# IMPLEMENTATION AND EFFECTIVENESS OF CONNECTICUT'S RISK-BASED GUN REMOVAL LAW: DOES IT PREVENT SUICIDES?

JEFFREY W. SWANSON, PHD; MICHAEL A. NORKO, MD, MAR

HSIU-JU LIN, PHD; KELLY ALANIS-HIRSCH, PHD

LINDA K. FRISMAN, PHD; MADELON V. BARANOSKI, PHD, MSN

MICHELE M. EASTER, PHD; ALLISON G. ROBERTSON, PHD, MPH

MARVIN S. SWARTZ, MD AND RICHARD J. BONNIE, LLB\*

# I

#### INTRODUCTION

Developing practical, effective, and legally sustainable policies to separate firearms from people at risk of harming themselves or others presents a potentially important, but challenging, public health opportunity for gun violence prevention in the United States. Risk-based, temporary, preemptive gun removal is a legal tool that four states—Connecticut, Indiana, California, and Washington —have adopted, and which has recently attracted considerable

Copyright © 2017 by the authors.

This article is also available online at http://lcp.law.duke.edu/.

\* Jeffrey W. Swanson, PhD, Kelly Alanis-Hirsch, PhD, Michele M. Easter, PhD, Allison G. Robertson, PhD, MPH, and Marvin S. Swartz, MD, are with the Department of Psychiatry and Behavioral Sciences at Duke University School of Medicine. Hsiu-Ju Lin, PhD, and Linda K. Frisman, PhD, are with the University of Connecticut School of Social Work. Michael A. Norko, MD, MAR, and Madelon V. Baranoski, PhD, MSN, are with the Department of Psychiatry at Yale University School of Medicine. Richard J. Bonnie, LLB, is with the University of Virginia Law School. The authors wish to acknowledge the assistance of Tameka Hollis, MBA, and are grateful to the collaborating state agencies in Connecticut for contributing the data that made this research possible. The research presented in this article was supported by The Fund for a Safer Future, The Elizabeth K. Dollard Trust, and The Brain and Behavior Foundation. The research, in part, was previously presented at the conference, Second Generation of Second Amendment Law and Policy at New York University School of Law in New York City on Friday, April 8, 2016; and as part of Dr. Swanson's Frontiers in Science distinguished lecture at the American Psychiatric Association's 169th annual meeting, in Atlanta, Georgia, on May 16, 2016. Corresponding author contact: Jeffrey W. Swanson, PhD; Box 3071 DUMC, Durham, NC, 27710; jeffrey.swanson@duke.edu; 919 682-4827.

- 1. CONN. GEN. STAT. § 29-38c (1999).
- 2. IND. CODE ANN. § 35-47-14 (2006).
- 3. Cal. Penal Code § 18100 (2016).
- 4. Washington Individual Gun Access Prevention by Court Order, Initiative 1491 (2016).

interest among policymakers in other jurisdictions.<sup>5</sup> To date, there has been little empirical scrutiny of these laws in practice and there are important unanswered questions about how they work: What are the legal and logistical barriers to implementing risk-based gun removal laws? Do they target the right people? Are the laws fair? Do they actually help reduce gun deaths?

In 1999, following a highly publicized mass shooting, 6 Connecticut became the first state to pass a law authorizing police to temporarily remove guns from individuals when there is "probable cause to believe . . . that a person poses a risk of imminent personal injury to himself or herself or to other individuals[.]" Connecticut's innovative statute established the legal practice of preemptive gun removal as a civil court action based on a risk warrant, a process that neither requires nor generates a record of criminal or mental health adjudication as its predicate. Our research study provides an analysis of the characteristics, implementation, and outcomes of gun removals conducted under Connecticut's risk warrant law during the period of October 1999 through June 2013. This article summarizes key features of the study in an effort to inform other states that are considering the adoption of similar gun-seizure laws.

Part II sketches the relevant policy landscape in order to demonstrate that point-of-purchase background checks are a necessary but insufficient component of a strategy to reduce gun violence in the United States, and that risk-based preemptive gun removal schemes provide a complementary policy to bridge the gap. Part III briefly recounts the history of enactment and gradual implementation of Connecticut's risk-based gun removal law, beginning with the high-profile homicide that drove public opinion to support the law. Part IV describes our research study's quantitative and qualitative methods and data sources. Part V presents the results of the study. It first describes the characteristics of gun removal cases in Connecticut. Next, it summarizes views of stakeholders regarding the effectiveness and fairness of gun removal, as well as particular challenges faced in implementing the risk warrant law. It then analyzes suicides committed by the individuals from whom firearms had been seized to

<sup>5.</sup> Six additional states—Illinois, Michigan, Minnesota, Missouri, New York, and Virginia—had introduced similar bills by the end of 2016. E-mail from Kelly Roskam, General Counsel, Educational Fund to Stop Gun Violence, to author (Dec. 8, 2016) (on file with author). Nevada introduced a similar bill, S.B.387, on March 20, 2017. *See* Nev. S.B. No. 387, (Mar. 20, 2017), http://www.leg.state.nv.us/Session/79th 2017/Bills/SB/SB387.pdf

<sup>6.</sup> See Jonathan Rabinovitz, Rampage in Connecticut: Connecticut Lottery Worker Kills 4 Bosses, Then Himself, N.Y. TIMES (Mar. 7, 1998), http://http://www.nytimes.com/1998/03/07/ nyregion/rampage-connecticut-overview-connecticut-lottery-worker-kills-4-bosses-then.html?\_r=0 [https://perma.cc/E585-2UZ5] (describing a shooting in which a thirty-five-year-old lottery worker used a semiautomatic handgun to kill four executives at the Connecticut Lottery headquarters in Hartford).

<sup>7.</sup> CONN. GEN. STAT. § 29-38c (1999).

<sup>8.</sup> See id. (describing the statutory criteria and process for gun removal as a civil judicial determination on the basis of probable cause to believe there is imminent risk of gun violence but not requiring any criminal charge or record).

<sup>9.</sup> Implementation and Effectiveness of Dangerous Persons' Gun-Seizure Laws in Connecticut and Indiana, research study funded by a grant from the New Venture Fund (Fund for a Safer Future) to Duke University; GA 0327014, Jeffrey Swanson, Principal Investigator (2014–2018).

determine whether the policy saved lives, and concludes with an estimate of the number of gun removal cases that are necessary to avert one suicide. Part VI summarizes the findings and draws key policy implications. Finally, Part VII renders the study's conclusion.

#### II

#### THE POLICY LANDSCAPE:

# THE LIMITS OF BACKGROUND CHECKS AND THE POTENTIALLY IMPORTANT ROLE OF RISK-BASED PREEMPTIVE GUN REMOVAL LAWS

Intentional gun violence in the United States remains a daunting public health problem—diverse in its surrounding circumstances, complex in its causal pathways, and far reaching in its social and economic consequences. How to solve the problem remains the subject of a contentious and partisan political debate, pitting public safety interests against the Second Amendment right. The 1994 Brady Law's requirement of point-of-purchase background checks for firearm sales from federally licensed dealers has long been the mainstay of federal and state efforts to prevent gun violence. This is arguably a necessary but insufficient policy approach. Wide variation in the operational criteria for gun restrictions across states, inconsistencies in local policies and practices that apply these criteria to individual cases, and major gaps in state authorities' reporting of gun-disqualifying records to the National Instant Criminal Background Check System (NICS), all contribute to inefficient identification of people who should not have guns. Under the problem of the contribute to inefficient identification of people who should not have guns.

Existing statutory schemes thus fall short of the practical goal of implementing gun prohibitions for dangerous people because most states have not closed point-of-purchase loopholes<sup>15</sup> and, with few exceptions, have no

<sup>10.</sup> See Centers for Disease Control and Prevention (CDC), Injury Prevention & Control: Data & Statistics, Web-based Injury Statistics Query and Reporting System (WISQARS™), Fatal Injury Reports and Nonfatal Injury Reports (2016), http://www.cdc.gov/injury/wisqars/index.html [https://perma.cc/7F3C-2EPY] (reporting that 33,599 fatal and 81,034 nonfatal gun injuries occurred in the United States in 2014); see also Garen J. Wintemute, The Epidemiology of Firearm Violence in the Twenty-First Century United States, 36 ANN. REV. PUB. HEALTH 5, 8–16 (2015) (discussing recent trends and current statistics of U.S. gun violence).

<sup>11.</sup> See generally PHILIP J. COOK & KRISTIN A. GOSS, THE GUN CONTROL DEBATE (2014) (explaining that the appropriate role of gun control in reducing gun-related violence is the subject of a long-running policy debate).

<sup>12.</sup> Brady Handgun Violence Prevention Act, Pub. L. No. 103-159, § 107 Stat. 1536 (1994).

<sup>13.</sup> See Philip J. Cook & Jens Ludwig, The Limited Impact of the Brady Act: Evaluation and Implications, in REDUCING GUN VIOLENCE IN AMERICA: INFORMING POLICY WITH EVIDENCE AND ANALYSIS 21, 28 (Daniel W. Webster & Jon S. Vernick eds., 2013) (explaining that the Brady Act's background check requirement is too narrow because many criminals obtain guns through unregulated secondary markets).

<sup>14.</sup> Federal firearms law is nested in widely variable state civil commitment practices. See Paul S. Appelbaum & Jeffrey W. Swanson, Gun Laws and Mental Illness: How Sensible are the Current Restrictions? 61 PSYCHIATRIC SERVS. 652, 652–54 (2010) (discussing the limitations of imposing gun restrictions based on mental health).

<sup>15.</sup> See LAW CENTER TO PREVENT GUN VIOLENCE, UNIVERSAL BACKGROUND CHECKS,

policies in place to proactively remove guns from legally prohibited persons.<sup>16</sup> At a more fundamental level, the federal prohibiting criteria themselves, as defined in the 1968 Gun Control Act<sup>17</sup> and mirrored in many states' statutes, tend to correlate poorly with actual risk of violence and suicide. The rules are both overand under-inclusive, insofar as they prohibit many people at a very low risk of violence from owning guns while also failing to identify many others who are at a high risk of violence.<sup>18</sup>

SUMMARY OF STATE LAW, http://smartgunlaws.org/gun-laws/policy-areas/background-checks/universal -background-checks/ [https://perma.cc/T379-KF4E] (reporting that only eight states—California, Colorado, Connecticut, Delaware, New York, Oregon, Rhode Island, and Washington, as well as the District of Columbia currently require comprehensive background checks for all transfers of all classes of firearms, including purchases from unlicensed sellers); see also U.S. Dep't of Just., Off. of the Inspector Gen., Review of ATF's Project Gunrunner 10 (Nov. 2010), http://www.justice.gov/oig/reports/ATF/e1101.pdf [https://perma.cc/CU35-MKQM] (noting that "individuals prohibited by law from possessing guns can easily obtain them from private sellers and do so without any federal records of the transactions").

16. See Garen J. Wintemute, et al., Evaluation of California's Armed and Prohibited Persons System: Study Protocol for a Cluster-Randomised Trial, INJURY PREVENTION 1, 1-5 (2016) (discussing the problem that large numbers of legal gun purchasers in the United States subsequently become prohibited from firearms due to a criminal conviction, mental health-related adjudication, or domestic violence order of protection, or acquire some other gun-disqualifying status under federal or state law; that "almost no attention has been given to interventions focused on [these] individuals..."; and discussing California's innovative Armed and Prohibited Persons System as a proposed state policy solution but one that lacks research evidence for its effectiveness). Insofar as background-check laws and policies are focused solely on regulating point-of-sale firearm transfers, they stop short of providing a mandate or authority for local law enforcement agents to assertively search for and remove any guns that may already be in the possession of a person who transitions to a gun-prohibited status. However, a gun-disqualified person who is found incidentally to possess guns may be subject to criminal charges of illegal gun possession under state law. An example appears in *United States v. Rehlander*, 666 F.3d 45 (1st Cir. 2012), a case involving a criminal defendant, Nathan Rehlander, who was indicted in Maine for illegal gun possession under 18 U.S.C. § 922(d)(4) due to a previous involuntary civil commitment—but only after police had later encountered Rehlander in responding to an assault complaint and discovered his gundisqualifying mental health history; there had apparently been no removal of guns from Rehlander when he first acquired the status of a gun-prohibited person.

17. See Gun Control Act of 1968, 18 U.S.C. § 922(d)(4) (2006) (most common disqualifying criteria include felony convictions, unlawful immigration status, and adjudication related to mental illness).

18. See Jeffrey W. Swanson, Allison G. Robertson, Linda K. Frisman, Michael A. Norko, Hsiu-Ju Lin, Marvin S. Swartz & Philip J. Cook, Preventing Gun Violence Involving People with Serious Mental Illness, in Reducing Gun Violence in America: Informing Policy with Evidence and ANALYSIS 33, 36 (Daniel W. Webster & Jon S. Vernick eds., 2013) ("The very small proportion of people with mental illnesses who are inclined to be dangerous often do not seek treatment before they do something harmful; they therefore do not acquire a gun-disqualifying record of mental health adjudication[.]"). There is limited evidence that background checks can substantially reduce gun violence risk in people with serious mental illness. In our recent study in Connecticut, we matched and merged mental health, court, and arrest records for 23,292 persons diagnosed with schizophrenia, bipolar disorder, or major depression who were receiving services in the state's public behavioral healthcare system. We found a six percent reduction in violent crime in gun-disqualified individuals attributable to Connecticut's initiating a policy of reporting records to NICS in 2007. However, while the NICSreporting effect was statistically significant, it turned out to be substantively trivial; the policy affected only seven percent of the study population of persons with serious mental illness, while ninety-six percent of the violent crimes recorded for that population were committed by persons who were not exposed to the policy, that is, not disqualified on the basis of a mental health adjudication history. As a result, the estimated net reduction in violent crime in the population was miniscule—a tiny fraction of one percent. The current epidemic of suicide in the United States<sup>19</sup> illustrates a large loophole in the mental-health-related criteria for restricting at-risk individuals from buying guns.<sup>20</sup> Over half of suicides in the United States are completed with guns,<sup>21</sup> and many of those guns are legally obtained.<sup>22</sup> Most people who die by suicide suffer from a mental disorder such as depressive illness,<sup>23</sup> but only a small proportion of them have a record of involuntary civil commitment or other gundisqualifying mental health or criminal adjudication.<sup>24</sup> Similarly, a substantial proportion of those at risk for committing violent crimes with guns do not have a record that would prohibit them from purchasing or possessing firearms.<sup>25</sup>

The sheer number of privately owned firearms already in existence in the United States—approximately 357,000,000 guns, by one government estimate<sup>26</sup>—

- 19. See Sally C. Curtin, Margaret Warner & Holly Hedegaar, Increase in Suicide in the United States, 1999–2014, CDC (Apr. 22, 2016), http://www.cdc.gov/nchs/products/databriefs/db241.htm [https://perma.cc/4W54-XKPZ] (finding that the age-adjusted suicide rate in the United States increased twenty-four percent between 1999 and 2014).
- 20. See Appelbaum & Swanson, supra note 14, at 652–54 (explaining that states' incomplete reporting to the NICS and the tenuous link between mental health defects and risk of violence create gaps in firearm regulation); see also Jeffrey W. Swanson, Paul S. Appelbaum & Richard J. Bonnie, Getting Serious about Preventing Suicide: More "How" and Less "Why," 314 J. AM. MED. ASS'N 2229, 2229–30 (2015) (suggesting that seizing firearms of those involuntarily hospitalized and enacting mandatory reporting to the NICS could be important tools in suicide prevention).
- 21. Suicide accounted for 41,149 deaths in 2013, and fifty-one percent of these suicides involved guns. Melonie Heron, *Deaths: Leading Causes for 2013*, 65 NAT'L VITAL STAT. REP. 2, 41 (2016), https://www.cdc.gov/nchs/data/nvsr/nvsr65/nvsr65\_02.pdf [https://perma.cc/F7UC-QKR3].
- 22. See K. M. Grassel, Garen J. Wintemute, M. A. Wright & M. P. Romero, Association Between Handgun Purchase and Mortality from Firearm Injury, 9 INJURY PREVENTION, 48, 48–52 (2003) (The authors matched California death records to state handgun purchase data and determined that 14.6 percent of persons who died from gun-related suicide had legally purchased a handgun within a two-year period before their death.).
- 23. See Jonathan Cavanagh, Alan Carson, Michael Sharpe & Stephen Lawrie, *Psychological Autopsy Studies of Suicide: A Systematic Review*, 33 PSYCHOLOGICAL MEDICINE, 395, 395–405 (2003) (reporting that ninety-one percent of persons who died by suicide had a mental disorder, on average across seventy-six studies).
- 24. See Jeffrey W. Swanson, Michele M. Easter, Allison G. Robertson, Marvin S. Swartz, Kelly Alanis-Hirsch, Daniel Mosely, Charles Dion & John Petrila, Gun Violence, Mental Illness, and Laws that Prohibit Gun Possession: Evidence from Two Florida Counties, 35 HEALTH AFF. 1067, 1067–75 (2016) (finding that in Florida, seventy-two percent of severely mentally ill gun suicide victims were found to be legally eligible to purchase a firearm on the day they used one to end their own life); see also Lesley C. Hedman, John Petrila, William H. Fisher, Jeffrey W. Swanson, Dierdre A. Dingman & Scott Burris, State Laws on Emergency Holds for Mental Health Stabilization, 65 PSYCHIATRIC SERVS. 529, 529–35 (2016) (finding that in many states, police commonly detain persons in a mental health crisis and transport them to a treatment facility, where they are briefly held before either being discharged or persuaded to sign into a hospital voluntarily, neither of which results in gun disqualification in most states, notwithstanding elevated risk of harm to self or others that may coincide with involuntary hospitalization).
- 25. See Swanson et al., supra note 24 at 1071 (finding that in Florida, thirty-eight percent of a large study population of persons with mental illness who were arrested for violent, gun-involved crimes were not prohibited from firearms at the time).
- 26. See Christopher Ingraham, There Are Now More Guns than People in the United States, WASH. POST (Oct. 5, 2015), https://www.washingtonpost.com/news/wonk/wp/2015/10/05/guns-in-the-united-states-one-for-every-man-woman-and-child-and-then-some/ [https://perma.cc/62L5-7RT5] (compiling estimates using firearm manufacturing, importing, and exporting data from the Congressional Research Service, combining Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) data with U.S. Census

further limits the effectiveness of any policy that relies solely on stopping a risky person from acquiring a new gun. There should be a concomitant means of gun removal. Guns are extremely durable devices that many owners retain indefinitely and pass down through generations. Meanwhile, U.S. gun manufacturers have continued to increase their output of new guns, particularly in recent years—from 5.6 million guns in 2009 to 10.9 million guns in 2013.<sup>27</sup> This means there are probably now more guns than there are people in the United States, though guns are not evenly distributed in the population.<sup>28</sup> Moreover, individuals at high risk of violence commonly have access to firearms at home, even if they would not qualify to buy a gun themselves, because they live in households with guns legally purchased by family members or others.

An estimated nine percent of adults in the United States have problems with impulsive, angry behavior and have access to firearms at home; these are individuals who admit that they "break and smash things" when they get angry, and many of them would meet diagnostic criteria for a mental health problem such as a personality disorder.<sup>29</sup> However, less than ten percent of these angry, impulsive, gun-possessing adults have ever been hospitalized for a mental health problem, and thus would never have lost their gun rights by dint of a mental-health-based restriction.<sup>30</sup> One such angry individual was Craig Stephen Hicks, the legal owner of a cache of about a dozen firearms who, in a fit of irrational rage, shot three young Muslim people in the head in Chapel Hill, North Carolina in February 2015.<sup>31</sup> Notably, properly conducted federal and state background check policies were insufficient to protect the public from Hicks. Although Hicks did not meet any gun-prohibiting criteria,<sup>32</sup> he was nevertheless a very dangerous

estimates of population, noting also that some experts put the estimate lower—in the range of 245,000,000 to 270,000,000 guns—to properly account for attrition in the civilian firearm stock).

<sup>27.</sup> Id.

<sup>28.</sup> See Lois Beckett, Gun Inequality: U.S. Study Charts Rise of Hardcore Super Owners, THE GUARDIAN (U.K.) (Sept. 19, 2016) (discussing results of a new unpublished Harvard/Northwestern survey, released exclusively to news outlets, which found that approximately half of the nation's guns are "concentrated in the hands of just 3 [percent] of American adults—a group of super-owners who have amassed an average of 17 guns each"); see also Behavioral Risk Factor Surveillance System (BRFSS), North Carolina State Center for Health Statistics, 2001, http://www.schs.state.nc.us/SCHS/brfss/2001/us/firearm3.html [https://perma.cc/KPP8-4884] (documenting wide regional variation in household gun ownership rates, ranging from under ten percent of households in some states to more than sixty percent of households in other states).

<sup>29.</sup> See Jeffrey W. Swanson, Nancy A. Sampson, Maria V. Petukhova, Alan M. Zaslavsky, Paul S. Appelbaum, Marvin S. Swartz & Ronald C. Kessler, Guns, Impulsive Angry Behavior, and Mental Disorders: Results from the National Comorbidity Survey Replication (NCS-R), 33 BEHAV. SCI. L. 199, 209 (2015) (reporting on the prevalence of impulsive angry behavior combined with access to firearms, and the significant association between personality disorders and the combination of impulsive anger with gun possession).

<sup>30.</sup> Id.

<sup>31.</sup> See Sarah Kaplan, Suspect in Chapel Hill Killings Described as Troublemaker, Obsessed with Parking, WASH. POST (Feb. 12, 2015), https://www.washingtonpost.com/news/morning-mix/wp/2015/02/12/alleged-chapel-hill-killer-described-as-neighborhood-bully-obsessed-with-parking-and-noise/ [https://perma.cc/GU5Z-D2XD] (suggesting that the suspect's extraordinary anger was known to neighbors).

<sup>32.</sup> See Anne Blythe, Craig Hicks Becomes Symbol in Gun Politics, NEWS & OBSERVER (Raleigh, N.C.) (Apr. 11, 2015), http://www.newsobserver.com/news/local/counties/orange-county/article

man who went on to use a legally obtained firearm to carry out a horrifying multiple homicide. What went wrong in the Hicks case? It would be tempting to see it simply as an egregious example of the mismatch between our gundisqualifying criteria and actual risk. After all, Hicks's neighbors were well aware that he had a serious anger problem, and that he had guns; it appears that people were quite afraid of him.<sup>33</sup> Would adding more inclusive criteria for restricting such people from purchasing guns have saved the lives of the three young people? Probably not, because Hicks already had a dozen guns sitting in his apartment.<sup>34</sup> Rather, in order to effectively deter and prevent people like Hicks from using guns in a harmful way, a different kind of law would have been needed: a legal tool to effectively remove guns from a dangerous person who already possesses them, that is, a preemptive, risk-based gun seizure law that would apply to dangerous-but-not-otherwise-gun-prohibited persons.

#### Ш

# BRIEF HISTORY OF A RISK-BASED PREEMPTIVE GUN REMOVAL LAW IN CONNECTICUT

On March 6, 1998, a disgruntled accountant with the Connecticut Lottery Corporation used a 9mm Glock pistol and a knife to murder four co-workers before shooting himself in the head.<sup>35</sup> The shooter, Matthew Beck, had previously attempted suicide and was being treated for depression.<sup>36</sup> In response to the public outcry over this incident as well as the infamous Columbine shooting the following year, state lawmakers passed Public Act 99-212 in 1999.<sup>37</sup> Connecticut thereby became the first state to authorize seizure of firearms from putatively dangerous persons who are not otherwise legally prohibited from purchasing or possessing guns, before they have committed an act of violence.<sup>38</sup>

18279290.html [https://perma.cc/3KF8-HQS7] ("Until his . . . arrest on three first-degree murder charges, Hicks was a gun owner with a valid conceal-carry permit and a cache of about a dozen firearms.").

- 33. Kaplan, supra note 31.
- 34. Blythe, supra note 32.
- 35. Rabinovitz, supra note 6.
- 36. Id.
- 37. Only two months after the lottery shooting, the Connecticut General Assembly passed PA 98-129, An Act Concerning Handgun Safety, which required the creation of a protected database regarding civil commitments and gun permits. The gun seizure provision began as a minor modification of gun permit statutes (C.G.S. 29-28 to 29-32) introduced in January 1999. After the Columbine shootings on April 20, 1999, the Bill was expanded to permit gun seizures with a warrant. It is encoded under CONN. GEN. STAT. § 29-38c. See Michael A. Norko & Madelon Baranoski, Gun Control Legislation in Connecticut: Effects on Persons with Mental Illness, 46 CONN. L. REV. 1609, 1615 n.33 (2014) (discussing the "legislative atmosphere" after the Connecticut Lottery shooting and the Columbine shooting); see also Transcript of Connecticut General Assembly House Debate on Bill Number 1166, June 7, 1999, pages 5412, 5432, 5502, 5507, 5522, and 5526 and Senate Debate on same bill, June 4, 1999, pages 3116, 3123, and 3126 (referring to the Lottery or Columbine shootings). The bill ultimately became Public Act 99-212.
- 38. In 2006, Indiana enacted a similar law, codified as amended in IND. CODE § 35-47-14-3 (2013). It allows police to seize guns from "dangerous persons" without a warrant, pending a judicial hearing. The state has the burden of showing, by clear and convincing evidence, that the person was dangerous at the time of the firearm seizure. If the court retains a firearm, the individual may petition for its return 180

The new law emerged from earlier policy discussions in Connecticut about how to identify risky people who should not possess guns, while also maintaining confidentiality of records that might include private health information; one proposal had focused on having psychiatrists evaluate mentally ill individuals for safety to possess firearms.<sup>39</sup> However, mental health stakeholders were concerned that such a law might stigmatize people with mental illness.<sup>40</sup> As the draft of the law evolved, it was written deliberately to exclude mental illness per se from among the reasons for attributing risk sufficient to remove someone's guns,<sup>41</sup> and it included sufficient procedural safeguards to satisfy gun-rights advocates in the legislature that the civil rights of law-abiding gun owners would not be needlessly infringed.<sup>42</sup> In the end, the proposal for a gun removal scheme

days after each court hearing. In 2014, California became the third state to pass a risk-based gun removal law, creating what is called a Gun Violence Restraining Order. Elliott Rodger was the legal owner of three 9mm pistols when he embarked on a killing spree in Isla Vista, California, in May 2014, leaving six dead and fourteen injured before turning a gun on himself and ending his own troubled life. Rodger's parents had been concerned enough about their son to ask the police to check on him. Law enforcement officers paid a social welfare visit to Rodger's residence but determined that he did not meet criteria to be detained. However, advocates for risk-based preemptive gun removal laws have argued that if such a law had been in place at the time, police could have searched for and seized Rodger's firearms. In the aftermath of the shooting, the California State Assembly passed and Governor Brown quickly signed CAL. COM. CODE § A.B. 1014, legislation authorizing the Gun Violence Restraining Order. See Shannon S. Frattaroli, Emma E. McGinty, Amy Barnhorst & Sheldon Greenberg, Gun Violence Restraining Orders: Alternative or Adjunct to Mental Health-Based Restrictions on Firearms? 33 BEHAV. SCI. L. 290, 302–03 (2015); see also Joshua Horwitz, Anna Grilley & Orla Kennedy, Beyond the Academic Journal: Unfreezing Misconceptions about Mental Illness and Gun Violence Through Knowledge Translation to Decision-Makers, 33 BEHAV. SCI. L. 356, 363 (2015) (describing the role of research evidence in advocating for this law). In 2016, Washington State became the fourth state to enact a preemptive, riskbased gun removal law, Initiative 1491, Washington Individual Gun Access Prevention by Court Order (2016), which authorized the use of the Extreme Risk Protection Order (ERPO).

- 39. Michael A. Norko, Legislative Consultation and the Forensic Specialist, in BEARING WITNESS TO CHANGE IN FORENSIC PSYCHIATRY AND PSYCHOLOGY PRACTICE 197 (Ezra E. H. Griffith, Michael A. Norko, Alec Buchanan, Madelon Baranoski & Howard V. Zonana eds., 2016); see also Norko & Baranoski, supra note 37, at 1614 (describing collaboration between state agencies—the Departments of Emergency Services and Public Protection, Mental Health and Addiction Services, and Information Technology—to create a system that would "accomplish the dual objectives of reporting [records of gundisqualified individuals] and maintaining confidentiality"; a "black box" computer database for sharing confidential records was eventually devised).
- 40. See Norko & Baranoski, supra note 37, at 1629–31 (discussing methods of de-stigmatizing psychiatric conditions and their treatments).
- 41. See Connecticut Network, Michael Norko Statement to the Connecticut Criminal Justice Policy Advisory Commission (Nov. 17, 2016), http://www.ctn.state.ct.us/ctnplayer.asp?odID=13447 [https://perma.cc/QNL4-GMVM] (describing his personal recollection of mental health stakeholders' successful efforts to advocate for language in the bill that that would not single out people with mental illness as categorically at risk, but rather focus on periods of crisis and behavioral indicators of risk: "The collaboration that occurred between the mental health community and the legislature at the time allowed for us not to take the road of making this a law about people with mental illness, but rather a law about people who are in periods of crisis, who are in a temporary stage of risk. And so the law did not require any finding of mental illness, per se. It required probable cause, it had a requirement for a hearing within 14 days of the gun removal, and the guns could be held for up to one year, or at the hearing, they could be returned to the owner."); see also Transcript of House Debate on Bill Number 1166, June 7, 1999, at 5380, 5402, 5404, 5446, 5480 and Senate Debate, June 4, 1999, at 3139 (explaining that the bill was not meant to focus on mental illness per se, but on a person in a dangerous situation from any cause).
  - 42. See Connecticut Network, Michael Lawlor Statement to the Connecticut Criminal Justice Policy

based solely on "imminent risk" regardless of mental health history was seen as less stigmatizing. 44 The law passed with strong bipartisan support. 45

Specifically, the Connecticut statute allows police, after independently investigating and determining probable cause, to obtain a court warrant and remove guns from anyone who is found to pose an imminent risk of harming someone else or himself or herself. In confirming probable cause and determining imminent risk, the judge must consider recent threats or acts of violence and recent acts of cruelty to animals. The judge may also consider: reckless gun use or display; a history of the use, attempted use, or threatened use of physical force against other persons; prior involuntary psychiatric hospitalization; and illegal use of drugs or alcohol abuse.

The typical case begins with a call to the police concerning a person who is thought to pose risk of harming someone with a gun. The police take the report and must conduct an independent investigation to gather facts that might support a determination of "probable cause to believe that (1) a person poses a risk of imminent personal injury to himself or herself or to other individuals, (2) such person possesses one or more firearms, and (3) such firearm or firearms are within or upon any place, thing or person . . . . "49 If the police find evidence that they consider supportive of such probable cause, they may issue a statement to this effect, signed by two officers as co-affiants. 50 The police officers' statement

Commission (Nov. 17, 2016), http://www.ctn.state.ct.us/ctnplayer.asp?odID=13447 Advisory [https://perma.cc/LP8R-RN2E] (describing the legislative history of Connecticut's risk warrant law: "[W]hen this bill was considered by the legislature, there [were] all the usual gun rights advocates on one side, and the so-called anti-gun advocates on the other side. But the end result, just to be clear, was a very strong bipartisan approval of this bill after a very elaborate analysis of the pros and cons of the initiative, and inclusion into the law of a whole series of procedural safeguards to ensure that the police wouldn't overreach here, and that there would be checks and balances all the way through . . . . [T]he vote in the House of Representatives that year was 103 to 47, and among the Republicans... there was 28 'yes' votes and 19 'no' votes. And in that 28 'yes' votes were some of the principal gun rights advocates who were members of the House of Representatives that year. At the end of the day, when it was finally enacted, [the law] incorporated enough safeguards to build a level of comfort among the gun rights advocates in the legislature, and outside. In fact . . . the Connecticut Sportsman Association was supportive . . . And in the Senate, the vote was 29-6, and that included 11 Republican votes, including some of the strongest gun advocates who were members of the Senate at the time ... So, I just want to point out that when it was enacted, a lot of time was spent trying to get the balance right.").

- 43. CONN. GEN. STAT. § 29-38c (1999).
- 44. Norko & Baranoski, supra note 37, at 1615.
- 45. Michael Lawlor, *supra* note 42; *see also* Remarks of Sen. Williams, Transcript of Senate Debate on Bill Number 1166, June 4, 1999, at 3103 ("[T]his bill is a product of both Republicans and Democrats of both Senators and Representatives. Of both gun control advocates, and sportsman advocates. And there is much to recommend in this bill.").
  - 46. CONN. GEN. STAT. § 29-38c (1999).
  - 47. *Id*.
  - 48. Id.
- 49. See id. (As a condition for a judge issuing a gun removal warrant, the statute requires that a "state's attorney or police officers have conducted an independent investigation and have determined that such probable cause exists and that there is no reasonable alternative available to prevent such person from causing imminent personal injury to himself or herself or to others with such firearm.").
  - 50. See id. (The statute requires that the risk complaint be made "on oath by any state's attorney or

requesting a risk warrant then goes to a Superior Court Judge, who may issue the warrant in an expedited fashion. Such a request may also be submitted to the judge directly by the state's attorney, either as the originator of the complaint or upon reviewing a statement submitted first to the state's attorney by police officers. The warrant then goes back to the police, who proceed to the residence of the subject, at which they may search for guns and seize any guns and ammunition they find. Selection of the subject of the sub

The police also must make a decision about what to do with the person of concern. Options include arresting the person if there is evidence they have committed a crime, transporting the person to a hospital emergency department for evaluation if there is evidence they are in a dangerous mental health crisis and might meet commitment criteria, or leaving the person alone.<sup>53</sup> If the person is arrested, criminal proceedings will follow, and if the person is taken to a hospital, they may be admitted or released. Within fourteen days of the gun removal, the court must hold a hearing to decide whether to return the guns to the person or hold the guns for up to one year.<sup>54</sup> Although the standard for the initial police seizure is probable cause, at the hearing the state must prove by clear and convincing evidence "that the person poses a risk of imminent personal injury to himself or herself or to other individuals."<sup>55</sup>

Those whose guns are removed also become ineligible to hold a permit, which is required to purchase or possess a firearm in Connecticut. <sup>56</sup> One gun owner subjected to firearm seizure under the Connecticut law challenged its constitutionality, arguing that it violates the Second Amendment to the United States Constitution. The recent Connecticut Appellate Court opinion in *State v. Hope* rejected this argument:

Section 29-38c does not implicate the Second Amendment, as it does not restrict the right of law-abiding, responsible citizens to use arms in defense of their homes. It restricts for up to one year the rights of only those whom a court has adjudged to pose a risk of imminent physical harm to themselves or others after affording due process protection to challenge the seizure of the firearms. The statute is an example of the longstanding 'presumptively lawful regulatory measures' articulated in *District of Columbia v. Heller . . . .* We thus conclude that § 29-38c does not violate the [S]econd [A]mendment.<sup>57</sup>

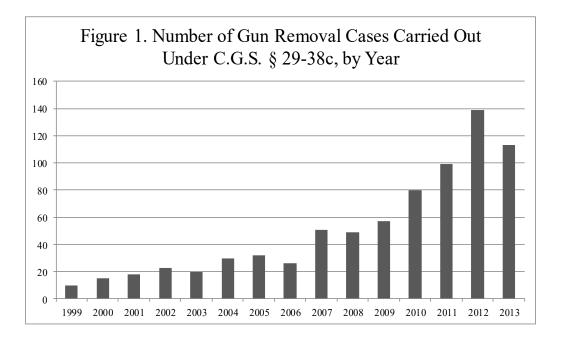
assistant state's attorney or by any two police officers, to any judge of the Superior Court[.]").

- 51. Id.
- 52. While this describes the procedure de jure, there is also a de facto practice in which police often take guns initially as part of "securing the scene" and apply for the warrant later. This is described in part V.B of the article, in the words of a police officer who was interviewed for the study.
  - 53. Norko & Baranoski, *supra* note 37, at 1619.
  - 54. CONN. GEN. STAT. § 29-38c(d).
  - 55. *Id*.

<sup>56.</sup> CONN. GEN. STAT. § 29-36f(b) addresses pistols and revolvers; CONN. GEN. STAT. § 29-37p(b) addresses long guns. The gun owner must appear before the Board of Firearms Permit Examiners in order to have the firearms permit reinstated. *Id.* This additional process was the reason the appeal in *State v. Hope* was not considered moot despite the firearms having been returned to the owner more than a month before the appeal was heard. State v. Hope, 133 A.3d 519 (Conn. App. Ct. 2016).

<sup>57.</sup> Hope, 133 A.3d at 524-25.

Despite initially high expectations that the statute would be widely used, very few gun removals were carried out during the first eight years after the law went into effect—about twenty per year, on average, from 1999 through 2006, as shown in Figure 1. The limited number of cases may have been due to the complexity and time-consuming nature of the removal procedures, explored further in part V. However, following 2007 (the year of the mass shooting at Virginia Tech University), the annual number of gun removals increased about fivefold—to about 100 cases per year—reaching a cumulative total of 762 by the end of June, 2013.<sup>58</sup>



<sup>58.</sup> The cutoff date for the study data collection was June 30, 2013. Thus, the number of cases for that year is incomplete and should not be interpreted to show a real decline in total cases from 2012 to 2013. In fact, subsequent data collection (by the DMHAS Division of Forensic Services, Michael Norko MD, Director) revealed a total of 184 gun removal cases in 2013, representing the highest number per year through 2016; the data subsequent to July 1, 2013 were not included in the analyses for this current research project.

#### IV

#### THE STUDY'S RESEARCH METHODS AND DATA SOURCES

Our study employed a mix of quantitative and qualitative research methods, combining descriptive analysis of semi-structured key informant stakeholder interviews with statistical analysis of merged administrative records for the population of persons subjected to gun removal in Connecticut (762 in total from 1999–2013). Wide-ranging, open-ended interviews were conducted and audio-recorded with eleven individuals who were strategically selected to provide indepth information relevant to gun seizure policy implementation and practice. These informants included judicial and law enforcement officers and administrators, mental health professionals, advocates, and a family member of a young adult diagnosed with schizophrenia. This article quotes and comments on selected passages from interviews that were particularly illustrative of legal actors' perspectives on the purpose of the gun removal law, the need to balance public safety interests with individual rights, practical and legal barriers to using the law, and how these barriers might be addressed.

State courts provided data on all gun seizures conducted under C.G.S. § 29-38c during the study period. We created a systematic database of descriptive characteristics of all individuals whose guns were removed and the circumstances surrounding gun seizure in these cases. These gun seizure cases were matched and merged with statewide arrest records, services utilization records in the public behavioral health system, and death records including cause of death, with a specific focus on suicides using guns versus other methods. Also assembled were records of arrest leading to conviction and public behavioral health service encounters for the period beginning twelve months before, and ending twelve months after the gun seizure event. The features of risk-based gun removal, and the characteristics of the population subjected to it were further explored by conducting descriptive statistical analyses of all gun removal cases, as well as longitudinal analysis of criminal arrest and behavioral health treatment in these cases, comparing the period before and after gun removal.

The study undertook a quasi-experimental analysis of the effect of the gun seizure policy on suicides by: (1) using the known case fatality rates for different methods of suicide to estimate the total number of suicide attempts represented by the recorded number of deaths by suicide; (2) extrapolating a counterfactual number of would-be suicide deaths, that is, excess deaths that would have occurred if the gun seizure subjects had kept their guns and used them in suicide

<sup>59.</sup> Unless otherwise cited, the source of all statistics reported in the article is the authors' original analysis of the data described in part IV. The study was sponsored by the Fund for a Safer Future. The formal name of the study in the Duke Health Institutional Review Board is: *Implementation and Effectiveness of 'Dangerous Persons' Gun Seizure Laws in Connecticut and Indiana*. In order to protect the confidentiality of private health information contained in the matched mental health records of individuals who were subject to gun removal under the risk warrant law, the data were de-identified within the relevant state agencies in Connecticut prior to delivery of the data to Duke University for analysis. Privacy concerns and appropriate protections thus preclude the publication here of more specific information tied to individual persons.

attempts at the same rate as other gun-owning men in the United States; (3) estimating the number of lives saved by subtracting the actual number from the counterfactual estimate of suicide deaths; and (4) calculating the number of gun removal cases needed for each averted suicide, by dividing the total number of removal cases by the estimated number of prevented suicides.<sup>60</sup>

The Connecticut Department of Mental Health and Addiction Services (DMHAS) coordinated the process of matching and merging the gun seizure database with other state agencies' longitudinal records pertaining to these individuals. The Judicial Branch provided data on court hearing outcomes. The Department of Emergency Services and Public Protection provided records for arrests resulting in convictions, with statutory charges. The Department of Correction provided data on any incarcerations. The Department of Health provided death records, including cause of death, with a special focus on suicides and whether guns were involved. Finally, DMHAS itself provided data on psychiatric diagnoses and services utilization for mental health and substance use disorders. The study was reviewed and approved by the Duke Health Institutional Review Board, the State of Connecticut Department of Mental Health and Addiction Services Institutional Review Board, and the Yale University Institutional Review Board.

## V RESULTS OF THE RESEARCH STUDY

# A. Prevalence And Characteristics Of Risk-Based Gun Removal Cases In Connecticut

The aggregate demographic characteristics of the study population (N=762) provide a profile of the typical gun seizure subject in Connecticut as a middle-aged or older married man. Almost all (ninety-two percent) of gun removal subjects were male. Of those whose marital status was known and reported, eighty-one percent were married or cohabiting. Five percent were military veterans, and thirty-one percent of these veterans had been deployed in the year before gun removal. Subjects ranged across the adult age spectrum, with an average age of forty-seven years at the time of gun removal; the oldest was ninety-three. In three cases, a minor was listed as the person of concern on the risk warrant, because the law was invoked as a means to remove unsecured guns from the possession of adults due to concern for the safety of an at-risk child.<sup>61</sup>

<sup>60.</sup> Equations were as follows: Estimated N suicide attempts =  $\sum_{K=1}^{M} (N_k * (\frac{1}{cfr_k}))$ , where N = number of recorded suicides, K = suicide method (1 to m), and cfr is the case fatality rate. Counterfactual N suicide deaths =  $\sum_{K=1}^{M} (A_k * p_k * cfr_k)$ , where A = estimated number of suicide attempts, K = suicide method (1 to m), and cfr is the case fatality rate. Estimated number of lives saved = Counterfactual N - Actual N suicide deaths. Estimated number-needed-to-remove = N total removals/ estimated number of lives saved.

<sup>61.</sup> These types of cases may not have been anticipated by the legislators who enacted the law and may reach beyond the class of cases the legislators expressly intended to cover. Whether the statute should be construed to include them raises an interesting issue of statutory interpretation on which

About half (forty-nine percent) of the gun removal cases were initially reported to the police by an acquaintance of the person of concern; forty-one percent of reports came from family members and eight percent from employers or clinicians. The other fifty-one percent were reported by people who either did not know the person of concern or did not disclose their relationship to the police. The social circumstances and emotional features of risk that led to these gun removal actions were diverse—ranging from anger and conflict between intimate partners, to emotional distress over financial problems, to the sadness of loss in old age.

The specific information written by police on the risk-warrant petitions was available for review in 702 gun-removal cases. Suicidality or self-injury threat was listed as a concern in sixty-one percent of cases, and risk of harm to others was a concern in thirty-two percent of cases. There was some overlap between these two categories, with risk of harm to both self and others noted in nine percent of cases. In sixteen percent of cases, the risk-warrant form did not indicate the type or object of risk that was being alleged, leaving unspecified whether the concern for gun removal was potential harm to self, others or both. Such cases tended to involve persons who appeared to the police to be severely psychotic, intoxicated, emotionally agitated, or some combination of these states, raising general safety concerns. Examples of brief narratives recorded on risk warrant forms include:

- "extremely paranoid and delusional, set up wooden device to barricade door to house"
- "history of bipolar, diabetic, intoxicated and yelling, went from paranoid to agitated to upset"
- "highly intoxicated, disorganized and paranoid, references to firearms and officer involved shooting on site, diagnosis of mental illness although no medicine according to mother"
- "emotionally sick and not eaten for past four days, mother in hospital, despondent and intoxicated"
- "eighty-two year old woman, disoriented, did not want to go to hospital, evidence of dementia, wanted to bring gun to hospital" 62

Police found and removed guns in ninety-nine percent of cases when they conducted a search, and they removed an average of seven guns from each risk-warrant subject. In seventeen percent of all cases, the gun removal process culminated in a concurrent arrest. This could have been due to the nature of the original incident reported to police or to the subject's uncooperative response during the police encounter. Only four percent were convicted in connection with an arrest on the day of the gun seizure. Most gun removal subjects were not

Connecticut judges appear to have differed. While some judges were willing to issue such warrants, another judge stated in an interview that he had refused to issue risk warrants to remove guns from households in cases where a child was named as the subject of the warrant request; in this judge's view, such cases should instead have been referred to child welfare authorities.

<sup>62.</sup> Risk Warrant Forms, Implementation and Effectiveness of 'Dangerous Persons' Gun Seizure Laws in Connecticut and Indiana, Duke Health Institutional Review Board, Protocol No. 00055585.

involved with the criminal justice system; about eighty-eight percent had no other arrests leading to conviction for any crime during the year before or after the gun removal event.

Six percent had been arrested in the year before seizure, and six percent were arrested in the year after. Two percent were arrested both in the year before and year after gun seizure. By contrast, in fifty-five percent of cases police were sufficiently concerned about the mental health or intoxicated condition of the subject that they transported the individual to a hospital emergency department for evaluation. In twenty-seven percent of cases, the individual was not detained—was neither transported to a hospital nor arrested—following gun seizure.

Most risk-warrant subjects were not known to DMHAS at the time of gun removal. Only about twelve percent had received treatment for a mental health or substance use disorder in the DMHAS system during the year before gun seizure. However, many of these individuals came into contact with DMHAS as an indirect result of the gun removal action, so that twenty-nine percent received treatment in the system during the year *following* gun seizure. Of the 348 cases with any (lifetime) matched record in DMHAS, forty-five percent were diagnosed with a mental illness only (no substance use disorder),<sup>64</sup> twenty-six percent with a substance use disorder only (no mental illness), and twenty-nine percent with both mental illness and substance use disorder.

Treatment entry in many cases occurred because police found the subject of the risk warrant in an apparent mental health crisis and transported the individual to a hospital emergency department for evaluation, where they were admitted for an acute inpatient stay and then discharged to outpatient behavioral health treatment follow-up in the community. These data suggest, then, that the gun removal intervention sometimes functioned as a signal event and a portal into needed treatment, in addition to being a public safety action to remove lethal weapons at a time of high risk.<sup>65</sup>

Outcomes of court hearings challenging gun removal were known for thirty percent of cases. Most of the others failed to appear in court and, importantly, lost their legal gun access by default. Among cases with known outcomes at hearing, results were as follows: guns held by police, sixty percent; guns ordered destroyed or forfeited, fourteen percent; guns returned directly to the subject, ten percent; guns transferred to another individual known to the subject and legally eligible to possess guns, eight percent; other, eight percent.

<sup>63.</sup> The study could only obtain records of arrests that led to criminal convictions. Thus, these figures underestimate the number of police encounters before and after the gun seizure.

<sup>64.</sup> Thirty-nine percent of those with a mental health diagnosis had a serious mental illness. Of those with a serious mental illness, seventeen percent had schizophrenia, twenty-three percent had bipolar disorder, and sixty percent had major depression.

<sup>65.</sup> It must be noted that still more seizure incidents may have resulted in private mental health care—for which records were not available to the study.

## B. The Practice Of Gun Removal In Connecticut: Stakeholders' Perspectives On Potential Benefits And Barriers To Implementation

To obtain a more textured and nuanced understanding of the gun removal policy in Connecticut, we interviewed a variety of respondents, including police supervisors and front-line police officers, prosecutors, judges, a mental health clinician, and a family member of a young adult with schizophrenia who had a history of violent behavior. We explored their perspectives on the need for, and purpose of the gun removal law, its intended target population, practical and legal barriers to its use, police responses to these barriers, and the perceived effectiveness of gun removal as a tool for reducing gun violence and suicide. In what follows, we quote and comment on interviews that were particularly illustrative of legal actors' views of the gun seizure law—its purpose and process, as well as challenges to implementation and how these challenges can be addressed.

One respondent was a former prosecutor who had participated in many risk-warrant gun removal proceedings under C.G.S. § 29-38c. He described a hypothetical case in which the law could be used to separate guns from an individual who clearly poses a significant risk of harm to self or others, but has not committed a crime, does not necessarily have a mental illness, and would not otherwise be legally prohibited from purchasing and possessing a firearm:

A lot of times the people who have their weapons seized are not having a bad life they're having a bad moment. A lot of times they're in darkness for a day . . . . It's the wife just told him, "We're getting a divorce," and they begin drinking, or they [make] suicidal comments to somebody . . . . [Let's say] my wife [and I] had a disagreement. I have two pistols and a rifle, and what I did was I left the house, and she saw me leave the house. I put the guns in my car and the last thing I said to her was, "You know what? I am done here. I'm done with everybody. I'm finished." And I had a couple of gin and tonics in me, and I said "I'm going to go to my favorite place and no one's ever going to see me again." She calls the police. I've committed no crime; I haven't threatened anybody. She calls the police and gives the police identifying information of the truck I left in. She knows that my favorite place as a little boy was Penwood State Park. The police department goes down and finds my truck at the Penwood State Park. You know what I was doing? I was just having a couple more gin and tonics at the present time. They roll up on me. "Sir, is everything okay?" "Yeah everything's just fine. Why?" "Well, we got a call that you were a little disconsolate." They do a warrant. They secure the guns.66

The attorney further articulated the law's rationale by noting its public safety purpose and its specific applicability to cases where the police would otherwise lack clear authority to intervene and to remove guns—situations where people have, as he put it, "violent propensities that do not rise to [the level of] a criminal event for an arrest, but nonetheless [we] have to take these guns from them for the protection of themselves and the public." While thus noting that the law

<sup>66.</sup> Interview with Connecticut Prosecutor, Implementation and Effectiveness of 'Dangerous Persons' Gun Seizure Laws in Connecticut and Indiana, Duke Health Institutional Review Board, Protocol No. 00055585. In compliance with approved IRB protocol, a different name is used for the state park mentioned in the first quotation.

<sup>67.</sup> Id.

primarily serves the public's interest in safety, the attorney also emphasized the need to be reasonable and fair to the individual respondent in gun removal actions—highlighting the importance of legal due process protections commensurate with abridging an individual right and removing a person's private property.<sup>68</sup> Such legal safeguards, in his view, motivate both the temporary feature of gun seizures and the conditioning of rights restoration upon evidence of reduced risk:

Politically, I believe that [gun removal under C.G.S. § 29-38c] is what the public wants us to do. They want us to take affirmative steps, [but let people] have their day in court. No one's saying.... "We're taking your property and you're never going to get it back." That's not fair. That's not reasonable. [We are saying] you'll have a day in court when you're no longer in crisis. When you're receiving treatment, you may get those weapons back. 69

To the concern that gun removal might be carried out unfairly in reliance on a single police officer's biased report of risk, the attorney noted a system of checks in the risk warrant's requirement that a series of three observers concur. This, he believed, should reassure those who fear that the power to remove guns could be abused:

[I]t gives them a certain amount of reassurance that they're not just counting on the police to make this determination. You have three sets of eyes [that] have looked at this. You have the police who are on the scene, the State's Attorney who is going to . . . read a report and see if [evidence of risk] is there, and then a third set [of eyes], the judge, who is now going to look at it, and again—separate from being on the scene and being there—reading over just a report within those four corners, making a determination as to whether you can do something which is rather large, in that you are going to remove a person's Constitutional rights. So, having three sets of eyes I think is probably important.<sup>71</sup>

And yet, despite this nod to fairness and due process, the former prosecutor also seemed to allow for discretion—even some manipulation of the legal rules—based on the legal actors' own perceptions of a subject's character and the nature of the risk at stake. Indeed, rather than relying too much on an adversarial system of legal representation to ensure fairness in every case, he described a kind of collaborative application of leverage by the State's lawyer and the judge—almost implying that this was somehow appropriate because the action in question involves only a civil deprivation and not a criminal sanction. Specifically, in

<sup>68.</sup> Id.

<sup>69.</sup> Id.

<sup>70.</sup> See CONN. GEN. STAT. § 29-38c (1999) (The statute refers to the roles of three kinds of actors in the risk warrant process—police officers, a state's attorney, and a judge of the Superior Court. In the typical case, all three of these actors will have considered and concurred that the available evidence supports the required probable cause determination for a risk warrant. Technically, though, a risk warrant could be issued on the basis of concurrence between only two sets of actors: the police and the judge, or the state's attorney and the judge: "(a) Upon complaint on oath by any state's attorney or assistant state's attorney or by any two police officers, to any judge of the Superior Court, that such state's attorney or police officers have probable cause to believe . . . such judge may issue a warrant commanding a proper officer to enter into or upon such place or thing, search the same or the person and take into such officer's custody any and all firearms and ammunition.").

<sup>71.</sup> Id.

response to a question about whether the subjects of gun removal should have access to legal representation, the attorney gave this answer:

It's not a criminal matter; it is a civil matter.... You [as a subject of gun removal] have an option. One, you can roll your dice with the hearing. Two, you can say to me [as the State's lawyer] right now, "I am not comfortable going forward without an attorney." And I will go up and tell the judge you would like counsel. And [you] would be told, "We are not going to have the hearing [now] and you're not going to get the guns back." And then [people think,] "Oh, I'm going to have to pay for an attorney now to get my guns back?" [So the hearing goes forward.] That happens most of the time ... I would then go into chambers and lay it out for the judge exactly what we talked about. I would say, "Look, I think this guy is a good guy," or "I think this guy is a borderline guy." "

Despite such efforts to make the law work at the judicial level, there are significant barriers to carrying out these gun removal actions at the policing level, which hampers broader implementation of the statute. When asked to explain why such a small number of gun removals have been completed throughout the state—less than fifty cases per year, on average, since C.G.S. § 29-38c was enacted in 1999<sup>73</sup>—the attorney pointed to a mismatch between available police staffing resources in most departments and the statutory requirement that two officers appear as co-affiants before a judge to obtain the risk warrant:

Most law enforcement agencies in this state are less than forty officers. [That] means that for any one given shift, you have a supervisor and two patrol officers. With [the requirement of] two affiants that have to appear in front of a judge, you have no police on the street. So a supervisor or a law enforcement executive is going to say, "Do you really need to do that warrant? Do you really need to draft it right now, at 3:00 in the morning on Halloween? Okay? We don't have the staff for that." So that goes to the wayside and you run, or you roll the dice. [If you] roll, you run the risk of whether this person's going to go out and be violent.<sup>74</sup>

Other logistical issues may impede wider use of the gun removal law. A police administrator was among several interviewees who identified the problem of gun storage as a significant barrier:

[If we take someone's gun], we now have a piece of property . . . and we're stuck with it. What do we do with it for the next 200 years? It sits in our gun cabinet. So we may look at other alternatives, you know—[store it with] family members who have the legal right to own firearms.<sup>75</sup>

A former police officer likewise expressed concerns about the law's implementation and effectiveness, pointing first to the statute's "obscure" nature and the cumbersome aspects of the risk-warrant process:

Do I think 29-38C—when it was written, when it was drafted, and how it had been utilized pre-Sandy Hook—was effective? No, I don't believe it was effective. Why? It was an obscure statute. It was something that was labor-intensive. It was something that required an affiant, a co-affiant, supervisor's review, State's attorney's office review, and approval and a judge's signature and then, of course, execution on that warrant. Okay, so I didn't think it was a streamlined, timely process. I know that traditionally

<sup>72.</sup> Id.

<sup>73.</sup> Norko & Baranoski, supra note 37.

<sup>74.</sup> Id.

<sup>75.</sup> Interview with Connecticut Police Administrator, Implementation and Effectiveness of 'Dangerous Persons' Gun Seizure Laws in Connecticut and Indiana, Duke Health Institutional Rev. Board, Protocol No. 00055585.

with a lot of this stuff, the state will come up with something and the citizenry and law enforcement doesn't even know it exists. And that has happened time and time again.<sup>76</sup>

The former officer seemed to imply that the gun removal statute has amounted to little more than another unworkable policy concocted by obtuse state lawmakers and bureaucrats, promulgated top-down without properly informing either the rank-and-file officers who would be expected to carry out the policy or the public that might be affected by it.

As if to illustrate the possible perverse consequences of what he sees as a poorly implemented law, the former officer went on to describe a particular case in which the police seized a citizen's guns without following the required legal procedures, and a judge then improperly decided to retain the guns at the hearing anyway, notwithstanding evidence of the police officers' illegal removal action. Despite expressing some human understanding for a risk-averse judge's improper decision in the case, the respondent argued that the ultimate result of such official malfeasance is loss of public trust in the legal system, and a sense of betrayal especially among law-abiding gun owners who are otherwise inclined to trust the police. This is a point that he thinks is lost, ironically, on many lawmakers and judges:

Just from a human point of view I understand, you know, if you're a judge, you don't want to give the guns back and have something happen the next day and be on the front page. But you still should follow the law . . . . The judge didn't [follow the law], and we got all this embarrassing testimony . . . . Firearms owners especially feel put-upon. I don't think the legislature, I don't think the judiciary realizes how, how strongly offended people are by that . . . . These are people that have trust in the system . . . . These are people that support the police, were in the military, you know, read the paper and when somebody is arrested they assume he's guilty because "the police don't arrest people who aren't guilty." I mean, that's who these people are. And then they come up with stuff like this, their whole universe is shaken, you know, and that's very distressful for people. Nobody recognizes that. <sup>77</sup>

Still, some police supervisors and field officers who were interviewed did express general support for the risk-warrant law, as they explained how they carried out its legal requirements in practice on a fairly routine basis. The police administrator described in detail how the police can, in many cases, quickly fill out the required form, obtain a warrant from a judge on call, and carry out a gun removal action within a few hours' time:

I mean, most of it is a [three to five] line narrative. You know, "We got a report of a guy wanted to commit suicide. I showed up, he was sitting in the corner with a loaded .357. He said to me, he wanted to commit suicide. I talked to him and he put it down. We sent him to the hospital. He owns additional firearms [and] we want to take them all." So you take this... down to a judge, and there are judges on call in the State of Connecticut twenty-four hours a day... and [we] have a very regular working relationship with them. The judge's phone rings at two o'clock in the morning, it's us, and one of us drives over there with a warrant. He reviews it, signs off on the bottom of it, we go back and we take all the guns. In the meantime, officers are sitting at the location where all the

<sup>76.</sup> Interview with Connecticut Police Officer, Implementation and Effectiveness of 'Dangerous Persons' Gun Seizure Laws in Connecticut and Indiana, Duke Health Institutional Rev. Board, Protocol No. 00055585.

guns are, and securing it, our subject is gone to the hospital. We get the warrant signed, we go back to the house and we collect everything related to the gun . . . firearms, obviously, ammunition, components for making ammunition, gun powder and those kinds of things, because if they are there, anybody with the internet in twenty minutes could build something.<sup>78</sup>

In the same interview, however, this police supervisor explained how police officers often circumvented the risk-warrant process out of an immediate concern for safety at the scene. In pressing circumstances, it seems that police have other justifications for removing guns, and may need the risk-warrant only to continue holding the weapons once the immediate risk of the scene has passed:

The process of obtaining control over firearms [can] happen very quickly . . . in the absence of a warrant, as a matter of fact. It can happen that way. What we end up doing is following up with one of these warrants [after seizing the guns], and then we serve it on ourselves, basically. We serve it on the caretaker of the records department. She has control of the guns once we get them here, and we end up serving her with the warrant. And then that starts the documentation of what we did . . . . "This is what we seized as a result of this warrant," and then we file it with the court . . . . We are at that point compelled to complete the return of service, provide the copy of the entire thing to the subject of the warrant. Our guy is going to be locked up in evaluation at that point in time . . . . So we have to go to the civil court clerk . . . and so the civil clerk would get a copy of our warrant now. They stamp the receiving of the warrant, and create a record, where the individual who is the subject of the warrant now gets notification that in two weeks, this day, you're going to have a hearing about these guns. The standard of the subject of the warrant now gets notification that in two weeks, this day, you're going to have a hearing about these guns.

Regarding the problem of delay in obtaining a risk warrant, one lawyer suggested that a solution would be to change the law to resemble provisions currently available under domestic violence circumstances, in which the officer merely needs probable cause to believe that significant risk exists in order to seize weapons, with the warrant being obtained later:

Officers have the ability to short circuit that whole warrant process under domestic violence circumstances in which a weapon was used, present, or on-scene at the time of the incident. Officers can seize those and take them for safekeeping. What we would like to see is a . . . scheme like the domestic violence provisions [where] . . . once probable cause is determined we've met that Fourth Amendment threshold. Okay? Once probable cause is determined, the officers, if there's a weapon on scene, or there's availability of weapons, we can seize. They can go back and do the warrants later. 80

In summary, the shared perspectives of key respondents in the gun removal process help us to better understand both the potential benefit that a risk-based gun removal law may offer in terms of public safety, as well as some of the key reasons why it is challenging to widely implement such a law while safeguarding individual rights and ensuring legal due process in every gun seizure case.

<sup>78.</sup> Police Administrator, *supra* note 75.

<sup>79.</sup> Police Officer, *supra* note 76. An additional illustration of this alternative process is found in *State v. Hope*, where the firearms were seized by police responding to a call of concern by the owner's wife. Four days later, the warrant was issued. 133 A.3d 519, 523 (Conn. App. Ct. 2016).

<sup>80.</sup> Interview with Connecticut Attorney, Implementation and Effectiveness of 'Dangerous Persons' Gun Seizure Laws in Connecticut and Indiana, Duke Health Institutional Rev. Board, Protocol No. 00055585.

### C. Suicide Outcomes In Connecticut's Gun Seizure Population

A match of gun removal cases to state death records revealed that twenty-one individuals had completed suicide at some time following the gun removal event.<sup>81</sup> This equates to an annualized suicide rate of 482 per 100,000 in the study population, based on an average of 5.7 years at risk per person. This rate is approximately forty times higher than the average suicide rate of twelve per 100,000 per year in the general adult population of Connecticut during the same period.<sup>82</sup> Importantly, however, only six of the twenty-one suicides in the study were carried out with guns, while fifteen used other means: ten by suffocation or hanging, two by vapor poisoning, two by drug overdose, and one by a self-inflicted stab wound to the chest.

The proportion of these suicides that involved guns (twenty-nine percent) was lower than the corresponding gender-matched proportion for all adults in Connecticut, averaged across the same years (thirty-five percent),<sup>83</sup> and much lower than would have been expected in a population of gun owners (at least sixty-five percent).<sup>84</sup> This is consistent with a gun-deterrent effect associated with removal. Police had removed an average of six guns from each of these individuals.

Considering the initial court hearing decisions in these cases, three of the six eventual gun suicides involved individuals whose guns had been held pending further action. In the other three cases, the hearing outcome was listed as unknown, presumably because they failed to appear and thus lost their gun rights for twelve months by default. Among those who used other means of suicide, three initial court hearing decisions were held pending further action and twelve were unknown.

Notably, none of the six gun suicides occurred during the twelve-month period following gun seizure when the law allowed guns to be retained by police.

<sup>81.</sup> The death records were matched and provided to the study investigators by the Connecticut Department of Health.

<sup>82.</sup> CDC, *supra* note 10 (providing the most current online report of fatal and nonfatal injury statistics collected by the CDC, by year, region, type of injury, and demographic category).

<sup>83.</sup> Id.

<sup>84.</sup> The proportion of suicides that use guns, that is, the number of firearm suicides (FS) divided by the total number of suicides (S), or FS/S, has been shown to be highly and reliably correlated with the rate of (survey-reported) gun ownership at the state level: r = (approximately) 0.81. Indeed, the correlation is so strong that researchers have used the time-varying FS/S proportion as a proxy measure of change in state gun ownership rates. See Deborah Azrael, Philip J. Cook & Matthew Miller, *State and Local Prevalence of Firearms Ownership: Measurement, Structure and Trends*, 20 J. QUANT. CRIM. 43, 43–62 (2004) (finding that the F/FS ratio is a more effective proxy for gun ownership than several other indicators, including NRA membership per capita). To illustrate, in the ten states (including Connecticut) with the lowest household gun ownership rate (averaging seventeen percent), guns were involved in thirty-nine percent of male suicides and sixteen percent of female suicides. In contrast, in the ten states with the highest household gun ownership rate (averaging fifty-six percent), guns were involved in sixty-nine percent of male suicide and forty-four percent of female suicides. With respect to these gun seizure subjects in Connecticut, then, the FS/S rate arguably should have been even higher than in these high gun-owning states, because the baseline rate of gun ownership was, by definition, 100 percent (absent the intervening gun seizure).

Instead, all of these gun suicides occurred after the date when these individuals would have become eligible to have their guns returned or to once again legally purchase guns. Regarding the timing of suicide in those who used means other than guns, five of the non-gun suicides occurred within twelve months of the seizure event; four more occurred within sixteen months. Overall, the time from the date of gun removal to date of death by suicide was considerably longer for those who used guns (average 3.7 years) than for those who used other means (average 2.2 years.) This finding is consistent with the explanation that gun removal effectively delayed access to guns for use in suicide (typically for twelve months or more), while those who used other means would have had access to those means at any time.<sup>85</sup>

Eighteen of the suicide victims were men, and three were women. Their ages at death ranged from thirty-three to seventy-five years, with an average of fifty years. Two were United States military veterans, one who had served in the Vietnam War and the other in the Iraq-Afghanistan War, deployed in the year before his guns were removed. Seven of these individuals were reported to be intoxicated at the time of the seizure event (six with alcohol, one with a prescription drug).

Eleven of the twenty-one suicide victims had been transported to a hospital emergency department in conjunction with their gun removal event. Nine of them had received treatment in Connecticut's public behavioral health system, and three had been involuntarily committed to a psychiatric hospital. Of those with treatment records, five were diagnosed with a serious mental illness, five with a substance disorder, and three with both. While six had a matching historical record with the Department of Correction, none had been convicted of a crime in the twelve months preceding the removal event. However, one individual had an arrest resulting in conviction in connection with the gun removal event itself, and two had an arrest resulting in conviction during the twelve months following gun removal.

When people have their guns removed and go on to commit suicide anyway, it would seem that the policy has obviously failed in these particular cases. However, because the majority (seventy-one percent) of the suicides in the study used methods other than guns—and specifically used methods that are known to be less lethal than guns—it is possible that the policy was beneficial overall, and that there would have been even more suicides without it in place. To test this, we estimated the total number in the sample who attempted suicide by alternative means and survived. We then estimated the additional number who would have died if their guns had not been taken away, based on independent

<sup>85.</sup> Two stories with different endings illustrate this finding. In the first case, police received a call from a man in his early thirties who "sounded very depressed, said he had consumed alcohol and explicitly threated to kill himself with one of his firearms." Police seized four rifles and two shotguns in the case. The man eventually did complete suicide with a firearm, but not until six years later. In the second case, a middle-aged man threatened to shoot himself after his wife asked for a divorce. His guns were removed and ordered held pending further action. This second man also completed suicide, just over one year later, but by means of hanging—not with a gun.

evidence as to the proportion that would have used a gun instead of a less lethal means in their suicide attempt. More specifically, using the known case fatality rates associated with each of the suicide methods used, <sup>86</sup> we extrapolated the number of suicide attempts represented by each completed suicide, according the following formula:

Estimated N suicide attempts =  $\sum_{k=1}^{M} (N_k * (\frac{1}{cfr_k}))$  where N=number of recorded suicides, K=suicide method (1 to m), and cfr is the case fatality rate.

Table 1 displays the result of these calculations and yields an estimate of 142 suicide attempts.

Method of intentional self-injury	Completed suicides	Case fatality rate*	Estimated nonfatal attempts	Estimated total attempts
Firearm	6	87.0%	1	7
Hanging/strangulation	10	72.7%	4	14
Poisoning - gas	2	37.5%	3	5
Poisoning - drugs	2	2.7%	72	74
Incision/cut	1	2.4%	41	42
Total	21	14.6%	121	142

Table 1. Completed Suicides and Estimated Number of Suicide Attempts, by Method of Self Injury, among Connecticut Gun Seizure Cases

Using this calculated number of suicide attempts, we created a counterfactual data array to estimate the additional number of suicide deaths that would have occurred in the absence of the gun seizure policy. Construction of the counterfactual required making an assumption about what proportion of gunowning men in the baseline (pre-intervention) target population who are inclined to attempt suicide would use a gun in their suicide attempt.<sup>87</sup> In our study, the target population could best be described as men who own multiple guns and are deemed to pose a high risk of harming themselves or others with a gun. There are

<sup>86.</sup> Case fatality rates for specific suicide methods in the Connecticut population are calculated by combining data on suicide deaths with data on hospital discharges for intentional self-inflicted injuries, using 2012 as the index year. Data on the number of suicide deaths by each means were obtained from the Connecticut Office of the Chief Medical Examiner. Data on the number of hospital discharges for self-inflicted injuries by each means were obtained from the Connecticut Hospital Inpatient Discharge Database, Department of Public Health. The means-specific case fatality rate is given by the number of suicides for each particular method, divided by the sum of suicides and intentional self-injury hospital discharges for that method.

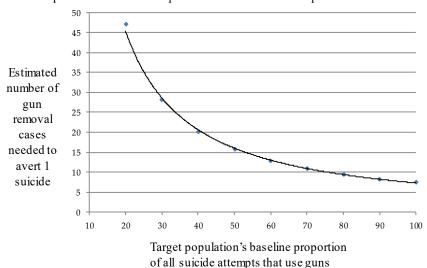
<sup>87.</sup> The large majority (ninety-two percent) of gun seizure cases were men.

no precise data for this specific population as to the distribution of preferred suicide methods. However, we were able to estimate this information for our study population using state-level, year-specific data on the frequency of different suicide methods among men, the estimated number of suicide attempts for each method in each state, based on known case fatality rates, and the linear correlation of the (survey-derived) rate of gun ownership in each state<sup>88</sup> with the estimated proportion of gun involvement in adult male gun suicides in each state.<sup>89</sup>

Specifically, the state-level linear correlation between the probability of gun ownership for any adult in a given state and the proportion of adult male suicide attempts using guns was r=0.79. We used the resulting regression equation to calculate the probability that any adult male who owns a gun and attempts suicide will use a gun in doing so, rather than some other method. That result (p=0.39) was used, in turn, to create the counterfactual hypothesis to estimate the number of excess fatalities that could have been expected in the absence of gun seizure, and then the number of gun seizure cases needed to prevent one suicide. The result for the latter was approximately twenty.

We consider that this initial estimate—twenty gun seizures for every averted suicide—is likely the most conservative, because it does not account for any excess risk of gun suicide associated with being identified as a gun seizure

Figure 2. Estimated Number of Gun Removal Cases Needed to Prevent One Suicide in a Population at High Risk for Suicide, as a Function of the Target Population's Baseline Proportion of All Suicide Attempts that Use Guns



<sup>88.</sup> See Bindu Kalesan, Marcos D. Villarreal, Katherine M. Keyes & Sandro Galea, *Gun Ownership and Social Gun Culture*, 22 INJ. PREVENTION 1, 1–5 (2015) (finding a close correlation between social gun culture, gun ownership, and firearm suicide).

<sup>89.</sup> CDC, supra note 10.

candidate and determined by a judge to be at high risk of harming self or others specifically with a gun. Indeed, it would seem reasonable to expect a much higher chance than thirty-nine percent that such a high-risk, multiple-gun-owning, male gun-seizure candidate would have chosen a gun, and not something else, as the preferred method of suicide, if his guns had not been removed by the police. Rather than speculating on this, we calculated the mathematical relationship between the expected proportion of gun use in suicides in a given target population, and the corresponding number of gun seizures that would be needed to avert a single suicide in that population. The model assumes that the hypothetical target population resembles the research study population of gunremoval cases in Connecticut with respect to the underlying prevalence of suicide attempts. The association follows a curvilinear form and is displayed in Figure 2.90

This graph illustrates that a gun seizure policy in any particular jurisdiction would be expected to be more or less efficient in preventing suicide as a predictable function of how often guns tend to be used in suicide attempts in the target population. If the law is applied to a population at risk in which guns are used very rarely as a method of suicide, it may be necessary to conduct a great many gun removals in order to prevent a single suicide. However, when the law is applied to a population at high risk of using guns in any suicide attempts, it may take far fewer gun removal cases to prevent one suicide.

As an example, if approximately seventy percent of the estimated 142 gun seizure suicide attempters in the Connecticut gun seizure database had used guns, 101 gun suicide attempts would have been expected, resulting in eighty-eight completed gun suicides. Assuming that the remaining forty-one non-gun suicide attempters had used alternative means in the same proportions as observed in the actual data, and applying the appropriate weighted average of lethality rates to those other means of suicide, we would have expected an additional five nongun suicides, for a total of ninety-three—or seventy-two more suicides than the twenty-one that actually occurred. Dividing the total number of gun seizures by this estimated number of averted gun suicides (762/72) yields an estimate of approximately one averted suicide for every ten to eleven gun seizure cases. That calculation is illustrated in Table 2.91

<sup>90.</sup> Estimate is derived from a state-level regression of the proportion of suicides that involve guns on the household gun ownership rates, and by extrapolation of the number of suicide attempts from case fatality rates applied to reported suicides by different methods in each state.

<sup>91.</sup> The counterfactual assumes that gun-owning men who attempt suicide in Connecticut would be as likely to use a gun in their suicide attempt as all men who attempt suicide in a high gun-ownership state. Estimated number of fatalities based on firearm suicide rates among Connecticut adults, 1999–2013, are reported by CDC WISQARS<sup>TM</sup> data. CDC, *supra* note 10.

Table 2. Estimated Suicide Prevention Effect of Connecticut's Gun Removal Policy

	Suicide outcomes for actual gun removal cases		Counterfactual (hypothetical) data assuming no gun removal		Estimated policy effect	
	Attempts	Fatalities	Attempts	Fatalities	Number of averted suicides	Number needed to remove
Firearm	7	6	101	88		
Other means	135	15	41	5		
Total	142	21	142	93	72	10.6

## VII SUMMARY AND IMPLICATIONS

Every day in the United States, more than 230 people are injured in gunfire and about ninety of them die—sixty of them by their own hand. Almost ninety percent of people who attempt suicide survive, and the large majority of those survivors do not go on to die in a subsequent suicide attempt; they are far more likely to die from some other cause later in life. However, people who use a firearm in that first suicide attempt almost never get a second chance; nationally, only about nine percent of gun suicide attempters survive. Using the law to prohibit a suicidal person from purchasing a gun is a good idea, but one that will not work—even with a comprehensive background check system—as long as those who are inclined to harm themselves do not fall into some category of persons prohibited from possessing or purchasing firearms under federal or state law. New research evidence suggests that people who die from self-inflicted gunshot wounds, even those suffering from a serious mental illness, typically have no gun-disqualifying record of any criminal or mental health adjudication.

<sup>92.</sup> *See* CDC, *supra* note 10 (here extrapolating a daily rate of firearm injury and mortality from the WISQARS<sup>TM</sup> report of all fatal and nonfatal gun injuries in 2014).

<sup>93.</sup> See David Owens, Judith Horrocks & Allan House, Fatal and Non-Fatal Repetition of Self-Harm: Systematic Review, 181 BRIT. J. OF PSYCHIATRY 3, 193, 193–99 (2002) (discussing results of a systematic review of published follow-up studies of survivors of suicide, which found that only seven percent of such survivors eventually died of a subsequent, fatal suicide attempt).

<sup>94.</sup> See CDC, supra note 10 (The survival rate for gun suicide attempts—9.0 percent—is calculated by dividing the total number of firearm suicides—3,320—by the sum of fatal and nonfatal intentional self-injuries with a firearm—36,919—as reported in the CDC's WISQARS<sup>TM</sup> databases for 2014).

<sup>95.</sup> See Swanson, supra note 24, at 1071 (reporting that sixteen percent of the Florida study subjects who died from suicide had a gun-disqualifying criminal record only, ten percent had a gun-disqualifying mental health adjudication record only, two percent had both types of disqualifying records, and seventy-

Indeed, the large majority of them would have been able to legally buy a gun on the day they used one to end their own life. 96

In a country where guns are highly prevalent and where the right to purchase and possess them is constitutionally protected, 97 it would seem prudent for states to adopt carefully tailored, civil (rather than criminal), public-safety-minded laws designed to separate guns from dangerous people—laws specifically targeting those few individuals who pose a clear and present risk of harm to themselves or others but who are not otherwise restricted from purchasing or possessing guns. The exercise of state authority to remove guns from private citizens under such risk-based regimes must, of course, be checked by appropriate due-process protections commensurate with abridging constitutional rights, including the opportunity for timely restoration of gun rights when risk recedes. Connecticut pioneered the use of these temporary preemptive gun removal laws, but research has been lacking to inform other jurisdictions about the particular challenges of implementing the laws, including evaluating their effectiveness and their cost to personal liberty.

This article has presented the results of an extensive, mixed-methods empirical study of Connecticut's experience with its pioneering gun removal law. As this study demonstrates, there has been a considerable shift between the original impetus for the statute—public concern over a highly publicized homicide—and the actual use of the law—concern over harm to self and the risk of suicide, with referrals often coming from family members. This law took several years to begin to work itself into routine practice as a useful tool for public safety and suicide prevention. Considerable barriers to implementation, such as the real and perceived time burden placed on police officers, seem to have prevented more extensive application.

Is the risk-warrant law being implemented and enforced fairly in Connecticut? Securing the guns first, getting the warrant later is not uncommon. While this reversed sequence might appear to raise due-process concerns, it was clear from our interviews that police officers often justified it on the basis of an immediate risk to public safety at the scene. To the extent that some officers may also deviate from the statutory process for reasons of expediency and convenience, there could be some benefit in systematic education through the Department of Emergency Services and Public Protection focused on the risk-warrant law, as well as development of specific gun removal protocols to improve police practice in this area.

Is the risk-warrant law targeting the right people, and does it actually work to reduce gun-related violence and suicide? It is difficult to answer the question

two percent had neither).

<sup>96.</sup> Id.

<sup>97.</sup> Following the Supreme Court's interpretation of the Second Amendment right as articulated in *Heller v. District of Columbia*, 554 U.S. 570 (2008) and *McDonald v. City of Chicago*, 561 U.S. 742 (2010), the limited role of law in preventing gun violence in the United States is mainly to keep guns out of the hands of dangerous individuals.

about violence to others without more cases to study, given the low base rate of gun-related aggravated assault and homicide in the population. Also, the fact that our study only had access to the records of arrest resulting in conviction—and we know independently that the majority of gun-related arrests in Connecticut do not result in convictions—posed a further obstacle to accurately measuring this outcome. Still, that almost nine out of ten gun seizure subjects had no convictions during the year before or after the gun removal event suggests that the policy is not targeting criminally involved individuals. This stands to reason, because a criminal background often precludes legal gun ownership in the first instance; police would not typically need to invoke a civil risk-warrant statute to separate guns from a known or accused criminal offender.

With respect to suicide, however—and suicide concern was the most common type of risk motivating these gun removals—the data from Connecticut may provide the basis for a productive policy discussion. First, the law in Connecticut has de facto targeted a population of people at exceedingly high risk of suicide, about forty times higher than that of the general population of the state. And to summarize the key finding, the study found that twenty-one individuals in the gun seizure database had died from suicide—six of them with guns and fifteen by other means. Using Connecticut population data on the case fatality rate associated with various means of suicide, we estimated that these twenty-one suicides represented 142 suicide attempts, 121 of them being nonfatal. This, in turn, allowed us to calculate by extrapolation how many additional fatalities could have been expected if these individuals had retained their guns, and had alternatively used a gun to attempt suicide. In this manner, we estimated that approximately ten to twenty gun seizures were carried out for every averted suicide. Are those numbers low or high? Is this a fair public health tradeoff? That is for policymakers to decide; but these data can help frame what is in the balance between risk and rights.

#### VII

#### CONCLUSION

Gun violence in America remains a multifaceted public health problem whose long-term solution calls for evidence-based public policies to address a range of contributing factors: gun safety concerns, illegal trafficking and access, as well as social and psychological determinants of assaultive and self-injurious behavior. But in a nation with a constitutionally protected individual right to bear arms, a gun-celebrating culture, powerful political and corporate gun interests, and a very high prevalence of private gun ownership, there are stiff headwinds

<sup>98.</sup> See CDC, supra note 10 (reporting that Connecticut's average annual rate of gun homicide between 1999 and 2015 was 2.16 per 100,000 inhabitants); see also Fed. Bureau of Investigation, Uniform Crime Reports, https://www.ucrdatatool.gov (reporting that Connecticut's average annual rate of aggravated assault between 1999 and 2012 was 164.7 per 100,000 population).

<sup>99.</sup> See Swanson, supra note 18, at 38 ("Independent analysis from the Office of Legislative Research in Connecticut has shown that about ninety-two percent of firearms violations (for example, illegal possession, transfer, and use of a firearm in a crime) in the state do not result in convictions[.]").

facing any form of firearms regulation. That guns are here to stay in America implies that efforts to reduce gun violence must be mainly about preventing dangerous behavior and restricting access to guns by individuals who demonstrate a significant risk of harming themselves or others. How to do that effectively and fairly, given the legal requirements for removing gun rights on the one hand, and the inherent scientific difficulty of predicting violent behavior on the other, is the essential challenge for policymakers and researchers.

Many current policies in the field of gun violence prevention are focused on improving the efficacy of background checks to identify and deter prospective gun purchasers who are legally prohibited from owning firearms. However, background checks alone may fail to prevent gun violence in some cases because the prohibiting criteria correlate poorly with risk, and because guns are often acquired in private transactions not subject to background checks. Thus, many individuals at risk have ready access to firearms—sometimes multiple firearms—in their homes. In a country with more privately owned guns than people<sup>101</sup> and many states with large percentages of households having firearms, strategies to prevent gun violence must consider ways to mitigate the risk posed by guns that are already possessed by persons who may be inclined to harm others or themselves.

Laws that authorize police to remove guns from persons at risk of violence or suicide appear to be a logical and complementary approach to background checks in preventing gun violence. This study advances the field of gun violence prevention also by providing new information regarding the challenges to implementation of removal laws in one state. Potential changes to the law could streamline the gun-removal process and make it easier for police to take preventive action when appropriate. One such change, which was suggested by an expert respondent interviewed for this study, would be to allow police to remove guns immediately with probable cause; this would be similar to current practice in domestic violence situations where a gun surrender requirement is triggered by an ex parte temporary order of protection. This study suggests that

<sup>100.</sup> See Bureau of Just. Stat., FY 2016 NICS Act Record Improvement Program (NARIP) (CFDA #16.813), at https://www.bjs.gov/content/pub/pdf/narip16sol.pdf [https://perma.cc/BDS2-PL35] (providing an example of such a policy: "The NICS Improvement Amendments Act of 2007, Pub. L. 110-180 (NIAA or the Act), was signed into law on January 8, 2008, in the wake of the April 2007 shooting tragedy at Virginia Tech. The Virginia Tech shooter was able to purchase firearms from a Federal Firearms Licensee (FFL) because information about his prohibiting mental health history was not available to the NICS, and the system was therefore unable to deny the transfer of the firearms used in the shootings. The NIAA seeks to address the gap in information available to NICS about such prohibiting mental health adjudications and commitments, and other prohibiting factors. Filling these information gaps will better enable the system to operate as intended to keep guns out of the hands of persons prohibited by federal or state law from receiving or possessing firearms. The automation of records will also reduce delays for law-abiding persons to purchase firearms.").

<sup>101.</sup> See Ingraham, supra note 26 (discussing one recent estimate that there are 357 million privately owned firearms in the United States, which is more than the estimated U.S. population of 320 million).

<sup>102.</sup> See Wes Duplantier, New Connecticut Law Requiring Guns Be Surrendered in Restraining Order Cases Takes Effect Saturday, NEW HAVEN REG. (Sept. 30, 2016) (describing the enactment of Public Act No. 16-34, An Act Protecting Victims Of Domestic Violence: "[The new law] requires a person to

risk-based gun removal laws, even as currently implemented in Connecticut, can be at least modestly effective in preventing suicide. Expanded police training in the features of such a law and police protocols for safely removing guns from persons at risk of harm to self or others might further enhance the law's utility and public safety benefit.

Millions of Americans every year undergo a personal background check to purchase a firearm, and over ninety-eight percent of them are approved. Some small proportion of those legal gun buyers will later experience a period in their lives when they pose a serious, knowable risk of interpersonal violence or suicidality—engaging in threatening or dangerous behavior Happarent to those around them—yet will not be legally or practically prohibited from accessing guns. The evidence presented in this article suggests that enacting and implementing laws like Connecticut's civil risk warrant statute in other states could significantly mitigate the risk posed by that small proportion of legal gun owners who, at times, may pose a significant danger to themselves or others. Such laws could thus save many lives and prove to be an important piece in the complex puzzle of gun violence prevention in the United States.

surrender their firearms if they are subject to a temporary restraining order. It further bars them from getting those guns back until there is a court hearing.").

<sup>103.</sup> See Jennifer C. Karberg, Ronald J. Frandsen, Joseph M. Durso & Allina D. Lee, *Background Checks for Firearm Transfers*, 2013–14 Statistical Tables, BUREAU OF JUST. STAT. (2016) (discussing trends in the recorded number of background checks conducted on prospective purchasers of firearms and the number of gun purchase attempts that are denied due to a background check).

<sup>104.</sup> See Swanson, supra note 29 (discussing estimates from a nationally representative survey that approximately nine percent of adults in the United States have impulsive angry behavior problems—such as a tendency to "break and smash things" when angry—and also have access to firearms).