require demonstration that the patient has a mental illness and represents a risk of danger to self or others.<sup>14</sup> The use of involuntary commitment may carry significant ramifications for firearm owners, depending on their state of residence, because federal law prohibits firearm ownership by individuals who have been "adjudicated as a mental defective" or "committed to a mental institution."<sup>15</sup> Civil commitment is rarely used.

#### *Unintended Consequences of State Laws Designed to Reduce Firearm Injury*

Some laws intended to reduce firearm injury may actually preclude or limit effective clinical interventions when a patient is in danger of hurting themselves or others. The case studies explore two such examples: universal background check (UBC) statutes and some

ERPO laws (see Tables 1a–d). UBCs may hamper voluntary firearm transfers by delaying what is ideally an immediate process. Almost all states exclude physicians from acting as petitioners for ERPOs. As legislatures revisit these laws they should include healthcare providers to design more effective processes, as they do for other key stakeholders.

### Case Studies

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**Case One: Severe Depression — Legal Issue: Transfer of Firearm Away from At-Risk Patient**

*A patient presents to their long-time primary care physician in Maryland with the chief complaint of “worsening depression.” What can the provider do to help keep their patient safe?*

Severe depression is associated with increased suicide risk,<sup>16</sup> and access to lethal means like firearms increases that risk.<sup>17</sup> Screening for suicidality and access to lethal means would be appropriate for this patient. If the physician’s assessment finds that the patient is at risk for suicide, possible interventions range from lethal means counseling to involuntary commitment. Physicians should also bear in mind the importance of trust in the ongoing patient relationship and the legal consequences of some clinical decisions.

If the patient discloses firearm possession, counseling may include discussing safe storage practices, such as storage of firearms in a locked location and separately storing ammunition from the firearm, or for those with severe depression a recommendation that possession of a firearm be temporarily transferred to a family member or friend. Federal law, which governs

only transfers and sales from federally-licensed dealers,<sup>18</sup> does not prohibit transfer of possession, but state UBC and licensing laws may limit patients’ ability to legally, temporarily transfer possession. Twenty-two states and the District of Columbia have taken steps to close the “loophole” that allows for any private firearm transfer, with thirteen of these states and the District of Columbia requiring a background check at any point of transfer for all classes of firearms.<sup>19</sup> Fourteen states and the District of Columbia, seven of which also have a UBC law, require a license to own or purchase a firearm. For the purposes of preventing access to firearms by prohibited persons, licensing and UBC laws may be useful, but without a workaround these well-intended laws create an unintended consequence: firearm owners in UBC and strict-licensure states who are in high-risk situations cannot easily or temporarily hand off their guns in a time of crisis.

Some states have tried to address this tension. In Maryland, although firearm transfers between parties who are not licensed dealers must be processed through a licensed dealer or law enforcement for a background check before transfer,<sup>20</sup> the state’s highest court held that “temporary gratuitous exchange or loan of a regulated firearm” does not constitute an illegal transfer.<sup>21</sup> In Washington state, a work group that included representation from the National Rifle Association reached unanimous agreement to amend an existing UBC law, allowing temporary transfers intended to prevent suicide.<sup>22</sup>

An ERPO is another legal mechanism, appropriate for only the highest-risk cases, by which a firearm can be temporarily removed from a patient. Most ERPO laws allow family members and law enforcement to petition the court for temporary restriction of a person’s access to firearms. Only the District of Columbia

Table 1a

### Voluntary Transfers

	Voluntary Transfer	States
UBCs or licensing laws	Yes	CA, CO, DC, DE, HI, IA, IL, MA*, MD, MI*, NC*, NE, NV, NJ, NM, NY, OR, PA, VT, VA, WA
	No	CT, RI
NO UBCs or licensing laws	Yes	AL, AK, AZ, AR, FL, GA, ID, IN, KS, KY, LA, ME, MN, MS, MO, MT, NH, ND, OH, OK, SC, SD, TN, TX, UT, WV, WI, WY
	No	N/A

\* Massachusetts has an exemption from the general prohibition for unlicensed persons who transfer “not more than four” firearms in any one calendar year. See Mass. Ann. Laws ch. 140 § 128A (2019). Iowa, Michigan, and North Carolina all have either licensing or permit to purchase laws for handguns. In Iowa, background checks are only required once every five years. In Michigan, a purchase license is void unless used within 30 days of issuance. In North Carolina, applicants must go through a background check to obtain a permit. All other types of firearms are not included in the licensing or permit to purchase laws in Iowa, Michigan, and North Carolina, and thus can be voluntarily transferred.

Table 1b

**ERPOs**

	<b>Petitioner</b>	<b>States</b>
<b>ERPO</b>	<b>Mental health professionals*</b>	DC, HI, MD
	<b>Physicians</b>	DC, HI, MD
	<b>Medical professionals**</b>	HI
	<b>No medical or mental health professionals</b>	CA, CO, CT, DE, FL, IL, IN, MA, NV, NJ, NM, NY, OR, RI, VT, WA
<b>NO ERPO</b>	–	AL, AK, AZ, AR, GA, IA, ID, MI, ME, MN, MS, MO, MT, NC, ND, NE, NH, OH, OK, PA, SC, SD, TN, TX, UT, VA, WV, WI, WY

\*Mental health professionals includes physicians, psychologists, social workers, marriage, family, or child counselors, rape crisis or sexual abuse counselors, and professional psychiatric nurses.

\*\*Medical professionals includes licensed physicians, advanced practice registered nurses, psychologists, and psychiatrists.

Table 1c

**CAP Laws**

<b>Criminal Liability</b>	<b>Variation</b>	<b>States</b>
<b>Negligent Storage</b>	<b>“May” or “Is Likely To” Gain Access</b>	CA, DC, MA, MN, NV, NY
	<b>Allowing a Child to Gain Access, Regardless of Whether Child Uses Firearm</b>	CA, DC, HI, MA, MD, MN, NV, NJ, TX
	<b>Allowing a Child to Gain Access, and Child Uses or Carries Firearm</b>	CT, FL, IA, IL, NC, NH, RI, WA
<b>Intentionally, Knowingly, and/or Recklessly Providing Firearms to Minors</b>	<b>All Firearms</b>	IN*, MO, NV, OK*, UT*
	<b>All Loaded Firearms</b>	DE, VA, WI
	<b>Handguns Only</b>	CO, GA*, KY*, MS, TN*

\* Georgia, Indiana, Kentucky, Oklahoma, Tennessee, and Utah have a weaker standard for parents and guardians, such that parents may be guilty only if they know of a substantial risk that the child will use the firearm to commit a felony.

Table 1d

**Mandatory Reporting of Intimate Partner Violence**

	<b>Variation</b>	<b>States</b>
<b>Mandatory Reporting of Non-Accidental Injury</b>	<b>Yes – Gun</b>	LA, MD, ME, MO, SC, SD, TX, VT
	<b>Yes – Gun or Other Weapon</b>	CT, DC, DE, IN, KS, MS, MT, VA, WA, WV
	<b>Yes – Gun, Other Weapon, or Burn</b>	AR, MN, NJ, NV, NY, RI
	<b>Yes – Gun, Other Weapon, Burn, or Injury from Other Means of Violence</b>	AK, AZ, CA, CO, FL, GA, HI, IA, ID, IL, KY, MA, MI, NC, ND, NE, NH, OH, OK, OR, PA, TN, UT, WI
	<b>No</b>	AL, NM, WY



and Maryland allow physicians and “mental health professionals” to petition, and Hawaii allows all “medical professionals” to petition for an ERPO.<sup>23</sup> For an ERPO to be granted, petitioners must typically show either “probable cause” or “reasonable cause” that the firearm owner poses “an imminent risk” of “significant danger” to themselves or others. Most statutes allow for orders directing the individual to surrender their firearms for a period of up to fourteen days.

In this Maryland case, if other interventions are unsuccessful and the patient is felt to be at imminent risk, the physician may petition directly for an ERPO. HIPAA permits unconsented disclosure about a patient’s imminent threat to self to “a person ... reasonably able to prevent or lessen the threat,”<sup>24</sup> so a physician may disclose the patient’s risk to petition for the ERPO directly or disclose the risk to a family member or law enforcement officer who can then initiate an ERPO. As always, this decision requires the physician to balance potential violation of patient-provider trust with assessment of the degree of patient risk.

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**Case Two: Intoxication and Threats — Legal Issue: Emergency Holds**

*A patient presents to a hospital in New York threatening to “shoot up the whole ER.” He is intoxicated. What can the physician do to keep the patient and others safe?*

In this case, the physician’s “duty to warn” is unclear. While his threat to “the whole ER” may satisfy the particularity requirement common in “duty to warn” statutes, it is debatable whether the patient has presented a serious and imminent danger to themselves or others. In New York, the Secure Ammunition and Firearms Enforcement Act of 2013 (SAFE Act) requires “mental health professionals” (including “a physician”) to report persons “likely to engage in conduct that would result in serious harm to self or others.”<sup>25</sup> Office of Mental Health guidance indicated that “harm” means “threats of ... homicidal/violent behavior towards others.”<sup>26</sup> The requirement includes a discretionary safety valve to exclude “any action which, in the exercise of reasonable professional judgment, would endanger [a] mental health professional or increase the danger to a potential victim.”<sup>27</sup>

Here, the most appropriate action would be to hold the patient for observation with a sitter. Refusing to discharge an intoxicated patient is common practice and is subject to fewer formal procedures and requirements than involuntary commitment.<sup>28</sup> Generally, whether to hold an intoxicated patient against their

will turns on a determination that the patient lacks decision-making capacity, and/or a determination that the patient poses a risk to self or others should they be released in an intoxicated state.

Once the patient is no longer intoxicated, they should be reassessed for violent intentions. If the patient continues to make threats, particularly if the patient indicated possession of a firearm, the physician should consider involving law enforcement and recommending an ERPO, voluntary admission, or an emergency hold.

If the physician identifies that the patient requires emergent psychiatric care, they may offer voluntary admission. If the patient does not agree to voluntary admission, the physician may opt to initiate an emergency hold in some states. Every state and the District of Columbia have emergency hold laws, but who can initiate an emergency hold varies, as does the duration of emergency holds, patients’ rights during the hold, and whether judicial approval is required.<sup>29</sup> Twenty-six states and the District of Columbia allow physicians to initiate emergency holds. Five states, including New York, allow physicians to initiate emergency holds of up to seventy-two hours, even if the danger that the individual poses is unrelated to an underlying mental illness.<sup>30</sup> Across all states, the most common maximum duration for an emergency hold is seventy-two hours, but ranges from twenty-three hours to ten days.<sup>31</sup> Importantly, in some states, a history of voluntary admission to a mental hospital or involuntary commitment may prohibit the patient from legally possessing a firearm in the future.<sup>32</sup>

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**Case Three: Childhood Aggression — Legal Issues: Child Access Prevention Laws**

*A parent brings their child into their pediatrician’s office in Missouri due to concern about the child’s involvement in numerous fights. The family has firearms in the home. What should a physician do?*

Studies suggest that a pattern of childhood aggression places the child at serious risk of future harm to others.<sup>33</sup> In addition, firearms in the home are an independent risk factor for future violent offenses and violent victimization,<sup>34</sup> particularly with respect to adolescent suicide.<sup>35</sup> For this at-risk patient, a conversation about firearms in the home should include counseling regarding these risks and strategies for mitigating them, including safe storage.

Both the National Rifle Association and the American Academy of Pediatrics recommend that firearms be stored in ways that are inaccessible to unauthor-

ized users; evidence-based recommendations indicate the safest form of firearm storage in a locked safe, unloaded, and separate from ammunition.<sup>36</sup> If followed diligently by even half of households with children, this storage practice could prevent up to one third of youth suicides.<sup>37</sup> As the majority of school shootings involve weapons obtained from the home, safe storage plays a significant role in preventing homicide. In some states, counseling on safe storage can be bolstered by reference to safe storage and child access prevention (CAP) laws.

not in the owner's possession or control to be stored with a safety lock in place.<sup>42</sup>

Despite the variety of laws related to safe storage — or perhaps because of their patchwork and state variation — more than half of owners store at least one firearm in a less safe manner,<sup>43</sup> and over 4.6 million minors live in homes with loaded, unlocked firearms.<sup>44</sup> Physicians can play a role in reducing children's access to firearms, particularly for patients with significant risk factors such as the child in this case. Physicians responsible for the care of children should be aware of

Each of these case studies illustrates important aspects of the physician-patient relationship. Most saliently, a number of laws discussed above require or permit a physician to intervene without or against a patient's permission. In such a scenario, special care must be taken to preserve trust in the patient-physician relationship by pursuing other interventions first, by seeking assent where consent is not possible, and by ensuring that patients are informed about the goals and evidence in support of a particular intervention.

There are no federal CAP laws or standards for locking devices used to store firearms. However, federal law prohibits licensed dealers from selling or transferring any handgun without a secure storage or safety device.<sup>38</sup> The prohibition does not apply to private sales, and there is no requirement that the buyer use the device. Twenty-nine states and the District of Columbia have CAP laws. Missouri's CAP law prohibits a person from knowingly or recklessly selling, leasing, loaning, giving away, or delivering a firearm to a minor without the consent of the child's custodial parent or guardian.<sup>39</sup> In comparison, states with stronger CAP laws such as California impose criminal liability when a minor is *likely* to gain access to a negligently stored firearm, regardless of whether they do.<sup>40</sup> In California, physicians could reference these strong CAP laws as a way to encourage compliance with safe storage counseling, similar to counseling regarding mandatory car seat use. Regardless, physicians must keep patient trust at the forefront of such discussions, and avoid creating any perception of threatening patients regarding their compliance with state laws.

States may also regulate methods of firearm storage. Eleven states require safety locks for firearms in the home, although Massachusetts is the only state that requires all firearms to be stored with a lock.<sup>41</sup> Some municipalities have local laws regulating firearm storage. For example, New York City requires all weapons

applicable CAP laws, risk factors for firearm-related injury, and evidence-based strategies for mitigating these risks.

Here, a physician could recommend that firearms be temporarily removed from the home in the case of acute child aggression or, at the least, that the firearms be stored in a locked safe, unloaded, and separate from ammunition.

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#### **Case Four: Intimate Partner Violence — Legal Issues: Mandatory Reporting**

*As part of the recommended intimate partner violence screening of all women of reproductive age,<sup>45</sup> a patient discloses to her primary care physician in Oklahoma that her partner threatens her with physical violence. She reports that he owns multiple firearms and frequently gets drunk. What can the provider do?*

Intimate partner violence (IPV) is prevalent — 36.4% of women are raped, stalked, or assaulted by a partner at some point in their lives.<sup>45</sup> Many instances of intimate partner violence involve a firearm; nearly one million women report being shot or shot at by an intimate partner, and about 4.5 million report that an intimate partner threatened them with a firearm.<sup>47</sup> Physicians have a significant role to play in both iden-

tifying and preventing firearm-related IPV.<sup>48</sup> Prior to engaging in conversations about risk of future harm, safety planning, and legal resources and options, physicians should take care to notify the patient if they are mandated reporters for any category of information.

Most states have a mandatory reporting law for physicians related to IPV.<sup>49</sup> Many states require reporting wounds from firearms, certain burns, and knives or sharp and pointed instruments.<sup>50</sup> Some states, including Oklahoma, require reporting wounds involving a criminal act, including IPV.<sup>51</sup> Physician compliance with mandatory IPV reporting laws is variable and controversial,<sup>52</sup> and some studies suggest that mandatory reporting laws may decrease patient disclosure of IPV.

In this case, after informing the patient about the possibility of mandatory reporting, the physician can counsel the patient about her risk factors for harm. For example, her partner's access to a firearm places her at a five times higher likelihood of IPV death.<sup>53</sup> Alcohol and controlled substance use are independently significant predictors of future violence, placing this patient at high risk of harm given her partner's frequent drinking.<sup>54</sup> Particular care must be taken to build trust in the physician-patient relationship prior to counseling, and the patient's safety must be carefully balanced with her own goals.

Patients may seek legal protections such as a temporary restraining order, or a related IPV order, but these are complicated legal processes subject to a number of loopholes. There is a substantial risk of homicide when patients report IPV to law enforcement and when patients seek restraining orders.<sup>55</sup> Therefore, physicians are well-advised to rely on trained experts in IPV advocacy, particularly when designing exit plans or intervention strategies, and refer patients to programs such as the National Domestic Violence Hotline rather than give their own advice regarding legal courses of action. Additionally, although some states have firearm relinquishment statutes covering cases of IPV, physicians have no ability to activate them beyond mandated reporting to law enforcement. The victim of IPV may not remove the firearm from the perpetrator's possession as this could constitute theft.

In this case, the role of law enforcement may be limited even if they are notified via reporting. Oklahoma's IPV-related firearm relinquishment laws allow seizure of the firearm only if the law enforcement officer has probable cause to believe that the firearm was used "to commit an act of domestic abuse."<sup>56</sup> Therefore, physician responsibilities in cases of suspected IPV involving firearms are generally limited to screening, identification, mandatory reporting, counseling regarding risk factors, safety planning where appro-

priate, and engaging expert advocates when desired by the patient.

\* \* \*

Each of these case studies illustrates important aspects of the physician-patient relationship. Most saliently, a number of laws discussed above require or permit a physician to intervene without or against a patient's permission. In such a scenario, special care must be taken to preserve trust in the patient-physician relationship by pursuing other interventions first, by seeking assent where consent is not possible, and by ensuring that patients are informed about the goals and evidence in support of a particular intervention. Each of these scenarios highlight the complexity of managing the risks to the individual and the community.

### Conclusion

When a physician identifies that a patient is at risk of firearm injury, they have an opportunity to mitigate potential harm to the patient and others. Physicians may not fully understand or be aware of the firearm laws that impact their clinical decision-making and the way they interact with one another and other legal requirements such as HIPAA. States should develop guides that physicians can reference when they are unsure what they are legally permitted or mandated to do when their patient is at risk of firearm injury. As legislators consider amending and enacting firearm laws, they also should include healthcare providers in these discussions to better understand how laws interact with clinical practice. Consideration of firearm laws should focus on the complete package of statutory protections and requirements in a state, so that interactions between laws and their influence on clinical practice can be more fully considered.

### Note

Megan Ranney reports grants from NIH and CDC outside the submitted work; she is also serving as the Chief Research Officer (volunteer) for the American Foundation for Firearm Injury Reduction in Medicine. The other authors do not have conflicts of interest to disclose.

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# Your Liberty or Your Gun? A Survey of Psychiatrist Understanding of Mental Health Prohibitors

*Cara Newlon, Ian Ayres, and Brian Barnett*

## Introduction

When Justice Scalia declared in *Heller* that the Second Amendment protected an individual's right to bear arms, he excluded an important group from constitutional protection: Americans living with mental illness.<sup>1</sup> Since 1968, a group of laws known as mental health prohibitors have explicitly tied mental health treatment to gun restrictions.<sup>2</sup> The federal prohibitor bans firearm possession by anyone "committed to any mental institution," a group that includes only those civilly committed by court order.<sup>3</sup> Some state prohibitors go further, restricting gun ownership for people who voluntarily admit themselves for inpatient treatment or who are detained via an emergency hold (a typically 72-hour involuntary hospitalization of a person deemed to present a danger to themselves or others).<sup>4</sup> Hawaii restricts gun rights based on mere diagnosis of "a significant behavioral, emotional, or mental disorder."<sup>5</sup>

No study has quantified mental health prohibitors' specific impact on firearm deaths and injury, and the link between mental illness and gun violence is com-

plex.<sup>6</sup> Studies suggest that people with serious mental illness are only slightly more likely to be violent than the general population, though certain mental health conditions like active psychosis are associated with an elevated risk of violence.<sup>7</sup> Research does indicate a strong association between firearm access, mental illness, and suicide.<sup>8</sup> However, some charge that mental health prohibitors are both over-inclusive and under-inclusive as suicide prevention policies, disqualifying low-risk individuals from gun access in some states and allowing high-risk individuals to obtain guns in others.<sup>9</sup> For instance, evidence suggests that emergency hold prohibitors may prevent suicide among high-risk individuals, but states like Connecticut restrict gun rights based on voluntary admissions (arguably a lower risk group) and not emergency holds.<sup>10</sup>

By conditioning gun rights on medical treatment, some states grant mental health providers a near-unilateral power to constrain a patient's Second Amendment rights. Yet no studies to date have explored how mental health professionals understand these laws, or their clinical and ethical role in informing patients about how their treatment implicates gun rights. Given informed consent's vital role in the ethical practice of medicine and the high stakes of psychiatric decision-making around hospitalization, we sought to explore psychiatrists' knowledge of prohibitor laws through a first-of-its kind national survey.

The survey revealed substantial evidence of clinicians being uninformed and misinformed, and misinforming patients of their gun rights following involuntary civil commitments and voluntary inpatient admissions. Many psychiatrists had inaccurate and incomplete knowledge of their state's mental health prohibitors. A significant percentage of psychiatrists (36.9%) did not understand that an involuntary civil

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commitment triggered the loss of gun rights, and the majority of psychiatrists in states with prohibitors on voluntary admissions (57.3%) were unaware that patients would lose gun rights upon voluntary admission.

More troublingly, while a substantial portion of surveyed psychiatrists (56%) reported never informing patients about any of the prohibitors, many reported misinforming their patients about their state's laws. Around 13% of respondents in states without a voluntary admissions prohibitor had incorrectly informed a patient they could lose gun rights by voluntarily admitting themselves for inpatient treatment. There

States without voluntary admission prohibitors therefore present some patients with a stark choice: Your liberty or your gun rights? Indeed, many respondents to the survey expressed discomfort with the potential impact of the prohibitors on patient rights, as well as their potential to dehumanize patients, compromise the therapeutic relationship, and chill mental health treatment. Respondents expressed more support for risk-based gun removal laws, like discretionary Extreme Risk Protection Orders (ERPOs), that allow physicians to report medical risk factors of suicidality or dangerousness and petition for gun removal.<sup>11</sup>

By conditioning gun rights on medical treatment, some states grant mental health providers a near-unilateral power to constrain a patient's Second Amendment rights. Yet no studies to date have explored how mental health professionals understand these laws, or their clinical and ethical role in informing patients about how their treatment implicates gun rights. Given informed consent's vital role in the ethical practice of medicine and the high stakes of psychiatric decision-making around hospitalization, we sought to explore psychiatrists' knowledge of prohibitor laws through a first-of-its kind national survey.

was also evidence that psychiatrists used gun rights to negotiate "voluntary" commitments with patients: 15.9% of respondents reported telling patients they could preserve their gun rights by permitting themselves to be voluntarily admitted for treatment, in lieu of being involuntarily committed. Many of the respondents who reported negotiating over gun rights practiced in voluntary admissions prohibitor jurisdictions; in those cases, patients may opt to receive inpatient treatment based on a false belief that they could preserve their gun rights. While the scope of a psychiatrist's ethical duty to inform patients is unclear, these cases raise questions of whether psychiatrists obtained full informed consent for patients' admission.

Our surveys suggest that medical providers in states with voluntary admission prohibitor laws may unknowingly deprive their patients of a constitutional right, implicating due process protections. Patients may be deprived unfairly of the use of their property without informed consent, and, in some jurisdictions, patients whose cases do not meet the legal standard for involuntary commitment may be improperly induced into institutionalization in order to preserve gun rights. Yet, to date, most psychiatrists receive no formal or mandatory training around these laws.

## Methodology

### *Mental Health Prohibitors in Targeted States*

We targeted psychiatrists in 10 jurisdictions in four broad categories of state mental health prohibitors: (1) states that only had the federal prohibitor on civil commitments ("involuntary commitment prohibitor"); (2) states that had prohibitors on patients admitted under emergency holds ("emergency hold prohibitor"); (3) states that had prohibitors for voluntary admissions ("voluntary admission prohibitor"); and (4) states with a mental health prohibitor based on a patient diagnosis ("diagnosis prohibitor").

Mental health prohibitors tie medical treatment — for example, an involuntary hold, a civil commitment, voluntary admission, or diagnosis — to an automatic loss of gun rights. Notably, while involuntary commitments implicate individual rights *during hospitalization* such as patient liberty and bodily autonomy, access to firearms is the exceptional right restricted *after* civil commitment.<sup>12</sup> These laws are distinct from other gun control laws concerning mental health, such as ERPOs, which may allow mental health professionals to report to law enforcement officials or directly petition a court for gun removal from violent or suicidal patients. Table 1 details the coding of each juris-

Table 1

**Summary of State Laws on Mental Health and Gun Rights**

	Involuntary commitment prohibitor	Emergency hold prohibitor	Voluntary admission prohibitor	Diagnosis prohibitor
<b>California</b>	Yes	Yes	X	X
<b>Connecticut</b>	Yes	X	Yes	X
<b>DC</b>	Yes	X	Yes	X
<b>Florida</b>	Yes	X	X	X
<b>Illinois</b>	Yes	X	Yes	X
<b>Hawaii</b>	Yes	X	X	Yes
<b>New Hampshire</b>	Yes	X	X	X
<b>New York</b>	Yes	X	X	Yes
<b>Texas</b>	Yes	X	X	X
<b>Washington</b>	Yes	Yes	X	X

diction's law for the survey analysis, differentiated by slight nuances that merit brief discussion.

First, of the states targeted, Florida, New Hampshire, and Texas *only* had a mental health prohibitor for court-ordered involuntary commitments. The federal mental health prohibitor on involuntary commitments facially applies in all 50 states and DC Therefore — while New Hampshire does not currently have a state law requiring the reporting of involuntary commitments by court order for background checks — all states were coded as having a mental health prohibitor on involuntary commitments. For more details, see Online Appendix Figure 1.

Second, only California and Washington had mental health prohibitors associated with emergency holds. Crucially, California's five-year prohibitor on gun ownership only applies for patients placed on a 72-hour hold (a Section 5150 hold) and then subsequently admitted for further treatment, as well as Section 5250 holds (14 days) that must be approved by a court. California also bars individuals from gun ownership *for life* if they are held on a 5150 and subsequently admitted more than once in a year. Washington's provision applies for six months after a patient is detained on a 72-hour hold for evaluation or treatment. See Online Appendix Figure 2.

Next, three jurisdictions surveyed — Connecticut, Illinois, and DC — prohibit, for a period of time, firearm ownership for residents who voluntarily admitted themselves for inpatient treatment. Connecticut's pro-

hibitor lasts for six months after the patient is released from their voluntary admission, while the prohibitors in DC and Illinois last for five years. See Online Appendix Figure 3.

Hawaii and New York were classified as states whose prohibitors are triggered on the mere diagnosis of a mental health condition. New York's diagnosis prohibitor requires residents seeking firearm licenses to disclose whether or not they have “ever suffered any mental illness,” which can result in an applicant's rejection. Additionally, New York psychiatrists are *required* to report patients they determine are “likely to engage in conduct that would result in serious harm to self or others.” In practice, these reports are allegedly “rubber-stamped” and automatically lead to revocation of a patient's right to own a gun for five years.<sup>13</sup> See Online Appendix Figure 4.

#### Survey Design

The thirteen-question survey, hosted online over Yale's Qualtrics platform, assessed: (1) if and how psychiatrists communicated with their patients about firearm ownership; (2) their understanding of their state's mental health prohibitors through a series of yes-or-no questions; (3) whether they informed patients when they could lose gun rights; (4) whether they ever used a mental health prohibitor to negotiate for voluntary admission, as opposed to an involuntary commitment; and (5) their attitudes toward ERPOs and reporting at-risk patients to law enforcement. In order to assess



whether responses changed based on awareness of the gun violence crisis, the survey also randomly assigned respondents to a primed or unprimed condition in which the primed subjects were reminded of the firearm suicide epidemic at the beginning of the survey. Participants could submit additional comments in an optional text box. Full survey questions are included in Online Appendix Figure 5.

### Survey Recruitment

Depending on the state, a large range of mental health professionals and state actors can petition for involuntary commitments or emergency holds. These include law enforcement, nurses, social workers, psychologists, and emergency medicine providers. We opted to survey only psychiatrists and psychiatric residents because they are the individuals that typically file for commitments.

Participants who were emailed were randomly selected from those listed for the 10 targeted jurisdictions in the American Psychiatric Association (APA) member directory.<sup>14</sup> As a recruitment incentive, respondents had the option to compete to win a pair of Apple AirPods. Between March 11, 2020 and April 7, 2020, individual emails were sent to 5,110 psychiatrists and psychiatric residents.

The survey received 516 anonymized responses — 485 from the targeted states — for a response rate of 10.1%.

### SURVEY LIMITATIONS

The low response rate could lead to a non-representative sample. As such, the survey results should not be construed to completely capture the entire population of American psychiatrists. Additionally, the implementation of each state's prohibitor varies from state-to-state, and so while the literal application of a prohibitor would result in gun rights being limited, the laws had differing practical effect in certain jurisdictions. For example, in California, the law — which is triggered only if the patient is admitted *after* an emergency hold — could have been plausibly interpreted by respondents as not being an emergency hold prohibitor *per se*.

## Results

### Initial Communication with Patients Regarding Firearms

Table 2 reports the practicing jurisdictions of respondents: (1) 107 responses from jurisdictions with prohibitors solely on involuntary commitments; (2) 120 responses from jurisdictions with prohibitors on emergency holds; (3) 185 responses from jurisdictions

Table 2

### Practicing Jurisdiction, Commitment Activity, and Firearm Communications

State	Number of Respondents	Percent of Total Respondents
California	51	10.5%
Connecticut	82	16.9%
District of Columbia	39	8.0%
Florida	38	7.8%
Hawaii	28	5.8%
Illinois	64	13.2%
New Hampshire	19	3.9%
New York	45	9.3%
Texas	50	10.3%
Washington	69	14.2%
<b>Does respondent routinely ask patients if they own firearms?</b>		
Yes	459	94.6%
No	26	5.4%
<b>Has respondent ever had a patient who was involuntarily committed?</b>		
Never	7	1.4%
Rarely	27	5.6%
Sometimes	194	40.0%
Often	117	24.1%
Always	140	28.9%

with prohibitors on voluntary admissions; and (4) 73 responses from jurisdictions with diagnosis prohibitors. An overwhelming majority of respondents — 94.6% — had a patient who had been involuntarily committed. State-specific summaries of responses to each question are available in Online Appendix Figure 7.

A little over half of respondents — 53% — reported that they “often” or “always” asked patients about firearms. A few added in the optional textbox that they were child or adolescent psychiatrists, and therefore they were less likely to ask patients about gun ownership. Only 7% of psychiatrists reported “never” or “rarely” asking patients about firearms, frequently cit-

ing that they did not believe the question was necessary unless the patient reported they were homicidal or suicidal. A Washington psychiatrist remarked that they “only assess if patients have access to guns if they express suicidal ideation. Most of my patients are the worried, high-functioning [type] in private practice.” An Illinois psychiatrist submitted that: “I am not a good survey participant since my patient cohort is not as ill or violent as would require these considerations.” Another Washington psychiatrist echoed: “If a patient has never had suicidal ideation or [has] not for many years, I don’t ask about whether they have firearms.”

There was no statistically significant difference for survey responses between the unprimed group and the group primed with the question regarding the suicide epidemic.

#### *Psychiatrist Knowledge of Mental Health Prohibitor Laws*

Table 3 details the proportion of respondents who inaccurately responded to questions concerning their jurisdictions’ prohibitors. Notably, respondents both overestimated and underestimated the force of their state prohibitors, indicating an urgent need for psychiatrist education and training. Underlying estimates can be found in Online Appendix Figures 7 and 8.

First, while the federal prohibitor applies in all states, over a third of total respondents (36.9%) inaccurately responded that an involuntary court-ordered commitment did not trigger the loss of gun rights. Notably, the majority of psychiatrists in New Hampshire (57.9%) and Texas (54%) — two states with more relaxed gun control laws — underestimated the force of an involuntary commitment on gun rights.

Second, the majority of respondents in states with emergency hold and voluntary admission prohibitors underestimated the force of their states’ laws, mistak-

enly reporting that those interventions *did not* lead to the loss of gun rights. Roughly 57% of participants in locations with voluntary admission prohibitors believed that a patient’s voluntary admission to inpatient treatment would not trigger the loss of gun rights. A slight majority of respondents in Illinois (57.8%) — which has some of the strictest gun laws in the nation — correctly construed the law. But the vast majority of respondents in DC (87.2%) and a slight majority of respondents in Connecticut (54.9%) believed that voluntary inpatient treatment had no impact on gun rights. Notably, eight percent of respondents in jurisdictions without voluntary admission prohibitors mistakenly reported that voluntary admission would result in a loss of gun rights.

Likewise, while the majority of participants in states *without* emergency hold prohibitors correctly understood that a temporary hold did not trigger a loss of gun rights, the majority of respondents in Washington and California (roughly 56%) inaccurately reported that an emergency hold did not trigger the loss of gun rights for patients. (As California’s emergency hold law is only triggered after the initial 72-hour period, a robustness check was performed on the results where California was not classified as an emergency hold state — in those circumstances, 71.0% of Washington respondents inaccurately interpreted the law). The majority of California respondents, however, understood the law as an emergency hold prohibitor (64.7%). Washington psychiatrists may have been less aware of the law as their emergency hold prohibitor was only enacted in May of 2019, less than one year before the survey.<sup>15</sup>

Finally, a significant percentage of psychiatrists without a diagnosis prohibitor (43.2%) overestimated the force of their state law, mistakenly reporting that patients could lose their gun rights based on the force

Table 3

#### **Share of Jurisdiction Respondents with Mistaken Beliefs about Prohibitors**

	<b>Jurisdiction With Prohibitor Law</b>	<b>Jurisdiction Without Prohibitor Law</b>
Inaccurate Response on Involuntary Commitment Prohibitor	36.9%	–
Inaccurate Response on Emergency Hold Prohibitor	55.8%	25.2%
<i>Results if California is not classified as an emergency hold state</i>	71.0%	30.0%
Inaccurate Response on Voluntary Admission Prohibitor	57.3%	8.3%
Inaccurate Response on Diagnosis Prohibitor	39.7%	43.2%

of their diagnosis. However, in Hawaii and New York, states with codified diagnosis prohibitors, roughly 60% of respondents correctly understood that their diagnosis of serious mental disorder could trigger the revocation of gun rights. In Hawaii, with its explicit statutory prohibitor, 67.9% of respondents correctly answered the diagnosis question; in New York, 55.6% understood that a diagnosis could result in revocation of gun rights. Some New York psychiatrists reported confusion about the SAFE system, noting that “[w]e use the SAFE act reporting system but we never know what happens afterwards.” Another psychiatrist wrote:

I fill out SAFE ACT paperwork for all patients who are psychiatrically admitted to hospital. My understanding was that this paperwork (which I highly doubt is every really reviewed by a human) merely places [patient] on a list such that their requests to purchase a gun are more redflagged or more carefully vetting — NOT that they cannot ever permanently buy a gun.

While reporting indicates that SAFE Act reports are *not* reviewed by a human, most reports are placed in a database barring state residents from obtaining a fire-

Table 4

**Informed Consent for Involuntary and Voluntary Commitments**

Informed patients they will lose gun rights if involuntarily committed	Total (485 respondents)	
Never	60.0%	
Rarely	17.9%	
Sometimes	7.0%	
Often	10.5%	
Always	4.5%	
<b>TOTAL</b>	<b>100.0%</b>	
Informed patients they will lose rights if voluntarily admitted	No Voluntary Admission Prohibitor (300 respondents )	Voluntary Admission Prohibitor (185 respondents)
Never	86.7%	62.7%
Rarely	7.3%	15.1%
Sometimes	1.3%	5.9%
Often	3.7%	9.2%
Always	1.0%	7.0%
<b>TOTAL</b>	<b>100.0%</b>	<b>100.0%</b>
Have suggested to patients they can preserve rights through voluntary admission, versus involuntary commitment	No Voluntary Admission Prohibitor (300 respondents )	Voluntary Admission Prohibitor (185 respondents)
Never	83.0%	85.9%
Rarely	9.3%	5.4%
Sometimes	2.0%	1.1%
Often	5.3%	7.6%
Always	0.3%	0.0%
<b>TOTAL</b>	<b>100.0%</b>	<b>100.0%</b>

arm license for five years. New Yorkers on the list must petition a court to have their gun permit restored.

Many participants expressed frustration that they did not understand their state's gun laws, indicating a need for further medical school and on-the-job training. One respondent from Illinois noted that, while they asked about guns as part of safety assessments: "I do not know anything about gun rights and mental health in [I]llinois. My answers were essentially guess[es]." A psychiatrist in New York wrote that "I was not aware till this very year that involuntary admission results in revoking of rights to possess firearms." Five separate psychiatric residents opined that they had received no education or training on firearms or gun rights; one DC respondent reported guessing on all questions and that "[t]o date (latter half of my first year of residency) I have received little to no instruction on local firearms laws and the effect of mental health hospitalizations on ability to purchase firearms."

#### *Informed Consent & Coercive Bargaining Over Gun Rights*

Table 4 summarizes the percentage of psychiatrists that informed patients about the mental health prohibitors, categorized by whether or not the respondent worked in a voluntary admission prohibitor jurisdiction. The survey indicates that psychiatrists' mistaken beliefs about gun laws lead them to communicate misinformation to patients about their rights. Some respondents indicated they may have induced patients into "voluntary" inpatient treatment based on misinformation: in voluntary admission prohibitor jurisdictions, 14.1% of respondents reported at times falsely suggesting to patients they could preserve gun rights through a voluntary admission, instead of being involuntarily committed.

The majority of surveyed psychiatrists (56%) reported never informing patients about either their state's voluntary admission or involuntary commitment prohibitor. And while psychiatrists manifestly should not misinform patients, it is troubling that 62.7% of respondents in voluntary admission prohibitor jurisdictions indicated that they never inform patients that voluntary admissions will result in a loss of constitutional rights. While the scope of psychiatrist's ethical duty to disclose is unclear, failing to describe the full consequences of voluntary admission may be inconsistent with obtaining informed consent to treatment, particularly if the psychiatrist reasonably believes it will impact patient decision-making. This is particularly concerning for certain patients, such as members of law enforcement, who may carry a firearm as part of their job, since loss of firearm access

could affect their employment. Indeed, Florida law contemplates this scenario by requiring patients to sign a court-reviewed consent form waiving their gun rights upon voluntary admission where physicians assert that they would have filed a petition for involuntary commitment if the person had not ultimately agreed to voluntary hospitalization.<sup>16</sup>

Some respondents stressed that involuntary commitments and emergency holds were life-or-death decisions, where discussing gun rights would be inappropriate and counterproductive. As one Florida psychiatrist commented, "[w]hen patient is brought to ER voluntarily or involuntarily, we don't get into discussing their [g]un rights... There are so many other priorities." One New Hampshire respondent stated that "there are more important issues than gun rights when people need involuntary level of psychiatric care" and a New York psychiatrist commented that "this is emergency room medicine, and assessment of risk is the predominant concern." A California psychiatrist elaborated:

[W]hen committing a patient to the ER/inpatient unit, the situation must be acute and imminently serious by its nature. Later consequences of such a decision, [e]ffects on the patient's ability to own or possess a gun, or other unfortunate negative [e]ffects on their future (stigma, job prospects, etc.) are not on the forefront of the psychiatrist's mind ... If a patient came into the ER bleeding out, and sending him/her into surgery in an attempt to save that patient's life means he or she may not possess a gun for a 5 or 10 year period or longer, as physicians, the hope is we decide to save the life at hand ...

Still other psychiatrists worried that informing patients of a loss of gun rights could result in violence. A psychiatrist working at a Connecticut Veterans Administration hospital commented "my concern would be that it would just make them upset and not want to go at all and then get agitated, and possibly aggressive, which puts staff at risk of harm."

In states with *no* voluntary admission prohibitor, a significant percentage of respondents — 13.3% — reported on at least one occasion misinforming patients they could lose gun rights by admitting themselves for inpatient treatment. Such misinformation could deter patients from inpatient treatment on a mistaken belief they could lose gun rights.

Finally, many psychiatrists reported using the threat of an involuntary commitment — and subsequent loss of gun rights — to encourage patients to voluntarily

admit themselves. 15.9% of respondents reported having suggested to patients, at least once, that they could preserve their gun rights by avoiding an involuntary commitment through a voluntary admission. Some respondents indicated they leveraged Second Amendment rights to induce a voluntary admission *based on misinformation*: 14.1% of respondents in voluntary admission prohibitor jurisdictions reported falsely telling patients that a voluntary admission would not impact their rights. In those cases, vulnerable patients may have decided to voluntarily forgo their liberty under a mistaken belief they could preserve their gun rights.

Some respondents reported changing treatment decisions in order to *preserve* their patients' gun rights. In Connecticut — where 18.3% of respondents reported telling patients they should voluntarily admit themselves to preserve access to firearms — respondents may have negotiated with patients over gun rights before 2013, when the state's voluntary admissions prohibitor went into effect. One Connecticut psychiatrist commented: "Prior to law change I ... informed [p]atients that by admitting themselves voluntarily they preserved the right to own firearm." After the law change, another Connecticut psychiatrist reported occasionally recommending an emergency hold over a voluntary admission "so that a patient whose work requires firearm access (e.g. law enforcement) may obtain treatment and continue to retain their firearm." Two California psychiatrists also reported that "public defenders push off 5250 involuntary hold certification hearings to avoid patients from being found by the court to need commitment which then makes buying a gun a felony for five years."

#### *Psychiatrist Feedback on Mental Health Prohibitors*

In supplementary comments, psychiatrists expressed concern that mental health prohibitors were overly stigmatizing and could chill treatment; however, many respondents also expressed frustration that they had no case-by-case basis of safely disarming violent or suicidal patients. Respondents were generally supportive of ERPO laws, as long as they were flexible and not mandatory: The average respondent *would* use an ERPO for gun removal at least "sometimes" if they were available to them (see Online Appendix Figure 9 for details).

Many psychiatrists worried that prohibitor laws discriminated against their patients, and could disincentivize them from seeking treatment. One Connecticut psychiatrist stated "patients may not be honest about their mental health if they fear they will lose privileges like gun ownership." Another Connecticut psychiatrist called the mental health prohibitors "out-

moded rubrics" that curbed patient rights, and a third lamented that "[g]un laws are excessively focused on the mentally ill." A Washington psychiatrist stated that "if American laws/society value the right to own guns, then individuals with mental illness's rights to own guns should have similar protections." Gun laws, commented one military psychiatrist from Texas, "tend to be concrete and draw clean lines but psychiatric symptoms and behaviors associated with diagnosis are anything but concrete and linear ... it would severely compromise trust/rapport in patients who value their gun rights but are afraid/concerned [seeking treatment] will result in the loss of their firearm rights." In contrast to studies showing that access to guns are strongly associated with suicidality,<sup>17</sup> another Texan respondent stated:

In my opinion, whether an individual has a gun or not doesn't matter. If they are motivated to kill themselves and have the urge to do so, they will find a way to do it ... I was NOT aware that firearms could be restricted based off of involuntary commitments, holds, or even voluntary admission to the hospital. This would highly dissuade a number of patients' inpatient hospitalization.

However, another New York psychiatrist responded that, while he felt it was wrong that patients were mental illness were "singled out ... if they represent a small proportion of those who may use firearms against others or, more likely, themselves, it seems egregious to not take steps to mitigate against risk once we are aware of it."

While respondents generally rejected the one-size-fits-all mental health prohibitors, psychiatrists, primarily from Texas and Florida, did indicate support for discretionary gun removal laws for at-risk patients, like ERPOs. Florida's ERPO law does not allow psychiatrists to directly petition for gun removal, while Texas has no ERPO law.<sup>18</sup> A Texan psychiatrist stated:

Texas doesn't enforce removing guns. I even had a patient tell me point blank he was going to use his gun to shoot himself. Not only was he sent home from ER, even after wife said he was at danger, but also cops let him keep his firearms. This state doesn't take away firearms for involuntary holds, and no one would enforce it. It's a huge travesty.

Another Texan called it a "problem" that "[a]uthorities will not intervene when a violent, psychotic patient

with a recent involuntary commitment is buying guns and making threats.” A Florida psychiatrist reported being concerned for their safety:

Though I have notified local law enforcement re: concern about certain patients and firearms, the firearms are usually not removed from them (in Florida); including somebody who was involuntary hospitalized for threatening to shoot a healthcare provider.

A Florida psychiatrist who reported being a “firm believer” in the Second Amendment commented that “there are rare times when it would be very appropriate to have someone’s gun rights infringed. I wish this option existed.”

### Conclusion

This study indicates that many psychiatrists are ignorant of federal prohibitor laws and those of their state, causing them to mislead and misinform patients about the consequences of voluntary psychiatric treatment. Our results have profound implications not only for gun rights, but for liberty rights. In some cases, psychiatrists may inappropriately induce a patient’s institutionalization through voluntary admission by threatening the loss of their Second Amendment rights from involuntary commitment, even though an involuntary commitment order would never have been issued. In other cases, vulnerable patients may unwittingly forfeit a constitutional right by obtaining voluntary treatment (and at times this forfeiture might be caused by psychiatrists’ mistaken assurance that voluntary treatment would not trigger a loss of rights). Vulnerable patients may also fail to seek voluntary treatment because they were misinformed by their psychiatrist that they would lose their gun rights as a result.

This study reveals an urgent need for psychiatrist training on mental health prohibitor laws and recommended best practices when those laws impact patient treatment. However, the results may also call into question the general wisdom of state prohibitor laws as policy. It may be unrealistic to expect psychiatrists to stay apprised of the patchwork and ever-changing morass of state prohibitor laws, and even more unrealistic to expect medical professionals to engage in the delicate rights-balancing analysis that is usually reserved for courts. Flexible policies based on individual patient risk assessment, such as discretionary ERPO laws, may better equip providers to disarm at-risk firearm owners with mental illness.

### Editor’s Note

Additional materials for this article can be found in the Online Appendix.

### Note

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# Your Liberty or Your Gun? A Survey of Psychiatrist Understanding of Mental Health Prohibitors

Cara Newlon, Ian Ayres, and Brian Barnett

## APPENDIX

Figure 1

### Summary of State Law for States with Mental Health Prohibitors Solely on Involuntary Civil Commitments

	Prohibitor based on involuntary commitment	State prohibitor based on an emergency hold	State prohibitor on voluntary admissions	State prohibitor on diagnosis
<b>Florida</b>	Yes	No	No	No
<b>New Hampshire</b>	Yes	No	No	No
<b>Texas</b>	Yes	No	No	No

Federal law prohibits possession of a firearm or ammunition by anyone who has been “adjudicated as a mental defective” or involuntarily “committed to any mental institution.”<sup>1</sup> However, states are not required to report data on involuntary commitments by court order to the National Instant Criminal Background Check System (NICS), and states vary in their statutory codes respecting involuntary commitments. For purposes of this paper, three states were surveyed with mental health prohibitors *solely* based on involuntary commitments: Florida, New Hampshire, and Texas.

In Florida, state law requires the Florida Department of Law Enforcement (FDLE) to compile and maintain a database of persons who are prohibited from purchasing a firearm based on court records of involuntary commitments.<sup>2</sup> Florida has an additional provision including those “voluntarily” admitted for inpatient treatment in the definition of “committed [involuntarily] to a mental institution” for purposes of the prohibitor if: 1) a physician asserts that he or she would have filed a petition for involuntary commitment if the person had not agreed to go voluntarily; 2) the patient has been notified that they may lose their gun rights and still gone forward with the treatment; and 3) a court has reviewed the certification.<sup>3</sup> Patients must then sign a form that states the following:

“I understand that the doctor who examined me believes I am a danger to myself or to others. I understand that if I do not agree to voluntary treatment, a petition will be filed in court to require me to receive involuntary treatment. I understand that if that petition is filed, I have the right to contest it. In the event a petition has been filed, I understand that I can subsequently agree to voluntary treatment prior to a court hearing. I understand that by agreeing to voluntary treatment in either of these situations, I may be prohibited from buying firearms and from applying for or retaining a concealed weapons or firearms license until I apply for and receive relief from that restriction under Florida law.”<sup>4</sup>

As the voluntary admission law is, by all accounts, rarely enforced — and amounts to an involuntary commitment in practice — Florida was coded as a state with a mental health prohibitor solely on involuntary commitment.<sup>5</sup>

In Florida, a mental health provider *may* (but is not required to) report persons to law enforcement if they have specifically threatened to cause serious bodily injury or death to a readily available person and the mental health provider believes that “the patient has the apparent intent and ability to imminently or immediately carry out such threat.”<sup>6</sup> Law enforcement can then seek voluntary surrender of firearms or ammunition for 24 hours if they take that person into custody for an involuntary examination, or petition a court for an extreme risk protection order (ERPO) up to but not exceeding one year.<sup>7</sup> However, a psychiatrist’s report does not independently or automatically lead to the revocation of the right to own a firearm.

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In New Hampshire, there is no law that requires the reporting of mental health information to NICS. In 2016, the legislature actually included a provision as part of their Medicaid expansion bill that prohibited “any person, organization, department or agency from submitting the name of any person to NICS on the basis that the person has been committed to a mental institution, except pursuant to a court order issued following a hearing in which the person participated and was represented by an attorney.”<sup>8</sup> That portion of the law was repealed in 2018. New Hampshire has mandatory reporting requirements only for licensed psychotherapists (generally only psychologists) where a patient has communicated a “serious threat of physical violence” against a reasonably identifiable victim or victims.<sup>9</sup> However, at time the survey was conducted, New Hampshire had no ERPO law on the books to allow law enforcement to petition for firearm removal.<sup>10S</sup>

Finally, Texas has a statute that mandates reporting of patients to NICS who have been court-ordered to receive inpatient mental health services or placed in the long-term care of a residential facility.<sup>11</sup> Psychiatrists in Texas *may* disclose information to law enforcement if they determine that there is a “probability of imminent physical injury by the patient to the patient.”<sup>12</sup> However, law enforcement are only allowed to seize a firearm for 15 days if someone is taken into custody of an inpatient mental health facility — there are no longer-term extreme risk protection orders.<sup>13</sup> Like Florida, a psychiatrist’s report to law enforcement does not automatically trigger the loss of firearms.

Figure 2

### Summary of State Law for States with Prohibitors Based on Emergency Holds

	Prohibition based on involuntary commitment	State prohibition based on an emergency hold	State prohibition on voluntary admissions	State prohibition on diagnosis
California	Yes <sup>14</sup>	Yes <sup>15</sup>	No	No
Washington	Yes <sup>16</sup>	Yes <sup>17</sup>	No	No

Psychiatric emergency hold laws permit involuntary admission to a health care facility of a person with an acute mental illness *without a court order*. The process of obtaining an emergency hold — and the procedural protections afforded to patients — vary greatly from state to state. Only California and Washington have mental health prohibitors associated with temporary emergency holds.

In California, patients can be involuntarily committed to a mental health facility under a 72-hour hold (a Section 5150 hold), a 14-day hold (a Section 5250 hold), a second additional 14-day hold (a Section 5260 hold) and a 30-day hold after completion of the initial Section 5250 14-day hold (Section 5270.51 hold).<sup>18</sup> Under a Section 5150 hold, a member of law enforcement, staff member at an evaluation facility designated by the county, or “other professional person designated by the country” may — upon probable cause that a person presents a danger to themselves or others — detain the patient for evaluation and treatment for a maximum of 72 hours (excluding Saturdays, Sundays, and holidays).<sup>19</sup> California’s statutory firearm ban *only is initiated* if a person is admitted to a facility for inpatient treatment under Section 5151 and 5152 after the initial Section 5150 hold. That means California’s five-year emergency hold prohibitor applies only if the emergency holds lasts longer than the initial 72 hours.

California’s gun prohibitor based on an emergency hold can also be indefinite: If a patient has been taken into a 5150 hold and admitted for treatment “one or more times within a period of one year,” they are barred from “owning, possessing, controlling, receiving, or purchasing a firearm *for the remainder of his or her life*.”<sup>20</sup> The statute *also* requires that medical facilities inform patients that they are prohibited from “owning, possessing, controlling, receiving, or purchasing any firearm” for a period of time, and inform patients that they can request a hearing from the court.<sup>21</sup>

California psychiatrists are required by law to report patients to law enforcement who exhibit “a serious threat of physical violence” against another, also known as a “Tarasoff Warning.”<sup>22</sup> State law bars anyone who has been



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the subject of a Tarasoff report from purchasing or possessing a firearm for five years after the report.<sup>23</sup> If a person wishes to own a firearm, they may petition superior court for a finding that they can use firearms in a safe and lawful manner.

Washington state’s emergency hold prohibitor law is comparably less restrictive than California’s. In Washington, any “designated crisis responder” — including psychiatrists, psychologists, physician assistance, nurse practitioners, and social workers<sup>24</sup> — who receives information that a person presents an imminent likelihood of serious harm can cause a person to be taken into emergency custody for 72 hours (excluding Saturdays, Sundays, and holidays). Individuals who have been detained for 72-hour evaluation and treatment under Section 71.05.153 and Section 71.05.150 of the Washington Code — but not subsequently involuntarily committed — “may not have in his or her possession or control any firearm for a period of six months after the date that the person is detained.”<sup>25</sup> Upon discharge, the designated crisis responder must inform the patient orally and in writing that he is prohibited from possessing or controlling any firearm and that he must surrender any firearms that he or she possesses.

Washington psychiatrists are under a mandatory duty to warn or take reasonable protections where patients communicate an actual threat of physical violence against a reasonably identifiable person.<sup>26</sup> A law enforcement officer can then petition for an extreme risk protection order that lasts up to one year.<sup>27</sup> However, a psychiatrist’s report does not independently result in the revocation of the right to own a firearm.

Figure 3

## Summary of State Laws for States with Prohibitors Based on Voluntary Admissions to Inpatient Treatment

	Prohibition based on involuntary commitment	State prohibition based on an emergency hold	State prohibition on voluntary admissions	State prohibition on diagnosis
<b>Connecticut</b>	Yes <sup>28</sup>	No	Yes <sup>29</sup>	No
<b>DC</b>	Yes <sup>30</sup>	No	Yes <sup>31</sup>	No
<b>Illinois</b>	Yes <sup>32</sup>	No	Yes <sup>33</sup>	No

Three states — Connecticut, Illinois, and Maryland — and the District of Columbia have some firearm prohibition on patients who have been voluntarily admitted to inpatient treatment. Of those jurisdictions, Maryland was excluded from the survey recruitment as its prohibitor only applied to a narrow category of patients voluntarily admitted to inpatient treatment (only if they have been “voluntarily admitted for more than 30 consecutive days to a facility”).<sup>34</sup>

As of October 1, 2013, Connecticut law places a six-month statutory prohibitor on firearm and ammunition purchase or possession on patients who have been voluntarily admitted to a psychiatric hospital.<sup>35</sup> The statute specifically excludes those who were admitted solely for substance abuse issues. While Connecticut bars patients from accessing guns who have been voluntarily admitted for inpatient treatment, patients who have been admitted through an emergency hold — a physician’s emergency certificate (PEC) — have no prohibition on firearm access. This has been described as a “huge gap in policy” and Connecticut Senator John McKinney that the legislature was not aware the prohibitor wouldn’t cover PECs when the law was passed.<sup>36</sup>

Connecticut allows, but does not require, psychiatrists to report patients to law enforcement who present an imminent risk of personal injury to themselves or others.<sup>37</sup> Law enforcement can then petition the state for an ERPO that lasts up to a year.<sup>38</sup> However, a report by a psychiatrist does not automatically lead to the revocation of gun rights.

In the District of Columbia, no person or organization can access or control a firearm unless they pass a DC background check and hold a valid registration certificate.<sup>39</sup> The District’s mental health prohibitions pertain to

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those registration certificates. Like Connecticut, DC’s prohibition does not apply to 48-emergency holds under Section 21-521,<sup>40</sup> but does for firearm registration applicants who have been voluntarily admitted to a mental health facility within the past five years.<sup>41</sup> Mental health providers in DC *may* report patients to law enforcement that present a “substantial risk of imminent and serious physical injury” to themselves or others.<sup>42</sup> They additionally can petition for the removal of firearms for up to one year via DC’s ERPO law.<sup>43</sup>

In Illinois — implemented as part of the Firearm Owners Identification Card (FOID) Act, which requires every Illinois citizen to obtain a license before they purchase or possess firearms or ammunition — a person in Illinois cannot lawfully possess or be sold a firearm if they have been voluntarily admitted “within the past 5 years.”<sup>44</sup> The statute excludes treatment that was voluntary and solely for an alcohol abuse disorder and no other secondary substance abuse disorder or mental illness.<sup>45</sup>

In addition to a five-year firearm prohibitor for patients who have been voluntarily admitted to inpatient treatment, Illinois has extensive reporting requirements. Clinicians must report any patients whom they believe pose a “clear and present” danger to themselves, another person, or the community to the DHS within 24 hours.<sup>46</sup> Clear and present danger is defined as a person who: communicates a serious threat of physical violence against a reasonable identifiable victim or poses a clear and imminent risk of harm to himself; herself, or another person; or 2) demonstrates threatening physical or verbal behavior, such as violent, suicidal, or assaultive threats, actions or other behavior.<sup>47</sup> Law enforcement can then revoke an owner’s FOID card.<sup>48</sup>

Figure 4

## Summary of State Laws for States with Prohibitors Based on a Diagnosis to Inpatient Treatment

	Prohibition based on involuntary commitment	State prohibition based on an emergency hold	State prohibition on voluntary admissions	State prohibition on diagnosis
<b>Hawaii</b>	Yes <sup>49</sup>	No	No	Yes <sup>50</sup>
<b>New York</b>	Yes <sup>51</sup>	No	No	Yes <sup>52</sup>

Hawaii has some of the most restrictive gun prohibitions in the country pertaining to mental health. Their current mental health prohibitors bars anyone “diagnosed as having a significant behavioral, emotional, or mental disorders as defined by the most current diagnostic manual of the American Psychiatric Association.”<sup>53</sup> The statute also bars those under treatment or counseling for substance abuse or addiction.<sup>54</sup> Psychiatrists in Hawaii must disclose mental health information of persons seeking a firearm to law enforcement in response to requests for such information.<sup>55</sup> Mental health professionals can also petition for gun removal for up to one year under Hawaii’s ERPO law.<sup>56</sup>

New York’s prohibitor on diagnosis is more nuanced than the Hawaii law. First, to obtain a gun license in the state of New York, a person must disclose whether or not he or she has “ever suffered any mental illness” to the licensing authority, which can result in the denial of a license.<sup>57</sup> As part of the SAFE Act, any “mental health professional” — including physicians, psychologists, nurses, and clinical social workers — are also *required* to report to the New York Director of Community Services if they determine that a person they are treating is “likely to engage in conduct that would result in serious harm to self or others.”<sup>58</sup> That information is then intended to be reviewed by the New York Department of Criminal Justice Services for the purpose of determining if the person is ineligible or eligible to possess a firearm. In practice, however, a report begins an “automatic process that results in revocation of a patient’s right to bear arms.”<sup>59</sup> All reports are effectively “rubber-stamp[ed]” and patients are placed in a no-gun list for the following five years. In 2014, the database had reportedly ballooned to roughly 34,500 individuals prohibited from accessing firearms.<sup>60</sup>

# APPENDIX

## Survey Language

Figure 5

### Survey Language

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**The survey began with filtering questions to identify the participants' current location and ensure that participants were 18 or older and psychiatrists or psychiatric residents:**

1. Are you 18 years of age or older? (Y/N)
2. Are you a psychiatrist or psychiatric resident? (Y/N)
3. In what state do you currently practice medicine? [Drop down menu to select state].

**Participants were then directed to answer the following questions:**

1. As a psychiatrist, have you ever had a patient who was involuntarily committed? (Y/N)
2. Do you routinely ask patients with mental health conditions if they own firearms? (Likert Scale: 1 (never) to 5 (always))
  - a. Question 2 was randomized for 50% of the participants as follows: As you may be aware, firearm suicide claims the lives of over 22,000 Americans every year. Do you routinely ask patients if they own firearms? (Likert Scale: 1 (never) to 5 (always))
  - b. If participants answered "rarely" or "never" for either version of the question, a contingent question appeared: What factors might make you refrain from asking patients with mental health conditions if they own firearms? A) Believe that it interferes with their second amendment rights; B) Concerned it could damage relationship with patient; C) Don't find it necessary unless patient is reporting they are suicidal or homicidal; D) I have never thought to ask; E) Other. \_\_\_\_\_
3. Is it your understanding that in [state] patients *who are involuntarily committed (by a court)* lose their right to purchase or possess a gun? (Y/N)
4. Is it your understanding that in [state] patients *who are admitted on an emergency hold* lose their right to purchase or possess a gun? (Y/N)
5. Is it your understanding that in [state] patients *who are voluntarily admitted to inpatient treatment* lose their right to purchase or possess a gun? (Y/N)
6. Is it your understanding that in [state] patients *who are diagnosed with a serious mental disorder* can lose their right to purchase or possess a gun? (Y/N)
7. Do you inform patients that they will lose the right to purchase or possess a firearm if they are involuntarily committed by court order? (Likert Scale: 1 (never) to 5 (always))
8. Do you inform patients that they will lose the right to purchase or possess a firearm if they are voluntarily admitted for inpatient treatment? (Likert Scale: 1 (never) to 5 (always))
9. Have you suggested to patients that they can preserve their right to purchase or possess firearms if, instead of being involuntarily committed by court order or emergency hold, they allow themselves to be voluntarily admitted? (Likert Scale: 1 (never) to 5 (always))
10. Do patients ever raise questions about what will happen to their gun rights if they are involuntarily committed or voluntarily admitted to inpatient treatment? (Likert Scale: 1 (never) to 5 (always))
11. Have you reported a patient to a state database or law enforcement in [state] because they present a danger to themselves or others? (Likert Scale: 1(never) to 5 (always))
12. Do you inform patients that they may lose their right to purchase or possess a firearm due a report by you? (Likert Scale: 1 (never) to 5 (always))
13. If extreme risk protection order (ERPO) reporting — also known as "red flag" petitioning in cases where patients present a risk of harm to themselves or others — was optional for psychiatrists, how often would you petition for firearm removal from a patient? (Likert Scale: 1 (never) to 5 (always))
14. Optional: Is there anything else related to this survey or mental health and gun rights that you'd like us to know? [OPTIONAL TEXT BOX]
15. Optional: Please let us know one or two additional emails of other mental health professionals who might be interested in completing this survey: [OPTIONAL TEXT BOX]

# APPENDIX

Figure 6

## State-by-State Results Breakdown

	State										Total
	California	Connecticut	District of Columbia	Florida	Hawaii	Illinois	New Hampshire	New York	Texas	Washington	
N	51	82	39	38	28	64	19	45	50	69	485
	%	%	%	%	%	%	%	%	%	%	%
<b>Ever committed a patient</b>											
No	7.8%	3.7%	7.7%	2.6%	10.7%	6.3%	5.3%	6.7%	6.0%	1.4%	5.4%
Yes	92.2%	96.3%	92.3%	97.4%	89.3%	93.8%	94.7%	93.3%	94.0%	98.6%	94.6%
<b>Routinely ask patients if they own firearms</b>											
Never	3.9%	1.2%	5.1%	0.0%	0.0%	1.6%	5.3%	0.0%	0.0%	0.0%	1.4%
Rarely	5.9%	6.1%	15.4%	0.0%	10.7%	6.3%	0.0%	4.4%	4.0%	2.9%	5.6%
Sometimes	45.1%	41.5%	20.5%	31.6%	28.6%	50.0%	36.8%	37.8%	50.0%	40.6%	40.0%
Often	19.6%	20.7%	28.2%	26.3%	25.0%	23.4%	15.8%	31.1%	22.0%	27.5%	24.1%
Always	25.5%	30.5%	30.8%	42.1%	35.7%	18.8%	42.1%	26.7%	24.0%	29.0%	28.9%
<b>Believe that patients involuntarily committed (court-ordered) lose gun rights</b>											
No	15.7%	42.7%	48.7%	47.4%	46.4%	20.3%	57.9%	40.0%	54.0%	24.6%	36.9%
Yes	84.3%	57.3%	51.3%	52.6%	53.6%	79.7%	42.1%	60.0%	46.0%	75.4%	63.1%
<b>Believe that patients committed on an emergency hold lose gun rights</b>											
No	35.3%	78.0%	66.7%	84.2%	71.4%	59.4%	94.7%	71.1%	86.0%	71.0%	70.1%
Yes	64.7%	22.0%	33.3%	15.8%	28.6%	40.6%	5.3%	28.9%	14.0%	29.0%	29.9%
<b>Believe that patients voluntarily admitted to inpatient treatment lose gun right</b>											
No	86.3%	54.9%	87.2%	92.1%	75.0%	42.2%	100.0%	91.1%	96.0%	97.1%	78.6%
Yes	13.7%	45.1%	12.8%	7.9%	25.0%	57.8%	0.0%	8.9%	4.0%	2.9%	21.4%
<b>Believe that patients diagnosed with a serious mental disorder lose gun rights</b>											
No	62.7%	56.1%	53.8%	47.4%	32.1%	37.5%	84.2%	44.4%	50.0%	75.4%	54.2%
Yes	37.3%	43.9%	46.2%	52.6%	67.9%	62.5%	15.8%	55.6%	50.0%	24.6%	45.8%
<b>Informed patients they will lose rights if involuntarily committed</b>											
Never	39.2%	62.2%	82.1%	57.9%	64.3%	48.4%	73.7%	80.0%	66.0%	49.3%	60.0%
Rarely	15.7%	15.9%	10.3%	10.5%	14.3%	29.7%	15.8%	11.1%	14.0%	29.0%	17.9%
Sometimes	11.8%	9.8%	2.6%	7.9%	10.7%	4.7%	5.3%	0.0%	8.0%	7.2%	7.0%
Often	17.6%	9.8%	5.1%	18.4%	10.7%	7.8%	5.3%	4.4%	12.0%	11.6%	10.5%
Always	15.7%	2.4%	0.0%	5.3%	0.0%	9.4%	0.0%	4.4%	0.0%	2.9%	4.5%
<b>Informed patients they will lose rights if voluntarily committed</b>											
Never	78.4%	53.7%	92.3%	86.8%	78.6%	56.3%	100.0%	88.9%	88.0%	89.9%	77.5%
Rarely	7.8%	13.4%	5.1%	7.9%	10.7%	23.4%	0.0%	8.9%	8.0%	5.8%	10.3%
Sometimes	3.9%	9.8%	2.6%	0.0%	3.6%	3.1%	0.0%	0.0%	2.0%	0.0%	3.1%
Often	5.9%	13.4%	0.0%	5.3%	7.1%	9.4%	0.0%	2.2%	2.0%	2.9%	5.8%
Always	3.9%	9.8%	0.0%	0.0%	0.0%	7.8%	0.0%	0.0%	0.0%	1.4%	3.3%
<b>Suggested to patients they can preserve rights if voluntary committed</b>											
Never	72.5%	81.7%	97.4%	76.3%	96.4%	84.4%	84.2%	95.6%	86.0%	78.3%	84.1%
Rarely	13.7%	6.1%	2.6%	7.9%	3.6%	6.3%	5.3%	4.4%	10.0%	13.0%	7.8%
Sometimes	2.0%	1.2%	0.0%	7.9%	0.0%	1.6%	0.0%	0.0%	0.0%	2.9%	1.6%
Often	11.8%	11.0%	0.0%	7.9%	0.0%	7.8%	10.5%	0.0%	4.0%	4.3%	6.2%
Always	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.2%
<b>Patients raise questions about gun rights</b>											
Never	41.2%	47.6%	82.1%	36.8%	57.1%	43.8%	42.1%	75.6%	62.0%	46.4%	52.6%
Rarely	37.3%	26.8%	12.8%	31.6%	35.7%	28.1%	47.4%	22.2%	22.0%	40.6%	29.7%
Sometimes	0.0%	1.2%	0.0%	10.5%	3.6%	3.1%	0.0%	2.2%	6.0%	0.0%	2.5%
Often	21.6%	23.2%	5.1%	21.1%	3.6%	23.4%	10.5%	0.0%	10.0%	13.0%	14.8%
Always	0.0%	1.2%	0.0%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	0.4%
<b>Have reported a patient to a state database or law enforcement as dangerous</b>											
Never	31.4%	54.9%	46.2%	36.8%	53.6%	46.9%	52.6%	35.6%	44.0%	33.3%	43.1%
Rarely	13.7%	22.0%	23.1%	23.7%	21.4%	34.4%	26.3%	24.4%	28.0%	31.9%	25.4%
Sometimes	13.7%	2.4%	7.7%	10.5%	7.1%	9.4%	10.5%	22.2%	2.0%	7.2%	8.7%
Often	31.4%	19.5%	23.1%	21.1%	14.3%	7.8%	10.5%	15.6%	22.0%	24.6%	19.6%
Always	9.8%	1.2%	0.0%	7.9%	3.6%	1.6%	0.0%	2.2%	4.0%	2.9%	3.3%
<b>Inform patients they may lose their rights due to your report</b>											
Never	39.2%	58.5%	87.2%	55.3%	67.9%	51.6%	84.2%	68.9%	76.0%	72.5%	63.9%
Rarely	37.3%	20.7%	7.7%	18.4%	14.3%	32.8%	15.8%	6.7%	16.0%	21.7%	20.6%
Sometimes	0.0%	6.1%	0.0%	2.6%	3.6%	0.0%	0.0%	8.9%	4.0%	0.0%	2.7%
Often	17.6%	13.4%	2.6%	15.8%	14.3%	10.9%	0.0%	13.3%	4.0%	2.9%	9.9%
Always	5.9%	1.2%	2.6%	7.9%	0.0%	4.7%	0.0%	2.2%	0.0%	2.9%	2.9%
<b>Would use ERPO for firearm removal from a patient</b>											
Never	2.0%	2.4%	5.1%	10.5%	0.0%	0.0%	5.3%	4.4%	10.0%	1.4%	3.7%
Rarely	15.7%	34.1%	28.2%	21.1%	32.1%	15.6%	26.3%	17.8%	18.0%	31.9%	24.3%
Sometimes	27.5%	12.2%	28.2%	23.7%	25.0%	21.9%	21.1%	24.4%	24.0%	14.5%	21.0%
Often	43.1%	37.8%	23.1%	28.9%	32.1%	43.8%	42.1%	35.6%	44.0%	43.5%	38.4%
Always	11.8%	13.4%	15.4%	15.8%	10.7%	18.8%	5.3%	17.8%	4.0%	8.7%	12.6%

# APPENDIX

Figure 7

## Summary of Physician Understanding of Gun Laws (N = 485)

Believe that patients involuntarily committed (court-ordered) lose gun rights	<u>Correct</u>	<u>Incorrect</u>
No	0.0%	36.9%
Yes	63.1%	0.0%
<b>Total</b>	<b>63.1%</b>	<b>36.9%</b>
Believe that patients committed on an emergency hold lose gun rights	<u>Correct</u>	<u>Incorrect</u>
No	56.3%	13.8%
Yes	10.9%	19.0%
<b>Total</b>	<b>67.2%</b>	<b>32.8%</b>
Believe that patients voluntarily admitted to inpatient treatment lose gun rights	<u>Correct</u>	<u>Incorrect</u>
No	56.7%	21.9%
Yes	16.3%	5.2%
<b>Total</b>	<b>73.0%</b>	<b>27.0%</b>
Believe that patients diagnosed with a serious mental disorder lose gun rights	<u>Correct</u>	<u>Incorrect</u>
No	48.2%	6.0%
Yes	9.1%	36.7%
<b>Total</b>	<b>57.3%</b>	<b>42.7%</b>

# APPENDIX

Figure 8

## Reporting Questions

	Mean
Have reported a patient to state database or law enforcement (Likert Scale 1-5)	2.15
Have informed patients they may lose rights due to your report (Likert Scale 1-5)	1.67
Would use ERPO for firearm removal from a patient (Likert Scale 1-5)	3.32

Figure 9

## Statistical Analysis of the Framed Question

Variable	(1) Unframed Mean/SE	(2) Framed Mean/SE	t-test p-value (1)-(2)
Routinely ask patients if they own firearms	3.722 [0.062]	3.746 [0.065]	0.790
Informed patients they will lose rights if involuntarily committed	1.701 [0.073]	1.930 [0.082]	0.037**
Informed patients they will lose rights if voluntarily committed	1.469 [0.068]	1.471 [0.064]	0.979
Suggested to patients they can preserve rights if voluntary committed	1.282 [0.052]	1.328 [0.051]	0.531
Patients raise questions about gun rights	1.714 [0.064]	1.902 [0.072]	0.053*
Have reported a patient to a state database or law enforcement as dangerous	2.021 [0.079]	2.270 [0.082]	0.028**
Inform patients they may lose their rights due to your report	1.614 [0.072]	1.730 [0.070]	0.250
Would use ERPO for firearm removal from a patient	3.299 [0.072]	3.336 [0.068]	0.706
Ever committed a patient	0.971 [0.011]	0.922 [0.017]	0.017**
Believe that patients involuntarily committed (court-ordered) lose gun rights	0.614 [0.031]	0.648 [0.031]	0.447
Believe that patients committed on an emergency hold lose gun rights	0.307 [0.030]	0.291 [0.029]	0.700
Believe that patients voluntarily admitted to inpatient treatment lose gun right	0.232 [0.027]	0.197 [0.026]	0.340
Believe that patients diagnosed with a serious mental disorder lose gun rights	0.436 [0.032]	0.480 [0.032]	0.334
N	241	244	
F-test of joint significance (p-value)			0.125
F-test, number of observations			485
The value displayed for t-tests are p-values.			
The value displayed for F-tests are p-values.			
Standard errors are robust.			
***, **, and * indicate significance at the 1, 5, and 10 percent critical level.			

# APPENDIX

## References

1. 18 U.S.C. § 922(d)(4) (2020).
2. FLA. STAT. § 790.065(2)(a)(4) (West 2020).
3. FLA. STAT. § 790.065(2)(a)(4)(b)(II) (West 2020)
4. *Id.*
5. J. Staletovich, “Florida Law Is Supposed to Keep Guns from the Violent and Mentally Ill. It’s Not Working,” *Miami Herald*, February 23, 2018, *available at* <<https://www.miamiherald.com/news/local/article201835374.html>> (last visited September 29, 2020).
6. FLA. STAT. § 394.4615 (West 2020).
7. FLA. STAT. § 394.463(2)(d)(1) (West 2020); FLA. STAT. § 790.401 et seq. (West 2020).
8. N.H. REV. STAT. ANN. § 126-A:5(XXX)(e) (repealed 2018).
9. N.H. REV. STAT. ANN. § 329-B:29 (West 2020).
10. However, an ERPO law did pass through the New Hampshire House in January of 2020. See H. Ramer, “NH House Passes Red-Flag Gun Bill,” *Associated Press*, January 8, 2020.
11. TEX. GOV’T CODE ANN. § 411.0521(a) (West 2020).
12. TEX. HEALTH & SAFETY CODE ANN. § 611.004 (West 2020).
13. TEX. CODE CRIM. PROC. ANN. art. 18.191 (West 2020).
14. California’s state statutory prohibitor on involuntary commitments includes: 1) any person who “has been adjudicated by a court of any state to be a danger to others as a result of a mental disorder or mental illness;” 2) has been adjudicated to be a “mentally disordered sex offender;” and 3) any person who has been placed “under conservatorship by a court ... because the person is gravely disabled as a result of a mental disorder or impairment of chronic alcoholism.” In California, Britney Spears — who is currently under a conservatorship — would likely not be able to purchase a gun. CAL. WELF. & INST. CODE §§ 8103(a)(1)-(E)(1) (WEST 2020).
15. California’s prohibition on firearm purchase, possession, and access lasts for a period of five years. CAL. WELF. & INST. CODE §§ 8103(f)(1)(A)-(C) (WEST 2020).
16. Washington specifies that the following individuals must have their information submitted to the NICs background check system: 1) a person is committed by court order under Section 71.05.240 (involuntary treatment for 14 days); 2) a person committed under Section 71.05.320 (treatment for an adult lasting 90 or 180 days); 3) a person committed under Section 71.34.740 (an involuntary commitment hearing for a minor), or 4) Section 71.34.750 (involuntary treatment for a minor for 180 days). WASH. REV. CODE ANN. § 9.41.047 (WEST 2020).
17. WASH. REV. CODE ANN. § 71.05.182 (WEST 2020).
18. CAL. WELF. & INST. CODE § 5150 (West 2020); CAL. WELF. & INST. CODE § 5250 (West 2020); CAL. WELF. & INST. CODE § 5260 (West 2020); CAL. WELF. & INST. CODE § 5270.15 (West 2020).
19. CAL. WELF. & INST. CODE § 5150(a) (West 2020).
20. CAL. WELF. & INST. CODE § 8103(f)(1)(B) (West 2020) (emphasis added).
21. CAL. WELF. & INST. CODE § 8103(f)(2)(B)(3) (West 2020).
22. CAL. CIV. CODE § 43.92 (West 2020).
23. CAL. WELF. & INST. CODE § 8100(b).
24. *See generally* WASH. REV. CODE ANN. § 71.05.160 (West 2020).
25. WASH. REV. CODE ANN. § 71.05.182(1) (West 2020). *See also* WASH. REV. CODE ANN. § 71.05.153 (West 2020); WASH. REV. CODE ANN. § 71.05.150 (West 2020).
26. WASH. REV. CODE ANN. § 71.05.120 (West 2020).
27. WASH. REV. CODE ANN. § 7.94.030 (West 2020).
28. CONN. GEN. STAT. § 29-36l(d)(2) (West 2020) (establishing the state process for submitting information on prohibited persons to NICs).
29. CONN. GEN. STAT. § 29-38b(a) (West 2020).
30. The District of Columbia has no federal reporting to NICs. However, the District of Columbia prohibits access to registration certificates for those who have been involuntarily committed by a mental facility by a court as defined in the federal regulations. *See generally* D.C. CODE §§ 7-2502.03(a)(6)(A)(1)-5 (West 2020).
31. D.C. CODE § 7-2502.03(a)(6)(A)(1) (West 2020).
32. In Illinois, the Department of State Police and the Department of Human Services must coordinate to submit to NICs information on those judicially committed involuntarily for purposes of background checks. 430 ILL. COMP. STAT. 65/3.1(e)(2) (West 2020).
33. 720 ILL. COMP. STAT. ANN. 5/24-3.1 (West 2020) (outlawing possession).
34. MD. PUB. SAFETY CODE § 5-133(b)(9) (West 2020).
35. CONN. GEN. STAT. § 29-38b(a) (West 2020).
36. A. Becker, “Post-Newtown Gun Law Has a Mental Health Loophole, Critics Say,” *CT Mirror*, February 14, 2014, *available at* <<https://ctmirror.org/2014/02/14/gun-law-has-a-mental-health-loophole-critics-say/>> (last visited September 29, 2020).
37. CONN. GEN. STAT. § 52-146c (West 2020).
38. CONN. GEN. STAT. § 29-38c (West 2020).
39. D.C. CODE ANN. §§ 7-2502.01, 7-2502.06(a) (West 2020).
40. D.C. CODE ANN. § 21-521 (West 2020).
41. D.C. CODE ANN. § 7-2502.03(a)(6)(A)(1) (West 2020).
42. D.C. CODE ANN. § 7-1203.03 (West 2020).
43. D.C. CODE ANN. § 7-2510.01 et seq. (West 2020).
44. 720 ILL. COMP. STAT. ANN. 5/24-3.1(a)(4) (West 2020).
45. *Id.*
46. 405 ILL. COMP. STAT. ANN. 5/6-103.3 (West 2020).
47. 430 ILL. COMP. STAT. 65/1.1 (West 2020).
48. 430 ILL. COMP. STAT. ANN. 65/8 (West 2020).
49. *See generally* HAW. REV. STAT. § 334-60.5 (West 2020).
50. HAW. REV. STAT. § 334-60.5(c)(3) (West 2020).

## APPENDIX

### References (continued)

51. N.Y. PENAL LAW § 400.00(1)(j) (McKinney 2019).
52. *Id.* § 400.00(1)(i).
53. HAW. REV. STAT. § 334-60.5(c)(3) (West 2020).
54. *Id.* § 334-60.5(c)(1).
55. HAW. REV. STAT. ANN. § 134-3.5 (West 2020).
56. HAW. REV. STAT. ANN. § 134-61 et seq. (West 2020).
57. N.Y. PENAL LAW § 400.00(i) (McKinney 2019).
58. N.Y. MENTAL HY. LAW § 9.46(b) (McKinney 2019).
59. M. Gamsin, Student Note, “The New York Safe Act: A Thoughtful Approach to Gun Control, or a Politically Expedient Response to the Public’s Fear of the Mentally Ill?” *Southern California Law Review* 88 (2015): 16, 30.
60. A. Hartocollis, “Mental Health Issues Put 34,500 on New York’s No-Guns List,” *New York Times*, October 19, 2014, available at <<https://www.nytimes.com/2014/10/19/nyregion/mental-reports-put-34500-on-new-yorks-no-guns-list.html>> (last visited September 29, 2020).



# Investing in the Frontlines: Why Trusting and Supporting Communities of Color Will Help Address Gun Violence

*Amber K. Goodwin and TJ Grayson*

## Introduction

Day-to-day interpersonal gun violence in communities of color constitutes a disproportionate number of shootings across the country. According to the Centers for Disease Control and Prevention (CDC), more than 70 percent of America's 13,958 gun homicide victims in 2018 were either Black or Latinx.<sup>1</sup> Black men make up 6 percent of the US population, yet account for more than half of all gun homicide victims each year; gun violence is disproportionately dangerous for Black women, who are nearly three times as likely to be murdered with a gun than white women;<sup>2</sup> worse yet, transgender women are four times more likely to experience gun violence than cisgender women, and nearly 85 percent of transgender victims are women of color.<sup>3</sup> Incidents of gun violence like these cost the United States at least \$229 billion every year<sup>4</sup> — with research indicating a single gun homicide can cost more than \$10 million in medical, criminal legal, and other expenses.<sup>5</sup> Still, the physical, economic,<sup>6</sup> and social<sup>7</sup> consequences of this violence do not end there.

A radical shift in our understanding and approach to gun violence in communities of color would likely lead to more compassionate,<sup>8</sup> public health-centered

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approaches to the problem.<sup>9</sup> But there are solutions we can implement today if we adopt one simple approach: trusting and empowering those directly impacted by exposure to gun violence to decide what the response should look like. In this article, we argue that the United States' focus on policing first strategies to address gun violence has contributed to the persistence of gun violence in communities of color. We critique the over reliance on law enforcement as the solution to gun violence in these communities and instead advocate for evidence-based and community-endorsed violence prevention programs that are already being implemented by people of color throughout the nation. To avoid the severe consequences associated with a policing-centered approach, law enforcement solutions to gun violence should be avoided and ultimately defunded. Instead, those directly impacted by gun violence must get sustained resources to take on this problem and address the negative repercussions of our current response.<sup>10</sup>

## How Gun Violence Is Currently Addressed in Communities of Color

### *Criminal Legal Approaches to Gun Violence*

Responses to gun violence in communities of color are commonly addressed through a criminal legal approach centered around policing at the local, state, and national levels.<sup>11</sup>

We have to bring back law and order. Now, whether or not in a place like Chicago you do stop and frisk, which worked very well ... It brought the crime rate way down. But you take the gun away from criminals that shouldn't be having it ... We have to protect our inner cities,

because African-American communities are being decimated by crime, decimated.

- Donald Trump, President of the United States<sup>12</sup>

Ninety percent of all people killed in our city — and 90 percent of all those who commit the murders and other violent crimes — are black and Hispanic. It is shameful that so many elected officials and editorial writers have been

Black people are three times more likely to be killed by police than white people.<sup>18</sup> Eight of the largest city police departments kill Black men at rates higher than the United States murder rate.<sup>19</sup> Police may jeopardize the safety of women of color facing disproportionate rates of gun related domestic violence.<sup>20</sup> In a 2015 survey by the National Domestic Violence Hotline analyzing survivor experiences with law enforcement, over half of the participants said calling the police would make their situation worse; one in four said

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largely silent on these facts ... Instead, they have argued that police stops are discriminatory because they do not reflect the city's overall census numbers. By that flawed logic, our police officers would stop women as often as men, and senior citizens as often as young people ... The absurd result of such a strategy would be far more crimes committed against black and Latino New Yorkers. When it comes to policing, political correctness is deadly.

- Michael Bloomberg, former Mayor, City of New York<sup>13</sup>

These comments are emblematic of our over reliance on law enforcement as the primary solution for gun violence in communities of color. Yet, the experiences<sup>14</sup> of these communities<sup>15</sup> and evaluations of evidence-based violence prevention programs<sup>16</sup> indicate that relying on policing centered measures will not stop the violence. Instead, they expose communities of color to violence stemming from policing itself.<sup>17</sup>

they would never call the police again; two-thirds said that they were afraid of not being believed and not getting the help they need as a result; and one in four reported that they were arrested or threatened with arrest during a partner abuse incident.<sup>21</sup> Similar problems have been identified for transgender people of color who face staggering rates of gun violence<sup>22</sup> and report experiencing high rates of police harassment and discrimination.<sup>23</sup>

In addition to the violence of everyday police encounters and harmful responses to domestic violence, these factors negatively impact the relationship between communities of color<sup>24</sup> and the state.<sup>25</sup> For example, children of color are forced to endure physical or verbal police violence which can lead them to distrust and despise police and the laws they enforce.<sup>26</sup> And the recent clashes between protestors and police following the police killings of Tony McDade, Breonna Taylor, and George Floyd provide an example of exactly how fraught the relationship between communities of color and police have become.<sup>27</sup>

The benefits experienced by communities of color in exchange for violent police intervention may be minimal at best. For example, when a Black or Latinx person is fatally shot, the likelihood that local detectives will catch the culprit is only 35 percent — 18 percentage points fewer than when the victim is white. For gun assaults, the arrest rate is 21 percent if the victim is Black or Latinx, versus 37 percent for white victims.<sup>28</sup> With respect to gun violence prevention, some studies have found that police patrols focused on illegal gun carrying can prevent gun violence.<sup>29</sup> Yet, these studies note that a small amount of research supports these findings,<sup>30</sup> while the impacts of police violence on communities of color — Black and Latinx communities specifically — cannot be denied. And although policing may result in gun violence reduction when officers dedicate their time to this specific issue, the reality is that police devote approximately 4 percent of their time to handling violent crime.<sup>31</sup>

#### *Perspectives of Those Impacted by Criminal Legal Approaches*

In some instances, communities are too familiar with the harmful effects of policing centered responses to gun violence.<sup>32</sup> Informed in large part by personal experiences with this issue, some members of these heavily policed neighborhoods have pursued violence reduction strategies that center positive interventions rather than criminal punishment.

Having measurable success in reducing violent crime is contingent on the approach used. A successful approach must see violence in inner cities as a symptom of underlying issues and incorporate solutions geared towards reforming the perpetrator, interrupting violent acts before they occur, and directing resources toward eliminating the conditions that breed violence.<sup>33</sup>

- Craig Muhammad, co-founder of Project Emancipation Now.<sup>34</sup>

The approaches Muhammad references stand in stark contrast to the policing centered strategies discussed above. These approaches center intentional investments in the wellbeing of perpetrators, victims, and the communities they come from;<sup>35</sup> policing approaches seek to punish those involved in violence and leave communities to deal with the repercussions of this violence<sup>36</sup> on their own. In addition to these investments, violence prevention programs and police can maintain contrasting goals. In response to the deaths of Tony McDade, Breonna Taylor, and George

Floyd and Ahmed Arbery in 2020, Javier Lopez, a violence interventionist and public health expert with the Red Hook Initiative<sup>37</sup> recently commented on this very distinction: “The brothers and sisters doing violence interruption work have an aversion to holding a firearm. That’s because it’s not war for us. It’s peacekeeping.”<sup>38</sup>

Several organizations implementing models centered on positive interventions like those supported by Muhammad are led by people of color — Black and Latinx individuals in particular — using a public health approach. The central tenants of a public health approach can roughly be described as those that treat violence as an epidemic similar to communicable diseases recognizing that both the victim and the perpetrator are impacted by violence because of their direct experiences with harm and attempts to provide resources to both groups to prevent future violence.<sup>39</sup>

People of color across the country have created organizations focused on addressing gun violence through this lens. The Cure Violence model represents one example. Mostly led by Black and Latinx people from directly impacted communities, all Cure Violence organizations incorporate the same three core goals: “(1) to “detect and interrupt potentially violent conflicts”; (2) to provide personal support to the highest-risk individuals; and (3) to “[m]obilize the community to change norms.”<sup>40</sup> Chico Tillman, a current Ph.D. Candidate in criminology at the University of Illinois at Chicago, works with Cure Violence in Chicago. Tillman argues that the success of the program is grounded in the fact that it is led and implemented by directly impacted people of color like him.

I was incarcerated for 16 years and when I came home, I went straight to school and started working on violence prevention. I’m doing this work and doing it well because I can directly reach people that white-led organizations like Giffords or Everytown can’t because of my access to this community. When we are interrupting violence and working with the community, people are going to be honest with us. They’re going to act like they’re talking to a friend or a family member because often that’s exactly what they’re doing ... But we don’t get the same amount of funding as these other organizations because the narrative of gun violence works against us. We want to focus more on changing community norms so that the decades of violence can stop. But for now, we have to work with what we have and focus on interrupting and detecting violence.<sup>41</sup>

Research has shown that in cities with 100,000 residents, the addition of every 10 organizations focusing on crime and community vitality results in a 9 percent reduction in the murder rate, a 6 percent reduction in the violent crime rate, and a 4 percent reduction in the property crime rate.<sup>42</sup> And when the Chicago branch of Cure Violence — formerly known as Cease-Fire<sup>43</sup> — first began its operations in the West Garfield Park neighborhood in 2000, it experienced a 67 percent reduction in shootings.<sup>44</sup>

Despite this success, the support given to these programs is inconsistent and under frequent attack. Some of the obstacles to implementing these strategies stem directly from our overreliance on police. For example, regional Safe Streets Baltimore offices — another violence prevention program that relies on community intervenors to help prevent gun violence — have been repeatedly suspended, often the result of an office's refusal to give confidential information gained through violence-interruption work to the police.<sup>45</sup> And while the program has yielded short-term reductions in violence, recent evaluations present mixed findings regarding its long-term success.<sup>46</sup> Researchers note, however, that cities like Chicago, Philadelphia, and New York — a city where local officials and foundations have provided significant support financially with services for high risk individuals engaged by outreach staff — have experienced positive long-term reductions in gun violence.<sup>47</sup> The experiences of these cities, and New York in particular, suggests that increased investment in programs like Safe Streets — resulting in changes such as higher and consistent salaries for community intervenors, more staff dedicated to a given region, and better collaboration with other community-based organizations — may produce meaningful reductions in gun violence in their communities.<sup>48</sup>

Cities, states, and local governments continue to invest billions of dollars in policing while successful programs like these continuously fight to sustain their funding.<sup>49</sup> In some cities, per capita police spending ranges from \$318 to as high as \$772, with cities like Oakland dedicating as much as 41.2 percent of their general fund expenditures to police.<sup>50</sup>

This reliance on police, however, is beginning to lose its stronghold. Fatimah Loren Muhammad, Executive Director of the Health Alliance for Violence Intervention, an organization focused on fostering hospital and community collaborations to advance equitable, trauma-informed care for violence intervention and prevention programs,<sup>51</sup> noted exactly this.

The problem of community violence is one that cities and states think about regularly, particularly where there are large concentrations of community violence. But you have a paradigmatic frame for the problem: they are either exclusively policing problems and talking about the value of our work is challenging, or they believe in our model. But what we have seen in the country over time is that the climate is shifting, and law makers are seeing that there are more approaches to addressing violence.<sup>52</sup>

Calls for new approaches to violence in communities throughout the country continue to gain support. In response to the weeks of protests against police killings of numerous Black individuals in the first half of 2020, elected officials have begun to embrace the idea of cutting police budgets and reinvesting in community-based programs.<sup>53</sup> Some have supported the dismantling of their city's police department in exchange for investments in community-led public safety initiatives.<sup>54</sup> As the movement to reduce police budgets continues to grow, stakeholders should look to the kinds of programs described here as targets for investment.

### **Stakeholder Approaches to Reduce Gun Violence through Policy Support**

To ensure the viability of these strategies, all levels of government as well as philanthropic institutions must contribute.

#### *Federal Agencies and Institutions*

Federal agencies should use their power to allocate adequate funding for public health focused community interventions on gun violence. Agencies should support federal allocation of funding for local strategies such as Advance Peace,<sup>55</sup> Hospital Based Violence Intervention,<sup>56</sup> and Cure Violence.<sup>57</sup> These programs have demonstrated their success and, consequently, receive some resources from local or state agencies. Yet, additional funding is necessary to expand and sustain their progress.

For fiscal year 2020, Congress allocated funds for gun violence research and other appropriations in the Commerce, Justice, Science appropriations bill. The allocation includes: \$25 million for gun violence research at the Centers of Disease Control (“CDC”), the National Institutes of Health (“NIH”), and Community Investments, \$8 million for community-based violence prevention grants, \$17 million for place-based, data-driven, community-oriented, and cost-effective solutions to violent gun crime, and \$8 million for the Children Exposed to Violence program, early

intervention strategies that address and treat children's exposure to trauma and violence.<sup>58</sup> This allocation of funds is a first step in providing research and agency level support to evidence-based solutions in communities of color. But it is not enough to sustain the success of these programs.

In addition to supporting evidence-based solutions to reduce gun violence, Congress should also set forth a comprehensive agenda that provides consistent funding for research, data, and innovation addressing other forms of violence that impact communities of color. Annual CDC data also shows the rise of suicides by firearms,<sup>59</sup> but there is a dearth of research about suicide rates in communities of color. The same can be said for research regarding rates of interpersonal gun violence against people of color with intersecting<sup>60</sup> marginalized identities.<sup>61</sup> In Congress, the focus of funding opportunities for domestic violence and guns rely on punitive interventions.<sup>62</sup> These carceral measures do not take into account the needs of evidence based prevention strategies that can help empower communities to prevent violence before it starts.

Additionally, there should be greater coordination among administrative offices, Congress, and heads of agencies should work together to pool resources from diversified pools of long-term funding. While traditional gun reform measures have been on legislative agendas for decades, the voices of communities of color have failed to be included.<sup>63</sup>

#### *State and Local Government Institutions*

In states across the country, lawmakers are providing blueprints for change through legislation. For many of these states, their programs have not been defined as criminal justice reform yet are traditionally intertwined with legislative efforts to reduce crime, prison reform, and mass incarceration. It is important to note that while these issues intersect, having stand-alone legislation to address gun violence intervention and prevention — ensuring that resources and attention are directed to these programs specifically — is critical.

California Governor Gavin Newsom signed into law the California Violence Intervention and Prevention (CalVIP) grant program, which provides competitive matching grants for cities and community-based organizations to implement effective programs designed to interrupt entrenched cycles of shootings and retaliation.<sup>64</sup> The legislature is also supporting AB 1603, which authorizes the CalVIP grant program by statute and strengthens the program by removing low caps on grant awards, requiring prioritization of grants from communities with the highest rate and number of

shootings and homicides, and requiring prioritization of programs targeted at individuals at highest risk of being victims or perpetrators of violence.<sup>65</sup> Sustained funding, however, would allow CalVIP to improve its current operations and expand to other areas in the state.

In 2019, the New Jersey legislature passed the Create and Fund the New Jersey Violence Intervention Program (NJVIP). This legislation addresses homicide reduction and interpersonal violence and is modeled after effective state grant programs in Massachusetts and New York. Through this program, the state will provide competitive multi-year grants to cities and non-profit organizations implementing effective, evidence-based violence intervention initiatives. In addition, the legislature created the Hospital-Based Violence Intervention Program Initiative to interrupt these cycles of violence by working with gunshot patients in and after their admission to the hospital. The program also requires the state's victim counseling service centers to create new partnerships with hospital trauma centers to connect gunshot patients with violence prevention programs.<sup>66</sup> Programs like these should be replicated in states throughout the country, and led by the organizations and organizers from the communities that are directly impacted.

In 2018, the Maryland legislature established the Maryland Violence Intervention and Prevention Program Fund (MDVIP) to invest and fund evidence-based public health approaches to gun violence prevention. MDVIP provides financial support to local governments and community-based organizations that use public health principles and demonstrate positive outcomes in preventing gun violence. It also established a council, anchored by the Director of the Governor's Office of Crime Control and Protection, to oversee the distribution of the funding and to review the efficacy of gun violence prevention programs.<sup>67</sup> Funding for MDVIP supported organizations that rely on the expertise of Black leaders on the frontlines of preventing gun violence utilizing HVIP and Cure Violence programs like ROCA and Safe Streets Baltimore. Again, these programs have been impactful, but are simply the first step towards meaningfully addressing gun violence in communities of color. Without funds from the state, these local organizations struggle to meet metrics and evaluations needed to help save lives.<sup>68</sup>

State, county, and local governments should work with health departments, hospitals, schools, universities, and non-profits to (1) share data on all forms of violence, (2) identify protocols for screenings and referrals, (3) develop and enhance programs and poli-

cies to prevent and reduce violence in communities of color, and (4) use data to continuously increase the efficiency and effectiveness of these efforts. In cities like Louisville, where Breonna Taylor was shot and killed by law enforcement, Anthony Smith from Cities United is one of the voices calling for consistent funding into preventing violence versus policing: “We value and lean so much on law enforcement and, as a city, that hurt us,” Smith said. “We’ve not been as imaginative and understanding of what it really takes to keep a community safe.”<sup>69</sup>

In June, New York City started to move in the direction with a \$10 million additional allocation of city funds for place-based public health approaches, including support for evidence-based programs like Life Camp led by Erica Ford, that has consistently shown dramatic reductions in violence.<sup>70</sup>

### *Philanthropic Institutions*

While philanthropic partners have helped create support systems for advocates working on the issue of gun violence, they alone cannot stop the bleeding. Funders can take a multi-year approach to not only help support the leadership of people of color, but also help to fill gaps that direct government services cannot reach. While funding direct services is critical, helping to support other forms of civic engagement can help grow the field of advocates of color who are in positions of leadership working to reduce gun violence. Unfortunately, few organizations led by Black or Latinx organizational leaders are fully funded on the local level.<sup>71</sup>

Refujio “Cuco” Rodriguez, Program Officer for the Hope and Heal Fund<sup>72</sup> spoke about the necessity of funding gun violence prevention work through philanthropy.

Race equity expertise is imperative due to the complexity of the issue. When gun violence reduction efforts and policies lack an in-depth race equity lens, they run the risk of perpetuating inequity and or prescribing solutions to an issue with a very limited depth of understanding. The absence of this critical perspective and expertise leads to unintended consequences that too often result in the criminalization of people of color.<sup>73</sup>

However, in contrast to many philanthropic organizations focused on gun violence prevention, some foundations and companies are beginning to invest directly into Black and Latinx groups doing this work. In June, Google.org gave a \$500,000 donation to the Marsha P. Johnson Institute, an organization focused

on the exclusion of Black transgender women in social justice issues, including gun violence. Elle Hearn, head of the organization, noted how important contributions like these are. “The donation will strengthen our direct cash assistance program, which is empowering individuals to secure housing, healthcare, and other essential supports during this time. Black Trans women are too often forgotten by our society, and with Google.org’s help we’re giving them the support they need.”<sup>74</sup> The Langeloth Foundation provides yet another example. According to Scott Moyer, President of the foundation, their recent \$10 million donation to people of color led organizations is a direct result of the need for policy change in communities of color.<sup>75</sup> Until more organizations follow similar approaches, the resources available to gun violence prevention programs led by communities of color will remain unstable.

### **Conclusion**

The decades long persistence of gun violence in communities of color shows that our current approach is not working. If we value the lives of marginalized communities, we need a new approach to gun violence in communities of color. Rather than of waiting for to gun violence to happen and deploying the police, we can send in teams of culturally competent community workers<sup>76</sup> to intervene and prevent the violence from occurring. They simply are not getting the resources, attention, and compassion they deserve. National, state, and local policy makers must give people of color addressing gun violence the funds to take on this issue and rely on their expertise and experiences when deciding how to address gun violence in communities of color; and Philanthropic stakeholders and partners should center the voices of leaders of color who work to prevent gun violence and invest in their leadership. Until then, it is all too likely that these communities will continue to endure the physical, economic, and social consequences of this issue.

### Note

The authors do not have any conflicts of interest to disclose.

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# A Behavioral Addiction Model of Revenge, Violence, and Gun Abuse

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**C**riminological and public health data show that most individuals who commit acts of violence do so in accord with a personal grievance or perception of having been treated unjustly.<sup>1</sup> Grievances that lead to violence include romantic rejection or betrayal, loss of a job, loss of custody of a child, verbal provocation, physical aggression, and bullying.<sup>2</sup> A recent FBI study of the pre-attack behaviors of active shooters in the U.S. noted that such grievances may result “in a grossly distorted preoccupation with a sense of injustice” that can “spark an overwhelming desire to ‘right the wrong’ and achieve a measure of satisfaction and/or revenge.”<sup>3</sup>

Why grievances lead to violence is not well understood, but neuroscience research provides clues that might lead to new approaches for preventing violence and saving lives. Brain imaging studies show that grievances spur a desire for revenge that activates the same neural reward-processing circuitry as that of substance addiction.<sup>4</sup> In substance addiction, environmental stimuli or cues — locations where a drug is taken, mental state before it is taken — trigger craving for the drug in anticipation of experiencing pleasure, or relief from dysphoria through intoxication.<sup>5</sup> With violence, the environmental stimulus appears to be a grievance that triggers a craving for revenge in anticipation of experiencing pleasure or relief from the distress caused by the injustice. This craving is gratified

through inflicting harm upon the perpetrator of the injustice or their proxies.

These findings suggest that a behavioral addiction framework might be appropriate for understanding and addressing violent behavior, including firearm violence, across most populations and subgroups. Although more research is needed, such a framework could yield significant benefits. The brain disease model of addiction has led to effective scientific and public health-oriented approaches for preventing and treating drug abuse.<sup>6</sup> Similarly, a behavioral addiction model of revenge-seeking and violence that is responsive to socioeconomic conditions, disparities, and discrimination which drive grievances, might lead to similarly effective approaches for preventing and treating “gun abuse” — abusing firearms to gratify the desire for revenge.

What might this look like? In recent decades, medical, behavioral, educational, self-help, community, and faith-based systems in the U.S. have been mobilized to develop interventions and supports to combat the devastating effects of substance addiction, including more than 60,000 drug overdose deaths annually.<sup>7</sup> Leveraging these public and private investments, new approaches aimed at developing interventions and supports to mitigate brain-biological-social craving to seek revenge in response to grievances might help free individuals and communities of the catastrophic consequences of firearm and other forms of violence, including more than 16,000 homicides and 6,000,000 reported violent victimizations in the U.S. each year.<sup>8</sup>

Focusing prevention and treatment approaches on grievances and revenge-cravings would avoid stigmatizing as violent individuals diagnosed with mental illnesses. It would also acknowledge the social and cultural factors contributing to violence in the U.S. and

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support and empower individuals and communities burdened by violence, including those that experience poverty and lack of access to adequate health care and economic opportunities. An example of a promising behavioral motive control intervention that has been shown to have preliminary efficacy in reducing revenge cravings will be discussed in this article.

### **Grievance: The Common Precursor to Violence**

FBI and U.S. Secret Service data reveal that the vast majority (> 79%) of perpetrators in the 160 active shooter incidents in the U.S. from 2000 to 2013, and the 41 targeted school shootings in the U.S. from 2008

global considerations, ideology, or hatred.<sup>19</sup> The most common grievances precipitating violent crimes are psychological rather than physical harms, including insults, betrayal, lack of respect, lack of courtesy, and being wrongly accused — especially when carried out by significant others or in public, leading to humiliation.<sup>20</sup> A study of U.S. Department of Justice investigations of civil rights and abuse of force violations within four major U.S. city police departments found “a deeply embedded practice” in all four departments of “retaliatory actions against citizens. Detainment, arrest, and physical force were used in response to behavior that officers deemed annoying or distasteful but posed no threat, to those who used language that

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to 2017, harbored a real or imagined sense of experienced wrong, injustice, or other form of perceived victimization.<sup>9</sup> For 2017, the U.S. Centers for Disease Control’s National Violent Death Reporting System identified the most common circumstance of all violent deaths not precipitated by another crime (such as robbery) as “injury occurred during an argument.”<sup>10</sup>

Retaliation in response to grievances is the single most important cause of human aggression and violent behavior<sup>11</sup> and the primary motive for intimate partner violence,<sup>12</sup> youth violence and bullying,<sup>13</sup> street and gang violence,<sup>14</sup> lone-actor attacks,<sup>15</sup> police brutality and abuse of force,<sup>16</sup> and terrorism.<sup>17</sup> The role of grievance and revenge in precipitating violence appears to hold true among those with serious mental illness who commit violent acts, with studies showing that anger and revenge, not mental illness, are the most common motives and predictors of proximate violence.<sup>18</sup>

The FBI active shooter study determined that grievances involving actions directed against the shooter personally (e.g., romantic, employment, governmental, etc.) were more likely to lead to violence than

officers considered disrespectful or critical; to individuals who videotaped interactions with officers; and to protesters.”<sup>21</sup>

### **Revenge: The Common Motivation for Violence**

A grievance itself is not a motivation to commit acts of violence, but a growing body of neuroscience research reveals that grievances activate the reward circuitry of the brain implicated in substance addiction, triggering a desire to retaliate against or punish transgressors or their proxies in anticipation of experiencing pleasure from gaining revenge or relief from the distress caused by the grievance.

Chester and DeWall performed a functional MRI (fMRI) brain imaging study of participants competing against a fictional opponent to see who could press a button faster, with the loser receiving noise blasts at volume levels chosen by the opponent. Study participants were able to see if their fictional opponent had set aggressively high-volume levels (high provocation) or low volume levels (low provocation). In subsequent

trials, participants had the chance to retaliate against the fictional opponent with high noise blasts of their own. On fMRI, significant activation of the area of the brain most associated with hedonic reward and pleasure in addiction was observed in the brains of those who retaliated. The authors concluded: “These findings have clear implications for treatments and interventions that target reducing aggression.... [I]f aggression is motivated by reward then such treatments should adopt practices from addiction treatment models that often seek to mitigate the role of cravings and anticipated reward.”<sup>22</sup>

Other brain imaging studies have produced similar results: significant activation of the NA among retaliatory participants in economic exchange games;<sup>23</sup> NA activation among study participants passively viewing infliction of pain upon unfair players of economic games,<sup>24</sup> significant activation of the caudate nucleus of the dorsal striatum (DS) — strongly associated with reward processing and motivation in substance addiction — among participants punishing trust violators in economic games.<sup>25</sup> Preliminary evidence from neurogenetic and neurochemistry studies also appears to support these brain imaging findings.<sup>26</sup>

### **A Behavioral Addiction Model of Revenge and Violence**

“Behavioral addiction” resembles drug and alcohol addiction but does not involve the ingestion of psychoactive substances.<sup>27</sup> The American Society of Addiction Medicine defines addiction as “a treatable, chronic medical disease involving complex interactions among brain circuits, genetics, the environment, and an individual’s life experiences. People with addiction use substances or engage in behaviors that become compulsive and often continue despite harmful consequences.”<sup>28</sup> The *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) identifies gambling disorder as an addictive disorder.<sup>29</sup> Other behaviors proposed by researchers as behavioral addictions but for which there is less data include internet gaming, internet addiction, and compulsive sex, shopping, exercise, tanning, and eating disorders.<sup>30</sup>

A hallmark of behavioral addiction is “the failure to resist an impulse, drive, or temptation to perform an action that is harmful to the person or others.”<sup>31</sup> Like substance addiction, behavioral addictions involve cravings, tension, arousal, and compulsivity.<sup>32</sup> Activation of the areas of the brain associated with anticipated reward, craving, motivation, and compulsive behavior in drug addiction (the NA and DS) has been observed in behavioral addictions.<sup>33</sup> Alterations in dopamine transmission within brain reward circuitry have been detected in both forms of addiction.<sup>34</sup>

Many features of behavioral addiction appear to be present for revenge-seeking. The primary purpose of revenge and the violence through which it is often achieved is to inflict harm upon others, satisfying the harmful consequences aspect of behavioral addiction. As described above, revenge-seeking exhibits the neurobiological traits of addiction. It also appears to become compulsive and obsessive for some individuals. The FBI’s active shooter study observed that grievances triggering retaliatory violence can “saturate a person’s thinking.”<sup>35</sup> Other researchers have pointed to the potential for individuals to become fixated on grievances and revenge, leading them to “spend much of their waking lives thinking about the object of their concern.”<sup>36</sup> Crockett and colleagues demonstrated that individuals are willing to incur personal costs to experience “pure retaliation” — that is, revenge solely for pleasure of it.<sup>37</sup> Bushman et al. showed that people become aggressive in response to grievances to improve their mood and make themselves feel better.<sup>38</sup> Other studies have shown that aggression can become appetitive.<sup>39</sup>

Notable similarities exist between addiction, compulsive revenge-seeking, and violence. For example, the age of onset during adolescence and young adulthood for substance and behavioral addictions<sup>40</sup> is similar to the age of onset of violent behavior during adolescence.<sup>41</sup> Both behaviors also appear to be progressive. Drug use often begins with legal ‘gateway’ drugs and proceeds to more powerful illicit narcotics.<sup>42</sup> Revenge-seeking appears to follow a similar course, from less dangerous non-violent revenge activities such as verbal insults and threats to more dangerous and unlawful violent behaviors.<sup>43</sup> Self-control theory, established as a key explanatory factor and predictor of crime,<sup>44</sup> appears to mesh at least in part with a behavioral addiction model that views compulsive hedonic revenge as a root cause of violence. Evidence presented in this article suggests, however, that the effect of low self-control on violent crime may be conditional upon the presence of a grievance. Further, although self-control training has been shown to reduce aggressiveness,<sup>45</sup> self-control alone often is not sufficient to counter powerful addictive cravings.

In summary, although definitive evidence does not yet exist for a behavioral addiction model of revenge-seeking and violence, significant neurobiological and behavioral similarities between revenge-seeking, substance addiction, and other addictive behaviors warrant further investigation.

### **Preventing and Treating Gun Abuse**

Papachristos and colleagues’ research provides evidence that gun violence is not random and that gun-

shot survivors may “pass on” violence through “norms of retaliation” to others in their social networks, especially among young, minority male co-offenders engaged in risky behaviors in urban settings.<sup>46</sup> They argue against sweeping violence prevention policies based on broad categorical distinctions and in favor of “interventions and policies that consider the observable risky behavior of individuals.”<sup>47</sup>

If addiction is an appropriate framework for understanding the mechanisms of grievance, retaliation, and violence, then scientific and public health-oriented strategies used for addressing substance and behavioral addictions should be considered for preventing and treating gun abuse and other forms of violent behavior.<sup>48</sup> Such strategies may include cognitive behavioral therapy, motivational interviewing, psychosocial approaches, peer recovery services, and 12-step self-help approaches.<sup>49</sup> Pharmaceuticals such as naltrexone and nalmefene have shown efficacy in reducing cravings in some behavioral addictions, and might be tested for effectiveness in reducing compulsive revenge cravings that lead to violence.<sup>50</sup>

A recent pilot study demonstrated preliminary efficacy of a promising motive control intervention — the Nonjustice System (NJS) — designed specifically to reduce revenge cravings by combining aspects of cognitive strategies, psychodrama, criminal justice theory, and wisdom traditions.<sup>51</sup> The intervention is a 9-step role-play in which aggrieved individuals explore their desire for revenge and possible alternatives through an imaginary mock trial of their perpetrator. Employed either as an online self-help tool or led by a trained facilitator in one-on-one or group sessions, individuals imaginatively play the roles of complainant, prosecutor, defendant, witness, defense lawyer, judge, jury, witness to administration of punishments, and judge of their own lives. A series of prompts guide individuals through each role and ask how they are feeling as the prosecution and punishment move forward.

In the pilot study, thirty-six adults experiencing repeated and intrusive revenge urges or fantasies arising out of personal grievances were recruited from social service and community mental health agencies in a mid-sized northeastern U.S. city. After measuring participant revenge urges at baseline, each participant was exposed to an artificial personal grievance scenario — the deliberate killing of a beloved (imaginary) pet. Twenty-one participants experienced increased measurable revenge urges because of the grievance scenario and moved on to receive administration of the NJS intervention by a trained facilitator. Results for this group showed significant decreases in revenge urges and increases in benevolence toward the perpetrator both immediately after the NJS intervention

and at two-week follow-up, indicating efficacy. Findings from qualitative interviews identified greater awareness of self and other, “thinking things through,” and a sense of empowerment among participants.<sup>52</sup>

The NJS has been used by outreach workers in the Connecticut Violence Intervention Program in collaboration with Yale New Haven Hospital to help prevent lethal retaliatory violence in the aftermath of neighborhood shootings. The intervention is currently being adapted for use as a bullying victim support and prevention program by a children’s mental health clinic for schools. It has also been used in a peer support program for individuals with serious mental illness re-entering the community from Pennsylvania jails, with results for the overall program showing significant decreases in the rate of re-incarceration.<sup>53</sup>

While the NJS targets vengeance cravings among individuals with grievances, it has potential group, self-help, and peer to peer applications that can be integrated within public health strategies, as well as individual ‘treatment’ approaches. Mass media public health awareness campaigns that target vengeance cravings might also be employed with the aims of promoting positive change in individual health behaviors<sup>54</sup> and reducing negative behaviors.<sup>55</sup>

### Social and Cultural Factors in Gun Abuse

“Revenge cravings” may run along a continuum from: intense but short-lasting, or ongoing but fairly well contained and not meeting the requirements of an addiction diagnosis; to powerful, compulsive, heedless of negative consequences, and possibly meeting addiction diagnostic criteria. Correspondingly, help for individuals whose lives are negatively affected by revenge cravings may run along a similar continuum or range of support. Such supports offered to persons with revenge cravings need not suggest that harms inflicted by others (physical, emotional, financial) or society (structural poverty, racism, social exclusion) are invalid or should not be addressed. Supports at one end of the continuum and treatment at the other should be designed to empower people to heal from and work toward the mitigation and elimination of victimization and oppression, with special attention to the potential stigmatization and negative labeling of persons seeking help for their vengeance cravings, as has been the case, for example, with the negative labeling of persons with mental illnesses.<sup>56</sup>

A prevention and treatment approach may help to reduce gun abuse, but we must also attend to social and economic inequities that give rise to grievances and revenge cravings. Communities, typically poor and often overrepresented by people of color, can become trapped in cycles of violence due to lack of economic

opportunity, inadequate public education, unequal treatment by law enforcement, and infrastructural neglect. Scientific and public health prevention and treatment strategies for violence are not a substitute for improving social and economic conditions that contribute to violence. At the same time, the advent of such strategies could offer new resources and forms of support, self-empowerment, and self-determination to families and communities across the U.S. struggling to break cycles of violence.

Another consideration is to ensure that public health-oriented prevention and treatment approaches for reducing gun abuse and gun violence are not misused to stigmatize, pathologize, discriminate against, or control marginalized communities. Policymakers, law enforcement and criminal justice officials, the medical community, and other stakeholders must resist attempts to view particular groups or communities as “addicted to violent behavior.” Viewing gun abuse and revenge cravings within the framework of compulsive behavior or addiction and, potentially, “as a treatable, chronic medical disease involving complex interactions among brain circuits, genetics, the environment, and an individual’s life experiences”<sup>57</sup> should be a tool for helping individuals, communities, and societies live in safety and peace.

## Conclusion

There is strong evidence that the desire to seek revenge in response to a grievance is a primary motive behind most acts of violence. This evidence suggests that a behavioral addiction model of revenge-seeking might be valuable for addressing firearm violence across most populations and subgroups. Under such a model, guns might be understood as objects of addictive abuse by which some individuals with grievances compulsively seek the pleasure of gaining revenge, or relief from the distress caused by the grievance, by inflicting harm upon the perpetrator or their proxies.<sup>58</sup>

Seen in this light, medical, behavioral, educational, self-help, community, and faith-based interventions and supports for preventing, treating, and recovering from substance and behavioral addictions might be adapted to become, or serve as a basis for the development of, new interventions and programs to prevent and treat gun abuse, identify and reduce threats of violence, promote recovery, and restore and protect individual and community health. Such interventions might be integrated with public health approaches, as with screening, brief intervention, and referral to treatment for substance misuse, which produces short-term health improvements for individuals and may benefit population health as well.<sup>59</sup> More traditional public health-oriented prevention and educa-

tion campaigns might also be employed to increase awareness of the dangers of, and strategies to mitigate, compulsive revenge cravings that arise from grievances and that can lead to violence.

## Note

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# Rethinking the Medicalization of Violence: The Risks of a Behavioral Addiction Model

*Catherine Feuille*

In “A Behavioral Addiction Model of Revenge, Violence, and Gun Abuse,”<sup>1</sup> Kimmel and Rowe medicalize retaliatory violence, suggesting that an addiction model will empower communities plagued by gun violence to heal from victimization and oppression. However, promoting a medical model of violence may overly individuate a phenomenon better described by social problems, creating a bias for clinical intervention and *against* redressing structural failures that drive violent behavior. A medical model of violence risks pathologizing behavior rooted in social injustice.

This response aims to criticize Kimmel and Rowe’s *model*, not to dismiss effective medical or other individual-level interventions. Efforts to prevent individual retaliatory behavior — through cognitive behavioral therapy, the Nonjustice System, peer support services, etc. — have a legitimate role in violence prevention. But reframing violence as an addiction is not necessary to support individualized approaches, and we should resist a model that may further marginalize poor urban communities of color and potentially subvert the impetus for structural change.

## Medicalization and the Behavioral Addiction Model

“Medicalization” is a sociological term critiquing the process by which medical models produce an epistemological shift in the way we view human behavior, typically by pathologizing it. Using biomed-

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cal etiologies to reconceptualize behaviors that are largely socially determined tends to decontextualize and depoliticize social problems. By focusing causation on individual-level pathology, medicalization obscures community-level and structural solutions.<sup>2</sup> “A behavioral addiction model of revenge-seeking and violence” fits squarely within this frame. It redefines violent behavior in terms of neurobiological causation, thereby abstracting it from social context.

The scientific validity and clinical utility of “behavioral addiction” models are controversial among experts.<sup>3</sup> Only one so-called “behavioral addiction” (gambling) is classified as such in the *Diagnostic and Statistical Manual of Mental Disorders*.<sup>4</sup> Some well-respected experts, including professional associations, adamantly reject addiction models of behavior as empirically unsupported and unduly pathologizing.<sup>5</sup> Critiquing the empirical conclusions underlying Kimmel and Rowe’s model is beyond the scope of this commentary, which instead scrutinizes their model’s *societal implications*. But the considerable scientific skepticism about “behavioral addictions” nevertheless accentuates doubts about the value of modeling violence this way.

## Oppressive History of Medicalization

Because low-income, predominately-minority urban communities have the highest rates of gun violence<sup>6</sup> — and are therefore disproportionately implicated by Kimmel and Rowe’s model — we must consider how medicalization has historically oppressed poor people of color in the United States. During the Civil War era, fleeing enslavement was hypothesized as a mental illness, called “drapetomania.”<sup>7</sup> Early-twentieth-century eugenicists medicalized poverty and criminality as



rooted in heredity, leading to involuntary sterilization of poor women of color.<sup>8</sup> During the civil rights movement, psychiatrists medicalized civil unrest by reconceptualizing schizophrenia as a “Black disease” and institutionalizing Black protesters.<sup>9</sup> Medicalizing substance use has followed similar patterns. A 1985 medical report on prenatal cocaine exposure spawned the now-discredited, racist notion of “crack babies.” The ensuing moral panic motivated an onslaught of fetal protection laws, which are still used to prosecute predominantly poor women of color for using drugs during pregnancy.<sup>10</sup>

well-intentioned police and prosecutors making more arrests and filings to get people into court-ordered treatment.<sup>13</sup>

The addiction model has also motivated jail expansion. While jail populations are declining in our largest cities, they are increasing throughout most of the country due to a boom in jail construction, driven in part by jail officials’ desire to build specialized substance abuse treatment facilities. County jail systems have received state funding to expand existing facilities to increase treatment capacity and build new “therapeutic” detention centers. They have also diverted existing funds from social services to jail construction.<sup>14</sup>

This response aims to criticize Kimmel and Rowe’s *model*, not to dismiss effective medical or other individual-level interventions. Efforts to prevent individual retaliatory behavior — through cognitive behavioral therapy, the Nonjustice System, peer support services, etc. — have a legitimate role in violence prevention. But reframing violence as an addiction is not necessary to support individualized approaches, and we should resist a model that may further marginalize poor urban communities of color and potentially subvert the impetus for structural change.

### Addiction Model and Carceral Investment

A behavioral addiction model of revenge-seeking and violence may appeal to reformers who believe the “brain disease model of addiction” subverted the War on Drugs and expect that Kimmel and Rowe’s model could have similar decarcerating effects for violent crime. However, while treatment for substance abuse is essential, the addiction model has failed to elevate medical over carceral responses. In fact, it has fueled *new investment* in the criminal legal system. The carceral system has become America’s primary infrastructure for managing substance abuse since deinstitutionalization began in the 1960s,<sup>11</sup> and the addiction model follows this trend.

Between 1999 and 2004, as the “brain disease model of addiction” gained traction, drug treatment courts (DTCs) more than tripled in number, with over 3000 now operating in all fifty states.<sup>12</sup> Despite modestly reducing convictions, DTCs are an unmistakably carceral response. For example, even *successful* graduates of Santa Clara’s DTC spent an average of 51 days in jail due to sanctions. Failure results in enhanced prison sentences (judges disproportionately fail poor and nonwhite participants). DTCs may even widen carceral control: drug cases in Denver nearly tripled in the two years after it established a DTC, likely due to

Similar investments have been made in policing. For example, as Congress increasingly asserts that opioid abuse is a disease, it is doubling down on funding for police: in fiscal year 2018, Congress appropriated over \$300 million (an approximately 12% increase from the previous year) for law enforcement efforts to combat the opioid crisis.<sup>15</sup> Department of Justice-administered grants, as well as private foundation money, fund traditional drug interdiction, along with police initiatives to administer naloxone and refer people to treatment *after arresting them*.<sup>16</sup> While life-saving first-responder initiatives are essential, police are poorly suited to this role. However, because we have built our crisis response infrastructure around police and eviscerated social services, policies that aim to address addiction as a medical problem slot effortlessly (albeit perversely) into this extant carceral infrastructure.

These investments not only bolster a bureaucracy that devastates poor communities of color; they also detract from investment in community infrastructure that can prevent substance abuse or provide treatment that does not hinge on arrests, criminal charges, or jail stays.

## Risks of Medicalizing Violence

Applying the addiction model to violent behavior may produce similar investments in the carceral state: expanding jail systems to treat “revenge addiction,” investing in treatment courts for “violent criminals,” and funding police first-responder initiatives to diffuse “revenge cravings.” Any further investment in carceral infrastructure, however well-intentioned, will disproportionately harm communities of color. Moreover, ill-intentioned carceral investment seems equally likely *because* those most affected by violence are poor people of color. That is, the notion of “inner-city violence addicts” seems more likely to spark fear that would exacerbate over-policing and mass incarceration than to elicit empathy that would motivate public health interventions. As history reveals, medicalizing violence could easily become a tool of oppressive social control.

Furthermore, an addiction model that motivates carceral investment would detract from funding to redress structural failures that are empirically linked to high rates of violence — including inadequate social spending, low social mobility, residential segregation, and failing public infrastructure.<sup>17</sup>

More broadly, when social problems are redefined in medical terms, policymakers tend to prefer medical solutions because they are “less elusive” than reforming social policy; also, because medicalization locates problems in individual pathology, it can obscure the need for such reform.<sup>18</sup> Thus, an addiction model of violence may reduce political accountability for structural change — either through racial bias, which will favor a naturalized explanation of inner-city violence, or through political weaponization that characterizes these populations as victims of apolitical pathology rather than systemic government neglect that warrants remediation. This may be especially likely because addiction is highly stigmatized — research shows that Americans hold significantly more negative attitudes about people with addiction than people with mental illness (an already stigmatized group), including strong opposition to social policies aimed at helping them.<sup>19</sup> Notwithstanding Kimmel and Rowe’s assertions that their model is not a substitute for social reform, their model’s normative force, as well as the cognitive effect of shifting focus from a social to a neurobiological etiology of violence, may actually subvert such reform efforts. Moreover, it is not clear why this highly pathologizing and potentially stigmatizing model is needed to support clinical interventions to reduce violent behavior, such as cognitive behavioral therapy, motivational interviewing, or Kimmel and Rowe’s own Nonjustice System.

## Conclusion

With the recent surge in anti-racist activism — fueled by police murders of Black citizens and racial disparities in COVID-19 — cries to dismantle the carceral state and medical racism have become too loud to ignore. The legal and medical communities are rightly being called upon to center anti-racism in every aspect of our work. Pathologizing violence, and in so doing, abstracting it from structural inequality, is a step in the wrong direction. It will undermine the divestments and investments that affected communities are demanding.<sup>20</sup> A behavioral addiction model risks fueling investment in the carceral bureaucracy. Furthermore, it risks undercutting structural investments that research suggests may reduce violence at the community level — such as neighborhood revitalization, residential integration initiatives, and increased spending on education and welfare.<sup>21</sup>

Of course, community reinvestment should include funding community-based mental health treatment and violence interruption programs, which can support individuals to break out of cycles of violence even as other structures fail them. Indeed, recent reinvestment petitions have included these demands.<sup>22</sup> But a behavioral addiction model does not advance this cause. It places our focus on failures of neural circuitry, not on failures of our mental healthcare infrastructure or state funding priorities. This model’s potential to further marginalize poor urban communities could ironically undermine funding to expand access to individual-level violence prevention. And it risks detracting from efforts to fundamentally reshape a structural landscape in which violence, far from being pathological, is a means of survival.

## Note

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# Guests with Guns: Public Support for “No Carry” Defaults on Private Land

*Ian Ayres and Spurthi Jonnalagadda*

## Introduction

All fifty states and DC allow some form of concealed carry, with most states requiring individuals to obtain a permit before they can carry.<sup>1</sup> Concealed carry, whether with or without a license, grants broad privileges to carriers to travel with their firearm in public. Moreover, on privately owned land, many states permit invitees, guests, employees, and customers to carry concealed or unconcealed firearms onto the real property of other people unless expressly prohibited by the owner. Many states even allow uninvited strangers to enter other people’s rural land with firearms to hunt unless the landowner has “posted” the property with signs prohibiting trespassing. These legal rules create right-to-carry defaults that might conflict with landowner preferences and burden the ability of private property owners to control what happens on their premises.

An early draft of a forthcoming book (Ayres & Vars, forthcoming 2020) conjectured that a “majority of homeowners do not expect or desire dinner guests or repair people to bring concealed weapons onto their property.” One of the book’s anonymous reviewers responded, “Maybe in New Haven, but not necessarily in Tuscaloosa or Ft. Worth.” This study grew out of a desire to empirically test this majoritarian conjecture. To obtain information on preferences about what people think the default should be, as well as what the law is, concerning the right to carry firearms onto pri-

vate land, we administered a survey to a representative sample of 2000 people across the US. In line with our findings, we argue that there are compelling reasons to flip the right-to-carry default in favor of a “prohibited-unless-permitted” default that requires explicit permission before carrying a firearm onto private property.

## Theoretical Framework

Defaults are legal rules that govern parties in the absence of some explicit contrary agreement or altering action. Altering rules are the associated laws governing the necessary and sufficient conditions for displacing a default. Majoritarian defaults are set by lawmakers to reflect what a majority of parties prefer. Setting defaults to majority preference will often be efficient because majoritarian defaults can economize on transaction costs by eliminating the need to contract around the default.

However, there are a number of reasons why minoritarian defaults might produce more efficient or more equitable outcomes. For example, if transaction costs are greater for parties in the minority, setting the default to reflect the minority’s preference may allow the “low cost” majority to contract around the default more efficiently than the “high cost” minority would have.<sup>2</sup> Alternatively, lawmakers might intentionally set defaults that are dispreferred in order to induce the parties, by their express contracting, to reveal private information. These information-forcing benefits of such “penalty” defaults have been shown to justify a variety of minoritarian defaults.<sup>3</sup> Finally, and most relevant to what follows, minoritarian defaults might be justified by externality or paternalism concerns. When a particular contractual outcome gives rise to either of these concerns, lawmakers might choose a

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minoritarian default that mitigates these concerns, relying on the inertial tendency of parties to stick with the default.<sup>4</sup> An externality-reducing default can be especially effective if combined with impeding altering rules that make the default stickier.

In the context of guns, a “no guns” default might be justified as a majoritarian rule to the extent that our survey evidence finds broad support for flipping the “permitted-unless-prohibited” presumption. Or, a “no guns” default might be justified as externality-reducing, even if only a minority support this presumption. Given the inertial tendency to stick with the status quo, lawmakers should expect that a “prohibited-unless-permitted” default would radically expand the private spaces where guns could not be carried. Reducing the number of places available for gun carriers to travel freely with their firearms might have knock-on effects, reducing preferences to carry and possess firearms more generally, as it becomes increasingly inconvenient to do so.<sup>5</sup>

### Legislative Landscape

Federal law prohibits concealed carry of a firearm in federal property, airports and airplanes, the Capitol building, and school areas.<sup>6</sup> Some states have expanded upon these limitations to include places of worship, hospitals and other healthcare facilities, sports arenas, alcohol outlets, and a few other places.<sup>7</sup>

Four jurisdictions have flipped defaults for private dwellings. In Louisiana, no one “may carry [a] concealed handgun into the private residence of another without first receiving the consent of that person”<sup>8</sup> and a similar statute exists in South Carolina.<sup>9</sup> D.C. states that “[the] carrying of a concealed pistol on private residential property shall be presumed to be prohibited unless otherwise authorized by the property owner.”<sup>10</sup> Arkansas requires individuals to inform a private property owner if they are carrying a firearm.<sup>11</sup> In 2003, Alaska amended its concealed carry statute to include that, “a person commits the crime of misconduct ... if the person ... knowingly possesses a deadly weapon ... within the residence of another person unless the person has first obtained the express permission of an adult residing there to bring a concealed deadly weapon within the residence.”<sup>12</sup>

Twenty-five states have flipped the default for hunting, requiring that hunters obtain permission before entering private property. Texas, for example, requires that hunters in counties with 3.3 million or more residents receive written permission and carry it with them so long as they are on the landowner’s property.<sup>13</sup> States that have not flipped the default often establish as an altering rule that landowners “post” their land

to indicate that no trespassing is allowed. States like North Carolina<sup>14</sup> and Missouri<sup>15</sup> make posting land easier by allowing property owners to paint purple marks along their property line. Vermont, in contrast, requires private landowners to post “Permission Only” signs around their property line, with “the owner’s name and a method by which to contact the property owner or a person authorized to provide permission” clearly printed on the posted notice.<sup>16</sup>

A few states have established “no carry” defaults for alcohol outlets<sup>17</sup> (and churches),<sup>18</sup> but no state has adopted generalized “no carry” defaults for retail establishments. States that recognize the rights of private property owners to control the carry of firearms onto their premises often make it burdensome to do so by imposing strict and specific altering rules, requiring, for example, posting multiple signs with minimum font sizes.<sup>19</sup> Other states encourage retail establishments to allow carry by immunizing them from tort liability if they allow, but not if they prevent, carry.<sup>20</sup>

All states, by remaining silent, effectively adopt a carry default that allows employees to bring guns onto their employers’ property unless explicitly prohibited by the employer. Twenty-five states have passed “bring your gun to work” mandatory rules that prohibit employers from banning the possession of guns in employees’ cars parked in the employer’s parking lot.<sup>21</sup> Kentucky allows employees to request an injunction against any employer who “fires, disciplines, demotes, or otherwise punishes an employee who is lawfully exercising” their right to leave a firearm in their car at work.<sup>22</sup>

Finally, all states, by default, allow tenants to possess firearms in their rental units, unless the lease explicitly prohibits it. A few states go further and prohibit landlords from restricting tenant firearm possession in leases, foreclosing landlords’ abilities to contract around this default.<sup>23</sup> Some states do not allow public housing to limit gun ownership,<sup>24</sup> but DC for example, has designated public housing as a gun-free zone.<sup>25</sup>

Our Online Appendix Table A1 summarizes the law in each of the fifty states and DC. As it stands, forty-seven jurisdictions allow carry into private residences, twenty-six allow employees to carry a firearm onto an employer’s parking lot, and twenty-five allow hunters to hunt on unposted rural lands, by default. All states have a carry default for places of employment and retail establishments (with some exceptions discussed above for bars and churches) and default or mandatory carry rights for rental units.

Table 1

**Proportion of Respondents Favoring “Carry” Default by Owner Context and Region**

Region	Total	Midwest	Mountain West	Northeast	South	West Coast	F-Test P-Value
N	2,000	533	138	367	604	358	
Rural land owners							
Hunters should be allowed to hunt without explicit consent	12.3%***	10.5%***	18.8%***	12.8%***	11.9%***	12.3%***	.1233
Home owners							
Service providers should be allowed to bring gun without permission	27.8%***	27%***	29.7%***	28.6%***	28.4%***	26.5%***	.9231
Friend should be allowed to bring gun without permission	32.1%***	31.5%***	36.2%***	33.8%***	32.8%***	28.8%***	.4654
Retailers							
Customers should be allowed to bring gun in business without permission	44.2%***	43.7%***	47.8%	45.4%*	44.7%***	41.6%***	.7341
Business should be protected from liability	61%***	60.4%***	64.5%***	61.3%***	60.5%***	61.1%***	.931
Employers							
Employee should be allowed to bring gun into work without permission	25.1%***	25.8%***	24.6%***	25.6%***	24.5%***	24.9%***	.989
Employee should be allowed to have gun in car at work without permission	68.3%***	69.4%***	79%***	65.4%***	71.5%***	60.3%***	.0002
Employee should be allowed to have gun in car even if employer objects	51.9%*	53.1%	57.2%*	48.8%	52.8%	49.7%	.3794
Landlords							
Tenant should be allowed to have gun without permission	67.1%***	68.9%***	77.4%***	63.5%***	67.2%***	64%***	.0259

Notes: F-Test p-value is for test that regional are jointly equal. Asterisks test whether proportion equals 50%: \* p < 10%, \*\* p < 5%, \*\*\* p < 1%.

**Methods**

We distributed a survey to 2000 individuals using YouGov, a custom research company that created a representative sample of individuals across demographic groups spanning the entirety of the United States based on the 2016 American Community Survey. Our respondents were selected through sample matching, wherein the final population was matched to a randomized target frame using a Euclidean distances metric.<sup>26</sup> The observations were collected from April 7–13, 2020 and are weighted based on demographic characteristics to further ensure that the sample is representative. We framed the survey as a series of seven vignettes, each presenting a different default rule.<sup>27</sup> We tested 5 different contexts of landowners: rural landowners, homeowners, retailers, employers, and landlords. In each context, we asked a question about what the respondent thinks the law should be, and a question about what the law is.

Our survey randomly assigned subjects to one of sixteen treatment groups in a 2x2x2x2 factorial design.<sup>28</sup> There were two global treatments. The first primed subjects as either landowners or gun owners. For example, subjects randomly assigned to the landowner frame were given the following vignette:

You are throwing a party at your home and you find out after the party ends that one of your friends had been carrying a firearm while at the party.

Should your family and friends be allowed to carry a gun onto your property without your explicit consent?

- Yes
- No

Does your state currently have laws that prevent acquaintances from carrying firearms into other people’s homes without their explicit consent?

- Yes
- No
- I don’t know

Subjects assigned to the gun-owner frame were asked the same questions, but the respondent was situated in the vignettes as the gun owner:

Your friends are throwing a party at their home. You are legally licensed to carry a gun and you do so while at the party.

We hypothesized that priming subjects to take the part of the gun-owner (landowner) might decrease (increase) respondent support for “no carry” defaults.

The second global treatment randomly assigned half the subjects to vignettes that included the word “concealed” in all the vignettes presented to the respondent. We hypothesized that priming subjects with vignettes emphasizing the shrouded nature of concealed carry would increase respondent support for “no carry” defaults. Balance tables presented in Online Appendix Tables A2 and A3 show that assignment to each of these two sets of framings was successfully randomized.

We also had two vignette-specific treatments. First, the vignette related to tort immunization for retail establishments was randomized among an “allow” or “prevent” condition, addressing whether tort immunity should exist for establishments that allow guns on their property or those that prevent gun carry. Second, in the vignette related to a “no hunting” default, subjects were randomly assigned to groups with two different altering rule descriptions: a no hunting “with-

out the explicit consent of the owner” condition or a no hunting “unless you post ‘No Trespassing’ signs” condition.

**Results**

*What the Law Should Be*

Table 1 reports our central results concerning respondent preferences across a variety of landowning contexts.<sup>29</sup>

We find only a small percentage of respondents (12.3%) report a preference for hunters to be allowed to hunt without the landowner’s explicit permission.<sup>30</sup> Similarly, less than a third of respondents support a “carry” default for service providers (27.8%) or friends and family (32.1%) with regard to home residences. These sample proportions are all statistically different from 50% ( $p < .01$ ). Only about one-quarter of respondents (25.1%) expressed support for a default right of employees to bring guns into their places of employment ( $p < .01$ ). A larger, but still minority proportion of respondents (44.2%), believe customers, by default, should be allowed to carry into retail establishments, and this percentage is again statistically different from 50%.

Table 1 indicates that respondent preferences were sensitive to particular carrying contexts. Two-thirds of respondents (67.1%) supported the default right of tenants to possess weapons on property they had rented, and this proportion was statistically greater than 50% ( $p < .01$ ). An even larger proportion (68.3%) support the default right of employees to keep guns in their cars on their employer’s parking lot ( $p < .01$ ). However only a bare majority (51.9%) supported the mandatory rule of many “bring your gun to work” statutes that grant a parking lot carry right, even if the employer objects, and this sample proportion was not statistically different than 50%. Finally, Table 1 shows that 61% of respondents support retailer businesses being immunized from tort liability, regardless of whether they allow or prevent gun carry in their stores.<sup>31</sup>

An important takeaway from Table 1 is the surprising consistency of respondent preferences across jurisdictions. The F-test results indicate there are no statistically significant differences in support for default carry rights for most of the contexts examined. For example, every region consistently disapproves of the hunting default — ranging from a high of 18.8% support in the Mountain West to a low of 10.5% in the Midwest. The only statistically significant regional dif-

Figure 1

**Logistic Regression Coefficients of “What the Law Should Be” by Demographics**

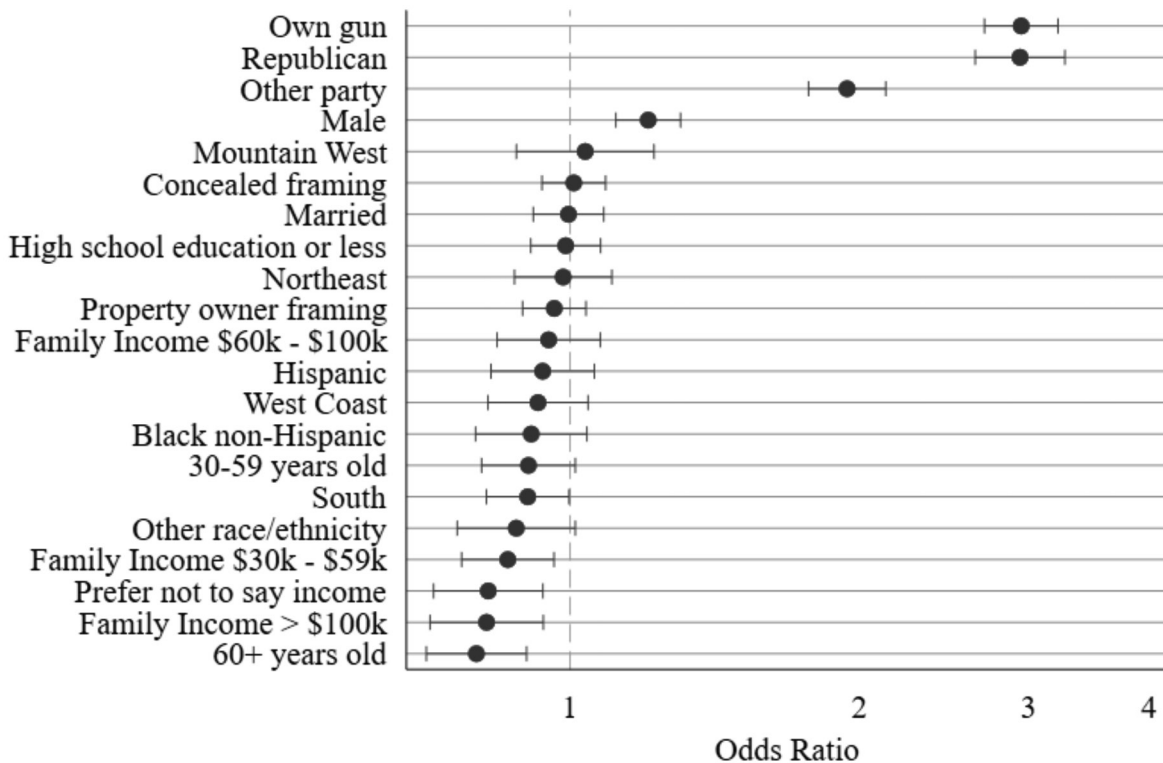


Table 2

**Prevalence of Respondents Being Uninformed and Misinformed about the Law**

	Carry Default		No Carry Default	
	Wrong about law	Don't know law	Wrong about law	Don't know law
Law concerning whether contractors can concealed carry without explicit consent	13.3%	76.8%	12.3%	76.7%
Law concerning whether customers can concealed carry without explicit consent	13.9%	65.6%	-	-
Law concerning whether employee can concealed carry without explicit consent	11.8%	68.8%	-	-
Law concerning whether employee must be able to store gun in car	12.7%	72.7%	9.0%	77.4%
Law concerning whether friends can concealed carry without explicit consent	18.0%	72.1%	12.3%	67.1%
Law concerning whether hunting is allowed without explicit consent	22.7%	65.6%	10.6%	68.6%
Law concerning whether tenant can concealed carry without explicit consent	23.4%	69.4%	-	-

ferences concern respondent beliefs around employees leaving guns in their cars and tenants being allowed to possess firearms without the landlord’s explicit consent. While we generally see that the Mountain West prefers the current default and the West Coast tends to favor default carry the least, the more important result is the surprising consistency of respondents’ support, or lack of support, in each context tested. Red states and blue states may differ substantially in their gun control regulations, but the citizens of these jurisdictions hold substantially similar beliefs about whether there should be a default right to carry firearms on other people’s property.

To explore how underlying demographic variables influence the support of individual respondents, we regressed answers to support questions in regressions that included question fixed effects and separately controlled for respondent race, gender, income, age education, political affiliations, and regional residence, as well as whether the respondent owns a gun. The underlying logistic and linear regressions can be found in Online Appendix Tables A8 and A9, respectively. Figure 1 summarizes the demographic influences from the logistic regression.

We find that gun owners, Republicans, individuals who identify as neither a Republican nor a Democrat and men are more likely to believe that the law ought, by default, to allow carry onto other people’s property. We find similar results for OLS specifications with the same controls (Online Appendix Table A9).

*What the Law Is*

Online Appendix Tables A10 and A11 show the results of specifications, regressing responses to our questions concerning the positive legal status of gun rights on the same demographic variables. These regressions do not find any consistent relationship between demographics and beliefs about what the law is. The more important survey result is that, as shown in Table 2, more than two-thirds of respondents reported not knowing whether their state, by default, allows firearms to be carried onto other people’s property in a

variety of landowning contexts. The table divides respondents into those who come from jurisdictions that have a carry default and those from jurisdictions that, by default, do not allow carrying in these contexts. The “No Carry Default” columns have some blanks because as discussed above, there are no jurisdictions that currently have a no-carry default for retail customers, employees or tenants.

The table also reports the proportion of respondents who hold mistaken beliefs about what the law is. For example, 22.7% of respondents residing in hunting default jurisdictions mistakenly believe that the law, by default, prevents third-party hunting, while 10.6% of respondents residing in no-hunting default jurisdictions mistakenly believe that hunting, by default, is allowed. The table indicates that the likelihood of being misinformed is more prevalent when the underlying default allows carrying firearms onto another person’s property.

Ignorance of the law can undermine the ability of individuals to exercise their rights as landowners and, more generally, as contractors. A homeowner who wrongly believes that repair people are, by default, not allowed to carry concealed weapons onto her property is less likely to explicitly condition entry on not carrying. In jurisdictions with a no-carry default with respect to private residences, such as South Carolina, misinformation about the law can lead a gun-owner to mistakenly bring a firearm onto another person’s property.

*Treatment Effects*

Table 3 summarizes the average effects of our global treatments. Regression results testing for treatment effects for individual questions using linear and logistic regressions can be found in A7 and A12, respectively, and a summary of responses by state is available in Online Appendix Tables A4 (what law should be) and A6 (what law is).

In designing the survey, we expected that participants who were framed in the vignettes as gunowners would be more likely to support a default right to carry



Table 3

**Average Effects for Property/Gun and Conceal Carry Frames**

Law should be (% believe law should allow carrying)			Law is (% believe law allows carrying)		
With Land Owner Framing	With Gun Owner Framing	P-Value	With Land Owner Framing	With Gun Owner Framing	P-Value
41.3%	41.5%	78.4%	45.2%	41.8%	3.4%
With Concealed Carry Framing	Without Concealed Carry Framing	P-Value	With Concealed Carry Framing	Without Concealed Carry Framing	P-Value
41.0%	41.8%	32.0%	45.6%	41.6%	1.4%

**Notes:** Percentages are averages of support for “carry” default across different owner contexts as described in the Appendix. P-values test whether frame proportions are equal.

than participants framed as landowners. As reported in Table 3, however, we find that the framing of the question did not significantly impact the proportion of people who believe the law should, by default, allow carrying on other people’s property ( $p > .7$ ).<sup>32</sup> Similarly, we expected that the concealed carry framing would induce greater normative concern with carry defaults, given the hidden nature of the weapon. However, our results again find no significant difference between vignettes with or without concealed carry framing on beliefs of what the law should be ( $p > .3$ ).

Table 3 does, however, find that participants who were framed in the vignettes as gun owners were significantly less likely to report that their jurisdiction, by default, allows carrying of firearms onto other people’s property (than participants framed as landowners). This result is surprising. The gun-owning condition caused different beliefs in what the law is — moreover it tended to make the treated group more mistaken, as it reduced the number of participants who believe their jurisdiction has a carry default, when most jurisdictions, for most contexts, by default, allow third-party firearm possession. One possible interpretation of this result is that when framed as gun-owners, survey respondents became more cynical about government providing appropriate legal rules. Online Appendix Table 13 shows, with linear regressions, that participants who were framed as a gun owner were significantly ( $p < .01$ ) more likely to believe that the law was consistent with what they believed the law should be, though the effect size was relatively small (1.9% estimated effect). Similarly, Table 3 shows that those participants exposed to the concealed carry framing were significantly more likely (than those who were not so exposed) to believe that the legal default permitted carry than those without that framing ( $p < .05$ ). This result is again consistent with a cynicism interpretation: as vignettes are framed to make gun carrying more dangerous, respondents are more likely to believe that the law provides the wrong default.

## Discussion

Our results strongly support a majoritarian justification for flipping to a “no carry” default onto rural lands for hunting, and into private residences and places of employment. We use majoritarian in a democratic, rather than in an outcome-based, sense. Our results reflect the preferences people have for what the law *should be*, not necessarily what they would choose for themselves. So, while people may prefer their own guests to carry, we find that people prefer a “no carry” default.

Flipping the default to coincide with what the majority of people want is democracy. Given that a substantial majority of people support a “no carry” default in these contexts, regardless of framing, there is a strong case for flipping the legal default to match their expectations. It also likely reduces transactional inefficiencies — like burdensome posting requirements or social invitations explicitly conditioned on invitees not carrying. States with posting requirements should flip the default to match the states that have already prohibited hunting without explicit landowner permission. Like South Carolina, Louisiana, DC, and Alaska, states should require individuals to seek explicit permission before entering a private dwelling.

Public preferences regarding defaults for retail establishments are not as overwhelming, but we still find statistically significant majorities rejecting the current “carry” default. In addition to this majoritarian evidence, there is also a substantial externality-reducing rationale for flipping the default. Following the 2019 WalMart shooting in El Paso, Texas, many retailers began to restrict the carry of firearms into their stores.<sup>33</sup> Costco prohibited anyone, except law enforcement officers, from carrying a firearm into its stores, justifying the policy as a means to “protect [its] members and employees” and WalMart requested that customers not openly carry firearms.<sup>34</sup>

Unfortunately, simply requesting that patrons refrain from carrying is not always effective, as some gun owners continue to carry into these establishments.<sup>35</sup> Retailers may fear customer backlash if they

erect signs restricting or permitting gun carry in their stores and may be inclined to abide by a state's default rule regardless of their preferences. Thus, establishments may not be well situated to contract around the right-to-carry default effectively and efficiently, even if they wish to.

Given the public safety concerns and difficulties for retailers to enforce no firearm policies on their own, states should flip the default, preventing individuals from carrying into an establishment without explicit permission to do so. Retailers who are comfortable

Once flipped, states would need to educate gun owners that they are not permitted to carry freely onto private property. Federally licensed dealers could distribute materials at time of sale and states requiring permits or training for public carry could include this information as part of their instruction. While we do not make any strong prescriptions for penalties, states may consider imposing civil penalties on individuals who violate our proposed default by carrying firearms onto private property without the owner's permission. This may include imposing a civil fine for a

**Our results strongly support a majoritarian justification for flipping to a “no carry” default onto rural lands for hunting, and into private residences and places of employment. We use majoritarian in a democratic, rather than in an outcome-based, sense. Our results reflect the preferences people have for what the law *should be*, not necessarily what they would choose for themselves. So, while people may prefer their own guests to carry, we find that people prefer a “no carry” default.**

permitting firearms in their stores can contract around this default and lawmakers need not impose overly onerous altering rules.

States that currently restrict the ability of employers to prevent employees from storing guns in their car while parked on the employer's parking lot unreasonably curtail the property rights of employers. While our results do not provide a majoritarian rationale for flipping the default, states ought to at least transform these “bring your gun to work” mandatory rules into mere defaults, maintaining the ability for employer landowners to post signs or contractually limit firearm carry onto their parking lots.

Similarly, statutes limiting a landlord's ability to contract around the tenant possession default also inappropriately limit the landlord's property rights and freedom of contract. Though our results do not provide a majoritarian justification, flipping the default may still be beneficial. Landlords may wish to know which of their tenants are armed, especially given instances where landlords have been shot by tenants in rent and eviction disputes.<sup>36</sup> While *Heller* prevents the government from limiting the ability to possess a firearm in the home, a private property owner is well within her right to do so. By flipping the default, we incentivize the gun owner to reveal that information to the landlord, allowing the landlord to be on notice of which tenants are carrying in their rental units.

first offense and requiring individuals to forfeit their gun and/or registering them in the NICS database — prohibiting future firearms purchases — upon further transgressions.

### Conclusion

The right to bear arms can only be exercised upon particular pieces of land. The Supreme Court's *Heller* decision firmly annunciates an individual right to possess firearms in one's own home.<sup>37</sup> The extent of the right to carry on streets, parks, and in other public places remains an open question.<sup>38</sup> But a substantial portion of the U.S. landmass is privately owned.

Landowners have a powerful self-defense interest to control whether invitees, licensees or tenants carry firearms onto their land. But right-to-carry defaults can undermine this central attribute of ownership. When Alaska's legislature was considering altering its right-to-carry default for private property, the Executive Director of the Alaska Network on Domestic Violence & Sexual Assault testified that “[when] a person carries concealed, that takes away my right to make a choice about whether or not I want to be in the presence of that weapon.”<sup>39</sup> The presumptive right to carry concealed weapons onto other people's property takes away their opportunity to make informed choices about how best to remain secure.

We find that a substantial and statistically significant majority of Americans reject the default right to carry

weapons onto other people's residences, unoccupied rural land, retail establishments and businesses. Moreover, we find consistent majoritarian preference not just in the blue coastal regions, but in the all regions of the country. Since many defaults are never altered, "no carry" defaults are public-regarding by radically expanding the areas that are de jure gun free. Restricting the places where guns can be possessed can not only reduce the likelihood of impulsive misuse of firearms — a likely explanation for Missouri's "no carry" default in bars — and the settings (especially automobiles) from which guns can be stolen,<sup>40</sup> such restrictions might also, on the margin, reduce overall demand for gun ownership. While some people purchase guns solely to defend their homes, others may purchase in part for use in other contexts. As these contexts for use decrease, so too might the demand for guns.

#### Editor's Note

Additional materials for this article can be found in the Online Appendix.

#### Note

The authors do not have any conflicts of interest to disclose.

#### Acknowledgment

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- See, e.g., Minn. Stat. Ann. § 624.714 (West 2019).
- See, e.g., Miss. Code Ann. §45-9-51 (West 2019).
- D.C. Code Ann. § 22-4503.02 (West 2019).
- A more detailed explanation can be found in the online appendix. YouGov has also been used in, I. Ayres and F. Vars, "Gun Owners Support the Right Not to Bear Arms," *Emory Law Review* (forthcoming).
- The full survey can be found in the Online Appendix.
- The survey also randomized the order in which vignettes were presented and subjects were randomized into two groups: in one group, "No" appeared first throughout the survey, and in the other, "Yes" appeared first (with "I don't know" always appearing at the end).
- Analogous results by state are available in Online Appendix Table A4. We also present similar tables for beliefs about what the law is by region and state in Online Appendix Tables A5 and A6, respectively.
- Appendix Table A7 presents linear regressions testing for treatment effects on each question — both with and without controls — and finds statistically significant treatment effects. Specifically, the "explicit consent" group was 10.5 percentage points less likely than the "No Trespassing" to say that the law should by default allow such hunting and 33 percentage points less likely to believe that that their state had such a law. This aspect of the experiments shows that altering rules can materially impact public support for the law. See Ayres, *supra* note 5.
- 60.8% of individuals said businesses should have immunity if they prevented individuals from carrying guns, while 61.1% said businesses should have immunity if they allowed individuals to carry guns. These differences were not statistically significant ( $p > .8$ ).
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# Guests with Guns: Public Support for “No Carry” Defaults on Private Land

Ian Ayres and Spurthi Jonnalagadda

## APPENDIX

Table A1

### Default Carry Rules Across the US

State	Carry default for invitees on private property	Carry default for retail establishment	Carry default for workplace	Mandatory carry for employer parking lot	Carry default for tenants	Carry default for hunting on unposted rural land
Alabama	Y	Y	Y	Y	Y	N
				Ala. Code § 13A-11-90 (West 2019).		Ala. Code § 9-11-241–241 (West 2019).
Alaska	N	Y	Y	Y	Y	Y
	Alaska Stat. Ann. § 11.61.220 (West 2019).			Alaska Stat. § 18.65.800 (West 2019).		
Arizona	Y	Y	Y	Y	Y	Y
				Ariz. Rev. Stat. § 12.781 (West 2019).		
Arkansas	Y	Y	Y	Y	Y	Y
				Ark. Code Ann. § 5-73-306 (West 2018).		
California	Y	Y	Y	N	Y	Y
Colorado	Y	Y	Y	N	Y	N
						Colo. Rev. Stat. Ann. § 33-6-116 (West 2019).
Connecticut	Y	Y	Y	N	Y	N
						Conn. Gen. Stat. § 26-65 (West 2019).
Delaware	Y	Y	Y	N	Y	N
						Del. Code Ann. Tit. 7, § 714 (West 2019).
D.C.	N	Y	Y	N	Y	N
	D.C. Code Ann. § 7-2509.07 (West 2019).					D.C. Code Ann. § 22-3302 (West 2019).
Florida	Y	Y	Y	Y	Y	Y
				Fla. Stat. Ann. § 790.251 (West 2020).		
Georgia	Y	Y	Y	Y	Y	N
				Ga. Code Ann. § 16-11-135 (West 2019).		Ga. Code Ann. § 27-3-1 (West 2019).

# APPENDIX

Table A1 (continued)

## Default Carry Rules Across the US

State	Carry default for invitees on private property	Carry default for retail establishment	Carry default for workplace	Mandatory carry for employer parking lot	Carry default for tenants	Carry default for hunting on unposted rural land
Hawaii	Y	Y	Y	N	Y	N
						Haw. Rev. Stat. Ann. § 183D-26 (West 2019).
Idaho	Y	Y	Y	N	Y	Y
Illinois	Y	Y	Y	Y	Y	N
				430 Ill. Comp. Stat. Ann. 66/65 (West 2020).		520 Ill. Comp. Stat. Ann. 5/2.33 (West 2020).
Indiana	Y	Y	Y	Y	Y	N
				Ind. Code Ann. § 35-47-2-1 (West 2019).		Ind. Code Ann. § 14-22-10-1 (West 2019).
Iowa	Y	Y	Y	N	Y	N
						Iowa Code Ann. § 716.7 (West 2020).
Kansas	Y	Y	Y	Y	Y	N
				Kan. Stat. Ann. § 75-7c10 (West 2019).		Kan. Stat. Ann. § 21-5810 (West 2019).
Kentucky	Y	Y	Y	Y	Y	N
				Ky. Rev. Stat. Ann. § 237.106 (West 2019).		Ky. Rev. Stat. Ann. § 150.092 (West 2019).
Louisiana	N	Y	Y	Y	Y	N
	La. Stat. Ann. § 40:1397.3 (West 2020)			La. Rev. Stat. § 32:292.1 (West 2020).		La. Stat. Ann. § 56:265 (West 2020).
Maine	Y	Y	Y	Y	Y	Y
				Me. Rev. Stat. tit. 26 §600 (West 2019).		
Maryland	Y	Y	Y	N	Y	N
						Md. Code Ann., Nat. Res. § 10-411 (West 2019).
Massachusetts	Y	Y	Y	N	Y	Y
Michigan	Y	Y	Y	N	Y	Y
Minnesota	Y	Y	Y	Y	Y	Y
				Minn. Stat. § 624.714 (West 2020).		
Mississippi	Y	Y	Y	Y	Y	Y
				Miss. Code. Ann. § 45-9-55 (West 2019).		

# APPENDIX

Table A1 (continued)

## Default Carry Rules Across the US

State	Carry default for invitees on private property	Carry default for retail establishment	Carry default for workplace	Mandatory carry for employer parking lot	Carry default for tenants	Carry default for hunting on unposted rural land
Missouri	Y	Y	Y	Y	Y	N
				Mo. Rev. Stat. § 571.030 (West 2020).		Mo. Ann. Stat. § 578.520 (West 2020).
Montana	Y	Y	Y	N	Y	N
						Mont. Code Ann. § 87-6-415 (West 2019).
Nebraska	Y	Y	Y	Y	Y	Y
				Neb. Rev. Stat. Ann. § 69-2441 (West 2019).		
Nevada	Y	Y	Y	N	Y	Y
New Hampshire	Y	Y	Y	N	Y	Y
New Jersey	Y	Y	Y	N	Y	Y
New Mexico	Y	Y	Y	N	Y	Y
New York	Y	Y	Y	N	Y	Y
North Carolina	Y	Y	Y	Y	Y	Y
				N.C. Gen. Stat. § 14-269.2 (West 2018).		
North Dakota	Y	Y	Y	Y	Y	Y
				N.D. Cent. Code § 62.1-02-13 (West 2019).		
Ohio	Y	Y	Y	Y	Y	N
				Ohio Rev. Code Ann. § 2923.1210 (West 2019).		Ohio Rev. Code Ann. § 1533.17 (West 2019).
Oklahoma	Y	Y	Y	Y	Y	N
				Okla. Stat. tit. 21, § 31290.22 (West 2020).		Okla. Stat. Ann. tit.29, §5-202. (West 2020).
Oregon	Y	Y	Y	N	Y	Y
Pennsylvania	Y	Y	Y	N	Y	Y
Rhode Island	Y	Y	Y	N	Y	N
						20 R.I. Gen. Laws Ann. § 20-15-1 (West 2019).
South Carolina	N	Y	Y	N	Y	N
	S.C. Code Ann. § 23-31-225 (West 2019).					S.C. Code Ann. § 50-1-90 (West 2019).

# APPENDIX

Table A1 (continued)

## Default Carry Rules Across the US

State	Carry default for invitees on private property	Carry default for retail establishment	Carry default for workplace	Mandatory carry for employer parking lot	Carry default for tenants	Carry default for hunting on unposted rural land
South Dakota	Y	Y	Y	N	Y	N
						S. D. Codified Laws § 41-9-1 (West 2019).
Tennessee	Y	Y	Y	Y	Y	N
				Tenn. Code Ann. § 39-17-1313 (West 2019).		Tenn. Code Ann. § 70-4-106 (West 2019).
Texas	Y	Y	Y	Y	Y	N
				Tex. Lab. Code Ann. § 52.061 (West 2019).		Tex. Park & Wild. Code Ann. § 62.012 (West 2019).
Utah	Y	Y	Y	Y	Y	Y
				Utah Code Ann. § 34-45-103 (West 2019).		
Vermont	Y	Y	Y	N	Y	Y
Virginia	Y	Y	Y	N	Y	N
						Va. Code Ann. § 18.8-132 (West 2019).
Washington	Y	Y	Y	N	Y	N
						Wash. Rev. Code Ann. § 77.15.435 (West 2020).
West Virginia	Y	Y	Y	Y	Y	Y
				W.Va. Code § 8-12-5a (West 2019).		
Wisconsin	Y	Y	Y	Y	Y	Y
				Wis. Stat. § 943.13 (West 2019).		
Wyoming	Y	Y	Y	N	Y	N
						Wyo. Stat. Ann. § 23-3-305 (West 2019).
<b>Total (Default)</b>	<b>47</b>	<b>51</b>	<b>51</b>	<b>26</b>	<b>51</b>	<b>25</b>

**Note:** We do not count any states that have a mandatory “Bring Your Gun to Work” rule for employer parking lots as a default carry.

# APPENDIX

Table A2

## Concealed Framing Balance

Variable	(1) No concealed framing Mean/SE	(2) Concealed framing Mean/SE	t-test p-value (1)-(2)
Northeast	0.271 [0.015]	0.286 [0.015]	0.486
Midwest	0.071 [0.009]	0.060 [0.008]	0.319
South	0.177 [0.013]	0.176 [0.012]	0.973
West Coast	0.308 [0.015]	0.307 [0.015]	0.959
Black non-Hispanic	0.108 [0.010]	0.133 [0.011]	0.104
White non-Hispanic	0.649 [0.016]	0.621 [0.016]	0.232
Hispanic	0.156 [0.013]	0.163 [0.013]	0.717
Other race/ethnicity	0.087 [0.009]	0.083 [0.009]	0.745
Male	0.507 [0.017]	0.467 [0.016]	0.088*
18-29 years old	0.195 [0.014]	0.184 [0.013]	0.570
30-59 years old	0.468 [0.017]	0.487 [0.016]	0.412
60+ years old	0.337 [0.015]	0.329 [0.015]	0.706
Family Income < \$30k	0.237 [0.015]	0.273 [0.015]	0.088*
Family Income \$30k - \$59k	0.274 [0.015]	0.231 [0.014]	0.033**
Family Income \$60k - \$99k	0.188 [0.013]	0.191 [0.013]	0.855
Family Income > \$100k	0.157 [0.012]	0.168 [0.012]	0.495
Married	0.508 [0.017]	0.487 [0.016]	0.369
High school education or less	0.389 [0.016]	0.397 [0.016]	0.720
Republican	0.270 [0.015]	0.247 [0.014]	0.260
Democrat	0.341 [0.016]	0.378 [0.016]	0.102
Other party	0.389 [0.016]	0.375 [0.016]	0.548
Own gun	0.319 [0.015]	0.306 [0.015]	0.577
N	1000	1000	
F-test of joint significance (p-value)			0.695
F-test, number of observations			2000

The value displayed for t-tests are p-values.

The value displayed for F-tests are p-values.

Standard errors are robust.

\*\*\*, \*\*, and \* indicate significance at the 1, 5, and 10 percent critical level.



# APPENDIX

Table A3

## Property Owner Framing Balance

Variable	(1) Gun owner framing Mean/SE	(2) Property owner framing Mean/SE	t-test p-value (1)-(2)
Northeast	0.290 [0.015]	0.266 [0.015]	0.239
Midwest	0.067 [0.008]	0.064 [0.008]	0.777
South	0.168 [0.012]	0.185 [0.013]	0.340
West Coast	0.298 [0.015]	0.318 [0.016]	0.347
Black non-Hispanic	0.118 [0.011]	0.122 [0.011]	0.818
White non-Hispanic	0.633 [0.016]	0.637 [0.016]	0.856
Hispanic	0.157 [0.013]	0.163 [0.013]	0.732
Other race/ethnicity	0.092 [0.009]	0.078 [0.009]	0.271
Male	0.475 [0.017]	0.499 [0.017]	0.312
18-29 years old	0.186 [0.014]	0.194 [0.014]	0.700
30-59 years old	0.472 [0.016]	0.483 [0.017]	0.648
60+ years old	0.342 [0.016]	0.324 [0.015]	0.408
Family Income < \$30k	0.262 [0.015]	0.247 [0.014]	0.463
Family Income \$30k - \$59k	0.242 [0.014]	0.263 [0.014]	0.286
Family Income \$60k - \$99k	0.195 [0.013]	0.184 [0.013]	0.543
Family Income > \$100k	0.168 [0.012]	0.157 [0.012]	0.515
Married	0.519 [0.016]	0.477 [0.017]	0.072*
High school education or less	0.378 [0.016]	0.408 [0.016]	0.192
Republican	0.250 [0.014]	0.267 [0.015]	0.410
Democrat	0.359 [0.016]	0.360 [0.016]	0.947
Other party	0.391 [0.016]	0.372 [0.016]	0.419
Own gun	0.306 [0.015]	0.320 [0.015]	0.520
N	1009	991	
F-test of joint significance (p-value)			0.720
F-test, number of observations			2000

The value displayed for t-tests are p-values.

The value displayed for F-tests are p-values.

Standard errors are robust.

\*\*\*, \*\*, and \* indicate significance at the 1, 5, and 10 percent critical level.

# APPENDIX

Table A4

## State-Level Summary of Opinions on What the Law Should Be

State	N	Phumber should be allowed to bring gun without permission	Friend should be allowed to bring gun without permission	Customers should be allowed to bring gun in business	Business should be protected from liability	Employee should be allowed to bring gun into work without permission	Employee should be allowed to have gun in car at work without permission	Employee should be allowed to have gun in car even if employer objects	Tenant should be allowed to have gun without permission	Hunters should be allowed to hunt without explicit consent
Total	2000	27.8%***	32.1%***	44.2%***	61%***	25.1%***	68.3%***	51.9%*	67.1%***	12.3%***
Alabama	31	35.5%*	48.4%	51.6%	80.6%***	38.7%	90.3%***	61.3%	71%***	9.7%***
Alaska	7	14.3%***	0%***	57.1%	57.1%	28.6%	100%***	57.1%	85.7%***	14.3%***
Arizona	51	19.6%***	33.3%***	43.1%	66.7%***	17.6%***	72.5%***	52.9%	84.3%***	15.7%***
Arkansas	20	35%	40%	45%	45%	35%	65%	60%	85%***	15%***
California	245	22.9%***	26.1%***	36.7%***	59.8%***	22%***	54.7%	47.8%	60%***	13.9%***
Colorado	12	25%**	33.3%	50%	75%**	16.7%***	83.3%***	50%	75%**	41.7%
Connecticut	17	23.5%***	29.4%*	47.1%	70.6%*	23.5%***	88.2%***	70.6%*	76.5%***	11.8%***
Delaware	3	33.3%	66.7%	100%***	66.7%	66.7%	66.7%	33.3%	100%***	0%***
District of Columbia	6	16.7%**	0%***	16.7%**	16.7%**	16.7%**	66.7%	50%	16.7%**	0%***
Florida	152	28.9%***	30.9%***	45.4%	63.6%***	25%***	69.7%***	55.9%	61.8%***	15.8%***
Georgia	74	33.8%***	39.2%*	47.3%	48.6%	28.4%***	67.6%***	45.9%	68.9%***	8.1%***
Hawaii	5	0%***	20%*	0%***	60%	20%*	80%*	40%	20%*	0%***
Idaho	11	27.3%*	45.5%	54.5%	63.6%	36.4%	81.8%***	63.6%	81.8%***	9.1%***
Illinois	82	23.2%***	26.8%***	35.4%***	64.6%***	24.4%***	61%**	40.2%*	63.4%***	15.9%***
Indiana	48	33.3%***	33.3%***	52.1%	50%	29.2%***	77.1%***	62.5%*	66.7%***	6.3%***
Iowa	22	40.9%	31.8%*	36.4%	54.5%	22.7%***	68.2%*	50%	77.3%***	0%***
Kansas	13	30.8%	46.2%	53.8%	61.5%	38.5%	76.9%***	61.5%	84.6%***	7.7%***
Kentucky	28	48.1%	53.6%	57.1%	64.3%	53.6%	89.3%***	71.4%***	75%***	10.7%***
Louisiana	23	30.4%**	34.8%	30.1%	60.9%	21.7%***	87%***	69.6%**	65.2%	21.7%***
Maine	11	45.5%	45.5%	81.8%***	72.7%*	54.5%	81.8%***	63.6%	72.7%*	45.5%
Maryland	43	11.6%***	16.3%***	34.9%**	65.1%**	9.3%***	69.8%***	46.5%	67.4%***	7%***
Massachusetts	40	30%***	22.5%***	37.5%	57.5%	17.5%***	60%	37.5%	60%	2.5%***
Michigan	58	31%***	31%***	43.1%	53.4%	34.5%***	69%***	53.4%	69%***	3.4%***
Minnesota	14	42.9%	35.7%	50%	55.7%	35.7%	71.4%*	71.4%*	78.6%***	28.6%*
Mississippi	12	16.7%***	25%**	25%**	33.3%	25%**	58.3%	25%**	66.7%	8.3%***
Missouri	37	24.3%***	21.6%***	43.2%	64.9%*	8.3%***	70.3%***	56.8%	62.2%	5.4%***
Montana	6	33.3%	33.3%	50%	100%***	50%	83.3%**	33.3%	83.3%**	16.7%**
Nebraska	18	44.4%	44.4%	50%	66.7%	38.9%	72.2%**	55.6%	66.7%	16.7%***
Nevada	27	44.4%	29.6%**	48.1%	66.7%*	29.6%**	92.6%***	70.4%**	74.1%***	25.9%***
New Hampshire	5	20%*	60%	20%*	60%	20%*	100%***	80%*	100%***	40%
New Jersey	57	21.1%***	22.8%***	33.3%***	56.1%	21.1%***	59.6%	45.6%	59.6%	15.8%***
New Mexico	12	25%**	25%**	41.7%	25%**	25%**	58.3%	41.7%	45.2%	8.3%***
New York	129	28.7%***	34.9%***	38%***	61.2%***	22.5%***	56.6%	41.1%**	55.8%	12.4%***
North Carolina	83	27.7%***	32.5%***	48.2%	60.2%*	24.1%***	72.3%***	50.6%	79.5%***	18.1%***
North Dakota	2	50%	100%***	50%	50%	50%	50%	50%	100%***	50%
Ohio	60	23.3%***	35%***	40%	68.3%***	18.3%***	71.7%***	53.3%	66.7%***	8.3%***
Oklahoma	21	28.6%**	38.1%	52.4%	61.9%	38.1%	81%***	57.1%	90.5%***	0%***
Oregon	39	38.5%	38.5%	48.7%	71.8%***	35.9%*	59%	51.3%	74.4%***	7.7%***
Pennsylvania	108	31.5%***	40.7%*	58.9%*	63%***	32.4%***	74.1%***	57.4%	71.3%***	11.1%***
Rhode Island	6	16.7%**	16.7%**	50%	83.3%**	0%***	83.3%**	83.3%**	50%	0%***
South Carolina	37	8.1%***	13.5%***	32.4%**	62.2%	21.6%***	59.5%	43.2%	54.1%	5.4%***
South Dakota	5	0%***	40%	40%	60%	40%	60%	40%	40%	0%***
Tennessee	35	28.6%***	25.7%***	42.9%	45.7%	8.0%***	62.9%	37.1%	65.7%*	5.7%***
Texas	94	24.5%***	27.7%***	34%***	58.5%*	18.1%***	68.1%***	51.1%	68.1%***	11.7%***
Utah	19	42.1%	57.9%	57.9%	63.2%	26.3%***	84.2%***	68.4%*	78.9%***	15.8%***
Vermont	2	50%	50%	50%	50%	50%	50%	50%	50%	0%***
Virginia	61	23%***	34.4%***	55.7%	77%***	24.6%***	75.4%***	50.8%	70.5%***	18%***
Washington	62	37.1%**	37.1%**	58.1%	59.7%	29%***	77.4%***	56.5%	74.2%***	9.7%***
West Virginia	16	43.8%	43.8%	62.5%	56.3%	31.3%	62.5%	56.3%	75%**	0%***
Wisconsin	31	22.6%***	38.7%	48.4%	61.3%	22.6%***	71%***	74.2%***	61.3%	16.1%***
F-Test P-Value		.1278	.0277	.0148	.1833	.0133	.0002	.0609	.0038	.0038
Number of states with marginally or statistically significant differences		35	30	14	22	34	34	13	37	46

# APPENDIX

Table A5

## Region-level Summary of Beliefs About What the Law Is

	Region					Total
	Midwest	Mountain West	Northeast	South	West Coast	
	%	%	%	%	%	%
Plumber is allowed to bring gun without permission						
Yes	8.4	5.8	12.8	9.8	11.7	10.1
No	12.6	18.8	12.0	14.7	10.6	13.2
I don't know	79.0	75.4	75.2	75.5	77.7	76.8
Friend is allowed to bring gun without permission						
Yes	7.5	5.8	12.5	10.1	12.8	10.1
No	19.5	20.3	15.3	21.4	12.3	18.1
I don't know	73.0	73.9	72.2	68.5	74.9	71.9
Customers are allowed to bring gun into business						
Yes	18.6	21.7	16.1	20.0	17.3	18.6
No	15.8	18.1	16.1	16.4	14.0	15.8
I don't know	65.7	60.1	67.8	63.6	68.7	65.6
Employee is allowed to bring gun into work						
Yes	19.5	15.2	20.4	18.0	22.1	19.4
No	12.4	13.0	10.9	14.4	7.0	11.8
I don't know	68.1	71.7	68.7	67.5	70.9	68.8
Employee is allowed to have gun in car at work						
Yes	12.2	10.1	10.4	14.7	8.1	11.8
No	13.1	10.9	16.3	12.1	12.6	13.2
I don't know	74.7	79.0	73.3	73.2	79.3	75.1
Tenant is allowed to have gun without permission						
Yes	6.8	4.3	8.2	7.3	8.4	7.3
No	22.5	28.3	19.6	27.6	19.3	23.4
I don't know	70.7	67.4	72.2	65.1	72.3	69.3
Hunters are allowed to hunt without explicit consent						
Yes	23.1	18.8	26.4	21.9	20.7	22.6
No	10.7	7.2	11.4	11.4	9.2	10.5
I don't know	66.2	73.9	62.1	66.7	70.1	66.8



# APPENDIX

Table A8

## Logistic Regressions for Demographic and Treatment Effects on Opinions About What the Law Should Be

	(1) Odds ratio for agreeing law should allow behavior	(2) Odds ratio for agreeing law should allow behavior	(3) Odds ratio for agreeing law should allow behavior
Answer			
Property owner framing	0.991 (-0.26)	0.990 (-0.29)	0.963 (-0.97)
Concealed framing	0.967 (-0.99)	0.962 (-1.07)	1.009 (0.23)
Plumber should be allowed to bring gun without permission		1 (.)	1 (.)
Friend should be allowed to bring gun without permission		1.233*** (2.90)	1.266*** (3.09)
Customers should be allowed to bring gun in business		2.021*** (10.00)	2.216*** (10.66)
Employee should be allowed to bring gun into work		0.864* (-1.95)	0.849** (-2.05)
Employee should be allowed to have gun in car at work		5.488*** (23.48)	6.815*** (24.84)
Employee should be allowed to have gun in car if employer objects		2.762*** (14.49)	3.160*** (15.35)
Tenant should be allowed to have gun without permission		5.157*** (22.72)	6.360*** (23.90)
Hunters should be allowed to hunt without explicit consent		0.360*** (-11.54)	0.326*** (-11.71)
Midwest			1 (.)
Mountain West			1.037 (0.43)
Northeast			0.984 (-0.28)
South			0.904** (-2.00)
West Coast			0.926 (-1.25)
White non-Hispanic			1 (.)
Black non-Hispanic			0.911 (-1.37)
Hispanic			0.937 (-1.04)
Other race/ethnicity			0.879* (-1.78)
Male			1.206*** (4.74)
18-29 years old			1 (.)
30-59 years old			0.905* (-1.74)
60+ years old			0.799*** (-3.66)
Family Income < \$30k			1 (.)
Family Income \$30k - \$59k			0.862*** (-2.64)
Family Income \$60k - \$100k			0.950 (-0.81)
Family Income > \$100k			0.819*** (-2.88)
Prefer not to say income			0.822*** (-2.93)
Married			0.996 (-0.09)
High school education or less			0.990 (-0.24)
Democrat			1 (.)
Republican			2.937*** (19.67)
Other party			1.941*** (14.06)
Own gun			2.945*** (24.05)
Constant	0.721*** (-11.28)	0.405*** (-15.47)	0.188*** (-16.83)
Prevent			
Explicit consent			
Observations	15996	15996	15996

Exponentiated coefficients; t statistics in parentheses  
Coefficients are in terms of odds ratios.

# APPENDIX

Table A9

## Linear Regressions for Demographic and Treatment Effects on Opinions About What the Law Should Be

	(1) Linear regression for agreeing law should allow behavior	(2) Linear regression for agreeing law should allow behavior	(3) Linear regression for agreeing law should allow behavior
Property owner framing	-0.00215 (-0.29)	-0.00215 (-0.29)	-0.00699 (-0.97)
Concealed framing	-0.00803 (-1.06)	-0.00803 (-1.06)	0.00176 (0.24)
Prevent			
Explicit consent			
Service providers should be allowed to bring gun without permission	0 ( )	0 ( )	0 ( )
Friend should be allowed to bring gun without permission	0.0444*** (2.90)	0.0444*** (2.90)	0.0443*** (3.10)
Customers should be allowed to bring gun in business without permis	0.161*** (10.21)	0.161*** (10.21)	0.161*** (10.87)
Employee should be allowed to bring gun into work without permissi	-0.0288* (-1.96)	-0.0288* (-1.96)	-0.0288** (-2.06)
Employee should be allowed to have gun in car at work without perm	0.401*** (26.41)	0.401*** (26.41)	0.401*** (27.86)
Employee should be allowed to have gun in car even if employer obje	0.239*** (15.12)	0.239*** (15.12)	0.239*** (15.99)
Tenant should be allowed to have gun without permission	0.388*** (25.35)	0.388*** (25.35)	0.387*** (26.60)
Hunters should be allowed to hunt without explicit consent	-0.159*** (-12.05)	-0.159*** (-12.05)	-0.159*** (-12.26)
Midwest			0 ( )
Mountain West			0.00587 (0.37)
Northeast			-0.00335 (-0.30)
South			-0.0194** (-2.07)
West Coast			-0.0145 (-1.29)
White non-Hispanic			0 ( )
Black non-Hispanic			-0.0172 (-1.41)
Hispanic			-0.0123 (-1.05)
Other race/ethnicity			-0.0242* (-1.82)
Male			0.0344*** (4.66)
18-29 years old			0 ( )
30-59 years old			-0.0180* (-1.70)
60+ years old			-0.0409*** (-3.61)
Family Income < \$30k			0 ( )
Family Income \$30k - \$59k			-0.0271*** (-2.59)
Family Income \$60k - \$100k			-0.00911 (-0.77)
Family Income > \$100k			-0.0360*** (-2.86)
Prefer not to say income			-0.0365*** (-2.93)
Married			-0.00117 (-0.15)
High school education or less			-0.00212 (-0.27)
Democrat			0 ( )
Republican			0.203*** (19.90)
Other party			0.122*** (14.17)
Own gun			0.212*** (24.64)
Constant	0.288*** (24.18)	0.288*** (24.18)	0.162*** (9.07)
Observations	15996	15996	15996

t statistics in parentheses

# APPENDIX

Table A10

## Logistic Regressions for Demographic and Treatment Effects on Beliefs About What the Law Is

	(1) Odds ratio for believing law allows behavior	(2) Odds ratio for believing law allows behavior	(3) Odds ratio for believing law allows behavior
Answer			
Property owner framing	1.143** (2.03)	1.173** (2.34)	1.164** (2.19)
Concealed framing	1.170** (2.39)	1.172** (2.33)	1.165** (2.20)
Plumber is allowed to bring gun without permission		1 (.)	1 (.)
Friend is allowed to bring gun without permission		0.762** (-2.03)	0.765** (-2.01)
Customers are allowed to bring gun into business		2.092*** (5.81)	2.120*** (5.89)
Employee is allowed to bring gun into work		2.255*** (6.24)	2.290*** (6.38)
Employee is allowed to have gun in car at work		1.242 (1.61)	1.245 (1.62)
Tenant is allowed to have gun without permission		0.442*** (-5.89)	0.445*** (-5.86)
Hunters are allowed to hunt without explicit consent		0.765** (-2.06)	0.765** (-2.06)
Midwest			1 (.)
Mountain West			0.899 (-0.72)
Northeast			1.218* (1.86)
South			1.071 (0.76)
West Coast			1.222* (1.78)
White non-Hispanic			1 (.)
Black non-Hispanic			1.126 (1.05)
Hispanic			1.153 (1.30)
Other race/ethnicity			0.936 (-0.54)
Male			0.971 (-0.41)
18-29 years old			1 (.)
30-59 years old			1.074 (0.66)
60+ years old			0.927 (-0.64)
Family Income < \$30k			1 (.)
Family Income \$30k - \$59k			1.109 (1.00)
Family Income \$60k - \$100k			1.170 (1.40)
Family Income > \$100k			1.059 (0.47)
Prefer not to say income			0.909 (-0.72)
Married			0.885 (-1.60)
High school education or less			0.921 (-1.07)
Democrat			1 (.)
Republican			1.129 (1.30)
Other party			1.071 (0.77)
Own gun			1.126 (1.59)
Constant	0.667*** (-7.10)	0.600*** (-4.71)	0.495*** (-3.94)
Prevent			
Explicit consent			
Observations	4113	4113	4113

Exponentiated coefficients; t statistics in parentheses  
Coefficients are in terms of odds ratios.

# APPENDIX

Table A1 I

## Linear Regressions for Demographic and Treatment Effects on Opinions About What the Law Should Be

	(1) Linear regressions for believing law allows behavior	(2) Linear regressions for believing law allows behavior	(3) Linear regressions for believing law allows behavior
Property owner framing	0.0327*** (2.03)	0.0364** (2.34)	0.0345** (2.19)
Concealed framing	0.0386** (2.39)	0.0363** (2.33)	0.0346** (2.19)
Prevent			
Explicit consent			
Plumber is allowed to bring gun without permission		0 (.)	0 (.)
Friend is allowed to bring gun without permission		-0.0640** (-2.03)	-0.0625** (-2.00)
Customers are allowed to bring gun into business		0.182*** (5.92)	0.184*** (5.99)
Employee is allowed to bring gun into work		0.200*** (6.39)	0.202*** (6.52)
Employee is allowed to have gun in car at work		0.0532 (1.61)	0.0533 (1.61)
Tenant is allowed to have gun without permission		-0.175*** (-5.93)	-0.173*** (-5.88)
Hunters are allowed to hunt without explicit consent		-0.0628** (-2.05)	-0.0624** (-2.05)
Midwest			0 (.)
Mountain West			-0.0239 (-0.73)
Northeast			0.0445* (1.84)
South			0.0155 (0.76)
West Coast			0.0456* (1.78)
White non-Hispanic			0 (.)
Black non-Hispanic			0.0269 (1.05)
Hispanic			0.0325 (1.29)
Other race/ethnicity			-0.0146 (-0.53)
Male			-0.00657 (-0.41)
18-29 years old			0 (.)
30-59 years old			0.0160 (0.65)
60+ years old			-0.0172 (-0.65)
Family Income < \$30k			0 (.)
Family Income \$30k - \$59k			0.0236 (1.00)
Family Income \$60k - \$100k			0.0359 (1.41)
Family Income > \$100k			0.0133 (0.48)
Prefer not to say income			-0.0206 (-0.70)
Married			-0.0278 (-1.59)
High school education or less			-0.0187 (-1.07)
Democrat			0 (.)
Republican			0.0277 (1.30)
Other party			0.0156 (0.78)
Own gun			0.0268 (1.58)
Constant	0.400*** (29.07)	0.377*** (14.61)	0.334*** (8.17)
Observations	4113	4113	4113

t statistics in parentheses  
--\* p<0.10

\*\* p<0.05

\*\*\* p<0.01\*





## APPENDIX

We had two question specific treatment groups. First, the vignette related to tort immunization for retail establishments was randomized among an “allow” or “prevent” condition, addressing whether tort immunity should exist for establishments that allow guns on their property or those that prevent gun carry. Given that currently some states immunize retailers that allow firearms, we wanted to see if those laws were in line with individual preference or if people believed that retailers should immunized if they prevent firearms. In the second question specific treatment, respondents were randomized between a no hunting “without the explicit permission of the landowner” condition or a no hunting “if land is posted condition.” We wanted to capture any differences in preference for altering rules to hunt on land given that some jurisdictions require landowner permission to hunt and others require the landowner to post if they want to restrict hunting.

### A16: Full Version of Survey

#### PRIMING FOR LANDOWNER RIGHTS

1. You have hired a plumber to come and fix a pipe in your home. As the plumber is working, you notice they are carrying a gun that you were not informed of.

Should your plumber or other service provider be allowed to bring a [concealed] gun into your home without your explicit consent?

- Yes
- No

Does your state currently have laws that prevent service providers from [concealed] carrying firearms into other people’s homes without their explicit consent?

- Yes
- No
- I don’t know

2. You are throwing a party at your home and you find out after the party ends that one of your friends had been carrying a firearm while at the party.

Should your family and friends be allowed to carry a [concealed] gun onto your property without your explicit consent?

- Yes
- No

Does your state currently have laws that prevent acquaintances from carrying [concealed] firearms into other people’s homes without their explicit consent?

- Yes
- No
- I don’t know

3. You run a local business and you learn that customers have been carrying firearms into your store.

Should customers be allowed to carry a [concealed] gun into your retail establishment without your explicit consent?

- Yes
- No

## APPENDIX

Should you be protected from paying damages in a lawsuit against you if you [prevent/allow] customers [from carrying/to carry] [concealed] guns into your business?

- Yes
- No

Does your state currently have laws that [prevent/allow] customers [from carrying/to carry] [concealed] firearms into retail establishments without the establishment's explicit consent?

- Yes
- No
- I don't know

4. You run a local business and you learn through some of your employees that another employee is carrying a firearm into the workplace.

Should your employee be allowed to carry their [concealed] gun into your business without your explicit consent?

- Yes
- No

Does your state currently have laws that prevent employees from carrying [concealed] firearms into places of employment without the employer's explicit consent?

- Yes
- No
- I don't know

5. You run a local business and you learn through some of your employees that another employee keeps a firearm in their vehicle in your parking lot.

Should your employee be allowed to keep their gun in their vehicle in the parking lot of your business without your explicit consent?

- Yes
- No

Should your employee be allowed to keep their gun in their vehicle even if you explicitly object?

- Yes
- No

Does your state currently have laws requiring that employees be able to carry firearms in their cars onto the employer's parking lots [even if the employer explicitly objects]?

- Yes
- No
- I don't know

6. As a landlord you are renting rooms to various tenants. You later discover that one of your tenants has a firearm in their apartment.

Should your tenant be allowed to possess a gun without your explicit consent?

- Yes
- No

## APPENDIX

Does your state currently have laws that prevent tenants from possessing firearms on rented property without their landlord's explicit consent?

- Yes
- No
- I don't know

7. You own a large, wooded, plot of land in a rural part of the state and on a recent visit you noticed empty bullet shells around your property. You learn that people have been hunting on your property.

Should people be allowed to enter your property to hunt [without your explicit consent/unless you post "No Trespassing" signs]?

- Yes
- No

Does your state currently have laws that [prevent strangers from carrying firearms onto rural property without the landowner's explicit consent/allow strangers to carry firearms onto rural property unless "No Trespassing" signs are posted]?

- Yes
- No
- I don't know

### PRIMING FOR GUN RIGHTS

8. You are a plumber who is legally licensed to carry a concealed weapon. You tend to carry your firearm during house visits.

Should you be allowed to carry a [concealed] gun into your customer's home without the owner's explicit consent?

- Yes
- No

Does your state currently have laws that prevent service providers from carrying [concealed] firearms into other people's homes without their explicit consent?

- Yes
- No
- I don't know

9. Your friends are throwing a party at their home. You are legally licensed to carry a gun and you do so while at the party.

Should you be allowed to carry a [concealed] gun onto your family and friends' property without their explicit consent?

- Yes
- No

Does your state currently have laws that prevent acquaintances from carrying [concealed] firearms into other people's homes without their explicit consent?

- Yes
- No
- I don't know

## APPENDIX

10. You are legally licensed to carry a gun. You enter a local business while carrying your firearm.

Should you be allowed to carry a [concealed] gun into a retail establishment without the explicit consent of the store owner?

- Yes
- No

Should the business owner be protected from paying damages in a lawsuit against them if they [prevent/allow] customers [from carrying/to carry] [concealed] guns into the business?

- Yes
- No

Does your state currently have laws that [prevent/allow] customers [from carrying/to carry] [concealed] firearms into retail establishments without the establishment's explicit consent?

- Yes
- No
- I don't know

11. You are legally licensed to carry a gun. Sometimes you carry your gun into your workplace without informing your employer.

Should you be allowed to carry your [concealed] gun into your workplace without the explicit consent of your employer?

- Yes
- No

Does your state currently have laws that prevent employees from carrying [concealed] firearms into places of employment without the employer's explicit consent?

- Yes
- No
- I don't know

12. You are legally licensed to carry a gun and you keep a firearm in your vehicle which you leave parked in the parking lot during work.

Should you be allowed to keep your gun in your vehicle in the parking lot without your employer's explicit consent?

- Yes
- No

Should you be allowed to keep your gun in your vehicle even if your employer explicitly objects?

- Yes
- No

Does your state currently have laws requiring that employees be able to carry firearms in their cars onto the employer's parking lots [even if the employer explicitly objects]?

- Yes
- No
- I don't know

## APPENDIX

13. You are renting an apartment and you legally possess a gun that you keep in your apartment.

Should you be allowed to possess a gun without the explicit consent of your landlord?

- Yes
- No

Does your state currently have laws that prevent tenants from possessing firearms on rented property without their landlord's explicit consent?

- Yes
- No
- I don't know

14. Your neighbor owns a large, wooded plot of land in a rural part of the state. You are planning a hunting trip with your friends.

Should you be allowed to enter the property to hunt [without the explicit consent of the property owner/ unless "No Trespassing" signs are posted]?

- Yes
- No

Does your state currently have laws that [prevent strangers from carrying firearms onto rural property without the landowner's explicit consent/allow strangers to carry firearms onto rural property unless "No Trespassing" signs are posted]?

- Yes
- No
- I don't know

### **Demographic Questions**

15. Do you own a firearm?

- Yes
- No

# APPENDIX

YouGov

**You are renting an apartment and you legally possess a gun that you keep in your apartment.**

Should you be allowed to possess a gun without the explicit consent of your landlord?

- Yes
- No

Does your state currently have laws that prevent tenants from possessing firearms on rented property without their landlord's explicit consent?

- Yes
- No
- I don't know



YouGov

**You are legally licensed to carry a gun and you keep a firearm in your vehicle which you leave parked in your employer's parking lot during work.**

Should you be allowed to keep your gun in your vehicle in the parking lot without your employer's explicit consent?

- Yes
- No

Should you be allowed to keep your gun in your vehicle even if your employer explicitly objects?

- Yes
- No

Does your state currently have laws requiring that employees be able to carry firearms in their cars onto the employer's parking lots (even if the employer explicitly objects)?

- Yes
- No
- I don't know



# APPENDIX

YouGov

---

**Your friends are throwing a party at their home. You are legally licensed to carry a gun and you do so while at the party.**

Should you be allowed to carry a concealed gun onto your family and friends' property without their explicit consent?

- Yes
- No

Does your state currently have laws that prevent acquaintances from carrying concealed firearms into other people's homes without their explicit consent?

- Yes
- No
- I don't know



YouGov

---

**Your neighbor owns a large, wooded plot of land in a rural part of the state. You are planning a hunting trip with your friends.**

Should you be allowed to enter the property to hunt unless "No Trespassing" signs are posted?

- Yes
- No

Does your state currently have laws that allow strangers to carry firearms onto rural property unless "No Trespassing" signs are posted?

- Yes
- No
- I don't know





# APPENDIX

YouGov

**You are legally licensed to carry a gun. Sometimes you carry your gun into your workplace without informing your employer.**

Should you be allowed to carry your concealed gun into your workplace without the explicit consent of your employer?

- Yes
- No

Does your state currently have laws that prevent employees from carrying concealed firearms into places of employment without the employer's explicit consent?

- Yes
- No
- I don't know



YouGov

**You are legally licensed to carry a gun. You enter a local business while carrying your firearm.**

Should you be allowed to carry a concealed gun into a retail establishment without the explicit consent of the store owner?

- Yes
- No

Should the business owner be protected from paying damages in a lawsuit against them if they allow customers to carry concealed guns into the business?

- Yes
- No

Does your state currently have laws that allow customers to carry concealed firearms into retail establishments without the establishment's explicit consent?

- Yes
- No
- I don't know



# APPENDIX

YouGov

---

Do you own a firearm?

- Yes
- No



YouGov

---

**You own a large, wooded plot of land in a rural part of the state and on a recent visit you noticed empty bullet shells around your property. You learn that people have been hunting on your property.**

Should people be allowed to enter your property to hunt without your explicit consent?

- No
- Yes

Does your state currently have laws that prevent strangers from carrying firearms onto rural property without the landowner's explicit consent?

- No
- Yes
- I don't know



# APPENDIX

YouGov

---

**You are throwing a party at your home and you find out after the party ends that one of your friends had been carrying a firearm while at the party.**

Should your family and friends be allowed to carry a concealed gun onto your property without your explicit consent?

- No
- Yes

Does your state currently have laws that prevent acquaintances from carrying concealed firearms into other people's homes without their explicit consent?

- No
- Yes
- I don't know



YouGov

---

**You have hired a plumber to come and fix a pipe in your home. As the plumber is working, you notice they are carrying a gun that you were not informed of.**

Should your plumber or other service provider be allowed to bring a concealed gun into your home without your explicit consent?

- No
- Yes

Does your state currently have laws that prevent service providers from carrying concealed firearms into other people's homes without their explicit consent?

- No
- Yes
- I don't know



# APPENDIX

YouGov

**You run a local business and you learn through some of your employees that another employee is carrying a firearm into the workplace.**

Should your employee be allowed to carry their concealed gun into your business without your explicit consent?

- No
- Yes

Does your state currently have laws that prevent employees from carrying concealed firearms into places of employment without the employer's explicit consent?

- No
- Yes
- I don't know



YouGov

**You run a local business and you learn through some of your employees that another employee keeps a firearm in their vehicle in your parking lot.**

Should your employee be allowed to keep their gun in their vehicle in the parking lot of your business without your explicit consent?

- No
- Yes

Should your employee be allowed to keep their gun in their vehicle even if you explicitly object?

- No
- Yes

Does your state currently have laws requiring that employees be able to carry firearms in their cars onto the employer's parking lots (even if the employer explicitly objects)?

- No
- Yes
- I don't know



# APPENDIX

YouGov

**As a landlord you are renting rooms to various tenants. You later discover that one of your tenants has a firearm in their apartment.**

Should your tenant be allowed to possess a gun without your explicit consent?

- No
- Yes

Does your state currently have laws that prevent tenants from possessing firearms on rented property without their landlord's explicit consent?

- No
- Yes
- I don't know



YouGov

**You run a local business and you learn that customers have been carrying firearms into your store.**

Should customers be allowed to carry a concealed gun into your retail establishment without your explicit consent?

- No
- Yes

Should you be protected from paying damages in a lawsuit against you if you prevent customers from carrying concealed guns into your business?

- No
- Yes

Does your state currently have laws that prevent customers from carrying concealed firearms into retail establishments without the establishment's explicit consent?

- No
- Yes
- I don't know



## APPENDIX

### **A17: A Note about Defaults**

In majoritarian default setting, the default is set to the preference that most people have. Our questions as framed asked people for their preferences on default rules, not necessarily their preference for carry for guests. So, our survey results indicate the democratic preference that most people have, but that might not actually be the majoritarian preference. In designing our survey, we assumed that these two would coincide. However, it is possible that people prefer that their guests be allowed to carry, but generally believe the law should default to no carry. Our results show that a majority of people prefer a no carry default for private residences, rural land for hunting, places of employment and retail establishments. If it is the case that this default preference does not align with individual preference, then our results provide a stronger rationale for adopting minority defaults. In some case minority defaults may be more efficient, they might be public-regarding or paternalistic, or they might be a way to signal social values. If it is the case that sometimes, individual preference does not align with democratic preference, then that may be another basis for preferencing the minoritarian default over the majoritarian one.

# Prevention of Firearm Injury through Policy and Law: The Social Ecological Model

*Allison Durkin, Christopher Schenck, Yamini Narayan, Kate Nyhan, Kaveh Khoshnood, and Sten H. Vermund*

## Introduction

The United States stands alone among high-income nations with its high rates of firearm injury. Additional epidemiological analysis can help to evaluate and address this crisis.<sup>1</sup> To guide future epidemiological studies and policy interventions, we propose applying the social ecological model for violence prevention to firearm injury.

## Causes of Firearm Injury

In 2018, 39,740 people died from firearm-related injury — more than from motor vehicle-related injury.<sup>2</sup> The primary causes of firearm-related injuries are suicide and homicide. The term firearm injury encompasses both fatal and non-fatal injury, which may lead to lasting functional impairment and psychological harm. This term does not even encompass the emotional and psychological injuries that may result from witnessing or being threatened with gun violence.

### *Firearm Suicide*

Suicide is the principal cause of firearm-related mortality, representing at least 61% of firearm deaths in 2018.<sup>3</sup> Firearm injury accounts for more suicides than all other modes of suicide combined, at least in part

due to the lethality of firearms. In a 2014 meta-analysis, Anglemeyer and colleagues found that the odds of dying by suicide were three times greater among those with firearm access than those without.<sup>4</sup> Higher firearm prevalence is associated with higher rates of total and firearm suicide at the state level,<sup>5</sup> a robust association even when adjusting for the prevalence of serious mental illness and substance use.<sup>6</sup> Risk for firearm suicide increases with age<sup>7</sup> and gun ownership. White males have a greater risk of firearm suicide than Black or Hispanic males,<sup>8</sup> although this association is likely mediated, in part, by the higher prevalence of firearm ownership among white men.<sup>9</sup> Rurality is also associated with higher rates of firearm suicide, alongside higher rates of firearm ownership.<sup>10</sup> Neuropsychiatric disorders, such as depression and bipolar disorder, as well as traumatic brain injury are associated with a greater risk for suicide.<sup>11</sup> Static risk factors that predispose an individual to suicide, such as neuropsychiatric disorders or adverse childhood events, interact with precipitating risk factors, such as social isolation, stressful life events, and access to lethal means. Suicide attempt is often an impulsive act,<sup>12</sup> therefore reducing access to lethal means, including limiting access to firearms, is a cornerstone of suicide prevention.<sup>13</sup> While mental illness is an important risk factor for firearm suicide, most decedents do not have a known mental health condition.<sup>14</sup>

### *Firearm Homicide*

Most homicides in the U.S. are committed with a firearm.<sup>15</sup> Firearm homicide is most common among young males,<sup>16</sup> and disproportionately affects Black males, who are subject to 9-57 additional firearm suicides per 100,000 per year relative to white men, depending on the state.<sup>17</sup> Firearm homicides are con-

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centrated in urban areas.<sup>18</sup> The proportion of individuals living in poverty and the proportion of males living alone are associated with higher rates of firearm injury; in contrast, increased social spending and economic opportunity are associated with lower rates of firearm injury.<sup>19</sup> Therefore structural racism — defined as “the totality of ways in which societies foster [racial] discrimination, via mutually reinforcing [inequitable] systems ... that in turn reinforce discriminatory beliefs, values, and distribution of resources” — may play an important role in health disparities in the burden of firearm homicide observed between Black and white individuals.<sup>20</sup> Although police-involved firearm deaths are excluded from most analyses of firearm homicide, police shootings contribute significantly to mortality among young Black men.<sup>21</sup> The May 25, 2020 filmed murder of George Floyd in Minnesota by members of the Minneapolis Police Department has embodied this issue of structural racism, and galvanized discussion about police targeting Black people with especially violent responses for hundreds of years. The firearms murder on March 13, 2020 of Breonna Taylor, an emergency medical technician working for the University of Louisville Health, was another case in point, as she was shot eight times without cause in her own home.

While women experience a lower rate of firearm-related injury than men, contributing factors are somewhat different. Intimate partner violence is experienced by women at higher rates than men<sup>22</sup> and firearm accessibility is a risk factor for intimate partner homicide.<sup>23</sup> Firearm injury is the second-leading cause of death among children and adolescents (ages 1-19), particularly by homicide.<sup>24</sup> Firearm homicides among children are associated with criminal- or gang-related activities as well as family violence.<sup>25</sup>

### Social Ecological Model of Firearm Injury

The social ecological model (SEM) is a conceptual framework widely utilized in public health which posits that health outcomes result from individual and environmental factors, which modify risk for the outcome. Risk and protective factors are organized in four levels: the individual, relationship, community, and societal. The SEM has been applied to diverse public health problems including HIV/AIDS risk assessment<sup>26</sup> and vaccine promotion,<sup>27</sup> as well as violence prevention. The World Health Organization proposed the use of the SEM for violence prevention in its 2002 World Report on Violence and Health.<sup>28</sup> This approach is also supported by the U.S. Centers for Disease Control and Prevention.<sup>29</sup>

As applied to violence prevention, the individual level of the SEM includes individual factors that influence the risk of being a victim of violence; the rela-

tionship level includes characteristics of one’s social network of family, friends, and peers; the community level includes the social and physical environment of neighborhoods, schools, and businesses; and the societal level includes policy, economic, and cultural factors that modify risk.<sup>30</sup> Allchin and Kaskie have each proposed an SEM to stem firearm suicide; the former focuses on limiting access to lethal means, while the latter focuses on limiting suicide in older age. The specificity of each lends valuable insights about how to reduce risk of firearm suicide.<sup>31</sup> Building on this previous work, we propose an SEM of firearm injury that captures all modes and intentions. This expanded SEM provides a useful framework for guiding firearm policy analysis and future epidemiological studies of firearm injury prevention (Figure 1).

Laws and policies can influence risk at various levels of the model. Below we provide examples that illustrate how laws can modulate risk at various levels of the SEM. These particular laws and policies were selected for this analysis because they represent core issues surrounding gun ownership and use in U.S. society.

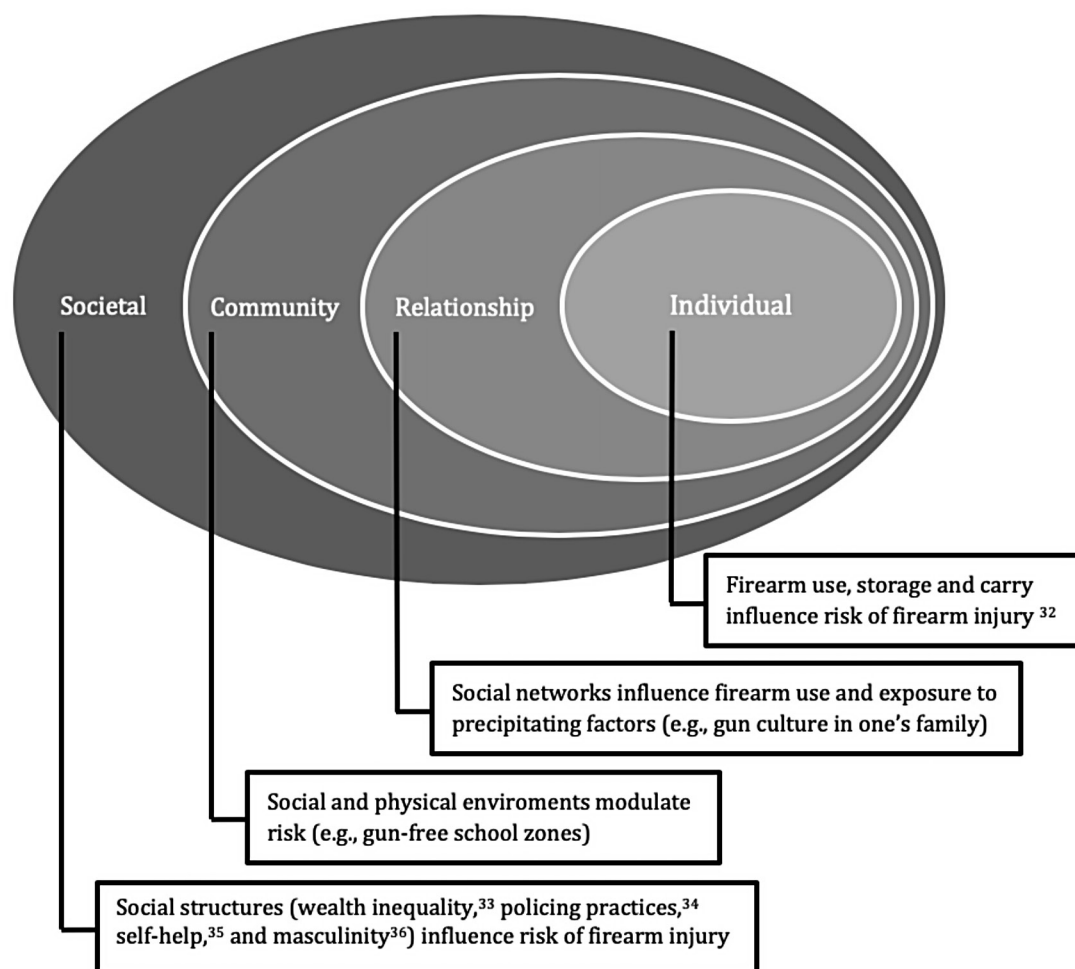
### Social Ecological Model: Individual Level

#### *Stand Your Ground (SYG)*

Historically, U.S. law has enforced a “duty to retreat” on individuals before permitting their use of force to defend themselves or others from harm, except when in their home. SYG laws have reversed this “duty to retreat,” legalizing the use of deadly force to defend oneself or others regardless of whether it is possible to retreat. Florida was the first state to implement an SYG law in 2005. Humphreys et al. found that implementation of Florida’s SYG law was associated with a 31.6% increase in firearm homicide.<sup>37</sup> Other studies have noted that the increase in firearm homicide has been greater in counties that were suburban, predominantly white, higher-income, and had lower rates of homicide prior to the enactment of the SYG law;<sup>38</sup> and that adolescents also experienced an increase in firearm homicide.<sup>39</sup> Florida also provides an important example of how SYG Laws can exacerbate racial disparities in health. Degli et al. found that Black adolescents made up a greater proportion of firearm homicide victims after the enactment of Florida’s SYG law compared to before.<sup>40</sup> An SYG case study is the February 26, 2012 unprovoked firearm murder of Trayvon Martin by self-appointed vigilante George Zimmerman, with subsequent acquittal of the white murderer of the Black 17-year old. Systemic racism is apparent in the application of the law; the odds of convicting a defendant of homicide were two times greater in cases



Figure 1

**The Social Ecological Model Applied to Firearm Injury and Death**

where the victim was white compared to cases where the victim was non-white.<sup>41</sup>

The finding that SYG laws are associated with increased rates of homicide is not consistent across states, however. Two studies evaluating SYG Laws in Texas<sup>42</sup> and Arizona<sup>43</sup> found no association with increased homicide. Cross-sectional studies examining the relationship between SYG laws and firearm injury have found significant associations,<sup>44</sup> while others have not.<sup>45</sup> The inconsistent findings of cross-sectional studies may be due to true heterogeneity in the impact of SYG laws on individual states, or may reflect methodological differences in data sources, time periods studied, and selection of confounding variables in their models. Importantly, while there is emerging evidence that SYG laws are associated with increased incidence of firearm homicide, there is no evidence

that SYG laws are associated with reduced incidence of burglary, robbery, or assault.<sup>46</sup> These findings suggest that SYG laws fail to accomplish their stated goal of deterring crime.

SYG laws modulate risk at several levels. At the individual level, SYG laws may influence an individual's decision to carry a firearm for self-defense as well as their assessment of when it is legal to use their firearm. SYG laws remove penalties for the use of lethal force for highly subjective causes ("feeling threatened"); this may predispose individuals to preemptive violence.<sup>47</sup> SYG may act at the relationship level as well. For example, an individual may use a firearm in a physical altercation in part because he is aware that the other individual would be legally justified in doing the same, like a duel or gunfight, with minimal fear of legal consequences.

SYG laws also modulate risk at the societal level because they interact with societal norms. These laws may influence, and be influenced by, social norms around self-help, where an individual must rely on himself to carry out justice. The Trayvon Martin murder,<sup>48</sup> as well as the research findings of Esposti<sup>49</sup> and Ackermann,<sup>50</sup> highlight how SYG laws interact with structural racism to harm people of color. Lobbying and affinity organizations such as the National Rifle Association have promoted SYG laws successfully in 27 states as of June 2020.

#### *Universal Background Checks*

Universal Background Check (UBC) laws may be understood as interacting at both the individual level and the societal level. Federal law mandates background checks on individuals who purchase firearms from licensed firearm dealers, conducted via the National Instant Criminal Background Check System (NICS).<sup>51</sup> However, background checks are not federally mandated for private sales, with one out of five firearm owners reporting firearm acquisition without a background check.<sup>52</sup> Seventeen states have passed UBC legislation or require state-issued permits as of June 2020, mandating background checks for all firearm sales including those between private parties.<sup>53</sup> An additional six states have such provisions for handguns only.

State-level cross-sectional and quasi-experimental longitudinal analyses have found a significant association between the presence of UBC legislation and a lower firearm mortality rate, driven by a lower firearm homicide rate.<sup>54</sup> However, Crifasi et al. and Castillo-Carniglia et al. both reported that UBC legislation was not associated with lower firearm mortality rates, possibly due to differences in study population (large urban counties and the state of California, in contrast to all 50 states).<sup>55</sup> The NICS is limited by voluntary state reporting mechanisms, so data are incomplete.<sup>56</sup> Locally conducted UBCs may benefit from more complete data, and these have been associated with lower firearm mortality rates,<sup>57</sup> supporting improvement in UBC mechanisms to ensure data completeness.

### **Social Ecological Model: Relationship Level**

#### *Child-Access Prevention (CAP)*

CAP laws seek to hold a firearm owner criminally liable if their firearm is involved in the injury of a child or is inappropriately accessed by a child. CAP laws are a heterogeneous group of legislation that vary between states in several ways. Laws vary widely by scope, severity of penalty, and maximum applicable ages.<sup>58</sup>

CAP laws interact at the relationship level, modulating risk to children by seeking to influence behavior of the parents and other adults in the child's primary social network. By encouraging safer firearm storage practices among adults, CAP laws seek to prevent children from accessing firearms during times of crises or engaging in high-risk firearm behaviors such as unsupervised use of firearms or playing with firearms.

There is robust evidence that CAP laws are associated with a reduction in pediatric firearm injury.<sup>59</sup> This association has been found in both cross-sectional studies that compare rates of injury between states with and without CAP laws<sup>60</sup> and quasi-experimental studies that compare the difference in rate of injury before and after CAP law enactment with difference in rate of injury in states that did not enact CAP laws.<sup>61</sup> Individual studies have found an association between the presence of a CAP law and reductions in pediatric firearm suicide,<sup>62</sup> unintentional firearm death,<sup>63</sup> firearm homicide,<sup>64</sup> and nonfatal firearm injury.<sup>65</sup>

While a few studies have not found a significant association between CAP laws and reduction in firearm injury, there are notable methodological flaws. For example, Lee et al. selected hospitalizations for firearm injury in those aged 0-20<sup>66</sup> even though most of these individuals are older than the maximum age covered by CAP laws. Therefore, the current body of evidence supports the presence of an association between CAP laws and reductions in pediatric firearm injury.

#### *Extreme Risk Protection Orders*

Extreme Risk Protection Order (ERPO) laws permit families, household members, law enforcement officers, and — in certain states — health care professionals to petition courts to remove firearms temporarily from an individual's possession. ERPO laws, colloquially described as "red flag" laws, are becoming increasingly common in the U.S. As of July 2020, 19 states and the District of Columbia had enacted ERPO or similar laws; nearly all were passed within the past five years.<sup>67</sup>

ERPO laws interact at the relationship level, modulating risk to the firearm owner through intervention at the relationship level. For example, a woman may believe her brother is temporarily at risk of harming himself. She can file an ERPO petition to request that the court order that the firearm be temporarily removed from her brother's possession.

Although the vast majority of ERPO laws are recent, with most having gone into effect since 2016,<sup>68</sup> studies of ERPO laws in Connecticut<sup>69</sup> and Indiana<sup>70</sup> suggest that they represent promising, effective tools to reduce

risk of firearm injury. Additional cross-sectional studies in California and Washington provide detail about the characteristics of the respondents, the petitioners, and the bases for their ERPO petitions. In both states, law enforcement officers represented the vast majority of petitioners. In California, respondents were most often white men, corresponding to the demographics of firearm owners in the state.<sup>71</sup> In Washington, the petitioner in over half of all cases reported that the respondent had a history of suicidal ideation.<sup>72</sup>

### **Social Ecological Model: Community Level**

#### *School Weapons Ban*

High-profile mass shootings such as those in Columbine High School (Colorado in 1999), Virginia Tech University (Virginia in 2007), Sandy Hook Elementary School (Connecticut in 2012), and Marjory Stoneman Douglas High School (Florida in 2018) propelled

level. Examples include policies that impact economic, health, educational, and criminal justice structures that modulate risk of violence. In addition, funding priorities can modulate risk. Policies designed to decrease firearm risk, such as training healthcare professionals to engage in lethal means safety counseling, can only succeed if they are sufficiently funded.<sup>74</sup>

### **Conclusions**

Patterns of firearm injury have complex causal pathways. Similarly, firearm legislation may act upon these pathways in different ways to modulate risk. The SEM highlights the complex interactions between social structures, legal policy, social networks, and individual behavior, and provides a framework for assessing these interactions. We have provided an introduction to the SEM and how it may be employed to assess firearm legislation.

The SEM provides a framework for considering how legislation modulates firearm risk. In order to address firearm violence comprehensively, legislators should design policies that intervene at multiple levels of the SEM.

In designing these policies, legislators may consider how factors such as state boundaries complicate how policies act at varying levels of the SEM. Legislators may also wish to consider legislation that incentivizes behavior that decreases firearm risk, rather than prohibiting behavior that increases risk.

firearm injury into the spotlight. The sheer rapidity with which children, adolescents, young adults, and teachers could be murdered with modern assault-style weapons has been highlighted over the past two decades. The Gun-Free School Zones Act of 1995 sought to prohibit possession or discharge of a firearm within a school zone. Firearm regulation in early care and education settings uses a similar approach.<sup>73</sup> Both policies can be classified as community-level interventions, as they seek to create firearm-free environments for children. While school-associated violent deaths are rare events, school weapons bans are illustrative of how legislation may interact at the community level to influence the availability of firearms in an environment and reduce firearm risk.

### **Social Ecological Model: Societal Level**

Typically, legal policy is uniformly assigned to the societal level of the SEM. We propose that laws that act primarily on the structural determinants of violence should be classified as acting at the societal

The SEM provides a framework for considering how legislation modulates firearm risk. In order to address firearm violence comprehensively, legislators should design policies that intervene at multiple levels of the SEM. In designing these policies, legislators may consider how factors such as state boundaries complicate how policies act at varying levels of the SEM. Legislators may also wish to consider legislation that incentivizes behavior that decreases firearm risk, rather than prohibiting behavior that increases risk.

The use of the SEM model is also beneficial because it borrows a framework familiar to public health, social and behavioral science, and medical professionals, thus encouraging cross-disciplinary engagement with law and policy. Legislators and public health practitioners may consider the SEM when drafting laws and designing studies. Additional research can clarify how laws and policies modify risk at various levels of the model, in order to inform future legislation.

Conscientious multidisciplinary collaboration can promote evidence-based solutions to firearm injury

in the United States.<sup>75</sup> The application of the SEM to firearm injury may guide collaborative efforts between these stakeholders to reduce our nation's high burden of firearm injury.

#### Note

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